LINK

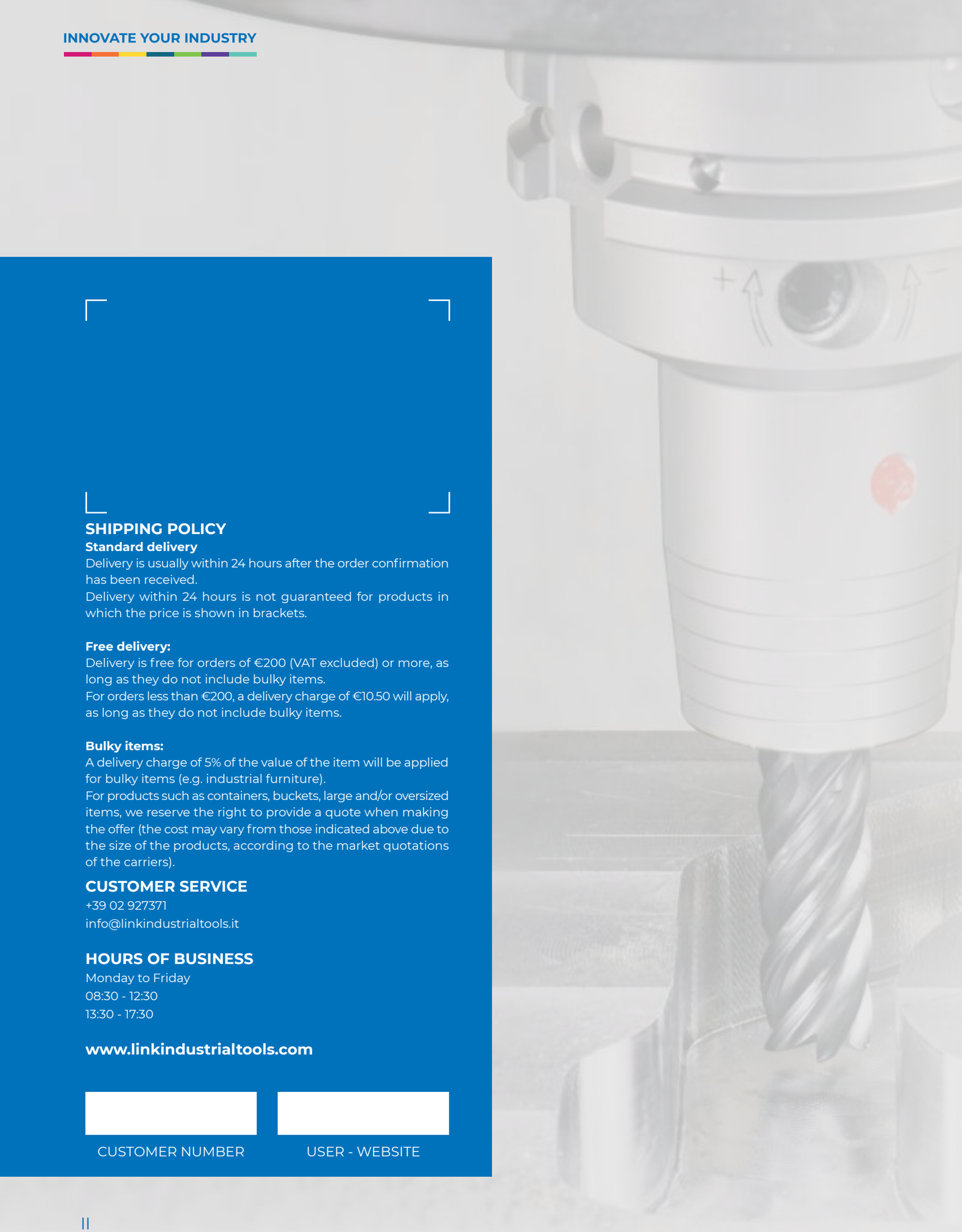
INNOVATE YOUR INDUSTRY

PRODUCT CATALOGUE 2023 - 2024

from 03.07.2023

Cutting tools
Clamping systems
Metrology
Oils and cooling lubricants
Hand tools
Abrasives
Safety equipments
Power tools
Lifting system
Workstations and storage

LINK
INNOVATE YOUR INDUSTRY



SHIPPING POLICY

Standard delivery

Delivery is usually within 24 hours after the order confirmation has been received.
Delivery within 24 hours is not guaranteed for products in which the price is shown in brackets.

Free delivery:

Delivery is free for orders of €200 (VAT excluded) or more, as long as they do not include bulky items.
For orders less than €200, a delivery charge of €10.50 will apply, as long as they do not include bulky items.

Bulky items:

A delivery charge of 5% of the value of the item will be applied for bulky items (e.g. industrial furniture).
For products such as containers, buckets, large and/or oversized items, we reserve the right to provide a quote when making the offer (the cost may vary from those indicated above due to the size of the products, according to the market quotations of the carriers).

CUSTOMER SERVICE

+39 02 927371
info@linkindustrialtools.it

HOURS OF BUSINESS

Monday to Friday
08:30 - 12:30
13:30 - 17:30

www.linkindustrialtools.com

CUSTOMER NUMBER

USER - WEBSITE

OUR GROUP

A+B
Industrial Tools Company

Link *is a company part of a large family,* ***A+B Group****, able to supply any tools and products around 3 meters from the machine tools.*

The technological level of the products that the group produces and markets is designed to reduce processing time, increase the production level and improve efficiency and operations within the mechanical workshop.

www.aplusb-tools.com
www.linkindustrialtools.com

OUR CATALOGUE

OUR CATALOGUE

User-friendly

Complete

International

SIMPLE AND COMPLETE

You can find any type of product in our practical and handy catalogue: from cutting tools to measuring instruments, lubricants, hand tools, lifting equipment and even furniture for your company.

It includes technical specifications, detailed images, application advice and much more.

MULTILINGUAL CATALOGUE

Our catalogue is available in six languages.

- Italian
- English
- German
- Spanish
- Polish

OUR E-SERVICES

E-COMMERCE

A technological platform full of features that allows you to purchase the products you need directly, in a simple click, with access to a whole universe of dedicated special offers. You can monitor the availability of each article and access updated information in real time.

AUTOMATIC REORDERING

Our services and tools such as Linkode, Matrix and DPI manager enable you to monitor your inventory and reorder products automatically.

OUR E-SERVICES

E-commerce

Stock management

DPI manager

OUR PARTNERS

We work with the best partners worldwide and make our choices according to the criteria of quality and reliability.

OUR PARTNERS

The best partners to meet your requirements

Excellent products

High performance

OUR BRANDS

Whatever your industrial needs may be,
trust our experience and choose Link brands.

KERFOLG is the brand dedicated to all high quality **cutting** tools.
ALPA offers a wide range of accurate and reliable **measuring instruments** .
LTEC is the brand dedicated to **lubricants**, chemicals, adhesives and sealants.
LANDOIL technology develops and manufactures advanced **coolants, cutting oils for machine tools** and industrial lubricating oils
WODEX is the premium brand for the **MRO** section, products with high quality ergonomic design.
B-HANDLING offers a complete range of **lifting** and handling systems suitable for different types of loads.
GUABO is the most important manufacturers of industrial **blades**.

WRK is a cross-range brand for all types of products that provides excellent value for money.

quality

price

OUR BRANDS

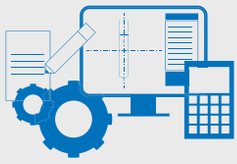
Our branded products are characterised by high quality level of excellence, a unique design and outstanding efficiency.

High quality and competitive prices make our brands a valid alternative to the market leaders.

KERFOLG THE BEST CHOICE

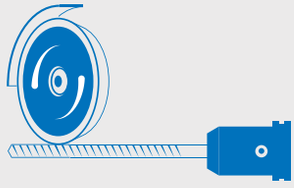
CUSTOMER REQUIREMENTS

The customer is both our starting point and our end point. Listening to our customers and satisfying their needs is our goal.



WE DEVELOP IT

Our team of project managers enables us to put all our experience and knowledge together to find innovative and unique ad hoc solutions to meet your needs.



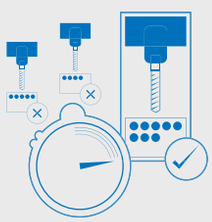
WE PRODUCE IT

We personally oversee the production of our tools in order to guarantee the highest levels of quality, even with large-scale production.

KERFOLG

HIGH QUALITY TOOLS

All of the cutting tools are made by carefully designing their geometries and selecting the materials and coatings to ensure maximum productivity for all types of processing.



WE TEST IT

We inspect every single tool in accordance with the strictest quality standards and constantly carry out comparative tests to improve the quality of our products.

YOUR TOOL

And what is the result of all this?
The perfect cutting tool to solve our customer's problems.
What you need to make the difference!

KERFOLG

Premium brand

Products
for high productivity

Research and innovation

LANDOIL THE IDEAL PARTNER

PRODUCTION

Today, Lub Factory is one of the most innovative lubricant production plants, both in Europe and across the world. A technology, innovation and productivity driven facility based on global best practices.

PRODUCTS

Thanks to our in-house research and development team, we formulate, test, manufacture and distribute over 70 product lines. Carefully select raw materials, continuously improve and innovate the formulations, constantly optimize production processes, which results in exceptionally high quality end products.

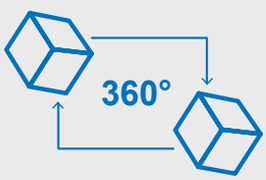
GREEN LAB

The quality of Landoil products is simply the result of a series of elements, the common denominator of which is the human factor. Green Lab operates proactively with respect to market demands, placing the operator's health as a key prerequisite for all its products.

Landoil

THE IDEAL PARTNER IN THE WORLD OF LUBRICANTS

Landoil Technology develops and manufactures advanced coolants, cutting oils for machine tools and industrial lubricating oils



LOGISTICS

Landoil's logistics department, like the other business divisions, is designed to be as efficient and innovative as possible. At Landoil, the concept of quality is not just limited to the actual products, but extends to all company areas.

SERVICES

Our approach, which has always been to provide the best possible assistance to customers and machine tools, has allowed us to develop an entire range of additional services that we are in full control of and manage independently, adding greater value to our offer.

LANDOIL

Manufacturers of technology and innovation

Excellent formulations

Industrial lubrication systems of 360°

LTEC CHEMICAL DIVISION

CUSTOMER REQUIREMENTS

For over 20 years, the LTec Brand has been synonymous with performance and safety. Experience and Development at the service of our customers. Ltec offers a range of chemicals, detergents, lubricants and lubricoolants for every requirement and use.

RESEARCH

LTec Chemical Division means continuous research to improve the performance of our products. Our team of specialists collaborates with universities and specialised centres to create new formulations and works closely with our partners.

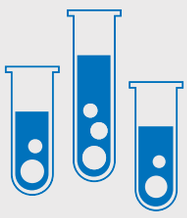
BIOCOMPATIBILITY

Two concepts are fundamental for us: HEALTH and EFFICIENCY. We aim to offer biocompatible products that guarantee high performance whilst safeguarding health and safety in the workplace. Being green and offering high performance products is what distinguishes us.

LTEC

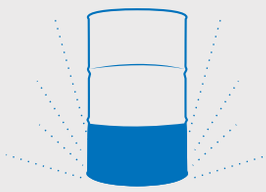
CHEMICAL DIVISION

The LTec brand is synonymous with performance and safety.
Experience and Development at the service of our customers.
Every day we develop, test and improve
our products in our lab thinking of your needs.



LABORATORY AND ANALYSIS

Our laboratory is equipped with the most up-to-date and sophisticated analysis equipment. This enables us to study a diverse range of issues relating to chemical formulas and their applications, and to subsequently resolve these.



THE PRODUCT FOR YOU

By constantly updating our technologies and carrying out extensive research, we can provide an excellent service to every sector of industry. Thanks to our close relationship with our customers, the marketing of LTec products constantly anticipates the needs of the market.

LTEC

Research and development

Health and efficacy

Laboratory and analysis

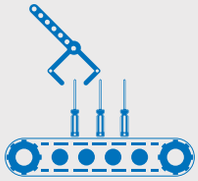
WODEX EFFICIENCY AND DESIGN

CUSTOMER REQUIREMENTS

Our customers are always looking for manual tools that combine design and ease of use.

WE DEVELOP IT

In order to do this, we have a dedicated team, which in close contact with the customer develops ergonomic, practical and handy products.



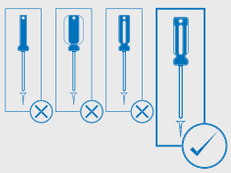
WE PRODUCE IT

We produce our tools directly using quality raw materials.

WODEX

OUR PREMIUM MRO BRAND

In our catalogue you will find a complete range of hand tools designed for the maintenance and repair of machines and all types of assembly operations. Ergonomic design and high quality materials ensure precision and ease of use.



WE TEST IT

Through a process of selective testing, we guarantee that each individual product placed on the market can meet even the most exacting customer requirements.

YOUR PRODUCT

And what is the result of all this?
Practical and easy to use hand tools with an appealing design which meet the highest ergonomic standards.

WODEX

High standards

Perfect ergonomics

Carefully selected materials

High efficiency and a unique design

ALPA UNDERLINE PRECISION

CUSTOMER REQUIREMENTS

Our customers are always looking for accurate measuring instruments, easy to use, with intuitive software and able to provide excellent performance in extreme enviroments.

TRAININGS

ALPA provides the great experience of its technicians for training courses in the classroom or at your premises.

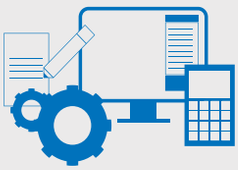
CALIBRATION LABORATORY

Our calibration laboratory enables us to provide certified instruments that meet the highest standards.

ALPA

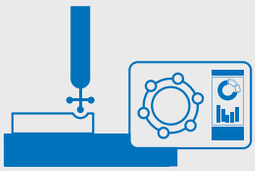
TECHNOLOGY IS SIMPLICITY

Technology makes life simple and allows you to reach a goal quickly. ALPA offers tools and measuring machines of high technological level and simple and intuitive use.



R&D

In ALPA there is an R & D department always ready to develop and test new solutions to meet your most special needs.



3D MEASURING MACHINES

We offer a wide range of 3D machines that are extremely easy to operate, thanks to intuitive software and construction specifications that also allows these technologies to be used in production environments.

ALPA

High precision

Innovation

Experience

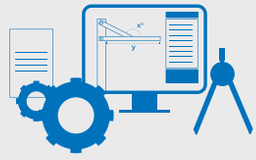
Calibration

Metrological consultancy

B-HANDLING TO BE SAFE

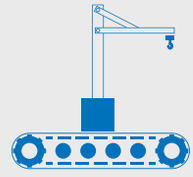
CUSTOMER NEEDS

Companies today pay a lot of attention to the safety of operators; therefore, they need to facilitate their work with performing and safe lifting systems.



WE DEVELOP IT

Thanks to our technical department, always in close contact with our sales representatives, the market's needs are always the main objective for creating ergonomic and easy -to-handle systems.



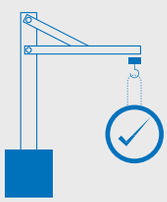
WE PRODUCE IT

We produce our plants in our production plant in Bentivoglio (BO), using high-quality raw materials.

B·HANDLING

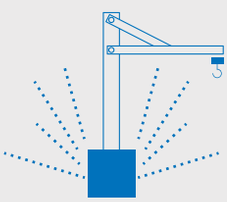
OUR BRAND FOR LIFTING

In our catalog you will find a complete assortment of lifting and handling systems suitable for different types of loads. Moreover, thanks to the services of installation and regular maintenance on cranes and hoists, we also relieve you from administrative procedures to comply with legal obligations, ensuring a longer life of the plants and a safer working environment.



WE TEST IT

All manufactured products must pass quality control process aimed at rational elimination of any foreseeable risk or malfunction.



YOUR PRODUCT

The result of all this? Lifting systems in line with the market needs, practical and performing, for handling in absolute safety.

B-HANDLING

Performing and safe lifting systems

Ergonomic and easy-to-handle systems

Services of installation and regular maintenance

GUABO BAND SAW BLADES

HIGH QUALITY STANDARDS

The high technological level and the automation of production processes guarantee a constant and consistent quality standard.

QUALITY CONTROL AREA

The production cycle includes a strict protocol within the quality control process, as part of which specific tests and checks are performed on samples.

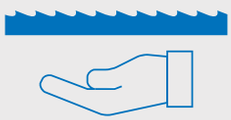
OUR TESTS

- welding rectilinearity
- welding elasticity
- thickness control
- mechanical resistance to the torsion

GUABO

TRADITION AND INNOVATION

Guabo, a LINK group partner, is one of the most important Italian manufacturers of industrial blades. With its highly qualified staff, state-of-the-art instrumentation and technical consultation services, the company is an ideal partner for all cutting operations.



CUSTOMIZED SERVICE

GUABO offers a wide portfolio of blades for band saws: welded-to-measure loops and coils in industrial sizes.

24H DELIVERY

We can guarantee fast delivery on most of our products.

GUABO

Industrial
band saw blades

Excellent
performance

Direct
consultancy

DELIVERY IN 24 HOURS

ORDER

Place an order through our sales network or via the online platform.

ORDER CHECKING

The order is received, verified and processed immediately..

ORDER PREPARATION

The details of the order are forwarded to the warehouse where the products to be shipped are prepared.

LOGISTICS

LARGER AND FASTER

We have a warehouse that covers over 30,000 square metres with a highly automated and advanced logistics system. We handle over 66,000 items and provide full tracking at each step of the process: we know where your product is at all times. Processes are continuously monitored and improved. 24-hour guaranteed delivery.

CHECKING AREA

The products leaving the warehouse undergo a quality control inspection and we make sure that the specific requests of the customer have been complied with.

PACKAGING AREA

The products are packaged and labelled with a barcode which enable them to be tracked.

SHIPPING

Your product will be delivered in 24h from the validation of your order.

LOGISTICS

30,000 m2

66,000 items

Delivery within 24 hours

Quality control

PRODUCTION

We follow the whole process linked to the realization of the product also thanks to our innovative production site

THE CHEMICAL CENTER

MORE ADVANCED AND TECNOLOGICAL

A project which was born that will revolutionize the industrial chemical field. In fact, the A + B group has given rise to a unique chemical center of its kind, which will contribute to drastically raise the quality of our products starting from the selection of the best raw materials and working them according to high quality standards.

RESEARCH DEVELOPMENT

Our department of qualified chemists produces a series of highly performing, innovative and attentive Ltec branded products to safeguard people's health.

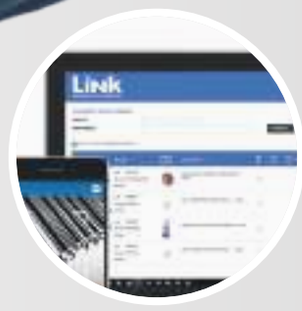
THE CHEMICAL CENTER

Production of lubricants and coolants

Continuous Resarch and development

Safety

Innovation



ADVICE ON LIFTING SYSTEMS

Production, assembly, distribution and maintenance of products for the handling and transport of raw materials, semi-finished and finished products.

C ITEM MANAGEMENT

We also guarantee to stock products of low added value and less strategically important in order to offer a 360° service.

DPI MANAGER

DPI manager is a distributor for personal protective equipment. It consists of 12 rotating shelves that can contain up to 432 products. The low stock level alert via SMS, makes it possible to monitor and reduce use and restock within 24 hours.

WAREHOUSE MANAGEMENT

We use Linkode to manage your inventory and Matrix to automate your logistics.
By monitoring use and inventory management optimisation, we ensure that orders are placed automatically only when needed, and for the required quantity.

OUR SERVICES

We put our innovative solutions at your disposal in order to simplify your purchasing process and inventory management. Each of them can be adapted to your requirements. This is all aimed at increasing the productivity, efficiency and knowledge of your company.

CALIBRATION LABORATORY

We have a wide range of very high precision measuring instruments available that are made with extremely high quality mechanics and electronics. We also provide assistance to customers during installation, set-up, calibration or certification.

TECHNICAL TRAINING

We organise and offer technical training seminars and update courses on the products for our customers.

CHEMICAL DIVISION

Our lubricants undergo stringent and constant quality control procedures to ensure an optimum result is obtained in compliance with current regulations. We also offer a laboratory analysis service and classroom training on the use of our products.

OUR SERVICES

- Advice on lifting systems
- C-Items management
- DPI-Manager
- Warehouse management
- Calibration laboratory
- Technical training
- Chemical division

B·HANDLING

HANDLING SYSTEM

B-HANDLING offers a complete range of lifting and handling systems suitable for different types of loads.

LTEC lubricants

METALWORKING LUBRICANTS

LTEC is the brand dedicated to lubricants, chemicals, adhesives and sealants.

WODEX mro

MRO

WODEX is the premium brand for the MRO section, products with high quality ergonomic design.

KERFOLG precision tooling

PRECISION TOOLING

KERFOLG is the brand dedicated to all high quality cutting tools.

in 3 m

everything

FULL SUPPORT

FOR ALL YOUR CUTTING OPERATIONS

As well as our products, we can provide you with complete support for your on board machine operations. We can provide cutting tools for your cutting operations, lubricants and manual tools for the maintenance of your machine. Measuring instruments to check your work and much more.

ALPA metrology

MEASURING INSTRUMENTS

ALPA offers a wide range of accurate and reliable measuring instruments

eters

you need

FULL SUPPORT

Everything you need for your on board machine operations

MACHINERY MANUFACTURERS

We work with companies that export products all over the world such as: machine tools, presses, automatic machinery, agricultural machinery and machines for the food industry.

HEALTHCARE INDUSTRY

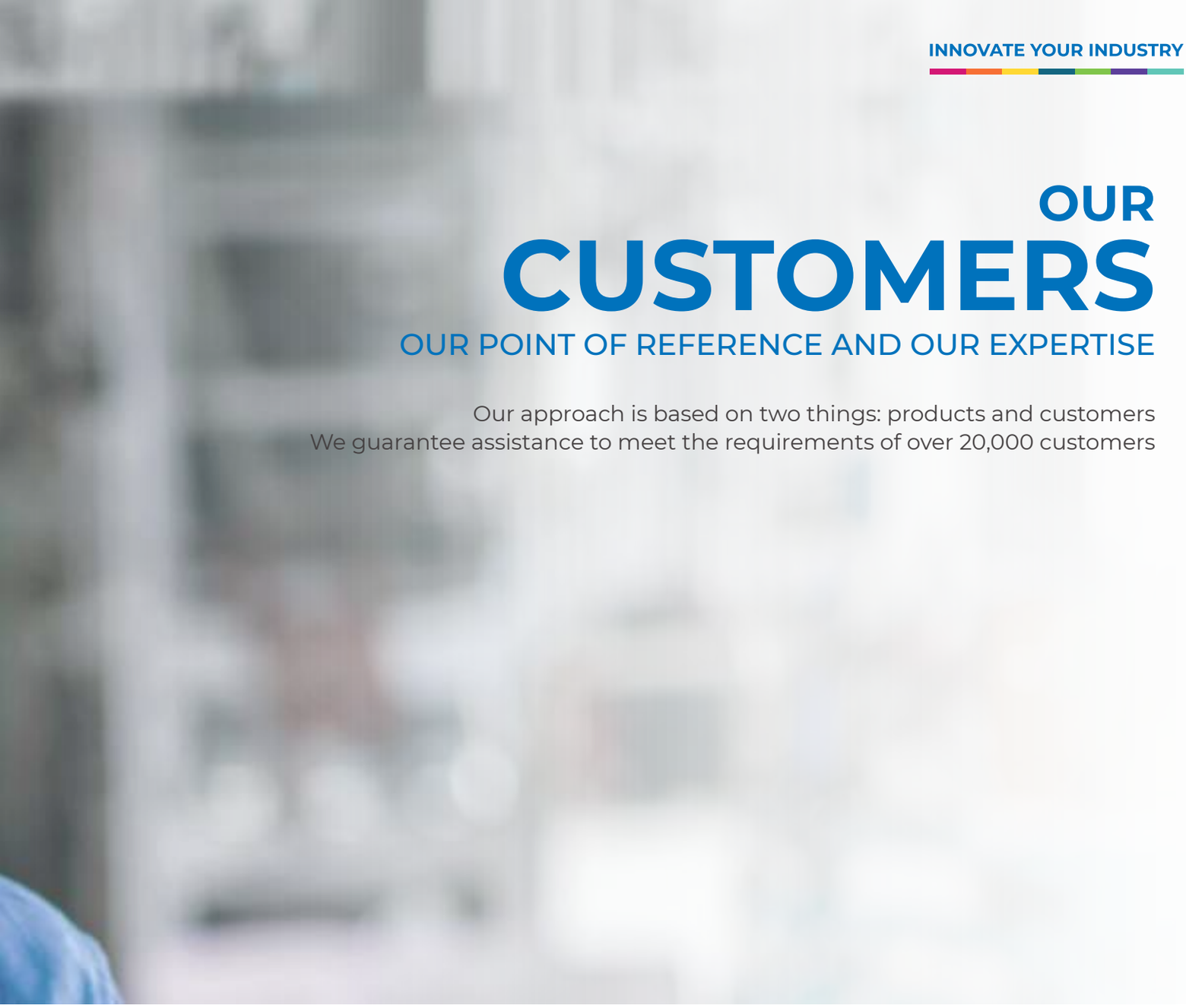
We develop products whose materials and dimensions make them suitable for the pharmaceutical and medical sectors.

FOOD & BEVERAGE

We supply specific high-tech products for the food & beverage industry, which are constantly evolving and manufactured specifically for the needs of our customers.

POWER GENERATION

We have a complete range of products for companies that operate directly and indirectly in the energy sector: motor manufacturers, wind power, solar power, photovoltaic and petrochemicals.



OUR CUSTOMERS

OUR POINT OF REFERENCE AND OUR EXPERTISE

Our approach is based on two things: products and customers
We guarantee assistance to meet the requirements of over 20,000 customers

HEAVY INDUSTRY

We are able to serve companies linked to the heavy industry sector: steelworks, earthmoving, shipbuilding, railway.

AEROSPACE

Over the last few years, we have introduced specific products for processing materials used in the aerospace industry.

AUTOMOTIVE

We produce specific solutions for the automotive industry and for all the main companies that are part of it.

OUR CUSTOMERS

- Automotive
- Aerospace
- Heavy industry
- Power generation
- Food & beverage
- Healthcare industry
- Machinery manufacturers

CHOOSE YOUR PRODUCT

HOW TO ORDER

- Select the product you are interested in.
- Inform us of the Tech. Code and the quantity required by phone, e-mail, website.
- Link will quickly send you the offer requested or confirm your order.

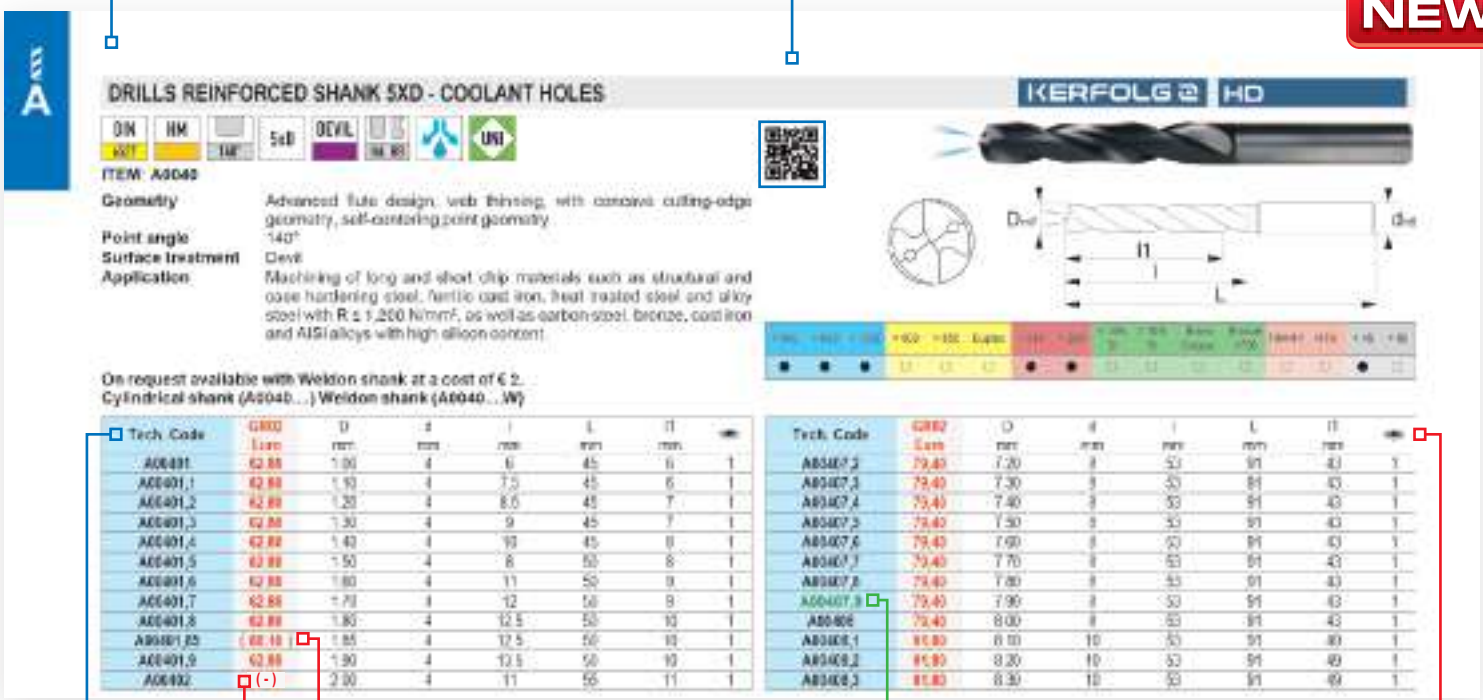
WATCH THE PRODUCT IN ACTION

- Scan the QR code and discover all the product contents

OUR NEW ITEMS

- Like we do every year, we have added many new items, both in terms of ranges and products.
  DISCOVER THEM NOW!

NEW



- To place your order, indicate the technical code in the blue column
- Prices on request
- The column with the red text indicates the price (exclusive of VAT) and the Discount Code. Have you found a price indicated in brackets? Delivery is not guaranteed within 24 hours.
- Retail pack
  Red non-divisible
  Black suggested
- Have you found a green Tech. Cod.? We have added a new product to the range.

- All prices, unless otherwise communicated, are exclusive of VAT and are valid until 30 April 2024.
- The images are indicative and not binding, we reserve the right to modify the product or the packaging at any time.
- The catalogue, its graphic representation and coding system are protected by copyright.
- The catalogue is made available to the customer but remains the property of LINK GRUPPO SPA with the right to return.

SOLID CUTTING TOOLS
A.1 - A.211

INDEXABLE TOOLS
B.1 - B.131

CLAMPING SYSTEM
C.1 - C.103

MEASURING INSTRUMENTS
D.1 - D.95

HAND TOOLS 01
E.1 - E.123

HAND TOOLS 02
F.1 - F.119

ABRASIVES
G.1 - G.73

METALWORKING LUBRICANTS
H.1 - H.41

ADHESIVES, CHEMICAL & WELDING
J.1 - J.65

SAFETY EQUIPMENT
K.1 - K.47

PNEUMATICS
L.1 - L.61

LIFTING AND HANDLING SYSTEM
M.1 - M.93

WORKSHOP EQUIPMENTS
N.1 - N.131

WORKSTATION AND STORAGE
P.1 - P.64

A

B

C

D

E

F

G

H

J

K

L

M

N

P

KERFOLG
" successfull "
KERFOLG

KERFOLG
WRK

A0
2 - 20
Solid carbide drills

KERFOLG
WRK

A1
21 - 50
HSS drills

KERFOLG
WRK

A2
51 - 89
Threading

KERFOLG

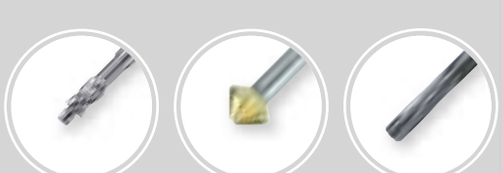
A3
90 - 91
Threading mills

KERFOLG
WIDIA HANITA
WRK

A4
92 - 159
Solid carbide end mills

WRK

A5
160 - 174
HSS end mills



KERFOLG
WRK
GRANLUND
BECK

A6
175 - 191
Boring
Countersinking
Facing

GUABO
band saw blades

A7
192 - 211
Band saw blades
Circular saw blades

MATERIALS TABLE

	Description	Content	Resistance RM (MPa)	Hardness	Material code
P	Steel with low carbon content, with long chips	C<0,25%	< 530	-	-
	Steel with low carbon content with short chips, high workability	C<0,25%	< 530	-	C15, Ck22, ST37-2, S235JR, 9SMnPb28, GS38
	Steel with medium and high carbon content	C<0,25%	< 530	< 25 HRC	ST52, S355JR, C35, GS60, Cf53
	Alloy steel and steel for tools	C<0,25%	600 - 850	< 35 HRC	16MnCr5, Ck45, 21CrMoV5-7, 38SMn28
	Alloy steel and steel for tools	C<0,25%	850 - 1400	35 - 48 HRC	100Cr6, 30CrNiMo8, 42CrMo4, C70W2, S6525, X120Mn12
	Ferritic, martensitic and hardening stainless steel by precipitation (PH)	-	600 - 900	< 35 HRC	100Cr6, 30CrNiMo8, 42CrMo4, C70W2, S6525, X120Mn12
	Ferritic, martensitic and hardening stainless steel by high resistance precipitation	-	900 - 1350	35 - 48 HRC	X102CrMo17, G-X120Cr29
M	Austenitic stainless steel	-	< 600	-	X5CrNi 18 10, X2CrNiMb 17 13 2, G-X25CrNiSi 18 9, X15CrNiSi 20 12
	High resistant austenitic steel and cast stainless steel	-	600 - 800	-	X2CrNiMo 13 4, X5NiCr 32 21, X5CrNiNb 18 10, G-X15CrNi 25-20
	Duplex stainless steel	-	< 800	-	X8CrNiMo 27 5, X2CrNiMoN22 5 3, X20CrNiSi25 4, G-X40CrNiS27 4
K	Gray cast Iron	-	125 - 500	125 - 500 HRB	GG15, GG25, GG30, GG40, GTW40
	Ductile (modular) cast iron with low-medium resistance and cast iron compact graphite (CGI)	-	< 600	< 600 HRB	GGG40, GTS35
	High resistance ductile cast Iron and ductile cast iron austempered (ADI)	-	> 600	> 600 HRB	GGG60, GTW55, GTS65
N	Milled aluminum	-	-	-	AlMg1, Al99.5, AlCuMg1, AlCuBiPb, AlMgSi1, AlMgSiPb
	Aluminum alloys with low silicon content and alloys of magnesium	Si < 12,2%	-	-	GAlSCu4, GDAlSi10Mg
	Aluminum alloys with low silicon content and alloys of magnesium	Si < 12,2%	-	-	G-ALSi12, G-AlSi17Cu4, G-AlSi21CuNiMg
	Copper base, brass and zinc with workability index of 70 - 100	-	-	-	CuZn40, Ms60, G-CuSn5ZnPb, CuZn37, CuSi3Mn
	Nylon, plastic materials, rubbers, phenols, resins, fiber glass	-	-	-	Lexan®, Hostalen™, polistirene, Makralon®
	Composite materials in carbon and graphite, CFRP	-	-	-	CFK, GFK
	Metal matrix compounds	-	-	-	-
S	Iron-based alloys resistant to heat	-	500 - 1200	-	X1NiCrMoCu32 28 7, X12NiCrSi36 16, X5NiCrAlTi31 20, X40CoCr
	Cobalt based alloys, heat resistant	-	1000 - 1450	-	Haynes® 188, Stelite® 6, 21, 31
	Nickel-based alloys, heat resistant	-	600 - 1700	-	INCONEL® 690, INCONEL® 625, Hastelloy®, Nimonic® 75
	Titanium and titanium alloys	-	900 - 1600	-	Ti1, TiAl5Sn2, TiAl6V4, TiAl4Mo4Sn2
H	Hardened materials	-	-	44 - 48 HRC	GX260NiCr42, GX330NiCr42, GX300CrNiSi952, GX300CrMo153, Hardox® 400
	Hardened materials	-	-	48 - 55 HRC	-
	Hardened materials	-	-	56 - 60 HRC	-
	Hardened materials	-	-	> 60 HRC	-

TOOLS ICONS LEGENDS

DIN XXXX — It follows din regulation

NdF — Manufacturing Standard

HSS — High speed steel

HSS Co8 — High speed steel co 8%

HSS + HM — Brazed carbide

HSSE — High speed steel co 5%

HM — Solide carbide

PM — Powder steel

90° — Point angle 90°

118° — Point angle 118°

120° — Point angle 120°

130° — Point angle 130°

135° — Point angle 135°

140° — Point angle 140°

142° — Point angle 142°

180° — Point angle 180°

HA — Cylindrical shank

HB — Weldon shank

HA HB — Cylindrical or weldon shank version available

CM — Morse cone

3xD — Cutting length: 3 Times ø

5xD — Cutting length: 5 Times ø

7xD — Cutting length: 7 Times ø

12xD — Cutting length: 12 Times ø

20xD — Cutting length: 20 Times ø

M 60° — Isometric m 60°

UN 60° — Unified 60°

BSW 55° — British standard Whitworth 55°

Extra short

Short

Medium

Long

Extra long

Short and medium

Different lengths

TiN — Monolayer titanium nitride
Hardness 2400 hv (0,05) - max 500°c
Thickness 1,5 - 4 µ

TiAlN — Monolayer titanium allumina nitride
Hardness 3300 hv (0,05)- max 800°c
Thickness 1,5 - 4 µ

TiCN — Monolayer carbo nitride of titanium
Hardness 3000 hv (0,05) - max 400°c
Thickness 1,5 - 5 µ

WIND — Multilayer TiAlN-TiN base
Hardness 3300 hv (0,05) - max 800°c
Thickness 1,5 - 5 µ

WIND Z — Monolayer ZrN base
Hardness 1600 hv (0,05) - max 500°c
Thickness 1 - 4 µ

DLC — Monolayer diamond base
Hardness 10000 hv (0,05) - max 650°c
Thickness 9 µ

PREMIUM — Monolayer nitride of titanium base
Hardness 2300 hv (0,05) - max 600°c
Thickness 1 - 5 µ

HT 300 — Multilayer TiSi base
Hardness 3600 hv (0,05) - max 1200°c
Thickness 2,5 - 3,5 µ

S/R — Right hand flute
For deep holes

F/R — Special designed helix
Right hand flute

FS/R — Large flute
Right hand

N/R — Standard right
Hand flute

VA/R — Right hand
Stainless steel flute

BSPT 55° — Bspt withworth 55°

UNF 60° — Unified fine thread 60°

GAS 55° — Bsp thread 55°

ALU — ALUMINIUM ALLOYS

HD — CARBON STEEL
<1300 N/mm²

UNI — UNIVERSAL APPLICATION

Inox — STAINLESS STEEL

TI — TITANIUM ALLOYS

GG — CAST IRON

CF — CARBON FIBRE

TiNOX — Multilayer TiAlN base
Hardness 3000 hv (0,05) - max 800°c
Thickness 2 - 6 µ

TiAlCN — Multilayer nitride of titanium base
Hardness 2800 hv (0,05)- max 500°c
Thickness 2 - 4 µ

AlTiN — Multilayer aluminum titanium nitride
Hardness 3300 hv (0,05) - max 800°c
Thickness 1,5 - 4 µ

WIND + — Monolayer aluminium cromium nitride
Hardness 3200 hv (0,05) - max 1100°c
Thickness 3 - 6 µ

VAP — Superficial vaporization
Self-lubricating

PRO 100 — Monolayer titanium allumina nitride
Hardness 3500 hv (0,05) - max 850°c
Thickness 2 - 4 µ

PERFORM — Multilayer TiAlN base
Hardness 3200 hv (0,05) - max 1100°c
Thickness 1 - 5 µ

IPER — Multilayer TiAlN base
Hardness 3000 hv (0,05) - max 500°c
Thickness 2 - 6 µ

Z 1 — 1 Cutting edge

Z 2 — 2 Cutting edges

Z 3 — 3 Cutting edges

Z 4 — 4 Cutting edges

With lubrication holes

NPT 60° — National pipe THREAD 60°

EG-M 60° — WIRE INSERT THREAD 60°

MF 60° — Isometric fine pitch m 60°

STD ALU — Roughing profile
Std alu

STD INOX — Roughing profile
Std inox

STD FINE — Roughing profile
Std fine

FLAT SHALLOW — Roughing profile
Flat shallow

HSC ALU — Roughing profile
Hsc alu

TiNOX + — Multilayer TinAlox base
Hardness 3500 hv (0,05) - max 850°c
Thickness 1,5 - 4 µ

TiAl CrSiN — Multilayer TiAlCrSiN base
Hardness 4000 hv (0,05) – max 1100°c
Thickness 3 – 4 µ

DEVIL — Multilayer TiAlN-TiN base
Hardness 3000 hv (0,05) - max 700°c
Thickness 1,5 - 4 µ

WIND X — Monolayer AlCrN
Hardness 3200 hv (0,05) - max 1100°c
Thickness 2 - 5 µ

NIT + VAP — Superficial hardening
Hardness 1300 hv (0,05) - max 550°c
Superficial vaporization self-lubricating

NITR — Superficial hardening
Hardness 1300 hv (0,05) - max 550°c

DURABLE — Multilayer TiAlN base
Hardness 3000 hv (0,05) - max 1000°c
Thickness 5 - 6 µ

PLATEX — Multilayer AlTiSiN + Chrome base
Hardness 3875 hv (0,05) - max 1050°c
Thickness 3 - 4 µ

Z 5 — 5 Cutting edges

Z 6 — 6 Cutting edges

Z 7 — 7 Cutting edges

Z + — Multicut

UNC 60° — Unified coarse thread 60°

PG 80° — Armored pipe 80°

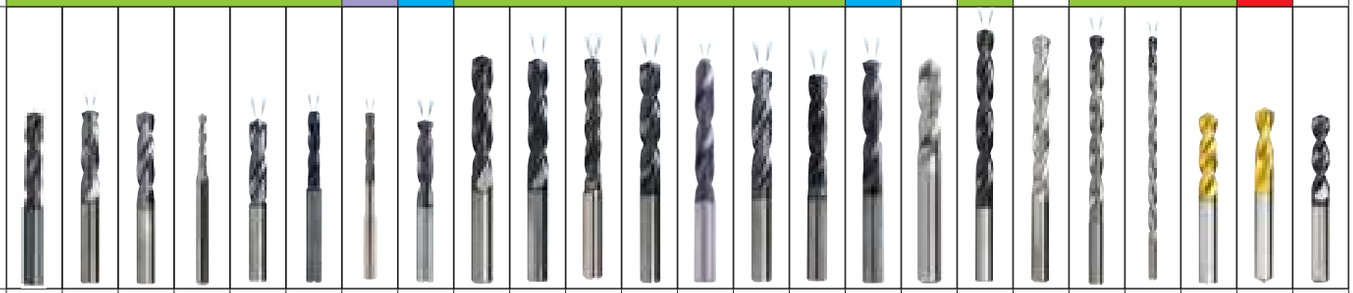
For through holes

For blind holes

For blind and through holes

6 H +0,1 — Oversized

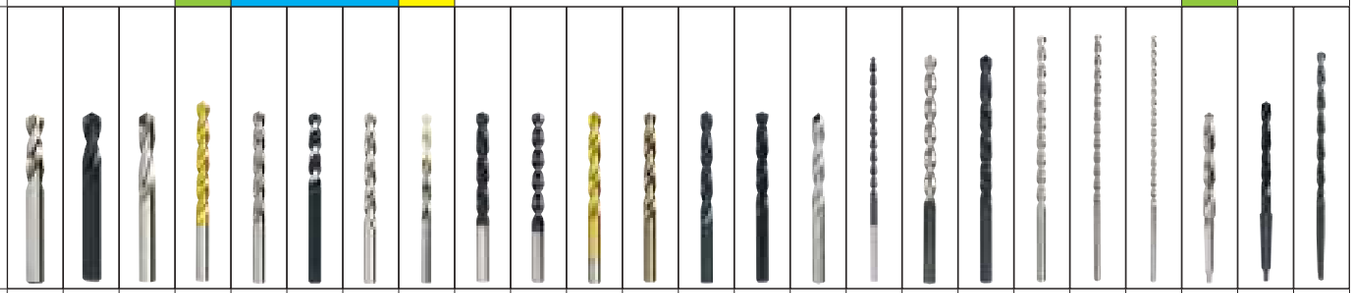
CHAP A - DRILLS SECTION - APPLICATION INDEX

Material		HM																							HSS		
Dimension		3xD								5xD									7xD	-	12xD	20xD	EXTRA SHORT			
Application		UNI						CF	INOX	UNI							INOX	-	UNI	-	UNI			HD	-	
																											
		A0010	A0020	A0005	A0003	A0090	A0100	A0500	A0085	A0030	A0040	A0045	A0072	A0007	A0095	A0096	A0088	A1080	A0050	A1230	A0060	A0070	A1040	A1050	A1060		
		KERFOLG	KERFOLG	WRK	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WRK	KERFOLG	KERFOLG	KERFOLG	WRK	KERFOLG	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG		
	Page. A	10	11	9	8	17	20	18	17	12	13	14	16	8	19	19	18	25	14	37	15	15	23	22	23		
	DIN	DIN 6537	DIN 6537	DIN 6537	DIN 1899 A	NdF	NdF	NdF	DIN 6537	DIN 6537	DIN 6537	DIN 6537	DIN 6537	DIN 6537	NdF	DIN 6535	DIN 6537	DIN 1897	DIN 6537	DIN 338	DIN 6537	DIN 6537	DIN 1897	DIN 1897	DIN 1897		
	Shank	HA HB	HA HB	HA HB	HA	HA	HA HB	HA	HA HB	HA HB	HA HB	HA HB	HA HB	HA HB	HA	HA	HA HB	HA	HA HB	HA	HA HB	HA HB	HA	HA	HA		
	Coating	DEVIL	DEVIL	DEVIL	—	DURABLE	DURABLE	DLC	DURABLE	DEVIL	DEVIL	DEVIL	DURABLE	DEVIL	DURABLE	DURABLE	DURABLE	—	DEVIL	—	DEVIL	DEVIL	TiN	TiN	TiAlN		
	Coolant	—		—	—					—								—		—			—	—	—		
P	< 500 N/mm²	75/95 6	80/100 6	90/100 7	60/90 1	80/100 6	70/80 4		95/115 6	75/95 6	80/100 6	80/100 7	110/130 7	90/100 7	80/100 6	70/90 6	95/115 6	70/80 5	80/100 6		80/100 6	100/120 8	30/45 6	35/45 6	25/35 5		
P	< 850 N/mm²	55/80 5	60/85 5		40/60 1	60/80 5	60/75 4		60/85 5	55/80 5	60/85 5	60/85 6	85/110 6		60/80 5	60/80 5	60/85 5	50/65 4	60/80 5		60/85 5	90/110 7	22/40 5	30/40 5	12/20 4		
P	< 1200 N/mm²	35/70 5	45/80 5		30/40 1	40/60 5	45/50 4		40/60 5	35/70 5	45/80 5	45/80 6	45/80 6		40/60 5	40/60 5	40/60 5	45/50 3	45/80 5		45/80 5	40/80 5	12/20 4	15/25 3	8/15 3		
M	< 600 N/mm²	35/40 4	45/50 4	40/60 5	45/60 1		35/50 3		50/70 4	35/40 4	45/50 4		55/65 4	40/60 4			50/70 4		45/50 4		45/50 4	60/100 5	12/18 4	10/15 4	4/6 4		
M	< 850 N/mm²	25/40 4	30/45 4	40/50 5	30/50 1		30/40 3		50/70 4	25/40 4	30/45 4			40/50 4			50/70 4		30/45 4		30/45 4	50/90 4	10/15 4	7/12 3	3/4 3		
M	DUPLEX	20/25 4	25/30 4	25/30 4			25/35 3		50/70 4	20/25 4	25/30 4			25/30 4			50/70 4		25/35 3		25/35 4		10 3				
K	< 240 HB	100/120 7	150/190 7			70/90 7	85/130 6			100/120 7	150/190 7	150/190 8	155/210 8		70/90 7	70/90 7		80/90 4	150/190 7	80/90 4	150/190 7	120/140 8	35/45 6	40/50 6			
K	< 300 HB	60/85 7	80/110 7			55/70 7	60/80 6			60/85 7	80/110 7	80/110 8	125/155 8		55/70 7	55/70 7		70/80 4	80/110 7	70/80 4	80/110 7	80/110 8	28/40 6	35/45 6			
N	< 10% Si	200/260 9	240/310 9	175/200 9	80/130 1		120/240 4			200/260 9	240/310 9			175/200 9		80/100 6		150/180 7	240/310 8	150/180 7			70/85 7		80/100 7		
N	> 10% Si	150/180 9	180/220 9		70/110 1		95/145 4			150/180 9	180/220 9					90/120 6		100/120 6	180/220 8	100/120 6			60/75 6		50/80 6		
N	Brass Copper	85/105 7	100/125 7	75/90 7			90/150 4			85/105 7	100/125 7			75/90 7				110/120 5	100/125 6	110/120 5			40/60 5	50/65 5	40/60 5		
N	Bronze >700 N/mm²	85/105 6	105/125 5		80/100 1		140/160 4			85/105 6	105/125 5							120/130 5	105/125 5	120/130 5	100/120 6	100/120 6	35/50 4	45/50 5	40/45 4		
S	Ti6Al4V	35/40 3	40/45 3	45/55 3						35/40 3	40/45 3		35/40 3	45/55 3					40/45 2								
S	HTA	25 4	25/35 4							25 4	25/35 4		25 4					8/12 2	25/35 3					12/15 2			
H	< 45 HRC	35/45 3	35/45 3							35/45 3	35/45 3		35/45 3					15/18 3	35/45 2	15/18 3	35/45 3	35/45 3					
H	< 60 HRC	25/30 2	25/30 2							25/30 2	25/30 2		25/30 2					7/10 2	25/30 1	7/10 2	25/30 2	25/30 2					
C	Carbon Fiber							*																			

* See cutting parameters on page

Example 35/45 / 3 — Suggested cutting speed (m/mm) / n° suggested feed column - look at page A.7

CHAP A - DRILLS SECTION - APPLICATION INDEX

Material	HSS																									
Dimension	EXTRA SHORT			SHORT												LONG			EXTRA LONG			SHORT		LONG	
Application	-			UNI	INOX			ALU	-													UNI		-	
																										
	A1030	A1010	A1090	A1200	A1135	A1130	A1140	A1125	A1190	A1220	A1180	A1145	A1120	A1110	A1240	A1330	A1320	A1310	A1340	A1350	A1360	A1512	A1510	A1518		
	KERFOLG	WRK	WRK	KERFOLG	KERFOLG	WRK	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WRK	WRK	KERFOLG	KERFOLG	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WRK	WRK		
Page. A	22	21	24	35	30	27	31	29	34	36	33	32	28 - 29	26 - 27	34	39	39	38	40	40	41	43	42	43		
DIN	DIN 1897	DIN 1897	DIN 8037	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 340	DIN 340	DIN 340	DIN 1869/1	DIN 1869/2	DIN 1869/3	DIN 345	DIN 345	DIN 1870		
Shank	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	—	—	—		
Coating	—	—	—	TiN	—	—	—	WINDZ	DEVIL	TiAlN	TiN	—	—	—	—	TiAlN	—	—	—	—	—	—	—	—		
Coolant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
P	< 500 N/mm²	20/35 5	20/30 5	40/60 3	30/45 6	30/45 6	25/32 6	20/28 4	33/40 4	25/35 5	25/35 5	25/40 6	20/35 5	25/32 6	20/30 5	40/60 3	25/35 6	25/28 6	20/30 6	18/22 5	15/18 4	15/18 4	30/40 6	20/30 5	20/30 5		
P	< 850 N/mm²	8/20 4	10/15 5	25/40 3	22/40 5	25/40 6	8/12 5		20/30 4	12/20 4	12/20 4	16/22 5	8/20 4	10/18 5	10/15 5	25/40 3	12/20 5	18/23 5	10/15 5	10/12 4	8/10 4	8/10 4	25/35 5		10/15 4		
P	< 1200 N/mm²	5/12 4	4/8 4	18/30 2	12/20 4					15/22 4	8/15 3	5/12 4	5/12 4	5/12 5	4/8 4	18/30 2	8/15 4		4/8 3	4/6 3		3/4 3	10/15 4	4/8 3	4/8 3		
M	< 600 N/mm²	3/4 4			12/18 4	8/15 3	10/12 6	10/16 4	7/10 3	16/20 5	4/6 4		3/4 4				4/6 5			6/8 3	8/10 3	8/10 3	10/12 4				
M	< 850 N/mm²				10/15 4	6/10 3	6/10 5	8/14 3		10/16 4	3/4 3		3/4 4				3/4 4										
M	DUPLEX																									
K	< 240 HB	30/40 6	25/35 6	60/80 4	35/45 6	30/40 6			40/45 6	30/40 6		30/40 6	30/40 6	25/32 6	25/35 6	60/80 4		22/28 6	25/35 5	20/25 5	16/20 5	16/20 5	15/25 7	25/35 6	25/35 6		
K	< 300 HB	25/35 6	20/30 6	45/60 4	28/40 6	25/35 6			33/40 5	25/35 6		25/35 6		20/28 6	20/30 6	45/60 4		16/20 6	20/30 5	16/20 5	12/16 5	12/16 5	12/20 7	20/30 6	20/30 6		
N	< 10% Si		70/90 6		70/85 7	60/80 5		70/90 7	80/105 7		80/100 7			70/100 7	70/90 7		80/100 8	45/65 7	70/90 7	40/55 6	35/45 6	35/45 6				
N	> 10% Si				60/75 6	40/50 5		55/70 6	60/95 7		50/80 6			65/80 6	55/70 6		50/80 7	35/45 6	55/70 6							
N	Brass Copper	45/60 4		40/80 5	40/60 5						40/60 5	45/60 5	45/60 4	25/40 5		40/80 5	40/60 6	25/30 5	20/32 5			25/30 4				
N	Bronze >700 N/mm²	30/40 4			35/50 4						40/45 4	45/50 4	30/40 4	30/35 4			36/38 5	20/28 4	25/30 4			20/22 3				
S	Ti6Al4V							6/7 2		10/16 2												6 1				
S	HTA									8/10 1																
H	< 45 HRC			6/10 3						5/7 1					6/10 3						4/6 1				
H	< 60 HRC			4/6 2											4/6 2										
C	Carbon Fiber																									

* See cutting parameters on page

Example 35/45 3 — Suggested cutting speed (m/mm)

n° suggested feed column - look at page A.7

CHAP A - DRILLS SECTION - APPLICATION INDEX

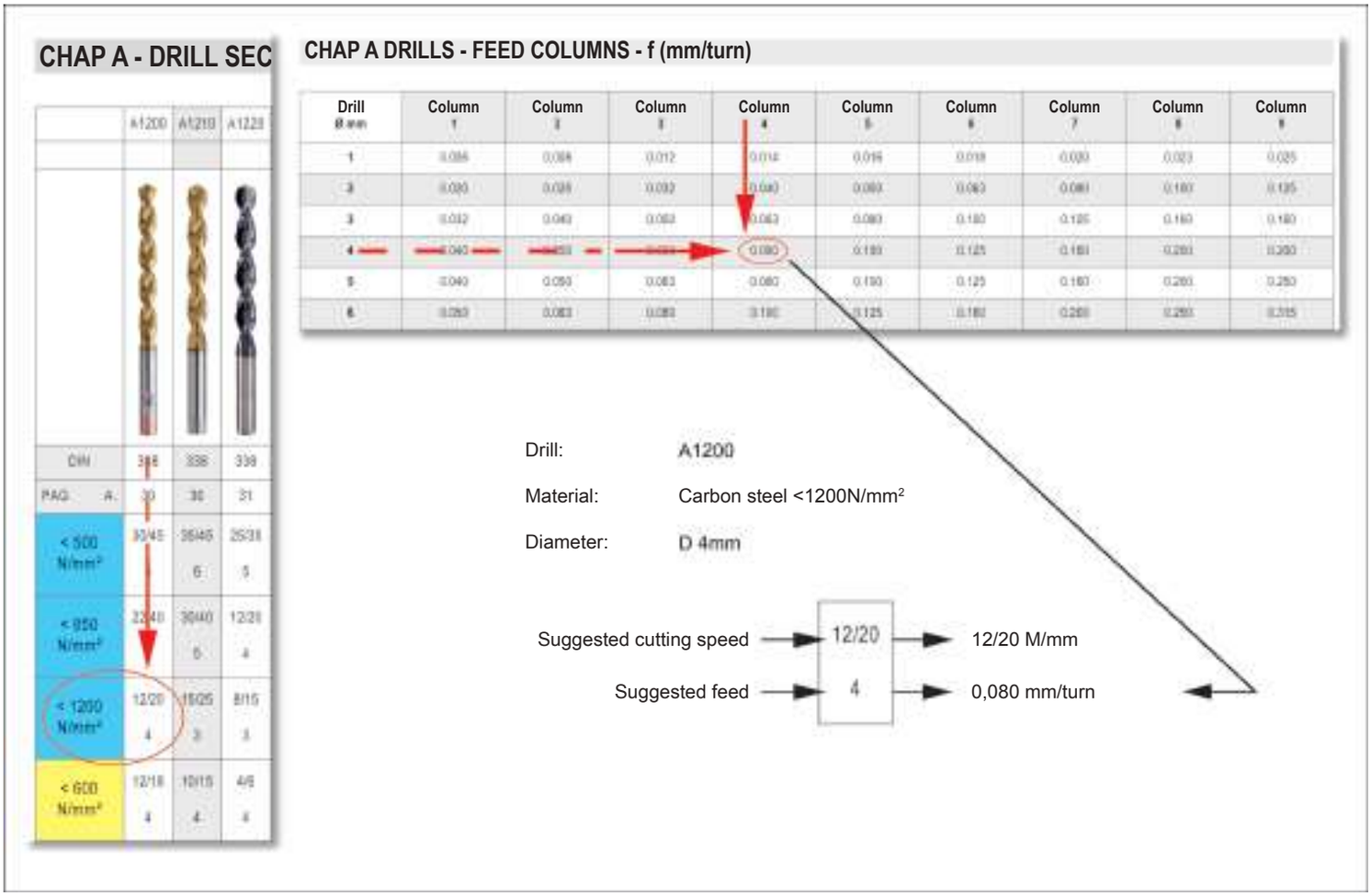
Material	HSS	HM	HSS						HM		HSS			HM		HSS		HM			HSS		
Dimension	EXTRA LONG	TYPE A				LONG TYPE A	TYPE R	TYPE B	90°				90° LONG	120°				142°		90° SHORT	90°		180° SHORT
Application	-	UNI			-				UNI												-		
	A1520	A1640	A1611	A1612	A1610	A1615	A1620	A1630	A1670	A1675	A1655	A1650	A1656	A1680	A1685	A1665	A1660	A1690	A1695	A1780	A1720	A1710	A1730
	WRK	KERFOLG	KERFOLG	KERFOLG	WRK	WRK	WRK	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WRK	WRK	WRK
Page. A	41	44	44	44	43	44	45	45	46	47	45	45	46	47	47	46	46	47	48	49	48	48	48
DIN	NdF	DIN 333 A	DIN 333 A	DIN 333 A	DIN 333 A	DIN 333 A	DIN 333 R	DIN 333 B	DIN 1897	DIN 1897	DIN 1897	DIN 1897	NdF	DIN 1897	DIN 1897	DIN 1897	DIN 1897	DIN 1897	DIN 1897	NdF	DIN 8378	DIN 8374	DIN 8376
Shank	—	—	—	—	—	—	—	—	HA	HA	HA	HA	HB	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA
Coating	—	—	—	TiN	—	—	—	—	—	TiAlN	TiAlN	—	TiAlN	—	TiAlN	TiAlN	—	—	TiAlN	DURABLE	—	—	—
Coolant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
P < 500 N/mm²	20/30 5	40/60 3	25/35 3	30/40 3	20/30 3	20/30 3	20/30 3	20/30 3	70/80 3	70/80 3	25/40 3	20/30 3	25/40 3	70/80 3	70/80 3	25/40 3	20/30 3	70/80 3	70/80 3	85/115 3	20/30 5	20/30 5	20/30 5
P < 850 N/mm²	10/15 4	25/40 3	15/20 3	20/30 3	10/15 3	10/15 3	10/15 3	10/15 3	50/65 3	50/65 3	16/22 3	10/15 3	16/22 3	50/65 3	50/65 3	16/22 3	10/15 3	50/65 3	50/65 3	70/100 3	10/15 5	10/15 5	10/15 5
P < 1200 N/mm²	4/8 3	18/30 2	5/10 3	10/15 2	4/8 2	4/8 2	4/8 2	4/8 2	45/50 2	45/50 2	5/12 2	4/8 2	5/12 2	45/50 2	45/50 2	5/12 2	4/8 2	45/50 2	45/50 2	60/80 2	4/8 4	4/8 4	4/8 4
M < 600 N/mm²									18/25 3	18/25 3	5/10 3		5/10 3	18/25 3	18/25 3	5/10 3	5/10 3	18/25 3	18/25 3	40/60 2			
M < 850 N/mm²									15/20 2	15/20 2	5/10 3		5/10 3	15/20 2	15/20 2	5/10 3	5/10 3	15/20 2	15/20 2	25/40 2			
M DUPLEX																				25/35 1			
K < 240 HB	25/35 6	60/80 4	35/50 3	30/45 3	25/35 3	25/35 3	25/35 3	25/35 3	80/90 4	100/110 4	30/40 3	25/35 3	30/40 3	80/90 4	100/110 4	30/40 3	25/35 3	80/90 4	100/110 4	70/100 3	25/35 6	25/35 6	25/35 6
K < 300 HB	20/30 6	45/60 4	25/40 3	30/35 3	20/30 3	20/30 3	20/30 3	20/30 3	70/80 4	80/90 4	25/35 3	20/30 3	25/35 3	70/80 4	80/90 4	25/35 3	20/30 3	70/80 4	80/90 4	60/80 3	20/30 6	20/30 6	20/30 6
N < 10% Si		70/90 4	70/90 4	70/90 4	70/90 4	70/90 4	70/90 4	70/90 4	150/180 4	150/200 4		70/90 4		150/180 4	150/200 4		70/90 4	150/180 4	150/200 4	100/150 3	70/90 7	70/90 7	70/90 7
N > 10% Si		55/70 4	55/70 4	55/70 4	55/70 4	55/70 4	55/70 4	55/70 4	100/120 4	100/140 4		55/70 4		100/120 4	100/140 4		55/70 4	100/120 4	100/140 4	50/80 3	55/70 6	55/70 6	55/70 6
N Brass Copper		40/80 5	30/45 3	30/45 3	30/45 3	30/45 3	30/45 3	30/45 3	110/120 5	130/150 4	45/60 3	30/45 3	45/60 3	110/120 5	130/150 4	45/60 3	30/45 3	110/120 5	130/150 4		20/32 5	20/32 5	20/32 5
N Bronze >700 N mm²		35/40 4	28/35 3	28/35 3	28/35 3	28/35 3	28/35 3	28/35 3													25/30 4	25/30 4	25/30 4
S Ti6Al4V																				30/50 2			
S HTA																							
H < 45 HRC																				30/50 1			
H < 60 HRC																							
C Carbon Fiber																							

* See cutting parameters on page

Example 35/45 / 3 — Suggested cutting speed (m/mm) / n° suggested feed column - look at page A.7

Drill Ø mm	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
1	0,006	0,008	0,012	0,014	0,016	0,018	0,020	0,023	0,025
2	0,020	0,025	0,032	0,040	0,050	0,063	0,080	0,100	0,125
3	0,032	0,040	0,050	0,063	0,080	0,100	0,125	0,160	0,160
4	0,040	0,050	0,063	0,080	0,100	0,125	0,160	0,200	0,200
5	0,040	0,050	0,063	0,080	0,100	0,125	0,160	0,200	0,250
6	0,050	0,063	0,080	0,100	0,125	0,160	0,200	0,250	0,315
8	0,063	0,080	0,100	0,125	0,160	0,200	0,250	0,315	0,315
10	0,080	0,100	0,125	0,160	0,200	0,250	0,315	0,400	0,400
12	0,080	0,100	0,125	0,160	0,200	0,250	0,315	0,400	0,500
16	0,100	0,125	0,160	0,200	0,250	0,315	0,400	0,500	0,630
20	0,125	0,160	0,200	0,250	0,315	0,400	0,500	0,630	0,630
25	0,160	0,200	0,250	0,315	0,400	0,500	0,630	0,800	0,800
30	0,160	0,200	0,250	0,315	0,400	0,500	0,630	0,800	1,000
40	0,200	0,250	0,315	0,400	0,500	0,630	0,800	1,000	1,250
50	0,250	0,310	0,400	0,500	0,630	0,800	1,000	1,250	1,250

HOW TO SELECT A PRODUCT



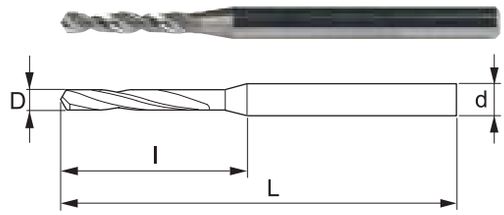
MICRO DRILLS REINFORCED SHANK

WRK

DIN 1899 A | HM | 118° | F/R | HA | UNI

ITEM: A0003

Geometry: Advanced flute geometry, designed for optimal chip evacuation on a broad range of materials
Point angle: 118°
Surface treatment: Bright
Application: Drill suited for machining on a wide range of materials.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○				●	●		○				

Tech. Code	GR01 Euro	D mm	d mm	l mm	L mm	
A00030,2	31,61	0.20	3	4	38	1
A00030,3	27,01	0.30	3	4	38	1
A00030,4	24,75	0.40	3	4	38	1
A00030,5	17,33	0.50	3	4	38	1
A00030,6	17,33	0.60	3	6	38	1
A00030,7	17,33	0.70	3	6	38	1
A00030,8	17,33	0.80	3	8	38	1
A00030,85	17,33	0.85	3	8	38	1
A00030,9	17,33	0.90	3	8	38	1
A00031	15,99	1.00	3	8	38	1
A00031,05	15,99	1.05	3	8	38	1
A00031,1	15,99	1.10	3	8	38	1
A00031,15	15,99	1.15	3	8	38	1

Tech. Code	GR01 Euro	D mm	d mm	l mm	L mm	
A00031,2	15,99	1.20	3	8	38	1
A00031,25	15,99	1.25	3	10	38	1
A00031,3	15,99	1.30	3	10	38	1
A00031,4	15,99	1.40	3	10	38	1
A00031,45	15,99	1.45	3	10	38	1
A00031,5	15,99	1.50	3	10	38	1
A00031,6	15,99	1.60	3	10	38	1
A00031,7	15,99	1.70	3	12	38	1
A00031,8	15,99	1.80	3	12	38	1
A00031,9	15,99	1.90	3	12	38	1
A00032	15,99	2.00	3	12	38	1
A00032,1	15,99	2.10	3	12	38	1
A00032,2	15,99	2.20	3	12	38	1

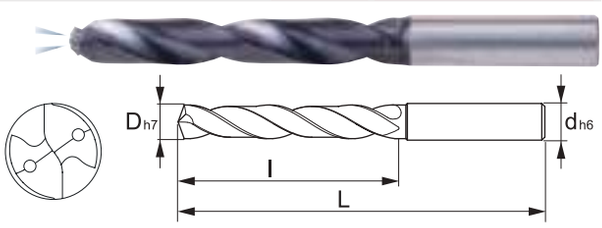
DRILLS REINFORCED SHANK 5XD - COOLANT HOLES

WRK SNAKE

DIN 6537 | HM | 140° | 5xD | DEVIL | HA HB | | UNI

ITEM: A0007

Geometry: Advanced flute design for high performance
Point angle: 140°
Surface treatment: Devil
Application: Short or long chip materials machining. Recommended for carbon steel up to 1100 N/mm² and austenitic stainless steel.



On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0007....) Weldon shank (A0007....W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○	○			○		○		○			

Tech. Code	GR01 Euro	D mm	d mm	l mm	L mm	
A00073	59,92	3.00	6	28	66	1
A00073,1	59,92	3.10	6	28	66	1
A00073,2	59,92	3.20	6	28	66	1
A00073,3	59,92	3.30	6	28	66	1
A00073,4	59,92	3.40	6	28	66	1
A00073,5	59,92	3.50	6	28	66	1
A00073,6	59,92	3.60	6	28	66	1
A00073,7	59,92	3.70	6	28	66	1
A00073,8	59,92	3.80	6	36	74	1
A00073,9	59,92	3.90	6	36	74	1
A00074	59,92	4.00	6	36	74	1
A00074,1	59,92	4.10	6	36	74	1
A00074,2	59,92	4.20	6	36	74	1
A00074,3	59,92	4.30	6	36	74	1
A00074,4	59,92	4.40	6	36	74	1
A00074,5	59,92	4.50	6	36	74	1
A00074,6	59,92	4.60	6	36	74	1
A00074,7	59,92	4.70	6	36	74	1
A00074,8	59,92	4.80	6	44	82	1
A00074,9	59,92	4.90	6	44	82	1
A00075	59,92	5.00	6	44	82	1
A00075,1	59,92	5.10	6	44	82	1
A00075,2	59,92	5.20	6	44	82	1
A00075,3	59,92	5.30	6	44	82	1
A00075,4	59,92	5.40	6	44	82	1
A00075,5	59,92	5.50	6	44	82	1
A00075,6	59,92	5.60	6	44	82	1
A00075,7	59,92	5.70	6	44	82	1
A00075,8	59,92	5.80	6	44	82	1
A00075,9	59,92	5.90	6	44	82	1
A00076	59,92	6.00	6	44	82	1
A00076,1	77,98	6.10	8	53	91	1
A00076,2	77,98	6.20	8	53	91	1
A00076,3	77,98	6.30	8	53	91	1
A00076,4	77,98	6.40	8	53	91	1
A00076,5	77,98	6.50	8	53	91	1

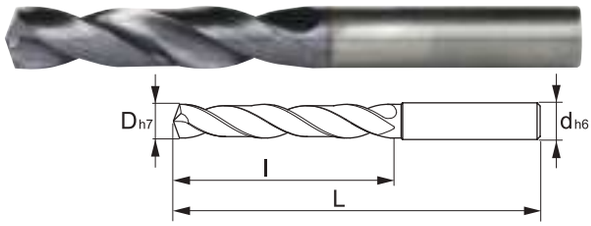
Tech. Code	GR01 Euro	D mm	d mm	l mm	L mm	
A00076,6	77,98	6.60	8	53	91	1
A00076,7	77,98	6.70	8	53	91	1
A00076,8	77,98	6.80	8	53	91	1
A00076,9	77,98	6.90	8	53	91	1
A00077	77,98	7.00	8	53	91	1
A00077,3	77,98	7.30	8	53	91	1
A00077,4	77,98	7.40	8	53	91	1
A00077,5	77,98	7.50	8	53	91	1
A00077,7	77,98	7.70	8	53	91	1
A00077,8	77,98	7.80	8	53	91	1
A00077,9	77,98	7.90	8	53	91	1
A00078	77,98	8.00	8	53	91	1
A00078,1	91,61	8.10	10	61	103	1
A00078,2	91,61	8.20	10	61	103	1
A00078,3	91,61	8.30	10	61	103	1
A00078,5	91,61	8.50	10	61	103	1
A00078,6	91,61	8.60	10	61	103	1
A00078,7	91,61	8.70	10	61	103	1
A00078,8	91,61	8.80	10	61	103	1
A00078,9	91,61	8.90	10	61	103	1
A00079	91,61	9.00	10	61	103	1
A00079,3	91,61	9.30	10	61	103	1
A00079,4	91,61	9.40	10	61	103	1
A00079,5	91,61	9.50	10	61	103	1
A00079,7	91,61	9.70	10	61	103	1
A00079,8	91,61	9.80	10	61	103	1
A00079,9	91,61	9.90	10	61	103	1
A000710	91,61	10.00	10	61	103	1
A000710,2	137,78	10.20	12	71	118	1
A000710,5	137,78	10.50	12	71	118	1
A000711	137,78	11.00	12	71	118	1
A000711,5	137,78	11.50	12	71	118	1
A000712	137,78	12.00	12	71	118	1
A000712,5	164,07	12.50	14	77	124	1
A000713	164,07	13.00	14	77	124	1

Indivisible package | Suggested retail package - Unit price

DRILLS REINFORCED SHANK 3XD

WRK SNAKE

DIN 6537 | HM | 140° | 3xD | DEVIL | HA HB | UNI



ITEM: A0005

Geometry — Advanced flute design for high performance

Point angle — 140°
Surface treatment — Devil
Application — Machining of short or long chip materials. Recommended for machining carbon steel up to 1100 N/mm² and austenitic stainless steel.

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0005....) Weldon shank (A0005...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○	○			○			○		○			

Tech. Code	GR01 Euro	D mm	d mm	l mm	L mm	
A00053	39,26	3.00	6	20	62	1
A00053,1	39,26	3.10	6	20	62	1
A00053,2	39,26	3.20	6	20	62	1
A00053,3	39,26	3.30	6	20	62	1
A00053,4	39,26	3.40	6	20	62	1
A00053,5	39,26	3.50	6	20	62	1
A00053,6	39,26	3.60	6	20	62	1
A00053,7	39,26	3.70	6	20	62	1
A00053,8	39,26	3.80	6	24	66	1
A00053,9	39,26	3.90	6	24	66	1
A00054	39,26	4.00	6	24	66	1
A00054,1	39,26	4.10	6	24	66	1
A00054,2	39,26	4.20	6	24	66	1
A00054,3	39,26	4.30	6	24	66	1
A00054,4	39,26	4.40	6	24	66	1
A00054,5	39,26	4.50	6	24	66	1
A00054,6	39,26	4.60	6	24	66	1
A00054,7	39,26	4.70	6	24	66	1
A00054,8	39,26	4.80	6	28	66	1
A00054,9	39,26	4.90	6	28	66	1
A00055	39,26	5.00	6	28	66	1
A00055,1	39,26	5.10	6	28	66	1
A00055,2	39,26	5.20	6	28	66	1
A00055,3	39,26	5.30	6	28	66	1
A00055,4	39,26	5.40	6	28	66	1
A00055,5	39,26	5.50	6	28	66	1
A00055,6	39,26	5.60	6	28	66	1
A00055,7	39,26	5.70	6	28	66	1

Tech. Code	GR01 Euro	D mm	d mm	l mm	L mm	
A00055,8	39,26	5.80	6	28	66	1
A00055,9	39,26	5.90	6	28	66	1
A00056	39,26	6.00	6	28	66	1
A00056,1	42,61	6.10	8	34	79	1
A00056,2	42,61	6.20	8	34	79	1
A00056,3	43,04	6.30	8	34	79	1
A00056,4	43,04	6.40	8	34	79	1
A00056,5	43,04	6.50	8	34	79	1
A00056,8	43,04	6.80	8	34	79	1
A00057	43,04	7.00	8	34	79	1
A00057,5	43,04	7.50	8	41	79	1
A00057,8	43,04	7.80	8	41	79	1
A00058	43,04	8.00	8	41	79	1
A00058,2	49,53	8.20	10	47	89	1
A00058,5	52,21	8.50	10	47	89	1
A00058,7	52,21	8.70	10	47	89	1
A00058,9	52,21	8.90	10	47	89	1
A00059	52,21	9.00	10	47	89	1
A00059,5	52,21	9.50	10	47	89	1
A00059,8	52,21	9.80	10	47	89	1
A000510	52,21	10.00	10	47	89	1
A000510,2	75,18	10.20	12	55	102	1
A000510,5	75,18	10.50	12	55	102	1
A000511	75,18	11.00	12	55	102	1
A000511,5	75,18	11.50	12	55	102	1
A000512	75,18	12.00	12	55	102	1
A000512,5	95,39	12.50	14	60	107	1
A000513	95,39	13.00	14	60	107	1

Related products

EROGLU **POWER CHUCKS DIN 69871 SK FORMA AD+B**

Tech. Code	SK	D mm	L mm
C002642090	40	20	90
C0026432100		32	100
C002652070	50	20	70
C002653295		32	95

The products are available in chapter C

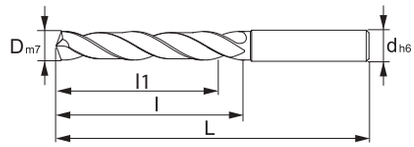
Indivisible package — Suggested retail package - Unit price

DRILLS REINFORCED SHANK 3XD

KERFOLG HD

DIN 6537 | HM | 140° | 3xD | DEVIL | HA HB | UNI

ITEM: A0010



Geometry	Advanced flute design, web thinning, with special sharpening, concave cutting-edge geometry, self-centering point geometry
Point angle	140°
Surface treatment	Devil
Application	Machining of long and short chip materials such as structural and case hardening steel, ferritic cast iron, heat treated steel and alloy steel with R ≤ 1,200 N/mm², as well as carbon steel, bronze, cast iron and AISi alloys with high silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●	○	○	○	○	○	○	●	○

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0010....) Weldon shank (A0010....W)

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00101	37,90	1.00	4	5	45	4	1
A00101,5	37,90	1.50	4	7.5	50	5	1
A00102	42,00	2,00	6	14	50	9	1
A00102,1	42,00	2.10	6	14	55	9	1
A00102,2	42,00	2.20	6	14	55	9	1
A00102,3	42,00	2.30	6	14	55	9	1
A00102,4	42,00	2.40	6	14	55	9	1
A00102,5	42,00	2.50	6	14	55	9	1
A00102,6	42,00	2.60	6	14	55	9	1
A00102,7	42,00	2.70	6	14	55	9	1
A00102,8	42,00	2,80	6	14	55	9	1
A00102,9	42,00	2,90	6	14	55	9	1
A00103	52,02	3.00	6	20	62	14	1
A00103,1	52,02	3.10	6	20	62	14	1
A00103,2	52,02	3.20	6	20	62	14	1
A00103,3	52,02	3.30	6	20	62	14	1
A00103,4	52,02	3.40	6	20	62	14	1
A00103,5	52,02	3.50	6	20	62	14	1
A00103,6	52,02	3.60	6	20	62	14	1
A00103,7	52,02	3.70	6	20	66	14	1
A00103,8	52,02	3.80	6	24	66	17	1
A00103,9	52,02	3.90	6	24	66	17	1
A00104	52,02	4.00	6	24	66	17	1
A00104,1	52,02	4.10	6	24	66	17	1
A00104,2	52,02	4.20	6	24	66	17	1
A00104,3	52,02	4.30	6	24	66	17	1
A00104,4	52,02	4.40	6	24	66	17	1
A00104,5	52,02	4.50	6	24	66	17	1
A00104,6	52,02	4.60	6	24	66	17	1
A00104,65	52,02	4,65	6	24	66	17	1
A00104,7	52,02	4.70	6	28	66	17	1
A00104,8	52,02	4.80	6	28	66	20	1
A00104,9	52,02	4.90	6	28	66	20	1
A00105	52,02	5.00	6	28	66	20	1
A00105,1	52,02	5.10	6	28	66	20	1
A00105,2	52,02	5.20	6	28	66	20	1
A00105,3	52,02	5.30	6	28	66	20	1
A00105,4	52,02	5.40	6	28	66	20	1
A00105,5	52,02	5.50	6	28	66	20	1
A00105,55	52,02	5,55	6	28	66	20	1
A00105,6	52,02	5.60	6	28	66	20	1
A00105,7	52,02	5.70	6	28	66	20	1
A00105,8	52,02	5.80	6	28	66	20	1
A00105,9	52,02	5.90	6	28	66	20	1
A00106	52,02	6.00	6	28	66	20	1
A00106,1	54,92	6.10	8	34	79	24	1
A00106,2	54,92	6.20	8	34	79	24	1
A00106,3	54,92	6.30	8	34	79	24	1
A00106,4	54,92	6.40	8	34	79	24	1
A00106,5	54,92	6.50	8	34	79	24	1

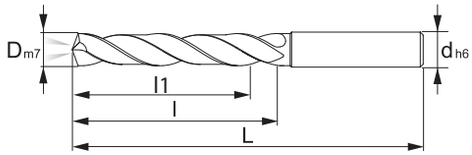
Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00106,6	54,92	6.60	8	34	79	24	1
A00106,7	54,92	6.70	8	34	79	24	1
A00106,8	54,92	6.80	8	34	79	24	1
A00106,9	54,92	6.90	8	34	79	24	1
A00107	54,92	7.00	8	34	79	24	1
A00107,1	54,92	7.10	8	41	79	29	1
A00107,2	54,92	7.20	8	41	79	29	1
A00107,3	54,92	7.30	8	41	79	29	1
A00107,4	54,92	7.40	8	41	79	29	1
A00107,5	54,92	7.50	8	41	79	29	1
A00107,6	54,92	7.60	8	41	79	29	1
A00107,7	54,92	7.70	8	41	79	29	1
A00107,8	54,92	7.80	8	41	79	29	1
A00107,9	54,92	7.90	8	41	79	29	1
A00108	54,92	8.00	8	41	79	29	1
A00108,1	58,77	8.10	10	47	89	35	1
A00108,2	58,77	8.20	10	47	89	35	1
A00108,3	58,77	8.30	10	47	89	35	1
A00108,4	58,77	8.40	10	47	89	35	1
A00108,5	58,77	8.50	10	47	89	35	1
A00108,6	58,77	8.60	10	47	89	35	1
A00108,7	58,77	8.70	10	47	89	35	1
A00108,8	58,77	8.80	10	47	89	35	1
A00108,9	58,77	8.90	10	47	89	35	1
A00109	58,77	9.00	10	47	89	35	1
A00109,1	58,77	9.10	10	47	89	35	1
A00109,2	58,77	9.20	10	47	89	35	1
A00109,3	58,77	9.30	10	47	89	35	1
A00109,4	58,77	9.40	10	47	89	35	1
A00109,5	58,77	9.50	10	47	89	35	1
A00109,6	58,77	9.60	10	47	89	35	1
A00109,7	58,77	9.70	10	47	89	35	1
A00109,8	58,77	9.80	10	47	89	35	1
A00109,9	58,77	9.90	10	47	89	35	1
A001010	58,77	10.00	10	47	89	35	1
A001010,2	87,98	10.20	12	55	102	40	1
A001010,5	87,98	10.50	12	55	102	40	1
A001010,8	87,98	10.80	12	55	102	40	1
A001011	87,98	11.00	12	55	102	40	1
A001011,2	87,98	11.20	12	55	102	40	1
A001011,5	87,98	11.50	12	55	102	40	1
A001012	87,98	12.00	12	55	102	40	1
A001012,5	116,76	12.50	14	60	107	43	1
A001013	116,76	13.00	14	60	107	43	1
A001013,5	116,76	13.50	14	60	107	43	1
A001014	116,76	14.00	14	60	107	43	1
A001014,5	151,43	14.50	16	65	115	45	1
A001015	151,43	15.00	16	65	115	45	1
A001015,5	151,43	15.50	16	65	115	45	1
A001016	151,43	16.00	16	65	115	45	1

Indivisible package Suggested retail package - Unit price

DRILLS REINFORCED SHANK 3XD - COOLANT HOLES

KERFOLG HD

DIN 6537 | HM | 140° | 3xD | DEVIL | HA HB | UNI



ITEM: A0020

Geometry	Advanced flute design, web thinning, with special sharpening, concave cutting-edge geometry, self-centering point geometry
Point angle	140°
Surface treatment	Devil
Application	Machining of long and short chip materials such as structural and case hardening steel, ferritic cast iron, heat treated steel and alloy steel with R ≤ 1200N/mm², as well as carbon steel, bronze, cast iron and AISi alloys with high silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●	○	○	○	○	○	○	●	○

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0020....) Weldon shank (A0020....W)

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00203	55,70	3.00	6	20	62	14	1
A00203,1	55,70	3,10	6	20	62	14	1
A00203,2	55,70	3,20	6	20	62	14	1
A00203,3	55,70	3.30	6	20	62	14	1
A00203,4	55,70	3,40	6	20	62	14	1
A00203,5	55,70	3.50	6	20	62	14	1
A00203,7	55,70	3,70	6	20	62	14	1
A00203,8	55,70	3,80	6	24	66	17	1
A00203,9	55,70	3,90	6	24	66	17	1
A00204	58,13	4.00	6	24	66	17	1
A00204,1	60,07	4,10	6	24	66	17	1
A00204,2	58,13	4.20	6	24	66	17	1
A00204,3	60,07	4,30	6	24	66	17	1
A00204,4	60,07	4,40	6	24	66	17	1
A00204,5	58,13	4.50	6	24	66	17	1
A00204,6	60,07	4,60	6	24	66	17	1
A00204,7	60,07	4,70	6	24	66	17	1
A00204,8	58,13	4,80	6	24	66	20	1
A00204,9	60,07	4,90	6	24	66	20	1
A00205	58,13	5.00	6	28	66	20	1
A00205,1	58,13	5,10	6	28	66	20	1
A00205,2	58,13	5,20	6	28	66	20	1
A00205,3	58,13	5,30	6	28	66	20	1
A00205,5	58,13	5.50	6	28	66	20	1
A00205,6	60,07	5,60	6	28	66	20	1
A00205,7	60,13	5,70	6	28	66	20	1
A00205,8	60,07	5,80	6	28	66	20	1
A00205,9	60,07	5,90	6	28	66	20	1
A00206	58,13	6.00	6	28	66	20	1
A00206,1	79,07	6,10	8	34	79	24	1
A00206,2	79,07	6.20	8	34	79	24	1
A00206,3	79,07	6,30	8	34	79	24	1
A00206,4	79,07	6,40	8	34	79	24	1
A00206,5	79,07	6.50	8	34	79	24	1
A00206,8	79,07	6.80	8	34	79	24	1
A00206,9	79,07	6,90	8	34	79	24	1
A00207	79,07	7.00	8	34	79	24	1
A00207,1	79,07	7,10	8	34	79	29	1
A00207,2	79,07	7,20	8	34	79	29	1
A00207,3	73,10	7,30	8	34	79	29	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00207,4	79,07	7,40	8	41	79	29	1
A00207,5	79,07	7.50	8	41	79	29	1
A00207,7	79,07	7,70	8	41	79	29	1
A00207,8	79,07	7,80	8	41	79	29	1
A00207,9	79,07	7,90	8	41	79	29	1
A00208	79,07	8.00	8	41	79	29	1
A00208,1	89,15	8,10	10	47	89	35	1
A00208,2	89,15	8,20	10	47	89	35	1
A00208,3	89,15	8,30	10	47	89	35	1
A00208,4	89,15	8,40	10	47	89	35	1
A00208,5	89,15	8.50	10	47	89	35	1
A00208,6	89,15	8.60	10	47	89	35	1
A00208,7	89,15	8,70	10	47	89	35	1
A00208,8	89,15	8.80	10	47	89	35	1
A00209	89,15	9.00	10	47	89	35	1
A00209,2	87,42	9,20	10	47	89	35	1
A00209,3	89,15	9,30	10	47	89	35	1
A00209,5	89,15	9.50	10	47	89	35	1
A00209,7	89,22	9,70	10	47	89	35	1
A00209,8	89,15	9.80	10	47	89	35	1
A002010	89,15	10.00	10	47	89	35	1
A002010,2	127,34	10.20	12	55	102	40	1
A002010,5	127,34	10.50	12	55	102	40	1
A002010,8	127,34	10,80	12	55	102	40	1
A002011	127,34	11.00	12	55	102	40	1
A002011,2	127,34	11,20	12	55	102	40	1
A002011,5	127,34	11.50	12	55	102	40	1
A002011,8	127,34	11,80	12	55	102	40	1
A002012	127,34	12.00	12	55	102	40	1
A002012,2	166,20	12,20	14	60	107	43	1
A002012,5	166,17	12.50	14	60	107	43	1
A002012,8	166,17	12,80	14	60	107	43	1
A002013	166,17	13.00	14	60	107	43	1
A002013,5	166,17	13.50	14	60	107	43	1
A002013,8	166,17	13,80	14	60	107	43	1
A002014	166,17	14.00	14	60	107	43	1
A002014,5	187,34	14,50	14	60	107	43	1
A002015	187,34	15,00	16	65	115	45	1
A002015,5	187,34	15,50	16	65	115	45	1
A002016	187,34	16,00	16	65	115	45	1

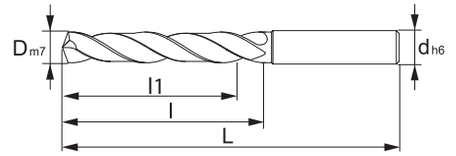
Indivisible package Suggested retail package - Unit price

DRILLS REINFORCED SHANK 5XD

KERFOLG HD

DIN 6537 | HM | 140° | 5xD | DEVIL | HA HB | UNI

ITEM: A0030



Geometry	Advanced flute design, web thinning, with concave cutting-edge geometry, self-centering point geometry
Point angle	140°
Surface treatment	Devil
Application	Machining of long and short chip materials such as structural and case hardening steel, ferritic cast iron, heat treated steel and alloy steel with R ≤ 1200N/mm², as well as carbon steel, bronze, cast iron and AISi alloys with high silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●	○	○	○	○	○	○	●	○

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0030....) Weldon shank (A0030....W)

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00303	52,72	3.00	6	28	66	23	1
A00303,2	52,72	3.20	6	28	66	23	1
A00303,3	52,72	3.30	6	28	66	23	1
A00303,4	52,72	3.40	6	28	66	23	1
A00303,5	52,72	3.50	6	28	66	23	1
A00304	52,72	4.00	6	36	74	29	1
A00304,2	52,72	4.20	6	36	74	29	1
A00304,3	52,72	4.30	6	36	74	29	1
A00304,5	52,72	4.50	6	36	74	29	1
A00304,6	52,72	4.60	6	36	74	29	1
A00304,7	52,72	4.70	6	36	74	29	1
A00305	52,72	5.00	6	44	82	35	1
A00305,1	52,72	5.10	6	44	82	35	1
A00305,2	52,72	5.20	6	44	82	35	1
A00305,3	52,72	5.30	6	44	82	35	1
A00305,5	52,72	5.50	6	44	82	35	1
A00305,7	52,72	5.70	6	44	82	35	1
A00306	52,72	6.00	6	44	82	35	1
A00306,2	55,45	6.20	8	53	91	43	1
A00306,4	55,45	6.40	8	53	91	43	1
A00306,5	55,45	6.50	8	53	91	43	1
A00306,7	55,45	6.70	8	53	91	43	1
A00306,8	55,45	6.80	8	53	91	43	1
A00306,9	55,45	6.90	8	53	91	43	1
A00307	55,45	7.00	8	53	91	43	1
A00307,1	55,45	7.10	8	53	91	43	1
A00307,2	55,45	7.20	8	53	91	43	1
A00307,5	55,45	7.50	8	53	91	43	1
A00307,7	55,45	7.70	8	53	91	43	1
A00307,8	55,45	7.80	8	53	91	43	1
A00307,9	55,45	7.90	8	53	91	43	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00308	55,45	8.00	8	53	91	43	1
A00308,4	60,13	8.40	10	61	103	49	1
A00308,5	60,13	8.50	10	61	103	49	1
A00308,6	60,13	8.60	10	61	103	49	1
A00308,7	60,13	8.70	10	61	103	49	1
A00308,8	60,13	8.80	10	61	103	49	1
A00308,9	60,13	8.90	10	61	103	49	1
A00309	60,13	9.00	10	61	103	49	1
A00309,5	60,13	9.50	10	61	103	49	1
A00309,7	60,13	9.70	10	61	103	49	1
A00309,8	60,13	9.80	10	61	103	49	1
A003010	60,13	10.00	10	61	103	49	1
A003010,2	89,06	10.20	12	71	118	56	1
A003010,5	89,06	10.50	12	71	118	56	1
A003011	89,06	11.00	12	71	118	56	1
A003011,5	89,06	11.50	12	71	118	56	1
A003012	89,06	12.00	12	71	118	56	1
A003012,5	117,57	12.50	14	77	124	60	1
A003013	117,57	13.00	14	77	124	60	1
A003013,5	117,57	13.50	14	77	124	60	1
A003014	117,57	14.00	14	77	124	60	1
A003014,5	147,29	14.50	16	83	133	63	1
A003015	147,29	15.00	16	83	133	63	1
A003015,5	147,29	15.50	16	83	133	63	1
A003016	147,29	16.00	16	83	133	63	1
A003016,5	235,07	16.50	18	93	143	71	1
A003017	235,07	17.00	18	93	143	71	1
A003017,5	235,07	17.50	18	93	143	71	1
A003018	235,07	18.00	18	93	143	71	1
A003020	264,58	20.00	20	101	153	77	1

Related products

KERFOLG HYDRAULIC CHUCKS STRONG LOCKING DIN 69871 SK AD+B

Tech. Code	SK	D mm	L mm
C0032420064	40	20	64.5
C0032532081	50	32	81

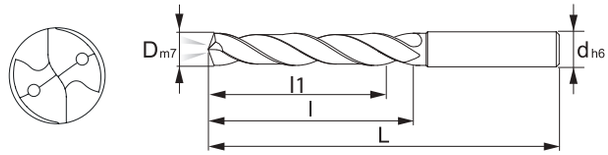
The products are available in chapter C

Indivisible package | Suggested retail package - Unit price

DRILLS REINFORCED SHANK 5XD - COOLANT HOLES

KERFOLG HD

DIN 6537 | HM | 140° | 5xD | DEVIL | HA HB | UNI



ITEM: A0040

Geometry	Advanced flute design, web thinning, with concave cutting-edge geometry, self-centering point geometry
Point angle	140°
Surface treatment	Devil
Application	Machining of long and short chip materials such as structural and case hardening steel, ferritic cast iron, heat treated steel and alloy steel with R ≤ 1,200 N/mm², as well as carbon steel, bronze, cast iron and AISi alloys with high silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●	○	○	○	○	○	○	●	○

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0040....) Weldon shank (A0040....W)

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00401	64,70	1.00	4	7	45	6	1
A00401,1	64,70	1.10	4	7,5	45	6	1
A00401,2	64,70	1.20	4	8,5	45	7	1
A00401,3	64,70	1.30	4	9	45	7	1
A00401,4	64,70	1.40	4	10	45	8	1
A00401,5	64,70	1.50	4	10,5	50	8	1
A00401,6	64,70	1.60	4	11	50	9	1
A00401,7	64,70	1.70	4	12	50	9	1
A00401,8	64,70	1.80	4	12,5	50	10	1
A00401,85	90,70	1.85	4	12,5	50	10	1
A00401,9	64,70	1.90	4	13,5	50	10	1
A00402	64,70	2.00	4	14	55	11	1
A00402,1	64,70	2.10	4	14,5	55	12	1
A00402,2	64,70	2.20	4	15,5	55	12	1
A00402,3	64,70	2.30	4	16	55	13	1
A00402,4	64,70	2.40	4	17	55	13	1
A00402,5	64,70	2.50	4	17,5	55	14	1
A00402,6	64,70	2.60	4	18	55	14	1
A00402,7	64,70	2.70	4	19	55	15	1
A00402,8	64,70	2.80	4	19.5	55	15	1
A00402,9	64,70	2.90	4	20.5	55	16	1
A00403	74,66	3.00	6	28	66	23	1
A00403,1	74,66	3.10	6	28	66	23	1
A00403,2	74,66	3.20	6	28	66	23	1
A00403,3	74,66	3.30	6	28	66	23	1
A00403,4	74,66	3.40	6	28	66	23	1
A00403,5	74,66	3.50	6	28	66	23	1
A00403,6	74,66	3.60	6	28	66	23	1
A00403,7	74,66	3.70	6	28	66	23	1
A00403,8	74,66	3.80	6	36	74	29	1
A00403,9	74,66	3.90	6	36	74	29	1
A00404,0	80,33	4.00	6	36	74	29	1
A00404,1	80,33	4.10	6	36	74	29	1
A00404,2	80,33	4.20	6	36	74	29	1
A00404,3	80,33	4.30	6	36	74	29	1
A00404,4	80,33	4.40	6	36	74	29	1
A00404,5	80,33	4.50	6	36	74	29	1
A00404,6	80,33	4.60	6	36	74	29	1
A00404,7	80,33	4.70	6	36	74	29	1
A00404,8	80,33	4.80	6	44	82	35	1
A00404,9	80,33	4.90	6	44	82	35	1
A00405	80,33	5.00	6	44	82	35	1
A00405,1	80,33	5.10	6	44	82	35	1
A00405,2	80,33	5.20	6	44	82	35	1
A00405,3	80,33	5.30	6	44	82	35	1
A00405,4	80,33	5.40	6	44	82	35	1
A00405,5	80,33	5.50	6	44	82	35	1
A00405,6	80,33	5.60	6	44	82	35	1
A00405,7	80,33	5.70	6	44	82	35	1
A00405,8	80,33	5.80	6	44	82	35	1
A00405,9	80,33	5.90	6	44	82	35	1
A00406	80,33	6.00	6	44	82	35	1
A00406,1	88,21	6.10	8	44	82	43	1
A00406,2	88,21	6.20	8	44	82	43	1
A00406,3	88,21	6.30	8	44	82	43	1
A00406,4	88,21	6.40	8	44	82	43	1
A00406,5	88,21	6.50	8	53	91	43	1
A00406,6	88,21	6.60	8	53	91	43	1
A00406,7	88,21	6.70	8	53	91	43	1
A00406,8	88,21	6.80	8	53	91	43	1
A00406,9	88,21	6.90	8	53	91	43	1
A00407	88,21	7.00	8	53	91	43	1
A00407,1	88,21	7.10	8	53	91	43	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00407,2	88,21	7.20	8	53	91	43	1
A00407,3	88,21	7.30	8	53	91	43	1
A00407,4	88,21	7.40	8	53	91	43	1
A00407,5	88,21	7.50	8	53	91	43	1
A00407,6	88,21	7.60	8	53	91	43	1
A00407,7	88,21	7.70	8	53	91	43	1
A00407,8	88,21	7.80	8	53	91	43	1
A00407,9	88,21	7.90	8	53	91	43	1
A00408	88,21	8.00	8	53	91	43	1
A00408,1	102,25	8.10	10	61	91	49	1
A00408,2	102,25	8.20	10	61	91	49	1
A00408,3	102,25	8.30	10	61	91	49	1
A00408,4	102,25	8.40	10	61	91	49	1
A00408,5	102,25	8.50	10	61	103	49	1
A00408,6	102,25	8.60	10	61	103	49	1
A00408,7	102,25	8.70	10	61	103	49	1
A00408,8	102,25	8.80	10	61	103	49	1
A00408,9	102,25	8.90	10	61	103	49	1
A00409	102,25	9.00	10	61	103	49	1
A00409,1	102,25	9.10	10	61	103	49	1
A00409,2	102,25	9.20	10	61	103	49	1
A00409,3	102,25	9.30	10	61	103	49	1
A00409,4	102,25	9.40	10	61	103	49	1
A00409,5	102,25	9.50	10	61	103	49	1
A00409,6	102,25	9.60	10	61	103	49	1
A00409,7	102,25	9.70	10	61	103	49	1
A00409,8	102,25	9.80	10	61	103	49	1
A00409,9	102,25	9.90	10	61	103	49	1
A004010	102,25	10.00	10	61	103	49	1
A004010,2	148,67	10.20	12	71	118	56	1
A004010,3	148,67	10.30	12	71	118	56	1
A004010,4	148,67	10.40	12	71	118	56	1
A004010,5	148,67	10.50	12	71	118	56	1
A004011	148,67	11.00	12	71	118	56	1
A004011,2	148,67	11.20	12	71	118	56	1
A004011,3	148,67	11.30	12	71	118	56	1
A004011,4	148,67	11.40	12	71	118	56	1
A004011,5	148,67	11.50	12	71	118	56	1
A004011,8	148,67	11.80	12	71	118	56	1
A004012	148,67	12.00	12	71	118	56	1
A004012,2	199,87	12.20	14	77	124	60	1
A004012,5	199,87	12.50	14	77	124	60	1
A004012,8	199,87	12.80	14	77	124	60	1
A004012,9	280,59	12.90	14	77	124	60	1
A004013	199,87	13.00	14	77	124	60	1
A004013,1	199,87	13.10	14	77	124	60	1
A004013,3	186,48	13.30	14	77	124	60	1
A004013,5	199,87	13.50	14	77	124	60	1
A004014	199,87	14.00	14	77	124	60	1
A004014,5	226,67	14.50	16	83	133	63	1
A004014,8	211,66	14.80	16	83	133	63	1
A004015	230,67	15.00	16	83	133	63	1
A004015,1	230,67	15.10	16	83	133	63	1
A004015,3	230,67	15.30	16	83	133	63	1
A004015,5	230,67	15.50	16	83	133	63	1
A004016	230,67	16.00	16	83	133	63	1
A004016,5	343,15	16.50	18	93	143	71	1
A004017	368,52	17.00	18	93	143	71	1
A004017,5	368,52	17.50	18	93	143	71	1
A004018	355,78	18.00	18	93	143	71	1
A004018,5	387,79	18.50	20	101	153	77	1
A004019	387,79	19.00	20	101	153	77	1
A004020	387,79	20.00	20	101	153	77	1

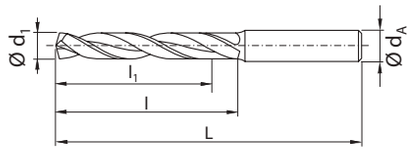
Indivisible package Suggested retail package - Unit price

DRILLS REINFORCED SHANK 5XD Z3 - COOLANT HOLES

KERFOLG

DIN 6537 | HM | 135° | 5xD | DEVIL | HA HB

ITEM: A0045



Geometry	Advanced helix, concave, geometry of the cutting edges, self-centering sharpening
Point angle	135°
Surface treatment	Devil
Application	Machining of long and short chipping materials, such as:construction and case hardening steels, cast steel, tempering steel and alloy steel with R ≤ 1200 N/mm² , as well as for carbon steel and cast.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					●	●								

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0045....) Weldon shank (A0045....W)

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A004503,0	125,76	3,00	6	28	66	23	1
A004503,3	125,76	3,30	6	28	66	23	1
A004503,5	125,76	3,50	6	28	66	23	1
A004503,7	125,76	3,70	6	28	66	23	1
A004503,8	125,25	3,80	6	36	74	29	1
A004504,0	124,22	4,00	6	36	74	29	1
A004504,2	124,22	4,20	6	36	74	29	1
A004504,5	124,22	4,50	6	44	82	29	1
A004504,8	124,22	4,80	6	44	82	35	1
A004505,0	124,22	5,00	6	44	82	35	1
A004505,5	124,22	5,50	6	44	82	35	1
A004505,8	124,22	5,80	6	44	82	35	1
A004506,0	124,22	6,00	6	44	82	35	1
A004506,5	164,18	6,50	8	53	91	43	1
A004506,8	164,18	6,80	8	53	91	43	1
A004507,0	164,18	7,00	8	53	91	43	1

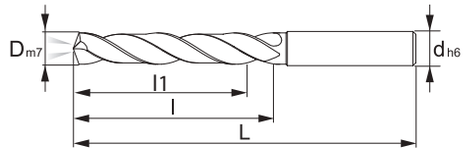
Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A004507,5	164,18	7,50	8	53	91	43	1
A004507,8	(164,18)	7,80	8	53	91	43	1
A004508,0	164,18	8,00	8	53	91	43	1
A004508,5	199,92	8,50	10	61	103	51	1
A004508,8	199,92	8,80	10	61	103	51	1
A004509,0	199,92	9,00	10	61	103	51	1
A004509,5	199,92	9,50	10	61	103	51	1
A004509,8	199,92	9,80	10	61	103	51	1
A004510,0	199,92	10,00	10	61	103	51	1
A004510,2	277,69	10,20	12	71	118	61	1
A004510,5	277,69	10,50	12	71	118	61	1
A004510,8	277,69	10,80	12	71	118	61	1
A004511,0	277,69	11,00	12	71	118	61	1
A004511,5	277,69	11,50	12	71	118	61	1
A004511,8	277,69	11,80	12	71	118	61	1
A004512,0	277,69	12,00	12	71	118	61	1

DRILLS REINFORCED SHANK 7XD - COOLANT HOLES

KERFOLG HD

DIN 6537 | HM | 135° | 7xD | DEVIL | HA HB | UNI

ITEM: A0050



Geometry	Advanced flute design, web thinning, with concave cutting-edge geometry, self-centering point geometry
Point angle	135°
Surface treatment	Devil
Application	Machining of long and short chip materials such as structural and case hardening steel, ferritic cast iron, heat treated steel and alloy steel with R ≤ 1200 N/mm², as well as carbon steel, bronze, cast iron and AISi alloys with high silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●	○	○	○	○	○	○	●	○

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0050....) Weldon shank (A0050....W)

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00504	138,00	4.00	6	43	81	36	1
A00504,1	138,00	4.10	6	43	81	36	1
A00504,2	138,00	4.20	6	43	81	36	1
A00504,3	138,00	4.30	6	43	81	36	1
A00504,5	138,00	4.50	6	43	81	36	1
A00504,6	138,00	4.60	6	43	81	36	1
A00504,7	138,00	4.70	6	43	81	36	1
A00504,8	138,00	4.80	6	57	95	48	1
A00504,9	138,00	4.90	6	57	95	48	1
A00505	138,00	5.00	6	57	95	48	1
A00505,1	138,00	5.10	6	57	95	48	1
A00505,2	138,00	5.20	6	57	95	48	1
A00505,3	138,00	5.30	6	57	95	48	1
A00505,5	138,00	5.50	6	57	95	48	1
A00505,8	138,00	5.80	6	57	95	48	1
A00505,9	138,00	5.90	6	57	95	48	1
A00506	138,00	6.00	6	57	95	48	1
A00506,1	171,86	6,10	8	76	114	64	1
A00506,2	171,86	6.20	8	76	114	64	1
A00506,3	171,86	6.30	8	76	114	64	1
A00506,5	171,86	6.50	8	76	114	64	1
A00506,6	171,86	6.60	8	76	114	64	1
A00506,7	171,86	6.70	8	76	114	64	1
A00506,8	171,86	6.80	8	76	114	64	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00507	171,86	7.00	8	76	114	64	1
A00507,4	171,86	7.40	8	76	114	64	1
A00507,5	171,86	7.50	8	76	114	64	1
A00507,7	171,86	7.70	8	76	114	64	1
A00507,8	171,86	7.80	8	76	114	64	1
A00508	171,86	8.00	8	76	114	64	1
A00508,5	210,74	8.50	10	95	142	80	1
A00509	210,74	9.00	10	95	142	80	1
A00509,1	210,74	9,10	10	95	142	80	1
A00509,5	210,74	9.50	10	95	142	80	1
A005010	210,74	10.00	10	95	142	80	1
A005010,5	289,70	10.50	12	114	162	96	1
A005011	289,70	11.00	12	114	162	96	1
A005011,5	289,70	11.50	12	114	162	96	1
A005012	289,70	12.00	12	114	162	96	1
A005012,5	433,76	12.50	14	133	178	112	1
A005013	433,76	13.00	14	133	178	112	1
A005013,5	433,76	13.50	14	133	178	112	1
A005014	433,76	14.00	14	133	178	112	1
A005014,5	571,77	14.50	16	152	203	128	1
A005015	571,77	15.00	16	152	203	128	1
A005015,5	571,77	15.50	16	152	203	128	1
A005016	571,77	16.00	16	152	203	128	1

Indivisible package | Suggested retail package - Unit price

DRILLS REINFORCED SHANK 12XD - COOLANT HOLES

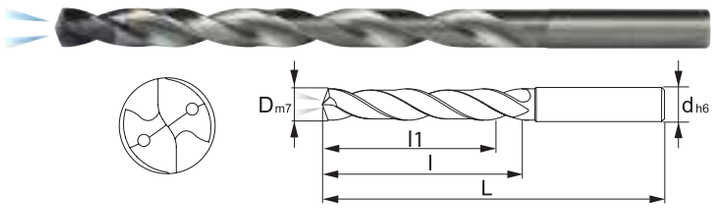
KERFOLG HD

DIN 6537 | HM | 135° | 12xD | DEVIL | HA HB | UNI

ITEM: A0060

Geometry — Advanced flute design, designed for optimal chip evacuation on a broad range of materials
Point angle — 135°
Surface treatment — Devil
Application — Machining of long and short chip materials such as structural and case hardening steel, hardener and tempered steel and alloy steel with R ≤ 1200 N/mm², as well as carbon steel and AISi alloys with high silicon content.

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0060....) Weldon shank (A0060....W)



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●				○			●	○

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00603	184,69	3,00	4	54	92	48	1
A00603,5	184,69	3,50	4	54	92	48	1
A00604	184,69	4,00	4	64	102	58	1
A00604,5	184,69	4,50	5	64	102	58	1
A00605	184,69	5,00	5	78	116	70	1
A00605,2	184,69	5,20	6	78	116	70	1
A00605,5	184,69	5,50	6	78	116	70	1
A00606	184,69	6,00	6	78	116	70	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A00606,8	203,04	6,80	8	108	146	94	1
A00607	203,04	7,00	8	108	146	94	1
A00608	203,04	8,00	8	108	146	94	1
A00608,5	285,20	8,50	10	120	162	110	1
A00609	285,20	9,00	10	120	162	110	1
A006010	285,20	10,00	10	120	162	110	1
A006012	414,02	12,00	12	156	204	142	1

DRILLS REINFORCED SHANK 20XD - COOLANT HOLES

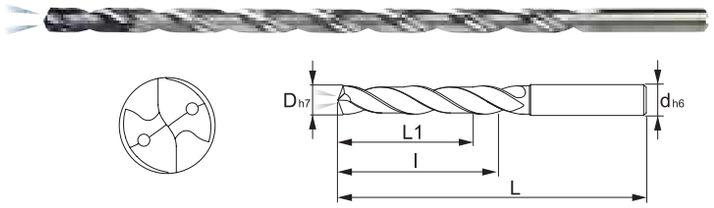
KERFOLG HD

DIN 6537 | HM | 135° | 20xD | DEVIL | HA HB | UNI

ITEM: A0070

Geometry — Advanced flute design, designed for optimal chip evacuation on a broad range of materials
Point angle — 135°
Surface treatment — Devil
Application — Machining of long and short chip materials such as structural and case hardening steel, hardened steel and alloy steel with R ≤ 1200 N/mm², as well as carbon steel and AISi alloys with high silicon content.

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0070....) Weldon shank (A0070....W)



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○		●	●				○			●	○

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	L1 mm	
A00704	316,79	4,00	4	86	120	80	1
A00705	338,75	5,00	5	102	145	109	1
A00706	348,18	6,00	6	121	170	130	1
A00707	364,10	7,00	8	140	190	150	1

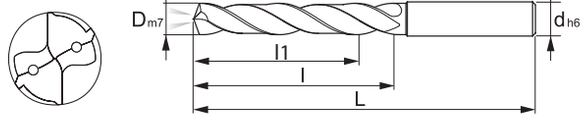
Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	L1 mm	
A00708	395,38	8,00	8	161	215	173	1
A007010	500,62	10,00	10	203	240	218	1
A007012	639,43	12,00	12	240	305	258	1

DRILLS DOUBLE LAND 5XD - COOLANT HOLES

KERFOLG DP-drill

DIN 6537 | HM | 140° | 5xD | DURABLE | HA HB | UNI

ITEM: A0072



Geometry	Advanced flute design with double margin chamfer for drilling with high axial accuracy
Point angle	140°
Surface treatment	Durable
Application	Machining of long and short chip materials such as unalloy steel, cast steel, alloy steel up to 1200 N/mm² and cast iron.

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0072....) Weldon shank (A0072....W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	○			●	●					○	○	○	○

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	L mm	
A00723	87,20	3,00	6	23	28	66	1
A00723,3	87,20	3,30	6	23	28	66	1
A00723,4	87,20	3,40	6	23	28	66	1
A00723,5	87,20	3,50	6	23	28	66	1
A00724	87,20	4,00	6	29	36	74	1
A00724,2	87,20	4,20	6	29	36	74	1
A00724,5	87,20	4,50	6	29	36	74	1
A00724,8	87,20	4,80	6	35	44	82	1
A00725	87,20	5,00	6	35	44	82	1
A00725,1	87,20	5,10	6	35	44	82	1
A00725,2	87,20	5,20	6	35	44	82	1
A00725,5	87,20	5,50	6	35	44	82	1
A00725,8	87,20	5,80	6	35	44	82	1
A00726	87,20	6,00	6	35	44	82	1
A00726,5	102,90	6,50	8	43	53	91	1
A00726,8	102,90	6,80	8	43	53	91	1
A00727	102,90	7,00	8	43	53	91	1
A00727,5	102,90	7,50	8	43	53	91	1
A00727,8	102,90	7,80	8	43	53	91	1
A00728	102,90	8,00	8	43	53	91	1
A00728,5	120,80	8,50	10	49	61	103	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	L mm	
A00729	120,80	9,00	10	49	61	103	1
A00729,5	120,80	9,50	10	49	61	103	1
A00729,8	120,80	9,80	10	49	61	103	1
A007210	120,80	10,00	10	49	61	103	1
A007210,2	171,20	10,20	12	56	71	118	1
A007210,5	171,20	10,50	12	56	71	118	1
A007211	171,20	11,00	12	56	71	118	1
A007211,5	171,20	11,50	12	56	71	118	1
A007212	171,20	12,00	12	56	71	118	1
A007212,5	232,10	12,50	14	60	77	124	1
A007212,8	232,10	12,80	14	60	77	124	1
A007213	232,10	13,00	14	60	77	124	1
A007213,5	232,10	13,50	14	60	77	124	1
A007213,8	232,10	13,80	14	60	77	124	1
A007214	232,10	14,00	14	60	77	124	1
A007214,5	247,80	14,50	16	63	83	133	1
A007214,8	247,80	14,80	16	63	83	133	1
A007215	247,80	15,00	16	63	83	133	1
A007215,5	247,80	15,50	16	63	83	133	1
A007215,8	247,80	15,80	16	63	83	133	1
A007216	247,80	16,00	16	63	83	133	1

Related products

KERFOLG HYDRAULIC CHUCKS DIN 69871 SK AD+B

Tech. Code	SK	D mm	L mm
C0031416080	40	16	80.5
C0031420080		20	
C0031520080	50		
C0031532081*		32	81

The products are available in chapter C

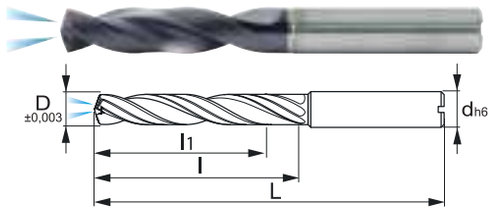
Indivisible package | Suggested retail package - Unit price

DRILLS REINFORCED SHANK 3XD - COOLANT HOLES

KERFOLG HS

DIN 6537 | HM | 140° | 3xD | DURABLE | HA HB | Inox

ITEM: A0085



Geometry	Advanced flute design for high performances in stainless steel.
Point angle	140°
Surface treatment	Durable
Application	Machining of long and short chip materials. Recommended for drilling on stainless steel

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0085....) Weldon shank (A0085....W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○	○	●	●	●											

Tech. Code	GR02 Euro	D mm	d mm	l mm	l1 mm	L mm	
A00853	80,41	3,00	6	22	14	62	1
A00853,3	80,41	3,30	6	22	14	62	1
A00853,4	80,41	3,40	6	22	14	62	1
A00853,5	80,41	3,50	6	22	14	62	1
A00853,8	80,41	3,80	6	26	17	66	1
A00854	80,41	4,00	6	26	17	66	1
A00854,2	80,41	4,20	6	26	17	66	1
A00854,3	80,41	4,30	6	26	17	66	1
A00854,5	80,41	4,50	6	26	17	66	1
A00854,8	80,41	4,80	6	30	20	66	1
A00855	80,41	5,00	6	30	20	66	1
A00855,2	80,41	5,20	6	30	20	66	1
A00855,5	80,41	5,50	6	30	20	66	1
A00855,8	80,41	5,80	6	30	20	66	1
A00856	80,41	6,00	6	30	20	66	1
A00856,5	98,05	6,50	8	42	29	79	1
A00856,8	98,05	6,80	8	42	29	79	1
A00857	98,05	7,00	8	42	29	79	1
A00857,8	98,05	7,80	8	42	29	79	1
A00858	98,05	8,00	8	42	29	79	1

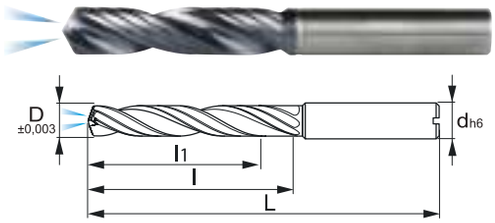
Tech. Code	GR02 Euro	D mm	d mm	l mm	l1 mm	L mm	
A00858,5	133,62	8,50	10	49	35	89	1
A00858,7	133,62	8,70	10	49	35	89	1
A00858,8	133,62	8,80	10	49	35	89	1
A00859	133,62	9,00	10	49	35	89	1
A00859,8	133,62	9,80	10	49	35	89	1
A008510	133,62	10,00	10	49	35	89	1
A008510,2	171,13	10,20	12	56	40	102	1
A008510,3	171,13	10,30	12	56	40	102	1
A008510,5	171,13	10,50	12	56	40	102	1
A008510,8	171,13	10,80	12	56	40	102	1
A008511	171,13	11,00	12	56	40	102	1
A008511,8	171,13	11,80	12	56	40	102	1
A008512	171,13	12,00	12	56	40	102	1
A008512,5	277,97	12,50	14	61	43	107	1
A008513	277,97	13,00	14	61	43	107	1
A008513,5	277,97	13,50	14	61	43	107	1
A008514	277,97	14,00	14	61	43	107	1
A008514,5	350,78	14,50	16	65	45	115	1
A008515	350,78	15,00	16	65	45	115	1
A008516	350,78	16,00	16	65	45	115	1

DRILLS REAMERS 3XD - COOLANT HOLES

KERFOLG D-ream

NdF | HM | 140° | 3xD | DURABLE | HA | UNI

ITEM: A0090



Geometry	Advanced flute geometry
Point angle	140°
Surface treatment	Durable
Application	Machining of drilling and reaming with H7 tolerance in one pass. It can be used on carbon steel alloys, cast iron, titanium alloys and aerospace alloys.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	○	●				●	●									

Tech. Code	GR02 Euro	D mm	d mm	l1 mm	l mm	L mm	
A009004	133,02	4	6	20	28	66	1
A009005	133,02	5	6	20	28	66	1
A009006	133,02	6	6	20	28	66	1
A009007	143,84	7	8	24	34	79	1
A009008	143,84	8	8	24	34	79	1
A009009	155,74	9	10	35	47	89	1
A009010	155,74	10	10	35	47	89	1

Tech. Code	GR02 Euro	D mm	d mm	l1 mm	l mm	L mm	
A009011	217,38	11	12	40	55	102	1
A009012	217,38	12	12	40	55	102	1
A009013	290,92	13	14	43	60	107	1
A009014	290,92	14	14	43	60	107	1
A009015	401,24	15	16	45	65	115	1
A009016	401,24	16	16	45	65	115	1

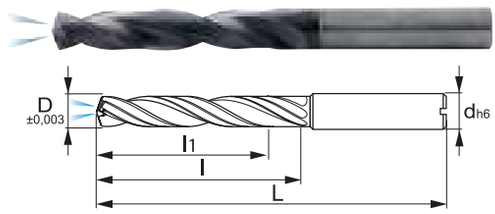
Indivisible package Suggested retail package - Unit price

DRILLS REINFORCED SHANK 5XD - COOLANT HOLES

KERFOLG HS

DIN 6537 | HM | 140° | 5xD | DURABLE | HA HB | Inox

ITEM: A0088



Geometry — Advanced flute design for high performance in stainless steel.

Point angle — 140°

Surface treatment — Durable

Application — Machining of long and short chip materials. Recommended for drilling holes on stainless steel

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0088....) Weldon shank (A0088...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○	○	●	●	●										

Tech. Code	GR02 Euro	D mm	d mm	l mm	l1 mm	L mm	
A00883	97,62	3,00	6	28	23	66	1
A00883,3	97,62	3,30	6	28	23	66	1
A00883,4	97,62	3,40	6	28	23	66	1
A00883,5	97,62	3,50	6	28	23	66	1
A00883,8	97,62	3,80	6	36	29	74	1
A00884	97,62	4,00	6	36	29	74	1
A00884,2	97,62	4,20	6	36	29	74	1
A00884,3	97,62	4,30	6	36	29	74	1
A00884,5	97,62	4,50	6	36	29	74	1
A00884,8	97,62	4,80	6	44	35	82	1
A00885	97,62	5,00	6	44	35	82	1
A00885,2	97,62	5,20	6	44	35	82	1
A00885,5	97,62	5,50	6	44	35	82	1
A00885,8	97,62	5,80	6	44	35	82	1
A00886	97,62	6,00	6	44	35	82	1
A00886,5	110,48	6,50	8	53	43	91	1
A00886,8	110,48	6,80	8	53	43	91	1
A00887	110,48	7,00	8	53	43	91	1
A00887,8	110,48	7,80	8	53	43	91	1
A00888	110,48	8,00	8	53	43	91	1

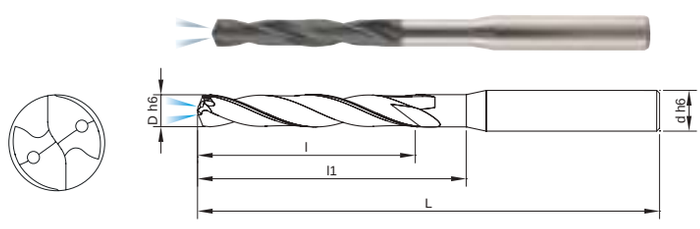
Tech. Code	GR02 Euro	D mm	d mm	l mm	l1 mm	L mm	
A00888,5	159,19	8,50	10	61	49	103	1
A00888,7	159,19	8,70	10	61	49	103	1
A00888,8	159,19	8,80	10	61	49	103	1
A00889	159,19	9,00	10	61	49	103	1
A00889,8	159,19	9,80	10	61	49	103	1
A008810	159,19	10,00	10	61	49	103	1
A008810,2	223,30	10,20	12	71	56	118	1
A008810,3	223,30	10,30	12	71	56	118	1
A008810,5	223,30	10,50	12	71	56	118	1
A008810,8	223,30	10,80	12	71	56	118	1
A008811	223,30	11,00	12	71	56	118	1
A008811,8	223,30	11,80	12	71	56	118	1
A008812	223,30	12,00	12	71	56	118	1
A008812,5	303,60	12,50	14	77	60	124	1
A008813	303,60	13,00	14	77	60	124	1
A008813,5	303,60	13,50	14	77	60	124	1
A008814	303,60	14,00	14	77	60	124	1
A008814,5	351,50	14,50	16	83	63	133	1
A008815	377,82	15,00	16	83	63	133	1
A008816	377,82	16,00	16	83	63	133	1

DRILLS WITH REINFORCED SHANK - COOLANT HOLES

KERFOLG

NdF | HM | 135° | DLC | HA | CF

ITEM: A0500



Geometry — Anti-delamination specification

Point angle — 135°

Surface treatment — DLC

Application — Working on sandwich panels in carbon fiber, mixed titanium carbon fiber, mixed aluminum carbon fiber.

< 500	< 850	< 1200	< 600	< 850	< 240	< 300	< 10% Si	> 10% Si	Ti6Al4V	HTA	< 45	< 60	C	C+Ti	C+AL
													●	●	●

Tech. Code	GR02 Euro	D mm	l mm	l1 mm	L mm	d mm	
A050002,48	(222,76)	2,48	23	28	66	6	1
A050003	(222,76)	3	23	28	66	6	1
A050003,18	(222,76)	3,175	23	28	66	6	1
A050004	(226,26)	4	29	36	74	6	1
A050004,84	(226,26)	4,826	36	44	82	6	1
A050006	(210,84)	6	35	44	82	6	1

Tech. Code	GR02 Euro	D mm	l mm	l1 mm	L mm	d mm	
A050006,33	(296,58)	6,35	43	53	91	8	1
A050007,93	(303,73)	7,93	43	53	91	8	1
A050008	(309,63)	8	43	53	91	8	1
A050009,52	(387,11)	9,52	49	61	103	10	1
A050010	(391,87)	10	49	61	103	10	1

Material	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2,48	D/mm 3	D/mm 3,175	D/mm 4	D/mm 4,826	D/mm 6	D/mm 6,35	D/mm 7,93	D/mm 8	D/mm 9,52	D/mm 10
C	90	112	fz/mm	0,015	0,015	0,016	0,02	0,025	0,03	0,032	0,04	0,04	0,048	0,05
C + TI	12	20	fz/mm	0,015	0,015	0,016	0,02	0,025	0,03	0,032	0,04	0,04	0,048	0,05
C + AL	35	50	fz/mm	0,015	0,015	0,016	0,02	0,025	0,03	0,032	0,04	0,04	0,048	0,05

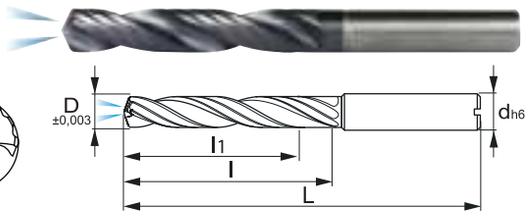
Indivisible package — Suggested retail package - Unit price

DRILLS REAMERS 5XD - COOLANT HOLES

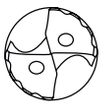
KERFOLG D-ream

NdF | HM | 140° | 5xD | DURABLE | HA | UNI

ITEM: A0095



Geometry	Advanced flute geometry
Point angle	140°
Surface treatment	Durable
Application	Machining of drilling and reaming with H7 tolerance in one pass. It can be used on carbon steel alloys, cast iron, titanium alloys and aerospace alloys.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	○	●				●	●									

Tech. Code	GR02 Euro	D mm	d mm	l1 mm	l mm	L mm	
A009504	161,20	4	6	35	44	82	1
A009505	161,20	5	6	35	44	82	1
A009506	161,20	6	6	35	44	82	1
A009507	192,51	7	8	43	53	91	1
A009508	192,51	8	8	43	53	91	1
A009509	228,25	9	10	49	61	103	1
A009510	228,25	10	10	49	61	103	1

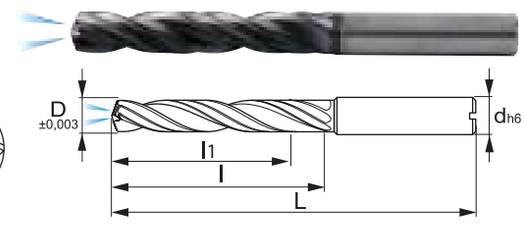
Tech. Code	GR02 Euro	D mm	d mm	l1 mm	l mm	L mm	
A009511	322,29	11	12	56	71	118	1
A009512	322,29	12	12	56	71	118	1
A009513	401,29	13	14	60	77	124	1
A009514	401,29	14	14	60	77	124	1
A009515	546,21	15	16	63	83	133	1
A009516	546,21	16	16	63	83	133	1

DRILLS REAMERS 5XD - COOLANT HOLES

KERFOLG D-ream

DIN 6535 | HM | 140° | 5xD | DURABLE | HA

ITEM: A0096



Geometry	Advanced flute geometry
Point angle	140°
Surface treatment	Durable
Application	Machining of drilling and reaming with different tolerances in one pass only. Recommended on carbon steel alloys, stainless steels and aluminum alloys.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●				●	●	○	●							

Tech. Code	GR02 Euro	D mm	d mm	l1 mm	l mm	L mm	
A00965,98	218,68	5,98	6	43	53	91	1
A00965,99	202,60	5,99	6	43	53	91	1
A00966,00	135,00	6,00	6	43	53	91	1
A00966,01	135,00	6,01	6	43	53	91	1
A00966,02	145,81	6,02	6	43	53	91	1
A00967,98	202,60	7,98	8	43	53	91	1
A00967,99	202,60	7,99	8	43	53	91	1
A00968,00	145,81	8,00	8	43	53	91	1
A00968,01	145,81	8,01	8	43	53	91	1
A00968,02	135,00	8,02	8	43	53	91	1

Tech. Code	GR02 Euro	D mm	d mm	l1 mm	l mm	L mm	
A00969,98	290,60	9,98	10	49	61	103	1
A00969,99	313,72	9,99	10	49	61	103	1
A009610,00	215,37	10,00	10	49	61	103	1
A009610,01	193,70	10,01	10	49	61	103	1
A009610,02	193,70	10,02	10	49	61	103	1
A009611,98	355,94	11,98	12	56	71	118	1
A009611,99	356,68	11,99	12	56	71	118	1
A009612,00	274,70	12,00	12	56	71	118	1
A009612,01	296,64	12,01	12	56	71	118	1
A009612,02	296,64	12,02	12	56	71	118	1

DRILLS WITH REINFORCED SHANK 180° 3XD - COOLANT HOLES

KERFOLG Flat

NdF | HM | 180° | 3xD | DURABLE | HA HB | UNI

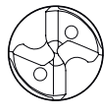
ITEM: A0100

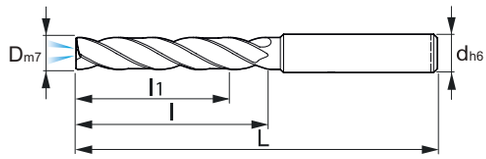
Geometry: Advanced helix, bevelled geometry for better hole cylindricity

Point angle: 180°

Surface treatment: Durable

Application: Processing of long and short chipping materials such as: construction and carburizing steels, steel cast iron, hardened and tempered steel and alloy steel with R ≤ 1200 N / mm² and carbon steel. Machining on straight or inclined surfaces in both entry and exit, drilling through existing through holes.





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●								

On request available with Weldon shank at a cost of € 2.
Cylindrical shank (A0100....) Weldon shank (A0100...W)

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A010003	97,08	3,00	6	20	62	14	1
A010003,1	97,08	3,10	6	20	62	14	1
A010003,2	97,08	3,20	6	20	62	14	1
A010003,3	97,08	3,30	6	20	62	14	1
A010003,4	97,08	3,40	6	20	62	14	1
A010003,5	97,08	3,50	6	20	62	14	1
A010003,6	97,08	3,60	6	20	62	14	1
A010003,7	97,08	3,70	6	20	62	14	1
A010003,8	97,08	3,80	6	24	66	17	1
A010003,9	97,08	3,90	6	24	66	17	1
A010004	97,08	4,00	6	24	66	17	1
A010004,1	97,08	4,10	6	24	66	17	1
A010004,2	97,08	4,20	6	24	66	17	1
A010004,3	97,08	4,30	6	24	66	17	1
A010004,4	97,08	4,40	6	24	66	17	1
A010004,5	97,08	4,50	6	24	66	17	1
A010004,6	97,08	4,60	6	24	66	17	1
A010004,65	97,08	4,65	6	24	66	17	1
A010004,7	97,08	4,70	6	24	66	17	1
A010004,8	97,08	4,80	6	28	66	20	1
A010004,9	97,08	4,90	6	28	66	20	1
A010005	97,08	5,00	6	28	66	20	1
A010005,1	97,08	5,10	6	28	66	20	1
A010005,2	97,08	5,20	6	28	66	20	1
A010005,3	97,08	5,30	6	28	66	20	1
A010005,4	97,08	5,40	6	28	66	20	1
A010005,5	97,08	5,50	6	28	66	20	1
A010005,55	97,08	5,55	6	28	66	20	1
A010005,6	97,08	5,60	6	28	66	20	1
A010005,7	97,08	5,70	6	28	66	20	1
A010005,8	97,08	5,80	6	28	66	20	1
A010005,9	97,08	5,90	6	28	66	20	1
A010006	97,08	6,00	6	28	66	20	1
A010006,1	117,90	6,10	8	34	79	24	1
A010006,2	117,90	6,20	8	34	79	24	1
A010006,3	117,90	6,30	8	34	79	24	1
A010006,4	117,90	6,40	8	34	79	24	1
A010006,5	117,90	6,50	8	34	79	24	1
A010006,6	117,90	6,60	8	34	79	24	1
A010006,7	117,90	6,70	8	34	79	24	1
A010006,8	117,90	6,80	8	34	79	24	1
A010006,9	117,90	6,90	8	34	79	24	1
A010007	117,90	7,00	8	34	79	24	1
A010007,1	117,90	7,10	8	41	79	29	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	l1 mm	
A010007,2	117,90	7,20	8	41	79	29	1
A010007,3	117,90	7,30	8	41	79	29	1
A010007,4	117,90	7,40	8	41	79	29	1
A010007,5	117,90	7,50	8	41	79	29	1
A010007,6	117,90	7,60	8	41	79	29	1
A010007,7	117,90	7,70	8	41	79	29	1
A010007,8	117,90	7,80	8	41	79	29	1
A010007,9	117,90	7,90	8	41	79	29	1
A010008	117,90	8,00	8	41	79	29	1
A010008,1	164,17	8,10	10	47	89	35	1
A010008,2	164,17	8,20	10	47	89	35	1
A010008,3	164,17	8,30	10	47	89	35	1
A010008,4	164,17	8,40	10	47	89	35	1
A010008,5	164,17	8,50	10	47	89	35	1
A010008,6	164,17	8,60	10	47	89	35	1
A010008,7	164,17	8,70	10	47	89	35	1
A010008,8	164,17	8,80	10	47	89	35	1
A010008,9	164,17	8,90	10	47	89	35	1
A010009	164,17	9,00	10	47	89	35	1
A010009,1	164,17	9,10	10	47	89	35	1
A010009,2	164,17	9,20	10	47	89	35	1
A010019,3	164,17	9,30	10	47	89	35	1
A010009,4	164,17	9,40	10	47	89	35	1
A010009,5	164,17	9,50	10	47	89	35	1
A010009,6	164,17	9,60	10	47	89	35	1
A010009,7	164,17	9,70	10	47	89	35	1
A010009,8	164,17	9,80	10	47	89	35	1
A010009,9	164,17	9,90	10	47	89	35	1
A010010	164,17	10,00	10	47	89	35	1
A010010,2	205,68	10,20	12	53	100	38	1
A010010,5	205,68	10,50	12	53	100	38	1
A010010,8	205,68	10,80	12	53	100	38	1
A010011	205,68	11,00	12	53	100	38	1
A010011,2	205,68	11,20	12	53	100	38	1
A010011,5	205,68	11,50	12	53	100	38	1
A010012	205,68	12,00	12	53	100	38	1
A010012,5	335,25	12,50	14	58	105	41	1
A010013	335,25	13,00	14	58	105	41	1
A010013,5	335,25	13,50	14	58	105	41	1
A010014	335,25	14,00	14	58	105	41	1
A010014,5	423,03	14,50	16	63	113	43	1
A010015	423,03	15,00	16	63	113	43	1
A010015,5	423,03	15,50	16	63	113	43	1
A010016	423,03	16,00	16	63	113	43	1

Indivisible package | Suggested retail package - Unit price

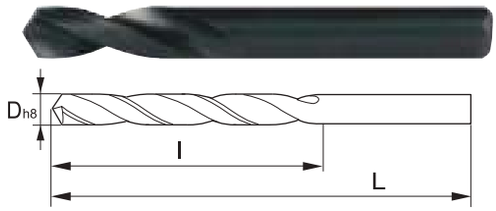
STUB DRILLS

WRK

DIN		N/R	
1897	135°		HA

ITEM: A1010

Geometry — Normal flute, right hand cut
Point angle — 135°
Surface treatment — Steam tempering
Application — General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	○	○								

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A10101	2,38	1.00	6	26	10
A10101,2	2,50	1.20	8	30	10
A10101,3	2,50	1.30	8	30	10
A10101,4	2,50	1.40	9	32	10
A10101,5	2,15	1.50	9	32	10
A10101,6	2,15	1.60	10	34	10
A10101,7	2,15	1.70	10	34	10
A10101,8	2,28	1.80	11	36	10
A10102	1,67	2.00	12	38	10
A10102,1	2,03	2.10	12	38	10
A10102,2	2,03	2.20	13	40	10
A10102,3	2,15	2.30	13	40	10
A10102,4	2,15	2.40	14	43	10
A10102,5	2,03	2.50	14	43	10
A10102,6	2,28	2.60	14	43	10
A10102,7	2,28	2.70	16	46	10
A10102,8	2,28	2.80	16	46	10
A10102,9	2,38	2.90	16	46	10
A10103	2,15	3.00	16	46	10
A10103,1	2,38	3.10	18	49	10
A10103,2	2,15	3.20	18	49	10
A10103,25	2,63	3.25	18	49	10
A10103,3	2,28	3.30	18	49	10
A10103,4	2,63	3.40	20	52	10
A10103,5	2,28	3.50	20	52	10
A10103,6	2,50	3.60	20	52	10
A10103,7	2,50	3.70	20	52	10
A10103,8	2,74	3.80	22	55	10
A10103,9	2,74	3.90	22	55	10
A10104	2,63	4.00	22	55	10
A10104,1	2,74	4.10	22	55	10
A10104,2	2,63	4.20	22	55	10
A10104,3	4,18	4.30	24	58	10
A10104,4	4,53	4.40	24	58	10
A10104,5	2,99	4.50	24	58	10
A10104,6	4,53	4.60	24	58	10

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A10104,7	4,53	4.70	24	58	10
A10104,8	4,66	4.80	26	62	10
A10104,9	4,66	4.90	26	62	10
A10105	3,57	5.00	26	62	10
A10105,1	4,66	5.10	26	62	10
A10105,2	4,66	5.20	26	62	10
A10105,3	4,66	5.30	26	62	10
A10105,4	6,32	5.40	28	66	10
A10105,5	4,42	5.50	28	66	10
A10105,6	6,32	5.60	28	66	10
A10105,7	6,32	5.70	28	66	10
A10105,8	6,32	5.80	28	66	10
A10105,9	6,45	5.90	28	66	10
A10106	4,53	6.00	28	66	10
A10106,3	6,81	6.30	31	70	10
A10106,4	6,81	6.40	31	70	10
A10106,5	5,02	6.50	31	70	10
A10106,6	6,81	6.60	31	70	10
A10106,7	6,81	6.70	31	70	10
A10106,8	7,88	6.80	34	74	10
A10106,9	7,88	6.90	34	74	10
A10107	5,97	7.00	34	74	10
A10107,5	6,32	7.50	34	74	10
A10108	7,16	8.00	37	79	10
A10108,2	9,80	8.20	37	79	10
A10108,5	9,80	8.50	37	79	10
A10109	9,80	9.00	40	84	5
A10109,5	10,74	9.50	40	84	5
A101010	10,74	10.00	43	89	5
A101010,5	19,21	10.50	43	89	5
A101011	18,98	11.00	47	95	5
A101011,5	20,04	11.50	47	95	5
A101012	23,38	12.00	51	102	5
A101012,5	24,71	12.50	51	102	5
A101013	24,71	13.00	51	102	5

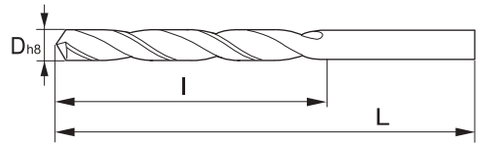
Indivisible package — Suggested retail package - Unit price

STUB DRILLS

KERFOLG

DIN 1897	HSSE	130°	N/R	HA

ITEM: A1030



Geometry	Normal flute, right hand cut
Point angle	130°
Surface treatment	Gold oxide
Application	General application.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○			●	●				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A10301,5	2,82	1.50	9	32	10
A10302	3,03	2.00	12	38	10
A10302,5	3,28	2.50	14	43	10
A10303	3,70	3.00	16	46	10
A10303,1	4,32	3.10	18	49	10
A10303,2	4,01	3.20	18	49	10
A10303,3	4,09	3.30	18	49	10
A10303,5	3,96	3.50	20	52	10
A10303,8	4,61	3.80	22	55	10
A10304	4,86	4.00	22	55	10
A10304,2	4,55	4.20	22	55	10
A10304,3	5,53	4.30	24	58	10
A10304,5	5,31	4.50	24	58	10
A10304,8	5,44	4.80	26	62	10
A10305	5,82	5.00	26	62	10
A10305,1	6,72	5.10	26	62	10
A10305,2	6,51	5.20	26	62	10
A10305,3	6,96	5.30	26	62	10

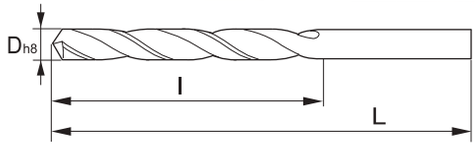
Tech. Code	GR03 Euro	D mm	l mm	L mm	
A10305,5	6,16	5.50	28	66	10
A10306	7,65	6.00	28	66	10
A10306,2	7,53	6.20	31	70	10
A10306,5	7,89	6.50	31	70	10
A10306,7	7,77	6.70	31	70	10
A10306,8	8,85	6.80	34	74	10
A10307	8,61	7.00	34	74	10
A10307,5	9,63	7.50	34	74	10
A10308	10,32	8.00	37	79	10
A10308,5	12,17	8.50	37	79	10
A10309	13,25	9.00	40	84	5
A10309,5	14,28	9.50	40	84	5
A103010	16,59	10.00	43	89	5
A103010,5	18,68	10.50	43	89	5
A103011	18,68	11.00	47	95	5
A103011,5	20,23	11.50	47	95	5
A103012	21,93	12.00	51	102	5
A103013	22,71	13.00	51	102	5

STUB DRILLS

KERFOLG

DIN 1897	PM	130°	N/R	TiN	HA	HD

ITEM: A1050



Geometry	Modified four-facet point sharpening, special web thinning, rounded flute profile, self-centering point geometry
Point angle	130°
Surface treatment	TiN
Application	Machining a variety of materials such as nonferrous metals, structural and carbon steel, high-percentage alloy steel, tool steel, stainless steel with R ≤ 1000 N/mm², magnesium alloys, plastic and aluminum.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	○	○		●	●			○	●		○		

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A10501	(16,24)	1.00	6	26	1
A10501,5	(15,29)	1.50	9	32	1
A10502	(13,12)	2.00	12	38	1
A10502,5	(14,35)	2.50	14	43	1
A10503	(14,62)	3.00	16	46	1
A10503,5	(15,96)	3.50	20	52	1
A10504	(14,88)	4.00	22	55	1
A10504,2	(15,29)	4.20	22	55	1
A10504,5	(15,00)	4.50	24	58	1
A10505	(16,65)	5.00	26	62	1
A10505,5	(18,00)	5.50	28	66	1
A10506	(18,81)	6.00	28	66	1
A10506,5	(19,48)	6.50	31	70	1
A10506,8	(22,74)	6.80	34	74	1
A10507	(29,64)	7.00	34	74	1
A10507,5	(31,00)	7.50	34	74	1
A10508	(32,21)	8.00	37	79	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A10508,2	(41,14)	8.20	37	79	1
A10508,5	(36,27)	8.50	37	79	1
A10508,8	(50,48)	8.80	40	84	1
A10509	(39,66)	9.00	40	84	1
A10509,5	(47,78)	9.50	40	84	1
A10509,8	(51,29)	9.80	43	89	1
A105010	(45,73)	10.00	43	89	1
A105010,2	(67,52)	10.20	43	89	1
A105010,5	(65,08)	10.50	43	89	1
A105011	(65,08)	11.00	47	95	1
A105011,5	(68,60)	11.50	47	95	1
A105012	(79,16)	12.00	51	102	1
A105012,5	(85,92)	12.50	51	102	1
A105013	(85,92)	13.00	51	102	1
A105013,5	(91,88)	13.50	54	107	1
A105014	(113,93)	14.00	54	107	1

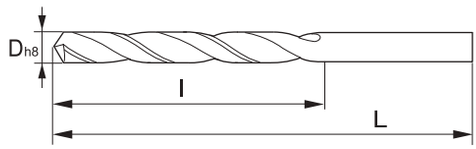
Indivisible package Suggested retail package - Unit price

STUB DRILLS

KERFOLG

DIN 1897 | HSSE | 130° | F/R | TiN | HA | UNI

ITEM: A1040



Geometry	Modified four-facet point sharpening, special web thinning, rounded flute profile, self-centering point geometry
Point angle	130°
Surface treatment	TiN
Application	Machining a variety of materials such as nonferrous metals, structural and carbon steel, high-percentage alloy steel, tool steel, stainless steel with R ≤ 1000 N/mm², magnesium alloys, plastic and aluminum.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	○	●	○	○				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A10401	9,48	1.00	6	26	1
A10401,2	9,60	1.20	8	30	1
A10401,4	8,94	1.40	9	32	1
A10401,5	8,94	1.50	9	32	1
A10402	7,58	2.00	12	38	1
A10402,2	9,21	2.20	13	40	1
A10402,4	9,34	2.40	14	43	1
A10402,5	8,25	2.50	14	43	1
A10402,6	9,60	2.60	14	43	1
A10402,8	9,48	2.80	16	46	1
A10402,9	9,48	2.90	16	46	1
A10403	8,52	3.00	16	46	1
A10403,1	8,94	3.10	18	49	1
A10403,2	8,94	3.20	18	49	1
A10403,3	8,94	3.30	18	49	1
A10403,4	8,94	3.40	20	52	1
A10403,5	8,94	3.50	20	52	1
A10403,8	10,41	3.80	22	55	1
A10404	10,01	4.00	22	55	1
A10404,1	11,24	4.10	22	55	1
A10404,2	10,01	4.20	22	55	1
A10404,3	11,36	4.30	24	58	1
A10404,5	11,24	4.50	24	58	1
A10404,6	11,24	4.60	24	58	1
A10404,7	12,06	4.70	24	58	1
A10404,8	12,31	4.80	26	62	1
A10405	10,95	5.00	26	62	1
A10405,1	11,64	5.10	26	62	1
A10405,2	13,00	5.20	26	62	1
A10405,3	13,12	5.30	26	62	1
A10405,5	12,18	5.50	28	66	1
A10405,6	14,35	5,60	28	66	1

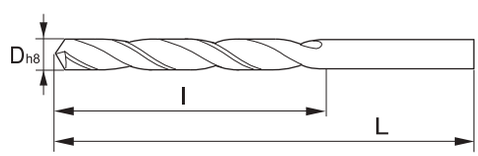
Tech. Code	GR03 Euro	D mm	l mm	L mm	
A10405,8	14,62	5.80	28	66	1
A10406	13,12	6.00	28	66	1
A10406,1	15,00	6,10	31	70	1
A10406,2	15,00	6.20	31	70	1
A10406,3	15,83	6.30	31	70	1
A10406,5	15,29	6.50	31	70	1
A10406,7	16,92	6.70	31	70	1
A10406,8	18,81	6.80	34	74	1
A10407	16,65	7.00	34	74	1
A10407,5	17,46	7.50	34	74	1
A10407,7	22,46	7.70	37	79	1
A10407,8	22,46	7.80	37	79	1
A10408	20,56	8.00	37	79	1
A10408,1	27,61	8.10	37	79	1
A10408,2	27,61	8.20	37	79	1
A10408,5	24,22	8.50	37	79	1
A10408,8	30,29	8.80	40	84	1
A10409	24,49	9.00	40	84	1
A10409,5	27,18	9.50	40	84	1
A10409,8	32,34	9.80	43	89	1
A104010	26,53	10.00	43	89	1
A104010,2	33,57	10.20	43	89	1
A104010,5	31,95	10.50	43	89	1
A104011	35,47	11.00	47	95	1
A104011,5	40,85	11.50	47	95	1
A104012	39,66	12.00	51	102	1
A104012,3	43,85	12,30	51	102	1
A104012,5	43,85	12.50	51	102	1
A104013	43,85	13.00	51	102	1
A104013,5	46,55	13.50	54	107	1
A104014	58,18	14.00	54	107	1

STUB DRILLS

KERFOLG X-310

DIN 1897 | HSSE | 130° | FS/R | TiAlN | HA

ITEM: A1060



Geometry	Parabolic flute design with wide flutes to provide optimal chip evacuation, self centering point geometry
Point angle	130°
Surface treatment	TiAlN
Application	Especially indicated for automatic lathes and NC machines, long chip materials with R ≤ 1000 N/mm², aluminum and copper alloys, soft bronze, electrolyte copper and hardened brass.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	○	●	●				○	○	●	●				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A10601	6,32	1.00	6	26	1
A10601,5	7,16	1.50	9	32	1
A10602	7,16	2.00	12	38	1
A10602,5	7,77	2.50	14	43	1
A10603	7,16	3.00	16	46	1
A10603,3	8,23	3.30	18	49	1
A10603,5	9,80	3.50	20	52	1
A10604	10,15	4.00	22	55	1
A10604,2	10,26	4.20	22	55	1
A10604,5	10,50	4.50	24	58	1
A10605	10,98	5.00	26	62	1
A10605,5	12,66	5.50	28	66	1
A10606	16,58	6.00	28	66	1
A10606,5	16,82	6.50	31	70	1
A10606,8	17,42	6.80	34	74	1
A10607	18,26	7.00	34	74	1
A10607,5	20,18	7.50	34	74	1
A10608	20,28	8.00	37	79	1
A10608,5	22,20	8.50	37	79	1
A10609	24,23	9.00	40	84	1
A10609,5	25,78	9.50	40	84	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A106010	26,37	10.00	43	89	1
A106010,5	31,38	10.50	43	89	1
A106011	34,25	11.00	47	95	1
A106011,5	35,80	11.50	47	95	1
A106012	39,38	12.00	51	102	1
A106012,5	45,35	12.50	51	102	1
A106013	47,38	13.00	51	102	1
A106013,5	47,38	13.50	54	107	1
A106014	46,90	14.00	54	107	1
A106014,5	49,40	14.50	56	111	1
A106015	63,37	15.00	56	111	1
A106015,5	64,91	15.50	58	115	1
A106016	67,29	16.00	58	115	1
A106016,5	100,34	16.50	60	119	1
A106017	105,62	17.00	60	119	1
A106017,5	110,97	17.50	62	123	1
A106018	113,48	18.00	62	123	1
A106018,5	124,57	18.50	64	127	1
A106019	125,53	19.00	64	127	1
A106019,5	137,82	19.50	66	131	1

Indivisible package Suggested retail package - Unit price

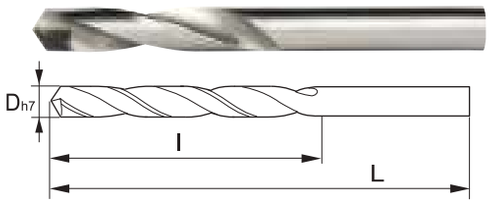
STUB DRILLS CARBIDE-TIPPED

WRK

DIN	HSS		N/R	
8037	+ HM	118°		HA

ITEM: A1090

Geometry	Flute 17° N/R
Point angle	118° with brazed carbide tip
Surface treatment	Bright
Application	General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	○	○				●	●			○					○	●

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A10902	20,91	2.00	18	45	1
A10902,5	20,91	2.50	18	45	1
A10903	20,91	3.00	20	50	1
A10903,2	23,87	3.20	25	56	1
A10903,3	23,87	3.30	25	56	1
A10903,5	20,91	3.50	25	56	1
A10904	20,91	4.00	25	56	1
A10904,2	24,54	4.20	28	63	1
A10904,5	21,59	4.50	28	63	1
A10905	21,59	5.00	28	63	1
A10905,5	22,61	5.50	32	71	1
A10906	23,64	6.00	32	71	1
A10906,5	28,18	6.50	32	71	1
A10906,8	31,14	6.80	40	80	1
A10907	28,18	7.00	40	80	1
A10907,5	30,79	7.50	40	80	1
A10908	30,79	8.00	40	80	1
A10908,5	32,50	8.50	50	90	1
A10909	32,50	9.00	50	90	1
A10909,5	35,57	9.50	50	90	1
A109010	35,57	10.00	56	100	1

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A109010,5	45,79	10.50	56	100	1
A109011	45,79	11.00	56	100	1
A109011,5	52,73	11.50	63	112	1
A109012	52,73	12.00	63	112	1
A109012,5	62,84	12.50	63	112	1
A109013	62,84	13.00	63	112	1
A109013,5	73,28	13.50	71	125	1
A109014	73,28	14.00	71	125	1
A109014,5	83,40	14.50	71	125	1
A109015	83,40	15.00	71	125	1
A109015,5	96,12	15.50	80	140	1
A109016	96,12	16.00	80	140	1
A109016,5	105,10	16.50	80	140	1
A109017	105,10	17.00	80	140	1
A109017,5	113,05	17.50	90	160	1
A109018	113,05	18.00	90	160	1
A109018,5	149,53	18.50	90	160	1
A109019	140,43	19.00	90	160	1
A109019,5	170,26	19.50	90	160	1
A109020	159,87	20.00	90	160	1

Related products

WRK ER COLLET CHUCKS DIN 69871 SK AD+B

Tech. Code	SK	ER	D mm
C001043270	40	32	50

The products are available in chapter C

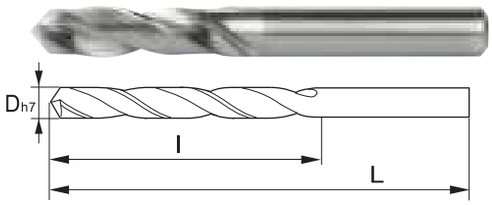
Indivisible package Suggested retail package - Unit price

SOLID CARBIDE STUB DRILLS

WRK

DIN	HM		5xD	N/R	
1897		118°			HA

ITEM: A1080



Geometry — Special web thinning, rounded flute profile

Point angle — 118°
Surface treatment — Bright
Application — Indicated for CN machines, materials with R ≤ 1000 N/mm².

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	○	●	●	○	○		○	○	○

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A10801	7,25	1.00	6	26	1
A10801,1	5,34	1.10	7	28	1
A10801,2	5,34	1.20	8	30	1
A10801,3	5,34	1.30	8	30	1
A10801,4	5,34	1.40	9	32	1
A10801,5	5,34	1.50	9	30	1
A10801,6	5,90	1.60	10	34	1
A10801,7	5,90	1.70	10	34	1
A10801,8	5,57	1.80	11	36	1
A10801,9	5,90	1.90	11	36	1
A10802	6,46	2.00	12	38	1
A10802,1	7,69	2.10	12	38	1
A10802,2	7,69	2.20	13	40	1
A10802,3	7,69	2.30	13	40	1
A10802,4	7,69	2.40	14	43	1
A10802,5	7,46	2.50	14	43	1
A10802,6	10,47	2.60	14	43	1
A10802,7	10,47	2.70	16	46	1
A10802,8	10,47	2.80	16	46	1
A10802,9	10,47	2.90	16	46	1
A10803	9,47	3.00	16	46	1
A10803,1	12,03	3.10	18	49	1
A10803,2	12,03	3.20	18	49	1
A10803,3	12,03	3.30	18	49	1
A10803,4	12,03	3.40	20	52	1
A10803,5	11,58	3.50	20	52	1
A10803,6	14,82	3.60	20	52	1
A10803,7	14,82	3.70	20	52	1
A10803,8	14,82	3.80	22	55	1
A10804	13,59	4.00	22	55	1
A10804,1	15,26	4.10	22	55	1
A10804,2	15,26	4.20	22	55	1
A10804,3	16,48	4.30	24	58	1
A10804,4	16,48	4.40	24	58	1
A10804,5	16,04	4.50	24	58	1
A10804,6	19,50	4.60	24	58	1

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A10804,7	19,50	4.70	24	58	1
A10804,8	20,61	4.80	26	62	1
A10805	18,83	5.00	26	62	1
A10805,1	24,06	5.10	26	62	1
A10805,2	24,06	5.20	26	62	1
A10805,3	24,06	5.30	26	62	1
A10805,5	23,39	5.50	28	66	1
A10805,7	26,18	5.70	28	66	1
A10806	25,62	6.00	28	66	1
A10806,2	31,86	6.20	31	70	1
A10806,5	29,85	6.50	31	70	1
A10806,6	35,98	6.60	31	70	1
A10806,7	35,98	6.70	31	70	1
A10806,8	35,98	6.80	34	74	1
A10806,9	35,98	6.90	34	74	1
A10807	34,20	7.00	34	74	1
A10807,1	43,22	7.10	34	74	1
A10807,3	43,22	7.30	34	74	1
A10807,5	40,66	7.50	34	74	1
A10807,7	48,34	7.70	37	79	1
A10808	42,22	8.00	37	79	1
A10808,2	55,15	8.20	37	79	1
A10808,4	55,15	8.40	37	79	1
A10808,5	53,13	8.50	37	79	1
A10809	53,13	9.00	40	84	1
A10809,5	61,16	9.50	40	84	1
A10809,8	68,39	9.80	43	89	1
A108010	65,61	10.00	43	89	1
A108010,2	77,75	10.20	43	89	1
A108010,5	77,75	10.50	43	89	1
A108011	87,77	11.00	47	95	1
A108011,5	99,81	11.50	47	95	1
A108012	103,60	12.00	51	102	1
A108012,5	107,17	12.50	51	102	1
A108013	119,08	13.00	51	102	1
A108014	149,27	14.00	54	107	1

Indivisible package — Suggested retail package - Unit price

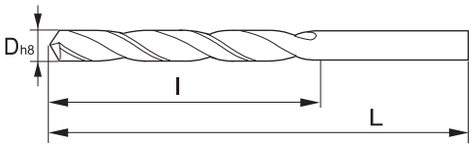
JOBBER DRILLS

WRK

DIN		N/R	
338	118°		HA

ITEM: A1110

Geometry	Normal flute, right hand cut
Point angle	118°
Surface treatment	Steam tempering
Application	General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	○	○	○						

Tech. Code	GR01 Euro	D mm	l mm	L mm	◈
A11100,25	3,12	0.25	3	19	10
A11100,3	3,00	0.30	3	19	10
A11100,35	3,00	0.35	4	19	10
A11100,4	3,00	0.40	5	20	10
A11100,45	3,00	0.45	5	20	10
A11100,5	2,88	0.50	6	22	10
A11100,55	3,23	0.55	7	24	10
A11100,6	2,88	0.60	7	24	10
A11100,65	3,12	0.65	8	26	10
A11100,7	2,51	0.70	9	28	10
A11100,75	2,51	0.75	9	28	10
A11100,8	2,39	0.80	10	30	10
A11100,85	2,39	0.85	10	30	10
A11100,9	2,39	0.90	11	32	10
A11100,95	2,39	0.95	11	32	10
A11101	1,21	1.00	12	34	10
A11101,1	1,21	1.10	14	36	10
A11101,2	1,21	1.20	16	38	10
A11101,25	1,21	1.25	16	38	10
A11101,3	1,21	1.30	16	38	10
A11101,35	1,55	1.35	18	40	10
A11101,4	1,21	1.40	18	40	10
A11101,5	1,21	1.50	18	40	10
A11101,55	1,31	1.55	20	43	10
A11101,6	1,21	1.60	20	43	10
A11101,65	1,31	1.65	20	43	10
A11101,7	1,21	1.70	20	43	10
A11101,75	1,21	1.75	22	46	10
A11101,8	1,21	1.80	22	46	10
A11101,85	1,31	1.85	22	46	10
A11101,9	1,21	1.90	22	46	10
A11102	1,20	2.00	24	49	10
A11102,1	1,21	2.10	24	49	10
A11102,2	1,21	2.20	27	53	10
A11102,25	1,21	2.25	27	53	10
A11102,3	1,21	2.30	27	53	10
A11102,4	1,21	2.40	30	57	10
A11102,45	3,12	2.45	30	57	10
A11102,5	1,30	2.50	30	57	10
A11102,6	1,31	2.60	30	57	10
A11102,65	3,12	2.65	30	57	10
A11102,7	1,31	2.70	33	61	10
A11102,75	1,31	2.75	33	61	10
A11102,8	1,31	2.80	33	61	10
A11102,9	1,31	2.90	33	61	10
A11103	1,43	3.00	33	61	10
A11103,1	1,44	3.10	36	65	10
A11103,15	2,51	3.15	36	65	10
A11103,17	2,15	3.17	36	65	10
A11103,2	1,44	3.20	36	65	10
A11103,25	1,43	3.25	36	65	10
A11103,3	1,44	3.30	36	65	10
A11103,4	1,44	3.40	39	70	10
A11103,5	1,80	3.50	39	70	10
A11103,6	1,92	3.60	39	70	10
A11103,7	1,92	3.70	39	70	10
A11103,75	1,92	3.75	39	70	10
A11103,8	1,92	3.80	43	75	10
A11103,9	1,92	3.90	43	75	10
A11103,95	3,23	3.95	43	75	10
A11104	1,91	4.00	43	75	10
A11104,1	1,92	4.10	43	75	10
A11104,15	3,35	4.15	43	75	10
A11104,2	1,91	4.20	43	75	10
A11104,25	1,91	4.25	43	75	10
A11104,3	1,92	4.30	47	80	10
A11104,4	1,92	4.40	47	80	10
A11104,45	4,56	4.45	47	80	10
A11104,5	2,27	4.50	47	80	10
A11104,6	2,28	4.60	47	80	10
A11104,65	4,56	4.65	47	80	10
A11104,7	2,28	4.70	47	80	10
A11104,75	2,28	4.75	47	80	10

Tech. Code	GR01 Euro	D mm	l mm	L mm	◈
A11104,8	2,28	4.80	52	86	10
A11104,85	4,20	4.85	52	86	10
A11104,9	2,28	4.90	52	86	10
A11105	2,27	5.00	52	86	10
A11105,1	2,28	5.10	52	86	10
A11105,2	2,28	5.20	52	86	10
A11105,25	2,27	5.25	52	86	10
A11105,3	2,28	5.30	52	86	10
A11105,4	2,28	5.40	57	93	10
A11105,45	6,59	5.45	57	93	10
A11105,5	3,22	5.50	57	93	10
A11105,6	3,23	5.60	57	93	10
A11105,7	3,23	5.70	57	93	10
A11105,75	3,23	5.75	57	93	10
A11105,8	3,23	5.80	57	93	10
A11105,9	3,23	5.90	57	93	10
A11105,95	4,20	5.95	57	93	10
A11106	3,22	6.00	63	101	10
A11106,1	3,23	6.10	63	101	10
A11106,2	3,23	6.20	63	101	10
A11106,25	3,23	6.25	63	101	10
A11106,3	3,23	6.30	63	101	10
A11106,35	4,79	6.35	63	101	10
A11106,4	3,23	6.40	63	101	10
A11106,5	3,94	6.50	63	101	10
A11106,6	3,96	6.60	63	101	10
A11106,7	3,96	6.70	69	109	10
A11106,75	3,94	6.75	69	109	10
A11106,8	3,96	6.80	69	109	10
A11106,9	3,96	6.90	69	109	10
A11107	5,02	7.00	69	109	10
A11107,1	5,04	7.10	69	109	10
A11107,2	5,04	7.20	69	109	10
A11107,25	5,04	7.25	69	109	10
A11107,3	5,04	7.30	69	109	10
A11107,4	5,04	7.40	69	109	10
A11107,5	5,72	7.50	75	117	10
A11107,6	5,74	7.60	75	117	10
A11107,7	5,74	7.70	75	117	10
A11107,75	5,74	7.75	75	117	10
A11107,8	5,74	7.80	75	117	10
A11107,9	5,74	7.90	75	117	10
A11108	5,72	8.00	75	117	10
A11108,1	5,74	8.10	75	117	10
A11108,2	5,74	8.20	75	117	10
A11108,25	5,74	8.25	75	117	10
A11108,3	5,74	8.30	75	117	10
A11108,4	5,74	8.40	75	117	10
A11108,5	6,47	8.50	81	125	10
A11108,6	6,47	8.60	81	125	5
A11108,7	6,47	8.70	81	125	5
A11108,75	6,47	8.75	81	125	5
A11108,8	6,47	8.80	81	125	5
A11108,9	6,47	8.90	81	125	5
A11109	7,50	9.00	81	125	5
A11109,1	7,55	9.10	81	125	5
A11109,2	7,55	9.20	81	125	5
A11109,25	7,55	9.25	81	125	5
A11109,3	7,55	9.30	81	125	5
A11109,4	7,55	9.40	81	125	5
A11109,5	8,40	9.50	87	133	5
A11109,6	8,39	9.60	87	133	5
A11109,7	8,39	9.70	87	133	5
A11109,75	8,39	9.75	87	133	5
A11109,8	8,39	9.80	87	133	5
A11109,9	8,39	9.90	87	133	5
A111010	9,65	10.00	87	133	5
A111010,1	9,71	10.10	87	133	5
A111010,2	9,71	10.20	87	133	5
A111010,25	9,71	10.25	87	133	5
A111010,5	10,90	10.50	94	142	5
A111010,75	10,90	10.75	94	142	5
A111011	13,06	11.00	94	142	5

◈ Indivisible package ◈ Suggested retail package - Unit price

JOBBER DRILLS

WRK

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A111011,25	13,19	11.25	94	142	5
A111011,5	13,06	11.50	94	142	5
A111011,75	13,19	11.75	101	151	5
A111012	13,74	12.00	101	151	5
A111012,1	13,80	12.10	101	151	5
A111012,25	13,80	12.25	101	151	5
A111012,5	15,78	12.50	101	151	5
A111012,75	15,94	12.75	101	151	5
A111013	16,92	13.00	108	160	5
A111013,25	21,09	13.25	108	160	1
A111013,5	22,42	13.50	108	160	1
A111013,75	24,56	13.75	108	160	1
A111014	22,26	14.00	114	169	1
A111014,25	22,53	14.25	114	169	1
A111014,5	28,23	14.50	114	169	1

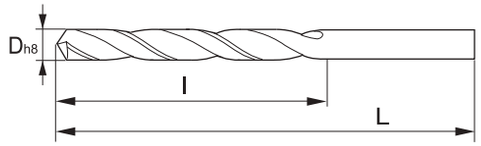
Tech. Code	GR01 Euro	D mm	l mm	L mm	
A111014,75	25,90	14.75	114	169	1
A111015	26,13	15.00	120	178	1
A111015,25	28,49	15.25	120	178	1
A111015,5	33,71	15.50	120	178	1
A111015,75	30,92	15.75	120	178	1
A111016	30,78	16.00	125	184	1
A111016,5	39,72	16.50	125	184	1
A111017	39,72	17.00	130	191	1
A111017,5	46,96	17.50	130	191	1
A111018	44,30	18.00	135	198	1
A111018,5	50,58	18.50	135	198	1
A111019	50,58	19.00	140	205	1
A111019,5	52,87	19.50	140	205	1
A111020	57,62	20.00	140	205	1

JOBBER DRILLS

WRK HI-NOX

DIN 338 | 130° | VA/R | HA | Inox

ITEM: A1130



Geometry	Right-hand cut
Point angle	130°
Surface treatment	Bright
Application	Designed to drill austenitic stainless steel eliminating all "auto-quenching" material problems while keeping perfect chip control.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		●	●											

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A11303	2,72	3.00	18	61	5
A11303,1	3,28	3.10	20	65	5
A11303,2	3,28	3.20	20	65	5
A11303,3	3,05	3.30	20	65	5
A11303,4	3,28	3.40	22	70	5
A11303,5	2,83	3.50	22	70	5
A11304	3,05	4.00	25	75	5
A11304,2	3,40	4.20	25	75	5
A11304,3	3,40	4.30	28	80	5
A11304,5	3,50	4.50	28	80	5
A11305	4,08	5.00	32	86	5
A11305,1	5,20	5.10	32	86	5
A11305,2	4,97	5.20	32	86	5
A11305,3	5,20	5.30	32	86	5
A11305,5	5,55	5.50	36	93	5
A11305,8	6,10	5.80	36	93	5
A11306	5,20	6.00	36	93	5
A11306,2	6,45	6.20	40	101	5
A11306,5	6,10	6.50	40	101	5
A11306,8	7,35	6.80	45	109	5

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A11307	6,89	7.00	45	109	5
A11307,5	9,04	7.50	51	117	5
A11308	8,93	8.00	51	117	5
A11308,1	11,42	8.10	51	117	5
A11308,2	11,42	8.20	51	117	5
A11308,5	10,07	8.50	57	125	5
A11308,6	13,01	8.60	57	125	1
A11309	11,20	9.00	57	125	1
A11309,5	13,45	9.50	63	133	1
A113010	14,36	10.00	63	133	1
A113010,2	22,39	10.20	63	133	1
A113010,5	17,30	10.50	63	133	1
A113011	19,32	11.00	71	142	1
A113011,2	26,68	11.20	71	142	1
A113011,5	20,58	11.50	71	142	1
A113011,8	30,43	11.80	71	142	1
A113012	22,85	12.00	71	151	1
A113012,5	26,45	12.50	71	151	1
A113013	28,50	13.00	71	151	1

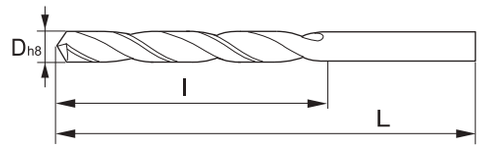
Indivisible package Suggested retail package - Unit price

JOBBER DRILLS

KERFOLG

DIN		N/R	
338	118°		HA

ITEM: A1120



Geometry	Normal flute, right hand cut
Point angle	118° with split point
Surface treatment	Bright up to ø 2.30 - Steam tempering over ø 2.40
Application	Steel and ferritic cast iron (alloy and non), grey cast iron, nodular spheroidal cast iron and graphite.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11200,3	5,65	0.30	3	19	10
A11200,4	4,84	0.40	5	20	10
A11200,5	4,13	0.50	6	22	10
A11200,6	4,38	0.60	7	24	10
A11200,7	3,96	0.70	9	28	10
A11200,75	5,11	0.75	9	28	10
A11200,8	4,06	0.80	10	30	10
A11200,9	3,88	0.90	11	32	10
A11201	3,70	1.00	12	34	10
A11201,1	3,70	1.10	14	36	10
A11201,2	3,88	1.20	16	38	10
A11201,25	3,70	1.25	16	38	10
A11201,3	4,42	1.30	16	38	10
A11201,4	3,10	1.40	18	40	10
A11201,5	2,82	1.50	18	40	10
A11201,6	2,98	1.60	20	43	10
A11201,7	3,19	1.70	20	43	10
A11201,75	3,19	1.75	22	46	10
A11201,8	2,56	1.80	22	46	10
A11201,9	2,63	1.90	22	46	10
A11202	2,20	2.00	24	49	10
A11202,1	2,56	2.10	24	49	10
A11202,2	2,56	2.20	27	53	10
A11202,25	2,82	2.25	27	53	10
A11202,3	2,56	2.30	27	53	10
A11202,4	2,82	2.40	30	57	10
A11202,5	2,82	2.50	30	57	10
A11202,6	2,82	2.60	30	57	10
A11202,7	2,82	2.70	33	61	10
A11202,75	3,35	2.75	33	61	10
A11202,8	2,82	2.80	33	61	10
A11202,9	2,82	2.90	33	61	10
A11203	2,30	3.00	33	61	10
A11203,1	2,82	3.10	36	65	10
A11203,2	2,82	3.20	36	65	10
A11203,25	3,10	3.25	36	65	10
A11203,3	3,19	3.30	36	65	10
A11203,4	3,19	3.40	39	70	10
A11203,5	2,75	3.50	39	70	10
A11203,6	3,19	3.60	39	70	10
A11203,7	3,19	3.70	39	70	10
A11203,75	3,61	3.75	39	70	10
A11203,8	3,53	3.80	43	75	10
A11203,9	3,53	3.90	43	75	10
A11204	2,82	4.00	43	75	10
A11204,1	3,53	4.10	43	75	10
A11204,2	3,53	4.20	43	75	10
A11204,25	3,81	4.25	43	75	10
A11204,3	3,88	4.30	47	80	10
A11204,4	3,88	4.40	47	80	10
A11204,5	3,61	4.50	47	80	10
A11204,6	3,88	4.60	47	80	10
A11204,7	4,14	4.70	47	80	10
A11204,75	4,78	4.75	47	80	10
A11204,8	4,14	4.80	52	86	10
A11204,9	4,14	4.90	52	86	10
A11205	3,61	5.00	52	86	10
A11205,1	4,42	5.10	52	86	10
A11205,2	4,42	5.20	52	86	10
A11205,25	5,46	5.25	52	86	10
A11205,3	4,42	5.30	52	86	10
A11205,4	5,12	5.40	57	93	10
A11205,5	4,93	5.50	57	93	10
A11205,6	5,20	5.60	57	93	10
A11205,7	5,39	5.70	57	93	10
A11205,75	7,40	5.75	57	93	10
A11205,8	5,46	5.80	57	93	10
A11205,9	5,56	5.90	57	93	10
A11206	4,93	6.00	57	93	10
A11206,1	6,09	6.10	63	101	10
A11206,2	6,09	6.20	63	101	10
A11206,25	7,94	6.25	63	101	10
A11206,3	6,27	6.30	63	101	10

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11206,4	6,45	6.40	63	101	10
A11206,5	6,16	6.50	63	101	10
A11206,6	6,62	6.60	63	101	10
A11206,7	6,71	6.70	63	101	10
A11206,75	8,28	6.75	69	109	10
A11206,8	8,21	6.80	69	109	10
A11206,9	8,47	6.90	69	109	10
A11207	7,40	7.00	69	109	10
A11207,1	8,47	7.10	69	109	10
A11207,2	8,64	7.20	69	109	10
A11207,25	10,75	7.25	69	109	10
A11207,3	8,64	7.30	69	109	10
A11207,4	8,80	7.40	69	109	10
A11207,5	7,84	7.50	69	109	10
A11207,6	9,60	7.60	75	117	10
A11207,7	9,60	7.70	75	117	10
A11207,75	11,82	7.75	75	117	10
A11207,8	9,60	7.80	75	117	10
A11207,9	9,87	7.90	75	117	10
A11208	8,92	8.00	75	117	10
A11208,1	10,04	8.10	75	117	10
A11208,2	10,40	8.20	75	117	10
A11208,25	11,46	8.25	75	117	10
A11208,3	10,30	8.30	75	117	10
A11208,4	10,75	8.40	75	117	10
A11208,5	9,60	8.50	75	117	10
A11208,6	12,51	8.60	81	125	5
A11208,7	12,51	8.70	81	125	5
A11208,75	15,39	8.75	81	125	5
A11208,8	12,51	8.80	81	125	5
A11208,9	12,78	8.90	81	125	5
A11209	11,63	9.00	81	125	5
A11209,1	12,78	9.10	81	125	5
A11209,2	12,78	9.20	81	125	5
A11209,25	15,51	9.25	81	125	5
A11209,3	13,53	9.30	81	125	5
A11209,4	13,53	9.40	81	125	5
A11209,5	12,78	9.50	81	125	5
A11209,6	14,03	9.60	87	133	5
A11209,7	14,03	9.70	87	133	5
A11209,75	17,62	9.75	87	133	5
A11209,8	14,78	9.80	87	133	5
A11209,9	14,78	9.90	87	133	5
A112010	13,77	10.00	87	133	5
A112010,1	18,00	10.10	87	133	5
A112010,2	17,73	10.20	87	133	5
A112010,25	21,60	10.25	87	133	5
A112010,3	20,85	10.30	87	133	5
A112010,4	20,85	10.40	87	133	5
A112010,5	17,73	10.50	87	133	5
A112010,6	21,36	10.60	87	133	5
A112010,7	26,42	10.70	94	142	5
A112010,75	26,42	10.75	94	142	5
A112010,8	26,42	10.80	94	142	5
A112010,9	(26,42)	10.90	94	142	5
A112011	20,85	11.00	94	142	5
A112011,1	(27,43)	11.10	94	142	5
A112011,2	26,42	11.20	94	142	5
A112011,25	26,42	11.25	94	142	5
A112011,3	26,42	11.30	94	142	5
A112011,4	(26,42)	11.40	94	142	5
A112011,5	22,21	11.50	94	142	5
A112011,6	(26,42)	11.60	94	142	5
A112011,7	(26,42)	11.70	94	142	5
A112011,75	27,04	11.75	94	142	5
A112011,8	27,04	11.80	94	142	5
A112011,9	(31,38)	11.90	101	151	5
A112012	24,69	12.00	101	151	5
A112012,1	33,52	12.10	101	151	5
A112012,2	34,01	12.20	101	151	5
A112012,25	34,38	12.25	101	151	5
A112012,3	(28,91)	12.30	101	151	5
A112012,4	(34,38)	12.40	101	151	5

Indivisible package Suggested retail package - Unit price

JOBBER DRILLS

KERFOLG

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A112012,5	27,43	12.50	101	151	5
A112012,6	(34,38)	12.60	101	151	5
A112012,7	(31,38)	12.70	101	151	5
A112012,75	34,75	12.75	101	151	5
A112012,8	(35,00)	12.80	101	151	5
A112012,9	(38,99)	12.90	101	151	5
A112013	28,29	13.00	101	151	5
A112013,25	45,68	13.25	108	160	1
A112013,5	36,24	13.50	108	160	1
A112013,75	47,41	13.75	108	160	1
A112014	39,60	14.00	108	160	1
A112014,25	53,25	14.25	114	169	1
A112014,5	42,57	14.50	114	169	1
A112014,75	(53,48)	14.75	114	169	1
A112015	43,06	15.00	114	169	1
A112015,25	71,22	15.25	120	178	1
A112015,5	50,52	15.50	120	178	1

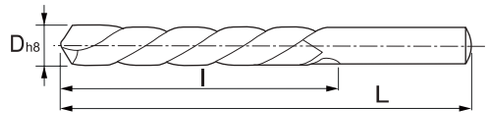
Tech. Code	GR03 Euro	D mm	l mm	L mm	
A112015,75	(74,71)	15.75	120	178	1
A112016	52,50	16.00	120	178	1
A112016,25	(105,85)	16.25	125	184	1
A112016,5	59,31	16.50	125	184	1
A112016,75	(109,82)	16.75	125	184	1
A112017	60,20	17.00	125	184	1
A112017,25	(114,53)	17.25	130	191	1
A112017,5	68,75	17.50	130	191	1
A112017,75	(123,22)	17.75	130	191	1
A112018,25	(128,81)	18.25	135	198	1
A112018	72,70	18.00	130	191	1
A112018,5	80,54	18.50	135	198	1
A112018,75	(131,92)	18.75	135	198	1
A112019	83,03	19.00	135	198	1
A112019,25	(174,46)	19.25	140	205	1
A112019,5	88,48	19.50	140	205	1
A112020	103,50	20.00	140	205	1

JOBBER DRILLS

KERFOLG

DIN 338 | 130° | FS/R | WIND Z | HA | ALU

ITEM: A1125



Geometry	Special self-centering geometry, reduced cutting force
Point angle	130°
Surface treatment	WIND Z
Application	Carbon steel up to 850 N/mm², cast iron and aluminum alloys. Low friction coefficient and great corrosion resistance.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○			●	●	●	●						

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A112503	1,54	3,00	33	61	10
A112503,3	3,34	3,30	36	65	10
A112503,5	3,43	3,50	39	70	10
A112504	3,53	4,00	43	75	10
A112504,2	3,87	4,20	43	75	10
A112504,5	3,85	4,50	47	80	10
A112505	4,18	5,00	52	86	10
A112505,5	5,30	5,50	57	93	10
A112506	5,64	6,00	57	93	10
A112506,5	6,77	6,50	63	101	10
A112506,8	7,59	6,80	69	109	10
A112507	7,39	7,00	69	109	10
A112507,5	7,90	7,50	69	109	10

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A112508	9,23	8,00	75	117	10
A112508,5	9,61	8,50	75	117	5
A112509	12,29	9,00	81	125	5
A112509,5	12,71	9,50	81	125	5
A112510	13,96	10,00	87	133	5
A112510,2	19,79	10,20	87	133	5
A112510,5	19,79	10,50	87	133	5
A112511	21,89	11,00	94	142	5
A112511,5	26,16	11,50	94	142	5
A112512	27,97	12,00	101	151	5
A112512,5	34,07	12,50	101	151	5
A112513	34,88	13,00	101	151	5

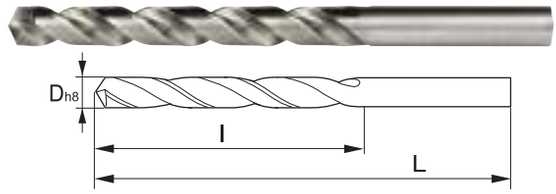
JOBBER DRILLS

KERFOLG Top-Nox

DIN	HSSE		VA/R		Inox
338		135°		HA	

ITEM: A1135

Geometry	Right-hand cut
Point angle	135° with split point
Surface treatment	Bright
Application	High performances on stainless steel.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		●	●		○	●	○	○						

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A113501	3,38	1.00	12	34	10
A113501,25	3,98	1.25	16	38	10
A113501,5	3,20	1.50	18	40	10
A113502	3,20	2.00	24	49	10
A113502,25	3,91	2.25	27	53	10
A113502,5	3,20	2.50	30	57	10
A113502,75	3,91	2.75	33	61	10
A113502,8	4,19	2.80	33	61	10
A113503	3,17	3.00	33	61	10
A113503,1	3,87	3.10	36	65	10
A113503,2	3,87	3.20	36	65	10
A113503,25	3,87	3.25	36	65	10
A113503,3	3,87	3.30	36	65	10
A113503,5	3,81	3.50	39	70	10
A113503,7	5,04	3.70	39	70	10
A113503,75	4,57	3.75	39	70	10
A113503,8	5,04	3.80	43	75	10
A113504	4,12	4.00	43	75	10
A113504,1	4,57	4.10	43	75	10
A113504,2	4,57	4.20	43	75	10
A113504,25	4,57	4.25	43	75	10
A113504,3	5,04	4.30	47	80	10
A113504,5	4,57	4.50	47	80	10
A113504,75	5,09	4.75	47	80	10
A113504,8	5,61	4.80	52	86	10
A113505	4,89	5.00	52	86	10
A113505,1	5,81	5.10	52	86	10
A113505,2	6,06	5.20	52	86	10

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A113505,25	5,71	5.25	52	86	10
A113505,5	6,19	5.50	57	93	10
A113505,7	7,64	5.70	57	93	10
A113505,75	6,91	5.75	57	93	10
A113506	6,60	6.00	57	93	10
A113506,25	7,54	6.25	63	101	10
A113506,5	7,70	6.50	63	101	10
A113506,75	9,02	6.75	69	109	10
A113506,8	9,02	6.80	69	109	10
A113507	8,39	7.00	69	109	10
A113507,25	11,53	7.25	69	109	10
A113507,5	8,95	7.50	69	109	10
A113508	10,47	8.00	75	117	10
A113508,25	13,34	8.25	75	117	5
A113508,5	10,91	8.50	75	117	5
A113509	13,94	9.00	81	125	5
A113509,1	19,45	9.10	81	125	5
A113509,5	14,43	9.50	81	125	5
A113510	15,90	10.00	87	133	5
A113510,2	21,41	10.20	87	133	5
A113510,25	27,89	10.25	87	133	5
A113510,5	21,41	10.50	87	133	5
A113511	23,75	11.00	94	142	5
A113511,5	27,29	11.50	94	142	5
A113512	29,23	12.00	101	151	5
A113512,5	32,54	12.50	101	151	5
A113513	33,03	13.00	101	151	5

Related products

EROGLU POWER CHUCKS DIN 69871 SK FORMA AD+B

Tech. Code	SK	D mm	L mm
C002642090	40	20	90
C0026432100		32	100
C002652070	50	20	70
C002653295		32	95

The products are available in chapter C

Indivisible package Suggested retail package - Unit price

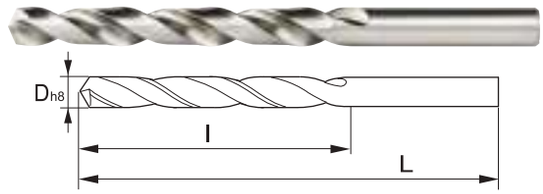
JOBBER DRILLS

WRK

DIN 338 | HSSE | 130° | VA/R | HA | Inox

ITEM: A1140

Geometry	Right-hand cut
Point angle	130° with split point
Surface treatment	Bright
Application	Stainless steel.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○			●	○				○	○				○			

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A11401	4,10	1.00	12	34	10
A11401,1	3,98	1.10	14	36	10
A11401,2	3,86	1.20	16	38	10
A11401,3	3,86	1.30	16	38	10
A11401,4	3,86	1.40	18	40	10
A11401,5	3,62	1.50	18	40	10
A11401,6	3,98	1.60	20	43	10
A11401,7	3,74	1.70	20	43	10
A11401,8	3,74	1.80	22	46	10
A11401,9	3,74	1.90	22	46	10
A11402	3,51	2.00	24	49	10
A11402,1	3,51	2.10	24	49	10
A11402,2	3,51	2.20	27	53	10
A11402,3	3,51	2.30	27	53	10
A11402,4	3,74	2.40	30	57	10
A11402,5	3,51	2.50	30	57	10
A11402,6	3,74	2.60	30	57	10
A11402,7	3,86	2.70	33	61	10
A11402,8	3,86	2.80	33	61	10
A11402,9	3,98	2.90	33	61	10
A11403	3,74	3.00	33	61	10
A11403,1	3,86	3.10	65	36	10
A11403,2	3,86	3.20	65	36	10
A11403,25	4,21	3.25	65	36	10
A11403,3	3,74	3.30	65	36	10
A11403,4	4,21	3.40	39	70	10
A11403,5	4,21	3.50	39	70	10
A11403,6	4,46	3.60	39	70	10
A11403,7	4,46	3.70	39	70	10
A11403,8	4,91	3.80	43	75	10
A11403,9	4,91	3.90	43	75	10
A11404	4,56	4.00	43	75	10
A11404,1	4,91	4.10	43	75	10
A11404,2	4,91	4.20	43	75	10

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A11404,3	4,91	4.30	47	80	10
A11404,4	5,27	4.40	47	80	10
A11404,5	5,04	4.50	47	80	10
A11404,6	5,27	4.60	47	80	10
A11404,7	5,27	4.70	47	80	10
A11404,8	5,74	4.80	52	86	10
A11404,9	5,74	4.90	52	86	10
A11405	5,38	5.00	52	86	10
A11405,1	5,74	5.10	52	86	10
A11405,2	5,74	5.20	52	86	10
A11405,3	5,74	5.30	52	86	10
A11405,4	7,61	5.40	57	93	10
A11405,5	7,25	5.50	57	93	10
A11405,6	8,19	5.60	57	93	10
A11405,7	8,19	5.70	57	93	10
A11405,8	8,19	5.80	57	93	10
A11405,9	8,19	5.90	57	93	10
A11406	7,71	6.00	57	93	10
A11406,5	8,78	6.50	63	101	10
A11406,8	9,84	6.80	69	109	10
A11407	9,35	7.00	69	109	10
A11407,5	9,84	7.50	69	109	10
A11408	11,59	8.00	75	117	10
A11408,5	11,81	8.50	75	117	10
A11409	14,86	9.00	81	125	5
A11409,5	15,33	9.50	81	125	5
A114010	17,09	10.00	87	133	5
A114010,5	22,24	10.50	87	133	5
A114011	27,50	11.00	94	142	5
A114011,5	32,29	11.50	94	142	5
A114012	32,77	12.00	101	151	5
A114012,5	40,96	12.50	101	151	5
A114013	32,77	13.00	101	151	5

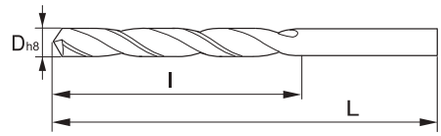
Indivisible package Suggested retail package - Unit price

JOBBER DRILLS

KERFOLG

DIN	HSSE		N/R	
338		130°		HA

ITEM: A1145



Geometry	Normale flute, right hand cut
Point angle	130°
Surface treatment	Gold oxide
Application	Highly heat-resistant drill bit for drilling alloy and non-alloy steel, cast iron with R> 800 N/mm², steel for bearings and hardened steel, also suitable for stainless steel.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●		○				○	○				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11451	4,89	1.00	12	34	10
A11451,1	4,80	1.10	14	36	10
A11451,2	4,89	1.20	16	38	10
A11451,3	4,76	1.30	16	38	10
A11451,4	4,55	1.40	18	40	10
A11451,5	4,22	1.50	18	40	10
A11451,6	2,74	1.60	20	43	10
A11451,7	2,67	1.70	20	43	10
A11451,8	2,63	1.80	22	46	10
A11451,9	2,63	1.90	22	46	10
A11452	2,56	2.00	24	49	10
A11452,1	2,67	2.10	24	49	10
A11452,2	2,74	2.20	27	53	10
A11452,3	2,67	2.30	27	53	10
A11452,4	2,83	2.40	30	57	10
A11452,5	2,74	2.50	30	57	10
A11452,6	2,93	2.60	30	57	10
A11452,7	3,00	2.70	33	61	10
A11452,8	2,93	2.80	33	61	10
A11452,9	3,06	2.90	33	61	10
A11453	2,97	3.00	33	61	10
A11453,2	3,27	3.20	36	65	10
A11453,3	3,27	3.30	36	65	10
A11453,4	3,50	3.40	39	70	10
A11453,5	3,41	3.50	39	70	10
A11453,6	3,75	3.60	39	70	10
A11453,7	3,66	3.70	39	70	10
A11453,8	3,87	3.80	43	75	10
A11453,9	3,87	3.90	43	75	10
A11454	3,80	4.00	43	75	10
A11454,1	3,98	4.10	43	75	10
A11454,2	3,94	4.20	43	75	10
A11454,3	4,34	4.30	47	80	10
A11454,5	4,16	4.50	47	80	10
A11454,6	4,29	4.60	47	80	10
A11454,7	4,29	4.70	47	80	10
A11454,8	4,51	4.80	52	86	10
A11454,9	4,68	4.90	52	86	10
A11455	4,60	5.00	52	86	10
A11455,1	5,24	5.10	52	86	10
A11455,2	5,17	5.20	52	86	10
A11455,3	5,09	5.30	52	86	10
A11455,5	5,75	5.50	57	93	10

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11455,6	5,67	5.60	57	93	10
A11455,7	6,24	5.70	57	93	10
A11455,8	6,02	5.80	57	93	10
A11456	6,12	6.00	57	93	10
A11456,1	6,59	6.10	63	101	10
A11456,2	6,50	6.20	63	101	10
A11456,3	6,24	6.30	63	101	10
A11456,4	6,68	6.40	63	101	10
A11456,5	6,59	6.50	63	101	10
A11456,6	7,16	6.60	63	101	10
A11456,7	7,02	6.70	63	101	10
A11456,8	7,69	6.80	69	109	10
A11457	7,42	7.00	69	109	10
A11457,1	7,96	7.10	69	109	10
A11457,3	8,52	7.30	69	109	10
A11457,5	8,36	7.50	69	109	10
A11457,7	9,19	7.70	75	117	10
A11457,8	9,16	7.80	75	117	10
A11458	8,85	8.00	75	117	10
A11458,2	9,64	8.20	75	117	10
A11458,3	9,47	8.30	75	117	10
A11458,4	9,92	8.40	75	117	10
A11458,5	9,76	8.50	75	117	10
A11458,6	11,05	8.60	81	125	10
A11458,7	10,86	8.70	81	125	10
A11458,9	16,08	8.90	81	125	10
A11459	14,51	9.00	81	125	10
A11459,1	16,08	9.10	81	125	10
A11459,2	16,08	9.20	81	125	10
A11459,3	16,33	9.30	81	125	10
A11459,4	16,33	9.40	81	125	10
A11459,5	16,33	9.50	81	125	10
A11459,7	17,91	9.70	87	133	10
A11459,8	19,26	9.80	87	133	10
A114510	17,22	10.00	87	133	10
A114510,2	21,85	10.20	87	133	5
A114510,5	22,56	10.50	87	133	5
A114511	25,60	11.00	94	142	5
A114511,5	28,21	11.50	94	142	5
A114512	31,37	12.00	101	151	5
A114512,5	24,83	12.50	101	151	5
A114513	25,27	13.00	101	151	5

Indivisible package Suggested retail package - Unit price

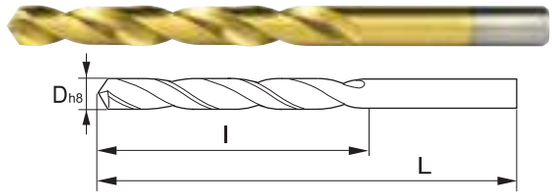
JOBBER DRILLS

KERFOLG Ti-One

DIN		N/R	TiN	
338	118°			HA

ITEM: A1180

Geometry	Normale flute, right hand cut
Point angle	118°
Surface treatment	TiN
Application	Steel, grey and spheroidal cast iron and graphite.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●			○	○				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11801	3,88	1.00	12	34	1
A11801,1	3,98	1.10	14	36	1
A11801,2	3,88	1.20	16	38	1
A11801,3	3,79	1.30	16	38	1
A11801,4	3,57	1.40	18	40	1
A11801,5	3,33	1.50	18	40	1
A11801,6	3,38	1.60	20	43	1
A11801,7	3,33	1.70	20	43	1
A11801,8	2,97	1.80	22	46	1
A11801,9	2,97	1.90	22	46	1
A11802	2,24	2.00	24	49	1
A11802,1	2,97	2.10	24	49	1
A11802,2	2,97	2.20	27	53	1
A11802,3	2,97	2.30	27	53	1
A11802,4	2,97	2.40	30	57	1
A11802,5	2,68	2.50	30	57	1
A11802,6	3,17	2.60	30	57	1
A11802,7	3,17	2.70	33	61	1
A11802,8	3,22	2.80	33	61	1
A11802,9	3,22	2.90	33	61	1
A11803	2,41	3.00	33	61	1
A11803,1	3,33	3.10	36	65	1
A11803,2	3,00	3.20	36	65	1
A11803,3	3,00	3.30	36	65	1
A11803,4	3,22	3.40	39	70	1
A11803,5	2,68	3.50	39	70	1
A11803,6	4,02	3.60	39	70	1
A11803,7	3,82	3.70	39	70	1
A11803,8	4,12	3.80	43	75	1
A11803,9	4,02	3.90	43	75	1
A11804	2,92	4.00	43	75	1
A11804,1	4,31	4.10	43	75	1
A11804,2	3,45	4.20	43	75	1
A11804,3	4,31	4.30	47	80	1
A11804,4	4,31	4.40	47	80	1
A11804,5	3,49	4.50	47	80	1
A11804,6	4,44	4.60	47	80	1
A11804,7	4,47	4.70	47	80	1
A11804,8	4,47	4.80	52	86	1
A11804,9	4,74	4.90	52	86	1
A11805	3,49	5.00	52	86	1
A11805,1	4,74	5.10	52	86	1
A11805,2	4,83	5.20	52	86	1
A11805,3	4,93	5.30	52	86	1
A11805,4	5,68	5.40	57	93	1
A11805,5	4,77	5.50	57	93	1
A11805,6	5,68	5.60	57	93	1
A11805,7	5,83	5.70	57	93	1
A11805,8	5,83	5.80	57	93	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11805,9	6,02	5.90	57	93	1
A11806	4,77	6.00	57	93	1
A11806,1	6,38	6.10	63	101	1
A11806,2	6,38	6.20	63	101	1
A11806,3	6,59	6.30	63	101	1
A11806,4	7,07	6.40	63	101	1
A11806,5	5,96	6.50	63	101	1
A11806,6	7,25	6.60	63	101	1
A11806,7	7,60	6.70	63	101	1
A11806,8	7,86	6.80	69	109	1
A11806,9	8,89	6.90	69	109	1
A11807	7,16	7.00	69	109	1
A11807,1	8,99	7.10	69	109	1
A11807,2	9,26	7.20	69	109	1
A11807,3	9,26	7.30	69	109	1
A11807,4	9,70	7.40	69	109	1
A11807,5	7,92	7.50	69	109	1
A11807,6	14,53	7.60	75	117	1
A11807,7	14,53	7.70	75	117	1
A11807,8	14,53	7.80	75	117	1
A11807,9	14,73	7.90	75	117	1
A11808	7,92	8.00	75	117	1
A11808,1	15,42	8.10	75	117	1
A11808,2	15,70	8.20	75	117	1
A11808,3	17,07	8.30	75	117	1
A11808,4	17,07	8.40	75	117	1
A11808,5	14,83	8.50	75	117	1
A11808,6	18,63	8.60	81	125	1
A11808,7	18,63	8.70	81	125	1
A11808,8	19,22	8.80	81	125	1
A11808,9	20,01	8.90	81	125	1
A11809	15,79	9.00	81	125	1
A11809,1	20,01	9.10	81	125	1
A11809,2	20,01	9.20	81	125	1
A11809,3	20,40	9.30	81	125	1
A11809,4	20,40	9.40	81	125	1
A11809,5	18,09	9.50	81	125	1
A11809,6	22,15	9.60	87	133	1
A11809,7	22,15	9.70	87	133	1
A11809,8	24,20	9.80	87	133	1
A11809,9	24,20	9.90	87	133	1
A118010	19,14	10.00	87	133	1
A118010,2	22,53	10.20	87	133	1
A118010,5	26,84	10.50	87	133	1
A118011	31,32	11.00	94	142	1
A118011,5	34,83	11.50	94	142	1
A118012	37,75	12.00	101	151	1
A118012,5	43,61	12.50	101	151	1
A118013	47,25	13.00	101	151	1

Indivisible package Suggested retail package - Unit price

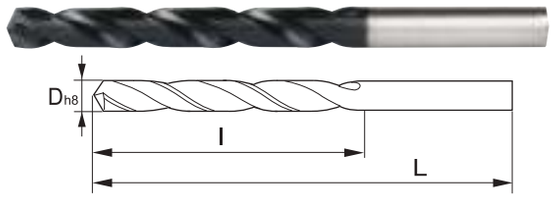
JOBBER DRILLS

KERFOLG

DIN	HSSE		VA/R	DEVIL	
338		130°			HA

ITEM: A1190

Geometry	Advanced flute design, core thinning, self centering point geometry
Point angle	130°
Surface treatment	Devil
Application	Titanium and titanium alloys, heat-resistant alloys and austenitic stainless steel, super alloys.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	○	●	●	○		●	●						●	○	○	

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11903	14,87	3.00	33	61	1
A11903,1	16,60	3.10	36	65	1
A11903,2	15,85	3.20	36	65	1
A11903,3	15,85	3.30	36	65	1
A11903,4	17,21	3.40	39	70	1
A11903,5	15,85	3.50	39	70	1
A11903,6	17,21	3.60	39	70	1
A11903,8	17,44	3.80	43	75	1
A11904	16,10	4.00	43	75	1
A11904,1	17,82	4.10	43	75	1
A11904,2	17,82	4.20	43	75	1
A11904,5	17,82	4.50	47	80	1
A11904,7	18,68	4.70	47	80	1
A11904,8	18,68	4.80	52	86	1
A11905	17,44	5.00	52	86	1
A11905,2	18,92	5.20	52	86	1
A11905,4	20,03	5.40	57	93	1
A11905,5	20,64	5.50	57	93	1
A11905,6	20,03	5.60	57	93	1
A11905,8	20,03	5.80	57	93	1
A11906	19,78	6.00	57	93	1
A11906,1	(22,62)	6.10	63	101	1
A11906,3	(26,30)	6.30	63	101	1
A11906,5	31,45	6.50	63	101	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A11906,8	33,81	6.80	69	109	1
A11906,9	(33,81)	6.90	69	109	1
A11907	32,09	7.00	69	109	1
A11907,2	(36,62)	7.20	69	109	1
A11907,5	32,58	7.50	69	109	1
A11907,7	(40,68)	7.70	75	117	1
A11907,8	(40,68)	7.80	75	117	1
A11908	36,13	8.00	75	117	1
A11908,1	(40,68)	8.10	75	117	1
A11908,2	(41,30)	8.20	75	117	1
A11908,3	(41,30)	8.30	75	117	1
A11908,5	36,13	8.50	75	117	1
A11908,8	(45,24)	8.80	81	125	1
A11909	40,68	9.00	81	125	1
A11909,3	(50,40)	9.30	81	125	1
A11909,4	(53,22)	9.40	81	125	1
A11909,5	44,60	9.50	81	125	1
A119010	43,51	10.00	87	133	1
A119010,5	53,84	10.50	87	133	1
A119011	57,26	11.00	94	142	1
A119011,5	68,10	11.50	94	142	1
A119012	73,74	12.00	101	151	1
A119012,5	84,09	12.50	101	151	1
A119013	88,61	13.00	101	151	1

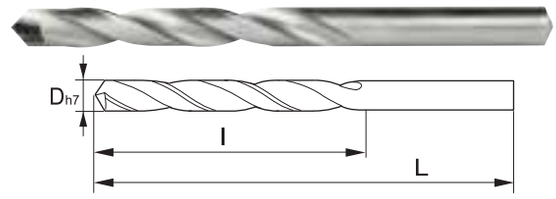
JOBBER DRILLS CARBIDE-TIPPED

WRK

DIN	HSS		N/R	
338	+ HM	118°		HA

ITEM: A1240

Geometry	Normal flute 25° N/R
Point angle	118° with brazed carbide tip
Surface treatment	Bright
Application	General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	○	○				●	●				○				○	●

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A12402	25,37	2.00	24	49	1
A12402,5	25,37	2.50	30	57	1
A12403	25,37	3.00	33	61	1
A12403,3	28,90	3.30	36	65	1
A12403,5	25,37	3.50	39	70	1
A12404	25,37	4.00	43	75	1
A12404,2	29,76	4.20	43	75	1
A12404,5	25,89	4.50	47	80	1
A12405	25,89	5.00	52	86	1
A12405,5	27,22	5.50	57	93	1
A12406	28,81	6.00	57	93	1
A12406,5	34,09	6.50	63	101	1
A12406,8	37,95	6.80	69	109	1
A12407	34,09	7.00	69	109	1
A12407,5	35,90	7.50	69	109	1
A12408	35,90	8.00	75	117	1
A12408,5	39,34	8.50	75	117	1
A12409	39,90	9.00	81	125	1

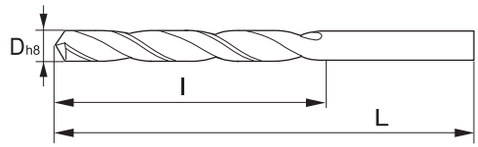
Tech. Code	GR01 Euro	D mm	l mm	L mm	
A12409,5	43,26	9.50	81	125	1
A124010	44,28	10.00	87	133	1
A124010,5	55,38	10.50	87	133	1
A124011	56,01	11.00	94	142	1
A124011,5	(64,47)	11.50	94	142	1
A124012	66,15	12.00	101	151	1
A124012,5	(75,00)	12.50	101	151	1
A124013	75,94	13.00	101	151	1
A124014	98,46	14.00	108	160	1
A124014,5	(100,74)	14.50	114	169	1
A124015	100,74	15.00	114	169	1
A124015,5	(115,94)	15.50	120	178	1
A124016	115,94	16.00	120	178	1
A124017	(126,96)	17.00	125	184	1
A124018	(136,66)	18.00	130	191	1
A124019	(169,65)	19.00	135	198	1
A124020	(193,00)	20.00	140	205	1

Indivisible package Suggested retail package - Unit price

JOBBER DRILLS

KERFOLG

DIN 338 | HSSE | 130° | F/R | TiN | HA | UNI



ITEM: A1200

Geometry	Modified four-facet point sharpening, special web thinning, rounded flute profile, self-centering point geometry
Point angle	130°
Surface treatment	TiN
Application	Ideal for a variety of materials such as nonferrous metals, structural and carbon steel, high-percentage alloy steel with R ≤ 1000 N/mm², tool steel, cast iron and cast iron alloys, magnesium alloys, plastic and aluminum.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●		●	●	○	●	○	○				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A12001	7,45	1.00	12	34	1
A12001,2	7,94	1.20	16	38	1
A12001,4	7,82	1.40	18	40	1
A12001,5	7,45	1.50	18	40	1
A12002	7,54	2.00	24	49	1
A12002,2	8,31	2.20	27	53	1
A12002,4	7,67	2.40	27	53	1
A12002,5	7,67	2.50	30	57	1
A12002,6	8,08	2.60	30	57	1
A12002,8	8,44	2.80	33	61	1
A12002,9	9,34	2.90	33	61	1
A12003	8,18	3.00	33	61	1
A12003,1	9,34	3.10	36	65	1
A12003,2	9,07	3.20	36	65	1
A12003,3	9,20	3.30	36	65	1
A12003,4	9,96	3,40	39	70	1
A12003,5	9,96	3.50	39	70	1
A12003,8	10,59	3.80	43	75	1
A12004	10,33	4.00	43	75	1
A12004,1	10,59	4.10	43	75	1
A12004,2	10,59	4.20	43	75	1
A12004,3	11,34	4.30	47	80	1
A12004,5	10,96	4.50	47	80	1
A12004,6	11,70	4.60	47	80	1
A12004,8	11,86	4.80	52	86	1
A12005	11,70	5.00	52	86	1
A12005,1	11,98	5.10	52	86	1
A12005,2	11,98	5.20	52	86	1
A12005,3	13,25	5.30	52	86	1
A12005,5	13,97	5.50	57	93	1
A12005,6	14,74	5,60	57	93	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A12005,8	14,74	5.80	57	93	1
A12006	14,23	6.00	57	93	1
A12006,2	15,74	6.20	63	101	1
A12006,3	15,50	6.30	63	101	1
A12006,5	16,76	6.50	63	101	1
A12006,7	17,89	6.70	63	101	1
A12006,8	19,16	6.80	69	109	1
A12006,9	19,79	6,90	69	109	1
A12007	19,16	7.00	69	109	1
A12007,5	20,15	7.50	69	109	1
A12007,7	23,93	7.70	75	117	1
A12007,8	23,93	7.80	75	117	1
A12008	22,80	8.00	75	117	1
A12008,2	24,68	8.20	75	117	1
A12008,5	23,30	8.50	75	117	1
A12008,8	27,33	8.80	81	125	1
A12009	25,83	9.00	81	125	1
A12009,3	27,08	9,30	81	125	1
A12009,5	27,08	9.50	81	125	1
A12009,8	31,51	9.80	87	133	1
A120010	30,35	10.00	87	133	1
A120010,2	35,15	10.20	87	133	1
A120010,5	35,55	10.50	87	133	1
A120011	36,65	11.00	94	142	1
A120011,5	40,57	11.50	94	142	1
A120012	43,32	12.00	101	151	1
A120012,5	45,10	12.50	101	151	1
A120013	47,87	13.00	101	151	1
A120013,5	55,54	13.50	108	160	1
A120014	58,07	14.00	108	160	1

Related products

WODEX WHEELED SERVICE TOOL CASES TSA APPROVED

Tech. Code	A mm	B mm	C mm
F715500	511	446	363

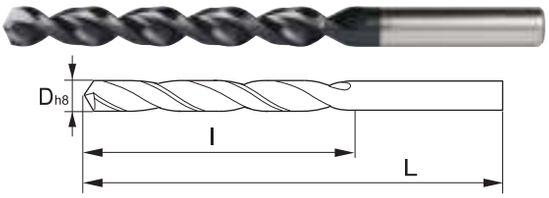
The products are available in chapter F

JOBBER DRILLS

KERFOLG X-310

DIN	HSSE		FS/R	TiAlN	
338		130°			HA

ITEM: A1220



Geometry	Parabolic flute design with wide grooves to provide optimal chip removal, self centering point geometry
Point angle	130°
Surface treatment	TiAlN
Application	Particularly suitable for long chip materials with R ≤ 1000 N / mm², aluminium and copper alloys, soft bronzes, electrolytic copper and tough brass

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	○	●	●				○	○	●	●				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A12201	5,98	1.00	12	34	10
A12201,1	6,16	1.10	14	36	10
A12201,2	7,13	1.20	16	38	10
A12201,3	7,13	1.30	16	38	10
A12201,4	6,25	1.40	18	40	10
A12201,5	5,98	1.50	18	40	10
A12201,6	6,25	1.60	20	43	10
A12201,7	5,98	1.70	20	43	10
A12201,8	6,16	1.80	22	46	10
A12201,9	6,44	1.90	22	46	10
A12202	6,70	2.00	24	49	10
A12202,1	6,70	2.10	24	49	10
A12202,2	6,44	2.20	27	53	10
A12202,3	6,44	2.30	27	53	10
A12202,5	7,84	2.50	30	57	10
A12202,6	7,84	2.60	30	57	10
A12202,7	7,31	2.70	33	61	10
A12202,8	7,31	2.80	33	61	10
A12202,9	7,31	2.90	33	61	10
A12203	6,44	3.00	33	61	10
A12203,1	7,57	3.10	36	65	10
A12203,2	7,57	3.20	36	65	10
A12203,3	7,57	3.30	36	65	10
A12203,4	7,94	3.40	39	70	10
A12203,5	8,11	3.50	39	70	10
A12203,6	8,19	3.60	39	70	10
A12203,8	8,35	3.80	43	75	10
A12203,9	8,46	3.90	43	75	10
A12204	8,54	4.00	43	75	10
A12204,1	8,54	4.10	43	75	10
A12204,2	8,54	4.20	43	75	10
A12204,3	8,89	4.30	47	80	10
A12204,4	8,89	4.40	47	80	10
A12204,5	8,98	4.50	47	80	10

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A12204,7	9,87	4.70	47	80	10
A12204,8	10,22	4.80	52	86	10
A12204,9	10,22	4.90	52	86	10
A12205	10,31	5.00	52	86	10
A12205,1	10,65	5.10	52	86	10
A12205,2	12,34	5.20	52	86	10
A12205,3	12,34	5.30	52	86	10
A12205,5	12,07	5.50	57	93	10
A12205,7	13,65	5.70	57	93	10
A12205,8	14,09	5.80	57	93	10
A12205,9	14,09	5.90	57	93	10
A12206	14,09	6.00	57	93	10
A12206,5	14,98	6.50	63	101	10
A12206,8	16,74	6.80	69	109	10
A12207	19,64	7.00	69	109	10
A12207,5	19,64	7.50	69	109	10
A12208	21,67	8.00	75	117	10
A12208,5	22,01	8.50	75	117	10
A12209	22,23	9.00	81	125	5
A12209,5	24,05	9.50	81	125	5
A122010	25,71	10.00	87	133	5
A122010,2	28,89	10.20	87	133	5
A122010,5	29,14	10.50	87	133	5
A122010,8	30,29	10.80	94	142	5
A122011	32,15	11.00	94	142	5
A122011,5	33,46	11.50	94	142	5
A122012	40,16	12.00	101	151	5
A122012,5	45,09	12.50	101	151	5
A122013	47,22	13.00	101	151	5
A122013,5*	47,45	13.50	108	160	1
A122014,5*	71,95	14.50	114	169	1
A122015,5*	78,10	15.50	120	178	1
A122016*	80,23	16.00	120	178	1

* WHILE STOCK LAST

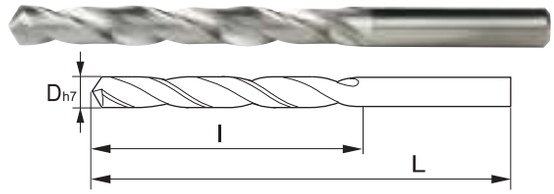
Indivisible package Suggested retail package - Unit price

SOLID CARBIDE DRILLS

WRK

DIN	HM		N/R	
338		118°		HA

ITEM: A1230



Geometry	Special web thinning, rounded flute profile, self-centering point geometry
Point angle	118°
Surface treatment	Bright
Application	Indicated for CN machines, materials with R ≤ 1000 N/mm².

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	○	●	●	○	○			○	○

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A12301	6,93	1.00	12	34	1
A12301,1	7,16	1.10	14	36	1
A12301,2	7,16	1.20	16	38	1
A12301,3	7,16	1.30	16	38	1
A12301,4	7,16	1.40	18	40	1
A12301,5	7,16	1.50	18	40	1
A12301,6	7,61	1.60	20	43	1
A12301,7	8,29	1.70	20	43	1
A12301,8	7,95	1.80	22	46	1
A12301,9	7,95	1.90	22	46	1
A12302	8,52	2.00	24	49	1
A12302,1	10,34	2.10	24	49	1
A12302,2	10,34	2.20	27	53	1
A12302,3	10,34	2.30	27	53	1
A12302,4	10,34	2.40	30	57	1
A12302,5	9,99	2.50	30	57	1
A12302,6	14,09	2.60	30	57	1
A12302,7	14,09	2.70	33	61	1
A12302,8	14,09	2.80	33	61	1
A12302,9	14,09	2.90	33	61	1
A12303	13,07	3.00	33	61	1
A12303,1	16,24	3.10	36	65	1
A12303,2	16,24	3.20	36	65	1
A12303,3	16,24	3.30	36	65	1
A12303,4	16,24	3.40	36	65	1
A12303,5	15,91	3.50	39	70	1
A12303,6	19,43	3.60	39	70	1
A12303,7	19,43	3.70	39	70	1
A12303,8	19,43	3.80	43	75	1
A12303,9	19,43	3.90	43	75	1
A12304	17,73	4.00	43	75	1
A12304,1	20,69	4.10	43	75	1
A12304,2	20,69	4.20	43	75	1
A12304,3	22,62	4.30	47	80	1
A12304,4	22,62	4.40	47	80	1

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A12304,5	21,93	4.50	47	80	1
A12304,6	26,58	4.60	47	80	1
A12304,7	26,58	4.70	47	80	1
A12304,8	27,72	4.80	52	86	1
A12304,9	27,72	4.90	52	86	1
A12305	25,56	5.00	52	86	1
A12305,1	31,82	5.10	52	86	1
A12305,2	31,82	5.20	52	86	1
A12305,3	31,82	5.30	52	86	1
A12305,4	32,71	5.40	57	93	1
A12305,5	31,58	5.50	57	93	1
A12305,6	35,45	5.60	57	93	1
A12305,7	35,45	5.70	57	93	1
A12305,8	35,45	5.80	57	93	1
A12305,9	35,45	5.90	57	93	1
A12306	34,66	6.00	57	93	1
A12306,5	40,45	6.50	63	101	1
A12306,8	48,86	6.80	69	109	1
A12307	46,58	7.00	69	109	1
A12307,5	55,12	7.50	69	109	1
A12308	57,15	8.00	75	117	1
A12308,5	70,10	8.50	75	117	1
A12309	72,04	9.00	81	125	1
A12309,5	83,06	9.50	81	125	1
A123010	89,31	10.00	87	133	1
A123010,2	105,90	10.20	87	133	1
A123010,5	108,84	10.50	87	133	1
A123011	119,54	11.00	94	142	1
A123011,5	135,78	11.50	94	142	1
A123012	141,01	12.00	101	151	1
A123012,5	152,60	12.50	101	151	1
A123013	164,99	13.00	101	151	1
A123013,5	207,02	13.50	108	160	1
A123014	226,00	14.00	108	160	1

Related products

WRK ER COLLET CHUCKS DIN 69871 SK AD+B

Tech. Code	SK	ER	D mm
C001043270	40	32	50

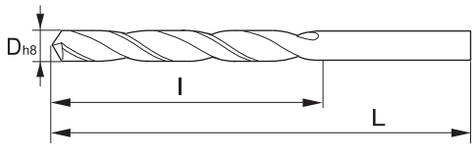
The products are available in chapter C

DRILLS - LONG SERIES

WRK

DIN		N/R	
340	118°		HA

ITEM: A1310



Geometry	Normal flute, right hand cut
Point angle	118°
Surface treatment	Bright up to ø 2.30 - Steam tempering over ø 2.40
Application	Steel and cast iron. Deep drilling and drilling with bit drive bush.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○	○				●	○	○	○	○	○				

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A13101	4,60	1.00	33	56	10
A13101,1	4,95	1.10	37	60	10
A13101,2	4,27	1.20	41	65	10
A13101,25	(4,39)	1.25	41	65	10
A13101,3	4,39	1.30	41	65	10
A13101,4	4,39	1.40	45	70	10
A13101,5	3,48	1.50	45	70	10
A13101,6	3,83	1.60	50	76	10
A13101,7	3,71	1.70	50	76	10
A13101,75	(3,71)	1.75	53	80	10
A13101,8	3,71	1.80	53	80	10
A13101,9	3,71	1.90	53	80	10
A13102	2,71	2.00	56	85	10
A13102,1	2,93	2.10	56	85	10
A13102,2	2,93	2.20	59	90	10
A13102,25	2,93	2.25	59	90	10
A13102,3	2,93	2.30	59	90	10
A13102,4	2,93	2.40	62	95	10
A13102,5	2,93	2.50	62	95	10
A13102,6	3,04	2.60	62	95	10
A13102,7	3,04	2.70	66	100	10
A13102,75	3,37	2.75	66	100	10
A13102,8	3,27	2.80	66	100	10
A13102,9	3,61	2.90	66	100	10
A13103	2,93	3.00	66	100	10
A13103,1	3,27	3.10	69	106	10
A13103,2	3,27	3.20	69	106	10
A13103,25	3,38	3.25	69	106	10
A13103,3	3,38	3.30	69	106	10
A13103,4	(3,48)	3.40	73	112	10
A13103,5	3,48	3.50	73	112	10
A13103,6	3,71	3.60	73	112	10
A13103,7	3,71	3.70	73	112	10
A13103,75	(4,27)	3.75	73	112	10
A13103,8	(3,71)	3.80	78	119	10
A13103,9	(3,71)	3.90	78	119	10
A13104	3,71	4.00	78	119	10
A13104,1	3,93	4.10	78	119	10
A13104,2	3,93	4.20	78	119	10
A13104,25	4,27	4.25	78	119	10
A13104,3	4,50	4.30	82	126	10
A13104,4	4,50	4.40	82	126	10
A13104,5	4,50	4.50	82	126	10
A13104,6	(4,50)	4.60	82	126	10
A13104,7	(4,50)	4.70	82	126	10

Tech. Code	GR01 Euro	D mm	l mm	L mm	
A13104,75	(4,60)	4.75	82	126	10
A13104,8	4,83	4.80	87	132	10
A13104,9	(4,83)	4.90	87	132	10
A13105	4,83	5.00	87	132	10
A13105,1	5,28	5.10	87	132	10
A13105,2	5,28	5.20	87	132	10
A13105,25	(5,52)	5.25	87	132	10
A13105,3	5,28	5.30	87	132	10
A13105,4	(6,08)	5.40	91	139	10
A13105,5	5,96	5.50	91	139	10
A13105,6	5,96	5.60	91	139	10
A13105,7	(6,42)	5.70	91	139	10
A13105,75	6,42	5.75	91	139	10
A13105,8	6,42	5.80	91	139	10
A13105,9	(6,42)	5.90	91	139	10
A13106	6,19	6.00	91	139	10
A13106,25	7,09	6.25	97	148	10
A13106,5	7,54	6.50	97	148	10
A13106,75	8,10	6.75	102	156	10
A13107	8,78	7.00	102	156	10
A13107,25	9,79	7.25	102	156	10
A13107,5	9,33	7.50	102	156	10
A13107,75	10,01	7.75	109	165	10
A13108	10,68	8.00	109	165	10
A13108,25	11,81	8.25	109	165	10
A13108,5	11,81	8.50	109	165	10
A13108,75	13,73	8.75	115	175	5
A13109	12,60	9.00	115	175	5
A13109,25	13,83	9.25	115	175	5
A13109,5	12,94	9.50	115	175	5
A13109,75	14,40	9.75	121	184	5
A131010	13,83	10.00	121	184	5
A131010,5	18,89	10.50	121	184	5
A131011	20,58	11.00	128	195	5
A131011,5	21,15	11.50	128	195	5
A131012	23,29	12.00	134	205	5
A131012,5	24,29	12.50	134	205	5
A131013	26,88	13.00	134	205	5
A131013,5	32,24	13.50	140	214	1
A131014	35,92	14.00	140	214	1
A131014,5	43,78	14.50	144	220	1
A131015	45,98	15.00	144	220	1
A131015,5	61,30	15.50	149	227	1
A131016	47,57	16.00	149	227	1

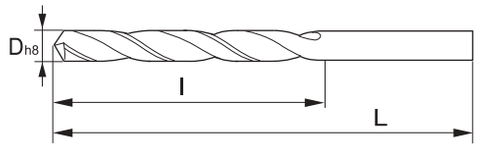
Indivisible package Suggested retail package - Unit price

DRILLS - LONG SERIES

KERFOLG

DIN		S/R	
340	130°		HA

ITEM: A1320



Geometry	Advanced flute, web thinning, wide and parabolic flutes with very rounded heel
Point angle	130°
Surface treatment	Bright with superficial hardening
Application	Especially suited for deep hole drilling in difficult conditions with insufficient chip evacuation.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					●	●	○	○	○	○					

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13201	12,93	1.00	33	56	10
A13201,1	14,19	1.10	37	60	10
A13201,2	13,67	1.20	41	65	10
A13201,3	13,54	1.30	41	65	10
A13201,4	12,76	1.40	45	70	10
A13201,5	11,06	1.50	45	70	10
A13201,6	10,43	1.60	50	76	10
A13201,7	10,25	1.70	50	76	10
A13201,8	10,16	1.80	53	80	10
A13201,9	10,07	1.90	53	80	10
A13202	9,52	2.00	56	85	10
A13202,1	10,88	2.10	56	85	10
A13202,2	11,06	2.20	59	90	10
A13202,3	11,24	2.30	59	90	10
A13202,4	11,49	2.40	62	95	10
A13202,5	9,99	2.50	62	95	10
A13202,6	11,49	2.60	62	95	10
A13202,7	11,62	2.70	66	100	10
A13202,8	11,62	2.80	66	100	10
A13202,9	11,86	2.90	66	100	10
A13203	10,07	3.00	66	100	10
A13203,1	13,54	3.10	69	106	10
A13203,2	11,40	3.20	69	106	10
A13203,25	20,77	3.25	69	106	10
A13203,3	12,93	3.30	69	106	10
A13203,4	13,54	3.40	73	112	10
A13203,5	11,62	3.50	73	112	10
A13203,6	15,08	3.60	73	112	10
A13203,7	13,82	3.70	73	112	10
A13203,8	14,19	3.80	78	119	10
A13203,9	14,81	3.90	78	119	10
A13204	12,58	4.00	78	119	10
A13204,1	15,08	4.10	78	119	10
A13204,2	14,19	4.20	78	119	10
A13204,25	24,15	4.25	78	119	10
A13204,3	16,10	4.30	82	126	10
A13204,4	16,72	4.40	82	126	10
A13204,5	14,81	4.50	82	126	10

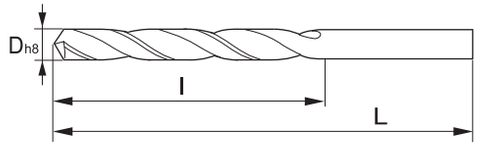
Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13204,6	16,72	4.60	82	126	10
A13204,7	16,72	4.70	82	126	10
A13204,75	21,63	4.75	82	126	10
A13204,8	16,72	4.80	87	132	10
A13204,9	17,20	4.90	87	132	10
A13205	15,43	5.00	87	132	10
A13205,1	17,98	5.10	87	132	10
A13205,2	18,85	5.20	87	132	10
A13205,25	22,65	5.25	87	132	10
A13205,3	19,11	5.30	87	132	10
A13205,4	19,48	5.40	91	139	10
A13205,5	18,23	5.50	91	139	10
A13205,6	22,03	5.60	91	139	10
A13205,7	22,65	5.70	91	139	10
A13205,75	28,86	5.75	91	139	10
A13205,8	23,16	5.80	91	139	10
A13206	18,85	6.00	91	139	10
A13206,25	32,02	6.25	97	148	10
A13206,5	21,01	6.50	97	148	10
A13206,75	32,53	6.75	102	156	10
A13207	24,42	7.00	102	156	10
A13207,5	29,73	7.50	102	156	10
A13207,75	49,37	7.75	109	165	10
A13208	28,23	8.00	109	165	10
A13208,25	58,60	8.25	109	165	10
A13208,5	36,96	8.50	109	165	10
A13209	33,80	9.00	115	175	5
A13209,25	66,20	9.25	115	175	5
A13209,5	51,90	9.50	115	175	5
A132010	41,88	10.00	121	184	5
A132010,5	74,32	10.50	121	184	5
A132011	61,89	11.00	128	195	5
A132011,5	86,44	11.50	128	195	5
A132012	75,56	12.00	134	205	5
A132012,5	82,53	12.50	134	205	5
A132013	85,56	13.00	134	205	5
A132014	143,53	14.00	140	214	1

DRILLS - LONG SERIES

KERFOLG X-310

DIN	HSSE		FS/R	TiAlN	
340		130°			HA

ITEM: A1330



Geometry	Parabolic flute design with wide flutes to provide optimal chip evacuation, self centering point geometry
Point angle	130°
Surface treatment	TiAlN
Application	Especially indicated for long chip materials with R ≤ 1000 N/mm², aluminum and copper alloys, soft bronze, electrolyte copper and tough brass.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○				○	○	●		●				

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13303	15,40	3.00	66	100	1
A13303,3	19,30	3.30	69	106	1
A13303,5	16,30	3.50	73	112	1
A13304	17,00	4.00	78	119	1
A13304,2	18,47	4.20	78	119	1
A13304,5	18,50	4.50	82	126	1
A13305	20,00	5.00	87	132	1
A13305,5	21,80	5.50	91	139	1
A13306	23,90	6.00	91	139	1
A13306,5	30,60	6.50	97	148	1
A13306,8	30,60	6.80	102	156	1
A13307	33,10	7.00	102	156	1
A13307,5	46,50	7.50	102	156	1
A13308	35,40	8.00	109	165	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13308,5	37,20	8.50	109	165	1
A13309	43,40	9.00	115	175	1
A13309,5	60,80	9.50	115	175	1
A133010	54,90	10.00	121	184	1
A133010,2	87,00	10.20	121	184	1
A133010,5	64,50	10.50	121	184	1
A133011	84,60	11.00	128	195	1
A133011,5	91,20	11.50	128	195	1
A133012	99,10	12.00	134	205	1
A133012,5	101,80	12.50	134	205	1
A133013	107,20	13.00	134	205	1
A133013,5	133,40	13.50	140	214	1
A133014	141,60	14.00	140	214	1

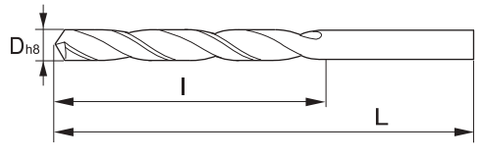
Indivisible package Suggested retail package - Unit price

DRILLS - EXTRA-LONG SERIES

KERFOLG

DIN	HSSE		S/R	
1869/1		130°		HA

ITEM: A1340



Geometry	Right-hand parabolic flute
Point angle	130°
Surface treatment	Bright
Application	Steel and cast iron. Deep hole drilling and drilling with bit drive bush.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○	○							

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13402	18,60	2.00	85	125	1
A13402,5	18,60	2.50	95	140	1
A13403	21,20	3.00	100	150	1
A13403,5	21,50	3.50	115	165	1
A13404	21,20	4.00	120	175	1
A13404,5	24,70	4.50	125	185	1
A13405	24,70	5.00	135	195	1
A13405,5	26,50	5.50	140	205	1
A13406	24,90	6.00	140	205	1
A13406,5	33,20	6.50	150	215	1
A13407	35,70	7.00	155	225	1
A13407,5	46,50	7.50	155	225	1

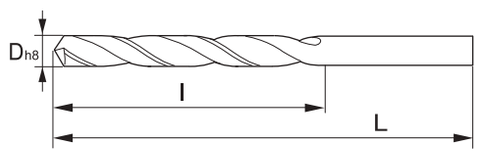
Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13408	46,20	8.00	165	240	1
A13408,5	55,20	8.50	165	240	1
A13409	76,40	9.00	175	250	1
A13409,5	89,10	9.50	175	250	1
A134010	82,50	10.00	185	265	1
A134010,5	85,80	10.50	185	265	1
A134011	94,20	11.00	195	280	1
A134011,5	114,30	11.50	195	280	1
A134012	110,50	12.00	205	295	1
A134012,5	119,20	12.50	205	295	1
A134013	129,50	13.00	205	295	1

DRILLS - EXTRA-LONG SERIES

KERFOLG

DIN	HSSE		S/R	
1869/2		130°		HA

ITEM: A1350



Geometry	Right-hand parabolic flute
Point angle	130°
Surface treatment	Bright
Application	Steel and cast iron. Deep hole drilling and drilling with bit drive bush.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○			●	○	○							

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13503	24,40	3.00	130	190	1
A13503,5	24,90	3.50	145	210	1
A13504	26,30	4.00	150	220	1
A13504,5	27,90	4.50	160	233	1
A13505	28,20	5.00	170	245	1
A13505,5	34,20	5.50	180	260	1
A13506	34,20	6.00	180	260	1
A13506,5	38,80	6.50	190	273	1
A13507	43,10	7.00	200	290	1
A13507,5	50,30	7.50	200	290	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13508	49,90	8.00	210	305	1
A13508,5	62,90	8.50	210	305	1
A13509	76,30	9.00	220	320	1
A13509,5	89,10	9.50	220	320	1
A135010	85,80	10.00	233	340	1
A135010,5	102,20	10.50	235	340	1
A135011	102,20	11.00	250	365	1
A135012	125,60	12.00	260	375	1
A135012,5	142,60	12.50	260	375	1
A135013	142,60	13.00	260	375	1

Indivisible package Suggested retail package - Unit price

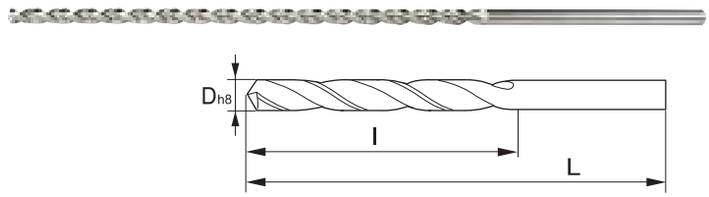
DRILLS - EXTRA-LONG SERIES

KERFOLG

DIN	HSSE		S/R	
1869/3		130°		HA

ITEM: A1360

Geometry — Right-hand parabolic flute
Point angle — 130°
Surface treatment — Bright
Application — Steel and cast iron. Deep hole drilling and drilling with bit drive bush.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○	○			○	○	○		○	

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13603,5	29,80	3.50	180	265	1
A13604	29,80	4.00	190	280	1
A13604,5	35,70	4.50	200	295	1
A13605	35,70	5.00	210	315	1
A13605,5	38,30	5.50	225	330	1
A13606	41,00	6.00	225	330	1
A13606,5	44,40	6.50	235	350	1
A13607	57,00	7.00	250	370	1
A13607,5	64,90	7.50	250	370	1
A13608	65,90	8.00	265	390	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A13608,5	83,80	8.50	265	390	1
A13609	90,50	9.00	280	410	1
A13609,5	106,30	9.50	280	410	1
A136010	105,50	10.00	295	430	1
A136010,5	114,40	10.50	295	430	1
A136011	119,90	11.00	300	455	1
A136011,5	132,60	11.50	300	455	1
A136012	141,50	12.00	300	480	1
A136012,5	165,20	12.50	300	480	1
A136013	165,20	13.00	300	480	1

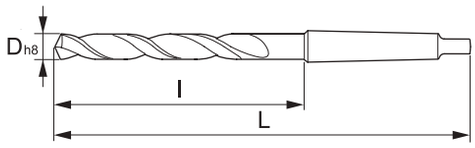
DRILLS MORSE TAPER SHANK - EXTRA-LONG SERIES

WRK

NdF		N/R	
	118°		CM

ITEM: A1520

Geometry — Normal flute, right hand cut
Point angle — 118°
Surface treatment — Steam tempering
Application — General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	○									

Tech. Code	GR01 Euro	D mm	l mm	L mm	CM	
A15208300	110,67	8	300	400	1	1
A152010300	138,14	10	300	400	1	1
A152012300	169,39	12	300	400	1	1
A152013300	174,76	13	300	400	1	1
A152014300	190,67	14	300	400	1	1
A152015375	223,98	15	375	500	2	1
A152016375	224,90	16	375	500	2	1

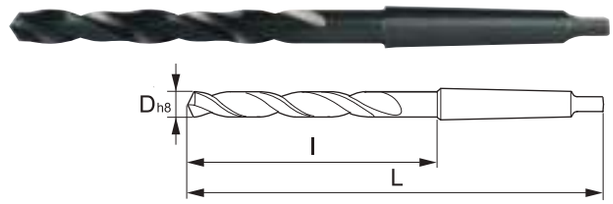
Tech. Code	GR01 Euro	D mm	l mm	L mm	CM	
A152018375	228,55	18	375	500	2	1
A152020375	240,46	20	375	500	2	1
A152022375	251,91	22	375	500	2	1
A152024375	353,77	24	375	500	3	1
A152025375	389,13	25	375	500	3	1
A152030375	487,79	30	375	500	3	1

DRILLS MORSE TAPER SHANK

WRK

DIN		N/R	
345	118°		CM

ITEM: A1510



Geometry	Normal flute, right hand cut
Point angle	118°
Surface treatment	Steam tempering
Application	General application.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○					●	○								

Tech. Code	GR01 Euro	D mm	l mm	L mm	CM	
A15105	16,07	5.00	52	133	1	1
A15105,25	18,80	5.25	52	133	1	1
A15105,5	16,07	5.50	57	138	1	1
A15105,75	20,49	5.75	57	138	1	1
A15106	15,65	6.00	57	138	1	1
A15106,25	18,06	6.25	63	144	1	1
A15106,5	15,65	6.50	63	144	1	1
A15106,75	18,06	6.75	69	150	1	1
A15107	15,65	7.00	69	150	1	1
A15107,25	18,06	7.25	69	150	1	1
A15107,5	15,65	7.50	69	150	1	1
A15107,75	18,06	7.75	75	156	1	1
A15108	16,28	8.00	75	156	1	1
A15108,25	18,90	8.25	75	156	1	1
A15108,5	16,28	8.50	75	156	1	1
A15108,75	18,90	8.75	81	162	1	1
A15109	18,69	9.00	81	162	1	1
A15109,25	21,63	9.25	81	162	1	1
A15109,5	18,69	9.50	81	162	1	1
A15109,75	21,63	9.75	87	168	1	1
A151010	20,27	10.00	87	168	1	1
A151010,2	20,27	10.20	87	168	1	1
A151010,25	23,63	10.25	87	168	1	1
A151010,5	20,27	10.50	87	168	1	1
A151010,75	23,63	10.75	94	175	1	1
A151011	22,05	11.00	94	175	1	1
A151011,25	25,62	11.25	94	175	1	1
A151011,5	22,05	11.50	94	175	1	1
A151011,75	25,62	11.75	94	175	1	1
A151012	24,78	12.00	101	182	1	1
A151012,25	28,77	12.25	101	182	1	1
A151012,5	24,78	12.50	101	182	1	1
A151012,75	28,77	12.75	101	182	1	1
A151013	25,73	13.00	101	182	1	1
A151013,25	30,03	13.25	108	189	1	1
A151013,5	25,73	13.50	108	189	1	1
A151013,75	30,03	13.75	108	189	1	1
A151014	24,89	14.00	108	189	1	1
A151014,25	34,44	14.25	114	212	2	1
A151014,5	29,61	14.50	114	212	2	1
A151014,75	34,44	14.75	114	212	2	1
A151015	34,13	15.00	114	212	2	1
A151015,25	40,01	15.25	120	218	2	1
A151015,5	34,13	15.50	120	218	2	1
A151015,75	40,01	15.75	120	218	2	1
A151016	32,87	16.00	120	218	2	1
A151016,25	40,85	16.25	125	223	2	1
A151016,5	35,07	16.50	125	223	2	1
A151016,75	40,85	16.75	125	223	2	1
A151017	37,49	17.00	125	223	2	1
A151017,25	43,68	17.25	130	228	2	1
A151017,5	37,49	17.50	130	228	2	1
A151017,75	43,68	17.75	130	228	2	1
A151018	38,43	18.00	130	228	2	1
A151018,25	49,25	18.25	135	233	2	1
A151018,5	42,32	18.50	135	233	2	1
A151018,75	47,88	18,75	135	233	2	1
A151019	41,58	19.00	135	233	2	1
A151019,25	51,35	19.25	140	238	2	1
A151019,5	43,89	19.50	140	238	2	1
A151019,75	51,35	19.75	140	238	2	1
A151020	43,68	20.00	140	238	2	1
A151020,25	53,97	20.25	145	243	2	1
A151020,5	46,31	20.50	145	243	2	1
A151020,75	53,97	20.75	145	243	2	1
A151021	56,49	21.00	145	243	2	1

Tech. Code	GR01 Euro	D mm	l mm	L mm	CM	
A151021,25	69,51	21.25	150	248	2	1
A151021,5	56,49	21.50	150	248	2	1
A151021,75	69,51	21.75	150	248	2	1
A151022	58,80	22.00	150	248	2	1
A151022,25	75,29	22.25	150	248	2	1
A151022,5	61,85	22.50	155	276	2	1
A151022,75	75,29	22.75	155	276	2	1
A151023	70,14	23.00	155	276	2	1
A151023,25	86,42	23.25	155	276	2	1
A151023,5	70,88	23.50	155	276	3	1
A151023,75	86,42	23.75	160	281	3	1
A151024	74,87	24.00	160	281	3	1
A151024,25	95,97	24.25	160	281	3	1
A151024,5	82,43	24.50	160	281	3	1
A151024,75	95,97	24.75	160	281	3	1
A151025	79,17	25.00	160	281	3	1
A151025,25	101,43	25.25	165	286	3	1
A151025,5	83,06	25.50	165	286	3	1
A151025,75	101,43	25.75	165	286	3	1
A151026	88,10	26.00	165	286	3	1
A151026,25	112,88	26.25	165	286	3	1
A151026,5	92,51	26.50	165	286	3	1
A151026,75	112,88	26.75	170	291	3	1
A151027	94,50	27.00	170	291	3	1
A151027,25	121,17	27.25	170	291	3	1
A151027,5	99,33	27.50	170	291	3	1
A151027,75	121,17	27.75	170	291	3	1
A151028	97,76	28.00	170	291	3	1
A151028,25	125,37	28.25	175	296	3	1
A151028,5	102,59	28.50	175	296	3	1
A151028,75	118,02	28,75	175	296	3	1
A151029	105,84	29.00	175	296	3	1
A151029,25	135,66	29.25	175	296	3	1
A151029,5	111,09	29.50	175	296	3	1
A151029,75	135,66	29.75	175	296	3	1
A151030	117,60	30.00	175	296	3	1
A151030,5	(128,63)	30.50	180	301	3	1
A151031	(132,09)	31.00	180	301	3	1
A151031,5	(141,23)	31.50	180	301	3	1
A151032	(142,38)	32.00	185	334	4	1
A151032,5	(156,56)	32.50	185	334	4	1
A151033	(157,71)	33.00	185	334	4	1
A151033,5	(159,29)	33.50	185	334	4	1
A151034	(167,16)	34.00	190	339	4	1
A151034,5	(183,86)	34.50	190	339	4	1
A151035	(175,46)	35.00	190	339	4	1
A151035,5	(187,53)	35.50	190	339	4	1
A151036	(195,83)	36.00	195	344	4	1
A151036,5	(209,06)	36.50	195	344	4	1
A151037	(202,65)	37.00	195	344	4	1
A151037,5	(216,20)	37.50	195	344	4	1
A151038	(223,97)	38.00	200	349	4	1
A151038,5	(239,30)	38.50	200	349	4	1
A151039	(227,33)	39.00	200	349	4	1
A151039,5	(245,18)	39.50	200	349	4	1
A151040	(243,08)	40.00	200	349	4	1
A151041	(281,09)	41.00	205	345	4	1
A151042	(293,37)	42.00	205	345	4	1
A151043	(307,44)	43.00	210	359	4	1
A151044	(329,28)	44.00	210	359	4	1
A151045	(331,70)	45.00	210	359	4	1
A151046	(336,53)	46.00	215	364	4	1
A151047	(357,74)	47.00	215	364	4	1
A151048	(389,97)	48.00	220	369	4	1
A151049	(399,32)	49.00	220	369	4	1
A151050	(407,82)	50.00	220	369	4	1

Indivisible package Suggested retail package - Unit price

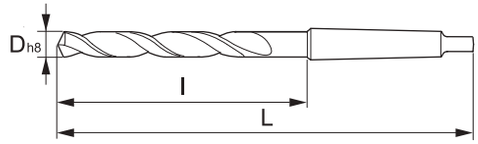
DRILLS MORSE TAPER SHANK

KERFOLG

DIN 345 | 118° | HSSE | N/R | CM | UNI

ITEM: A1512

Geometry — Normal flute, right-hand cut
Point angle — 118°
Surface treatment — Bright
Application — General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○								

Tech. Code	GR03 Euro	D mm	l mm	L mm	CM	
A151214	(63,40)	14,00	114	212	1	1
A151214,5	(68,70)	14.50	114	212	2	1
A151215	(68,70)	15.00	114	212	2	1
A151215,5	(72,20)	15.50	120	218	2	1
A151216	(72,20)	16.00	120	218	2	1
A151216,5	(75,40)	16.50	125	223	2	1
A151217	(75,40)	17.00	125	223	2	1
A151217,5	(85,20)	17.50	130	228	2	1
A151218	(85,20)	18.00	130	228	2	1
A151218,5	(88,60)	18.50	135	233	2	1
A151219	(88,60)	19.00	135	233	2	1
A151219,5	(98,30)	19.50	140	238	2	1
A151220	(98,30)	20.00	140	238	2	1
A151220,5	(112,80)	20.50	145	243	2	1
A151221	(103,30)	21.00	145	243	2	1
A151221,5	(112,80)	21.50	150	248	2	1
A151222	(112,80)	22.00	150	248	2	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	CM	
A151222,5	(134,70)	22.50	155	253	2	1
A151223	(134,70)	23.00	155	253	2	1
A151223,5	(148,20)	23.50	155	276	3	1
A151224	(148,20)	24.00	160	281	3	1
A151224,5	(177,40)	24.50	160	281	3	1
A151225	(177,40)	25.00	160	281	3	1
A151226	(189,70)	26.00	165	286	3	1
A151227	(201,00)	27.00	170	291	3	1
A151228	(221,10)	28.00	170	291	3	1
A151229	(231,20)	29.00	175	296	3	1
A151230	(238,00)	30.00	175	296	3	1
A151231	(353,60)	31.00	180	301	3	1
A151232	(353,60)	32.00	185	334	4	1
A151233	(403,00)	33.00	185	334	4	1
A151234	(422,10)	34.00	190	339	4	1
A151235	(422,10)	35.00	190	339	4	1

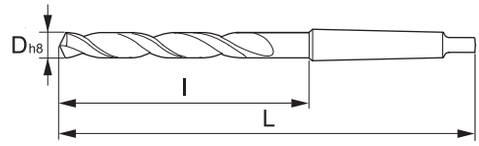
DRILLS MORSE TAPER SHANK - LONG SERIES

WRK

DIN 1870 | 118° | N/R | CM

ITEM: A1518

Geometry — Normal flute, right-hand cut
Point angle — 118°
Surface treatment — Steam tempering
Application — General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	○								

Tech. Code	GR01 Euro	D mm	l mm	L mm	CM	
A151812	101,85	12,00	205	310	1	1
A151813	107,63	13,00	205	310	1	1
A151814	124,74	14,00	220	325	1	1
A151815	129,36	15,00	220	340	2	1
A151816	138,50	16,00	230	355	2	1

Tech. Code	GR01 Euro	D mm	l mm	L mm	CM	
A151818	163,70	18,00	245	370	2	1
A151820	187,64	20,00	260	385	2	1
A151825	284,97	25,00	290	440	3	1
A151830	357,00	30,00	305	460	3	1

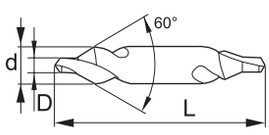
CENTRE DRILLS TYPE A

WRK

DIN 333 A | 118°

ITEM: A1610

Geometry — Type A 60°
Point angle — 118°
Surface treatment — Bright
Application — General application up to R ≤ 800 N/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16101	5,57	1.00	3.15	31.5	1
A16101,25	5,57	1.25	3.15	31.5	1
A16101,6	6,14	1.60	4.00	35.5	1
A16102	6,60	2.00	5.00	40.0	1
A16102,5	7,28	2.50	6.30	45.0	1

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16103,15	9,08	3.15	8.00	50.0	1
A16104	14,32	4.00	10.00	56.0	1
A16105	19,09	5.00	12.50	63.0	1
A16106,3	28,41	6.30	16.00	71.0	1

Indivisible package — Suggested retail package - Unit price

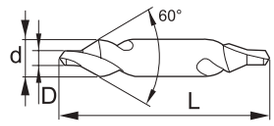
CENTRE DRILLS TYPE A

KERFOLG

DIN 333 A | HSSE | 118° | UNI

ITEM: A1611

Geometry Type A 60°
Point angle 118°
Surface treatment Bright
Application General application up to R ≤ 1000 N/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR03 Euro	D mm	d mm	L mm	
A16111	8,73	1.00	3.15	31.5	1
A16111,25	8,73	1.25	3.15	31.5	1
A16111,6	9,43	1.60	4.00	35.5	1
A16112	10,15	2.00	5.00	40.0	1
A16112,5	11,61	2.50	6.30	45.0	1

Tech. Code	GR03 Euro	D mm	d mm	L mm	
A16113,15	14,18	3.15	8.00	50.0	1
A16114	22,12	4.00	10.00	56.0	1
A16115	29,41	5.00	12.50	63.0	1
A16116,3	43,91	6.30	16.00	71.0	1

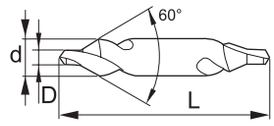
CENTRE DRILLS TYPE A

KERFOLG

DIN 333 A | 118° | TiN | UNI

ITEM: A1612

Geometry Type A 60°
Point angle 118°
Surface treatment TiN
Application General application up to R ≤ 1000 N/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR03 Euro	D mm	d mm	L mm	
A16121	11,34	1.00	3.15	31.5	1
A16121,25	11,34	1.25	3.15	31.5	1
A16121,6	11,77	1.60	4,00	35.5	1
A16122	12,14	2.00	5,00	40,0	1
A16122,5	12,60	2.50	6.30	45,0	1

Tech. Code	GR03 Euro	D mm	d mm	L mm	
A16123,15	14,22	3.15	8,00	50,0	1
A16124	25,10	4.00	10,00	56,0	1
A16125	33,50	5.00	12.50	63,0	1
A16126,3	45,16	6.30	16,00	71,0	1

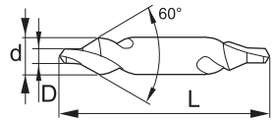
CENTRE DRILLS TYPE A - LONG SERIES

WRK

DIN 333 A | 118°

ITEM: A1615

Geometry Type A 60°
Point angle 118°
Surface treatment Bright
Application General application up to R ≤ 800 N/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16151	11,35	1.00	3.15	120	1
A16151,6	11,93	1.60	4.00	120	1
A16152	12,52	2.00	5.00	120	1
A16152,5	13,57	2.50	6.30	120	1

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16153,15	14,86	3.15	8.00	120	1
A16154	23,29	4.00	10.00	120	1
A16155	35,23	5.00	12.50	120	1

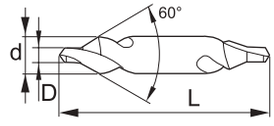
CENTRE DRILLS TYPE A

KERFOLG

DIN 333 A | HM | 118° | UNI

ITEM: A1640

Geometry Type A 60°
Point angle 118°
Surface treatment Bright
Application General application up to R ≤ 1000 N/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR02 Euro	D mm	d mm	L mm	
A16401	40,89	1.00	3.17	38	1
A16401,25	40,89	1.25	3.17	38	1
A16401,6	49,17	1.60	4.00	40	1
A16402	54,73	2.00	5.00	50	1

Tech. Code	GR02 Euro	D mm	d mm	L mm	
A16402,5	68,70	2.50	6.30	50	1
A16403,15	87,85	3.15	8.00	63	1
A16404	114,41	4.00	10.00	66	1

Indivisible package Suggested retail package - Unit price

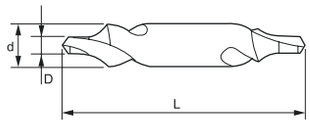
CENTRE DRILLS TYPE R

WRK

DIN 333 R | 118°

ITEM: A1620

Geometry Type R
Point angle 118°
Surface treatment Bright
Application General application up to R ≤ 800 N/mm²



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○			●	●	○	○	○	○				

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16201,6	7,05	1.60	4.00	35.5	1
A16202	7,84	2.00	5.00	40.0	1
A16202,5	8,63	2.50	6.30	45.0	1

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16203,15	10,00	3.15	8.00	50.0	1
A16204	17,61	4.00	10.00	56.0	1
A16205	24,08	5.00	12.50	63.0	1

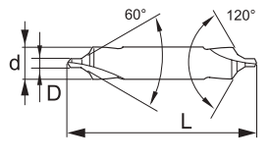
CENTRE DRILLS TYPE B

WRK

DIN 333 B | 118°

ITEM: A1630

Geometry Type B 60° + 120°
Point angle 118°
Surface treatment Bright
Application General application.



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○			●	●	○	○	○	○				

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16301	11,20	1.00	4.00	35.50	1
A16301,25	12,35	1.25	5.00	40.00	1
A16301,6	14,92	1.60	6.30	45.00	1
A16302	15,06	2.00	8.00	50.00	1
A16302,5	19,44	2.50	10.00	56.00	1

Tech. Code	GR01 Euro	D mm	d mm	L mm	
A16303,15	24,97	3.15	11.20	60.00	1
A16304	37,34	4.00	14.00	67.00	1
A16305	50,09	5.00	18.00	75.00	1
A16306,3	65,52	6.30	20.00	80.00	1

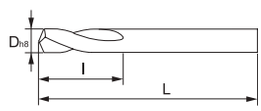
CENTRE SPOTTING DRILLS 90°

KERFOLG

DIN 1897 | HSSE | 90° | N/R | HA | UNI

ITEM: A1650

Geometry N/R-type flute
Point angle 90°
Surface treatment Bright
Application General application.



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○			●	●	●	○	○					

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A16503	10,62	3	12	46	1
A16504	11,86	4	12	55	1
A16505	12,79	5	14	62	1
A16506	13,42	6	19	66	1
A16508	19,70	8	23	79	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A165010	25,10	10	26	89	1
A165012	35,21	12	31	102	1
A165016	46,61	16	34	115	1
A165020	75,07	20	36	131	1

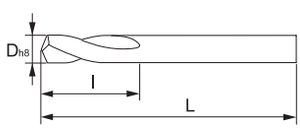
CENTRE SPOTTING DRILLS 90°

KERFOLG

DIN 1897 | HSSE | 90° | TiAlN | N/R | HA | UNI

ITEM: A1655

Geometry N/R-type flute
Point angle 90°
Surface treatment TiAlN
Application General application.



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○	●	●			○					

Tech. Code	GR03 Euro	D H8 mm	l mm	L mm	
A16553	11,82	3	12	46	1
A16554	12,80	4	12	55	1
A16555	14,07	5	14	62	1
A16556	19,04	6	16	66	1
A16558	26,08	8	21	79	1

Tech. Code	GR03 Euro	D H8 mm	l mm	L mm	
A165510	33,51	10	25	89	1
A165512	38,22	12	30	102	1
A165516	54,58	16	38	115	1
A165520	83,97	20	45	131	1

Indivisible package Suggested retail package - Unit price

CENTRE SPOTTING DRILLS 90° - LONG SERIES

KERFOLG

NdF | HSSE | 90° | TiAlN | N/R | HB | UNI

ITEM: A1656

Geometry N/R-type flute
Point angle 90°
Surface treatment TiAlN
Application General application.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●			○					

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A16566	39,88	6	20	140	1
A16568	46,34	8	25	140	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A165610	53,91	10	25	170	1
A165612	64,83	12	30	170	1

CENTRE SPOTTING DRILLS 120°

KERFOLG

DIN 1897 | HSSE | 120° | N/R | HA

ITEM: A1660

Geometry N/R-type flute
Point angle 120°
Surface treatment Bright
Application General application.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●	●	○	○					

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A16606	12,48	6	19	66	1
A16608	17,74	8	23	79	1
A166010	23,11	10	26	89	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A166012	32,80	12	31	102	1
A166016	43,42	16	34	115	1
A166020	69,91	20	36	131	1

CENTRE SPOTTING DRILLS 120°

KERFOLG

DIN 1897 | HSSE | 120° | N/R | TiAlN | HA | UNI

ITEM: A1665

Geometry N/R-type flute
Point angle 120°
Surface treatment TiAlN
Application General application.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●			○				○	

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A16656	17,39	6	16	66	1
A16658	23,81	8	21	79	1
A166510	30,58	10	25	89	1

Tech. Code	GR03 Euro	D mm	l mm	L mm	
A166512	38,04	12	30	102	1
A166516	49,83	16	38	115	1
A166520	76,67	20	45	131	1

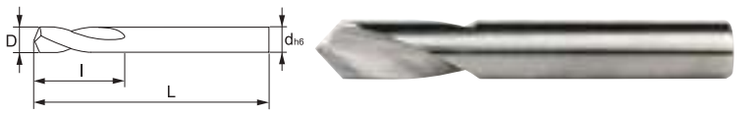
CENTRE SPOTTING DRILLS 90°

KERFOLG

DIN 1897 | HM | 90° | N/R | HA | UNI

ITEM: A1670

Geometry N/R-type flute
Point angle 90°
Surface treatment Bright
Application General application.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○	○		●	●	●	○	○					

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A16703	21,71	3	3	12	40	1
A16704	25,16	4	4	12	40	1
A16705	33,01	5	5	16	50	1
A16706	36,58	6	6	21	50	1
A16708	49,68	8	8	25	60	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A167010	66,01	10	12	27	70	1
A167012	75,79	12	12	27	70	1
A167016	154,74	16	16	30	75	1
A167020	327,39	20	20	33	100	1

Indivisible package Suggested retail package - Unit price

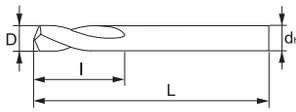
CENTRE SPOTTING DRILLS 90°

KERFOLG

DIN 1897 | HM | 90° | TiAlN | N/R | HA | UNI

ITEM: A1675

Geometry N/R-Type flute
Point angle 90°
Surface treatment TiAlN
Application General application



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○	●	●	○	○	○					

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A167503	26,45	3	3	12	40	1
A167504	30,50	4	4	12	40	1
A167505	40,39	5	5	16	50	1
A167506	44,44	6	6	21	50	1
A167508	60,05	8	8	25	60	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A167510	76,72	10	10	27	70	1
A167512	98,88	12	12	27	70	1
A167516	168,34	16	16	30	75	1
A167520	299,87	20	20	33	100	1

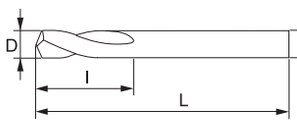
CENTRE SPOTTING DRILLS 120°

KERFOLG

DIN 1897 | HM | 120° | N/R | HA

ITEM: A1680

Geometry N/R-type flute
Point angle 120°
Surface treatment Bright
Application General application.



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○	○	●	●	●	○	○					

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A16806	36,58	6	6	21	50	1
A16808	49,68	8	8	25	60	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A168010	64,09	10	10	27	70	1
A168012	75,79	12	12	27	70	1

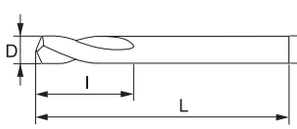
CENTRE SPOTTING DRILLS 120°

KERFOLG

DIN 1897 | HM | 120° | TiAlN | N/R | HA

ITEM: A1685

Geometry N/R-Type flute
Point angle 120°
Surface treatment TiAlN
Application General application



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○	●	●	○	○	○					

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A168506	44,44	6	6	21	50	1
A168508	60,05	8	8	25	60	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A168510	76,72	10	10	27	70	1
A168512	98,88	12	12	27	70	1

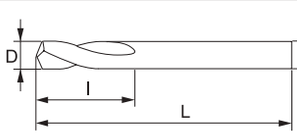
CENTRE SPOTTING DRILLS 142°

KERFOLG

DIN 1897 | HM | 140° | N/R | HA | UNI

ITEM: A1690

Geometry N/R-Type flute
Angolo a Vertice 142°
Surface treatment Bright
Application General application



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○	○	●	●	○	○	○					

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A169003	21,33	3	3	12	40	1
A169004	25,38	4	4	12	40	1
A169005	27,16	5	5	16	50	1
A169006	30,86	6	6	21	50	1
A169008	42,89	8	8	25	60	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A169010	59,45	10	10	27	70	1
A169012	80,90	12	12	27	70	1
A169016	146,07	16	16	30	75	1
A169020	255,31	20	20	33	100	1

CENTRE SPOTTING DRILLS 142°

KERFOLG

DIN	HM		TiAlN	N/R	
1897		140°			HA

ITEM: A1695

Geometry N/R-Type flute
Point angle 142°
Surface treatment TiAlN
Application General application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○	○		●	●	○	○	○					

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A169503	28,35	3	3	12	40	1
A169504	33,36	4	4	12	40	1
A169505	42,30	5	5	16	50	1
A169506	46,11	6	6	21	50	1
A169508	61,71	8	8	25	60	1

Tech. Code	GR02 Euro	D mm	d mm	l mm	L mm	
A169510	79,82	10	10	27	70	1
A169512	101,27	12	12	27	70	1
A169516	174,18	16	16	30	75	1
A169520	304,75	20	20	33	100	1

SUBLAND TWIST DRILLS 90°

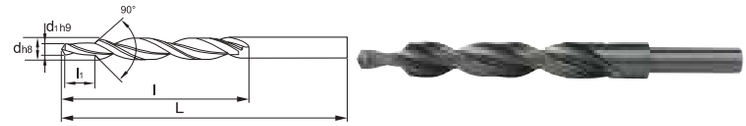
WRK

DIN		N/R	
8374	118°		HA

ITEM: A1710

Fine grade

Point angle 118°
Surface treatment Bright
Application For through holes with 90° screw head.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR01 Euro	Thread	d1 mm	d mm	l1 mm	l mm	L mm	
A1710M3	49,54	M3	3,20	6,30	11	52	90	1
A1710M4	57,99	M4	4,30	8,30	13	63	105	1
A1710M5	71,48	M5	5,30	10,40	16	83	133	1

Tech. Code	GR01 Euro	Thread	d1 mm	d mm	l1 mm	l mm	L mm	
A1710M6	71,69	M6	6,40	12,40	20	90	142	1
A1710M8	103,62	M8	8,40	16,30	23	115	186	1
A1710M10	140,08	M10	10,50	19,00	23	135	198	1

SUBLAND TWIST DRILLS 90°

WRK

DIN		N/R	
8378	118°		HA

ITEM: A1720

Point angle 118°
Surface treatment Bright
Application For tapping pre-holes and 90° countersinks.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR01 Euro	Thread	d1 mm	d mm	l1 mm	l mm	L mm	
A1720M3	40,79	M3	2,50	3,40	8	39	70	1
A1720M4	42,23	M4	3,30	4,50	11	47	80	1
A1720M5	43,47	M5	4,20	5,50	13	57	93	1
A1720M6	51,81	M6	5,00	6,60	16	63	101	1

Tech. Code	GR01 Euro	Thread	d1 mm	d mm	l1 mm	l mm	L mm	
A1720M8	59,64	M8	6,80	9,00	21	81	125	1
A1720M10	69,32	M10	8,50	11,00	25	94	142	1
A1720M12	96,61	M12	10,20	13,50	30	108	160	1

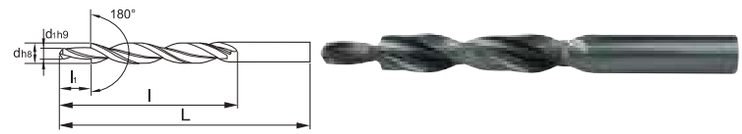
SUBLAND TWIST DRILLS 180°

WRK

DIN		N/R	
8376	118°		HA

ITEM: A1730

Point angle 118°
Surface treatment Bright
Application For through holes with 180° screw head.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	○	○	○	○				

Tech. Code	GR01 Euro	Thread	d1 mm	d mm	l1 mm	l mm	L mm	
A1730M3	34,81	M3	3.40	6	9	57	93	1
A1730M4	44,50	M4	4.50	8	11	75	117	1
A1730M5	52,32	M5	5.50	10	13	87	133	1

Tech. Code	GR01 Euro	Thread	d1 mm	d mm	l1 mm	l mm	L mm	
A1730M6	54,80	M6	6.60	11	15	94	142	1
A1730M8	84,05	M8	9.00	15	19	114	169	1

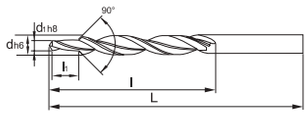
Indivisible package Suggested retail package - Unit price

SUBLAND TWIST DRILLS 90° - SHORT SERIES

KERFOLG Step

NdF	HM	140°	N/R	DURABLE	HA

ITEM: A1780



Geometry — Rake angles and offset angles designed for steels and cast iron

Point angle — 140°
Surface treatment — Durable
Application — For tapping pre-holes and countersinking on materials as carbon steels, cast iron and non ferrous metals.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●	●	●			○		○	

Tech. Code	GR02 Euro	Threading	d1 mm	d mm	l1 mm	l mm	L mm	
A1780M3	(68,46)	M3	2.5	6	8.8	20	66	1
A1780M4	(78,33)	M4	3.3	6	11.4	24	66	1
A1780M5	(88,20)	M5	4.2	6	13.6	28	66	1
A1780M6	(111,62)	M6	5.0	8	16.5	34	79	1
A1780M8	(145,01)	M8	6.8	10	21.0	47	89	1

Tech. Code	GR02 Euro	Threading	d1 mm	d mm	l1 mm	l mm	L mm	
A1780M10	(196,56)	M10	8.5	12	25.5	55	102	1
A1780M12	(261,14)	M12	10.2	14	30.0	60	107	1
A1780M14	(280,25)	M14	12.0	16	34.5	65	115	1
A1780M16	(311,22)	M16	14.0	18	38.5	73	123	1

BOXES FOR JOBBER DRILLS SET - EMPTY

WRK

ITEM: A1790

BOXES FOR JOBBER DRILLS SET - EMPTY

Tech. Code	GR01 Euro	Description	
A179019	9,56	Empty box for assortment of 19 tips	1
A179025	16,38	Empty box for assortment of 25 tips	1

Tech. Code	GR01 Euro	Description	
A179041	20,69	Empty box for assortment 41 tips	1
A179050	12,50	Empty box for assortment of 50 tips	1

JOBBER DRILLS KIT

WRK

ITEM: A1111

Geometry — Normal flute, right hand cut
Point angle — 118°
Surface treatment — Steam tempering
Application — General application.

Tech. Code	GR01 Euro	Description	Pieces	
A1111SET110	(119,00)	Set of 19 drills Item A1110 from 1.00 to 10.00 x 0.5	19	1
A1111SET113	(199,00)	Set of 25 drills Item A1110 from 1.00 to 13 x 0.5	25	1

Tech. Code	GR01 Euro	Description	Pieces	
A1111SET15,9	(168,00)	Set of 50 drills Item A1110 from 1.00 to 5.9 x 0.1	50	1
A1111SET610	(369,00)	Set of 41 drills Item A1110 from 6.00 to 10.00 x 0.1	41	1

JOBBER DRILLS KIT

WRK

ITEM: A1141

Geometry — Right-hand VA/R-type flute
Point angle — 130° with split point
Surface treatment — Bright
Application — Stainless steel

Tech. Code	GR01 Euro	Description	Pieces	
A1141SET110	149,00	Drill set Item A1140 from 1.00 to 10.00 x 0.5	19	1
A1141SET113	330,00	Drill set Item A1140 from 1.00 to 13.00 x 0.5	25	1

Tech. Code	GR01 Euro	Description	Pieces	
A1141SET15,9	235,00	Drill set Item A1140 from 1.00 to 5.90 x 0.1	50	1
A1141SET610	549,00	Drill set Item A1140 from 6.00 to 10.00 x 0.1	41	1

Indivisible package — Suggested retail package - Unit price

JOBBER DRILLS KIT

KERFOLG

ITEM: A1181

Geometry	Normal flute, right hand cut
Point angle	118°
Surface treatment	TiN
Application	Steel, grey and spheroidal cast iron and graphite.

Tech. Code	GR03 Euro	Description	Pieces	
A1181SET110	178,00	Drill set Item A1180 from 1.00 to 10.00 x 0.5	19	1

Tech. Code	GR03 Euro	Description	Pieces	
A1181SET113	371,00	Drill set Item A1180 from 1.00 to 13.00 x 0.5	25	1

TAPS DRILL-OUT TOOLS

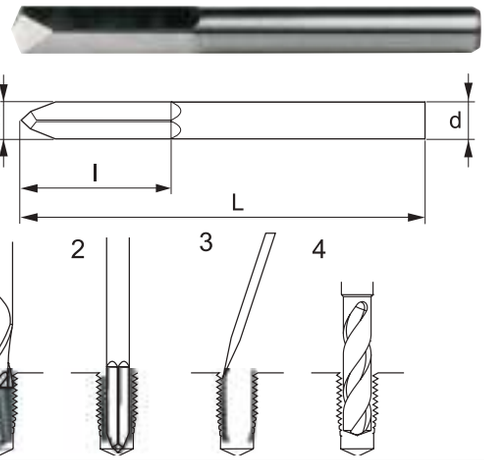
WRK

ITEM: A1810

This solid carbide tool was designed to extract broken taps from holes.
Machining is normally run dry.

For best centring, follow the procedure below:

- (1) Flatten the broken tap, using a larger tool or a same-sized hand mill.
- (2) Select a suitable tap destroying tool and execute the work being careful that the processed rigidity is the maximum. Recommended cutting speed not greater than 45 m/mm and feed rate from 0.03 to 0.05 mm.
- (3) Remove the tap pieces left along the walls using a sharp tool.
- (4) When finished, we recommend reprocessing the hole with a drill of the same size as the pre-tapping hole.



Tech. Code	GR01 Euro	D mm	TAP	L1 mm	L mm	d mm	
A18103	55,29	3	M4 - M5	15	50	3	1
A18104	55,29	4	M6	20	50	4	1
A18104,5	66,07	4.5	M8	20	50	4.5	1
A18105	66,07	5	M10	25	50	5	1

Tech. Code	GR01 Euro	D mm	TAP	L1 mm	L mm	d mm	
A18106	66,07	6	M12	30	60	6	1
A18108	77,31	8	M14 - M16	30	80	8	1
A181010	105,56	10	M18 - M20	35	100	10	1
A181012	113,35	12	M22 - M24	35	100	12	1

TAPS DRILL-OUT KIT

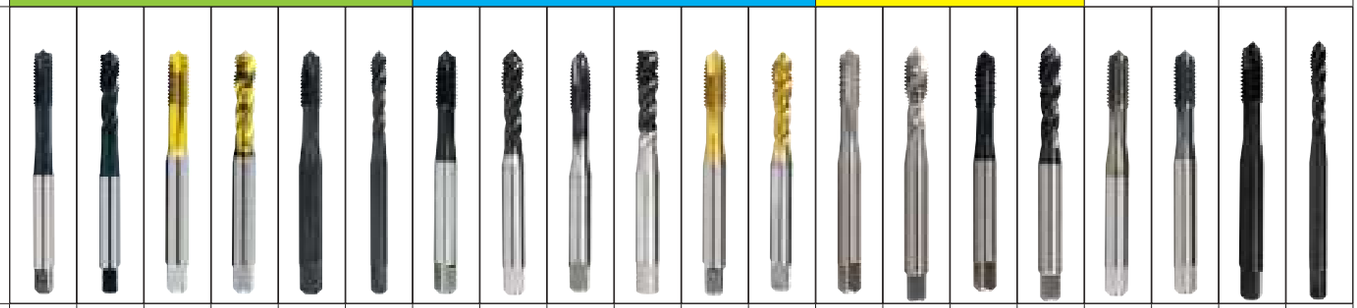
WRK

ITEM: A1811

Tech. Code	GR01 Euro	Composition	
A1811KIT	283,77	5-piece set Ø 3-6 mm	1

Indivisible package Suggested retail package - Unit price

CHAP A - TAPS SECTION - RECOMMENDED CUTTING DATA

Material	HSSE																		PM	HSSE	
Threading	M																				
Application	UNI						INOX						ALU				GG		-		
																					
	A2102	A2103	A2104	A2105	A2210	A2215	A2220	A2225	A2226	A2227	A2230	A2235	A2250	A2255	A2260	A2265	A2310	A2320	A2110	A2120
	KERFOLG																				
Page. A	60	60	60	61	66	67	67	67	68	68	68	69	70	70	70	71	71	71	61	61
DIN	DIN 371/6																				
Hole																					
Coating	NIT + VAP	NIT + VAP	TiN	TiN	VAP	VAP	TiNOX	TiNOX	TiNOX +	TiNOX +	TiN	TiN	—	—	IPER	IPER	NITR	TiCN	VAP	VAP
Coolant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chamfer form	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	C 2/3	C 2/3	B 4/5	C 2/3
P	< 500 N/mm²	20/25	20/30	20/25	20/30	20/25	20/25			20/25	20/25			18/20		30/35	25/30			20/25	20/25
P	< 850 N/mm²	10/20	10/20	10/20	10/20	15/20	15/20			20/25	20/25	20/25	15/20							10/15	10/15
P	< 1200 N/mm²	5/10	5/10	5/10	5/10	12/15	12/15					5/10	5/10							3/5	3/5
M	< 600 N/mm²	5/10	5/10	5/15	5/15			16/20	15/18	15/18	10/15	15/18	12/16								
M	< 850 N/mm²	5/10	5/10	5/15	5/15			12/15	10/15	10/15	8/10	6/10	5/8								
M	DUPLEX	2/5	2/5	2/5	2/5			6/8	5/8	5/8	6/8	6/8	5/8								
K	< 240 HB	10/25	10/25	10/25	10/25	15/20	15/20											12/15	40/45	10/15	10/15
K	< 300 HB	10/20	10/20	10/20	10/25	15/20	15/20					25/30	20/25							8/10	8/10
N	< 10% Si	10/25	10/30	10/25	10/30	20/25	20/25			30/35	30/35	25/30		18/25	12/15	35/40	30/35		40/45		
N	> 10% Si	10/25	10/30	10/25	10/25	15/28	15/28					25/30		15/20	10/15	30/40	25/30	12/15	40/45		
N	Bass Copper	20/30	20/30	25/30	20/30					25/30	25/30	25/30		8/10	6/8	15/18	12/15	18/20	45/50		15/18
N	Bronze >700 N/mm²															10/25	10/25	15/20	45/50		
S	Ti6Al4V																				
S	HTA									5/8	5/8										
H	< 45 HRC																				
H	< 60 HRC																				

● RECOMMENDED FOR... ○ USABLE FOR...

CHAP A - TAPS SECTION - RECOMMENDED CUTTING DATA

Material		HSSE													HSS	HSSE	PM	PREMIUM	HSS	HSSE		
Threading		M																				MF
Application		-														UNI				HARD		UNI
		A2130	A2135	A2010	A2020	A2030	A2040	A2125	A2128	A2080	A2085	A2070	A2022	A2042	A2060	A2840	A2351	A2358	A2362	A2814	A2818	A2450
		KERFOLG	KERFOLG	WRK	WRK	WRK	WRK	WRK	WRK	KERFOLG	KERFOLG	WRK	KERFOLG	KERFOLG	KERFOLG	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG
Page. A		62	62	56	56	56	57	57	57	59	59	59	58	58	58	83	72	72	73	84	84	76
DIN		DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	NdF	NdF	DIN 357	DIN 371/6	DIN 371/6	DIN 371/6	NdF	DIN 371	DIN 371/6	DIN 371	DIN 352	DIN 352	DIN 374
Hole																						
Coating		TiN	TiN	—	—	—	—	TiN	TiN	—	—	—	—	—	—	—	TiN	PREMIUM	PREMIUM	—	—	NIT + VAP
Coolant		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chamfer form		B 4/5	C 2/3		B 4/5	C 2/3		B 4/5	C 2/3	B 4/5	C 2/3	B 18/20	B 4/5	C 2/3		-	C 2/3		E 1,5/2	C 2/3		B 4/5
P	< 500 N/mm²	20/30	20/30	15/20	20/25	20/25	20/25	20/25	20/25	20/25	20/25	10/15	20/25	20/25	15/20	10/15	35/40	35/40	35/40	●	●	20/25
P	< 850 N/mm²	15/20	15/20	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15	8/10	10/15	10/15	10/15	8/10	30/35	30/35	30/35	●	●	10/20
P	< 1200 N/mm²	8/15	8/15					5/8	5/8						5/8							5/10
M	< 600 N/mm²	10/15	10/15			8/12		5/8	5/8				5/8	5/8				10/15	10/15	○	●	5/10
M	< 850 N/mm²																	8/12	8/12	○	●	5/10
M	DUPLEX																					
K	< 240 HB	15/25	15/25	10/15	10/15	10/15	10/15						10/15	10/15						○	●	10/25
K	< 300 HB	15/20	15/20	8/12	8/12	8/12	8/10								8/12					●	●	10/20
N	< 10% Si	20/40	20/40	20/30	20/30		15/30	20/30	20/30	20/30	15/30		20/30	15/30		15/20	40/45	40/45	40/45	●	●	10/25
N	> 10% Si	20/35	20/35		15/25					15/25	12/25		15/25	12/25	15/25	10/15	40/45	40/45	40/45		●	10/25
N	Bass Copper	10/20	10/20		6/15			20/35	20/35	6/15	5/12		6/15	5/12	5/12					●	●	
N	Bronze >700 N/mm²																20/25	15/20	15/20	●		
S	Ti6Al4V																	○				
S	HTA																					
H	< 45 HRC																				●	
H	< 60 HRC																					

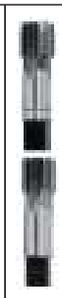
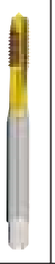
● RECOMMENDED FOR... ○ USABLE FOR...

CHAP A - TAPS SECTION - RECOMMENDED CUTTING DATA

Material		HSSE																			
Threading		MF									UNC			UNF			GAS				
Application		UNI		INOX		-					INOX	-		INOX	-		UNI		INOX		-
		A2455	A2457	A2430	A2435	A2410	A2415	A2432	A2425	A2420	A2520	A2510	A2617	A2560	A2550	A2555	A2611	A2616	A2620	A2625	A2610
		KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG
Page. A		76	77	75	75	73	74	74	74	75	78	77	77	79	78	78	80	80	80	81	79
DIN		DIN 374	DIN 371/4	DIN 374	DIN 374	DIN 374	DIN 374	DIN 374	DIN 374	DIN 374	DIN 2184	DIN 2184	DIN 2184	DIN 2184	DIN 2184	DIN 2184	DIN 5156	DIN 5156	DIN 5156	DIN 5156	DIN 5156
Hole																					
Coating		NIT + VAP	TiN	TiNOX	TiNOX	VAP	VAP	TiN	TiN	—	TiNOX	—	—	TiNOX	—	—	NIT + VAP	NIT + VAP	TiNOX	TiNOX	—
Coolant		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chamfer form		C 2/3	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	C 2/3	C 2/3	B 4/5	C 2/3	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5	C 2/3	B 4/5
P	< 500 N/mm²	20/25	35/40			20/25	20/25	20/30	20/30	15/20		20/25	20/25		20/25	20/25	20/25	20/25			20/25
P	< 850 N/mm²	10/20	30/35			10/15	10/15	15/20	15/20	10/15		10/15	10/15		10/15	10/15	10/20	10/20			10/15
P	< 1200 N/mm²	5/10		10/15	10/15						8/10	12/15	10/12	8/10			5/10	5/10		8/10	
M	< 600 N/mm²	5/10		10/12	8/12			8/10	8/10		8/12		5/10	8/12	5/10	5/10	5/10	5/10	10/12	8/12	5/10
M	< 850 N/mm²	5/10		10/12	8/12						8/12		5/10	8/12	5/10	5/10	5/10	5/10	10/12	8/12	5/10
M	DUPLEX			6/8	5/8						5/8			5/8					6/8	5/8	
K	< 240 HB	10/25								10/15		10/15	10/15		10/15	10/15	10/25	10/25			10/15
K	< 300 HB	10/20				8/10	8/10	15/20	15/20	8/12		8/12	8/10		8/12	8/10	10/20	10/20			8/12
N	< 10% Si	10/30	40/45			12/20	12/20	20/40	20/40	20/30		20/30	15/30		20/30	15/30	10/25	10/30			20/30
N	> 10% Si	10/30	40/45			10/15	10/15	20/35	20/35	15/25		15/25	12/25		15/25	12/25	10/25	10/30			15/25
N	Bass Copper							10/20	10/20			6/15	5/12		6/15	5/12					6/15
N	Bronze >700 N/mm²		20/25																		
S	Ti6Al4V																				
S	HTA																				
H	< 45 HRC																				
H	< 60 HRC																				

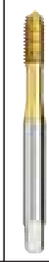
● RECOMMENDED FOR... ○ USABLE FOR…

CHAP A - TAPS SECTION - RECOMMENDED CUTTING DATA

Material		HSSE		HSS	HSSE				PM														
Threading		GAS			NPT		PG	EG-M	M														
Application		-							UNI					HARD								TI	
																							
		A2615	A2640	A2825	A2650	A2655	A2660	A2671	A2152	A2157	A2175	A2180	A2182	A2160	A2165	A2161	A2166	A2170	A2190	A2195	A2245	A2246	
		KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WRK	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	
Page. A		79	81	84	81	82	82	83	62	63	65	65	65	63	63	64	64	64	66	66	69	69	
DIN		DIN 5156	DIN 2189	DIN 5157	NdF	NdF	DIN 40432	DIN 40435	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371/6	DIN 371	DIN 371
Hole																							
Coating		—	TiN	—	—	—	—	—	PERFORM	PERFORM	IPER	IPER	IPER	—	—	TiN	TiN	IPER	TiCN	TiCN	TiCN	TiCN	
Coolant		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	
Chamfer form		C 2/3					C 2/3		B 4/5	C 2/3	B 4/5	C 2/3	E 1,5/2	B 4/5	C 2/3	B 4/5	C 2/3		B 4/5	C 2/3	B 4/5	C 2/3	
P	< 500 N/mm²	20/25	35/40	●	10/15	12/15	15/20	15/20	40/45	40/45	30/35	25/30	25/30	20/30	20/30				25/30				
P	< 850 N/mm²	10/15	30/35	●	10/12			12/15	35/40	35/40	25/30	20/25	20/25	15/20	15/20	15/20	15/20	10/18	20/25	20/25			
P	< 1200 N/mm²				6/8				10/15	10/15	15/20	15/20	15/20	8/15	8/15	10/15	10/15	8/12	5/10	5/10			
M	< 600 N/mm²			○	4/6	4/6			16/20	16/20	10/12	8/10	8/10	8/15	8/12	5/15	5/20		10/20	10/20			
M	< 850 N/mm²				2/3	2/3			10/15	10/15	8/10	6/8	6/8	5/8		5/10	5/10		6/8	6/8			
M	DUPLEX								10/15	10/12	6/8	5/7	5/7				3/5						
K	< 240 HB	10/15		○	10/12			8/12	30/45	30/40				15/25	15/25	15/25	15/25		15/25	15/25			
K	< 300 HB	8/10		○	8/10			3/5	25/30	20/25	20/25	15/20	15/20	15/20	15/20	15/20	15/20	25/30	15/20	15/20			
N	< 10% Si	15/30	40/45	○	12/15	12/15	20/25	20/25	45/50	35/40	30/40	25/30	25/30					20/40	30/40	30/40			
N	> 10% Si	12/25	40/45	○	10/12	10/12			45/50	35/40	25/35	20/25	20/25					20/35	30/40	30/40			
N	Bass Copper	5/12		○	6/8			12/18	18/20	18/20	15/18	15/18	15/18	10/20	10/20				20/35	25/35			
N	Bronze >700 N/mm²		20/25	○				5/8				5/8	5/8										
S	Ti6Al4V					2/3												2/4			4/8	4/8	
S	HTA										6/8	4/6	4/6					2/4			6/8	6/8	
H	< 45 HRC			○							5/8	5/8	5/8						2/4	2/4	5/8	5/8	
H	< 60 HRC																						

● RECOMMENDED FOR... ○ USABLE FOR...

CHAP A - TAPS SECTION - RECOMMENDED CUTTING DATA

	Material	PM	HSSE	PM	HSSE	HSS													HM			
	Threading	MF	M			MF					GAS	UNC	UNF	BSW	PG	BSPT	NPT	M/MF	GAS	NPT	UN	
	Application	UNI		INOX		-												UNI				
																						
		A2445	A2350	A2360	A2912	A2910	A2914	A2915	A2911	A2913	A2916	A2920	A2925	A2927	A2930	A2935	A2940	A2945	A3013	A3016	A3021	A3024
		KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG
	Page. A	76	72	73	86	85	87	86	85	87	86	87	88	88	88	89	89	89	90	90	90	91
	DIN	DIN 374	DIN 371/6	DIN 371/6	DIN 22568	DIN 22568	DIN 22568	DIN 22568	DIN 22568	DIN 22568	DIN 22568	DIN 24231	DIN 22568	DIN 22568	DIN 22568	DIN 40434 B	DIN 24230	NdF	NdF	NdF	NdF	NdF
	Hole				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Coating	IPER	TiN	PERFORM	—	—	TiN	—	—	TiN	—	—	—	—	—	—	—	—	WIND +	WIND +	WIND +	WIND +
	Coolant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Chamfer form	C 2/3			CORRECT														-			
P	< 500 N/mm²	25/30	35/40		○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
P	< 850 N/mm²	20/25	30/35			○	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	●
P	< 1200 N/mm²	15/20																	●	●	●	●
M	< 600 N/mm²	8/10		15/20	●	○	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	●
M	< 850 N/mm²	6/8		10/15	○														●	●	●	●
M	DUPLEX	5/7		8/10															●	●	●	●
K	< 240 HB						○					○	○	○	○	○	○	○	●	●	●	●
K	< 300 HB	15/20					○					○	○	○	○	○	○	○	●	●	●	●
N	< 10% Si	25/30	40/45		○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	●
N	> 10% Si	20/25	40/45				○					○	○	○	○	○	○	○	●	●	●	●
N	Bass Copper	15/18			○		○					○	○	○	○	○	○	○	●	●	●	●
N	Bronze >700 N/mm²		20/25			○	○					○	○	○	○	○	○	○	●	●	●	●
S	Ti6Al4V																		●	●	●	●
S	HTA	4/6																	●	●	●	●
H	< 45 HRC																		●	●	●	●
H	< 60 HRC																					

● RECOMMENDED FOR... ○ USABLE FOR...

STRAIGHT FLUTE TAP FOR BLIND AND THROUGH-HOLES - M

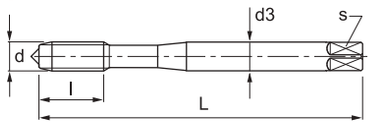
WRK

DIN 371/6 | HSSE

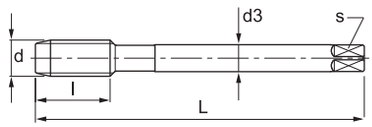
ITEM: A2010

ISO thread DIN 13 coarse pitch

DIN 371



DIN 376



Tolerance	6H ISO 2
Surface finish	Bright
Thread depth	≤ 2XD
Hole type	Blind and through
Chamfer form	C 2/3
Application	Structural and case hardened steel R < 850 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					○	●	●							

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2010M2	23,33	2 x 0.4	45	8	2.5	2.1	1.6	371
A2010M3	13,78	3 x 0.5	56	11	3.5	2.7	2.5	371
A2010M4	13,76	4 x 0.7	63	12	4.5	3.4	3.3	371
A2010M5	15,08	5 x 0.8	70	14	6	4.9	4.2	371
A2010M6	15,11	6 x 1	80	16	6	4.9	5	371
A2010M8	16,90	8 x 1.25	90	18	8	6.2	6.8	371
A2010M10	19,96	10 x 1.5	100	20	10	8	8.5	371
A2010M3GP	18,44	3 x 0.5	56	5	3.5	2.7	2.5	376
A2010M4GP	15,99	4 x 0.7	63	12	2.8	2.1	3.3	376
A2010M5GP	17,52	5 x 0.8	70	14	3.5	2.7	4.2	376
A2010M6GP	17,21	6 x 1	80	16	4.5	3.4	5	376
A2010M8GP	19,14	8 x 1.25	90	18	6	4.9	6.8	376
A2010M10GP	21,45	10 x 1.5	100	20	10	8	8.5	376

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2010M12	26,45	12 x 1.75	110	24	9	7	10.2	376
A2010M14	32,75	14 x 2	110	26	11	9	12	376
A2010M16	39,04	16 x 2	110	28	12	9	14	376
A2010M18	54,69	18 x 2.5	125	30	14	11	15.5	376
A2010M20	56,52	20 x 2.5	140	32	16	12	17.5	376
A2010M22	59,55	22 x 2.5	140	32	18	14.5	19.5	376
A2010M24	61,88	24 x 3	160	36	18	14.5	21	376
A2010M27	81,18	27 x 3	160	36	20	16	24	376
A2010M30	102,80	30 x 3.5	180	40	22	18	26.5	376
A2010M33	128,62	33 x 3.5	180	40	25	20	29.5	376
A2010M36	212,57	36 x 4	200	55	28	22	32	376
A2010M39	266,22	39 x 4	200	60	32	24	35	376
A2010M42	316,73	42 x 4.5	200	60	32	24	37.5	376

SPIRAL POINT TAP FOR THROUGH-HOLES - M

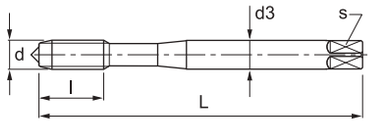
WRK

DIN 371/6 | HSSE

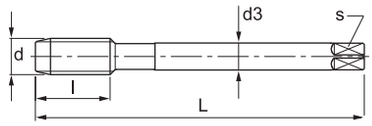
ITEM: A2020

ISO thread DIN 13 coarse pitch

DIN 371



DIN 376



Tolerance	6H ISO 2
Surface finish	Bright
Thread depth	< 2XD
Hole type	Through
Chamfer form	B 4/5
Application	Low and medium resistance steel ≤ 800 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					○	●	●	○	○					

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2020M2	24,18	2 x 0.4	45	8	2.8	2.1	1.6	371
A2020M2,5	19,43	2.5 x 0.45	50	9	2.8	2.1	2.05	371
A2020M3	17,53	3 x 0.5	56	10	3.5	2.7	2.5	371
A2020M4	17,53	4 x 0.7	63	12	4.5	3.4	3.3	371
A2020M5	18,73	5 x 0.8	70	14	6	4.9	4.2	371
A2020M6	19,46	6 x 1	80	16	6	4.9	5	371
A2020M8	21,73	8 x 1.25	90	18	8	6.2	6.8	371

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2020M10	25,85	10 x 1.5	100	20	10	8	8.5	371
A2020M12	33,22	12 x 1.75	110	25	9	7	10.2	376
A2020M14	42,64	14 x 2	110	25	11	9	12	376
A2020M16	46,83	16 x 2	110	28	12	9	14	376
A2020M18	65,59	18 x 2.5	125	32	14	11	15.5	376
A2020M20	68,63	20 x 2.5	140	32	16	12	17.5	376

SPIRAL FLUTE 15° TAP FOR BLIND HOLES - M

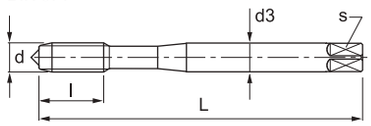
WRK

DIN 371/6 | HSSE

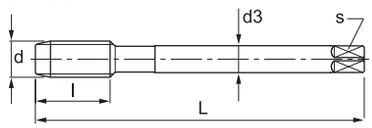
ITEM: A2030

ISO thread DIN 13 coarse pitch

DIN 371



DIN 376



Tolerance	6H ISO 2
Surface finish	Bright
Thread depth	< 2XD
Hole type	Blind
Chamfer form	C 2/3
Application	Structural and case hardened steel R < 850 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○			○	●								

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2030M2	30,08	2 x 0.4	45	8	2.8	2.1	1.6	371
A2030M2,5	35,57	2.5 x 0.45	50	9	2.8	2.1	2.05	371
A2030M3	16,90	3 x 0.5	56	10	3.5	2.7	2.5	371
A2030M4	17,53	4 x 0.7	63	12	4.5	3.4	3.3	371
A2030M5	18,15	5 x 0.8	70	14	6	4.9	4.2	371
A2030M6	18,10	6 x 1	80	16	6	4.9	5	371
A2030M8	21,09	8 x 1.25	90	18	8	6.2	6.8	371
A2030M10	25,37	10 x 1.5	100	20	10	8	8.5	371
A2030M5GP	21,07	5 x 0.8	70	14	3.5	2.7	4.2	376
A2030M6GP	25,14	6 x 1	80	16	4.5	3.4	5	376
A2030M8GP	27,22	8 x 1.25	90	18	6	4.9	6.8	376

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2030M10GP	34,36	10 x 1.5	100	20	7	5.5	8.5	376
A2030M12	31,74	12 x 1.75	110	25	9	7	10.2	376
A2030M14	41,07	14 x 2	110	25	11	9	12	376
A2030M16	45,70	16 x 2	110	28	12	9	14	376
A2030M18	62,48	18 x 2.5	125	30	14	11	15.5	376
A2030M20	65,00	20 x 2.5	140	32	16	12	17.5	376
A2030M22	67,37	22 x 2.5	140	32	18	14.5	19.5	376
A2030M24	68,61	24 x 3	160	36	18	14.5	21	376
A2030M27	103,29	27 x 3	160	36	20	16	24	376
A2030M30	113,09	30 x 3.5	180	40	22	18	26.5	376

Indivisible package | Suggested retail package - Unit price

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

WRK

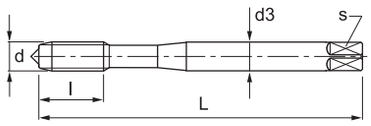
DIN 371/6 | HSSE

ITEM: A2040

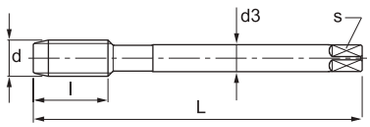
ISO thread DIN 13 coarse pitch

Tolerance	6H ISO 2
Surface finish	Bright
Thread depth	< 2.5XD
Hole type	Blind
Chamfer form	C 2/3
Application	Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					○	●	●								

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2040M2	22,70	2 x 0.4	45	6	2.8	2.1	1.6	371
A2040M2,5	22,73	2.5 x 0.45	50	6.5	2.8	2.1	2.05	371
A2040M3	18,69	3 x 0.5	56	7	3.5	2.7	2.5	371
A2040M4	19,41	4 x 0.7	63	8.5	4.5	3.4	3.3	371

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2040M5	19,89	5 x 0.8	70	10	6	4.9	4.2	371
A2040M6	19,89	6 x 1	80	12	6	4.9	5	371
A2040M8	23,28	8 x 1.25	90	15	8	6.2	6.8	371
A2040M10	27,66	10 x 1.5	100	17.5	10	8	8.5	371

SPIRAL POINT TAP FOR THROUGH-HOLES - M

WRK

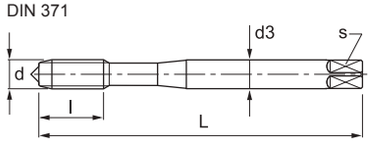
DIN 371/6 | HSSE | TiN

ITEM: A2125

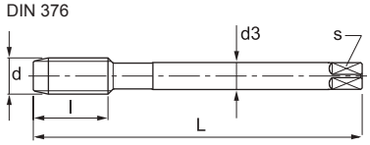
ISO thread DIN 13 coarse pitch

Tolerance	6H ISO 2
Surface finish	TIN
Thread depth	< 2XD
Hole type	Through
Chamfer form	B 4/5
Application	Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●					○		○						

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2125M3	21,88	3 x 0,5	56	10	3,5	2,7	2,5	371
A2125M4	21,93	4 x 0,7	63	12	4,5	3,4	3,3	371
A2125M5	22,04	5 x 0,8	70	14	6	4,9	4,2	371
A2125M6	22,04	6 x 1,0	80	16	6	4,9	5	371
A2125M8	31,15	8 x 1,25	90	18	8	6,2	6,8	371
A2125M10	36,71	10 x 1,5	100	20	10	8	8,5	371
A2125M12	49,87	12 x 1,75	110	22	9	7	10,2	376

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2125M14	60,37	14 x 2,0	110	24	11	9	12	376
A2125M16	71,53	16 x 2,0	110	26	12	9	14	376
A2125M18	93,94	18 x 2,5	125	30	14	11	15,5	376
A2125M20	112,28	20 x 2,5	140	30	16	12	17,5	376
A2125M22	142,02	22 x 2,5	140	30	18	14,5	19,5	376
A2125M24	151,83	24 x 3	160	36	18	14,5	21	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

WRK

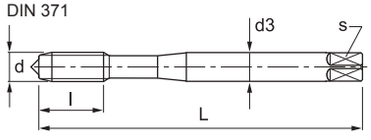
DIN 371/6 | HSSE | TiN

ITEM: A2128

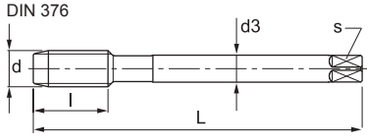
ISO thread DIN 13 coarse pitch

Tolerance	6H ISO 2
Surface finish	TiN
Thread depth	≤ 2,5XD
Hole type	Blind
Chamfer form	C 2/3
Application	Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●					○		○						

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2128M3	21,88	3 x 0,5	56	7	3,5	2,7	2,5	371
A2128M4	21,93	4 x 0,7	63	8	4,5	3,4	3,3	371
A2128M5	22,04	5 x 0,8	70	10	6	4,9	4,2	371
A2128M6	22,04	6 x 1,0	80	12	6	4,9	5	371
A2128M8	31,15	8 x 1,25	90	15	8	6,2	6,8	371
A2128M10	36,71	10 x 1,5	100	18	10	8	8,5	371
A2128M12	49,87	12 x 1,75	110	18	9	7	10,2	376

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2128M14	60,37	14 x 2,0	110	20	11	9	12	376
A2128M16	71,53	16 x 2,0	110	20	12	9	14	376
A2128M18	93,94	18 x 2,5	125	25	14	11	15,5	376
A2128M20	112,28	20 x 2,5	140	25	16	12	17,5	376
A2128M22	142,02	22 x 2,5	140	25	18	14,5	19,5	376
A2128M24	151,83	24 x 3,0	160	30	18	14,5	21	376

SPIRAL POINT TAP FOR THROUGH HOLES - M - OVERSIZED

KERFOLG

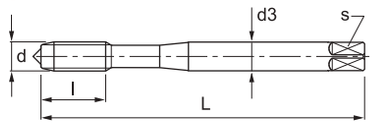
DIN 371/6 | HSSE | 6 H + 0.1

ITEM: A2022

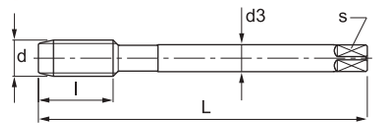
ISO DIN 13 thread oversized dimension

Tolerance 6H ISO 2 + 0.1mm
Surface finish Bright
Thread depth < 3XD
Hole type Through
Chamfer form B 4/5
Application Low and medium resistance steel ≤ 800 N/mm²
Aluminum alloys - Copper

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○			○		●	○	●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2022M3	30,83	3 x 0,5	56	10	3,5	2,7	2,5	371
A2022M4	30,80	4 x 0.7	63	13	4.5	3.4	3.3	371
A2022M5	30,80	5 x 0.8	70	13	6	4.9	4.2	371
A2022M6	30,80	6 x 1	80	16	6	4.9	5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2022M8	36,44	8 x 1.25	90	18	8	6.2	6.8	371
A2022M10	43,87	10 x 1.5	100	20	10	8	8.5	371
A2022M12	53,74	12 x 1.75	110	25	9	7	10.3	376
A2022M16	84,55	16 x 2	110	28	12	9	14	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M - OVERSIZED

KERFOLG

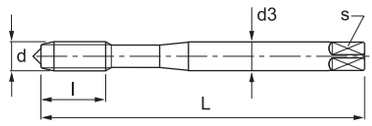
DIN 371/6 | HSSE | 6 H + 0.1

ITEM: A2042

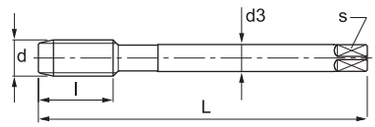
ISO thread DIN 13 coarse pitch oversized

Tolerance 6H ISO 2 + 0.1mm
Surface finish Bright
Thread depth < 2.5XD
Type of hole Blind
Chamfer form C 2/3
Applicazione Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○			○		●	○	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2042M4	30,83	4 x 0.7	63	7	4.5	3.4	3.3	371
A2042M5	30,83	5 x 0.8	70	8	6	4.9	4.2	371
A2042M6	30,83	6 x 1	80	10	6	4.9	5	371
A2042M8	36,48	8 x 1.25	90	13	8	6.2	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2042M10	43,85	10 x 1.5	100	15	10	8	8.5	371
A2042M12	53,72	12 x 1.75	110	25	9	7	10.3	376
A2042M16	84,54	16 x 2	110	28	12	9	14	376

STRAIGHT FLUTE TAP LEFT-HANDED THREAD - M

KERFOLG

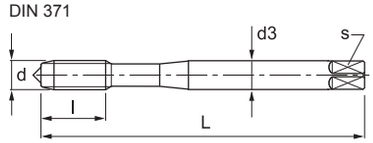
DIN 371/6 | HSSE

ITEM: A2060

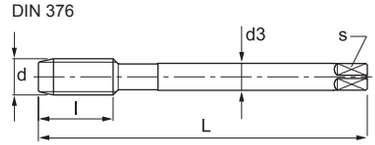
ISO thread DIN 13 coarse pitch

Tolerance 6H LH ISO 2
Surface finish Bright
Thread depth < 2XD
Hole type Through and Blind
Chamfer form C 2/3
Application Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○					●		●	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2060M3	24,62	3 x 0.5	56	10	3.5	2.7	2.5	371
A2060M4	24,51	4 x 0.7	63	12	4.5	3.4	3.3	371
A2060M5	24,51	5 x 0.8	70	14	6	4.9	4.2	371
A2060M6	24,51	6 x 1	80	16	6	4.9	5	371
A2060M8	27,75	8 x 1.25	90	18	8	6.2	6.8	371
A2060M10	32,32	10 x 1.5	100	20	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2060M12	41,56	12 x 1.75	110	25	9	7	10.2	376
A2060M14	53,70	14 x 2	110	25	11	9	12	376
A2060M16	61,06	16 x 2	110	28	12	9	14	376
A2060M18	87,91	18 x 2.5	125	32	14	11	15.5	376
A2060M20	95,71	20 x 2.5	140	32	16	12	17.5	376

Indivisible package Suggested retail package - Unit price

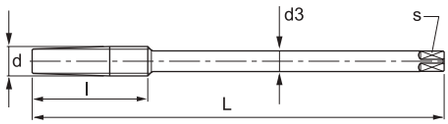
STRAIGHT FLUTE TAP FOR THROUGH-HOLES REDUCED SHANK - M

WRK

DIN 357 | HSSE

ITEM: A2070

ISO thread DIN 13 coarse pitch



Tolerance	6H ISO 2
Surface finish	Bright
Thread depth	≤ 2XD
Hole type	Through
Chamfer form	B 18/20
Application	Nut tapping

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●														

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2070M4	31,84	4 x 0.7	90	25	2.8	2.1	3.3	357
A2070M5	33,92	5 x 0.8	100	28	3.5	2.7	4.2	357
A2070M6	35,68	6 x 1	110	32	4.5	3.4	5	357
A2070M8	44,57	8 x 1.25	125	40	6	4.9	6.8	357

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2070M10	50,72	10 x 1.5	140	45	7	5.5	8.5	357
A2070M12	65,98	12 x 1.75	180	50	9	7	10.2	357
A2070M14	66,96	14 x 2	200	56	11	9	12	357
A2070M16	74,98	16 x 2	209	63	12	9	14	357

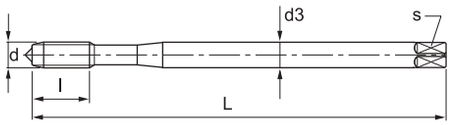
SPIRAL POINT TAP FOR THROUGH-HOLES EXTRA-LONG SHANK - M

KERFOLG

NdF | HSSE

ITEM: A2080

ISO thread DIN 13 coarse pitch



Tolerance	6H ISO 2
Surface finish	Bright
Thread depth	2,5XD
Hole type	Through
Chamfer form	B 4/5 extra-long shank
Application	Structural and case hardened steel R < 850 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●							○	○	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm
A2080M4	49,58	4 x 0.7	112	12	4.5	3.4	3.3
A2080M5	52,04	5 x 0.8	125	14	6	4.9	4.2
A2080M6	54,60	6 x 1	125	16	6	4.9	5

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm
A2080M8	59,83	8 x 1.25	140	18	8	6.2	6.8
A2080M10	67,85	10 x 1.5	160	20	10	8	8.5
A2080M12	77,99	12 x 1.75	180	25	9	7	10.2

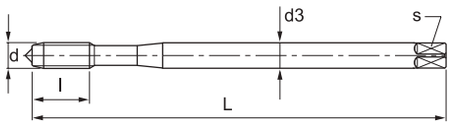
SPIRAL FLUTE 40° TAP FOR BLIND HOLES EXTRA-LONG SHANK - M

KERFOLG

NdF | HSSE

ITEM: A2085

ISO thread DIN 13 coarse pitch



Tolerance	6H ISO 2
Surface finish	Bright
Thread depth	< 2.5XD
Hole type	Blind
Chamfer form	C 2/3 extra-long shank
Application	Structural and case hardened steel R < 850 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●							○	○	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm
A2085M4	51,03	4 x 0.7	112	5	4.5	3.4	3.3
A2085M5	53,60	5 x 0.8	125	6.5	6	4.9	4.2
A2085M6	56,27	6 x 1	125	7	6	4.9	5

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm
A2085M8	62,40	8 x 1.25	140	9	8	6.2	6.8
A2085M10	69,08	10 x 1.5	160	11	10	8	8.5
A2085M12	79,44	12 x 1.75	180	13	9	7	10.2

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

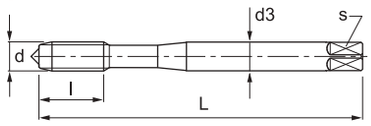
DIN 371/6 | HSSE | NIT + VAP | UNI

ITEM: A2102

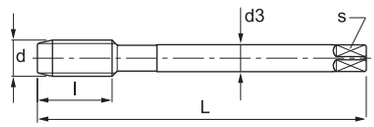
ISO Thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Nitrided and steam tempering
Thread depth < 2XD
Hole type Through
Chamfer form B 4/5
Application Taps for universal applications. For almost all materials.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	○	○	○	●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2102M02	34,94	2 x 0,4	45	7	2,8	2,1	1,6	371
A2102M02,5	33,79	2,5 x 0,45	50	9	2,8	2,1	2,05	371
A2102M03	25,80	3 x 0,5	56	11	3,5	2,7	2,5	371
A2102M04	26,19	4 x 0,7	63	13	4,5	3,4	3,3	371
A2102M05	26,71	5 x 0,8	70	14	6	4,9	4,2	371
A2102M06	26,69	6 x 1	80	17	6	4,9	5	371
A2102M08	30,05	8 x 1,25	90	20	8	6,2	6,8	371
A2102M10	36,63	10 x 1,5	100	22	10	8	8,5	371
A2102M12	46,55	12 x 1,75	110	24	9	7	10,2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2102M14	71,07	14 x 2	110	26	11	9	12	376
A2102M16	68,48	16 x 2	110	27	12	9	14	376
A2102M18	115,17	18 x 2,5	125	30	14	11	15,5	376
A2102M20	104,33	20 x 2,5	140	32	16	12	17,5	376
A2102M22	173,32	22 x 2,5	140	32	18	14,5	19,5	376
A2102M24	143,55	24 x 3	160	34	18	14,5	21	376
A2102M27	197,99	27 x 3	160	36	20	16	24	376
A2102M30	229,57	30 x 3,5	180	40	22	18	26,5	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

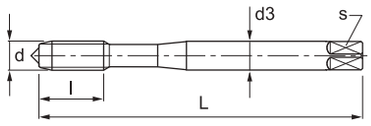
DIN 371/6 | HSSE | NIT + VAP | UNI

ITEM: A2103

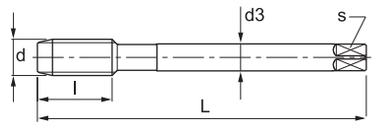
ISO Thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Nitrided and steam tempering
Thread depth < 2,5XD
Hole type Blind
Chamfer form C 2/3 with rear taper
Application Taps for universal applications. For almost all materials.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	○	○	○	●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2103M02	34,94	2 x 0,4	45	4	2,8	2,1	1,6	371
A2103M02,5	(35,58)	2,5 x 0,45	50	5	2,8	2,1	2,05	371
A2103M03	(26,70)	3 x 0,5	56	6	3,5	2,7	2,5	371
A2103M04	(27,73)	4 x 0,7	63	7	4,5	3,4	3,3	371
A2103M05	(28,23)	5 x 0,8	70	8	6	4,9	4,2	371
A2103M06	29,13	6 x 1	80	10	6	4,9	5	371
A2103M08	34,16	8 x 1,25	90	14	8	6,2	6,8	371
A2103M10	41,39	10 x 1,5	100	16	10	8	8,5	371
A2103M12	50,93	12 x 1,75	110	18	9	7	10,2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2103M14	77,24	14 x 2	110	20	11	9	12	376
A2103M16	72,61	16 x 2	110	22	12	9	14	376
A2103M18	125,34	18 x 2,5	125	25	14	11	15,5	376
A2103M20	110,92	20 x 2,5	140	25	16	12	17,5	376
A2103M22	173,32	22 x 2,5	140	27	18	14,5	19,5	376
A2103M24	148,97	24 x 3	160	30	18	14,5	21	376
A2103M27	207,63	27 x 3	160	30	20	16	24	376
A2103M30	250,21	30 x 3,5	180	35	22	18	26,5	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

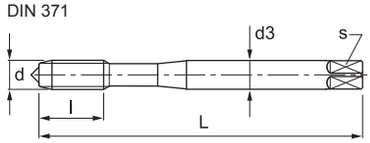
DIN 371/6 | HSSE | TiN | UNI

ITEM: A2104

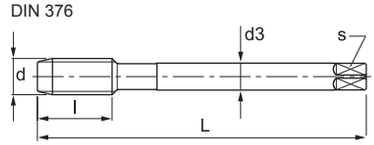
ISO DIN 13 coarse pitch

Tolleranza 6H ISO 2
Surface finish TiN
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application Taps for universal applications. For almost all materials.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	○	○		●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2104M02	46,16	2 x 0,4	45	4	2,8	2,1	1,6	371
A2104M02,5	46,16	2,5 x 0,45	50	5	2,8	2,1	2,05	371
A2104M03	35,86	3 x 0,5	56	6	3,5	2,7	2,5	371
A2104M04	37,38	4 x 0,7	63	7	4,5	3,4	3,3	371
A2104M05	38,05	5 x 0,8	70	8	6	4,9	4,2	371
A2104M06	43,22	6 x 1	80	10	6	4,9	5	371
A2104M08	47,46	8 x 1,25	90	14	8	6,2	6,8	371
A2104M10	60,33	10 x 1,5	100	16	10	8	8,5	371
A2104M12	70,05	12 x 1,75	110	18	9	7	10,2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2104M14	95,69	14 x 2	110	20	11	9	12	376
A2104M16	89,75	16 x 2	110	22	12	9	14	376
A2104M18	138,65	18 x 2,5	125	25	14	11	15,5	376
A2104M20	126,26	20 x 2,5	140	25	16	12	17,5	376
A2104M22	211,12	22 x 2,5	140	27	18	14,5	19,5	376
A2104M24	180,19	24 x 3	160	30	18	14,5	21	376
A2104M27	232,39	27 x 3	160	30	20	16	24	376
A2104M30	263,99	30 x 3,5	180	35	22	18	26,5	376

Indivisible package | Suggested retail package - Unit price

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

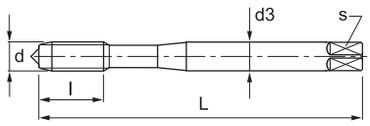
DIN 371/6 | HSSE | TiN | UNI

ITEM: A2105

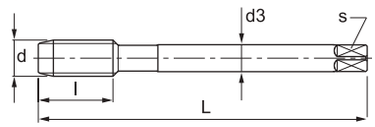
ISO Thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish TiN
Thread depth < 2,5XD
Hole type Blind
Chamfer form C 2/3 with rear taper
Application Taps for universal applications. For almost all materials.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	○	○	○	●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2105M02	46,55	2 x 0,4	45	4	2,8	2,1	1,6	371
A2105M02,5	46,16	2,5 x 0,45	50	5	2,8	2,1	2,05	371
A2105M03	41,27	3 x 0,5	56	6	3,5	2,7	2,5	371
A2105M04	42,70	4 x 0,7	63	7	4,5	3,4	3,3	371
A2105M05	44,38	5 x 0,8	70	8	6	4,9	4,2	371
A2105M06	45,52	6 x 1	80	10	6	4,9	5	371
A2105M08	50,95	8 x 1,25	90	14	8	6,2	6,8	371
A2105M10	58,68	10 x 1,5	100	16	10	8	8,5	371
A2105M12	74,15	12 x 1,75	110	18	9	7	10,2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2105M14	100,72	14 x 2	110	20	11	9	12	376
A2105M16	102,14	16 x 2	110	22	12	9	14	376
A2105M18	148,17	18 x 2,5	125	25	14	11	15,5	376
A2105M20	172,56	20 x 2,5	140	25	16	12	17,5	376
A2105M22	229,70	22 x 2,5	140	27	18	14,5	19,5	376
A2105M24	199,78	24 x 3	160	30	18	14,5	21	376
A2105M27	246,31	27 x 3	160	30	20	16	24	376
A2105M30	286,05	30 x 3,5	180	35	22	18	26,5	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG Black V

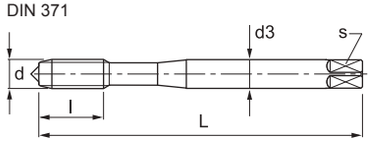
DIN 371/6 | HSSE | VAP

ITEM: A2110

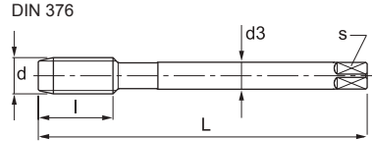
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Steam tempering
Thread depth < 2XD
Hole type Through
Chamfer form B 4/5
Application Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				○	●	○	○						

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2110M2	25,18	2 x 0.4	45	7	2.8	2.1	1.6	371
A2110M2,5	21,39	2.5 x 0.45	50	9	2.8	2.1	2.05	371
A2110M3	19,40	3 x 0.5	56	10	3.5	2.7	2.5	371
A2110M4	19,40	4 x 0.7	63	12	4.5	3.4	3.3	371
A2110M5	20,73	5 x 0.8	70	14	6	4.9	4.2	371
A2110M6	21,17	6 x 1	80	16	6	4.9	5	371
A2110M8	23,84	8 x 1.25	90	18	8	6.2	6.8	371
A2110M10	28,86	10 x 1.5	100	20	10	8	8.5	371
A2110M4GP	23,40	4 x 0.7	63	12	2.8	2.1	3.3	376
A2110M5GP	23,73	5 x 0.8	70	14	3.5	2.7	4.2	376
A2110M6GP	24,29	6 x 1	80	16	4.5	3.4	5	376
A2110M8GP	26,19	8 x 1.25	90	18	6	4.9	6.8	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2110M10GP	30,53	10 x 1.5	100	20	7	5.5	8.5	376
A2110M12	36,55	12 x 1.75	110	25	9	7	10.2	376
A2110M14	46,58	14 x 2	110	25	11	9	12	376
A2110M16	51,48	16 x 2	110	28	12	9	14	376
A2110M18	71,75	18 x 2.5	125	32	14	11	15.5	376
A2110M20	75,55	20 x 2.5	140	32	16	12	17.5	376
A2110M22	78,66	22 x 2.5	140	32	18	14	19.5	376
A2110M24	98,94	24 x 3	160	36	18	14	21	376
A2110M27	110,31	27 x 3	160	36	20	16	24	376
A2110M30	138,84	30 x 3.5	180	40	22	18	26.5	376
A2110M33	(174,49)	33 x 3.5	180	40	25	20	29.5	376
A2110M36	(287,48)	36 x 4	200	55	28	22	32	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG Black V

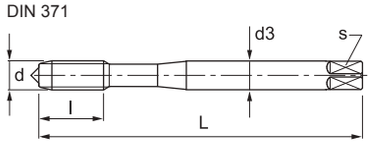
DIN 371/6 | HSSE | VAP

ITEM: A2120

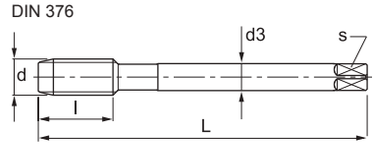
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Steam tempering
Thread depth < 2.5XD
Hole type Blind
Chamfer form C 2/3 back-tapered
Application Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				○	●	○	○	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2120M2	25,52	2 x 0.4	45	6	2.8	2.1	1.6	371
A2120M2,5	31,54	2.5 x 0.45	50	6.5	2.8	2.1	2.05	371
A2120M3	20,73	3 x 0.5	56	6.5	3.5	2.7	2.5	371
A2120M4	21,39	4 x 0.7	63	7	4.5	3.4	3.3	371
A2120M5	21,83	5 x 0.8	70	10	6	4.9	4.2	371
A2120M6	21,83	6 x 1	80	12	6	4.9	5	371
A2120M8	25,74	8 x 1.25	90	15	8	6.2	6.8	371
A2120M10	30,75	10 x 1.5	100	117.5	10	8	8.5	371
A2120M4GP	23,18	4 x 0.7	63	8.5	2.8	2.1	3.3	376
A2120M5GP	23,18	5 x 0.8	70	10	3.5	2.7	4.2	376
A2120M6GP	23,18	6 x 1	80	12	4.5	3.4	5	376
A2120M8GP	25,95	8 x 1.25	90	15	6	4.9	6.8	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2120M10GP	29,86	10 x 1.5	100	17.5	7	5.5	8.5	376
A2120M12	37,99	12 x 1.75	110	18	9	7	10.2	376
A2120M14	49,14	14 x 2	110	20.5	11	9	12	376
A2120M16	54,82	16 x 2	110	20.5	12	9	14	376
A2120M18	74,54	18 x 2.5	125	25.5	14	11	15.5	376
A2120M20	77,43	20 x 2.5	140	29.5	16	12	17.5	376
A2120M22	90,03	22 x 2.5	140	29.5	18	14.5	19.5	376
A2120M24	122,78	24 x 3	160	35.5	18	14.5	21	376
A2120M27	134,93	27 x 3	160	37.5	20	16	24	376
A2120M30	167,80	30 x 3.5	180	42	22	18	26.5	376
A2120M33	(211,71)	33 x 3.5	180	43.5	25	20	29.5	376
A2120M36	(349,09)	36 x 4	200	47	28	22	32	376

Indivisible package Suggested retail package - Unit price

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

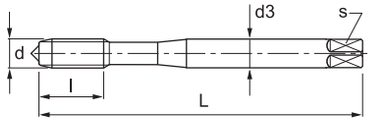
DIN 371/6 | HSSE | TiN

ITEM: A2130

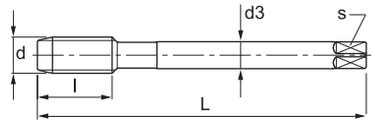
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish TiN
Thread depth 2,5XD
Hole type Through
Chamfer form B 4/5
Application Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●			○	●	●	●	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2130M2	35,88	2 x 0.4	45	8	2.8	2.1	1.6	371
A2130M2,5	31,31	2.5 x 0.45	50	9	2.8	2.1	2.05	371
A2130M3	28,41	3 x 0.5	56	10	3.5	2.7	2.5	371
A2130M4	28,41	4 x 0.7	63	12	4.5	3.4	3.3	371
A2130M5	28,41	5 x 0.8	70	14	6	4.9	4.2	371
A2130M6	28,41	6 x 1	80	16	6	4.9	5	371
A2130M8	35,21	8 x 1.25	90	18	8	6.2	6.8	371
A2130M10	41,68	10 x 1.5	100	20	10	8	8.5	371
A2130M12	51,26	12 x 1.75	110	25	9	7	10.2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2130M14	67,07	14 x 2	110	25	11	9	12	376
A2130M16	75,43	16 x 2	110	28	12	9	14	376
A2130M18	93,37	18 x 2.5	125	32	14	11	15.5	376
A2130M20	126,13	20 x 2.5	140	32	16	12	17.5	376
A2130M22	(126,68)	22 x 2.5	140	32	18	14.5	19.5	376
A2130M24	(187,08)	24 x 3	160	36	18	14.5	21	376
A2130M27	(226,52)	27 x 3	160	36	20	16	24	376
A2130M30	(266,64)	30 x 3.5	180	40	22	18	26.5	376
A2130M33	(315,44)	33 x 3.5	180	40	25	20	29.5	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

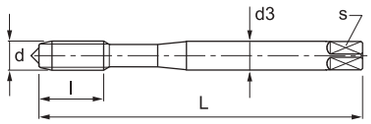
DIN 371/6 | HSSE | TiN

ITEM: A2135

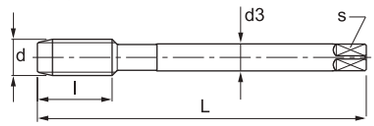
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish TiN
Thread depth ≤ 2XD
Hole type Blind
Chamfer form C 2/3 back-tapered
Application Low and medium resistance steel ≤ 800 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●			○	●	●	●	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2135M2	33,10	2 x 0.4	45	6	2.8	2.1	1.6	371
A2135M2,5	33,10	2.5 x 0.45	50	6.5	2.8	2.1	1.9	371
A2135M3	30,64	3 x 0.5	56	7	3.5	2.7	2.7	371
A2135M4	30,64	4 x 0.7	63	8.5	4.5	3.4	3.4	371
A2135M5	30,64	5 x 0.8	70	10	6	4.9	4.2	371
A2135M6	30,64	6 x 1	80	12	6	4.9	5.0	371
A2135M8	37,44	8 x 1.25	90	15	8	6.2	6.8	371
A2135M10	44,57	10 x 1.5	100	17.5	10	8	8.5	371
A2135M12	55,38	12 x 1.75	110	18	9	7	10.2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2135M14	71,98	14 x 2	110	20.5	11	9	12	376
A2135M16	81,01	16 x 2	110	20.5	12	9	14	376
A2135M18	101,28	18 x 2.5	125	25.5	14	11	15.5	376
A2135M20	133,93	20 x 2.5	140	29.5	16	12	17.5	376
A2135M22	150,53	22 x 2.5	140	29.5	18	14.5	19.5	376
A2135M24	196,78	24 x 3	160	35.5	18	14.5	21	376
A2135M27	239,34	27 x 3	160	37.5	20	16	24	376
A2135M30	283,36	30 x 3.5	180	42	22	18	26.5	376

SPIRAL POINT TAPS - M

KERFOLG Synchro

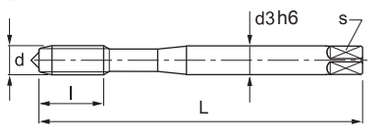
DIN 371/6 | PM | PERFORM | UNI

ITEM: A2152

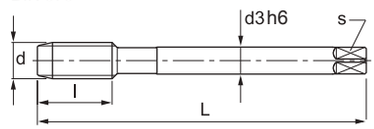
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish PERFORM
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application For rigid tapping with synchronized feed.
Machining of structural, case hardening and heat-treated steels with R ≤1200 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	○	●	●	○	●		○	○		

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2152M3	43,91	3 x 0.5	70	5	6	4.9	2.5	371
A2152M4	43,91	4 x 0.7	70	7	6	4.9	3.3	371
A2152M5	43,91	5 x 0.8	70	8	6	4.9	4.2	371
A2152M6	44,12	6 x 1	80	10	6	4.9	5	371
A2152M8	55,04	8 x 1.25	90	12.5	8	6.2	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2152M10	68,20	10 x 1.5	100	15	10	8	8.5	371
A2152M12	87,91	12 x 1.75	110	17.5	12	9	10.2	371
A2152M14	114,88	14 x 2	110	20	12	9	12	376
A2152M16	129,59	16 x 2	110	20	12	9	14	376

Indivisible package Suggested retail package - Unit price

SPIRAL FLUTE 40° TAPS - M

KERFOLG Synchro

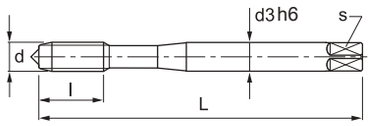
DIN 371/6 | PM | PERFORM | UNI

ITEM: A2157

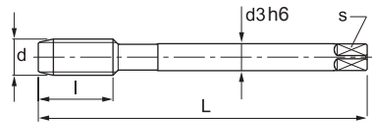
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish PERFORM
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application For rigid tapping with synchronized feed.
Machining of structural, case hardening and heat-treated steels with R ≤1200 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	○	●	●	○	●		○	○		

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2157M3	48,02	3 x 0.5	70	5.5	6	4.9	2.5	371
A2157M4	48,02	4 x 0.7	70	7.5	6	4.9	3.3	371
A2157M5	48,02	5 x 0.8	70	8.5	6	4.9	4.2	371
A2157M6	48,02	6 x 1	80	10.5	6	4.9	5	371
A2157M8	60,06	8 x 1.25	90	11.5	8	6.2	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2157M10	69,64	10 x 1.5	100	14	10	8	8.5	371
A2157M12	95,94	12 x 1.75	110	16.5	12	9	10.2	371
A2157M14	126,80	14 x 2	110	19	12	9	12	376
A2157M16	143,07	16 x 2	110	19	12	9	14	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

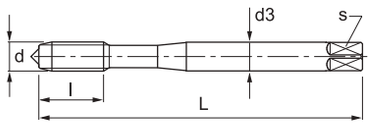
DIN 371/6 | PM | HD

ITEM: A2160

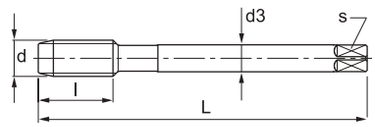
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Bright
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application Alloy steel with R ≤ 1100 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●		○	●			○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2160M3	23,84	3 x 0.5	56	10	3.5	2.7	2.5	371
A2160M4	24,07	4 x 0.7	63	12	4.5	3.4	3.3	371
A2160M5	25,41	5 x 0.8	70	14	6	4.9	4.2	371
A2160M6	25,29	6 x 1	80	16	6	4.9	5	371
A2160M8	28,63	8 x 1.25	90	18	8	6.2	6.8	371
A2160M10	34,43	10 x 1.5	100	20	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2160M12	45,02	12 x 1.75	110	25	9	7	10.2	376
A2160M14	57,39	14 x 2	110	25	11	9	12	376
A2160M16	63,62	16 x 2	110	28	12	9	14	376
A2160M18	95,60	18 x 2.5	125	32	14	11	15.5	376
A2160M20	99,39	20 x 2.5	140	32	16	12	17.5	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

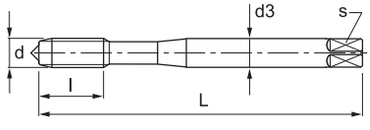
DIN 371/6 | PM | HD

ITEM: A2165

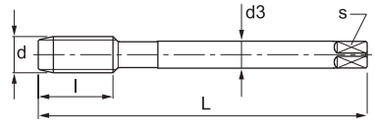
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Bright
Thread depth 3XD
Hole type Blind
Chamfer form C 2/3
Application Alloy steel with R ≤ 1100 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●			○	●			○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2165M3	25,95	3 x 0.5	56	5	3.5	2.7	2.5	371
A2165M4	26,52	4 x 0.7	63	5	4.5	3.4	3.3	371
A2165M5	27,30	5 x 0.8	70	6.5	6	4.9	4.2	371
A2165M6	27,63	6 x 1	80	7	6	4.9	5	371
A2165M8	31,87	8 x 1.25	90	9	8	6.2	6.8	371
A2165M10	39,01	10 x 1.5	100	11	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2165M12	48,92	12 x 1.75	110	13	9	7	10.2	376
A2165M14	73,32	14 x 2	110	16.5	11	9	12	376
A2165M16	71,75	16 x 2	110	16.5	12	9	14	376
A2165M18	102,18	18 x 2.5	125	20	14	11	15.5	376
A2165M20	104,51	20 x 2.5	140	22	16	12	17.5	376
A2165M24	117,67	24 x 3	160	35,5	18	14,5	21	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

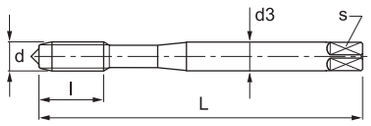
DIN 371/6 | PM | TiN | HD

ITEM: A2161

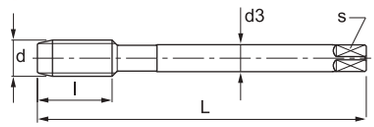
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish TiN
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application Alloy steel ≤ 45 HRC and stainless steel.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●			○	○								

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2161M03	46,84	3 x 0,5	56	11	3,5	2,7	2,5	371
A2161M04	50,39	4 x 0,7	63	13	4,5	3,4	3,3	371
A2161M05	50,39	5 x 0,8	70	15	6	4,9	4,2	371
A2161M06	62,97	6 x 1	80	17	6	4,9	5	371
A2161M08	71,74	8 x 1,25	90	20	8	6,2	6,8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2161M10	92,61	10 x 1,5	100	22	10	8	8,5	371
A2161M12	105,97	12 x 1,75	110	24	9	7	10,2	376
A2161M16	151,76	16 x 2	110	27	12	9	14	376
A2161M20	198,46	20 x 2,5	140	32	16	12	17,5	376
A2161M24	258,58	24 x 3	160	34	18	14,5	21	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

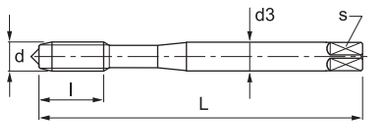
DIN 371/6 | PM | TiN | HD

ITEM: A2166

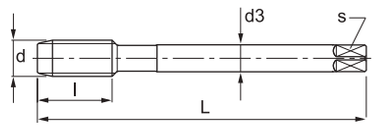
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish TiN
Thread depth ≤ 2,5XD
Hole type Blind
Chamfer form C 2/3
Application Alloy steel ≤ 45 HRC and stainless steel.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●		○	○	○								

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2166M03	61,89	3 x 0,5	56	6	3,5	2,7	2,5	371
A2166M04	61,89	4 x 0,7	63	7	4,5	3,4	3,3	371
A2166M05	64,14	5 x 0,8	70	8	6	4,9	4,2	371
A2166M06	71,74	6 x 1	80	10	6	4,9	5	371
A2166M08	84,52	8 x 1,25	90	14	8	6,2	6,8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2166M10	108,50	10 x 1,5	100	16	10	8	8,5	371
A2166M12	118,45	12 x 1,75	110	18	9	7	10,2	376
A2166M16	160,05	16 x 2	110	22	12	9	14	376
A2166M20	218,03	20 x 2,5	140	25	16	12	17,5	376
A2166M24	280,52	24 x 3	160	30	18	14,5	21	376

SPIRAL FLUTE 15° TAP FOR BLIND HOLES - COOLANT HOLES - M

KERFOLG Hard F

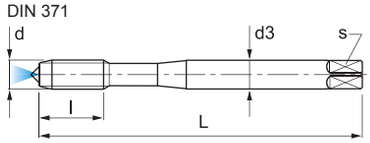
DIN 371/6 | PM | IPER | HD

ITEM: A2170

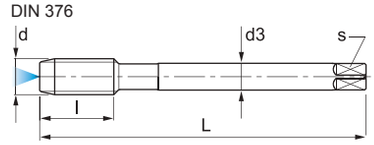
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish IPER
Thread depth ≤ 2XD
Hole type Blind
Chamfer form C 2/3 with axial internal coolant hole
Application Alloy steel with R ≤ 1100 N/mm² and nodular cast iron, titanium and nickel alloys

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					●		○	●			○	●		

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2170M5	70,20	5 x 0.8	70	15	6	4.9	4.2	371
A2170M6	70,20	6 x 1	80	16	6	4.9	5	371
A2170M8	73,65	8 x 1.25	90	18	8	6.2	6.8	371
A2170M10	80,23	10 x 1.5	100	20	10	8	8.5	371
A2170M12	112,21	12 x 1.75	110	25	9	7	10.2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2170M14	129,14	14 x 2	110	25	11	9	12	376
A2170M16	133,71	16 x 2	110	28	12	9	14	376
A2170M18	200,12	18 x 2.5	125	31	14	11	15.5	376
A2170M20	227,30	20 x 2.5	140	32	16	12	17.5	376

Indivisible package | Suggested retail package - Unit price

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG | Iper 110

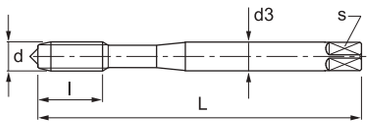
DIN 371/6 | PM | IPER | UNI

ITEM: A2175

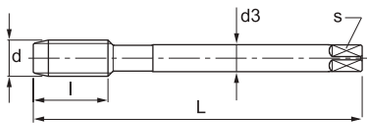
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish IPER
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application High performance on medium/high alloy steel with resistance ≤ 1100 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	●	●	●		●	●	○	○			●	○	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2175M3	40,34	3 x 0.5	56	10	3.5	2.7	2.5	371
A2175M4	40,11	4 x 0.7	63	12	4.5	3.4	3.3	371
A2175M5	40,11	5 x 0.8	70	14	6	4.9	4.2	371
A2175M6	39,89	6 x 1	80	16	6	4.9	5	371
A2175M8	50,15	8 x 1.25	90	18	8	6.2	6.8	371
A2175M10	62,40	10 x 1.5	100	20	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2175M12	80,45	12 x 1.75	110	24	9	7	10.2	376
A2175M14	104,18	14 x 2	110	25	11	9	12	376
A2175M16	116,89	16 x 2	110	28	12	9	14	376
A2175M18	159,45	18 x 2.5	125	32	14	11	15.5	376
A2175M20	205,91	20 x 2.5	140	32	16	12	17.5	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG | Iper 110

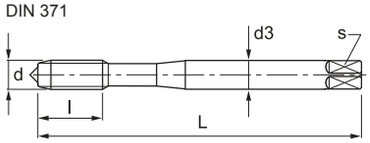
DIN 371/6 | PM | IPER | UNI

ITEM: A2180

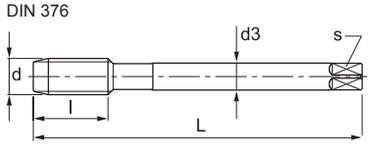
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish IPER
Thread depth 3XD
Hole type Blind
Chamfer form C 2/3
Application High performance on medium/high alloy steel with resistance ≤ 1100 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	●	●	●		●	●	○	○	○		●	○	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2180M3	44,46	3 x 0.5	56	7	3.5	2.7	2.5	371
A2180M4	44,23	4 x 0.7	63	8.5	4.5	3.4	3.3	371
A2180M5	44,23	5 x 0.8	70	10	6	4.9	4.2	371
A2180M6	44,01	6 x 1	80	12	6	4.9	5	371
A2180M8	55,04	8 x 1.25	90	14	8	6.2	6.8	371
A2180M10	68,30	10 x 1.5	100	17	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2180M12	88,14	12 x 1.75	110	18	9	7	10.2	376
A2180M14	115,21	14 x 2	110	20.5	11	9	12	376
A2180M16	129,36	16 x 2	110	20.5	12	9	14	376
A2180M18	166,81	18 x 2.5	125	25.5	14	11	15.5	376
A2180M20	212,60	20 x 2.5	140	25.5	16	12	17.5	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES E - M

KERFOLG

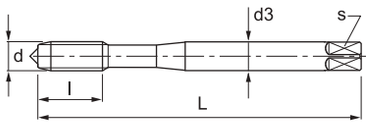
DIN 371/6 | PM | IPER | UNI

ITEM: A2182

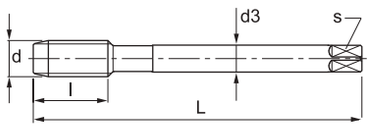
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish IPER
Thread depth ≤ 3XD
Hole type Blind
Chamfer form E 1,5/2
Application High performance on medium / high alloy steels and stainless steels.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	●	●	●		●	●	○	○	○		●	○	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2182M3	44,79	3 x 0,5	56	7	3,5	2,7	2,5	371
A2182M4	45,02	4 x 0,7	63	8,5	4,5	3,4	3,3	371
A2182M5	44,79	5 x 0,8	70	10	6	4,9	4,2	371
A2182M6	45,02	6 x 1	80	12	6	4,9	5	371
A2182M8	56,71	8 x 1,25	90	14	8	6,2	6,8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2182M10	70,09	10 x 1,5	100	17	10	8	8,5	371
A2182M12	90,25	12 x 1,75	100	18	9	7	10,2	376
A2182M14	121,45	14 x 2	110	20,5	11	9	12	376
A2182M16	136,26	16 x 2	125	20,5	14	11	15,5	376
A2182M20	226,30	20 x 2,5	140	20,5	16	12	17,5	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG Hard T

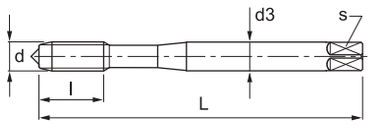
DIN 371/6 | PM | TiCN | HD

ITEM: A2190

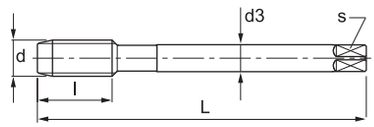
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish TiCN
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application Alloy steel with 1100÷1300 N/mm² R

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	●	●		○	●	●	●	●				○	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2190M2	38,22	2 x 0,4	45	7	2,8	2,1	1,6	371
A2190M3	35,32	3 x 0.5	56	10	3.5	2.7	2.5	371
A2190M4	35,66	4 x 0.7	63	12	4.5	3.4	3.3	371
A2190M5	34,99	5 x 0.8	70	14	6	4.9	4.2	371
A2190M6	34,99	6 x 1	80	16	6	4.9	5	371
A2190M8	44,36	8 x 1.25	90	18	8	6.2	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2190M10	54,82	10 x 1.5	100	20	10	8	8.5	371
A2190M12	70,20	12 x 1.75	110	25	9	7	10.2	376
A2190M14	90,70	14 x 2	110	25	11	9	12	376
A2190M16	101,62	16 x 2	110	28	12	9	14	376
A2190M18	135,16	18 x 2.5	125	32	14	11	15.5	376
A2190M20	177,95	20 x 2.5	140	32	16	12	17.5	376

SPIRAL FLUTE 15° TAP FOR BLIND HOLES - M

KERFOLG Hard T

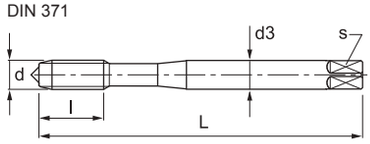
DIN 371/6 | PM | TiCN | HD

ITEM: A2195

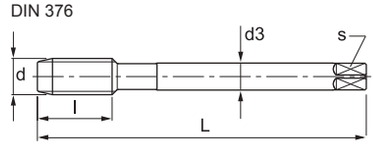
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish TiCN
Thread depth ≤ 2XD
Hole type Blind
Chamfer form C 2/3
Application Alloy steel with 1100÷1300 N/mm² R

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●	●		○	●	●	●	●				○	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2195M3	38,11	3 x 0.5	56	6	3.5	2.7	2.5	371
A2195M4	38,11	4 x 0.7	63	7	4.5	3.4	3.3	371
A2195M5	38,11	5 x 0.8	70	8	6	4.9	4.2	371
A2195M6	38,11	6 x 1	80	10	6	4.9	5	371
A2195M8	48,24	8 x 1.25	90	13	8	6.2	6.8	371
A2195M10	60,06	10 x 1.5	100	15	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2195M12	76,55	12 x 1.75	110	18	9	7	10.2	376
A2195M14	99,84	14 x 2	110	20	11	9	12	376
A2195M16	112,32	16 x 2	110	20	12	9	14	376
A2195M18	141,18	18 x 2.5	125	25	14	11	15.5	376
A2195M20	186,96	20 x 2.5	140	25	16	12	17.5	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

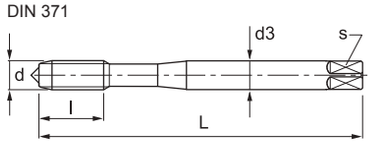
DIN 371/6 | HSSE | VAP

ITEM: A2210

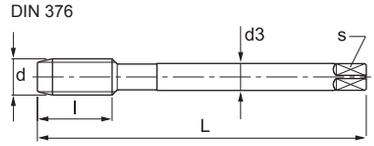
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Steam tempering
Thread depth < 2,5XD
Hole type Through
Chamfer form B 4/5
Application Medium and low strength steel

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●				●	●	●	○						

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2210M2	25,18	2 x 0.4	45	8	2.8	2.1	1.6	371
A2210M2,5	21,51	2.5 x 0.45	50	9	2.8	2.1	1.9	371
A2210M3	21,39	3 x 0.5	56	10	3.5	2.7	2.5	371
A2210M4	21,62	4 x 0.7	63	12	4.5	3.4	3.3	371
A2210M5	23,06	5 x 0.8	70	14	6	4.9	4.2	371
A2210M6	23,40	6 x 1	80	16	6	4.9	5	371
A2210M8	26,63	8 x 1.25	90	18	8	6.2	6.8	371
A2210M10	31,42	10 x 1.5	100	20	10	8	8.5	371
A2210M12	43,23	12 x 1.75	110	25	9	7	10.2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2210M14	51,48	14 x 2	110	25	11	9	12	376
A2210M16	56,49	16 x 2	110	28	12	9	14	376
A2210M18	63,07	18 x 2.5	125	32	14	11	15.5	376
A2210M20	88,69	20 x 2.5	140	32	16	12	17.5	376
A2210M22	103,73	22 x 2.5	140	32	18	14.5	19.5	376
A2210M24	128,36	24 x 3	160	36	18	14.5	21	376
A2210M27	131,59	27 x 3	160	36	20	16	24	376
A2210M30	146,41	30 x 3.5	180	40	22	18	26.5	376

Indivisible package Suggested retail package - Unit price

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

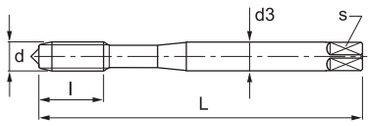
DIN 371/6 | HSSE | VAP

ITEM: A2215

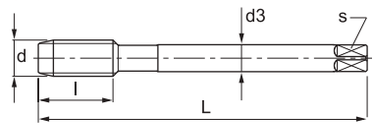
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Steam tempering
Thread depth ≤ 2,5XD
Hole type Blind
Chamfer form C 2/3
Application Medium and low strength steel

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●				●	●	●	○						

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2215M2	25,52	2 x 0.4	45	8	2.8	2.1	1.6	371
A2215M2,5	30,53	2.5 x 0.45	50	9	2.8	2.1	1.9	371
A2215M3	23,40	3 x 0.5	56	10	3.5	2.7	2.5	371
A2215M4	23,40	4 x 0.7	63	12	4.5	3.4	3.3	371
A2215M5	24,40	5 x 0.8	70	14	6	4.9	4.2	371
A2215M6	24,74	6 x 1	80	16	6	4.9	5	371
A2215M8	28,63	8 x 1.25	90	18	8	6.2	6.8	371
A2215M10	34,99	10 x 1.5	100	20	10	8	8.5	371
A2215M12	43,23	12 x 1.75	110	13	9	7	10.2	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2215M14	55,16	14 x 2	110	16.5	11	9	12	376
A2215M16	61,17	16 x 2	110	16.5	12	9	14	376
A2215M18	93,59	18 x 2.5	125	20	14	11	15.5	376
A2215M20	104,18	20 x 2.5	140	22	16	12	17.5	376
A2215M22	111,30	22 x 2.5	140	24	18	14.5	19.5	376
A2215M24	122,78	24 x 3	160	28	18	14.5	21	376
A2215M27	134,93	27 x 3	160	30	20	16	24	376
A2215M30	167,80	30 x 3.5	180	34	22	18	26.5	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

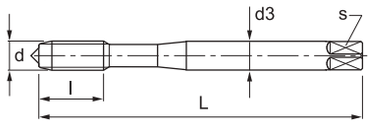
DIN 371/6 | HSSE | TiNOX | Inox

ITEM: A2220

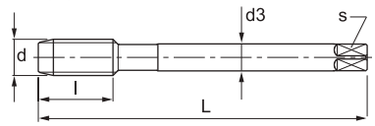
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish TiNOX
Thread depth ≤ 2,5XD
Hole type Through
Chamfer form B 4/5
Application Stainless steel

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
			●	●	●										

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2220M3	31,54	3 x 0.5	56	10	3.5	2.7	2.5	371
A2220M4	31,54	4 x 0.7	63	12	4.5	3.4	3.3	371
A2220M5	31,54	5 x 0.8	70	14	6	4.9	4.2	371
A2220M6	31,54	6 x 1	80	16	6	4.9	5	371
A2220M8	39,34	8 x 1.25	90	18	8	6.2	6.8	371
A2220M10	46,34	10 x 1.5	100	20	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2220M12	57,15	12 x 1.75	110	25	9	7	10.2	376
A2220M14	74,10	14 x 2	110	25	11	9	12	376
A2220M16	83,46	16 x 2	110	28	12	9	14	376
A2220M18	103,40	18 x 2.5	125	32	14	11	15.5	376
A2220M20	140,28	20 x 2.5	140	32	16	12	17.5	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

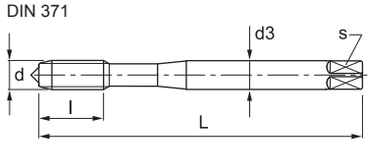
DIN 371/6 | HSSE | TiNOX | Inox

ITEM: A2225

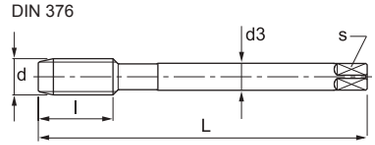
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish TiNOX
Thread depth ≤ 2,5XD
Hole type Blind
Chamfer form C 2/3 back-tapered
Application Stainless steel

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
			●	●	●										

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2225M3	33,65	3 x 0.5	56	10	3.5	2.7	2.5	371
A2225M4	33,65	4 x 0.7	63	12	4.5	3.4	3.3	371
A2225M5	33,65	5 x 0.8	70	14	6	4.9	4.2	371
A2225M6	33,65	6 x 1	80	16	6	4.9	5	371
A2225M8	41,23	8 x 1.25	90	18	8	6.2	6.8	371
A2225M10	49,58	10 x 1.5	100	20	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2225M12	61,06	12 x 1.75	110	24	9	7	10.2	376
A2225M14	80,00	14 x 2	110	25	11	9	12	376
A2225M16	89,92	16 x 2	110	28	12	9	14	376
A2225M18	112,32	18 x 2.5	125	32	14	11	15.5	376
A2225M20	148,19	20 x 2.5	140	32	16	12	17.5	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

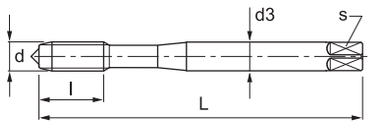
DIN 371/6 | HSSE | TiNOX + | Inox

ITEM: A2226

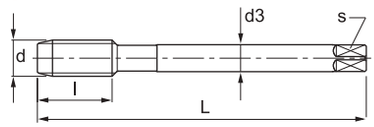
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish TiNOX +
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application Stainless steel with R < 1400 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●	●	●			●		●			●		

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2226M3	34,21	3 x 0.5	56	10	3.5	2.7	2.5	371
A2226M4	36,90	4 x 0.7	63	13	4.5	3.4	3.3	371
A2226M5	36,90	5 x 0.8	70	13	6	4.9	4.2	371
A2226M6	37,28	6 x 1	80	16	6	4.9	5	371
A2226M8	40,33	8 x 1.25	90	18	8	6.2	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2226M10	50,67	10 x 1.5	100	20	10	8	8.5	371
A2226M12	62,79	12 x 1.75	110	25	9	7	10.3	376
A2226M14	85,95	14 x 2	110	28	11	9	12	376
A2226M16	100,30	16 x 2	110	28	12	9	14	376

SPIRAL FLUTE 48° TAPS - M

KERFOLG

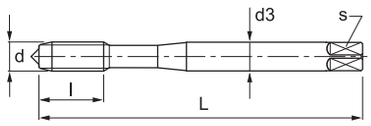
DIN 371/6 | HSSE | TiNOX + | Inox

ITEM: A2227

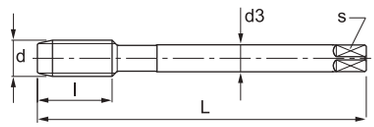
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish TiNOX +
Thread depth 3.5XD
Hole type Blind
Chamfer form C 2/3
Application Stainless steel with R < 1400 N/mm²

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●	●	●			●		●			●		

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2227M3	35,52	3 x 0.5	56	5	3.5	2.7	2.5	371
A2227M4	36,90	4 x 0.7	63	7	4.5	3.4	3.3	371
A2227M5	36,90	5 x 0.8	70	8	6	4.9	4.2	371
A2227M6	37,28	6 x 1	80	10	6	4.9	5	371
A2227M8	42,10	8 x 1.25	90	13	8	6	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2227M10	50,67	10 x 1.5	100	15	10	8	8.5	371
A2227M12	62,79	12 x 1.75	110	18	9	7	10.3	376
A2227M14	85,95	14 x 2	110	20	11	9	12	376
A2227M16	100,30	16 x 2	110	20	12	9	14	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG

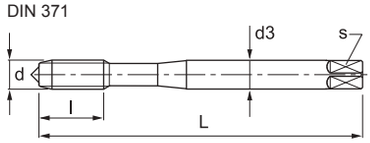
DIN 371/6 | HSSE | TiN | Inox

ITEM: A2230

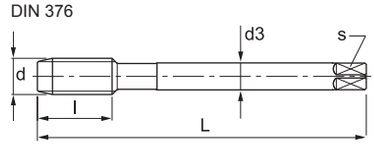
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish TiN
Thread depth ≤ 2,5XD
Hole type Through
Chamfer form B 4/5
Application Stainless steel. Particularly suitable for materials such as Duplex or Superduplex.

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○	○	●		●	●	●	●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2230M2	32,32	2 x 0.4	45	8	2.8	2.1	1.6	371
A2230M3	31,31	3 x 0.5	56	10	3.5	2.7	2.5	371
A2230M4	31,31	4 x 0.7	63	12	4.5	3.4	3.3	371
A2230M5	31,31	5 x 0.8	70	14	6	4.9	4.2	371
A2230M6	31,31	6 x 1	80	16	6	4.9	5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2230M8	38,33	8 x 1.25	90	18	8	6.2	6.8	371
A2230M10	46,02	10 x 1.5	100	20	10	8	8.5	371
A2230M12	57,94	12 x 1.75	110	25	9	7	10.2	376
A2230M16	85,13	16 x 2	110	28	12	9	14	376
A2230M20	142,63	20 x 2.5	140	32	16	12	17.5	376

Indivisible package Suggested retail package - Unit price

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

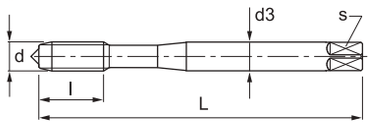
KERFOLG

DIN 371/6 | HSSE | TiN | Inox

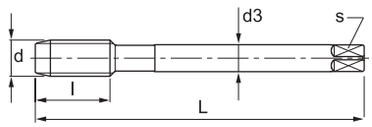
ITEM: A2235

ISO thread DIN 13 coarse pitch

DIN 371



DIN 376



Tolerance 6H ISO 2
Surface finish TiN
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3 back-tapered
Application Stainless steel. Particularly suitable for materials such as Duplex or Superduplex.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○	○	●		●									

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2235M2	37,00	2 x 0.4	45	8	2.8	2.1	1.6	371
A2235M2,5	37,00	2.5 x 0.45	50	9	2.8	2.1	1.9	371
A2235M3	33,42	3 x 0.5	56	10	3.5	2.7	2.5	371
A2235M4	33,42	4 x 0.7	63	12	4.5	3.4	3.3	371
A2235M5	33,42	5 x 0.8	70	14	6	4.9	4.2	371
A2235M6	33,42	6 x 1	80	16	6	4.9	5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2235M8	41,23	8 x 1.25	90	18	8	6.2	6.8	371
A2235M10	48,92	10 x 1.5	100	20	10	8	8.5	371
A2235M12	62,62	12 x 1.75	110	13	9	7	10.2	376
A2235M16	91,48	16 x 2	110	28	12	9	14	376
A2235M20	151,19	20 x 2.5	140	32	16	12	17.5	376

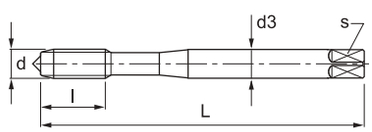
SPIRAL FLUTE 15° LEFT-HAND TAP FOR THROUGH HOLES - M

KERFOLG | TI Tap

DIN 371 | PM | TiCN | TI

ITEM: A2245

ISO thread DIN 13 coarse pitch



Tolerance 6HX
Surface finish TiCN
Thread depth ≤ 2XD
Type of hole Through
Chamfer form D 4/5
Application Titanium-base alloys with R ≤ 1400 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
													●	●	○	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2245M3	39,62	3 x 0.5	56	10	3.5	2.7	2.5	371
A2245M4	39,62	4 x 0.7	63	13	4.5	3.4	3.3	371
A2245M5	42,23	5 x 0.8	70	13	6	4.9	4.2	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2245M6	42,56	6 x 1	80	16	6	4.9	5	371
A2245M8	52,21	8 x 1.5	90	18	8	6.2	6.8	371
A2245M10	57,05	10 x 1.5	100	20	10	8	8.5	371

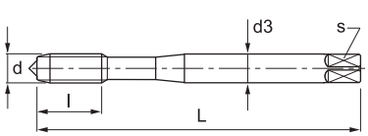
SPIRAL FLUTE 25° RIGHT-HAND TAP FOR BLIND HOLES - M

KERFOLG | TI Tap

DIN 371 | PM | TiCN | TI

ITEM: A2246

ISO thread DIN 13 coarse pitch



Tolerance 6HX
Surface finish TiCN
Thread depth ≤ 1.5XD
Type of hole Blind
Chamfer form C 2/3
Application Titanium-base alloys with R ≤ 1400 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
													●	●	○	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2246M3	40,33	3 x 0.5	56	5	3.5	2.7	2.5	371
A2246M4	40,33	4 x 0.7	63	7	4.5	3.4	3.3	371
A2246M5	43,04	5 x 0.8	70	8	6	4.9	4.2	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2246M6	43,38	6 x 1	80	10	6	4.9	5	371
A2246M8	53,27	8 x 1.25	90	13	8	6.2	6.8	371
A2246M10	58,22	10 x 1.5	100	15	10	8	8.5	371

STRAIGHT FLUTE TAP FOR THROUGH HOLES - M

KERFOLG

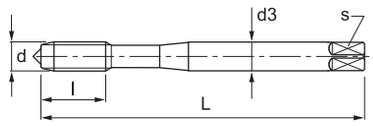
DIN 371/6 | HSSE | ALU

ITEM: A2250

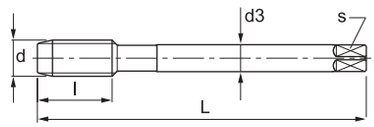
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Bright
Thread depth 2,5XD
Hole type Through
Chamfer form C 2/3 Alternate teeth
Application Aluminum and light alloys

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○								●	○	●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2250M3	27,63	3 x 0.5	56	11	3.5	2.7	2.5	371
A2250M4	27,52	4 x 0.7	63	13	4.5	3.4	3.3	371
A2250M5	27,52	5 x 0.8	70	15	6	4.9	4.2	371
A2250M6	27,63	6 x 1	80	16	6	4.9	5	371
A2250M8	29,97	8 x 1.25	90	18	8	6.2	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2250M10	35,66	10 x 1.5	100	20	10	8	8.5	371
A2250M12	38,22	12 x 1.75	110	25	9	7	10.2	376
A2250M14	49,47	14 x 2	110	25	11	9	12	376
A2250M16	54,82	16 x 2	110	28	12	9	14	376

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

KERFOLG

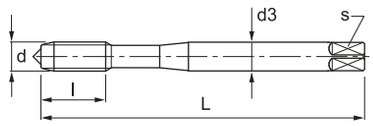
DIN 371/6 | HSSE | ALU

ITEM: A2255

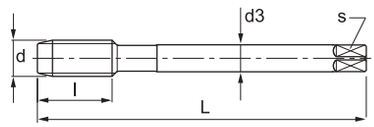
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Bright
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application Aluminum and light alloys with long chips

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	○	●					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2255M2	23,52	2 x 0.4	45	8	2.8	2.1	1.6	371
A2255M2,5	21,72	2.5 x 0.45	50	9	2.8	2.1	2.05	371
A2255M3	22,74	3 x 0.5	56	10	3.5	2.7	2.5	371
A2255M4	23,06	4 x 0.7	63	12	4.5	3.4	3.3	371
A2255M5	23,96	5 x 0.8	70	14	6	4.9	4.2	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2255M6	24,18	6 x 1	80	16	6	4.9	5	371
A2255M8	27,96	8 x 1.25	90	18	8	6.2	6.8	371
A2255M10	33,65	10 x 1.5	100	20	10	8	8.5	371
A2255M12	46,02	12 x 1.75	110	13	9	7	10.2	376
A2255M14	57,60	14 x 2	110	16.5	11	9	12	376

SPIRAL POINT TAP FOR THROUGH HOLES - M

KERFOLG Space

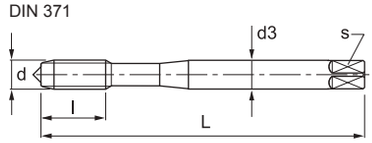
DIN 371/6 | HSSE | IPER | ALU

ITEM: A2260

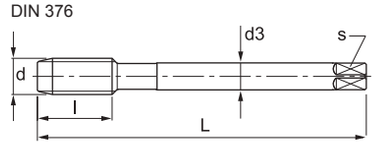
ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish IPER
Thread depth 2,5XD
Hole type Through
Chamfer form B 4/5 Alternate teeth
Application Aluminum alloys with silicon ≤ 10%

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●								●	●	○	○				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2260M3	32,20	3 x 0.5	56	10	3.5	2.7	2.5	371
A2260M4	33,10	4 x 0.7	63	13	4.5	3.4	3.3	371
A2260M5	33,10	5 x 0.8	70	15	6	4.9	4.2	371
A2260M6	33,10	6 x 1	80	16	6	4.9	5	371
A2260M8	40,45	8 x 1.25	90	18	8	6.2	6.8	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2260M10	47,02	10 x 1.5	100	20	10	8	8.5	371
A2260M12	59,50	12 x 1.75	110	25	9	7	10.2	376
A2260M14	75,66	14 x 2	110	25	11	9	12	376
A2260M16	85,57	16 x 2	110	28	12	9	14	376

Indivisible package Suggested retail package - Unit price

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M

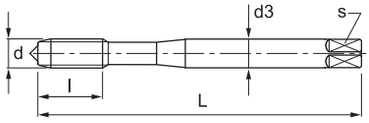
KERFOLG Space

DIN 371/6 | HSSE | IPER | ALU

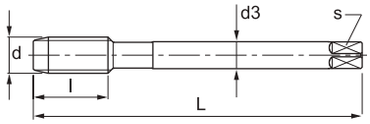
ITEM: A2265

ISO thread DIN 13 coarse pitch

DIN 371



DIN 376



Tolerance	6H ISO 2
Surface finish	IPER
Thread depth	< 2.5XD
Hole type	Blind
Chamfer form	C 2/3 with rear taper
Application	Aluminum alloys with silicon ≤ 10%

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●								●	●	○	○				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2265M3	36,22	3 x 0.5	56	7	3.5	2.7	2.5	371
A2265M4	36,22	4 x 0.7	63	8.5	4.5	3.4	3.3	371
A2265M5	36,22	5 x 0.8	70	10	6	4.9	4.2	371
A2265M6	36,22	6 x 1	80	12	6	4.9	5	371
A2265M8	41,78	8 x 1.25	90	15	8	6.2	6.8	371
A2265M10	49,58	10 x 1.5	100	17.5	10	8	8.5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2265M12	61,17	12 x 1.75	110	18	9	7	10.2	376
A2265M14	80,11	14 x 2	110	20.5	11	9	12	376
A2265M16	89,47	16 x 2	110	20.5	12	9	14	376
A2265M18	111,98	18 x 2.5	125	25.5	14	11	15.5	376
A2265M20	148,87	20 x 2.5	140	29.5	16	12	17.5	376

STRAIGHT FLUTE TAP FOR BLIND HOLES - M

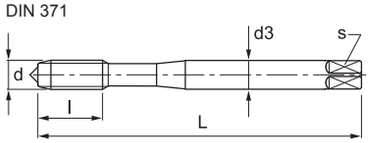
KERFOLG

DIN 371/6 | HSSE | NITR

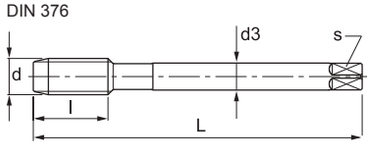
ITEM: A2310

ISO thread DIN 13 coarse pitch

DIN 371



DIN 376



Tolerance	6HX
Surface finish	Nitrided
Thread depth	≤ 2XD
Hole type	Blind and through
Chamfer form	C 2/3
Application	Cast iron, bronze and brass

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
						●			○	○	○				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2310M3	17,05	3 x 0.5	56	11	3.5	2.7	2.5	371
A2310M4	18,72	4 x 0.7	63	13	4.5	3.4	3.3	371
A2310M5	19,61	5 x 0.8	70	15	6	4.9	4.2	371
A2310M6	20,17	6 x 1	80	16	6	4.9	5	371
A2310M8	22,61	8 x 1.25	90	18	8	6.2	6.8	371
A2310M10	27,18	10 x 1.5	100	20	10	8	8.5	371
A2310M12	36,66	12 x 1.75	110	25	9	7	10.2	376
A2310M14	46,02	14 x 2	110	25	11	9	12	376

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2310M16	51,26	16 x 2	110	28	12	9	14	376
A2310M18	(59,39)	18 x 2.5	125	32	14	11	15.5	376
A2310M20	75,10	20 x 2.5	140	32	16	12	17.5	376
A2310M22	(80,11)	22 x 2.5	140	32	18	14.5	19.5	376
A2310M24	(81,45)	24 x 3	160	36	18	14.5	21	376
A2310M27	(98,38)	27 x 3	160	36	20	16	24	376
A2310M30	(124,25)	30 x 3.5	180	40	22	18	26.5	376
A2310M33	(155,55)	33 x 3.5	180	40	25	20	29.5	376

STRAIGHT FLUTE TAP FOR BLIND HOLES - M

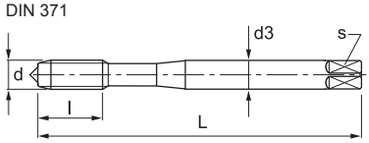
KERFOLG

DIN 371/6 | PM | TiCN

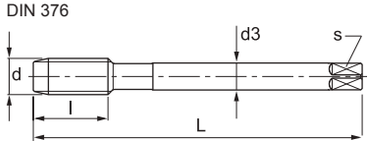
ITEM: A2320

ISO thread DIN 13 coarse pitch

DIN 371



DIN 376



Tolerance	6HX
Surface finish	TiCN
Thread depth	≤ 2,5XD
Hole type	Blind and through
Chamfer form	C 2/3
Application	Grey cast iron and aluminum alloys with silicon ≥ 10%

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
						●		●	●	●	●				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2320M3	(36,22)	3 x 0.5	56	11	3.5	2.7	2.5	371
A2320M4	36,22	4 x 0.7	63	13	4.5	3.4	3.3	371
A2320M5	36,22	5 x 0.8	70	15	6	4.9	4.2	371
A2320M6	36,22	6 x 1	80	16	6	4.9	5	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2320M8	45,24	8 x 1.25	90	18	8	6.2	6.8	371
A2320M10	56,94	10 x 1.5	100	20	10	8	8.5	371
A2320M12	72,53	12 x 1.75	110	25	9	7	10.2	376
A2320M16	105,52	16 x 2	110	28	12	9	14	376

FORMING TAP FOR BLIND AND THROUGH HOLES - M

KERFOLG

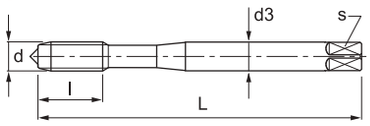
DIN 371/6 | HSSE | TiN | UNI

ITEM: A2350

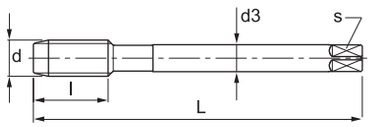
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish TiN
Thread depth ≤ 2.5XD
Hole type Blind and through
Chamfer form C 2/3 without coolant groove
Application Carbon and stainless steel up to R ≤ 800 N/mm², aluminum alloys with silicon ≤ 7%

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●							●	○			●				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2350M3	39,34	3 x 0.5	56	10	3.5	2.7	2.8	371
A2350M4	39,34	4 x 0.7	63	12	4.5	3.4	3.7	371
A2350M5	40,78	5 x 0.8	70	14	6	4.9	4.65	371
A2350M6	40,78	6 x 1	80	16	6	4.9	5.55	371
A2350M8	49,58	8 x 1.25	90	18	8	6.2	7.40	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2350M10	63,40	10 x 1.5	100	20	10	8	9.30	371
A2350M12	73,31	12 x 1.75	110	25	9	7	11.2	376
A2350M14	80,45	14 x 2	110	25	11	9	13.1	376
A2350M16	96,83	16 x 2	110	28	12	9	15.1	376

FORMING TAP FOR BLIND AND THROUGH HOLES - M

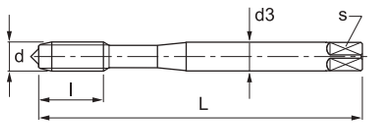
KERFOLG

DIN 371 | HSSE | TiN | UNI

ITEM: A2351

ISO thread DIN 13 coarse pitch

Tolerance 6GX
Surface finish TiN
Thread depth ≤ 2.5XD
Hole type Blind and through
Chamfer form C 2/3 with coolant groove
Application Carbon and stainless steel up to R ≤ 800 N/mm², aluminum alloys with silicon ≤ 7%



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●							●	○			●				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2351M3	45,69	3 x 0.5	56	10	3.5	2.7	2.8	371
A2351M4	45,69	4 x 0.7	63	12	4.5	3.4	3.7	371
A2351M5	45,69	5 x 0.8	70	14	6	4.9	4.65	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2351M6	45,69	6 x 1	80	16	6	4.9	5.55	371
A2351M8	56,94	8 x 1.25	90	18	8	6.2	7.40	371
A2351M10	72,09	10 x 1.5	100	20	10	8	9.30	371

FORMING TAP FOR BLIND AND THROUGH HOLES - M

KERFOLG Form

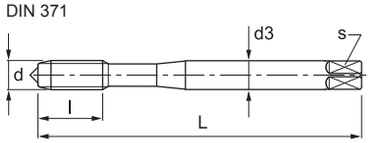
DIN 371/6 | PM | PREMIUM | UNI

ITEM: A2358

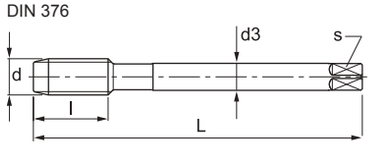
ISO thread DIN 13 coarse pitch

Tolerance 6HX
Surface finish PREMIUM
Thread depth ≤ 3XD
Hole type Blind and through
Chamfer form C 2/3 with coolant groove
Application Carbon and stainless steel up to R ≤ 800 N/mm², aluminum alloys with silicon ≤ 7%

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●	●				●	○			●		10/15		

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2358M2	67,85	2 x 0,4	45	7	2,8	2,1	1,85	371
A2358M2,5	49,58	2 x 0.45	50	9	2.8	2.1	2.3	371
A2358M3	46,79	3 x 0.5	56	10	3.5	2.7	2.8	371
A2358M4	46,58	4 x 0.7	63	12	4.5	3.4	3.7	371
A2358M5	46,24	5 x 0.8	70	14	6	4.9	4.65	371
A2358M6	46,02	6 x 1	80	16	6	4.9	5.55	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2358M8	57,39	8 x 1.25	90	18	8	6.2	7.40	371
A2358M10	71,43	10 x 1.5	100	20	10	8	9.30	371
A2358M12	83,68	12 x 1.75	110	25	9	7	11.2	376
A2358M14	107,85	14 x 2	110	25	11	9	13.1	376
A2358M16	133,83	16 x 2	110	28	12	9	15.1	376

Indivisible package Suggested retail package - Unit price

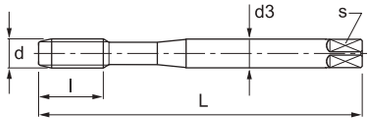
FORMING TAP - M

KERFOLG Form

DIN 371 | PM | PREMIUM | UNI

ITEM: A2362

ISO thread DIN 13 coarse pitch



Tolerance	6HX
Surface finish	PREMIUM
Thread depth	≤ 1,5XD
Hole type	Blind and through
Chamfer form	E 1,5/2
Application	Carbon and stainless steel up to R ≤ 800 N/mm², l aluminum alloys with silicon ≤ 7%

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●	●				●	○		●				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2362M3	63,40	3 x 0,5	56	10	3,5	2,7	2,8	371
A2362M4	61,17	4 x 0,7	63	12	4,5	3,4	3,7	371
A2362M5	61,17	5 x 0,8	70	14	6	4,9	4,65	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2362M6	61,17	6 x 1	80	16	6	4,9	5,55	371
A2362M8	76,44	8 x 1,25	90	18	8	6,2	7,40	371
A2362M10	96,26	10 x 1,5	100	20	10	8	9,30	371

FORMING TAP FOR BLIND AND THROUGH HOLES - M

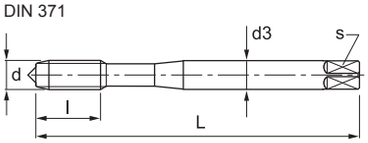
KERFOLG

DIN 371/6 | PM | PERFORM | Inox

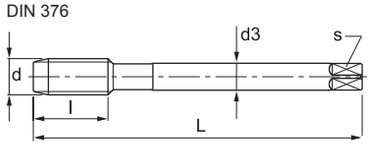
ITEM: A2360

Thread ISO coarse pitch DIN13

DIN 371



DIN 376



Tolerance	6HX
Surface finish	PERFORM
Thread depth	≤ 3XD
Hole type	Blind and through
Chamfer form	C 2/3 with coolant grooves
Application	Specific for machining all types of stainless steel and Duplex

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○			●	●	●										

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2360M4	61,96	4 x 0.7	70	7	4.5	3.4	3.7	371
A2360M5	61,96	5 x 0.8	70	8	6	4.9	4.65	371
A2360M6	61,96	6 x 1	80	10	6	4.9	5.55	371
A2360M8	77,10	8 x 1.25	90	14	8	6.2	7.40	371

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2360M10	96,38	10 x 1.5	100	16	10	8	9.30	371
A2360M12	114,32	12 x 1.75	110	18	9	7	11.2	376
A2360M14	180,17	14 x 2	110	20	11	9	13.1	376
A2360M16	184,85	16 x 2	110	20	12	9	15.1	376

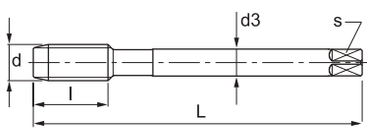
SPIRAL POINT TAP FOR THROUGH HOLES - MF

KERFOLG

DIN 374 | HSSE | VAP | MF 60°

ITEM: A2410

ISO thread DIN 13 fine pitch



Tolerance	6H ISO 2
Surface finish	Steam tempering
Thread depth	≤ 2,5XD
Hole type	Through
Chamfer form	B 4/5
Application	Steel and non ferrous materials with R up to 800 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●						○	●	●						

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2410MF40,5	25,52	4 x 0.5	63	10	2.8	2.1	3.5	374
A2410MF50,5	25,52	5 x 0.5	70	12	3.5	2.7	4.5	374
A2410MF60,75	31,75	6 x 0.75	80	14	4.5	3.4	5.2	374
A2410MF80,75	35,32	8 x 0.75	80	16	6	4.9	7.2	374
A2410MF81	30,64	8 x 1	90	16	6	4.9	7	374
A2410MF100,75	42,35	10 x 0.75	100	18	7	5.5	9.2	374
A2410MF101	33,55	10 x 1	100	18	7	5.5	9	374
A2410MF101,25	38,33	10 x 1.25	100	18	7	5.5	8.8	374
A2410MF121	39,01	12 x 1	100	22	9	7	11	374
A2410MF121,25	43,79	12 x 1.25	100	22	9	7	10.8	374
A2410MF121,5	36,76	12 x 1.5	100	22	9	7	10.5	374
A2410MF141	52,82	14 x 1	100	22	11	9	13	374
A2410MF141,25	40,55	14 x 1.25	100	22	11	9	12.8	374
A2410MF141,5	49,58	14 x 1.5	100	22	11	9	12.5	374
A2410MF161	56,61	16 x 1	100	22	12	9	15	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2410MF161,5	54,60	16 x 1.5	100	22	12	9	14.5	374
A2410MF181	74,33	18 x 1	110	25	14	11	17	374
A2410MF181,5	69,31	18 x 1.5	110	25	14	11	16.5	374
A2410MF201	79,11	20 x 1	125	25	16	12	19	374
A2410MF201,5	74,10	20 x 1.5	125	25	16	12	18.5	374
A2410MF221	82,11	22 x 1	125	25	18	14.5	21	374
A2410MF221,5	70,52	22 x 1.5	125	25	18	14.5	20.5	374
A2410MF241	92,71	24 x 1	140	25	18	14.5	23	374
A2410MF241,5	81,12	24 x 1.5	140	25	18	14.5	22.5	374
A2410MF242	112,87	24 x 2	140	25	18	14.5	22	374
A2410MF271,5	118,00	27 x 1.5	140	28	20	16	25.5	374
A2410MF272	134,04	27 x 2	140	28	20	16	25	374
A2410MF301,5	135,82	30 x 1.5	150	28	22	18	28.5	374
A2410MF302	141,73	30 x 2	150	28	22	18	28	374

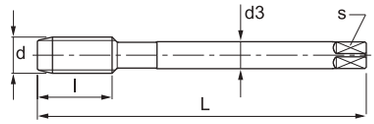
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - MF

KERFOLG

DIN 374 | HSSE | VAP | MF 60°

ITEM: A2415

ISO thread DIN 13 fine pitch



Tolerance 6H ISO 2
Surface finish Steam tempering
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application Low and medium resistance steel with R up to 800 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●						○	●	●						

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2415MF60,75	34,88	6 x 0.75	80	6	4.5	3.4	5.2	374
A2415MF81	33,31	8 x 1	90	8	6	4.9	7	374
A2415MF101	36,89	10 x 1	90	8	7	5.5	9	374
A2415MF101,25	38,33	10 x 1.25	100	9	7	5.5	8.8	374
A2415MF121	48,47	12 x 1	100	11	9	7	11	374
A2415MF121,25	44,57	12 x 1.25	100	11	9	7	11	374
A2415MF121,5	41,56	12 x 1.5	100	11	9	7	10.5	374
A2415MF141,5	55,04	14 x 1.5	100	12.5	11	9	12.5	374
A2415MF161,5	62,62	16 x 1.5	100	12.5	12	9	14.5	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2415MF181,5	76,76	18 x 1.5	110	13	14	11	16.5	374
A2415MF201,5	83,46	20 x 1.5	125	14	16	12	18.5	374
A2415MF221,5	91,15	22 x 1.5	125	16	18	14.5	20.5	374
A2415MF241,5	107,75	24 x 1.5	140	18	18	14.5	22.5	374
A2415MF261,5	141,51	26 x 1.5	140	20	20	16	24.5	374
A2415MF271,5	153,20	27 x 1.5	140	20	20	16	25.5	374
A2415MF281,5	177,83	28 x 1.5	140	20	20	26	26.5	374
A2415MF301,5	202,79	30 x 1.5	150	22	22	18	28.5	374

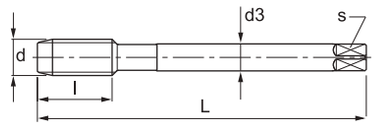
SPIRAL POINT TAP FOR THROUGH HOLES - MF

KERFOLG

DIN 374 | HSSE | TiN | MF 60°

ITEM: A2432

ISO thread DIN 13 fine pitch



Tolerance 6H ISO 2
Surface finish TiN
Thread depth ≤ 2,5XD
Hole type Through
Chamfer form B 4/5
Application Structural steel and copper, brass with R up to 800 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●				●	○	●	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2432MF60,75	36,22	6 x 0.75	80	14	4.5	3.4	5.2	374
A2432MF81	38,56	8 x 1	90	16	6	4.9	7	374
A2432MF101	42,68	10 x 1	100	18	7	5.5	9	374
A2432MF101,25	41,68	10 x 1.25	100	18	7	5.5	8.8	374
A2432MF121	50,48	12 x 1	100	22	9	7	11	374
A2432MF121,5	49,37	12 x 1.5	100	22	9	7	10.5	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2432MF141,25	66,63	14 x 1.25	100	22	11	9	12.8	374
A2432MF141,5	64,85	14 x 1.5	100	22	11	9	12.5	374
A2432MF161,5	71,65	16 x 1.5	100	22	12	9	14.5	374
A2432MF181,5	89,92	18 x 1.5	110	25	14	11	16.5	374
A2432MF201,5	121,45	20 x 1.5	125	25	16	12	18.5	374

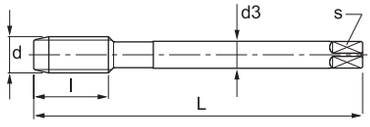
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - MF

KERFOLG

DIN 374 | HSSE | TiN | MF 60°

ITEM: A2425

ISO thread DIN 13 fine pitch



Tolerance 6H ISO 2
Surface finish TiN
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application Low and medium resistance steel with R up to 800 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●				●	○	●	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2425MF60,75	41,90	6 x 0.75	80	6	4.5	3.4	5.2	374
A2425MF81	44,12	8 x 1	90	8	6	4.9	7	374
A2425MF101	48,47	10 x 1	90	8	7	5.5	9	374
A2425MF101,25	47,25	10 x 1.25	100	9	7	5.5	8.8	374
A2425MF121	67,42	12 x 1	100	11	9	7	11	374
A2425MF121,25	56,27	12 x 1.25	100	11	9	7	10.8	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2425MF121,5	56,27	12 x 1.5	100	11	9	7	10.5	374
A2425MF141,5	73,31	14 x 1.5	100	12.5	11	9	12.5	374
A2425MF161,5	81,23	16 x 1.5	100	12.5	12	9	14.5	374
A2425MF181,5	100,28	18 x 1.5	110	13	14	11	16.5	374
A2425MF201,5	135,72	20 x 1.5	125	14	16	12	18.5	374

Indivisible package Suggested retail package - Unit price

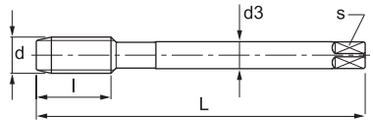
STRAIGHT FLUTE TAP FOR BLIND HOLES LEFT-HAND THREAD - MF

KERFOLG

DIN 374 | HSSE | MF 60°

ITEM: A2420

ISO thread DIN 13 fine pitch



Tolerance 6H LH ISO 2
Surface finish Bright
Thread depth ≤ 1,5XD
Hole type Blind and through
Chamfer form C 2/3
Application Low and medium strength steels with R up to 800 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					○	●	○	●						

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2420MF60,75	37,10	6 x 0.75	80	14	4.5	3.4	5.2	374
A2420MF81	34,65	8 x 1	90	16	6	4.9	7	374
A2420MF101	35,77	10 x 1	90	18	7	5.5	9	374
A2420MF101,25	34,65	10 x 1.25	100	18	7	5.5	8.8	374
A2420MF121,25	41,68	12 x 1.25	100	22	9	7	10.8	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2420MF121,5	41,68	12 x 1.5	100	22	9	7	10.5	374
A2420MF141,5	54,49	14 x 1.5	100	22	11	9	12.5	374
A2420MF161,5	60,73	16 x 1.5	100	22	12	9	14.5	374
A2420MF181,5	81,12	18 x 1.5	110	25	14	11	16.5	374
A2420MF201,5	92,71	20 x 1.5	125	25	16	12	18.5	374

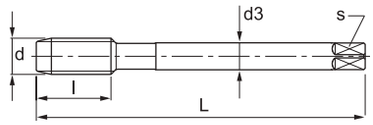
SPIRAL POINT TAP FOR THROUGH HOLES - MF

KERFOLG

DIN 374 | HSSE | TiNOX | MF 60° | Inox

ITEM: A2430

ISO thread DIN 13 fine pitch



Tolerance 6H ISO 2
Surface finish TiNOX
Thread depth 2,5XD
Hole type Through
Chamfer form B 4/5
Application Medium-high resistance steel and Duplex

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●			●	●	●										

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2430MF81	47,02	8 x 1	90	16	6	4.9	7	374
A2430MF101	51,82	10 x 1	90	18	7	5.5	9	374
A2430MF101,25	50,48	10 x 1.25	100	18	7	5.5	8.8	374
A2430MF121	61,96	12 x 1	100	22	9	7	11	374
A2430MF121,25	59,73	12 x 1.25	100	22	9	7	10.8	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2430MF121,5	59,73	12 x 1.5	100	22	9	7	10.5	374
A2430MF141,5	78,77	14 x 1.5	100	22	11	9	12.5	374
A2430MF161,5	86,68	16 x 1.5	100	22	12	9	14.5	374
A2430MF181,5	108,30	18 x 1.5	110	25	14	11	16.5	374
A2430MF201,5	149,98	20 x 1.5	125	25	16	12	18.5	374

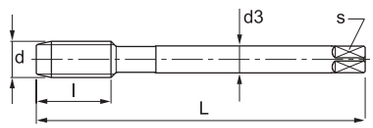
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - MF

KERFOLG

DIN 374 | HSSE | TiNOX | MF 60° | Inox

ITEM: A2435

ISO thread DIN 13 fine pitch



Tolerance 6H ISO 2
Surface finish TiNOX
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application Medium-high resistance steel and Duplex

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●			●	●	●										

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2435MF81	51,93	8 x 1	90	8	6	4.9	7	374
A2435MF101	57,28	10 x 1	90	8	7	5.5	9	374
A2435MF101,25	55,60	10 x 1.25	100	9	7	5.5	8.8	374
A2435MF121,25	65,96	12 x 1.25	100	11	9	7	10.8	374
A2435MF121,5	65,96	12 x 1.5	100	11	9	7	10.5	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2435MF141,5	86,58	14 x 1.5	100	12.5	11	9	12.5	374
A2435MF161,5	95,48	16 x 1.5	100	12.5	12	9	14.5	374
A2435MF181,5	120,45	18 x 1.5	110	13	14	11	16.5	374
A2435MF201,5	163,02	20 x 1.5	125	14	16	12	18.5	374

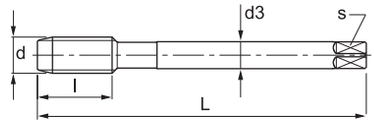
SPIRAL FLUTE 45° TAP FOR BLIND HOLES - MF

KERFOLG

DIN 374 | PM | IPER | MF 60°

ITEM: A2445

ISO thread DIN 13 fine pitch



Tolerance 6HX
Surface finish IPER
Thread depth ≤ 2,5XD
Hole type Blind
Chamfer form C 2/3
Application High performance on medium/high alloy steels with resistance ≤ 1100 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	●	●	●		●	●	○	○			●		

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping Hole mm	DIN
A2445MF81	65,85	8 x 1	90	12	6	4.9	7.0	374
A2445MF101	75,77	10 x 1	90	12	7	5.5	9.0	374
A2445MF101,25	73,76	10 x 1.25	100	14	7	5.5	8.8	374
A2445MF121	97,39	12 x 1	100	14	9	7.0	11	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping Hole mm	DIN
A2445MF121,25	93,26	12 x 1.25	100	14	9	7.0	10.8	374
A2445MF121,5	90,14	12 x 1.5	100	15	9	7.0	10.5	374
A2445MF141,5	122,11	14 x 1.5	100	16	11	9.0	12.5	374
A2445MF161,5	134,93	16 x 1.5	100	16	12	9.0	14.5	374

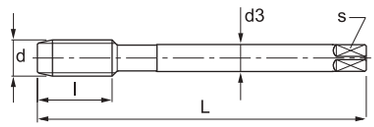
SPIRAL POINT TAP FOR THROUGH HOLES- MF

KERFOLG

DIN 374 | HSSE | NIT + VAP | MF 60° | UNI

ITEM: A2450

ISO thread DIN 13 coarse pitch



Tolerance 6H ISO 2
Surface finish Nitrided and steam tempering
Thread depth ≤ 3XD
Hole type Through
Chamfer form B 4/5
Application Taps for universal application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●		●	○	○	○						

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2450MF060,75	59,57	6 x 0,75	80	13	4,5	3,4	5,2	374
A2450MF081	59,57	8 x 1	90	17	6	4,9	7	374
A2450MF101	60,36	10 x 1	90	18	7	5,5	9	374
A2450MF121	79,19	12 x 1	100	18	9	7	11	374
A2450MF121,5	67,81	12 x 1,5	100	22	9	7	10,5	374
A2450MF141,5	87,84	14 x 1,5	100	22	11	9	12,5	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2450MF161,5	106,93	16 x 1,5	100	22	12	9	14,5	374
A2450MF181,5	120,98	18 x 1,5	110	25	14	11	16,5	374
A2450MF201,5	141,76	20 x 1,5	125	25	16	12	18,5	374
A2450MF221,5	152,96	22 x 1,5	125	25	18	14,5	20,5	374
A2450MF241,5	175,53	24 x 1,5	140	27	18	14,5	22,5	374

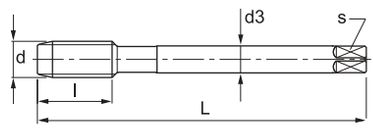
SPIRAL FLUTE 35° TAP FOR BLIND HOLES - MF

KERFOLG

DIN 374 | HSSE | NIT + VAP | MF 60° | UNI

ITEM: A2455

ISO fine thread DIN 13



Tolerance 6H ISO 2
Surface finish Nitrided and steam tempering
Thread depth < 2,5XD
Hole type Blind
Chamfer form C 2/3 with rear taper
Application Taps for universal application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●		●	○	○	○	○					

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2455MF060,75	63,86	6 x 0,75	80	8	4,5	3,4	5,2	374
A2455MF081	63,86	8 x 1	90	10	6	4,9	7	374
A2455MF101	67,47	10 x 1	90	10	7	5,5	9	374
A2455MF121	82,53	12 x 1	100	11	9	7	11	374
A2455MF121,5	76,21	12 x 1,5	100	15	9	7	10,5	374
A2455MF141,5	100,34	14 x 1,5	100	15	11	9	12,5	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2455MF161,5	122,39	16 x 1,5	100	15	12	9	14,5	374
A2455MF181,5	134,14	18 x 1,5	110	17	14	11	16,5	374
A2455MF201,5	156,19	20 x 1,5	125	17	16	12	18,5	374
A2455MF221,5	184,56	22 x 1,5	125	17	18	14,5	20,5	374
A2455MF241,5	200,56	24 x 1,5	140	20	18	14,5	22,5	374

Indivisible package Suggested retail package - Unit price

FORMING TAP FOR BLIND THROUGH HOLES - MF

KERFOLG

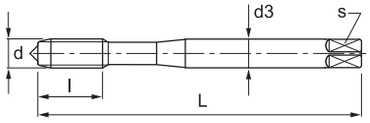
DIN 371/4 | HSSE | TiN | MF 60° | UNI

ITEM: A2457

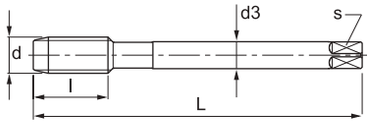
ISO thread fine pitch DIN13

Tolerance 6HX
Surface finish TiN
Thread depth ≤ 2,5XD
Hole type Blind and through
Chamfer form C 2/3 with coolant grooves
Application Carbon and stainless steel up to R ≤ 800 N/mm², aluminum alloys with silicon ≤ 7%

DIN 371



DIN 374



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●						●	○		●				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2457MF081	82,45	8 x 1	90	18	8	6,2	7,5	371
A2457MF101	94,49	10 x 1	90	18	10	8	9,5	371
A2457MF101,25	87,80	10 x 1,25	100	20	10	8	9,4	371
A2457MF121	119,78	12 x 1	100	22	9	7	11,5	374
A2457MF121,25	112,65	12 x 1,25	100	22	9	7	11,4	374

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2457MF121,5	112,65	12 x 1,5	100	22	9	7	11,3	374
A2457M141	156,55	14 x 1	100	22	11	9	13,4	374
A2457M141,5	148,75	14 x 1,5	100	22	11	9	13,3	374
A2457M161	203,90	16 x 1	100	22	12	9	15,5	374
A2457M161,5	186,75	16 x 1,5	100	22	12	9	15,3	374

SPIRAL POINT TAP FOR THROUGH HOLES - UNC

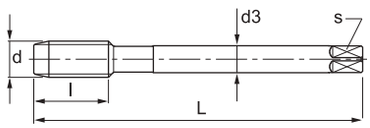
KERFOLG

DIN 2184 | HSSE | UNC 60°

ITEM: A2510

UNC American thread

Tolerance 2 B
Surface finish Bright
Thread depth ≤ 2,5XD
Hole type Through
Chamfer form B 4/5
Application General application



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●			○	●	●	○	○					

Tech. Code	GR04 Euro	UNC	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2510UNC1/4	32,53	1/4"	20	80	18	7	5.5	5.2	2184
A2510UNC5/16	33,42	5/16"	18	90	20	6	4.9	6.6	2184
A2510UNC3/8	34,43	3/8"	16	100	22	7	5.5	8	2184
A2510UNC7/16	45,02	7/16"	14	100	24	8	6.2	9.4	2184
A2510UNC1/2	45,02	1/2"	13	110	26	9	7	10.75	2184

Tech. Code	GR04 Euro	UNC	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2510UNC9/16	69,75	9/16"	12	110	28	11	9	12.25	2184
A2510UNC5/8	66,52	5/8"	11	110	30	12	9	13.5	2184
A2510UNC3/4	84,90	3/4"	10	125	32	14	11	16.5	2184
A2510UNC7/8	105,63	7/8"	9	140	34	18	14.5	19.5	2184
A2510UNC1	151,54	1"	8	160	38	18	16	22.25	2184

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - UNC

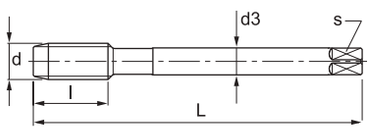
KERFOLG

DIN 2184 | HSSE | UNC 60°

ITEM: A2617

UNC American thread

Tolerance 2 B
Surface finish Bright
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application General application



< 500	< 850	< 1200	< 600	< 850 DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●	●	●	●	○	●	●	○	○					

Tech. Code	GR04 Euro	UNC	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2617UNC1/4	32,64	1/4"	20	80	18	7	5,5	5,2	2184
A2617UNC5/16	33,99	5/16"	18	90	20	6	4,9	6,6	2184
A2617UNC3/8	35,10	3/8"	16	100	22	7	5,5	8	2184
A2617UNC7/16	(45,35)	7/16"	14	100	24	8	6,2	9,4	2184
A2617UNC1/2	45,35	1/2"	13	110	26	9	7	10,75	2184

Tech. Code	GR04 Euro	UNC	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2617UNC9/16	(70,52)	9/16"	12	110	28	11	9	12,25	2184
A2617UNC5/8	67,75	5/8"	11	110	30	12	9	13,5	2184
A2617UNC3/4	85,90	3/4"	10	125	32	14	11	16,5	2184
A2617UNC7/8	107,19	7/8"	9	140	34	18	14,5	19,5	2184
A2617UNC1	151,54	1"	8	160	38	18	16	22,25	2184

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - UNC

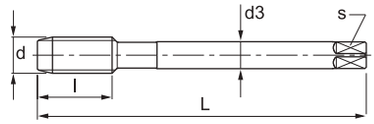
KERFOLG

DIN 2184 | HSSE | TiNOX | UNC 60° | Inox

ITEM: A2520

UNC American thread

Tolerance 2 B
Surface finish TiNOX
Thread depth ≤ 2,5XD
Hole type Blind
Chamfer form C 2/3
Application Stainless steel



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
		●	●	●	●										

Tech. Code	GR04 Euro	UNC	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2520UNC1/4	48,24	1/4"	20	80	8	7	5.5	5.1	2184
A2520UNC5/16	50,25	5/16"	18	90	13	6	4,9	6,6	2184
A2520UNC3/8	56,71	3/8"	16	100	11	7	5.5	8	2184
A2520UNC7/16	(61,51)	7/16"	14	100	17	8	6,2	9,4	2184

Tech. Code	GR04 Euro	UNC	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2520UNC1/2	70,52	1/2"	13	110	15	9	7	10.75	2184
A2520UNC5/8	101,85	5/8"	11	110	18	12	9	13.5	2184
A2520UNC3/4	153,77	3/4"	10	125	21	14	11	16.5	2184

SPIRAL POINT TAP FOR THROUGH HOLES - UNF

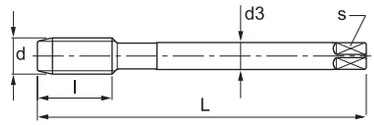
KERFOLG

DIN 2184 | HSSE | UNF 60°

ITEM: A2550

UNF American thread

Tolerance 2 B
Surface finish Bright
Thread depth ≤ 2,5XD
Hole type Through
Chamfer form B 4/5
Application General application



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●		●	●		○	●	●	○	○					

Tech. Code	GR04 Euro	UNF	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2550UNF1/4	35,10	1/4"	28	80	16	7	5.5	5.5	2184
A2550UNF5/16	36,55	5/16"	24	90	18	6	4.9	6.9	2184
A2550UNF3/8	37,21	3/8"	24	100	24	7	5.5	8.5	2184
A2550UNF7/16	49,47	7/16"	20	100	22	8	6.2	9.9	2184
A2550UNF1/2	49,47	1/2"	20	100	21	9	7	11.5	2184

Tech. Code	GR04 Euro	UNF	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2550UNF9/16	76,22	9/16"	18	100	21	11	9	12.9	2184
A2550UNF5/8	72,09	5/8"	18	100	21	12	9	14.5	2184
A2550UNF3/4	94,27	3/4"	16	125	25	14	11	17.5	2184
A2550UNF7/8	114,10	7/8"	14	140	28	18	14.5	20.4	2184
A2550UNF1	168,81	1"	12	140	28	18	14.5	23.3	2184

SPIRAL FLUTE 40° TAP FOR BLIND HOLES - UNF

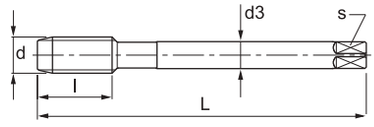
KERFOLG

DIN 2184 | HSSE | UNF 60°

ITEM: A2555

UNF ISO thread

Tolerance 2 B
Surface finish Bright
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application General application



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●		●	●		○	●	●	○	○					

Tech. Code	GR04 Euro	UNF	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2555UNF1/4	35,77	1/4"	28	80	18	7	5.5	5.5	2184
A2555UNF5/16	37,21	5/16"	24	90	18	6	4.9	6.9	2184
A2555UNF3/8	37,67	3/8"	24	100	24	7	5.5	8.5	2184
A2555UNF7/16	50,25	7/16"	20	100	22	8	6.2	9.9	2184
A2555UNF1/2	50,25	1/2"	20	100	21	9	7	11.5	2184

Tech. Code	GR04 Euro	UNF	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2555UNF9/16	77,67	9/16"	18	100	21	11	9	12.9	2184
A2555UNF5/8	73,20	5/8"	18	100	21	12	9	14.5	2184
A2555UNF3/4	95,60	3/4"	16	125	25	14	11	17.5	2184
A2555UNF7/8	116,11	7/8"	14	140	28	18	14.5	20.4	2184
A2555UNF1	171,37	1"	12	140	28	18	14.5	23.3	2184

Indivisible package Suggested retail package - Unit price

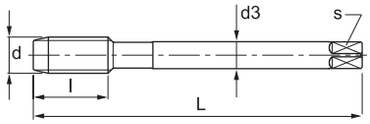
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - UNF

KERFOLG

DIN 2184 | HSSE | TiNOX | UNF 60° | Inox

ITEM: A2560

UNF ISO thread-fine pitch



Tolerance 2 B
Surface finish TiNOX
Thread depth ≤ 2,5XD
Hole type Blind
Chamfer form C 2/3
Application Stainless steel

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●			●	●		●									

Tech. Code	GR04 Euro	UNF	TPI	L mm	l mm	d3 mm	s mm	Tapping Hole mm	DIN
A2560UNF1/4	51,69	1/4"	28	80	10.0	7	5.5	5.5	2184
A2560UNF3/8	63,52	3/8"	24	90	12.0	7	5.5	8.5	2184
A2560UNF1/2	83,46	1/2"	20	100	14.5	9	7.0	11.5	2184

Tech. Code	GR04 Euro	UNF	TPI	L mm	l mm	d3 mm	s mm	Tapping Hole mm	DIN
A2560UNF5/8	118,90	5/8"	18	100	16.0	12	9.0	14.5	2184
A2560UNF3/4	183,86	3/4"	16	110	18.0	14	11.0	17.5	2184

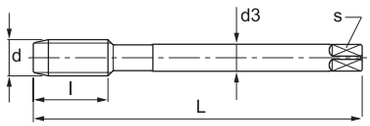
SPIRAL POINT TAP FOR THROUGH HOLES - BSP

KERFOLG

DIN 5156 | HSSE | GAS 55°

ITEM: A2610

Cylindrical BSP thread



Tolerance ISO 5969
Surface finish Bright
Thread depth ≤ 2,5XD
Hole type Through
Chamfer form B 4/5
Application Medium alloy and stainless steels

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●		●	●		○	●	●	○	○					

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2610GAS1/8	31,75	1/8"	28	90	20	7	5.5	8.8	5156
A2610GAS1/4	42,46	1/4"	19	100	21	11	9	11.8	5156
A2610GAS3/8	54,15	3/8"	19	100	21	12	9	15.3	5156
A2610GAS1/2	72,43	1/2"	14	125	24	16	12	19	5156
A2610GAS5/8	91,37	5/8"	14	125	25	18	14.5	21	5156
A2610GAS3/4	123,46	3/4"	14	140	28	20	16	24.5	5156

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2610GAS7/8	(154,43)	7/8"	14	150	28	22	18	28.25	5156
A2610GAS1	193,09	1"	11	160	30	25	20	30.75	5156
A2610GAS11/8	285,25	1-1/8"	11	170	30	28	22	35.5	5156
A2610GAS11/4	359,56	1-1/4"	11	170	30	32	24	39.5	5156
A2610GAS11/2	471,33	1-1/2"	11	190	32	36	29	45.2	5156

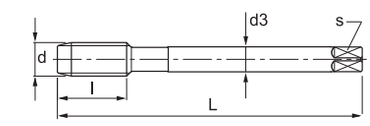
SPIRAL FLUTE 15° TAP FOR BLIND HOLES - BSP

KERFOLG

DIN 5156 | HSSE | GAS 55°

ITEM: A2615

Cylindrical BSP thread



Tolerance ISO 5969
Surface finish Bright
Thread depth ≤ 1,5XD
Hole type Blind
Chamfer form C 2/3
Application General application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					○	●	●	●	○					

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2615GAS1/8	37,21	1/8"	28	90	20	7	5.5	8.8	5156
A2615GAS1/4	51,36	1/4"	19	100	21	11	9	11.8	5156
A2615GAS3/8	60,84	3/8"	19	100	21	12	9	15.3	5156
A2615GAS1/2	81,33	1/2"	14	125	24	16	12	19	5156
A2615GAS5/8	104,30	5/8"	14	125	25	18	14.5	21	5156
A2615GAS3/4	133,93	3/4"	14	140	28	20	16	24.5	5156
A2615GAS7/8	155,55	7/8"	14	150	28	22	16	28.25	5156

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2615GAS1	186,96	1"	11	160	30	25	20	30.75	5156
A2615GAS11/8	211,82	1-1/8"	11	170	30	28	22	35.5	5156
A2615GAS11/4	257,27	1-1/4"	11	170	30	32	24	39.5	5156
A2615GAS11/2	352,54	1-1/2"	11	190	32	36	29	45.2	5156
A2615GAS13/4	573,94	1-3/4"	11	190	32	40	32	51.4	5156
A2615GAS2	672,34	2"	11	220	40	45	35	57.2	5156
A2615GAS21/2	1047,95	2-1/2"	11	250	50	45	35	72.8	5156

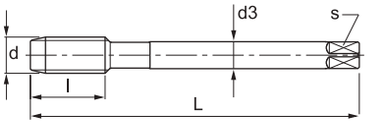
SPIRAL POINT TAP FOR THROUGH HOLES - BSP

KERFOLG

DIN 5156 | HSSE | NIT + VAP | GAS 55° | UNI

ITEM: A2611

Cylindrical BSP thread



Tolerance ISO 228
Surface finish Nitrided and steam tempering
Thread depth 3XD
Hole type Through
Chamfer form B 4/5
Application Taps for universal application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●		●	○	○	○						

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Prehole mm	DIN
A2611GAS1/8	49,77	1/8"	28	90	18	7	5,5	8,8	5156
A2611GAS1/4	67,71	1/4"	19	100	22	11	9	11,8	5156
A2611GAS3/8	85,91	3/8"	19	100	22	12	9	15,25	5156

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Prehole mm	DIN
A2611GAS1/2	106,56	1/2"	14	125	25	16	12	19	5156
A2611GAS3/4	173,09	3/4"	14	140	28	20	16	24,5	5156

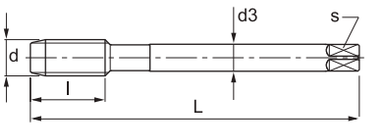
SPIRAL FLUTE 35° TAP FOR BLIND HOLES - BSP

KERFOLG

DIN 5156 | HSSE | NIT + VAP | GAS 55° | UNI

ITEM: A2616

Cylindrical BSP thread



Tolerance ISO 5969
Surface finish Nitrided and steam tempering
Thread depth < 2,5XD
Hole type Blind
Chamfer form C 2/3 with rear taper
Application Taps for universal application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●		●	○	○	○						

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2616GAS1/8	54,54	1/8"	28	90	10	7	5,5	8,8	5156
A2616GAS1/4	72,61	1/4"	19	100	15	11	9	11,8	5156
A2616GAS3/8	91,44	3/8"	19	100	15	12	9	15,25	5156

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2616GAS1/2	129,21	1/2"	14	125	17	16	12	19	5156
A2616GAS3/4	209,96	3/4"	14	140	20	20	16	24,5	5156

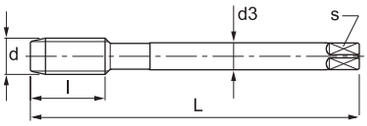
SPIRAL POINT TAP FOR THROUGH HOLES - BSP

KERFOLG

DIN 5156 | HSSE | TiNOX | GAS 55° | Inox

ITEM: A2620

Cylindrical BSP thread



Tolerance ISO 5969
Surface finish TiNOX
Thread depth ≤ 2,5XD
Hole type Through
Chamfer form B 4/5
Application Stainless steel

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
			●	●	●										

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2620GAS1/8	45,80	1/8"	28	90	20	7	5.5	8.8	5156
A2620GAS1/4	64,30	1/4"	19	100	21	11	9	11.8	5156
A2620GAS3/8	77,22	3/8"	19	100	21	12	9	15.3	5156
A2620GAS1/2	121,79	1/2"	14	125	24	16	12	19	5156

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2620GAS5/8	144,74	5/8"	14	125	25	18	14.5	21	5156
A2620GAS3/4	213,93	3/4"	14	140	28	20	16	24.5	5156
A2620GAS1	299,07	1"	11	160	30	25	20	30.75	5156

Indivisible package Suggested retail package - Unit price

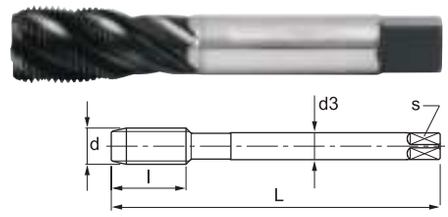
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - BSP

KERFOLG

DIN 5156 | HSSE | TiNOX | GAS 55° | Inox

ITEM: A2625

Cylindrical BSP thread



Tolerance ISO 5969
Surface finish TiNOX
Thread depth ≤ 2.5XD
Hole type Blind
Chamfer form C 2/3
Application Stainless steel

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●			●	●	●										

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2625GAS1/8	51,59	1/8"	28	90	20	7	5.5	8.8	5156
A2625GAS1/4	72,77	1/4"	19	100	21	11	9	11.8	5156
A2625GAS3/8	87,70	3/8"	19	100	21	12	9	15.3	5156
A2625GAS1/2	138,16	1/2"	14	125	24	16	12	19	5156

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2625GAS5/8	164,25	5/8"	14	125	25	18	14.5	21	5156
A2625GAS3/4	241,11	3/4"	14	140	28	20	16	24.5	5156
A2625GAS1	339,17	1"	11	160	30	25	20	30.75	5156

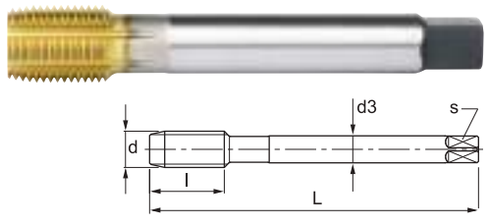
FORMING TAP FOR BLIND AND THROUGH HOLES - BSP

KERFOLG

DIN 2189 | HSSE | TiN | GAS 55°

ITEM: A2640

Cylindrical BSP thread



Tolerance ISO 5969
Surface finish TiN
Thread depth ≤ 2.5XD
Hole type Blind and through
Chamfer form C 2/3 with coolant grooves
Application Carbon and stainless steel up to R ≤ 800 N/mm², aluminum alloys with silicon ≤ 7%

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●							●	○		●				

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2640GAS1/8	74,21	1/8"	28	90	18	7	5.5	9.25	2189
A2640GAS1/4	86,47	1/4"	19	100	22	11	9	12.5	2189

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2640GAS3/8	108,42	3/8"	19	100	22	12	9	16	2189
A2640GAS1/2	142,39	1/2"	14	125	25	16	12	20	2189

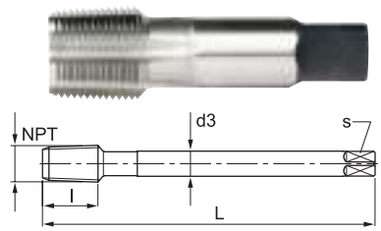
STRAIGHT FLUTE TAP FOR BLIND AND THROUGH HOLES - NPT

KERFOLG

NdF | HSSE | NPT 60°

ITEM: A2650

NPT tapered thread taper ratio 1:16



Surface finish Bright
Thread depth ≤ 1.5XD
Hole type Blind and through
Chamfer form C 2/3
Application General application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○	○		○	●	○	○	○					

Tech. Code	GR04 Euro	NPT	TPI	L mm	l mm	d3 mm	s mm
A2650NPT1/16	45,91	1/16"	27	63	12	6	4.9
A2650NPT1/8	39,11	1/8"	27	63	12	7	5.5
A2650NPT1/4	56,83	1/4"	18	63	18	11	9
A2650NPT3/8	59,83	3/8"	18	70	18	12	9
A2650NPT1/2	75,55	1/2"	14	80	23	16	12

Tech. Code	GR04 Euro	NPT	TPI	L mm	l mm	d3 mm	s mm
A2650NPT3/4	113,76	3/4"	14	100	24	20	16
A2650NPT1	160,67	1"	11.1/2	110	30	25	20
A2650NPT11/4	(254,60)	1-1/4"	11.1/2	125	32	32	24
A2650NPT11/2	(332,83)	1-1/2"	11.1/2	140	32	36	29
A2650NPT2	(461,63)	2"	11.1/2	160	34	45	35

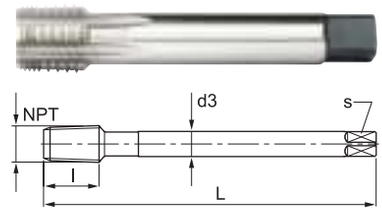
STRAIGHT FLUTE TAP FOR BLIND AND THROUGH HOLES - NPT

KERFOLG

NdF | HSSE | NPT 60°

ITEM: A2655

NPT tapered thread taper ratio 1:16



Surface finish Bright
Hole type Blind and through
Thread depth ≤ 2XD
Chamfer form C 2/3 Alternate teeth
Application General application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○	○			●	○	○		○				

Tech. Code	GR04 Euro	NPT	TPI	L mm	l mm	d3 mm	s mm
A2655NPT1/16	105,87	1/16"	27	90	12	6	4,9
A2655NPT1/8	91,93	1/8"	27	100	12	7	5.5
A2655NPT1/4	104,46	1/4"	18	100	18	11	9
A2655NPT3/8	115,44	3/8"	18	110	18	12	9

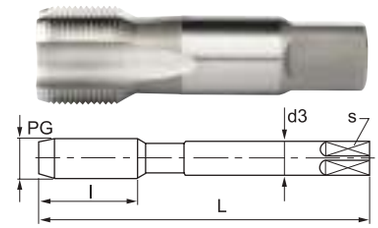
Tech. Code	GR04 Euro	NPT	TPI	L mm	l mm	d3 mm	s mm
A2655NPT1/2	153,99	1/2"	14	140	23	16	12
A2655NPT3/4	240,23	3/4"	14	150	24	20	16
A2655NPT1	332,05	1"	11,1/2	170	30	25	20

STRAIGHT FLUTE TAP FOR BLIND AND THROUGH HOLES - PG

WRK

DIN 40432 | HSSE | PG 80°

ITEM: A2660



Surface finish Bright
Hole type Blind and through
Thread depth ≤ 1.5XD
Chamfer form C 2/3
Application Low and medium strength steel ≤ 800 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●								●							

Tech. Code	GR01 Euro	PG	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2660PG7	62,89	7	12.5 x 20	70	20	9	7	11.4	40432
A2660PG9	81,59	9	15.2 x 18	70	20	12	9	14	40432
A2660PG11	95,12	11	18.6 x 18	80	22	14	11	17.25	40432

Tech. Code	GR01 Euro	PG	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2660PG13,5	119,83	13.5	20.4 x 18	80	22	16	12	19	40432
A2660PG16	137,20	16	22.5 x 18	80	22	18	14.5	21.25	40432
A2660PG21	148,63	21	28.3 x 16	90	22	22	18	27	40432

Related products

BOWERS FAST ACTION DIGITAL MICROMETERS - BLUETOOTH - IP67

Tech. Code	Range mm	Depth mm	Accuracy µm
D1276050065	50 ÷ 65	80	5
D1276065080	65 ÷ 80		
D1276080100	80 ÷ 100	85	

The products are available in chapter D

Indivisible package Suggested retail package - Unit price

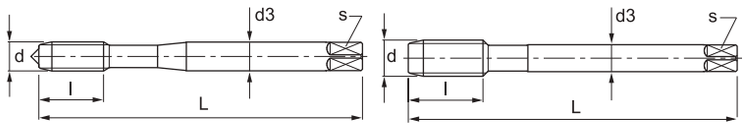
SPIRAL FLUTE 40° TAP FOR THREAD INSERTS - EG - M

WRK

DIN 40435 | HSSE | EG-M 60°

ITEM: A2671

ISO thread DIN 13 coarse pitch



Tolerance FR 6H
Surface finish Bright
Thread depth ≤ 2,5XD
Hole type Blind
Chamfer form C 2/3
Application Structural steel, malleable cast iron, light alloys, cupric aluminum (aluminum bronze)

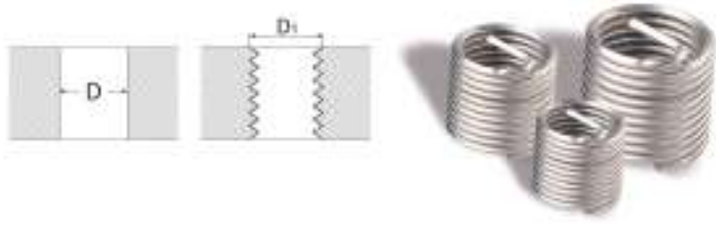
< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●					○	●	●		●	●				

Tech. Code	GR01 Euro	M	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2671M3	42,08	3 x 0.5	63	7	4,5	3.4	3.2	40435
A2671M4	42,08	4 x 0.7	70	8	6	4.9	4.2	40435
A2671M5	42,08	5 x 0.8	80	10	7	5.5	5.2	40435
A2671M6	51,97	6 x 1	90	13	8	6.2	6.3	40435
A2671M8	55,49	8 x 1.25	100	15	10	8	8.4	40435

Tech. Code	GR01 Euro	M	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2671M10	74,79	10 x 1.5	110	18	9	7	10.50	40435
A2671M12	95,84	12 x 1.75	110	20	11	9	12.50	40435
A2671M14	124,96	14 x 2	110	20	12	9	14.50	40435
A2671M16	143,06	16 x 2	125	25	14	11	16.50	40435

TECHNICAL NOTES FOR THREAD INSERTS

Thread inserts	Drilling D mm	∅ external D1 mm
M3 x 0.50	3.20	3.65
M4 x 0.70	4.20	4.91
M5 x 0.80	5.20	60.4
M6 x 1.00	6.30	7.30
M8 x 1.25	8.40	9.62
M10 x 1.50	10.50	11.95
M12 x 1.75	12.50	14.27
M16 x 2.00	16.50	18.60



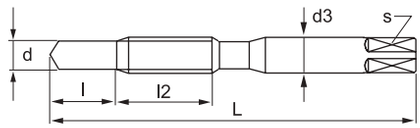
COMBINATION DRILL TAP - M

WRK

NdF

ITEM: A2840

ISO thread DIN 13 coarse pitch



Tolerance 6H ISO 2
Surface finish Bright
Hole type Through
Application General application

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○							○	○						

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	l2 mm	d3 mm	s mm	Drill bit mm
A2840M3	54,21	3 x 0.5	66	10	10	3.5	2.7	2.5
A2840M4	63,62	4 x 0.7	69	11	11	4.5	3.4	3.3
A2840M5	68,67	5 x 0.8	81	12	11	6	4.9	4.2
A2840M6	68,31	6 x 1	82	13	13	6	4.9	5

Tech. Code	GR01 Euro	d x p mm	L mm	l mm	l2 mm	d3 mm	s mm	Drill bit mm
A2840M8	76,67	8 x 1.25	101	18	14	6	4.9	6.8
A2840M10	97,82	10 x 1.5	107	24	15	7	5.6	8.5
A2840M12	117,10	12 x 1.75	120	25	17	9	7	10.2

HAND TAP 3-PIECE SET - M

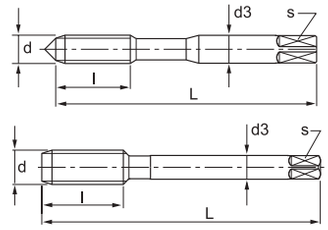
KERFOLG

DIN 352 | UNI

ITEM: A2814

ISO thread DIN 13 coarse pitch

Tolerance ISO 6H
Surface finish Bright
Hole type Blind and through
Chamfer form C 2/3
Application Steel and non ferrous materials with R ≤ 850/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○	○		○	●	●		●	●				

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2814M2	42,01	2 x 0,4	36	7,5	2,8	2,1	1,6	352
A2814M2,5	35,88	2,5 x 0,45	40	14,5	2,9	2,1	2,05	352
A2814M3	37,78	3 x 0,5	40	10	3.5	2.7	2.5	352
A2814M3,5	44,46	3,5 x 0,6	45	11	4	3	2,9	352
A2814M4	37,54	4 x 0,7	45	12	4.5	3.4	3.3	352
A2814M4,5	65,96	4,5 x 0,75	50	13	6	4,9	3,7	352
A2814M5	40,55	5 x 0,8	50	14	6	4.9	4.2	352
A2814M6	40,55	6 x 1	50	16	6	4.9	5	352
A2814M7	63,62	7 x 1	56	19	6	4,9	6	352
A2814M8	46,13	8 x 1,25	63	22	6	4.9	6.8	352
A2814M9	85,90	9 x 1,25	63	22	7	5,5	7,8	352

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2814M10	57,72	10 x 1,5	70	24	7	5.5	8.5	352
A2814M12	74,88	12 x 1,75	75	29	9	7	10.2	352
A2814M14	88,48	14 x 2	80	30	11	9	12	352
A2814M16	108,87	16 x 2	80	32	12	9	14	352
A2814M18	157,88	18 x 2,5	95	40	14	11	15.5	352
A2814M20	179,06	20 x 2,5	95	40	16	12	17.5	352
A2814M22	183,18	22 x 2,5	100	34	18	14,5	19,5	352
A2814M24	207,48	24 x 3	110	38	18	14,5	21	352
A2814M27	279,23	27 x 3	100	38	20	16	24	352
A2814M30	350,43	30 x 3,5	125	45	22	18	26,5	352

HAND TAP 3-PIECE SET FOR HARDENED - M

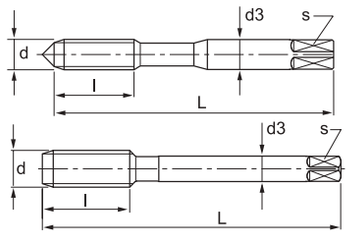
KERFOLG

DIN 352 | HSSE | HD

ITEM: A2818

ISO thread DIN 13 coarse pitch

Tolerance ISO 2 6H
Surface finish Bright
Hole type Blind and through
Chamfer form C 2/3
Application All materials



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		●	●		●	●	●	●	●				●	

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	S mm	Tapping hole mm	DIN
A2818M2	83,13	2 x 0,4	36	7,5	2,8	2,1	1,6	352
A2818M2,5	80,45	2,5 x 0,45	40	9	2,8	2,1	2,05	352
A2818M3	66,86	3 x 0,5	40	10	3,5	2,7	2,5	352
A2818M3,5	68,41	3,5 x 0,6	45	11	4	3	2,9	352
A2818M4	66,86	4 x 0,7	45	12	4,5	3,4	3,3	352
A2818M5	68,86	5 x 0,8	50	14	6	4,9	4,2	352

Tech. Code	GR04 Euro	d x p mm	L mm	l mm	d3 mm	S mm	Tapping hole mm	DIN
A2818M6	68,86	6 x 1	56	16	6	4,9	5	352
A2818M8	80,45	8 x 1,25	63	22	6	4,9	6,8	352
A2818M10	93,37	10 x 1,5	70	24	7	5,5	8,5	352
A2818M12	127,46	12 x 1,75	75	28	9	7	10,2	352
A2818M16	206,02	16 x 2	80	32	12	9	14	352
A2818M20	330,26	20 x 2,5	95	34	16	12	17,5	352

HAND TAP 2-PIECE SET - BSP

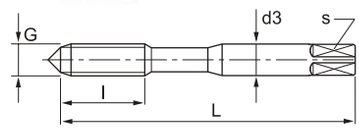
KERFOLG

DIN 5157 | GAS 55°

ITEM: A2825

Cylindrical BSP thread

Tolerance ISO 5969
Surface finish Bright
Hole type Blind and through
Chamfer form C 2/3
Application Steel and non ferrous materials with R ≤ 850/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●		○			○	○	○	○	○	○			○	

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2825GAS1/8	42,35	1/8"	28	63	18	7	5,5	8,8	5157
A2825GAS1/4	57,39	1/4"	19	70	20	11	9	11,8	5157
A2825GAS3/8	74,88	3/8"	19	70	20	12	9	15,25	5157
A2825GAS1/2	106,75	1/2"	14	80	22	16	12	19	5157

Tech. Code	GR04 Euro	G	TPI	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
A2825GAS5/8	125,45	5/8"	14	80	22	18	14,5	21	5157
A2825GAS3/4	171,93	3/4"	14	90	22	20	16	24,5	5157
A2825GAS7/8	216,61	7/8"	14	90	22	22	18	28,25	5157
A2825GAS1	291,48	1"	11	100	25	25	20	30,75	5157

Indivisible package Suggested retail package - Unit price

RIGHT-HAND FIXED DIN - M

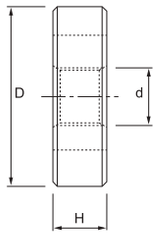
KERFOLG

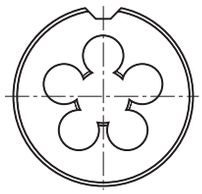
DIN 22568

ITEM: A2910

ISO - DIN 13 coarse and fine pitch metric thread

Tolerance 6g
Execution Spiral lapped point
Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○					○			○				

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2910M2	29,40	M 2 x 0.4	16	5	22568
A2910M2,5	29,40	M 2.5 x 0.45	16	5	22568
A2910M3	22,23	M 3 x 0.5	20	5	22568
A2910M3,5	27,76	M 3.5 x 0.6	20	5	22568
A2910M4	22,23	M 4 x 0.7	20	5	22568
A2910M5	23,16	M 5 x 0.8	20	7	22568
A2910M6	23,16	M 6 x 1	20	7	22568
A2910M7	27,76	M 7 x 1	25	9	22568
A2910M8	27,76	M 8 x 1.25	25	9	22568
A2910M9	32,11	M 9 x 1.25	25	9	22568
A2910M10	34,34	M 10 x 1.5	30	11	22568
A2910M11	36,69	M 11 x 1.5	30	11	22568

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2910M12	42,69	M 12 x 1.75	38	14	22568
A2910M14	42,69	M 14 x 2	38	14	22568
A2910M16	60,91	M 16 x 2	45	14	22568
A2910M18	63,86	M 18 x 2.5	45	18	22568
A2910M20	63,86	M 20 x 2.5	45	18	22568
A2910M22	91,62	M 22 x 2.5	55	22	22568
A2910M24	92,56	M 24 x 3	55	22	22568
A2910M27	125,95	M 27 x 3	65	25	22568
A2910M30	125,95	M 30 x 3.5	65	25	22568
A2910M33	143,94	M 33 x 3.5	65	25	22568
A2910M36	145,12	M 36 x 4	65	25	22568
A2910M39	188,28	M 39 x 4	75	30	22568

RIGHT-HAND FIXED DIN - MF

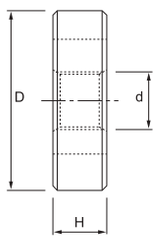
KERFOLG

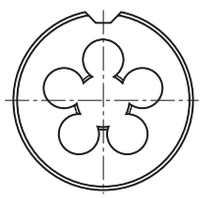
DIN 22568 | MF 60°

ITEM: A2911

ISO - DIN 13 coarse and fine pitch metric thread

Tolerance 6g
Execution Spiral lapped point
Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○					○							

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2911MF30,35	25,99	MF 3 x 0.35	20	5	22568
A2911MF40,35	29,99	MF 4 x 0.35	20	5	22568
A2911MF40,5	25,99	MF 4 x 0.5	20	5	22568
A2911MF50,5	28,69	MF 5 x 0.5	20	5	22568
A2911MF60,5	28,69	MF 6 x 0.5	20	5	22568
A2911MF60,75	27,30	MF 6 x 0.75	20	7	22568
A2911MF70,75	34,11	MF 7 x 0.75	25	9	22568
A2911MF80,5	32,23	MF 8 x 0.5	25	9	22568
A2911MF80,75	32,23	MF 8 x 0.75	25	9	22568
A2911MF81	30,22	MF 8 x 1	25	9	22568
A2911MF90,75	39,98	MF 9 x 0.75	25	9	22568
A2911MF91	39,63	MF 9 x 1	25	9	22568
A2911MF100,5	45,88	MF 10 x 0.5	30	11	22568
A2911MF100,75	45,88	MF 10 x 0.75	30	11	22568
A2911MF101	40,45	MF 10 x 1	30	11	22568
A2911MF101,25	40,45	MF 10 x 1.25	30	11	22568
A2911MF111	(45,28)	MF 11 x 1	30	11	22568
A2911MF120,75	59,40	MF 12 x 0.75	38	10	22568
A2911MF121	56,34	MF 12 x 1	38	10	22568
A2911MF121,25	50,21	MF 12 x 1.25	38	10	22568
A2911MF121,5	50,21	MF 12 x 1.5	38	10	22568
A2911MF131	(77,73)	MF 13 x 1	38	10	22568
A2911MF141	57,04	MF 14 x 1	38	10	22568
A2911MF141,25	50,21	MF 14 x 1.25	38	10	22568
A2911MF141,5	50,21	MF 14 x 1.5	38	10	22568
A2911MF151	77,51	MF 15 x 1	38	10	22568
A2911MF161	72,34	MF 16 x 1	45	14	22568
A2911MF161,25	(75,98)	MF 16 x 1.25	45	14	22568
A2911MF161,5	71,63	MF 16 x 1.5	45	14	22568
A2911MF171	79,15	MF 17 x 1	45	14	22568

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2911MF181	75,50	MF 18 x 1	45	14	22568
A2911MF181,5	74,81	MF 18 x 1.5	45	14	22568
A2911MF182	(74,81)	MF 18 x 2	45	14	22568
A2911MF201	75,50	MF 20 x 1	45	14	22568
A2911MF201,5	74,81	MF 20 x 1.5	45	14	22568
A2911MF202	74,81	MF 20 x 2	45	14	22568
A2911MF221	114,43	MF 22 x 1	55	16	22568
A2911MF221,5	107,84	MF 22 x 1.5	55	16	22568
A2911MF222	107,84	MF 22 x 2	55	16	22568
A2911MF241	134,78	MF 24 x 1	55	16	22568
A2911MF241,5	134,78	MF 24 x 1.5	55	16	22568
A2911MF242	114,43	MF 24 x 2	55	16	22568
A2911MF251,5	155,95	MF 25 x 1.5	55	16	22568
A2911MF261	149,01	MF 26 x 1	65	18	22568
A2911MF261,5	(165,71)	MF 26 x 1.5	65	18	22568
A2911MF271	149,01	MF 27 x 1	65	18	22568
A2911MF271,5	149,01	MF 27 x 1.5	65	18	22568
A2911MF272	148,06	MF 27 x 2	65	18	22568
A2911MF281,5	171,95	MF 28 x 1.5	65	18	22568
A2911MF301	157,13	MF 30 x 1	65	18	22568
A2911MF301,5	157,13	MF 30 x 1.5	65	18	22568
A2911MF302	148,06	MF 30 x 2	65	18	22568
A2911MF331,5	171,24	MF 33 x 1.5	65	18	22568
A2911MF332	169,11	MF 33 x 2	65	18	22568
A2911MF351,5	198,87	MF 35 x 1.5	65	18	22568
A2911MF361,5	171,59	MF 36 x 1.5	65	18	22568
A2911MF362	171,59	MF 36 x 2	65	18	22568
A2911MF381,5	347,76	MF 38 x 1.5	75	20	22568
A2911MF401,5	319,54	MF 40 x 1.5	75	20	22568

LEFT-HAND FIXED DIE - M

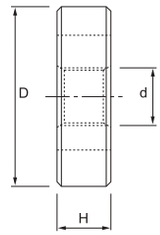
KERFOLG

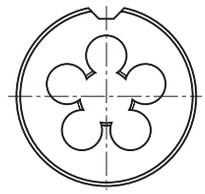
DIN 22568

ITEM: A2915

ISO - DIN 13 coarse and fine pitch thread

Tolerance 6g
Execution Spiral lapped point
Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○					○								

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2915M2	47,74	M2 x 0,4	16	5	22568
A2915M3	35,75	M3 x 0,5	20	5	22568
A2915M4	35,75	M4 x 0,7	20	5	22568
A2915M5	37,39	M5 x 0,8	20	7	22568
A2915M6	37,39	M6 x 1	20	7	22568
A2915M8	41,76	M8 x 1,25	25	9	22568
A2915M10	55,63	M10 x 1,5	30	11	22568
A2915M12	69,15	M12 x 1,75	38	14	22568

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2915M14	69,15	M14 x 2	38	14	22568
A2915M16	98,80	M16 x 2	45	14	22568
A2915M18	103,13	M18 x 2,5	45	18	22568
A2915M20	103,13	M20 x 2,5	45	18	22568
A2915M22	148,89	M22 x 2,5	55	22	22568
A2915M24	150,53	M24 x 3	55	22	22568
A2915M27	204,05	M27 x 3	55	25	22568
A2915M30	204,05	M30 x 3,5	65	25	22568

LEFT-HAND FIXED DIE - MF

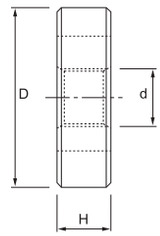
KERFOLG

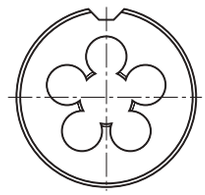
DIN 22568 | MF 60°

ITEM: A2916

ISO - DIN 13 coarse and fine pitch thread

Tolerance 6g
Execution Spiral lapped point.
Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○					○								

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2916MF81	41,76	MF8 x 1	25	9	22568
A2916MF101	55,63	MF10 x 1	30	11	22568
A2916MF101,25	55,63	MF10 x 1,25	30	11	22568
A2916MF121	69,15	MF12 x 1	38	10	22568
A2916MF121,25	69,15	MF12 x 1,25	38	10	22568
A2916MF121,5	69,15	MF12 x 1,5	38	10	22568
A2916MF141	86,67	MF14 x 1	38	10	22568

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2916MF141,5	69,15	MF14 x 1,5	38	10	22568
A2916MF161	100,07	MF16 x 1	45	14	22568
A2916MF161,5	74,56	MF16 x 1,5	45	14	22568
A2916MF181,5	103,13	MF18 x 1,5	45	14	22568
A2916MF201,5	103,13	MF20 x 1,5	45	14	22568
A2916MF221,5	(148,89)	MF22 x 1,5	55	16	22568
A2916MF241,5	(186,06)	MF24 x 1,5	55	15	22568

RIGHT-HAND FIXED DIE - M

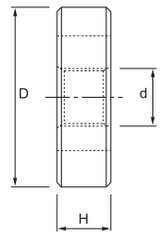
KERFOLG

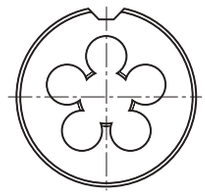
DIN 22568 | HSSE | Inox

ITEM: A2912

ISO - DIN 13 coarse and fine pitch thread

Tolerance 6g
Execution Spiral lapped point.
Backed-off lapped threads
Surface finish Bright
Application For stainless steel





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○			●	○				○	○							

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2912M3	27,87	M 3 x 0.5	20	5	22568
A2912M4	27,87	M 4 x 0.7	20	5	22568
A2912M5	28,93	M 5 x 0.8	20	7	22568
A2912M6	28,93	M 6 x 1	20	7	22568
A2912M8	32,23	M 8 x 1.25	25	9	22568
A2912M10	42,80	M 10 x 1.5	30	11	22568

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2912M12	53,27	M 12 x 1.75	38	14	22568
A2912M14	53,27	M 14 x 2	38	14	22568
A2912M16	76,33	M 16 x 2	45	14	22568
A2912M18	79,51	M 18 x 2.5	45	18	22568
A2912M20	79,51	M 20 x 2.5	45	18	22568

Indivisible package Suggested retail package - Unit price

RIGHT-HAND FIXED DIE - TIN - M

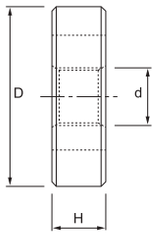
KERFOLG

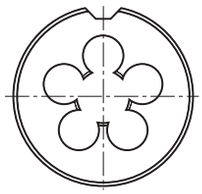
DIN	TiN
22568	

ITEM: A2914

ISO - DIN 13 coarse and fine pitch metric thread

Tolerance 6g
Execution Spiral lapped point. Backed-off lapped threads.
Surface finish TiN
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2914M3	29,99	M 3 x 0,5	20	5	22568
A2914M4	29,99	M 4 x 0,7	20	5	22568
A2914M5	31,28	M 5 x 0,8	20	7	22568
A2914M6	31,28	M 6 x 1,0	20	7	22568
A2914M8	37,17	M 8 x 1,25	25	9	22568
A2914M10	50,46	M 10 x 1,5	30	11	22568

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2914M12	57,62	M 12 x 1,75	38	14	22568
A2914M14	57,62	M 14 x 2,0	38	14	22568
A2914M16	82,20	M 16 x 2,0	45	14	22568
A2914M18	86,09	M 18 x 2,5	45	18	22568
A2914M20	86,09	M 20 x 2,5	45	18	22568

RIGHT-HAND FIXED DIE - TIN - MF

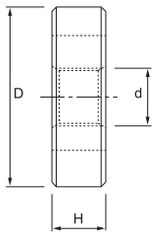
KERFOLG

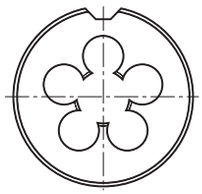
DIN	MF	TiN
22568	60°	

ITEM: A2913

ISO - DIN 13 coarse and fine pitch metric thread

Tolerance 6g
Execution Spiral lapped point. Backed-off lapped threads.
Surface finish TiN
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○					○							

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2913MF81	(40,81)	MF 8 x 1,0	25	9	22568
A2913MF101	(54,46)	MF 10 x 1,0	30	11	22568
A2913MF10125	(54,46)	MF 10 x 1,25	30	11	22568
A2913MF12125	(67,86)	MF 12 x 1,25	38	14	22568
A2913MF1215	(67,86)	MF 12 x 1,5	38	14	22568

Tech. Code	GR04 Euro	d x p mm	D mm	H mm	DIN
A2913MF1415	(67,86)	MF 14 x 1,5	38	14	22568
A2913MF1615	(96,55)	MF 16 x 1,5	45	14	22568
A2913MF1815	(101,15)	MF 18 x 1,5	45	18	22568
A2913MF2015	(101,15)	MF 20 x 1,5	45	18	22568

RIGHT-HAND FIXED DIE - BSP

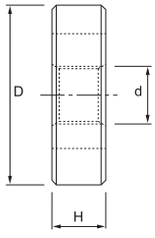
KERFOLG

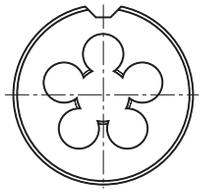
DIN	GAS
24231	55°

ITEM: A2920

Cylindrical BSP thread

Tolerance A
Execution Spiral lapped point. Backed-off lapped threads.
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2920GAS1/8	42,46	1/8" x 28	38	10	24231
A2920GAS1/4	42,46	1/4" x 19	38	10	24231
A2920GAS3/8	60,21	3/8" x 19	45	14	24231
A2920GAS1/2	60,21	1/2" x 14	45	14	24231
A2920GAS5/8	92,66	5/8" x 14	55	16	24231
A2920GAS3/4	127,48	3/4" x 14	65	18	24231

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2920GAS7/8	(133,71)	7/8" x 14	65	18	24231
A2920GAS1	133,71	1" x 11	65	18	24231
A2920GAS11/8	(173,70)	1 1/8" x 11	75	20	24231
A2920GAS11/4	187,70	1 1/4" x 11	75	20	24231
A2920GAS11/2	303,54	1 1/2" x 11	90	22	24231
A2920GAS2	(543,70)	2" x 11	105	22	24231

RIGHT-HAND FIXED DIE - UNC

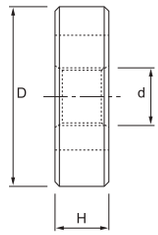
KERFOLG

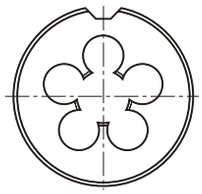
DIN 22568 | UNC 60°

ITEM: A2925

UNC American thread

Tolerance 2A
Execution Spiral lapped point. Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2925UNC440	28,58	#4 x 40	20	5	22568
A2925UNC540	28,58	#5 x 40	20	5	22568
A2925UNC632	28,58	#6 x 32	20	5	22568
A2925UNC832	28,58	#8 x 32	20	5	22568
A2925UNC1024	28,58	#10 x 24	20	7	22568
A2925UNC1224	28,58	#12 x 24	20	7	22568
A2925UNC1/4	28,58	1/4" x 20	20	7	22568
A2925UNC5/16	33,17	5/16" x 18	25	9	22568

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2925UNC3/8	39,27	3/8" x 16	30	11	22568
A2925UNC7/16	39,27	7/16" x 14	30	11	22568
A2925UNC1/2	52,67	1/2" x 13	38	14	22568
A2925UNC9/16	57,39	9/16" x 12	38	14	22568
A2925UNC5/8	73,51	5/8" x 11	45	18	22568
A2925UNC3/4	78,22	3/4" x 10	45	18	22568
A2925UNC7/8	114,43	7/8" x 9	55	22	22568
A2925UNC1	120,78	1" x 8	55	22	22568

RIGHT-HAND FIXED DIE - UNF

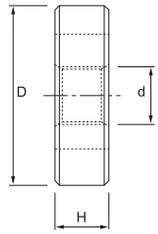
KERFOLG

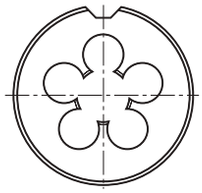
DIN 22568 | UNF 60°

ITEM: A2927

UNF American thread

Tolerance 2A
Execution Spiral lapped point. Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2927UNF836	28,58	#8 x 36	20	5	22568
A2927UNF1032	28,58	#10 x 32	20	7	22568
A2927UNF1228	28,58	#12 x 28	20	7	22568
A2927UNF1/4	28,58	1/4" x 28	20	7	22568
A2927UNF5/16	33,17	5/16" x 24	25	9	22568
A2927UNF3/8	39,27	3/8" x 24	30	11	22568
A2927UNF7/16	39,27	7/16" x 20	30	11	22568

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2927UNF1/2	52,67	1/2" x 20	38	10	22568
A2927UNF9/16	57,39	9/16" x 18	38	10	22568
A2927UNF5/8	73,51	5/8" x 18	45	14	22568
A2927UNF3/4	78,22	3/4" x 16	45	14	22568
A2927UNF7/8	114,43	7/8" x 14	55	16	22568
A2927UNF1	120,78	1" x 12	55	16	22568

RIGHT-HAND FIXED DIE - BSW

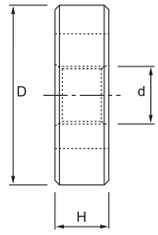
KERFOLG

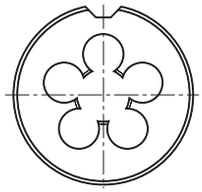
DIN 22568 | BSW 55°

ITEM: A2930

BSW thread

Tolerance MC
Execution Spiral lapped point. Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2930BSW3/32	(34,34)	3/32" x 48	20	5	22568
A2930BSW1/8	(28,69)	1/8" x 48	20	5	22568
A2930BSW3/16	(29,28)	3/16" x 24	20	7	22568
A2930BSW7/32	(36,10)	7/32" x 24	20	7	22568
A2930BSW1/4	(30,93)	1/4" x 20	20	7	22568
A2930BSW5/16	(33,40)	5/16" x 18	25	9	22568
A2930BSW3/8	(39,27)	3/8" x 16	30	11	22568

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2930BSW7/16	(40,93)	7/16" x 14	30	11	22568
A2930BSW1/2	(52,46)	1/2" x 12	38	14	22568
A2930BSW9/16	(57,74)	9/16" x 12	38	14	22568
A2930BSW5/8	(74,45)	5/8" x 11	45	18	22568
A2930BSW3/4	(80,22)	3/4" x 10	45	18	22568
A2930BSW7/8	(113,84)	7/8" x 9	55	22	22568

Indivisible package Suggested retail package - Unit price

RIGHT-HAND FIXED DIE - PG

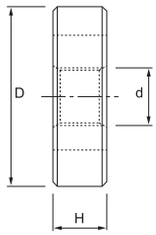
KERFOLG

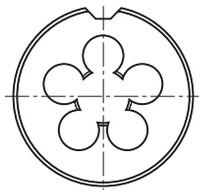
DIN 40434 B | PG 80°

ITEM: A2935

PG thread DIN 40430

Execution Spiral lapped point. Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	N° x TPI	D mm	H mm	DIN
A2935PG7	(108,79)	PG 7 x 20	38	14	40434 B
A2935PG9	(108,79)	PG 9 x 18	38	14	40434 B
A2935PG11	(114,55)	PG 11 x 18	45	14	40434 B

Tech. Code	GR04 Euro	N° x TPI	D mm	H mm	DIN
A2935PG13,5	(114,55)	PG 13.5 x 18	45	14	40434 B
A2935PG16	(238,02)	PG 16 x 18	55	16	40434 B
A2935PG21	(273,56)	PG 21 x 16	65	18	40434 B

RIGHT-HAND FIXED DIE - BSPT

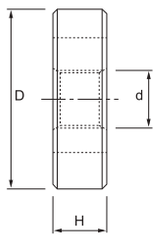
KERFOLG

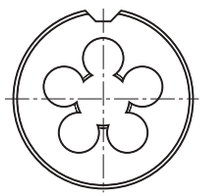
DIN 24230 | BSPT 55°

ITEM: A2940

BSPT thread

Execution Spiral lapped point. Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2940BSPT1/8	(74,45)	1/8" x 28	38	11.5	24230
A2940BSPT1/4	(74,45)	1/4" x 19	38	13	24230
A2940BSPT3/8	(111,96)	3/8" x 19	45	15	24230

Tech. Code	GR04 Euro	d x TPI	D mm	H mm	DIN
A2940BSPT1/2	(111,96)	1/2" x 14	45	19	24230
A2940BSPT3/4	(220,51)	3/4" x 14	65	22	24230
A2940BSPT1	(242,38)	1" x 1	65	20.5	24230

RIGHT-HAND FIXED DIE - NPT

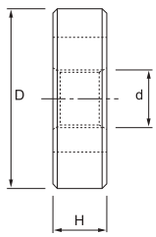
KERFOLG

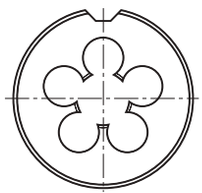
NdF | NPT 60°

ITEM: A2945

Tapered thread NPT 1:16

Execution Spiral lapped point. Backed-off lapped threads
Surface finish Bright
Application General application





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○	○	○	○	○	○				

Tech. Code	GR04 Euro	d x TPI	D mm	H mm
A2945NPT1/8	60,21	1/8" x 27	30	10
A2945NPT1/4	60,21	1/4" x 18	38	15
A2945NPT3/8	90,91	3/8" x 18	45	15.3
A2945NPT1/2	88,21	1/2" x 14	45	20

Tech. Code	GR04 Euro	d x TPI	D mm	H mm
A2945NPT3/4	178,77	3/4" x 14	55	20.2
A2945NPT1	196,65	1" x 11.5	65	25
A2945NPT11/4	(255,20)	1 1/4" x 11.5	75	25.6
A2945NPT11/2	411,03	1 1/2" x 11.5	90	26

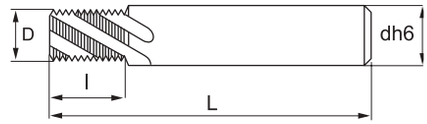
THREAD MILLING CUTTER 2XD - M-MF

KERFOLG ALL T

NdF | HM | WIND + | MF 60° | UNI

ITEM: A3013

ISO thread DIN13 coarse and fine pitch



Material Carbide micro-grain
Helix 10° right
Tolerance on diam. D e8
Surface treatment WIND +
Threading Internal. Possible to produce non precise external thread
Application Threading on materials up to 45HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Tech. Code	GR04 Euro	Pitch mm	M	MF	D mm	d mm	l mm	L mm	Z
A3013M050D04,5	204,15	0.50	-	MF6	4.50	6	12	55	3
A3013M070D03,1	125,56	0.70	M4	-	3.10	6	8	55	3
A3013M075D04,5	125,56	0.75	-	MF6	4.50	6	12	55	3
A3013M080D04	125,56	0.80	M5	-	4.00	6	12	55	3
A3013M100D04,5	125,56	1.00	M6-M7	-	4.50	6	12	55	3
A3013M100D06	150,69	1.00	-	MF8	6.00	6	15	55	3
A3013M100D08	176,85	1.00	-	MF10	8.00	8	20	66	3
A3013M125D06	150,69	1.25	M8-M9	MF10	6.00	6	15	66	3
A3013M125D08	176,85	1.25	-	MF12	8.00	8	20	66	3
A3013M150D08	176,85	1.50	M10-M11	MF12	8.00	8	20	66	3

Tech. Code	GR04 Euro	Pitch mm	M	MF	D mm	d mm	l mm	L mm	Z
A3013M150D10	221,66	1.50	-	MF14	10	10	25	80	4
A3013M150D12	277,28	1.50	-	MF16	12	12	30	82	4
A3013M175D08	277,28	1.75	M12	-	8	8	20	66	3
A3013M200D10	221,66	2.00	M14	-	10	10	25	80	4
A3013M200D12	277,28	2.00	M16	-	12	12	30	82	4
A3013M200D14	327,54	2.00	-	MF18	14	14	35	100	4
A3013M200D16	377,80	2.00	-	MF20	16	16	40	100	5
A3013M250D14	327,54	2.50	M18	-	14	14	35	100	4
A3013M250D16	377,80	2.50	M20	-	16	16	40	100	5

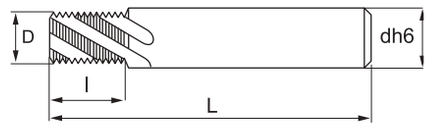
THREAD MILLING CUTTER 2XD - BSP

KERFOLG ALL T

NdF | HM | WIND + | GAS 55° | UNI

ITEM: A3016

G (BSPP) - For cylindrical BSP threads



Material Micro-grain solid carbide
Helix 10° right
Tolerance on diam. D e8
Surface Treatment WIND +
Threading Non precise internal and external
Application Threading on materials up to 45HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Tech. Code	GR04 Euro	TPI	Diameter G (BSPP)	D mm	d mm	l mm	L mm	Z
A3016G28D08	176,85	28	1/8	8	8	20	66	3
A3016G19D10	221,66	19	1/4	10	10	25	80	4
A3016G19D14	327,54	19	3/8	14	14	35	100	4

Tech. Code	GR04 Euro	TPI	Diameter G (BSPP)	D mm	d mm	l mm	L mm	Z
A3016G14D16	377,80	14	1/2	16	16	40	100	5
A3016G14D20	488,01	14	5/8 - 3/4 - 7/8	20	20	40	110	5
A3016G11D20	488,01	11	>1	20	20	40	110	5

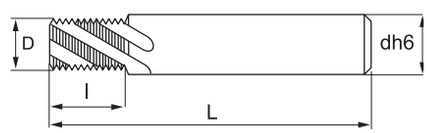
THREAD MILLING CUTTER - NPT

KERFOLG ALL T

NdF | HM | WIND + | NPT 60° | UNI

ITEM: A3021

NPT - For American tapered thread. Taper ratio 1:16



Material Carbide micro-grain
Helix 10° right
Tolerance on diam. D e8
Surface Treatment WIND +
Threading Internal
Application Threading on materials up to 45HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Tech. Code	GR04 Euro	TPI	Diameter NPT	D mm	d mm	l mm	L mm	Z
A3021NP27D05,9	(229,28)	27	1/16	5.90	8	9.88	55	3
A3021NP27D07,6	(229,28)	27	1/8	7.65	8	9.88	55	3
A3021NP18D10,2	(360,29)	18	1/4	10.15	12	14.82	75	4

Tech. Code	GR04 Euro	TPI	Diameter NPT	D mm	d mm	l mm	L mm	Z
A3021NP18D11,2	(360,29)	18	3/8	11.15	12	14.82	75	4
A3021NP14D14,3	(491,31)	14	1/2 - 3/4	14.25	16	19.05	80	4
A3021NP11D19,6	(635,41)	11 - 1/2	1 - 2	19.60	20	23.19	90	5

Indivisible package Suggested retail package - Unit price

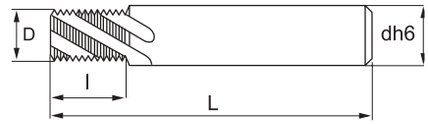
THREAD MILLING CUTTER 2XD - UN

KERFOLG ALL T

NdF | HM | WIND + | UN 60° | UNI

ITEM: A3024

UN - for ANSI B1.1 UN threads



Material	Carbide micro-gran
Helix	10° right
Tolerance on diam. D	e8
Surface Treatment	WIND +
Threading	Internal. Possible to produce non precise external thread
Application	Threading on materials up to 45HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Tech. Code	GR04 Euro	TPI	UNC"	UNF"	D mm	d mm	l mm	L mm	Z
A3024UN28D04,5	(125,56)	28	-	1/4	4.50	6	12	55	3
A3024UN24D05,5	(150,69)	24	-	5/16	5.50	6	15	55	3
A3024UN24D08	(176,85)	24	-	3/8	8.00	8	20	66	3
A3024UN20D04,5	(125,56)	20	1/4	-	4.50	6	12	55	3
A3024UN20D08	(176,85)	20	-	7/16	8.00	8	20	66	3
A3024UN20D10	(221,66)	20	-	1/2	10.00	10	25	80	4
A3024UN18D05,5	(150,69)	18	5/6	-	5.50	6	15	55	3
A3024UN18D10	(221,66)	18	-	5/8	10.00	10	25	80	4
A3024UN18D12	(277,28)	18	-	9/16	12.00	12	30	83	4
A3024UN16D07,5	(176,85)	16	3/8	-	7.50	8	20	66	3

Tech. Code	GR04 Euro	TPI	UNC"	UNF"	D mm	d mm	l mm	L mm	Z
A3024UN16D15,5	(377,80)	16	-	3/4	15.50	16	40	100	5
A3024UN14D08	(176,85)	14	7/16	-	8.00	8	20	66	3
A3024UN14D15,5	(377,80)	14	-	7/8	15.50	16	40	100	5
A3024UN13D10	(221,66)	13	1/2	-	10.00	10	25	80	4
A3024UN12D10	(221,66)	12	9/16	-	10.00	10	25	80	4
A3024UN11D12	(277,28)	11	5/8	-	12.00	12	30	80	4
A3024UN10D15,5	(377,80)	10	3/4	-	15.50	16	40	100	5
A3024UN09D18	(433,42)	9	7/8	-	18.00	18	40	110	5
A3024UN08D20	(488,01)	8	1	-	20.00	20	40	110	5

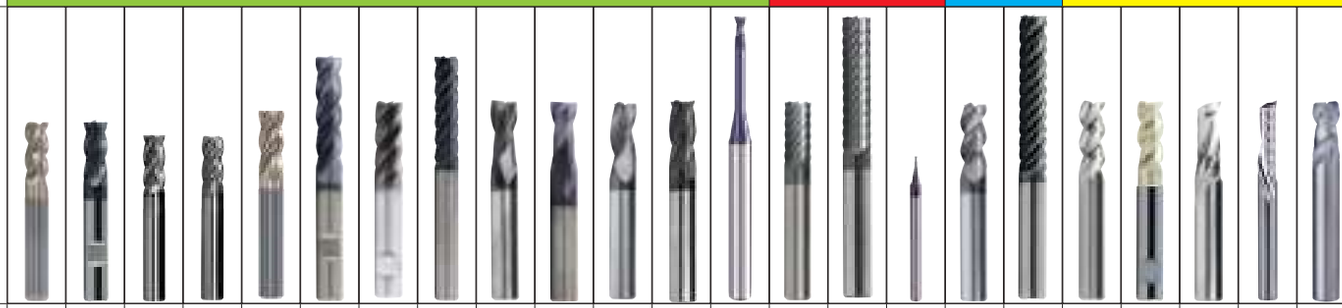
Related products

GLOVES IN CONTINUOUS DYNEEMA® WIRE COATED IN POLYURETHANE

Tech. Code	Size	EU size
K23208	M	8
K23209	L	9
K232010	XL	10

The products are available in chapter K

CHAP A - END MILLS SECTION - APPLICATION INDEX

Material		HM																							
Profile		Finishing																							
Application		UNI													HARD			INOX		ALU					
																									
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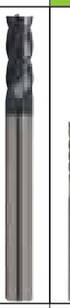
		NEW		NEW	NEW	NEW																			
		KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WIDIA HANITA	KERFOLG	WIDIA HANITA	KERFOLG	WIDIA HANITA	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG
Page. A		104	109	110	110	108	116	116	119	98	99	101	107	130	125	125	129	103	127	123	124	120	121	122
DIN		DIN 6527 L	NdF	NdF	NdF	DIN 6527 L	NdF	DIN 6528	NdF	DIN 6528	NdF	NdF	NdF	NdF	DIN 6527	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF
Shank		HA HB	HB	HA HB	HA HB	HA HB	HB	HB	HA	HA HB	HA	HA HB	HA HB	HA	HA	HA	HA	HA HB	HA	HA HB	HA HB	HA	HA	HA HB
Coating		PLATEX	AlTiN	WIND X	WIND X	PLATEX	TiAlN	PRO 100	AlTiN	TiAlN	TiAlN	TiAlN	TiAlN	WIND +	WIND	WIND	WIND X	TiAlN	TiAlCN	—	WIND Z	—	—	—
Length																									
Type		VARI	VARI	VARI	VARI	VARI	VARI	VARI	VARI	STD	STD	STD	STD	MINI	SF	SF	MINI	STD	SF	VARI	VARI	STD	STD	STD
P	< 500 N/mm²	●	●	●	●	●	●	●	●	●	●	●	●	●				○	●					
P	< 850 N/mm²	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	●					
P	< 1200 N/mm²	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●					
M	< 600 N/mm²	●	●	●	●	●	●	●	●	●	●	●	●	●				●	●					
M	< 850 N/mm²	●	●			●	●	●	●	●	●	●	●	●				●	●					
M	DUPLEX	●	○			●	○	○	○	○	○	○	○	○				●	●					
K	< 240 HB	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○							
K	< 300 HB	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○							
N	< 10% Si		○																	●	●	●	●	●
N	> 10% Si		○																	●	●	●	●	●
N	Bass Copper		●																					
N	Bronze >700 N/mm²		●				○	○	○	○		○	○	○					○	○	○	○	○	○	○
S	Ti6Al4V	●	●			●											○	●	○					
S	HTA	●	●			○	●	●	●	●		●	●	●	●	●	●		●					
H	< 45 HRC	○					○	○	○	○		○	○	●	●	●	●		○					
H	< 60 HRC														●	●	●							
C	Carbon Fiber																							

● RECOMMENDED FOR... ○ USABLE FOR...

CHAP A - END MILLS SECTION - APPLICATION INDEX

	Material	HM																							MD
	Profile	Finishing											ROUGHING				TOROIDAL					TROCO	
	Application	ALU	-								UNI	CF	UNI		INOX	ALU	UNI								
																								
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											NEW			NEW				NEW					NEW
		KERFOLG	WRK	KERFOLG	WRK	KERFOLG	WRK	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG
	Page. A	122	97	100	102	105	106	113	114	115	126	128	132	131	133	134	135	111	137	138	140	117	118
	DIN	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	DIN 844 A	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF
	Shank	HA HB	HA HB	HB	HA HB	HA HB	HA HB	HA HB	HA HB	HA HB	HA HB	HA	HA HB	HA HB	HA HB	HA HB	HB	HA HB	HA HB	HA HB	HA	HB	HB
	Coating	—	WIND	WIND	WIND	TiAlN	WIND	WIND	TiAlN	WIND	PLATEX	DLC	WIND	PLATEX	WIND +	—	—	WIND X	WIND	WIND	WIND	HT 300	TiAlN
	Length																						
	Type	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	VARI	STD	STD	STD	STD	STD	MINI	VARI	VARI
P	< 500 N/mm²		●	●	●	●	●	●	●	●	●		●	●	●			●	●	●	●	●	
P	< 850 N/mm²		●	●	●	●	●	●	●	●	●		●	●	●			●	●	●	●	●	●
P	< 1200 N/mm²		●	●	●	●	●	●	●	●	●		●	●	●			●	●	●	●	●	
M	< 600 N/mm²		●	●	●	●	●	●	●	●	●		●	●	●			●	●	●	●	●	●
M	< 850 N/mm²		○	○	○		○	○		○	●		●	●	●				●	●	●	●	●
M	DUPLEX										●		○	●	●				○	○	○	●	●
K	< 240 HB		●	●	●	●	●	●	●	●	●		●	●				●	●	●	●	●	●
K	< 300 HB		●	●	●	●	●	●	●	●	●		●	●				●	●	●	●	●	●
N	< 10% Si	●														●	●						
N	> 10% Si	●														●	●						
N	Brass Copper																						
N	Bronze >700 N/mm²	○											○		○	○	○		○	○	○	●	
S	Ti6Al4V										●			●	○							○	●
S	HTA		●	●	●	●	●	●	●	●	●		●	●	●				●	●	●		●
H	< 45 HRC		○	○	○	○	○	○	○	○	○		○	○	○				●	●	●		
H	< 60 HRC																						
C	Carbon Fiber											●											

● RECOMMENDED FOR... ○ USABLE FOR...

CHAP A - END MILLS SECTION - APPLICATION INDEX

Material		HM																						
Profile		TOROIDAL			HI-FEED		BALL-NOSE												SERVICE					
Application		HARD	UNI	ALU	UNI	HARD	UNI							HARD		ALU		-						
		A4118	A4U11	A4616	A4140	A4138	A4340	A4318	A4350	A4351	A4352	A4430	A4360	A4330	A4427	A4620	A4622	A4315	A4715	A4720	A4723	A4724	A4725	
			NEW																					
		KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WIDIA HANITA	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG	KERFOLG	
Page. A		112	136	139	141	142	148	144	145	146	147	153	154	151	152	149	150	143	157	155	156	156	158	
DIN		NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	NdF	
Shank		HA HB	HA HB	HA HB	HA	HA	HA	HA HB	HA	HA	HA	HA	HA	HA	HA	HA HB	HA	HA HB	HA HB	HA HB	HA HB	HA HB	HA	
Coating		TiAl CrSiN	PLATEX	—	TiCN	WIND X	AlTiN	TiAlN	HT 300	HT 300	HT 300	WIND +	HT 300	WIND X	WIND X	—	WIND Z	WIND	WIND	WIND	WIND	WIND	WIND +	
Length																								
Type		VARI	VARI	VARI	STD	STD	VARI	STD	STD	STD	STD	MINI	MINI	STD	MINI	VARI	STD	STD	-	-	-	-	-	
P	< 500 N/mm²		●		●		●	●	●	●	●	●						●	●	●	●	●	●	
P	< 850 N/mm²	○	●		●	○	●	●	●	●	●	●	●	○	○			●	●	●	●	●	●	
P	< 1200 N/mm²	●	●		●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	
M	< 600 N/mm²		●		●		●	●	●	●	●	●						●					●	
M	< 850 N/mm²		●		●		●	●	●	●	●	●	●		○			○					○	
M	DUPLEX		●		○		○	○	○	○	○	○	●		○									
K	< 240 HB		●		●	○	●	●	●	●	●	●		○	○			●	●	●	●	●	●	
K	< 300 HB		●		●	○	●	●	●	●	●	●		○	○			●	●	●	●	●	●	
N	< 10% Si			●												●	●							
N	> 10% Si			●												●	●							
N	Brass Copper																							
N	Bronze >700 N/mm²			○	○		○	○	○	○	○	○			○	○	○		●					
S	Ti6Al4V		●										●		○				●					
S	HTA	●	●		●	●	●	●	●	●	●	●	●	●	●			●	●	○	●	●	●	
H	< 45 HRC	●	○		●	●	○	●	●	●	●	●	●	●	●			○	○	○	○	○	○	
H	< 60 HRC	●			○	●							○	●	●									
C	Carbon Fiber																							

● RECOMMENDED FOR... ○ USABLE FOR...

CHAP A - END MILLS SECTION - APPLICATION INDEX

Material		HM		HSS																			
Profile		SERVICE		Finishing								ROUGHING		BALL-NOSE		SERVICE							
Application		-																					
		A4810	A4815	A5010	A5015	A5020	A5025	A5110	A5115	A5210	A5215	A5120	A5310	A5315	A5040	A5045	A5410	A5415	A5420	A5425	A5455	A5460	A5465
		WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK	WRK
Page. A		159	159	160	160	161	163	161	163	162	164	166	167	167	165	165	168	169	170	171	172	173	174
DIN		DIN 1837 A	DIN 1838 B	DIN 327 B	DIN 327 B	DIN 844 A	DIN 844 A	DIN 844 A	DIN 844 A	DIN 844 A	DIN 844 A	DIN 844	DIN 844 A	DIN 844 A	DIN 327 B	DIN 327 B	DIN 850 B	DIN 850 AB	DIN 1833 A	DIN 1833 A	NdF	DIN 1837 A	DIN 1838 B
Shank		—	—	HB	HB	HB	HB	HB	HB	HB	HB	HA HB	HB	HB	HB	HB	HA HB	HB	HA	HA	—	—	—
Coating		—	—	—	WIND	—	WIND	—	WIND	—	WIND	—	—	WIND	—	WIND	—	—	—	—	—	—	—
Length		—	—														—	—	—	—	—	—	—
Type		-	-	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	-	-	-	-	-	-	-
P	< 500 N/mm²	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
P	< 850 N/mm²	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
P	< 1200 N/mm²	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
M	< 600 N/mm²	●	●	●	●	○	●	●	●	●	●	○	●	●	○	○	○	○	○	○	○	○	○
M	< 850 N/mm²	●	●	○	○		○	○	○	○	○		○	○								○	○
M	DUPLEX	○	○										○	○									
K	< 240 HB	○	○			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
K	< 300 HB	○	○			●	●	○	○	○	○	○	○	○	●	●	○	○	○	○	○	○	○
N	< 10% Si	○	○	○	○																	○	●
N	> 10% Si	○	○	○	○																	○	●
N	Brass Copper	○	○																			○	○
N	Bronze >700 N/mm²	●	●																				
S	Ti6Al4V																						
S	HTA	○	○														○	○	○	○	○		
H	< 45 HRC																						
H	< 60 HRC																						
C	Carbon Fiber																						

● RECOMMENDED FOR... ○ USABLE FOR...

Link partner

ALPA metrology

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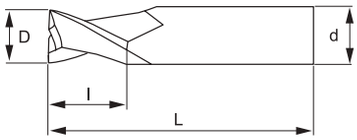
END MILLS Z2

WRK

NdF | HM | Z 2 | WIND | HA HB

ITEM: A4015

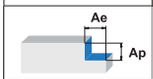
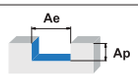


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D ≤ 1mm - ~0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical / Weldon
Helix	35° right-hand
Surface treatment	WIND
Application	Slotting on materials up to 55 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

On request available with Weldon shank
Cylindrical shank (A4015....) Weldon shank (A4015...W)

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A40151	19,36	1.00	50	3	4	2
A40151,5	19,36	1.50	50	4	4	2
A40152	19,36	2.00	50	6	4	2
A40152,5	19,36	2.50	50	8	4	2
A40153	19,36	3.00	50	8	4	2
A40153,5	19,36	3.50	50	10	4	2
A40154	19,36	4.00	50	11	4	2
A40154,5	26,68	4.50	50	13	6	2
A40155	26,68	5.00	50	13	6	2
A40155,5	26,68	5.50	50	13	6	2
A40156	22,04	6.00	50	16	6	2
A40156,5	42,33	6.50	60	16	8	2
A40157	42,33	7.00	60	16	8	2
A40158	33,58	8.00	60	20	8	2
A40158,5	47,79	8.50	75	20	10	2
A40159	47,79	9.00	75	20	10	2
A40159,5	47,79	9.50	75	25	10	2
A401510	47,79	10.00	75	25	10	2
A401510,5	79,41	10.50	75	30	12	2
A401511	79,41	11.00	75	30	12	2
A401512	79,41	12.00	75	30	12	2
A401516	189,93	16,00	100	40	16	2
A401518	189,93	18.00	100	45	20	2
A401520	237,11	20.00	100	45	20	2

		Side milling		Slotting	RANGE												
					A4015												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	1.25 x D	0.1 x D	0.5 x D	110	130	fz/mm	0.006	0.009	0.012	0.015	0.020	0.025	0.032	0.040	0.052	0.080
	< 850 N/mm²	1.25 x D	0.1 x D	0.5 x D	90	120	fz/mm	0.006	0.009	0.011	0.016	0.018	0.023	0.028	0.035	0.048	0.070
	< 1200 N/mm²	1.25 x D	0.1 x D	0.3 x D	70	100	fz/mm	0.006	0.008	0.010	0.014	0.016	0.020	0.026	0.032	0.043	0.065
STAINLESS STEEL	< 600 N/mm²	1.25 x D	0.1 x D	0.5 x D	70	95	fz/mm	0.006	0.009	0.011	0.015	0.018	0.023	0.028	0.035	0.045	0.070
	< 800 N/mm²	1.25 x D	0.1 x D	0.3 x D	50	80	fz/mm	0.006	0.008	0.010	0.013	0.016	0.019	0.025	0.030	0.040	0.065
CAST IRON	< 240 HB	1.25 x D	0.1 x D	0.5 x D	80	120	fz/mm	0.007	0.011	0.013	0.016	0.020	0.028	0.035	0.045	0.055	0.075
	< 300 HB	1.25 x D	0.1 x D	0.5 x D	70	100	fz/mm	0.006	0.010	0.012	0.015	0.018	0.025	0.030	0.040	0.050	0.065

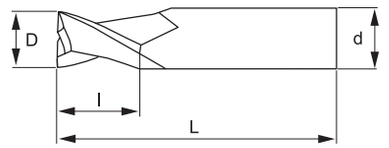
Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 1.25)

END MILLS FOR SLOTTING Z2

KERFOLG

DIN 6528 | HM | Z 2 | TiAlN | HA HB | UNI

ITEM: A4012

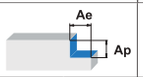
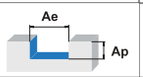


Material	Micro-grain carbide
Standard	DIN 6528
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	Right-hand 30°
Surface treatment	TiAlN
Application	Slotting on materials up to 50 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

On request available with Weldon shank.
Cylindrical shank (A4012....) Weldon shank (A4012...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	DIN	Z
A401202	21,59	2	38	6	3	6528	2
A401203	19,42	3	38	7	3	6528	2
A401204	21,84	4	50	8	4	6528	2
A401205	18,14	5	50	10	5	6528	2
A401206	23,70	6	50	10	6	6528	2
A401208	31,44	8	63	16	8	6528	2
A401210	46,41	10	72	19	10	6528	2
A401212	66,40	12	83	22	12	6528	2
A401214	93,50	14	83	22	16	6528	2
A401216	109,54	16	92	26	16	6528	2
A401218	142,95	18	92	26	18	6528	2
A401220	172,35	20	104	32	20	6528	2

		Side milling		Slotting	RANGE												
					A4012												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	1 x D	0.25 x D	0.5 x D	100	140	fz/mm	0.015	0.023	0.032	0.041	0.050	0.070	0.086	0.099	0.123	0.149
	< 850 N/mm²	1 x D	0.25 x D	0.5 x D	90	125	fz/mm	0.015	0.023	0.032	0.041	0.050	0.070	0.086	0.099	0.123	0.149
	< 1200 N/mm²	1 x D	0.25 x D	0.5 x D	80	115	fz/mm	0.012	0.019	0.025	0.032	0.040	0.056	0.068	0.079	0.099	0.120
STAINLESS STEEL	< 600 N/mm²	1 x D	0.25 x D	0.5 x D	65	90	fz/mm	0.010	0.015	0.021	0.026	0.032	0.046	0.056	0.064	0.080	0.097
	< 800 N/mm²	1 x D	0.25 x D	0.5 x D	60	80	fz/mm	0.009	0.014	0.020	0.025	0.031	0.043	0.053	0.060	0.077	0.093
CAST IRON	< 240 HB	1 x D	0.25 x D	0.5 x D	80	115	fz/mm	0.013	0.021	0.029	0.037	0.045	0.063	0.077	0.089	0.110	0.134
	< 300 HB	1 x D	0.25 x D	0.5 x D	70	100	fz/mm	0.013	0.020	0.027	0.034	0.042	0.059	0.073	0.085	0.105	0.127
SUPER ALLOY	TI6AI4V	1 x D	0.25 x D	0.5 x D	60	85	fz/mm	0.011	0.017	0.023	0.030	0.036	0.052	0.063	0.073	0.091	0.110
	< 45 HRC	1 x D	0.25 x D	0.5 x D	25	35	fz/mm	0.008	0.014	0.018	0.023	0.029	0.041	0.050	0.057	0.071	0.086

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

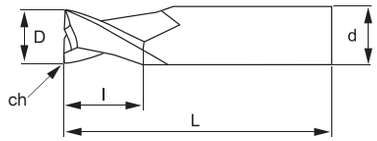
Indivisible package Suggested retail package - Unit price

END MILLS FOR SLOTTING Z2 CENTER CUTTING

WIDIA HANITA

NdF | HM | Z 2 | TiAlN | HA | UNI

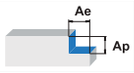
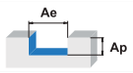
ITEM: A4005



Material	MIcro-grain Integral hard metal
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical
Helix	Right-hand 30°
Surface treatment	TiAlN
Application	Slotting on materials up to 50 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●								

Tech. Code	GR11 Euro	D mm	L mm	l mm	d mm	ch 45° mm	Z
A400501	15,10	1,00	38	4	3	-	2
A400501,5	16,16	1,50	38	4	3	-	2
A400502	15,10	2,00	38	6,3	3	-	2
A400502,5	15,10	2,50	38	6,3	3	-	2
A400503	15,10	3,00	38	9,5	3	-	2
A400504	20,00	4,00	50	12	4	0,10	2
A400505	21,54	5,00	50	14	5	0,10	2
A400506	22,86	6,00	50	16	6	0,10	2
A400507	34,75	7,00	63	20	7	0,10	2
A400508	27,86	8,00	63	20	8	0,20	2
A400509	45,64	9,00	63	20	9	0,20	2
A400510	40,69	10,00	72	22	10	0,20	2
A400511	48,46	11,00	76	25	11	0,30	2
A400512	53,50	12,00	76	25	12	0,30	2
A400514	75,89	14,00	83	32	14	0,30	2
A400516	95,30	16,00	89	32	16	0,30	2
A400518	129,50	18,00	100	38	18	0,30	2
A400520	140,49	20,00	104	38	20	0,30	2

		Side milling		Slotting	RANGE											
					A4005											
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 14	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1 x D	0,1 x D	0.5 x D	150	200	fz/mm	0,014	0,021	0,028	0,044	0,060	0,072	0,083	0,092	0,101	0,114
	<850 N/mm²	1 x D	0,1 x D	0.5 x D	120	160	fz/mm	0,014	0,021	0,028	0,044	0,060	0,072	0,083	0,092	0,101	0,114
	<1200 N/mm²	1 x D	0,1 x D	0.5 x D	90	150	fz/mm	0,014	0,021	0,028	0,044	0,060	0,072	0,083	0,092	0,101	0,114
STAINLESS STEEL	<600 N/mm²	1 x D	0,1 x D	0.5 x D	90	115	fz/mm	0,011	0,017	0,023	0,036	0,050	0,061	0,070	0,079	0,098	0,101
	<800 N/mm²	1 x D	0,1 x D	0.5 x D	60	80	fz/mm	0,010	0,016	0,021	0,033	0,045	0,054	0,062	0,070	0,077	0,088
CAST IRON	<240 HB	1 x D	0,1 x D	0.5 x D	120	150	fz/mm	0,011	0,017	0,023	0,036	0,050	0,061	0,070	0,079	0,087	0,101
	<300 HB	1 x D	0,1 x D	0.5 x D	110	140	fz/mm	0,009	0,014	0,019	0,029	0,040	0,048	0,056	0,063	0,070	0,081

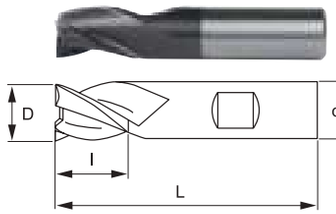
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

END MILLS Z3

KERFOLG

NdF | HM | Z 3 | | WIND | HB

ITEM: A4032



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	e8
Shank	Weldon
Helix	30° right-hand
Surface treatment	WIND
Application	Slotting and side milling on materials up to 50 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A40321	18,64	1,00	38	2	3	3
A40321,5	18,64	1,50	38	2	3	3
A40322	22,37	2.00	38	4	6	3
A40323	22,37	3.00	38	5	6	3
A40323,5	20,69	3,50	38	6	6	3
A40324	22,37	4.00	38	7	6	3
A40324,5	20,69	4,50	38	8	6	3
A40325	22,86	5.00	38	8	6	3
A40325,5	20,69	5.50	38	8	6	3
A40325,75	23,06	5,75	38	8	6	3
A40326	22,86	6.00	38	8	6	3
A40327	23,46	7.00	42	10	8	3
A40327,75	28,04	7,75	42	10	8	3
A40328	32,48	8.00	43	11	8	3
A40328,7	(41,50)	8,70	48	11	10	3
A40329	32,87	9.00	48	11	10	3
A40329,7	(41,50)	9,70	48	11	10	3
A403210	43,82	10.00	50	13	10	3
A403212	56,80	12.00	55	15	12	3
A403214	62,78	14,00	58	15	14	3
A403216	80,93	16,00	62	18	16	3
A403220	130,88	20,00	75	22	20	3

		Side milling		Slotting	RANGE												
		Ae / Ap		Ae / Ap	A4032												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	0.1 x D	0.5 x D	0.5 x D	90	120	fz/mm	0.006	0.009	0.012	0.015	0.020	0.025	0.032	0.040	0,054	0,066
	<850 N/mm²	0.1 x D	0.5 x D	0.5 x D	80	105	fz/mm	0.006	0.009	0.011	0.016	0.018	0.023	0.028	0.035	0,045	0,057
	<1200 N/mm²	0.1 x D	0.5 x D	0.3 x D	65	90	fz/mm	0.006	0.008	0.010	0.014	0.016	0.020	0.026	0.032	0,040	0,050
STAINLESS STEEL	<600 N/mm²	0.1 x D	0.5 x D	0.5 x D	45	60	fz/mm	0.006	0.009	0.011	0.015	0.018	0.023	0.028	0.035	0,045	0,057
	<800 N/mm²	0.1 x D	0.5 x D	0.3 x D	40	50	fz/mm	0.006	0.008	0.010	0.013	0.016	0.019	0.025	0.030	0,038	0,045
CAST IRON	<240 HB	0.1 x D	0.5 x D	0.5 x D	110	130	fz/mm	0.007	0.011	0.013	0.016	0.020	0.028	0.035	0.045	0,050	0,057
	<300 HB	0.1 x D	0.5 x D	0.5 x D	90	110	fz/mm	0.006	0.010	0.012	0.015	0.018	0.025	0.030	0.040	0,045	0,050

Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 1.25)

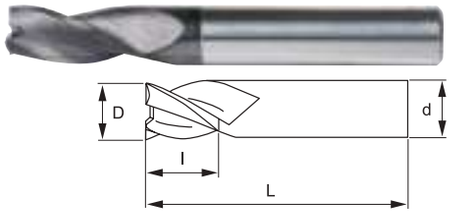
Indivisible package Suggested retail package - Unit price

END MILLS FOR SLOTTING Z3

KERFOLG

NdF | HM | Z 3 | TiAlN | HA HB | UNI

ITEM: A4034



Material	Micro-grain carbide
Standard	factory standard
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	Right-hand 30°
Surface treatment	TiAlN
Application	Slots and side milling on materials up to 50 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

On request available with Weldon shank.
Cylindrical shank (A4034....) Weldon shank (A4034...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A403402	21,85	2	38	6	3	3
A403403	21,85	3	38	7	3	3
A403404	21,38	4	50	8	4	3
A403405	21,32	5	50	10	5	3
A403406	22,58	6	57	10	6	3
A403408	31,31	8	63	16	8	3
A403410	44,99	10	72	19	10	3
A403412	65,12	12	83	22	12	3
A403414	83,40	14	83	22	14	3
A403416	105,07	16	92	26	16	3
A403418	131,60	18	92	26	18	3
A403420	174,42	20	104	32	20	3

		Side milling		Slotting	RANGE												
		Ae / Ap		Ae / Ap	A4034												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	1 x D	0.25 x D	0.5 x D	100	140	fz/mm	0.015	0.023	0.032	0.041	0.050	0.070	0.086	0.099	0.123	0.149
	< 850 N/mm²	1 x D	0.25 x D	0.5 x D	90	125	fz/mm	0.015	0.023	0.032	0.041	0.050	0.070	0.086	0.099	0.123	0.149
	< 1200 N/mm²	1 x D	0.25 x D	0.5 x D	80	115	fz/mm	0.012	0.019	0.025	0.032	0.040	0.056	0.068	0.079	0.099	0.120
STAINLESS STEEL	< 600 N/mm²	1 x D	0.25 x D	0.5 x D	65	90	fz/mm	0.010	0.015	0.021	0.026	0.032	0.046	0.056	0.064	0.080	0.097
	< 800 N/mm²	1 x D	0.25 x D	0.5 x D	60	80	fz/mm	0.009	0.014	0.020	0.025	0.031	0.043	0.053	0.060	0.077	0.093
CAST IRON	< 240 HB	1 x D	0.25 x D	0.5 x D	80	115	fz/mm	0.013	0.021	0.029	0.037	0.045	0.063	0.077	0.089	0.110	0.134
	< 300 HB	1 x D	0.25 x D	0.5 x D	70	100	fz/mm	0.013	0.020	0.027	0.034	0.042	0.059	0.073	0.085	0.105	0.127
SUPER ALLOY	Ti6Al4V	1 x D	0.25 x D	0.5 x D	60	85	fz/mm	0.011	0.017	0.023	0.030	0.036	0.052	0.063	0.073	0.091	0.110
	< 45 HRC	1 x D	0.25 x D	0.5 x D	25	35	fz/mm	0.008	0.014	0.018	0.023	0.029	0.041	0.050	0.057	0.071	0.086

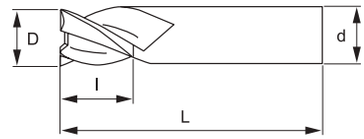
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

END MILLS Z3

WRK

NdF | HM | Z 3 | WIND | HA HB

ITEM: A4035



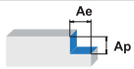
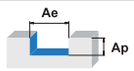
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~ 0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical / Weldon
Helix	45° right-hand
Surface treatment	WIND
Application	Slotting and side milling on materials up to 55 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

On request available with Weldon shank
Cylindrical shank (A4035....) Weldon shank (A4035...W)

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Pieces	Z
A40352	17,51	2	50	6	4	1	3
A40353	16,89	3	50	8	4	1	3
A40354	17,00	4	50	11	4	1	3
A40355	21,94	5	50	13	6	1	3
A40356	23,07	6	50	16	6	1	3
A40358	39,96	8	60	20	8	1	3
A403510	62,11	10	75	25	10	1	3
A403512	67,47	12	75	30	12	1	3
A403516	158,21	16	100	40	16	1	3
A403520	210,12	20	100	45	20	1	3

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Pieces	Z
A4035SET5	213,00	5	50	13	6	10	3
A4035SET6	222,79	6	50	16	6	10	3
A4035SET8	196,63	8	60	20	8	5	3
A4035SET10	305,81	10	75	25	10	5	3
A4035SET12	327,75	12	75	30	12	5	3

		Side milling		Slotting	RANGE												
					A4035												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1.5 x D	0.15 x D	0.25 x D	90	115	fz/mm	0.012	0.015	0.025	0.032	0.040	0.050	0.065	0.075	0.095	0.110
	<850 N/mm²	1.5 x D	0.15 x D	0.25 x D	80	110	fz/mm	0.012	0.015	0.025	0.032	0.040	0.048	0.058	0.065	0.080	0.095
	<1200 N/mm²	1.5 x D	0.15 x D	-	70	95	fz/mm	0.010	0.012	0.022	0.025	0.036	0.042	0.052	0.058	0.075	0.085
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.15 x D	0.25 x D	70	85	fz/mm	0.009	0.009	0.022	0.025	0.032	0.040	0.046	0.050	0.075	0.080
	<800 N/mm²	1.5 x D	0.15 x D	-	55	70	fz/mm	0.008	0.008	0.020	0.022	0.028	0.035	0.042	0.045	0.055	0.065
CAST IRON	<240 HB	1.5 x D	0.15 x D	0.25 x D	80	105	fz/mm	0.012	0.015	0.025	0.032	0.040	0.050	0.065	0.075	0.110	0.130
	<300 HB	1.5 x D	0.15 x D	0.25 x D	70	90	fz/mm	0.012	0.015	0.025	0.032	0.040	0.050	0.065	0.075	0.100	0.115
HARDENED	<45 HRC	0.5 x D	0.05 x D	-	35	45	fz/mm	0.008	0.008	0.020	0.022	0.028	0.035	0.042	0.045	0.055	0.065

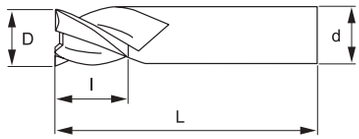
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

Indivisible package Suggested retail package - Unit price

END MILLS Z3

KERFOLG

NdF | HM | Z 3 | TiAlN | HA HB | Inox



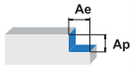
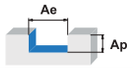
ITEM: A4036

Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	45° right-hand
Surface treatment	TiAlN
Application	Slotting and side milling extremely finished on materials such as stainless steel and titanium alloys.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	○	○	●	●	●							●			

On request available with Weldon shank
Cylindrical shank (A4036....) Weldon shank (A4036...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A40363	27,19	3	38	8	3	3
A40364	29,77	4	50	11	4	3
A40365	34,20	5	50	13	5	3
A40366	39,86	6	57	13	6	3
A40368	54,59	8	63	19	8	3
A403610	78,69	10	72	22	10	3
A403612	91,67	12	83	26	12	3
A403616	168,82	16	92	32	16	3
A403620	272,64	20	104	38	20	3

		Side milling		Slotting	RANGE										
					A4036										
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
STAINLESS STEEL	<600 N/mm²	1 x D	0.25 x D	0.5 x D	75	90	fz/mm	0.013	0.016	0.022	0.026	0.031	0.037	0.045	0.065	0.078
	<800 N/mm²	1 x D	0.25 x D	0.5 x D	60	80	fz/mm	0.012	0.015	0.021	0.025	0.035	0.043	0.050	0.061	0.075
SUPER ALLOY	TI6Al4V	1 x D	0.25 x D	0.5 x D	45	65	fz/mm	0.012	0.014	0.020	0.023	0.033	0.041	0.047	0.059	0.070

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

END MILLS WITH VARIABLE PITCH Z3

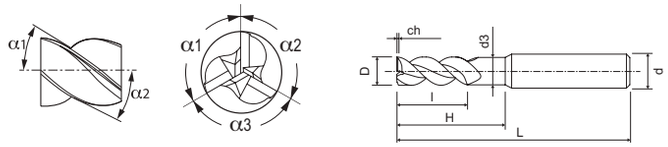
KERFOLG

DIN 6535 | HM | Z 3 | PLATEX | HA HB | UNI

NEW

ITEM: A4U39

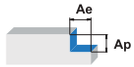
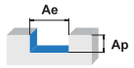
Material	Micro-grain carbide
Standard	DIN 6535
Tolerance	D=f8 / d=h5
Shank	Cylindrical / Weldon
Helix	Right hand variable angle Varialble pitch not equidistant
Surface treatment	PLATEX
Application	Slotting and side milling on materials up to 55 HRC. Sharp with reinforcing chamfer particularly suitable for stainless steel.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●					●	●	○	

On request available with Weldon shank.
Cylindrical shank (A4U39....) Weldon shank (A4U39...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	ch mm	Z
A4U3902	43,53	2	57	5	10	6	1,92	0,1	3
A4U3903	43,53	3	57	8	15	6	2,9	0,1	3
A4U3904	43,53	4	57	11	16	6	3,9	0,1	3
A4U3905	43,53	5	57	13	19	6	4,9	0,1	3
A4U3906	45,77	6	57	13	19	6	5,9	0,1	3
A4U3907	52,39	7	63	19	25	8	6,8	0,2	3
A4U3908	52,39	8	63	19	25	8	7,8	0,2	3
A4U3910	86,63	10	72	22	30	10	9,7	0,2	3
A4U3912	120,78	12	83	26	36	12	11,7	0,2	3
A4U3914	159,50	14	83	26	36	14	13,7	0,2	3
A4U3916	241,43	16	92	32	42	16	15,5	0,2	3

		Side milling		Slotting	RANGE												
					A4U39												
Material	Caratteristica	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 7-8	D/mm 10	D/mm 12	D/mm 14	D/mm 16
CARBON STEEL	<500 N/mm²	1,5 x D	0,5 x D	1,0 x D	180	200	fz/mm	0,011	0,014	0,019	0,025	0,030	0,040	0,050	0,060	0,070	0,075
	<850 N/mm²	1,5 x D	0,5 x D	1,0 x D	150	170	fz/mm	0,011	0,014	0,019	0,025	0,030	0,040	0,050	0,060	0,070	0,075
	<1200 N/mm²	1,5 x D	0,5 x D	1,0 x D	110	150	fz/mm	0,011	0,014	0,019	0,025	0,030	0,040	0,050	0,060	0,070	0,075
STAINLESS STEEL	<600 N/mm²	1,5 x D	0,5 x D	1,0 x D	85	140	fz/mm	0,007	0,009	0,012	0,016	0,019	0,026	0,033	0,040	0,047	0,051
	<800 N/mm²	1,5 x D	0,5 x D	1,0 x D	65	105	fz/mm	0,007	0,009	0,012	0,016	0,019	0,026	0,033	0,040	0,047	0,051
	Duplex	1,5 x D	0,25 x D	1,0 x D	55	90	fz/mm	0,007	0,009	0,012	0,016	0,019	0,026	0,033	0,040	0,047	0,051
CAST IRON	<240 HB	0,5 x D	0,5 x D	1,0 x D	160	200	fz/mm	0,016	0,019	0,024	0,030	0,035	0,046	0,057	0,058	0,081	0,087
	<300 HB	0,5 x D	0,5 x D	1,0 x D	125	160	fz/mm	0,016	0,019	0,024	0,030	0,035	0,046	0,057	0,058	0,081	0,087
SUPER ALLOY	Ti6Al4V	1 x D	0,25 x D	0,5 x D	35	60	fz/mm	0,007	0,009	0,012	0,016	0,019	0,026	0,033	0,040	0,047	0,051
	HTA	1 x D	0,25 x D	0,5 x D	25	35	fz/mm	0,006	0,008	0,010	0,013	0,015	0,020	0,025	0,030	0,035	0,038

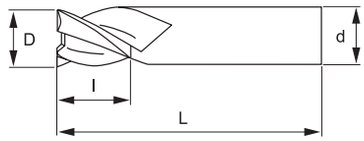
Indivisible package Suggested retail package - Unit price

END MILLS LONG SERIES Z3

KERFOLG

NdF | HM | Z 3 | TiAlN | HA HB

ITEM: A4038

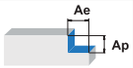
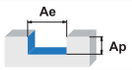


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	35° right
Surface treatment	TiAlN
Application	Side milling on materials up to 50 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●			●	●						●	○	

On request available with Weldon shank.
Cylindrical shank (A4038....) Weldon shank (A4038...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A403804060	37,80	4	60	20	4	3
A403805060	42,84	5	60	20	5	3
A403806065	53,76	6	65	24	6	3
A403806080	59,16	6	80	40	6	3
A403808080	67,80	8	80	32	8	3
A403808100	79,20	8	100	42	8	3
A403810080	86,40	10	80	32	10	3
A403810100	103,92	10	100	45	10	3
A403812100	129,24	12	100	50	12	3
A403812150	150,20	12	150	75	12	3
A403816120	(233,50)	16	120	60	16	3
A403816150	(244,42)	16	150	75	16	3
A403820130	(356,40)	20	130	60	20	3
A403820150	(366,80)	20	150	75	20	3

		Side milling		Slotting	RANGE									
					A4038									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	2.5 x D	0.15 x D	-	90	130	fz/mm	0.015	0.020	0.025	0.035	0.045	0.056	0.080	0.100
	<850 N/mm²	2.5 x D	0.15 x D	-	80	120	fz/mm	0.015	0.020	0.025	0.035	0.045	0.056	0.080	0.100
	<1200 N/mm²	2.5 x D	0.15 x D	-	80	110	fz/mm	0.010	0.012	0.015	0.021	0.027	0.033	0.045	0.060
STAINLESS STEEL	<600 N/mm²	2.5 x D	0.15 x D	-	70	90	fz/mm	0.010	0.012	0.015	0.021	0.027	0.033	0.045	0.060
CAST IRON	<240 HB	2.5 x D	0.15 x D	-	70	110	fz/mm	0.015	0.020	0.025	0.035	0.045	0.056	0.080	0.100
HARDENED	<45 HRC	2.5 x D	0.10 x D	-	70	100	fz/mm	0.010	0.012	0.015	0.021	0.027	0.033	0.045	0.060

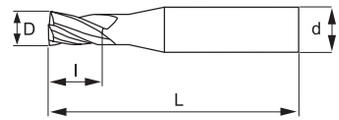
Recommended "fz" values for side milling.

END MILLS Z4

WRK

NdF | HM | Z4 | WIND | HA HB

ITEM: A4045



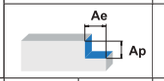
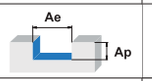
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D ≤ 1mm - ~ 0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical / Weldon
Helix	35° right-hand
Surface treatment	WIND
Application	Side milling on materials up to 55 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

On request available with Weldon shank
Cylindrical shank (A4045....) Weldon shank (A4045...W)

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Pieces	Z
A40451	18,95	1	50	3	4	1	4
A40451,5	18,95	1.5	50	4	4	1	4
A40452	18,95	2	50	6	4	1	4
A40452,5	18,95	2.5	50	8	4	1	4
A40453	18,95	3	50	8	4	1	4
A40453,5	18,95	3.5	50	10	4	1	4
A40454	18,95	4	50	11	4	1	4
A40454,5	26,06	4.5	50	13	6	1	4
A40455	26,06	5	50	13	6	1	4
A40455,5	26,06	5.5	50	13	6	1	4
A40456	26,06	6	50	16	6	1	4
A40456,5	41,30	6.5	60	16	8	1	4
A40457	41,30	7	60	16	8	1	4
A40458	41,30	8	60	20	8	1	4
A40458,5	41,30	8.5	75	20	10	1	4
A40459	46,66	9	75	20	10	1	4
A40459,5	46,66	9.5	75	25	10	1	4
A404510	46,66	10	75	25	10	1	4
A404510,5	77,46	10.5	75	30	12	1	4
A404511	77,46	11	75	30	12	1	4
A404512	77,46	12	75	30	12	1	4
A404516	185,30	16,00	100	40	16	1	4
A404518	185,30	18,00	100	45	20	1	4
A404520	231,34	20,00	100	45	20	1	4

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Pieces	Z
A4045SET6	225,80	6	60	16	6	10	4
A4045SET8	194,67	8	60	20	8	5	4
A4045SET10	210,00	10	75	25	8	5	4
A4045SET12	373,74	12	75	30	12	5	4

		Side milling		Slotting	RANGE												
					A4045												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	1.25 x D	0.1 x D	0.5 x D	110	130	fz/mm	0.006	0.009	0.012	0.015	0.020	0.025	0.032	0.040	0.052	0.080
	< 850 N/mm²	1.25 x D	0.1 x D	0.5 x D	90	120	fz/mm	0.006	0.009	0.011	0.016	0.018	0.023	0.028	0.035	0.048	0.070
	< 1200 N/mm²	1.25 x D	0.1 x D	0.3 x D	70	100	fz/mm	0.006	0.008	0.010	0.014	0.016	0.020	0.026	0.032	0.043	0.065
STAINLESS STEEL	< 600 N/mm²	1.25 x D	0.1 x D	0.5 x D	70	95	fz/mm	0.006	0.009	0.011	0.015	0.018	0.023	0.028	0.035	0.045	0.070
	< 800 N/mm²	1.25 x D	0.1 x D	0.3 x D	50	80	fz/mm	0.006	0.008	0.010	0.013	0.016	0.019	0.025	0.030	0.040	0.065
CAST IRON	< 240 HB	1.25 x D	0.1 x D	0.5 x D	80	120	fz/mm	0.007	0.011	0.013	0.016	0.020	0.028	0.035	0.045	0.055	0.075
	< 300 HB	1.25 x D	0.1 x D	0.5 x D	70	100	fz/mm	0.006	0.010	0.012	0.015	0.018	0.025	0.030	0.040	0.050	0.065

Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 1.25)

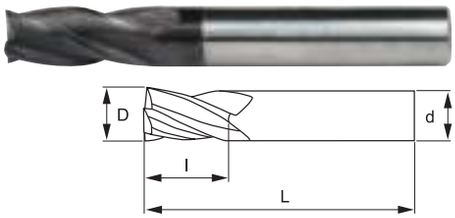
Indivisible package Suggested retail package - Unit price

END MILLS FOR SLOTTING Z4

KERFOLG

NdF | HM | Z 4 | TiAlN | HA HB | UNI

ITEM: A4042

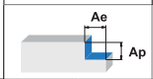
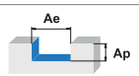


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	30° right-hand
Surface treatment	TiAlN
Application	Side milling on materials up to 50 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

On request available with Weldon shank.
Cylindrical shank (A4042....) Weldon shank (A4042...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A404202	18,12	2	38	7	3	4
A404203	18,00	3	38	8	3	4
A404204	19,83	4	50	11	4	4
A404205	19,63	5	50	13	5	4
A404206	28,08	6	57	13	6	4
A404208	41,00	8	63	19	8	4
A404210	53,64	10	72	22	10	4
A404212	73,62	12	83	26	12	4
A404214	112,70	14	83	26	14	4
A404216	107,37	16	92	32	16	4
A404218	155,32	18	92	32	18	4
A404220	193,00	20	104	38	20	4

		Side milling		Slotting	RANGE												
					A4042												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	1 x D	0.25 x D	0.5 x D	100	140	fz/mm	0.015	0.023	0.032	0.041	0.050	0.070	0.086	0.099	0.123	0.149
	< 850 N/mm²	1 x D	0.25 x D	0.5 x D	90	125	fz/mm	0.015	0.023	0.032	0.041	0.050	0.070	0.086	0.099	0.123	0.149
	< 1200 N/mm²	1 x D	0.25 x D	0.5 x D	80	115	fz/mm	0.012	0.019	0.025	0.032	0.040	0.056	0.068	0.079	0.099	0.120
STAINLESS STEEL	< 600 N/mm²	1 x D	0.25 x D	0.5 x D	65	90	fz/mm	0.010	0.015	0.021	0.026	0.032	0.046	0.056	0.064	0.080	0.097
	< 800 N/mm²	1 x D	0.25 x D	0.5 x D	60	80	fz/mm	0.009	0.014	0.020	0.025	0.031	0.043	0.053	0.060	0.077	0.093
CAST IRON	< 240 HB	1 x D	0.25 x D	0.5 x D	80	115	fz/mm	0.013	0.021	0.029	0.037	0.045	0.063	0.077	0.089	0.110	0.134
	< 300 HB	1 x D	0.25 x D	0.5 x D	70	100	fz/mm	0.013	0.020	0.027	0.034	0.042	0.059	0.073	0.085	0.105	0.127
SUPER ALLOY	Ti6Al4V	1 x D	0.25 x D	0.5 x D	60	85	fz/mm	0.011	0.017	0.023	0.030	0.036	0.052	0.063	0.073	0.091	0.110
	< 45 HRC	1 x D	0.25 x D	0.5 x D	25	35	fz/mm	0.008	0.014	0.018	0.023	0.029	0.041	0.050	0.057	0.071	0.086

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

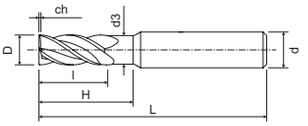
END MILLS WITH VARIABLE PITCH Z4

KERFOLG

DIN 6535 | HM | Z 4 | PLATEX | HA HB | UNI

NEW

ITEM: A4U47

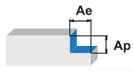
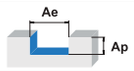


Material	Micro-grain carbide
Standard	DIN 6535
Tolerance	D=f8 / d=h5
Shank	Cylindrical / Weldon
Helix	Variable
Surface treatment	PLATEX
Application	Execution of slots, contours and ramps on materials with hardness up to 55 HRC. Possibility of drilling from solid. Suitable for steel, stainless steel, cast iron and heat resistant alloys.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●					●	○		

On request available with Weldon shank.
Cylindrical shank (A4U47....) Weldon shank (A4U47...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	ch mm	Z
A4U4704	52,86	4	57	11	12	6	3,9	0,10	4
A4U4705	53,03	5	57	13	18	6	4,9	0,10	4
A4U4706	55,27	6	57	13	18	6	5,9	0,20	4
A4U4708	66,72	8	63	21	25	8	7,8	0,20	4
A4U4710	89,10	10	72	22	30	10	9,7	0,30	4
A4U4712	114,51	12	83	26	36	12	11,7	0,30	4
A4U4714	137,14	14	83	26	36	14	13,7	0,30	4
A4U4716	200,00	16	92	36	42	16	15,5	0,30	4
A4U4720	316,00	20	103	41	52	20	19,5	0,30	4

		Side milling		Slotting	RANGE								
					A4U47								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1 x D	0.50 x D	1.0 x D	120	150	fz/mm	0.025	0.040	0.050	0.060	0.070	0.075	0.080
	<850 N/mm²	1 x D	0.50 x D	1.0 x D	85	130	fz/mm	0.020	0.035	0.045	0.053	0.060	0.067	0.073
	<1200 N/mm²	1 x D	0.40 x D	1.0 x D	75	115	fz/mm	0.017	0.032	0.038	0.045	0.053	0.060	0.065
STAINLESS STEEL	<600 N/mm²	1 x D	0.50 x D	1.0 x D	70	100	fz/mm	0.025	0.037	0.045	0.050	0.060	0.065	0.070
	<800 N/mm²	1 x D	0.40 x D	1.0 x D	60	100	fz/mm	0.015	0.030	0.040	0.045	0.050	0.055	0.060
	DUPLEX	1 x D	0.40 x D	1.0 x D	60	100	fz/mm	0.015	0.030	0.040	0.045	0.050	0.055	0.060
CAST IRON	<240 HB	1 x D	0.50 x D	1.0 x D	130	175	fz/mm	0.025	0.040	0.060	0.065	0.070	0.075	0.080
	<300 HB	1 x D	0.50 x D	1.0 x D	100	150	fz/mm	0.020	0.035	0.050	0.055	0.065	0.070	0.075
SUPER ALLOY	Ti6Al4V	1 x D	0.25 x D	0.5 x D	50	75	fz/mm	0.012	0.023	0.030	0.033	0.040	0.045	0.055
	HTA	1 x D	0.25 x D	0.5 x D	30	55	fz/mm	0.009	0.018	0.023	0.027	0.035	0.040	0.045

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

Indivisible package Suggested retail package - Unit price

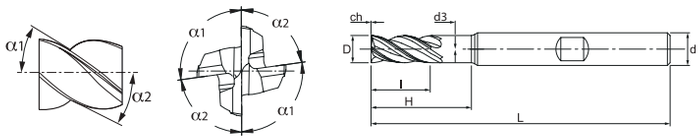
END MILLS WITH VARIABLE PITCH Z4

KERFOLG Vari Plus

NdF | HM | Z 4 | AlTiN | HB | UNI

ITEM: A4040

Material	Micro-grain solid carbide
Standard	Factory Standard
Tolerance	f8
Shank	Weldon
Helix	Right-hand variable angle 35° - 38°
Surface Treatment	TiAlN
Application	Slotting and side milling of low, medium and high alloy steels, ferritic and martensitic stainless steels, cast iron, titanium and HTA. Special flute with reinforcing chamfer.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●	○	○	●	●	●	●		

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d ø mm	d3 mm	ch 45° mm	Z
A40404	66,88	4	57	11	14	6	0.1	0,1	4
A40405	50,29	5	57	13	17	6	0.1	0,1	4
A40406	50,29	6	57	13	17	6	0.1	0,1	4
A40407	73,46	7	63	21	25	8	0.2	0,2	4
A40408	69,23	8	63	21	25	8	0.2	0,2	4
A40409	96,51	9	72	22	27	10	0.2	0,2	4
A404010	100,90	10	72	22	27	10	0.2	0,2	4
A404012	135,68	12	83	26	32	12	0.3	0,3	4
A404014	153,12	14	83	26	32	14	0.3	0,3	4
A404016	209,83	16	92	36	43	16	0.3	0,3	4
A404020	330,10	20	104	41	51	20	0.3	0,3	4

		Side milling		Slotting	RANGE								
		Ae / Ap		Ae / Ap	A4040								
Material	Feature	Ap	Ae	Ap	Vc min m/min	Vc max m/min	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 14	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1 x D	0,5 x D	1 x D	200	260	0,030	0,040	0,050	0,060	0,070	0,090	0,120	0,170
	<850 N/mm²	1 x D	0,5 x D	1 x D	200	220	0,025	0,035	0,045	0,547	0,060	0,085	0,100	0,120
	<1200 N/mm²	1 x D	0,5 x D	1 x D	180	210	0,020	0,034	0,040	0,050	0,055	0,070	0,080	0,100
STAINLESS STEEL	<600 N/mm²	1 x D	0,5 x D	1 x D	90	110	0,025	0,025	0,025	0,032	0,040	0,045	0,050	0,070
	<800 N/mm²	1 x D	0,5 x D	1 x D	70	90	0,015	0,020	0,020	0,027	0,035	0,040	0,045	0,060
CAST IRON	<240 HB	1 x D	0,5 x D	1 x D	180	220	0,030	0,040	0,050	0,060	0,070	0,085	0,100	0,170
	<330 HB	1 x D	0,5 x D	1 x D	140	180	0,030	0,035	0,045	0,057	0,070	0,085	0,100	0,120
NON FERROUS	-	1 x D	0,5 x D	1 x D	200	280	0,035	0,040	0,050	0,060	0,070	0,090	0,120	0,170
	-	1 x D	0,5 x D	1 x D	220	300	0,035	0,040	0,050	0,060	0,070	0,090	0,120	0,170
SUPER ALLOY	Ti6Al4V	0,5 x D	0,25 x D	0,5 x D	50	90	0,015	0,019	0,025	0,032	0,040	0,045	0,050	0,070
	HTA	0,5 x D	0,25 x D	0,5 x D	30	40	0,012	0,015	0,020	0,025	0,030	0,035	0,040	0,050

Indivisible package Suggested retail package - Unit price

END MILLS WITH VARIABLE PITCH Z4

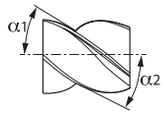
KERFOLG

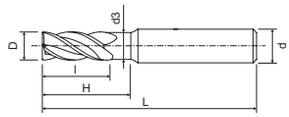
NdF | HM | Z4 | | WIND X | HA HB | UNI

NEW

ITEM: A4S43

Material	Micro grain solid carbide
Standard	NDF
Tolerance	D < = 12mm - 0,02mm D > 12mm - 0,03mm
Shank	Cylindrical / Weldon
Helix	Variable 35/38°
Surface treatment	WindX
Application	Slotting and contouring on steel and cast iron.





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●			●	●								

On request available with Weldon shank.
Straight Shank (A4S43...) Woldon Shank (A4S43...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	Z
A4S4303	20,80	3	57	8	12	6	2,8	4
A4S4304	20,80	4	57	11	15	6	3,8	4
A4S4305	20,80	5	57	13	17	6	4,8	4
A4S4306	20,80	6	57	13	21	6	5,8	4
A4S4308	30,90	8	63	19	27	8	7,7	4
A4S4310	46,78	10	72	22	32	10	9,7	4
A4S4312	65,22	12	83	26	38	12	11,6	4
A4S4316	130,44	16	92	32	44	16	15,5	4
A4S4320	171,29	20	104	38	54	20	19,5	4

END MILLS WITH VARIALBE PITCH Z4

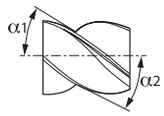
KERFOLG

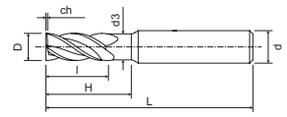
NdF | HM | Z4 | | WIND X | HA HB | UNI

NEW

ITEM: A4S53

Material	Micro grain solid carbide
Standard	NDF
Tolerance	D < = 12mm - 0,02mm D > 12mm - 0,03mm
Shank	Cylindrical / Weldon
Helix	Variable 35/38°
Surface treatment	WindX
Application	Slotting and contouring on steel and cast iron.

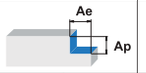
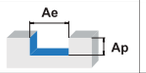




< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●			●	●								

On request available with Weldon shank.
Straight shank (A4S53...) Weldon shank (A4S53...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	Ch 45°	Z
A4S5303	21,12	3	57	8	12	6	2,8	0,15	4
A4S5304	21,12	4	57	11	15	6	3,8	0,15	4
A4S5305	21,12	5	57	13	17	6	4,8	0,15	4
A4S5306	21,12	6	57	13	21	6	5,8	0,2	4
A4S5308	31,50	8	63	19	27	8	7,7	0,2	4
A4S5310	48,96	10	72	22	32	10	9,7	0,3	4
A4S5312	65,60	12	83	26	38	12	11,6	0,3	4
A4S5316	113,44	16	92	32	44	16	15,5	0,3	4

		Side milling		Slotting	RANGE									
					A4S43					A4S53				
Material	Feature	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	1 x D	0,25 x D	1 x D	130	180	fz/mm	0,033	0,045	0,065	0,075	0,095	0,11	0,13
	< 850 N/mm²	1 x D	0,25 x D	1 x D	110	150	fz/mm	0,033	0,045	0,065	0,075	0,095	0,11	0,13
	< 1200 N/mm²	1 x D	0,25 x D	1 x D	110	150	fz/mm	0,025	0,030	0,040	0,050	0,070	0,090	0,10
STAINLESS STEEL	< 600 N/mm²	1 x D	0,25 x D	0,5 x D	60	90	fz/mm	0,030	0,043	0,060	0,070	0,077	0,095	0,11
SUPER ALLOY	< 240 HB	1 x D	0,25 x D	0,8 x D	80	120	fz/mm	0,036	0,050	0,060	0,074	0,085	0,095	0,11
	< 300 HB	1 x D	0,25 x D	0,8 x D	80	120	fz/mm	0,036	0,050	0,060	0,074	0,085	0,095	0,11
HARDENED	<60 HRC	1 x D	0,25 x D	0,5 x D	50	70	fz/mm	0,025	0,033	0,040	0,060	0,070	0,080	0,090

Recommended "fz" values for contouring.
For slotting to adjust the cutting parameters (eg fz x0.8)

Indivisible package Suggested retail package - Unit price

CORNER RADIUS END MILLS WITH VARIABLE PITCH Z4

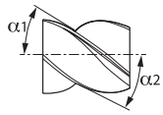
KERFOLG

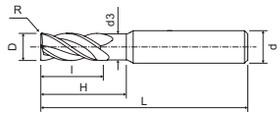
NdF | HM | Z 4 | WIND X | HA HB | UNI

NEW

ITEM: A4S16

Material	Micro-grain solid carbide
Standard	NDF
Tollerance	D < = 12mm - 0,02mm D > 12mm - 0,03mm
Shank	Cylindrical / Weldon
Helix	Variable 35/38°
Surface treatment	WindX
Application	Slotting and contouring on steel and cast iron.

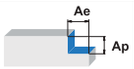
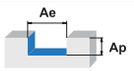




< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●			●	●								

On request available with Weldon shank.
Straight Shank (A4S16...) Weldon Shank (A4S16...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	r mm	Z
A4S160403	29,77	4	57	11	15	6	3,8	0,3	4
A4S160405	18,90	4	57	11	15	6	3,8	0,5	4
A4S160503	29,77	5	57	13	17	6	4,8	0,3	4
A4S160505	29,77	5	57	13	17	6	4,8	0,5	4
A4S160605	28,90	6	57	13	21	6	5,8	0,5	4
A4S160610	28,90	6	57	13	21	6	5,8	1	4
A4S160805	38,38	8	63	19	27	8	7,7	0,5	4
A4S160810	38,78	8	63	19	27	8	7,7	1	4
A4S161005	55,00	10	72	22	32	10	9,7	0,5	4
A4S161010	55,00	10	72	22	32	10	9,7	1	4
A4S161020	57,37	10	72	22	32	10	9,7	2	4
A4S161205	68,30	12	83	26	38	12	11,6	0,5	4
A4S161210	68,30	12	83	26	38	12	11,6	1	4
A4S161220	70,35	12	83	26	38	12	11,6	2	4

		Side milling		Slotting	RANGE						
					A4S16						
Material	Feature	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12
CARBON STEEL	< 500 N/mm²	1 x D	0,25 x D	1 x D	130	180	fz/mm	0,033	0,045	0,065	0,075	0,95
	< 850 N/mm²	1 x D	0,25 x D	1 x D	110	150	fz/mm	0,033	0,045	0,065	0,075	0,95
	< 1200 N/mm²	1 x D	0,25 x D	1 x D	110	150	fz/mm	0,025	0,030	0,040	0,050	0,070
STAINLESS STEEL	< 600 N/mm²	1 x D	0,25 x D	0,5 x D	60	90	fz/mm	0,030	0,043	0,060	0,070	0,077
CAST IRON	< 240 HB	1 x D	0,25 x D	0,8 x D	80	120	fz/mm	0,036	0,050	0,060	0,074	0,085
	< 300 HB	1 x D	0,25 x D	0,8 x D	80	120	fz/mm	0,036	0,050	0,060	0,074	0,085
HARDENED	<60 HRC	1 x D	0,25 x D	0,5 x D	50	70	fz/mm	0,025	0,033	0,040	0,060	0,070

Recommended "fz" values for contouring.
For slotting to adjust the cutting parameters (eg fz x0.8)

Indivisible package Suggested retail package - Unit price

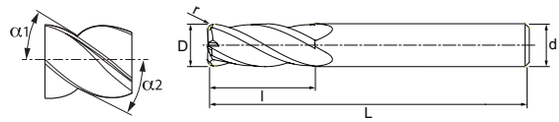
END MILLS Z4

KERFOLG

NdF | HM | Z4 | TiAl CrSiN | HA HB | HD

ITEM: A4118

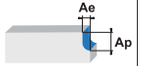
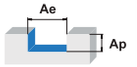
Material	Micro-grain solid carbide
Standard	NDF
Tolerance	D < = 6mm - 0,01mm D > 6-12mm - 0,015mm
Shank	Cylindric / Weldon
Helix	Right 35°
Surface treatment	TiAlCrSiN
Application	Slotting and side milling on materials up to 65 HRC.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
	○	●											●	●	●

On request they can be supplied with Weldon shank
Straight shank (A4118 ...) Weldon shank (A4118 ... W)

Tech. Code	GR05 Euro	D mm	r mm	l mm	L mm	d mm	Z
A41180403	38,93	4	0,3	10	50	4	4
A41180405	38,93	4	0,5	10	50	4	4
A41180605	51,91	6	0,5	16	50	6	4
A41180610	51,91	6	1,0	16	50	6	4
A41180805	73,54	8	0,5	20	60	8	4
A41180810	73,54	8	1,0	20	60	8	4
A41181005	124,42	10	0,5	25	75	10	4
A41181010	124,42	10	1,0	25	75	10	4
A41181205	170,88	12	0,5	30	75	12	4
A41181210	170,88	12	1,0	30	75	12	4

		Side milling		Slotting	RANGE							
					A4118							
Material	Caratteristica	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12
HARDENED	<45 HRC	1 x D	0,10 x D	0,15 x D	95	115	fz/mm	0,026	0,041	0,055	0,065	0,072
	<60 HRC	1 x D	0,05 x D	0,15 x D	80	95	fz/mm	0,022	0,051	0,069	0,092	0,093
	<65 HRC	1 x D	0,02 x D	0,15 x D	60	80	fz/mm	0,020	0,046	0,075	0,075	0,084

Recommended "fz" values for contouring.
For slotting Ap = 1 x D Ae = 0,1 x D, adjust the cutting parameters (ex: Vc x 0,2 fz x 0,4)

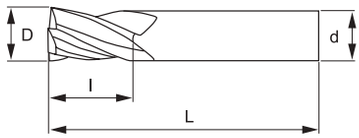
Indivisible package Suggested retail package - Unit price

END MILLS Z4

WRK

NdF | HM | Z 4 | WIND | HA HB

ITEM: A4055

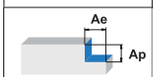
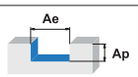


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D ≤ 1mm - ~0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical / Weldon
Helix	45° right-hand
Surface treatment	WIND
Application	Side milling on materials up to 55 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

On request available with Weldon shank
Cylindrical shank (A4055....) Weldon shank (A4055...W)

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A40551	19,36	1	50	3	4	4
A40552	19,36	2	50	6	6	4
A40553	19,36	3	50	8	6	4
A40554	19,36	4	50	11	6	4
A40555	24,10	5	50	13	6	4
A40556	24,10	6	50	16	6	4
A40558	45,73	8	60	20	8	4
A405510	67,36	10	75	25	10	4
A405512	73,85	12	75	30	12	4
A405516	184,27	16	100	40	16	4
A405520	235,15	20	100	45	20	4

		Side milling		Slotting	RANGE												
					A4055												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1.5 x D	0.15 x D	0.25 x D	90	115	fz/mm	0.012	0.015	0.025	0.032	0.040	0.050	0.065	0.075	0.095	0.110
	<850 N/mm²	1.5 x D	0.15 x D	0.25 x D	80	110	fz/mm	0.012	0.015	0.025	0.032	0.040	0.048	0.058	0.065	0.080	0.095
	<1200 N/mm²	1.5 x D	0.15 x D	-	70	95	fz/mm	0.010	0.012	0.022	0.025	0.036	0.042	0.052	0.058	0.075	0.085
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.15 x D	0.25 x D	70	85	fz/mm	0.009	0.009	0.022	0.025	0.032	0.040	0.046	0.050	0.075	0.080
	<800 N/mm²	1.5 x D	0.15 x D	-	55	70	fz/mm	0.008	0.008	0.020	0.022	0.028	0.035	0.042	0.045	0.055	0.065
CAST IRON	<240 HB	1.5 x D	0.15 x D	0.25 x D	80	105	fz/mm	0.012	0.015	0.025	0.032	0.040	0.050	0.065	0.075	0.110	0.130
	<300 HB	1.5 x D	0.15 x D	0.25 x D	70	90	fz/mm	0.012	0.015	0.025	0.032	0.040	0.050	0.065	0.075	0.100	0.115
HARDENED	<45 HRC	0.5 x D	0.05 x D	-	35	45	fz/mm	0.008	0.008	0.020	0.022	0.028	0.035	0.042	0.045	0.055	0.065

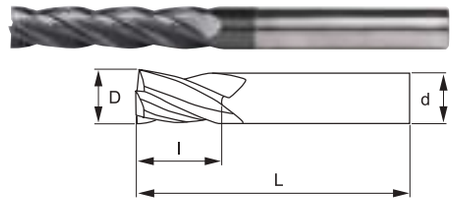
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

END MILLS LONG SERIES Z4

KERFOLG

NdF | HM | Z4 | TiAlN | HA HB

ITEM: A4048

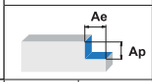
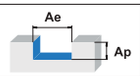


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	30° right
Surface treatment	TiAlN
Application	Side milling on materials up to 50 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●			●	●						●	○	

On request available with Weldon shank.
Cylindrical shank (A4048....) Weldon shank (A4048...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A404804060	35,53	4	60	20	4	4
A404805060	40,70	5	60	20	5	4
A404806065	43,45	6	65	24	6	4
A404806080	57,38	6	80	40	6	4
A404808080	63,91	8	80	32	8	4
A404808100	81,51	8	100	42	8	4
A404810080	81,51	10	80	32	10	4
A404810100	98,01	10	100	45	10	4
A404812100	121,99	12	100	50	12	4
A404812150	208,85	12	150	75	12	4
A404816120	211,53	16	120	60	16	4
A404816150	268,62	16	150	75	16	4
A404820130	336,71	20	130	60	20	4
A404820150	415,36	20	150	75	20	4

		Side milling		Slotting	RANGE									
					A4048									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	2.5 x D	0.15 x D	-	90	130	fz/mm	0.015	0.020	0.025	0.035	0.045	0.056	0.080	0.100
	<850 N/mm²	2.5 x D	0.15 x D	-	80	120	fz/mm	0.015	0.020	0.025	0.035	0.045	0.056	0.080	0.100
	<1200 N/mm²	2.5 x D	0.15 x D	-	80	110	fz/mm	0.010	0.012	0.015	0.021	0.027	0.033	0.045	0.060
STAINLESS STEEL	<600 N/mm²	2.5 x D	0.15 x D	-	70	90	fz/mm	0.010	0.012	0.015	0.021	0.027	0.033	0.045	0.060
CAST IRON	<240 HB	2.5 x D	0.15 x D	-	70	110	fz/mm	0.015	0.020	0.025	0.035	0.045	0.056	0.080	0.100
HARDENED	<45 HRC	2.5 x D	0.10 x D	-	70	100	fz/mm	0.010	0.012	0.015	0.021	0.027	0.033	0.045	0.060

Recommended "fz" values for side milling.

Indivisible package Suggested retail package - Unit price

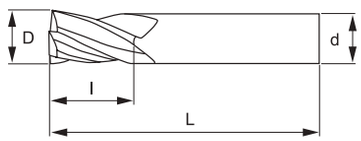
END MILLS Z4

KERFOLG

NdF | HM | Z 4 | WIND | HA HB

ITEM: A4050

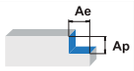
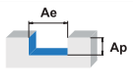
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D ≤ 1mm - ~0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical / Weldon
Helix	35° right-hand
Surface treatment	WIND
Application	Side milling on materials up to 55 HRC



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

On request available with Weldon shank.
Cylindrical shank (A4050....) Weldon shank (A4050...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A4050375	31,60	3	75	8	4	4
A4050475	31,60	4	75	11	4	4
A4050575	32,80	5	75	13	6	4
A4050675	32,80	6	75	16	6	4
A4050875	55,62	8	75	20	8	4
A40504100	38,00	4	100	11	4	4
A40506100	38,00	6	100	16	6	4
A40508100	61,00	8	100	20	8	4
A405010100	82,00	10	100	25	10	4
A405012100	107,00	12	100	30	12	4
A40501210050	107,00	12	100	50	12	4
A40506150	85,40	6	150	16	6	4
A40508150	127,80	8	150	20	8	4
A405010150	169,90	10	150	25	10	4
A405012150	218,10	12	150	30	12	4
A405014150	293,60	14	150	50	16	4
A405016150	293,60	16	150	60	16	4
A405020200	661,10	20	200	90	20	4

		Side milling		Slotting	RANGE												
					A4050												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	1.25 x D	0.1 x D	0.5 x D	110	130	fz/mm	0.006	0.009	0.012	0.015	0.020	0.025	0.032	0.040	0.052	0.080
	< 850 N/mm²	1.25 x D	0.1 x D	0.5 x D	90	120	fz/mm	0.006	0.009	0.011	0.016	0.018	0.023	0.028	0.035	0.048	0.070
	< 1200 N/mm²	1.25 x D	0.1 x D	0.3 x D	70	100	fz/mm	0.006	0.008	0.010	0.014	0.016	0.020	0.026	0.032	0.043	0.065
STAINLESS STEEL	< 600 N/mm²	1.25 x D	0.1 x D	0.5 x D	70	95	fz/mm	0.006	0.009	0.011	0.015	0.018	0.023	0.028	0.035	0.045	0.070
	< 800 N/mm²	1.25 x D	0.1 x D	0.3 x D	50	80	fz/mm	0.006	0.008	0.010	0.013	0.016	0.019	0.025	0.030	0.040	0.065
CAST IRON	< 240 HB	1.25 x D	0.1 x D	0.5 x D	80	120	fz/mm	0.007	0.011	0.013	0.016	0.020	0.028	0.035	0.045	0.055	0.075
	< 300 HB	1.25 x D	0.1 x D	0.5 x D	70	100	fz/mm	0.006	0.010	0.012	0.015	0.018	0.025	0.030	0.040	0.050	0.065

Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 1.25)

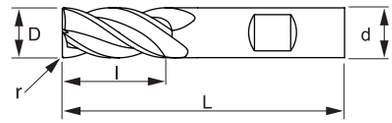
END MILLS WITH VARIABLE PITCH Z5

KERFOLG Vari

DIN 6528 | HM | Z 5 | PRO 100 | HB | UNI

ITEM: A4057

Material	Micro-grain carbide
Standard	DIN 6528
Tolerance	e8
Shank	Weldon
Helix	38° Right-hand variable pitch
Surface treatment	PRO-100
Application	Slotting and side milling on materials up to 55 HRC. Edge with reinforcement radius. Particularly suitable for stainless steel and super alloys. Center cutting.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	r mm	Z
A405704	58,20	4	55	11	6	0.25	5
A405705	58,20	5	57	13	6	0.25	5
A405706	58,20	6	57	13	6	0.40	5
A405707	73,33	7	63	16	8	0.40	5
A405708	73,33	8	63	19	8	0.50	5
A405709	95,42	9	72	19	10	0.50	5
A405710	95,42	10	72	22	10	0.50	5
A405712	122,20	12	83	26	12	0.75	5
A405714	173,20	14	83	26	14	0.75	5
A405716	192,50	16	92	32	16	0.75	5
A405718	257,60	18	92	32	18	0.75	5
A405720	290,00	20	104	38	20	0.75	5
A405725	430,00	25	121	44	25	0.75	5

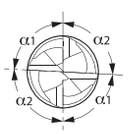
END MILLS VARIABLE PITCH LONG SERIES Z4

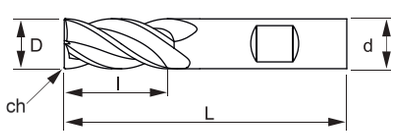
WIDIA HANITA

NdF | HM | Z 4 | TiAlN | HB | UNI

ITEM: A4051

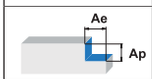
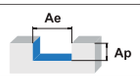
Material	MIcro-grain Integral hard metal
Standard	Factory standard
Tolerance	e8
Shank	Weldon
Helix	Right-hand 38° variable pitch
Surface treatment	TiAlN
Application	Roughing and finishing on all materials





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

Tech. Code	GR10 Euro	D mm	L mm	l mm	ch 45° mm	d mm	Z
A405106	52,61	6	76	32	0,40	6	4
A405108	68,40	8	87	32	0,40	8	4
A405110	96,21	10	89	38	0,50	10	4
A405112	138,01	12	100	51	0,50	12	4
A405116	222,00	16	125	57	0,50	16	4
A405120	372,00	20	125	57	0,50	20	4

		Side milling		Slotting	RANGE												
					A4057						A4051						
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 14	D/mm 16	D/mm 20	D/mm 25
CARBON STEEL	<500 N/mm²	1,5 x D	0,5 x D	1 x D	130	190	fz/mm	0,030	0,038	0,045	0,060	0,075	0,085	0,090	0,100	0,115	0,125
	<850 N/mm²	1,5 x D	0,5 x D	1 x D	110	150	fz/mm	0,025	0,032	0,035	0,050	0,060	0,070	0,080	0,090	0,100	0,110
	<1200 N/mm²	1,5 x D	0,5 x D	1 x D	80	100	fz/mm	0,022	0,028	0,030	0,040	0,050	0,060	0,070	0,080	0,090	0,100
STAINLESS STEEL	<600 N/mm²	1,5 x D	0,5 x D	1 x D	90	120	fz/mm	0,025	0,032	0,035	0,050	0,060	0,070	0,080	0,080	0,100	0,110
	<800 N/mm²	1,5 x D	0,5 x D	1 x D	60	80	fz/mm	0,022	0,028	0,030	0,040	0,050	0,055	0,065	0,075	0,086	0,095
	Duplex	1,5 x D	0,5 x D	1 x D	50	80	fz/mm	0,018	0,022	0,025	0,035	0,045	0,050	0,060	0,065	0,075	0,085
CAST IRON	<240 HB	1,5 x D	0,5 x D	1 x D	120	150	fz/mm	0,030	0,038	0,045	0,060	0,075	0,085	0,090	0,100	0,115	0,125
	<300 HB	1,5 x D	0,5 x D	1 x D	110	130	fz/mm	0,025	0,032	0,035	0,050	0,060	0,070	0,080	0,090	0,100	0,110
SUPER ALLOY	TI6AI4V	1,5 x D	0,5 x D	1 x D	50	65	fz/mm	0,018	0,022	0,025	0,035	0,045	0,050	0,060	0,070	0,075	0,080
	HTA	1,5 x D	0,3 x D	0,3 x D	25	40	fz/mm	0,012	0,015	0,020	0,030	0,040	0,045	0,050	0,060	0,065	0,070

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.75)

Indivisible package | Suggested retail package - Unit price

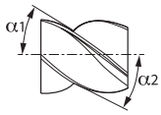
END MILLS WITH VARIABLE HELIX AND CHIP BREAKER FOR TROCHOIDAL MILLING Z5

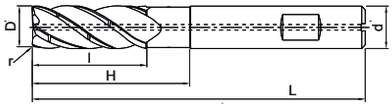
KERFOLG

NdF | HM | Z 5 | HT 300 | HB | UNI

ITEM: A4059

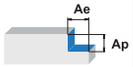
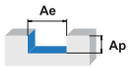
Material	Micro-grain solid carbide
Standard	NDF
Tolerance	D 8 mm ± 0.015 mm D 10~12 ± 0.02 mm
Shank	Weldon
Helix	Right-hand variable angle
Surface Treatment	HT300
Application	Trochoidal machining of steels, cast iron, stainless steels and super alloys.





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●				●	○			

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d ø mm	r mm	Z
A405908	70,35	8	64	20	25	8	0.2	5
A405910	102,79	10	72	25	30	10	0.2	5
A405912	136,27	12	83	30	40	12	0.3	5
A405916	224,95	16	92	40	50	16	0.3	5

		Side milling		Slotting	RANGE						
					A4059						
Material	Feature	Ap	Ae	Ap	Vc min/max min	Vc min/max. max	mm	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEELS	<500 N/mm²	2.5 x D	0.15 x D	-	275	320	fz/mm	0.070	0.085	0,102	0,12
	<850 N/mm²	2.5 x D	0.15 x D	-	275	320	fz/mm	0.051	0.063	0,078	0,09
	<1220 N/mm²	2.5 x D	0.15 x D	-	250	300	fz/mm	0.051	0.063	0,078	0,09
STAINLESS STEELS	<600 N/mm²	2.5 x D	0.12 x D	-	90	150	fz/mm	0.035	0.052	0,052	0,065
	<800 N/mm²	2.5 x D	0.10 x D	-	60	130	fz/mm	0.025	0.033	0,042	0,055
CAST IRON	<240 HB	2.5 x D	0.15 x D	-	220	300	fz/mm	0.050	0.063	0,074	0,086
	<300 HB	2.5 x D	0.12 x D	-	150	260	fz/mm	0.035	0.043	0,051	0,065
SUPER ALLOY	Ti6Al4V	2.5 x D	0.12 x D	-	75	120	fz/mm	0.028	0.036	0,042	0,055
	HTA	2.5 x D	0.10 x D	-	60	100	fz/mm	0.027	0.034	0,041	0,050
HARDENED	<45 HRC	2.5 x D	0.12 x D	-	220	250	fz/mm	0.034	0.041	0,052	0,064

Indivisible package Suggested retail package - Unit price

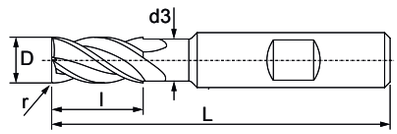
END MILLS WITH VARIABLE PITCH CORNER RADIUS AND CHIP BREAKER FOR TROCHOIDAL MILLING Z5

KERFOLG

NdF | HM | Z 5 | TiAlN | HB | UNI

NEW

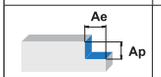
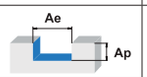
ITEM: A4063



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D=e8 d=h6
Shank	Weldon
Helix	Right-hand variable angle 35/36°
Surface treatment	TiAlN
Application	Trochoidal technology machining on steels, cast iron, stainless steel and super alloys

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
	●			●	●	●		●					●	●	

Tech. Code	GR05 Euro	D mm	L mm	l mm	r mm	d3 mm	Z
A40636	93,84	6	75	34	1	5,8	5
A40638	108,21	8	85	44	1	7,7	5
A406310	149,40	10	100	55	1,5	9,7	5
A406312	185,13	12	115	65	1,5	11,6	5
A406316	376,32	16	140	86	1,5	15,5	5
A406320	519,69	20	163	108	1,5	19,5	5

		Side milling		Slotting	RANGE							
					A4063							
Material	Feature	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	5 x D	0,1 x D	-	200	230	fz/mm	0,06	0,07	0,08	0,09	0,10	0,12
	<850 N/mm²	5 x D	0,1 x D	-	200	230	fz/mm	0,05	0,06	0,07	0,08	0,10	0,12
	<1200 N/mm²	5 x D	0,1 x D	-	190	210	fz/mm	0,05	0,06	0,07	0,08	0,10	0,12
STAINLESS STEEL	<600 N/mm²	5 x D	0,1 x D	-	90	130	fz/mm	0,036	0,045	0,054	0,063	0,085	0,11
	<850 N/mm²	5 x D	0,1 x D	-	60	110	fz/mm	0,036	0,045	0,054	0,063	0,085	0,11
CAST IRON	<240 HB	5 x D	0,1 x D	-	180	230	fz/mm	0,05	0,06	0,07	0,08	0,10	0,12
	<300 HB	5 x D	0,1 x D	-	160	210	fz/mm	0,05	0,06	0,07	0,08	0,10	0,12
SUPER ALLOY	Ti6Al4V	5 x D	0,1 x D	-	65	80	fz/mm	0,029	0,036	0,045	0,054	0,068	0,08
	HTA	5 x D	0,1 x D	-	30	40	fz/mm	0,029	0,036	0,045	0,054	0,068	0,08

Indivisible package Suggested retail package - Unit price

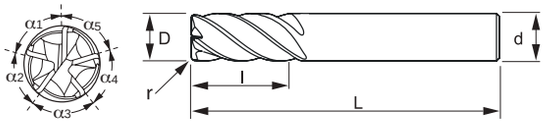
END MILLS VARIABLE PITCH LONG SERIES Z5

WIDIA HANITA

NdF | HM | Z 5 | AlTiN | HA | UNI

ITEM: A4060

Material	MIcro-grain Integral hard metal
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical
Helix	Right-hand 43° variable pitch
Surface treatment	AlTiN
Application	Roughing and finishing on all materials. Excellent in dynamic milling. Without central cutting.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

Tech. Code	GR10 Euro	D mm	L mm	l mm	r mm	d mm	Z
A40600605	65,50	6	76	24	0,50	6	5
A40600805	67,09	8	76	32	0,50	8	5
A40601000	99,80	10	100	40	-	10	5
A40601005	107,01	10	100	40	0,50	10	5
A40601200	144,50	12	125	48	-	12	5
A40601205	152,00	12	125	48	0,50	12	5
A40601210	152,00	12	125	48	1,00	12	5
A40601605	221,50	16	141	64	0,50	16	5
A40601610	221,50	16	141	64	1,00	16	5
A40602005	328,00	20	150	80	0,50	20	5
A40602010	328,00	20	150	80	1,00	20	5

		Side milling		Slotting	RANGE							
		Ae / Ap		Ae / Ap	A4060							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	4 x D	0.05 x D	-	300	400	fz/mm	0.053	0.072	0.086	0.099	0.121	0.137
	<850 N/mm²	4 x D	0.05 x D	-	240	320	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
	<1200 N/mm²	4 x D	0.05 x D	-	120	200	fz/mm	0.030	0.040	0.048	0.056	0.068	0.078
STAINLESS STEEL	<600 N/mm²	4 x D	0.05 x D	-	180	230	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
	<800 N/mm²	4 x D	0.05 x D	-	120	160	fz/mm	0.030	0.040	0.048	0.056	0.068	0.078
CAST IRON	<240 HB	4 x D	0.05 x D	-	240	300	fz/mm	0.053	0.072	0.086	0.099	0.121	0.137
	<300 HB	4 x D	0.05 x D	-	200	260	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
SUPER ALLOY	Ti6Al4V	4 x D	0.05 x D	-	100	180	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
	HTA	4 x D	0.05 x D	-	50	80	fz/mm	0.023	0.032	0.038	0.045	0.056	0.065
HARDENED	< 45 HRC	4 x D	0.05 x D	-	160	280	fz/mm	0.039	0.054	0.065	0.075	0.092	0.106

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

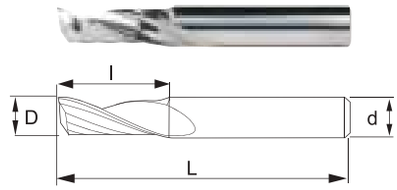
Indivisible package Suggested retail package - Unit price

END MILLS FOR ALUMINUM ALLOYS Z1

KERFOLG

NdF | HM | Z1 | | HA | ALU

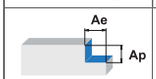
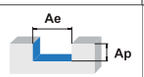
ITEM: A4710



Material	Micro-grain carbide
Standard	Factory standard
Shank	Cylindrical
Helix	25° right-hand - right-cut
Surface treatment	Bright
Application	Machining aluminum alloys and plastic material applications

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A47101,5	26,49	1,50	40	6	3	1
A4710210	18,22	2,00	40	10	2	1
A47102	38,01	2,00	60	10	6	1
A471026	23,10	2.00	40	6	3	1
A47102,5	20,99	2,50	40	6	2,5	1
A47103	17,98	3.00	40	12	3	1
A4710310	34,63	3,00	60	10	6	1
A4710312	36,07	3,00	60	12	6	1
A4710315	35,87	3,00	60	15	6	1
A47104	21,74	4.00	40	15	4	1
A4710412	36,07	4,00	60	12	6	1
A4710415	38,03	4,00	60	15	6	1
A4710420	48,24	4,00	75	20	6	1
A47105	26,25	5.00	50	16	5	1
A4710516	35,87	5,00	60	16	6	1
A4710528	51,50	5,00	75	28	6	1
A47106	30,02	6.00	60	20	6	1
A4710630	37,17	6.00	60	30	6	1
A4710635	48,59	6,00	75	35	6	1
A47108	48,60	8.00	63	22	8	1
A4710830	71,81	8,00	75	30	8	1
A4710840	83,33	8.00	100	45	8	1
A471010	77,37	10.00	72	25	10	1
A47101055	143,09	10,00	100	55	10	1
A471012	142,50	12,00	83	30	12	1

		Side milling		Slotting	RANGE								
					A4710								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12
NON FERROUS	ALU <10% Si	0.5 x D	0.5 x D	0.5 x D	300	500	fz/mm	0.040	0.050	0.060	0.070	0.080	0.085	0.090

Recommended "fz" values for slotting.

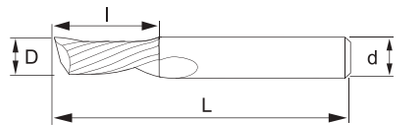
Indivisible package Suggested retail package - Unit price

END MILLS FOR ALUMINUM ALLOYS LEFT HELIX Z1

KERFOLG

NdF | HM | Z1 | HA | ALU

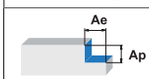
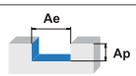
ITEM: A4711



Material	Micro-grain carbide
Standard	Factory standard
Shank	Cylindrical
Helix	25° left-hand - right cut
Surface treatment	Bright
Application	Machining aluminum alloys and plastic material.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A471101,5640	26,49	1,50	40	6	3	1
A471102640	25,17	2,00	40	6	3	1
A4711021040	17,73	2,00	40	10	2	1
A4711021060	36,07	2,00	60	10	6	1
A471102,5640	(20,99)	2,50	40	6	2,5	1
A4711031060	34,63	3,00	60	10	6	1
A4711031240	19,06	3,00	40	12	3	1
A4711031260	36,07	3,00	60	12	6	1
A4711031560	38,03	3,00	60	15	6	1
A4711041260	(36,07)	4,00	60	12	6	1
A4711041540	23,08	4,00	40	15	4	1
A4711041560	38,03	4,00	60	15	6	1
A4711042075	48,24	4,00	75	20	6	1
A4711051650	(29,98)	5,00	50	16	5	1
A4711051660	35,87	5,00	60	16	6	1
A4711052875	51,50	5,00	75	28	6	1
A4711062060	31,97	6,00	60	20	6	1
A4711063060	39,97	6,00	60	30	6	1
A4711063575	(51,50)	6,00	75	35	6	1
A4711082263	55,02	8,00	63	22	8	1
A4711083075	71,81	8,00	75	30	8	1
A47110840100	(89,54)	8,00	100	45	8	1
A4711102572	82,72	10,00	72	25	10	1
A47111055100	(134,99)	10,00	100	55	10	1
A4711123083	109,21	12,00	83	30	12	1

		Side milling		Slotting	RANGE								
					A4711								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12
NON FERROUS	ALU <10% Si	0.5 x D	0.5 x D	0.5 x D	300	500	fz/mm	0.040	0.050	0.060	0.070	0.080	0.085	0.090

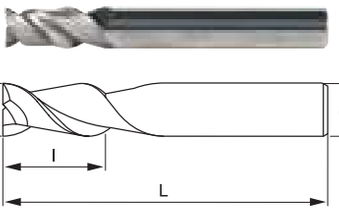
Recommended "fz" values for slotting.

END MILLS FOR ALUMINUM ALLOYS Z2

KERFOLG Alufly

NdF | HM | Z 2 | HA HB | ALU

ITEM: A4610



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical / Weldon
Helix	45° right-hand
Surface treatment	Bright
Application	Slotting and side milling on aluminum alloys and plastic materials.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

On request available with Weldon shank
Cylindrical shank (A4610....) Weldon shank (A4610...W)

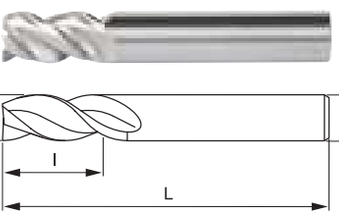
Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A46101	41,32	1	50	3	6	2
A46102	40,94	2	50	6	6	2
A46103	41,32	3	57	8	6	2
A46104	41,32	4	57	11	6	2
A46105	41,32	5	57	13	6	2
A46106	41,32	6	57	13	6	2
A46108	51,96	8	63	19	8	2
A461010	75,77	10	75	22	10	2
A461012	99,69	12	83	26	12	2
A461016	206,01	16	92	32	16	2

END MILLS FOR ALUMINUM ALLOYS Z3

KERFOLG Alufly

NdF | HM | Z 3 | HA HB | ALU

ITEM: A4615

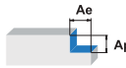
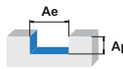


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical / Weldon
Helix	45° right-hand
Surface treatment	Bright
Application	Slotting and side milling on aluminum alloys and plastic materials.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

On request available with Weldon shank
Cylindrical shank (A4615....) Weldon shank (A4615...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A46152	42,50	2	50	3	6	3
A46153	42,89	3	50	6	6	3
A46154	42,89	4	57	8	6	3
A46155	42,89	5	57	11	6	3
A46156	42,89	6	57	13	6	3
A46158	63,18	8	57	13	8	3
A461510	85,33	10	63	19	10	3
A461512	111,01	12	75	22	12	3
A461516	215,22	16	83	26	16	3

		Side milling		Slotting	RANGE							
					A4610			A4615				
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
NON FERROUS	ALU <10% Si	1.5 x D	0.5 x D	1 x D	250	1000	fz/mm	0.027	0.054	0.072	0.090	0,110	0,145
	ALU >10% Si	1.5 x D	0.5 x D	1 x D	150	350	fz/mm	0.022	0.043	0.058	0.072	0,086	0,115

Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 0.8)

Indivisible package Suggested retail package - Unit price

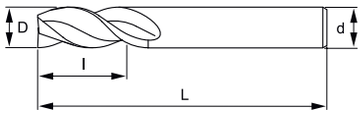
END MILLS FOR ALUMINUM ALLOYS Z3

KERFOLG Alufly

NdF | HM | Z 3 | HA HB | ALU

ITEM: A4612

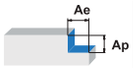
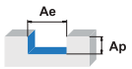
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	45° right-hand Variable pitch
Surface treatment	Lapped face
Application	Slotting and side milling on aluminum alloys and plastic materials.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

On request available with Weldon shank
Cylindrical shank (A4612....) Weldon shank (A4612...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A461203	45,92	3	57	10	6	3
A461204	45,92	4	57	13	6	3
A461205	45,92	5	57	15	6	3
A461206	45,92	6	57	18	6	3
A461208	63,85	8	63	20	8	3
A461210	86,31	10	72	25	10	3
A461212	108,90	12	83	30	12	3
A461216	229,12	16	92	35	16	3
A461220	323,59	20	104	45	20	3

		Side milling		Slotting	RANGE							
					A4612							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
NON FERROUS	ALU <10% Si	1.25 x D	0.25 x D	0.5 x D	250	800	fz/mm	0.016	0.027	0.040	0.048	0.080	0.095
	ALU >10% Si	1.25 x D	0.25 x D	0.5 x D	150	300	fz/mm	0.016	0.027	0.040	0.048	0.080	0.095

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.75)

Indivisible package Suggested retail package - Unit price

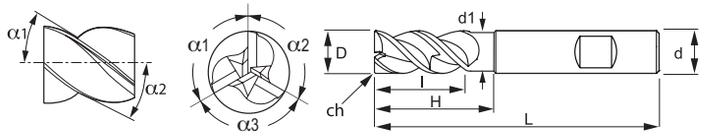
END MILLS FOR ALUMINUM ALLOYS Z3

KERFOLG Alufly

NdF | HM | Z 3 | WIND Z | HA HB | ALU

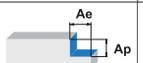
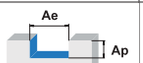
ITEM: A4625

Material	Micro-grain carbide
Standard	Factory standard
Tolerance	f8
Shank	Cylindrical / Weldon
Helix	Right hand variable angle and variable pitch
Surface treatment	WIND Z
Application	Slotting and side milling on aluminum alloys. Superior performances in finishing and tool life.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

Tech. Code	GR05 Euro	D mm	L mm	H mm	d1 mm	l mm	ch 45° mm	d mm	Shank	Z
A462503	53,71	3	57	12	2,70	8	0,10	6	Cylindrical	3
A462504	53,71	4	57	18	3,70	11	0,10	6	Cylindrical	3
A462505	53,71	5	57	18	4,70	13	0,10	6	Cylindrical	3
A462506	56,60	6	57	18	5,70	13	0,20	6	Cylindrical	3
A462508	64,95	8	63	25	7,40	21	0,20	8	Cylindrical	3
A462510	110,42	10	72	30	9,20	22	0,20	10	Cylindrical	3
A462512	146,91	12	83	36	11	26	0,20	12	Cylindrical	3
A462516	267,93	16	92	42	15	36	0,20	16	Weldon	3
A462520	392,69	20	104	52	19	41	0,20	20	Weldon	3

		Side milling		Slotting	RANGE								
					A4625								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
NON FERROUS	ALU <10% Si	1 x D	0.5 x D	1 x D	250	800	fz/mm	0.025	0.06	0.07	0.08	0.09	0.12	0,052
	ALU >10% Si	1 x D	0.5 x D	1 x D	150	300	fz/mm	0.025	0.06	0.07	0.08	0.09	0.12	0,048

Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 0.8)

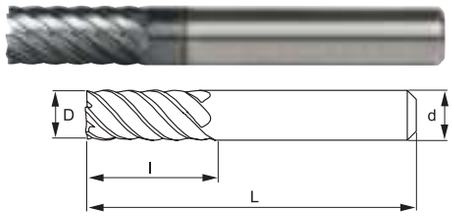
Indivisible package Suggested retail package - Unit price

MULTI FLUTE SUPER FINISHING END MILLS - CENTRE CUTTING

KERFOLG

DIN 6527 | HM | Z+ | WIND | HA | HD

ITEM: A4215



Material	Micro-grain carbide
Standard	DIN 6527
Tolerance	H10
Shank	Cylindrical
Helix	45° right-hand
Surface treatment	WIND
Application	Super-finishing, side milling on materials up to 64 HRC

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●					○	○						●	●	●

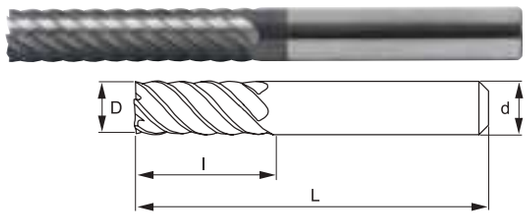
Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A42156	54,38	6	57	13	6	6
A42158	83,22	8	63	19	8	6
A421510	123,29	10	72	22	10	8
A421512	163,77	12	83	26	12	8
A421516	295,00	16	92	32	16	10

MULTI FLUTE SUPER FINISHING END MILLS - CENTRE CUTTING

KERFOLG

NdF | HM | Z+ | WIND | HA | HD

ITEM: A4220



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	H10
Shank	Cylindrical
Helix	45° right-hand
Surface treatment	WIND
Application	Super-finishing side milling on materials up to 64 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●					○	○						●	●	●

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A42204	62,42	4	63	19	6	6
A42205	62,42	5	68	24	6	6
A42206	59,74	6	68	24	6	6
A42208	87,65	8	88	38	8	6
A422010	130,40	10	95	45	10	8
A422012	173,76	12	110	53	12	8
A422014	228,25	14	110	53	14	10
A422016	314,67	16	123	63	16	10
A422020	517,27	20	141	75	20	12

		Side milling		Slotting	RANGE									
		Ae / Ap		Ae / Ap	A4215						A4220			
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	2.0 x D	0.05 x D	-	170	210	fz/mm	0.010	0.020	0.025	0.035	0.044	0.052	0.063	0.080
	<850 N/mm²	2.0 x D	0.05 x D	-	155	190	fz/mm	0.010	0.020	0.022	0.032	0.038	0.046	0.054	0.066
	<1200 N/mm²	2.0 x D	0.05 x D	-	95	135	fz/mm	0.007	0.014	0.017	0.024	0.030	0.036	0.045	0.057
STAINLESS STEEL	<600 N/mm²	2.0 x D	0.05 x D	-	90	115	fz/mm	0.010	0.020	0.024	0.032	0.038	0.046	0.054	0.066
	<800 N/mm²	2.0 x D	0.05 x D	-	75	95	fz/mm	0.007	0.014	0.017	0.024	0.030	0.036	0.045	0.057
CAST IRON	<240 HB	2.0 x D	0.05 x D	-	220	270	fz/mm	0.010	0.020	0.025	0.032	0.039	0.048	0.058	0.073
	<300 HB	2.0 x D	0.05 x D	-	200	250	fz/mm	0.010	0.020	0.024	0.030	0.038	0.046	0.054	0.066
SUPER ALLOY	Ti6Al4V	2.0 x D	0.05 x D	-	65	90	fz/mm	0.006	0.014	0.017	0.024	0.030	0.036	0.045	0.057
	HTA	2.0 x D	0.05 x D	-	45	65	fz/mm	0.004	0.010	0.013	0.019	0.025	0.030	0.038	0.045
HARDENED	<45 HRC	2.0 x D	0.05 x D	-	55	90	fz/mm	0.003	0.009	0.011	0.016	0.021	0.026	0.032	0.038
	<64 HRC	1.5 x D	0.03 x D	-	45	65	fz/mm	0.003	0.007	0.009	0.014	0.018	0.022	0.027	0.033

Recommended "fz" values for side milling.

SUPER FINISHING END MILLS WITH CENTRE CUTTING Z6 WTIH VARABLE PITCH

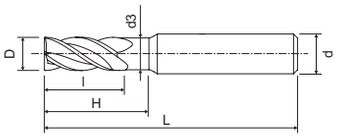
KERFOLG

DIN 6535 | HM | Z 6 | PLATEX | HA HB

NEW

ITEM: A4U25

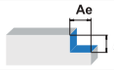
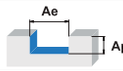
Material	Micro-grain carbide
Standard	DIN 6535
Tolerance	D=f8 / d=h5
Shank	Cylindrical / Weldon
Helix	Variable
Surface treatment	PLATEX
Application	Finishing and super-finishing on steel molds up to 52 HRC



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●					●	●	○	

On request available with Weldon shank.
Straight shank (A4U25....) Weldon shank (A4U25...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	Z
A4U2506	48,22	6	57	13	19	6	5,9	6
A4U2508	55,05	8	63	19	25	8	7,8	6
A4U2510	90,45	10	72	22	30	10	9,7	6
A4U2512	120,55	12	83	26	36	12	11,7	6
A4U2516	228,69	16	92	32	42	16	15,5	6
A4U2520	329,07	20	104	38	52	20	19,5	6

		Side milling		Slotting	RANGE							
					A4U25							
Material	Feature	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	2 x D	0,05 x D	-	200	240	fz/mm	0,030	0,040	0,050	0,060	0,075	0,085
	<850 N/mm²	2 x D	0,05 x D	-	180	200	fz/mm	0,030	0,040	0,050	0,060	0,075	0,085
	<1200 N/mm²	2 x D	0,05 x D	-	160	180	fz/mm	0,023	0,031	0,039	0,047	0,075	0,085
STAINLESS STEEL	<600 N/mm²	2 x D	0,05 x D	-	100	110	fz/mm	0,019	0,026	0,033	0,040	0,050	0,058
	<850 N/mm²	2 x D	0,05 x D	-	100	110	fz/mm	0,019	0,026	0,033	0,040	0,050	0,058
	DUPLEX	2 x D	0,05 x D	-	100	110	fz/mm	0,019	0,026	0,033	0,040	0,050	0,058
CAST IRON	<240 HB	2 x D	0,05 x D	-	200	230	fz/mm	0,035	0,047	0,058	0,070	0,087	0,098
	<300 HB	2 x D	0,05 x D	-	190	210	fz/mm	0,035	0,047	0,058	0,070	0,087	0,098
SUPER ALLOY	Ti6Al4V	2 x D	0,05 x D	-	160	180	fz/mm	0,019	0,026	0,033	0,040	0,051	0,058
	HTA	2 x D	0,05 x D	-	100	120	fz/mm	0,015	0,020	0,025	0,030	0,037	0,042

Recommended "fz" values for side milling finishing.

Indivisible package Suggested retail package - Unit price

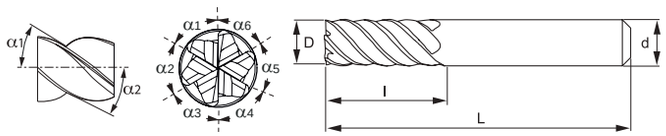
SUPER FINISHING END MILLS

KERFOLG

NdF | HM | Z+ | TiAlCN | HA | Inox

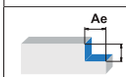
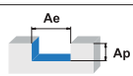
ITEM: A4240

Material	MIcro-grain Integral hard metal
Standard	Factory standard
Tolerance	f8
Shank	Cylindrical
Helix	Right-hand variable angle
Surface treatment	TiAlCN
Application	Finishing and superfinishing on carbon steel, stainless steel, cast iron and super alloys



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●						○	○	●	○	

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A424006	81,75	6	80	33	6	6
A424008	101,44	8	100	40	8	6
A424010	153,55	10	100	55	10	6
A424012	233,05	12	120	65	12	6
A424016	434,63	16	150	85	16	8
A424020	597,81	20	160	100	20	8

		Side milling		Slotting	RANGE							
					A4240							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	2 x D	0.05 x D	-	180	220	fz/mm	0.035	0.045	0.060	0.070	0.095	0.110
	<850 N/mm²	2 x D	0.05 x D	-	155	190	fz/mm	0.030	0.040	0.050	0.060	0.076	0.085
	<1200 N/mm²	2 x D	0.05 x D	-	120	160	fz/mm	0.025	0.035	0.045	0.050	0.065	0.075
STAINLESS STEEL	<600 N/mm²	2 x D	0.05 x D	-	90	130	fz/mm	0.025	0.035	0.045	0.050	0.065	0.075
	<800 N/mm²	2 x D	0.05 x D	-	70	90	fz/mm	0.025	0.035	0.045	0.050	0.065	0.075
	Duplex	2 x D	0.05 x D	-	85	100	fz/mm	0.025	0.035	0.045	0.050	0.065	0.075
SUPER ALLOY	TI6AI4V	2 x D	0.05 x D	-	85	100	fz/mm	0.025	0.035	0.045	0.050	0.065	0.075
	HTA	2 x D	0.05 x D	-	30	55	fz/mm	0.020	0.025	0.030	0.035	0.045	0.055
HARDENED	<45 HRC	2 x D	0.05 x D	-	80	105	fz/mm	0.025	0.035	0.045	0.050	0.065	0.075

Recommended "fz" values for side milling.

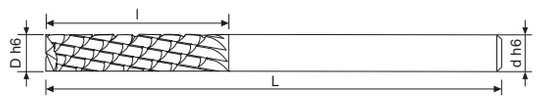
CROSS CUTTING END MILLS Z2

KERFOLG

NdF | HM | Z 2 | DLC | HA | CF

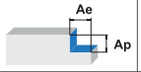
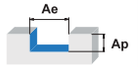
ITEM: A4910

Material	Micro-grain hard metal
Standard	NDF
Tolerance	E9
Shank	Cylindrical
Helix	Cross
Surface treatment	DLC
Application	Specific processing on carbon fiber, both in quarry from full and in contouring.



< 500	< 850	< 1200	< 600	< 850	< 240	< 300	< 10% Si	> 10% Si	Ti6Al4V	HTA	< 45	< 60	C	C+Ti	C+AL
													●		

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A491005060	(104,49)	5	60	16	6	2
A491005075	(120,25)	5	75	28	6	2
A491006060	(114,20)	6	60	20	6	2
A491006075	(132,41)	6	75	35	6	2
A491008063	(142,12)	8	63	22	8	2
A491008100	(167,62)	8	100	40	8	2
A491010072	(204,06)	10	72	25	10	2
A491010100	(239,29)	10	100	50	10	2
A491012083	(259,95)	12	83	30	12	2
A491012100	(306,13)	12	100	50	12	2
A491016092	(455,54)	16	92	35	16	2
A491016125	(569,73)	16	125	60	16	2

		Side milling		Slotting	RANGE							
					A4910							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
C	-	2 x D	0.5 x D	1 x D	80	150	fz/mm	0,125	0,15	0,2	0,25	0,3	0,4

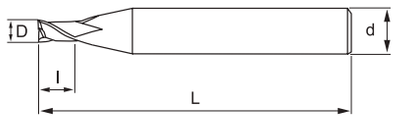
Indivisible package Suggested retail package - Unit price

FLAT MICRO END MILLS Z2

KERFOLG

NdF | HM | Z 2 | WIND X | HA | HD

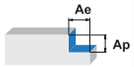
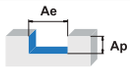
ITEM: A4415



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~ 0.005/0.025mm D > 1mm - ~ 0.001/0.025mm
Shank	Cylindrical
Helix	35° right-hand
Surface treatment	WIND X
Application	Finishing and semi-finishing on materials up to 65 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●					○	○					○	●	●	●

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A44150,2	62,73	0.20	50	0.4	4	2
A44150,3	50,57	0.30	50	0.6	4	2
A44150,4	50,57	0.40	50	0.8	4	2
A44150,5	50,57	0.50	50	1.0	4	2
A44150,6	41,30	0.60	50	1.2	4	2
A44150,7	41,30	0.70	50	1.4	4	2
A44150,8	41,30	0.80	50	1.6	4	2
A44150,9	41,30	0.90	50	1.8	4	2
A44151	41,30	1.00	50	2.0	4	2
A44151,1	41,30	1.10	50	2.0	4	2
A44151,2	41,30	1.20	50	2.5	4	2
A44151,3	41,30	1.30	50	2.5	4	2
A44151,4	41,30	1.40	50	3.0	4	2
A44151,5	41,30	1.50	50	3.0	4	2
A44151,6	41,30	1.60	50	3.5	4	2
A44151,7	41,30	1.70	50	3.5	4	2
A44151,8	41,30	1.80	50	4.0	4	2
A44151,9	41,30	1.90	50	4.0	4	2
A44152	41,30	2.00	50	4.0	4	2
A44152,5	41,30	2.50	50	5.0	4	2
A44153	41,30	3.00	50	6.0	4	2

		Side milling		Slotting	RANGE												
					A4415												
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 0.2	D/mm 0.4	D/mm 0.6	D/mm 0.8	D/mm 1.0	D/mm 1.2	D/mm 1.5	D/mm 2.0	D/mm 2.5	D/mm 3.0
CARBON STEEL	<1200 N/mm²	1 x D	0.05 x D	0.025 x D	250	375	fz/mm	0.002	0.006	0.011	0.015	0.018	0.019	0.023	0.030	0.038	0.046
HARDENED	<45 HRC	1 x D	0.05 x D	0.025 x D	140	230	fz/mm	0.002	0.005	0.010	0.013	0.016	0.017	0.021	0.027	0.034	0.041
	<65 HRC	1 x D	0.05 x D	0.025 x D	100	155	fz/mm	0.002	0.004	0.009	0.011	0.014	0.015	0.018	0.024	0.030	0.036

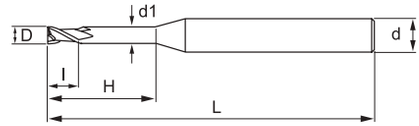
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

FLAT MICRO END MILLS Z2

KERFOLG

NdF | HM | Z 2 | WIND + | HA | UNI

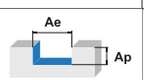
ITEM: A4420



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~ 0.005/0.025mm D > 1 ~ 4mm - ~ 0.001/0.025mm
Shank	Cylindrical with neck
Helix	35° right-hand
Surface treatment	WIND +
Application	Finishing and semifinishing on materials up to 60 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○			●	●

Tech. Code	GR05 Euro	D mm	d1 mm	L mm	l mm	H mm	d mm	Z
A44200,52	61,80	0.5	0.46	50	1	2	4	2
A44200,54	61,91	0.5	0.46	50	1	4	4	2
A44200,56	63,14	0.5	0.46	50	1	6	4	2
A442016	49,67	1	0.95	50	1.5	6	4	2
A442018	49,67	1	0.95	50	1.5	8	4	2
A4420110	49,67	1	0.95	50	1.5	10	4	2
A4420112	49,67	1	0.95	50	1.5	12	4	2
A44201,58	49,67	1.5	1.44	50	2	8	4	2
A44201,510	49,67	1.5	1.44	50	2	10	4	2
A44201,512	49,67	1.5	1.44	50	2	12	4	2
A44201,516	49,67	1.5	1.44	50	2	16	4	2
A442028	49,67	2	1.92	50	3	8	4	2
A4420210	49,67	2	1.92	50	3	10	4	2
A4420212	49,67	2	1.92	50	3	12	4	2
A4420216	49,67	2	1.92	50	3	16	4	2
A4420220	49,67	2	1.92	50	3	20	4	2
A44202,510	49,67	2.5	2.4	50	3	10	4	2
A44202,512	49,67	2.5	2.4	50	3	12	4	2
A44202,516	49,67	2.5	2.4	50	3	16	4	2
A44202,520	49,67	2.5	2.4	50	3	20	4	2
A4420310	54,91	3	2.9	50	4	10	6	2
A4420312	54,91	3	2.9	50	4	12	6	2
A4420316	54,91	3	2.9	50	4	16	6	2
A4420320	61,94	3	2.9	60	4	20	6	2
A4420325	61,94	3	2.9	60	4	25	6	2

		Side milling		Slotting	RANGE													
					A4420													
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 0.2	D/mm 0.4	D/mm 0.6	D/mm 0.8	D/mm 1.0	D/mm 1.2	D/mm 1.5	D/mm 2.0	D/mm 2.5	D/mm 3.0	D/mm 4.0
CARBON STEEL	<850 N/mm²	1 x D	0.5 x D	0.025 x D	200	320	fz/mm	0.002	0.006	0.011	0.015	0.018	0.019	0.023	0.030	0.038	0.046	0.055
	<1200 N/mm²	1 x D	0.5 x D	0.025 x D	180	260	fz/mm	0.002	0.005	0.010	0.013	0.016	0.017	0.021	0.027	0.034	0.041	0.052
HARDENED	<45 HRC	1 x D	0.5 x D	0.025 x D	75	140	fz/mm	0.002	0.004	0.009	0.011	0.014	0.015	0.018	0.024	0.030	0.036	0.043
	<60 HRC	1 x D	0.5 x D	0.025 x D	50	115	fz/mm	0.002	0.004	0.008	0.010	0.013	0.014	0.017	0.022	0.028	0.033	0.040

Recommended "fz" values for side milling with H < 3 x D sized tools.
As for H > 3 x D, adjust cutting parameters (ex. fz x 0.7)
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

Indivisible package Suggested retail package - Unit price

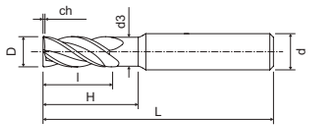
ROUGHING END MILLS Z4 VARIALBLE HELIX

KERFOLG

DIN 6535 | HM | Z 4 | STD FINE | PLATEX | HA HB | UNI

NEW

ITEM: A4U12

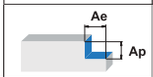
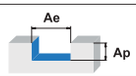


Material	Micro-grain carbide
Standard	DIN 6535
Tolerance	D=f8 / d=h5
Shank	Cylindrical / Weldon
Helix	Variable
Surface treatment	PLATEX
Application	Roughing and side milling on carbon steels up to 50 HRC, grey and malleable cast iron.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●					●	●	○	

On request available with Weldon shank.
Straight Shank (A4U12....) Weldon Shank (A4U12...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	ch mm	Z
A4U1206	72,49	6	57	13	20	6	5,9	0,1	4
A4U1208	92,05	8	63	21	26	8	7,8	0,2	4
A4U1210	113,26	10	72	23	31	10	9,7	0,2	4
A4U1212	145,00	12	83	26	37	12	11,7	0,3	4
A4U1216	223,64	16	92	32	42	16	15,5	0,3	4
A4U1220	364,00	20	104	38	53	20	19,5	0,3	4

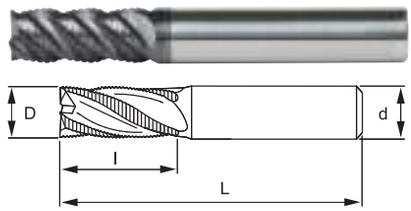
		Side milling		Slotting	RANGE								
					A4U12								
Material	Caratteristica	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1,5 x D	0,5 x D	1,0 x D	140	200	fz/mm	0,035	0,047	0,058	0,070	0,087	0,098
	<850 N/mm²	1,5 x D	0,5 x D	1,0 x D	120	165	fz/mm	0,035	0,047	0,058	0,070	0,087	0,098
	<1200 N/mm²	1 x D	0,75 x D	1,0 x D	65	120	fz/mm	0,030	0,040	0,050	0,060	0,075	0,085
STAINLESS STEEL	<600 N/mm²	1,5 x D	0,75 x D	1,0 x D	80	100	fz/mm	0,019	0,026	0,033	0,040	0,050	0,058
	<800 N/mm²	1 x D	0,75 x D	1,0 x D	60	85	fz/mm	0,019	0,026	0,033	0,040	0,050	0,058
	Duplex	1 x D	0,75 x D	1,0 x D	50	70	fz/mm	0,019	0,026	0,033	0,040	0,050	0,058
CAST IRON	<240 HB	1,5 x D	1 x D	1,0 x D	120	160	fz/mm	0,047	0,063	0,080	0,095	0,120	0,135
	<300 HB	1,5 x D	1 x D	1,0 x D	100	130	fz/mm	0,047	0,063	0,080	0,095	0,120	0,135
SUPER ALLOY	Ti6Al4V	1 x D	0,5 x D	0,5 x D	50	90	fz/mm	0,020	0,026	0,033	0,040	0,050	0,058
	HTA	1 x D	0,5 x D	0,5 x D	45	60	fz/mm	0,015	0,020	0,025	0,030	0,037	0,041

ROUGHING END MILLS MULTI-CUTTING

KERFOLG Rav

NdF | HM | Z+ | STD FINE | WIND | HA HB | UNI

ITEM: A4507

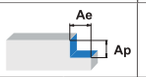
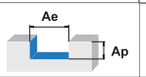


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h11
Shank	Cylindrical / Weldon
Helix	45° right-hand
Surface treatment	WIND
Application	Roughing and side milling on carbon steels up to 55 HRC, stainless steel, titanium alloy and HTA.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

On request available with Weldon shank
Cylindrical shank (A4507....) Weldon shank (A4507...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A450703	85,28	3	57	8	6	3
A450704	86,94	4	57	12	6	3
A450705	86,94	5	57	12	6	4
A450706	86,94	6	57	13	6	4
A450707	111,93	7	63	13	8	4
A450708	100,70	8	63	16	8	4
A450709	133,46	9	70	16	10	4
A450710	120,02	10	70	22	10	4
A450711	153,31	11	75	26	12	4
A450712	142,17	12	75	26	12	4
A450714	212,55	14	75	26	16	4
A450715	248,38	15	92	32	16	4
A450716	258,88	16	92	32	16	6
A450720	357,31	20	104	38	20	6

		Side milling		Slotting	RANGE											
					A4507											
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1.5 x D	0.3 x D	1.0 x D	115	160	fz/mm	0.016	0.020	0.026	0.031	0.042	0.059	0.072	0.088	0.100
	<850 N/mm²	1.5 x D	0.3 x D	1.0 x D	80	125	fz/mm	0.015	0.018	0.025	0.029	0.035	0.053	0.063	0.079	0.090
	<1200 N/mm²	1.5 x D	0.3 x D	0.5 x D	70	105	fz/mm	0.012	0.016	0.022	0.027	0.032	0.050	0.059	0.072	0.080
STAINLESS STEEL	<600 N/mm²	1.0 x D	0.3 x D	0.5 x D	45	75	fz/mm	0.016	0.018	0.025	0.031	0.035	0.054	0.063	0.080	0.090
	<800 N/mm²	1.0 x D	0.3 x D	0.5 x D	35	70	fz/mm	0.012	0.014	0.022	0.027	0.032	0.050	0.052	0.072	0.082
CAST IRON	<240 HB	1.5 x D	0.3 x D	1.0 x D	80	120	fz/mm	0.016	0.019	0.026	0.033	0.047	0.060	0.074	0.090	0.110
	<300 HB	1.5 x D	0.3 x D	1.0 x D	70	100	fz/mm	0.015	0.018	0.024	0.029	0.045	0.054	0.065	0.082	0.100
SUPER ALLOY	TI6Al4V	0.5 x D	0.3 x D	0.3 x D	35	50	fz/mm	0.010	0.015	0.022	0.027	0.035	0.044	0.052	0.063	0.080
	HTA	0.5 x D	0.3 x D	0.3 x D	15	30	fz/mm	0.009	0.013	0.020	0.025	0.032	0.039	0.046	0.058	0.072

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

Indivisible package Suggested retail package - Unit price

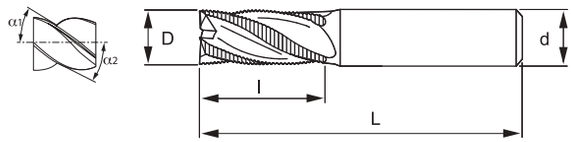
ROUGHING END MILLS MULTI-CUTTING-VARIABLE HELIX

KERFOLG Vari RAV

NdF | HM | Z+ | STD INOX | WIND + | HA HB | Inox

ITEM: A4516

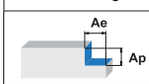
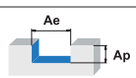
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon
Helix	Variable 28° - 31° right-hand
Surface treatment	WIND +
Application	High performance roughing and semi finishing on carbon steels, stainless steels and nickel alloys



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●						○	○	●	○	

On request available with Weldon shank
Cylindrical shank (A4516....) Weldon shank (A4516...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A451606	88,50	6	57	13	6	4
A451608	102,80	8	63	19	8	4
A451610	123,50	10	72	22	10	4
A451612	148,50	12	83	26	12	4
A451616	239,10	16	92	32	16	6
A451620	360,30	20	104	38	20	6

		Side milling		Slotting	RANGE							
					A4516							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1.5 x D	0.3 x D	1 x D	140	175	fz/mm	0.020	0.025	0.030	0.040	0.050	0.065
	<850 N/mm²	1.5 x D	0.3 x D	1 x D	120	145	fz/mm	0.015	0.020	0.025	0.030	0.040	0.050
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.3 x D	1 x D	75	100	fz/mm	0.031	0.034	0.045	0.050	0.052	0.055
	<800 N/mm²	1.5 x D	0.3 x D	1 x D	60	75	fz/mm	0.020	0.030	0.040	0.045	0.050	0.052
	Duplex	1.5 x D	0.3 x D	0.5 x D	40	70	fz/mm	0.030	0.035	0.040	0.050	0.070	0.080
SUPER ALLOY	Ti6Al4V	1.5 x D	0.3 x D	0.3 x D	30	55	fz/mm	0.030	0.035	0.040	0.050	0.070	0.080
	HTA	1.5 x D	0.3 x D	0.3 x D	25	35	fz/mm	0.015	0.020	0.025	0.030	0.040	0.050

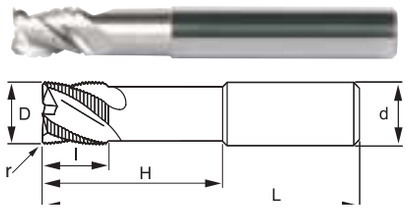
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

ROUGHING END MILLS FOR ALUMINUM ALLOYS Z3

KERFOLG Alufly

NdF | HM | Z 3 | HSC ALU | HA HB | ALU

ITEM: A4525

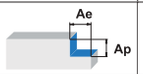
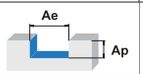


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h6
Shank	Cylindrical / Weldon
Helix	40° right-hand
Surface treatment	Bright
Application	Very high performing rougher for slot and side milling on aluminum alloy up to 7% silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

On request available with Weldon shank
Cylindrical shank (A4525....) Weldon shank (A4525...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	H mm	r mm	Z
A452506	71,00	6	57	9	6	18	0,25	3
A452508	99,00	8	63	12	8	23	0,25	3
A452510	129,00	10	72	12	10	29	0,50	3
A452512	177,00	12	83	12	12	35	0,50	3
A452516	275,00	16	92	14	16	35	1,0	3
A452520	415,00	20	104	17	20	59	1,0	3

		Side milling		Slotting	RANGE							
					A4525							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
NON FERROUS	ALU<10%Si	1 x D	0.5 x D	1 x D	250	1000	fz/mm	0.070	0.120	0.150	0.170	0.200	0.220
	ALU>10%Si	1 x D	0.5 x D	1 x D	200	350	fz/mm	0.060	0.100	0.130	0.150	0.180	0.200

Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 1.5)

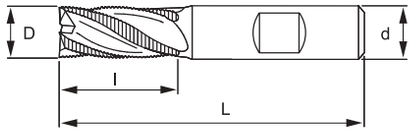
Indivisible package Suggested retail package - Unit price

ROUGHING END MILLS FOR ALUMINUM ALLOYS Z3

KERFOLG Alufly

NdF | HM | Z 3 | STD ALU | HB | ALU

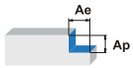
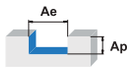
ITEM: A4520



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	-0.020 / -0.070 mm
Shank	Weldon
Helix	30° right-hand
Surface treatment	Bright
Application	Roughing and side milling on aluminum alloy up to 7% silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A45206	(63,21)	6	57	13	6	3
A45208	89,36	8	63	16	8	3
A452010	119,57	10	72	22	10	3
A452012	142,81	12	83	26	12	3
A452016	256,76	16	92	32	16	3
A452020	380,00	20	104	38	20	3

		Side milling		Slotting	RANGE							
					A4520							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
NON FERROUS	ALU <10% Si	1.5 x D	0.5 x D	1 x D	250	1000	fz/mm	0.054	0.069	0.085	0.100	0.130	0.160
	ALU >10% Si	1.5 x D	0.5 x D	1 x D	150	350	fz/mm	0.045	0.058	0.071	0.083	0.096	0.135

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

CORNER RADIUS END MILLS WITH VARIABLE PITCH Z4

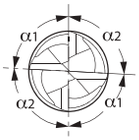
KERFOLG

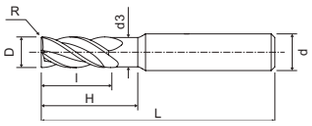
NEW

DIN 6535 | HM | Z 4 | PLATEX | HA HB | Inox

ITEM: A4U11

Material	Micro-grain carbide
Standard	DIN 6535
Tolerance	D=f8 / d=h5
Shank	Cylindrical / Weldon with neck reduction
Helix	Variable
Surface treatment	PLATEX
Application	Slotting and profiling on materials up to 55 HRC. Particularly suitable for stainless steel.

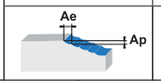
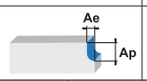




< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Bass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	●	●					●	●	○	

On request available with Weldon shank.
Cylindrical shank (A4U11....) Weldon shank (A4U11...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d3 mm	R mm	Z
A4U110602	70,16	6	57	13	18	6	5,9	0,20	4
A4U110605	70,16	6	57	13	18	6	5,9	0,50	4
A4U110610	70,16	6	57	13	18	6	5,9	1,00	4
A4U110805	79,26	8	63	21	25	8	7,8	0,50	4
A4U110810	79,26	8	63	21	25	8	7,8	1,00	4
A4U111005	97,89	10	72	22	30	10	9,7	0,50	4
A4U111010	97,89	10	72	22	30	10	9,7	1,00	4
A4U111020	97,89	10	72	22	30	10	9,7	2,00	4
A4U111205	140,22	12	83	26	36	12	11,7	0,50	4
A4U111210	140,22	12	83	26	36	12	11,7	1,00	4
A4U111220	140,22	12	83	26	36	12	11,7	2,00	4
A4U111605	215,24	16	92	36	42	16	15,5	0,50	4
A4U111610	215,24	16	92	36	42	16	15,5	1,00	4
A4U111620	215,24	16	92	36	42	16	15,5	2,00	4

		Profiling		Slotting		RANGE						
						A4U11						
Material	Feature	Ap	Ae	Ap	Vc m/min min	Vc m/min max	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	1 x D	0,5 x D	1,0 x D	120	150	fz/mm	0,035	0,047	0,058	0,070	0,087
	<850 N/mm²	1 x D	0,5 x D	1,0 x D	85	130	fz/mm	0,035	0,047	0,058	0,070	0,087
	<1200 N/mm²	1 x D	0,4 x D	1,0 x D	75	115	fz/mm	0,030	0,040	0,050	0,060	0,075
STAINLESS STEEL	<600 N/mm²	1 x D	0,5 x D	1,0 x D	70	110	fz/mm	0,019	0,026	0,033	0,040	0,050
	<800 N/mm²	1 x D	0,4 x D	1,0 x D	60	100	fz/mm	0,019	0,026	0,033	0,040	0,050
	DUPLEX	1 x D	0,4 x D	1,0 x D	55	90	fz/mm	0,019	0,026	0,033	0,040	0,050
CAST IRON	<240 HB	1 x D	0,5 x D	1,0 x D	130	175	fz/mm	0,047	0,063	0,080	0,095	0,120
	<300 HB	1 x D	0,5 x D	1,0 x D	100	150	fz/mm	0,047	0,063	0,080	0,095	0,120
SUPER ALLOY	Ti6Al4V	1 x D	0,25 x D	0,5 x D	50	75	fz/mm	0,019	0,026	0,033	0,040	0,050
	HTA	1 x D	0,25 x D	0,5 x D	30	55	fz/mm	0,015	0,020	0,025	0,030	0,037

Indivisible package Suggested retail package - Unit price

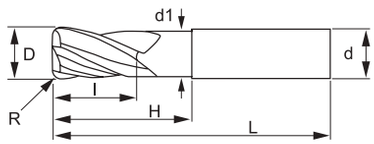
CORNER RADIUS END MILLS Z4

KERFOLG

NdF | HM | Z 4 | WIND | HA HB | UNI

ITEM: A4126

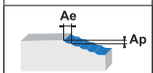
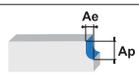
Material	Sub micro-grain carbide 0,4
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon with neck reduction
Helix	30° right-hand
Surface treatment	WIND
Application	Slotting, pocketing and profiling on materials up to 62 HRC.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

On request available with Weldon shank
Cylindrical shank (A4126....) Weldon shank (A4126...W)

Tech. Code	GR05 Euro	D mm	R mm	l mm	d1 mm	H mm	L mm	d mm	Z
A412660,3	58,61	6	0.3	6	5.8	24	60	6	4
A412660,5	58,61	6	0.5	6	5.8	24	60	6	4
A412661	58,61	6	1,0	6	5.8	24	60	6	4
A412680,3	70,86	8	0.3	8	7.8	29	75	8	4
A412680,5	70,86	8	0.5	8	7.8	29	75	8	4
A412681	70,86	8	1,0	8	7.8	29	75	8	4
A412681,5	70,86	8	1.5	8	7.8	29	75	8	4
A412682	70,86	8	2,0	8	7.8	29	75	8	4
A4126100,3	100,73	10	0.3	10	9.7	35	80	10	4
A4126100,5	100,73	10	0.5	10	9.7	35	80	10	4
A4126101	100,73	10	1,0	10	9.7	35	80	10	4
A4126101,5	100,73	10	1.5	10	9.7	35	80	10	4
A4126102	100,73	10	2,0	10	9.7	35	80	10	4
A4126120,5	127,21	12	0.5	12	11.7	37	100	12	4
A4126121	127,21	12	1,0	12	11.7	37	100	12	4
A4126121,5	127,21	12	1.5	12	11.7	37	100	12	4
A4126122	127,21	12	2,0	12	11.7	37	100	12	4
A4126160,5	237,93	16	0.5	16	15.5	42	105	16	4
A4126161	237,93	16	1,0	16	15.5	42	105	16	4
A4126161,5	(237,93)	16	1.5	16	15.5	42	105	16	4
A4126162	(237,93)	16	2,0	16	15.5	42	105	16	4

		Profiling		Slotting		RANGE							
						A4126							
Material	Feature	Ap	Ae	Ap	Ae	Vc m/min. min.	Vc m/min. max	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<850 N/mm²	0.1 x D	0.1 x D	1 x D	0.1 x D	200	240	fz/mm	0.053	0.071	0.084	0.095	0.135
	<1200 N/mm²	0.1 x D	0.1 x D	1 x D	0.1 x D	180	215	fz/mm	0.048	0.064	0.076	0.086	0.125
CAST IRON	<240 HB	0.1 x D	0.1 x D	1 x D	0.1 x D	200	240	fz/mm	0.061	0.082	0.097	0.110	0.145
	<300 HB	0.1 x D	0.1 x D	1 x D	0.1 x D	180	215	fz/mm	0.053	0.071	0.084	0.095	0.132
HARDENED	<45 HRC	0.1 x D	0.1 x D	1 x D	0.1 x D	95	120	fz/mm	0.043	0.057	0.067	0.076	0.105
	<62 HRC	0.1 x D	0.1 x D	1 x D	0.1 x D	65	90	fz/mm	0.043	0.057	0.067	0.076	0.095

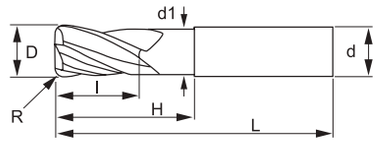
Recommended "fz" values for profiling.
For side milling Ap = 1 x D Ae = 0,1 x D, Adjust cutting parameters (ex. Vc x 0.6 fz x 0.75)

CORNER RADIUS END MILLS Z4

KERFOLG

NdF | HM | Z4 | WIND | HA HB | UNI

ITEM: A4131

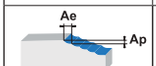
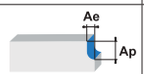


Material	Sub micro-grain carbide 0,4
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical / Weldon with neck reduction
Helix	30° right-hand
Surface treatment	WIND
Application	Slotting, pocketing and profiling on materials up to 62 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

On request available with Weldon shank
Cylindrical shank (A4131....) Weldon shank (A4131...W)

Tech. Code	GR05 Euro	D mm	R mm	l mm	d1 mm	H mm	L mm	d mm	Z
A413160,5	75,81	6	0.5	6	5.8	45	90	6	4
A413161	75,81	6	1,0	6	5.8	45	90	6	4
A413180,5	106,50	8	0.5	8	7.8	55	100	8	4
A413181	106,50	8	1,0	8	7.8	55	100	8	4
A4131100,5	133,69	10	0.5	10	9.7	55	100	10	4
A4131101,5	133,69	10	1.5	10	9.7	55	100	10	4
A4131120,5	178,60	12	0.5	12	11.7	75	120	12	4
A4131121	178,60	12	1,0	12	11.7	75	120	12	4
A4131121,5	178,60	12	1.5	12	11.7	75	120	12	4

		Profiling		Side milling		RANGE							
						A4131							
Material	Feature	Ap	Ae	Ap	Ae	Vc m/min. min.	Vc m/min. max	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<850 N/mm²	0.1 x D	0.1 x D	1 x D	0.1 x D	200	240	fz/mm	0.053	0.071	0.084	0.095	0.135
	<1200 N/mm²	0.1 x D	0.1 x D	1 x D	0.1 x D	180	215	fz/mm	0.048	0.064	0.076	0.086	0.125
CAST IRON	<240 HB	0.1 x D	0.1 x D	1 x D	0.1 x D	200	240	fz/mm	0.061	0.082	0.097	0.110	0.145
	<300 HB	0.1 x D	0.1 x D	1 x D	0.1 x D	180	215	fz/mm	0.053	0.071	0.084	0.095	0.132
HARDENED	<45 HRC	0.1 x D	0.1 x D	1 x D	0.1 x D	95	120	fz/mm	0.043	0.057	0.067	0.076	0.105
	<62 HRC	0.1 x D	0.1 x D	1 x D	0.1 x D	65	90	fz/mm	0.043	0.057	0.067	0.076	0.095

Recommended "fz" values for profiling.
For side milling Ap = 1 x D Ae = 0,1 x D, Adjust cutting parameters (ex. Vc x 0.6 fz x 0.75)

Indivisible package Suggested retail package - Unit price

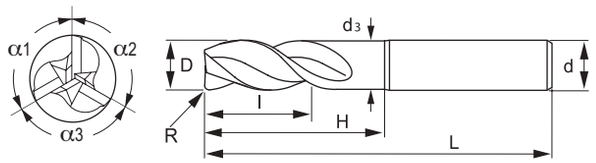
CORNER RADIUS END MILLS FOR ALUMINUM ALLOYS Z3

KERFOLG Alufly

NdF | HM | Z 3 | HA HB | ALU

ITEM: A4616

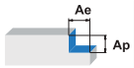
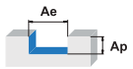
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical / Weldon
Helix	45° right-hand variable pitch
Surface treatment	Bright
Application	Slotting, pocketing on aluminum alloys, superior performances for steep wall finishing.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

On request available with Weldon shank
Cylindrical shank (A4616....) Weldon shank (A4616...W)

Tech. Code	GR05 Euro	D mm	R mm	L mm	d3 mm	l mm	H mm	d mm	Z
A4616302	45,14	3	0.2	55	2.8	4.5	12	3	3
A4616305	45,14	3	0.5	55	2.8	4.5	12	3	3
A4616402	47,52	4	0.2	55	3.8	6	12	4	3
A4616405	47,52	4	0.5	55	3.8	6	12	4	3
A4616502	49,03	5	0.2	58	4.8	7.5	15	5	3
A4616505	49,03	5	0.5	58	4.8	7.5	15	5	3
A4616602	54,32	6	0.2	63	5.8	9	18	6	3
A4616605	54,32	6	0.5	63	5.8	9	18	6	3
A4616610	54,32	6	1.0	63	5.8	9	18	6	3
A4616615	54,32	6	1.5	63	5.8	9	18	6	3
A4616802	74,74	8	0.2	76	7.7	12	24	8	3
A4616805	74,74	8	0.5	76	7.7	12	24	8	3
A4616810	74,74	8	1.0	76	7.7	12	24	8	3
A4616815	74,74	8	1.5	76	7.7	12	24	8	3
A4616820	74,74	8	2.0	76	7.7	12	24	8	3
A46161002	111,46	10	0.2	89	9.7	15	30	10	3
A46161005	111,46	10	0.5	89	9.7	15	30	10	3
A46161010	111,46	10	1.0	89	9.7	15	30	10	3
A46161015	111,46	10	1.5	89	9.7	15	30	10	3
A46161020	111,46	10	2.0	89	9.7	15	30	10	3
A46161202	162,32	12	0.2	100	11.6	18	36	12	3
A46161205	162,32	12	0.5	100	11.6	18	36	12	3
A46161210	162,32	12	1.0	100	11.6	18	36	12	3
A46161215	162,32	12	1.5	100	11.6	18	36	12	3
A46161220	162,32	12	2.0	100	11.6	18	36	12	3
A46161602	268,60	16	0.2	110	15.5	24	48	16	3
A46161610	268,60	16	1.0	110	15.5	24	48	16	3
A46161620	268,60	16	2.0	110	15.5	24	48	16	3

		Side milling		Slotting	RANGE								
					A4616								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
NON FERROUS	ALU <10% Si	1.5 x D	0.5 x D	1 x D	250	1000	fz/mm	0.027	0.054	0.072	0.090	0,110	0,145
	ALU >10% Si	1.5 x D	0.5 x D	1 x D	150	350	fz/mm	0.022	0.043	0.058	0.072	0,086	0,115

Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 0.8)

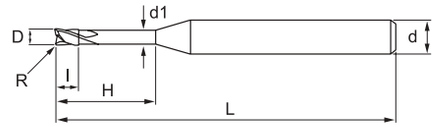
Indivisible package Suggested retail package - Unit price

CORNER RADIUS MICRO END MILLS Z2

KERFOLG

NdF | HM | Z 2 | WIND | HA | UNI

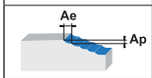
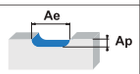
ITEM: A4435



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h8
Shank	Cylindrical with reduced neck
Helix	30° right-hand
Surface treatment	WIND
Application	Finishing and semi-finishing on materials up to 60 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

Tech. Code	GR05 Euro	D mm	R mm	L mm	l mm	H mm	d1 mm	d mm	Z
A44350,54	63,34	0.50	0.10	50	1.00	4	0.48	4	2
A44350,66	63,34	0.60	0.10	50	1.00	6	0.58	4	2
A44350,84	63,34	0.80	0.10	50	1.00	4	0.77	4	2
A44350,86	63,34	0.80	0.10	50	1.00	6	0.77	4	2
A443516	59,20	1.00	0.10	50	0.80	6	0.95	4	2
A4435110	63,34	1.00	0.10	50	0.80	10	0.95	4	2
A4435116	59,20	1.00	0.10	55	0.80	16	0.95	4	2
A4435120	63,34	1.00	0.10	60	0.80	20	0.95	4	2
A44351,212	63,34	1.20	0.10	55	1.10	12	1.15	4	2
A44351,58	59,20	1.50	0.15	50	1.35	8	1.44	4	2
A44351,512	59,20	1.50	0.15	55	1.35	12	1.44	4	2
A44351,520	59,20	1.50	0.15	60	1.35	20	1.44	4	2
A44351,820	63,34	1.80	0.15	60	1.60	20	1.73	4	2
A443526	56,83	2.00	0.20	50	1.70	6	1.92	4	2
A443528	56,83	2.00	0.20	50	1.70	8	1.92	4	2
A4435210	59,20	2.00	0.20	50	1.70	10	1.92	4	2
A4435212	59,20	2.00	0.20	55	1.70	12	1.92	4	2
A4435216	59,20	2.00	0.20	55	1.70	16	1.92	4	2
A4435220	59,20	2.00	0.20	60	1.70	20	1.92	4	2
A4435225	59,20	2.00	0.20	65	1.70	25	1.92	4	2
A4435230	59,20	2.00	0.20	70	1.70	30	1.92	4	2
A44352,513	63,34	2.50	0.25	58	2.00	13	2.4	6	2
A4435310	62,60	3.00	0.30	58	2.50	10	2.85	6	2
A4435312	62,60	3.00	0.30	58	3,00	12	2.85	6	2
A4435316	62,60	3.00	0.30	65	3,00	16	2.85	6	2
A4435320	62,60	3.00	0.30	65	4,00	20	2.85	6	2
A4435335	62,60	3.00	0.30	80	2.50	35	2.85	6	2
A4435412	74,26	4.00	0.40	58	4.50	12	3.90	6	2
A4435420	76,34	4.00	0.40	65	5.00	20	3.90	6	2
A4435435	76,34	4.00	0.40	80	3.00	35	3.90	6	2
A4435540	73,00	5.00	0.50	80	3.50	40	4.90	6	2
A4435650	80,30	6.00	0.50	100	6.00	50	5.9	6	2

		Profiling		Slotting	RANGE													
					A4435													
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 0.5	D/mm 0.5	D/mm 1.0	D/mm 1.0	D/mm 1.5	D/mm 1.5	D/mm 2.0	D/mm 2.0	D/mm 2.5	D/mm 2.5	D/mm 3.0
CARBON STEEL	<850 N/mm²	1.0 x D	0.2 x D	0.20 x D	200	320	fz/mm	0.003	0.004	0.005	0.007	0.008	0.010	0.016	0.022	0.048	0.038	0.048
	<1200 N/mm²	1.0 x D	0.2 x D	0.15 x D	180	260	fz/mm	0.003	0.003	0.004	0.006	0.007	0.009	0.014	0.020	0.045	0.036	0.045
HARDENED	<45 HRC	0.5 x D	0.2 x D	0.10 x D	75	140	fz/mm	0.002	0.003	0.004	0.006	0.007	0.009	0.011	0.016	0.040	0.030	0.040
	<60 HRC	0.5 x D	0.2 x D	0.10 x D	50	115	fz/mm	0.002	0.003	0.003	0.005	0.006	0.008	0.010	0.013	0.035	0.026	0.035

Recommended "fz" values for profiling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

Indivisible package Suggested retail package - Unit price

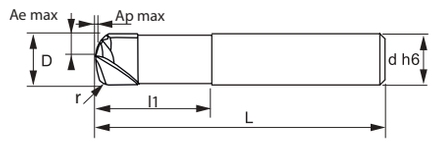
HIGH FEED END MILLS - Z2 - Z3

KERFOLG Plana

NdF | HM | Z 2 | Z 3 | TiCN | HA | UNI

ITEM: A4140

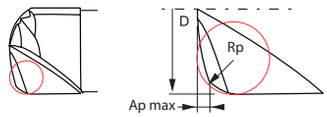
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical with nacked shank
Helix	0° right-hand
Surface treatment	TiCN
Application	Roughing of 3D surfaces on hardened materials up to 52 HRC.

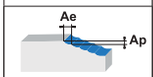


< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	○

Tech. Code	GR05 Euro	D mm	L mm	l1 mm	r mm	Rp mm	Ae max mm	Ap max mm	d mm	Z
A41400314	60,57	3	53	14	0,75	0,70	1,5	0,20	3	2
A41400326	71,10	3	53	26	0,75	0,70	1,5	0,20	3	2
A41400419	60,57	4	53	19	1,0	0,85	2	0,27	4	3
A41400435	72,20	4	64	35	1,0	0,85	2	0,27	4	3
A41400524	63,54	5	53	24	1,25	1,20	2,5	0,34	5	3
A41400629	75,60	6	53	29	1,50	1,40	3,00	0,40	6	3
A41400653	81,27	6	80	53	1,50	1,40	3,00	0,40	6	3
A41400838	89,10	8	64	38	2,00	1,95	4,00	0,54	8	3
A41400858	112,14	8	106	58	2,00	1,95	4,00	0,54	8	3
A41401048	118,80	10	80	48	2,50	2,30	5,00	0,68	10	3
A41401060	134,64	10	106	60	2,50	2,30	5,00	0,68	10	3
A41401252	147,33	12	80	52	3,00	2,85	6,00	0,81	12	3

D mm	Rp mm	Ap max mm
3	0.70	0.20
4	0.85	0.27
5	1.20	0.34
6	1.40	0.40
8	1.95	0.54
10	2.30	0.68
12	2.85	0.81



		Profiling			RANGE									
					A4140									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12
CARBON STEEL	<850 N/mm²	0,067 x D	0,55 x D		260	300	fz/mm	0.15	0.15	0.16	0.20	0.28	0.33	0.38
	<1200 N/mm²	0,067 x D	0,55 x D		190	265	fz/mm	0.14	0.14	0.15	0.18	0.25	0.30	0.35
STAINLESS STEEL	<800 N/mm²	0,067 x D	0,55 x D		125	150	fz/mm	0.15	0.15	0.16	0.20	0.26	0.30	0.35
	Duplex	0,067 x D	0,55 x D		110	135	fz/mm	0.14	0.14	0.15	0.18	0.24	0.28	0.32
SUPER ALLOY	TI6AI4V	0,067 x D	0,55 x D		75	125	fz/mm	0.12	0.12	0.13	0.16	0.20	0.26	0.30
HARDENED	<52 HRC	0,067 x D	0,55 x D		60	70	fz/mm	0.14	0.14	0.15	0.18	0.22	0.28	0.32

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

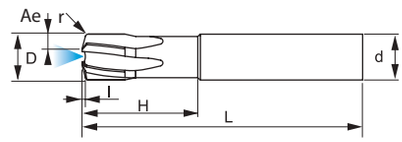
HIGH FEED END MILLS - COOLANT HOLE Z6

KERFOLG Ultracut

NdF | HM | Z 6 | | WIND X | HA | | HD

ITEM: A4138

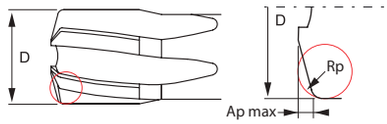
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical with neck reduction
Helix	15° right-hand
Surface treatment	WIND X
Application	Pocketing and side milling on hardned materials up to 65 HRC.

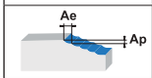
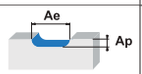


< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
	○	●				○	○						●	●	●

Tech. Code	GR05 Euro	D mm	L mm	r mm	l max mm	Ae max mm	H mm	d mm	Z
A41386	83,87	6	63	0.63	0,32	1,32	18	6	6
A41388	114,97	8	76	0.83	0,42	1,76	24	8	6
A413810	172,98	10	89	1.04	0,53	2,20	30	10	6
A413812	227,24	12	100	1.24	0,63	2,64	36	12	6
A413816	347,03	16	110	1.66	0,84	3,52	48	16	6

D mm	Rp mm	Ap max mm
6	0.63	0.32
8	0.83	0.42
10	1.04	0.53
12	1.24	0.63
16	1.66	0.84



		Profiling		Slotting	RANGE							
					A4138							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<850 N/mm²	0.025 x D	0.5 x D	0.025 x D	120	145	fz/mm	0.136	0.210	0.290	0.360	0.450
	<1200 N/mm²	0.025 x D	0.5 x D	0.025 x D	95	125	fz/mm	0.136	0.210	0.290	0.360	0.450
HARDENED	<56 HRC	0.025 x D	0.5 x D	0.025 x D	60	70	fz/mm	0.105	0.165	0.215	0.265	0.340
	<62 HRC	0.025 x D	0.5 x D	0.025 x D	35	55	fz/mm	0.105	0.165	0.215	0.265	0.340

Recommended "fz" values for profiling.
For slotting Ap < 0,025 x D Ae = 1 x D, Adjust cutting parameters. (ex: Vc X 0,8 fz X 0,75)

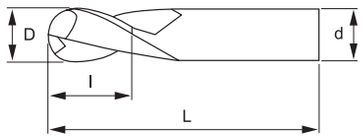
Indivisible package Suggested retail package - Unit price

BALL NOSE END MILLS Z2

WRK

NdF | HM | Z 2 | WIND | HA HB

ITEM: A4315

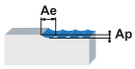
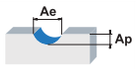


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical / Weldon
Helix	30° right-hand
Surface treatment	WIND
Application	Copying, semi-finishing and finishing.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

On request available with Weldon shank
Cylindrical shank (A4315....) Weldon shank (A4315...W)

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A43151	28,12	1.00	50	2	6	2
A43151,5	28,12	1.50	50	3	6	2
A43152	28,12	2.00	50	4	6	2
A43152,5	28,12	2.50	50	5	6	2
A43153	28,12	3.00	50	6	6	2
A43154	28,12	4.00	50	8	6	2
A43155	28,12	5.00	50	10	6	2
A43156	28,12	6.00	50	12	6	2

		Profiling		Slotting	RANGE								
					A4315								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12
CARBON STEEL	<500 N/mm²	0.05 x D	0.05 x D	0.4 x D	90	115	fz/mm	0.012	0.016	0.025	0.031	0.042	0.053	0.063
	<850 N/mm²	0.05 x D	0.05 x D	0.4 x D	80	110	fz/mm	0.010	0.015	0.023	0.027	0.035	0.050	0.059
	<1200 N/mm²	0.05 x D	0.05 x D	-	70	95	fz/mm	0.008	0.010	0.018	0.025	0.032	0.044	0.052
STAINLESS STEEL	<600 N/mm²	0.05 x D	0.05 x D	0.3 x D	70	85	fz/mm	0.008	0.015	0.023	0.027	0.035	0.050	0.059
	<800 N/mm²	0.05 x D	0.05 x D	-	55	70	fz/mm	0.007	0.010	0.018	0.025	0.032	0.044	0.052
CAST IRON	<240 HB	0.05 x D	0.05 x D	0.4 x D	80	105	fz/mm	0.010	0.016	0.022	0.030	0.042	0.053	0.063
	<300 HB	0.05 x D	0.05 x D	0.3 x D	70	90	fz/mm	0.008	0.015	0.020	0.029	0.040	0.050	0.059
HARDENED	<45 HRC	0.03 x D	0.03 x D	-	35	45	fz/mm	0.006	0.010	0.016	0.025	0.032	0.039	0.048

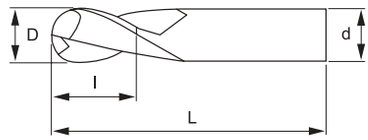
Recommended "fz" values for finishing.
For semi-finishing, adjust the cutting parameters. (ex: Ap = 0.2 x D Ae = 0.1 x D fz x 1.8)

BALL NOSE END MILLS Z2

KERFOLG

NdF | HM | Z 2 | TiAlN | HA HB | UNI

ITEM: A4318

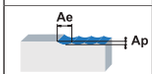
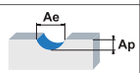


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h10
Shank	Cylindrical
Helix	Right-hand 30°
Surface treatment	TiAlN
Application	Copying, semi-finishing and finishing on materials up to 55 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

On request available with Weldon shank.
Cylindrical shank (A4318....) Weldon shank (A4318...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A431802	21,74	2	38	7	3	2
A431803	27,06	3	57	8	6	2
A431804	27,06	4	57	11	6	2
A431805	27,06	5	57	13	6	2
A431806	27,06	6	57	13	6	2
A431808	37,59	8	63	19	8	2
A431810	54,60	10	72	22	10	2
A431812	79,28	12	83	26	12	2
A431816	141,41	16	92	32	16	2
A431820	227,85	20	104	38	20	2

		Profiling		Slotting	RANGE									
					A4318									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<850 N/mm²	0.3 x D	0.7 x D	0.2 x D	100	120	fz/mm	0.010	0.019	0.031	0.037	0.046	0.050	0.059
	<1200 N/mm²	0.3 x D	0.7 x D	0.2 x D	80	100	fz/mm	0.008	0.015	0.025	0.030	0.037	0.041	0.047
CAST IRON	<240 HB	0.3 x D	0.7 x D	-	140	160	fz/mm	0.020	0.030	0.050	0.060	0.074	0.084	0.120
	<300 HB	0.3 x D	0.7 x D	-	100	140	fz/mm	0.016	0.024	0.040	0.048	0.059	0.064	0.095
HARDENED	<55 HRC	0.3 x D	0.7 x D	-	30	60	fz/mm	0.008	0.012	0.020	0.025	0.030	0.035	0.040

Recommended "fz" values for finishing.
For semi-finishing, adjust the cutting parameters. (ex: Ap = 0.2 x D Ae = 0.1 x D fz x 1.8)

Indivisible package Suggested retail package - Unit price

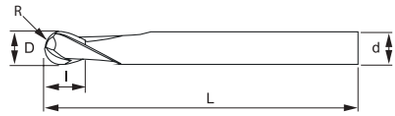
BALL NOSE END MILLS Z2

KERFOLG Sphere

NdF | HM | Z 2 | HT 300 | HA | UNI

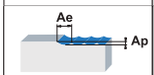
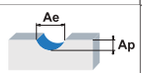
ITEM: A4350

Material	Micro-grain carbide
Standard	Factory standard
Tolerance	+0 / -0,02 mm
Shank	Cylindrical
Helix	30° right-hand
Surface treatment	HT-300
Application	Semifinishing and 3D finishing on very difficult to cut materials, up to 52 HRC



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

Tech. Code	GR05 Euro	D mm	R mm	L mm	l mm	d mm	Z
A435003	40,48	3	1.50	50	5	6	2
A435004	40,48	4	2.00	50	8	6	2
A435005	40,48	5	2.50	50	9	6	2
A435006	42,85	6	3.00	60	10	6	2
A435008	61,80	8	4.00	64	12	8	2
A435010	90,13	10	5.00	70	14	10	2
A435012	121,23	12	6.00	75	16	12	2
A435016	(206,31)	16	8.00	90	32	16	2

		Profiling		Slotting	RANGE									
					A4350									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
	<850 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
	<1200 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
STAINLESS STEEL	<800 N/mm²	0.05 x D	0.2 x D	-	200	310	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075
SUPER ALLOY	HTA	0.05 x D	0.2 x D	-	170	280	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075
HARDENED	≤ 50 HRC	0.05 x D	0.2 x D	-	200	310	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075

Recommended "fz" values for finishing applications.
For semi-finishing, adjust cutting parameters (ex: Ap= 0.1 x D Ae = 0.1 x D fz x 1.5)

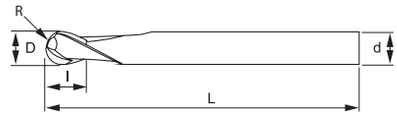
E BALL NOSE END MILLS Z2

KERFOLG Sphere

NdF | HM | Z 2 | HT 300 | HA | UNI

ITEM: A4351

Material	Micro-grain carbide
Standard	Factory standard
Tolerance	+0 / -0,02 mm
Shank	Cylindrical
Helix	30° right-hand
Surface treatment	HT-300
Application	Semifinishing and 3D finishing on very difficult to cut materials, up to 52 HRC



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

Tech. Code	GR05 Euro	D mm	R mm	L mm	l mm	d mm	Z
A435103	52,32	3	1.50	75	5	6	2
A435104	52,32	4	2.00	75	8	6	2
A435105	52,32	5	2.50	75	9	6	2
A435106	52,32	6	3.00	75	10	6	2
A435108	74,78	8	4.00	75	12	8	2
A435110	110,73	10	5.00	100	14	10	2
A435112	144,30	12	6.00	100	16	12	2

		Profiling		Slotting	RANGE									
		Ae / Ap		Ae / Ap	A4351									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
	<850 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
	<1200 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
STAINLESS STEEL	<800 N/mm²	0.05 x D	0.2 x D	-	200	310	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075
SUPER ALLOY	HTA	0.05 x D	0.2 x D	-	170	280	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075
HARDENED	≤ 50 HRC	0.05 x D	0.2 x D	-	200	310	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075

Recommended "fz" values for finishing applications.
For semi-finishing, adjust cutting parameters (ex: Ap= 0.1 x D Ae = 0.1 x D fz x 1.5)

Indivisible package Suggested retail package - Unit price

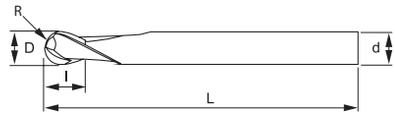
BALL NOSE END MILLS Z2

KERFOLG Sphere

NdF | HM | Z 2 | HT 300 | HA | UNI

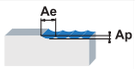
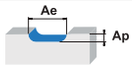
ITEM: A4352

Material	Micro-grain carbide
Standard	Factory standard
Tolerance	+0 / -0,02 mm
Shank	Cylindrical
Helix	30° right-hand
Surface treatment	HT-300
Application	Semifinishing and 3D finishing on very difficult to cut materials, up to 52 HRC



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

Tech. Code	GR05 Euro	D mm	R mm	L mm	l mm	d mm	Z	Z
A435203	66,02	3	1.50	100	5	6	2	2
A435204	66,02	4	2.00	100	8	6	2	2
A435205	66,02	5	2.50	100	9	6	2	2
A435206	66,02	6	3.00	100	10	6	2	2
A435208	93,22	8	4.00	100	12	8	2	2
A435210	127,00	10	5.00	125	14	10	2	2
A435212	184,68	12	6.00	125	16	12	2	2

		Profiling		Slotting	RANGE									
					A4352									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
	<850 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
	<1200 N/mm²	0.05 x D	0.2 x D	-	230	370	fz/mm	0.018	0.025	0.030	0.037	0.045	0.056	0.065	0.083
STAINLESS STEEL	<800 N/mm²	0.05 x D	0.2 x D	-	200	310	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075
SUPER ALLOY	HTA	0.05 x D	0.2 x D	-	170	280	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075
HARDENED	≤ 50 HRC	0.05 x D	0.2 x D	-	200	310	fz/mm	0.016	0.021	0.027	0.033	0.040	0.050	0,058	0.075

Recommended "fz" values for finishing applications.
For semi-finishing, adjust cutting parameters (ex: Ap= 0.1 x D Ae = 0.1 x D fz x 1.5)

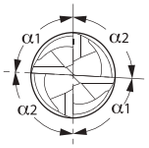
BALL NOSE END MILLS VARIABLE PITCH Z4

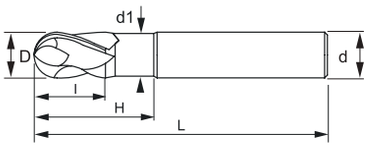
WIDIA HANITA

NdF | HM | Z4 | AlTiN | HA | UNI

ITEM: A4340

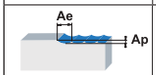
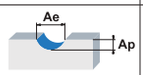
Material	MIcro-grain Integral hard metal
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical
Helix	Right-hand 38° variable pitch
Surface treatment	AlTiN
Application	Roughing and finishing on all materials





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	○	

Tech. Code	GR10 Euro	D mm	L mm	l mm	H mm	d1 mm	d mm	Z
A434005	63,60	5	57	9	15	4,70	6	4
A434006	63,60	6	57	10	15	5,64	6	4
A434008	80,20	8	63	12	20	7,52	8	4
A434010	116,49	10	72	14	25	9,40	10	4
A434012	162,01	12	83	16	30	11,28	12	4
A434016	258,49	16	92	22	38	15,04	16	4
A434020	(377,00)	20	104	26	50	18,80	20	4

		Profiling		Slotting	RANGE									
					A4340									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1.25 x D	0.50 x D	1.0 x D	150	200	fz/mm	0.036	0.044	0.060	0.072	0.083	0.101	0.114
	<850 N/mm²	1.25 x D	0.50 x D	1.0 x D	120	160	fz/mm	0.030	0.036	0.050	0.061	0.070	0.087	0.101
	<1200 N/mm²	1.25 x D	0.50 x D	0.75 x D	60	100	fz/mm	0.024	0.029	0.040	0.048	0.056	0.070	0.081
STAINLESS STEEL	<600 N/mm²	1.25 x D	0.50 x D	1.0 x D	90	115	fz/mm	0.030	0.036	0.050	0.061	0.070	0.087	0.101
	<800 N/mm²	1.25 x D	0.50 x D	1.0 x D	60	80	fz/mm	0.024	0.029	0.040	0.048	0.056	0.070	0.081
	Duplex	1.25 x D	0.50 x D	1.0 x D	60	70	fz/mm	0.020	0.025	0.034	0.040	0.047	0.057	0.065
CAST IRON	<240 HB	1.25 x D	0.50 x D	1.0 x D	120	150	fz/mm	0.036	0.044	0.060	0.072	0.083	0.101	0.114
	<300 HB	1.25 x D	0.50 x D	1.0 x D	110	140	fz/mm	0.030	0.036	0.050	0.061	0.070	0.087	0.101
SUPER ALLOY	TI6Al4V	1.25 x D	0.50 x D	1.0 x D	50	90	fz/mm	0.030	0.036	0.050	0.061	0.070	0.087	0.101
	HTA	1.25 x D	0.50 x D	0.3 x D	25	40	fz/mm	0.016	0.019	0.026	0.032	0.037	0.046	0.054
HARDENED	<45 HRC	1.25 x D	0.50 x D	0.75 x D	80	140	fz/mm	0.027	0.033	0.045	0.054	0.062	0.077	0.088

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

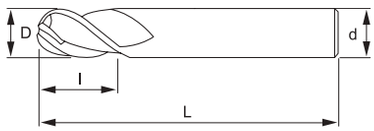
Indivisible package Suggested retail package - Unit price

BALL NOSE END MILLS FOR ALUMINUM ALLOYS Z3

KERFOLG Alufly

NdF | HM | Z 3 | HA HB | ALU

ITEM: A4620

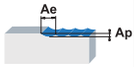
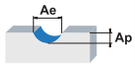


Material	Micro-grain carbide
Standard	Factory standard
Tolerance	e8
Shank	Cylindrical / Weldon
Helix	40° right-hand variable pitch
Surface treatment	Bright
Application	Finishing and semi-finishing on aluminum alloys up to 12% silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

On request available with Weldon shank
Cylindrical shank (A4620....) Weldon shank (A4620...W)

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A46203	38,00	3	38	12	3	3
A46204	45,00	4	51	15	4	3
A46205	50,00	5	64	20	5	3
A46206	63,00	6	64	20	6	3
A46208	82,00	8	64	20	8	3
A462010	105,00	10	70	25	10	3
A462012	128,00	12	76	25	12	3
A462016	210,00	16	89	35	16	3

		Profiling		Slotting	RANGE								
					A4620								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
NON FERROUS	ALU <10% Si	0.1 x D	0.1 x D	0.25 x D	250	1000	fz/mm	0.030	0.060	0.080	0.095	0.110	0,165
	ALU >10% Si	0.1 x D	0.1 x D	0.25 x D	150	350	fz/mm	0.030	0.060	0.080	0.095	0.110	0,165

Recommended "fz" values for profiling.
For slotting, adjust the cutting parameters. (ex: fz x 0.6)

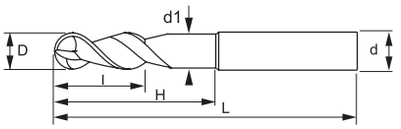
Indivisible package Suggested retail package - Unit price

BALL NOSE END MILLS FOR ALUMINUM Z2

KERFOLG Alufly

NdF | HM | Z 2 | WIND Z | HA | ALU

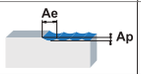
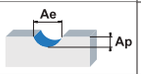
ITEM: A4622



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	f8
Shank	Cylindrical
Helix	45° right-hand
Surface treatment	WIND Z
Application	Finishing and semi-finishing on aluminum alloys up to12% Silicon content.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
								●	●		○				

Tech. Code	GR05 Euro	D mm	L mm	H mm	d1 mm	l mm	d mm	Z
A462203	48,90	3	50	16	2,7	6	3	2
A462204	58,21	4	54	17	3,7	7	4	2
A462205	64,74	5	54	18	4,6	8	5	2
A462206	63,13	6	54	21	5,5	10	6	2
A462208	80,68	8	59	27	7,5	12	8	2
A462210	105,72	10	67	32	9,4	13	10	2
A462212	143,06	12	73	38	11,4	16	12	2
A462216	228,55	16	83	44	15	20	16	2
A462220	318,86	20	83	50	19	25	20	2

		Profiling		Slotting	RANGE											
					A4622											
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
NON FERROUS	ALU <10% Si	0.1 x D	0.1 x D	0.25 x D	350	1000	fz/mm	0.030	0.040	0.045	0.050	0.060	0.070	0.080	0.120	0.170
	ALU >10% Si	0.1 x D	0.1 x D	0.25 x D	350	750	fz/mm	0.030	0.040	0.045	0.050	0.060	0.070	0.080	0.120	0.170

Recommended "fz" values for profiling.
For slotting, adjust the cutting parameters. (ex: fz x 0.6)

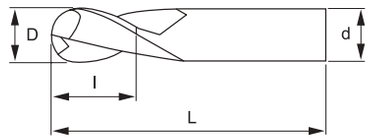
Indivisible package Suggested retail package - Unit price

BALL NOSE END MILLS Z2

KERFOLG

NdF | HM | Z 2 | | WIND X | HA | HD

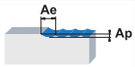
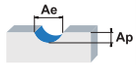
ITEM: A4330



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~ 0.019mm D 1~ 6mm - ~ 0.02mm D > 6 ~20mm - ~ 0.025mm
Shank	Cylindrical
Helix	30° right-hand
Surface treatment	WIND X
Application	Copying, semi-finishing and finishing on materials up to 65 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
	○	●				○	○						●	●	●

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A43301	39,76	1	50	1.5	4	2
A43301,5	39,76	1.5	50	2.5	4	2
A43302	39,76	2	50	3	4	2
A43302,5	39,76	2.5	50	4	4	2
A43303	39,76	3	50	5	4	2
A43304	39,76	4	50	6	4	2
A43305	55,21	5	50	8	6	2
A43306	55,21	6	50	9	6	2
A43307	77,66	7	60	14	8	2
A43308	77,66	8	60	16	8	2
A43309	(115,57)	9	75	18	10	2
A433010	(115,57)	10	75	20	10	2
A433012	(157,59)	12	75	24	12	2
A433014	(283,25)	14	80	24	16	2
A433016	(335,06)	16	100	24	16	2

		Profiling		Slotting	RANGE									
					A4330									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<1200 N/mm²	0.03 x D	0.02 x D	-	280	380	fz/mm	0.022	0.030	0.040	0.060	0.080	0.100	0.150	0.200
HARDENED	<45 HRC	0.03 x D	0.02 x D	-	210	250	fz/mm	0.020	0.028	0.037	0.056	0.075	0.090	0.135	0.175
	<65 HRC	0.02 x D	0.02 x D	-	130	165	fz/mm	0.016	0.022	0.030	0.050	0.062	0.080	0.100	0.150

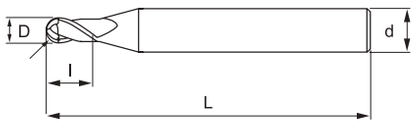
Recommended "fz" values for finishing.
For semi-finishing, adjust the cutting parameters. (ex: Ap = 0.1 x D Ae = 0.1 x D fz x 1.5)

BALL NOSE MICRO END MILLS Z2

KERFOLG

NdF | HM | Z 2 | WIND X | HA | HD

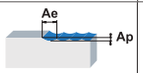
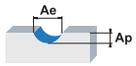
ITEM: A4427



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~ 0.005/0.025mm D 1~ 4mm - ~ 0.001/0.025mm
Shank	Cylindrical
Helix	30° right-hand
Surface treatment	WIND X
Application	Finishing and semi-finishing on materials up to 65 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
○	●		○	○		○	○				○	○	●	●	●

Tech. Code	GR05 Euro	D mm	L mm	l mm	d mm	Z
A44270,3	77,68	0,30	50	0,60	4	2
A44270,4	71,05	0,40	50	0,80	4	2
A44270,5	51,68	0,50	50	1,00	4	2
A44270,6	51,68	0,60	50	1,20	4	2
A44270,7	51,68	0,70	50	1,40	4	2
A44270,8	46,87	0,80	50	1,60	4	2
A44270,9	46,87	0,90	50	1,80	4	2
A44271	39,27	1,00	50	2,00	4	2
A44271,2	46,87	1,20	50	2,40	4	2
A44271,5	39,27	1,50	50	3,00	4	2
A44272	39,27	2,00	50	4,00	4	2
A44273	39,27	3,00	50	6,00	4	2
A44274	39,27	4,00	50	8,00	4	2

		Profiling		Slotting	RANGE													
					A4427													
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 0.2	D/mm 0.4	D/mm 0.6	D/mm 0.8	D/mm 1.0	D/mm 1.2	D/mm 1.5	D/mm 2.0	D/mm 2.5	D/mm 3.0	D/mm 4.0
CARBON STEEL	<1200 N/mm²	0.05 x D	0.05 x D	0.25 x D	250	375	fz/mm	0.008	0.009	0.012	0.015	0.023	0.030	0.036	0.048	0.060	0.072	0.100
HARDENED	<45 HRC	0.05 x D	0.05 x D	0.25 x D	140	230	fz/mm	0.006	0.006	0.008	0.010	0.015	0.023	0.028	0.036	0.050	0.062	0.085
	<60 HRC	0.05 x D	0.05 x D	0.25 x D	100	155	fz/mm	0.005	0.005	0.006	0.008	0.012	0.018	0.024	0.032	0.041	0.050	0.075

Recommended "fz" values for side milling with H < 3 x D sized tools.
As for H > 3 x D, adjust cutting parameters (ex. fz x 0.7)
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

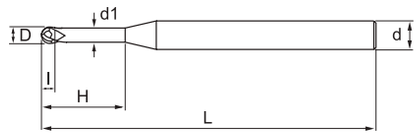
Indivisible package Suggested retail package - Unit price

BALL NOSE MICRO END MILLS Z2

KERFOLG

NdF | HM | Z 2 | WIND + | HA | UNI

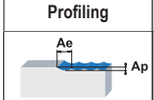
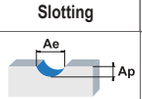
ITEM: A4430



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	D < = 1mm - ~ 0.005/0.025mm D > 1 ~ 4mm - ~ 0.001/0.025mm
Shank	Cylindrical with neck
Helix	30° right-hand
Surface treatment	WIND +
Application	Finishing and semi-finishing on materials up to 60 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	●	●				○		●	●	

Tech. Code	GR05 Euro	D mm	L mm	l mm	H mm	d mm	d1 mm	Z
A44300,52	56,43	0.50	50	1.00	2	4	0.45	2
A44300,54	56,43	0.50	50	1.00	4	4	0.45	2
A44300,56	60,24	0.50	50	1.00	6	4	0.45	2
A44300,64	60,24	0.60	50	1.20	4	4	0.55	2
A44300,66	50,11	0.60	50	1.20	6	4	0.55	2
A44300,86	59,40	0.80	50	1.20	6	4	0.75	2
A44300,88	59,40	0.80	50	1.20	8	4	0.75	2
A443016	51,87	1.00	50	1.50	6	4	0.95	2
A443018	51,87	1.00	50	1.50	8	4	0.95	2
A4430110	51,87	1.00	50	1.50	10	4	0.95	2
A4430112	51,87	1.00	50	1.50	12	4	0.95	2
A44301,28	60,03	1.20	50	2.00	8	4	1.15	2
A44301,212	71,37	1.20	50	2.00	12	4	1.15	2
A44301,58	49,40	1.50	50	2.00	8	4	1.44	2
A44301,512	49,40	1.50	50	2.00	12	4	1.44	2
A44301,516	49,40	1.50	50	2.00	16	4	1.44	2
A44301,520	49,40	1.50	50	2.00	20	4	1.44	2
A44301,68	(51,03)	1.60	50	2.50	8	4	1.55	2
A44301,612	(71,37)	1.60	50	2.50	12	4	1.55	2
A44301,616	(71,37)	1.60	50	2.50	16	4	1.55	2
A443028	53,35	2.00	50	3.00	8	4	1.95	2
A4430212	53,35	2.00	50	3.00	12	4	1.95	2
A4430216	53,35	2.00	50	3.00	16	4	1.95	2
A4430220	53,35	2.00	50	3.00	20	4	1.95	2
A443038	58,07	3.00	50	4.00	8	6	2.9	2
A4430310	55,30	3.00	50	4.00	10	6	2.9	2
A4430316	65,60	3.00	50	4.00	16	6	2.9	2
A4430320	65,60	3.00	60	4.00	20	6	2.9	2
A4430325	69,20	3.00	60	4.00	25	6	2.9	2
A4430410	(58,07)	4.00	75	5.00	10	6	3.9	2
A4430415	(71,10)	4.00	75	5.00	15	6	3.9	2
A4430420	(75,10)	4.00	75	5.00	20	6	3.9	2
A4430425	(75,10)	4.00	75	5.00	25	6	3.9	2
A4430430	(75,10)	4.00	75	5.00	30	6	3.9	2

		Profiling		Slotting	RANGE													
					A4430													
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 0.2	D/mm 0.4	D/mm 0.6	D/mm 0.8	D/mm 1.0	D/mm 1.2	D/mm 1.5	D/mm 2.0	D/mm 2.5	D/mm 3.0	D/mm 4.0
CARBON STEEL	<850 N/mm²	0.05 x D	0.05 x D	0.25 x D	200	320	fz/mm	0.009	0.010	0.016	0.020	0.025	0.032	0.038	0.052	0.065	0.080	0.110
	<1200 N/mm²	0.05 x D	0.05 x D	0.25 x D	180	260	fz/mm	0.008	0.009	0.012	0.015	0.023	0.030	0.036	0.048	0.060	0.072	0.100
HARDENED	<45 HRC	0.05 x D	0.05 x D	0.25 x D	75	140	fz/mm	0.006	0.006	0.008	0.010	0.015	0.023	0.028	0.036	0.050	0.062	0.085
	<60 HRC	0.05 x D	0.05 x D	0.25 x D	50	115	fz/mm	0.005	0.005	0.006	0.008	0.012	0.018	0.024	0.032	0.041	0.050	0.075

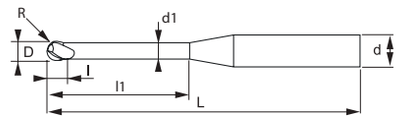
Recommended "fz" values for side milling with H < 3 x D sized tools.
As for H > 3 x D, adjust cutting parameters (ex. fz x 0.7)
For slotting, adjust the cutting parameters. (ex: fz x 0.8)

BALL NOSE MICRO END MILLS Z2

KERFOLG Sphere

NdF | HM | Z 2 | HT 300 | HA | UNI

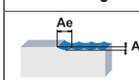
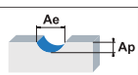
ITEM: A4360



Material	Micro-grain carbide
Standard	Factory standard
Tolerance	+0 / -0,02 mm
Shank	Cylindrical
Helix	30° right-hand
Surface treatment	HT-300
Application	Semifinishing and 3D finishing on very difficult to cut materials, up to 52 HRC.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
	●	●		●	●							●	●	●	○

Tech. Code	GR05 Euro	D mm	R mm	d1 mm	L mm	l mm	l1 mm	d mm	Z
A4360021	(87,55)	0.2	0.1	0.15	50	0.2	1.0	4	2
A4360031	(81,68)	0.3	0.15	0.25	50	0.3	1.0	4	2
A4360041	(75,91)	0.4	0.2	0.35	50	0.4	1.0	4	2
A4360042	(75,91)	0.4	0.2	0.35	50	0.4	2.0	4	2
A4360043	(75,91)	0.4	0.2	0.35	50	0.4	3.0	4	2
A4360052	71,59	0.5	0.25	0.45	50	0.4	2.0	4	2
A4360053	71,59	0.5	0.25	0.45	50	0.4	3.0	4	2
A4360054	71,59	0.5	0.25	0.45	50	0.4	4.0	4	2
A4360055	71,59	0.5	0.25	0.45	50	0.4	5.0	4	2
A4360062	68,19	0.6	0.3	0.55	50	0.5	2.0	4	2
A4360064	68,19	0.6	0.3	0.55	50	0.5	4.0	4	2
A4360068	68,50	0.6	0.3	0.55	50	0.5	8.0	4	2
A4360082	68,19	0.8	0.4	0.75	50	0.6	2.0	4	2
A4360084	68,19	0.8	0.4	0.75	50	0.6	4.0	4	2
A4360086	68,19	0.8	0.4	0.75	50	0.6	6.0	4	2
A436013	50,68	1.0	0.5	0.95	50	0.8	3.0	4	2
A436014	50,68	1.0	0.5	0.95	50	0.8	4.0	4	2
A436016	50,68	1.0	0.5	0.95	50	0.8	6.0	4	2
A436018	50,68	1.0	0.5	0.95	50	0.8	8.0	4	2
A4360110	52,02	1.0	0.5	0.95	50	0.8	10.0	4	2
A4360116	53,87	1.0	0.5	0.95	50	0.8	16.0	4	2
A4360158	50,06	1.5	0.75	1.45	50	1.2	8.0	4	2
A43601512	50,47	1.5	0.75	1.45	50	1.2	12.0	4	2
A436024	49,34	2.0	1.0	1.95	50	1.6	4.0	4	2
A436028	49,54	2.0	1.0	1.95	50	1.6	8.0	4	2
A4360210	49,75	2.0	1.0	1.95	50	1.6	10.0	4	2
A4360212	50,16	2.0	1.0	1.95	50	1.6	12.0	4	2
A4360216	51,50	2.0	1.0	1.95	50	1.6	16.0	4	2
A4360220	57,68	2.0	1.0	1.95	60	1.6	20.0	4	2
A4360225	63,04	2.0	1.0	1.95	75	1.6	25.0	4	2
A4360230	64,48	2.0	1.0	1.95	75	1.6	30.0	4	2
A436038	73,95	3.0	1.5	2.85	50	2.4	8.0	6	2
A4360310	73,95	3.0	1.5	2.85	50	2.4	10.0	6	2
A4360316	73,95	3.0	1.5	2.85	60	2.4	16.0	6	2
A4360320	73,95	3.0	1.5	2.85	60	2.4	20.0	6	2
A4360330	81,27	3.0	1.5	2.85	75	2.4	30.0	6	2
A4360335	81,27	3.0	1.5	2.85	75	2.4	35.0	6	2
A4360410	(70,56)	4.0	2.0	3.85	50	3.2	10.0	6	2
A4360416	73,95	4.0	2.0	3.85	60	3.2	16.0	6	2
A4360420	73,95	4.0	2.0	3.85	60	3.2	20.0	6	2
A4360425	81,27	4.0	2.0	3.85	75	3.2	25.0	6	2
A4360430	82,09	4.0	2.0	3.85	75	3.2	30.0	6	2
A4360435	82,09	4.0	2.0	3.85	75	3.2	35.0	6	2
A4360440	85,90	4.0	2.0	3.85	100	3.2	40.0	6	2

		Profiling		Slotting	RANGE													
					A4360													
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 0.2	D/mm 0.3	D/mm 0.4	D/mm 0.5	D/mm 0.6	D/mm 0.8	D/mm 1.0	D/mm 1.5	D/mm 2.0	D/mm 3.0	D/mm 4.0
CARBON STEEL	<1200 N/mm²	0.1 x D	0.02 x D	-	60	80	fz/mm	0.002	0.002	0.002	0.003	0.004	0.004	0.005	0.005	0.006	0.009	0.011
STAINLESS STEEL	<800 N/mm²	0.1 x D	0.02 x D	-	50	70	fz/mm	0.002	0.002	0.002	0.003	0.004	0.004	0.005	0.005	0.006	0.009	0.011
SUPER ALLOY	HTA	0.1 x D	0.02 x D	-	40	65	fz/mm	0.002	0.002	0.002	0.003	0.004	0.004	0.005	0.005	0.006	0.009	0.011
HARDENED	≤ 50 HRC	0.1 x D	0.02 x D	-	50	70	fz/mm	0.002	0.002	0.002	0.003	0.004	0.004	0.005	0.005	0.006	0.009	0.011

Recommended "fz" values for finishing applications.
For semi-finishing, adjust cutting parameters (ex: Ap= 0.1 x D Ae = 0.1 x D fz x 1.5)

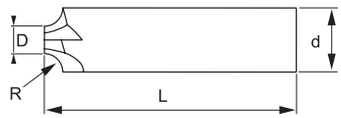
Indivisible package Suggested retail package - Unit price

CORNER - ROUNDING END MILLS

KERFOLG

NdF | HM | Z 4 | WIND | HA HB

ITEM: A4720



Material	Micro-grain carbide
Standard	Factory standard
Shank	Cylindrical / Weldon
Surface treatment	WIND
Application	Corner rounding operations on all materials.

On request available with Weldon shank.
Cylindrical shank (A4720....) Weldon shank (A4720...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●				●	●						○	○	

Tech. Code	GR05 Euro	D mm	R mm	L mm	d mm	Z
A4720101	88,06	8	1.0	50	10	4
A4720101,5	88,06	7	1.5	50	10	4
A4720102	88,06	6	2.0	50	10	4
A4720102,5	88,06	5	2.5	50	10	4
A4720123	101,22	6	3.0	60	12	4
A4720124	101,22	4	4.0	60	12	4
A4720165	208,54	6	5.0	75	16	4
A4720166	208,54	4	6.0	75	16	4

		Side milling		Slotting	RANGE					
					A4720					
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	1 x r	1 x r	-	70	90	fz/mm	0.025	0.030	0.050
	<850 N/mm²	1 x r	1 x r	-	55	70	fz/mm	0.025	0.030	0.050
	<1200 N/mm²	1 x r	1 x r	-	45	50	fz/mm	0.020	0.026	0.030
CAST IRON	<240 HB	1 x r	1 x r	-	65	75	fz/mm	0.025	0.032	0.040
	<300 HB	1 x r	1 x r	-	45	60	fz/mm	0.020	0.024	0.030

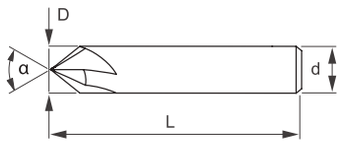
Recommended "fz" values for side milling.

CHAMFER END MILLS Z4 - 90°

KERFOLG Speedy

NdF | HM | Z 4 | 90° | WIND | HA HB

ITEM: A4723



Material	Micro-grain carbide
Standard	Factory standard
Shank	Cylindrical / Weldon
Helix	0° right-hand
Surface treatment	WIND
Application	Holes, shafts, and straight walls chamfering and deburring. For all materials.

On request available with Weldon shank.
Cylindrical shank (A4723....) Weldon shank (A4723...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●				●	●						●	○	

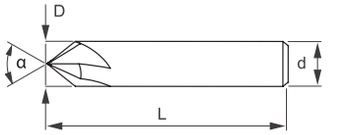
Tech. Code	GR05 Euro	D mm	L mm	d mm	α°	Z
A47236	33,81	6	60	6	90	4
A47238	51,52	8	70	8	90	4
A472310	69,96	10	75	10	90	4
A472312	88,83	12	75	12	90	4
A472316	152,11	16	80	16	90	4

END MILLS FOR BEVELING 120° Z4

KERFOLG Speedy

NdF | HM | Z 4 | 120° | WIND | HA HB

ITEM: A4724

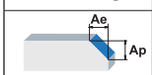
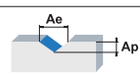


Material	Micro-grain solid carbide
Standard	NDF
Shank	Cylindrical / Weldon
Helix	Right-hand 0°
Surface treatment	WIND
Application	Execution of chamfers and countersinks on holes, shafts and rectilinear walls. Suitable for any type of material.

On request available with Weldon shank.
Cilindrical shank (A4724....) Weldon shank (A4724...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●				●	●						●	○	

Tech. Code	GR05 Euro	D mm	L mm	d mm	α°	Z
A472404	23,18	4	50	4	120	4
A472406	35,09	6	50	6	120	4
A472408	54,01	8	60	8	120	4
A472410	69,30	10	75	10	120	4
A472412	92,18	12	75	12	120	4
A472416	146,40	16	100	16	120	4

		Side milling		Slotting	RANGE							
					A4723					A4724		
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	0.1 x D	0.1 x D	-	70	80	fz/mm	0.011	0.015	0.020	0.025	0,030	0,035
	<850 N/mm²	0.1 x D	0.1 x D	-	55	65	fz/mm	0.011	0.015	0.020	0.025	0,030	0,035
	<1200 N/mm²	0.1 x D	0.1 x D	-	45	55	fz/mm	0.007	0.012	0.017	0.020	0,026	0,031
CAST IRON	<240 HB	0.1 x D	0.1 x D	-	65	75	fz/mm	0.011	0.015	0.020	0.025	0,032	0,036
	<300 HB	0.1 x D	0.1 x D	-	45	60	fz/mm	0.007	0.012	0.017	0.020	0,024	0,029

Recommended "fz" values for side milling.
Diameter values to be considered as effective work diameters.

Indivisible package Suggested retail package - Unit price

FORWARD AND BACKWARD CHAMFER END MILLS - 45°

KERFOLG

NdF | HM | Z 4 | WIND | HA HB

ITEM: A4715

Material	Micro-grain carbide
Standard	Factory standard
Shank	Cylindrical / Weldon
Surface treatment	WIND
Application	45° forward and backward chamfering. Circular interpolation applications. For all materials.

Fig.1

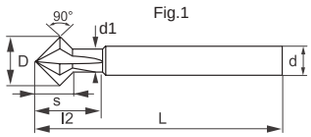
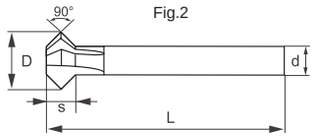


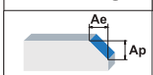
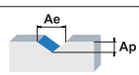
Fig.2



On request available with Weldon shank.
Cylindrical shank (A4715....) Weldon shank (A4715...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●				●	●				●	●	●	○	

Tech. Code	GR05 Euro	D mm	L mm	d1 mm	l2 mm	s mm	d mm	Fig.	Z
A47153	81,38	3	75	2,2	12	2	4	1	4
A47154	81,38	4	75	2,9	15,7	2,7	4	1	4
A47155	81,38	5	75	3,9	18	3	5	1	4
A47156	82,74	6	100	3.9	19	4	6	1	4
A47158	115,40	8	100	-	-	2	6	2	4
A471510	143,54	10	100	-	-	4	6	2	4
A471512	171,99	12	100	-	-	6	6	2	4

		Side milling		Slotting	RANGE								
					A4715								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	0.1 x D	0.1 x D	-	70	80	fz/mm	0.011	0.015	0.020	0.025	0,030	0,035
	<850 N/mm²	0.1 x D	0.1 x D	-	55	65	fz/mm	0.011	0.015	0.020	0.025	0,030	0,035
	<1200 N/mm²	0.1 x D	0.1 x D	-	45	55	fz/mm	0.007	0.012	0.017	0.020	0,026	0,031
CAST IRON	<240 HB	0.1 x D	0.1 x D	-	65	75	fz/mm	0.011	0.015	0.020	0.025	0,032	0,036
	<300 HB	0.1 x D	0.1 x D	-	45	60	fz/mm	0.007	0.012	0.017	0.020	0,024	0,029

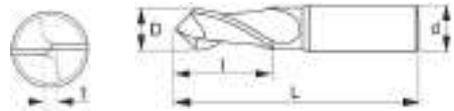
Recommended "fz" values for side milling.
Diameter values to be considered as effective work diameters.

MULTI-FUNCTION 90° END MILLS Z2

KERFOLG V Slot

NdF | HM | Z 2 | WIND + | HA

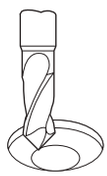
ITEM: A4725



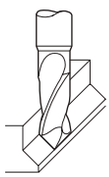
Material	Micro-grain carbide
Standard	Factory standard
Tolerance	h7
Shank	Cylindrical
Helix	30° right-hand - 90° peak
Surface treatment	WIND+
Application	Multi-function

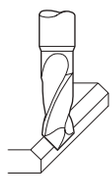
< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	○		●	●						●	○	

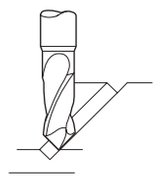
Tech. Code	GR05 Euro	D mm	t mm	L mm	l mm	d mm	Z
A472501	56,40	1,0	0,10	40	2	3	2
A472501,5	64,37	1,5	0,15	40	3	3	2
A472502	56,40	2,0	0,20	40	4	3	2
A472503	57,87	3,0	0,30	50	6	4	2
A472504	59,43	4,0	0,40	50	8	5	2
A472505	69,37	5,0	0,50	50	10	6	2
A472506	78,57	6,0	0,60	60	12	8	2
A472508	114,54	8,0	0,80	70	16	10	2
A472510	142,69	10,0	1,00	75	18	12	2
A472512	142,69	12,0	1,20	75	20	12	2

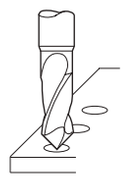

Interpolation counterboring

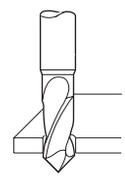
Engraving

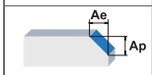
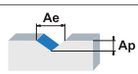

Side milling


Longitudinal chamfer


V grooving


Spotting


Drilling

		Side milling		Slotting	RANGE									
					A4725									
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 5	D/mm 6	D/mm 8	D/mm 10	D/mm 12
CARBON STEEL	<500 N/mm²	0.3 x D	0.3 x D	0.5 x D	70	75	fz/mm	0.008	0.010	0.012	0.015	0.018	0.023	0.030	0.040
	<850 N/mm²	0.3 x D	0.3 x D	0.5 x D	40	60	fz/mm	0.008	0.010	0.012	0.015	0.018	0.023	0.030	0.040
	<1200 N/mm²	0.3 x D	0.3 x D	0.5 x D	35	45	fz/mm	0.006	0.008	0.010	0.012	0.015	0.018	0.025	0.035
STAINLESS STEEL	<600 N/mm²	0.3 x D	0.3 x D	0.5 x D	35	45	fz/mm	0.006	0.008	0.010	0.012	0.015	0.018	0.023	0.030
	<800 N/mm²	0.3 x D	0.3 x D	0.5 x D	30	40	fz/mm	0.006	0.008	0.010	0.012	0.015	0.018	0.023	0.030
CAST IRON	<240 HB	0.3 x D	0.3 x D	0.5 x D	40	60	fz/mm	0.008	0.010	0.012	0.015	0.018	0.023	0.030	0.040
	<300 HB	0.3 x D	0.3 x D	0.5 x D	30	35	fz/mm	0.006	0.008	0.010	0.012	0.015	0.018	0.025	0.035
NON FERROUS	ALU <10% Si	0.3 x D	0.3 x D	0.5 x D	130	150	fz/mm	0.008	0.010	0.012	0.015	0.018	0.023	0.030	0.040
	ALU >10% Si	0.3 x D	0.3 x D	0.5 x D	90	120	fz/mm	0.008	0.010	0.012	0.015	0.018	0.023	0.030	0.040
HARDENED	<45 HRC	0.3 x D	0.3 x D	0.5 x D	25	35	fz/mm	0.006	0.008	0.010	0.012	0.015	0.018	0.023	0.030

Recommended "fz" values for side milling.

Indivisible package Suggested retail package - Unit price

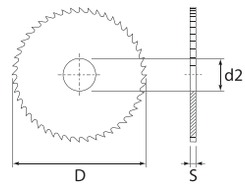
SLITTING SAWS FINE TOOTHING

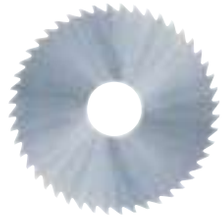
WRK

DIN	HM
1837 A	

ITEM: A4810

Solid carbide slitting saws to DIN 1837-A standard with type A fine toothing.
On request Ø run from 15 mm to 200 mm; thickness from 0.1 mm to 6 mm.





< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	○	○	○	○	○	●		○		

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A48100200,2	(25,65)	20	0.20	5	80
A48100200,5	(25,65)	20	0.50	5	48
A48100201	(34,09)	20	1.00	5	40
A48100201,2	(36,36)	20	1.20	5	40
A48100201,5	(41,61)	20	1.50	5	40
A48100250,5	(29,46)	25	0.50	8	64
A48100251	(39,45)	25	1.00	8	48
A48100251,5	(49,34)	25	1.50	8	40
A48100252	(62,21)	25	2.00	8	40
A48100252,5	(75,50)	25	2.50	8	40
A48100300,3	(32,45)	30	0.30	8	80
A48100300,4	(32,45)	30	0.40	8	80
A48100300,5	(34,40)	30	0.50	8	80
A48100300,7	(41,41)	30	0.70	8	64
A48100301	(49,34)	30	1.00	8	64
A48100301,2	(56,44)	30	1.20	8	48
A48100301,5	(63,45)	30	1.50	8	48
A48100302	(73,34)	30	2.00	8	48
A48100303	(102,79)	30	3.00	8	40
A48100400,3	(40,07)	40	0.30	10	100
A48100400,4	(42,33)	40	0.40	10	100
A48100400,5	(45,94)	40	0.50	10	80
A48100400,6	(45,94)	40	0.60	10	80
A48100400,7	(52,74)	40	0.70	10	80
A48100401	(56,65)	40	1.00	10	64
A48100401,2	(60,67)	40	1.20	10	64

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A48100401,5	(67,47)	40	1.50	10	64
A48100401,9	(77,46)	40	1.90	10	48
A48100402	(77,46)	40	2.00	10	48
A48100500,5	(55,83)	50	0.50	13	100
A48100501	(67,47)	50	1.00	13	80
A48100501,4	(81,89)	50	1.40	13	64
A48100501,5	(86,01)	50	1.50	13	64
A48100501,9	(94,97)	50	1.90	13	64
A48100502	(97,64)	50	2.00	13	64
A48100502,5	(119,17)	50	2.50	13	64
A48100504	(165,32)	50	4.00	13	48
A48100630,5	(74,78)	63	0.50	16	128
A48100630,8	(94,97)	63	0.80	16	100
A48100631	(97,95)	63	1.00	16	100
A48100631,1	(101,76)	63	1.10	16	80
A48100631,4	(109,59)	63	1.40	16	80
A48100631,5	(111,65)	63	1.50	16	80
A48100632	(134,83)	63	2.50	16	80
A48100800,6	(116,49)	80	0.60	22	128
A48100800,7	(125,97)	80	0.70	22	128
A48100800,8	(125,97)	80	0.80	22	128
A48100800,9	(131,22)	80	0.90	22	100
A48100801	(131,22)	80	1.00	22	100
A48100801,2	(140,49)	80	1.20	22	100
A48100802	(183,65)	80	2.00	22	80
A48100803	(260,38)	80	3.00	22	80

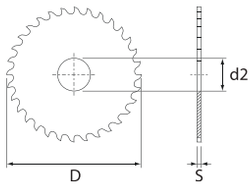
SLITTING SAWS COARSE TOOTHING

WRK

DIN	HM
1838 B	

ITEM: A4815

Solid carbide slitting saws to DIN 1838 standard with type B large toothing.
On request Ø run from 15 mm to 200 mm; thickness from 0.1 mm to 6 mm.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	○	○	○	○	○	○	●		○		

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A48150150,3	(23,48)	15	0,30	5	20
A48150150,4	(23,48)	15	0,40	5	20
A48150150,5	(23,07)	15	0,50	5	20
A48150151	(30,08)	15	1,00	5	20
A48150200,2	(25,65)	20	0,20	5	20
A48150200,5	(25,65)	20	0,50	5	20
A48150201	(34,09)	20	1,00	5	20
A48150300,2	(32,45)	30	0,20	8	24
A48150300,7	(41,41)	30	0,70	8	30
A48150301,7	(66,64)	30	1,70	8	24
A48150400,9	(54,90)	40	0,90	10	32
A48150401	(56,65)	40	1,00	10	32
A48150401,3	(61,80)	40	1,30	10	32
A48150401,5	(67,47)	40	1,50	10	32
A48150403	(115,05)	40	3,00	10	32
A48150500,5	(55,83)	50	0,50	13	48
A48150501	(67,47)	50	1,00	13	40
A48150501,5	(86,01)	50	1,50	13	32

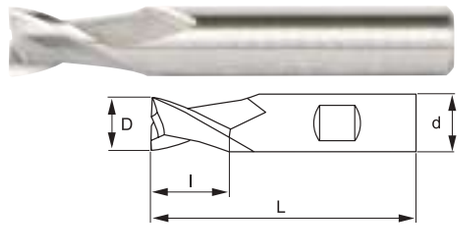
Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A48150502	(97,64)	50	2,00	13	32
A48150503	(138,43)	50	3,00	13	24
A48150630,5	(74,78)	63	0,50	16	64
A48150630,8	(94,97)	63	0,80	16	48
A48150631	(97,95)	63	1,00	16	48
A48150631,2	(105,27)	63	1,20	16	40
A48150631,4	(109,59)	63	1,40	16	40
A48150631,5	(111,65)	63	1,50	16	40
A48150631,6	(116,91)	63	1,60	16	40
A48150631,7	(123,09)	63	1,70	16	40
A48150632	(134,83)	63	2,00	16	40
A48150633	(183,34)	63	3,00	16	32
A48150634	(230,10)	63	4,00	16	32
A48150800,6	(116,49)	80	0,60	22	64
A48150801	(131,12)	80	1,00	22	48
A48151001	(179,32)	100	1,00	22	64
A48151001,5	(179,32)	100	1,50	22	48

END MILLS Z2

WRK

DIN 327 B | HSS Co8 | Z 2 | HB

ITEM: A5010



Material	High speed steel Co8
Standard	DIN 327B
Tolerance	e8
Shank	Weldon
Helix	30° right-hand
Surface treatment	Bright / Wind
Application	Slot applications

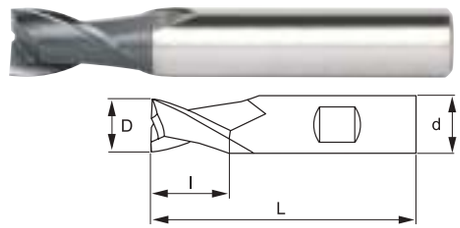
< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○				○	○						

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A50101,5	28,04	1,50	49	4	6	2
A50102	21,95	2,00	49	4	6	2
A50102,5	25,41	2,50	49	5	6	2
A50103	21,53	3,00	49	5	6	2
A50103,5	28,67	3,50	51	7	6	2
A50104	20,58	4,00	51	7	6	2
A50104,5	21,84	4,50	51	7	6	2
A50105	19,32	5,00	52	8	6	2
A50105,5	27,83	5,50	52	8	6	2
A50106	18,90	6,00	52	8	6	2
A50106,5	26,99	6,50	60	10	10	2
A50107	30,24	7,00	60	10	10	2
A50107,5	(34,86)	7,50	61	11	10	2
A50108	23,73	8,00	61	11	10	2
A50108,5	34,86	8,50	61	11	10	2
A50109	30,24	9,00	61	11	10	2

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A50109,5	(34,86)	9,50	61	11	10	2
A501010	25,52	10,00	63	13	10	2
A501010,5	44,42	10,50	70	13	12	2
A501011	42,95	11,00	70	13	12	2
A501011,5	44,21	11,50	73	16	12	2
A501012	31,19	12,00	73	16	12	2
A501012,5	46,10	12,50	73	16	12	2
A501013	46,10	13,00	73	16	12	2
A501014	41,79	14,00	73	16	12	2
A501015	57,44	15,00	79	19	16	2
A501016	42,11	16,00	79	19	16	2
A501017	67,94	17,00	79	19	16	2
A501018	60,48	18,00	79	19	16	2
A501019	79,91	19,00	79	19	16	2
A501020	59,33	20,00	88	22	20	2
A501022	93,56	22,00	88	22	20	2

DIN 327 B | HSS Co8 | Z 2 | WIND | HB

ITEM: A5015

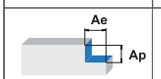
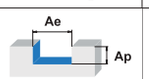


Material	High speed steel Co8
Standard	DIN 327B
Tolerance	e8
Shank	Weldon
Helix	30° right-hand
Surface treatment	WIND (coated)
Application	Slot applications

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○				○	○						

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A50152	34,28	2,00	49	4	6	2
A50152,5	34,28	2,50	49	5	6	2
A50153	29,37	3,00	49	5	6	2
A50154	30,02	4,00	51	7	6	2
A50154,5	37,01	4,50	51	7	6	2
A50155	25,00	5,00	52	8	6	2
A50155,5	36,14	5,50	52	8	6	2
A50156	25,66	6,00	52	8	6	2
A50156,5	51,10	6,50	60	10	10	2
A50157	43,79	7,00	60	10	10	2
A50157,5	50,55	7,50	61	11	10	2
A50158	35,92	8,00	61	11	10	2
A50158,5	51,10	8,50	61	11	10	2
A50159	43,79	9,00	61	11	10	2
A50159,5	51,10	9,50	63	13	10	2
A501510	37,12	10,00	63	13	10	2
A501510,5	60,92	10,50	70	13	12	2

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A501511	54,16	11,00	70	13	12	2
A501511,5	60,92	11,50	73	16	12	2
A501512	43,79	12,00	73	16	12	2
A501512,5	63,21	12,50	73	16	12	2
A501513	57,32	13,00	73	16	12	2
A501513,5	65,84	13,50	73	16	12	2
A501514	55,68	14,00	73	16	12	2
A501515	68,02	15,00	79	19	16	2
A501516	59,07	16,00	79	19	16	2
A501517	95,75	17,00	79	19	16	2
A501518	79,81	18,00	79	19	16	2
A501520	85,49	20,00	82	22	16	2
A501522	120,43	22,00	88	22	20	2
A501525	156,46	25,00	102	26	25	2
A501528	(204,93)	28,00	102	26	25	2
A501530	(210,17)	30,00	102	26	25	2

		Side milling		Slotting	RANGE								
					A5010				A5015				
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20	D/mm 25
CARBON STEEL	<500 N/mm²	1.5 x D	0.2 x D	0.5 x D	25	32	fz/mm	0.018	0.028	0.034	0.041	0.055	0.059	0.067
	<850 N/mm²	1.5 x D	0.2 x D	0.5 x D	20	29	fz/mm	0.019	0.030	0.038	0.045	0.060	0.065	0.068
	<1200 N/mm²	1.5 x D	0.2 x D	0.5 x D	17	22	fz/mm	0.017	0.023	0.036	0.043	0.057	0.057	0.063
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.2 x D	0.5 x D	10	14	fz/mm	0.020	0.027	0.033	0.041	0.056	0.056	0.061
	<800 N/mm²	1.5 x D	0.2 x D	0.5 x D	8	12	fz/mm	0.017	0.023	0.036	0.043	0.057	0.057	0.063

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.75)

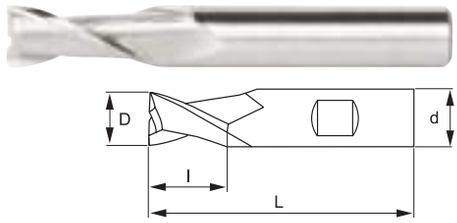
Indivisible package | Suggested retail package - Unit price

END MILLS Z2

WRK

DIN 844 A | HSS Co8 | Z 2 | HB

ITEM: A5020



Material	High speed steel Co8
Standard	DIN 844 A
Tolerance	k10
Shank	Weldon
Helix	30° right-hand
Surface treatment	Bright
Application	Slotting

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	●								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A50201,5	28,77	1,50	52	7	6
A50202	25,31	2,00	52	7	6
A50203	25,31	3,00	52	8	6
A50203,5	28,14	3,50	54	10	6
A50204	26,46	4,00	55	11	6
A50204,5	31,61	4,50	55	11	6
A50205	19,85	5,00	57	13	6
A50206	19,85	6,00	57	13	6
A50207	35,60	7,00	66	16	10
A50208	26,46	8,00	69	19	10
A50209	35,60	9,00	69	19	10

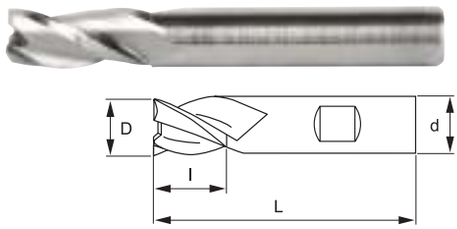
Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A502010	26,46	10,00	72	22	10
A502011	46,10	11,00	79	22	12
A502012	32,45	12,00	83	26	12
A502013	55,76	13,00	83	26	12
A502014	51,03	14,00	83	26	12
A502015	64,26	15,00	83	26	16
A502016	46,52	16,00	92	32	16
A502018	71,19	18,00	92	32	16
A502019	90,30	19,00	92	32	16
A502020	66,99	20,00	104	38	20
A502022	106,26	22,00	104	38	20

THREE FLUTE HSS END MILL - CENTRE CUTTING

WRK

DIN 844 A | HSS Co8 | Z 3 | HB

ITEM: A5110

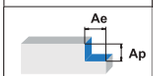
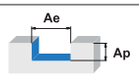


Material	High speed steel Co8
Standard	DIN 844A
Tolerance	h7
Shank	Weldon
Helix	30° right-hand
Surface treatment	Bright
Application	Slot applications

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	○								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A51101,5	(25,94)	1,50	52	7	6
A51102	(23,21)	2,00	52	7	6
A51103	23,21	3,00	52	8	6
A51104	23,94	4,00	55	11	6
A51105	19,85	5,00	57	13	6
A51105,5	32,03	5,50	57	13	6
A51106	19,85	6,00	57	13	6
A51106,5	40,74	6,50	66	16	10
A51107	35,60	7,00	66	16	10
A51108	26,46	8,00	69	19	10
A51109	35,60	9,00	69	19	10

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A511010	26,46	10,00	72	22	10
A511011	46,10	11,00	79	22	12
A511012	32,45	12,00	83	26	12
A511013	58,38	13,00	83	26	12
A511014	51,03	14,00	83	26	16
A511015	64,26	15,00	83	26	12
A511016	46,52	16,00	92	32	16
A511017	78,86	17,00	92	32	16
A511018	73,29	18,00	92	32	16
A511020	68,46	20,00	104	38	20
A511022	(111,09)	22,00	104	38	20

		Side milling		Slotting	RANGE								
					A5020					A5110			
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20	D/mm 25
CARBON STEEL	<500 N/mm²	1.5 x D	0.2 x D	0.5 x D	25	32	fz/mm	0.018	0.028	0.034	0.041	0.055	0.059	0.067
	<850 N/mm²	1.5 x D	0.2 x D	0.5 x D	20	29	fz/mm	0.019	0.030	0.038	0.045	0.060	0.065	0.068
	<1200 N/mm²	1.5 x D	0.2 x D	0.5 x D	17	22	fz/mm	0.017	0.023	0.036	0.043	0.057	0.057	0.063
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.2 x D	0.5 x D	10	14	fz/mm	0.020	0.027	0.033	0.041	0.056	0.056	0.061
	<800 N/mm²	1.5 x D	0.2 x D	0.5 x D	8	12	fz/mm	0.017	0.023	0.036	0.043	0.057	0.057	0.063

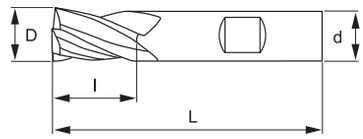
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.75)

FOUR FLUTE HSS END MILL - CENTRE CUTTING

WRK

DIN 844 A | HSS Co8 | Z 4 | HB

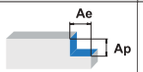
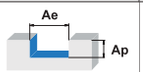
ITEM: A5210



Material	High speed steel Co8
Standard	DIN 844A
Tolerance	h7
Shank	Weldon
Helix	30° right-hand
Surface treatment	Bright
Application	Slotting and side milling

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	○								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A52102	32,13	2,00	52	7	6	4
A52102,5	(30,14)	2,50	52	8	6	4
A52103	27,62	3,00	52	8	6	4
A52104	27,62	4,00	55	11	6	4
A52105	21,53	5,00	57	13	6	4
A52106	21,53	6,00	57	13	6	4
A52107	36,86	7,00	66	16	10	4
A52108	31,19	8,00	69	19	10	4
A52109	37,80	9,00	69	19	10	4
A521010	31,19	10,00	72	22	10	4
A521011	51,66	11,00	79	22	12	4
A521012	36,54	12,00	83	26	12	4
A521013	59,33	13,00	83	26	12	4
A521014	50,72	14,00	83	26	12	4
A521015	68,46	15,00	83	26	12	4
A521016	48,62	16,00	92	32	16	4
A521018	76,86	18,00	92	32	16	4
A521020	69,93	20,00	104	38	20	4
A521022	(113,40)	22,00	10	38	20	4

		Side milling		Slotting	RANGE								
					A5210								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20	D/mm 25
CARBON STEEL	<500 N/mm²	1.5 x D	0.2 x D	0.5 x D	25	32	fz/mm	0.018	0.028	0.034	0.041	0.055	0.059	0.067
	<850 N/mm²	1.5 x D	0.2 x D	0.5 x D	20	29	fz/mm	0.019	0.030	0.038	0.045	0.060	0.065	0.068
	<1200 N/mm²	1.5 x D	0.2 x D	0.5 x D	17	22	fz/mm	0.017	0.023	0.036	0.043	0.057	0.057	0.063
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.2 x D	0.5 x D	10	14	fz/mm	0.020	0.027	0.033	0.041	0.056	0.056	0.061
	<800 N/mm²	1.5 x D	0.2 x D	0.5 x D	8	12	fz/mm	0.017	0.023	0.036	0.043	0.057	0.057	0.063

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.75)

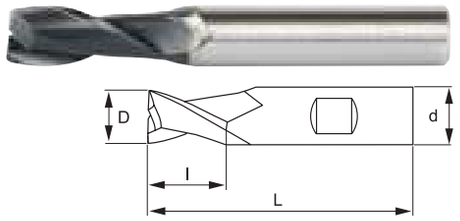
Indivisible package | Suggested retail package - Unit price

END MILLS Z2

WRK

DIN 844 A | HSS Co8 | Z 2 | WIND | HB

ITEM: A5025



Material	High speed steel Co8
Standard	DIN 844 A
Tolerance	k10
Shank	Weldon
Helix	30° right-hand
Surface treatment	WIND
Application	Slotting

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A50253	33,29	3	52	8	6
A50254	33,60	4	55	11	6
A50255	25,94	5	57	13	6
A50256	25,94	6	57	13	6
A50257	47,46	7	66	16	10
A50258	37,49	8	69	19	10
A50259	47,46	9	69	19	10
A502510	37,49	10	72	22	10
A502511	61,11	11	79	22	12
A502512	44,31	12	83	26	15

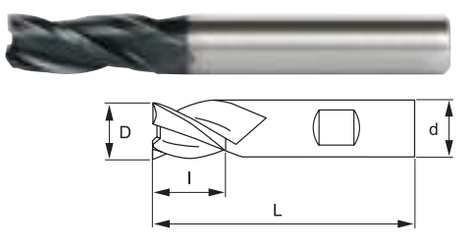
Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A502513	72,98	13	83	26	15
A502514	68,78	14	83	26	15
A502515	82,43	15	83	26	15
A502516	64,89	16	92	32	16
A502517	107,21	17	92	32	16
A502518	101,22	18	92	32	16
A502520	90,41	20	104	38	20
A502522	143,64	22	104	38	20
A502525	183,54	25	121	45	25

THREE FLUTE HSS END MILL - CENTRE CUTTING

WRK

DIN 844 A | HSS Co8 | Z 3 | WIND | HB

ITEM: A5115



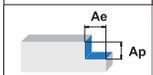
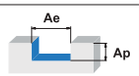
Material	High speed steel Co8
Standard	DIN 844A
Tolerance	h7
Shank	Weldon
Helix	30° right-hand
Surface treatment	WIND
Application	Slot applications

Cutting data available at pages A.95

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	○								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A51151,5	(34,51)	1,50	52	7	6
A51152	31,78	2,00	52	7	6
A51152,5	(36,46)	2,50	52	8	6
A51153	31,78	3,00	52	8	6
A51153,5	(37,45)	3,50	54	10	6
A51154	35,27	4,00	55	11	6
A51154,5	(40,51)	4,50	55	11	6
A51155	27,18	5,00	57	13	6
A51156	27,18	6,00	57	13	6
A51156,5	57,32	6,50	66	16	10
A51157	49,79	7,00	66	16	10
A51157,5	57,32	7,50	69	19	10
A51158	43,89	8,00	69	19	10
A51158,5	57,32	8,50	69	19	10

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A51159	49,79	9,00	69	19	10
A51159,5	57,32	9,50	72	22	10
A511510	43,89	10,00	72	22	10
A511511	62,12	11,00	79	22	12
A511512	52,29	12,00	83	26	12
A511513	79,37	13,00	83	26	12
A511514	72,28	14,00	83	26	16
A511515	86,47	15,00	83	26	12
A511516	76,64	16,00	92	32	16
A511518	108,85	18,00	92	32	16
A511520	110,93	20,00	104	38	20
A511522	(144,00)	22,00	104	38	20
A511525	(201,55)	25,00	121	45	25

		Side milling		Slotting	RANGE								
					A5025					A5115			
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20	D/mm 25
CARBON STEEL	<500 N/mm²	1.5 x D	0.2 x D	0.5 x D	25	32	fz/mm	0.023	0.045	0.061	0.073	0.098	0.124	0.153
	<850 N/mm²	1.5 x D	0.2 x D	0.5 x D	20	23	fz/mm	0.022	0.043	0.058	0.069	0.093	0.119	0.144
	<1200 N/mm²	1.5 x D	0.2 x D	0.5 x D	17	22	fz/mm	0.020	0.038	0.051	0.061	0.082	0.103	0.127
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.2 x D	0.5 x D	10	14	fz/mm	0.018	0.035	0.046	0.055	0.073	0.092	0.115
	<800 N/mm²	1.5 x D	0.2 x D	0.5 x D	8	12	fz/mm	0.014	0.027	0.033	0.041	0.054	0.068	0.083

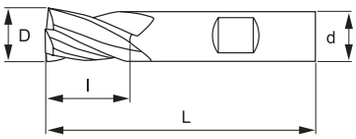
Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.75)

FOUR-FLUTE HSS END MILL - CENTRE-CUTTING

WRK

DIN 844 A | HSS Co8 | Z+ | WIND | HB

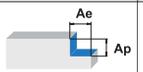
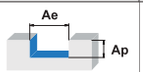
ITEM: A5215



Material	High speed steel Co8
Standard	DIN 844A
Tolerance	h7
Shank	Weldon
Helix	30° right-hand
Surface treatment	WIND
Application	Slotting and side milling

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V HTA	< 45	< 60
●	●	○	●	○		●	○							

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A52152	36,36	2	52	7	6	4
A52152,5	40,51	2,5	52	8	6	4
A52153	34,72	3	52	8	6	4
A52153,5	42,25	3,5	54	10	6	4
A52154	34,72	4	55	11	6	4
A52154,5	42,25	4,5	55	11	6	4
A52155	26,86	5	57	13	6	4
A52155,5	42,25	5,5	57	13	6	4
A52156	26,86	6	57	13	6	4
A52157	51,64	7	66	16	10	4
A52158	44,33	8	69	19	10	4
A52159	52,41	9	69	19	10	4
A521510	44,33	10	72	22	10	4
A521511	69,66	11	79	22	12	4
A521512	60,92	12	83	26	12	4
A521513	80,13	13	83	26	12	4
A521514	76,64	14	83	26	12	4
A521515	89,41	15	83	26	12	4
A521516	79,16	16	92	32	16	4
A521517	119,98	17	92	32	16	4
A521518	103,39	18	92	32	16	4
A521520	103,39	20	104	38	20	4
A521522	155,69	22	104	38	20	6
A521524	208,97	24	121	45	25	6
A521525	(207,01)	25	121	45	25	6

		Side milling		Slotting	RANGE								
					A5215								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20	D/mm 25
CARBON STEEL	<500 N/mm²	1.5 x D	0.2 x D	0.5 x D	25	32	fz/mm	0.023	0.045	0.061	0.073	0.098	0.124	0.153
	<850 N/mm²	1.5 x D	0.2 x D	0.5 x D	20	23	fz/mm	0.022	0.043	0.058	0.069	0.093	0.119	0.144
	<1200 N/mm²	1.5 x D	0.2 x D	0.5 x D	17	22	fz/mm	0.020	0.038	0.051	0.061	0.082	0.103	0.127
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.2 x D	0.5 x D	10	14	fz/mm	0.018	0.035	0.046	0.055	0.073	0.092	0.115
	<800 N/mm²	1.5 x D	0.2 x D	0.5 x D	8	12	fz/mm	0.014	0.027	0.033	0.041	0.054	0.068	0.083

Recommended "fz" values for side milling.
For slotting, adjust the cutting parameters. (ex: fz x 0.75)

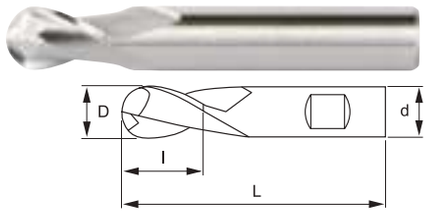
Indivisible package | Suggested retail package - Unit price

TWO FLUTE HSS BALL NOSE END MILL - CENTRE CUTTING

WRK

DIN 327 B | HSS Co8 | Z 2 | HB

ITEM: A5040



Material	High speed steel Co8
Standard	DIN 327 B
Tolerance	h7
Shank	Weldon
Helix	30° right-hand
Surface treatment	Bright
Application	Copying

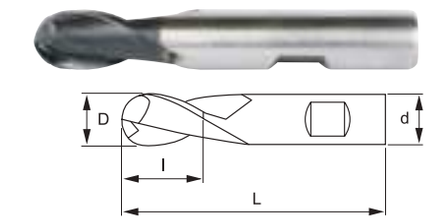
< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	●								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A50402	35,07	2	49	4	6	2
A50403	42,74	3	49	5	6	2
A50404	39,06	4	51	7	6	2
A50405	32,45	5	52	8	6	2
A50406	32,45	6	52	8	6	2
A50408	37,80	8	61	11	10	2

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A504010	41,37	10	63	13	10	2
A504012	47,46	12	73	16	12	2
A504014	73,40	14	73	16	12	2
A504016	66,99	16	79	19	16	2
A504020	112,98	20	88	22	20	2

DIN 327 B | HSS Co8 | Z 2 | WIND | HB

ITEM: A5045

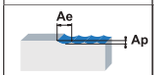
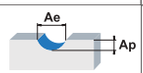


Materiale	High speed steel Co8
Standard	DIN 327 B
Tolerance	h7
Shank	Weldon
Helix	Right-hand 30°
Surface treatment	WIND (coating)
Application	Copying

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	●								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A50452	(43,37)	2	49	4	6	2
A50453	(55,34)	3	49	5	6	2
A50454	(53,97)	4	51	7	6	2
A50455	(38,12)	5	52	8	6	2
A50456	(38,12)	6	52	8	6	2
A50458	(48,62)	8	61	11	10	2

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A504510	(52,19)	10	63	13	10	2
A504512	(59,33)	12	73	16	12	2
A504514	(84,42)	14	73	16	12	2
A504516	(84,42)	16	79	19	16	2
A504520	(104,58)	20	88	22	20	2

		Profiling		Slotting	RANGE										
					A5040						A5045				
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 2	D/mm 3	D/mm 4	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16
CARBON STEEL	<500 N/mm²	0.3 x D	0.7 x D	-	20	35	fz/mm	0.020	0.024	0.031	0.046	0.062	0.072	0.079	0.097
	<850 N/mm²	0.3 x D	0.7 x D	-	20	28	fz/mm	0.015	0.019	0.026	0.038	0.052	0.061	0.067	0.084
	<1200 N/mm²	0.3 x D	0.7 x D	-	15	22	fz/mm	0.012	0.016	0.021	0.031	0.042	0.048	0.054	0.067
STAINLESS STEEL	<600 N/mm²	0.3 x D	0.7 x D	-	10	14	fz/mm	0.012	0.016	0.021	0.031	0.042	0.048	0.054	0.067
	<800 N/mm²	0.3 x D	0.7 x D	-	8	10	fz/mm	0.010	0.013	0.018	0.026	0.035	0.040	0.045	0.055

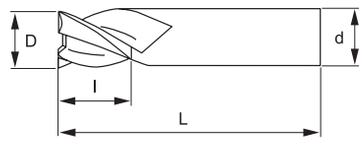
Recommended "fz" values for profiling.

LONG SERIES END MILLS CENTER CUTTING Z3

WRK

DIN 844 | HSS Co8 | Z 3 | HA HB

ITEM: A5120

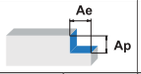
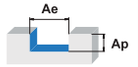


Material	High speed steel Co8
Standard	DIN 844
Tolerance	h7
Shank	Cylindrical / Weldon
Helix	30° right-hand
Surface treatment	Bright
Application	Side milling

On request available with Weldon shank
Cylindrical shank (A5120....) Weldon shank (A5120...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A51203	31,61	3	56	12	6	3
A51204	31,61	4	63	19	6	3
A51205	31,61	5	68	24	6	3
A51206	29,51	6	68	24	6	3
A51208	40,53	8	88	38	10	3
A512010	44,73	10	95	45	10	3
A512012	55,13	12	110	53	12	3
A512014	66,68	14	110	53	12	3
A512016	76,44	16	123	63	16	3
A512018	112,67	18	123	63	16	3
A512020	110,36	20	141	75	20	3

		Side milling		Slotting	RANGE							
					A5120							
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	<500 N/mm²	1.5 x D	0.15 x D	-	20	35	fz/mm	0.025	0.035	0.045	0.060	0.090	0.120
	<850 N/mm²	1.5 x D	0.15 x D	-	20	28	fz/mm	0.022	0.030	0.040	0.056	0.078	0.100
STAINLESS STEEL	<600 N/mm²	1.5 x D	0.15 x D	-	10	14	fz/mm	0.022	0.030	0.040	0.056	0.078	0.100
CAST IRON	<240 HB	1.5 x D	0.15 x D	-	16	22	fz/mm	0.025	0.035	0.045	0.060	0.090	0.120

Recommended "fz" values for side milling.

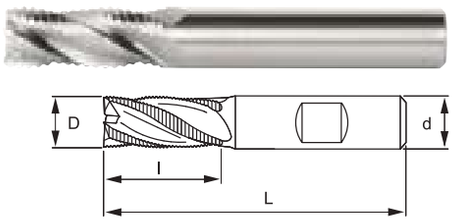
Indivisible package Suggested retail package - Unit price

FOUR FLUTE HSS ROUGHING END MILL - CENTRE CUTTING

WRK

DIN 844 A | HSS Co8 | Z 4 | STD FINE | HB

ITEM: A5310



Material	High speed steel Co8
Standard	DIN 844 A
Tolerance	k12
Shank	Weldon
Helix	30° right-hand
Surface treatment	Bright
Application	Roughing

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	○								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A53105	37,80	5	57	13	6	4
A53106	34,02	6	57	13	6	4
A53107	57,12	7	66	16	10	4
A53108	55,86	8	69	19	10	4
A53109	(58,38)	9	69	19	10	4
A531010	54,18	10	72	22	10	4
A531011	64,68	11	79	22	12	4
A531012	59,85	12	83	26	12	4
A531013	70,46	13	83	26	12	4

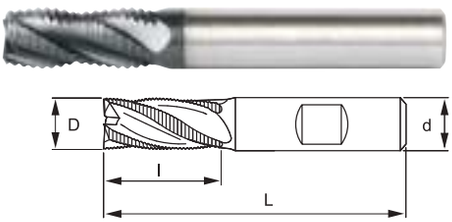
Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A531014	64,47	14	83	26	12	4
A531015	(79,38)	15	83	26	12	4
A531016	76,86	16	92	32	16	4
A531018	99,44	18	92	32	16	4
A531020	110,99	20	104	38	20	4
A531022	132,20	22	104	38	20	4
A531024	(204,86)	24	121	45	25	4
A531025	198,03	25	121	45	25	4

FOUR FLUTE HSS ROUGHING END MILL - CENTRE CUTTING

WRK

DIN 844 A | HSS Co8 | Z + | STD FINE | WIND | HB

ITEM: A5315

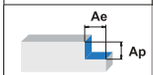
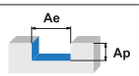


Material	High speed steel Co8
Standard	DIN 844 A
Tolerance	k12
Shank	Weldon
Helix	30° right-hand
Surface treatment	WIND
Application	Slotting and side milling

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	○								

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A53155	46,51	5	57	13	6	4
A53156,5	78,06	6,5	66	16	10	4
A53156	42,03	6	57	13	6	4
A53157	72,82	7	66	16	10	4
A53158,5	78,06	8,5	69	19	10	4
A53158	69,00	8	69	19	10	4
A53159	73,58	9	69	19	10	4
A531510	68,45	10	72	22	10	4
A531510,5	86,47	10,5	79	22	12	4
A531511	82,10	11	79	22	12	4
A531512	82,10	12	83	26	12	4

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm	Z
A531513	90,07	13	83	26	12	4
A531514	88,11	14	83	26	12	4
A531515	119,88	15	83	26	12	4
A531516	102,85	16	92	32	16	4
A531517	123,16	17	98	32	20	4
A531518	128,72	18	92	32	16	4
A531520	141,39	20	104	38	20	4
A531522	240,74	22	104	38	20	4
A531525	260,72	25	121	45	25	4
A531528	273,50	28	121	45	25	6
A531532	329,72	32	133	53	32	6

		Side milling		Slotting	RANGE								
					A5310					A5315			
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20	D/mm 25
CARBON STEEL	<500 N/mm²	1 x D	0.5 x D	1 x D	25	32	fz/mm	0.010	0.020	0.030	0.040	0.050	0.060	0.080
	<850 N/mm²	1 x D	0.5 x D	1 x D	20	29	fz/mm	0.010	0.020	0.030	0.040	0.050	0.070	0.070
	<1200 N/mm²	1 x D	0.5 x D	1 x D	17	22	fz/mm	0.010	0.020	0.020	0.030	0.040	0.050	0.070
STAINLESS STEEL	<600 N/mm²	1 x D	0.5 x D	1 x D	10	14	fz/mm	0.010	0.010	0.020	0.030	0.040	0.050	0.060
	<800 N/mm²	1 x D	0.5 x D	1 x D	8	12	fz/mm	0.010	0.010	0.020	0.030	0.040	0.050	0.060

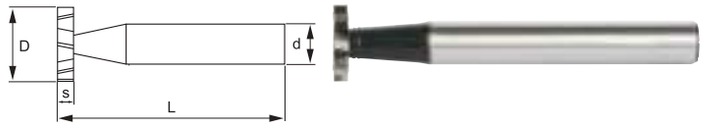
Recommended "fz" values for slotting.
For side milling, adjust the cutting parameters. (ex: fz x 1.25)

WOODRUFF KEYSEATS CUTTERS

WRK

DIN 850 B | HSSE | HA HB

ITEM: A5410

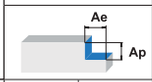
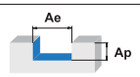


Material	High speed steel Co
Standard	DIN 850B
Shank	Cylindrical / Weldon
Teeth	Alternate
Surface treatment	Bright
Application	Woodruff keyseats

On request available with Weldon shank
Cylindrical shank (A5410....) Weldon shank (A5410...W)

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○						○		

Tech. Code	GR01 Euro	D mm	S mm	L mm	d mm	Z
A541010,52	65,42	10,50	2	50	6	8
A541010,52,5	66,84	10,50	2,5	50	6	8
A541010,53	66,84	10,50	3	50	6	8
A541013,52	79,46	13,50	2	56	10	8
A541013,53	79,46	13,50	3	56	10	8
A541013,54	79,46	13,50	4	56	10	8
A541016,53	79,46	16,50	3	56	10	8
A541016,54	79,46	16,50	4	56	10	8
A541016,55	79,46	16,50	5	56	10	8
A541019,53	93,00	19,50	3	63	10	10
A541019,54	93,00	19,50	4	63	10	10
A541019,55	93,00	19,50	5	63	10	10
A541019,56	93,00	19,50	6	63	10	10
A541022,54	117,00	22,50	4	63	10	10
A541022,55	117,00	22,50	5	63	10	10
A541022,56	117,00	22,50	6	63	10	10
A541022,58	117,00	22,50	8	63	10	10
A541025,56	124,70	25,50	6	63	10	12
A541028,56	148,00	28,50	6	63	10	12
A541028,58	148,00	28,50	8	71	10	12
A541028,510	148,00	28,50	10	71	12	12
A541032,56	196,60	32,50	6	71	12	12
A541032,58	181,00	32,50	8	71	12	12
A541032,510	181,00	32,50	10	71	12	12
A541045,510	257,13	45,50	10	71	12	12

		Side milling		Slotting	RANGE								
					A5410								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 10	D/mm 16	D/mm 20	D/mm 25	D/mm 32	D/mm 40
CARBON STEEL	<500 N/mm²	-	-	0.10 x D	20	35	fz/mm	0.035	0.040	0.055	0.064	0.072	0.080
	<850 N/mm²	-	-	0.10 x D	20	28	fz/mm	0.032	0.036	0.050	0.058	0.066	0.072
STAINLESS STEEL	<600 N/mm²	-	-	0.10 x D	10	14	fz/mm	0.028	0.032	0.044	0.052	0.058	0.064
CAST IRON	<240 HB	-	-	0.10 x D	16	22	fz/mm	0.032	0.036	0.050	0.058	0.066	0.072
	<300 HB	-	-	0.10 x D	10	15	fz/mm	0.028	0.032	0.044	0.052	0.058	0.064
SUPER ALLOY	TI6AI4V	-	-	0.10 x D	7	10	fz/mm	0.022	0.036	0.036	0.042	0.046	0.056

Recommended "fz" values for slotting.

Indivisible package | Suggested retail package - Unit price

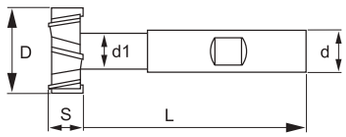
T-SLOT CUTTERS

WRK

DIN 850 AB | HSSE | HB

ITEM: A5415

Material	High speed steel Co
Standard	DIN 850AB
Shank	Weldon
Teeth	Alternate
Surface treatment	Bright
Application	T-slots



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○						○		

Tech. Code	GR01 Euro	D mm	S mm	d1 mm	L mm	d mm	Z
A541512,5	88,00	12.5	6	5	57	10	6
A541516	102,00	16	8	7	62	10	6
A541518	110,00	18	8	8	70	12	6
A541521	128,00	21	9	10	74	12	6
A541525	152,00	25	11	12	82	16	8
A541528	165,00	28	12	13	75	16	8
A541532	202,00	32	14	15	90	16	8
A541536	245,00	36	16	17	95	25	10
A541540	309,00	40	18	19	108	25	10

		Side milling		Slotting	RANGE								
		Ae / Ap		Ae / Ap	A5415								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 10	D/mm 16	D/mm 20	D/mm 25	D/mm 32	D/mm 40
CARBON STEEL	<500 N/mm²	= S	1 x D	-	20	35	fz/mm	0,035	0.040	0.055	0.064	0.072	0.080
	<850 N/mm²	= S	1 x D	-	20	28	fz/mm	0,032	0.036	0.050	0.058	0.066	0.072
STAINLESS STEEL	<600 N/mm²	= S	1 x D	-	10	14	fz/mm	0,028	0.032	0.044	0.052	0.058	0.064
CAST IRON	< 240 HB	= S	1 x D	-	16	22	fz/mm	0,032	0.036	0.050	0.058	0.066	0.072
	<300 HB	= S	1 x D	-	10	15	fz/mm	0.028	0.032	0.044	0.052	0.058	0.064
SUPER ALLOY	Ti6Al4V	= S	1 x D	-	7	10	fz/mm	0.022	0.036	0.036	0.042	0.046	0.056

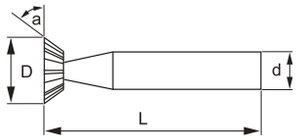
Recommended "fz" values for slotting.

DOVETAIL CUTTERS

WRK

DIN 1833 A | HSSE | HA

ITEM: A5420



Material	High speed steel Co
Standard	DIN 1833A
Shank	Cylindrical
Teeth	Front and side edges
Surface finish	Bright
Application	Side milling, chamfer and angular recesses on all materials.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○						○		

Tech. Code	GR01 Euro	D mm	a °	L mm	d mm	Z
A54201645	72,00	16	45	60	12	10
A54202045	103,00	20	45	63	12	10
A54202545	127,00	25	45	67	12	10
A54201660	72,00	16	60	60	12	10
A54202060	103,00	20	60	63	12	10
A54202560	127,00	25	60	67	12	10

		Side milling		Slotting	RANGE								
		Ae / Ap		Ae / Ap	A5420								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 10	D/mm 16	D/mm 20	D/mm 25	D/mm 32	D/mm 40
CARBON STEEL	<500 N/mm²	= S	1 x D	-	20	35	fz/mm	0,035	0.040	0.055	0.064	0.072	0.080
	<850 N/mm²	= S	1 x D	-	20	28	fz/mm	0,032	0.036	0.050	0.058	0.066	0.072
STAINLESS STEEL	<600 N/mm²	= S	1 x D	-	10	14	fz/mm	0,028	0.032	0.044	0.052	0.058	0.064
CAST IRON	< 240 HB	= S	1 x D	-	16	22	fz/mm	0,032	0.036	0.050	0.058	0.066	0.072
	<300 HB	= S	1 x D	-	10	15	fz/mm	0.028	0.032	0.044	0.052	0.058	0.064
SUPER ALLOY	Ti6Al4V	= S	1 x D	-	7	10	fz/mm	0.022	0.036	0.036	0.042	0.046	0.056

Recommended "fz" values for slotting.

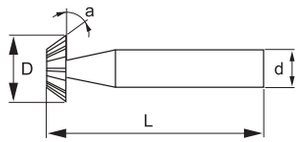
Indivisible package Suggested retail package - Unit price

INVERTED DOVETAIL CUTTERS

WRK

DIN	HSSE	
1833 A		HA

ITEM: A5425



Material	High speed steel Co
Standard	DIN 1833A
Shank	Cylindrical
Teeth	Front and side edges
Surface finish	Bright
Application	Side milling, chamfer and angular recesses on all materials.

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○						○		

Tech. Code	GR01 Euro	D mm	a °	L mm	d mm	Z
A54251645	72,00	16	45	60	12	10
A54252045	103,00	20	45	63	12	10
A54252545	127,00	25	45	67	12	10
A54251660	72,00	16	60	60	12	10
A54252060	103,00	20	60	63	12	10
A54252560	127,00	25	60	67	12	10

		Side milling		Slotting	RANGE								
		Ae / Ap		Ae / Ap	A5425								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 10	D/mm 16	D/mm 20	D/mm 25	D/mm 32	D/mm 40
CARBON STEEL	<500 N/mm²	= S	1 x D	-	20	35	fz/mm	0,035	0.040	0.055	0.064	0.072	0.080
	<850 N/mm²	= S	1 x D	-	20	28	fz/mm	0,032	0.036	0.050	0.058	0.066	0.072
STAINLESS STEEL	<600 N/mm²	= S	1 x D	-	10	14	fz/mm	0,028	0.032	0.044	0.052	0.058	0.064
CAST IRON	< 240 HB	= S	1 x D	-	16	22	fz/mm	0,032	0.036	0.050	0.058	0.066	0.072
	<300 HB	= S	1 x D	-	10	15	fz/mm	0.028	0.032	0.044	0.052	0.058	0.064
SUPER ALLOY	Ti6Al4V	= S	1 x D	-	7	10	fz/mm	0.022	0.036	0.036	0.042	0.046	0.056

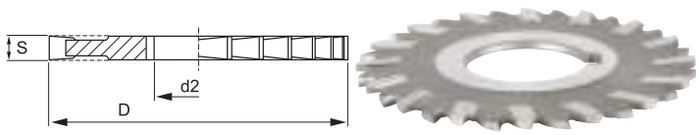
Recommended "fz" values for slotting.

SLITTING CUTTERS

WRK

NdF | HSSE

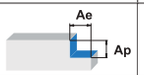
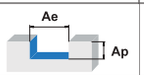
ITEM: A5455



Material	High speed steel Co
Standard	Factory standard
Teeth	Alternate
Profile	Type N
Surface treatment	Bright
Application	For steel and cast iron slotting

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○			●	○						○		

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A5455631,6	209,48	63	1.6	22	32
A5455632	209,48	63	2	22	32
A5455632,5	209,48	63	2.5	22	32
A5455633	209,48	63	3	22	28
A5455633,5	209,48	63	3.5	22	28
A5455802	275,63	80	2	22	36
A5455802,5	275,63	80	2.5	22	36
A5455803	275,63	80	3	22	32
A5455803,5	275,63	80	3.5	22	32
A54551002	332,96	100	2	27	44
A54551002,5	332,96	100	2.5	27	44
A54551003	332,96	100	3	27	40
A54551003,5	332,96	100	3.5	27	40
A54551252	487,31	125	2	32	44
A54551252,5	487,31	125	2.5	32	44
A54551253	487,31	125	3	32	44
A54551253,5	487,31	125	3.5	32	40
A54551254	487,31	125	4	32	40

		Side milling		Slotting	RANGE													
					A5455													
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 50 S 4-6	D/mm 50 S 8-10	D/mm 63 S 4-8	D/mm 63 S 10-14	D/mm 80 S 4-10	D/mm 80 S 12-18	D/mm 100 S 4-10	D/mm 100 S 14-16	D/mm 125 S 5-12	D/mm 125 S 14-20	D/mm 160 S 6-12
CARBON STEEL	<500 N/mm²	-	-	0.1 x D	20	35	fz/mm	0.025	0.030	0.035	0.040	0.042	0.046	0.048	0.054	0.056	0.060	0.066
	<850 N/mm²	-	-	0.1 x D	20	28	fz/mm	0.020	0.026	0.030	0.035	0.038	0.042	0.044	0.050	0.052	0.055	0.060
STAINLESS STEEL	<600 N/mm²	-	-	0.1 x D	10	14	fz/mm	0.020	0.026	0.030	0.035	0.038	0.042	0.044	0.050	0.052	0.055	0.060
CAST IRON	<240 HB	-	-	0.1 x D	16	22	fz/mm	0.025	0.030	0.035	0.040	0.042	0.046	0.048	0.054	0.056	0.060	0.066
	<300 HB	-	-	0.1 x D	10	15	fz/mm	0.020	0.026	0.030	0.035	0.038	0.042	0.044	0.050	0.052	0.055	0.060

Recommended "fz" values for slotting.

Indivisible package Suggested retail package - Unit price

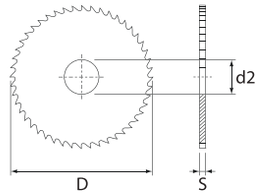
SLITTING SAW BLADES HSS DIN 1837-A FINE TOOTHING

WRK

DIN
1837 A

ITEM: A5460

HSS slitting saws in both high speed and super high speed steels suitable for cutting-off, milling, and grooving steels and alloys on manual, semi-automatic and fully automatic machines.
The saw blade range is Ø 20 mm - Ø 250 mm with thicknesses ranging 0,3 mm - 6 mm in variable increments. On request up to Ø 315.
All standard saws are available in HP-GRIND execution but are readily available in VAPO or P.V.D. (Physical Vapour Deposition) coated execution.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○	○		●	○	○	○	○					

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A54600200,8	(17,20)	20	0.8	5	48
A54600201	(17,20)	20	1,00	5	40
A54600202	(21,94)	20	2,00	5	32
A54600202,5	(23,28)	20	2.5	5	32
A54600250,5	(17,72)	25	0.5	8	64
A54600251	(17,72)	25	1,00	8	48
A54600251,6	(21,42)	25	1.6	8	40
A54600252	(23,07)	25	2,00	8	40
A54600253	(28,74)	25	3,00	8	32
A54600255	(39,66)	25	5,00	8	32
A54600320,6	(18,64)	32	0.6	8	64
A54600320,8	(18,64)	32	0.8	8	64
A54600321	(18,64)	32	1,00	8	64
A54600321,2	(21,32)	32	1.2	8	48
A54600322	(24,41)	32	2,00	8	48
A54600400,3	(23,07)	40	0.3	10	10
A54600400,4	(23,07)	40	0.4	10	10
A54600400,5	(20,70)	40	0.5	10	80
A54600400,7	(20,70)	40	0.7	10	80
A54600400,8	(20,70)	40	0.8	10	80
A54600401	(20,70)	40	1,00	10	64
A54600401,2	(23,38)	40	1.2	10	64
A54600401,5	(23,38)	40	1.5	10	64
A54600402	(25,13)	40	2,00	10	48
A54600402,5	(28,22)	40	2.5	10	48
A54600500,3	(25,13)	50	0.3	13	128
A54600500,4	(25,13)	50	0.4	13	100
A54600500,5	(22,97)	50	0.5	13	100
A54600500,6	(22,97)	50	0.6	13	100
A54600500,7	(24,93)	50	0.7	13	100
A54600500,8	(22,97)	50	0.8	13	80
A54600501	(22,97)	50	1,00	13	80
A54600501,6	(30,08)	50	1.6	13	64
A54600502	(30,08)	50	2,00	13	64
A54600502,5	(30,69)	50	2.5	13	64
A54600503	(35,74)	50	3,00	13	48
A54600630,3	(28,63)	63	0.3	16	128
A54600630,4	(28,63)	63	0,40	16	128
A54600630,5	(28,63)	63	0.5	16	128
A54600630,6	(26,06)	63	0.6	16	100
A54600630,8	(26,06)	63	0.8	16	100
A54600631	(26,06)	63	1,00	16	100
A54600631,2	(30,18)	63	1.2	16	80
A54600631,5	(30,18)	63	1.5	16	80
A54600631,6	(30,18)	63	1.6	16	80
A54600632	(32,55)	63	2,00	16	80
A54600632,5	(33,58)	63	2.5	16	64
A54600633	(37,80)	63	3,00	16	64

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A54600800,3	(32,96)	80	0.3	22	160
A54600800,4	(42,75)	80	0.4	22	160
A54600800,5	(30,59)	80	0.5	22	128
A54600800,6	(30,59)	80	0.6	22	128
A54600800,8	(30,59)	80	0.8	22	128
A54600801	(30,69)	80	1,00	22	100
A54600801,2	(30,59)	80	1.2	22	100
A54600801,5	(33,78)	80	1.5	22	100
A54600801,6	(33,78)	80	1.6	22	100
A54600802	(36,67)	80	2,00	22	80
A54600802,5	(44,19)	80	2.5	22	80
A54600803	(47,79)	80	3,00	22	80
A54600804	(58,61)	80	4,00	22	64
A54600805	(72,72)	80	5,00	22	64
A54600806	(79,72)	80	6,00	22	60
A54601000,5	(36,36)	100	0.5	22	160
A54601000,8	(36,36)	100	0,80	22	128
A54601001	(36,36)	100	1,00	22	128
A54601001,2	(36,36)	100	1.2	22	128
A54601001,5	(43,88)	100	1.5	22	100
A54601001,6	(43,88)	100	1.6	22	100
A54601002	(48,93)	100	2,00	22	100
A54601002,5	(55,31)	100	2.5	22	100
A54601003	(59,23)	100	3,00	22	80
A54601004	(79,62)	100	4,00	22	80
A54601005	(89,61)	100	5,00	22	80
A54601250,8	(52,74)	125	0.8	22	160
A54601251	(52,94)	125	1,00	22	160
A54601251,2	(53,35)	125	1.2	22	128
A54601251,5	(56,03)	125	1.5	22	128
A54601251,6	(56,03)	125	1.6	22	128
A54601252	(59,23)	125	2,00	22	128
A54601252,5	(62,83)	125	2.5	22	100
A54601253	(69,53)	125	3,00	22	100
A54601254	(103,62)	125	4,00	32	100
A54601601,2	(80,24)	160	1.2	32	160
A54601601,6	(81,47)	160	1.6	32	160
A54601602	(83,53)	160	2,00	32	128
A54601602,5	(89,92)	160	2.5	32	128
A54601603	(102,38)	160	3,00	32	128
A54601604	(142,35)	160	4,00	32	100
A54601605	(168,10)	160	5,00	32	100
A54602001	(109,28)	200	1,00	32	200
A54602001,2	(109,70)	200	1.2	32	200
A54602002	(121,85)	200	2,00	32	160
A54602002,5	(132,66)	200	2.5	32	160
A54602504	(291,90)	250	4,00	32	160

Indivisible package Suggested retail package - Unit price

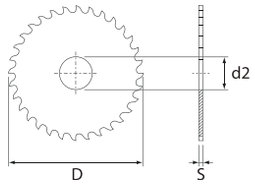
SLITTING SAW BLADES HSS 1838-B - COARSE TOOTHING

WRK

DIN
1838 B

ITEM: A5465

HSS slitting saws in both high speed and super high speed steels suitable for cutting-off, milling, and grooving steels and alloys on manual, semi-automatic and fully automatic machines.
The saw blade range is Ø 50 mm - Ø 125 mm with thicknesses ranging 0,5 mm - 6 mm in variable increments.
On request up to Ø 315.
All standard saws are available in HP-GRIND execution but are readily available in VAPO or P.V.D. (Physical Vapour Deposition) coated execution.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	○	○		●	○	●	●	○					

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A54650500,6	(23,38)	50	0.60	13	48
A54650500,8	(23,38)	50	0.80	13	40
A54650501	(23,38)	50	1,00	13	40
A54650501,2	(27,09)	50	1.20	13	40
A54650501,6	(27,09)	50	1.60	13	32
A54650502	(29,15)	50	2,00	13	32
A54650502,5	(31,31)	50	2.50	13	32
A54650630,5	(26,47)	63	0.50	16	64
A54650630,8	(26,47)	63	0.80	16	48
A54650631	(26,47)	63	1,00	16	48
A54650631,2	(30,69)	63	1.20	16	40
A54650631,5	(30,69)	63	1.50	16	40
A54650631,6	(30,69)	63	1.60	16	40
A54650632	(33,17)	63	2,00	16	40
A54650633	(38,63)	63	3,00	16	32
A54650634	(48,62)	63	4,00	16	32
A54650635	(60,77)	63	5,00	16	24
A54650800,5	(30,59)	80	0.50	22	64
A54650800,8	(32,55)	80	0.80	22	64
A54650801	(32,55)	80	1,00	22	48

Tech. Code	GR01 Euro	D mm	S mm	d2 mm	Z
A54650801,2	(32,55)	80	1.20	22	48
A54650801,6	(34,51)	80	1.60	22	48
A54650802	(37,39)	80	2,00	22	40
A54650803	(37,39)	80	3,00	22	40
A54650804	(59,84)	80	4,00	22	32
A54650805	(74,16)	80	5,00	22	32
A54651000,8	(36,15)	100	0,80	22	64
A54651001	(36,15)	100	1,00	22	64
A54651001,5	(44,70)	100	1.50	22	64
A54651001,6	(44,70)	100	1.60	22	48
A54651002	(49,75)	100	2,00	22	48
A54651003	(60,26)	100	3,00	22	40
A54651004	(81,16)	100	4,00	22	40
A54651250,8	(53,77)	125	0.80	22	80
A54651251	(53,97)	125	1,00	22	80
A54651252	(60,26)	125	2,00	22	64
A54651252,5	(64,07)	125	2.50	22	48
A54651253	(70,86)	125	3,00	22	48
A54651254	(105,68)	125	4,00	22	48
A54651255	(124,01)	125	5,00	22	40

SLITTING SAW HOLDERS DIN 1837-A AND DIN 1838-B

TUKOY

ITEM: C3230

HSS + HM disk saw holders cilindrical weldon shank grinded surfaces clamp

Tech. Code	GR33 Euro	D1 mm	D2 mm	D3 mm	L mm
C323005	146,00	5	6	16	60
C323008	141,80	8	6	15	60
C323013	141,80	13	10	24	69
C323016	137,60	16	12	31	78
C323022	146,00	22	16	40	86
C323032	314,20	32	25	88	124

Indivisible package Suggested retail package - Unit price

CLASSIC LINE ANGLE HEADS - IDEAL FOR MICRO MACHININGS

TOOLING 2023 GENERAL CATALOGUE

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Slim GS90-3XS Slim GS90-2

Angle Heads
Classic Line & Evolution Line

Driven & Static Tool Holders
for lathes and turrets

Modular Quick Change
Adaptors for ER nuts

CHAP A - REAMERS SECTION - RECOMMENDED CUTTING DATA

	Material	HM				HSS							HSSE	
	Tolerance	0/+0,004 mm	0/+0,003 mm	H7							-		0/+0,004 mm	H7
	Application	UNI	-											
		A6045	A6037	A6035	A6036	A6040	A6042	A6010	A6015	A6050	A6070	A6075	A6027	A6032
		KERFOLG	KERFOLG	KERFOLG	KERFOLG	BECK	BECK	WRK	WRK	WRK	KERFOLG	KERFOLG	KERFOLG	KERFOLG
	Page. A	183	182	181	181	182	182	179	179	183	184	184	180	180
	DIN	NdF	DIN 212 D	DIN 212 D	DIN 212 D	NdF	NdF	DIN 206 B	DIN 212 D	DIN 208 B	DIN 9	DIN 2179	DIN 212 D	DIN 212 D
	Shank	HA	HA	HA	HA	HA	HA	HA	HA	—	HA	HA	HA	HA
	Coating	DURABLE	—	—	WIND X	WIND X	WIND X	—	—	—	—	—	TiAlN	TiAlN
	Hole	●	—	—	—	●	●	—	—	—	—	—	—	—
		-				PASSING	BLIND	-						
P	< 500 N/mm²	130/185 4	25/35 3	25/35 3	20/30 4	35/45 2	35/45 2	12/15 3	12/15 3	12/15 3	12/15 3	12/15 3	12/15 3	12/15 3
P	< 850 N/mm²	120/160 4	25/30 3	25/30 3	15/20 4	25/30 2	25/30 2	10/12 3	10/12 3	10/12 3	12/15 3	10/12 3	10/12 3	10/12 3
P	< 1200 N/mm²	100/120 3	20/25 2	20/25 2	10/20 3	15/20 2	15/20 2	8/10 2	8/10 2	8/10 2	8/10 2	8/10 2	8/10 2	8/10 2
M	< 600 N/mm²	30/40 3	20/25 3	20/25 3	15/20 2			6/8 3	6/8 3	6/8 3	6/8 3	6/8 3	6/8 3	6/8 3
M	< 850 N/mm²	30/35 2	18/22 2	18/22 2	12/15 2			5/6 3	5/6 3	5/6 3	5/6 3	5/6 3	6/8 3	6/8 3
M	DUPLEX	25/30 2	15/18 2	15/18 2	10/15 2				3/4 1	3/4 1	3/4 1	3/4 1	3/4 1	3/4 1
K	< 240 HB	150/180 4	25/35 2	25/35 2	15/20 4	30/40 2	30/40 2	12/15 2	12/15 2	12/15 2	12/15 2	12/15 2	12/15 2	12/15 2
K	< 300 HB	130/160 4	25/32 2	25/32 2	10/15 2	20/25 2	20/25 2	10/12 2	10/12 2	10/12 2	10/12 2	10/12 2	10/12 2	10/12 2
N	< 10% Si		35/50 4	35/50 4	25/35 4			18/20 4	18/20 4	18/20 4	18/20 4	18/20 4	18/20 4	18/20 4
N	> 10% Si		35/45 4	35/45 4	20/30 2				15/18 4	15/18 4	15/18 4	15/18 4	15/18 4	15/18 4
N	Bass Copper			30/38 2	30/35 4				15/18 3	15/18 3	15/18 3	15/18 3	15/18 3	15/18 4
N	Bronze >700 N/mm²		25/30 2	25/30 2	25/30 4				14/16 3	14/16 3	14/16 3	14/16 3	14/16 3	14/16 3
S	Ti6Al4V		16/18 1	16/18 1					4/6 2	4/6 2		4/6 2	4/6 2	4/6 2
S	HTA		12/16 1	12/16 1					3/4 1	3/4 1		3/4 1	3/4 1	3/4 1

● RECOMMENDED FOR... ○ USABLE FOR…

Example 35/45 / 3

Suggested cutting speed (m/mm)

n° suggested feed column - look at page A.178

CHAP A - COUNTERSINK SECTION - APPLICATION INDEX

	Material	HM	HSS														
	Tolerance	-															
	Application	UNI											-				
		A6112	A6110	A6108	A6111	A6153	A6115	A6140	A6155	A6145	A6150	A6157	A6120	A6160	A6230	A6210	A6216
		KERFOLG	KERFOLG	GRANLUND	GRANLUND	GRANLUND	KERFOLG	GRANLUND	GRANLUND	GRANLUND	GRANLUND	KERFOLG	WRK	WRK	WRK	WRK	WRK
	Page. A	186	185	185	186	188	186	187	188	187	188	189	187	189	189	190	190
	DIN	NdF	DIN 335 C	DIN 335 C	DIN 335 C	NdF	DIN 335 C	DIN 335 C	DIN 335 C	DIN 334 C	DIN 334 C	DIN 335 C	DIN 335 D	NdF	DIN 1866	DIN 373	DIN 373
	Shank	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	—	HA	HA	HA	HA
	Coating	—	—	—	—	—	TiN	TiN	—	TiN	—	TiN	—	—	—	—	—
	Hole	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		90°								60°		90°				180°	
P	< 500 N/mm²	35/45 3	35/45 3	15/30 2	15/30 2	15/30 2	35/45 3	15/30 2	20/50 2	15/30 2	15/30 2	30/40 1	35/45 3	●	●	●	●
P	< 850 N/mm²	20/30 2	20/30 1	10/25 2	10/25 2	10/25 2	20/30 2	10/25 2	15/45 2	10/25 2	10/25 2	10/30 1	20/30 2	●	●	●	●
P	< 1200 N/mm²	15/20 1	15/20 1	5/15 2	5/15 2	5/15 2	15/20 1	5/15 2	10/35 2	5/15 2	5/15 2	15/25 1	15/20 1	○	○	○	○
M	< 600 N/mm²	12/15 1	12/15 1	5/15 2	5/15 2	5/15 2	12/15 1	5/15 2	10/35 2	5/15 2	5/15 2	10/15 1	12/15 1	●		●	●
M	< 850 N/mm²	6/10 1	6/10 1	5/15 2	5/15 2	5/15 2	6/10 1	5/15 2	10/25 2	5/15 2	5/15 2	10/15 1	6/10 1	○		○	○
M	DUPLEX	6/10 1		5/15 1	5/15 1	5/15 1	25/40 3	5/15 1	5/15 1	5/15 1	5/15 1	8/10 1					
K	< 240 HB	20/30 2	25/40 3	10/25 2	10/25 2	10/25 2	20/302	10/25 2	20/50 2	10/25 2	10/25 2	15/20 2	25/40 3	●	●	●	●
K	< 300 HB	50/60 3	20/30 2	10/20 2	10/20 2	10/20 2	50/60 3	10/20 2	10/40 2	10/20 2	10/20 2	15/20 2	20/30 2	●	●	●	●
N	< 10% Si	35/45 3	50/60 3	40/80 2	40/80 2	40/80 2	35/45 3	40/80 2	40/80 2	40/80 2	40/80 2	40/50 2	50/60 3	●	●	●	●
N	> 10% Si	30/40 3	35/45 3	30/70 2	30/70 2	30/70 2	30/40 3	30/70 2	30/70 2	30/70 2	30/70 2	40/50 2	35/45 3	●	○	○	
N	Bass Copper	30/40 3	30/40 3	20/50 2	20/50 2	20/50 2	30/40 3	20/50 2	40/100 2	20/50 2	20/50 2	30/40 2	30/40 3	●	○	○	
N	Bronze >700 N/mm²	30/40 3	30/40 3	20/50 2	20/50 2	20/50 2	30/40 3	20/50 2	25/80 2	20/50 2	20/50 2	30/40 2	30/40 3		○	○	
S	Ti6Al4V	6/10 1	6/10 1	5/10 1	5/10 1	5/10 1	6/10 1	5/10 1		5/10 1	5/10 1	8/10 1	6/10 1				
S	HTA			5/10 1	5/10 1	5/10 1		5/10 1		5/10 1	5/10 1	8/10 1					

● RECOMMENDED FOR... ○ USABLE FOR…

Example

35/45 — Suggested cutting speed (m/mm)

3 — n° suggested feed column - look at page A.178

CHAP A REAMERS - RECOMMENDED FEED RATE - f (mm/turn)

Reamer Ø mm	Column 1 f (mm/turn)	Column 2 f (mm/turn)	Column 3 f (mm/turn)	Column 4 f (mm/turn)
2	0,040	0,060	0,080	0,100
3	0,050	0,080	0,100	0,125
4	0,060	0,080	0,125	0,150
5	0,080	0,100	0,125	0,160
6	0,100	0,125	0,160	0,200
8	0,125	0,160	0,200	0,250
10	0,160	0,200	0,250	0,300
12	0,200	0,220	0,270	0,320
16	0,220	0,250	0,320	0,400
20	0,250	0,320	0,400	0,500
25	0,320	0,400	0,480	0,580
30	0,400	0,420	0,520	0,620
40	0,420	0,500	0,620	0,800
50	0,500	0,620	0,800	1,000

RECOMMENDED STOCK MATERIAL - DIAMETER D/mm

		D/mm 2 - 5	D/mm 5 - 10	D/mm 10 - 20	D/mm 20 - 30	D/mm 30 - 40	D/mm > 40
	Stock	mm	mm	mm	mm	mm	mm
P	< 500 N/mm²	0.10 - 0.20	0.20 - 0.25	0.20 - 0.30	0.30 - 0.40	0.40 - 0.50	0.60
	< 850 N/mm²	0.10 - 0.20	0.20 - 0.25	0.20 - 0.25	0.30 - 0.40	0.40 - 0.50	0.55
	< 1200 N/mm²	0.10 - 0.20	0.20	0.20 - 0.25	0.25 - 0.35	0.35 - 0.45	0.50
M	< 600 N/mm²	0.10 - 0.20	0.20	0.20 - 0.30	0.25 - 0.30	0.35 - 0.45	0.50 - 0.55
	< 800 N/mm²	0.10 - 0.20	0.20	0.20 - 0.25	0.25 - 0.30	0.35 - 0.40	0.50 - 0.55
	Duplex	0.10 - 0.20	0.20	0.20 - 0.25	0.25	0.30	0.40
K	< 240 HB	0.10 - 0.20	0.20 - 0.25	0.30	0.30	0.30 - 0.40	0.45 - 0.50
	< 300 HB	0.10 - 0.20	0.20	0.25 - 0.30	0.30	0.30 - 0.40	0.45 - 0.55
N	< 10% Si	0.10 - 0.20	0.20 - 0.30	0.30 - 0.40	0.40 - 0.50	0.50 - 0.60	0.60 - 0.70
	> 10% Si	0.10 - 0.20	0.20 - 0.25	0.30 - 0.35	0.40 - 0.45	0.50 - 0.55	0.60 - 0.65
	Brass - Copper	0.10 - 0.20	0.20	0.25 - 0.30	0.30 - 0.35	0.35 - 0.40	0.45 - 0.50
	Bronze > 700 < 1500 N/mm²	0.10 - 0.20	0.20	0.25 - 0.30	0.30 - 0.35	0.35 - 0.40	0.45 - 0.50

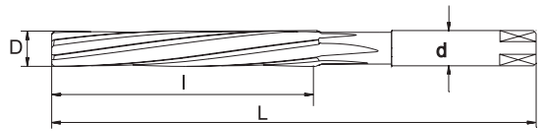
Indivisible package Suggested retail package - Unit price

HAND REAMERS

WRK

DIN 206 B | HA

ITEM: A6010



Material	HSS
Standard	DIN 206B
Tolerance	H7
Flutes	Spiral 7° - 8° - cutting right-hand
Surface finish	Bright
Application	H7-reaming on all materials

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●	●							

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A60102	21,78	2.00	50	25	2
A60102,5	23,58	2.50	58	29	2.5
A60103	21,78	3.00	62	31	3
A60103,5	23,58	3.50	71	35	3.5
A60104	17,62	4.00	76	38	4
A60104,5	23,58	4.50	81	41	4.5
A60105	21,78	5.00	87	44	5
A60106	22,23	6.00	93	47	6
A60107	23,35	7.00	107	54	7
A60108	25,82	8.00	115	58	8
A60109	32,00	9.00	124	62	9

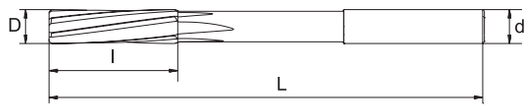
Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A601010	33,79	10.00	133	66	10
A601011	35,37	11.00	142	71	11
A601012	38,17	12.00	152	76	12
A601013	40,53	13.00	152	76	13
A601014	45,25	14.00	163	81	14
A601015	48,39	15.00	163	81	15
A601016	54,34	16.00	175	87	16
A601017	57,03	17.00	175	87	17
A601018	62,09	18.00	188	93	18
A601020	72,75	20.00	201	100	20

MACHINE REAMERS

WRK

DIN 212 D | HSSE | HA

ITEM: A6015



Material	HSSE
Standard	DIN 212D
Tolerance	H7
Flutes	Spiral 7° - 8° - cutting right-hand
Surface finish	Bright
Application	H7-reaming on all materials

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○	○	○		

Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A60151,5	20,60	1.50	40	8	1.5
A60152	15,38	2.00	49	11	2
A60152,5	18,42	2.50	57	14	2.5
A60152,6	(18,30)	2.60	57	15	2.6
A60152,7	18,30	2.70	61	15	2.7
A60153	17,07	3.00	61	15	3
A60153,1	(18,75)	3.10	65	16	3.1
A60153,2	20,55	3.20	65	16	3.2
A60153,4	20,44	3.40	70	18	3.4
A60153,5	21,10	3.50	70	18	3.5
A60154	18,86	4.00	75	19	4
A60154,2	21,90	4.20	75	19	4
A60154,3	22,79	4.30	80	21	4.5
A60154,5	22,11	4.50	80	21	4.5
A60154,8	23,35	4.80	80	23	5
A60154,9	23,35	4.90	80	23	5
A60155	21,33	5.00	86	23	5
A60155,1	23,92	5.10	86	23	5
A60155,2	23,92	5.20	86	23	5
A60155,4	23,92	5.40	93	26	5.6
A60155,5	22,79	5.50	93	26	5.6
A60156	21,44	6.00	93	26	5.6
A60156,1	25,60	6.10	101	28	6.3

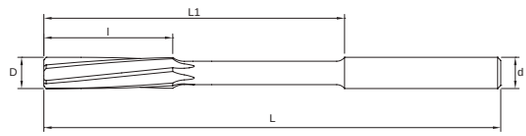
Tech. Code	GR01 Euro	D mm	L mm	l mm	d mm
A60156,2	23,48	6.20	101	28	6.3
A60156,5	22,34	6.50	101	28	6.3
A60156,6	26,72	6.60	101	28	6.3
A60157	25,71	7.00	109	31	7.1
A60157,5	23,59	7.50	109	31	7.1
A60157,8	27,84	7.80	117	33	8
A60158	26,16	8.00	117	33	8
A60158,5	31,66	8.50	117	33	8
A60158,8	(31,66)	8.80	125	36	9
A60159	32,45	9.00	125	36	9
A60159,5	32,90	9.50	125	36	9
A60159,8	35,37	9.80	133	38	10
A601510	33,57	10.00	133	38	10
A601510,5	40,87	10.50	133	38	10
A601511	40,98	11.00	142	41	10
A601512	42,44	12.00	151	44	10
A601512,5	45,58	12.50	151	44	10
A601513	46,03	13.00	151	44	10
A601514	49,51	14.00	160	47	12.5
A601514,5	(56,14)	14.50	162	50	12.5
A601515	51,09	15.00	162	50	12.5
A601516	54,46	16.00	170	52	12.5

CENTESIMAL MACHINE REAMERS

KERFOLG

DIN	HSSE	TiAlN	
212 D			HA

ITEM: A6027



Material	HSSE
Standard	DIN 212 D
Tolerance	0/+0,004 mm
Flutes	Spiral 6° - cutting right-hand
Surface finish	TiAlN
Application	Boring on materials with R < 1100 N/mm²

NOTE - To order a reamer, the technical code to be requested:
example Ø 1,32 = A602701,32

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○					

Tech. Code	GR06 Euro	D mm	Available range D from mm to mm	L mm	l mm	L1 mm	d mm
A602701,00	(30,47)	1,00	1,00 - 1,50	40	8	-	-
A602701,51	(29,94)	1,51	1,51 - 1,93	43	9	-	-
A602701,94	(28,41)	1,94	1,94 - 2,12	49	11	26	2
A602702,13	(29,48)	2,13	2,13 - 2,36	53	12	-	2
A602702,37	(28,70)	2,37	2,37 - 2,48	57	14	-	2,3
A602702,49	(28,70)	2,49	2,49 - 2,65	57	14	-	2,5
A602702,66	(28,86)	2,66	2,66 - 2,96	61	15	-	2,5
A602702,97	(28,87)	2,97	2,97 - 3,35	65	16	40	3
A602703,36	(28,58)	3,36	3,36 - 3,75	70	18	45	3,5
A602703,76	(28,58)	3,76	3,76 - 4,25	75	19	47	4
A602704,26	(29,69)	4,26	4,26 - 4,75	80	21	51	4,5

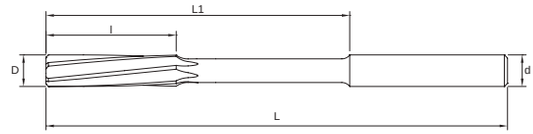
Tech. Code	GR06 Euro	D mm	Available range D from mm to mm	L mm	l mm	L1 mm	d mm
A602704,76	(29,84)	4,76	4,76 - 5,15	86	23	56	5
A602705,16	(30,83)	5,16	5,16 - 5,65	93	26	58	5
A602705,65	(30,83)	5,65	5,66 - 6,15	93	26	58	6
A602706,16	(35,75)	6,16	6,16 - 6,71	101	28	63	6
A602706,72	(36,30)	6,72	6,72 - 7,65	109	31	71	7
A602707,66	(39,59)	7,66	7,66 - 8,65	117	33	77	8
A602708,66	(44,61)	8,66	8,66 - 9,65	125	36	80	9
A602709,66	(46,58)	9,66	9,66 - 10,60	133	38	85	10
A602710,61	(62,68)	10,61	10,61 - 11,80	142	41	92	10
A602711,81	(64,65)	11,81	11,81 - 12,20	151	44	99	10
A602712,21	(79,71)	12,21	12,21 - 13,20	151	44	99	10

MACHINE REAMERS

KERFOLG

DIN	HSSE	TiAlN	
212 D			HA

ITEM: A6032



Material	HSSE
Standard	DIN 212 D
Tolerance	H7
Flutes	Spiral 6° - cutting right-hand
Surface finish	TiAlN
Application	Boring on materials with R <1100 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○					

Tech. Code	GR06 Euro	D mm	L mm	l mm	L1 mm	d mm
A603201,00	29,91	1,00	40	8	-	1
A603201,50	24,99	1,50	40	8	-	1,5
A603202,00	22,54	2,00	49	11	-	2
A603202,50	22,54	2,50	57	14	-	2,5
A603203,00	21,15	3,00	65	16	-	3
A603203,50	23,60	3,50	70	18	45	3,5
A603204,00	23,60	4,00	75	19	47	4
A603204,50	25,69	4,50	80	21	51	4,5
A603205,00	25,69	5,00	86	23	56	5
A603205,50	26,98	5,50	93	26	58	5
A603206,00	26,98	6,00	93	26	58	6
A603206,50	31,42	6,50	101	28	63	6
A603207,00	33,40	7,00	109	31	71	7
A603207,50	34,45	7,50	109	31	71	7
A603208,00	34,45	8,00	117	33	77	8
A603208,50	39,59	8,50	117	33	77	8
A603209,00	39,59	9,00	125	36	80	9
A603209,50	41,12	9,50	125	36	80	9
A603210,00	41,12	10,00	133	38	85	10
A603210,50	46,96	10,50	133	38	85	10

Tech. Code	GR06 Euro	D mm	L mm	l mm	L1 mm	d mm
A603211,00	49,53	11,00	142	41	92	10
A603211,50	55,94	11,50	142	41	92	10
A603212,00	55,94	12,00	151	44	99	10
A603212,50	60,38	12,50	151	44	99	10
A603213,00	60,38	13,00	151	44	99	10
A603213,50	64,12	13,50	160	47	105	12,5
A603214,00	64,12	14,00	160	47	105	12,5
A603214,50	79,42	14,50	162	50	107	12,5
A603215,00	79,42	15,00	162	50	107	12,5
A603215,50	80,36	15,50	170	52	115	12,5
A603216,00	80,36	16,00	170	52	115	12,5
A603216,50	91,69	16,50	175	54	119	14
A603217,00	91,69	17,00	175	54	119	14
A603217,50	100,80	17,50	182	56	122	14
A603218,00	100,80	18,00	182	56	122	14
A603218,50	108,75	18,50	189	58	127	16
A603219,00	108,75	19,00	189	58	127	16
A603219,50	121,48	19,50	195	60	130	16
A603220,00	121,48	20,00	195	60	130	16

Indivisible package Suggested retail package - Unit price

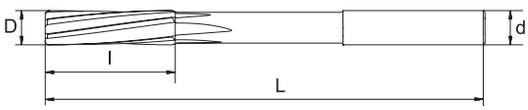
MACHINE REAMERS

KERFOLG

DIN 212 D | HM | HA

ITEM: A6035

Material Solid carbide
Standard DIN 212D
Tolerance H7
Flutes Spiral 7° - 8° - cutting right-hand
Surface treatment Bright
Application H7-reaming on materials such as steel, cast iron and light alloys with R ≤ 1400 N/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○	○	●		

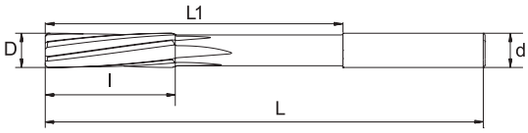
Tech. Code	GR06 Euro	D mm	L mm	l mm	d mm
A60351	41,79	1.00	40	5	1.0
A60351,1	41,79	1.10	40	7	1.1
A60351,2	41,79	1.20	40	7	1.2
A60351,3	41,79	1.30	40	7	1.2
A60351,4	41,79	1.40	40	8	1.3
A60351,5	42,42	1.50	40	8	1.5
A60351,6	42,42	1.60	43	9	1.5
A60351,7	42,42	1.70	46	10	1.6
A60351,8	42,42	1.80	46	10	1.7
A60351,9	42,42	1.90	46	10	1.8
A60352	40,43	2.00	49	11	2.0
A60352,1	40,43	2.10	49	11	2.0
A60352,2	44,00	2.20	53	12	2.0
A60352,3	44,00	2.30	53	12	2.0
A60352,4	47,67	2.40	54	14	2.3
A60352,5	47,67	2.50	57	14	2.5
A60352,6	47,67	2.60	57	14	2.5
A60352,7	47,67	2.70	61	15	2.5
A60352,8	47,67	2.80	61	15	2.5

Tech. Code	GR06 Euro	D mm	L mm	l mm	d mm
A60352,9	47,67	2.90	61	15	2.5
A60353	47,67	3.00	61	15	3.0
A60353,3	51,87	3.30	65	16	3.0
A60353,5	51,87	3.50	70	18	3.5
A60354	55,55	4.00	75	19	4.0
A60354,3	63,63	4.30	80	21	4.0
A60354,9	66,99	4.90	86	23	5.0
A60355	66,99	5.00	86	23	5.0
A60355,1	66,99	5.10	86	23	5.0
A60355,5	76,55	5.50	93	26	5.0
A60356	76,55	6.00	93	26	6.0
A60357	90,72	7.00	109	31	7.0
A60358	101,12	8.00	117	33	8.0
A60358,5	108,89	8.50	117	33	8.0
A60359	110,36	9.00	125	36	9.0
A603510	127,05	10.00	133	38	10.0
A603511	139,86	11.00	142	41	11.0
A603512	160,86	12.00	151	44	12.0

DIN 212 D | HM | WIND X | HA

ITEM: A6036

Material Intergral hard metal
Standard DIN 212 D
Tolerance H7
Flutes Spiral 6° - cutting right-hand
Surface finish WIND X
Application Boring on material R ≤ 1100 N/mm²



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○		●	○	

Tech. Code	GR06 Euro	D mm	L mm	l mm	L1 mm	d mm
A603601,00	46,87	1,00	40	8	-	1,00
A603601,50	46,87	1,50	40	8	-	1,50
A603602,00	38,99	2,00	49	11	-	2,00
A603602,50	39,10	2,50	57	14	-	2,50
A603603,00	40,61	3,00	65	16	-	3,00
A603603,50	43,85	3,50	70	18	45	3,50
A603604,00	48,60	4,00	75	19	47	4,00
A603604,50	53,68	4,50	80	21	51	4,50
A603605,00	60,05	5,00	86	23	56	5,00
A603605,50	63,18	5,50	93	26	58	5,00
A603606,00	72,58	6,00	93	26	58	6,00
A603606,50	85,64	6,50	101	28	63	6,00
A603607,00	97,42	7,00	109	31	71	7,00

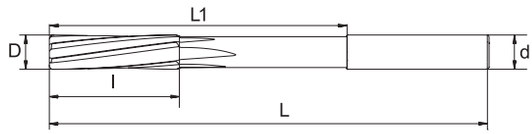
Tech. Code	GR06 Euro	D mm	L mm	l mm	L1 mm	d mm
A603607,50	101,30	7,50	109	31	71	7,00
A603608,00	109,08	8,00	117	33	77	8,00
A603608,50	121,39	8,50	117	33	77	8,00
A603609,00	130,14	9,00	125	36	80	9,00
A603609,50	157,57	9,50	125	36	80	9,00
A603610,00	157,57	10,00	133	38	85	10,00
A603610,50	172,48	10,50	133	38	85	10,00
A603611,00	175,18	11,00	142	41	92	10,00
A603611,50	198,07	11,50	142	41	92	10,00
A603612,00	274,75	12,00	151	44	99	12,00
A603612,50	206,82	12,50	151	44	99	12,00
A603613,00	219,24	13,00	151	44	99	12,00

CENTESIMAL MACHINE REAMERS

KERFOLG

DIN 212 D | HM | HA

ITEM: A6037



Material	Solid carbide
Standard	DIN 212D
Tolerance	0/+0,003 mm
Flutes	Spiral 6° - cutting right-hand
Surface treatment	Bright
Application	Reaming on materials such as steel, cast iron and light alloys with R ≤ 1400 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○		●	○	

NOTE - To order a reamer, the required technical code is:
e.g. Ø 2.37 = A603702.37

Tech. Code	GR06 Euro	D mm	Available range D from mm to mm	L mm	l mm	L1 mm	d mm
A603701,00	(49,90)	1,00	1,00 - 1,50	40	8	-	-
A603701,51	(49,90)	1,51	1,51 - 1,90	43	9	-	-
A603701,91	(49,90)	1,91	1,91 - 2,12	49	11	26	2
A603702,13	(49,90)	2,13	2,13 - 2,36	53	12	-	2
A603702,37	(58,21)	2,37	2,37 - 2,48	57	14	-	2,3
A603702,49	(58,21)	2,49	2,49 - 2,65	57	14	-	2,5
A603702,66	(58,21)	2,66	2,66 - 2,96	61	15	-	2,5
A603702,97	(58,21)	2,97	2,97 - 3,35	65	16	40	3
A603703,36	(58,21)	3,36	3,36 - 3,75	70	18	45	3,5
A603703,76	(66,53)	3,76	3,76 - 4,25	75	19	47	4
A603704,26	(66,53)	4,26	4,26 - 4,75	80	21	51	4,5

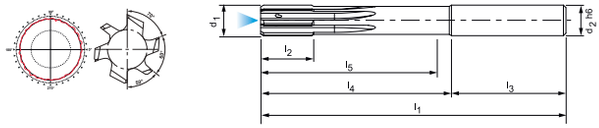
Tech. Code	GR06 Euro	D mm	Available range D from mm to mm	L mm	l mm	L1 mm	d mm
A603704,76	(79,06)	4,76	4,76 - 5,15	86	23	56	5
A603705,16	(79,06)	5,16	5,16 - 5,65	93	26	58	5
A603705,66	(99,90)	5,66	5,66 - 6,15	93	26	58	6
A603706,16	(104,11)	6,16	6,16 - 6,70	101	28	63	6
A603706,71	(112,32)	6,71	6,71 - 7,65	109	31	71	7
A603707,66	(117,29)	7,66	7,66 - 8,65	117	33	77	8
A603708,66	(158,54)	8,66	8,66 - 9,65	125	36	80	9
A603709,66	(190,19)	9,66	9,66 - 10,65	133	38	85	10
A603710,66	(218,05)	10,66	10,66 - 11,65	142	41	92	10
A603711,66	(218,05)	11,66	11,66 - 13,00	151	44	99	12

MACHINE REAMERS ECOSPEED

BECK

NdF | WIND X | HA

ITEM: 033260



Material	HSS
Standard	NDF
Tolerance	H7
Flutes	Straight variable pitch with lubrication holes, variable spacing between the compartments
Application	Bores in through holes on steel and cast iron
Range	Ø 6 - 40 - orderable millesimal diameters

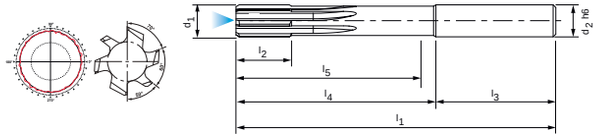
< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●								

Tech. Code	GR08 Euro	d1 mm	d2 mm	l1 mm	l2 mm	l3 mm	l4 mm	l5 mm	Z
A604006	(94,80)	6	8	100	16	36	64	58	6
A604007	(98,01)	7	8	100	16	36	64	58	6
A604008	(99,08)	8	8	100	16	36	64	59	6
A604009	(102,40)	9	10	100	20	40	60	54	6
A604010	(103,58)	10	10	120	20	40	80	75	6
A604011	(108,50)	11	12	120	20	45	75	69	6
A604012	(109,89)	12	12	120	20	45	75	70	6
A604013	(115,45)	13	14	130	22	45	85	79	6

Tech. Code	GR08 Euro	d1 mm	d2 mm	l1 mm	l2 mm	l3 mm	l4 mm	l5 mm	Z
A604014	(123,80)	14	14	130	22	45	85	80	6
A604015	(133,86)	15	16	130	22	48	82	76	6
A604016	(137,07)	16	16	150	25	48	102	97	6
A604017	(164,89)	17	18	150	25	48	102	96	8
A604018	(165,74)	18	18	150	25	48	102	97	8
A604019	(170,88)	19	20	150	25	50	100	94	8
A604020	(173,23)	20	20	150	25	50	100	95	8

NdF | WIND X | HA

ITEM: 033261



Material	HSS
Standard	NDF
Tolerance	H7
Flutes	Straight variable pitch with lubrication holes
Application	Bores in blind holes on steel and cast iron, variable spacing between the compartments
Range	Ø 6 - 40 - orderable millesimal dimensions

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●								

Tech. Code	GR08 Euro	d1 mm	d2 mm	l1 mm	l2 mm	l3 mm	l4 mm	l5 mm	Z
A604206	(85,17)	6	8	100	16	36	64	39	6
A604207	(88,28)	7	8	100	16	36	64	42	6
A604208	(89,45)	8	8	100	16	36	64	46	6
A604209	(93,95)	9	10	100	20	40	60	40	6
A604210	(96,73)	10	10	120	20	40	80	60	6
A604211	(102,93)	11	12	120	20	45	75	52	6
A604212	(104,22)	12	12	120	20	45	75	54	6
A604213	(109,89)	13	14	130	22	45	85	59	6

Tech. Code	GR08 Euro	d1 mm	d2 mm	l1 mm	l2 mm	l3 mm	l4 mm	l5 mm	Z
A604214	(116,42)	14	14	130	22	45	85	63	6
A604215	(126,58)	15	16	130	22	48	82	58	6
A604216	(129,90)	16	16	150	25	48	02	79	6
A604217	(154,08)	17	18	150	25	48	102	79	6
A604218	(155,04)	18	18	150	25	48	102	80	6
A604219	(159,86)	19	20	150	25	50	100	80	6
A604220	(162,53)	20	20	150	25	50	100	82	6

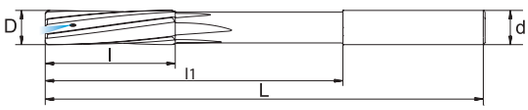
Indivisible package | Suggested retail package - Unit price

HP MACHINE REAMERS - VARIABLE FLUTES

KERFOLG Vari AL

NdF | HM | DURABLE | HA

ITEM: A6045



Material Solid carbide
Standard Factory standard
Tolerance 0/+0.004
Flutes Spiral 7°- 8° variable pitch. - cutting right-hand

Surface finish Durable
Application High performance reaming on materials such as carbon steels, cast irons and stainless steels with R ≤ 1400 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	●	●	●	○	○						●		

Tech. Code	GR06 Euro	D mm	L mm	l1 mm	l mm	d mm	Z
A604503,98	(192,82)	3.98	75	39	12	6	4
A604503,99	(192,82)	3.99	75	39	12	6	4
A604504	(176,44)	4.00	75	39	12	6	4
A604504,01	(192,82)	4.01	75	39	12	6	4
A604504,02	(192,82)	4.02	75	39	12	6	4
A604504,5	(201,16)	4.50	75	39	12	6	4
A604504,98	(201,16)	4.98	75	39	12	6	4
A604504,99	(201,16)	4.99	75	39	12	6	4
A604505	(183,55)	5.00	75	39	12	6	4
A604505,01	(201,16)	5.01	75	39	12	6	4
A604505,02	(201,16)	5.02	75	39	12	6	4
A604505,5	(204,76)	5.50	75	39	12	6	4
A604505,98	(204,76)	5.98	75	39	12	6	4
A604505,99	(204,76)	5.99	75	39	12	6	4
A604506	(188,08)	6.00	75	39	12	6	4
A604506,01	(204,76)	6.01	75	39	12	6	4
A604506,02	(204,76)	6.02	75	39	12	6	4
A604506,5	(197,66)	6.50	100	64	16	8	6
A604507	(204,76)	7.00	100	64	16	8	6
A604507,5	(216,40)	7.50	100	64	16	8	6
A604507,98	(216,40)	7.98	100	64	16	8	6

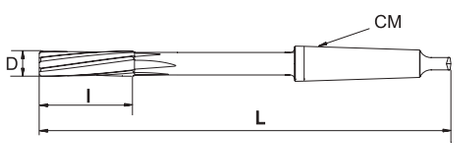
Tech. Code	GR06 Euro	D mm	L mm	l1 mm	l mm	d mm	Z
A604507,99	(216,40)	7.99	100	64	16	8	6
A604508	(201,16)	8.00	100	64	16	8	6
A604508,01	(216,40)	8.01	100	64	16	8	6
A604508,02	(216,40)	8.02	100	64	16	8	6
A604508,5	(245,86)	8.50	100	60	20	10	6
A604509	(245,86)	9.00	100	60	20	10	6
A604509,5	(245,86)	9.50	120	80	20	10	6
A604509,98	(245,86)	9.98	120	80	20	10	6
A604509,99	(245,86)	9.99	120	80	20	10	6
A604510	(286,96)	10.00	120	80	20	10	6
A604510,01	(302,20)	10.01	120	80	20	10	6
A604510,02	(302,20)	10.02	120	80	20	10	6
A604510,5	(372,76)	10.50	120	75	20	12	6
A604511	(372,76)	11.00	120	75	20	12	6
A604511,5	(372,76)	11.50	120	75	20	12	6
A604511,98	(402,11)	11.98	120	75	20	12	6
A604511,99	(402,11)	11.99	120	75	20	12	6
A604512	(382,13)	12.00	120	75	20	12	6
A604512,01	(402,11)	12.01	120	75	20	12	6
A604512,02	(402,11)	12.02	120	75	20	12	6

MACHINE REAMERS WITH MORSE TAPER SHANK

WRK

DIN 208 B | HSSE | CM

ITEM: A6050



Material HSSE
Standard DIN 208B
Tolerance H7
Flutes Spiral 7° - 8° - cutting right-hand
Surface finish Bright
Application H7-reaming on materials with R < 750 N/mm²

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○	○	○		

Tech. Code	GR01 Euro	D mm	L mm	l mm	CM
A60506	43,79	6	138	26	1
A60508	46,03	8	156	33	1
A605010	49,85	10	168	38	1
A605011	50,29	11	175	41	1
A605012	52,10	12	182	44	1
A605013	54,00	13	182	44	1
A605014	55,47	14	189	47	1
A605015	61,19	15	204	50	2
A605016	66,35	16	210	52	2
A605017	68,48	17	214	54	2
A605018	72,08	18	219	56	2
A605019	78,36	19	223	58	2

Tech. Code	GR01 Euro	D mm	L mm	l mm	CM
A605020	82,63	20	228	60	2
A605021	89,26	21	232	60	2
A605022	99,14	22	237	64	2
A605023	99,14	23	241	66	2
A605024	102,73	24	268	68	3
A605025	102,73	25	268	68	3
A605026	106,77	26	273	70	3
A605028	111,71	28	277	71	3
A605030	131,58	30	281	73	3
A605032	158,97	32	317	77	4
A605035	191,09	35	321	78	4
A605040	252,27	40	329	81	4

Indivisible package Suggested retail package - Unit price

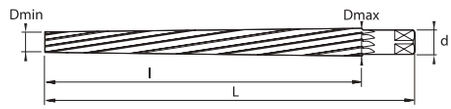
TAPER PIN HAND REAMERS

KERFOLG

DIN	HSSE	
9		HA

ITEM: A6070

Material HSSE
Standard DIN 9
Conicity 1 : 50
Flutes Left helix 6°
Surface finish Bright
Application Taper pin hand reamers



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○				

Tech. Code	GR06 Euro	Nominal ø mm	D min mm	D max mm	l mm	L mm	d mm
A607002	34,56	2	1.90	2.86	48	68	3.15
A607003	39,64	3	2.90	4.06	58	80	4.00
A607004	42,98	4	3.90	5.26	68	93	5.00
A607005	44,60	5	4.90	6.36	73	100	6.30

Tech. Code	GR06 Euro	Nominal ø mm	D min mm	D max mm	l mm	L mm	d mm
A607006	51,30	6	5,90	8,00	105	135	8,00
A607008	71,39	8	7,90	10,80	145	180	10,00
A607010	101,30	10	9.90	13.40	175	215	12.50
A607012	134,68	12	11.80	16.00	210	255	14.00

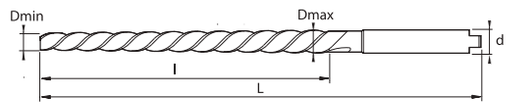
TAPER PIN MACHINE REAMERS

KERFOLG

DIN	HSSE	
2179		HA

ITEM: A6075

Material HSSE
Standard DIN 2179
Conicity 1 : 50
Cut Left helix 42°
Surface finish Bright
Application Taper pin reamers



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○	○	○		

Tech. Code	GR06 Euro	Nominal ø mm	D min mm	D max mm	l mm	L mm	d mm
A607502	42,44	2	1.90	2.86	48	86	3.15
A607502,5	46,01	2,5	2,40	3,36	48	86	3,15
A607503	49,79	3	2.90	4.06	58	100	4.00
A607504	52,70	4	3.90	5.26	68	112	5.00
A607505	53,68	5	4.90	3.36	73	122	6.30

Tech. Code	GR06 Euro	Nominal ø mm	D min mm	D max mm	l mm	L mm	d mm
A607506	63,94	6	5.90	8.00	105	160	8.00
A607508	90,94	8	7.90	10.80	145	207	10.00
A607510	133,49	10	9,90	13,40	175	245	12,50
A607512	187,81	12	11,80	16,00	210	290	16,00

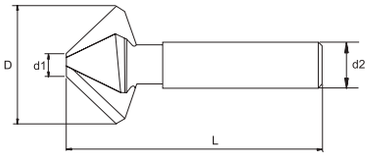
Indivisible package Suggested retail package - Unit price

COUNTERSINKS 90° Z3

GRANLUND

DIN 335 C | HA

ITEM: A6108



Model	200T
Material	HSS
Standard	DIN 335C
Countersinking angle	90°
Surface treatment	Bright
Cut	Right-hand
Application	90° countersinking on all materials

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	●	●	○	○	○	○	○		

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A610810,4	31,03	10.4	47	2	6
A610812,4	31,03	12.4	48	2	6
A610816,5	38,31	16.5	55	3	10

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A610820,5	48,58	20.5	58	4	10
A610825	66,34	25	61	4	10
A610830	105,07	30	65	4	10

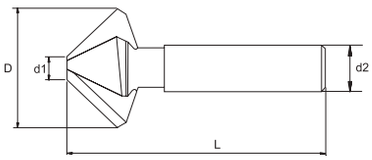
Tech. Code	GR07 Euro	Description
A6109SET	296,93	5 countersinks kit 200T Granlund Ø 10.4 - 16.5 - 20.5 - 25 - 30

COUNTERSINKS 90° Z3

KERFOLG

DIN 335 C | HA

ITEM: A6110



Material	HSS
Standard	DIN 335C
Countersinking angle	90°
Surface treatment	Bright
Cut	Right-hand
Application	90° countersinking on all materials

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●	●	○	○	○	○			

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A61105	11,90	5.00	40	1.5	4
A61106	11,59	6.00	45	1.5	5
A61106,3	11,59	6.30	45	1.5	5
A61108	12,64	8.00	50	2	6
A61108,3	13,47	8.30	50	2	6
A611010	15,57	10.00	50	2.5	6
A611010,4	11,22	10.40	50	2.5	6
A611012,4	15,58	12.40	56	2.9	8

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A611015	16,90	15.00	60	3.2	10
A611016,5	18,83	16.50	60	3.2	10
A611020,5	26,11	20.50	63	3.5	10
A611025	34,03	25.00	67	3.8	10
A611028	47,73	28.00	71	4.2	12
A611030	50,80	30.00	71	4.2	12
A611031	57,19	31.00	71	4.2	12

Tech. Code	GR06 Euro	Description
A6125SETA6110	117,94	Set of 5 countersinks A6110 90° Ø 8 - 12.4 - 16.5 - 20.5 - 25
A6125SETA6115	162,23	Set of 5 countersinks A6115 90° TiN Ø 8 - 12.4 - 16.5 - 20.5 - 25

COUNTERSINKS 90° Z3

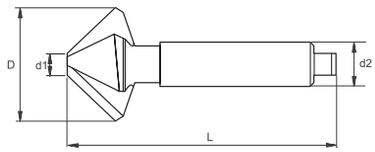
GRANLUND

DIN 335 C | HA

ITEM: A6111

Model	100T
Material	HSS
Standard	DIN 335C
Countersinking angle	90°
Surface treatment	Bright
Cut	Right-hand
Application	90° countersinking on all materials

(*) Cylindrical shank with 3 facets



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	●	●	○	○	○	○	○		

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A611104,3	30,60	4.3	44.0	1.5	6
A611105	30,17	5.0	44.0	1.5	6
A611106	30,71	6.0	44.0	1.5	6
A611106,3	30,71	6.3	44.0	1.5	6
A611106,5	32,31	6.5	44.5	1.5	6
A611107	32,31	7.0	45.0	1.5	6
A611107,3	(33,60)	7.3	45.0	1.5	6
A611108,0	33,60	8.0	45.5	1.5	6
A611108,3	34,56	8.3	45.5	1.5	6
A611108,6	36,49	8.6	45.5	2.0	6
A611109,4	37,66	9.4	46.0	2.0	6
A611110	40,02	10.0	46.0	2.0	6
A611110,4	41,41	10.4	46.5	2.0	6
A611111,5	43,98	11.5	47.5	2.0	6
A611112	44,51	12.0	47.5	2.0	6
A611112,4	44,51	12.4	48.0	2.0	6
A611113,4	46,97	13.4	48.5	2.0	6
A611115	50,40	15.0	54.0	3.0	10 (*)

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A611116	54,46	16.0	55.0	3.0	10 (*)
A611116,4	54,46	16.4	55.0	3.0	10 (*)
A611116,5	54,46	16.5	55.0	3.0	10 (*)
A611118	69,76	18.0	56.5	3.0	10 (*)
A611119	73,62	19.0	57.0	3.0	10 (*)
A611120	74,04	20.0	57.0	4.0	10 (*)
A611120,5	74,04	20.5	57.5	4.0	10 (*)
A611122	96,62	22.0	58.5	4.0	10 (*)
A611123	96,62	23.0	59.0	4.0	10 (*)
A611125	99,51	25.0	60.5	4.0	10 (*)
A611126	134,61	26.0	61.0	4.0	10 (*)
A611128	138,24	28.0	62.5	4.0	10 (*)
A611130	151,19	30.0	64.0	4.0	10 (*)
A611131	153,12	31.0	64.5	4.0	10 (*)
A611134	190,03	34.0	74.0	8.0	16
A611135	197,09	35.0	75.0	8.0	16
A611137	200,73	37.0	76.0	8.0	16
A611140	235,40	40.0	77.0	8.0	16

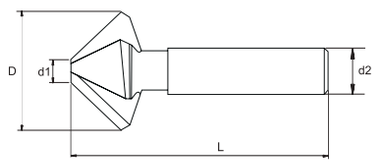
COUNTERSINKS 90° Z3

KERFOLG Spot

NdF | HM | HA

ITEM: A6112

Material	Micro-grain carbide
Standard	Factory Standard
Countersinking angle	90°
Cut	Right-hand
Surface treatment	Bright
Application	90° countersinking on all materials



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○		●	○	

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A61126,3906	51,31	6.3	51	1.5	6
A61128,3906	46,35	8.3	52	2	6
A611210,4906	52,06	10.4	53	2.5	6
A611212,4906	56,38	12.4	55	2.9	6
A611212,4908	56,38	12.4	55	2.9	8
A611216,5906	72,84	16.5	58	3.2	6
A611216,5908	(72,84)	16.5	58	3.2	8

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A611216,59010	72,84	16.5	58	3.2	10
A611220,5906	(101,75)	20.5	61	3.5	6
A611220,5908	(101,75)	20.5	61	3.5	8
A611220,59010	(101,75)	20.5	61	3.5	10
A611225,59010	(160,06)	25.5	64	3.8	10
A611231,59010	(218,81)	31.5	68	4.2	10

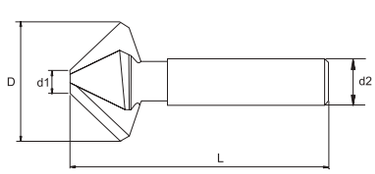
COUNTERSINKS 90° Z3

KERFOLG

DIN 335 C | TiN | HA

ITEM: A6115

Material	HSS
Standard	DIN 335C
Countersinking angle	90°
Surface treatment	TiN
Cut	Right-hand
Application	90° countersinking on hard materials and special alloys



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	●	●	○	○	○	○			

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A61155	18,91	5.00	40	1.5	4
A61156	19,61	6.00	45	1.5	5
A61156,3	19,61	6.30	45	1.5	5
A61158	21,38	8.00	50	2	6
A611510	26,82	10.00	50	2.5	6
A611512,4	29,78	12.40	56	2.9	8

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A611515	34,62	15.00	60	3.2	10
A611516,5	36,85	16.50	60	3.2	10
A611520,5	54,29	20.50	63	3.5	10
A611525	69,05	25.00	67	3.8	10
A611530	89,54	30.00	71	4.2	12

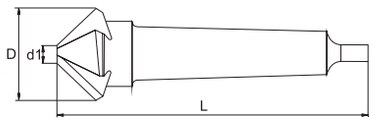
Indivisible package | Suggested retail package - Unit price

COUNTERSINKS 90° Z3 WITH MORSE TAPER SHANK

WRK

DIN 335 D | CM

ITEM: A6120



Material	HSS
Standard	DIN 335D
Countersinking angle	90°
Surface treatment	Bright
Cut	Right-hand
Application	90° countersinking on all materials

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●	●	○	○	○	○			

Tech. Code	GR01 Euro	D mm	L mm	d1 mm	CM
A612025	94,50	25	106	3.8	2
A612031	109,94	31	112	4.2	2

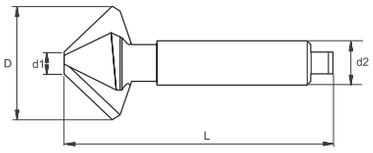
Tech. Code	GR01 Euro	D mm	L mm	d1 mm	CM
A612040	117,60	40	140	10	3
A612050	147,00	50	150	14	3

COUNTERSINKS 90° Z3

GRANLUND

DIN 335 C | TiN | HA

ITEM: A6140



Model	100TT
Material	HSS
Standard	DIN 335C
Countersinking angle	90°
Surface treatment	TiN
Cut	Right-hand
Application	90° countersinking on hard materials and special alloys

(*) Cylindrical shank with 3 facets

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	●	●	○	○	○	○	○		

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A614006	37,13	6.0	44.0	1.5	6
A614006,3	37,13	6.3	44.0	1.5	6
A614008	40,34	8.0	45.5	1.5	6
A614008,3	41,62	8.3	45.5	1.5	6
A614010	48,58	10.0	46.0	2.0	6
A614010,4	49,86	10.4	46.5	2.0	6
A614012	52,97	12.0	47.5	2.0	6
A614012,4	52,97	12.4	48.0	2.0	6
A614015	60,88	15.0	54.0	3.0	10 (*)

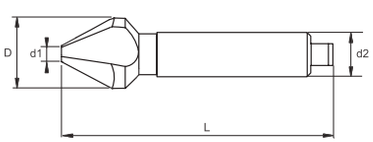
Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A614016	65,70	16.0	55.0	3.0	10 (*)
A614016,5	65,70	16.5	55.0	3.0	10 (*)
A614020	89,24	20.0	57.0	4.0	10 (*)
A614020,5	89,24	20.5	57.5	4.0	10 (*)
A614025	119,20	25.0	60.5	4.0	10 (*)
A614030	181,90	30.0	64.0	4.0	10 (*)
A614035	237,33	35.0	75.0	8.0	16
A614040	282,37	40.0	77.0	8.0	16

COUNTERSINKS 60° Z3

GRANLUND

DIN 334 C | TiN | HA

ITEM: A6145



Model	100TT
Material	HSS
Standard	DIN 334C
Countersinking angle	60°
Surface treatment	TiN
Cut	Right-hand
Application	60° countersinking on hard materials and special alloys

(*) Cylindrical shank with 3 facets

< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	●	●	○	○	○	○	○		

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A614510	52,97	10	49	2	6
A614512	52,97	12	51.5	2	6
A614516	67,84	16	59.5	3	10 (*)

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A614520	94,48	20	63	4	10 (*)
A614525	129,26	25	68	4	10 (*)
A614530	203,84	30	73.5	4	10 (*)

COUNTERSINKS 60° Z3

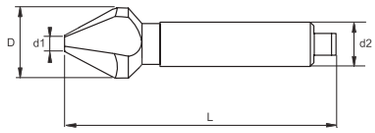
GRANLUND

DIN 334 C | HA

ITEM: A6150

Model	100T
Material	HSS
Standard	DIN 334C
Countersinking angle	60°
Surface treatment	Bright
Cut	Right-hand
Application	60° countersinking on all materials

(*) Cylindrical shank with 3 facets



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	●	●	○	○	○	○	○		

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A615008	33,92	8	47.5	1.5	6
A615010	44,51	10	49.0	2.0	6
A615012	44,51	12	51.5	2.0	6
A615016	56,39	16	59.5	3.0	10 (*)

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A615020	82,39	20	63.0	4.0	10 (*)
A615025	107,75	25	68.0	4.0	10 (*)
A615030	178,48	30	73.5	4.0	10 (*)
A615040	253,06	40	88.0	8.0	16

COUNTERSINKS 90° Z3 WITH LONG CYLINDRICAL SHANK

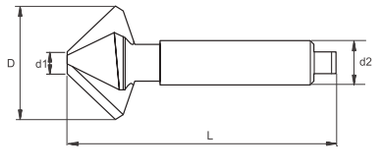
GRANLUND

NdF | HA

ITEM: A6153

Model	100TL
Material	HSS
Standard	Factory standard
Countersinking angle	90°
Surface treatment	Bright
Cut	Right-hand
Application	90° countersinking

(*) Cylindrical shank with 3 facets



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○	○	●	●	●	○	○	○	○	○		

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A615312	66,13	12	112.0	4	10 (*)
A615316	94,59	16	116.0	4	10 (*)
A615320	111,71	20	118.0	4	10 (*)

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A615325	148,94	25	121.5	4	10 (*)
A615330	227,38	30	125.0	4	10 (*)

COUNTERSINKS 90° Z3

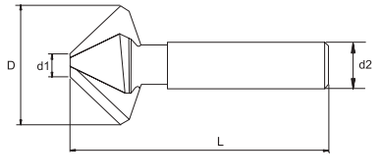
GRANLUND

DIN 335 C | HSS + HM | HA

ITEM: A6155

Model	100TH
Material	HSS + HM K10
Standard	DIN 335 C
Countersinking angle	90°
Cut	Right-hand
Application	90° countersinking

(*) Cylindrical shank with 3 facets



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	●	○	●	●	●	○	○	○				

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A615512	268,57	12	49.0	4	6
A615516	274,88	16	57.2	4	10 (*)
A615520	286,12	20	60.0	4	10 (*)

Tech. Code	GR07 Euro	D mm	L mm	d1 mm	d2 mm
A615525	297,46	25	36.0	4	10 (*)
A615530	334,05	30	67.0	4	10 (*)
A615540	404,89	40	79.0	8	16

Indivisible package Suggested retail package - Unit price

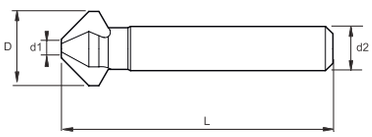
COUNTERSINKS VARIALBE PITCH A 90° Z3

KERFOLG

DIN 335 C | TiN | HA

ITEM: A6157

Material HSS
Standard DIN 335C
Countersinking angle 90°
Surface treatment TiN
Cut Right-hand to variable pitch
Application 90° Countersinking on all materials



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	●	○	○	○	●	●	○	●		○	○	○	○	

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A615704,30	32,53	4,30	40	1,3	4
A615706,00	34,67	6,00	45	1,5	5
A615706,30	35,10	6,30	45	1,5	5
A615708,00	38,09	8,00	50	2	6
A615708,30	38,95	8,30	50	2	6
A615710,00	39,59	10,00	50	2,5	6
A615710,40	39,70	10,40	50	2,5	6
A615711,50	45,37	11,50	56	2,8	8

Tech. Code	GR06 Euro	D mm	L mm	d1 mm	d2 mm
A615712,40	49,38	12,40	56	2,8	8
A615715,00	53,50	15,00	60	3,2	10
A615716,50	54,78	16,50	60	3,2	10
A615719,00	60,56	19,00	63	3,5	10
A615720,50	68,27	20,50	63	3,5	10
A615723,00	74,69	23,00	67	3,8	10
A615725,00	82,28	25,00	67	3,8	10
A615731,00	100,79	31,00	71	4,2	12

Tech. Code	GR06 Euro	Description
A6158SET	311,07	Assortment 5 countersinks variable pitch Ø 6,3 - 10,4 - 16,5 - 20,5 - 25

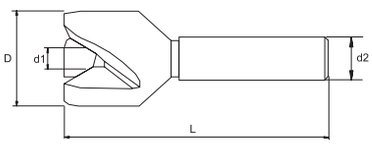
EXTERNAL COUNTERSINKS 90° Z3

WRK

NdF | HA

ITEM: A6160

Material HSS
Standard Factory standard
Countersinking angle 90°
Cut Right
Application 90° external countersinking on all materials



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●	●	●	●					

Tech. Code	GR01 Euro	D mm	L mm	d1 mm	d2 mm
A61600412	37,71	12	55	4	8
A61600820	65,16	20	60	8	10

Tech. Code	GR01 Euro	D mm	L mm	d1 mm	d2 mm
A61601028	97,82	28	65	10	14

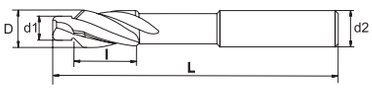
90° COUNTERBORES FOR HEAD SCREWS

WRK

DIN 1866 | HSSE | HA

ITEM: A6230

Material HSSE
Standard DIN 1866
Surface treatment Bright
Cut Right-hand 4 flutes
Application Counterboring for head screws



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○				●	●	●	○	○	○				

Tech. Code	GR01 Euro	Screw mm	L mm	l mm	D mm	d1 mm	d2 mm	Z
A6230M3	36,23	M3	71	14	6.5	3.2	6	4
A6230M4	36,23	M4	71	14	8.6	4.3	8	4
A6230M5	51,03	M5	80	18	10.6	5.3	10	4

Tech. Code	GR01 Euro	Screw mm	L mm	l mm	D mm	d1 mm	d2 mm	Z
A6230M6	54,08	M6	80	18	12.6	6.4	10	4
A6230M8	78,12	M8	100	22	16.7	8.4	12	4
A6230M10	83,58	M10	100	22	20.7	10.5	12	4

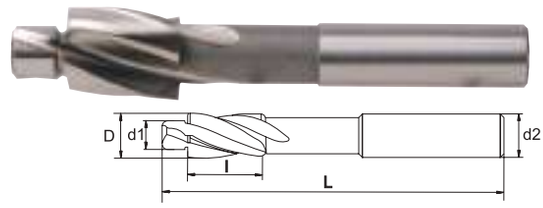
180° COUNTERBORES FOR CYLINDRICAL HEAD SCREWS

WRK

DIN 373 | HSSE | HA

ITEM: A6210

Material HSSE
Standard DIN 373
Surface treatment Bright
Cut Right-hand 3 flutes
Application Counterboring for cylindrical head screws



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●	●							

Tech. Code	GR01 Euro	Screw mm	L mm	l mm	D mm	d mm	d2 mm	Z
A6210M3	27,20	M3	71	14	6	3.2	5	3
A6210M4	27,20	M4	71	14	8	4.3	5	3
A6210M5	27,20	M5	80	18	10	5.3	8	3
A6210M6	28,14	M6	80	18	11	6.4	8	3
A6210M8	41,06	M8	100	22	15	8.4	12	3

Tech. Code	GR01 Euro	Screw mm	L mm	l mm	D mm	d mm	d2 mm	Z
A6210M10	50,09	M10	100	22	18	10.5	12	3
A6210M12	64,79	M12	100	22	20	13	12	3
A6210M14	90,51	M14	130	30	24	15	16	3
A6210M16	114,45	M16	150	30	26	17	20	3

Tech. Code	GR01 Euro	Description
A6218Z3	191,52	Set of 6 counterborers for Z3 cylindrical head screws Tech. Code A6210 from M3 to M10

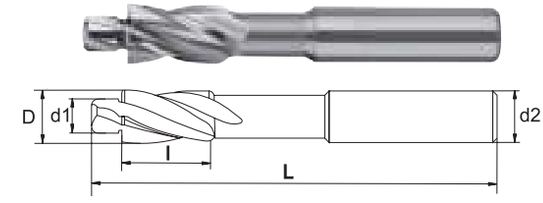
180° COUNTERBORES Z4 FOR CYLINDRICAL HEAD SCREWS

WRK

DIN 373 | HSSE | HA

ITEM: A6216

Material HSSE
Standard DIN 373
Surface treatment Bright
Cut Right-hand 4 flutes
Application Counterboring for cylindrical head screws



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●	○	●	○		●	●	●							

Tech. Code	GR01 Euro	Screw mm	L mm	l mm	D mm	d1 mm	d2 mm	Z
A6216M3	29,72	M3	71	14	6.0	3.2	5	4
A6216M4	34,76	M4	71	14	7.4	4.3	5	4
A6216M5	40,74	M5	80	18	9.4	5.3	8	4
A6216M6	40,74	M6	80	18	10.4	6.4	8	4
A6216M8	48,93	M8	100	22	13.5	8.4	12	4

Tech. Code	GR01 Euro	Screw mm	L mm	l mm	D mm	d1 mm	d2 mm	Z
A6216M10	61,43	M10	100	22	16.5	10.5	12	4
A6216M12	73,08	M12	100	22	20.0	13.0	12	4
A6216M14	102,17	M14	130	30	24.0	15.0	16	4
A6216M16	117,81	M16	150	30	26.0	17.0	20	4

Tech. Code	GR01 Euro	Description
A6218Z4	249,69	Set of 6 counterborers for Z4 cylindrical head screws Tech. Code A6216 from M3 to M10

FRONT AND BACK DEBURRING TOOLS

EZ BURR

ITEM: A6310

EZ BURR tool allows for front and back deburring in a single pass.

Material HSS
Standard DIN 335C
Counterbore angle 90°
Surface treatment Bright - TIN (coated)
Cut Right-hand
Assortment 90° counterboring on all materials

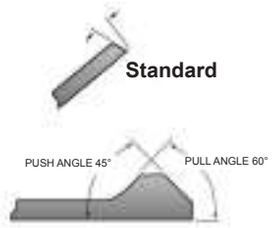
Tech. Code	GR06 Euro	D mm	d1 Offset mm	L1 mm	L2 mm	L3 mm	L mm	D mm	Application mm	Blade Cod.
A6310L1A2,5	(303,54)	2.5	- 0.10 ÷ - 0.12	11	31.7	25	85.6	6	2.47 ÷ 2.65	L1A
A6310L1A3	303,54	3.0	- 0.10 ÷ - 0.12	11	31.7	25	85.6	6	2.97 ÷ 3.15	L1A
A6310L1B3,3	(303,54)	3.3	- 0.10 ÷ - 0.12	11	31.7	25	114	6	3.27 ÷ 3.45	L1B
A6310L2A4	272,44	4.0	- 0.15 ÷ - 0.20	13	44	33	114	6	3.90 ÷ 4.40	L2A
A6310L2B5	272,44	5.0	- 0.15 ÷ - 0.20	13	44	33	127	6	4.90 ÷ 5.40	L2B
A6310L2B6	272,44	6.0	- 0.15 ÷ - 0.20	13	44	33	127	6	5.90 ÷ 6.40	L2B
A6310L3A8	277,69	8.0	- 0.15 ÷ - 0.20	17	51	-	127	9	7.90 ÷ 8.40	L3A
A6310L3A8,5	277,69	8.5	- 0.15 ÷ - 0.20	17	51	-	127	9	8.40 ÷ 8.90	L3A
A6310L3B10	295,82	10.0	- 0.15 ÷ - 0.20	17	-	-	127	10	9.90 ÷ 11.0	L3B
A6310L3B12	(312,61)	12.0	- 0.15 ÷ - 0.20	17	-	-	127	12	11.90 ÷ 13.00	L3B
A6310L3B14	(365,75)	14.0	- 0.17 ÷ - 0.25	17	114	-	165	12	13.90 ÷ 15.00	L3B
A6310L3B16	(412,41)	16.0	- 0.17 ÷ - 0.25	17	114	-	165	12	15.90 ÷ 17.00	L3B

Indivisible package Suggested retail package - Unit price

STANDARD BLADES FOR DEBURRING TOOLS TYPE B

ITEM: A6320

STANDARD BLADES FOR DEBURRING TOOLS TYPE B

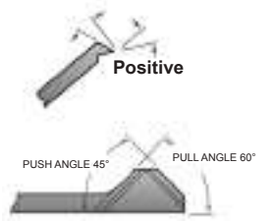


Tech. Code	GR06 Euro	Tool Dimension	Front cutting angle	Back cutting angle
A6320L1A	59,53	L1A	45°	60°
A6320L1B	59,53	L1B	45°	60°
A6320L2A	59,53	L2A	45°	60°
A6320L2B	59,53	L2B	45°	60°
A6320L3A	59,53	L3A	45°	60°
A6320L3B	59,53	L3B	45°	60°

POSITIVE BLADES FOR DEBURRING TOOLS TYPE B

ITEM: A6321

POSITIVE BLADES FOR DEBURRING TOOLS TYPE B



Tech. Code	GR06 Euro	Tool Dimension	Front cutting angle	Back cutting angle
A6321L1A	(59,53)	L1A	45°	60°
A6321L1B	(59,53)	L1B	45°	60°
A6321L2A	59,53	L2A	45°	60°
A6321L2B	(59,53)	L2B	45°	60°
A6321L3A	59,53	L3A	45°	60°
A6321L3B	59,53	L3B	45°	60°

Tools for front and rear burr removal.
E-Z Burr tools are manufactured for front and rear burr removal.
No other HSS deburring tool are designed with the flexible blade to operate independent from springs and plungers,a a solid shank particulary strong assure a great durability.
The patented E-Z Burr HSS deburring tool allows you to change chamfer settings, and cutting blades without removing it from the holder.Once the desired chamfer is set, it won't change, even from blade to blade. The result is less downtime, more production.

GENERAL CATALOGUE

To buy any products of this GUABO catalogue contact our commercial office. Delivery time depends on the availability of our supplier, you will receive a confirmation of your order with the details of the delivery date.

The GUABO items included in our LINK23 catalogue are ready to be delivered in 24 h.

www.linkindustrialtools.com
info@linkindustrialtools.it

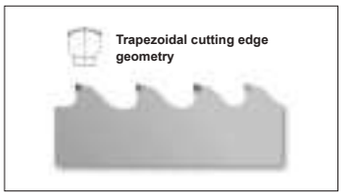
HOW TO SELECT A BAND SAW BLADE

Blades dimensions are selected according to the sawing machine to be used. This info are usually to be found in the user/maintenance manual provided along with the machine as well as on the ID plate applied on it.

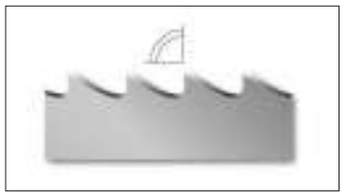
LINK with GUABO band saw blades offer three main types of cutting edges:
- Bimetallic
- Carbide
- Carbon steel

Always choose the cutting edge type according to the materials being cut.

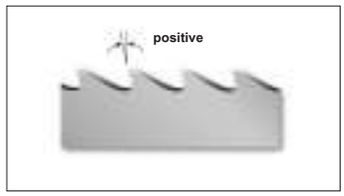
Our different tooth shapes have been combined optimizing the cutting edge's materials and the dimensions of the saw blade.



Rake angle: positive for:
- High performance and better finish
- Tooth with multiple geometry
- Finishing tooth and roughing tooth



Rake angle 0°, for:
- Short chip materials
- Pieces with small cross sections
- Structural section with thin walls
- Universal use
- Low alloy steels

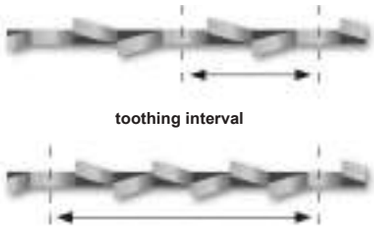


Rake angle positive, for:
- Ferrous metals and high alloy steels
- Full section
- Long chip materials

Rake angle: positive, for:
- Ferrous metals and high alloy steels
- Construction steels
- Tubular - Boxed
- Profiles - Beams

Our blades are made with the following types of tooth settings to meet all cutting needs.

The cutting channel is made by means of the tooth setting where the teeth protrude alternately left and right beyond the thickness of the blades body structure.



Standard tooth pitch (SD) can be used universally, the sequence of the tooth pitch is: left / right / straight.

Indicated for small teeth, the advantage is given by the fractioning of the force by the number of the teeth in the same position.

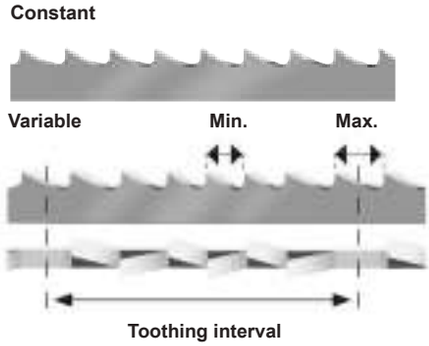
Indicated for Important cutting sections, variable cutting angles permit less resistance to penetration.

Tooth pitch refers to the number of teeth per inch (tpi). 1 inch equates to 25.4 mm.

A distinction is made between constant tooth pitches with a uniform tooth distance and variable tooth pitches with different tooth distances within one toothing interval.

Variable tooth pithces, for instance 2-3 tpi can be characterized by two measures:

2 tpi stands for the maximum tooth distance and 3 tpi stands for the minimum tooth distance in the toothing interval.



The size of the tooth and direct proportional function of the material to be cut.

The following charts suggest the appropriate tooth size.

Manual or semi-automated band saw machines.
Machine shops/carpentry shops.
Medium-alloyed steel, stainless steel cutting.

Machine shop precision cutting.
Medium to high alloyed steels' high-performance cutting.
Semi-automated/automated band saw machines.

State-of-the-art technology bandsaw blades.
higher performance production requirements.
Max output, top performances.

HOW TO SELECT A BAND SAW BLADE

SOLID MATERIAL

Variable tooth pitch		
Cross section	Teeth per inch	
mm	inch	Tooth shape
≥ 750	0,75/1,25	PD
380 - 750	1/1,5	PD
250 - 550	1,4/2	PD
120 - 350	2/3	HK
80 - 140	3/4	HK
60 - 110	4/6	HK
40 - 70	5/8 (5/7)	S
30 - 60	6/10	S
20 - 40	8/12 (8/11)	S
≤ 25	10/14	S

HK = Variable tooth

PROFILES

Heavy wall structurals (positive rake angle)								
Wall thickness	Diam. of structural (D in mm)							
(S) mm	80	100	120	150	200	300	500	750
10	-	-	-	4/6	4/6	4/6	3/4	2/3
15	4/6	4/6	4/6	4/6	4/6	3/4	2/3	2/3
20	4/6	4/6	4/6	4/6	3/4	3/4	2/3	2/3
30	4/6	4/6	4/6	3/4	3/4	2/3	2/3	2/3
50	-	-	3/4	3/4	2/3	2/3	2/3	1,4/2
80	-	-	-	-	2/3	2/3	1,4/2	1,4/2
100	-	-	-	-	-	2/3	1,4/2	1,4/2

Thin structurals (0° rake angle)							
Wall thickness	Diam. of structural (D in mm)						
(S) mm	20	40	60	80	100	120	150
2	14	14	14	14	14	14	10/14
3	14	14	14	14	10/14	10/14	8/12
4	14	14	10/14	10/14	8/12	8/12	6/10
5	14	10/14	10/14	8/12	8/12	6/10	6/10
6	14	10/14	8/12	8/12	6/10	6/10	5/8
8	14	8/12	6/10	6/10	5/8	5/8	5/8
10	-	6/10	6/10	5/8	5/8	5/8	-

● RECOMMENDED
○ SUITABLE
- NOT SUITABLE

MANUAL ARCH	SEMI AUTOMATIC ARCH	AUTOMATIC ARCH	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
●	●	●	○	-

MATERIALS TO MACHINING						
CARBON STEELS	STAINLESS STEELS	CAST IRON	COPPER - ALUMINUM BRONZE	DUPLEX	NICKEL BASED ALLOYS	COMPOSITE
●	○	○	-	-	-	-

ICONS MATERIALS

Big round solid

Small round solid

Small square pipe

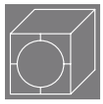
Small full square

Medium round solid

Small pipe

Big pipe

Beam of pipes


Boxed

Beams H - IPE

Square profiles

BLADES SELECTION BY TYPE OF MATERIAL AND MACHINE

GUABO

Blade	Page A.	MANUAL ARCH SHAPE							SEMI AUTOMATIC ARCH SHAPE							AUTOMATIC ARCH SHAPE							AUTOMATIC DOUBLE COLUMN							AUTOMATIC HM HIGH SPEED						
		P	M	K	N	S	H	C	P	M	K	N	S	H	C	P	M	K	N	S	H	C	P	M	K	N	S	H	C	P	M	K	N	S	H	C
M42 - LION	196,198	●	-	-	-	-	-	-	○	-	-	-	-	-	-	○	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M42 - BASIC PLUS UNIFLEX	196,199	●	○	○	○	-	-	-	●	○	○	○	-	-	-	○	○	○	○	-	-	-	○	○	○	○	-	-	-	-	-	-	-	-	-	-
M42 - BASIC UNIFLEX	196,200	●	-	-	○	-	-	-	●	-	-	○	-	-	-	○	-	-	○	-	-	-	○	-	-	○	-	-	-	-	-	-	-	-	-	-
M42 - BULLDOG	196,202	●	●	-	-	-	-	-	○	○	-	-	-	-	-	○	○	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M42 - PROFILE PERFORMANCE	196,203	●	-	-	-	-	-	-	●	-	-	-	-	-	-	○	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M42 - PROFILE SUPERIOR	196,204	○	○	-	-	-	-	-	●	○	-	-	-	-	-	●	○	-	-	-	-	-	●	○	-	-	-	-	-	-	-	-	-	-	-	-
M42 - BASIC PLUS PERFORMANCE	196,205	○	○	○	○	-	-	-	○	○	○	○	-	-	-	●	○	○	○	-	-	-	●	○	○	○	○	-	-	-	-	-	-	-	-	-
M42 - BASIC PERFORMANCE	196,207	○	-	-	○	-	-	-	●	-	-	○	-	-	-	●	-	-	○	-	-	-	●	-	-	○	-	-	-	-	-	-	-	-	-	-
M51 - BASIC PLUS UNIFLEX	196,208	○	●	-	-	○	○	-	-	●	-	-	○	○	-	-	●	-	-	-	○	-	-	○	-	-	-	○	-	-	-	-	-	-	-	-

● RECOMMENDED FOR... ○ USABLE FOR... - NOT USABLE FOR ...

BLADES SELECTION FOR MATERIAL SHAPE

GUABO

Blade	Page A.	SELECTION OF MATERIALS TO BE CUT										
M42 - LION	196,198	-	○	●	-	○	●	○	-	-	-	-
M42 - BASIC PLUS UNIFLEX	196,199	-	●	-	○	-	-	-	-	-	○	○
M42 - BASIC UNIFLEX	196,200	-	●	●	○	○	●	○	-	○	-	-
M42 - BULLDOG	196,202	-	○	○	-	○	○	○	○	-	-	-
M42 - PROFILE PERFORMANCE	196,203	-	-	-	○	●	-	●	●	-	○	○
M42 - PROFILE SUPERIOR	196,204	-	○	○	●	●	○	●	●	-	●	●
M42 - BASIC PLUS PERFORMANCE	196,205	●	●	-	○	-	-	-	-	-	○	○
M42 - BASIC PERFORMANCE	196,207	-	●	●	○	○	●	○	-	-	-	-
M51 - BASIC PLUS UNIFLEX	196,208	○	●	○	-	-	○	-				

● RECOMMENDED FOR... ○ USABLE FOR... - NOT USABLE FOR ...

BLADES SELECTION BY TYPE OF MATERIAL GROUP

GUABO

	DIN	Material	M42 - LION	M42 - BASIC PLUS UNIFLEX	M42 - BASIC UNIFLEX	M42 - BULLDOG	M42 - PROFILE PERFORMANCE	M42 - PROFILE SUPERIOR	M42 - BASIC PLUS PERFORMANCE	M42 - BASIC PERFORMANCE	M51 - BASIC PLUS UNIFLEX
			BIMETAL								STD
1	St37, St42, C10, C15	Low alloy steel	●	●	●	○	●	●	●	●	-
2	St50, St60, C35, C45	Alloyed steel and hardened steel	○	●	○	○	-	○	●	○	○
3	16 MnCr5, 42 CrMo4,50CrV4	Spring steel and case hardened steel	-	○	-	-	-	-	○	-	○
4	40 CrMnMo7, 55 NiCrMoV6	Cold rolled steel	-	○	-	-	-	-	○	-	●
5	X40CrMoV51, 40CrMnNiMo864	Hot rolled steel	-	○	-	-	-	-	○	-	○
6	100Cr6, C125W	High alloyed steel	-	-	-	-	-	-	-	-	○
7	X210Cr12, X155CrVMo121	Hardened steel up to 50 HRC	-	-	-	-	-	-	-	-	○
8	S 6-5-2, S2-10-1-8	High speed steel and non alloyed	-	●	●	○	-	○	●	●	○
9	GG15, GG30, GGG5O	Cast iron	-	○	-	-	-	-	○	-	○
10	X17CrNi16-2, X30Cr13, X42Cr13	Stainless steel Aisi 303, 304, X20	-	○	-	○	-	○	○	-	●
11	X5CrNi18-10, X2CrNiMo17-12-2, X6CrNiM017-12-2	Stainless steel Aisi 316, 316L, X5, X6	-	-	-	-	-	-	-	-	●
12	X2Cr19NbMo, NiMo16Cr16Ti	Duplex, Heat resistant steel	-	-	-	-	-	-	-	-	○
13	NiCr19NbMo, NiMo16Cr16Ti	Nickel alloys	-	-	-	-	-	-	-	-	○
14	AlMg3, AlSi12, AlMg4, 5Mn	Aluminium for horizontal saw machines	-	○	○	-	-	-	○	○	-
15	-	Copper	-	○	○	-	-	-	○	○	-
16	Cu 99.9	Brass	-	○	○	-	-	-	○	○	-
17	CuZn34, CuZn40Pb2	Aluminum / Bronze	-	○	○	○	-	-	○	○	-
18	CuA10Ni, CUAl10Fe	Titanium alloys	-	-	-	-	-	-	-	-	○
19	Ti1, Ti-6Al-4V	Composite materials	-	-	-	-	-	-	-	-	-

● RECOMMENDED FOR... ○ USABLE FOR… - NOT USABLE FOR ...

SAW BLADES - PARAMETERS FOR CUTTING FOR ROUND FULL

			10-99 mm		100-200 mm		201-300 mm		301-400 mm		401-500 mm	
N°	Materials group	DIN	V m/min	AV mm/min	V m/min	AV mm/min	V m/min	AV mm/min	V m/min	AV mm/min	V m/min	AV mm/min
1	Low alloy steel	S235JR FE C40 C45	100	120	85	100 - 60	75	60 - 45	65	45 - 30	50	0 - 20
2	Alloyed steel and tempered	39NiCrMo3 42NiCrMo4	70	120 - 80	65	80 - 50	60	50 - 30	55	30 - 20	45	20 - 10
3	Steel for springs and case hardening	55Si7 50CrV4 52SiCrNi5	60	110 - 70	55	70 - 40	50	40 - 20	45	20 - 12	35	12 - 8
17	Steel for cold working	-	40	60 - 25	35	25 - 12	32	18 - 10	25	10 - 8	22	8 - 5
4	Steel for working high temperatures	1.2343 1.2344 1.2714	42	70 - 40	38	40 - 25	35	25 - 15	32	15 - 10	30	10 - 5
5	Highly alloyed steel	At least one element >5%	40	70 - 35	36	35 - 20	32	20 - 12	30	12 - 8	28	8 - 5
6	Temperd steel up to 50 HRC	-	20	25 - 8	15	8 - 5	12	5 - 2	10	2 - 1,5	10	1,5 - 1
7	Unalloyed speed steels	11SMnPb37	45	100 - 40	40	40 - 25	38	35 - 15	35	15 - 10	32	10 - 7
8	Cast iron	G10 G15 G20	55	120 - 75	50	75 - 45	45	45 - 30	40	30 - 18	35	18 - 10
9	Stainless steel	Aisi 303 Aisi 304 X20	45	70 - 30	40	30 - 15	38	15 - 10	35	10 - 7	32	7 - 5
10	Stainless steel	Aisi 316 Aisi 316L X5 X6	40	60 - 25	35	25 - 12	32	12 - 8	30	8 - 6	25	6 - 4
11	Duplex, steel resistant to temperature	-	25	40 - 15	20	15 - 8	15	8 - 5	15	5 - 2	15	2
12	Nickel alloys	Monel Inconel / Hastelloy Waspalloy	20	25 - 8	15	8 - 5	12	5 - 2	12	2 - 1,5	12	1,5 - 1
13	Alluminium of horizontal sawing machine	-	140	200	140	200 - 120	120	120 - 100	120	100 - 60	120	60 - 50
14	Copper	-	120	200 - 100	110	100 - 70	100	70 - 50	80	50 - 30	60	30 - 20
15	Brass	-	120	200	120	200 - 100	100	100 - 80	90	80 - 50	90	50 - 30
16	Alluminium / bronze	Ampco Bral	35	60 - 15	30	15 - 10	27	10 - 5	25	5 - 3	20	3 - 2
17	Titanium alloys	-	40	60 - 25	35	25 - 12	32	12 - 8	30	8 - 6	25	6 - 4

V = Blade rotation speed (meters / minute) AV = Advancement / descent blade (millimeters / minute)

It is recommended to use top quality products.

PERCENTAGE OF EMULSION

CARBON STEEL	STAINLESS STEEL	CAST IRON	COPPER-ALUMINUM-BRONZE	DUPLEX	SPECIAL ALLOYS A NICKEL BASE	COMPOSITE
5 - 10%	10 - 15%	DRY	15%	15%	20%	MINIMAL LUBRICATION

TYPES OF LUBRIFICANTS

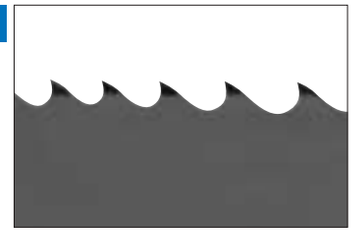
CARBON STEEL	STAINLESS STEEL	CAST IRON	COPPER-ALUMINUM-BRONZE	DUPLEX	SPECIAL ALLOYS A NICKEL BASE	COMPOSITE
UNITEC 520	UNITEC GREEN COOLANT	DELTA SAW	UNITEC 2K MD	UNITEC GREEN COOLANT	UNITEC 2K CF	STEEL 46

During cutting operations, frictions are generated which determine high temperatures, with consequent heating of the material and wear of the surfaces concerned. In fact blade wear is influenced by temperature; in order to extend the life of the cutting edge, therefore it is necessary to have during processing, an efficient cooling (to lower the temperature) and a good lubrication in the contact area (to reduce friction). For this purpose we recommend the use of our emulsifiable liquids, whose chemical characteristics enhance the following actions:
1. cool and keep the temperature constant in the cutting area, removing the heat caused by the sliding of the tool, to avoid deformation of both the piece and the blade;
2. lubricate the contact area between the chip and the blade, thus reducing the cutting forces caused by friction between piece, chip and blade;
3. transport the chips away from the cutting area, to avoid chipping and breaking of the blades;

Above are the percentages and types of emulsifiable that we suggest according to the materials to be processed.

BAND SAW BLADES M42 - LION

GUABO



GENERIC-PURPOSE BANDSAW BLADES

Blade width	from 13 to 27 mm
Teeth per inch	from 4/6 to 10/14
Tooth shape	S
Tooth hardness	67 HRC
Features	Bimetal blade with carbon steel body and HSS M42 teeth
Tooth set	Standard
Material group	1 - 2 (Page A.195 - 196)
Application	Suitable for medium alloy steels on small and medium sections. Suitable for all materials up to a maximum of 40 HRC.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
●	○	○	-	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
●	-	-	-	-	-	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro					Welding
	Dimensions (w x t) mm	Tooth pitch 4/6	Tooth pitch 5/8	Tooth pitch 6/10	Tooth pitch 4/6	Tooth pitch 4/6	Euro
10	13 x 0.6	-	-	-	(7,00)	(7,00)	(4,50)
10	13 x 0.9	-	-	-	(7,00)	(7,00)	(4,50)
10	27 x 0.9	(7,75)	(7,75)	(7,75)	(7,75)	-	(4,50)

ITEM: A7005

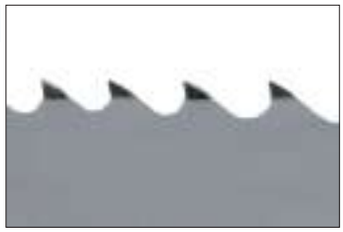
Blade width 27 x 0.9 mm

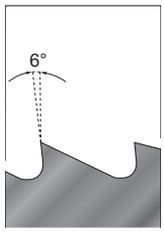
Length mm	GR12 Euro	Tooth pitch 4/6	GR12 Euro	Tooth pitch 5/8	GR12 Euro	Tooth pitch 6/10	
2450	(23,49)	A7005245046	(23,49)	A7005245058	(23,49)	A70052450610	10
2750	(25,81)	A7005275046	(25,81)	A7005275058	(25,81)	A70052750610	10
2825	(26,39)	A7005282546	(26,39)	A7005282558	(24,96)	A70052825610	10
2950	(25,88)	A7005295046	(25,88)	A7005295058	(27,36)	A70052950610	10
3010	(26,32)	A7005301046	(27,83)	A7005301058	(26,32)	A70053010610	10
3150	(27,35)	A7005315046	(28,91)	A7005315058	(28,91)	A70053150610	10
3180	(27,57)	A7005318046	(27,57)	A7005318058	(27,57)	A70053180610	10
3320	(28,60)	A7005332046	(28,60)	A7005332058	(28,60)	A70053320610	10
3660	(32,87)	A7005366046	(32,87)	A7005366058	(32,87)	A70053660610	10

Indivisible package Suggested retail package - Unit price

BAND SAW BLADES M42 - BASIC PLUS UNIFLEX

GUABO





GENERIC-PURPOSE BANDSAW BLADES

Band width	from 20 to 41 mm
Teeth per inch	from 2/3 to 4/6 variable pitch
Tooth shape	K (for 2/3 - 3/4 - 4/6 tooth pitch)
Tooth hardness	68 HRC
Features	Bimetal blade with carbon steel body and HSS M42 teeth
Tooth set	SD
Material group	1 - 2 - 3 - 4 - 5 - 6 - 15 - 16 - 17 (Page A.195 - 196)
Application	Suitable for medium alloy steels on small and medium sections. Suitable for all materials with maximum resistance up to 40 HRC.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
●	●	●	○	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
●	○	○	-	-	-	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro			Welding
	Dimension (w x t) mm	Tooth pitch 2/3	Tooth pitch 3/4	Tooth pitch 4/6	Euro
10	20 x 0.9	-	-	(10,00)	(4,50)
5	27 x 0.9	(10,00)	(10,00)	(10,00)	(4,50)
5	34 x 1.1	(13,80)	(13,80)	(13,80)	(6,00)
1	41 x 1.3	(19,95)	(19,95)	(19,95)	(9,00)

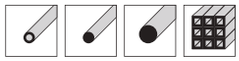
ITEM: A7015

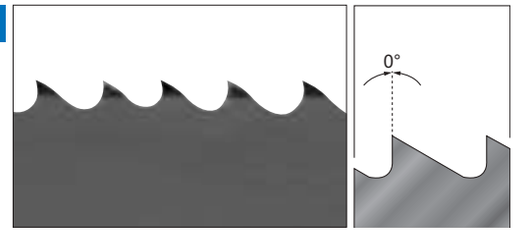
Blade width 27 x 0.9 mm

Length mm	GR12 Euro	Tooth pitch 3/4	GR12 Euro	Tooth pitch 4/6	
2450	29,10	A7015245034	29,10	A7015245046	5
2480			29,40	A7015248046	5
2590			30,50	A7015259046	5
2700			31,60	A7015270046	5
2750			32,10	A7015275046	5
2825			32,85	A7015282546	5
2845	33,05	A7015284534	33,05	A7015284546	5
2925	33,85	A7015292534	33,85	A7015292546	5
2945	34,05	A7015294534			5
2950			34,10	A7015295046	5
3010	34,70	A7015301034	34,70	A7015301046	5
3100	35,60	A7015310034	35,60	A7015310046	5
3120	35,80	A7015312034	35,80	A7015312046	5
3150	36,10	A7015315034	36,10	A7015315046	5
3180	36,40	A7015318034	36,40	A7015318046	5
3225			36,85	A7015322546	5
3270	37,30	A7015327034	37,30	A7015327046	5
3320	37,80	A7015332034	37,80	A7015332046	5
3370			38,30	A7015337046	5
3660	41,20	A7015366034	41,20	A7015366046	5

BAND SAW BLADES M42 - BASIC UNIFLEX

GUABO





GENERIC-PURPOSE BANDSAW BLADES

Band width	from 13 to 41 mm
Teeth per inch	from 5/8 to 14/18
Tooth shape	Standard
Tooth hardness	68 HRC
Features	Bimetal blade with carbon steel body and HSS M42 teeth
Tooth set	SD
Material group	1 - 2 - 8 - 14 - 15 - 16 - 17 (Page A.195 - 196)
Application	Suitable for medium alloy steels on small and medium sections. Suitable for all materials with maximum resistance up to 40 HRC.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
○	●	○	○	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
●	○	○	-	-	-	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro					Welding
📦	Dimensions (w x t) mm	Tooth pitch 5/8	Tooth pitch 6/10	Tooth pitch 8/12	Tooth pitch 10/14	Tooth pitch 14/18	Euro
10	13 x 0,65	-	(8,65)	(8,65)	(8,65)	(8,65)	(4,50)
10	13 x 0,90	-	(8,65)	(8,65)	(8,65)	-	(4,50)
10	20 x 0,90	(10,00)	(10,00)	(10,00)	(10,00)	-	(4,50)
5	27 x 0,90	(10,00)	(10,00)	(10,00)	(10,00)	-	(4,60)
1	34 x 1,10	(13,80)	(13,80)	(13,80)	-	-	(6,00)
1	41 x 1,30	(19,95)	-	-	-	-	(9,00)

ITEM: A7012

Blade width 13 x 0.65 mm

Length mm	GR12 Euro	Tooth pitch 6/10	GR12 Euro	Tooth pitch 8/12	GR12 Euro	Tooth pitch 10/14	📦
1140	14,36	A70121140610	14,36	A70121140812			10
1330			16,00	A70121330812			10
1335	16,05	A70121335610	16,05	A70121335812	16,05	A701213351014	10
1440	16,96	A70121440610	16,96	A70121440812			10
1470	17,22	A70121470610	17,22	A70121470812			10

ITEM: A7013

Blade width 13 x 0.9 mm

Length mm	GR12 Euro	Tooth pitch 6/10	GR12 Euro	Tooth pitch 8/12	📦
1735	19,51	A70131735610	19,51	A70131735812	10

ITEM: A7014

Blade width 20 x 0.9 mm

Length mm	GR12 Euro	Tooth pitch 5/8	GR12 Euro	Tooth pitch 6/10	GR12 Euro	Tooth pitch 8/12	📦
2000			24,50	A70142000610			10
2060	25,10	A7014206058	25,10	A70142060610			10
2080	25,30	A7014208058					10
2085			25,35	A70142085610	25,35	A70142085812	10

📦 Indivisible package 📦 Suggested retail package - Unit price

BAND SAW BLADES M42 - BASIC UNIFLEX

GUABO

ITEM: A7007

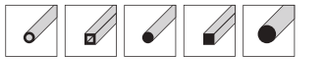
Blade width 27 x 0.9 mm

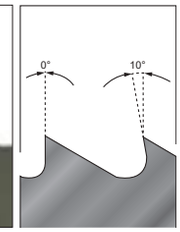
Length mm	GR12 Euro	Tooth pitch 5/8	GR12 Euro	Tooth pitch 6/10	GR12 Euro	Tooth pitch 8/12	
2450	29,10	A7007245058	29,10	A70072450610	29,10	A70072450812	5
2480	29,40	A7007248058	29,40	A70072480610			5
2500	29,60	A7007250058	29,60	A70072500610			5
2590	30,50	A7007259058					5
2600			30,60	A70072600610			5
2700	31,60	A7007270058	31,60	A70072700610			5
2750	32,10	A7007275058	32,10	A70072750610			5
2760	32,20	A7007276058					5
2765	32,25	A7007276558					5
2825	32,85	A7007282558	32,85	A70072825610	32,85	A70072825812	5
2845	33,05	A7007284558					5
2880	33,40	A7007288058					5
2925	33,85	A7007292558					5
2945	34,05	A7007294558	34,05	A70072945610			5
2950	34,10	A7007295058	34,10	A70072950610	34,10	A70072950812	5
3010	34,70	A7007301058	34,70	A70073010610			5
3120	35,80	A7007312058	35,80	A70073120610			5
3150	36,10	A7007315058	36,10	A70073150610			5
3320	37,80	A7007332058					5
3660	41,20	A7007366058					5

Indivisible package Suggested retail package - Unit price

BAND SAW BLADES M42 - BULLDOG

GUABO





BLADES FOR GENERIC APPLICATION

Blade width	27 mm
Teeth per inch	4/6
Tooth shape	Combined P + K + S
Tooth hardness	67/68 HRC
Features	Bimetal blade M42
Tooth set	Standard (SD)
Material group	1 - 2 - 10 (Page A.195 - 196)
Application	The BULLDOG blade provides a highly satisfactory cutting performance on materials with various sections such as tubular, beamed, solid, round, square and box sections and on various materials such as iron, C40 stainless steels and aluminium. The BULLDOG blade has a triple tooth geometry combined with variable pitch and the following types of teeth: standard, single tooth (positive) and profiled toothed (chip breaker).

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
●	○	-	-	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
○	○	○	○	-	-	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro	Welding
Dimensions (w x t) mm		Tooth pitch 4/6	Euro
5	27 x 0.9	(13,75)	(5,00)

ITEM: A7019

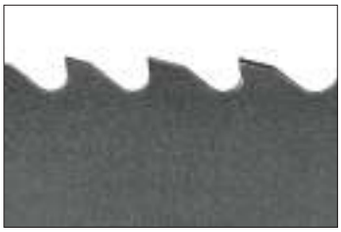
Blade width 27 x 0.9 mm

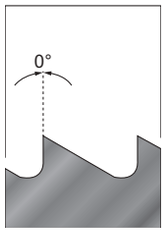
Length mm	GR12 Euro	Tooth pitch 4/6	
2450	(38,69)	A7019245046	5
2500	(39,38)	A7019250046	5
2590	(40,61)	A7019259046	5
2600	(40,75)	A7019260046	5
2700	(42,13)	A7019270046	5
2750	(42,81)	A7019275046	5
2825	(43,84)	A7019282546	5
2925	(45,22)	A7019292546	5
2950	(45,56)	A7019295046	5
3010	(46,39)	A7019301046	5
3120	(47,90)	A7019312046	5
3150	(48,31)	A7019315046	5
3180	(48,73)	A7019318046	5
3270	(49,96)	A7019327046	5
3320	(50,65)	A7019332046	5
3370	(51,34)	A7019337046	5
3660	(55,33)	A7019366046	5

Indivisible package Suggested retail package - Unit price

BAND SAW BLADES M42 - PROFILE PERFORMANCE

GUABO





BLADES FOR METAL CARPENTRIES

Blade width	from 13 to 41 mm
Teeth per inch	from 2/3 to 8/11
Tooth shape	P-Shaped Reinforced tooth
Tooth hardness	68 HRC
Features	M42 bimetal blade with special tooth geometry and toothing
Tooth set	SD
Material group	1 - 2 - 3 - 4 - 5 - 6 (Page A.195 - 196)
Application	Suitable for cutting pipes and profiles, single or bundle cuts. Not suitable for cutting solid materials.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
●	●	○	○	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
●	-	-	-	-	-	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro					Welding
📦	Dimensions (w x t) mm	Tooth pitch 2/3	Tooth pitch 3/4	Tooth pitch 4/6	Tooth pitch 5/7	Tooth pitch 8/11	Euro
10	13 x 0.6	-	-	-	-	(13,75)	(4,50)
10	13 x 0.9	-	-	-	-	(13,75)	(4,50)
10	20 x 0.9	-	-	-	(13,75)	(13,75)	(4,50)
5	27 x 0.9	-	(16,00)	(16,00)	(16,00)	(16,00)	(5,00)
5	34 x 1.1	(19,50)	(19,50)	(19,50)	(19,50)	(19,50)	(7,50)
1	41 x 1.3	(27,50)	(27,50)	(27,50)	(27,50)	-	(9,50)

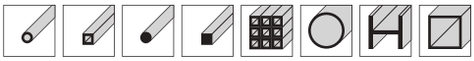
ITEM: A7032

Blade width 27 x 0.9 mm

Length mm	GR12 Euro	Tooth pitch 4/6	GR12 Euro	Tooth pitch 5/7	GR12 Euro	Tooth pitch 8/11	📦
2450	(44,20)	A7032245046	(44,20)	A7032245057	(44,20)	A70322450811	5
2500					(45,00)	A70322500811	5
2700			(48,20)	A7032270057	(48,20)	A70322700811	5
2750			(49,00)	A7032275057	(49,00)	A70322750811	5
2765			(49,24)	A7032276557			5
2825	(50,20)	A7032282546	(50,20)	A7032282557	(50,20)	A70322825811	5
2835			(50,36)	A7032283557			5
2845			(50,52)	A7032284557			5
2950	(52,20)	A7032295046	(52,20)	A7032295057	(52,20)	A70322950811	5
3010	(53,16)	A7032301046	(53,16)	A7032301057			5
3100	(54,60)	A7032310046	(54,60)	A7032310057			5
3120	(54,92)	A7032312046	(54,92)	A7032312057			5
3150			(55,40)	A7032315057	(55,40)	A70323150811	5
3180			(55,88)	A7032318057			5
3270			(57,32)	A7032327057			5
3320	(58,12)	A7032332046	(58,12)	A7032332057			5
3660			(63,56)	A7032366057			5

BAND SAW BLADES M42 - PROFILE SUPERIOR

GUABO



BLADES FOR PROFILE AND SOLID CUTTING

Blade width	from 20 to 54 mm
Teeth per inch	from 2/3 to 12/16
Tooth shape	Reinforced tooth
Tooth hardness	68 HRC
Features	M42 bimetal blade with special tooth geometry, reinforced profile, slightly positive angle
Tooth set	A GROUPS
Material group	1 - 2 - 4 (Page A.195 - 196)
Application	Suitable for cutting medium to large size beams, profiles, pipes, single or bundle cuts, flats, box sections in general, iron, medium alloy steel, stainless steel and cutting medium size solid materials.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
-	○	●	●	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
●	○	-	-	-	-	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro							Welding
◈	Dimensions (w x t) mm	Tooth pitch 2/3	Tooth pitch 3/4	Tooth pitch 4/6	Tooth pitch 5/7	Tooth pitch 12/16	Tooth pitch 8/11	Tooth pitch 12/16	Euro
5	20 x 0.9	-	-	-	-	(16,50)	-	(16,50)	(6,50)
5	27 x 0.9	-	(16,50)	(16,50)	(16,50)	(16,50)	(16,50)	(16,50)	(6,50)
1	34 x 1.10	(19,75)	(19,75)	(19,75)	(19,75)	-	-	-	(9,50)
1	41 x 1.30	(27,90)	(27,90)	(27,90)	-	-	-	-	(13,50)
1	54 x 1.60	(39,00)	(39,00)	(39,00)	-	-	-	-	(20,00)

ITEM: A7030

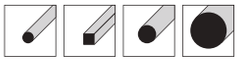
Blade width 27 x 0.9 mm

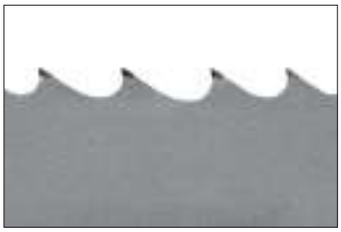
Length mm	GR12 Euro	Tooth pitch 4/6	GR12 Euro	Tooth pitch 5/7	GR12 Euro	Tooth pitch 6/10	GR12 Euro	Tooth pitch 8/11	◈
2450	(46,93)	A7030245046	(46,93)	A7030245057	(46,93)	A70302450610			5
2500			(47,75)	A7030250057					5
2590			(49,24)	A7030259057					5
2750			(51,88)	A7030275057	(51,88)	A70302750610	(51,88)	A70302750811	5
2845					(53,44)	A70302845610			5
2950			(55,18)	A7030295057	(55,18)	A70302950610	(55,18)	A70302950811	5
3010			(56,17)	A7030301057					5
3120			(57,98)	A7030312057					5
3150	(58,48)	A7030315046	(58,48)	A7030315057	(58,48)	A70303150610			5
3270			(60,46)	A7030327057	(60,46)	A70303270610			5
3320	(61,28)	A7030332046							5

◈ Indivisible package ◈ Suggested retail package - Unit price

BAND SAW BLADES M42 - BASIC PLUS PERFORMANCE

GUABO





STANDARD-PRODUCTION BLADES

Band width	from 20 to 67 mm
Teeth per inch	from 0.75 / 1.00 to 8/12
Tooth shape	K
Tooth hardness	68-69 HRC
Features	Bimetal blade with carbon steel body and HSS M42 cobalt-enhanced teeth
Tooth set	SD
Material group	1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 (Page A.195 - 196)
Application	Thanks to a good resistance to high temperatures, this band saw blade can be used for wide section cuts or to cut materials such as high-alloy steel, stainless steel, titanium, bronze and metals up to 44 HRC.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
○	○	●	●	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
●	○	○	○	-	○	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro					Welding
◈	Dimensions (w x t) mm	Tooth pitch 0.75/1	Tooth pitch 1.4/2	Tooth pitch 2/3	Tooth pitch 3/4	Tooth pitch 4/6	Euro
5	27 x 0.9	-	-	(12,45)	(12,45)	(12,45)	(5,00)
5	34 x 1.1	-	(16,50)	(16,50)	(16,50)	(16,50)	(7,50)
1	41 x 1.3	-	(23,50)	(23,50)	(23,50)	(23,50)	(9,50)
1	54 x 1.3	-	(31,50)	(31,50)	(31,50)	(31,50)	(14,50)
1	54 x 1.6	(33,50)	(33,50)	(33,50)	(33,50)	(33,50)	(14,50)
1	67 x 1.6	(43,50)	(43,50)	(43,50)	-	-	(24,50)

ITEM: A7021

Blade width 27 x 0,9 mm

Length mm	GR12 Euro	Tooth pitch 2/3	GR12 Euro	Tooth pitch 3/4	GR12 Euro	Tooth pitch 4/6	◈
2450			(35,50)	A7021245034	35,50	A7021245046	5
2500					36,13	A7021250046	5
2590					37,25	A7021259046	5
2600					37,37	A7021260046	5
2650					(37,99)	A7021265046	5
2700					38,62	A7021270046	5
2750			(39,24)	A7021275034	39,24	A7021275046	5
2765					(39,42)	A7021276546	5
2825					40,17	A7021282546	5
2845			40,42	A7021284534	40,42	A7021284546	5
2950			41,73	A7021295034	41,73	A7021295046	5
3010	(42,47)	A7021301023	42,49	A7021301034	42,47	A7021301046	5
3100			43,60	A7021310034			5
3120			43,84	A7021312034	43,84	A7021312046	5
3150			44,22	A7021315034	44,22	A7021315046	5
3180			44,59	A7021318034	44,59	A7021318046	5
3200			(44,84)	A7021320034			5
3225					(45,15)	A7021322546	5
3320			46,33	A7021332034	46,33	A7021332046	5
3370					46,96	A7021337046	5
3505					(48,64)	A7021350546	5
3660	(50,57)	A7021366023	50,57	A7021366034	50,57	A7021366046	5
3900					53,55	A7021390046	5
4600			(62,27)	A7021460034			5

◈ Indivisible package ◈ Suggested retail package - Unit price

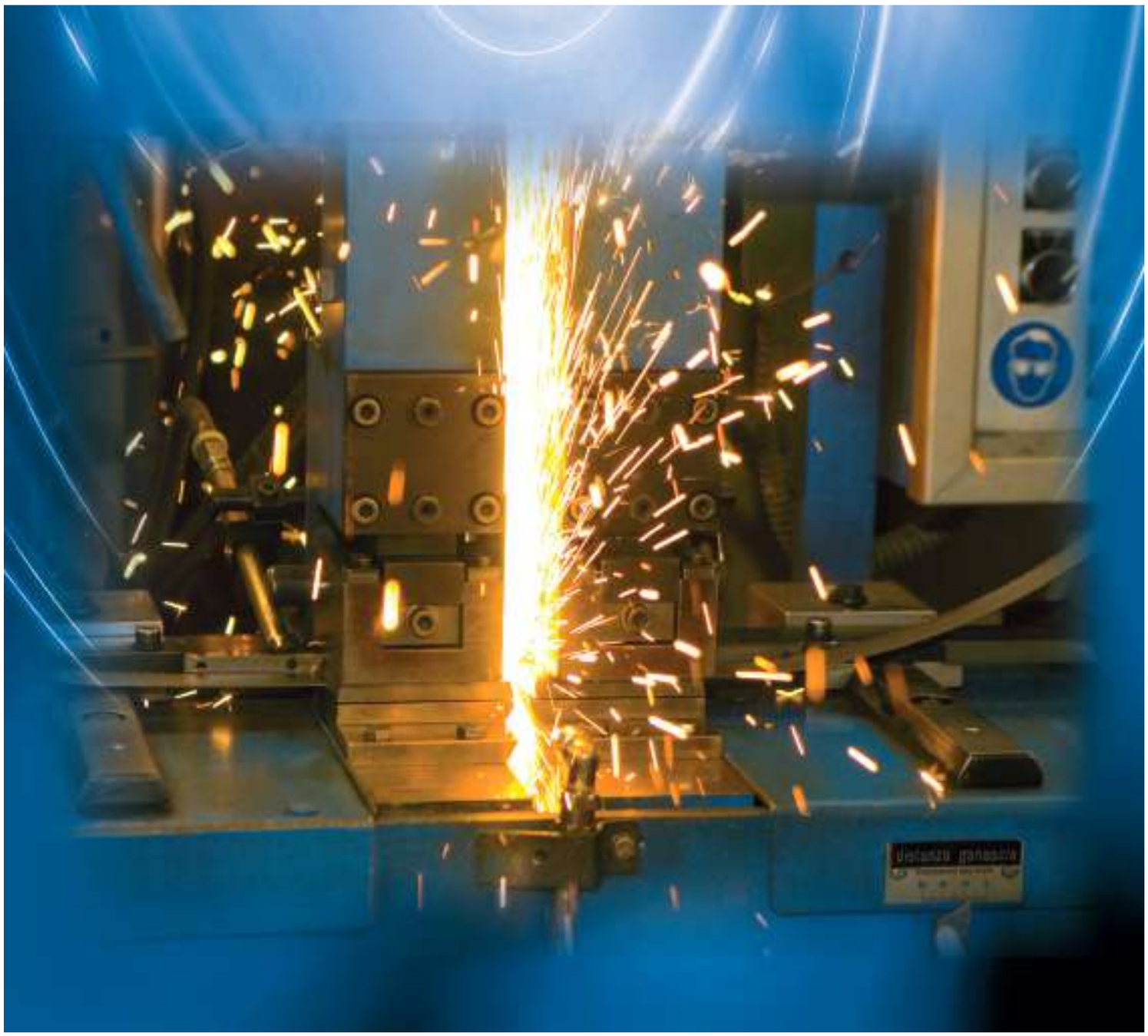
BAND SAW BLADES M42 - BASIC PLUS PERFORMANCE

GUABO

ITEM: A7022

Blade width 34 x 1.1 mm

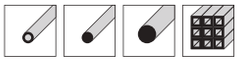
Length mm	GR12 Euro	Tooth pitch 3/4	GR12 Euro	Tooth pitch 4/6	
4100	(75,15)	A7022410034			5
4115	(75,40)	A7022411534			5
4120	(75,48)	A7022412034	(75,48)	A7022412046	5
4500	(81,75)	A7022450034	(81,75)	A7022450046	5
4640	(84,06)	A7022464034			5
5095	(91,57)	A7022509534			5
5400	(96,60)	A7022540034			5

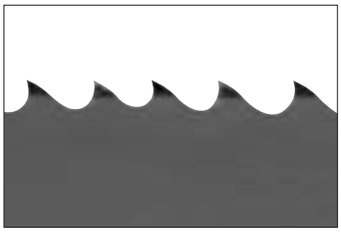


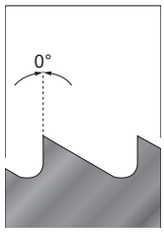
Indivisible package Suggested retail package - Unit price

BAND SAW BLADES M42 - BASIC PERFORMANCE

GUABO







STANDARD-PRODUCTION BLADES

Band width	from 13 to 54 mm
Teeth per inch	from 5/8 to 10/14 variable pitch
Tooth shape	K
Tooth hardness	68-69 HRC
Features	Bimetal blade with carbon steel body and HSS M42 cobalt-enhanced teeth
Tooth set	SD
Material group	1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 (Page A.195 - 196)
Application	Thanks to a good resistance to high temperatures, this band saw blade can be used for wide section cuts or to cut materials such as high-alloy steel, stainless steel, titanium, bronze and metals up to 44 HRC.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
○	●	○	○	-

SELECTION OF MATERIALS TO BE CUT						
P	M	K	N	S	H	C
●	○	○	○	-	○	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro				Welding
◈	Dimensions (w x t) mm	Tooth pitch 5/8	Tooth pitch 6/10	Tooth pitch 8/12	Tooth pitch 10/14	Euro
10	13 x 0.65	-	(11,70)	(11,70)	(11,70)	(4,50)
10	13 x 0.90	-	(11,70)	(11,70)	(11,70)	(4,50)
10	20 x 0.90	(12,45)	(12,45)	(12,45)	(12,45)	(4,50)
5	27 x 0.90	(12,45)	(12,45)	(12,45)	(12,45)	(5,00)
5	34 x 1.10	(16,50)	(16,50)	(16,50)	(16,50)	(7,50)
1	41 x 1.30	(23,50)	(23,50)	-	-	(9,50)

ITEM: A7024

Blade width 27 x 0.9 mm

Length mm	GR12 Euro	Tooth pitch 5/8	GR12 Euro	Tooth pitch 6/10	GR12 Euro	Tooth pitch 8/12	◈
2450	(35,50)	A7024245058	(35,50)	A70242450610			5
2500	(36,13)	A7024250058	(36,13)	A70242500610			5
2590	(37,25)	A7024259058					5
2600	(37,37)	A7024260058					5
2700	(38,62)	A7024270058					5
2750	(39,24)	A7024275058	(39,24)	A70242750610	(39,24)	A70242750812	5
2765	(39,42)	A7024276558					5
2825	(40,17)	A7024282558	(40,17)	A70242825610			5
2845	(40,42)	A7024284558	(40,42)	A70242845610			5
2925	(41,42)	A7024292558					5
2945	(41,67)	A7024294558	(41,67)	A70242945610			5
2950	(41,73)	A7024295058	(41,73)	A70242950610	(41,73)	A70242950812	5
3010	(42,47)	A7024301058	(42,47)	A70243010610	(42,47)	A70243010812	5
3120	(43,84)	A7024312058	(43,84)	A70243120610			5
3150	(44,22)	A7024315058	(44,22)	A70243150610	(44,22)	A70243150812	5
3180	(44,59)	A7024318058					5
3200	(44,84)	A7024320058					5
3320	(46,33)	A7024332058	(46,33)	A70243320610			5
3660	(50,57)	A7024366058					5

◈ Indivisible package ◈ Suggested retail package - Unit price

BAND SAW BLADES M51 - BASIC PLUS UNIFLEX

GUABO

LAME PER MATERIALI ALTAMENTE LEGATI

Blade width	from 27 to 34 mm
Teeth per inch	from 2/3 to 4/6
Tooth shape	K
Tooth hardness	70 HRC
Features	Blade with high cobalt content (~10%)
Tooth set	Standard
Material group	4 - 10 - 11 (Page A.195 - 196)
Application	Steels resistant up to about 1700 N/mm², stainless and acid resistant steels, nickel alloys, titanium, solid materials.

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
○	●	●	○	-

SELECTION OF MATERIALS TO BE CUT

P	M	K	N	S	H	C
○	●	○	-	○	○	-

		Price per meter - Standard tooth pitch (teeth per inch) GR12 - Euro			Welding
	Dimension	Tooth pitch 2/3	Tooth pitch 3/4	Tooth pitch 4/6	Euro
5	27 x 0.9	(16,90)	(16,90)	(16,90)	(4,60)
1	34 x 1.10	(24,15)	(24,15)	(24,15)	(6,00)

ITEM: A7050

Blade width 27 x 0.9 mm

Length mm	GR12 Euro	Tooth pitch 2/3	GR12 Euro	Tooth pitch 3/4	GR12 Euro	Tooth pitch 4/6	
2450			(46,01)	A7050245034	(46,01)	A7050245046	5
2750			(51,08)	A7050275034	(51,08)	A7050275046	5
2765					(51,33)	A7050276546	5
2825					(52,34)	A7050282546	5
2845			(52,68)	A7050284534	(52,68)	A7050284546	5
2950			(54,45)	A7050295034	(54,45)	A7050295046	5
3010	(55,47)	A7050301023	(55,47)	A7050301034	(55,47)	A7050301046	5
3120			(57,33)	A7050312034	(57,33)	A7050312046	5
3150			(57,83)	A7050315034	(57,83)	A7050315046	5
3180			(58,34)	A7050318034	(58,34)	A7050318046	5
3200			(58,68)	A7050320034			5
3320			(60,71)	A7050332034	(60,71)	A7050332046	5
3370					(61,55)	A7050337046	5
3505					(63,83)	A7050350546	5
3660	(66,45)	A7050366023	(66,45)	A7050366034	(66,45)	A7050366046	5

ITEM: A7051

Blade width 34 x 1.1 mm

Length mm	GR12 Euro	Tooth pitch 3/4	GR12 Euro	Tooth pitch 4/6	
4100	(105,02)	A7051410034			1
4115	(105,38)	A7051411534			1
4120	(105,50)	A7051412034	(105,50)	A7051412046	1
4500	(114,68)	A7051450034	(114,68)	A7051450046	1
4640	(118,06)	A7051464034			1
5095	(129,04)	A7051509534			1
5400	(136,41)	A7051540034			1

Indivisible package Suggested retail package - Unit price

HSS DMO5 (M2) CIRCULAR SAW BLADES

ITEM: A7210

Constructed according to strict production criteria and cover a wide range of applications.

The circular discs are of compounds of HSS wolfram-molybdenum.

The protective coating gives GUABO discs a greater degree of hardness of the cusps, a reduction of coefficient friction with a consequent increase of the cutting performance of automatic machines and cutting applications of hard metal.

VAPORIZED

Tech. Code	GR12 Euro	Ø mm	Blade thickness mm	Ø hole mm	Z
A721020018130V	(91,31)	200	1.8	32	130
A721020018160V	(91,31)	200	1.8	32	160
A721020018200V	(91,31)	200	1.8	32	200
A72102252140V	(99,48)	225	2.0	32	140
A72102252180V	(99,48)	225	2.0	32	180
A72102252220V	(99,48)	225	2.0	32	220
A72102502100V	(110,86)	250	2.0	32	100
A72102502128V	(110,86)	250	2.0	32	128
A72102502160V	(110,86)	250	2.0	32	160

Tech. Code	GR12 Euro	Ø mm	Blade thickness mm	Ø hole mm	Z
A72102502200V	(110,86)	250	2.0	32	200
A721027525140V	(145,82)	275	2.5	32	140
A721027525220V	(155,71)	275	2.5	32	220
A721030025120V	(177,33)	300	2.5	32	120
A721030025160V	(177,33)	300	2.5	32	160
A721030025220V	(177,33)	300	2.5	32	220
A721031525160V	(197,11)	315	2.5	32	160
A721031525220V	(197,11)	315	2.5	32	220

SILENT-TYPE CIRCULAR BLADES WITH HARD METAL TEETH FOR CUTTING ALLUMINIUM

ITEM: A7500

Circular blades with hard metal coated teeth for cutting light alloys and aluminum profiles. Used for single or double mechanical cutting with mechanical clamping of the piece, with also particular multiple geometry of the teeth, alternated tooth (flat - trapezoidal cutting edge) negative - positive cutting angle, low noise level.

Tech. Code	GR12 Euro	Ø mm	Tooth thickness mm	Blade thickness mm	Hole Ø mm	Z	Rpm max
A7500250060	(144,67)	250	3.2	2.6	32	60	6500
A7500250080	(158,01)	250	3,2	2,6	32	80	6500
A7500300072	(162,96)	300	3.4	2.6	32	72	5400
A7500300096	(188,83)	300	3.4	2.6	32	96	5400
A7500350084	(199,76)	350	3.4	2.6	32	84	4600
A7500350108	(225,75)	350	3.4	2.6	32	108	4600
A7500400096	(247,60)	400	4.0	4.0	32	96	4000
A7500400120	(276,46)	400	4.0	4.0	32	120	4000
A7500450108	(329,02)	450	4.0	3.2	32	108	3600

TCT CIRCULAR SAW BLADES FOR FERROUS DRY-CUT METALS

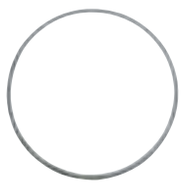
ITEM: A7450

Circular blades with hard metal coated teeth for cutting insulated panels coated in iron or steel. They can also cut small profiles and iron pipes. Blades with alternate tooth (flat - triple) positive cutting angle, low noise level. For use on professional machines, portable and stationary.

Tech. Code	GR12 Euro	Ø mm	Tooth thickness mm	Blade thickness mm	Ø hole mm	Z	Rpm max
A745016030	(57,39)	160	2.2	1.6	20	28	3100
A745018034	(62,56)	180	2.2	1.6	30	34	2700
A745019048	(94,30)	190	2.2	1.8	30	48	2500
A745023044	(84,41)	230	2.2	1.8	30	44	2100
A745025054	(132,60)	250	2.2	1.8	30	54	1800
A745027060	(163,53)	270	2.2	1.8	30	60	1700
A745030080	(185,27)	300	2.2	1.8	30	80	1600
A745035080	(201,25)	350	2.4	2	30	80	850

ITEM: A7550

Reductions for circular blade



Tech. Code	GR12 Euro	External diameter mm	Internal diameter mm
A75503230	(8,00)	32	30

POLISHING BRUSHES FOR BAND SAW MACHINES

ITEM: A7300

Polishing brushes for band saw machines,
suitable for the following models:

MEP 260 - MEP 281 - MEP 282 - MEP 332

Tech. Code	GR12 Euro	Ø mm	Thickness mm	Shank mm
A730050	18,27	50	12	M6 x 25

ITEM: A7310

Polishing brushes for band saw machines,
suitable for the following models:

WHITE 280M 60° - WHITE 330M 60° - WHITE 370M 60°

Tech. Code	GR12 Euro	Ø mm	Thickness mm	Hole mm
A731080	(21,84)	80	12	8

Related products

GUABO READY TO USE OIL FOR BAND SAWS

Tech. Code	Quantity L	Specific weight a 20°C kg/L	Appearance
H005020	20	1,0	Translucent

The products are available in chapter H

ILTEC lubricants

Safety
High quality
Renewable

Indivisible package Suggested retail package - Unit price

GENERAL CATALOGUE

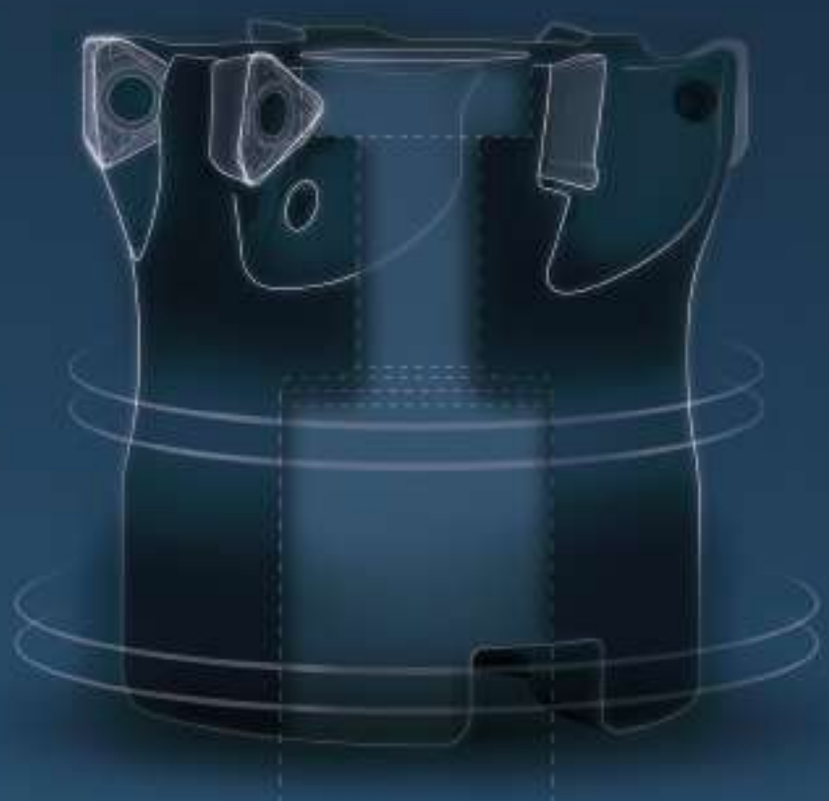
To buy any products of this WERA catalogue contact our commercial office. Delivery time depends on the availability of our supplier, you will receive a confirmation of your order with the details of the delivery date.

The WERA items included in our LINK23 catalogue are ready to be delivered in 24 h.

www.linkindustrialtools.com
info@linkindustrialtools.it

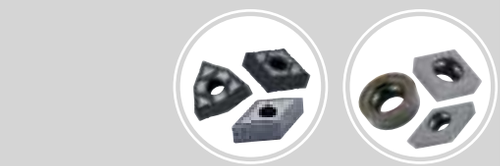
KERFOLG

" successfull "



KERFOLG

B0
2 - 19
Turning toolholders



KERFOLG
Tungaloy

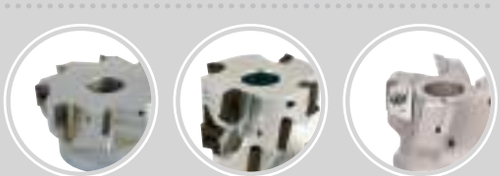
B1
20 - 43
Turning positive and negative inserts

KERFOLG

B2
44 - 57
Threading, parting and knurling

KERFOLG

B3
58 - 62
Face milling

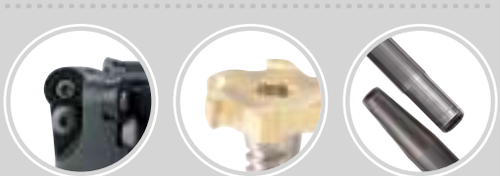


KERFOLG
Tungaloy

B4
63 - 76
Square shoulder milling

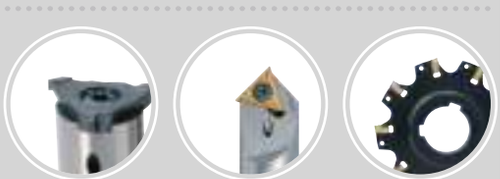
KERFOLG
Tungaloy

B5
77 - 82
High feed milling



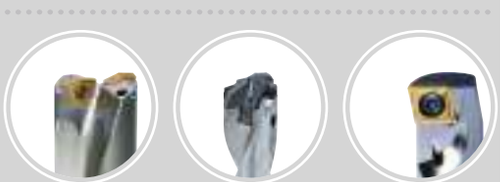
KERFOLG
Tungaloy

B6
83 - 90
Multifuntional copying milling



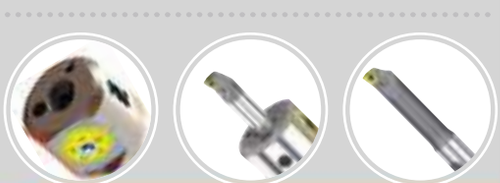
KERFOLG

B7
91 - 100
Slitting, slotting, chamfering mills and threading



KERFOLG
GRANLUND
Tungaloy

B8
101 - 120
Drilling, spotfacing and countebores



KERFOLG

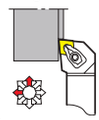
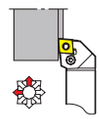
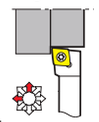
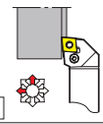
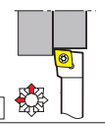
B9
121 - 131
Boring, broaching

APPLICATION INDEX - TURNING

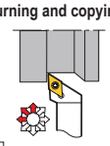
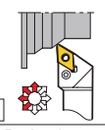
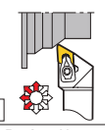
Inserts

TORNITURA ESTERNA

C SHAPE

DCLNR/L	PCLNR/L	SCLCR/L	PCLNR/L	SCLCR/L
Turning and facing	Turning and facing	Turning and facing	Turning and facing with lubricant	Turning and facing with lubricant
				
95°	95°	95°	95°	95°
Pagina 4	Pagina 4	Pagina 9	Pagina 5	Pagina 11

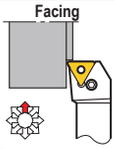
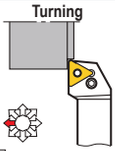
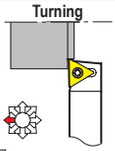
D SHAPE

DDJNR/L	PDJNR/L	SDJCR/L	PDJNR/L	SDJCR/L
Turning and facing	Turning and facing	Turning and copying	Turning and facing with lubricant	Turning and copying with lubricant
				
93°	93°	93°	93°	93°
Pagina 5	Pagina 5	Pagina 12	Pagina 6	Pagina 12

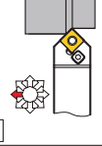
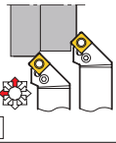
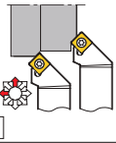
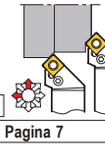
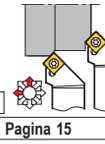
W SHAPE

DWLNR/L	MWLNR/L	PWLNR/L
Turning and facing	Turning and facing	Turning and facing with lubricant
95°	95°	95°
Pagina 8	Pagina 8	Pagina 8

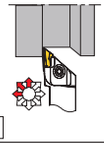
T SHAPE

PTFNR/L	PTGNR/L	STGCR/L
Facing	Turning	Turning
		
91°	91°	91°
Pagina 7	Pagina 7	Pagina 16

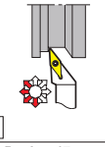
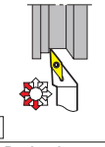
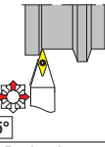
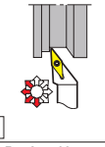
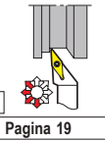
S SHAPE

PSDNN	PSSNR/L	SSSCR/L	PSSNR/L	SSSCR/L
Turning	Turning and facing	Turning and facing	Turning and facing with lubricant	Turning and facing with lubricant
				
45°	45°	45°	45°	45°
Pagina 6	Pagina 6	Pagina 15	Pagina 7	Pagina 15

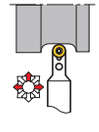
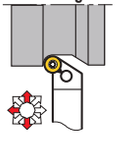
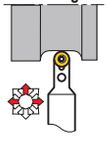
K SHAPE

CKJNR/L
Turning and copying

93°
Pagina 14

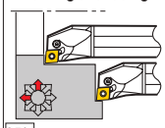
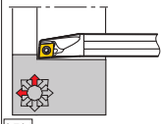
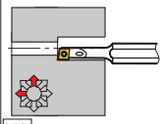
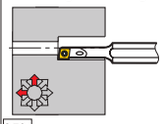
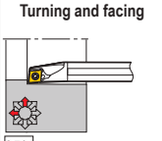
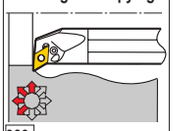
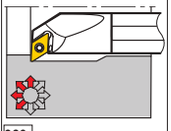
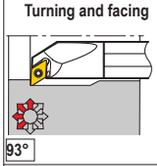
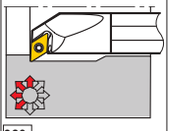
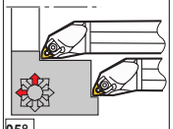
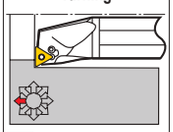
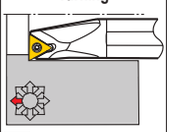
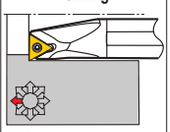
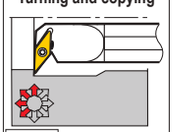
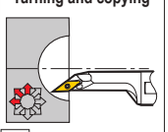
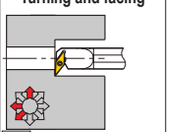
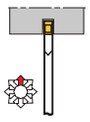
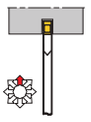
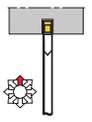
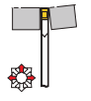
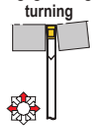
V SHAPE

SVJBR/L	MVJNR/L	MVVNN	SVJCR/L	SVJCR/L
Turning and copying	Turning and copying	Turning and copying	Turning and copying	Turning and copying with lubricant
				
93°	93°	72,5°	93°	93°
Pagina 17	Pagina 8	Pagina 8	Pagina 18	Pagina 19

R SHAPE

SRDCN	PRGCR/L	PRDCN
Turning and copying	Turning	Turning
		
Pagina 14	Pagina 15	Pagina 15

INTERNAL TURNING

Inserts					
C SHAPE	A....PCLNR/L Turning and facing  95° Page 5	A...SCLCR/L Turning and facing  95° Page 10	AH...SCLCR/L Turning and facing  95° Page 11	E...SCLCR/L Turning and facing  95° Page 10	A...SCLCR/L Turning and facing  95° Page 11
D SHAPE	A....PDUNR/L Turning and copying  93° Page 6	A...SDUCR/L Turning  93° Page 13	E...SDUCR/L Turning and facing  93° Page 13	A...SDUCR/L Turning  93° Page 14	
W SHAPE	A....MWLNR/L Turning and facing  95° Pagina 9				
T SHAPE	A....PTFNR/L Turning  91° Page 7	A...STFCR/L Turning  90° Page 16	E...STFCR/L Turning  90° Page 17		
S SHAPE					
K SHAPE					
V SHAPE	A...SVQBR/L Turning and copying  107,30° Page 17	A...SVJCR/L Turning and copying  52° Page 18	E...SVUCR/L Turning and facing  93° Page 18		
CUT OFF	BL/R/N... SGN Parting and grooving  Page 46	BN... SCN Parting and grooving  Page 44	BN...SGN Parting and grooving  Page 47	TGE...-DGN Parting, grooving and turning  Page 45	TGE..DGN25... Parting, grooving and turning  Page 47

ICONS LEGEND

- CC... Insert type CC...
- CN... Insert type CN...
- DC... Insert type DC...
- DGN... Insert type DGN...
- DN... Insert type DN...
- KN... Insert type KN...
- RC... Insert type RC...
- SC... Insert type SC...
- SCN... Insert type SCN...
- SG... Insert type SG...
- SGN... Insert type SGN...
- SN... Insert type SN...
- TC... Insert type TC...
- TN... Insert type TN...
- VB... Insert type VB...
- VC... Insert type VC...
- VN... Insert type VN...
- WN... Insert type WN...
- 16E-I... Insert type 16E-I...
- Holes of lubrification
- Enlargment
- Plung
- Slotting
- Slide slotting
- Slotting with radius
- External Thread
- Internal Thread
- Drilling
- Slide Milling
- Counterboring
- Profiling
- Ramp
- Chamfering
- Square shouldering
- Square shouldering
- Smoothing
- Countersinking
- Pocketing
- 7° / 0.8 mm KAPR= 7° Ap max.= 0,8 mm
- 17° / 1 mm KAPR= 17° Ap max.= 1 mm
- 17° / 1,3 mm KAPR= 17° Ap max.= 1,3 mm
- 14° / 2,5 mm KAPR= 14° Ap max.= 2,5 mm
- mm / 3,5-16 Ap max.=3,5-16 mm
- 45° / 4 mm KAPR= 45° Ap max.= 4 mm
- 90° / 5 mm KAPR= 90° Ap max.= 5 mm
- 90° / 5,2 mm KAPR= 90° Ap max.= 5,2 mm
- 90° / 6 mm KAPR= 90° Ap max.= 6 mm
- 90° / 16 mm KAPR= 90° Ap max.= 16 mm
- RAA Knurled type RAA
- RBL Knurled type RBL
- RBR Knurled type RBR
- RGE Knurled type RGE
- RGV Knurled type RGV

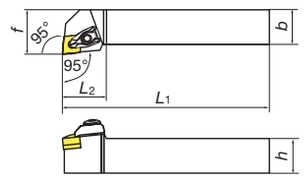
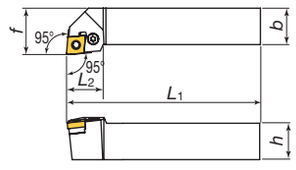
EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - C SHAPE

KERFOLG Turn

CN...

ART. B0U10

Material	Steel
Clamping system	D clamp
Application	Turning and facing works

DCLNR/L	PCLNR/L
	

									SPARE PARTS INCLUDED				
Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	Clamp	Wrench	Shim	Support screw	Spring pin
B0U10R2020K12	88,83	DCLNR 2020 K12	20	20	25	30	125	CN..1204..	BRICA005	BRICA006	BRICA007	BRICA008	/
B0U10R2525M12	105,29	DCLNR 2525 M12	25	25	32	33	150	CN..1204..	BRICA005	BRICA006	BRICA007	BRICA008	/
B0U10L2020K12	100,41	DCLNL 2020 K12	20	20	25	30	125	CN..1204..	BRICA005	BRICA006	BRICA007	BRICA008	/
B0U10L2525M12	105,29	DCLNL 2525 M12	25	25	32	33	150	CN..1204..	BRICA005	BRICA006	BRICA007	BRICA008	/

									SPARE PARTS INCLUDED				
Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	Lever	Screw	Wrench	Shim	Spring pin
B0U11R2020K12	78,07	PCLNR 2020 K12	20	20	25	27	125	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017
B0U11R2525M12	86,62	PCLNR 2525 M12	25	25	32	28	150	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017
B0U11L2020K12	78,07	PCLNL 2020 K12	20	20	25	27	125	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017
B0U11L2525M12	86,62	PCLNL 2525 M12	25	25	32	28	150	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017
B0U11R2525M16	86,62	PCLNR 2525 M16	25	25	32	33	150	CN..1606..	BRICA018	BRICA019	BRICA014	BRICA020	BRICA021
B0U11L2525M16	86,62	PCLNL 2525 M16	25	25	32	33	150	CN..1606..	BRICA018	BRICA019	BRICA014	BRICA020	BRICA021
B0U11R3232P19	95,58	PCLNR 3232 P19	32	32	40	38	170	CN..1906..	BRICA022	BRICA023	BRICA024	BRICA025	BRICA026
B0U11R4040S19	(162,64)	PCLNR 4040 S19	40	40	50	38	250	CN..1906..	BRICA022	BRICA023	BRICA024	BRICA025	BRICA026
B0U11L3232P19	95,58	PCLNL 3232 P19	32	32	40	38	170	CN..1906..	BRICA022	BRICA023	BRICA024	BRICA025	BRICA026
B0U11L4040S19	(162,64)	PCLNL 4040 S19	40	40	50	38	250	CN..1906..	BRICA022	BRICA023	BRICA024	BRICA025	BRICA026

Indivisible package Suggested retail package - Unit price

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - C SHAPE

KERFOLG Turn

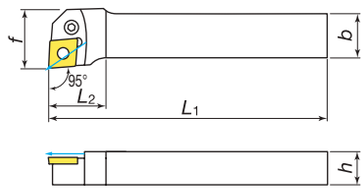
CN...

ART. B0U13

Material Steel
Clamping system P (lever)
Application External Turning and Facing

Connector 1/8" Gas included

PCLNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Support	Spring pin
B0U13L1616H12	(209,48)	PCLNL 1616 H12 IK G1/8	16	16	20	26.1	100	CN..1204..	BRICA249	BRICA252	BRICA256	BRICA244	BRICA254
B0U13L2020K12	(220,50)	PCLNL 2020 K12 IK G1/8	20	20	25	27.4	125	CN..1204..	BRICA249	BRICA252	BRICA256	BRICA244	BRICA254
B0U13L2525M12	(237,09)	PCLNL 2525 M12 IK G1/8	25	25	32	28	150	CN..1204..	BRICA249	BRICA252	BRICA256	BRICA244	BRICA254
B0U13R1616H12	(209,48)	PCLNR 1616 H12 IK G1/8	16	16	20	26.1	100	CN..1204..	BRICA249	BRICA252	BRICA256	BRICA244	BRICA254
B0U13R2020K12	(220,50)	PCLNR 2020 K12 IK G1/8	20	20	25	27.4	125	CN..1204..	BRICA249	BRICA252	BRICA256	BRICA244	BRICA254
B0U13R2525M12	(237,09)	PCLNR 2525 M12 IK G1/8	25	25	32	28	150	CN..1204..	BRICA249	BRICA252	BRICA256	BRICA244	BRICA254

INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - C SHAPE

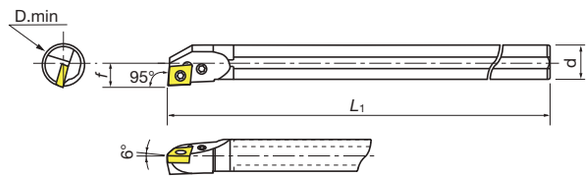
KERFOLG Turn

CN...

ART. B0U15

Material Steel
Clamping system P (lever)
Application Internal turning

A....PCLNR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Shim	Spring pin
B0U15R2512	197,25	A25R PCLNR 12	32	25	17	200	CN..1204..	BRICA013	BRICA053	BRICA015	BRICA007	BRICA017
B0U15R3212	220,94	A32S PCLNR 12	40	32	22	250	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017
B0U15R4012	262,44	A40V PCLNR 12	50	40	27	300	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017
B0U15L2512	197,25	A25R PCLNL 12	32	25	17	200	CN..1204..	BRICA013	BRICA053	BRICA015	BRICA007	BRICA017
B0U15L3212	220,94	A32S PCLNL 12	40	32	22	250	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017
B0U15L4012	262,44	A40V PCLNL 12	50	40	27	300	CN..1204..	BRICA013	BRICA027	BRICA015	BRICA007	BRICA017

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - D SHAPE

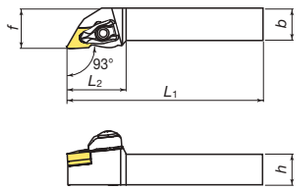
KERFOLG Turn

DN...

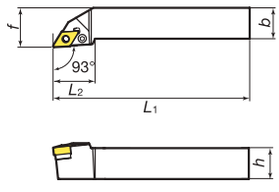
ART. B0U20

Material Steel
Clamping system D - P (clamp - lever)
Application Turning and copying

DDJNR/L



PDJNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Clamp	Wrench	Shim	Support screw	Spring pin
B0U20R2020K15	112,25	DDJNR 2020 K15	20	20	25	35	125	DN..1506..	BRICA005	BRICA006	BRICA028	BRICA008	/
B0U20R2525M15	113,85	DDJNR 2525 M15	25	25	32	36	150	DN..1506..	BRICA005	BRICA006	BRICA028	BRICA008	/
B0U20L2020K15	113,99	DDJNL 2020 K15	20	20	25	35	125	DN..1506..	BRICA005	BRICA006	BRICA028	BRICA008	/
B0U20L2525M15	113,85	DDJNL 2525 M15	25	25	32	36	150	DN..1506..	BRICA005	BRICA006	BRICA028	BRICA008	/

Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Shim	Spring pin
B0U21R2020K15	90,64	PDJNR 2020 K15	20	20	25	35	125	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017
B0U21R2525M15	93,94	PDJNR 2525 M15	25	25	32	36	150	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017
B0U21L2020K15	90,64	PDJNL 2020 K15	20	20	25	35	125	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017
B0U21L2525M15	93,94	PDJNL 2525 M15	25	25	32	35	150	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - D SHAPE

KERFOLG Turn

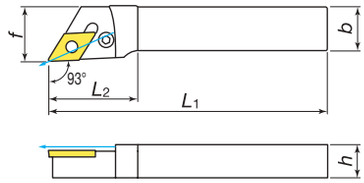
DN...

ART. B0U23

Material Steel
Clamping system P (lever)
Application Turnings, Facing and Chamfers

Connector 1/8" Gas included

PDJNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Support	Spring pin
B0U23L1616H11	(209,48)	PDJNL 1616 H11 IK G1/8	16	16	20	30	100	DN..1104..	BRICA250	BRICA253	BRICA256	BRICA245	BRICA255
B0U23L2020K15	(220,50)	PDJNL 2020 K15 IK G1/8	20	20	25	30	125	DN..1506..	BRICA251	BRICA252	BRICA256	BRICA246	BRICA254
B0U23L2525M15	(237,09)	PDJNL 2525 M15 IK G1/8	25	25	32	30	150	DN..1506..	BRICA251	BRICA252	BRICA256	BRICA246	BRICA254
B0U23R1616H11	(209,48)	PDJNR 1616 H11 IK G1/8	16	16	20	30	100	DN..1104..	BRICA250	BRICA253	BRICA256	BRICA245	BRICA255
B0U23R2020K15	(220,50)	PDJNR 2020 K15 IK G1/8	20	20	25	30	125	DN..1506..	BRICA251	BRICA252	BRICA256	BRICA246	BRICA254
B0U23R2525M15	(237,09)	PDJNR 2525 M15 IK G1/8	25	25	32	30	150	DN..1506..	BRICA251	BRICA252	BRICA256	BRICA246	BRICA254

INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - D SHAPE

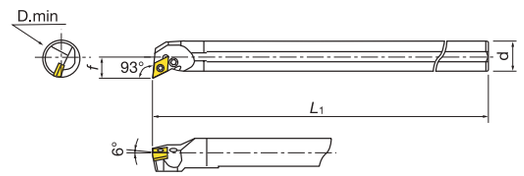
KERFOLG Turn

DN...

ART. B0U25

Material Steel
Clamping system P (lever)
Application Turning and copying

A....PDUNR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Support	Spring pin
B0U25R2511	311,68	A25R PDUNR 11	32	25	17	200	DN..1104..	BRICA054	BRICA035	BRICA056	BRICA057	BRICA058
B0U25R3215	220,94	A32S PDUNR 15	40	32	22	250	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017
B0U25R4015	262,44	A40T PDUNR 15	50	40	27	300	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017
B0U25L2511	316,41	A25R PDUNL 11	32	25	17	200	DN..1104..	BRICA054	BRICA035	BRICA056	BRICA057	BRICA058
B0U25L3215	220,94	A32S PDUNL 15	40	32	22	250	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017
B0U25L4015	262,44	A40T PDUNL 15	50	40	27	300	DN..1506..	BRICA059	BRICA030	BRICA015	BRICA031	BRICA017

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - S SHAPE

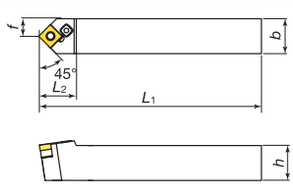
KERFOLG Turn

SN...

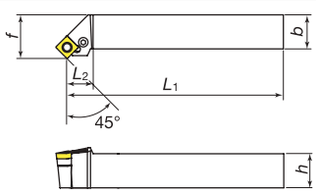
ART. B0U33

Material Steel
Clamping system P (lever)
Application Turnings, Facing and Chamfers

PSDNN



PSSNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Shim	Spring pin
B0U33N2020K12	78,07	PSDNN 2020 K12	20	20	10.3	28	125	SN..1204..	BRICA013	BRICA027	BRICA015	BRICA038	BRICA017
B0U33N2525M12	86,62	PSDNN 2525 M12	25	25	12.8	29	150	SN..1906..	BRICA013	BRICA027	BRICA015	BRICA038	BRICA017
B0U33N3232P19	95,58	PSDNN 3232 P19	32	32	16.5	40	170	SN..1906..	BRICA022	BRICA023	BRICA024	BRICA039	BRICA026

Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Shim	Spring pin
B0U34R2020K12	75,91	PSSNR 2020 K12	20	20	25	29	125	SN..1204..	BRICA013	BRICA027	BRICA015	BRICA038	BRICA017
B0U34R2525M12	84,15	PSSNR 2525 M12	25	25	32	29	150	SN..1204..	BRICA013	BRICA027	BRICA015	BRICA038	BRICA017
B0U34L2020K12	75,91	PSSNL 2020 K12	20	20	25	29	125	SN..1204..	BRICA013	BRICA027	BRICA015	BRICA038	BRICA017
B0U34L2525M12	84,15	PSSNL 2525 M12	25	25	32	29	150	SN..1204..	BRICA013	BRICA027	BRICA015	BRICA038	BRICA017
B0U34R3232P19	92,80	PSSNR 3232 P19	32	32	40	41	170	SN..1906..	BRICA022	BRICA023	BRICA024	BRICA039	BRICA026
B0U34R4040S19	(157,80)	PSSNR 4040 S19	40	40	50	41	250	SN..1906..	BRICA022	BRICA023	BRICA024	BRICA039	BRICA026
B0U34L3232P19	92,80	PSSNL 3232 P19	32	32	40	41	170	SN..1906..	BRICA022	BRICA023	BRICA024	BRICA039	BRICA026
B0U34L4040S19	(157,80)	PSSNL 4040 S19	40	40	50	41	250	SN..1906..	BRICA022	BRICA023	BRICA024	BRICA039	BRICA026

Indivisible package Suggested retail package - Unit price

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - S SHAPE

KERFOLG Turn

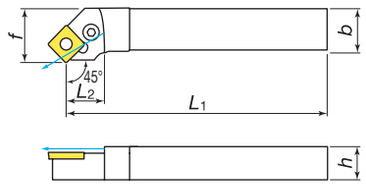
SN...

ART. B0U35

Material Steel
Clamping system P (lever)
Application Turnings, Facing and Chamfers

Connector 1/8" Gas included

PSSNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Support	Spring pin
B0U35L2020K12	(220,50)	PSSNL 2020 K12 IK G1/8	20	20	25	29.4	125	SN..1204..	BRICA249	BRICA252	BRICA256	BRICA247	BRICA254
B0U35L2525M12	(237,09)	PSSNL 2525 M12 IK G1/8	25	25	32	29.3	150	SN..1204..	BRICA249	BRICA252	BRICA256	BRICA247	BRICA254
B0U35R2020K12	(220,50)	PSSNR 2020 K12 IK G1/8	20	20	25	29.4	125	SN..1204..	BRICA249	BRICA252	BRICA256	BRICA247	BRICA254
B0U35R2525M12	(237,09)	PSSNR 2525 M12 IK G1/8	25	25	32	29.3	150	SN..1204..	BRICA249	BRICA252	BRICA256	BRICA247	BRICA254

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - T SHAPE

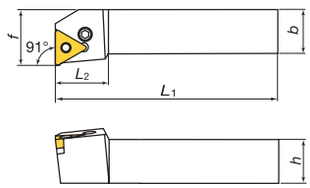
KERFOLG Turn

TN...

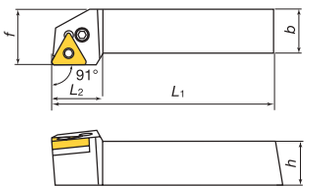
ART. B0U40

Material Steel
Clamping system P (lever)
Application Turning and facing

PTFNR/L



PTGNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Shim	Spring pin
B0U40R2020K16	78,07	PTFNR 2020 K16	20	20	25	20	125	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U40R2525M16	86,62	PTFNR 2525 M16	25	25	32	22	150	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U40L2020K16	78,07	PTFNL 2020 K16	20	20	25	20	125	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U40L2525M16	86,62	PTFNL 2525 M16	25	25	32	22	150	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037

Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Shim	Spring pin
B0U41R2020K16	78,07	PTGNR 2020 K16	20	20	25	20	125	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U41R2525M16	86,62	PTGNR 2525 M16	25	25	32	20	150	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U41L2020K16	78,07	PTGNL 2020 K16	20	20	25	20	125	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U41L2525M16	86,62	PTGNL 2525 M16	25	25	32	20	150	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U41R2525M22	86,62	PTGNR 2525 M22	25	25	32	29	150	TN..2204..	BRICA013	BRICA027	BRICA015	BRICA033	BRICA017
B0U41R3225P22	89,71	PTGNR 3225 P22	25	32	40	29	170	TN..2204..	BRICA013	BRICA027	BRICA015	BRICA033	BRICA017
B0U41L2525M22	86,62	PTGNL 2525 M22	25	25	32	29	150	TN..2204..	BRICA013	BRICA027	BRICA015	BRICA033	BRICA017
B0U41L3225P22	89,71	PTGNL 3225 P22	25	32	40	29	170	TN..2204..	BRICA013	BRICA027	BRICA015	BRICA033	BRICA017

INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - T SHAPE

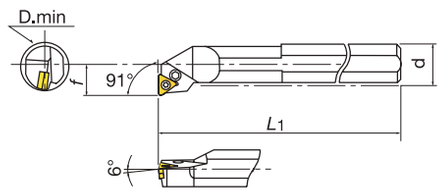
KERFOLG Turn

TN...

ART. B0U45

Material Steel
Clamping system P (lever)
Application Internal turning

A....PTFNR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Shim	Spring pin
B0U45R2516	197,25	A25R PTFNR 16	32	25	17	200	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U45R3216	220,94	A32S PTFNR 16	40	32	22	250	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U45L2516	197,25	A25R PTFNL 16	32	25	17	200	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037
B0U45L3216	220,94	A32S PTFNL 16	40	32	22	250	TN..1604..	BRICA034	BRICA035	BRICA056	BRICA036	BRICA037

EXTERNAL TURNING TOOLHOLDERS FOR NEGATIVE INSERTS - V SHAPE

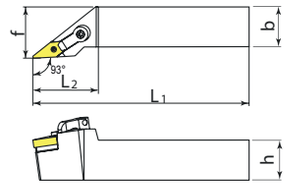
KERFOLG Turn

VN...

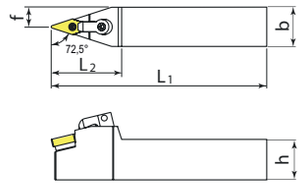
ART. B0U47

Material Steel
Clamping system M (Clamp and lever)
Application Turning and profiling

MVJNR/L



MVVNN



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Lever screw	Wrench	Shim	Support screw
B0U47R2016	155,30	MVJNR 2020 K16	20	20	25	32	125	VN...1604..	BRICA085	BRICA086	BRICA093	BRICA095	BRICA096
B0U47L2016	147,11	MVJNL 2020 K16	20	20	25	32	125	VN...1604..	BRICA085	BRICA086	BRICA093	BRICA095	BRICA096
B0U47R2516	168,89	MVJNR 2525 K16	25	25	32	32	150	VN...1604..	BRICA085	BRICA086	BRICA093	BRICA095	BRICA096
B0U47L2516	152,96	MVJNL 2525 K16	25	25	32	32	150	VN...1604..	BRICA085	BRICA086	BRICA093	BRICA095	BRICA096

Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Lever screw	Wrench	Shim	Support screw
B0U48N2016	155,30	MVVNN 2020 K16	20	20	10	45	125	VN..1604..	BRICA085	BRICA086	BRICA093	BRICA095	BRICA096
B0U48N2516	168,89	MVVNN 2525 M16	25	25	12,5	45	150	VN..1604..	BRICA085	BRICA086	BRICA093	BRICA095	BRICA096

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - W SHAPE

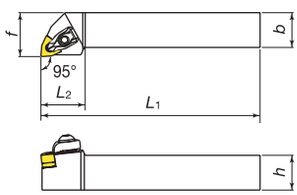
KERFOLG Turn

WN...

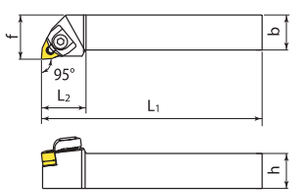
ART. B0U50

Material Steel
Clamping system D - M (Clamp - Clamp and Pin)

DWLNR/L



MWLNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Clamp	Wrench	Shim	Support screw	Dowel
B0U50R2020K08	113,99	DWLNR 2020 K08	20	20	25	125	30	WN..0804..	BRICA005	BRICA006	BRICA062	BRICA008	/
B0U50R2525M08	113,85	DWLNR 2525 M08	25	25	32	150	33	WN..0804..	BRICA005	BRICA006	BRICA062	BRICA008	/
B0U50L2020K08	112,25	DWLNL 2020 K08	20	20	25	125	30	WN..0804..	BRICA005	BRICA006	BRICA062	BRICA008	/
B0U50L2525M08	113,85	DWLNL 2525 M08	25	25	32	150	33	WN..0804..	BRICA005	BRICA006	BRICA062	BRICA008	/

Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Clamp	Wrench	Shim	Pin	Dowel
B0U51R2020K08	78,07	MWLNR 2020 K08	20	20	25	28	125	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA081	BRICA091
B0U51R2525M08	86,62	MWLNR 2525 M08	25	25	32	31	150	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA081	BRICA091
B0U51L2020K08	78,07	MWLNL 2020 K08	20	20	25	28	125	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA081	BRICA091
B0U51L2525M08	86,62	MWLNL 2525 M08	25	25	32	31	150	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA081	BRICA091

EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - W SHAPE

KERFOLG Turn

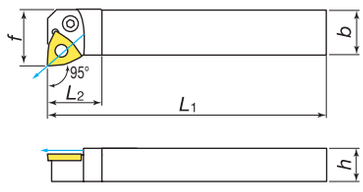
WN...

ART. B0U49

Material Steel
Clamping system P (lever)
Application Turnings, Facing and Chamfers

Connector 1/8" Gas included

PWLNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Lever	Screw	Wrench	Support	Spring pin
B0U49L2020K08	(220,50)	PWLNL 2020 K08 IK G1/8	20	20	25	29.4	125	WN..0804..	BRICA249	BRICA252	BRICA256	BRICA248	BRICA254
B0U49L2525M08	(237,09)	PWLNL 2525 M08 IK G1/8	25	25	32	29.3	150	WN..0804..	BRICA249	BRICA252	BRICA256	BRICA248	BRICA254
B0U49R2020K08	(220,50)	PWLNR 2020 K08 IK G1/8	20	20	25	29.4	125	WN..0804..	BRICA249	BRICA252	BRICA256	BRICA248	BRICA254
B0U49R2525M08	(237,09)	PWLNR 2525 M08 IK G1/8	25	25	32	29.3	150	WN..0804..	BRICA249	BRICA252	BRICA256	BRICA248	BRICA254

Indivisible package Suggested retail package - Unit price

INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - W SHAPE

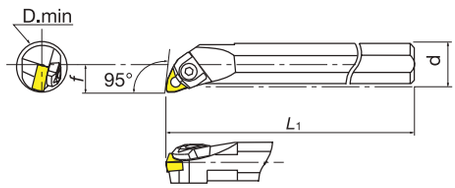
KERFOLG Turn

WN...

ART. B0U55

Material Steel
Clamping system M (Clamp and Pin)
Application Internal turning

A....MWLNR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	Inserts	SPARE PARTS INCLUDED Clamp	Wrench	Shim	Pin	Pin screw
B0U55R2508	189,83	A25R MWLNR 08	32	25	17	200	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA061	BRICA092
B0U55R3208	220,94	A32S MWLNR 08	40	32	22	250	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA061	BRICA092
B0U55R4008	262,44	A40T MWLNR 08	50	40	27	300	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA061	BRICA092
B0U55L2508	189,83	A25R MWLNL 08	32	25	17	200	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA061	BRICA092
B0U55L3208	220,94	A32S MWLNL 08	40	32	22	250	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA061	BRICA092
B0U55L4008	262,44	A40T MWLNL 08	50	40	27	300	WN..0804..	BRICA060	BRICA056	BRICA062	BRICA061	BRICA092

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - C SHAPE

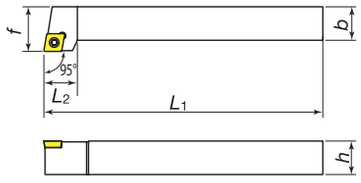
KERFOLG Turn

CC...

ART. B1U10

Material Steel
Clamping system S (Screw)
Application Turning and facing

SCLCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U10R0808D06	67,16	SCLCR 0808 D06	8	8	10	9	60	CC...0602	BRICA136	BRICA002	/	/
B1U10L0808D06	67,16	SCLCL 0808 D06	8	8	10	9	60	CC...0602	BRICA136	BRICA002	/	/
B1U10R1010E06	67,16	SCLCR 1010 E06	10	10	12	10	70	CC...0602	BRICA136	BRICA002	/	/
B1U10L1010E06	67,16	SCLCL 1010 E06	10	10	12	10	70	CC...0602	BRICA136	BRICA002	/	/
B1U10R1212F09	71,48	SCLCR 1212 F09	12	12	16	17	80	CC..09T3..	BRICA137	BRICA141	/	/
B1U10R1616H09	74,37	SCLCR 1616 H09	16	16	20	17	100	CC..09T3..	BRICA137	BRICA141	BRICA143	BRICA145
B1U10R2020K09	87,86	SCLCR 2020 K09	20	20	25	18	125	CC..09T3..	BRICA137	BRICA141	BRICA143	BRICA145
B1U10L1212F09	71,48	SCLCL 1212 F09	12	12	16	17	80	CC..09T3..	BRICA137	BRICA141	/	/
B1U10L1616H09	74,37	SCLCL 1616 H09	16	16	20	17	100	CC..09T3..	BRICA137	BRICA141	BRICA143	BRICA145
B1U10L2020K09	87,86	SCLCL 2020 K09	20	20	25	18	125	CC..09T3..	BRICA137	BRICA141	BRICA143	BRICA145
B1U10L2020K12	87,86	SCLCL 2020 K12	20	20	25	20	125	CC..1204..	BRICA138	BRICA141	BRICA144	BRICA146
B1U10R2525M12	87,86	SCLCR 2525 M12	25	25	32	20	150	CC..1204..	BRICA138	BRICA141	BRICA144	BRICA146
B1U10R2020K12	87,86	SCLCR 2020 K12	20	20	25	20	125	CC..1204..	BRICA138	BRICA141	BRICA144	BRICA146
B1U10L2525M12	87,86	SCLCL 2525 M12	25	25	32	20	150	CC..1204..	BRICA138	BRICA141	BRICA144	BRICA146

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - C SHAPE

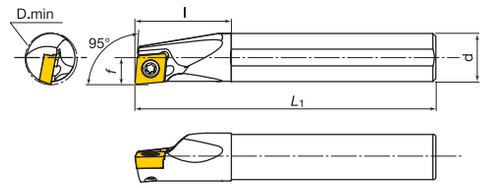
KERFOLG Turn

CC...

ART. B1U15

Material Steel
Clamping system S (Screw)
Application Internal turning

A...SCLCR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U15R0806	99,23	A08H SCLCR 06	10	8	6	100	17,8	CC..0602..	BRICA147	BRICA002	/	/
B1U15L0806	99,23	A08H SCLCL 06	10	8	6	100	17,8	CC..0602..	BRICA147	BRICA002	/	/
B1U15R1006	102,53	A10K SCLCR 06	12	10	7	125	17,7	CC..0602..	BRICA147	BRICA002	/	/
B1U15L1006	102,53	A10K SCLCL 06	12	10	7	125	17,7	CC..0602..	BRICA147	BRICA002	/	/
B1U15R1206	104,74	A12L SCLCR 06	16	12	9	140	24,2	CC..0602..	BRICA147	BRICA002	/	/
B1U15L1206	104,74	A12L SCLCL 06	16	12	9	140	24,2	CC..0602..	BRICA147	BRICA002	/	/
B1U15R1609	121,64	A16Q SCLCR 09	20	16	11	180	26,7	CC..09T3..	BRICA148	BRICA004	/	/
B1U15L1609	113,62	A16Q SCLCL 09	20	16	11	180	26,7	CC..09T3..	BRICA148	BRICA004	/	/
B1U15R2009	120,17	A20R SCLCR 09	25	20	13	200	36,7	CC..09T3..	BRICA148	BRICA004	/	/
B1U15L2009	120,17	A20R SCLCL 09	25	20	13	200	36,7	CC..09T3..	BRICA148	BRICA004	/	/
B1U15R2512	167,58	A25R SCLCR 12	32	25	17	200	40	CC..1204..	BRICA032	BRICA135	/	/
B1U15L2512	167,58	A25R SCLCL 12	32	25	17	200	40	CC..1204..	BRICA032	BRICA135	/	/
B1U15R3212	237,04	A32S SCLCR 12	40	32	22	250	30	CC..1204..	BRICA149	BRICA004	BRICA144	BRICA146
B1U15L3212	237,04	A32S SCLCL 12	40	32	22	250	30	CC..1204..	BRICA149	BRICA004	BRICA144	BRICA146
B1U15R4012	(309,80)	A40T SCLCR 12	49	40	27	300	31	CC..1204..	BRICA149	BRICA004	BRICA144	BRICA146
B1U15L4012	(309,80)	A40T SCLCL 12	49	40	27	300	31	CC..1204..	BRICA149	BRICA004	BRICA144	BRICA146

INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - C SHAPE

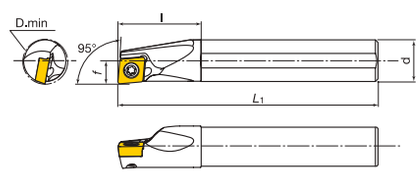
KERFOLG Turn

CC...

ART. B1U13

Materiale Carbide
Clamping system S (Screw)
Application Esecuzione di torniture interne

E...SCLCR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver
B1U13R0603	(255,85)	E06J SCLCR 03	7	6	3,5	110	10	CC...0301...	BRICA236	BRICA151
B1U13L0603	(255,85)	E06J SCLCL 03	7	6	3,5	110	10	CC...0301...	BRICA236	BRICA151
B1U13R0806	216,16	E08K SCLCR 06	10	8	5	125	10	CC...0602...	BRICA147	BRICA002
B1U13L0806	216,16	E08K SCLCL 06	10	8	5	125	10	CC...0602...	BRICA147	BRICA002
B1U13R1006	216,16	E10K SCLCR 06	12	10	6	125	10	CC...0602...	BRICA147	BRICA002
B1U13L1006	216,16	E10K SCLCL 06	12	10	6	125	10	CC...0602...	BRICA147	BRICA002
B1U13R1206	239,24	E12M SCLCR 06	14	12	8	150	10	CC...0602...	BRICA147	BRICA002
B1U13L1206	239,24	E12M SCLCL 06	14	12	8	150	10	CC...0602...	BRICA147	BRICA002
B1U13R1609	(414,21)	E16R SCLCR 09	18	16	10	200	16	CC...09T3...	BRICA148	BRICA002
B1U13L1609	(422,32)	E16R SCLCL 09	18	16	10	200	16	CC...09T3...	BRICA148	BRICA002
B1U13R2009	(915,07)	E20S SCLCR 09	23	20	12	250	16	CC...09T3...	BRICA148	BRICA002
B1U13L2009	(915,07)	E20S SCLCL 09	23	20	12	250	16	CC...09T3...	BRICA148	BRICA002
B1U13R2512	(1282,26)	E25S SCLCR 12	30	25	15	250	16	CC...1204...	BRICA032	BRICA135
B1U13L2512	(1467,49)	E25S SCLCL 12	30	25	15	250	16	CC...1204...	BRICA032	BRICA135

Indivisible package Suggested retail package - Unit price

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - C SHAPE

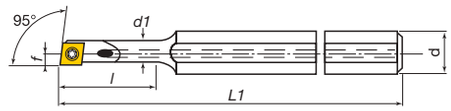
KERFOLG Turn

CC...

ART. B1U11

Material Steel
Clamping system S (Screw)
Application Internal turning

A...SCLCR/L



Tech. Code	GR18 Euro	Description	D min. mm	d mm	d1 mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver
B1U11L060806	77,24	A 0608H SCLCL 06	8	8	6	4	100	21,5	CC..0602..	BRICA147	BRICA002
B1U11L081006	80,55	A 0810J SCLCL 06	11	10	8	6	110	27	CC..0602..	BRICA147	BRICA002
B1U11L101206	86,06	A 1012K SCLCL 06	13	12	10	7	125	32,5	CC..0602..	BRICA147	BRICA002
B1U11L121606	89,30	A 1216M SCLCL 06	16	16	12	9	150	42	CC..0602..	BRICA147	BRICA002
B1U11R060806	77,24	A 0608H SCLCR 06	8	8	6	4	100	21,5	CC..0602..	BRICA147	BRICA002
B1U11R081006	80,55	A 0810J SCLCR 06	11	10	8	6	110	27	CC..0602..	BRICA147	BRICA002
B1U11R101206	86,06	A 1012K SCLCR 06	13	12	10	7	125	32,5	CC..0602..	BRICA147	BRICA002
B1U11R121606	89,30	A 1216M SCLCR 06	16	16	12	9	150	42	CC..0602..	BRICA147	BRICA002

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - C SHAPE

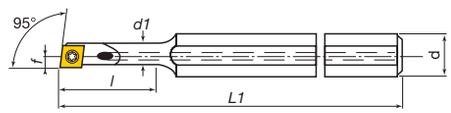
KERFOLG Turn

CC...

ART. B1U14

Material High speed steel
Clamping system S (Screw)
Application Internal turning

AH...SCLCR/L



Tech. Code	GR18 Euro	Description	Dmin. mm	d mm	d1 mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver
B1U14R060806	(123,54)	AH 0608H SCLCR 06	8	8	6	4	100	25	CC..0602..	BRICA147	BRICA002
B1U14R081006	(129,05)	AH 0810J SCLCR 06	12	10	8	6	110	32	CC..0602..	BRICA147	BRICA002
B1U14R101206	(135,67)	AH 1012K SCLCR 06	14	12	10	7	125	38	CC..0602..	BRICA147	BRICA002
B1U14R121606	(174,20)	AH 1216M SCLCR 06	18	16	12	9	150	50	CC..0602..	BRICA147	BRICA002
B1U14L060806	(123,54)	AH 0608H SCLCL 06	8	8	6	4	100	25	CC..0602..	BRICA147	BRICA002
B1U14L081006	(129,05)	AH 0810J SCLCL 06	12	10	8	6	110	32	CC..0602..	BRICA147	BRICA002
B1U14L101206	(135,67)	AH 1012K SCLCL 06	14	12	10	7	125	38	CC..0602..	BRICA147	BRICA002
B1U14L121606	(174,20)	AH 1216M SCLCL 06	18	16	12	9	150	50	CC..0602..	BRICA147	BRICA002

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - C SHAPE

KERFOLG Turn

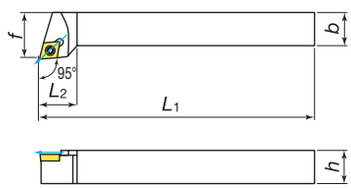
CC...

ART. B1U12

Material Steel
Clamping system S (Screw)
Application External Turning and Facing

Connector 1/8" Gas included

SCLCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Support	Support screw
B1U12L1616H09	(206,17)	SCLCL 1616 H09 IK G1/8	16	16	20	17	100	CC..09T3..	BRICA137	BRICA004	BRICA143	BRICA145
B1U12L2020K09	(213,89)	SCLCL 2020 K09 IK G1/8	20	20	25	17	125	CC..09T3..	BRICA137	BRICA004	BRICA143	BRICA145
B1U12L2525M12	(224,96)	SCLCL 2525 M12 IK G1/8	25	25	32	20	150	CC..1204..	BRICA149	BRICA004	BRICA144	BRICA146
B1U12R1616H09	(206,17)	SCLCR 1616 H09 IK G1/8	16	16	20	17	100	CC..09T3..	BRICA137	BRICA004	BRICA143	BRICA145
B1U12R2020K09	(213,89)	SCLCR 2020 K09 IK G1/8	20	20	25	17	125	CC..09T3..	BRICA137	BRICA004	BRICA143	BRICA145
B1U12R2525M12	(224,96)	SCLCR 2525 M12 IK G1/8	25	25	32	20	150	CC..1204..	BRICA149	BRICA004	BRICA144	BRICA146

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - D SHAPE

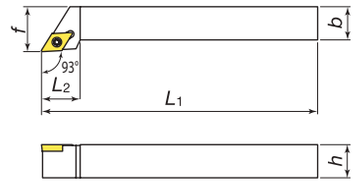
KERFOLG Turn

DC...

ART. B1U20

Material Steel
Clamping system S (Screw)
Application Turning and copying

SDJCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U20R0808D07	72,77	SDJCR 0808 D07	8	8	10	12,8	60	DC..0702..	BRICA136	BRICA004	/	/
B1U20L0808D07	72,77	SDJCL 0808 D07	8	8	10	12,8	60	DC..0702..	BRICA136	BRICA004	/	/
B1U20R1010E07	72,31	SDJCR 1010 E07	10	10	12	12,8	70	DC..0702..	BRICA136	BRICA004	/	/
B1U20R1212F07	77,04	SDJCR 1212 F07	12	12	16	17	80	DC..0702..	BRICA136	BRICA004	/	/
B1U20L1010E07	72,31	SDJCL 1010 E07	10	10	12	12,8	70	DC..0702..	BRICA136	BRICA004	/	/
B1U20L1212F07	77,04	SDJCL 1212 F07	12	12	16	17	80	DC..0702..	BRICA136	BRICA004	/	/
B1U20R1616H11	113,20	SDJCR 1616 H11	16	16	20	20	100	DC..11T3..	BRICA137	BRICA004	BRICA229	BRICA049
B1U20R2020K11	117,94	SDJCR 2020 K11	20	20	25	20,5	125	DC..11T3..	BRICA137	BRICA004	BRICA229	BRICA049
B1U20R2525M11	125,56	SDJCR 2525 M11	25	25	32	21,5	150	DC..11T3..	BRICA137	BRICA004	BRICA229	BRICA049
B1U20L1616H11	113,20	SDJCL 1616 H11	16	16	20	20	100	DC..11T3..	BRICA137	BRICA004	BRICA229	BRICA049
B1U20L2020K11	117,94	SDJCL 2020 K11	20	20	25	20,5	125	DC..11T3..	BRICA137	BRICA004	BRICA229	BRICA049
B1U20L2525M11	125,56	SDJCL 2525 M11	25	25	32	21,5	150	DC..11T3..	BRICA137	BRICA004	BRICA229	BRICA049

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - D SHAPE

KERFOLG Turn

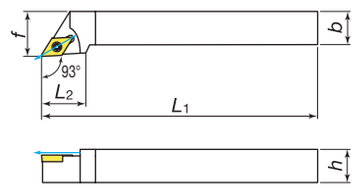
DC...

ART. B1U22

Material Steel
Clamping system S (Screw)
Application Turning and copying

Connector 1/8" Gas included

SDJCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Support	Support screw
B1U22L1616H11	(206,17)	SDJCL 1616 H11 IK G1/8	16	16	20	20	100	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U22L2020K11	(213,89)	SDJCL 2020 K11 IK G1/8	20	20	25	24	125	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U22L2525M11	(224,96)	SDJCL 2525 M11 IK G1/8	25	25	32	27	150	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U22R1616H11	(206,17)	SDJCR 1616 H11 IK G1/8	16	16	20	20	100	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U22R2020K11	(213,89)	SDJCR 2020 K11 IK G1/8	20	20	25	24	125	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U22R2525M11	(224,96)	SDJCR 2525 M11 IK G1/8	25	25	32	27	150	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145

Indivisible package Suggested retail package - Unit price

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - D SHAPE

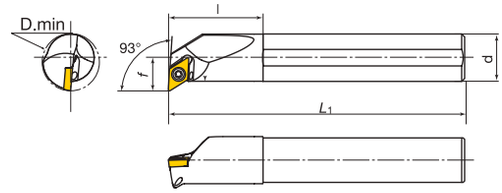
KERFOLG Turn

DC...

ART. B1U25

Material Steel
Clamping system S (Screw)
Application Internal turning

A...SDUCR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U25R1007	99,23	A10K SDUCR 07	13,5	10	7	125	15	DC..0702..	BRICA147	BRICA002	/	/
B1U25R1207	104,74	A12L SDUCR 07	16	12	9	140	20	DC..0702..	BRICA147	BRICA002	/	/
B1U25R1607	113,62	A16Q SDUCR 07	20	16	11	180	27	DC..0702..	BRICA147	BRICA002	/	/
B1U25R2011	125,69	A20R SDUCR 11	25	20	13	200	33,8	DC..11T3..	BRICA148	BRICA004	/	/
B1U25R2511	156,56	A25R SDUCR 11	32	25	17	200	35,8	DC..11T3..	BRICA148	BRICA004	/	/
B1U25R3211	228,22	A32S SDUCR11	40	32	22	250	18,5	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U25R4011	(309,80)	A40T SDUCR 11	49	40	27	300	18,5	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U25L1007	99,23	A10K SDUCL 07	13,5	10	7	125	15	DC..0702..	BRICA147	BRICA002	/	/
B1U25L1207	104,74	A12L SDUCL 07	16	12	9	140	20	DC..0702..	BRICA147	BRICA002	/	/
B1U25L1607	111,42	A16Q SDUCL 07	20	16	11	180	27	DC..0702..	BRICA147	BRICA002	/	/
B1U25L2011	125,69	A20R SDUCL 11	25	20	13	200	33,8	DC..11T3..	BRICA148	BRICA004	/	/
B1U25L2511	156,56	A25R SDUCL 11	32	25	17	200	35,8	DC..11T3..	BRICA148	BRICA004	/	/
B1U25L3211	228,22	A32S SDUCL 11	40	32	22	250	18,5	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145
B1U25L4011	(309,80)	A40T SDUCL 11	49	40	27	300	18,5	DC..11T3..	BRICA137	BRICA004	BRICA152	BRICA145

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - D SHAPE

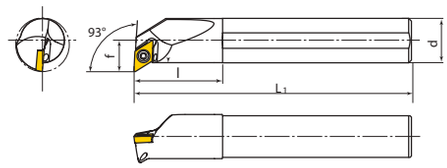
KERFOLG Turn

DC...

ART. B1U23

Material Carbide
Clamping system S (Screw)
Application Internal turning

E...SDUCR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver
B1U23R0807	179,71	E08K SDUCR 07	12.5	8	7.5	125	10	DC..0702..	BRICA147	BRICA002
B1U23R1007	185,22	E10K SDUCR 07	13.5	10	7.5	125	10	DC..0702..	BRICA147	BRICA002
B1U23R1207	219,45	E12M SDUCR 07	15	12	9	150	12.5	DC..0702..	BRICA147	BRICA002
B1U23R1607	370,50	E16R SDUCR 07	19	16	11	200	16.5	DC..0702..	BRICA147	BRICA002
B1U23R2011	(915,07)	E20S SDUCR 11	23.5	20	14	250	20.5	DC...11T3..	BRICA148	BRICA004
B1U23R2511	(1282,26)	E25S SDUCR 11	32	25	16	250	26	DC...11T3..	BRICA148	BRICA004
B1U23L0807	179,71	E08K SDUCL 07	12.5	8	7.5	125	10	DC..0702..	BRICA147	BRICA002
B1U23L1007	186,32	E10K SDUCL 07	13.5	10	7.5	125	10	DC..0702..	BRICA147	BRICA002
B1U23L1207	219,45	E12M SDUCL 07	15	12	9	150	12.5	DC..0702..	BRICA147	BRICA002
B1U23L1607	378,22	E16R SDUCL 07	19	16	11	200	16.5	DC..0702..	BRICA147	BRICA002
B1U23L2011	(897,44)	E20S SDUCL 11	23.5	20	14	250	20.5	DC...11T3..	BRICA148	BRICA004
B1U23L2511	(1282,26)	E25S SDUCL 11	32	25	16	250	26	DC...11T3..	BRICA148	BRICA004

INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - D SHAPE

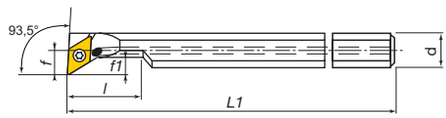
KERFOLG Turn

DC...

ART. B1U21

Material Steel
Clamping system S (Screw)
Application Esecuzione di torniture interne

A...SDUCR/L



Tech. Code	GR18 Euro	Description	D min. mm	d mm	f1 mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver
B1U21R081007	127,97	A0810H SDUCR 07	12,5	10	4,4	6,5	100	22,5	DC...0702...	BRICA147	BRICA002
B1U21L081007	127,97	A0810H SDUCL 07	12,5	10	4,4	6,5	100	22,5	DC...0702...	BRICA147	BRICA002
B1U21R101207	127,97	A1012K SDUCR 07	15,5	12	5,9	9	125	27,5	DC...0702...	BRICA147	BRICA002
B1U21L101207	127,97	A1012K SDUCL 07	15,5	12	5,9	9	125	27,5	DC...0702...	BRICA147	BRICA002
B1U21L121607	141,20	A1216M SDUCL 07	18	16	4,9	11	150	40,5	DC...0702...	BRICA147	BRICA002
B1U21R121607	141,20	A1216M SDUCR 07	18	16	4,9	11	150	40,5	DC...0702...	BRICA147	BRICA002

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - K SHAPE

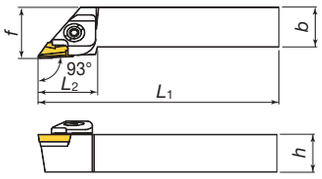
KERFOLG Turn

KN...

ART. B1U55

Material Steel
Clamping system C (Clamp)
Application External Turning

CKJNR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Clamp	Shim	Spring pin	Shim/clamp screw
B1U55L2020K16	118,35	CKJNL 2020 K16	20	20	30	34	125	KN..X1604..	BRICA177	BRICA178	BRICA180	BRICA181
B1U55L2525M16	132,13	CKJNL 2525 M16	25	25	32	34	150	KN..X1604..	BRICA177	BRICA178	BRICA180	BRICA181
B1U55L3232P16	173,08	CKJNL 3232 P16	32	32	40	34	170	KN..X1604..	BRICA177	BRICA178	BRICA180	BRICA181
B1U55R2020K16	116,62	CKJNR 2020 M16	20	20	30	34	125	KN..X1604..	BRICA176	BRICA179	BRICA180	BRICA181
B1U55R2525M16	130,14	CKJNR 2525 M16	25	25	32	34	150	KN..X1604..	BRICA176	BRICA179	BRICA180	BRICA181
B1U55R3232P16	173,08	CKJNR 3232 P16	32	32	40	34	170	KN..X1604..	BRICA176	BRICA179	BRICA180	BRICA181

EXTERNAL TURNING TOOL HOLDERS FOR POSITIVE INSERTS - R SHAPE

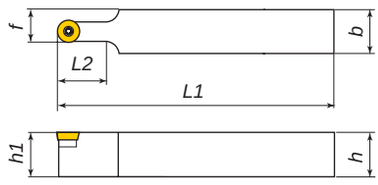
KERFOLG Turn

RC...

ART. B1U58

Material Steel
Clamping system S (Screw)
Application Esecuzione di tornitura e copiatura

SRDCN



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Clamp
B1U58N2020K08	87,96	SRDCN 2020 K08	20	20	14,0	16,4	125	RC..0803MO	BRICA237	BRICA002	/
B1U58N2525M08	95,17	SRDCN 2525 M08	25	25	16,5	16,4	150	RC..0803MO	BRICA237	BRICA002	/
B1U58N2020K10	87,96	SRDCN 2020 K10	20	20	15,0	20,3	125	RC..1003MO	BRICA010	BRICA004	BRICA145
B1U58N2525M10	95,17	SRDCN 2525 M10	25	25	17,5	20,3	150	RC..1003MO	BRICA010	BRICA004	BRICA145
B1U58N2020K12	87,96	SRDCN 2020 K12	20	20	16,0	20,3	125	RC..1204MO	BRICA010	BRICA004	BRICA145
B1U58N2525M12	95,17	SRDCN 2525 M12	25	25	18,5	20,3	150	RC..1204MO	BRICA010	BRICA004	BRICA145

Indivisible package Suggested retail package - Unit price

EXTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - R SHAPE

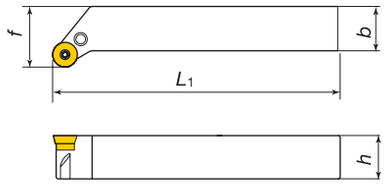
KERFOLG Turn

RC...

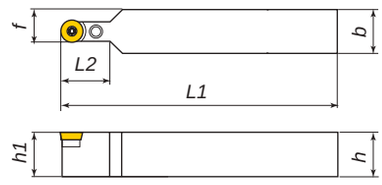
ART. B1U60 - B1U62

Material Steel
Clamping system P (lever)
Application Esecuzione di tornitura esterna

PRGCR/L



PRDCN



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L1 mm	Inserts	SPARE PARTS INCLUDED Clamp	Shim	Spring pin	Clamp screw
B1U60R3225P16	99,50	PRGCR 3225 P16	25	32	32	170	RC...1606MO	BRICA040	BRICA044	BRICA046	BRICA048
B1U60L3225P16	99,50	PRGCL 3225 P16	25	32	32	170	RC...1606MO	BRICA040	BRICA044	BRICA046	BRICA048
B1U60R3232P20	103,72	PRGCR 3232 P20	32	32	40	170	RC...2006MO	BRICA042	BRICA045	BRICA021	BRICA050
B1U60L3232P20	103,72	PRGCL 3232 P20	32	32	40	170	RC...2006MO	BRICA042	BRICA045	BRICA021	BRICA050

Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L1 mm	L2 mm	Inserts	SPARE PARTS INCLUDED Clamp	Shim	Spring pin	Clamp screw
B1U62N3225P16	(99,50)	PRDCN 3225 P16	32	25	20,4	170	34	RC...1606MO...	BRICA040	BRICA044	BRICA046	BRICA049
B1U62N3232P20	(103,72)	PRDCN 3232 P20	32	32	25,9	170	40	RC...2006MO...	BRICA042	BRICA045	BRICA021	BRICA050

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - S SHAPE

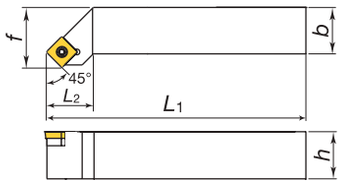
KERFOLG Turn

SC...

ART. B1U38

Material Steel
Clamping system S (Screw)
Application Turning and chamfering

SSSCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U38L1616H12	100,33	SSSCL 1616 H12	16	16	20	26	100	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146
B1U38L2020K12	104,79	SSSCL 2020 K12	20	20	25	26,7	125	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146
B1U38L2525M12	104,79	SSSCL 2525 M12	25	25	32	25	150	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146
B1U38R1616H12	100,33	SSSCR 1616 H12	16	16	20	26	100	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146
B1U38R2020K12	104,79	SSSCR 2020 K12	20	20	25	26,7	125	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146
B1U38R2525M12	104,79	SSSCR 2525 M12	25	25	32	25	150	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - S SHAPE

KERFOLG Turn

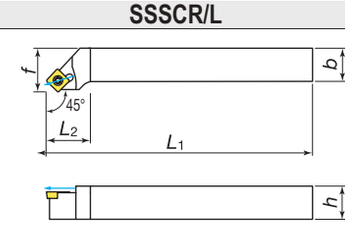
SC...

ART. B1U45

Material Steel
Clamping system Screw
Application External Turnings, Facing and Chamfers

Connector 1/8" G included

SSSCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Support	Support screw
B1U45L1616H09	(206,17)	SSSCL 1616 H09 IK G1/8	16	16	20	20	100	SC..09T3..	BRICA137	BRICA004	BRICA257	BRICA145
B1U45L2020K09	(213,89)	SSSCL 2020 K09 IK G1/8	20	20	25	20	125	SC..09T3..	BRICA137	BRICA004	BRICA257	BRICA145
B1U45L2525M12	(224,96)	SSSCL 2525 M12 IK G1/8	25	25	32	25	150	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146
B1U45R1616H09	(206,17)	SSSCR 1616 H09 IK G1/8	16	16	20	20	100	SC..09T3..	BRICA137	BRICA004	BRICA257	BRICA145
B1U45R2020K09	(213,89)	SSSCR 2020 K09 IK G1/8	20	20	25	20	125	SC..09T3..	BRICA137	BRICA004	BRICA257	BRICA145
B1U45R2525M12	(224,96)	SSSCR 2525 M12 IK G1/8	25	25	32	25	150	SC..1204..	BRICA149	BRICA004	BRICA175	BRICA146

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - T SHAPE

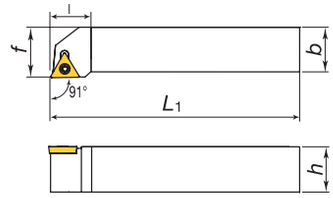
KERFOLG Turn

TC...

ART. B1U31

Material Steel
Clamping system S (Screw)
Application Turning and facing

STGCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U31R1616H16	75,09	STGCR 1616 H16	16	16	20	22	100	TC..16T3..	BRICA137	BRICA004	BRICA051	BRICA145
B1U31R2020K16	75,09	STGCR 2020 K16	20	20	25	22	125	TC..16T3..	BRICA137	BRICA004	BRICA051	BRICA145
B1U31R2525M16	86,62	STGCR 2525 M16	25	25	32	23	150	TC..16T3..	BRICA137	BRICA004	BRICA051	BRICA145
B1U31L1616H16	75,09	STGCL 1616 H16	16	16	20	22	100	TC..16T3..	BRICA137	BRICA004	BRICA051	BRICA145
B1U31L2020K16	75,09	STGCL 2020 K16	20	20	25	22	125	TC..16T3..	BRICA137	BRICA004	BRICA051	BRICA145
B1U31L2525M16	86,62	STGCL 2525 M16	25	25	32	23	150	TC..16T3..	BRICA137	BRICA004	BRICA051	BRICA145

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - T SHAPE

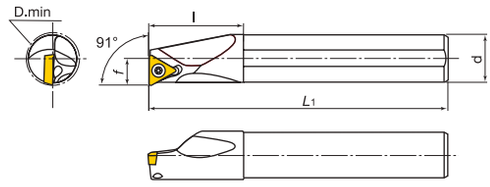
KERFOLG Turn

TC...

ART. B1U35

Material Steel
Clamping system S (Screw)
Application Internal turning

A...STFCR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U35R1011	99,23	A10K STFCR 11	13	10	7	125	22,8	TC..1102..	BRICA147	BRICA002	/	/
B1U35R1211	104,74	A12L STFCR 11	16	12	9	140	26,5	TC..1102..	BRICA147	BRICA002	/	/
B1U35R1611	113,62	A16Q STFCR 11	20	16	11	180	26,7	TC..1102..	BRICA147	BRICA002	/	/
B1U35R2016	119,07	A20R STFCR 16	25	20	13	200	36,6	TC..16T3..	BRICA148	BRICA004	/	/
B1U35R2516	158,76	A25R STFCR 16	32	25	17	200	41	TC..16T3..	BRICA148	BRICA004	/	/
B1U35R3216	230,42	A32S STFCR 16	40	32	22	250	34,6	TC..16T3..	BRICA137	BRICA004	BRICA153	BRICA145
B1U35R4016	282,24	A40T STFCR 16	49	40	27	300	37,5	TC..16T3..	BRICA137	BRICA004	BRICA153	BRICA145
B1U35L1011	99,23	A10K STFCL 11	13	10	7	125	22,8	TC..1102..	BRICA147	BRICA002	/	/
B1U35L1211	104,74	A12L STFCL 11	16	12	9	140	26,5	TC..1102..	BRICA147	BRICA002	/	/
B1U35L1611	113,62	A16Q STFCL 11	20	16	11	180	26,7	TC..1102..	BRICA147	BRICA002	/	/
B1U35L2016	119,07	A20R STFCL 16	25	20	13	200	36,6	TC..16T3..	BRICA148	BRICA004	/	/
B1U35L2516	158,76	A25R STFCL 16	32	25	17	200	41	TC..16T3..	BRICA148	BRICA004	/	/
B1U35L3216	230,42	A32S STFCL 16	40	32	22	250	34,6	TC..16T3..	BRICA137	BRICA004	BRICA153	BRICA145
B1U35L4016	282,24	A40T STFCL 16	49	40	27	300	37,5	TC..16T3..	BRICA137	BRICA004	BRICA153	BRICA145

Indivisible package Suggested retail package - Unit price

INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - T SHAPE

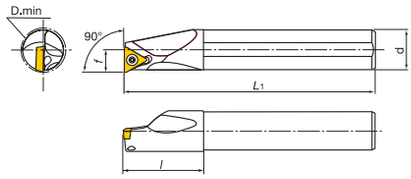
KERFOLG Turn

TC...

ART. B1U33

Materiale Carbide
Clamping system S (Screw)
Application Esecuzione di torniture interne

E...STFCR/L



Tech. Code	GR18 Euro	Description	D min. mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U33R1011	(242,62)	E10K STFCR 11	12	10	6	125	16	TC..1102..	BRICA147	BRICA002	/	/
B1U33L1011	(242,62)	E10K STFCL 11	12	10	6	125	16	TC..1102..	BRICA147	BRICA002	/	/
B1U33R1211	(256,95)	E12M STFCR 11	15	12	8	150	20	TC..1102..	BRICA147	BRICA002	/	/
B1U33L1211	(256,95)	E12M STFCL 11	15	12	8	150	20	TC..1102..	BRICA147	BRICA002	/	/
B1U33R1611	(448,79)	E16R STFCR 11	19	16	9,5	200	25	TC..1102..	BRICA147	BRICA002	/	/
B1U33L1611	(448,79)	E16R STFCL 11	19	16	9,5	200	25	TC..1102..	BRICA147	BRICA002	/	/
B1U33R2016	(915,07)	E20S STFCR 16	24	20	12	250	32	TC..16T3..	BRICA148	BRICA004	/	/
B1U33L2016	(915,07)	E20S STFCL 16	24	20	12	250	32	TC..16T3..	BRICA148	BRICA004	/	/
B1U33R2516	(1192,95)	E25S STFCR 16	27	25	13,5	250	40	TC..16T3..	BRICA148	BRICA004	/	/
B1U33L2516	(1192,95)	E25S STFCL 16	27	25	13,5	250	40	TC..16T3..	BRICA148	BRICA004	/	/

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - V SHAPE

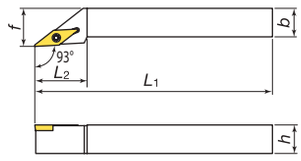
KERFOLG Turn

VB...

ART. B1U50

Material Steel
Clamping system S (Screw)
Application Turning and copying

SVJBR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U50L2020K16	110,31	SVJBL 2020 K16	20	20	25	29,5	125	VB..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U50L2525M16	122,16	SVJBL 2525 K16	25	25	32	33	150	VB..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U50R2020K16	110,31	SVJBR 2020 K16	20	20	25	29,5	125	VB..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U50R2525M16	122,16	SVJBR 2525 M16	25	25	32	33	150	VB..1604..	BRICA137	BRICA004	BRICA154	BRICA145

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - V SHAPE

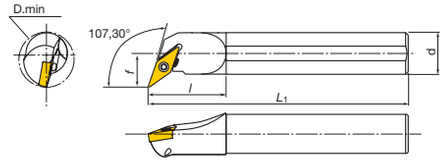
KERFOLG Turn

VB...

ART. B1U53

Material Steel
Clamping system S (Screw)
Application Internal Turning and facing

A...SVQBR/L



Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U53R2516	189,63	A25R SVQBR 16	32	25	17	200	40	VB..1604..	BRICA148	BRICA004	/	/
B1U53L2516	189,63	A25R SVQBL 16	32	25	17	200	40	VB..1604..	BRICA148	BRICA004	/	/

EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - V SHAPE

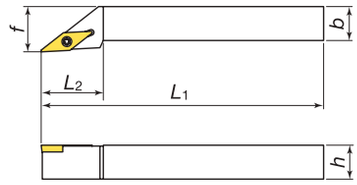
KERFOLG Turn

VC...

ART. B1U41

Material Steel
Clamping system S (Screw)
Application External turning

SVJCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Shim	Support screw
B1U41R1212F11	84,89	SVJCR 1212 F11	12	12	16	21,5	80	VC..1103..	BRICA136	BRICA002	/	/
B1U41L1212F11	84,89	SVJCL 1212 F11	12	12	16	21,5	80	VC..1103..	BRICA136	BRICA002	/	/
B1U41R1616H11	122,38	SVJCR 1616 H11	16	16	20	21,5	100	VC..1103..	BRICA136	BRICA002	/	/
B1U41L1616H11	122,38	SVJCL 1616 H11	16	16	20	21,5	100	VC..1103..	BRICA136	BRICA002	/	/
B1U41R2020K11	127,96	SVJCR 2020 K11	20	20	25	24	125	VC..1103..	BRICA136	BRICA002	/	/
B1U41L2020K11	127,96	SVJCL 2020 K11	20	20	25	24	125	VC..1103..	BRICA136	BRICA002	/	/
B1U41R2525M11	127,96	SVJCR 2525 M11	25	25	32	26	150	VC..1103..	BRICA136	BRICA002	/	/
B1U41L2525M11	127,96	SVJCL 2525 M11	25	25	32	26	150	VC..1103..	BRICA136	BRICA002	/	/
B1U41R2020K16	124,65	SVJCR 2020 K16	20	20	25	29.5	125	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U41L2020K16	124,65	SVJCL 2020 K16	20	20	25	29.5	125	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U41R2525M16	126,86	SVJCR 2525 M16	25	25	32	32.5	150	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U41L2525M16	126,86	SVJCL 2525 M16	25	25	32	32.5	150	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145

INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - V SHAPE

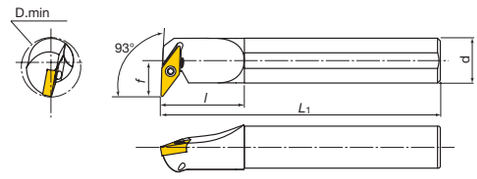
KERFOLG Turn

VC...

ART. B1U44

Materiale Carbide
Clamping system S (Screw)
Application Esecuzione di tornitura e copiatura interna

E...SVUCR/L



Tech. Code	GR18 Euro	Description	D min. mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver
B1U44R1611	(422,32)	E16R SVUCR 11	21	16	11	200	16,5	VC..1103..	BRICA147	BRICA002
B1U44L1611	(422,32)	E16R SVUCL 11	21	16	11	200	16,5	VC..1103..	BRICA147	BRICA002
B1U44R2011	(1192,91)	E20S SVUCR 11	25	20	13	250	20,5	VC..1103..	BRICA147	BRICA002
B1U44L2011	(915,07)	E20S SVUCL 11	25	20	13	250	20,5	VC..1103..	BRICA147	BRICA002
B1U44R2511	(1270,13)	E25S SVUCR 11	31,5	25	17	250	25,5	VC..1103..	BRICA147	BRICA002
B1U44L2511	(1467,49)	E25S SVUCL 11	31,5	25	17	250	25,5	VC..1103..	BRICA147	BRICA002

INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - V SHAPE

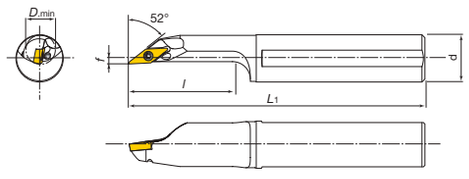
KERFOLG Turn

VC...

ART. B1U46

Material Steel
Clamping system S (Screw)
Application Internal Turning and facing

A...SVJCR/L



Tech. Code	GR18 Euro	Description	D min. mm	d mm	f mm	L1 mm	l mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver
B1U46L1611	(134,51)	A16M SVJCL 11	22	16	2	150	31,4	VC..1103..	BRICA147	BRICA002
B1U46R1611	(134,51)	A16M SVJCR 11	22	16	2	150	31,4	VC..1103..	BRICA147	BRICA002
B1U46L2011	(140,02)	A20Q SVJCL 11	24	20	2	180	38	VC..1103..	BRICA147	BRICA002
B1U46R2011	(140,02)	A20Q SVJCR 11	24	20	2	180	38	VC..1103..	BRICA147	BRICA002
B1U46L2516	166,48	A25R SVJCL 16	28	25	4,6	200	44	VC..1604..	BRICA148	BRICA004
B1U46R2516	166,48	A25R SVJCR 16	28	25	4,6	200	44	VC..1604..	BRICA148	BRICA004

Indivisible package Suggested retail package - Unit price

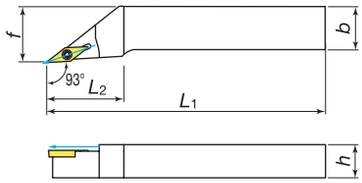
VC...

ART. B1U39

Material	Steel
Clamping system	S (Screw)
Application	External turning

Bore 1/8" Gas included

SVJCR/L



Tech. Code	GR18 Euro	Description	b mm	h mm	f mm	L2 mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Screwdriver	Support	Support screw
B1U39L1616H11	(206,17)	SVJCL 1616 H11 IK G1/8	16	16	20	21.5	100	VC..1103..	BRICA136	BRICA002	/	/
B1U39L2020K11	(213,89)	SVJCL 2020 K11 IK G1/8	20	20	25	23	125	VC..1103..	BRICA136	BRICA002	/	/
B1U39L2020K16	(213,89)	SVJCL 2020 K16 IK G1/8	20	20	25	29.5	125	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U39L2525M16	(224,96)	SVJCL 2525 M16 IK G1/8	25	25	32	32.5	150	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U39R1616H11	(206,17)	SVJCR 1616 H11 IK G1/8	16	16	20	21.5	100	VC..1103..	BRICA136	BRICA002	/	/
B1U39R2020K11	(213,89)	SVJCR 2020 K11 IK G1/8	20	20	25	23	125	VC..1103..	BRICA136	BRICA002	/	/
B1U39R2020K16	(213,89)	SVJCR 2020 K16 IK G1/8	20	20	25	29.5	125	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145
B1U39R2525M16	(224,96)	SVJCR 2525 M16 IK G1/8	25	25	32	32.5	150	VC..1604..	BRICA137	BRICA004	BRICA154	BRICA145

Related products

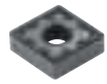
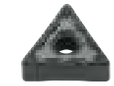
PROTECTIVE EYEWEAR

Tech. Code	Filter	Gradation	Optical class
K4120100	2C - UV plus FIlter	1.2 – Clear lens	Class 1

The products are available in chapter K

TURNING NEGATIVE INSERTS INDEX

KERFOLG Turn

		C SHAPE	D SHAPE	S SHAPE	T SHAPE	V SHAPE	W SHAPE	CARBONSTEEL	ACCIAI INOX	GHISE	NON FERROSI	SUPER LEGHE	TEMPRATI
													
	Side dimension	12 - 16 - 19 - 25	11 - 15	12 - 16 - 19 - 25	16 - 22	16	06 - 08						
	Page	B.22,26	B.28	B.30	B.31	B.32	B.33						
FIN.	FF	•	•					•	•	•			
FIN.	SF	•	•			•	•		•	•	•	•	
FIN.	CSF	•	•			•	•	•	•	•			
MEDIUM CUTTING	CM	•	•	•	•	•	•	•	•	•			
MEDIUM CUTTING	SA	•	•	•	•	•	•		•			•	
MEDIUM CUTTING	SM	•	•	•	•	•	•	•	•				
ROUGHING	CR	•	•	•	•		•	•	•	•			
ROUGHING	CMR	•		•	•		•	•		•			
ROUGHING	CM2	•	•					•	•	•			
ROUGHING	CCM	•		•				•	•	•			
ROUGHING	CCR	•		•				•	•	•			

● RECOMMENDED FOR... ○ USABLE FOR...

TURNING NEGATIVE INSERTS INDEX

Tungaloy TURNLINE

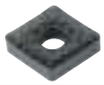
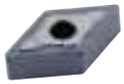
		C SHAPE	D SHAPE	S SHAPE	T SHAPE	V SHAPE	W SHAPE	CARBON STEEL	ACCIAI INOX	GHISE	NON FERROSI	SUPER LEGHE	TEMPRATI
	Side dimension	12 - 16	11 - 15	12	16		06 - 08						
	Page	B.23,27	B.29	B.30	B.31	B.32	B.34						
FIN.	TSF	•	•	•	•	•	•	•	•	•			
FIN.	SF	•	•	•	•	•	•	•	•				
FIN.	HRF	•	•		•	•	•		•			•	
MEDIUM CUTTING	37	•			•			•		•			
MEDIUM CUTTING	TM	•	•	•	•	•	•	•	•	•		•	
MEDIUM CUTTING	SM	•	•	•	•	•	•		•				
MEDIUM CUTTING	HRM	•	•	•	•	•	•		•			•	
ROUGH.	TH	•		•			•	•	•	•			•
ROUGH.	SH	•	•				•	•	•				

● RECOMMENDED FOR... ○ USABLE FOR...

Indivisible package Suggested retail package - Unit price

TURNING POSITIVE INSERTS INDEX

KERFOLG Turn

		C SHAPE	D SHAPE	K SHAPE	R SHAPE	S SHAPE	T SHAPE	V SHAPE	CARBON STEEL	ACCIAI INOX	GHISE	NON FERROSI	SUPERLEGHE	TEMPRATI
														
	Side dimension	6 - 9 - 12	7 - 11	16	8 - 10 - 12 - 16 - 20	9 - 12	11 - 16							
	Page	B.24,35	B.37	B.38	B.39	B.39	B.40	B.41						
FIN.	FFP	•	•				•		•	•	•			
FIN.	CFP	•	•					•	•	•			•	
MEDIUM CUTTING	CMP	•	•	•	•	•	•	•	•	•	•			
MEDIUM CUTTING	SMP	•	•			•	•	•		•			•	
MEDIUM CUTTING	CLP				•				•	•				
MEDIUM CUTTING	AFP	•	•			•	•	•				•		

● RECOMMENDED FOR... ○ USABLE FOR...

TURNING POSITIVE INSERTS INDEX

Tungaloy TURNLINE

		C SHAPE	D SHAPE	S SHAPE	T SHAPE	V SHAPE	CARBON STEEL	ACCIAI INOX	GHISE	NON FERROSI	SUPERLEGHE	TEMPRATI
	Side dimension	3 - 6 - 9 - 12	7 - 11	12	11 - 16	16						
	Page	B.25,36	B.38	B.25,39	B.40	B.41						
FIN.	W...	•	•				•	•			•	
FIN.	PSF	•	•		•	•	•	•	•			
MEDIUM CUTTING	PSS	•	•		•	•	•	•			•	
MEDIUM CUTTING	PS			•			•	•				
MEDIUM CUTTING	JS	•	•				•	•	•		•	
MEDIUM CUTTING	PM	•	•	•	•		•	•	•			

● RECOMMENDED FOR... ○ USABLE FOR...

DEGREE AND RECOMMENDED CUTTING CONDITIONS - NEGATIVE INSERTS

KERFOLG Turn

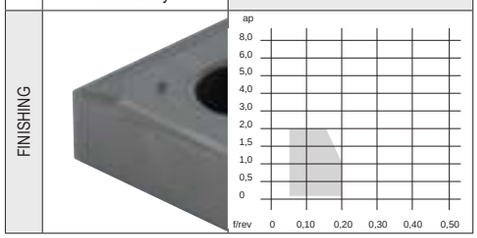
			P			M			K		N	S	H
Grade		Coating	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	DUPLEX	<240 HB	<300 HB	Alu	HTA	<60 HRC
1010	P15-M10-K10	-	230-270	180-230	160-200	200-240	170-210			220-300			
4115	P15-K25-M10	CVD TiCN-Al203	220-400	200-320	180-320	220-320							
4125	P25-K30-M20	CVD TiCN-Al203	170-240	130-210	100-190	140-210	100-210						
4135	P35-M25-S25	CVD TiCN-Al203	170-190	120-200	90-150	140-200	110-190	80-150					
3120	K20-P10	CVD TiCN-Al203 ML	200-340	150-290	150-290				150-400	120-300			
2120	M20-K20	PVD TiAlTaN				150-250	120-200	90-160	120-160	120-160	100-400	20-50	
2125	M25-P35-S25	PVD TiAlTaN	130-250	80-200	60-180	120-230	100-200	60-160					
NL10	N15-K15	-							120-160	130-170	100-200	20-45	
5110	S15-M15	PVD TiAlN				150-230	140-190	60-100				60-120	
5115	S15-M15	PVD TiAlN-TiN				130-220	120-180	50-90				60-120	

GEOMETRY AND RECOMMENDED CUTTING CONDITIONS - NEGATIVE INSERTS

KERFOLG Turn

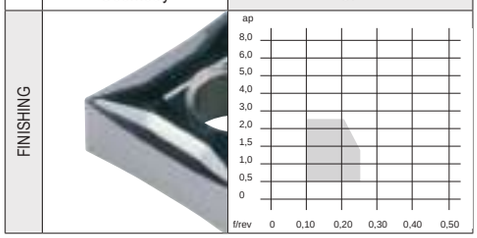
FINISHING

Geometry FF



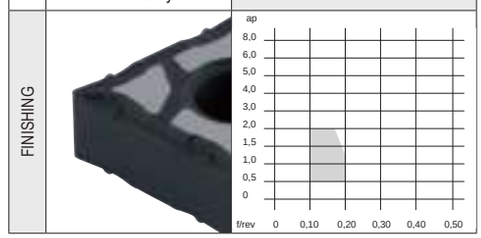
FINISHING

Geometry SF



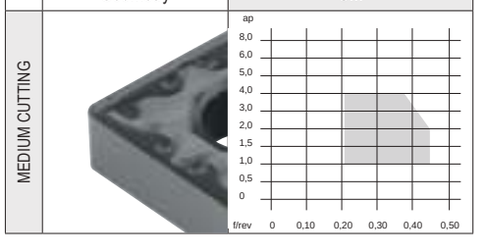
FINISHING

Geometry CSF



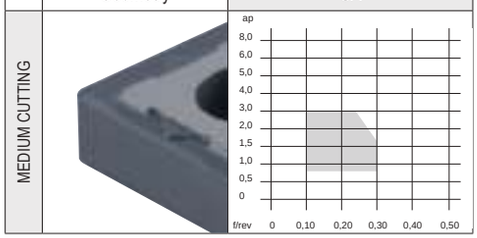
MEDIUM CUTTING

Geometry CM



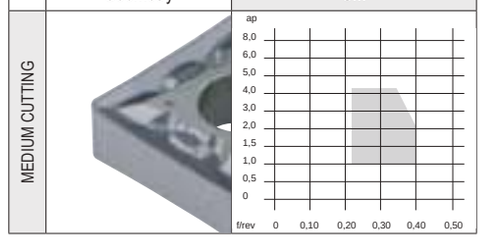
MEDIUM CUTTING

Geometry SA



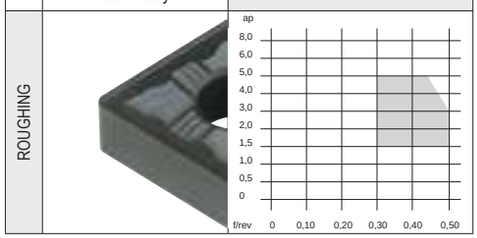
MEDIUM CUTTING

Geometry SM



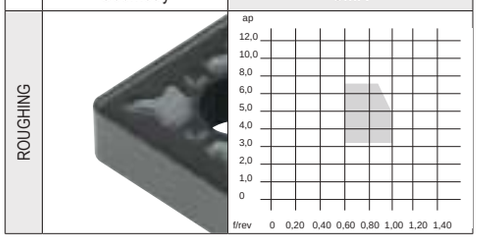
ROUGHING

Geometry CR



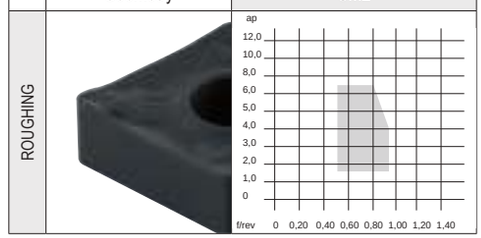
ROUGHING

Geometry CMR



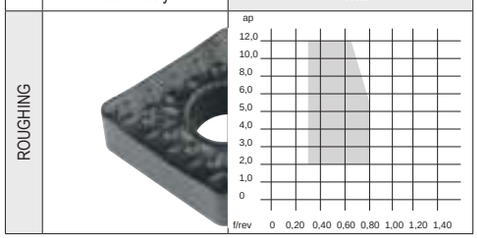
ROUGHING

Geometry CM2



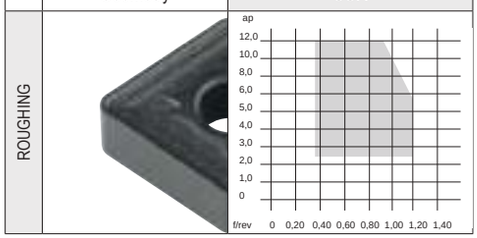
ROUGHING

Geometry CCM



ROUGHING

Geometry CCR



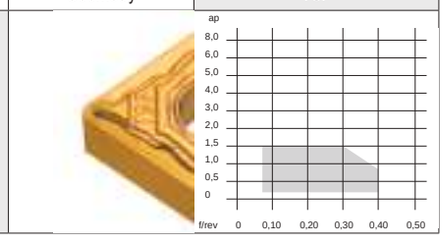
Indivisible package Suggested retail package - Unit price

DEGREE AND RECOMMENDED CUTTING CONDITIONS - POSITIVE INSERTS

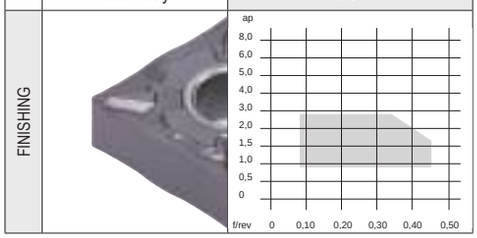
			P			M			K		N	S	H
Grade		Coating	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	DUPLEX	<240 HB	<300 HB	Alu	HTA	<60 HRC
T9215	P20-K30	CVD TiCN-Al2O3	150-400	150-400	120-250	120-200			140-400	140-370			
T9225	P20-P30	CVD TiCN-Al2O3	120-300	120-300	100-250	90-130	60-100		120-300	120-250			
T9235	P30-P40	CVD TiCN-Al2O3	50-200	50-200	50-150								
T6120	P20-M20	CVD TiCN based				140-200	100-200	70-160					
T6130	P30-M30	CVD TiCN based				100-200	90-160	60-120					
AH630	P30-M30	(Ti,Al)N	130-220	100-180	90-170	90-190	70-160	60-110				30-70	
AH645	P40-M40	(Ti,Al)N	120-200	90-160	80-150	90-150	70-140	50-10				30-80	
AH8005	M10-S10	(Al,Ti)N										30-100	
AH8015	M20-S20	(Al,Ti)N										20-80	

RECOMMENDED GEOMETRIES AND CUTTING CONDITIONS - NEGATIVE INSERTS

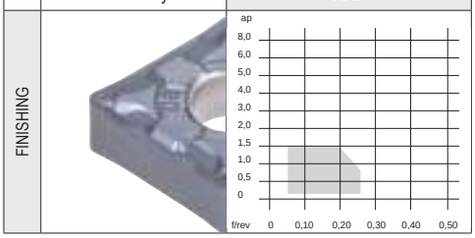
FINISHING — Geometry TSF



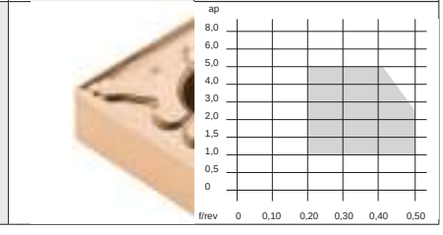
FINISHING — Geometry SF



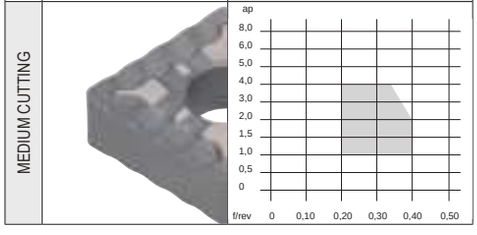
FINISHING — Geometry HRF



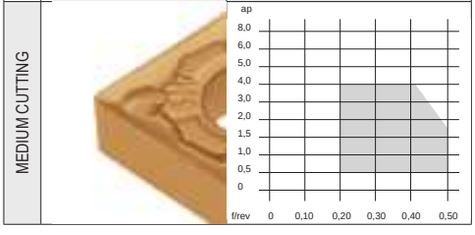
MEDIUM CUTTING — Geometry TM



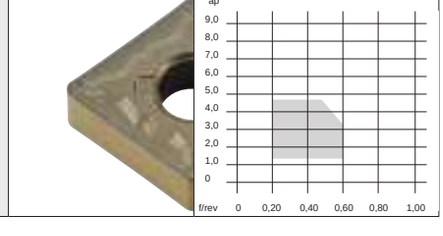
MEDIUM CUTTING — Geometry 37



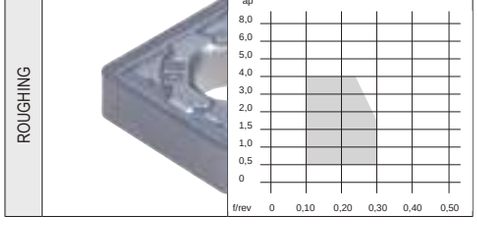
MEDIUM CUTTING — Geometry SM



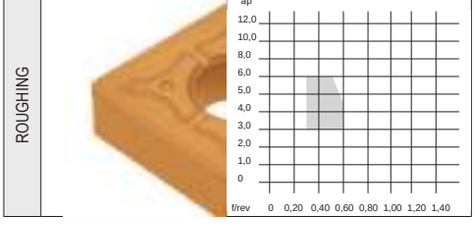
MEDIUM CUTTING — Geometry AM



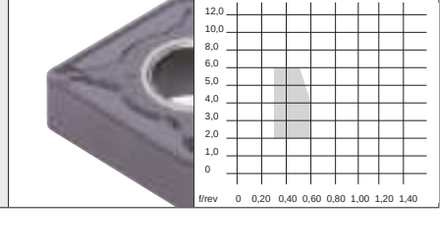
ROUGHING — Geometry HRM



ROUGHING — Geometry TH



ROUGHING — Geometry SH



Indivisible package Suggested retail package - Unit price

DEGREE AND CUTTING CONDITIONS - POSITIVE INSERTS

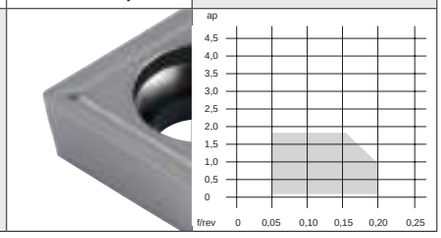
KERFOLG Turn

			P			M			K		N	S	H
Grade		Coating	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	DUPLEX	<240 HB	<300 HB	Alu	HTA	<60 HRC
1010	P 15 Cermet	/	230-270	180-230	160-200	200-240	170-210			220-300			
4115	P15-K25-M10	CVD TiCN-Al203	220-400	200-320	180-320	220-320							
4125	P25-K30-M20	CVD TiCN-Al203	170-240	130-210	100-190	140-210	100-210						
4135	P35-M25S25	CVD TiCN-Al203	170-190	120-200	90-150	140-200	110-190	80-150					
3120	K20-P10	CVD TiCN-Al203 ML	200-340	150-290	150-290				150-400	120-300			
2120	M20-K20	PVD TiAlTaN				150-250	120-200	90-160	120-160	120-160	100-400	20-50	
2125	M25-P35-S25	PVD TiAlTaN	130-250	80-200	60-180	120-230	100-200	60-160					
2135	M35-P35	PVD TiAlN-TiN				130-220	120-180	50-90				60-120	
NL10	N24-K15	/							120-160	130-170	100-200	20-45	
5110	S15-M15	PVD TiAlN				150-230	140-190	60-100				60-120	
5115	S15-M15	PVD TiAlN-TiN				130-220	120-180	50-90				60-120	

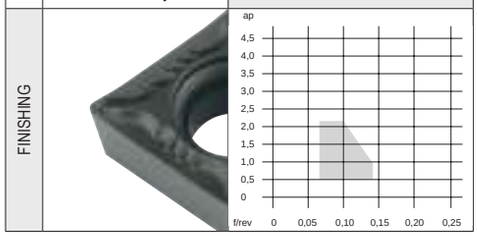
GEOMETRY AND RECOMMENDED CUTTING CONDITIONS - POSITIVE INSERTS

KERFOLG Turn

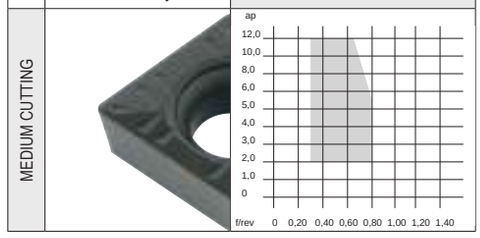
FINISHING — Geometry FFP



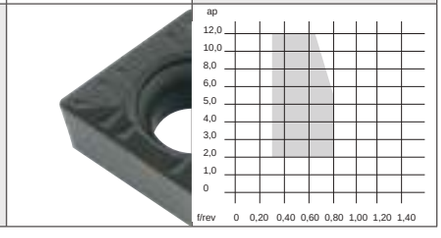
FINISHING — Geometry CFP



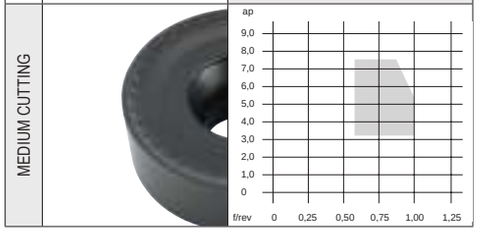
MEDIUM CUTTING — Geometry CMP



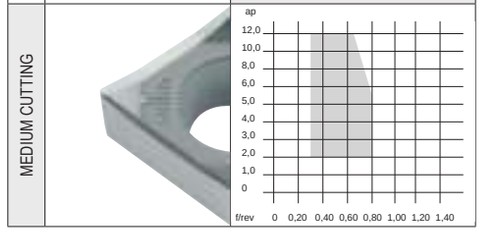
MEDIUM CUTTING — Geometry SMP



MEDIUM CUTTING — Geometry CLP



MEDIUM CUTTING — Geometry AFP



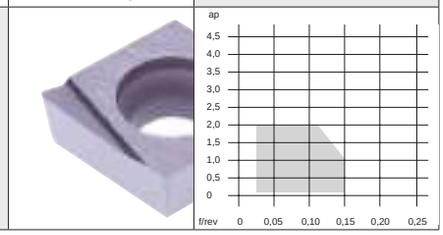
Indivisible package Suggested retail package - Unit price

DEGREE AND CUTTING CONDITIONS - POSITIVE INSERTS

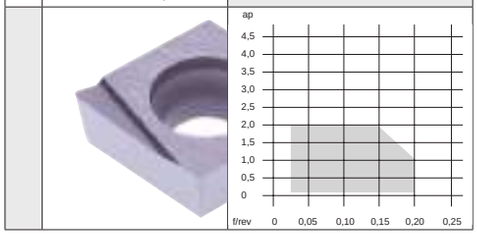
			P			M			K		N	S	H
Grade		Coating	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	DUPLEX	<240 HB	<300 HB	Alu	HTA	<60 HRC
NS9530	Cermet	Uncoated	150-250	80-180	150-300								
GT9530	Cermet	Ti(C,N,O)	150-300	140-250	80-200								
T9215	P20-K30	CVD TiCN-Al2O3	150-400	150-400	150-250	50-200			140-350	140-350			
T9125	P20-P30	CVD TiCN-Al2O3	120-250	80-200	80-160	90-130	60-100		120-300	120-250			
T9225	P20-P30	CVD TiCN-Al2O3	120-300	120-300	100-250	90-130	60-100		120-300	120-250			
T9235	P30-P40	CVD TiCN-Al2O3	50-200	50-200	50-150								
T6120	P20-M20	CVD TiCN based				140-240	100-200	70-160					
T6130	P30-M30	CVD TiCN based				100-200	90-160	60-120					
AH630	P30-M30	PVD (Ti,Al)N	130-220	100-180	90-170	90-190	70-160	60-110				30-70	
AH645	P40-M40	PVD (Ti,Al)N	120-200	90-160	80-150	90-150	70-140	50-100				30-80	
AH725	P30-M30-S25	PVD (Ti,Al)N	120-240	70-200	70-170	50-150			30-140	30-120		20-80	20-50
SH730	P15-P30	PVD (Ti,Al)N	100-150	80-150	40-125	60-160	60-140	50-90	30-120	30-100	90-200	25-70	20-50
AH8005	M10-S10	PVD (Ti,Al)N										30-100	
AH8015	M20-S20	PVD (Ti,Al)N										20-80	

GEOMETRY AND RECOMMENDED CUTTING CONDITIONS - POSITIVE INSERTS

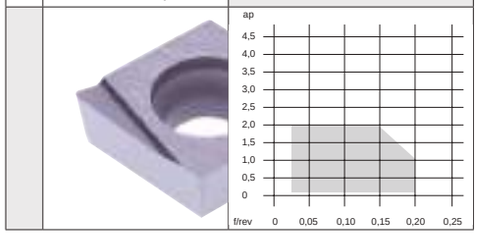
FINISHING — Geometry — W08



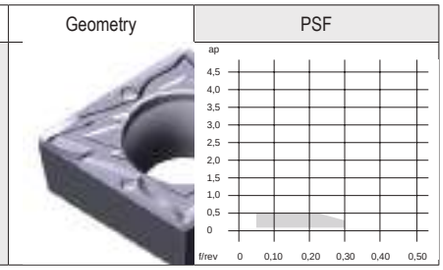
FINISHING — Geometry — W15



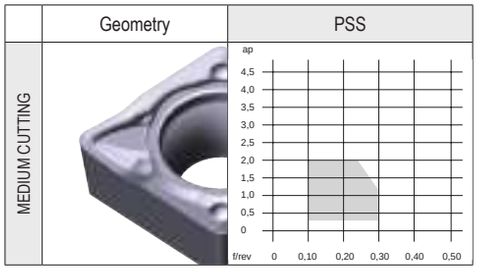
FINISHING — Geometry — W20



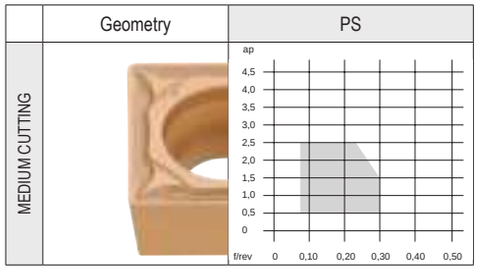
FINISHING — Geometry — PSF



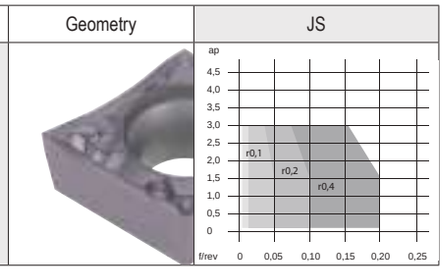
MEDIUM CUTTING — Geometry — PSS



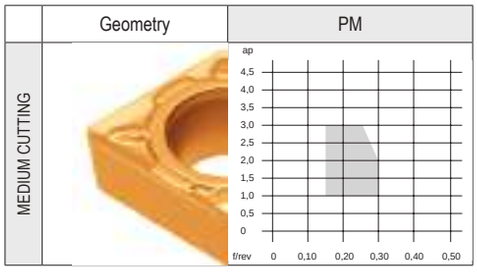
MEDIUM CUTTING — Geometry — PS



MEDIUM CUTTING — Geometry — JS



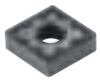
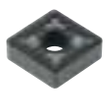
MEDIUM CUTTING — Geometry — PM



Indivisible package Suggested retail package - Unit price

TURNING NEGATIVE INSERTS - C SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	FF		CNMG 120404EN-FF	1010	B0C57CNFF10	10,01	0,20 1,00 2,00	0,05 0,10 0,20	●	●	●			
			CNMG 120408EN-FF		B0C57CNFF11				●	●	●			
	SF		CNGP 120404-SF	2120	B0C50CNSF10	18,03	0,50 1,00 2,50	0,10 0,15 0,25		●	○	○	●	
			CNGP 120408-SF		B0C50CNSF11					●	○	○	●	
			CNGP 120412-SF		B0C50CNSF12	18,10				●	○	○	●	
	CSF		CNMG 120404-CSF	4115	B0C58CNCSF11	10,01	0,50 1,00 2,00	0,10 0,15 0,20	●	○				
				4125	B0C58CNCSF12				●	○				
			CNMG 120408-CSF	4115	B0C58CNCSF13				●	○				
				4125	B0C58CNCSF14				●	○				
MEDIUM CUTTING	CM		CNMG 120404-CM	4115	B0C51CNCM10	9,85	1,00 2,50 4,00	0,22 0,35 0,44	●	○				
				4125	B0C51CNCM11				●	○				
			CNMG 120408-CM	4115	B0C51CNCM12				●	○				
				4125	B0C51CNCM13				●	○				
				4135	B0C51CNCM14				●	○				
				3120	B0C51CNCM20	10,01			○		●			
			CNMG 120412-CM	4115	B0C51CNCM15	9,85			●	○				
				4125	B0C51CNCM16				●	○				
				4135	B0C51CNCM17				●	○				
				3120	B0C51CNCM21	10,01			○		●			
	SA		CNMG 120404-SA	5110	B0C59CNSA05	12,98	0,80 2,00 3,00	0,10 0,20 0,30		○			●	
			CNMG 120408-SA		B0C59CNSA06					○			●	
			CNMG 120404-SA	5115	B0C59CNSA07					○			●	
			CNMG 120408-SA		B0C59CNSA08					○			●	
	SM		CNMG 120404-SM	2125	B0C52CNSM10	9,85	1,00 2,50 4,20	0,22 0,30 0,40	○	●				
			CNMG 120408-SM		B0C52CNSM11				○	●				
ROUGHING	CR		CNMG 120408-CR	4115	B0C53CNCR08	10,01	1,50 3,50 5,00	0,30 0,40 0,50	●	○				
			CNMG 120412-CR	4125	B0C53CNCR09				●	○				
	CMR		CNMG 120408-CMR	3120	B0C54CNCMR20	10,01	2,00 3,50 5,00		○		●			
			CNMG 120412-CMR		B0C54CNCMR21				○		●			
			CNMG 160612-CMR	4125	B0C54CNCMR10	17,99			●	○				
				4135	B0C54CNCMR11				●	○				
			CNMG 190616-CMR	4125	B0C54CNCMR12	23,68			●	○				
				4135	B0C54CNCMR13				●	○				
	CM2		CNMM 120408-CM2	4125	B0C40CNCM206	10,01	1,70 3,50 6,50	0,45 0,70 0,95	●	○				
				4135	B0C40CNCM207				●	○				
			CNMM120412-CM2	4125	B0C40CNCM208				●	○				
	CCM		CNMM 190612-CCM		B0C55CNCCM10	23,68	2,00 6,00 12,00	0,30 0,50 0,80	●	○				
			CNMM 190616-CCM		B0C55CNCCM11				●	○				
			CNMM 250924-CCM		B0C55CNCCM12	43,62			●	○				
	CCR		CNMM 250924-CCR		B0C56CNCCR10		2,50 6,00 12,00	0,35 0,75 1,20	●	○				

Related products

Wera TORQUE INDICATOR SCREWDRIVERS PRE-SET FOR TORX® SCREWS 300 TX

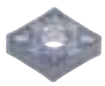
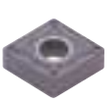
Tech. Code	✪	Torque Nm	a mm
E663520	TX 20	0,5	65

The products are available in chapter E

Indivisible package Suggested retail package - Unit price

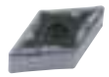
TURNING NEGATIVE INSERTS - C SHAPE

Tungaloy TURNLINE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	TSF		CNMG 120404-TSF	T9215	B0C11CNTSF016	12,65	0,20 1,00 1,50	0,08 0,15 0,40	●	○	○			
				T9225	B0C11CNTSF018				●	○	○			
			CNMG 120408-TSF	T9215	B0C11CNTSF015				●	○	○			
				T9225	B0C11CNTSF017				●	○	○			
	SF		CNMG 120404-SF	T6120	B0C12CNSF005		0,80 1,50 2,80	0,09 0,25 0,45		●				
				T6130	B0C12CNSF006					●				
				AH630	B0C12CNSF007				○	●			●	
			CNMG 120408-SF	T6120	B0C12CNSF008					●				
				T6130	B0C12CNSF009					●				
				AH630	B0C12CNSF010					●				
	HRF		CNMG 120404-HRF	AH8005	B0C13CNHRF005	11,85	0,40 1,00 1,50	0,05 0,15 0,25					●	
				AH8015	B0C13CNHRF006								●	
			CNMG 120408-HRF	AH8005	B0C13CNHRF007								●	
				AH8015	B0C13CNHRF008								●	
			CNMG 120412-HRF	AH8005	B0C13CNHRF009								●	
				AH8015	B0C13CNHRF010								●	
MEDIUM CUTTING	37		CNMG 120404-37	T9215	B0C14CN37007	12,65	1,00 2,50 4,00	0,20 0,30 0,40	●	○	○			
			CNMG 120408-37		B0C14CN37008				●	○	○			
	AM		CNMG 120408-AM	T9215	B0C18CNAM005	12,65	1,00 3,00 5,00	0,20 0,30 0,50	●	○	○			
				T9225	B0C18CNAM006	(12,65)			●	○	○			
	TM		CNMG 120408-TM	T9215	B0C21CNTM01420	12,65			●	○	○			
				T9225	B0C21CNTM021				●	○	○			
				T9235	B0C21CNTM022				●	○	○			
			CNMG 120412-TM	T9215	B0C21CNTM020				●	○	○			
				T9225	B0C21CNTM023				●	○	○			
				T9235	B0C21CNTM024				●	○	○			
	SM		CNMG 120408-SM	T6120	B0C23CNSM010	11,85	0,50 2,00 4,00			●				
				T6130	B0C23CNSM011					●				
				AH630	B0C23CNSM012				○	●			●	
				AH645	B0C23CNSM013				○	●				
			CNMG 120412-SM	T6120	B0C23CNSM014					●				
				T6130	B0C23CNSM015					●				
				AH630	B0C23CNSM016				○	●				
				AH645	B0C23CNSM017				○	●				
ROUGHING	HRM		CNMG 120408-HRM	AH8005	B0C24CNHRM005			0,10 0,20 0,30					●	
				AH8015	B0C24CNHRM006								●	
			CNMG 120412-HRM	AH8005	B0C24CNHRM007								●	
				AH8015	B0C24CNHRM008								●	
	TH		CNMG 120408-TH	T9225	B0C31CNTH034	12,65	3,00 4,00 6,00	0,30 0,40 0,60	●	○	○			
				T9235	B0C31CNTH035				●	○	○			
			CNMG 120412-TH	T9225	B0C31CNTH036				●	○	○			
				T9235	B0C31CNTH037				●	○	○			
			CNMG 120416-TH	T9225	B0C31CNTH038				●	○	○			
				T9235	B0C31CNTH039				●	○	○			
			CNMG 160612-TH	T9225	B0C31CNTH040	19,85			●	○	○			
				T9235	B0C31CNTH041				●	○	○			
			CNMG 160616-TH	T9225	B0C31CNTH042				●	○	○			
				T9235	B0C31CNTH043				●	○	○			
	SH		CNMG 120408-SH	T6130	B0C32CNSH005	11,85	2,00 4,00 6,00	0,30 0,45 0,60		●				
				AH630	B0C32CNSH006				○	●			○	
				AH645	B0C32CNSH007				○	●			○	
			CNMG 120412-SH	AH630	B0C32CNSH009					●				
				T6130	B0C32CNSH008					●				
				AH645	B0C32CNSH010				○	●			○	

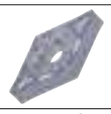
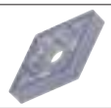
TURNING NEGATIVE INSERTS - D SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	FF		DNMG 110404-FF	1010	B0D50DNFF10	10,85	0.20 1.00 2.00	0.05 0.10 0.20	●	●	○			
			DNMG 150404-FF		B0D50DNFF11	14,33			●	●	○			
	SF		DNGP 150602-SF	2120	B0D51DNSF09	21,03	0.50 1.00 2.50	0.10 0.15 0.25		●	○	○	●	
			DNGP 150604-SF		B0D51DNSF10	21,55				●	○	○	●	
			DNGP 150608-SF		B0D51DNSF11					●	○	○	●	
	CSF		DNMG 110404-CSF	4115	B0D54DNCSF10	10,85	0,50 1,00 2,00	0,10 0,15 0,20	●	○				
				4125	B0D54DNCSF11				●	○				
			DNMG 150604-CSF	4115	B0D54DNCSF12	13,61			●	○				
			DNMG 150608-CSF		B0D54DNSCF13				●	○				
MEDIUM CUTTING	CM		DNMG 110404-CM	4115	B0D52DNCM05	10,96	1.00 2.50 4.00	0.22 0.35 0.44	●	○				
				4125	B0D52DNCM06	10,85			●	○				
			DNMG 110408-CM	4115	B0D52DNCM07				●	○				
				4125	B0D52DNCM08				●	○				
				4135	B0D52DNCM09				●	○				
			DNMG 150604-CM	4115	B0D52DNCM10	11,80			●	○				
				4125	B0D52DNCM11				●	○				
			DNMG 150608-CM	4115	B0D52DNCM12				●	○				
				4125	B0D52DNCM13				●	○				
				4135	B0D52DNCM14				●	○				
				3120	B0D52DNCM20	14,33			○		●			
			DNMG 150612-CM	4115	B0D52DNCM15				●	○				
				4125	B0D52DNCM16				●	○				
				4135	B0D52DNCM17				●	○				
				3120	B0D52DNCM21				○		●			
	SA		DNMG 150608-SA	5110	B0D56DNSA05	11,83	0.80 2.00 3.00	0.10 0.20 0.30		○			●	
				5115	B0D56DNSA06					○			●	
	SM		DNMG 110404-SM	2125	B0D53DNSM05	10,85	1.00 2.50 4.20	0.22 0.30 0.40		●			●	
			DNMG 110408-SM		B0D53DNSM06					●			●	
			DNMG 150604-SM		B0D53DNSM10	11,80			○	●				
			DNMG 150608-SM		B0D53DNSM11				○	●				
ROUGHING	CR		DNMG 150608-CR	4115	B0D57DNCR05	11,83	1.50 3.50 5.00	0.30 0.40 0.50	●	○				
				4125	B0D57DNCR06				●	○				
				4135	B0D57DNCR07				●	○				
			DNMG 150612-CR	4115	B0D57DNCR08				●	○				
				4125	B0D57DNCR09				●	○				
				4135	B0D57DNCR10				●	○				
	CM2		DNMM 150608-CM2	4115	B0D58DNCM205		1.70 3.50 6.50	0.45 0.70 0.95	●	○				
				4125	B0D58DNCM206				●	○				
				4135	B0D58DNCM207				●	○				

Indivisible package Suggested retail package - Unit price

TURNING NEGATIVE INSERTS - D SHAPE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	TSF		DNMG 150604-TSF	T9215	B0D11DNTSF015	17,30	0,20 1,00 1,50	0,08 0,15 0,40	●	○	○			
				T9225	B0D11DNTSF016				●	○	○			
			DNMG 150608-TSF	T9215	B0D11DNTSF014				●	○	○			
				T9225	B0D11DNTSF017				●	○	○			
	SF		DNMG 150604-SF	T6120	B0D12DNFS005	16,05	0,80 1,50 2,80	0,09 0,25 0,45		●				
				T6130	B0D12DNSF006					●				
				AH630	B0D12DNSF007				○	●				
			DNMG 150608-SF	T6120	B0D12DNSF008					●				
				T6130	B0D12DNSF009					●				
				AH630	B0D12DNSF010				○	●			○	
	HRF		DNMG 150604-HRF	AH8005	B0D13DNHRF005		0,40 1,00 1,50	0,05 0,15 0,25					●	
				AH8015	B0D13DNHRF006								●	
			DNMG 150608-HRF	AH8005	B0D13DNHRF007								●	
				AH8015	B0D13DNHRF008								●	
MEDIUM CUTTING	AM		DNMG 150608-AM	T9215	B0D21DNAM005	(17,30)	1,00 3,00 5,00	0,20 0,30 0,50	●	○	○			
	TM		DNMG 110404-TM	T9215	B0D22DNTM017	13,30			●	○	○			
				T9225	B0D22DNTM019				●	○	○			
			DNMG 110408-TM	T9215	B0D22DNTM018				●	○	○			
				T9225	B0D22DNTM020				●	○	○			
			DNMG 150604-TM	T9215	B0D22DNTM016	17,30			●	○	○			
				T9225	B0D22DNTM024				●	○	○			
			DNMG 150608-TM	T9215	B0D22DNTM023				●	○	○			
				T9225	B0D22DNTM025				●	○	○			
	SM		DNMG 150604-SM	T6120	B0D23DNSM020	16,05	0,50 2,00 4,00			●				
				AH630	B0D23DNSM022				○	●			○	
				T6130	B0D23DNSM023					●				
			DNMG 150608-SM	T6120	B0D23DNSM024					●				
				T6130	B0D23DNSM025					●				
				AH630	B0D23DNSM026				○	●			○	
				AH645	B0D23DNSM027				○	●			●	
ROUGHING	HRM		DNMG 150604-HRM	AH8005	B0D24DNHRM006		0,40 2,00 4,00	0,10 0,20 0,30					●	
				AH8015	B0D24DNHRM005								●	
			DNMG 150608-HRM	AH8005	B0D24DNHRM007								●	
				AH8015	B0D24DNHRM008								●	
	TH		DNMG 150608-TH	T9215	B0D25DNTH011	17,30	3,00 4,00 6,00	0,30 0,40 0,60	●	○	○			
				T9225	B0D25DNTH013				●	○	○			
				T9235	B0D25DNTH014				●	○	○			
			DNMG 150612-TH	T9215	B0D25DNTH012				●	○	○			
				T9225	B0D25DNTH015				●	○	○			
				T9235	B0D25DNTH016				●	○	○			

Related products

Landoil ANTI-SEIZE PASTES

Tech. Code	Package	Quantity g
H2636125	Tube	125

The products are available in chapter H

TURNING NEGATIVE INSERTS - S SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
MEDIUM CUTTING	CM		SNMG 120408-CM	4115	B0S52SNCM10	10,29	1,00 2,50 4,00	0,22 0,35 0,44	●	○				
				4125	B0S52SNCM11				●	○				
				4135	B0S52SNCM12				●	○				
				3120	B0S52SNCM20	10,61			○		●			
			SNMG 120412-CM	4125	B0S52SNCM13	10,29			●	○				
				4135	B0S52SNCM14				●	○				
	SA		SNMG 120408-SA	5110	B0S51SNSA05	13,77	0,80 2,00 3,00	0,10 0,20 0,30		○			●	
				5115	B0S51SNSA06					○			●	
	SM		SNMG 120408-SM	2125	B0S53SNSM10	10,29	1,00 2,50 4,20	0,22 0,30 0,40	○	●				
ROUGHING	CR		SNMG 120408-CR	4125	B0S54SNCR10	10,29	1,50 3,50 5,00	0,30 0,40 0,50	●	○				
			SNMG 120412-CR		B0S54SNCR11				●	○				
	CMR		SNMG 120408-CMR	3120	B0S55SNCMR21	10,61	2,00 3,50 5,00		○		●			
			SNMG 150612-CMR	4125	B0S55SNCMR12	19,74			●	○				
				4135	B0S55SNCMR13				●	○				
			SNMG 190612-CMR	4125	B0S55SNCMR10	21,37			●	○				
				4135	B0S55SNCMR11				●	○				
	CMM		SNMM 190612-CMM	4125	B0S56SNCCM10	23,68	2,00 6,00 12,00	0,30 0,50 0,80	●	○				
			SNMM 190616-CMM		B0S56SNCCM11				●	○				
			SNMM 250924-CMM		B0S56SNCCM12	43,62			●	○				
	CCR		SNMM 250932-CCR		B0S57SNCCR11	46,55	2,50 6,00 12,00	0,35 0,75 1,20	●	○				
			SNMM 250924-CCR		B0S57SNCCR10	43,62			●	○				

TURNING NEGATIVE INSERTS - S SHAPE

Tungaloy TURNLINE TUNGALOY

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	TSF		SNMG 120404-TSF	T9215	B0S20SNTSF010	12,65	0,20 1,00 1,50	0,08 0,15 0,40	●	○	○			
				T9225	B0S20SNTSF011				●	○	○			
			SNMG 120408-TSF	T9215	B0S20SNTSF009				●	○	○			
				T9225	B0S20SNTSF012				●	○	○			
	SF		SNMG 120404-SF	T6120	B0S23SNSF005	11,85	0,80 1,50 2,80	0,09 0,25 0,45		●				
				T6130	B0S23SNSF006					●				
				AH630	B0S23SNSF007				○	●			○	
			SNMG 120408-SF	T6120	B0S23SNSF008					●				
				T6130	B0S23SNSF009					●				
				AH630	B0S23SNSF010				○				○	
MEDIUM CUTTING	TM		SNMG 120404-TM	T9215	B0S21SNTM023	12,65	1,00 3,00 5,00	0,20 0,30 0,50	●	○	○			
				T9225	B0S21SNTM016				●	○	○			
			SNMG 120408-TM	T9215	B0S21SNTM021				●	○	○			
				T9225	B0S21SNTM017				●	○	○			
				T9235	B0S21SNTM025				●	○	○			
			SNMG 120412-TM	T9215	B0S21SNTM022				●	○	○			
				T9225	B0S21SNTM026				●	○	○			
				T9235	B0S21SNTM027				●	○	○			
	SM		SNMG 120408-SM	T6120	B0S22SNSM010	11,85	1,00 3,00 4,00			●				
				T6130	B0S22SNSM011					●				
				AH630	B0S22SNSM012				○	●			○	
			SNMG 120412-SM	T6120	B0S22SNSM014					●				
				T6130	B0S22SNSM015					●				
				AH630	B0S22SNSM016				○	●			●	
ROUGHING	HRM		SNMG 120408-HRM	AH8005	B0S30SNHRM005		0,50 2,00 4,00	0,10 0,20 0,30					●	
				AH8015	B0S30SNHRM006								●	
			SNMG 120412-HRM	AH8005	B0S30SNHRM007								●	
				AH8015	B0S30SNHRM008								●	
	TH		SNMG 120408-TH	T9215	B0S31SNTH016	12,65	3,00 4,00 6,00	0,30 0,40 0,60	●	●	●			
				T9225	B0S31SNTH018				●	●	●			
				T9235	B0S31SNTH020				●	●	●			
			SNMG 120412-TH	T9215	B0S31SNTH017				●	●	●			
				T9225	B0S31SNTH019				●	●	●			
				T9235	B0S31SNTH021				●	●	●			

Indivisible package Suggested retail package - Unit price

TURNING NEGATIVE INSERTS - T SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
MEDIUM CUTTING	CM		TNMG 160404-CM	4115	B0T53TNCM10		1,00 2,50 4,00	0,22 0,35 0,44	●	○				
				4125	B0T53TNCM11				●	○				
			TNMG 160408-CM	4115	B0T53TNCM12	9,07			●	○				
				4125	B0T53TNCM13				●	○				
				4135	B0T53TNCM14				●	○				
				3120	B0T53TNCM20	9,10			○		●			
			TNMG 160412-CM	4115	B0T53TNCM17				●	○				
				4125	B0T53TNCM15	9,07			●	○				
				3120	B0T53TNCM21	9,10			○		●			
			TNMG 220404-CM	4125	B0T53TNCM18	12,66			●	○				
			TNMG 220408-CM		B0T53TNCM16	12,59			●	○				
				3120	B0T53TNCM22	12,66			○		●			
	SA		TNMG 160408-SA	5110	B0T54TNSA05	12,41	0,80 2,00 3,00	0,10 0,20 0,30		●			●	
				5115	B0T54TNSA06					●			●	
	SM		TNMG 160404-SM	2125	B0T55TNSM10	9,07	1,00 2,50 4,20	0,22 0,30 0,40	○	●				
			TNMG 160408-SM		B0T55TNSM11	8,31			○	●				
			TNMG 160408-SM	**2125**										
ROUGHING	CR		TNMG 160408-CR	4125	B0T56TNCR10	9,07	1,50 3,50 5,00	0,30 0,40 0,50	●					
			TNMG 160412-CR		B0T56TNCR11				●					
	CMR		TNMG 160408-CMR	3120	B0T57TNCMR20	9,10	2,00 3,50 5,00		○		●			
			TNMG 220412-CMR	4125	B0T57TNCMR05	12,66			●	○				

TURNING NEGATIVE INSERTS -T SHAPE

Tungaloy TURNLINE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	TSF		TNMG 160404-TSF	T9215	B0T11TNTSF015	11,20	0,20 1,00 1,50	0,08 0,15 0,40	●	○	○			
				T9225	B0T11TNTSF017				●	○	○			
			TNMG 160408-TSF	T9215	B0T11TNTSF016				●	○	○			
				T9225	B0T11TNTSF018				●	○	○			
	SF		TNMG 160404-SF	T6120	B0T12TNSF05	10,45	0,80 1,50 2,80	0,09 0,25 0,45		●				
				T6130	B0T12TNSF06					●				
				AH630	B0T12TNSF07				○	●			○	
			TNMG 160408-SF	T6120	B0T12TNSF08					●				
				AH630	B0T12TNSF09					●				
				T6130	B0T12TNSF10				○	●			○	
	HRF		TNMG 160404-HRF	AH8005	B0T13TNHRF05		0,40 1,00 1,50	0,05 0,15 0,25					●	
				AH8015	B0T13TNHRF06								●	
			TNMG 160408-HRF	AH8005	B0T13TNHRF07								●	
				AH8015	B0T13TNHRF08								●	
MEDIUM CUTTING	TM		TNMG 160404-TM	T9215	B0T21TNTM019	11,20	1,00 3,00 4,00	0,20 0,30 0,50	●	○	○			
				T9225	B0T21TNTM018				●	○	○			
				T9235	B0T21TNTM022				●	○	○			
			TNMG 160408-TM	T9215	B0T21TNTM017				●	○	○			
				T9225	B0T21TNTM020				●	○	○			
				T9235	B0T21TNTM021				●	○	○			
	37		TNMG 160404-37	T9215	B0T22TN3708		1,00 2,50 4,00	0,20 0,30 0,40	●	○	○			
			TNMG 160408-37		B0T22TN3707				●	○	○			
	SM		TNMG 160404-SM	T6120	B0T23TNSM05	10,45	0,50 2,00 4,00	0,20 0,30 0,50		●				
				T6130	B0T23TNSM06					●				
				AH630	B0T23TNSM07				○	●			○	
				AH645	B0T23TNSM08				○	●			○	
			TNMG 160408-SM	T6120	B0T23TNSM010					●				
				T6130	B0T23TNSM011					●				
				AH630	B0T23TNSM012				○	●			○	
				AH645	B0T23TNSM013				○	●			○	
			TNMG 160412-SM	T6120	B0T23TNSM014					●				
				T6130	B0T23TNSM015					●				
				AH630	B0T23TNSM016				○	●			○	
				AH645	B0T23TNSM017				○	●			○	
	HRM		TNMG 160408-HRM	AH8005	B0T24TNHRM05			0,10 0,20 0,30					●	
				AH8015	B0T24TNHRM06								●	
			TNMG 160412-HRM	AH8005	B0T24TNHRM07								●	
				AH8015	B0T24TNHRM08								●	

Indivisible package Suggested retail package - Unit price

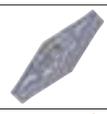
TURNING NEGATIVE INSERTS - V SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	SF		VNGP 160402-SF	2120	B0V55VNSF05	25,88	0,50 1,00 2,50	0,10 0,15 0,25		●	○	○	○	
			VNGP 160404-SF		B0V55VNSF06					●	○	○	○	
	CSF		VNMG 160404-CSF	4115	B0V56VNCSF05	15,97	0,50 1,00 2,00	0,10 0,15 0,20	●	○				
MEDIUM CUTTING	CM		VNMG 160404-CM	4115	B0V57VNCM10	15,97	1,00 2,50 4,00	0,22 0,35 0,44	●	○				
				4125	B0V57VNCM11				●	○				
			VNMG 160408-CM	4115	B0V57VNCM12				●	○				
				4125	B0V57VNCM13				●	○				
	SA		VNMG 160408-SA	5110	B0V58VNSA05	18,33	0,80 2,00 3,00	0,10 0,20 0,30		○			●	
				5115	B0V58VNSA06					○			●	
	SM		VNMG 160408-SM	2125	B0V59VNSM05	15,97	1,00 2,50 4,20	0,22 0,30 0,40	○	●				

TURNING NEGATIVE INSERTS - V SHAPE

Tungaloy TURNLINE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	TSF		VNMG 160404-TSF	T9215	B0V10VNTSF09	22,70	0,20 1,00 1,50	0,08 0,15 0,40	●	○	○			
				T9225	B0V10VNTSF11				●	○	○			
			VNMG 160408-TSF	T9215	B0V10VNTSF10				●	○	○			
				T9225	B0V10VNTSF12				●	○	○			
	SF		VNMG 160404-SF	T6120	B0V11VNSF05	21,15	0,80 1,50 2,80	0,09 0,25 0,45		●				
				T6130	B0V11VNSF06					●				
				AH630	B0V11VNSF07				○	●			○	
			VNMG 160408-SF	T6120	B0V11VNSF08					●				
				T6130	B0V11VNSF09					●				
				AH630	B0V11VNSF10				○	●			●	
	HRF		VNMG 160404-HRF	AH8005	B0V12VNHRF05		0,40 1,00 1,50	0,05 0,15 0,25					●	
				AH8015	B0V12VNHRF06								●	
			VNMG 160408-HRF	AH8005	B0V12VNHRF07								●	
				AH8015	B0V12VNHRF08								●	
MEDIUM CUTTING	TM		VNMG 160404-TM	T9215	B0V13VNTM09	22,70	1,00 3,00 5,00	0,20 0,30 0,50	●	○	○			
				T9225	B0V13VNTM12				●	○	○			
			VNMG 160408-TM	T9215	B0V13VNTM10				●	○	○			
				T9225	B0V13VNTM13				●	○	○			
	SM		VNMG 160404-SM	T6120	B0V14VNSM05	21,15	0,50 2,00 4,00			●				
				T6130	B0V14VNSM06					●				
				AH630	B0V14VNSM07				○	●			○	
			VNMG 160408-SM	T6120	B0V14VNSM08					●				
				T6130	B0V14VNSM09					●				
				AH630	B0V14VNSM10				○	●			○	
	HRM		VNMG 160404-HRM	AH8005	B0V15VNHRM05			0,10 0,20 0,30					●	
				AH8015	B0V15VNHRM06								●	
			VNMG 160408-HRM	AH8005	B0V15VNHRM07								●	
				AH8015	B0V15VNHRM08								●	

Indivisible package Suggested retail package - Unit price

TURNING NEGATIVE INSERTS - W SHAPE

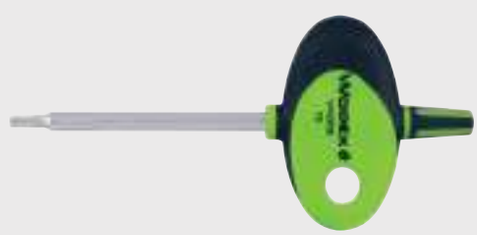
KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	SF		WNGP 080404-SF	2120	B0W54WNSF10	19,68	0,50 1,00 2,50	0,10 0,15 0,25		●	○	○	○	
			WNGP 080408-SF		B0W54WNSF11					●	○	○	○	
	CSF		WNMG 060604-CSF	4115	B0W55WNCSF10	10,44	0,50 1,00 2,00	0,10 0,15 0,20	●	○				
			WNMG 080404-CSF		B0W55WNCSF11	12,24			●	○				
MEDIUM CUTTING	CM		WNMG 060404-CM	4115	B0W56WNCM05	10,44	1,00 2,50 4,00	0,22 0,35 0,44	●	○				
				4125	B0W56WNCM06				●	○				
			WNMG 060408-CM	4115	B0W56WNCM07				●	○				
				4125	B0W56WNCM08				●	○				
			WNMG 080404-CM	4115	B0W56WNCM10	10,29			●	○				
				4125	B0W56WNCM11				●	○				
			WNMG 080408-CM	4115	B0W56WNCM12				●	○				
				4125	B0W56WNCM13				●	○				
				4135	B0W56WNCM14				●	○				
				3120	B0W56WNCM20	11,91			○		●			
			WNMG 080412-CM	4115	B0W56WNCM15	10,29			●	○				
				4125	B0W56WNCM16				●	○				
				4135	B0W56WNCM17				●	○				
				3120	B0W56WNCM21	11,91			○		●			
	SA		WNMG 080408-SA	5110	B0W57WNSA05	13,89	0,80 2,00 3,00	0,10 0,20 0,30		○			●	
				5115	B0W57WNSA06					○			●	
	SM		WNMG 060404-SM	2125	B0W58WNSM05	10,44	1,00 2,50 4,20	0,22 0,30 0,40	○	●				
			WNMG 060408-SM		B0W58WNSM06				○	●				
			WNMG 080404-SM		B0W58WNSM10	10,29			○	●				
			WNMG 080408-SM		B0W58WNSM11				○	●				
			WNMG 080412-SM		B0W58WNSM12	11,91			○	●				
ROUGHING	CR		WNMG 080408-CR	4125	B0W59WNCR10	10,29	1,50 3,50 5,00	0,30 0,40 0,50	●	○				
			WNMG 080412-CR		B0W59WNCR11				●	○				
	CMR		WNMG 080408-CMR	3120	B0W60WNCMR20	11,91	2,00 3,50 5,00		○		●			
			WNMG 080412-CMR		B0W60WNCMR21	12,24			○		●			

Related products

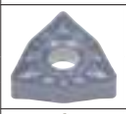
WODEX FLAGDRIVERS FOR TORX® SCREWS

Tech. Code	✪	L mm
E355006	T6	50
E355007	T7	
E355008	T8	
E355009	T9	



Product available in Chap. E

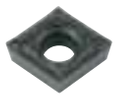
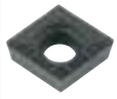
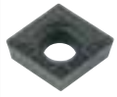
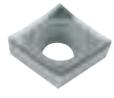
TURNING NEGATIVE INSERTS - W SHAPE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	TSF		WNMG 060404-TSF	T9215	B0W11WNTSF016	11,20	0,20 1,00 1,50	0,08 0,15 0,40	●	○	○			
				T9225	B0W11WNTSF018				●	○	○			
			WNMG 060408-TSF	T9215	B0W11WNTSF015				●	○	○			
				T9225	B0W11WNTSF019				●	○	○			
			WNMG 080404-TSF	T9215	B0W11WNTSF014	13,90			●	○	○			
				T9225	B0W11WNTSF020				●	○	○			
			WNMG 080408-TSF	T9215	B0W11WNTSF017				●	○	○			
				T9225	B0W11WNTSF021				●	○	○			
	SF		WNMG 080404-SF	T6120	B0W12WNSF05	13,00	0,80 1,50 2,80	0,09 0,25 0,45		●				
				T6130	B0W12WNSF06					●				
				AH630	B0W12WNSF07				○	●			○	
			WNMG 080408-SF	T6120	B0W12WNSF08					●				
				T6130	B0W12WNSF09					●				
				AH630	B0W12WNSF10				○	●			●	
	HRF		WNMG 080404-HRF	AH8005	B0W13WNHRF05		0,40 1,00 1,50	0,05 0,15 0,25					●	
				AH8015	B0W13WNHRF06								●	
			WNMG 080408-HRF	AH8005	B0W13WNHRF07								●	
				AH8015	B0W13WNHRF08								●	
MEDIUM CUTTING	AM		WNMG 150608-AM	T9215	B0W20WNAM005	(13,90)	1,00 3,00 5,00	0,20 0,30 0,50	●	○	○			
	TM		WNMG 060404-TM	T9215	B0W21WNTM018	11,20			●	○	○			
				T9225	B0W21WNTM21				●	○	○			
			WNMG 060408-TM	T9215	B0W21WNTM017				●	○	○			
				T9225	B0W21WNTM22				●	○	○			
			WNMG 080404-TM	T9215	B0W21WNTM19	13,90			●	○	○			
				T9225	B0W21WNTM23				●	○	○			
				T9235	B0W21WNTM24				●	○	○			
			WNMG 080408-TM	T9215	B0W21WNTM18				●	○	○			
				T9225	B0W21WNTM25				●	○	○			
				T9235	B0W21WNTM26				●	○	○			
			WNMG 080412-TM	T9215	B0W21WNTM20				●	○	○			
				T9225	B0W21WNTM27				●	○	○			
				T9235	B0W21WNTM28				●	○	○			
	SM		WNMG 080404-SM	T6120	B0W22WNSM010	13,00	0,50 2,00 4,00			●				
				T6130	B0W22WNSM011					●				
				AH630	B0W22WNSM012				○	●			○	
			WNMG 080408-SM	T6120	B0W22WNSM014					●				
				T6130	B0W22WNSM015					●				
				AH630	B0W22WNSM016				○	●			○	
			WNMG 080412-SM	T6120	B0W22WNSM17					●				
				T6130	B0W22WNSM18					●				
				AH630	B0W22WNSM19				○	●			●	
	HRM		WNMG 080404-HRM	AH8005	B0W24WNHRM05			0,10 0,20 0,30					●	
				AH8015	B0W24WNHRM06								●	
			WNMG 080408-HRM	AH8005	B0W24WNHRM07								●	
				AH8015	B0W24WNHRM08								●	
ROUGHING	TH		WNMG 080408-TH	T9215	B0W31WNTH018	13,90	3,00 4,00 6,00	0,30 0,40 0,60	●	●	●			
				T9225	B0W31WNTH019				●	○	○			
				T9235	B0W31WNTH020				●	○	○			
			WNMG 080412-TH	T9215	B0W31WNTH017				●	●	●			
				T9225	B0W31WNTH021				●	○	○			
				T9235	B0W31WNTH022				●	○	○			
	SH		WNMG 080408-SH	T6130	B0W32WNSH05	13,00	2,00 4,00 6,00	0,30 0,45 0,60		●				
				AH630	B0W32WNSH06				○	●			○	
				AH645	B0W32WNSH07				○	●			○	
			WNMG 080412-SH	T6130	B0W32WNSH08					●				
				AH630	B0W32WNSH09				○	●			○	
				AH645	B0W32WNSH10				○	●			○	

Indivisible package Suggested retail package - Unit price

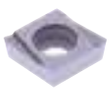
TURNING POSITIVE INSERTS - C SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	FFP		CCMT 060402-FFP	1010	B1C54CCFFP05	7,70	0,20 0,50 1,80	0,05 0,12 0,20	●	●	○			
			CCMT 09T308-FFP		B1C54CCFFP06	9,27			●	●	○			
	CFP		CCMT 060202-CFP	4125	B1C55CCCFP10	7,04	0,50 1,50 2,20	0,07 0,10 0,14	●	○				
			CCMT 060204-CFP	4115	B1C55CCCFP14	7,47			●	○				
				4125	B1C55CCCFP11	7,04			●	○				
			CCMT 09T302-CFP		B1C55CCCFP15	8,54			●	○				
			CCMT 09T304-CFP	4115	B1C55CCCFP16				●	○				
				4125	B1C55CCCFP12	8,00			●	○				
			CCMT 09T308-CFP	4115	B1C55CCCFP17	8,54			●	○				
				4125	B1C55CCCFP13	8,00			●	○				
				4135	B1C55CCCFP18	8,54			●	○				
MEDIUM CUTTING	CMP		CCMT 060204-CMP	4115	B1C56CCCMP10	7,04	2,00 3,00 5,00	0,12 0,16 0,21	●	●				
				4125	B1C56CCCMP11				●	●				
				4135	B1C56CCCMP23	7,47			●	○				
			CCMT 060208-CMP	4115	B1C56CCCMP18				●	○				
				4125	B1C56CCCMP20				●	○				
				4135	B1C56CCCMP24				●	○				
			CCMT 09T304-CMP	4115	B1C56CCCMP12	8,00			●	●				
				4125	B1C56CCCMP13				●	●				
				4135	B1C56CCCMP14				●	●				
			CCMT 09T308-CMP	4115	B1C56CCCMP19	8,54			●	○				
				4125	B1C56CCCMP21				●	○				
				4135	B1C56CCCMP15	8,00			●	○				
			CCMT 120404-CMP	4125	B1C56CCCMP16	10,24			●	○				
			CCMT 120408-CMP		B1C56CCCMP17				●	○				
			CCMT 120412-CMP		B1C56CCCMP22	10,90			●	●				
	SMP		CCMT 060204-SMP	2125	B1C57CCSMP10	7,04	2,00 3,00 5,00		○	●				
			CCMT 060208-SMP		B1C57CCSMP12	7,47			○	●				
			CCMT 09T304-SMP		B1C57CCSMP11	8,00			○	●				
				2135	B1C57CCSMP13	8,54			○	●				
			CCMT 09T308-SMP	2125	B1C57CCSMP14				○	●				
				2135	B1C57CCSMP15				○	●				
			CCMT 120404-SMP	2125	B1C57CCSMP16	10,90			○	●				
			CCMT 120408-SMP		B1C57CCSMP17				○	●				
			CCMT 120412-SMP		B1C57CCSMP18				○	●				
	AFP		CCGT 06021FN-AFP	NL10	B1C58CCAFP15	16,07					○	●	○	
			CCGT 060202FN-AFP		B1C58CCAFP10	15,84					○	●	○	
			CCGT 060204FN-AFP		B1C58CCAFP11						○	●	○	
			CCGT 09T302FN-AFP		B1C58CCAFP12	16,33					○	●	○	
			CCGT 09T304FN-AFP		B1C58CCAFP13						○	●	○	
			CCGT 09T308FN-AFP		B1C58CCAFP14						○	●	○	
			CCGT 120404FN-AFP		B1C58CCAFP16	16,38					○	●	○	
			CCGT 120408FN-AFP		B1C58CCAFP17						○	●	○	

Indivisible package Suggested retail package - Unit price

TURNING POSITIVE INSERTS - C SHAPE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	W08		CCGT 03X102L-W08	SH730	B1C11CCW010	16,85	0,10 0,30 0,50	0,05 0,15 0,30	●	●	●	●	●	●
			CCGT 03X102R-W08		B1C11CCW011				●	●	●	●	●	●
	W15		CCGT 060204L-W15	GT9530	B1C11CCW1505	14,80			●					
	W20		CCGT 09T304L-W20	GT9530	B1C11CCW2005	15,85			●					
	PSF		CCMT 060202-PSF	AH725	B1C12CCPSF010	8,20			●	●	●		●	●
			CCMT 060204-PSF		B1C12CCPSF011				●	●	●		●	●
				T9215	B1C12CCPSF025	8,85			●	○	○			
			CCMT 09T302-PSF	AH725	B1C12CCPSF020	9,25			●	●	●		●	●
			CCMT 09T304-PSF		B1C12CCPSF021				●	●	●		●	●
				T9215	B1C12CCPSF024	9,85			●	○	○			
MEDIUM CUTTING	PSS		CCMT 060204-PSS		B1C14CCPSS035	8,85	0,50 1,50 2,50	0,08 0,15 0,30	●	●	●			
				T6120	B1C14CCPSS005	8,20				●				
				T6130	B1C14CCPSS006					●				
				AH725	B1C14CCPSS007				●	●	●		●	●
			CCMT 060208-PSS	T9215	B1C14CCPSS036	(8,85)			●	○	○			
				T9225	B1C14CCPSS037				●	○	○			
				T6130	B1C14CCPSS011	8,20				●				
				AH725	B1C14CCPSS012				●	●	●		●	●
			CCMT 09T304-PSS	T9215	B1C14CCPSS033	9,85			●	○	○			
				T9225	B1C14CCPSS038	(9,85)			●	○	○			
				T6120	B1C14CCPSS025	9,25				●				
				T6130	B1C14CCPSS026					●				
				AH725	B1C14CCPSS027				●	●	●		●	●
			CCMT 09T308-PSS	T9215	B1C14CCPSS034	9,85			●	○	○			
				T6120	B1C14CCPSS030	9,25				●				
				T6130	B1C14CCPSS031					●				
				AH725	B1C14CCPSS032				●	●	●		●	●
	JS		CCGT 060201N-JS	AH725	B1C15CCJS005	(13,40)	1,00 1,50 3,00	0,02 0,08 0,20	●	●	●		●	●
			CCGT 060202N-JS		B1C15CCJS006				●	●	●		●	●
			CCGT 060204N-JS		B1C15CCJS007				●	●	●		●	●
			CCGT 09T302N-JS		B1C15CCJS008	14,45			●	●	●		●	●
			CCGT 09T304-JS		B1C15CCJS009				●	●	●		●	●
	PM		CCMT 060204-PM	T9215	B1C21CCPM019	8,85	1,00 2,00 3,00	0,15 0,20 0,30	●	○	○			
				AH725	B1C21CCPM002	8,20			●	●	●		●	●
				T6120	B1C21CCPM003					●				
				T6130	B1C21CCPM004					●				
			CCMT 060208-PM	T9215	B1C21CCPM020	8,85			●	○	○			
				AH725	B1C21CCPM006	8,20			●	●	●		●	●
				T6120	B1C21CCPM021					●				
				T6130	B1C21CCPM008					●				
			CCMT 09T304-PM	AH725	B1C21CCPM010	9,25			●	●	●		●	●
				T6120	B1C21CCPM011					●				
				T6130	B1C21CCPM012					●				
			CCMT 09T308-PM	AH725	B1C21CCPM013				●	●	●		●	●
				T6120	B1C21CCPM014					●				
				T6130	B1C21CCPM015					●				
			CCMT 120408-PM	AH725	B1C21CCPM016	12,80			●	●	●		●	●
				T6120	B1C21CCPM017					●				
				T6130	B1C21CCPM018					●				

Indivisible package Suggested retail package - Unit price

TURNING POSITIVE INSERTS - D SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	FFP		DCMT 070204-FFP	1010	B1D55DCFFP05	7,70	0,20 0,50 1,80	0,05 0,12 0,20	●	●	○			
			DCMT 11T304-FFP		B1D55DCFFP06				●	●	○			
	CFP		DCMT 070202-CFP	4125	B1D56DCCFP10	6,91	0,50 1,50 2,20	0,07 0,10 0,14	●	○				
			DCMT 070204-CFP	4115	B1D56DCCFP14	7,34			●	○				
				4125	B1D56DCCFP11	6,91			●	○				
			DCMT 11T302-CFP		B1D56DCCFP15	9,36			●	○				
			DCMT 11T304-CFP		B1D56DCCFP12	8,81			●	○				
			DCMT 11T308-CFP		B1D56DCCFP13				●	○				
MEDIUM CUTTING	CMP		DCMT 070204-CMP	4125	B1D57DCCMP10	6,91	2,00 3,00 5,00	0,12 0,16 0,21	●	○				
				4135	B1D57DCCMP11				●	○				
			DCMT 070208-CMP	4125	B1D57DCCMP18	7,34			●	○				
				4135	B1D57DCCMP19				●	○				
			DCMT 11T304-CMP	4115	B1D57DCCMP12	8,81			●	○				
				4125	B1D57DCCMP13				●	○				
				4135	B1D57DCCMP14				●	○				
			DCMT 11T308-CMP	4115	B1D57DCCMP15				●	○				
				4125	B1D57DCCMP16				●	○				
				4135	B1D57DCCMP17				●	○				
	SMP		DCMT 070204-SMP	2125	B1D58DCSMP10	6,91			○	●				
			DCMT 070208-SMP		B1D58DCSMP13	7,34			○	●				
			DCMT 11T304-SMP		B1D58DCSMP11	8,81			○	●				
				2135	B1D58DCSMP14	9,36				●			○	
			DCMT 11T308-SMP	2125	B1D58DCSMP12	8,81			○	●				
				2135	B1D58DCSMP15	9,36				●			○	
	AFP		DCGT 070201FN-AFP	NL10	B1D59DCAFP15	12,24		0,20 0,35 0,50			○	●	○	
			DCGT 070202FN-AFP		B1D59DCAFP10	11,63					○	●	○	
			DCGT 070204FN-AFP		B1D59DCAFP11						○	●	○	
			DCGT 070208FN-AFP		B1D59DCAFP16	12,24					○	●	○	
			DCGT 11T302FN-AFP		B1D59DCAFP12						○	●	○	
			DCGT 11T304FN-AFP		B1D59DCAFP13	13,61					○	●	○	
			DCGT 11T308FN-AFP		B1D59DCAFP14						○	●	○	

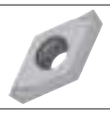
Related products

KERFOLG PRESETTING EYE TRIM II

Tech. Code	Useful X axis mm	Useful Z axis mm	Spindle
C471540	130 (ø 260)	360	ISO 40
C471550			ISO 50
C471563			HSK 63

The products are available in chapter C

TURNING POSITIVE INSERTS - D SHAPE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	W15		DCGT 11T302L-W15	NS9530	B1D10DCW1505	14,70	0,10 0,30 0,50	0,05 0,15 0,30	●					
			DCGT 11T302R-W15		B1D10DCW1506				●					
			DCGT 11T304L-W15		B1D10DCW1507				●					
			DCGR 11T304R-W15		B1D10DCW1508				●					
	PSF		DCMT 070202-PSF	AH725	B1D11DCPSF010	7,95			●	●	●		●	●
			DCMT 070204-PSF		B1D11DCPSF005				●	●	●		●	●
				T9215	B1D11DCPSF015	8,50			●	○	○			
			DCMT 11T302-PSF	AH725	B1D11DCPSF020	10,50			●	●	●		●	●
			DCMT 11T304-PSF		B1D11DCPSF021				●	●	●		●	●
				T9215	B1D11DCPSF014	11,25			●	○	○			
			DCMT 11T308-PSF	AH725	B1D11DCPSF022	10,50			●	●	●		●	●
				T9215	B1D11DCPSF013	11,25			●	○	○			
MEDIUM CUTTING	PSS		DCMT 070204-PSS	T9215	B1D12DCPSS032	8,50	0,50 1,50 2,50	0,08 0,15 0,30	●	○	○			
				T9225	B1D12DCPSS035				●	○	○			
				T6120	B1D12DCPSS005	7,95				●				
				T6130	B1D12DCPSS006					●				
				AH725	B1D12DCPSS007				●	●	●		●	●
			DCMT 070208-PSS	T9215	B1D12DCPSS034	8,50			●	○	○			
				T6120	B1D12DCPSS016	7,95				●				
			DCMT 11T304-PSS	T9215	B1D12DCPSS031	11,25			●	●	●			
				T6120	B1D12DCPSS009					●				
				AH725	B1D12DCPSS020	10,50			●	●	●		●	●
			DCMT 11T308-PSS		B1D12DCPSS026				●	●	●		●	●
				T9215	B1D12DCPSS033	11,25			●	○	○			
				T9225	B1D12DCPSS036				●	○	○			
				T6120	B1D12DCPSS018	10,50				●				
				T6130	B1D12DCPSS011					●				
	JS		DCGT 070201N-JS	AH725	B1D13DCJS005	13,10	1,00 1,50 3,00	0,02 0,08 0,20	●	●	●		●	●
			DCGT 070202N-JS		B1D13DCJS006				●	●	●		●	●
			DCGT 11T301N-JS		B1D13DCJS007	15,25			●	●	●		●	●
			DCGT 11T302N-JS		B1D13DCJS008				●	●	●		●	●
			DCGT 11T304N-JS		B1D13DCJS009				●	●	●		●	●
	PM		DCMT 070204-PM	T9215	B1D21DCPM021	8,50	1,00 2,00 3,00	0,15 0,20 0,30	●	○	○			
				AH725	B1D21DCPM006	7,95			●	●	●		●	●
				T6120	B1D21DCPM007					●				
				T6130	B1D21DCPM008					●				
			DCMT 070208-PM	T9215	B1D21DCPM022	8,50			●	○	○			
				AH725	B1D21DCPM016	7,95			●	●	●		●	●
				T6120	B1D21DCPM023					●				
			DCMT 11T304-PM	T9215	B1D21DCPM020	11,25			●	○	○			
				AH725	B1D21DCPM010	10,50			●	●	●		●	●
				T6120	B1D21DCPM011					●				
				T6130	B1D21DCPM012					●				
			DCMT 11T308-PM	T9215	B1D21DCPM019	11,25			●	○	○			
				AH725	B1D21DCPM013	10,50			●	○	○		●	●
				T6120	B1D21DCPM014					●				
				T6130	B1D21DCPM015					●				

TURNING POSITIVE INSERTS - K SHAPE

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
MED. CUT.	CMP		KNUX 160405L-CMP	4125	B1K61KNCMP10	12,20	2.00 3.00 5.00	0.12 0.16 0.21	●	○				
			KNUX 160405R-CMP		B1K61KNCMP11				●	○				
			KNUX 160410R-CMP	4125	B1K61KNCMP12	12,27			●	○				
			KNUX 160410L-CMP		B1K61KNCMP13				●	○				

Indivisible package Suggested retail package - Unit price

TURNING POSITIVE INSERTS - R SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
MEDIUM CUTTING	CMP		RCMT 0803MO-CMP	4135	B1R62RCCMP05	8,16	2,00 3,00 5,00	0,12 0,16 0,21	●	○				
			RCMT 1003MO-CMP		B1R62RCCMP06	8,86			●	○				
			RCMT 1204MO-CMP		B1R62RCCMP07	10,14			●	○				
	CLP		RCMT 1606MOSN-CLP	4125	B1R65RCCLP05	17,16	3,20 5,50 7,20	0,55 0,75 1,00	●	○				
				4135	B1R65RCCLP06				●	○				
			RCMT 2006MOSN-CLP	4125	B1R65RCCLP07	23,05			●	○				
				4135	B1R65RCCLP08				●	○				

TURNING POSITIVE INSERTS - S SHAPE

KERFOLG Cross

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
MEDIUM CUTTING	CMP		SCMT 09T304-CMP	4125	B1S55SCCMP10	8,44	1,00 1,50 2,50	0,12 0,16 0,21	●	○				
			SCMT 09T308-CMP		B1S55SCCMP18	9,00			●	○				
				4135	B1S55SCCMP11	8,44			●	○				
			SCMT 120404-CMP	4115	B1S55SCCMP15	12,06			●	○				
			SCMT 120408-CMP	4125	B1S55SCCMP12	11,30			●	○				
					B1S55SCCMP13				●	○				
				4135	B1S55SCCMP14				●	○				
			SCMT 120412-CMP	4125	B1S55SCCMP16	12,06			●	○				
				4135	B1S55SCCMP17				●	○				
	SMP		SCMT 09T304-SMP	2125	B1S56SCSMP05	9,00			○	●				
			SCMT 09T308-SMP		B1S56SCSMP06				○	●				
			SCMT 120404-SMP		B1S56SCSMP07	12,06			○	●				
			SCMT 120408-SMP		B1S56SCSMP08				○	●				
			SCMT 120412-SMP		B1S56SCSMP09				○	●				
	AFP		SCGT 09T304FN-AFP	NL10	B1S57SCAFP05	13,02		0,10 0,18 0,25				●	○	○
			SCGT 09T308FN-AFP		B1S57SCAFP06							●	○	○

TURNING POSITIVE INSERTS - S SHAPE

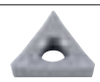
Tungaloy TURNLINE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
MEDIUM CUTTING	PS		SCMT 120404-PS	T9215	B1S11SCPS016	13,70	0,50 1,50 2,50	0,08 0,18 0,30	●	○	○			
				T9225	B1S11SCPS017				●	○	○			
				T6120	B1S11SCPS007	12,80				●				
				T6130	B1S11SCPS008					●				
				AH725	B1S11SCPS009				●	●	●		●	●
			SCMT 120408-PS	T9215	B1S11SCPS015	13,70			●	○	○			
				T9225	B1S11SCPS018				●	○	○			
				T6120	B1S11SCPS012	12,80				●				
				T6130	B1S11SCPS013					●				
				AH725	B1S11SCPS014				●	●	●		●	●
	PM		SCMT 120408-PM	T9215	B1S12SCPM010	13,70	1,00 2,00 3,00	0,15 0,20 0,30	●	○	○			
				T6120	B1S12SCPM011	12,80				●				
				T6130	B1S12SCPM012					●				
				AH725	B1S12SCPM007				●	●	●		●	●
			SCMT 120412-PM		B1S12SCPM009				●	●	●		●	●

Indivisible package Suggested retail package - Unit price

TURNING POSITIVE INSERTS - T SHAPE

KERFOLG Cross

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FIN.	FFP		TCGT 110202-FFP	1010	B1T55TCFFP05	9,66	0,20 0,50 1,80	0,05 0,12 0,20	●	●	○			
			TCGT 110204-FFP		B1T55TCFFP06	8,81			●	●	○			
MEDIUM CUTTING	CMP		TCMT 110204-CMP	4115	B1T56TCCMP16	7,55	2,00 3,00 5,00	0,12 0,16 0,21	●	○				
				4125	B1T56TCCMP10	7,12			●	○				
				4135	B1T56TCCMP11				●	○				
			TCMT 110208-CMP	4125	B1T56TCCMP17	7,55			●	○				
				4135	B1T56TCCMP18				●	○				
			TCMT 16T304-CMP	4125	B1T56TCCMP12	9,35			●	○				
				4135	B1T56TCCMP13				●	○				
			TCMT 16T308-CMP	4125	B1T56TCCMP14				●	○				
				4135	B1T56TCCMP15				●	○				
			TCMT 16T312-CMP	4125	B1T56TCCMP19	9,92			●	○				
	SMP		TCMT 110204-SMP	2125	B1T57TCSMP10	7,12			○	●				
				2135	B1T57TCSMP13	7,55				●			●	
			TCMT 1102008-SMP	2125	B1T57TCSMP14				○	●				
				2135	B1T57TCSMP15					●			●	
			TCMT 16T304-SMP	2125	B1T57TCSMP11	9,35			○	●				
			TCMT 16T308-SMP		B1T57TCSMP12				○	●				
			TCMT 16T312-SMP		B1T57TCSMP16	9,92			○	●				
	AFP		TCGT 110204FN-AFP	NL10	B1T58TCAFP05	13,60		0,20 0,35 0,50			○	●	○	
			TCGT 16T304FN-AFP		B1T58TCAFP06	15,15					○	●	○	
			TCGT 16T308FN-AFP		B1T58TCAFP07						○	●	○	

TURNING POSITIVE INSERTS - T SHAPE

tungaloy TURNLINE TUNGALOY

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	PSF		TCMT 110202-PSF	AH725	B1T11TCPSF010	8,60	0,10 0,30 0,50	0,05 0,15 0,30	●	●	●		●	●
			TCMT 110204-PSF		B1T11TCPSF011				●	●	●		●	●
				T9215	B1T11TCPSF016	9,25			●	○	○			
			TCMT 16T304-PSF	AH725	B1T11TCPSF020	11,20			●	●	●		●	●
				T9215	B1T11TCPSF017	12,05			●	○	○			
				T9225	B1T11TCPSF021				●	○	○			
MEDIUM CUTTING	PSS		TCMT 110204-PSS	AH725	B1T12TCPSS010	8,60	0,50 1,50 2,50	0,08 0,15 0,30	●	●	●		●	●
				T9215	B1T12TCPSS029	9,25			●	○	○			
			TCMT 16T304-PSS	AH725	B1T12TCPSS020	11,20			●	●	●		●	●
				T9215	B1T12TCPSS028	12,05			●	○	○			
			TCMT 16T308-PSS	AH725	B1T12TCPSS027	11,20			●	●	●		●	●
				T9215	B1T12TCPSS030	12,05			●	○	○			
	PM		TCMT 110202-PM	AH725	B1T21TCPM005	8,60	1,00 2,00 3,00	0,15 0,20 0,30	●	●	●		●	●
			TCMT 110204-PM		B1T21TCPM010				●	●	●		●	●
				T9215	B1T21TCPM024	9,25			●	○	○			
				T6120	B1T21TCPM008	8,60				●				
				T6130	B1T21TCPM009					●				
			TCMT 16T304-PM	AH725	B1T21TCPM020	11,20			●	●	●		●	●
				T9215	B1T21TCPM025	12,05			●	○	○			
				T9225	B1T21TCPM028				●	○	○			
				T6120	B1T21TCPM013	11,20				●				
				T6130	B1T21TCPM014					●				
			TCMT 16T308-PM	AH725	B1T21TCPM023				●	●	●		●	●
				T9215	B1T21TCPM022	12,05			●	○	○			
				T9225	B1T21TCPM026				●	○	○			
				T6120	B1T21TCPM017	11,20				●				
				T6130	B1T21TCPM018					●				
			TCMT 16T312-PM	AH725	B1T21TCPM019				●	●	●		●	●
				T9225	B1T21TCPM029	12,05			●	○	○			
				T6130	B1T21TCPM027	11,20				●				

Indivisible package Suggested retail package - Unit price

TURNING POSITIVE INSERTS - V SHAPE

KERFOLG Turn

			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
M. CUT.	CMP		VBMT 160404-CMP	4115	B1V59VBCMP12	13,72	0,50 1,50 2,50	0,12 0,16 0,21	●	●				
				4125	B1V59VBCMP10	12,92			●	●				
			VBMT 160408-CMP		B1V59VBCMP11				●	●				

TURNING POSITIVE INSERTS - V SHAPE

Tungaloy TURNLINE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	PSF		VBMT 160402-PSF	AH725	B1V11VBPSF005	14,80	0,10 0,30 0,50	0,05 0,15 0,30	●	●	●		●	●
			VBMT 160404-PSF		B1V11VBPSF006				●	●	●		●	●
				T9215	B1V11VBPSF009	15,90			●	●	●			
MEDIUM CUTTING	PSS		VBMT 160404-PSS	AH725	B1V12VBPSS005	14,80	0,50 1,50 2,50	0,08 0,15 0,30	●	●	●		●	●
				T9215	B1V12VBPSS016	15,90			●	●	●			
				T6120	B1V12VBPSS008	14,80				●				
				T6130	B1V12VBPSS009					●				
			VBMT 160408-PSS	AH725	B1V12VBPSS010				●	●	●		●	●
				T9215	B1V12VBPSS015	15,90			●	●	●			
				T6120	B1V12VBPSS013	14,80				●				
				T6130	B1V12VBPSS014					●				

WODEX mro

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TURNING POSITIVE INSERTS - V SHAPE

KERFOLG Turn

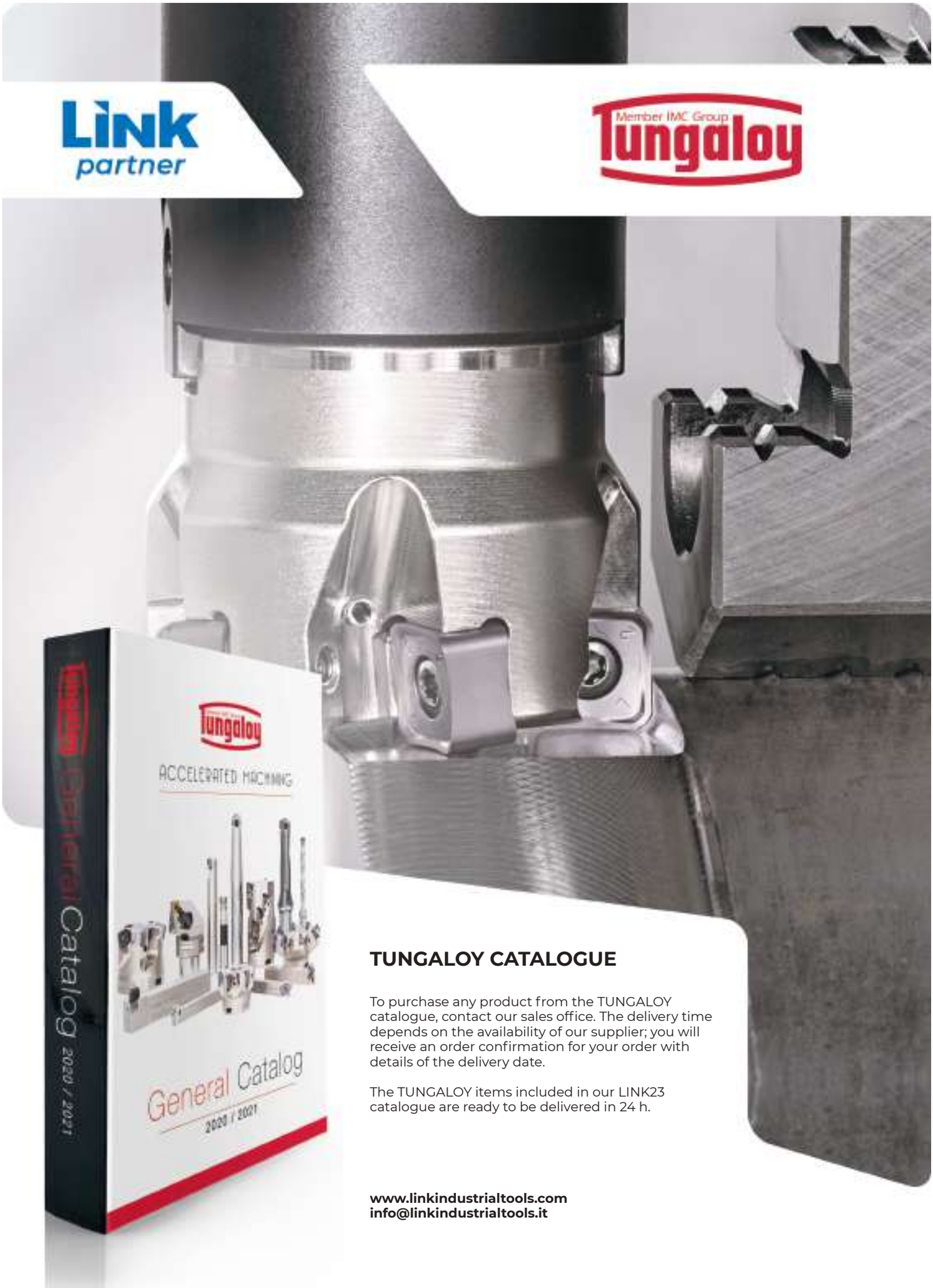
			Description	Grade	Tech. Code	GR19 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FIN.	CFP		VCMT 160404-CFP	4125	B1V55VCCFP10	12,92	0,50 1,50 2,20	0,07 0,10 0,14	●	○				
			VCMT 160408-CFP		B1V55VCCFP11	13,72			●	○				
MEDIUM CUTTING	CMP		VCMT 110304-CMP	4125	B1V60VCCMP17	10,26	1,00 1,50 2,50	0,12 0,16 0,21	●	○				
				4135	B1V60VCCMP14				●	○				
			VCMT 110308-CMP	4125	B1V60VCCMP15				●	○				
				4135	B1V60VCCMP16				●	○				
			VCMT 160404-CMP	4125	B1V60VCCMP10	12,92			●	○				
				4135	B1V60VCCMP11				●	○				
			VCMT 160408-CMP	4125	B1V60VCCMP12				●	○				
				4135	B1V60VCCMP13				●	○				
	SMP		VCMT 110204-SMP	2125	B1V61VCSMP12	10,26			○	●				
				2135	B1V61VCSMP13				○	●				
			VCMT 110208-SMP	2125	B1V61VCSMP14				○	●				
				2135	B1V61VCSMP15				○	●				
			VCMT 160404-SMP	2125	B1V61VCSMP10	12,92			○	●				
			VCMT 160408-SMP		B1V61VCSMP11				○	●				
	AFP		VCGT 110302FN-AFP	NL10	B1V62VCAFP12	14,78		0,10 0,18 0,25			○	●	○	
			VCGT 110304FN-AFP		B1V62VCAFP13						○	●	○	
			VCGT 160404FN-AFP		B1V62VCAFP10	21,48					○	●	○	
			VCGT 160408FN-AFP		B1V62VCAFP11						○	●	○	
			VCGT 110312FN-AFP		B1V62VCAFP14	13,89					○	●	○	

TURNING POSITIVE INSERTS - V SHAPE

Tungaloy TURNLINE

			Description	Grade	Tech. Code	GR17 Euro	CUTTING DATA: Depth mm	Feed mm/rev	P	M	K	N	S	H
FINISHING	PSF		VCMT 160404-PSF	AH725	B1V20VCPSF005	14,80	0,10 0,30 0,50	0,12 0,16 0,21	●	●	●		●	●
				T9215	B1V20VCPSF012	15,90			●	○	○			
			VCMT 160408-PSF	AH725	B1V20VCPSF008	14,80			●	●	●		●	●
				T9215	B1V20VCPSF011	15,90			●	○	○			
MEDIUM CUTTING	PSS		VCMT 160404-PSS	AH725	B1V21VCPSS005	14,80	0,50 1,50 2,50	0,08 0,15 0,30	●	●	●		●	●
				T9215	B1V21VCPSS013	15,90			●	○	○			
				T9225	B1V21VCPSS017				●	○	○			
				T6120	B1V21VCPSS008	14,80				●				
				T6130	B1V21VCPSS015					●				
			VCMT 160408-PSS	AH725	B1V21VCPSS009				●	●	●		●	●
				T9215	B1V21VCPSS014	15,90			●	○	○			
				T9225	B1V21VCPSS018				●	○	○			
				T6120	B1V21VCPSS012	14,80				●				

Indivisible package Suggested retail package - Unit price



TUNGALOY CATALOGUE

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TOOLHOLDERS FOR GROOVING AND CUTTING

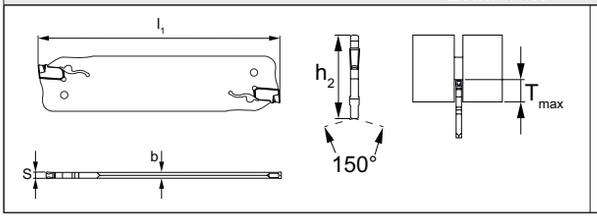
KERFOLG

SCN...

ART. B2U25

Type	SCN...
Dimension	3 - 4 mm
Clamping system	Flexible
Application	Grooving and parting

BN... SCN



Tech. Code	GR18 Euro	Description	h2 mm	b mm	s mm	l1 mm	Tmax mm	SPARE PARTS Inserts	SPARE PARTS Wrench
B2U2526N03	103,19	BN3-26 SCN	26	2,4	3	110	35	SCN 3...	BRICA215
B2U2526N04	103,19	BN4-26 SCN	26	3,2	4	110	40	SCN 4...	BRICA215
B2U2532N03	103,19	BN3-32 SCN	32	2,4	3	150	50	SCN 3...	BRICA215
B2U2532N04	103,19	BN4-32 SCN	32	3,2	4	150	50	SCN 4...	BRICA215

INSERTS FOR GROOVING AND PARTING - SINGLE SIDE

KERFOLG

		Description	Grado	Tech. Code	GR19 Euro	s mm	a max mm	l mm	r mm	Tool Holders
PARTING	G1	SCN 3.00-0.20-G1	G135	B2T2503G101	12,41	3	-	11,3	0,2	BN3...SCN
		SCN 3.00-0.20-G1	G145	B2T2503G102	12,41	3	-	11,3	0,2	BN3...SCN
		SCN 4.00-0.30-G1	G135	B2T2504G101	14,24	4	-	13,3	0,3	BN4...SCN
		SCN 4.00-0.30-G1	G145	B2T2504G102	14,24	4	-	13,3	0,3	BN4...SCN
	G2	SCN 3.00-0.30-G2	G135	B2T2603G201	12,79	3	2,0	11,3	0,3	BN3...SCN
		SCN 3.00-0.30-G2	G145	B2T2603G202	12,79	3	2,0	11,3	0,3	BN3...SCN
		SCN 4.00-0.40-G2	G135	B2T2604G201	14,65	4	2,5	13,3	0,4	BN4...SCN
		SCN 4.00-0.40-G2	G145	B2T2604G202	14,65	4	2,5	13,3	0,4	BN4...SCN
	S1	SCN 3.00-0.30-S1	G010	B2T2703S101	15,33	3	2,5	11,3	0,3	BN3...SCN
		SCN 4.00-0.40-S1	G010	B2T2704S101	15,33	4	3,0	13,3	0,4	BN4...SCN

RECOMMENDED CUTTING CONDITIONS

KERFOLG

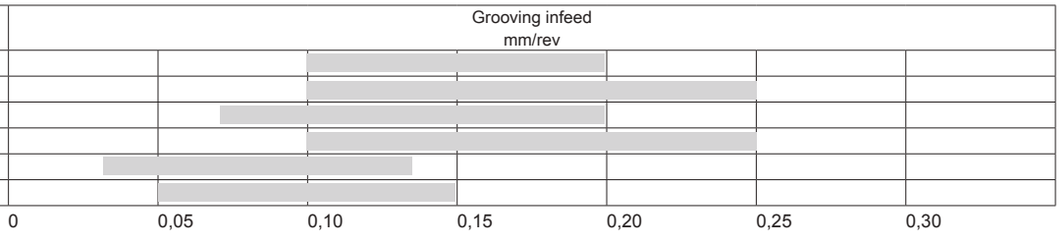
Grado	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
G135	110 - 190	110 - 180	70 - 160			90 - 180	80 - 150			
G145	80 - 150	70 - 120	60 - 110	70 - 120	50 - 100				25 - 50	
G010								200 - 2000		

Geometry for grooving and parting.	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
G1 - First choice in parting steels and cast irons.	○	●	●	○		●	●			
G2 - Soft cut. First choice in case of varying materials.	●	●	○	●	●	○	○		●	
S1 - Very sharp geometry. For aluminum alloys.								●		

● RECOMMENDED FOR... ○ USABLE FOR…

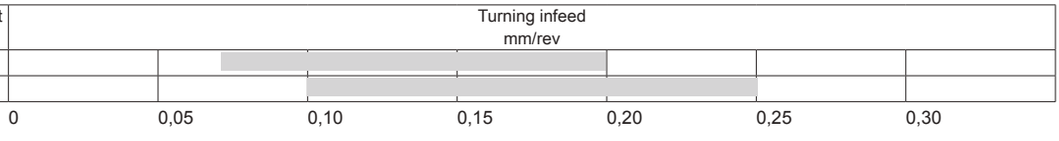
	Geometry	Width of cut mm
GROOVING	G1	3
		4
	G2	3
		4
	S1	3
		4

Grooving infeed mm/rev



	Geometry	Width of cut mm	Max depth of cut mm
	G2	3	2,0
		4	2,5

Turning infeed mm/rev



Indivisible package Suggested retail package - Unit price

TOOLHOLDERS FOR PARTING, GROOVING AND TURNING

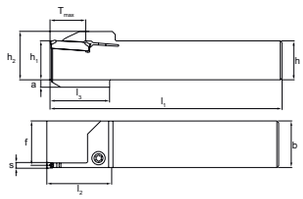
KERFOLG

DGN...

ART. B2U30

Type	DGN22..
Dimension	2 - 3 mm
Clamping system	Screw
Application	Grooving, parting and turning

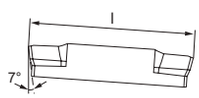
TGE...-DGN

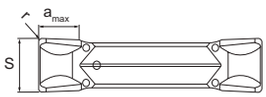


Tech. Code	GR18 Euro	Description	h mm	b mm	s mm	Tmax mm	h2 mm	l1 mm	l2 mm	l3 mm	f mm	a mm	SPARE PARTS Inserts	Screw	Wrench
B2U3016L1202	102,05	TGE16L-DGN2202-12	16	16	2	12	25	125	35	24	15,3	4	DGN22...2	BRICA 217	BRICA 219
B2U3016R1202	102,05	TGE16R-DGN2202-12	16	16	2	12	25	125	35	24	15,3	4	DGN22...2	BRICA 217	BRICA 219
B2U3020L1202	124,98	TGE20L-DGN2202-12	20	20	2	12	25	125	35	-	19,3	-	DGN22...2	BRICA 217	BRICA 219
B2U3020R1202	124,98	TGE20R-DGN2202-12	20	20	2	12	25	125	35	-	19,3	-	DGN22...2	BRICA 217	BRICA 219
B2U3020L2103	127,27	TGE20L-DGN2203-21	20	20	3	21	25	125	35	-	18,8	-	DGN22...3	BRICA 217	BRICA 219
B2U3020R2103	127,27	TGE20R-DGN2203-21	20	20	3	21	25	125	35	-	18,8	-	DGN22...3	BRICA 217	BRICA 219
B2U3020L1203	118,10	TGE20L-DGN2203-12	20	20	3	12	25	125	35	-	18,8	-	DGN22...3	BRICA 217	BRICA 219
B2U3020R1203	118,10	TGE20R-DGN2203-12	20	20	3	12	25	125	35	-	18,8	-	DGN22...3	BRICA 217	BRICA 219
B2U3025L1203	126,13	TGE25L-DGN2203-12	25	25	3	12	30	125	35	-	23,8	-	DGN22...3	BRICA 217	BRICA 219
B2U3025R1203	126,13	TGE25R-DGN2203-12	25	25	3	12	30	125	35	-	23,8	-	DGN22...3	BRICA 217	BRICA 219
B2U3025L2103	136,45	TGE25L-DGN2203-21	25	25	3	21	30	125	35	-	23,8	-	DGN22...3	BRICA 217	BRICA 219
B2U3025R2103	136,45	TGE25R-DGN2203-21	25	25	3	21	30	125	35	-	23,8	-	DGN22...3	BRICA 217	BRICA 219

INSERTS FOR PARTING, GROOVING AND TURNING - DOUBLE SIDE

KERFOLG





			Description	Grado	Tech. Code	GR19 Euro	s mm	a max mm	l mm	r mm	T max mm	Tool Holders
GROOVING	G1		DGN22 2.00-0.20-G1	G135	B2T3002G101	15,41	2	2,5	22	0,2	20	TGE...22
			DGN22 2.00-0.20-G1	G240	B2T3002G102	15,41	2	2,5	22	0,2	20	TGE...22
			DGN22 2.00-0.20-G1	G145	B2T3002G103	15,41	2	2,5	22	0,2	20	TGE...22
			DGN22 3.00-0.20-G1	G135	B2T3003G101	16,93	3	2,5	22	0,2	20	TGE...22
			DGN22 3.00-0.20-G1	G240	B2T3003G102	16,93	3	2,5	22	0,2	20	TGE...22
			DGN22 3.00-0.20-G1	G145	B2T3003G103	16,93	3	2,5	22	0,2	20	TGE...22
	G01		DGN22 2.00-0.20-G01	G135	B2T3102G0101	15,41	2	-	22	0,2	20	TGE...22
			DGN22 2.00-0.20-G01	G240	B2T3102G0102	15,41	2	-	22	0,2	20	TGE...22
			DGN22 2.00-0.20-G01	G145	B2T3102G0103	15,41	2	-	22	0,2	20	TGE...22
			DGN22 3.00-0.20-G01	G135	B2T3103G0101	16,93	3	-	22	0,2	20	TGE...22
			DGN22 3.00-0.20-G01	G240	B2T3103G0102	16,93	3	-	22	0,2	20	TGE...22
			DGN22 3.00-0.20-G01	G145	B2T3103G0103	16,93	3	-	22	0,2	20	TGE...22
	S01		DGN22 2.00-0.20-S01	G145	B2T3202S0101	15,41	2	-	22	0,2	20	TGE...22
			DGN22 2.00-0.20-S01	G245	B2T3202S0102	15,41	2	-	22	0,3	20	TGE...22
			DGN22 3.00-0.20-S01	G145	B2T3203S0101	16,93	3	-	22	0,3	20	TGE...22
			DGN22 3.00-0.20-S01	G240	B2T3203S0102	16,93	3	-	22	0,3	20	TGE...22
TURNING	MD1		DGN22 2.00-0.20-MD1	G240	B2T3302MD101	15,41	2	-	22	0,2	20	TGE...22
			DGN22 3.00-0.30-MD1	G240	B2T3303MD102	16,93	3	-	22	0,3	20	TGE...22
			DGN22 3.00-0.30-MD1	G240			3	-	22	0,3	20	TGE...22
	MP1		DGN22 2.00-1.00-MP1	G240	B2T3402MP101	15,41	2	-	22	1,0	20	TGE...22
			DGN22 3.00-1.50-MP1	G240	B2T3403MP102	21,03	3	-	22	1,5	20	TGE...22
			DGN22 3.00-1.50-MP1	G240			3	-	22	1,5	20	TGE...22

TOOLHOLDERS FOR PARTING, GROOVING AND CUTTING SINGLE SIDE

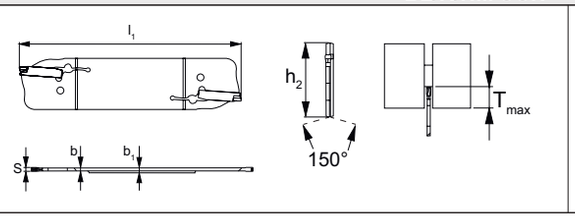
KERFOLG

SGN...

ART. B2U35

Type	SGN22...
Dimension	2 mm
Clamping system	Flexible
Application	Grooving and parting

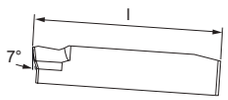
BL/R/N... SGN



									SPARE PARTS	
Tech. Code	GR18 Euro	Description	h2 mm	b mm	b1 mm	s mm	l1 mm	Tmax mm	Inserts	Wrench
B2U3526L02	146,77	BL2-26 SGN	26	1,4	2,4	2	110	50	SGN22...2	BRICA 215
B2U3526R02	146,77	BR2-26 SGN	26	1,4	2,4	2	110	50	SGN22...2	BRICA 215
B2U3532L02	146,77	BL2-32 SGN	32	1,4	2,4	2	150	60	SGN22...2	BRICA 215
B2U3532R02	146,77	BR2-32 SGN	32	1,4	2,4	2	150	60	SGN22...2	BRICA 215
B2U3526N03	120,39	BN3-26 SGN	26	2,4	-	3	110	70	SGN22...3	BRICA 215
B2U3532N03	120,39	BN3-32 SGN	32	2,4	-	3	150	100	SGN22...3	BRICA 215

INSERTS FOR GROOVING AND PARTING - SINGLE SIDE

KERFOLG



		Description	Grado	Tech. Code	GR19 Euro	s mm	a max mm	l mm	r mm	Tool Holders
GROOVING	G1	SGN22 2.00-0.20-G1	G135	B2T3502G101	12,64	2	2,5	21,35	0,2	BL2... BR2...
		SGN22 2.00-0.20-G1	G240	B2T3502G102	12,64	2	2,5	21,35	0,2	BL2... BR2...
		SGN22 2.00-0.20-G1	G145	B2T3502G103	12,64	2	2,5	21,35	0,2	BL2... BR2...
		SGN22 3.00-0.30-G1	G135	B2T3503G101	15,41	3	2,5	21,35	0,2	BN3...
		SGN22 3.00-0.30-G1	G240	B2T3503G102	15,41	3	2,5	21,35	0,2	BN3...
		SGN22 3.00-0.30-G1	G145	B2T3503G103	15,41	3	2,5	21,35	0,2	BN3...

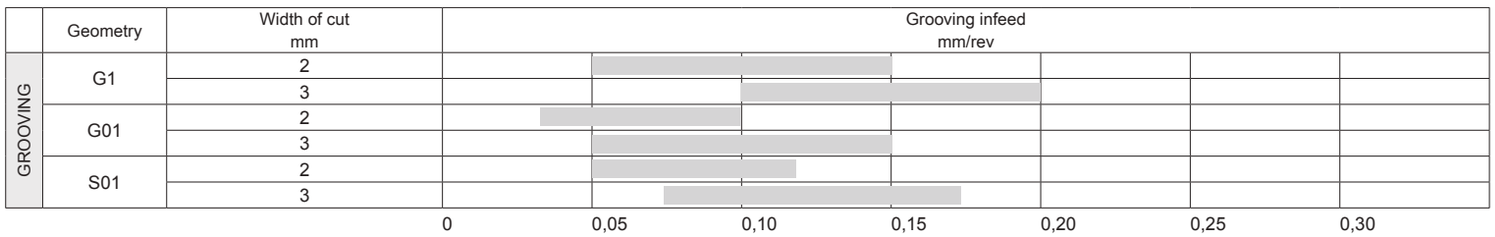
RECOMMENDED CUTTING CONDITIONS

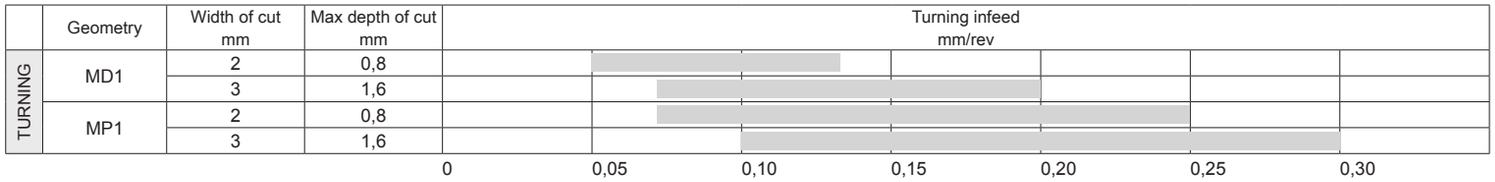
KERFOLG

	P			M		K		N	S	H
Grade	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
G135	110 - 190	110 - 180	70 - 160			90 - 180	80 - 150			
G145	80 - 150	70 - 120	60 - 100	70 - 120	50 - 100				25 - 50	
G240	80 - 180	60 - 150	50 - 120	50 - 160	50 - 100	100 - 200	100 - 180			

Geometry for grooving, parting and turning	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
G1 - Tough cut. First choice on steels and cast irons.	○	●	●	○		●	●			
G01 - Soft cut. First choice in case of varying materials.	●	●	○	●	○	○	○		○	
S01 - Soft cut expecially for stainless and Titanium alloy.	○	○	●	●	●				●	
MD1 - Grooving and turning on steels and stailness.	●	●	●	●	●	●	○		○	
MP1 - Radius grooves and copy turning.	○	●	●	●	○	●	●		○	

● RECOMMENDED FOR... ○ USABLE FOR...





Indivisible package Suggested retail package - Unit price

TOOLHOLDERS FOR PARTING,GROOVING AND TURNING

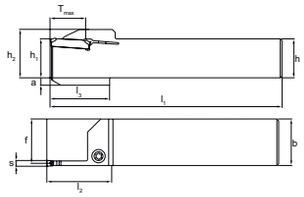
KERFOLG

DGN...

ART. B2U32

Type DGN25...
Dimension 4 - 5 - 6 mm
Clamping system Screw
Application Grooving, cut off and turning

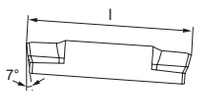
TGE..DGN25..

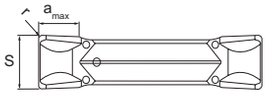


Tech. Code	GR18 Euro	Description	h mm	b mm	s mm	Tmax mm	h2 mm	l1 mm	l2 mm	f mm	SPARE PARTS Inserts	Insert screw	Wrench
B2U3220L2104	127,27	TGE20L-DGN2504-21	20	20	4	21	30	125	35	18,5	DGN25...4	BRICA 217	BRICA 219
B2U3220R2104	127,27	TGE20R-DGN2504-21	20	20	4	21	30	125	35	18,5	DGN25...4	BRICA 217	BRICA 219
B2U3225L2104	136,45	TGE25L-DGN2504-21	25	25	4	21	30	125	35	23,5	DGN25...4	BRICA 217	BRICA 219
B2U3225R2104	136,45	TGE25R-DGN2504-21	25	25	4	21	30	125	35	23,5	DGN25...4	BRICA 217	BRICA 219

INSERTS FOR DEEP GROOVING AND PARTING - DOUBLE SIDE

KERFOLG





			Description	Grado	Tech. Code	GR19 Euro	s mm	a max mm	l mm	r mm	T max mm	Tool Holders
GROOVING	G1		DGN25 4.00-0.30-G1	G135	B2T4004G101	21,03	4	3	25	0,3	23	TGE...
			DGN25 4.00-0.30-G1	G240	B2T4004G102	21,03	4	3	25	0,3	23	TGE...
			DGN25 4.00-0.30-G1	G145	B2T4004G103	21,03	4	3	25	0,3	23	TGE...
	G01		DGN25 4.00-0.30-G01	G135	B2T4104G0101	21,03	4	-	25	0,3	23	TGE...
			DGN25 4.00-0.30-G01	G240	B2T4104G0102	21,03	4	-	25	0,3	23	TGE...
			DGN25 4.00-0.30-G01	G145	B2T4104G0103	21,03	4	-	25	0,3	23	TGE...
	S01		DGN25 4.00-0.40-S01	G145	B2T4204S0101	21,03	4	-	25	0,4	23	TGE...
			DGN25 4.00-0.40-S01	G240	B2T4204S0102	21,03	4	-	25	0,4	23	TGE...
TURNING	MD1		DGN25 4.00-0.40-MD1	G240	B2T4304MD101	(21,03)	4	3	25	0,4	23	TGE...
	MP1		DGN25 4.00-2.00-MP1	G240	B2T4404MP101	21,03	4	2,5	25	2,0	23	TGE...

DEEP GROOVING AND PARTING BLADES - SINGLE SIDE

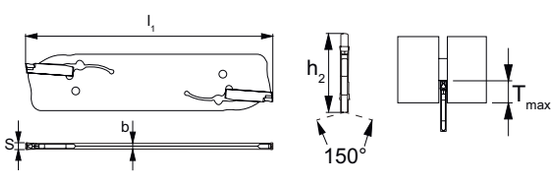
KERFOLG

SGN...

ART. B2U45

Type SGN25...
Dimension 4 mm
Clamping system Flexible
Application Grooving and parting off

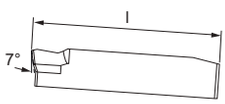
BN...SGN



Tech. Code	GR18 Euro	Description	h2 mm	b mm	s mm	l1 mm	T max mm	SPARE PARTS Inserts	Wrench
B2U4526N04	120,39	BN4-26-SGN	26	2,4	4	110	40	SGN25...4	BRICA215
B2U4532N04	120,39	BN4-32-SGN	32	2.4	4	150	50	SGN25...4	BRICA215

INSERTS FOR GROOVING AND PARTING - SINGLE SIDE

KERFOLG



			Description	Grado	Tech. Code	GR19 Euro	s mm	a max mm	l mm	r mm	Tool Holders
	G1		SGN25 4.00-0.30-G1	G135	B2T4504G101	19,04	4	3	24,3	0,3	BN4...
			SGN25 4.00-0.30-G1	G240	B2T4504G102	19,04	4	3	24,3	0,3	BN4...
			SGN25 4.00-0.30-G1	G145	B2T4504G103	19,04	4	3	24,3	0,3	BN4...

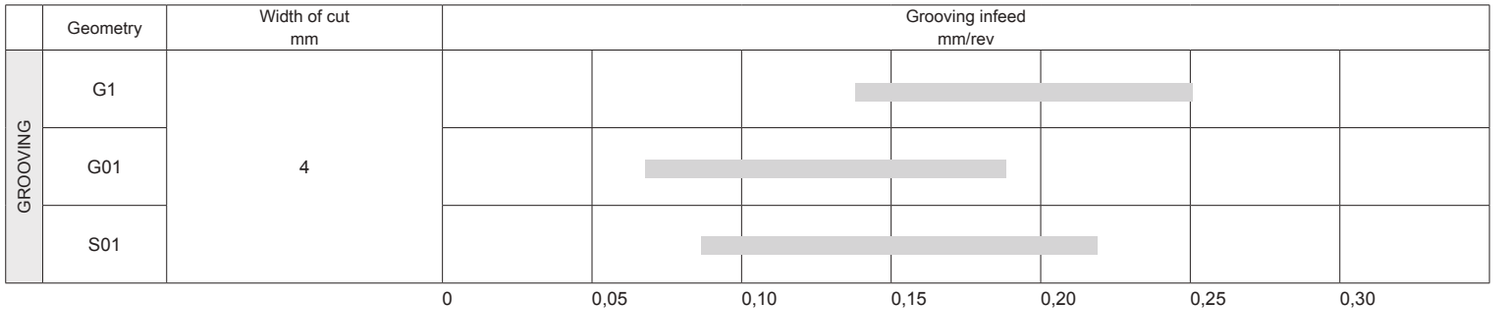
RECOMMENDED CUTTING CONDITIONS

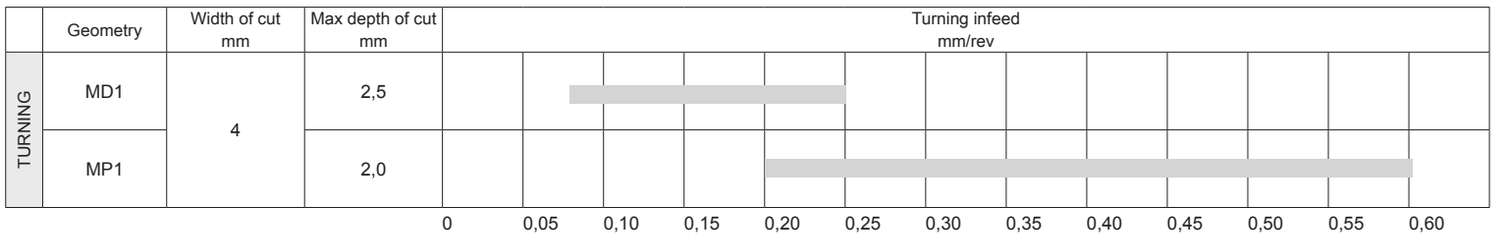
KERFOLG

Grade	P			M		K		N	S	H
	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
G135	110 - 190	110 - 180	70 - 160			90 - 180	80 - 150			
G145	80 - 150	70 - 120	60 - 100	70 - 120	50 - 100				25 - 50	
G240	80 - 180	60 - 150	50 - 120	50 - 160	50 - 100	100 - 200	100 - 180			

Geometry for grooving, parting off and turning	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
G1 - Tough cut. First choise on steels and cast irons.	○	●	●	○		●	●			
G01 - Soft cut. First choice in case of varying materials.	●	●	○	●	○	○	○		○	
S01 - Soft cut expecially for stainless and Titanium alloy.	○	○		●	●				●	
MD1 - Grooving and turning on steels and stailness.	●	●	●	●	●	●	○		○	
MP1 - Radius grooves and copy turning.	○	●	●	●	○	●	●		○	

● RECOMMENDED FOR... ○ USABLE FOR…





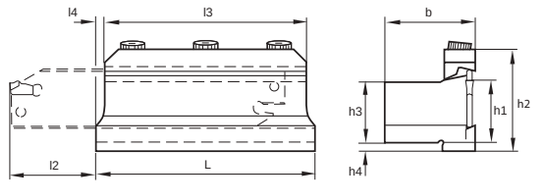
TOOL BLOCK FOR PARTING BLADES

KERFOLG Tronca

ART. B2U07

Application Parting off

B2U07



Tech. Code	GR18 Euro	L mm	l2 max mm	l3 mm	l4 mm	h1 mm	h2 mm	h3 mm	h4 mm	b mm	Blades h mm
B2U07262020	188,90	80	45	70	5	20	45.5	20	10	38	26
B2U07323232	209,16	120	80	110	5	32	54.5	32	5	50	32

Indivisible package Suggested retail package - Unit price

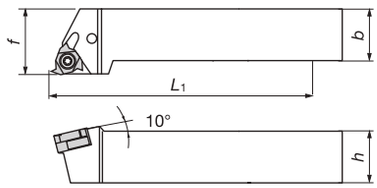
TOOLHOLDERS FOR EXTERNAL THREADING

16E-I...

ART. B2U10

Material Steel
Clamping system S (Screw)
Application External threading

SER



Tech. Code	GR26 Euro	Description	b mm	h mm	f mm	L1 mm	Inserts	SPARE PARTS INCLUDED Insert screw	Supporto AE	Supporto AI	Support screw
B2U101616H16	140,56	SER 1616 H16	16	16	20	100	16ER/L...	BRICA067	BRICA069	-	BRICA068
B2U102020K16	140,56	SER 2020 K16	20	20	25	125	16ER/L...	BRICA067	BRICA069	-	BRICA068
B2U102525M16	149,54	SER 2525 M16	25	25	32	150	16ER/L...	BRICA067	BRICA069	-	BRICA068
B2U103232P16	209,25	SER 3232 P16	32	32	40	170	16ER/L...	BRICA067	BRICA069	-	BRICA068

EXTERNAL THREADING INSERTS KITS

Kit for external threading composed of 10 inserts and a tool holder.

Tech. Code	GR27 Euro	Description	Pieces
B2U10SET	443,40	1 pce SER2525M16 1pce 16ER 0.75 - 1 - 1.25 - 1.50 - 1.75 - 2 - 2.50 - 3 - AG55 - AG60	11

- Standard shim for lead angle 1.5°

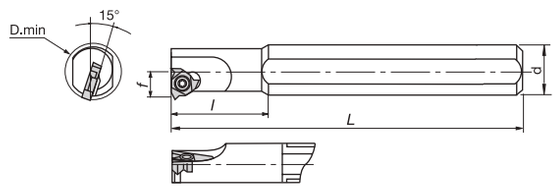
TOOLHOLDERS FOR INTERNAL THREADING

16E-I...

ART. B2U20

Material Acciaio
Clamping system S (Screw)
Application Internal threading

SIR



Tech. Code	GR26 Euro	Description	D mm	f mm	d mm	l mm	L mm	Inserts	SPARE PARTS INCLUDED Insert screw	Supporto AE	Supporto AI	Support screw
B2U2013M16	127,13	SIR 0013 M16	16	10.2	16	32	150	16ER/L...	BRICA067	-	BRICA070	BRICA068
B2U2016P16	127,13	SIR 0016 P16	19	11.7	20	40	170	16ER/L...	BRICA067	-	BRICA070	BRICA068
B2U2020P16	140,59	SIR 0020 P16	24	13.7	20	__	170	16ER/L...	BRICA067	-	BRICA070	BRICA068
B2U2025R16	156,27	SIR 0025 R16	29	16.2	25	__	200	16ER/L...	BRICA067	-	BRICA070	BRICA068
B2U2025R22	165,41	SIR 0025 R22	29	18.1	25	__	200	22ER/L...	BRICA071	-	BRICA074	BRICA072

INTERNAL THREADING INSERTS KITS

Kit for internal threading composed of 10 inserts and a tool holder.

Tech. Code	GR27 Euro	Description	Pieces
B2U20SET	465,00	1 pce SIR0020P16 2 pcs 16IR 1.5 - 2 - 3 - 11W - AG60	11

- Standard shim for lead angle 1.5°

INSERTS FOR EXTERNAL THREADING

			Description	Grade	Tech. Code	GR27 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
ISO 60°			16ER 0,5 ISO	BH	B2IE1ISO160,5	22,33	180	130	80	130	80	200	110	250	40	30
			16ER 0,75 ISO		B2IE1ISO160,7		180	130	80	130	80	200	110	250	40	30
			16ER 1.0 ISO		B2IE1ISO161	18,83	180	130	80	130	80	200	110	250	40	30
			16ER 1,25 ISO		B2IE1ISO161,2		180	130	80	130	80	200	110	250	40	30
			16ER 1,5 ISO		B2IE1ISO161,5		180	130	80	130	80	200	110	250	40	30
			16ER 1,75 ISO		B2IE1ISO161,7		180	130	80	130	80	200	110	250	40	30
			16ER 2.0 ISO		B2IE1ISO162		180	130	80	130	80	200	110	250	40	30
			16ER 2,5 ISO		B2IE1ISO162,5	20,63	180	130	80	130	80	200	110	250	40	30
			16ER 3.0 ISO		B2IE1ISO163		180	130	80	130	80	200	110	250	40	30
			16ER AG60		B2IE116AG60		180	130	80	130	80	200	110	250	40	30
W 55°			16ER 14W		B2IE216W14	18,83	180	130	80	130	80	200	110	250	40	30
			16ER 11W		B2IE216W11	20,63	180	130	80	130	80	200	110	250	40	30
			16ER AG55		B2IE216AG55		180	130	80	130	80	200	110	250	40	30

INSERTS FOR INTERNAL THREADING

			Description	Grade	Tech. Code	GR27 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
ISO 60°			16IR 1.0 ISO	BH	B2II1ISO161	18,83	180	130	80	130	80	200	110	250	40	30
			16IR 1,5 ISO		B2II1ISO161,5	18,10	180	130	80	130	80	200	110	250	40	30
			16IR 2.0 ISO		B2II1ISO162	18,83	180	130	80	130	80	200	110	250	40	30
			16IR 2,5 ISO		B2II1ISO162,5	20,63	180	130	80	130	80	200	110	250	40	30
			16IR 3.0 ISO		B2II1ISO163		180	130	80	130	80	200	110	250	40	30
			16IR AG60		B2II216AG60		180	130	80	130	80	200	110	250	40	30
W 55°			16IR 14W		B2II216W14	18,83	180	130	80	130	80	200	110	250	40	30
			16IR 11W		B2II216W11	20,63	180	130	80	130	80	200	110	250	40	30
			16IR AG55		B2II116AG55		180	130	80	130	80	200	110	250	40	30

THREADING INSERTS KIT

Tech. Code	GR27 Euro	Description	Grade	Pieces
B2IES16ES	189,30	10 inserts 16ER P 1-3 kit	BH	10
B2IES16IN	189,30	10 inserts 16IR P 1-3 kit	BH	10

ANVIL SHIM FOR THREADING INSERTS

ART. B2SET

Tech. Code	GR30 Euro	Description
B2SETKAES16	38,27	Kaes 16N
B2SETKAIS16	38,27	Kais 16N

Indivisible package Suggested retail package - Unit price

EXTERNAL GROOVING TOOLHOLDERS TRIANGOLAR INSERTS

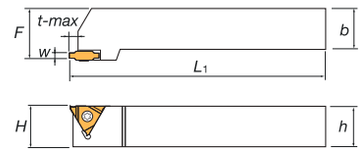
KERFOLG Turn

SG...

ART. B2U50

Material — Acciaio
Clamping system — S (Screw)
Application — External Cir-clip grooves; External slots

CGER/L



Right hand

Tech. Code	GR18 Euro	Description	b mm	h mm	H mm	L1 mm	W mm	t-max mm	Inserts	SPARE PARTS INCLUDED Screw	Wrench
B2U50L2020	142,65	CESL 2020K 16	20	20	20	125	1,25 - 3,35	3	SG16...	BRICA199	BRICA186
B2U50L2525	142,65	CESL 2525M 16	25	25	25	150	1,25 - 3,35	3	SG16...	BRICA199	BRICA186
B2U50R2020	142,65	CESR 2020K 16	20	20	20	125	1,25 - 3,35	3	SG16...	BRICA199	BRICA186
B2U50R2525	142,65	CESR 2525M 16	25	25	25	150	1,25 - 3,35	3	SG16...	BRICA199	BRICA186

INTERNAL GROOVING TOOLHOLDERS TRIANGOLAR INSERTS

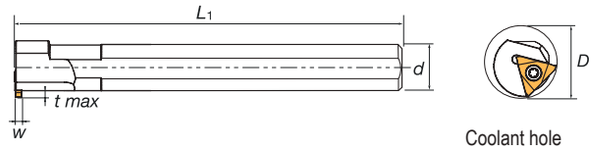
KERFOLG Turn

SG...

ART. B2U51

Material — Acciaio
Tipo di bloccaggio — S (Screw)
Application — Internal Cir-clip grooves; Internal slots

R/L



Right hand

Coolant hole

Tech. Code	GR18 Euro	Description	D min mm	d mm	f mm	L1 mm	W mm	t-max mm	Inserts	SPARE PARTS INCLUDED Screw	Wrench
B2U51L16M16	247,45	CISL 0016M 16	20	16	10,8	150	1,25 - 3,35	3	SG16...	BRICA199	BRICA186
B2U51L20Q16	247,45	CISL 0020Q 16	25	20	13,0	180	1,25 - 3,35	3	SG16...	BRICA199	BRICA186
B2U51R16M16	247,45	CISR 0016M 16	23	16	10,8	150	1,25 - 3,35	3	SG16...	BRICA199	BRICA186
B2U51R20Q16	247,45	CISR 0020Q 16	25	20	11,0	180	1,25 - 3,35	3	SG16...	BRICA199	BRICA186

GROOVING INSERTS - SG16

KERFOLG Turn

		Grade 4L35	Description	W mm	Tech. Code	GR19 Euro	Seeger thickness mm	Dep. max mm	Feed mm/rev	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	MM		SG16 110 - MM	1,25	B2S16110		1,00	1,2 1,5 1,8	0,05 0,08 0,16	140	110	90	90	70	150	120		50	
			SG16 130 - MM	1,45	B2S16130	27,32	1,20			140	110	90	90	70	150	120		50	
			SG16 160 - MM	1,80	B2S16160		1,50			140	110	90	90	70	150	120		50	
			SG16 185 - MM	2,00	B2S16185	24,15	1,75	3		140	110	90	90	70	150	120		50	
			SG16 215 - MM	2,30	B2S16215	30,56	2,00			140	110	90	90	70	150	120		50	
			SG16 265 - MM	2,80	B2S16265	33,35	2,50			140	110	90	90	70	150	120		50	
			SG16 315 - MM	3,35	B2S16315	38,99	3,00			140	110	90	90	70	150	120		50	

GROOVING INSERTS SG16 SET

KERFOLG Turn

ART. B2S16K

Tech. Code	GR19 Euro	Description	Grade	Pieces
B2S16KIT	218,40	Set of 10 inserts SG16 2pz 1,25 - 1,45 - 1,80 1pz 1,85 - 2,15 - 2,65 - 3,15	4L35	10

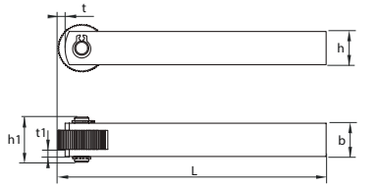
Indivisible package — Suggested retail package - Unit price

SINGLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES

KERFOLG Rough

ART. B2G01

Materiale Steel
Knurling profile RAA - RBL - RBR - RGE - RGV
Rotazione DX + SX
Coupling 8 - 200 mm
Application Execution of form knurl



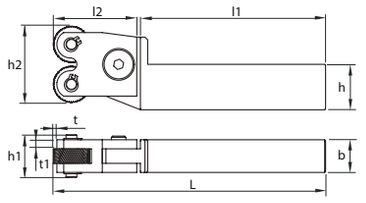
Tech. Code	GR18 Euro	L mm	b mm	h mm	h1 mm	t mm	t1 mm	KNURLING HOLDERS	mm
B2G01R01	49,16	113	14	14	19	3	3	AA - BL - BR - GV - GE	20 x 8 x 6

DOUBLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES

KERFOLG Rough

ART. B2G02

Materiale Steel
Knurling profile RAA - RGE30° - RGE45°
Rotazione DX + SX
Coupling 8 - 200 mm
Application Execution of form knurl



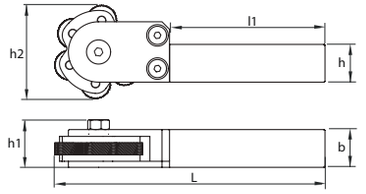
Tech. Code	GR18 Euro	L mm	b mm	h mm	h1 mm	h2 mm	l1 mm	l2 mm	t mm	t1 mm	Knurling wheels B2G...	mm
B2G02R02	193,10	150	18	25	24	46	102	46	2	5	AA - BL - BR	20 x 8 x 6

MULTIPLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES

KERFOLG Rough

ART. B2G03

Materiale Steel
Knurling profile RAA - RGE30° - RGE45°
Rotazione DX + SX
Coupling 8 - 200 mm
Application Execution of form knurl



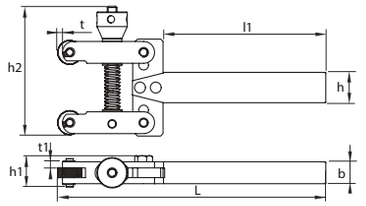
Tech. Code	GR18 Euro	L mm	b mm	h mm	h1 mm	h2 mm	l1 mm	KNURLING HOLDERS	mm
B2G03R06	320,20	181	25	25	30	62	103	AA - BL - BR	20 x 8 x 6

ADJUSTABLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES

KERFOLG Rough

ART. B2G04

Materiale Steel
Knurling profile RAA - RGE30° - RGE45°
Rotazione DX + SX
Coupling 4 - 50 mm
Application Execution of form knurl



Tech. Code	GR18 Euro	L mm	b mm	h mm	h1 mm	h2 mm	l1 mm	t mm	t1 mm	KNURLING HOLDERS	mm
B2G04R02	(490,44)	221	20	25	26,5	107	134	3	5	AA - BL - BR	20 x 8 x 6

Indivisible package Suggested retail package - Unit price

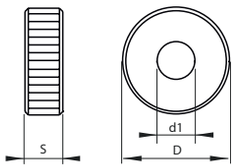
FORM KNURLING WHEELS - AA TYPE

KERFOLG Rough

RAA

ART. B2G10

Material HSS + co
Knurling profile RAA



Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G10AA05	44,40	20	8	6	0°	0,5
B2G10AA06	44,40	20	8	6	0°	0,6
B2G10AA08	44,40	20	8	6	0°	0,8
B2G10AA10	44,40	20	8	6	0°	1,0

Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G10AA12	44,40	20	8	6	0°	1,2
B2G10AA15	44,40	20	8	6	0°	1,5
B2G10AA18	44,40	20	8	6	0°	1,8
B2G10AA20	44,40	20	8	6	0°	2,0

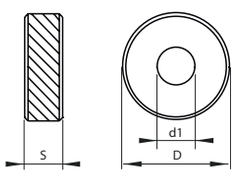
FORM KNURLING WHEELS - BR TYPE

KERFOLG Rough

RBR

ART. B2G15 - B2G20

Material HSS + co
Knurling profile RBL



Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G15BR05	44,40	20	8	6	DX 30°	0,5
B2G15BR06	44,40	20	8	6	DX 30°	0,6
B2G15BR08	44,40	20	8	6	DX 30°	0,8
B2G15BR10	44,40	20	8	6	DX 30°	1,0
B2G15BR12	44,40	20	8	6	DX 30°	1,2
B2G15BR15	44,40	20	8	6	DX 30°	1,5
B2G15BR18	44,40	20	8	6	DX 30°	1,8
B2G15BR20	44,40	20	8	6	DX 30°	2,0

Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G20BR05	44,40	20	8	6	DX 45°	0,5
B2G20BR06	44,40	20	8	6	DX 45°	0,6
B2G20BR08	44,40	20	8	6	DX 45°	0,8
B2G20BR10	44,40	20	8	6	DX 45°	1,0
B2G20BR12	44,40	20	8	6	DX 45°	1,2
B2G20BR15	44,40	20	8	6	DX 45°	1,5
B2G20BR18	44,40	20	8	6	DX 45°	1,8
B2G20BR20	44,40	20	8	6	DX 45°	2,0

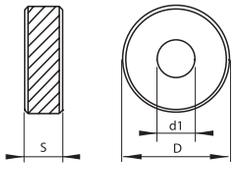
FORM KNURLING WHEELS - BL TYPE

KERFOLG Rough

RBL

ART. B2G25 - B2G30

Material HSS + co
Knurling profile RBR



Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G25BL05	43,20	20	8	6	SX 30°	0,5
B2G25BL06	44,40	20	8	6	SX 30°	0,6
B2G25BL08	44,40	20	8	6	SX 30°	0,8
B2G25BL10	44,40	20	8	6	SX 30°	1,0
B2G25BL12	44,40	20	8	6	SX 30°	1,2
B2G25BL15	44,40	20	8	6	SX 30°	1,5
B2G25BL18	44,40	20	8	6	SX 30°	1,8
B2G25BL20	44,40	20	8	6	SX 30°	2,0

Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G30BL05	44,40	20	8	6	SX 45°	0,5
B2G30BL06	44,40	20	8	6	SX 45°	0,6
B2G30BL08	44,40	20	8	6	SX 45°	0,8
B2G30BL10	44,40	20	8	6	SX 45°	1,0
B2G30BL12	44,40	20	8	6	SX 45°	1,2
B2G30BL15	44,40	20	8	6	SX 45°	1,5
B2G30BL18	44,40	20	8	6	SX 45°	1,8
B2G30BL20	44,40	20	8	6	SX 45°	2,0

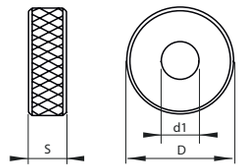
FORM KNURLING WHEELS - GV TYPE

KERFOLG Rough

RGV

ART. B2G35 - B2G40

Material HSS + co
Knurling profile RGE



Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G35GV05	(80,53)	20	8	6	SX 30°	0,5
B2G35GV06	(80,53)	20	8	6	SX 30°	0,6
B2G35GV08	(80,53)	20	8	6	SX 30°	0,8
B2G35GV10	(80,53)	20	8	6	SX 30°	1,0
B2G35GV12	(80,53)	20	8	6	SX 30°	1,2
B2G35GV15	(73,90)	20	8	6	SX 30°	1,5
B2G35GV18	(80,53)	20	8	6	SX 30°	1,8
B2G35GV20	(80,53)	20	8	6	SX 30°	2,0

Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G40GV05	(80,53)	20	8	6	SX 45°	0,5
B2G40GV06	(80,53)	20	8	6	SX 45°	0,6
B2G40GV08	(80,53)	20	8	6	SX 45°	0,8
B2G40GV10	(80,53)	20	8	6	SX 45°	1,0
B2G40GV12	(80,53)	20	8	6	SX 45°	1,2
B2G40GV15	(80,53)	20	8	6	SX 45°	1,5
B2G40GV18	(80,53)	20	8	6	SX 45°	1,8
B2G40GV20	(80,53)	20	8	6	SX 45°	2,0

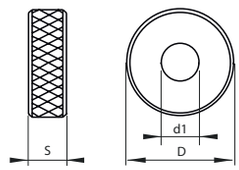
FORM KNURLING WHEELS - GE TYPE

KERFOLG Rough

RGE

ART. B2G45 - B2G50

Material HSS + co
Knurling profile RGV



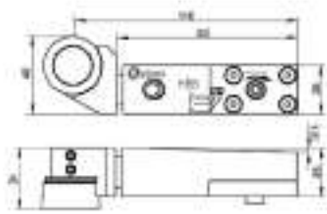
Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G45GE05	(73,60)	20	8	6	DX 30°	0,5
B2G45GE06	(73,60)	20	8	6	DX 30°	0,6
B2G45GE08	(73,60)	20	8	6	DX 30°	0,8
B2G45GE10	(73,60)	20	8	6	DX 30°	1,0
B2G45GE12	(73,60)	20	8	6	DX 30°	1,2
B2G45GE15	(73,60)	20	8	6	DX 30°	1,5
B2G45GE18	(73,60)	20	8	6	DX 30°	1,8
B2G45GE20	(73,60)	20	8	6	DX 30°	2,0

Tech. Code	GR19 Euro	D mm	s mm	d1 mm	Inclination	Passo mm
B2G50GE05	(73,60)	20	8	6	DX 45°	0,5
B2G50GE06	(73,60)	20	8	6	DX 45°	0,6
B2G50GE08	(73,60)	20	8	6	DX 45°	0,8
B2G50GE10	(73,60)	20	8	6	DX 45°	1,0
B2G50GE12	(73,60)	20	8	6	DX 45°	1,2
B2G50GE15	(73,60)	20	8	6	DX 45°	1,5
B2G50GE18	(73,60)	20	8	6	DX 45°	1,8
B2G50GE20	(73,60)	20	8	6	DX 45°	2,0

BURNISHING TOOLS

ART. B2R01

Tool designed for burnishing on lathes, also on various profiles. The roll is supported between both axial and radial bearings. The pressure of the head can be adjusted in order to obtain different levels of burnishing on the workpiece. Possibility of burnishing up to one face. Usable on pieces of different types of materials upto an hardness of 45 HRC. Provided with a B type burnishing roll made of HSS and tempered to 62 HRC, with a polished surface to Ra<0.4



Tech. Code	GR18 Euro	Art. Forn.	Version	Roller	Weight kg
B2R013025L	(931,40)	HBB 30.25 L	L	30 x 13 x 20/17	0,8

Tech. Code	GR18 Euro	Art. Forn.	Version	Roller	Weight kg
B2R013025R	(931,40)	HBB 30.25 R	R	30 x 13 x 20/17	0,8

ROLLERS PROFILE B

ART. B2RB2

HSS rollers hardened to 62 HRC.
Polished surface Ra (0.15-0.40).

Tech. Code	GR18 Euro	Mod.	Profile	Ø D mm	E mm	Ø d mm	Ø d1 mm	R
B2RB2R10B3013	105,90	RB 30x13x20/17	B	30	13	17	20	0,1

Indivisible package Suggested retail package - Unit price

EXTERNAL TURNING ISO 2 BRAZED TOOLS

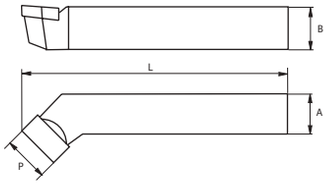
KERFOLG Brazer

ART. B2U90

45° Approach angle

DIN 4972
UNI 4103

Upon request, also available for left running
Minimum order quantity 2 pcs.



Tech. Code	GR22 Euro	A mm	B mm	L mm	P Carbide tip	Grado
B2U900808P	11,47	8	8	80	C6	P
B2U901010P	11,58	10	10	90	C8	P
B2U901212P	13,31	12	12	100	C10	P
B2U901616P	14,94	16	16	110	C12	P
B2U902020P	20,27	20	20	125	C16	P
B2U902525P	31,26	25	25	140	C20	P

Tech. Code	GR22 Euro	A mm	B mm	L mm	P Carbide tip	Grado
B2U903232P	(52,91)	32	32	170	C25	P
B2U900808K	11,47	8	8	80	C6	K
B2U901616K	14,94	16	16	110	C12	K
B2U902020K	20,27	20	20	125	C16	K
B2U902525K	31,26	25	25	140	C20	K

EXTERNAL TURNING ISO 6 BRAZED TOOLS

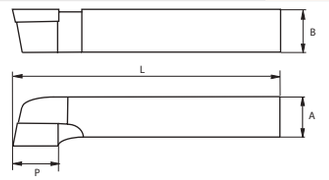
KERFOLG Brazer

ART. B2U91

90° Approach angle

DIN 4980
UNI 4104

Upon request, also available for left running
Minimum order quantity 2 pcs.



Tech. Code	GR22 Euro	A mm	B mm	L mm	P Carbide tip	Grado
B2U910808P	11,47	8	8	80	C6	P
B2U911010P	11,58	10	10	90	C8	P
B2U911212P	13,31	12	12	100	C10	P
B2U911616P	14,94	16	16	110	C12	P
B2U912020P	20,27	20	20	125	C16	P
B2U912525P	31,26	25	25	140	C20	P
B2U913232P	(52,91)	32	32	170	C25	P

Tech. Code	GR22 Euro	A mm	B mm	L mm	P Carbide tip	Grado
B2U910808K	11,47	8	8	80	C6	K
B2U911010K	11,58	10	10	90	C8	K
B2U911212K	13,31	12	12	100	C10	K
B2U911616K	14,94	16	16	110	C12	K
B2U912020K	20,27	20	20	125	C16	K
B2U912525K	31,26	25	25	140	C20	K

EXTERNAL GROOVING ISO 7 BRAZED TOOLS

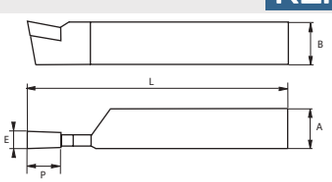
KERFOLG Brazer

ART. B2U92

0° Approach angle

DIN 4981
UNI 4100

Upon request, also available for left running
Minimum order quantity 2 pcs.



Tech. Code	GR22 Euro	B mm	A mm	L mm	E mm	P Carbide tip	Grado
B2U921006P	12,62	10	6	90	3	D3	P
B2U921208P	11,93	12	8	100	3	D3	P
B2U921610P	15,05	16	10	110	4	D4	P
B2U922012P	18,18	20	12	125	5	D5	P
B2U922516P	23,28	25	16	140	6	D6	P

Tech. Code	GR22 Euro	B mm	A mm	L mm	E mm	P Carbide tip	Grado
B2U923220P	36,35	32	20	170	8	D8	P
B2U921006K	11,58	10	6	90	3	D3	K
B2U921208K	11,93	12	8	100	3	D3	K
B2U921610K	15,05	16	10	110	4	D4	K
B2U922012K	18,18	20	12	125	5	D5	K

INTERNAL GROOVING ISO 354R BRAZED TOOLS

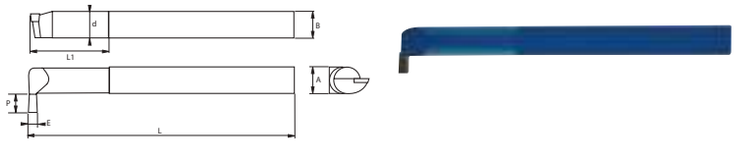
KERFOLG Brazer

ART. B2U95

0° Approach angle

DIN 4971
UNI 4102R

Upon request, also available for left running
Minimum order quantity 2 pcs.



Tech. Code	GR22 Euro	A mm	B mm	D mm	L mm	L1 mm	E mm	P Carbide tip	Grado
B2U951010P	18,18	10	10	10	140	52	3	D3	P
B2U951212P	19,91	12	12	12	160	56	4	D4	P
B2U951616P	23,85	16	16	16	180	63	5	D5	P

Tech. Code	GR22 Euro	A mm	B mm	D mm	L mm	L1 mm	E mm	P Carbide tip	Grado
B2U952020P	30,68	20	20	20	210	80	6	D6	P
B2U952525P	42,96	25	25	25	250	100	8	D8	P

INTERNAL TURNING ISO 9 BRAZED TOOLS

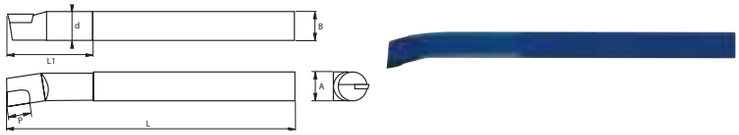
KERFOLG Brazer

ART. B2U96

75° Approach angle

DIN 4974
UNI 4111

Upon request, also available for left running
Minimum order quantity 2 pcs.



Tech. Code	GR22 Euro	A mm	B mm	D mm	L mm	L1 mm	P Carbide tip	Grado
B2U960808P	10,88	8	8	8	125	40	A5	P
B2U961010P	16,10	10	10	10	150	50	A6	P
B2U961212P	16,10	12	12	12	180	63	A8	P
B2U961616P	18,18	16	16	16	210	80	A10	P
B2U962020P	24,31	20	20	20	250	100	A12	P
B2U962525P	33,23	25	25	25	300	125	A16	P
B2U963232P	54,76	32	32	32	355	160	A20	P

Tech. Code	GR22 Euro	A mm	B mm	D mm	L mm	L1 mm	P Carbide tip	Grado
B2U960808K	15,74	8	8	8	125	40	A5	K
B2U961010K	16,10	10	10	10	150	50	A6	K
B2U961212K	16,10	12	12	12	180	63	A8	K
B2U961616K	18,18	16	16	16	210	80	A10	K
B2U962020K	24,31	20	20	20	250	100	A12	K
B2U962525K	33,23	25	25	25	300	125	A16	K
B2U963232K	54,76	32	32	32	355	160	A20	K

Related products

WODEX REVERSIBLE RATCHETS

Tech. Code	Coupling ■	Teeth	Head width mm
E47103/8	3/8"	72	18
E47101/4	1/4"		23
E47101/2	1/2"		36

The products are available in CAP E

Indivisible package Suggested retail package - Unit price

HM ROUND GROUND TOOL BITS

KERFOLG

ART. B2U40

Ground round tool bits HM.
Tolerance h6.

Tech. Code	GR22 Euro	Dimension mm
B2U4002100	9,90	2 x 100
B2U4003100	10,92	3 x 100
B2U4004100	13,24	4 x 100
B2U4005100	19,87	5 x 100

Tech. Code	GR22 Euro	Dimension mm
B2U4006100	24,28	6 x 100
B2U4008100	38,09	8 x 100
B2U4010100	52,97	10 x 100
B2U4012100	75,01	12 x 100

HSS-CO 12% ROUND GROUND TOOL BITS

KERFOLG

ART. B2U70

DIN 4964 12% HSS-Co round-shaped ground drill bits.
Tolerance h8.

Tech. Code	GR22 Euro	Dimension mm
B2U7003100	17,04	3 x 100
B2U7004200	24,47	4 x 200
B2U7005200	25,52	5 x 200
B2U7006200	27,61	6 x 200

Tech. Code	GR22 Euro	Dimension mm
B2U7008200	34,06	8 x 200
B2U7010200	39,71	10 x 200
B2U7012200	50,41	12 x 200

HSS-CO 12% SQUARE GROUND TOOL BITS

KERFOLG

ART. B2U75

DIN 4964 12% HSS-Co square ground drill bits.
Tolerance h14.

Tech. Code	GR22 Euro	Dimension mm
B2U7504200	36,15	4 x 4 x 200
B2U7505200	36,65	5 x 5 x 200
B2U7506200	37,02	6 x 6 x 200
B2U7508200	38,66	8 x 8 x 200
B2U7510200	42,14	10 x 10 x 200

Tech. Code	GR22 Euro	Dimension mm
B2U7512200	53,05	12 x 12 x 200
B2U7514200	70,01	14 x 14 x 200
B2U7516200	89,73	16 x 16 x 200
B2U7520200	123,78	20 x 20 x 200

HSS-CO 12% RECTANGULAR GROUND TOOL BITS

KERFOLG

ART. B2U80

DIN 4964 12% HSS-Co rectangular ground drill bits.
Tolerance h14.

Tech. Code	GR22 Euro	Dimension mm
B2U801003200	36,15	10 x 3 x 200
B2U801004200	35,43	10 x 4 x 200
B2U801005200	34,12	10 x 5 x 200
B2U801006200	38,25	10 x 6 x 200
B2U801008200	43,86	10 x 8 x 200
B2U801503200	42,89	15 x 3 x 200
B2U801504200	42,68	15 x 4 x 200
B2U801505200	46,73	15 x 5 x 200
B2U801506200	53,78	15 x 6 x 200

Tech. Code	GR22 Euro	Dimension mm
B2U801508200	63,06	15 x 8 x 200
B2U801510200	69,54	15 x 10 x 200
B2U802003200	46,14	20 x 3 x 200
B2U802004200	50,49	20 x 4 x 200
B2U802005200	59,81	20 x 5 x 200
B2U802006200	63,82	20 x 6 x 200
B2U802008200	76,42	20 x 8 x 200
B2U802010200	86,26	20 x 10 x 200

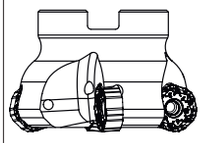
B

SPIANATURA

HNKU0806...

SEHX1204...

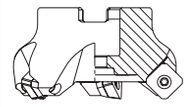
KERFOLG FACE



Two-side hexagonal inserts end mills

Page 62

KERFOLG FACE



General surfacing of any material

Page 61

SPALLAMENTO RETTO

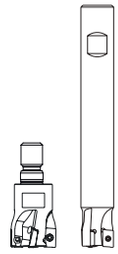
TOKX07... ML
TOKX07... MM

APKT06 ... MR

AVGT06...M5

XVCT16...A5

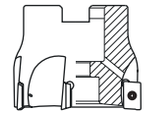
KERFOLG WALL



Single-side square shouldering end mills

Page 69

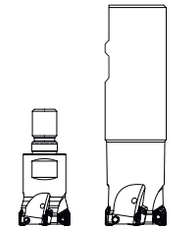
KERFOLG WALL



Single-side square shouldering end mills

Page 70

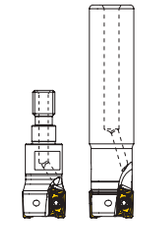
KERFOLG TRIPLE



Single-side square shouldering end mills

Page 71

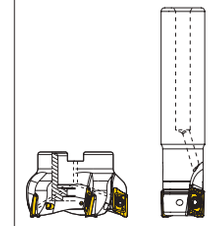
TUNGALOY TUNGFORCEREC



Single-side square shouldering end mills

Page 73

TUNGALOY TUNGALUMILL



Single-side square shouldering end mills

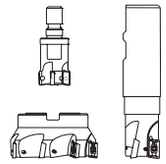
Page 75

SHOULDER AND HELICAL MILLING CUTTERS

APKT1003...

APKT1604...

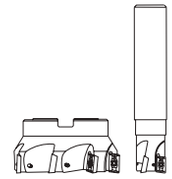
KERFOLG WALL



General, small-depth square shouldering

Page 63

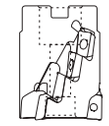
KERFOLG WALL



General, greater-depth square shouldering

Page 66

KERFOLG HELIX



16 mm insert greater-depth contouring

Page 67

HIGH FEED MILLING

RDPX 0702 - 1003 12T3

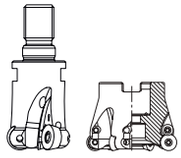
XPLT07

LNMU0303...

LNMX04 ...

SWMT15 ...

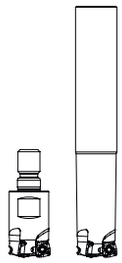
KERFOLG COPY



Multifunctional end mills round inserts

Page 83

KERFOLG MINIFEED



Single-side inserts multifunctional high feed end mills

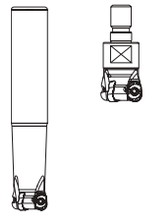
Page 82

TUNGALOY DOFEED MINI

Multi-task type for ultra high-feed milling

Page 77

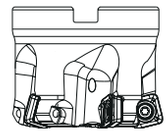
TUNGALOY DOTWISTBALL



Multifunctional high feed toroidal end mills

Page 79

TUNGALOY MILLQUADFEED



Multifunctional high feed end mills

Page 81

MULTIFUNCTION

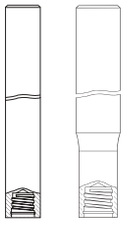
VDE...

VCP...

VST...

VTB...

TUNGALOY TUNGMEISTER



Multifunctional milling tool

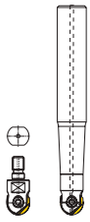
Page 89

FINISHING

ZFBM...M5

ZFRM...M5

TUNGALOY BALL FINISH NOSE



Finishing end mills

Page 85

CHAMFER MILLING

TCMT1102... TCMT16T3... TCMX16T3...

SCMT1204...

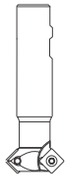
APKT1003... APKT1604...

KERFOLG CROSS

Chamfer end mills triangular inserts

Page 97

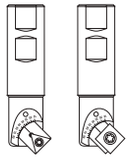
KERFOLG CROSS



Chamfer end mills square inserts

Page 98

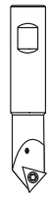
KERFOLG CROSS



Adjustable chamfer end mills

Page 98

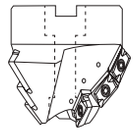
KERFOLG CROSS



Chamfer end mill triangular inserts

Pag. 96

KERFOLG HELIX



Large-size chamfering end mills

Page 64

APPLICATION INDEX - MILLING

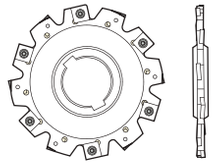
SLOTTING TOOLS

SNHX11...
SNHX12...

GCOM0...

B7B10...
B7B12...
B7B14...

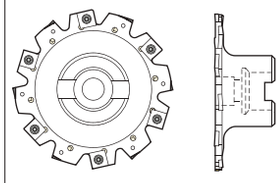
KERFOLG GROOVE



Shaft-coupled disk end mills for grooving and cutting

Page 91

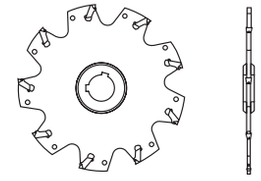
KERFOLG GROOVE



Shell-coupled side cutter mill for cutting and grooving works

Page 92

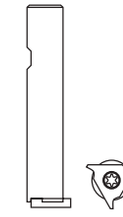
KERFOLG SLOT



Disk end mills for grooving and single-thickness cutting

Page 93

KERFOLG DELTA



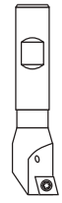
Shank type milling cutters for low-thickness grooving

Page 94

SPOT FACING MILLING

CCMT0602...
CCMT09T3...

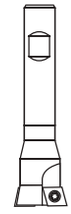
KERFOLG SPLAY



Single or dual cutting-edge insert counter borers

Page 111

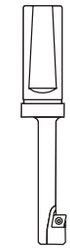
KERFOLG SPLAY



Dual cutting-edge insert counter borers

Page 113

KERFOLG SPLAY



Insert back facing tools

Page 115

DRILLING

WCMT...MF

WCMT...MF

DPM ...
DMC ...

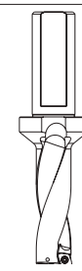
XPMT...

TUNGALOY DRILL MEISTER

Interchangable insert heads

Page 101

TUNGALOY TUNGDRILL TWISTED



Indexable drills

Page 107

KERFOLG HOLE

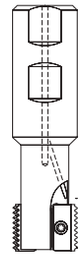
Multi-purpose insert drills

Page 109

SLOTTING TOOLS

ISO...
UN...

SMICUT



Thread milling cutters

Page 100

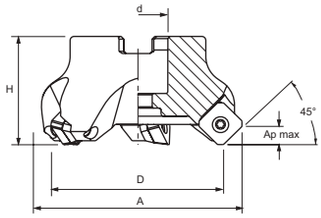
FACE MILLS FOR SINGLE-SIDED SQUARE INSERTS

KERFOLG Face

ART. B3F06

General, multifunctional face mills

Coupling type Bore
Applicable inserts SEHX 1204
Application Face milling

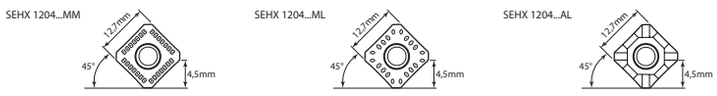


Tech. Code	GR18 Euro	Z	D mm	d mm	A mm	H mm	Ap max mm	Air hole	Insert
B3F0640Z3	214,99	3	40	16	53	40	6	With	SEHX 1204
B3F0650Z4	326,61	4	50	22	63	48	6	With	SEHX 1204
B3F0663Z5	320,91	5	63	22	76	48	6	With	SEHX 1204
B3F0680Z6	382,65	6	80	27	93	50	6	With	SEHX 1204
B3F06100Z8	428,94	8	100	32	113	50	6	With	SEHX 1204
B3F06125Z9	577,71	9	125	40	138	63	6	With	SEHX 1204

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA130	5,56	All diameters	Insert screw	BRICA130
BRICA004	10,90	All diameters	Wrench	BRICA004

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Face



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR20 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MED. CUT	MM		SEHX 1204 AFSN MM	PT30	B3B2112SNMM01	17,04	●	●	○	○		○				
	ML		SEHX 1204 AFSN ML	MT30	B3B2212SNML05	17,04	●	○	○	●	●				○	
	AL		SEHX 1204 AFFN AL	K10	B3B2312SNAL10	18,39								●		

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Recommended Grades	Geometry	Cutting speed Vc (m/min.)	Feed tz/mm
Low carbon content steel (C15, etc.)	~ 200	PT30	MM	180 - 250	0.08 - 0.25
High carbon content steel (C45, C55, etc.)	200 ~ 300	PT30	MM	150 - 200	0.08 - 0.25
Alloy steel 42CRMo4, 17Cr3, etc.	200 ~ 300	PT30	MM	150 - 230	0.08 - 0.25
Tool steel (X155CrVMo 12 1, etc.)	~ 300	PT30	MM	130 - 180	0.06 - 0.20
Stainless steel (X5CrNi 18-9, etc.)	-	MT30	ML	100 - 150	0.06 - 0.20
Grey cast iron (GG25, GG30, etc.)	150 ~ 250	PT30	MM	120 - 180	0.08 - 0.25
Spheroidal cast iron (GGG40, etc.)	150 ~ 250	PT30	MM	100 - 150	0.06 - 0.20
Non ferrous alloys (SI < 13%)	-	K10	AL	200 - 500	0.04 - 0.35
Non ferrous alloys (SI > 13%)	-	K10	AL	200 - 350	0.04 - 0.28

Indivisible package Suggested retail package - Unit price

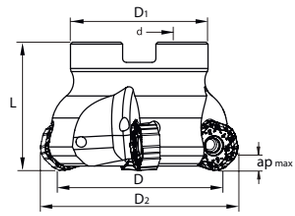
DOUBLE SIDE HEXAGONAL INSERTS SHELL MILLS

KERFOLG Face

ART. B3F08

High productivity face milling of steel and stainless steel

Coupling type	Bore
Insert type	HNKU 08…
Application	Face milling on steel and stainless steel
Cutting angle	45°



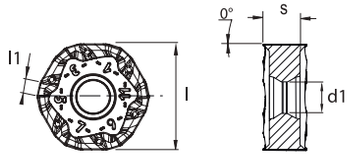
Tech. Code	GR18 Euro	Z	D mm	D2 mm	d mm	L mm	D1 mm	Ap max mm	Air hole	Insert
B3F084008Z4	377,23	4	40	52	16	40	38	4,0	With	HNKU0806AZER...
B3F085008Z4	382,97	4	50	62	22	40	43	4,0	With	HNKU0806AZER...
B3F086308Z5	537,76	5	63	75	22	40	48	4,0	With	HNKU0806AZER...
B3F088008Z6	616,88	6	80	92	27	50	58	4,0	With	HNKU0806AZER...
B3F0810008Z7	708,60	7	100	112	32	50	78	4,0	With	HNKU0806AZER...
B3F0810008Z8	740,70	8	100	112	32	50	78	4,0	With	HNKU0806AZER...
B3F0812508Z8	850,77	8	125	137	40	63	88	4,0	With	HNKU0806AZER...
B3F0812508Z9	978,05	9	125	137	40	63	88	4,0	With	HNKU0806AZER...

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA196	6,11	HNKU0806AZER...	Clamping insert screw	BRICA196

GEOMENTRY AND CUTTING CONDITIONS

KERFOLG Face

HNKU 0806... l=14,7mm l1=1,5mm s=5,3mm d1=5,24mm



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR21 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	MM		HNKU0806AZER-MM	PH35	B3P1008HNMM10	15,59	●	●	●	○		○				
				MT35	B3P1008HNMM15		●	○		●	●				○	
				ST35	B3P1008HNMM20	19,49	●			○	●				●	

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Speed (m/min.)	Geometry MM
Low carbon content steel (C15E, etc.)	~ 200	PH35	180 - 260	0.08 - 0.50
High carbon content steels (C45E, C55E etc.)	200 ~ 300	PH35	120 - 200	0.08 - 0.45
Alloyed steel (42CRMo4, 17Cr3 etc.)	200 ~ 300	PH35	60 - 160	0.08 - 0.40
Stainless steels (X5CrNi 18-9, etc.)	-	MT35	75 - 180	0.08 - 0.40
Heat resistant alloys (Inconel 718, Ti-6Al-4V etc.)	-	ST35	25 - 75	0.08 - 0.25

Indivisible package Suggested retail package - Unit price

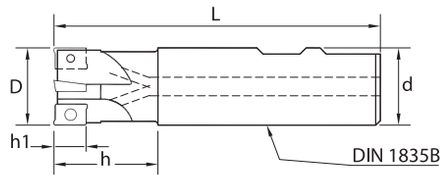
90° SHOULDERING MILLS SHANK WELDON

KERFOLG Wall

ART. B4F30

Multifunctional end mills for square shouldering

Coupling type Weldon
Applicable inserts APKT 1003
Application Square shoulder milling



Tech. Code	GR18 Euro	Z	D mm	d mm	L mm	h mm	h1 mm	Air hole	Insert	Insert screw
B4F3010Z1	125,69	1	10	16	80	24	10	With	APKT 1003	BRICA001
B4F3011Z1	151,04	1	11	16	80	24	10	With	APKT 1003	BRICA001
B4F3012Z1	125,69	1	12	16	80	24	10	With	APKT 1003	BRICA001
B4F3013Z1	151,04	1	13	16	80	24	10	With	APKT 1003	BRICA001
B4F3014Z1	159,86	1	14	16	80	24	10	With	APKT 1003	BRICA001
B4F3015Z2	(127,89)	2	15	16	85	25	10	With	APKT 1003	BRICA001
B4F3016Z2	159,86	2	16	16	85	25	10	With	APKT 1003	BRICA001
B4F3017Z2	(185,32)	2	17	16	85	25	10	With	APKT 1003	BRICA001
B4F3018Z2	185,22	2	18	20	85	25	10	With	APKT 1003	BRICA001
B4F3020Z3	198,45	3	20	20	90	25	10	With	APKT 1003	BRICA001
B4F3025Z4	244,85	4	25	25	95	25	10	With	APKT 1003	BRICA001
B4F3028Z4	(266,90)	4	28	25	95	25	10	With	APKT 1003	BRICA001
B4F3032Z5	302,18	5	32	25	95	26	10	With	APKT 1003	BRICA001

Tech. Code	GR18 Euro	Z	D mm	d mm	L mm	h mm	h1 mm	Air hole	Insert	Insert screw
B4F3116Z2	212,78	2	16	16	150	100	10	With	APKT1003	BRICA001
B4F3120Z3	263,59	3	20	20	150	100	10	With	APKT1003	BRICA001
B4F3125Z4	305,49	4	25	20	150	100	10	With	APKT1003	BRICA001
B4F3132Z5	352,80	5	32	25	150	95	10	With	APKT1003	BRICA001

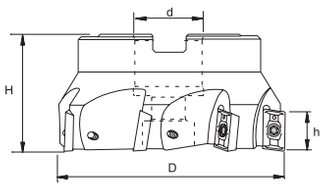
90° SHOULDERING SHELL MILLS - ABORE COUPLING

KERFOLG Wall

ART. B4F34

Multifunctional end mills for square shouldering

Coupling type Bore
Applicable inserts APKT 1003
Application Square shoulder milling



Tech. Code	GR18 Euro	Z	D mm	d mm	H nn	h mm	Air hole	Insert	Insert screw
B4F3440Z6	244,76	6	40	16	40	10	With	APKT 1003	BRICA001
B4F3450Z7	295,47	7	50	22	40	10	With	APKT 1003	BRICA001
B4F3463Z8	409,03	8	63	22	40	10	With	APKT 1003	BRICA001
B4F3480Z11	(586,60)	11	80	27	50	10	With	APKT 1003	BRICA001
B4F34100Z12	(712,22)	12	100	32	50	10	With	APKT 1003	BRICA001

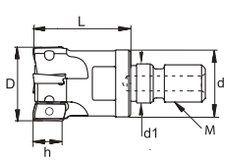
90° SHOULDERING MILLS - SCREW-ON SHANK

KERFOLG Wall

ART. B4F33

Multifunctional end mills for square shouldering

Coupling type Metric thread
Applicable inserts APKT 1003
Application Square shoulder milling



Tech. Code	GR18 Euro	Z	D mm	d1 mm	d mm	M	L mm	h mm	Air hole	Insert	Insert screw
B4F3316Z2	200,66	2	16	8.5	13	M8	25	10	With	APKT 1003	BRICA001
B4F3320Z3	228,29	3	20	10.5	18	M10	30	10	With	APKT 1003	BRICA001
B4F3325Z4	273,42	4	25	12.5	21	M12	35	10	With	APKT 1003	BRICA001
B4F3332Z5	391,39	5	32	17	29	M16	43	10	With	APKT 1003	BRICA001

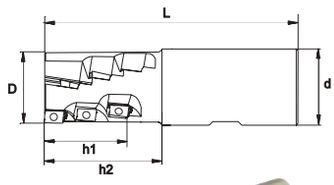
90° HELIX SHOULDERING END MILLS

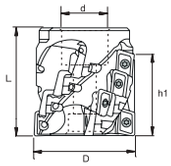
KERFOLG Helix

ART. B4F35

Frese generiche multifunzionali per lo spallamento retto

Tipo di attacco	Weldon Shank - Bore
Tipo inserto	APKT 1003...
Application	Square shoulder milling





Tech. Code	GR18 Euro	Z	D mm	d mm	L mm	h1 mm	h2 mm	K	Air hole	Insert	Insert screw
B4F3525K2Z8	(509,43)	8	25	25	105	37	49	2	With	APKT1003	BRICA001
B4F3532K2Z12	(631,73)	10	32	32	115	46	55	2	With	APKT1003	BRICA001
B4F3532K3Z15	(749,77)	15	32	32	115	46	55	3	With	APKT1003	BRICA001
B4F3540K2Z14	(860,02)	18	40	32	130	55	70	3	With	APKT1003	BRICA001

Tech. Code	GR18 Euro	Z	D mm	d mm	L mm	h1 mm	h2 mm	K	Air hole	Insert	Insert screw
B4F3640K3Z12	(877,59)	12	40	16	50	37	-	3	With	APKT1003	BRICA001
B4F3650K3Z15	(781,72)	15	50	22	60	46	-	3	With	APKT1003	BRICA001
B4F3663K4Z20	(1272,36)	20	63	27	60	46	-	4	With	APKT1003	BRICA001

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA001	6,40	All diameters	Clamping insert screw	BRICA001
BRICA002	10,79	All diameters	Wrench	BRICA002

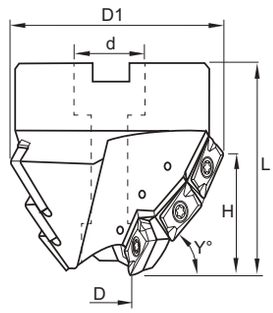
HELICAL MILLS FOR HEAVY-DUTY CHAMFERING

KERFOLG Helix

ART. B4F20

Heavy-duty chamfering end mills

Coupling type	Bore
Applicable inserts	APKT 1003
Application	Chamfering

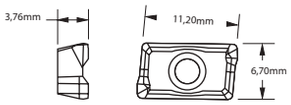


Tech. Code	GR18 Euro	Z	D mm	D1 mm	d mm	Y°	H mm	L mm	K	Air hole	Insert
B4F2015	722,14	9	17	70	22	15	7	50	3	With	APKT1003
B4F2030	711,11	9	17	65	22	30	13	50	3	With	APKT1003
B4F2045	711,11	9	17	56	22	45	19	50	3	With	APKT1003
B4F2060	711,11	9	17	45	16	60	24	50	3	With	APKT1003
B4F2075	708,91	9	19	33	16	75	27	60	3	With	APKT1003

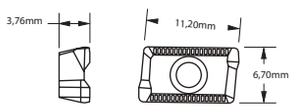
Indivisible package Suggested retail package - Unit price

GEOMETRY AND CUTTING CONDITIONS

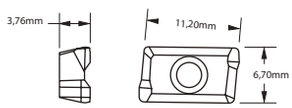
MF



MR



ALP



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR20 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
FINISH	MF		APKT 1003PDER - MF	MT35	B4E1110MFMT35	16,62	●	○		●	●	○				
MEDIUM CUT	MR		APKT 1003PDR - MR	PT25	B4E2110MRPT25	15,65	○	○	●			●	●			○
			APKT 1003PDTR - MR	PT30	B4E2110MRPT30	13,80	●	●	●			●	○			○
			APKT 1003PDR - MR	PT35	B4E2110MRPT35		●	●	○	○	○	○	○		○	
	ALP		APKT 1003PDFR - ALP	K10	B4E2210ALPK10	28,92								●		
	MR		APKT 1003PDFR - MR	PT35	B4E2410MRPT35	(9,98)	●	●	○	○	○	○	○		○	

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA001	6,40	All diameters	Clamping insert screw	BRICA001
BRICA002	10,79	All diameters	Wrench	BRICA002
BRICA084	43,89	All diameters	B4F20 bur's fastening screw Ø d16	BRICA084
BRICA116	43,90	All diameters	B4F20 bur's fastening screw Ø d22	BRICA116

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Speed (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P30	150 - 200	0.08 - 0.20
	~ 180	P35	90 - 150	0.08 - 0.25
High carbon content steel (C45E, C55E, etc.)	~ 300	P30	150 - 200	0.08 - 0.20
	~ 300	P35	90-150	0.08 - 0.25
Tool steel (X155CrVMo 12 1, etc.)	~ 300	P30	150 - 200	0.08 - 0.20
	~ 300	P35	90-150	0.08 - 0.25
Stainless steel (X5CrNi 18-9, etc.)	-	M35	80-180	0.06 - 0.10
Cast iron (GG25, GG30, etc.) Spheroidal cast iron (GGG40, etc.)	150 ~ 250	P25	130 - 230	0.08 - 0.15
Non ferrous alloys (Si < 13%)	-	K10	200-1000	0.06 - 0.18
Hardened steel < 55 HRC	-	P25	30 - 50	0.05 - 0.08

Indivisible package Suggested retail package - Unit price

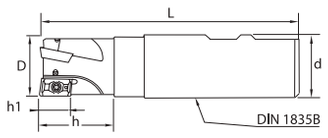
90° SHOULDERING MILLS WELDON SHANK

KERFOLG Wall

ART. B4F37

Multifunction end mills for square shouldering

Coupling type Weldon shank
Applicable inserts APKT 1604
Application Square shoulder milling



Tech. Code	GR18 Euro	Z	D mm	d mm	L mm	h mm	h1 mm	Air hole	Insert	Insert screw
B4F3725Z2	168,68	2	25	25	100	44	17	With	APKT 1604	BRICA003
B4F3732Z3	202,86	3	32	32	110	50	17	With	APKT 1604	BRICA003
B4F3740Z4	251,45	4	40	32	115	45	17	With	APKT 1604	BRICA003

Tech. Code	GR18 Euro	Z	D mm	d mm	L mm	h mm	h1 mm	Air hole	Insert	Insert screw
B4F3822Z2	243,65	2	22	20	200	145	17	With	APKT 1604	BRICA003
B4F3825Z2	278,93	2	25	25	200	140	17	With	APKT 1604	BRICA003
B4F3832Z3	333,03	3	32	32	200	140	17	With	APKT 1604	BRICA003
B4F3840Z4	346,25	4	40	32	200	60	17	With	APKT 1604	BRICA003

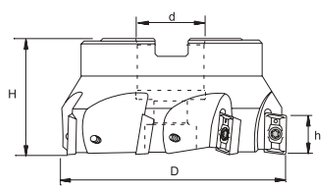
90° SHOULDERING SHELL MILLS - ARBOR COUPLING

KERFOLG Wall

ART. B4F40

Multifunctional end mills for square shouldering

Coupling type Bore
Applicable inserts APKT 1604
Application Square shoulder milling



Tech. Code	GR18 Euro	Z	D mm	d mm	H mm	h mm	Air hole	Insert	Insert screw
B4F4040Z4	263,58	4	40	16	40	17	With	APKT 1604	BRICA003
B4F4050Z5	282,33	5	50	22	40	17	With	APKT 1604	BRICA003
B4F4063Z6	346,19	6	63	22	40	17	With	APKT 1604	BRICA003
B4F4080Z7	442,20	7	80	27	50	17	With	APKT 1604	BRICA003
B4F40100Z8	500,63	8	100	32	50	17	With	APKT 1604	BRICA003
B4F40125Z9	589,93	9	125	40	63	17	With	APKT 1604	BRICA003
B4F40160Z10	659,37	10	160	40	63	17	With	APKT 1604	BRICA003
B4F40200Z13	957,04	13	200	60	63	17	With	APKT 1604	BRICA003
B4F40250Z16	1498,30	16	250	60	63	17	With	APKT 1604	BRICA003

Indivisible package Suggested retail package - Unit price

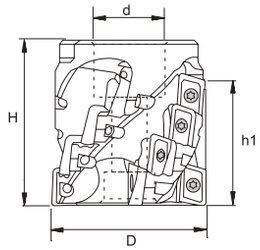
90° SHOULDERING FLUTED MILLS

KERFOLG Helix

ART. B4F41

General, multi-task end mills for square shouldering

Coupling type Bore type
Applicable inserts APKT 1604
Application Square shoulder milling

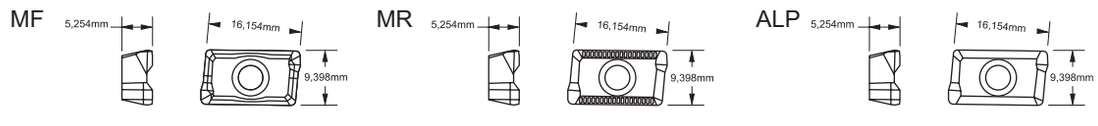


Tech. Code	GR18 Euro	Z	D mm	d mm	H mm	K	h1 mm	h2	Air hole	Insert	Insert screw
B4F4150Z3	(407,93)	6	50	27	50	3	30	-	With	APKT 1604	BRICA003
B4F4163Z4	(718,90)	12	63	27	60	4	44	-	With	APKT 1604	BRICA003
B4F4180Z5	(962,56)	15	80	32	60	5	44	-	With	APKT 1604	BRICA003

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA003	9,58	All diameters	Clamping insert screw	BRICA003
BRICA004	10,90	All diameters	Wrench	BRICA004

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Wall WRK



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR20 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
FINISH	MF		APKT 1604PDR - MF	MT35	B4F1116MFMT35	20,57		○		●	●	○				
				PT35	B4F1116MFPT35	20,62		●	○	○	○	○	○		○	
MEDIUM CUT	MR		APKT 1604PDR - MR	PT25	B4F2116MRPT25	19,37	○	○	●			●	●			○
				PT30	B4F2116MRPT30	16,35	●	●	●			●	○			○
				PT35	B4F2116MRPT35		●	●	○	○	○	○	○		○	
	ALP		APKT 1604PDFR - ALP	K10	B4F2216ALPK10	28,92								●		
	MR		APKT 1604PDFR - MR	PT35	B4F2416MRPT35	(13,29)	●	●	○	○	○	○	○		○	

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Speed(m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P30	150 - 200	0.10 - 0.25
	~ 180	P35	90 - 150	0.12 - 0.30
High carbon content steel (C45E, C55E, etc.)	~ 300	P30	150 - 200	0.10 - 0.25
	~ 300	P35	90-150	0.12 - 0.30
Tool steel (X155CrVMo 12 1, etc.)	~ 300	P30	150 - 200	0.10 - 0.25
	~ 300	P35	90-150	0.12 - 0.30
Stainless steel (X5CrNi 18-9, etc.)	-	M35	80-180	0.08 - 0.15
Cast iron (GG25, GG30, etc.) Spheroidal cast iron (GGG40, etc.)	150 ~ 250	P25	130 - 230	0.10 - 0.20
Non ferrous alloys (SI < 13%)	-	K10	200-1000	0.10 - 0.25
Hardened steel < 55 HRC	-	P25	30 - 50	0.06 - 0.10

Indivisible package Suggested retail package - Unit price

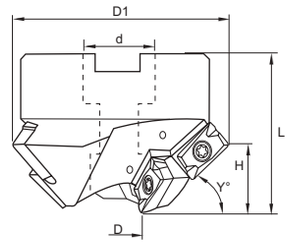
HELICAL MILLS FOR HEAVY-DUTY CHAMFERING

KERFOLG Helix

ART. B4F43

Multifunctional general purpose milling cutters for heavy chamfers

Coupling type Bore
Applicable inserts APKT1604...
Application Chamfering

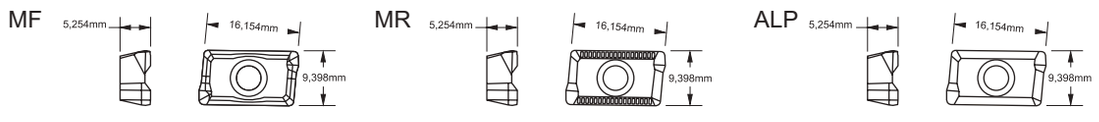


Tech. Code	GR18 Euro	Z	D mm	D1 mm	d mm	Y°	H mm	L mm	K	Air hole	Insert
B4F4315	(694,58)	6	35	94	27	15	8	50	3	With	APKT 1604...
B4F4330	667,01	6	35	88	27	30	15	50	3	With	APKT 1604...
B4F4345	667,01	6	35	77,8	27	45	21,5	50	3	With	APKT 1604...
B4F4360	667,01	6	35	65	27	60	26,5	50	3	With	APKT 1604...
B4F4375	(694,58)	6	35	50,7	22	75	29,5	60	3	With	APKT 1604...

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA003	9,58	All diameters	Clamping insert screw	BRICA003
BRICA004	10,90	All diameters	Wrench	BRICA004
BRICA116	43,90	All diameters	B4F20 bur's fastening screw Ø d22	BRICA116
BRICA238	5,64	All diameters	B4F43 bur's fastening screw Ø d27	BRICA238

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Wall WRK



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR20 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
FINISH	MF		APKT 1604PDR - MF	MT35	B4F1116MFMT35	20,57		○		●	●	○				
				PT35	B4F1116MFPT35	20,62		●	○	○	○	○	○		○	
MEDIUM CUT	MR		APKT 1604PDR - MR	PT25	B4F2116MRPT25	19,37	○	○	●			●	●			○
				PT30	B4F2116MRPT30	16,35	●	●	●			●	○			○
				PT35	B4F2116MRPT35		●	●	○	○	○	○	○		○	
	ALP		APKT 1604PDFR - ALP	K10	B4F2216ALPK10	28,92								●		
	MR		APKT 1604PDFR - MR	PT35	B4F2416MRPT35	(13,29)	●	●	○	○	○	○	○		○	

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Speed(m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P30	150 - 200	0.10 - 0.25
	~ 180	P35	90 - 150	0.12 - 0.30
High carbon content steel (C45E, C55E, etc.)	~ 300	P30	150 - 200	0.10 - 0.25
	~ 300	P35	90-150	0.12 - 0.30
Tool steel (X155CrVMo 12 1, etc.)	~ 300	P30	150 - 200	0.10 - 0.25
	~ 300	P35	90-150	0.12 - 0.30
Stainless steel (X5CrNi 18-9, etc.)	-	M35	80-180	0.08 - 0.15
Cast iron (GG25, GG30, etc.) Spheroidal cast iron (GGG40, etc.)	150 ~ 250	P25	130 - 230	0.10 - 0.20
Non ferrous alloys (SI < 13%)	-	K10	200-1000	0.10 - 0.25
Hardened steel < 55 HRC	-	P25	30 - 50	0.06 - 0.10

Indivisible package Suggested retail package - Unit price

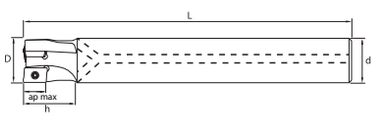
SINGLE-SIDE SQUARE SHOULDERING END MILLS

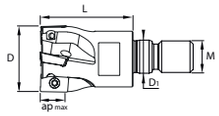
KERFOLG Wall

ART. B4F25

General, multifunctional shouldering mills.

Coupling type Cylindrical shank - Screw-On
Tipo inserto APKT060204...
Application Square shouldering





Tech. Code	GR18 Euro	Z	D mm	L mm	d mm	h mm	Ap max mm	Air hole	Insert
B4F251006Z2	107,00	2	10	80	10	28	5,2	con	APKT060204PDTR...
B4F251206Z3	134,51	3	12	80	12	30	5,2	con	APKT060204PDTR...
B4F251406Z3	134,51	3	14	85	12	32	5,2	con	APKT060204PDTR...
B4F251606Z4	174,25	4	16	85	16	35	5,2	con	APKT060204PDTR...
B4F251806Z4	174,25	4	18	90	16	30	5,2	con	APKT060204PDTR...
B4F252006Z5	200,66	5	20	90	20	40	5,2	con	APKT060204PDTR...
B4F252506Z7	212,10	7	25	106	20	50	5,2	con	APKT060204PDTR...
B4F253206Z8	242,55	8	32	124	25	64	5,2	con	APKT060204PDTR...

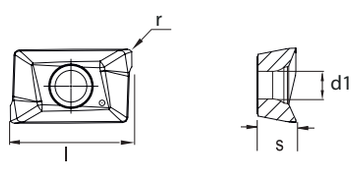
Tech. Code	GR18 Euro	Z	D mm	L mm	D1 mm	Ap max mm	M mm	Air hole	Insert
B4F271006Z2	(138,92)	2	10	16	6,5	5,2	6	con	APKT060204PDTR...
B4F271206Z3	(178,66)	3	12	16	6,5	5,2	6	con	APKT060204PDTR...
B4F271606Z4	(214,99)	4	16	21	8,5	5,2	8	con	APKT060204PDTR...
B4F272006Z5	(231,53)	5	20	26	10,5	5,2	10	con	APKT060204PDTR...
B4F272506Z7	(251,42)	7	25	30	12,5	5,2	12	con	APKT060204PDTR...

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA200	7,43	APKT060204PDTR...	Clamping insert screw	BRICA200
BRICA151	9,78	For insert Ø 7.9mm and Ø 10.6mm	Torx screwdriver	BRICA151

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Wall

APKT 060204... l=6,0mm s=2,16mm
d1=2,06mm r=0,4mm



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR20 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	MR		APKT 060204PDR MR	PT35	B4E1206APMR10	9,73	●	●	○	○	○	○	○		○	
						-										

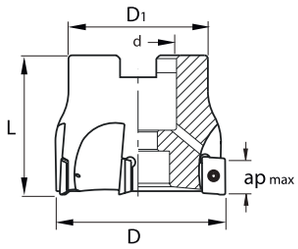
SINGLE-SIDE SQUARE SHOULDERING SHELL MILLS

KERFOLG Wall

ART. B4F29

General multifunctional shouldering mills

Tipo di attacco Bore
Tipo inserto APKT060204
Application Square shouldering on carbon steel and stainless steel

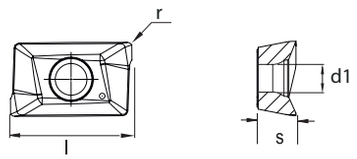


Tech. Code	GR18 Euro	Z	D mm	d mm	L mm	D1 mm	Ap max mm	Air hole	Insert
B4F293206Z8	251,42	8	32	16	40	31,5	5,2	con	APKT060204PDTR...
B4F294006Z10	282,24	10	40	16	40	38,0	5,2	con	APKT060204PDTR...
B4F295006Z11	305,39	11	50	22	40	48,0	5,2	con	APKT060204PDTR...

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Wall

APKT 060204... l=6,0mm s=2,16mm
d1=2,06mm r=0,4mm



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR20 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	MR		APKT 060204PDR MR	PT35	B4E1206APMR10	9,73	●	●	○	○	○	○	○		○	
						-										

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Geometry	Cutting speed Vc (mt/min)	Feed f/z mm
Carbon steels (C45-C55 etc.)	~ 300HB	PT35	MR	160 - 230	0.05 - 0.12
Alloyed steel (42CRMo4, 17Cr3 etc.)	~ 300HB	PT35	MR	90 - 180	0.05 - 0.12
Hardened and tempered steels (NAK80, PX5 etc.)	30 ~ 40HRC	PT35	MR	80 - 160	0.05 - 0.12
Stainless steels (X5CrNi 18-9, etc.)	~ 200HB	PT35	MR	75 - 130	0.05 - 0.09

Indivisible package Suggested retail package - Unit price

SINGLE SIDE SQUARE SHOULDERING END MILLS

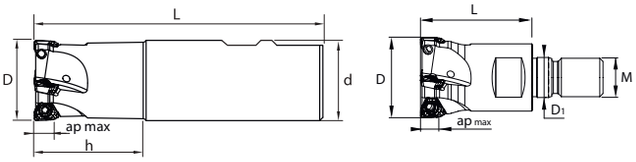
KERFOLG Triple

ART. B4F50

General multifunctional shouldering mills

Coupling type Weldon shank and screw-on
Tipo inserto TOKX0703...
Application Square shouldering on steel, stainless steel, cast Iron and super alloys

Cutting Angle 90°



Tech. Code	GR18 Euro	Z	D mm	L mm	d mm	h mm	Ap max mm	Air hole	Insert
B4F502007Z3	268,31	3	20	77	20	25	5	con	TOKX070305PDER
B4F502507Z4	296,97	4	25	90	25	35	5	con	TOKX070305PDER
B4F503207Z5	324,49	5	32	102	32	40	5	con	TOKX070305PDER

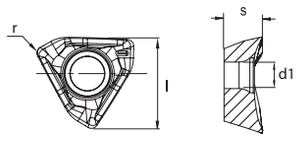
Tech. Code	GR18 Euro	Z	D mm	L mm	D1 mm	Ap max mm	M	Air hole	Insert
B4F512007Z3	268,31	3	20	30	10.5	5	10	con	TOKX070305PDER
B4F512507Z4	296,97	4	25	35	12.5	5	12	con	TOKX070305PDER
B4F513207Z5	324,49	5	32	40	17.0	5	16	con	TOKX070305PDER

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA198	5,90	TOKX070305PDER	Clamping insert screw	24645

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Triple

TOKX 070305... l=14,7mm s=5,3mm d1=5,24mm



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR21 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	ML		TOKX070305PDER-ML	MT35	B4T0707TOML10	7,46	●	○	○	●	●				○	
	MM		TOKX070305PDER-MM	PH35	B4T0807TOMM10	7,46	●	●	●	○	○	○	○			○

Indivisible package Suggested retail package - Unit price

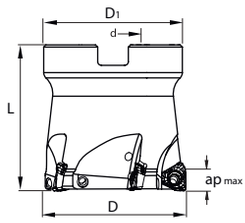
SINGLE SIDE SQUARE SHOULDERING SHELL MILLS

KERFOLG Triple

ART. B4F52

General multifunctional shouldering mills

Tipo di attacco	Bore
Tipo inserto	TOKX0703...
Application	Square shouldering on steel, stainless steel and super alloys.
Cutting angle	90°

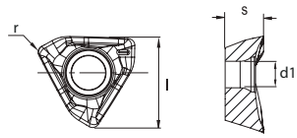


Tech. Code	GR18 Euro	Z	D mm	D1 mm	d mm	L mm	Ap max mm	Air hole	Insert
B4F524007Z5	355,45	5	40	38	16	40	5	With	TOKX070305PDER
B4F525007Z6	393,29	6	50	43	22	40	5	With	TOKX070305PDER

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Triple

TOKX 070305... l=14,7mm d1=5,24mm s=5,3mm



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR21 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	ML		TOKX070305PDER-ML	MT35	B4T0707TOML10	7,46	●	○	○	●	●				○	
	MM		TOKX070305PDER-MM	PH35	B4T0807TOMM10	7,46	●	●	●	○	○	○	○			○

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Speed (m/min.)	Feed fz/mm
Low carbon content steel (C15E, etc.)	~ 200	PH35	180 - 260	0.08 - 0.15
High carbon content steels (C45E, C55E etc.)	200 ~ 300	PH35	120 - 200	0.08 - 0.13
Alloyed steel (42CRMo4, 17Cr3 etc.)	200 ~ 300	PH35	60 - 160	0.08 - 0.12
Stainless steels (X5CrNi 18-9, etc.)	-	MT35	75 - 180	0.08 - 0.12
Cast irons (GG25, GG30 etc.)	150 ~ 250	PH35	180 - 260	0.08 - 0.15
Spheroidal cast irons (GGG40 etc)	150 ~ 250	PH35	120 - 200	0.08 - 0.13
Heat resistant alloys (Inconel 718, Ti-6Al-4V etc.)	-	MT35	25 - 75	0.08 - 0.10

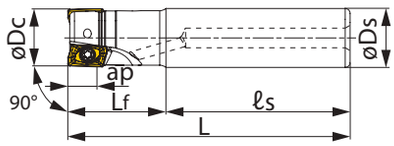
Indivisible package Suggested retail package - Unit price

SINGLE SIDE SQUARE SHOULDERING END MILLS

ART. B4F55

Square shoulddering mills for small diameters

Coupling type	Cylindrical shank
Tipo inserto	AVGT06...
Application	Square shouldering for small diameters
Angolo di spoglia	A.R. +6° ~ +7,6°, R.R. = -37,1° ~ -32,4°

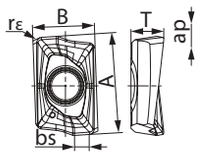


Tech. Code	GR14 Euro	Z	Dc mm	Ds mm	L mm	Lf mm	Max a.p. mm	Weight kg	Air hole
B4F5508Z1	(232,70)	1	8	10	80	20	6	0,04	With
B4F5510Z2	232,70	2	10	10	80	20	6	0,04	With
B4F5510Z2L	248,75	2	10	10	100	35	6	0,06	With
B4F5512Z2	(238,40)	2	12	12	80	20	6	0,06	With
B4F5512Z2L	(255,05)	2	12	12	120	35	6	0,09	With
B4F5512Z3	255,05	3	12	12	80	20	6	0,06	With
B4F5516Z3	266,60	3	16	16	90	20	6	0,12	With
B4F5516Z3L	285,25	3	16	16	140	35	6	0,20	With
B4F5516Z4	283,25	4	16	16	90	20	6	0,12	With

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA188	3,95	HPAV06M	Clamping insert screw	CSPB-2H

GEOMETRY AND CUTTING CONDITIONS - TUNGFORCEREC

MJ type
A = 8mm
B = 5mm
T = 2,7mm



rε = 0,2mm bs = 1,5mm
rε = 0,4mm bs = 1,3mm
rε = 0,8mm bs = 0,9mm

● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR16 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	MJ		AVGT 060302PBER-MJ	AH120	B4T12AVMJ01	15,40					●	●	●		●	●
				AH3135	B4T12AVMJ02		●	●	●	●	○					
			AVGT 060304PBER-MJ	AH120	B4T12AVMJ03						●	●	●		●	●
				AH3135	B4T12AVMJ04		●	●	●	●	○					
			AVGT 060308PBER-MJ	AH120	B4T12AVMJ05						●	●	●		●	●
				AH3135	B4T12AVMJ06		●	●	●	●	○					

Indivisible package Suggested retail package - Unit price

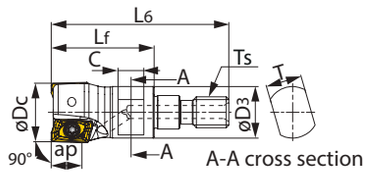
SINGLE SIDE SQUARE SHOULDERING END MILLS

Tungaloy TUNGFORCEREC

ART. B4F56

End mills for square shouldering in small diameters.

Tipo di attacco	Screw-On shank
Insert type	AVGT06...
Application	Square shouldering for small diameters
Angolo di spoglia	A.R. = +6° ~ +7,6°, R.R = -37,1 ~ -32,4°

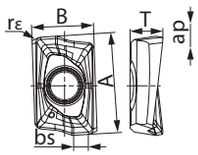


Tech. Code	GR14 Euro	Z	Dc mm	D3 mm	Lf mm	Ts mm	L6 mm	Max a.p. mm	Weight kg	Air hole
B4F5610Z2	(220,35)	2	10	9,5	20	M6	34,5	6	0,01	With
B4F5612Z3	(248,20)	3	12	10	20	M6	34,5	6	0,01	With
B4F5616Z4	(275,60)	4	16	13	25	M8	42	6	0,03	With

GEOMETRY AND CUTTING CONDITIONS - TUNGFORCEREC

Tungaloy TUNGFORCEREC

MJ type
A = 8mm
B = 5mm
T = 2,7mm



rε = 0,2mm bs = 1,5mm
rε = 0,4mm bs = 1,3mm
rε = 0,8mm bs = 0,9mm

● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR16 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	MJ		AVGT 060302PBER-MJ	AH120	B4T12AVMJ01	15,40					●	●	●		●	●
				AH3135	B4T12AVMJ02		●	●	●	●	○					
			AVGT 060304PBER-MJ	AH120	B4T12AVMJ03						●	●	●		●	●
				AH3135	B4T12AVMJ04		●	●	●	●	○					
			AVGT 060308PBER-MJ	AH120	B4T12AVMJ05						●	●	●		●	●
				AH3135	B4T12AVMJ06		●	●	●	●	○					

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Priority	Recommended grades	Geometry	Cutting speed Vc (mt/min)	Feed f/z mm
Carbon steels (C45-C55 etc.)	~ 300HB	First choice	AH3135	MJ	230 - 430	0,07 - 0,12
Alloyed steel (42CRMo4, 17Cr3 etc.)	~ 300HB	First choice	AH3135	MJ	150 - 350	0,07 - 0,12
Hardened and tempered steels (NAK80, PX5 etc.)	30 - 40HRC	First choice	AH120	MJ	100 - 230	0,07 - 0,12
Stainless steels (X5CrNi 18-9, etc.)	-	First choice	AH3135	MJ	150 - 220	0,06 - 0,1
Cast irons (GG25, GG30 etc.)	150 - 250HB	First choice	AH120	MJ	200 - 330	0,07 - 0,12
Spheroidal cast irons (GGG40 etc)	150 - 250HB	First choice	AH120	MJ	150 - 240	0,07 - 0,12
Titanium alloys (Ti-6AL-4V, etc.)	-	First choice	AH120	MJ	70 - 90	0,06 - 0,1
Super Alloy (inconel718, ecc.)	-	First choice	AH120	MJ	45 - 65	0,06 - 0,09
Hardened steel (SKD11 etc.)	40 - 50HRC	First choice	AH120	MJ	45 - 70	0,05 - 0,08
Hardened steel(SKD11 etc.)	50 - 60HRC	First choice	AH120	MJ	40 - 60	0,04 - 0,06

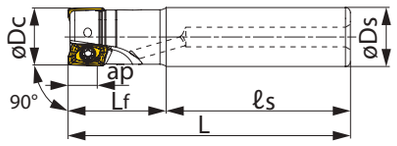
Indivisible package Suggested retail package - Unit price

SINGLE SIDE SQUARE SHOULDERING END MILLS

lungaloy TUNG-ALUMILL

ART. B4F57

Coupling type	Cyclindrical shank
Tipo inserto	XVCT1605...
Application	Square shouldering on aluminum
Angolo di spoglia	A.R. = +6° ~ +10°, R.R. = +12° ~ -9°



Tech. Code	GR14 Euro	Z	Dc mm	Ds mm	L mm	Lf mm	Air hole
B4F5725Z2	447,20	2	25	25	125	55	With
B4F5725Z2L	482,35	2	25	25	170	70	With
B4F5732Z2	538,25	2	32	32	150	50	With
B4F5732Z2L	(578,85)	2	32	32	200	80	With
B4F5732Z3	560,25	3	32	32	150	50	With

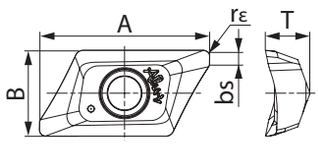
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA211	3,20	EPV16R025M...	Clamping insert screw	TS40085I/HG
BRICA212	3,20	EPV16R032M...	Clamping insert screw	TS40093I/HG

GEOMETRY AND CUTTING CONDITIONS - TUNG-ALUMILL

lungaloy TUNG-ALUMILL

AJ type

rε = 0,4mm	A=22,2mm	B=11,2mm	T=5,9mm	bs=1,3mm
rε = 0,8mm	A=22,2mm	B=11,2mm	T=5,9mm	bs=1mm
rε = 1,2mm	A=21,7mm	B=11,2mm	T=5,8mm	bs=1mm
rε = 2,0mm	A=20,8mm	B=11,2mm	T=5,75mm	bs=1mm
rε = 3,0mm	A=19,5mm	B=11,2mm	T=5,6mm	bs=1mm
rε = 4,0mm	A=18,4mm	B=11,2mm	T=5,5mm	bs=1,2mm



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR16 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	AJ		XVCT 160504R-AJ	TH10	B4X05XVAJ01	27,90								●		
			XVCT 160508R-AJ		B4X05XVAJ02									●		
			XVCT 160512R-AJ		B4X05XVAJ03									●		
			XVCT 160520R-AJ		B4X05XVAJ05									●		
			XVCT 160530R-AJ		B4X05XVAJ06									●		
			XVCT 160540R-AJ		B4X05XVAJ08									●		

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Recommended grades	Cutting speed Speed (m/min.)	Feed fz/mm
Non ferrous alloys with Si ≤ 13%	75	TH10	200 ~ 1000	0.15 ~ 0.3
	90	TH10	200 ~ 1500	0.1 ~ 0.25
Non ferrous alloys with Si ≥ 13%	130	TH10	200 ~ 1000	0.07 ~ 0.15

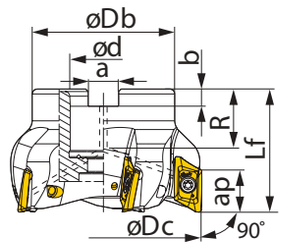
SQUARE SHOULDERING SHELL MILLS

Tungaloy TUNG-ALUMILL

ART. B4F58

Frese per spallamento su alluminio

Coupling type	Bore
Tipo inserto	XVCT1605...
Application	Square shouldering on aluminum
Angolo di spoglia	A.R. = +10° ~ +11°, R.R = -9° ~ 5,5°



Tech. Code	GR14 Euro	Z	Dc mm	d mm	Lf mm	Air hole
B4F5840Z3	474,85	3	40	16	50	With
B4F5850Z4	549,45	4	50	22	50	With
B4F5863Z5	628,15	5	63	22	50	With
B4F5880Z5	725,90	5	80	27	50	With

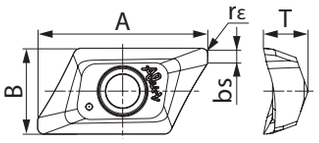
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA211	3,20	EPV16R025M...	Clamping insert screw	TS40085I/HG
BRICA212	3,20	EPV16R032M...	Clamping insert screw	TS40093I/HG

GEOMETRY AND CUTTING CONDITIONS - TUNG-ALUMILL

Tungaloy TUNG-ALUMILL

AJ type

rε = 0,4mm	A=22,2mm	B=11,2mm	T=5,9mm	bs=1,3mm
rε = 0,8mm	A=22,2mm	B=11,2mm	T=5,9mm	bs=1mm
rε = 1,2mm	A=21,7mm	B=11,2mm	T=5,8mm	bs=1mm
rε = 2,0mm	A=20,8mm	B=11,2mm	T=5,75mm	bs=1mm
rε = 3,0mm	A=19,5mm	B=11,2mm	T=5,6mm	bs=1mm
rε = 4,0mm	A=18,4mm	B=11,2mm	T=5,5mm	bs=1,2mm



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR16 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	AJ		XVCT 160504R-AJ	TH10	B4X05XVAJ01	27,90								●		
			XVCT 160508R-AJ		B4X05XVAJ02									●		
			XVCT 160512R-AJ		B4X05XVAJ03									●		
			XVCT 160520R-AJ		B4X05XVAJ05									●		
			XVCT 160530R-AJ		B4X05XVAJ06									●		
			XVCT 160540R-AJ		B4X05XVAJ08									●		

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Recommended grades	Cutting speed Speed (m/min.)	Feed fz/mm
Non ferrous alloys with Si ≤ 13%	75	TH10	200 ~ 1000	0.15 ~ 0.3
	90	TH10	200 ~ 1500	0.1 ~ 0.25
Non ferrous alloys with Si ≥ 13%	130	TH10	200 ~ 1000	0.07 ~ 0.15

Indivisible package Suggested retail package - Unit price

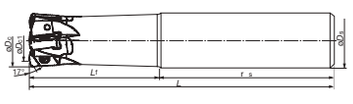
TWO-SIDE INSERTS HIGH FEED END MILLS

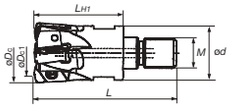
lungaloy DOFEEDMINI

ART. B5F01

High feed multi-task end mill for various materials

Coupling type	Cylindrical and screw-on type
Insert type	LNMU03..
Application	Multi-task
Angolo di spoglia	A.R. +6° R.R = +5°~ +11°





Tech. Code	GR14 Euro	Z	Dc mm	Ds mm	Dc1 mm	L mm	Lf mm	rs mm	KAPR	Air hole
B5F0116Z2	298,75	2	16	16	9.5	100	30	70	15°	With
B5F0118Z2	298,75	2	18	16	11.5	100	30	70	17°	With
B5F0120Z4	386,65	4	20	20	13.5	130	50	80	17°	With
B5F0122Z4	386,65	4	22	20	15.5	130	50	80	17°	With
B5F0125Z5	415,95	5	25	25	18.5	140	60	80	17°	With
B5F0128Z5	425,35	5	28	25	21.5	140	60	80	17°	With
B5F0130Z5	(437,00)	5	30	32	23.5	150	70	80	17°	With
B5F0132Z6	(516,65)	6	32	32	25.5	150	70	80	17°	With

Tech. Code	GR14 Euro	Z	Dc mm	Ds mm	Dc1 mm	L mm	Lf mm	rs mm	KAPR	Air hole
B5F0216Z2	322,25	2	16	16	9.5	150	50	100	17°	With
B5F0220Z3	391,30	3	20	20	13.5	160	80	80	17°	With
B5F0222Z3	(391,30)	3	22	20	15.5	160	30	130	17°	With
B5F0225Z4	(418,30)	4	25	25	18.5	180	100	80	17°	With
B5F0228Z4	(418,30)	4	28	25	21.5	180	35	145	17°	With

Tech. Code	GR14 Euro	Z	Dc mm	Dc1 mm	d mm	LH mm	LH1 mm	M mm	KAPR	Air hole
B5F0320Z4	386,65	4	20	13.5	18	48	30	10	17°	With
B5F0325Z5	415,95	5	25	18.5	18	48	30	12	17°	With
B5F0332Z6	516,65	6	32	25.5	25	55	30	16	17°	With

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA109	3,85	All diameters	Clamping insert screw	CSPB-2.5

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Priority	Recommended grades	Geometry	Cutting speed Vc (m/min.)	Feed ø 16 ▯ 22 f/z mm	Feed ø 25 ▯ 32 f/z mm
Carbon steel (C45-C55, etc.)	~ 300 HB	First choice	AH725	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
	~ 300 HB	Low cutting forces	AH725	ML	100 - 200 - 300	0.5 - 0.6 - 0.7	0.5 - 0.8 - 1.0
	~ 300 HB	Impact-resistant	AH3035	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Alloy steel (42CRMo4, 17Cr3, etc.)	~ 300 HB	First choice	AH3035	MJ	100 - 150 - 200	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
	~ 300 HB	Low cutting forces	AH3035	ML	100 - 150 - 200	0.5 - 0.6 - 0.7	0.5 - 0.8 - 1.0
	~ 300 HB	Impact-resistant	AH3035	MJ	100 - 150 - 200	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Hardened and tempered steel (NAK80, PX5, etc.)	30 ~ 40 HRC	-	AH3035	MJ	100 - 150 - 200	0.5 - 0.6 - 0.7	0.5 - 0.8 - 1.0
Stainless steel (X5CrNi 18-9, etc.)	~ 200 HB	First choice	AH130	MS	80 - 120 - 150	0.3 - 0.4 - 0.5	0.3 - 0.5 - 0.7
	~ 200 HB	Impact-resistant	AH3035	MJ	100 - 120 - 150	0.3 - 0.5 - 0.8	0.3 - 0.6 - 0.8
Cast iron (GG25, GG30, etc.)	150 ~ 250HB	First choice	AH725	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Spheroidal cast iron (GGG40, etc.)	150 ~ 250HB	First choice	AH725	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Titanium alloys (Ti-6AL-4V, etc.)	~ 40 HRC	First choice	AH130	ML	30 - 40 - 60	0.3 - 0.4 - 0.5	0.3 - 0.5 - 0.7
Hardened steel (SKD61, etc.)	40 ~ 50 HRC	First choice	AH8015	MJ	80 - 100 - 130	0.1 - 0.15 - 0.2	0.1 - 0.2 - 0.3
Hardened steel (SKD11, etc.)	50 ~ 60 HRC	First choice	AH8015	MJ	50 - 60 - 70	0.03 - 0.04 - 0.05	0.03 - 0.05 - 0.07

DOUBLE-SIDE INSERTS HIGH FEED END MILLS

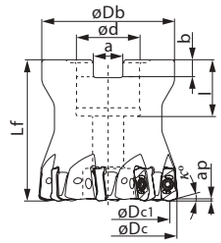
Tungaloy DOFEEDMINI

17° 1 mm

ART. B5F04

General, multifunctional high feed mills

Coupling type	Bore
Insert type	LNMU03...
Application	Multi-task
Rake angle	A.R. +6° R.R. +5°~ +11°

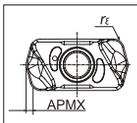


Tech. Code	GR14 Euro	Z	Dc mm	Dc1 mm	Db mm	d mm	l mm	Lf mm	b mm	a mm	KAPR	Air hole
B5F0440Z5	496,75	5	40	33,6	35	16	18	40	5.6	8.4	17°	With
B5F0440Z6	531,90	6	40	33,6	35	16	18	40	5,6	8,4	17°	With
B5F0450Z5	599,85	5	50	43,6	47	22	20	50	6.3	10.4	17°	With
B5F0450Z8	701,70	8	50	43,6	47	22	20	50	6,3	10,4	17°	With

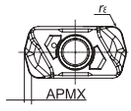
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA109	3,85	All diameters	Clamping insert screw	CSPB-2.5

GEOMETRY AND CUTTING CONDITIONS

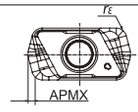
Tungaloy DOFEEDMINI



MJ
(general application)
rε = 1,2 mm
APMX = 1 mm



ML
(low cutting force)
rε = 1,2 mm
APMX = 1 mm



MS
(stainless steel)
rε = 1,2 mm
APMX = 1 mm

● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR17 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MED. CUT.	ML		LNMU 0303ZER-ML	AH725	B5A2103MUML01	17,25	●	●	●		○	●	●		●	●
				AH130	B5A2103MUML02		●	●	●	●					●	
				AH8015	B5A2103MUML04		○	○	○			○				●
				AH3225	B5A2103MUML05	18,15	●	●	●	●	●	○				●
ROUGH.	MJ		LNMU 0303ZER-MJ	AH725	B5A3103MUMJ01	17,25	●	●	●			●	●			○
				AH130	B5A3103MUMJ02		●	●	●	●					●	
				AH8015	B5A3103MUMJ04		○	○	○			○				●
				AH3225	B5A3103MUMJ05	18,15	●	●	●	●	●	○				●
INOX	MS		LNMU 0303ZER-MS	AH130	B5A4103MUMS02	17,25										

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Priority	Recommended grades	Geometry	Cutting speed Vc (m/min.)	Feed ø 16 ▯ 22 f/z mm	Feed ø 25 ▯ 32 f/z mm
Carbon steel (C45-C55, etc.)	~ 300 HB	First choice	AH725	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
	~ 300 HB	Low cutting forces	AH725	ML	100 - 200 - 300	0.5 - 0.6 - 0.7	0.5 - 0.8 - 1.0
	~ 300 HB	Impact-resistant	AH3225	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Alloy steel (42CRMo4, 17Cr3, etc.)	~ 300 HB	First choice	AH3225	MJ	100 - 150 - 200	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
	~ 300 HB	Low cutting forces	AH3225	ML	100 - 150 - 200	0.5 - 0.6 - 0.7	0.5 - 0.8 - 1.0
	~ 300 HB	Impact-resistant	AH3225	MJ	100 - 150 - 200	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Hardened and tempered steel (NAK80, PX5, etc.)	30 ~ 40 HRC	-	AH3225	MJ	100 - 150 - 200	0.5 - 0.6 - 0.7	0.5 - 0.8 - 1.0
Stainless steel (X5CrNi 18-9, etc.)	~ 200 HB	First choice	AH130	MS	80 - 120 - 150	0.3 - 0.4 - 0.5	0.3 - 0.5 - 0.7
	~ 200 HB	Impact-resistant	AH3225	MJ	100 - 120 - 150	0.3 - 0.5 - 0.8	0.3 - 0.6 - 0.8
Cast iron (GG25, GG30, etc.)	150 ~ 250HB	First choice	AH725	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Spheroidal cast iron (GGG40, etc.)	150 ~ 250HB	First choice	AH725	MJ	100 - 200 - 300	0.5 - 0.8 - 1.2	0.5 - 1.0 - 1.5
Titanium alloys (Ti-6AL-4V, etc.)	~ 40 HRC	First choice	AH130	ML	30 - 40 - 60	0.3 - 0.4 - 0.5	0.3 - 0.5 - 0.7
Hardened steel (SKD61, etc.)	40 ~ 50 HRC	First choice	AH8015	MJ	80 - 100 - 130	0.1 - 0.15 - 0.2	0.1 - 0.2 - 0.3
Hardened steel (SKD11, etc.)	50 ~ 60 HRC	First choice	AH8015	MJ	50 - 60 - 70	0.03 - 0.04 - 0.05	0.03 - 0.05 - 0.07

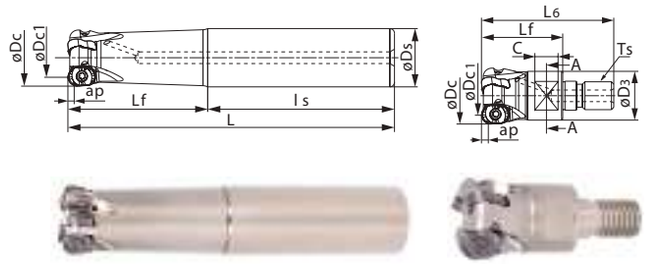
Indivisible package Suggested retail package - Unit price

DOUBLE-SIDE INSERTS TOROIDAL END MILLS FOR ADVANCE FEED

ART. B5F07

Multifuctional high feed end mills for various materials

Tipo di attacco	Cylindrical shank screw on
Tipo inserto	LNMX04..
Application	Multi task
Angolo di spoglia	A.R. +3° R.R = -12°~ +14°



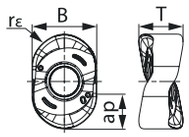
Tech. Code	GR14 Euro	Z	Dc mm	Ds mm	Dc1 mm	ls mm	Lf mm	L mm	Weight kg	Air hole
B5F0720Z2	332,75	2	20	20	12	80	50	130	0.28	With
B5F0725Z3	357,40	3	25	25	17	80	60	140	0.46	With
B5F0732Z4	(444,05)	4	32	32	24	80	70	150	0.83	With
B5F0732Z5	(310,70)	5	32	32	24	80	70	150	0.83	With

Tech. Code	GR14 Euro	Z	Dc mm	Dc1 mm	L6 mm	Lf mm	C mm	T mm	D3 mm	Ts	Weight kg	Air hole
B5F0820Z2	332,75	2	20	12	49	30	10	15	18	M10	0.07	With
B5F0825Z3	357,40	3	25	17	57	35	10	17	21	M12	0.16	With
B5F0832Z4	444,05	4	32	24	63	40	12	22	29	M16	0.20	With

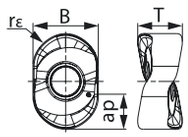
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA203	3,85	All diameters	Insert screw	CSPD-3

GEOMETRY AND CUTTING CONDITIONS

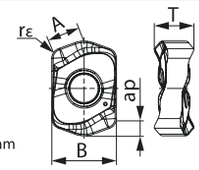
ML type
B = 8,2mm
T = 5,6mm
rε =4,0mm
ap max = 4mm



MJ type
B = 8,2mm
T = 5,6mm
rε =4,0mm
ap max = 4mm



HJ type
B = 8,2mm
T = 5,0mm
A = 4,2mm
rε =1,3mm
ap max = 1,3mm



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR17 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MED. CUT.	ML		LNMX 0405R4-ML	AH120	B5A35MXML01	16,60		○	○			●	●		●	●
				AH3135	B5A35MXML02		●	●	●	●	●				○	●
ROUGH.	MJ		LNMX 0405R4-MJ	AH120	B5A36MXMJ01	16,60		○	○			●	●		●	●
				AH3135	B5A36MXMJ02		●	●	●	●	●				○	●
HIGH FEED	HJ		LNMX 0405ZER-HJ	AH120	B5A37MXHJ01	16,60		○	○			●	●		●	●
				AH3135	B5A37MXHJ02										○	●

Indivisible package Suggested retail package - Unit price

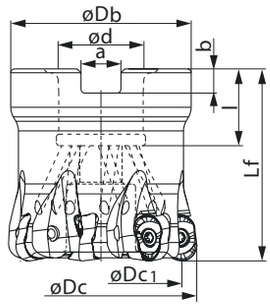
DOUBLE SIDE INSERTS TOROIDAL SHELL MILLS FOR ADVANCE FEED

Tungaloy DOTWIST BALL

ART. B5F09

Multifuntional high speed end mills for various materials

Tipo di attacco	Bore
Tipo inserto	LNMX04..
Application	Multi task
Angolo di spoglia	A.R. +3° R.R = -13°

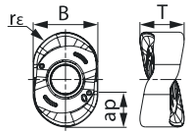


Tech. Code	GR14 Euro	Z	Dc mm	Dc1 mm	Db mm	Lf mm	d mm	l mm	b mm	Ap max mm	Weight kg	Air hole
B5F0940Z6	494,45	6	40	32	35	40	16,00	18,00	5,60	4	0.35	With
B5F0950Z7	652,55	7	50	42	47	50	22,00	20,00	6,30	4	0.35	With

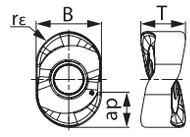
GEOMETRY AND CUTTING CONDITIONS

Tungaloy DOTWIST BALL

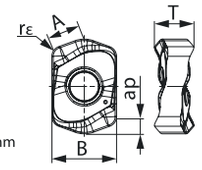
ML type
B = 8,2mm
T = 5,6mm
rε =4,0mm
ap max = 4mm



MJ type
B = 8,2mm
T = 5,6mm
rε =4,0mm
ap max = 4mm



HJ type
B = 8,2mm
T = 5,0mm
A = 4,2mm
rε =1,3mm
ap max = 1,3mm



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR17 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MED. CUT.	ML		LNMX 0405R4-ML	AH120	B5A35MXML01	16,60		○	○			●	●		●	●
				AH3135	B5A35MXML02		●	●	●	●	●				○	●
ROUGH.	MJ		LNMX 0405R4-MJ	AH120	B5A36MXMJ01	16,60		○	○			●	●		●	●
				AH3135	B5A36MXMJ02		●	●	●	●	●				○	●
HIGH FEED	HJ		LNMX 0405ZER-HJ	AH120	B5A37MXHJ01	16,60		○	○			●	●		●	●
				AH3135	B5A37MXHJ02										○	●

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Priority	Recommended geometries	Recommended grades	Cutting speed Vc (m/min.)	Feed MJ - ML f/z mm	Feed HJ f/z mm
Carbon steel (C45-C55, etc.)	~ 300 HB	Low cutting forces	ML	AH3135	150 - 250	0.20 - 0.60	0.50 - 1.30
	~ 300 HB	Impact resistant	MJ	AH3135	150 - 250	0.20 - 0.60	0.50 - 1.30
Alloy steel (42CRMo4, 17Cr3, etc.)	~ 300 HB	Low cutting forces	ML	AH3135	150 - 250	0.20 - 0.60	0.50 - 1.30
	~ 300 HB	Impact resistant	MJ	AH3135	150 - 250	0.20 - 0.60	0.50 - 1.30
Hardened and tempered steel (NAK80, PX5, etc.)	30 ~ 40 HRC	Low cutting forces	ML	AH3135	100 - 200	0.15 - 0.40	0.30 - 0.70
	30 ~ 40 HRC	Impact resistant	MJ	AH3135	100 - 200	0.15 - 0.40	0.30 - 0.70
Stainless steel (X5CrNi 18-9, etc.)	~ 200 HB	First choice	ML	AH3135	100 - 200	0.20 - 0.60	0.30 - 0.70
	~ 200 HB	Impact resistant	MJ	AH3135	100 - 200	0.20 - 0.60	0.30 - 0.70
Cast iron (GG25, GG30, etc.)	150 ~ 250HB	First choice	MJ	AH120	150 - 250	0.20 - 0.60	0.50 - 1.30
Spheroidal cast iron (GGG40, etc.)	150 ~ 250HB	First choice	MJ	AH120	150 - 250	0.20 - 0.60	0.50 - 1.30
Titanium alloys (Ti-6AL-4V, etc.)	~ 40HRC	First choice	ML	AH3135	20 - 50	0.15 - 0.40	0.30 - 0.70
Hardened steel (SKD61, etc.)	40 ~ 50 HRC	First choice	MJ	AH3135	50 - 150	0.10 - 0.30	0.10 - 0.50
Hardened steel (SKD11, etc.)	40 ~ 50 HRC	First choice	MJ	AH120	50 - 70	0.05 - 0.15	0.05 - 0.20

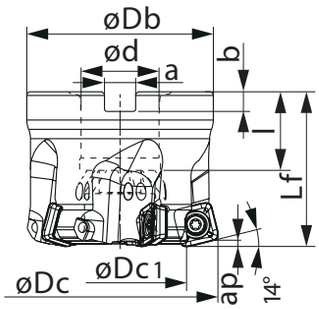
Indivisible package Suggested retail package - Unit price

SINGLE-SIDE INSERTS SQUARE SHOULDERING END MILLS

ART. B5F12

High feed multi-task end mill for various materials

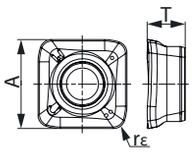
Coupling type	Bore
Insert type	SWMT1506...
Application	Multi-task
Rake angle	A.R. +5° R.R = 0°



Tech. Code	GR14 Euro	Z	Dc mm	Dc1 mm	Db mm	Lf mm	d mm	l mm	a mm	b mm	Max Op. mm	Weight kg	Air hole
B5F1263Z4	(476,85)	4	63	37,1	59	50	22	20	10.4	6.3	2.5	0.66	With
B5F1280Z5	(609,20)	5	80	54,1	76	63	27	22	12.4	7	2.5	1.41	With
B5F12100Z6	(741,55)	6	100	74,1	96	63	32	25	14.4	8	2.5	2.26	With
B5F12125Z7	(913,75)	7	125	99,1	100	63	40	32	16.4	9	2.5	2.83	With
B5F12160Z8	(1107,00)	8	160	134,1	100	63	40	32	16.4	9	2.5	4.23	With

GEOMETRY AND CUTTING CONDITIONS

MJ type
A = 15,875mm
T = 6,8mm
rε =2,0mm
ap max = 2,5mm



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR17 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
ROUG.	MT		SWMT 1506ZER-MT	AH120	B5A40MTMT01	21,85		○	○			●	●		●	●

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Priority	Recommended geometries	Recommended grades	Cutting speed Vc (m/min.)	Feed MJ f/z mm
Carbon steel (C45-C55, etc.)	~ 300 HB	First choice	MJ	AH3135	100 - 300	0.5 - 2.0
	~ 300 HB	Second choice	MJ	AH120	100 - 300	0.5 - 2.0
Alloy steel (42CRMo4, 17Cr3, etc.)	~ 300 HB	First choice	MJ	AH3135	100 - 300	0.5 - 2.0
	~ 300 HB	Second choice	MJ	AH120	100 - 200	0.5 - 2.0
Hardened and tempered steel (NAK80, PX5, etc.)	30 ~ 40HRC	First choice	MJ	AH3135	100 - 200	0.5 - 1.5
	30 ~ 40HRC	Second choice	MJ	AH120	100 - 200	0.5 - 1.5
Stainless steel (X5CrNi 18-9, etc.)	~ 200HB	First choice	MJ	AH3135	100 - 150	0.3 - 1.0
	~ 200HB	First choice	MJ	AH120	100 - 300	0.5 - 2.0
Cast iron (GG25, GG30, etc.)	150 ~ 250HB	First choice	MJ	AH120	80 - 200	0.5 - 2.0
Spheroidal cast iron (GGG40, etc.)	150 ~ 250HB	First choice	MJ	AH3135	30 - 60	0.3 - 0.7
Titanium alloys (Ti-6AL-4V, etc.)	~ 40HRC	First choice	MJ	AH120	20 - 50	0.1 - 0.3
Hardened steel (SKD61, etc.)	40 ~ 50HRC	First choice	MJ	AH3135	80 - 130	0.1 - 0.3
Hardened steel (SKD11, etc.)	50 ~ 60HRC	First choice	MJ	AH120	50 - 70	0.03 - 0.07

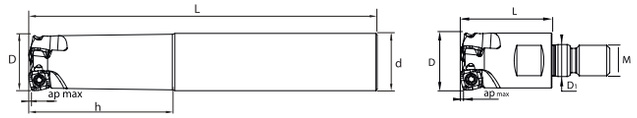
SINGLE-SIDE INSERTS SQUARE SHOULDERING END MILLS

KERFOLG Minifeed

ART. B5F10

High feed multi-task end mill for various materials

Coupling type Cylindrical shank - Screw-On
Insert type XPLT070305...
Application Roughing flat surfaces and 3D



Tech. Code	GR18 Euro	Z	D mm	L mm	d ø mm	h mm	Max Op. mm	Air hole	Insert
B5F101607Z2	222,44	2	16	200	16	50	0,8	With	XPLT 070305 SR
B5F102007Z3	252,25	3	20	200	20	50	0,8	With	XPLT 070305 SR
B5F102507Z4	282,06	4	25	200	25	50	0,8	With	XPLT 070305 SR

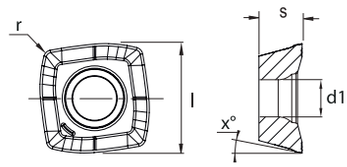
Tech. Code	GR18 Euro	Z	D mm	L mm	D1 mm	Max Op. mm	M	Air hole	Insert
B5F111607Z2	222,44	2	16	43	8,5	0,8	8	With	XPLT 070305 SR
B5F112007Z3	252,25	3	20	49	10,5	0,8	10	With	XPLT 070305 SR
B5F112507Z4	282,06	4	25	57	12,5	0,8	12	With	XPLT 070305 SR

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA197	6,11	XPLT 070305 SR...	Clamping insert screw	BRICA197

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Minifeed

XPLT 070305... l=7,0mm r=0,5mm x=11° s=2,75mm d1=2,80mm



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR21 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MED. CUT.			XPLT 070305 SR MM	ST35	B5T1007XPMM10	14,10	●			○	●				●	
				ST40	B5T1007XPMM11	15,25				●	●				●	
ROUGH.			XPLT 070305 SR MR	PH35	B5T1107XPMR10	11,36	●	●	●	○		○				
				MT35	B5T1107XPMR11		●		○	●	●				○	

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Geometry	Cutting speed Vc (mt/min)	Feed fz/mm
Carbon steels (C45-C55 etc.)	~ 300HB	PH35	MR	180 - 260	0,1 - 1,5
Alloyed steel (42CRMo4, 17Cr3 etc.)	~ 300HB	PH35	MR	120 - 200	0,1 - 1,5
Hardened and tempered steels (NAK80, PX5 etc.)	30 ~ 40HRC	PH35	MR	60 - 160	0,1 - 1,5
Stainless steels (X5CrNi 18-9, etc.)	~ 200HB	MT35	MR	75 - 180	0,1 - 1,5
Titanium alloys (Ti-6Al-4V, etc.)	~ 40HRC	ST40	MM	25 - 75	0,1 - 0,5
Heat resistant alloys (Inconel 718, etc.)	-	ST35	MM	25 - 75	0,1 - 1,5

Indivisible package Suggested retail package - Unit price

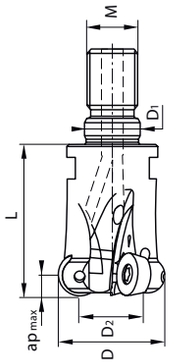
MULTIFUNCTIONAL END MILLS ROUND INSERTS

KERFOLG Copy

ART. B6F15

Toroidal end mills with round inserts for face milling and pocketing.

Coupling type Screw-On
Tipo inserto RD...0702MO - RD...1003MO
Application For profiling and pocketing.



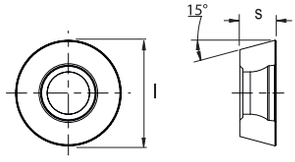
Tech. Code	GR18 Euro	Z	D mm	D2 mm	L mm	D1 mm	Ap max mm	M	Air hole	Insert
B6F151607Z3	124,00	3	16	9	23	8.5	3.5	8	With	RDPX0702MO
B6F152007Z4	161,00	4	20	13	30	10.5	3.5	10	With	RDPX0702MO
B6F152507Z5	179,00	5	25	18	35	12.5	3.5	12	With	RDPX0702MO
B6F152010Z2	116,00	2	20	10	30	10.5	5	10	With	RDPX1003MO
B6F152510Z3	145,00	3	25	15	35	12.5	5	12	With	RDPX1003MO
B6F153010Z4	168,00	4	30	20	43	17	5	16	With	RDPX1003MO
B6F153510Z5	172,00	5	35	25	45	17	5	16	With	RDPX1003MO

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA192	4,17	RDPX 0702MOSN...	Clamping insert screw	BRICA192
BRICA193	4,17	RDPX 1003MOSN... - RDPX 12T3MOSN...	Clamping insert screw	BRICA193
BRICA195	4,17	RDPX 12T3MOSN...	Clamping screw	BRICA195
BRICA004	10,90	All diameters	Wrench	BRICA004

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Copy

RDPX 0702... l=7mm s=2,38mm
RDPX 1003... l=10mm s=3,18mm
RDPX 12T3... l=12mm s=3,97mm



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR21 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
ROUGHING	MR		RDPX 0702MOSN MR	PH20	B6A2207RDMR01	6,97	○	●	●			●	○			●
			RDPX 1003MOSN MR		B6A2210RDMR02	7,69	○	●	●			●	○			●
			RDPX 12T3MOSN MR		B6A2212RDMR03	8,16	○	●	●			●	○			●
			RDPX 0702MOSN MR	PT20	B6A2207RDMR04	6,97		●	●	○		○				
			RDPX 1003MOSN MR		B6A2210RDMR05	7,69		●	●	○		○				
			RDPX 12T3MOSN MR		B6A2212RDMR06	8,16		●	●	○		○				

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Priority	Recommended grades	Geometry	Cutting speed Vc (m/min.)	Insert r = 3.5 mm P.D.T. - fz	Insert r = 5 mm P.D.T. - fz	Insert r = 6mm P.D.T. - fz
Alloyed steel (42CRMo4, 17Cr3 etc.)	~ 300HB	Roughing	PT20	MR	215 - 250	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80
Hardened and tempered steels (NAK80, PX5 etc.)	30 ~ 40HRC	Roughing	PT20	MR	185 - 215	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80
Hardened steels	40 ~ 50HRC	Roughing	PH20	MR	140 - 175	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80
	50 ~ 56HRC	Roughing	PH20	MR	115 - 140	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80

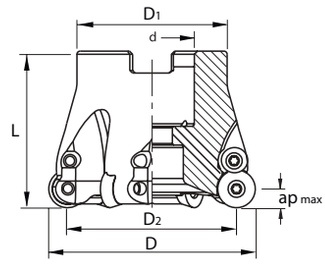
MULTIFUNCTIONAL END MILLS FOR ROUND INSERTS

KERFOLG Copy

ART. B6F20

Toroidal end mills with round inserts for face milling and pocketing.

Tipo di attacco	Bore
Tipo inserto	RD...1003MO - RD...12T3MO
Application	Profiling and pocketing.



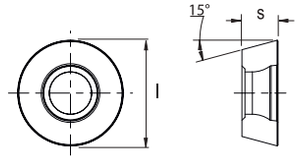
Tech. Code	GR18 Euro	Z	D mm	D2 mm	d mm	L mm	D1 mm	Ap max mm	Air hole	Insert
B6F204010Z5	206,00	5	40	30	16	40	37	5	With	RDPX1003MO
B6F205010Z6	265,00	6	50	40	22	40	44	5	With	RDPX1003MO
B6F205210Z6	265,00	6	52	42	22	50	44	5	With	RDPX1003MO
B6F204012Z4	203,00	4	40	28	16	40	37	6	With	RDPX12T3MO
B6F205012Z5	231,00	5	50	38	22	40	44	6	With	RDPX12T3MO
B6F205212Z5	231,00	5	52	40	22	50	44	6	With	RDPX12T3MO
B6F206312Z6	265,00	6	63	51	22	40	44	6	With	RDPX12T3MO
B6F206612Z6	265,00	6	66	54	27	50	60	6	With	RDPX12T3MO

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA192	4,17	RDPX 0702MOSN...	Clamping insert screw	BRICA192
BRICA193	4,17	RDPX 1003MOSN... - RDPX 12T3MOSN...	Clamping insert screw	BRICA193
BRICA195	4,17	RDPX 12T3MOSN...	Clamping screw	BRICA195
BRICA004	10,90	All diameters	Wrench	BRICA004

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Copy

RDPX 0702...	l=7mm	s=2,38mm
RDPX 1003...	l=10mm	s=3,18mm
RDPX 12T3...	l=12mm	s=3,97mm



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR21 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
ROUGHING	MR		RDPX 0702MOSN MR	PH20	B6A2207RDMR01	6,97	○	●	●			●	○			●
			RDPX 1003MOSN MR		B6A2210RDMR02	7,69	○	●	●			●	○			●
			RDPX 12T3MOSN MR		B6A2212RDMR03	8,16	○	●	●			●	○			●
			RDPX 0702MOSN MR	PT20	B6A2207RDMR04	6,97		●	●	○		○				
			RDPX 1003MOSN MR		B6A2210RDMR05	7,69		●	●	○		○				
			RDPX 12T3MOSN MR		B6A2212RDMR06	8,16		●	●	○		○				

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Priority	Recommended grades	Geometry	Cutting speed Vc (m/min.)	Insert r = 3.5 mm P.D.T. - fz	Insert r = 5 mm P.D.T. - fz	Insert r = 6mm P.D.T. - fz
Alloyed steel (42CRMo4, 17Cr3 etc.)	~ 300HB	Roughing	PT20	MR	215 - 250	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80
Hardened and tempered steels (NAK80, PX5 etc.)	30 ~ 40HRC	Roughing	PT20	MR	185 - 215	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80
Hardened steels	40 ~ 50HRC	Roughing	PH20	MR	140 - 175	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80
	50 ~ 56HRC	Roughing	PH20	MR	115 - 140	0.25 - 0.40	0.30 - 0.50	0.65 - 0.80

Indivisible package Suggested retail package - Unit price

FINISHING INDEXABLE END MILLS

lungaloy BALL FINISH NOSE

ART. B6F30

End mills for toroidal inserts for finishings

Coupling type	Cylindrical shank
Tipo inserto	ZFBM... - ZFRM...
Application	Finishing of 3D profile

Fig. 1

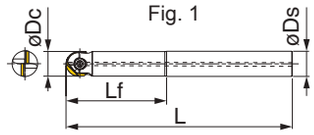
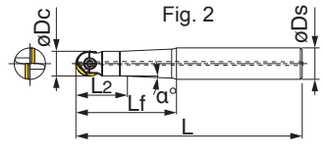


Fig. 2

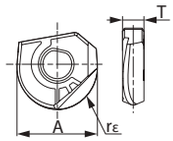


Tech. Code	GR14 Euro	Dc mm	Ds mm	L mm	Lf mm	L2 mm	α°	Fig.	Air hole
B6F300808100C	(488,80)	8	8	100	30	-	-	1	Without
B6F300808140C	(555,05)	8	8	140	65	-	-	1	Without
B6F300812100S	(142,20)	8	12	100	20	10	9,5	2	With
B6F301010140C	(555,05)	10	10	140	75	-	-	1	Without
B6F301010220C	(583,00)	10	10	220	140	-	-	1	Without
B6F301012100S	(145,80)	10	12	100	25	15	5	2	With
B6F301212160C	(605,10)	12	12	160	90	-	-	1	Without
B6F301212220C	(635,05)	12	12	220	150	-	-	1	Without
B6F301212110S	(180,40)	12	12	110	30	-	-	1	With
B6F301616160C	(734,55)	16	16	160	80	-	-	1	Without
B6F301616220C	(860,90)	16	16	220	150	-	-	1	Without
B6F301620130S	(217,50)	16	20	130	50	15,5	1,5	2	With
B6F302020220C	(1163,45)	20	20	220	120	-	-	1	Without
B6F302020300C	(1326,35)	20	20	300	220	-	-	1	Without
B6F302025180S	(278,20)	20	25	180	80	24	2,5	2	With
B6F302532200S	(344,75)	25	32	200	100	32	1,5	2	With

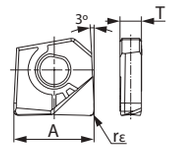
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA221	11,85	EBFM10...	Clamping insert screw	TS 30F100A
BRICA222	12,35	EBFM12...	Clamping insert screw	TS 40F120A
BRICA224	21,85	EBFM20...	Clamping insert screw	TS 60F200A
BRICA225	8,90	EBFM25...	Clamping insert screw	TS 70F250A

GEOMETRY AND CUTTING CONDITIONS - BALL FINISH NOSE

ZFBM080R00-MJ - A = 8,0mm T = 2,4mm rε = 4,0mm
ZFBM100R00-MJ - A = 10,0mm T = 2,9mm rε = 5,0mm
ZFBM120R00-MJ - A = 12,0mm T = 3,4mm rε = 6,0mm
ZFBM160R00-MJ - A = 16,0mm T = 4,4mm rε = 8,0mm
ZFBM200R00-MJ - A = 20,0mm T = 5,4mm rε = 10,0mm
ZFBM250R00-MJ - A = 25,0mm T = 6,4mm rε = 12,5mm



ZFRM120R05-MJ - A = 12,0mm T = 3,4mm rε = 0,5mm
ZFRM120R10-MJ - A = 12,0mm T = 3,4mm rε = 1,0mm
ZFRM160R05-MJ - A = 16,0mm T = 4,4mm rε = 0,5mm
ZFRM160R10-MJ - A = 16,0mm T = 4,4mm rε = 1,0mm
ZFRM200R10-MJ - A = 20,0mm T = 5,4mm rε = 1,0mm
ZFRM200R15-MJ - A = 20,0mm T = 5,4mm rε = 1,5mm



● RECOMMENDED FOR... ○ USABLE FOR...

							P			M		K		N	S	H
			Description	Grade	Tech. Code	GR16 Euro	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
MEDIUM CUTTING	MJ		ZFBM080R00-MJ	AH710	B6C05MJ0805	(27,40)	○	●	●			●	●			●
				AH725	B6C05MJ0806		●	●	●		○	○				○
			ZFBM100R00-MJ	AH710	B6C05MJ1007	(30,35)	○	●	●			●	●			●
				AH725	B6C05MJ1008		●	●	●		○	○				○
			ZFBM120R00-MJ	AH710	B6C05MJ1209	(32,40)	○	●	●			●	●			●
				AH725	B6C05MJ1210		●	●	●		○	○				○
			ZFBM160R00-MJ	AH710	B6C05MJ1611	(36,10)	○	●	●			●	●			●
				AH725	B6C05MJ1612		●	●	●		○	○				○
			ZFBM200R00-MJ	AH710	B6C05MJ2013	(40,45)	○	●	●			●	●			●
				AH725	B6C05MJ2014		●	●	●		○	○				○
			ZFBM250R00-MJ	AH710	B6C05MJ2515	(58,05)	○	●	●			●	●			●
				AH725	B6C05MJ2516		●	●	●		○	○				○
			ZFRM120R05-MJ	AH710	B6C10MJ1205	(37,85)	○	●	●			●	●			●
				AH725	B6C10MJ1206		●	●	●	○		○				○
			ZFRM120R10-MJ	AH710	B6C10MJ1207		○	●	●			●	●			●
				AH725	B6C10MJ1208		●	●	●	○		○				○
			ZFRM160R05-MJ	AH710	B6C10MJ1609	(41,70)	○	●	●			●	●			●
				AH725	B6C10MJ1610		●	●	●	○		○				○
			ZFRM160R10-MJ	AH710	B6C10MJ1611		○	●	●			●	●			●
				AH725	B6C10MJ1612		●	●	●	○		○				○
			ZFRM160R15-MJ	AH710	B6C10MJ1613		○	●	●			●	●			●
				AH725	B6C10MJ1614		●	●	●	○		○				○
			ZFRM200R10-MJ	AH710	B6C10MJ2015	(47,95)	○	●	●			●	●			●
				AH725	B6C10MJ2016		●	●	●	○		○				○
			ZFRM200R15-MJ	AH710	B6C10MJ2017		○	●	●			●	●			●
				AH725	B6C10MJ2018		●	●	●	○		○				○

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Recommended grades	Cutting speed VC (m/min)	SIDE SLOTS Cutting speed	SIDE SLOTS Feed
Low carbon content steels (C15 etc.)	~ 200	AH725 - GH130	180 ~ 260	110 ~ 140	0,05 - 0,15
Carbon steels (C45-C55 etc.)	200 ~ 300	AH725 - GH130	150 ~ 230	100 ~ 120	0,05 - 0,15
Alloyed steel (42CRMo4, 17Cr3 etc.)	150 ~ 300	AH725 - GH130	180 ~ 300	100 120	0,05 - 0,15
Stainless steels (ex. X5CrNi 18-9, etc.)	-	AH725 - GH130	100 ~ 250	60 ~ 120	0,03 - 0,12
Cast irons (GG25, GG30 etc.)	150 ~ 200	AH725 - GH130	90 ~ 350	90~ 160	0,03 - 0,12
Spheroidal cast irons (GGG40 etc)	150 ~ 200	AH725 - GH130	90 ~ 350	90 ~ 160	0,03 - 0,12
Aluminium alloys (Si<13%)	-	AH725 - GH130	200 ~ 400	700 ~ 900	0,05 - 0,15

Indivisible package Suggested retail package - Unit price

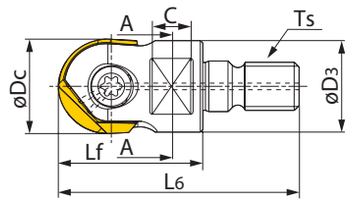
FINISHING INDEXABLE END MILLS

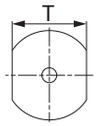
lungaloy BALL FINISH NOSE

ART. B6F31

Finishing end mills

Coupling type	Threaded shank
Tipo inserto	ZFBM - ZBRM...
Application	Moulds finishing





A - A cross section

Tech. Code	GR14 Euro	Dc mm	D3 mm	L6 mm	Lf mm	C mm	Ts mm	Air hole
B6F3110M06	(142,55)	10	9,7	34,5	20	5	M6	With
B6F3112M06	(154,95)	12	11,5	37,5	23	5	M6	With
B6F3116M08	(188,10)	16	13	47	30	8	M8	With
B6F3120M10	(202,65)	20	19	49	30	10	M10	With
B6F3125M12	(272,15)	25	24	57	35	10	M12	With

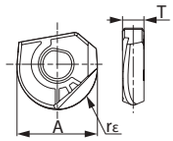
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA220	13,00	EBFM08...	Clamping insert screw	TS 25F080A
BRICA221	11,85	EBFM10...	Clamping insert screw	TS 30F100A
BRICA222	12,35	EBFM12...	Clamping insert screw	TS 40F120A
BRICA224	21,85	EBFM20...	Clamping insert screw	TS 60F200A
BRICA225	8,90	EBFM25...	Clamping insert screw	TS 70F250A

ALPA metrology

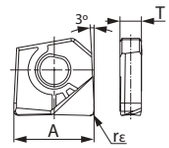
Accuracy
Repeatability
Reliability

GEOMETRY AND CUTTING CONDITIONS - BALL FINISH NOSE

ZFBM080R00-MJ - A = 8,0mm T = 2,4mm rε = 4,0mm
ZFBM100R00-MJ - A = 10,0mm T = 2,9mm rε = 5,0mm
ZFBM120R00-MJ - A = 12,0mm T = 3,4mm rε = 6,0mm
ZFBM160R00-MJ - A = 16,0mm T = 4,4mm rε = 8,0mm
ZFBM200R00-MJ - A = 20,0mm T = 5,4mm rε = 10,0mm
ZFBM250R00-MJ - A = 25,0mm T = 6,4mm rε = 12,5mm



ZFRM120R05-MJ - A = 12,0mm T = 3,4mm rε = 0,5mm
ZFRM120R10-MJ - A = 12,0mm T = 3,4mm rε = 1,0mm
ZFRM160R05-MJ - A = 16,0mm T = 4,4mm rε = 0,5mm
ZFRM160R10-MJ - A = 16,0mm T = 4,4mm rε = 1,0mm
ZFRM200R10-MJ - A = 20,0mm T = 5,4mm rε = 1,0mm
ZFRM200R15-MJ - A = 20,0mm T = 5,4mm rε = 1,5mm



● RECOMMENDED FOR... ○ USABLE FOR…

							P			M		K		N	S	H
			Description	Grade	Tech. Code	GR16 Euro	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
MEDIUM CUTTING	MJ		ZFBM080R00-MJ	AH710	B6C05MJ0805	(27,40)	○	●	●			●	●			●
				AH725	B6C05MJ0806		●	●	●		○	○				○
			ZFBM100R00-MJ	AH710	B6C05MJ1007	(30,35)	○	●	●			●	●			●
				AH725	B6C05MJ1008		●	●	●		○	○				○
			ZFBM120R00-MJ	AH710	B6C05MJ1209	(32,40)	○	●	●			●	●			●
				AH725	B6C05MJ1210		●	●	●		○	○				○
			ZFBM160R00-MJ	AH710	B6C05MJ1611	(36,10)	○	●	●			●	●			●
				AH725	B6C05MJ1612		●	●	●		○	○				○
			ZFBM200R00-MJ	AH710	B6C05MJ2013	(40,45)	○	●	●			●	●			●
				AH725	B6C05MJ2014		●	●	●		○	○				○
			ZFBM250R00-MJ	AH710	B6C05MJ2515	(58,05)	○	●	●			●	●			●
				AH725	B6C05MJ2516		●	●	●		○	○				○
			ZFRM120R05-MJ	AH710	B6C10MJ1205	(37,85)	○	●	●			●	●			●
				AH725	B6C10MJ1206		●	●	●	○		○				○
			ZFRM120R10-MJ	AH710	B6C10MJ1207		○	●	●			●	●			●
				AH725	B6C10MJ1208		●	●	●	○		○				○
			ZFRM160R05-MJ	AH710	B6C10MJ1609	(41,70)	○	●	●			●	●			●
				AH725	B6C10MJ1610		●	●	●	○		○				○
			ZFRM160R10-MJ	AH710	B6C10MJ1611		○	●	●			●	●			●
				AH725	B6C10MJ1612		●	●	●	○		○				○
			ZFRM160R15-MJ	AH710	B6C10MJ1613		○	●	●			●	●			●
				AH725	B6C10MJ1614		●	●	●	○		○				○
			ZFRM200R10-MJ	AH710	B6C10MJ2015	(47,95)	○	●	●			●	●			●
				AH725	B6C10MJ2016		●	●	●	○		○				○
			ZFRM200R15-MJ	AH710	B6C10MJ2017		○	●	●			●	●			●
				AH725	B6C10MJ2018		●	●	●	○		○				○

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Recommended grades	Cutting speed VC (m/min)	SIDE SLOTS Cutting speed	SIDE SLOTS Feed
Low carbon content steels (C15 etc.)	~ 200	AH725 - GH130	180 ~ 260	110 ~ 140	0,05 - 0,15
Carbon steels (C45-C55 etc.)	200 ~ 300	AH725 - GH130	150 ~ 230	100 ~ 120	0,05 - 0,15
Alloyed steel (42CRMo4, 17Cr3 etc.)	150 ~ 300	AH725 - GH130	180 ~ 300	100 120	0,05 - 0,15
Stainless steels (ex. X5CrNi 18-9, etc.)	-	AH725 - GH130	100 ~ 250	60 ~ 120	0,03 - 0,12
Cast irons (GG25, GG30 etc.)	150 ~ 200	AH725 - GH130	90 ~ 350	90~ 160	0,03 - 0,12
Spheroidal cast irons (GGG40 etc)	150 ~ 200	AH725 - GH130	90 ~ 350	90 ~ 160	0,03 - 0,12
Aluminium alloys (Si<13%)	-	AH725 - GH130	200 ~ 400	700 ~ 900	0,05 - 0,15

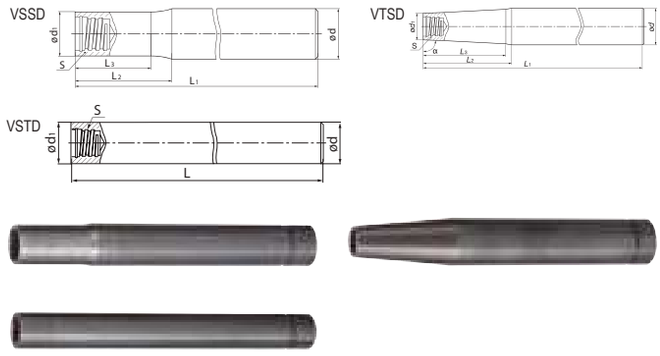
Indivisible package Suggested retail package - Unit price

MULTIFUNCTIONAL MILLING TOOL WITH INTERCHANGEABLE HEADS - SCREW ON COUPLING

ART. B6F40 - B6F41 - B6F42

Multifunctional milling for different material

Coupling type	Cylindrical screw on
Insert type	Interchangeable heads
Application	Multifunctional



Tech. Code	GR13 Euro	Ød mm	Ød1 mm	L1 mm	L2 mm	L3 mm	S mm	Shank material
B6F4008060S	95,10	8	7,6	60	15	15	S05	Steel
B6F4010075S	98,80	10	9,6	75	20	20	S06	Steel
B6F4012090S	108,55	12	11,5	90	16	16	S08	Steel
B6F4016100S	121,65	16	15,2	100	20	20	S10	Steel
B6F4020120S	140,70	20	18,3	120	25	25	S12	Steel

Tech. Code	GR13 Euro	Ød mm	α° mm	Ød1 mm	L1 mm	L2 mm	L3 mm	S mm	Shank material
B6F4112100S	(160,80)	12	89°	7,6	100	35	29	S05	STEEL
B6F4116160S	(164,85)	16	89°	9,6	160	55	46,5	S06	STEEL
B6F4120170S	(171,90)	20	89°	11,5	170	80	69,5	S08	STEEL
B6F4120190S	(196,00)	20	89°	15,2	190	80	73	S10	STEEL
B6F4125210S	(234,20)	25	89°	18,3	210	100	94,5	S12	STEEL

Tech. Code	GR13 Euro	Ød mm	Ød1 mm	L mm	S mm	Shank material
B6F4208070S	95,10	8	8	70	S05	STEEL
B6F4210080S	98,80	10	10	80	S06	STEEL
B6F4212090S	108,55	12	12	90	S08	STEEL
B6F4216100S	121,65	16	16	100	S10	STEEL

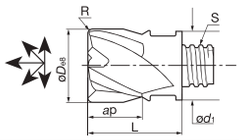
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA230	7,20	S05	Wrench	KEYV-S05
BRICA231	7,20	S06	Wrench	KEYV-S06
BRICA232	7,20	S08	Wrench	KEYV-S08
BRICA233	8,60	S10	Wrench	KEYV-S10
BRICA234	17,95	S12	Wrench	KEYV-S12
BRICA235	2,65	S08	Wrench	KEYV-217

RECOMMENDED CUTTING DATA

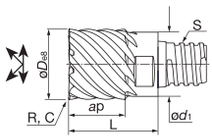
Material	Hardness Brinnel HB	Recommended grades	Cutting speed VC (m/min)	SIDE SLOTS Cutting speed	SIDE SLOTS Feed
Low carbon content steels (C15 etc.)	~ 200	AH725 - GH130	180 ~ 260	110 ~ 140	0,05 - 0,15
Carbon steels (C45-C55 etc.)	200 ~ 300	AH725 - GH130	150 ~ 230	100 ~ 120	0,05 - 0,15
Alloyed steel (42CRMo4, 17Cr3 etc.)	150 ~ 300	AH725 - GH130	180 ~ 300	100 120	0,05 - 0,15
Stainless steels (ex. X5CrNi 18-9, etc.)	-	AH725 - GH130	100 ~ 250	60 ~ 120	0,03 - 0,12
Cast irons (GG25, GG30 etc.)	150 ~ 200	AH725 - GH130	90 ~ 350	90~ 160	0,03 - 0,12
Spheroidal cast irons (GGG40 etc)	150 ~ 200	AH725 - GH130	90 ~ 350	90 ~ 160	0,03 - 0,12
Aluminium alloys (Si<13%)	-	AH725 - GH130	200 ~ 400	700 ~ 900	0,05 - 0,15
High hardened steels	55HRC	AH725 - GH130	40 ~ 80	-	-

RECOMMENDED HEADS AND DATA - TUNGMEISTER

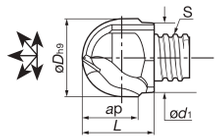
VED - VEE 4TG



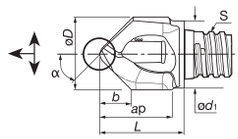
VED - VEE 8/10TG



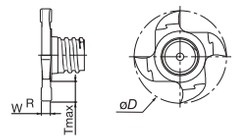
VBB - BM/BG



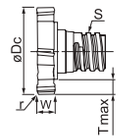
VCP



VST



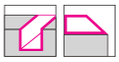
VTB



● RECOMMENDED FOR... ○ USABLE FOR...

											P	M	K	N	S	H
		Description	Grade	Tech. Code	GR15 Euro	D mm	ap/W mm	L/T max mm	Helix α°	R	<1200 N/mm²	<600 N/mm²	<240 HB	Alu	HTA	<60 HRC
SLOTTING		VED080L05.0R05-04S05	AH725	B6V0508R0504	52,60	8	5	10	30	0,5	●	○	○		○	○
		VED100L07.0R05-04S06		B6V0510R0504	59,90	10	7	13			●	○	○		○	○
		VED120L09.0R05-04S08		B6V0512R0504	74,85	12	9	16,5			●	○	○		○	○
		VED120L09.0R10-04S08		B6V0512R1004	(74,85)					1	●	○	○		○	○
		VED160L12.0R10-04S10		B6V0512R2004	(115,70)	16	12	20,5			●	○	○		○	○
		VED160L12.0R20-04S10		B6V0516R1004	115,70					2	●	○	○		○	○
		VED200L6.0R10-04S12		B6V0520R1004	(134,20)	20	15	25,5		1	●	○	○		○	○
		VED200L15.0R20-04S12		B6V0520R2004						2	●	○	○		○	○
SUPERFINISH		VED160L12.0R05-08S10		B6V0816R0508	(147,30)	16	12	20,5		0,5	●	○	○		○	○
		VED160L12.R10-08S10		B6V0816R1008						1	●	○	○		○	○
		VED160L12.0R16-08S10		B6V0816R1608						1,6	●	○	○		○	○
		VED160L12.0R20-08S10		B6V0816R2008						2	●	○	○		○	○
		VED200L15.0R10-10S12		B6V0820R1010	(199,65)	20	15	25,5		1	●	○	○		○	○
		VED200L15.0R20-10S12		B6V0820R2010						2	●	○	○		○	○
COPYING		VBB080L08.0-BG-02S05	AH750	B6V1008BG02	(56,45)	8	8	10	0	4	●	○	○		○	○
		VBB080L08.0-BM-02S05	AH725	B6V1008BM02	(42,25)	10	10	12,4		5	●	○	○		○	○
		VBB100L10.0-BG-02S06	AH750	B6V1010BG02	62,65	12	11,5	15,3		6	●	○	○		○	○
		VBB100L10.0-BM-02S06	AH725	B6V1010BM02	48,10	16	15,2	19,1		8	●	○	○		○	○
		VBB120L12.0-BG-02S08	AH750	B6V1012BG02	77,95	8	8	10		4	●	○	○		○	○
		VBB120L12.0-BM-02S08	AH725	B6V1012BM02	59,75	10	10	12,4		5	●	○	○		○	○
		VBB160L16.0-BG-02S10	AH750	B6V1016BG02	(120,00)	12	12	15,3		6	●	○	○		○	○
		VBB160L16.0-BM-02S10		B6V1016BM02	(92,90)	16	16	19,1		8	●	○	○		○	○
CENTERING AND CHAMFERING		VCP080L07.7A45-02S05	AH725	B6V1508A4502	41,10	8	7,5	9,75	45	-	●	○	○		○	○
		VCP100L09.5A30-02S06		B6V1510A3002	46,55	10	8,5	11,75	30		●	○	○		○	○
		VCP100L09.0A45-02S06		B6V1510A4502			9,5		45		●	○	○		○	○
		VCP100L09.5A60-02S06		B6V1510A6002				12,7	60		●	○	○		○	○
		VCP120L12.0A30-02S08		B6V1512A3002	58,05	12	11	15,4	30		●	○	○		○	○
		VCP120L12.0A45-02S08		B6V1512A4502			11,5		45		●	○	○		○	○
		VCP120L12.0A60-02S08		B6V1512A6002				15,2	60		●	○	○		○	○
		VCP160L15.0A30-02S10		B6V1516A3002	(90,05)	16	16	20,2	30		●	○	○		○	○
		VCP160L15.0A45-02S10		B6V1516A4502	90,05		15	18,8	45		●	○	○		○	○
		VCP160L15.5A60-02S10		B6V1516A6002	(90,05)		16	19,9	60		●	○	○		○	○
LATERAL SLOTTING AND SEEGER (DIN 471-472)		VST217W1.00R005-4S08	GH130	B6V20W1,0004	(46,65)	21,7	1	2	0	0,05	○	●	●		●	○
		VST217W1.20R005-4S08		B6V20W1,2004			1,2	4,5			○	●	●		●	○
		VST217W1.40R005-4S08		B6V20W1,4004			1,4				○	●	●		●	○
		VST217W1.57R000-4S08		B6V20W1,5704			1,57			0	○	●	●		●	○
		VST217W1.70R010-4S08		B6V20W1,7004			1,7			0,1	○	●	●		●	○
		VST217W1.95R020-4S08		B6V20W1,9504			1,95			0,2	○	●	●		●	○
		VST217W2.00R020-4S08		B6V20W2,0004			2				○	●	●		●	○
		VST217W2.25R020-4S08		B6V20W2,2504			2,25				○	●	●		●	○
		VST217W2.39R020-4S08		B6V20W2,3904			2,39				○	●	●		●	○
		VST217W2.50R020-4S08		B6V20W2,5004			2,5				○	●	●		●	○
		VST217W2.75R020-4S08		B6V20W2,7504			2,75				○	●	●		●	○
		VST217W3.00R020-4S08		B6V20W3,0004			3				○	●	●		●	○
SIDE SLOTTING		VTB135W4.00R04-06S05		B6V25135W404	57,95	13,5	4	2,65		0,4	●	●	●		●	○
		VTB160W4.00R04-06S06		B6V25160W404	60,95	16		2,9			●	●	●		●	○
		VTB165W4.00R04-06S06		B6V25165W404	68,10	16,5		3,15			●	●	●		●	○
		VTB195W4.00R04-06S08		B6V25195W404	64,95	19,5		3,45			●	●	●		●	○
		VTB195W5.00R04-06S08		B6V25195W504	68,85		5				●	●	●		●	○
		VTB195W6.00R04-06S08		B6V25195W604	72,80		6				●	●	●		●	○
		VTB225W5.00R04-06S08		B6V25225W504	69,65	22,5	5	4,95			●	●	●		●	○
		VTB225W6.00R04-06S08		B6V25225W604	74,55		6				●	●	●		●	○
		VTB250W6.00R04-06S08		B6V25250W604	81,40	25		5,9			●	●	●		●	○
		VTB250W5.00R04-06S10		B6V25250W504	(76,75)		5	4,3			●	●	●		●	○

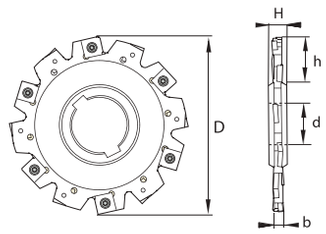
Indivisible package Suggested retail package - Unit price



ART. B7F10

Disk end mills for grooving and cutting works

Coupling type	with hole
Tipo inserto	SNHX11... - SNHX12...
Application	Slotting and cutting on all materials



Tech. Code	GR18 Euro	Z	D mm	b mm	h mm	H mm	d mm	Factor K	Air hole	Insert
B7F10634	(662,60)	8	63	4	14	8	22	4	Without	SNHX 1102T
B7F10635	(662,60)	8	63	5	14	8	22	4	Without	SNHX 1103T
B7F10636	(662,60)	6	63	6	14	8	22	3	Without	SNHX 1203T
B7F10804	(685,81)	10	80	4	22	8	22	5	Without	SNHX 1102T
B7F10805	(685,81)	10	80	5	22	8	22	5	Without	SNHX 1103T
B7F10806	(685,81)	8	80	6	22	8	22	4	Without	SNHX 1203T
B7F101004	(848,20)	12	100	4	25	12	27	6	Without	SNHX 1102T
B7F101005	(848,20)	12	100	5	25	12	27	6	Without	SNHX 1103T
B7F101006	(848,20)	10	100	6	25	12	27	5	Without	SNHX 1203T
B7F1010010	(853,88)	10	100	10	25	12	27	5	Without	SNHX 1205T
B7F101254	(983,82)	12	125	4	31	12	40	6	Without	SNHX 1102T
B7F101255	(1002,99)	12	125	5	31	12	40	6	Without	SNHX 1103T
B7F101256	(1018,01)	12	125	6	31	12	40	6	Without	SNHX 1203T
B7F101604	(1215,15)	18	160	4	44	12	40	9	Without	SNHX 1102T
B7F101605	(1109,85)	18	160	5	44	12	40	9	Without	SNHX 1103T
B7F101606	(1045,46)	16	160	6	44	12	40	8	Without	SNHX 1203T
B7F1016010	(1258,73)	16	160	10	44	12	40	8	Without	SNHX 1205T
B7F102004	(1360,49)	18	200	4	62	12	50	9	Without	SNHX 1102T
B7F102005	(1360,49)	18	200	5	62	12	50	9	Without	SNHX 1103T
B7F102006	(1360,49)	18	200	6	62	12	50	9	Without	SNHX 1203T
B7F1020010	(1449,79)	18	200	10	62	12	50	9	Without	SNHX 1205T

Tech. Code	GR30 Euro	Description	Insert
BRICA087	9,77	Clamping insert screw	SNHX1102T
BRICA088	9,77	Clamping insert screw	SNHX1103T
BRICA089	9,77	Clamping insert screw	SNHX1203T
BRICA090	9,77	Clamping insert screw	SNHX1205T

Tech. Code	GR30 Euro	Description	Insert
BRICA016	7,70	Wrench	SNHX1102T
BRICA016	7,70	Wrench	SNHX1103T
BRICA004	10,90	Wrench	SNHX1203T
BRICA004	10,90	Wrench	SNHX1205T

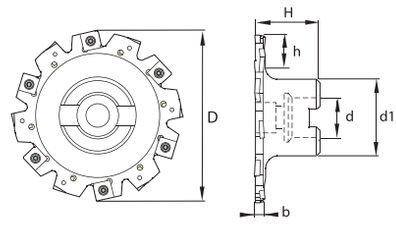
GROOVING AND SLOTTING CUTTERS

KERFOLG Groove

ART. B7F11

Disk end mills for grooving and cutting works

Coupling type	Bore
Tipo inserto	SNHX11... - SNHX12...
Application	Slotting and cutting on all materials

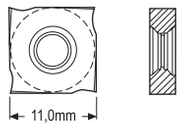


Tech. Code	GR18 Euro	Z	D mm	b mm	h mm	H mm	d mm	d1 mm	Air hole	Insert
B7F11634	(712,94)	8	63	4	10.5	50	22	40	Without	SNHX 1102T
B7F11635	(712,94)	8	63	5	10.5	50	22	40	Without	SNHX 1103T
B7F11636	(585,48)	6	63	6	10.5	50	22	40	Without	SNHX 1203T
B7F11804	(803,19)	10	80	4	20	50	22	40	Without	SNHX 1102T
B7F11805	(803,19)	10	80	5	20	50	22	40	Without	SNHX 1103T
B7F11806	(803,19)	8	80	6	20	50	22	40	Without	SNHX 1203T
B7F111004	(939,89)	12	100	4	24.2	50	27	48	Without	SNHX 1102T
B7F111005	(939,89)	12	100	5	24.2	50	27	48	Without	SNHX 1103T
B7F111006	(939,91)	10	100	6	24.2	50	27	48	Without	SNHX 1203T
B7F1110010	(939,91)	10	100	10	24.2	50	27	48	Without	SNHX 1205T
B7F111256	(1000,02)	12	125	6	23,7	50	40	70	Without	SNHX 1203T
B7F1112510	(1000,02)	12	125	10	23,7	50	40	70	Without	SNHX 1205T
B7F111606	(1224,88)	16	160	6	41,2	50	40	70	Without	SNHX 1203T
B7F1116010	(1224,88)	16	160	10	41,2	50	40	70	Without	SNHX 1205T

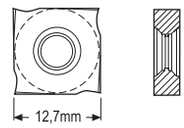
GEOMETRY AND CUTTING CONDITIONS

KERFOLG Groove

SNHX 1102T MM
SNHX 1103T MM
SNHX 1102 AL
SNHX 1103 AL



SNHX 1203T MM
SNHX 1205T MM
SNHX 1203 AL
SNHX 1205 AL



● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR20 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	MM		SNHX 1102T MM	PT30	B7A2111SNMM01	20,54	●	●	○	○		○			○	
			SNHX 1103T MM		B7A2111SNMM02		●	●	○	○		○			○	
			SNHX 1203T MM		B7A2112SNMM10	21,40	●	●	○	○		○			○	
			SNHX 1205T MM		B7A2112SNMM13	21,33	●	●	○	○		○			○	
	AL		SNHX 1102 AL	HT15	B7A4111SNAL01	23,61								●		
			SNHX 1103 AL		B7A4111SNAL02	25,29								●		
			SNHX 1203 AL		B7A4112SNAL10	26,64								●		
			SNHX 1205 AL		B7A4112SNAL13	24,79								●		

RECOMMENDED CUTTING DATA

Material	Hardness Brinnell HB	Degrees Recommended	Cutting speed Speed (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	PT30	140 - 220	0.08 - 0.16
High carbon content steel (C45E, C55E, etc.)	~ 300	PT30	110 - 160	0.06 - 0.15
Tool steel (X155CrVMo 12 1, etc.)	~ 300	PT30	90 - 130	0.05 - 0.10
Stainless steel (X5CrNi 18-9, etc.)	-	PT30	80 - 120	0.05 - 0.10
Grey cast iron (GG25, GG30, etc.) Spheroidal cast iron (GGG40, etc.)	150 ~ 250	PT30	100 - 180	0.08 - 0.16
Heat-resistant alloys (Inconel 718, Ti-6Al-4V, etc.)	-	PT30	40 - 60	0.05 - 0.10

Cutting conditions relating to ae = 10% x D. Apply adjustment factor if ae different from 10%.

Indivisible package Suggested retail package - Unit price

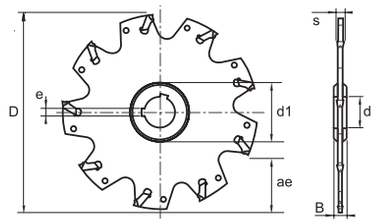
DISK END MILLS FOR THIN-LAYER CUTTING

KERFOLG Slot

ART. B7F13

Disk end mills for thin-layer cutting and grooving

Coupling type with hole
Tipo inserto GCOM...
Application Thin-layer cutting and grooving

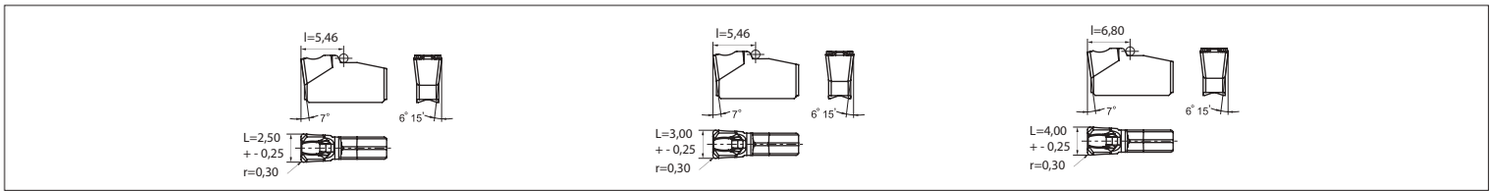


Tech. Code	GR18 Euro	Z	D mm	s mm	d mm	d1 mm	e mm	B mm	Max Ae mm	Air hole	Insert
B7F138025	(481,90)	7	80	2.50	27	56	7	8	17	Without	B2T0025
B7F138030	(481,90)	7	80	3.12	27	56	7	8	17	Without	B2T0030
B7F138040	(481,90)	7	80	4.12	27	56	7	8	17	Without	B2T0040
B7F1310030	(636,30)	8	100	3.12	32	52	8	8	24	Without	B2T0030
B7F1310040	(636,30)	8	100	4.12	32	52	8	8	24	Without	B2T0040

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA140	22,00	All diameters	Assembly & disassembly key	BRICA140

PARTING AND GROOVING INSERTS

KERFOLG



● RECOMMENDED FOR... ○ USABLE FOR...

			Description	Grade	Tech. Code	GR19 Euro	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
CUT	MM		GCOM0025	PT30	B2T0025	12,05	200	160	110	90	75	160	140			
			GCOM0030		B2T0030	12,30	200	160	110	90	75	160	140			
			GCOM0040		B2T0040	13,94	200	160	110	90	75	160	140			

RECOMMENDED CUTTING DATA

Materiale	Hardness Brinnell HB	Degrees Recommended	Cutting speed Speed (m/min.)	Feed fz/mm
Low carbon content steel (C15E, etc.)	~ 180	P30	140 - 220	0.08 - 0.16
High carbon content steel (C45E, C55E, etc.)	~ 300	P30	110 - 160	0.06 - 0.15
Tool steel (X155CrVMo 12 1, etc.)	~ 300	P30	90 - 130	0.05 - 0.10
Stainless steel (X5CrNi 18-9, etc.)	-	P30	80 - 120	0.05 - 0.10
Grey cast iron (GG25, GG30, etc.) Spheroidal cast iron (GGG40, etc.)	150 ~ 250	P30	100 - 180	0.08 - 0.16

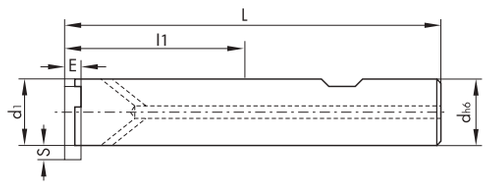
MILLING TOOL FOR INTERNAL AND EXTERNAL GROOVING

KERFOLG Delta

ART. B7F15

Circular milling tools

Tipo di attacco	Cylindrical and weldon shanks
Tipo inserto	14...
Applicazione	Side slots, Seeger and O-ring seats



Tech. Code	GR18 Euro	Denomination	Material	Z	D min mm	D mm	l1 mm	d h6 mm	d1 mm	S max mm	E mm	L mm	Air hole	Dim D Inserts mm
B7F1507901	152,71	123491	Acciaio	3	8	7.9	19.20	10	7.2	0.35	2.00	59.20	Without	7.9
B7F1510601	152,71	123477	Acciaio	3	11	10.6	19.54	10	7.4	1.60	2.34	59.54	Without	10.6
B7F1510602	(152,71)	123478	Acciaio	3	11	10.6	19.54	12	7.4	1.60	2.34	67.00	Without	10.6
B7F1510603	(224,42)	123480	HM	3	11	10.6	36.54	10	7.4	1.60	2.34	76.54	With	10.6
B7F1510604	152,71	123479	Steel	3	11	10.6	19.54	12	7.4	1.60	2.34	67.00	Without	10.6
B7F1510605	(224,42)	123489	HM	3	11	10.6	-	8	8.0	1.25	2.34	80.00	With	10.6

Tech. Code	GR18 Euro	Denomination	Material	Z	D min mm	D mm	l1 mm	d h6 mm	d1 mm	S max mm	E mm	L mm	Air hole	Dim D Inserts mm
B7F1617501	161,89	123445	Steel	3	20	17.5	32.20	12	12	2.60	3.50	77.55	With	17.5
B7F1617502	169,99	123446	Steel	3	20	17.5	32.20	16	12	2.60	3.50	82.10	With	17.5
B7F1617503	(341,17)	123448	HM	3	20	17.5	67.20	12	12	2.60	3.50	112.20	With	17.5
B7F1617504	165,46	123447	Steel	3	20	17.5	32.20	16	12	2.60	3.50	82.10	With	17.5
B7F1617506	(331,99)	123471	HM	3	20	17.5	-	12	12	2.60	3.50	100.00	With	17.5

Tech. Code	GR18 Euro	Denomination	Material	Z	D min mm	D mm	l1 mm	d h6 mm	d1 mm	S max mm	E mm	L mm	Air hole	Dim D Inserts mm
B7F1723001	169,99	123412	Steel	3	25	23	42.50	16	16	3.45	4	91.00	With	23
B7F1723002	179,28	123414	Steel	3	25	23	71.50	16	16	3.45	4	120.00	With	23
B7F1723004	(377,03)	123416	HM	3	25	23	92.50	16	17	3.00	4	141.00	With	23
B7F1723005	188,57	123415	Steel	3	25	23	45.00	20	17	3.00	4	97.00	With	23
B7F1723006	(350,46)	123440	HM	3	25	23	-	16	16	3.45	4	115.00	With	23

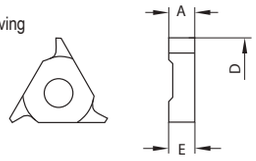
Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA151	9,78	For insert Ø 7.9mm and Ø 10.6mm	Torx screwdriver	BRICA151
BRICA111	4,20	For insert Ø 7.9mm and Ø 10.6mm	Clamping insert screw	BRICA 111
BRICA004	10,90	All diameters	Wrench	BRICA004
BRICA113	6,10	For insert Ø 17.5mm	Clamping insert screw	BRICA113
BRICA135	7,18	For Ø 16.0mm	Wrench	BRICA135
BRICA115	6,10	For insert Ø 23.0mm	Clamping insert screw	BRICA115

Indivisible package Suggested retail package - Unit price

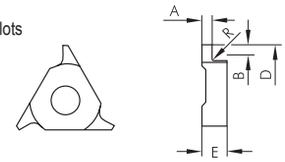
GEOMETRY AND CUTTING CONDITIONS

KERFOLG Delta

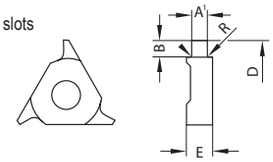
Pict. 1
Side grooving



Pict. 2
Seeger slots



Pict. 3
O-ring slots



- Hard metal inserts with retified profile
- Coating TiAlN

			Description		Tech. Code	GR21 Euro	A mm	E mm	B mm	D mm	R mm	P <850 N/mm²	M <600 N/mm²	K <240 HB	N Alu	S HTA	H <60 HRC
MEDIUM CUTTING	Pict. 1		141719		B7B1007200	61,34	2.00	2.34	-	7.90	-	●	●	●	●	●	○
			141642		B7B1010234	50,87	2.34			10.60		●	●	●	●	●	○
			141669		B7B1010300	52,60	3.00	3.00				●	●	●	●	●	○
			141533		B7B1017350	32,18	3.50	3.50		17.50		●	●	●	●	●	○
			141535		B7B1017500	53,35	5.00	5.00				●	●	●	●	●	○
			141544		B7B1017600	58,86	6.00	6.00				●	●	●	●	●	○
			141361	2	B7B1023400	55,84	4.00	4.00		23.00		●	●	●	●	●	○
			141396		B7B1023650		6.50	6.50				●	●	●	●	●	○
	Pict.2		141726		B7B1207098	61,34	0.98	2.34	0.30	7.90	0.30	●	●	●	●	●	○
			141611		B7B1210098	50,87				10.60		●	●	●	●	●	○
			141567		B7B1210118		1.18		0.60			●	●	●	●	●	○
			141609		B7B1210130		1.38		0.80			●	●	●	●	●	○
			141630		B7B1210168		1.68		1.00			●	●	●	●	●	○
			141574	2	B7B1210193		1.93		1.40			●	●	●	●	●	○
			141416		B7B1217098	45,79	0.98	3.50	0.70	17.50		●	●	●	●	●	○
			141435		B7B1217118		1.18		0.90			●	●	●	●	●	○
			141431		B7B1217138		1.38		1.10			●	●	●	●	●	○
			141454		B7B1217168		1.68		1.25			●	●	●	●	●	○
			141436		B7B1217193		1.93					●	●	●	●	●	○
			141437		B7B1217223		2.23		1.75			●	●	●	●	●	○
			141477		B7B1217273		2.73					●	●	●	●	●	○
			141440		B7B1217323		3.23		2.20			●	●	●	●	●	○
			141254		B7B1223098		0.98	4.00	0.70	23.00		●	●	●	●	●	○
			141245		B7B1223118		1.18		0.90			●	●	●	●	●	○
			141261		B7B1223138		1.38		1.10			●	●	●	●	●	○
			141255	2	B7B1223168		1.68		1.25			●	●	●	●	●	○
			141269		B7B1223193		1.93					●	●	●	●	●	○
			141258		B7B1223223		2.23		1.75			●	●	●	●	●	○
			141264		B7B1223273		2.73					●	●	●	●	●	○
			141293		B7B1223323		3.23		2.20			●	●	●	●	●	○
	Pict.3		141654		B7B1410228	77,00	2.28	3.00	1.45	10.60	0.20	●	●	●	●	●	○
			141510		B7B1417228	71,82		3.50		17.50		●	●	●	●	●	○
			141470		B7B1417308		3.08	5.00	2.30			●	●	●	●	●	○
			141236		B7B1423228		2.28	4.00	1.45	23.00		●	●	●	●	●	○
			141277		B7B1423308		3.08		2.30			●	●	●	●	●	○
			141306		B7B1423408	74,95	4.08	5.00	3.10			●	●	●	●	●	○

● RECOMMENDED FOR... ○ USABLE FOR...

RECOMMENDED CUTTING DATA

Material	Hardness	Degrees Recommended	Cutting speed VC (m/min.)	Feed fz/mm
Tool steel (X155CrVMo 12 1, etc.)	<850 N/mm²	TINAMATIC	150 - 180	0.05 - 0.12
Stainless steel (X5CrNi 18-9, etc.)	<700 N/mm²	TINAMATIC	120 - 150	0.05 - 0.12
Cast iron (GG25, GG30, etc.) Spheroidal cast iron (GG40, etc.)	<240 HB	TINAMATIC	130 - 200	0.05 - 0.12
Non ferrous alloys (SI < 13%)	<10% Si	TINAMATIC	250 - 300	0.15 - 0.40
Hardened steel < 55 HRC	48 - 55 HRC	TINAMATIC	80 - 100	0.05 - 0.10

Indivisible package Suggested retail package - Unit price

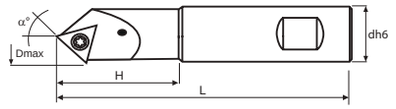
INDEXABLE MILLS FOR CHAMFERING AND CENTERING

KERFOLG Cross

ART. B7F30

Indexable mills for chamfering and centering

Tipo di attacco	Weldon shank
Tipo inserto	TCMX16T3...
Application	Chamfering, centering 45° V grooving

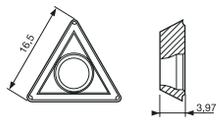


Tech. Code	GR18 Euro	Z	D min mm	D max mm	L mm	H mm	d mm	α° mm	Air hole	Insert
B7F3020115	(217,19)	1	0,4	20	115	40	20	45	With	TCMX16T3ZR
B7F3020150	(248,13)	1	0,4	20	150	60	20	45	With	TCMX16T3ZR
B7F3020200	(284,45)	1	0,4	20	200	80	20	45	With	TCMX16T3ZR

GEOMETRIES AND CUTTING CONDITIONS

KERFOLG Cross

TCMX 16T3ZR



			Description	Grade	Tech. Code	GR19 Euro	Dep. mm	Feed mm/rev	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N ALU	S HTA	H <60 HRC
M. CUT.	ML		TCMX 16T3ZR-ML	P35	B1T22TCZR010	29,86	1.50 2.00 2.50	0.20 0.25 0.30	180	130	100	80						

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Vc (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P35	240	0,08 - 0,11 - 0,15
High carbon content steel (C45, C55, etc.)	~ 300	P35	180	0,08 - 0,11 - 0,15
Tool steel (X155CrVMo 12 1, etc.)	~ 300	P35	160	0.12 - 0.16 - 0.21
Stainless steel (X5CrNi 18-19, etc.)	-	2125	200	0,08 - 0,11 - 0,15

Indivisible package Suggested retail package - Unit price

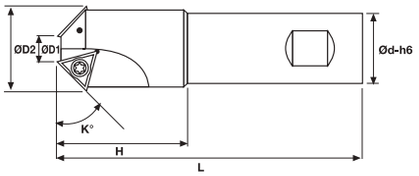
INDEXABLE MILLS FOR CHAMFERING

KERFOLG Cross

ART. B8F20

Indexable mills for chamfering and countersinking

Tipo di attacco Weldon
Tipo inserto TCMT1102... TCMT16T3...
Applicazione Chamfering, centering, 45° V grooving



Tech. Code	GR18 Euro	Z	D1 mm	D2 mm	L mm	H mm	d h6 mm	k°	Air hole	Insert
B8F20161,2	91,57	1	1.2	16	70	20	12	45°	With	TC...1102
B8F20216,2	127,96	2	6.2	21	90	35	20	45°	With	TC...1102
B8F203210,4	212,78	2	10.4	32,5	100	42	25	45°	With	TC...16T3

Tech. Code	GR18 Euro	Z	D1 mm	D2 mm	L mm	H mm	d h6 mm	k°	Air hole	Insert
B8F23165,4	91,57	1	5.4	16	70	20	12	60°	With	TC...1102
B8F232615,8	127,96	2	15.8	26	90	35	20	60°	With	TC...1102
B8F233520	214,99	2	20	35	100	39	25	60°	With	TC...16T3

Tech. Code	GR30 Euro	Description	Insert
BRICA003	9,58	Clamping insert screw	TCMX16T3ZR...
BRICA001	6,40	Clamping insert screw	TCMT1102...
BRICA003	9,58	Clamping insert screw	TCMT16T3...

Tech. Code	GR30 Euro	Description	Insert
BRICA004	10,90	Wrench	TCMX16T3ZR...
BRICA002	10,79	Wrench	TCMT1102...
BRICA004	10,90	Wrench	TCMT16T3...

GEOMETRY AND CUTTING CONDITIONS

KERFOLG Cross

									P			M		K		N	S	H
			Description	Grade	Tech. Code	GR19 Euro	Dep. mm	Feed mm/rev	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
MEDIUM CUTTING	CMP		TCMT 110204-CMP	4125	B1T56TCCMP10	7,12	2,00 3,00 5,00	0,12 0,16 0,21	240	180	160	140	110	210	150			
				4135	B1T56TCCMP11				200	160	120	140	100					
			TCMT 16T304-CMP	4125	B1T56TCCMP12	9,35			240	180	160	140	110	210	150			
				4135	B1T56TCCMP13				200	160	120	140	100					
			SCMT 09T304-CMP	4125	B1S55SCCMP10	8,44			240	180	160	140	110	210	150			
			SCMT 120408-CMP		B1S55SCCMP13	11,30			240	180	160	140	110	210	150			
				4135	B1S55SCCMP14				200	160	120	140	100					

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Vc (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P35	240	0,08 - 0,11 - 0,15
High carbon content steel (C45, C55, etc.)	~ 300	P35	180	0,08 - 0,11 - 0,15
Tool steel (X155CrVMo 12 1, etc.)	~ 300	P35	160	0.12 - 0.16 - 0.21
Stainless steel (X5CrNi 18-19, etc.)	-	2125	200	0,08 - 0,11 - 0,15
Cast iron (GG25, GG30, GGG40 etc.)	150 ~ 250	P35	210	0.12 - 0.16 - 0.21

Indivisible package Suggested retail package - Unit price

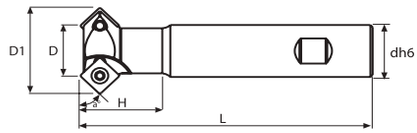
INDEXABLE MILLS FOR CHAMFERING

KERFOLG Cross

ART. B8F21

Indexable mills for chamfering and counterboring

Coupling type Weldon
Tipo inserto SCMT09T3...
Application linear and hole chamfering



Tech. Code	GR18 Euro	Z	D mm	D1 mm	L mm	H mm	dh6 mm	α° mm	Air hole	Insert
B8F2124100	121,28	1	12	23.7	100	37	20	45	With	SCMT09T3
B8F2129100	185,29	2	16	28.8	100	32	16	45	With	SCMT09T3
B8F2142100	214,99	3	30	42.3	100	32	20	45	With	SCMT09T3
B8F2124200	159,93	1	12	23.7	200	37	20	45	With	SCMT09T3
B8F2129200	202,86	2	16	28.8	200	32	16	45	With	SCMT09T3
B8F2142200	250,33	3	30	42.3	200	32	20	45	With	SCMT09T3

Tech. Code	GR30 Euro	Description	Insert
BRICA003	9,58	Clamping insert screw	SCMT09T3

Tech. Code	GR30 Euro	Description	Insert
BRICA004	10,90	Wrench	SCMT09T3

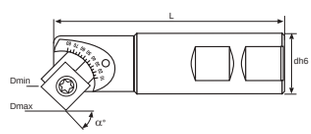
ADJUSTABLE MILLS FOR CHAMFERING AND COUNTERBORING

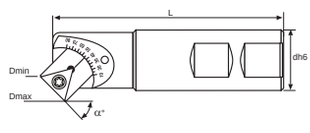
KERFOLG Cross

ART. B8F40

Adjustable end mills for chamfering and counterboring

Coupling type Weldon
Applicable inserts TCMT16T3... - SCMT1204...
Application 10° up to 80°chamfering





Note: B8F401080 includes an end mill body, two cartridges, each featuring TCMT16T3 and SCMT1204 respectively.

Tech. Code	GR18 Euro	Z	D min mm	Max D mm	L mm	dh6 mm	α° mm	Air hole	Insert
B8F401080	333,02	1	11-17.5	33-33.5	95	25	10-80	Without	TCMT16T3 SCMT1204

Tech. Code	GR30 Euro	Description	Insert
BRICA075	131,47	Cartridge TC	TCMT16T3...
BRICA003	9,58	Clamping insert screw	TCMT16T3...
BRICA029	8,70	Cartridge screw	TCMT16T3...
BRICA004	10,90	Wrench	TCMT16T3...

Tech. Code	GR30 Euro	Description	Insert
BRICA076	131,47	Cartridge SC	SCMT1204...
BRICA055	7,16	Clamping insert screw	SCMT1204...
BRICA029	8,70	Cartridge screw	SCMT1204...
BRICA135	7,18	Wrench	SCMT1204...

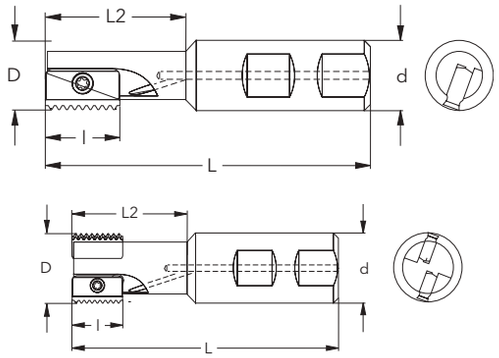
Indivisible package Suggested retail package - Unit price

THREADING INDEXABLE END MILLS

ART. B9011

Threading indexable end mills

Coupling type Weldon
Insert type 14... 21... 30... 40...
Application For comb type cutting threads on all materials



Tech. Code	GR26 Euro	Denomination	Z	D mm	L mm	L2 mm	l mm	d mm	Air hole	Insert
B90111412	(246,18)	SR0012F14	1	12	7	20	14	20	With	14...
B90111414	(246,18)	SR0014H14	1	14.5	85	25	14	20	With	14...
B90111417	(246,18)	SR0017H14	1	17	85	30	14	20	With	14...
B901121181	(246,18)	SR0018H21	1	18	85	30	21	20	With	21...
B90112121	(246,18)	SR0021H21	1	21	94	40	21	20	With	21...
B90112125	(287,18)	SR0025K21	1	25	125	-	21	20	With	30...
B90113029	(287,18)	SR0029J30	1	29	110	50	30	25	With	30...
B90113031	(351,00)	SR0031M30	1	31	150	-	30	25	With	30...
B90113038	(411,08)	SR0038M30	1	38	150	-	30	32	With	30...
B90114048	(411,08)	SR0048M40	1	48	210	-	40	40	With	40...

Tech. Code	GR26 Euro	Denomination	Z	D mm	L mm	L2 mm	l	d mm	Air hole	Insert
B90211420	(378,44)	SR0020H14-2	2	20	93	41	14	20	With	14...
B90212130	(433,00)	SR0030J21-2	2	30	108	52	21	25	With	21...
B90213040	(533,29)	SR0040L30-2	2	40	130	70	30	32	With	30...
B90214050	(621,80)	SR0050M40-2	2	50	153	78	40	40	With	40...

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA259	3,30	For Insert 14	Insert screw 14	S14
BRICA260	4,13	For Insert 21	Insert screw 21	S21
BRICA261	5,13	For Insert 30	Insert screw 30	S30
BRICA262	5,13	For Insert 40	Insert screw 40	S40

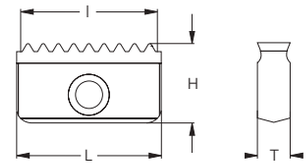
Related products

WRK GLOVES IN POLYESTER COATED IN POLYURETHANE

Tech. Code	Taglia	EU size
K23106	S	6
K23107	M	7
K23108	L	8
K23109	XL	9

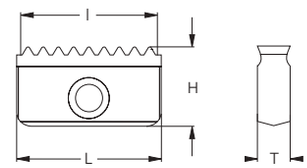
The products are available in chapter K

GEOMETRY AND CUTTING CONDITIONS



							P			M		K		N	S	H
			Description	Passo	Tech. Code	GR27 Euro	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
METRIC	BH		14I_1.0ISO-FC	1,0	B9II1ISO141	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_1.0ISO-FC		B9II1ISO211	(85,74)	180	130	80	130	80	200	110	250	40	30
			14I_1.5ISO-FC	1,5	B9II1ISO141,5	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_1.5ISO-FC		B9II1ISO211,5	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_1.5ISO-FC		B9II1ISO301,5	(134,24)	180	130	80	130	80	200	110	250	40	30
			14I_2.0ISO-FC	2,0	B9II1ISO142	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_2.0ISO-FC		B9II1ISO212	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_2.0ISO-FC		B9II1ISO302	(134,24)	180	130	80	130	80	200	110	250	40	30
			40I_2.0ISO-FC		B9II1ISO402	(208,81)	180	130	80	130	80	200	110	250	40	30
			14I_2.5ISO-FC	2,5	B9II1ISO142,5	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_3.0ISO-FC	3,0	B9II1ISO213	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_3.0ISO-FC		B9II1ISO303	(134,24)	180	130	80	130	80	200	110	250	40	30
			40I_3.0ISO-FC		B9II1ISO403	(208,81)	180	130	80	130	80	200	110	250	40	30
			21I_3.0ISO-FC	3,5	B9II1ISO213,5	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_4.0ISO-FC	4,0	B9II1ISO304	(134,24)	180	130	80	130	80	200	110	250	40	30
			40I_4.0ISO-FC		B9II1ISO404	(208,81)	180	130	80	130	80	200	110	250	40	30

GEOMETRY AND CUTTING CONDITIONS



							P			M		K		N	S	H
			Description	Passo	Tech. Code	GR27 Euro	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
UN	BH		14I_32UN-FC	32	B9II1UN1432	(58,77)	180	130	80	130	80	200	110	250	40	30
			14I_28UN-FC	28	B9II1UN1428		180	130	80	130	80	200	110	250	40	30
			14I_24UN-FC	24	B9II1UN1424		180	130	80	130	80	200	110	250	40	30
			14I_20UN-FC	20	B9II1UN1420		180	130	80	130	80	200	110	250	40	30
			21I_20UN-FC		B9II1UN2120	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_20UN-FC		B9II1UN3020	(134,24)	180	130	80	130	80	200	110	250	40	30
			14I_18UN-FC	18	B9II1UN1418	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_18UN-FC		B9II1UN2118	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_18UN-FC		B9II1UN3018	(134,24)	180	130	80	130	80	200	110	250	40	30
			14I_16UN-FC	16	B9II1UN1416	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_16UN-FC		B9II1UN2116	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_16UN-FC		B9II1UN3016	(134,24)	180	130	80	130	80	200	110	250	40	30
			40I_16UN-FC		B9II1UN4016	(208,81)	180	130	80	130	80	200	110	250	40	30
			14I_14UN-FC	14	B9II1UN1414	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_14UN-FC		B9II1UN2114	(85,74)	180	130	80	130	80	200	110	250	40	30
			14I_12UN-FC	12	B9II1UN1412	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_12UN-FC		B9II1UN2112	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_12UN-FC		B9II1UN3012	(134,24)	180	130	80	130	80	200	110	250	40	30
			40I_12UN-FC		B9II1UN4012	(208,81)	180	130	80	130	80	200	110	250	40	30
			14I_10UN-FC	10	B9II1UN1410	(58,77)	180	130	80	130	80	200	110	250	40	30
			21I_8UN-FC	8	B9II1UN218	(85,74)	180	130	80	130	80	200	110	250	40	30
			30I_8UN-FC		B9II1UN308	(134,24)	180	130	80	130	80	200	110	250	40	30
			40I_8UN-FC		B9II1UN408	(208,81)	180	130	80	130	80	200	110	250	40	30

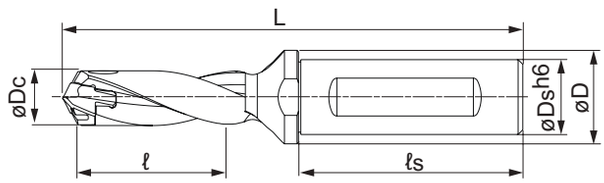
Indivisible package Suggested retail package - Unit price

MODULAR DRILLS WITH INTERCHANGEABLE HEAD - 3XD WELDON SHANK

ART. B8P25

Drills with 3XD head - though coolant.

Coupling type	Weldon
Insert type	DMP...
Application	General drilling of all materials



Tech. Code	GR14 Euro	Denomination	ØDc mm	ØDs mm	ØD mm	l mm	ls mm	L mm	Head
B8P25060	(214,85)	TID060F12-3	6 - 6,4	12	16	18	45	77	DM..060 - DM..064
B8P25065	(214,85)	TID065F12-3	6,5 - 6,9	12	16	20	45	78.8	DM..065 - DM..069
B8P25070	(214,85)	TID070F12-3	7 - 7,4	12	16	21	45	80.6	DM..070 - DM..074
B8P25075	(214,85)	TID075F12-3	7,5 - 7,9	12	16	23	45	82.1	DM..075 - DM..079
B8P25080	(214,85)	TID080F12-3	8 - 8,4	12	16	24	45	84.4	DM..080 - DM..084
B8P25085	(224,65)	TID085F12-3	8,5 - 8,9	12	16	26	45	85.9	DM..085 - DM..089
B8P25090	(224,65)	TID090F12-3	9 - 9,4	12	16	27	45	87.8	DM..090 - DM..094
B8P25095	(224,65)	TID095F12-3	9,5 - 9,9	12	16	29	45	89.3	DM..095 - DM..099
B8P25100	(227,80)	TID100F16-3	10 - 10,4	16	20	30	48	94.2	DM..100 - DM..104
B8P25105	(233,40)	TID105F16-3	10,5 - 10,9	16	20	32	48	95.7	DM..105 - DM..109
B8P25110	(233,40)	TID110F16-3	11 - 11,4	16	20	33	48	97.6	DM..110 - DM..114
B8P25115	(233,40)	TID115F16-3	11,5 - 11,9	16	20	35	48	99,1	DM..115 - DM..119
B8P25120	(233,40)	TID120F16-3	12 - 12,4	16	20	36	48	101	DM..120 - DM..124
B8P25125	(236,90)	TID125F16-3	12,5 - 12,9	16	20	37	48	102.5	DM..125 - DM..129
B8P25130	(236,90)	TID130F16-3	13 - 13,4	16	20	39	48	104.6	DM..130 - DM..134
B8P25135	(236,90)	TID135F16-3	13,5 - 13,9	16	20	41	48	106,1	DM..135 - DM..139
B8P25140	(236,90)	TID140F16-3	14 - 14,4	16	20	42	48	110,1	DM..140 - DM..144
B8P25145	(236,90)	TID145F16-3	14,5 - 14,9	16	20	44	48	111.6	DM..145 - DM..149
B8P25150	(253,50)	TID150F20-3	15 - 15,9	20	25	45	50	118,7	DM..150 - DM..159
B8P25160	(253,50)	TID160F20-3	16 - 16,9	20	25	48	50	123,3	DM..160 - DM..169
B8P25170	(283,15)	TID170F20-3	17 - 17,9	20	25	51	50	127,9	DM..170 - DM..179
B8P25180	(283,15)	TID180F25-3	18 - 18,9	25	32	54	56	138,5	DM..180 - DM..189
B8P25190	(312,75)	TID190F25-3	19 - 19,9	25	32	57	56	143	DM..190 - DM..199
B8P25200	(346,80)	TID200F25-3	20 - 20,9	25	32	60	56	147.6	DM..200 - DM..209
B8P25210	(417,70)	TID210F25-3	21 - 21,9	25	32	63	56	152.2	DM..210 - DM..219
B8P25220	(417,70)	TID220F25-3	22 - 22,9	25	32	66	56	156.8	DM..220 - DM..229
B8P25230	(462,40)	TID230F32-3	23 - 23,9	32	42	69	60	165.3	DM..230 - DM..239
B8P25240	(462,40)	TID240F32-3	24 - 24,9	32	42	72	60	169.9	DM..240 - DM..249
B8P25250	(515,85)	TID250F32-3	25 - 25,9	32	42	75	60	174.5	DM..250 - DM..259

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA226	7,65	For indexable head drills from Ø 6 to 9,99 mm	Clamping key	K - TID6 - 9,99
BRICA227	5,70	For indexable head drills from Ø 10 to 19,99 mm	Clamping key	K - TID10 - 19,99
BRICA228	7,65	For indexable head drills from Ø 20 to 25 mm	Clamping key	K - TID20 - 25,9

RECOMMENDED CUTTING DATA

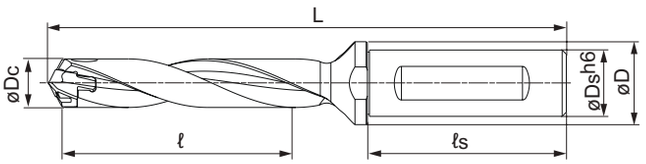
Material	Cutting speed m/min	Feed Ø 10-11,9 (mm/turn)	Feed Ø 12-13,9 (mm/turn)	Feed Ø 14 - 15,9 (mm/turn)	Feed Ø 16 - 19,9 (mm/turn)	Feed Ø 20 - 25,9 (mm/turn)
Carbon steel (C45, C55, etc.)	80 - 140	0,15 - 0,28	0,18 - 0,30	0,20 - 0,35	0,25 - 0,45	0,25 - 0,40
Low alloy steel (18CrMo4, etc.)	70 - 120	0,15 - 0,28	0,18 - 0,30	0,18 - 0,35	0,23 - 0,40	0,25 - 0,40
High alloyed steel (42CrMo4, 20Cr4, etc.)	40 - 90	0,14 - 0,28	0,16 - 0,32	0,18 - 0,35	0,23 - 0,40	0,25 - 0,40
Stainless steel (X5CrNi 18-9, etc.)	30 - 70	0,12 - 0,18	0,14 - 0,20	0,16 - 0,24	0,16 - 0,26	0,18 - 0,30
Cast irons (GG25, GG30, etc.)	80 - 120	0,20 - 0,35	0,25 - 0,40	0,30 - 0,45	0,35 - 0,55	0,35 - 0,60
Spheroidal cast irons (GGG40, etc.)	80 - 140	0,20 - 0,35	0,25 - 0,40	0,30 - 0,45	0,35 - 0,55	0,35 - 0,60
Aluminum alloys	80 - 220	0,28 - 0,40	0,30 - 0,45	0,30 - 0,50	0,40 - 0,60	0,50 - 0,75
Titanium alloys (Ti-6Al-4V, etc.)	20 - 50	0,08 - 0,15	0,10 - 0,28	0,12 - 0,20	0,14 - 0,22	0,18 - 0,27
Nickel alloys	20 - 50	0,08 - 0,13	0,10 - 0,15	0,12 - 0,18	0,12 - 0,22	0,14 - 0,22

DRILLS WITH INTERCHANGEABLE HEAD - 5XD WELDON SHANK

ART. B8P27

Drills with 5XD heads with internal lubrication

Tipo di attacco	Weldon
Tipo inserto	DM...
Application	General drilling of all materials



Tech. Code	GR14 Euro	Denomination	ØDc mm	ØDs mm	ØD mm	l mm	ls mm	L mm	Head
B8P27060	(248,65)	TID060F12-5	6 - 6,4	12	16	30	45	89	DM..060 - DM..064
B8P27065	(248,65)	TID065F12-5	6,5 - 6,9	12	16	33	45	91,8	DM..065 - DM..069
B8P27070	(248,65)	TID070F12-5	7 - 7,4	12	16	35	45	94,6	DM..070 - DM..074
B8P27075	(248,65)	TID075F12-5	7,5 - 7,9	12	16	38	45	97,1	DM..075 - DM..079
B8P27080	(248,65)	TID080F12-5	8 - 8,4	12	16	40	45	100,4	DM..080 - DM..084
B8P27085	(259,55)	TID085F12-5	8,5 - 8,9	12	16	43	45	102,9	DM..085 - DM..089
B8P27090	(259,55)	TID090F12-5	9 - 9,4	12	16	45	45	105,8	DM..090 - DM..094
B8P27095	(259,55)	TID095F12-5	9,5 - 9,9	12	16	48	45	108,3	DM..095 - DM..099
B8P27100	(269,40)	TID100F16-5	10 - 10,4	16	20	50	48	114,2	DM..100 - DM..104
B8P27105	(281,35)	TID105F16-5	10,5 - 10,9	16	20	53	48	116,7	DM..105 - DM..109
B8P27110	(281,35)	TID110F16-5	11 - 11,4	16	20	55	48	119,6	DM..110 - DM..114
B8P27115	(281,35)	TID115F16-5	11,5 - 11,9	16	20	58	48	122,1	DM..115 - DM..119
B8P27120	(281,35)	TID120F16-5	12 - 12,4	16	20	60	48	125	DM..120 - DM..124
B8P27125	(303,15)	TID125F16-5	12,5 - 12,9	16	20	62	48	127,5	DM..125 - DM..129
B8P27130	(303,15)	TID130F16-5	13 - 13,4	16	20	65	48	130,6	DM..130 - DM..134
B8P27135	(303,15)	TID135F16-5	13,5 - 13,9	16	20	68	48	133,1	DM..135 - DM..139
B8P27140	(303,15)	TID140F16-5	14 - 14,4	16	20	70	48	138,2	DM..140 - DM..144
B8P27145	(311,90)	TID145F16-5	14,5 - 14,9	16	20	73	48	140,7	DM..145 - DM..149
B8P27150	(325,00)	TID150F20-5	15 - 15,9	20	25	75	50	148,7	DM..150 - DM..159
B8P27160	(325,00)	TID160F20-5	16 - 16,9	20	25	80	50	155,3	DM..160 - DM..169
B8P27170	(364,25)	TID170F20-5	17 - 17,9	20	25	85	50	161,9	DM..170 - DM..179
B8P27180	(364,25)	TID180F25-5	18 - 18,9	25	32	90	56	174,5	DM..180 - DM..189
B8P27190	(401,30)	TID190F25-5	19 - 19,9	25	32	95	56	181	DM..190 - DM..199
B8P27200	(401,30)	TID200F25-5	20 - 20,9	25	32	100	56	187,6	DM..200 - DM..209
B8P27210	(486,40)	TID210F25-5	21 - 21,9	25	32	105	56	194,2	DM..210 - DM..219
B8P27220	(486,40)	TID220F25-5	22 - 22,9	25	32	110	56	200,8	DM..220 - DM..229
B8P27230	(533,25)	TID230F32-5	23 - 23,9	32	42	115	60	211,3	DM..230 - DM..239
B8P27240	(533,25)	TID240F32-5	24 - 24,9	32	42	120	60	217,9	DM..240 - DM..249
B8P27250	(599,75)	TID250F32-5	25 - 25,9	32	42	125	60	224,5	DM..250 - DM..259

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA226	7,65	For indexable head drills from Ø 6 to 9,99 mm	Clamping key	K - TID6 - 9,99
BRICA227	5,70	For indexable head drills from Ø 10 to 19,99 mm	Clamping key	K - TID10 - 19,99
BRICA228	7,65	For indexable head drills from Ø 20 to 25 mm	Clamping key	K - TID20 - 25,9

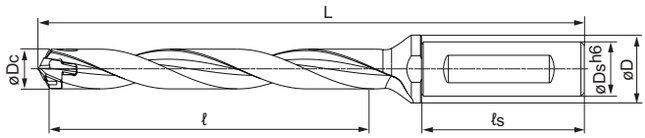
RECOMMENDED CUTTING DATA

Material	Cutting speed m/min	Feed Ø 10-11,9 (mm/turn)	Feed Ø 12-13,9 (mm/turn)	Feed Ø 14 - 15,9 (mm/turn)	Feed Ø 16 - 19,9 (mm/turn)	Feed Ø 20 - 25,9 (mm/turn)
Carbon steel (C45, C55, etc.)	80 - 140	0,15 - 0,28	0,18 - 0,30	0,20 - 0,35	0,25 - 0,45	0,25 - 0,40
Low alloy steel (18CrMo4, etc.)	70 - 120	0,15 - 0,28	0,18 - 0,30	0,18 - 0,35	0,23 - 0,40	0,25 - 0,40
High alloyed steel (42CrMo4, 20Cr4, etc.)	40 - 90	0,14 - 0,28	0,16 - 0,32	0,18 - 0,35	0,23 - 0,40	0,25 - 0,40
Stainless steel (X5CrNi 18-9, etc.)	30 - 70	0,12 - 0,18	0,14 - 0,20	0,16 - 0,24	0,16 - 0,26	0,18 - 0,30
Cast irons (GG25, GG30, etc.)	80 - 120	0,20 - 0,35	0,25 - 0,40	0,30 - 0,45	0,35 - 0,55	0,35 - 0,60
Spheroidal cast irons (GGG40, etc.)	80 - 140	0,20 - 0,35	0,25 - 0,40	0,30 - 0,45	0,35 - 0,55	0,35 - 0,60
Aluminum alloys	80 - 220	0,28 - 0,40	0,30 - 0,45	0,30 - 0,50	0,40 - 0,60	0,50 - 0,75
Titanium alloys (Ti-6Al-4V, etc.)	20 - 50	0,08 - 0,15	0,10 - 0,28	0,12 - 0,20	0,14 - 0,22	0,18 - 0,27
Nickel alloys	20 - 50	0,08 - 0,13	0,10 - 0,15	0,12 - 0,18	0,12 - 0,22	0,14 - 0,22

Indivisible package Suggested retail package - Unit price

DRILLS WITH INTERCHANGEABLE HEAD - 8XD WELDON SHANK

ART. B8P30



8XD cusp drill bits with internal lubrication.

Tipo di attacco	Weldon
Tipo inserto	DM...
Application	General drilling of all materials

Assembly key included.

Tech. Code	GR14 Euro	Denomination	ØDc mm	ØDs mm	ØD mm	l mm	ls mm	L mm	Head
B8P30070	(296,65)	TID070F12-8	7 - 7,4	12	16	56	45	115,6	DM..070 - DM..074
B8P30075	(296,65)	TID075F12-8	7,5 - 7,9	12	16	60	45	119,6	DM..075 - DM..079
B8P30080	(296,65)	TID080F12-8	8 - 8.4	12	16	64	45	124,4	DM..080 - DM..084
B8P30085	(311,90)	TID085F12-8	8,5 - 8,9	12	16	68	45	128,4	DM..085 - DM..089
B8P30090	(311,90)	TID090F12-8	9 - 9,4	12	16	72	45	132,8	DM..090 - DM..094
B8P30095	(311,90)	TID095F12-8	9,5 - 9,9	12	16	76	45	136,8	DM..095 - DM..099
B8P30100	(322,80)	TID100F16-8	10 - 10,4	16	20	80	48	144,2	DM..100 - DM..104
B8P30105	(339,20)	TID105F16-8	10,5 - 10,9	16	20	84	48	148,2	DM..105 - DM..109
B8P30110	(339,20)	TID110F16-8	11 - 11,4	16	20	88	48	152,6	DM..110 - DM..114
B8P30115	(339,20)	TID115F16-8	11,5 - 11,9	16	20	92	48	156,6	DM..115 - DM..119
B8P30120	(339,20)	TID120F16-8	12 - 12,4	16	20	96	48	161	DM..120 - DM..124
B8P30125	(339,20)	TID125F16-8	12,5 - 12,9	16	20	100	48	165	DM..125 - DM..129
B8P30130	(362,10)	TID130F16-8	13 - 13,4	16	20	104	48	169,6	DM..130 - DM..134
B8P30135	(362,10)	TID135F16-8	13,5 - 13,9	16	20	108	48	173,6	DM..135 - DM..139
B8P30140	(362,10)	TID140F16-8	14 - 14,4	16	20	112	48	180,1	DM..140 - DM..144
B8P30145	(362,10)	TID145F16-8	14,5 - 14,9	16	20	116	48	184,2	DM..145 - DM..149
B8P30150	(370,75)	TID150F20-8	15 - 15,9	20	25	120	50	193,7	DM..150 - DM..159
B8P30160	(391,50)	TID160F20-8	16 - 16,9	20	25	128	50	203,3	DM..160 - DM..169
B8P30170	(436,20)	TID170F20-8	17 - 17,9	20	25	136	50	212,9	DM..170 - DM..179
B8P30180	(436,20)	TID180F25-8	18 - 18,9	25	32	144	56	228,5	DM..180 - DM..189
B8P30190	(480,95)	TID190F25-8	19 - 19,9	25	32	152	56	238	DM..190 - DM..199
B8P30200	(480,95)	TID200F25-8	20 - 20,9	25	32	160	56	247,6	DM..200 - DM..209
B8P30210	(582,35)	TID210F25-8	21 - 21,9	25	32	168	56	257,2	DM..210 - DM..219
B8P30220	(582,35)	TID220F25-8	22 - 22,9	25	32	176	56	266,8	DM..220 - DM..229
B8P30230	(641,20)	TID230F32-8	23 - 23,9	32	42	184	60	280,3	DM..230 - DM..239
B8P30240	(641,20)	TID240F32-8	24 - 24,9	32	42	192	60	289,9	DM..240 - DM..249
B8P30250	(718,60)	TID250F32-8	25 - 25,9	32	42	200	60	299,5	DM..250 - DM..259

Tech. Code	GR30 Euro	Version	Description	Denomination
BRICA226	7,65	For indexable head drills from Ø 6 to 9,99 mm	Clamping key	K - TID6 - 9,99
BRICA227	5,70	For indexable head drills from Ø 10 to 19,99 mm	Clamping key	K - TID10 - 19,99
BRICA228	7,65	For indexable head drills from Ø 20 to 25 mm	Clamping key	K - TID20 - 25,9

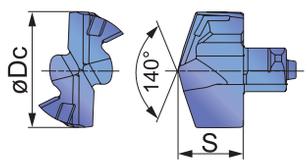
RECOMMENDED CUTTING DATA

Material	Cutting speed m/min	Feed Ø 10-11,9 (mm/turn)	Feed Ø 12-13,9 (mm/turn)	Feed Ø 14 - 15,9 (mm/turn)	Feed Ø 16 - 19,9 (mm/turn)	Feed Ø 20 - 25,9 (mm/turn)
Carbon steel (C45, C55, etc.)	80 - 140	0,15 - 0,28	0,18 - 0,30	0,20 - 0,35	0,25 - 0,45	0,25 - 0,40
Low alloy steel (18CrMo4, etc.)	70 - 120	0,15 - 0,28	0,18 - 0,30	0,18 - 0,35	0,23 - 0,40	0,25 - 0,40
High alloyed steel (42CrMo4, 20Cr4, etc.)	40 - 90	0,14 - 0,28	0,16 - 0,32	0,18 - 0,35	0,23 - 0,40	0,25 - 0,40
Stainless steel (X5CrNi 18-9, etc.)	30 - 70	0,12 - 0,18	0,14 - 0,20	0,16 - 0,24	0,16 - 0,26	0,18 - 0,30
Cast irons (GG25, GG30, etc.)	80 - 120	0,20 - 0,35	0,25 - 0,40	0,30 - 0,45	0,35 - 0,55	0,35 - 0,60
Spheroidal cast irons (GGG40, etc.)	80 - 140	0,20 - 0,35	0,25 - 0,40	0,30 - 0,45	0,35 - 0,55	0,35 - 0,60
Aluminum alloys	80 - 220	0,28 - 0,40	0,30 - 0,45	0,30 - 0,50	0,40 - 0,60	0,50 - 0,75
Titanium alloys (Ti-6Al-4V, etc.)	20 - 50	0,08 - 0,15	0,10 - 0,28	0,12 - 0,20	0,14 - 0,22	0,18 - 0,27
Nickel alloys	20 - 50	0,08 - 0,13	0,10 - 0,15	0,12 - 0,18	0,12 - 0,22	0,14 - 0,22

Indivisible package Suggested retail package - Unit price

DMP INTERCHANGEABLE HEADS

ART. B8A28



Tech. Code	GR23 Euro	ØDc mm	S	Denomination	Degree	
B8A28060	(83,30)	6.00	4.00	DMP060	AH725	2
B8A28061	(83,30)	6.10	4.00	DMP061	AH725	2
B8A28062	(83,30)	6.20	4.00	DMP062	AH725	2
B8A28063	(83,30)	6.30	4.00	DMP063	AH725	2
B8A28064	(83,30)	6.40	4.00	DMP064	AH725	2
B8A28065	(83,30)	6.50	4.30	DMP065	AH725	2
B8A28066	(83,30)	6.60	4.30	DMP066	AH725	2
B8A28067	(83,30)	6.70	4.30	DMP067	AH725	2
B8A28068	(83,30)	6.80	4.30	DMP068	AH725	2
B8A28069	(83,30)	6.90	4.30	DMP069	AH725	2
B8A28070	(83,30)	7.00	4.60	DMP070	AH725	2
B8A28071	(83,30)	7.10	4.60	DMP071	AH725	2
B8A28072	(83,30)	7.20	4.60	DMP072	AH725	2
B8A28073	(83,30)	7.30	4.60	DMP073	AH725	2
B8A28074	(83,30)	7.40	4.60	DMP074	AH725	2
B8A28075	(83,30)	7.50	4.60	DMP075	AH725	2
B8A28076	(83,30)	7.60	4.60	DMP076	AH725	2
B8A28077	(83,30)	7.70	4.60	DMP077	AH725	2
B8A28078	(83,30)	7.80	4.60	DMP078	AH725	2
B8A28079	(83,30)	7.90	4.60	DMP079	AH725	2
B8A28080	(83,30)	8.00	5.40	DMP080	AH725	2
B8A28081	(83,30)	8.10	5.40	DMP081	AH725	2
B8A28082	(83,30)	8.20	5.40	DMP082	AH725	2
B8A28083	(83,30)	8.30	5.40	DMP083	AH725	2
B8A28084	(83,30)	8.40	5.40	DMP084	AH725	2
B8A28085	(83,30)	8.50	5.40	DMP085	AH725	2
B8A28086	(83,30)	8.60	5.40	DMP086	AH725	2
B8A28087	(83,30)	8.70	5.40	DMP087	AH725	2
B8A28088	(83,30)	8.80	5.40	DMP088	AH725	2
B8A28089	(83,30)	8.90	5.40	DMP089	AH725	2
B8A28090	(83,30)	9.00	5.80	DMP090	AH725	2
B8A28091	(83,30)	9.10	5.80	DMP091	AH725	2
B8A28092	(83,30)	9.20	5.80	DMP092	AH725	2
B8A28093	(83,30)	9.30	5.80	DMP093	AH725	2
B8A28094	(83,30)	9.40	5.80	DMP094	AH725	2
B8A28095	(83,30)	9.50	5.80	DMP095	AH725	2
B8A28096	(88,00)	9.60	5.80	DMP096	AH725	2
B8A28097	(88,00)	9.70	5.80	DMP097	AH725	2
B8A28098	(88,00)	9.80	5.80	DMP098	AH725	2
B8A28099	(88,00)	9.90	5.80	DMP099	AH725	2
B8A28100	(88,00)	10,00	6,05	DMP100	AH725	2
B8A28101	(88,30)	10.10	6.05	DMP101	AH725	2
B8A28102	(88,30)	10,20	6,05	DMP102	AH725	2
B8A28103	(88,30)	10.30	6.05	DMP103	AH725	2
B8A28104	(88,30)	10,40	6,05	DMP104	AH725	2
B8A28105	(88,30)	10,50	6,05	DMP105	AH725	2
B8A28106	(88,30)	10.60	6.05	DMP106	AH725	2
B8A28107	(88,30)	10.70	6.05	DMP107	AH725	2
B8A28108	(88,30)	10.80	6.05	DMP108	AH725	2
B8A28109	(88,30)	10.90	6.05	DMP109	AH725	2
B8A28110	(88,30)	11,00	6,45	DMP110	AH725	2
B8A28111	(88,30)	11,10	6,45	DMP111	AH725	2
B8A28112	(88,30)	11.20	6.45	DMP112	AH725	2
B8A28113	(88,30)	11.30	6.45	DMP113	AH725	2
B8A28114	(88,30)	11,40	6,45	DMP114	AH725	2
B8A28115	(88,30)	11,50	6,45	DMP115	AH725	2
B8A28116	(88,30)	11.60	6.45	DMP116	AH725	2
B8A28117	(88,30)	11.70	6.45	DMP117	AH725	2
B8A28118	(88,30)	11,80	6,45	DMP118	AH725	2
B8A28119	(88,30)	11,90	6,45	DMP119	AH725	2
B8A28120	(88,30)	12.00	6.80	DMP120	AH725	2
B8A28121	(92,40)	12.10	6.80	DMP121	AH725	2
B8A28122	(92,40)	12,20	6,80	DMP122	AH725	2
B8A28123	(92,40)	12.30	6.80	DMP123	AH725	2
B8A28124	(92,40)	12,40	6,80	DMP124	AH725	2
B8A28125	(92,40)	12,50	6,80	DMP125	AH725	2
B8A28126	(92,40)	12,60	6,80	DMP126	AH725	2
B8A28127	(92,40)	12,70	6,80	DMP127	AH725	2
B8A28128	(92,40)	12.80	6.80	DMP128	AH725	2
B8A28129	(92,40)	12.90	6.80	DMP129	AH725	2
B8A28130	(92,40)	13,00	7,40	DMP130	AH725	2
B8A28131	(92,40)	13.10	7.40	DMP131	AH725	2
B8A28132	(92,40)	13.20	7.40	DMP132	AH725	2
B8A28133	(92,40)	13.30	7.40	DMP133	AH725	2
B8A28134	(92,40)	13.40	7.40	DMP134	AH725	2

Tech. Code	GR23 Euro	ØDc mm	S	Denomination	Degree	
B8A28135	(92,40)	13,50	7,40	DMP135	AH725	2
B8A28136	(92,40)	13.60	7.40	DMP136	AH725	2
B8A28137	(92,40)	13,70	7,40	DMP137	AH725	2
B8A28138	(92,40)	13,80	7,40	DMP138	AH725	2
B8A28139	(92,40)	13.90	7.40	DMP139	AH725	2
B8A28140	(92,40)	14.00	7.95	DMP140	AH725	2
B8A28141	(92,40)	14.10	7.95	DMP141	AH725	2
B8A28142	(92,40)	14,20	7,95	DMP142	AH725	2
B8A28143	(92,40)	14,30	7,95	DMP143	AH725	2
B8A28144	(92,40)	14,40	7,95	DMP144	AH725	2
B8A28145	(92,40)	14,50	7,95	DMP145	AH725	2
B8A28146	(92,40)	14.60	7.95	DMP146	AH725	2
B8A28147	(92,40)	14,70	7,95	DMP147	AH725	2
B8A28148	(92,40)	14.80	7.95	DMP148	AH725	2
B8A28149	(92,40)	14.90	7.95	DMP149	AH725	2
B8A28150	(100,55)	15.00	8.53	DMP150	AH725	2
B8A28151	(100,55)	15.10	8.53	DMP151	AH725	2
B8A28152	(100,55)	15,20	8,53	DMP152	AH725	2
B8A28153	(100,55)	15,30	8,53	DMP153	AH725	2
B8A28154	(100,55)	15.40	8.53	DMP154	AH725	2
B8A28155	(100,55)	15,50	8,53	DMP155	AH725	2
B8A28156	(100,55)	15.60	8.53	DMP156	AH725	2
B8A28157	(100,55)	15,70	8,53	DMP157	AH725	2
B8A28158	(100,55)	15,80	8,53	DMP158	AH725	2
B8A28159	(100,55)	15,90	8,53	DMP159	AH725	2
B8A28160	(100,55)	16,00	9,10	DMP160	AH725	2
B8A28161	(109,70)	16.10	9.10	DMP161	AH725	2
B8A28162	(109,70)	16,20	9,10	DMP162	AH725	2
B8A28163	(109,70)	16.30	9.10	DMP163	AH725	2
B8A28164	(109,70)	16.40	9.10	DMP164	AH725	2
B8A28165	(109,70)	16,50	9,10	DMP165	AH725	2
B8A28166	(109,70)	16,60	9,10	DMP166	AH725	2
B8A28167	(109,70)	16,70	9,10	DMP167	AH725	2
B8A28168	(109,70)	16,80	9,10	DMP168	AH725	2
B8A28169	(109,70)	16.90	9.10	DMP169	AH725	2
B8A28170	(109,70)	17,00	9,70	DMP170	AH725	2
B8A28171	(109,70)	17.10	9.70	DMP171	AH725	2
B8A28172	(109,70)	17,20	9,70	DMP172	AH725	2
B8A28173	(109,70)	17.30	9.70	DMP173	AH725	2
B8A28174	(109,70)	17.40	9.70	DMP174	AH725	2
B8A28175	(109,70)	17.50	9.70	DMP175	AH725	2
B8A28176	(109,70)	17.60	9.70	DMP176	AH725	2
B8A28177	(109,70)	17,70	9,70	DMP177	AH725	2
B8A28178	(109,70)	17,80	9,70	DMP178	AH725	2
B8A28179	(109,70)	17,90	9,70	DMP179	AH725	2
B8A28180	(109,70)	18,00	10,30	DMP180	AH725	2
B8A28181	(117,25)	18.10	10.30	DMP181	AH725	2
B8A28182	(117,25)	18.20	10.30	DMP182	AH725	2
B8A28183	(117,25)	18.30	10.30	DMP183	AH725	2
B8A28184	(117,25)	18.40	10.30	DMP184	AH725	2
B8A28185	(117,25)	18,50	10,30	DMP185	AH725	2
B8A28186	(117,25)	18,60	10,30	DMP186	AH725	2
B8A28187	(117,25)	18.70	10.30	DMP187	AH725	2
B8A28188	(117,25)	18.80	10.30	DMP188	AH725	2
B8A28189	(117,25)	18,90	10,30	DMP189	AH725	2
B8A28190	(117,25)	19,00	10,80	DMP190	AH725	2
B8A28191	(117,25)	19.10	10.80	DMP191	AH725	2
B8A28192	(117,25)	19,20	10,80	DMP192	AH725	2
B8A28193	(117,25)	19.30	10.80	DMP193	AH725	2
B8A28194	(117,25)	19.40	10.80	DMP194	AH725	2
B8A28195	(117,25)	19,50	10,80	DMP195	AH725	2
B8A28196	(117,25)	19.60	10.80	DMP196	AH725	2
B8A28197	(117,25)	19,70	10,80	DMP197	AH725	2
B8A28198	(117,25)	19,80	10,80	DMP198	AH725	2
B8A28199	(117,25)	19,90	10,80	DMP199	AH725	2
B8A28256	(149,80)	25.60	14.30	DMP256	AH725	1
B8A28257	(149,80)	25.70	14.30	DMP257	AH725	1
B8A28258	(149,80)	25.80	14.30	DMP258	AH725	1
B8A28259	(149,80)	25.90	14.30	DMP259	AH725	1
B8A28200	(117,25)	20.00	11.40	DMP200	AH725	1
B8A28201	(128,10)	20.10	11.40	DMP201	AH725	1
B8A28202	(128,10)	20.20	11.40	DMP202	AH725	1
B8A28203	(128,10)	20.30	11.40	DMP203	AH725	1
B8A28204	(128,10)	20.40	11.40	DMP204	AH725	1
B8A28205	(128,10)	20.50	11.40	DMP205	AH725	1

Indivisible package Suggested retail package - Unit price

DMP INTERCHANGEABLE HEADS

ART. B8A28

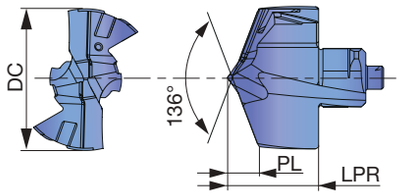
Tech. Code	GR23 Euro	ØDc mm	S	Denomination	Degree	
B8A28206	(128,10)	20.60	11.40	DMP206	AH725	1
B8A28207	(128,10)	20.70	11.40	DMP207	AH725	1
B8A28208	(128,10)	20.80	11.40	DMP208	AH725	1
B8A28209	(128,10)	20.90	11.40	DMP209	AH725	1
B8A28210	(128,10)	21.00	11.98	DMP210	AH725	1
B8A28211	(128,10)	21.10	11.98	DMP211	AH725	1
B8A28212	(128,10)	21.20	11.98	DMP212	AH725	1
B8A28213	(128,10)	21.30	11.98	DMP213	AH725	1
B8A28214	(128,10)	21.40	11.98	DMP214	AH725	1
B8A28215	(128,10)	21.50	11.98	DMP215	AH725	1
B8A28216	(128,10)	21.60	11.98	DMP216	AH725	1
B8A28217	(128,10)	21.70	11.98	DMP217	AH725	1
B8A28218	(128,10)	21.80	11.98	DMP218	AH725	1
B8A28219	(128,10)	21.90	11.98	DMP219	AH725	1
B8A28220	(128,10)	22.00	12.56	DMP220	AH725	1
B8A28221	(137,90)	22.10	12.56	DMP221	AH725	1
B8A28222	(137,90)	22.20	12.56	DMP222	AH725	1
B8A28223	(137,90)	22.30	12.56	DMP223	AH725	1
B8A28224	(137,90)	22.40	12.56	DMP224	AH725	1
B8A28225	(137,90)	22.50	12.56	DMP225	AH725	1
B8A28226	(137,90)	22.60	12.56	DMP226	AH725	1
B8A28227	(137,90)	22.70	12.56	DMP227	AH725	1
B8A28228	(137,90)	22.80	12.56	DMP228	AH725	1
B8A28229	(137,90)	22.90	12.56	DMP229	AH725	1
B8A28230	(137,90)	23.00	13.13	DMP230	AH725	1

Tech. Code	GR23 Euro	ØDc mm	S	Denomination	Degree	
B8A28231	(137,90)	23.10	13.13	DMP231	AH725	1
B8A28232	(137,90)	23.20	13.13	DMP232	AH725	1
B8A28233	(137,90)	23.30	13.13	DMP233	AH725	1
B8A28234	(137,90)	23.40	13.13	DMP234	AH725	1
B8A28235	(137,90)	23.50	13.13	DMP235	AH725	1
B8A28236	(137,90)	23.60	13.13	DMP236	AH725	1
B8A28237	(137,90)	23.70	13.13	DMP237	AH725	1
B8A28238	(137,90)	23.80	13.13	DMP238	AH725	1
B8A28239	(137,90)	23.90	13.13	DMP239	AH725	1
B8A28240	(149,80)	24.00	13.70	DMP240	AH725	1
B8A28241	(149,80)	24.10	13.70	DMP241	AH725	1
B8A28242	(149,80)	24.20	13.70	DMP242	AH725	1
B8A28243	(149,80)	24.30	13.70	DMP243	AH725	1
B8A28244	(149,80)	24.40	13.70	DMP244	AH725	1
B8A28245	(149,80)	24.50	13.70	DMP245	AH725	1
B8A28246	(149,80)	24.60	13.70	DMP246	AH725	1
B8A28247	(149,80)	24.70	13.70	DMP247	AH725	1
B8A28248	(149,80)	24.80	13.70	DMP248	AH725	1
B8A28249	(149,80)	24.90	13.70	DMP249	AH725	1
B8A28250	(149,80)	25.00	14.30	DMP250	AH725	1
B8A28251	(149,80)	25.10	14.30	DMP251	AH725	1
B8A28252	(149,80)	25.20	14.30	DMP252	AH725	1
B8A28253	(149,80)	25.30	14.30	DMP253	AH725	1
B8A28254	(149,80)	25.40	14.30	DMP254	AH725	1
B8A28255	(149,80)	25.50	14.30	DMP255	AH725	1

Indivisible package Suggested retail package - Unit price

DMC INTERCHANGEABLE HEADS

ART. B8A29



Tech. Code	GR23 Euro	ØDc mm	S	Denomination	Degree	
B8A29060	93,05	6,00	4,00	DMC060	AH9130	2
B8A29065	(93,05)	6,50	4,30	DMC065	AH9130	2
B8A29070	(93,05)	7,00	4,90	DMC070	AH9130	2
B8A29075	(93,05)	7,50	4,90	DMC075	AH9130	2
B8A29080	(93,05)	8,00	5,40	DMC080	AH9130	2
B8A29085	(93,05)	8,50	5,40	DMC085	AH9130	2
B8A29090	(93,05)	9,00	5,80	DMC090	AH9130	2
B8A29095	(93,05)	9,50	5,80	DMC095	AH9130	2
B8A29100	(98,20)	10,00	6,67	DMC100	AH9130	2
B8A29101	(96,75)	10,10	6,67	DMC101	AH9130	2
B8A29102	(96,75)	10,20	6,67	DMC102	AH9130	2
B8A29103	(96,75)	10,30	6,67	DMC103	AH9130	2
B8A29104	(96,75)	10,40	6,67	DMC104	AH9130	2
B8A29105	(96,75)	10,50	6,67	DMC105	AH9130	2
B8A29106	(96,75)	10,60	6,67	DMC106	AH9130	2
B8A29107	(96,75)	10,70	6,67	DMC107	AH9130	2
B8A29108	(96,75)	10,80	6,67	DMC108	AH9130	2
B8A29109	(96,75)	10,90	6,67	DMC109	AH9130	2
B8A29110	(96,75)	11,00	7,10	DMC110	AH9130	2
B8A29111	(96,75)	11,10	7,10	DMC111	AH9130	2
B8A29112	(96,75)	11,20	7,10	DMC112	AH9130	2
B8A29113	(96,75)	11,30	7,10	DMC113	AH9130	2
B8A29114	(96,75)	11,40	7,10	DMC114	AH9130	2
B8A29115	(96,75)	11,50	7,10	DMC115	AH9130	2
B8A29116	(96,75)	11,60	7,10	DMC116	AH9130	2
B8A29117	(96,75)	11,70	7,10	DMC117	AH9130	2
B8A29118	(96,75)	11,80	7,10	DMC118	AH9130	2
B8A29119	(96,75)	11,90	7,10	DMC119	AH9130	2
B8A29120	(96,75)	12,00	7,43	DMC120	AH9130	2
B8A29121	(101,65)	12,10	7,43	DMC121	AH9130	2
B8A29122	(101,65)	12,20	7,43	DMC122	AH9130	2
B8A29123	(101,65)	12,30	7,43	DMC123	AH9130	2
B8A29124	(101,65)	12,40	7,43	DMC124	AH9130	2
B8A29125	(101,65)	12,50	7,43	DMC125	AH9130	2
B8A29126	(101,65)	12,60	7,43	DMC126	AH9130	2
B8A29127	(101,65)	12,70	7,43	DMC127	AH9130	2
B8A29128	(101,65)	12,80	7,43	DMC128	AH9130	2
B8A29129	(101,65)	12,90	7,43	DMC129	AH9130	2
B8A29130	(101,65)	13,00	8,15	DMC130	AH9130	2
B8A29131	(101,65)	13,10	8,15	DMC131	AH9130	2
B8A29132	(101,65)	13,20	8,15	DMC132	AH9130	2
B8A29133	(101,65)	13,30	8,15	DMC133	AH9130	2
B8A29134	(101,65)	13,40	8,15	DMC134	AH9130	2
B8A29135	(101,65)	13,50	8,15	DMC135	AH9130	2
B8A29136	(101,65)	13,60	8,15	DMC136	AH9130	2
B8A29137	(101,65)	13,70	8,15	DMC137	AH9130	2
B8A29138	(101,65)	13,80	8,15	DMC138	AH9130	2
B8A29139	(101,65)	13,90	8,15	DMC139	AH9130	2
B8A29140	(101,65)	14,00	8,76	DMC140	AH9130	2
B8A29141	(101,65)	14,10	8,76	DMC141	AH9130	2
B8A29142	(101,65)	14,20	8,76	DMC142	AH9130	2
B8A29143	(101,65)	14,30	8,76	DMC143	AH9130	2
B8A29144	(101,65)	14,40	8,76	DMC144	AH9130	2
B8A29145	(101,65)	14,50	8,76	DMC145	AH9130	2
B8A29146	(101,65)	14,60	8,76	DMC146	AH9130	2
B8A29147	(89,35)	14,70	8,76	DMC147	AH9130	2
B8A29148	(101,65)	14,80	8,76	DMC148	AH9130	2
B8A29149	(101,65)	14,90	8,76	DMC149	AH9130	2
B8A29150	(110,80)	15,00	9,44	DMC150	AH9130	2
B8A29151	(110,80)	15,10	9,44	DMC151	AH9130	2
B8A29152	(97,20)	15,20	9,44	DMC152	AH9130	2

Tech. Code	GR23 Euro	ØDc mm	S	Denomination	Degree	
B8A29153	(110,80)	15,30	9,44	DMC153	AH9130	2
B8A29154	(110,80)	15,40	9,44	DMC154	AH9130	2
B8A29155	(110,80)	15,50	9,44	DMC155	AH9130	2
B8A29156	(110,80)	15,60	9,44	DMC156	AH9130	2
B8A29157	(97,20)	15,70	9,44	DMC157	AH9130	2
B8A29158	(97,20)	15,80	9,44	DMC158	AH9130	2
B8A29159	(102,55)	15,90	10,07	DMC159	AH9130	2
B8A29160	(110,80)	16,00	10,07	DMC160	AH9130	2
B8A29161	(105,55)	16,10	10,07	DMC161	AH9130	2
B8A29162	(120,55)	16,20	10,07	DMC162	AH9130	2
B8A29163	(120,55)	16,30	10,07	DMC163	AH9130	2
B8A29164	(105,55)	16,40	10,07	DMC164	AH9130	2
B8A29165	(120,55)	16,50	10,07	DMC165	AH9130	2
B8A29166	(120,55)	16,60	10,07	DMC166	AH9130	2
B8A29167	(111,60)	16,70	10,07	DMC167	AH9130	2
B8A29168	(120,55)	16,80	10,07	DMC168	AH9130	2
B8A29169	(120,55)	16,90	10,07	DMC169	AH9130	2
B8A29170	(120,55)	17,00	10,68	DMC170	AH9130	2
B8A29171	(120,55)	17,10	10,68	DMC171	AH9130	2
B8A29172	(120,55)	17,20	10,68	DMC172	AH9130	2
B8A29173	(120,55)	17,30	10,68	DMC173	AH9130	2
B8A29174	(120,55)	17,40	10,68	DMC174	AH9130	2
B8A29175	(120,55)	17,50	10,68	DMC175	AH9130	2
B8A29176	(120,55)	17,60	10,68	DMC176	AH9130	2
B8A29177	(120,55)	17,70	10,68	DMC177	AH9130	2
B8A29178	(120,55)	17,80	10,68	DMC178	AH9130	2
B8A29179	(105,55)	17,90	10,68	DMC179	AH9130	2
B8A29180	(120,55)	18,00	11,35	DMC180	AH9130	2
B8A29181	(129,20)	18,10	11,35	DMC181	AH9130	2
B8A29182	(129,20)	18,20	11,35	DMC182	AH9130	2
B8A29183	(129,20)	18,30	11,35	DMC183	AH9130	2
B8A29184	(129,20)	18,40	11,35	DMC184	AH9130	2
B8A29185	(129,20)	18,50	11,35	DMC185	AH9130	2
B8A29186	(129,20)	18,60	11,35	DMC186	AH9130	2
B8A29187	(129,20)	18,70	11,35	DMC187	AH9130	2
B8A29188	(129,20)	18,80	11,35	DMC188	AH9130	2
B8A29189	(129,20)	18,90	11,35	DMC189	AH9130	2
B8A29190	(129,20)	19,00	11,91	DMC190	AH9130	2
B8A29191	(129,20)	19,10	11,91	DMC191	AH9130	2
B8A29192	(129,20)	19,20	11,91	DMC192	AH9130	2
B8A29193	(129,20)	19,30	11,91	DMC193	AH9130	2
B8A29194	(129,20)	19,40	11,91	DMC194	AH9130	2
B8A29195	(129,20)	19,50	11,91	DMC195	AH9130	2
B8A29196	(129,20)	19,60	11,91	DMC196	AH9130	2
B8A29197	(129,20)	19,70	11,91	DMC197	AH9130	2
B8A29198	(129,20)	19,80	11,91	DMC198	AH9130	2
B8A29199	(129,20)	19,90	11,91	DMC199	AH9130	2
B8A29200	(129,20)	20,00	12,60	DCM200	AH9130	1
B8A29205	(142,25)	20,50	12,60	DMC205	AH9130	1
B8A29210	142,25	21,00	13,20	DMC210	AH9130	1
B8A29215	(142,25)	21,50	13,20	DMC215	AH9130	1
B8A29220	(142,25)	22,00	13,80	DMC220	AH9130	1
B8A29225	(156,35)	22,50	13,80	DMC225	AH9130	1
B8A29230	(156,35)	23,00	14,50	DMC230	AH9130	1
B8A29235	(156,35)	23,50	14,50	DMC235	AH9130	1
B8A29240	(167,20)	24,00	15,10	DMC240	AH9130	1
B8A29245	(167,20)	24,50	15,10	DMC245	AH9130	1
B8A29250	(167,20)	25,00	15,80	DMC250	AH9130	1
B8A29255	(167,20)	25,50	15,80	DMC255	AH9130	1
B8A292567	(167,20)	25,67	15,80	DMC2567	AH9130	1

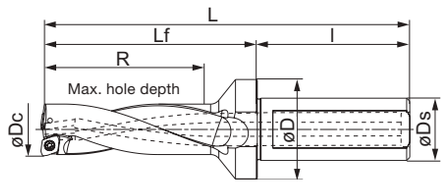
Indivisible package Suggested retail package - Unit price

INDEXABLE DRILLS 3XD WELDON SHANK - SCREW FIXING

ART. B8P20

Insert tips with internal lubrication.

Tipo di attacco	Weldon
Insert type	XPMT...
Application	General drilling of all materials



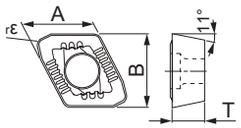
Tech. Code	GR14 Euro	Denomination	ØDc mm	ØDs mm	ØD mm	R mm	l mm	Lf mm	L mm	Insert
B8P20125	(335,35)	TDX125F20-3	12,5	20	25	37,5	49	53	102	XPMT040104R-...
B8P20130	(335,35)	TDX130F20-3	13	20	25	39	49	55	104	XPMT040104R-...
B8P20135	(335,35)	TDX135F20-3	13,5	20	25	40,5	49	56	105	XPMT040104R-...
B8P20140	(335,35)	TDX140F20-3	14	20	25	42	49	58	107	XPMT040104R-...
B8P20145	(335,35)	TDX145F20-3	14,5	20	25	43,5	49	60	109	XPMT040104R-...
B8P20150	(335,35)	TDX150F20-3	15	20	25	45	49	62	111	XPMT050204R-...
B8P20155	(335,35)	TDX155F20-3	15,5	20	32	46,5	49	64	113	XPMT050204R-...
B8P20160	(351,85)	TDX160F20-3	16	20	32	48	49	66	115	XPMT050204R-...
B8P20165	(351,85)	TDX165F20-3	16,5	20	32	49,5	49	68	117	XPMT050204R-...
B8P20170	(351,85)	TDX170F20-3	17	20	32	51	49	69	118	XPMT050204R-...
B8P20175	(351,85)	TDX175F35-3	17,5	25	32	52,5	54	72	126	XPMT06X308R-...
B8P20180	(351,85)	TDX180F25-3	18	25	32	54	54	73	127	XPMT06X308R-...
B8P20185	(351,85)	TDX185F25-3	18,5	25	32	55,5	54	75	129	XPMT06X308R-...
B8P20190	(351,85)	TDX190F25-3	19	25	32	57	54	76	130	XPMT06X308R-...
B8P20195	(351,85)	TDX195F25-3	19,5	25	32	58,5	54	79	133	XPMT06X308R-...
B8P20200	(351,85)	TDX200F25-3	20	25	32	60	54	81	135	XPMT06X308R-...
B8P20205	(351,85)	TDX205F25-3	20,5	25	32	61,5	54	82	136	XPMT06X308R-...
B8P20210	(375,10)	TDX210F25-3	21	25	32	63	54	84	138	XPMT06X308R-...
B8P20215	(375,10)	TDX215F25-3	21,5	25	32	64,5	54	86	140	XPMT06X308R-...
B8P20220	(375,10)	TDX220F25-3	22	25	32	66	54	87	141	XPMT07H308R-...
B8P20225	(375,10)	TDX225F25-3	22,5	25	37	67,5	54	90	144	XPMT07H308R-...
B8P20230	(375,65)	TDX230F25-3	23	25	37	69	54	91	145	XPMT07H308R-...
B8P20235	(375,65)	TDX235F25-3	23,5	25	37	70,5	54	93	147	XPMT07H308R-...
B8P20240	(375,65)	TDX240F25-3	24	25	37	72	54	95	149	XPMT07H308R-...
B8P20245	(375,65)	TDX245F25-3	24,5	25	37	73,5	54	97	151	XPMT07H308R-...
B8P20250	(375,65)	TDX250F25-3	25	25	37	75	54	99	153	XPMT07H308R-...
B8P20255	(375,65)	TDX255F25-3	25,5	25	37	76,5	54	100	154	XPMT07H308R-...
B8P20260	(411,00)	TDX260F25-3	26	25	37	78	54	102	156	XPMT07H308R-...
B8P20270	(411,00)	TDX270F32-3	27	32	40	81	59	105	164	XPMT08T308R-...
B8P20280	(411,00)	TDX280F32-3	28	32	40	84	59	109,3	168,3	XPMT08T308R-...
B8P20290	(411,00)	TDX290F32-3	29	32	40	87	59	112,3	171,3	XPMT08T308R-...
B8P20300	(411,00)	TDX300F32-3	30	32	40	90	59	117,3	176,3	XPMT08T308R-...
B8P20310	(455,90)	TDX310F32-3	31	32	40	93	59	121,3	180,3	XPMT08T308R-...
B8P20320	(455,90)	TDX320F32-3	32	32	40	96	59	124,3	183,3	XPMT08T308R-...
B8P20330	(455,90)	TDX330F32-3	33	40	50	99	69	128,6	197,6	XPMT110412R-...
B8P20340	(484,05)	TDX340F40-3	34	40	50	102	69	121,6	200,6	XPMT110412R-...
B8P20350	(484,05)	TDX350F40-3	35	40	50	105	69	135,6	204,6	XPMT110412R-...
B8P20360	(484,05)	TDX360F40-3	36	40	50	108	69	139,6	208,6	XPMT110412R-...
B8P20370	(502,05)	TDX370F40-3	37	40	50	111	69	142,6	211,6	XPMT110412R-...
B8P20380	(502,05)	TDX380F40-3	38	40	50	114	69	146,6	215,6	XPMT110412R-...
B8P20390	(502,05)	TDX390F40-3	39	40	50	117	69	149,6	218,6	XPMT110412R-...
B8P20400	(502,05)	TDX400F40-3	40	40	50	120	69	153,6	222,6	XPMT110412R-...
B8P20410	(535,45)	TDX410F40-3	41	40	50	123	69	157,6	226,6	XPMT110412R-...
B8P20420	(535,45)	TDX420F40-3	42	40	55	126	69	161	230	XPMT150512R-...
B8P20430	(535,45)	TDX430F40-3	43	40	55	129	69	165	234	XPMT150512R-...
B8P20440	(535,45)	TDX440F40-3	44	40	55	132	69	168	237	XPMT150512R-...
B8P20450	(573,50)	TDX450F40-3	45	40	55	135	69	173	242	XPMT150512R-...
B8P20460	(573,50)	TDX460F40-3	46	40	55	138	69	177	246	XPMT150512R-...
B8P20470	(573,50)	TDX470F40-3	47	40	55	141	69	180	249	XPMT150512R-...
B8P20480	(573,50)	TDX480F40-3	48	40	55	144	69	184	252	XPMT150512R-...
B8P20490	(573,50)	TDX490F40-3	49	40	55	147	69	187	256	XPMT150512R-...
B8P20500	(573,50)	TDX500F40-3	50	40	55	150	69	191	260	XPMT150512R-...

Tech. Code	GR30 Euro	Description	Description	Insert
BRICA188	3,95	Up to Ø 14,5	Clamping insert screw	CSPB-2H
BRICA107	3,10	From Ø 15 to Ø 17	Clamping insert screw	CSPB-2L043
BRICA240	3,95	From Ø 17,5 to Ø 21,5	Clamping insert screw	CSPB-2.2
BRICA109	3,85	From Ø 22 to Ø 26	Clamping insert screw	CSPB-2.5

Tech. Code	GR30 Euro	Description	Description	Insert
BRICA241	1,95	From Ø 27 to Ø 32	Clamping insert screw	CSTB-3
BRICA242	1,95	From Ø 33 to Ø 41	Clamping insert screw	CSTB-4
BRICA243	1,95	From Ø 42 to Ø 50	Clamping insert screw	CSTB-5

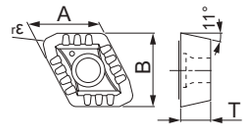
Indivisible package Suggested retail package - Unit price

GEOMETRIES AND CUTTING CONDITIONS



DJ (general application)

	A	B	T	rε
XPMT040104R	4,3	4,5	1,59	0,4
XPMT050204R	5,2	5,4	2,38	0,4
XPMT06X308R	6	7	3,15	0,8
XPMT07H308R	7	8,2	3,6	0,8
XPMT08T308R	8,5	9,9	3,97	0,8
XPMT110412R	11,2	12,5	4,76	1,2
XPMT150512	15	16,1	5,56	1,2



DS (low cutting force)

● RECOMMENDED FOR... ○ USABLE FOR…

			Description	Grade	Tech. Code	GR17 Euro	P <500 N/mm²	P <800 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
GENERAL APPLICATIONS	DJ		XPMT040104R-DJ	AH6030	B8A2504XPDJ01		○	●	●	○		●	●		○	●
			XPMT050204R-DJ		B8A2505XPDJ02	(13,65)	○	●	●	○		●	●		○	●
			XPMT06X308R-DJ		B8A2506XPDJ03		○	●	●	○		●	●		○	●
			XPMT07H308R-DJ		B8A2507XPDJ04	(14,00)	○	●	●	○		●	●		○	●
			XPMT08T308R-DJ		B8A2508XPDJ05	(14,85)	○	●	●	○		●	●		○	●
			XPMT110412R-DJ		B8A2511XPDJ06	(16,45)	○	●	●	○		●	●		○	●
			XPMT150512R-DJ		B8A2515XPDJ07	(20,80)	○	●	●	○		●	●		○	●
			XPMT040104R-DJ	AH725	B8A2504XPDJ08		○	●	●	○		●	●		○	●
			XPMT050204R-DJ		B8A2505XPDJ09	(13,65)	○	●	●	○		●	●		○	●
			XPMT06X308R-DJ		B8A2506XPDJ10		○	●	●	○		●	●		○	●
			XPMT07H308R-DJ		B8A2507XPDJ11	(14,00)	○	●	●	○		●	●		○	●
			XPMT08T308R-DJ		B8A2508XPDJ12	(14,85)	○	●	●	○		●	●		○	●
			XPMT110412R-DJ		B8A2511XPDJ13	(16,45)	○	●	●	○		●	●		○	●
			XPMT150512R-DJ		B8A2515XPDJ14	(20,80)	○	●	●	○		●	●		○	●
FINE CUTTING	DS		XPMT040104R-DS	AH6030	B8A2604XPDS01		●	○	○	●	●			●	●	
			XPMT050204R-DS		B8A2605XPDS02	(13,65)	●	○	○	●	●			●	●	
			XPMT06X308R-DS		B8A2606XPDS03		●	○	○	●	●			●	●	
			XPMT07H308R-DS		B8A2607XPDS04	(14,00)	●	○	○	●	●			●	●	
			XPMT08T308R-DS		B8A2608XPDS05	(14,85)	●	○	○	●	●			●	●	
			XPMT110412R-DS		B8A2611XPDS06	(16,45)	●	○	○	●	●			●	●	
			XPMT150512R-DS		B8A2615XPDS07	(20,80)	●	○	○	●	●			●	●	
			XPMT040104R-DS	AH725	B8A2604XPDS08		●	○	○	●	●			●	●	
			XPMT050204R-DS		B8A2605XPDS09	(13,65)	●	○	○	●	●			●	●	
			XPMT06X308R-DS		B8A2606XPDS10		●	○	○	●	●			●	●	
			XPMT07H308R-DS		B8A2607XPDS11	(14,00)	●	○	○	●	●			●	●	
			XPMT08T308R-DS		B8A2608XPDS12	(14,85)	●	○	○	●	●			●	●	
			XPMT110412R-DS		B8A2611XPDS13	(16,45)	●	○	○	●	●			●	●	
			XPMT150512R-DS		B8A2615XPDS14	(20,80)	●	○	○	●	●			●	●	

RECOMMENDED CUTTING DATA

Material	Priority	Recommended Grades	Geometry	Cutting speed m/min.	Feed Ø 12,5 - 17 (mm/turn)	Feed Ø 17,5 - 32 (mm/turn)	Feed Ø 33 - 50 (mm/turn)
Carbon steels (C45, C55, etc.)	First choice	AH6030	DJ	80 - 250	0,04 - 0,10	0,06 - 0,13	0,08 - 0,18
Low alloy steels (18CrMo4, etc.)	First choice	AH6030	DS	160 - 250	0,04 - 0,08	0,06 - 0,12	0,06 - 0,14
	Wear resistance	AH725	DS	160 - 250	0,04 - 0,08	0,06 - 0,12	0,06 - 0,14
High alloy steels (42CrMo4, 20Cr4, etc.)	First choice	AH6030	DJ	80 - 200	0,04 - 0,10	0,06 - 0,13	0,08 - 0,18
Stainless steels (X5CrNi 18-9, etc.)	Wear resistance	AH6030	DS	100 - 200	0,02 - 0,08	0,04 - 0,10	0,04 - 0,12
	First choice	AH6030	DS	100 - 200	0,02 - 0,08	0,04 - 0,10	0,04 - 0,12
Hardened stainless steels	Wear resistance	AH6030	DS	80 - 180	0,04 - 0,08	0,04 - 0,10	0,06 - 0,10
	First choice	AH6030	DS	80 - 180	0,04 - 0,08	0,04 - 0,10	0,06 - 0,10
Grey cast irons (GG25, GG30, etc.)	First choice	AH725	DJ	80 - 250	0,06 - 0,12	0,06 - 0,15	0,08 - 0,20
Spheroidal cast iron (GGG40, etc.)	First choice	AH725	DJ	80 - 200	0,06 - 0,12	0,06 - 0,15	0,08 - 0,20
Alluminum alloys	High speed	AH725	DS	200 - 400	0,10 - 0,15	0,15 - 0,20	0,15 - 0,25
Titanium alloys (Ti-6Al-4V, etc.)	First choice	AH6030	DS	40 - 110	0,04 - 0,08	0,04 - 0,10	0,04 - 0,10
	Wear resistance	AH725	DS	40 - 110	0,04 - 0,08	0,04 - 0,10	0,04 - 0,10
Hardened steels (≥40 HRC)	First choice	AH725	DJ	40 - 100	0,04 - 0,08	0,04 - 0,08	0,04 - 0,10

Indivisible package Suggested retail package - Unit price

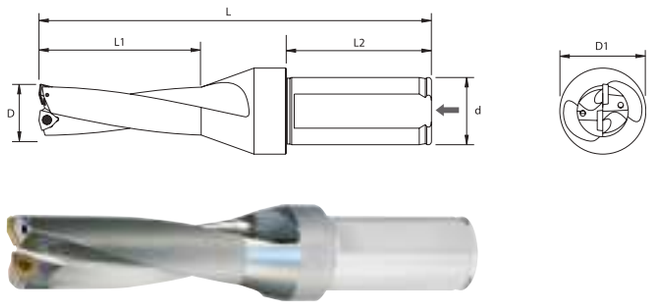
INDEXABLE DRILLS 3XD WELDON SHANK

KERFOLG Hole

ART. B8P10

Inserts drills with internal lubrication

Coupling type	Weldon
Tipo inserto	WCMT...
Application	Drilling on all materials



Tech. Code	GR18 Euro	D mm	d mm	D1 mm	L mm	L1 mm	L2 mm	Air hole	Insert
B8P1018	373,81	18	25	32	140	56	54	With	WCMT0302...
B8P1019	373,81	19	25	32	143	59	54	With	WCMT0302...
B8P1020	373,81	20	25	32	146	62	54	With	WCMT0302...
B8P1021	373,81	21	25	32	149	66	54	With	WCMT0402...
B8P1022	373,81	22	25	32	152	68	54	With	WCMT0402...
B8P1023	373,81	23	25	32	155	71	54	With	WCMT0402...
B8P1024	381,86	24	25	32	158	74	54	With	WCMT0402...
B8P1025	381,86	25	25	32	161	77	54	With	WCMT0402...
B8P1026	387,61	26	25	32	164	80	54	With	WCMT0503...
B8P1027	387,61	27	25	32	167	83	54	With	WCMT0503...
B8P1028	381,86	28	25	32	170	86	54	With	WCMT0503...
B8P1029	387,61	29	25	32	173	89	54	With	WCMT0503...
B8P1030	416,13	30	32	49	180	92	58	With	WCMT0503...
B8P1031	416,13	31	32	49	183	95	58	With	WCMT06T3...
B8P1032	422,46	32	32	49	186	98	58	With	WCMT06T3...
B8P1033	416,13	33	32	49	189	101	58	With	WCMT06T3...
B8P1034	422,46	34	32	49	192	104	58	With	WCMT06T3...
B8P1035	416,13	35	32	49	195	107	58	With	WCMT06T3...
B8P1036	441,99	36	32	49	198	110	58	With	WCMT06T3...
B8P1037	448,61	37	32	49	201	113	58	With	WCMT06T3...
B8P1038	441,99	38	32	49	204	116	58	With	WCMT06T3...
B8P1039	448,61	39	32	49	207	119	58	With	WCMT06T3...
B8P1040	441,99	40	32	49	210	122	58	With	WCMT06T3...
B8P1041	456,70	41	32	49	213	125	58	With	WCMT06T3...
B8P1042	456,70	42	32	49	216	128	58	With	WCMT0804...
B8P1043	456,70	43	32	49	219	131	58	With	WCMT0804...
B8P1044	456,70	44	32	49	222	134	58	With	WCMT0804...
B8P1045	493,04	45	40	59	240	137	68	With	WCMT0804...
B8P1046	493,04	46	40	59	243	140	68	With	WCMT0804...
B8P1047	493,04	47	40	59	246	143	68	With	WCMT0804...
B8P1048	429,51	48	40	59	249	146	68	With	WCMT0804...
B8P1049	527,81	49	40	59	252	149	68	With	WCMT0804...
B8P1050	520,01	50	40	59	255	152	68	With	WCMT0804...

Tech. Code	GR30 Euro	Description	Insert
BRICA155	7,20	Insert screw	WCMT0302...
BRICA156	7,20	Insert screw	WCMT0402...
BRICA157	7,20	Insert screw	WCMT0503...
BRICA158	7,20	Insert screw	WCMT06T3...
BRICA159	7,20	Insert screw	WCMT0804...

Tech. Code	GR30 Euro	Description	Insert
BRICA132	7,18	Wrench	WCMT0302...
BRICA132	7,18	Wrench	WCMT0402...
BRICA016	7,70	Wrench	WCMT0503...
BRICA004	10,90	Wrench	WCMT06T3...
BRICA004	10,90	Wrench	WCMT0804...

WCMT ...MF

WCMT ...MR

● RECOMMENDED FOR... ○ USABLE FOR…

							P			M		K		N	S	H
			Description	Quality	Tech. Code	GR20 Euro	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
MEDIUM CUT	MF		WCMT 040208 MF	PT30	B8A2104WCMF01	15,37	○	●	●	●	●	○	○	○	●	
			WCMT 050308 MF		B8A2105WCMF02		○	●	●	●	●	○	○	○	●	
			WCMT 06T308 MF		B8A2106WCMF03	16,22	○	●	●	●	●	○	○	○	●	
			WCMT 080412 MF		B8A2108WCMF04	18,45	○	●	●	●	●	○	○	○	●	
	MR		WCMT 030208 MR	PT35	B8A2203WCMR01	17,28	●	●	○	●	○	○				
			WCMT 040208 MR		B8A2204WCMR02	17,94	●	●	○	●	○	○				
			WCMT 050308 MR		B8A2205WCMR03	17,98	●	●	○	●	○	○				
			WCMT 06T308 MR		B8A2206WCMR04	17,20	●	●	○	●	○	○				
			WCMT 080412 MR		B8A2208WCMR05	19,50	●	●	○	●	○	○				

RECOMMENDED CUTTING DATA

Material	Degrees Recommended	Geometry	Cutting speed Vc (m/min.)	fz/mm D18 - D20	fz/mm D21 - D25	fz/mm D26 - D30	fz/mm D31 - D41	fz/mm D42 - D50
Low carbon content steel. Not hardened steel ST 37, etc. (< 180 HB)	PT35	MR	150 - 170 - 200	0.04 - 0.12	0.06 - 0.14	0.10 - 0.18	0.12 - 0.20	0.12 - 0.22
Carbon steel. Alloy steel. CK45, 42CrMo4, etc. (< 300 HB)	PT35	MR	100 - 120 - 150	0.04 - 0.12	0.06 - 0.14	0.10 - 0.18	0.12 - 0.20	0.12 - 0.22
Mould steel X96CrMoV12, etc.	PT30	MF	80 - 100 - 120	0.04 - 0.12	0.06 - 0.14	0.10 - 0.18	0.12 - 0.20	0.12 - 0.22
Stainless steel X5CrNi 18-9 < 250 HB	PT30	MF	80 - 100 - 120	0.04 - 0.12	0.06 - 0.12	0.10 - 0.14	0.12 - 0.16	0.12 - 0.18
Cast iron (GG25, GG30, etc.) Spheroidal cast iron (GGG40, etc.)	PT35	MR	120 - 160 - 200	0.08 - 0.14	0.08 - 0.18	0.12 - 0.18	0.14 - 0.26	0.15 - 0.28
Aluminium alloys (Si < 13%)	PT30	MF	250 - 300 - 330	0.06 - 0.16	0.10 - 0.18	0.10 - 0.18	0.12 - 0.22	0.14 - 0.26
Titanium alloys (Ti-6Al-4V, etc.)	PT30	MF	35 - 50 - 60	0.08 - 0.14	0.08 - 0.14	0.12 - 0.16	0.14 - 0.18	0.16 - 0.20

Indivisible package Suggested retail package - Unit price

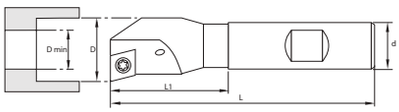
SPOT FACING AND REAMING CUTTERS - 1 CUTTING EDGE

KERFOLG Splay

ART. B8F01

Mills for reaming and spot milling

Coupling type	Weldon
Tipo inserto	CC...0602 - CC...09T3...
Application	Thrust spot milling and reaming



Tech. Code	GR18 Euro	Z	D mm	L mm	L1 mm	d mm	Min D. mm	Air hole	Insert
B8F0110	98,12	1	10	85	15	12	4	With	CC...0602...
B8F0111	98,12	1	11	85	15	12	4	With	CC...0602...
B8F0112	98,12	1	12	85	18	12	4	With	CC...0602...
B8F0113	98,12	1	13	85	23	12	5	With	CC...0602...
B8F0114	98,12	1	14	85	23	12	5	With	CC...0602...
B8F0115	98,12	1	15	85	30	12	5	With	CC...0602...
B8F0116	98,12	1	16	85	30	12	5	With	CC...0602...
B8F0117	98,12	1	17	95	30	16	6	With	CC...09T3...
B8F0118	124,58	1	18	95	40	16	6	With	CC...09T3...
B8F0119	124,58	1	19	95	40	16	6	With	CC...09T3...
B8F0120	124,58	1	20	95	40	16	5	With	CC...09T3...
B8F0121	151,04	1	21	95	42	16	5	With	CC...09T3...
B8F0122	151,04	1	22	95	42	16	6	With	CC...09T3...
B8F0123	151,04	1	23	95	42	16	6	With	CC...09T3...
B8F0124	151,04	1	24	95	42	16	6	With	CC...09T3...
B8F0125	151,04	1	25	95	42	16	8	With	CC...09T3...
B8F0126	(143,33)	1	26	120	56	20	8	With	CC...09T3...
B8F0127	(143,33)	1	27	120	56	20	8	With	CC...09T3...
B8F0128	(143,33)	1	28	120	56	20	10	With	CC...09T3...
B8F0129	(148,84)	1	29	120	56	20	10	With	CC...09T3...
B8F0130	(146,63)	1	30	120	56	20	10	With	CC...09T3...
B8F0131	(146,63)	1	31	120	56	20	12	With	CC...09T3...
B8F0132	(146,63)	1	32	120	56	20	12	With	CC...09T3...
B8F0133	(146,63)	1	33	120	56	20	12	With	CC...09T3...

Tech. Code	GR30 Euro	Description	Insert
BRICA001	6,40	Clamping insert screw	CC...0602...
BRICA003	9,58	Clamping insert screw	CC...09T3...

Tech. Code	GR30 Euro	Description	Insert
BRICA002	10,79	Wrench	CC...0602...
BRICA004	10,90	Wrench	CC...09T3...

Related products

wiha DYNAMOMETRIC SCREWDRIVERS IN SET

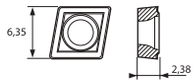
Tech. Code	Pieces
E641013A	13
E641013B	

The products are available in chapter E

TURNING POSITIVE INSERTS - C SHAPE

KERFOLG Splay

CCMT 060204 - CPM



CCMT 09T304 - CPM

CCMT 120412 - CPM

										P			M		K		N	S	H
			Description	Grade	Tech. Code	GR19 Euro	Dep. mm	Feed mm/rev	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
MEDIUM CUTTING	CMP		CCMT 060204-CMP	4115	B1C56CCCMP10	7,04	2,00 3,00 5,00	0,12 0,16 0,21	320	200	180	160		430	290			
				4125	B1C56CCCMP11				240	180	160	140	110	210	150			
			CCMT 09T304-CMP	4115	B1C56CCCMP12	8,00			320	200	180	160		430	290			
				4125	B1C56CCCMP13				240	180	160	140	110	210	150			
				4135	B1C56CCCMP14				200	160	120	140	100					

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Vc (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P35	240	0,08 - 0,11 - 0,15
High carbon content steel (C45, C55, etc.)	~ 300	P35	180	0,08 - 0,11 - 0,15
Tool steel (X155CrVMo 12 1, etc.)	~ 300	4115	180	0,08 - 0,11 - 0,15
Stainless steel (X5CrNi 18-19, etc.)	-	2125	200	0,08 - 0,11 - 0,15
Cast iron (GG25, GG30, GGG40 etc.)	150 ~ 250	4115	430	0,08 - 0,11 - 0,15

Indivisible package Suggested retail package - Unit price

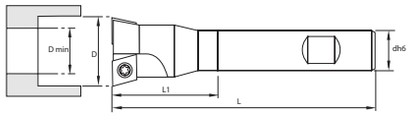
SPOT FACING AND REAMING CUTTERS - 2 CUTTING EDGE

KERFOLG Splay

ART. B8F02

Mill for reaming and spot facing

Coupling type Weldon
Tipo inserto CC...0602 - CC...09T3...
Application Thrust spot facing and reaming



Tech. Code	GR18 Euro	Z	D mm	L mm	L1 mm	dh6 mm	D min mm	Air hole	Insert
B8F0216	(228,30)	2	16	92	30	12	5	With	CC...0602...
B8F0217	(228,30)	2	17	94	32	16	6	With	CC...0602...
B8F0218	(235,94)	2	18	97	41	16	7	With	CC...0602...
B8F0219	(235,94)	2	19	100	41	16	8	With	CC...0602...
B8F0220	229,39	2	20	102	41	16	9	With	CC...0602...
B8F0221	229,39	2	21	105	41	16	10	With	CC...0602...
B8F0222	242,55	2	22	110	41	16	11	With	CC...0602...
B8F0223	242,55	2	23	112	41	16	12	With	CC...0602...
B8F0224	242,55	2	24	115	41	16	13	With	CC...0602...
B8F0225	269,08	2	25	120	40	16	8	With	CC...09T3...
B8F0226	269,08	2	26	125	55	20	9	With	CC...09T3...
B8F0227	269,08	2	27	128	55	20	10	With	CC...09T3...
B8F0228	269,08	2	28	130	55	20	11	With	CC...09T3...
B8F0229	282,24	2	29	132	55	20	12	With	CC...09T3...
B8F0230	282,24	2	30	134	55	20	13	With	CC...09T3...
B8F0231	282,24	2	31	136	55	20	14	With	CC...09T3...
B8F0232	282,24	2	32	138	55	20	15	With	CC...09T3...
B8F0233	282,24	2	33	140	55	20	16	With	CC...09T3...
B8F0234	282,24	2	34	140	60	25	16	With	CC...09T3...
B8F0235	282,24	2	35	140	60	25	17	With	CC...09T3...
B8F0236	282,24	2	36	140	60	25	18	With	CC...09T3...
B8F0237	282,24	2	37	140	60	25	19	With	CC...09T3...
B8F0238	282,24	2	38	140	60	25	20	With	CC...09T3...
B8F0239	307,60	2	39	140	60	25	21	With	CC...09T3...
B8F0240	307,60	2	40	140	60	25	22	With	CC...09T3...
B8F0241	(307,60)	2	41	140	60	25	23	With	CC...09T3...
B8F0242	(307,60)	2	42	140	60	25	24	With	CC...09T3...

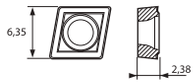
Tech. Code	GR30 Euro	Description	Insert
BRICA001	6,40	Clamping insert screw	CC...0602...
BRICA003	9,58	Clamping insert screw	CC...09T3...

Tech. Code	GR30 Euro	Description	Insert
BRICA002	10,79	Wrench	CC...0602...
BRICA004	10,90	Wrench	CC...09T3...

TURNING POSITIVE INSERTS - C SHAPE

KERFOLG Splay

CCMT 060204 - CPM



CCMT 09T304 - CPM

CCMT 120412 - CPM

									P			M		K		N	S	H
			Description	Grade	Tech. Code	GR19 Euro	Dep. mm	Feed mm/rev	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
MEDIUM CUTTING	CMP		CCMT 060204-CMP	4115	B1C56CCCMP10	7,04	2,00 3,00 5,00	0,12 0,16 0,21	320	200	180	160		430	290			
				4125	B1C56CCCMP11				240	180	160	140	110	210	150			
			CCMT 09T304-CMP	4115	B1C56CCCMP12	8,00			320	200	180	160		430	290			
				4125	B1C56CCCMP13				240	180	160	140	110	210	150			
				4135	B1C56CCCMP14				200	160	120	140	100					
			CCMT 120412-CMP	4125	B1C56CCCMP22	10,90			240	180	160	140	110	210	150			

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Vc (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P35	240	0,10 - 0,13 - 0,16
High carbon content steel (C45, C55, etc.)	~ 300	P35	180	0,10 - 0,13 - 0,16
Tool steel (X155CrVMo 12 1, etc.)	~ 300	4115	180	0,10 - 0,13 - 0,16
Stainless steel (X5CrNi 18-19, etc.)	-	2125	200	0,10 - 0,13 - 0,16
Cast iron (GG25, GG30, GGG40 etc.)	150 ~ 250	4115	430	0,10 - 0,13 - 0,16

Indivisible package Suggested retail package - Unit price

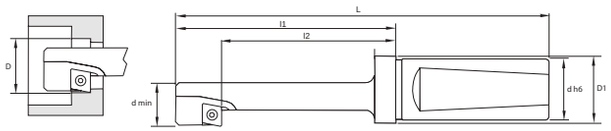
BACKSPOT FACING AND REAMING CUTTERS

KERFOLG Splay

ART. B8F05

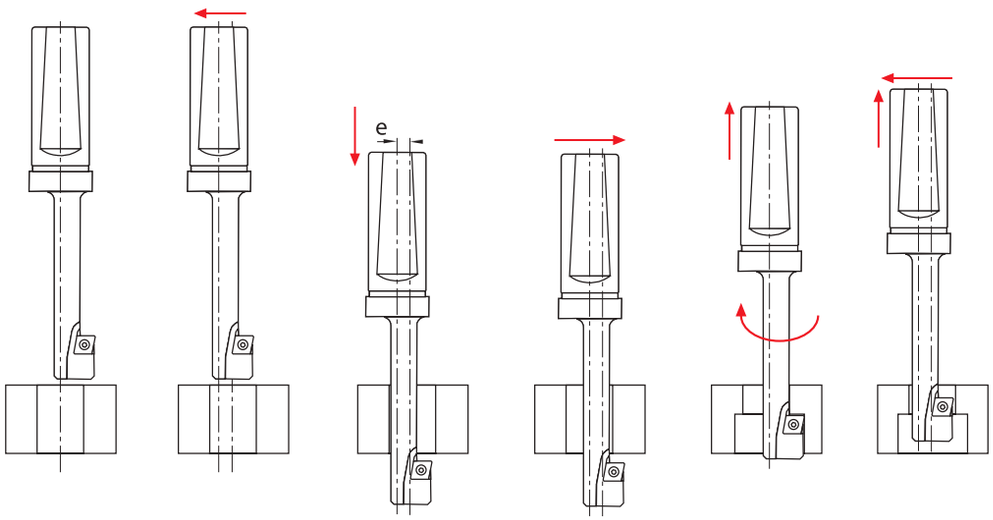
Mills for traction reaming and spot facing

Coupling type	Weldon
Tipo inserto	CC...0602... - CC...09T3... - CC...1204...
Application	Traction spot facing and reaming



Tech. Code	GR18 Euro	Z	D mm	min D mm	L mm	L1 mm	L2 mm	dh6 mm	D1 mm	e mm	Air hole	Insert
B8F0520	223,81	1	20	13	117	67	52	20	25	3.75	With	CC...0602...
B8F0524	237,04	1	24	15	122	72	57	20	25	4.75	With	CC...0602...
B8F0526	253,58	1	26	17	132	82	67	20	25	5	With	CC...0602...
B8F0530	277,90	1	30	19	142	92	77	20	25	6	With	CC...0602...
B8F0533	320,90	1	33	21	152	102	82	20	25	6.5	With	CC...09T3...
B8F0536	326,34	1	36	23	173	113	93	32	40	7	With	CC...09T3...
B8F0540	359,48	1	40	25	183	123	103	32	40	8	With	CC...09T3...
B8F0543	(374,92)	1	43	30	183	123	103	32	40	7	With	CC...09T3...
B8F0548	(383,74)	1	48	33	223	163	143	32	40	8	With	CC...09T3...
B8F0553	(395,80)	1	53	36	210	140	-	40	-	9	With	CC...1204...
B8F0557	(407,99)	1	57	39	220	150	-	40	-	9,5	With	CC...1204...
B8F0566	(438,86)	1	66	45	245	165	-	50	-	11	With	CC...1204...
B8F0576	(480,76)	1	76	52	265	185	-	50	-	12,5	With	CC...1204...

TOOLS

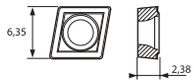


Indivisible package Suggested retail package - Unit price

TURNING POSITIVE INSERTS - C SHAPE

KERFOLG Splay

CCMT 060204 - CPM



CCMT 09T304 - CPM

CCMT 120412 - CPM

										P			M		K		N	S	H
			Description	Grade	Tech. Code	GR19 Euro	Dep. mm	Feed mm/rev	<500 N/mm²	<850 N/mm²	<1200 N/mm²	<600 N/mm²	<850 N/mm²	<240 HB	<300 HB	Alu	HTA	<60 HRC
MEDIUM CUTTING	CMP		CCMT 060204-CMP	4115	B1C56CCCMP10	7,04	2,00 3,00 5,00	0,12 0,16 0,21	320	200	180	160		430	290			
				4125	B1C56CCCMP11				240	180	160	140	110	210	150			
			CCMT 09T304-CMP	4115	B1C56CCCMP12	8,00			320	200	180	160		430	290			
				4125	B1C56CCCMP13				240	180	160	140	110	210	150			
				4135	B1C56CCCMP14				200	160	120	140	100					

Tech. Code	GR30 Euro	Description	Insert
BRICA001	6,40	Clamping insert screw	CC...0602...
BRICA003	9,58	Clamping insert screw	CC...09T3...
BRICA032	7,13	Insert screw	CC...1204...

Tech. Code	GR30 Euro	Description	Insert
BRICA002	10,79	Wrench	CC...0602...
BRICA004	10,90	Wrench	CC...09T3...
BRICA135	7,18	Wrench	CC...1204...

RECOMMENDED CUTTING DATA

Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Vc (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P35	240	0,08 - 0,11 - 0,15
High carbon content steel (C45, C55, etc.)	~ 300	P35	180	0,08 - 0,11 - 0,15
Tool steel (X155CrVMo 12 1, etc.)	~ 300	4115	180	0,08 - 0,11 - 0,15
Stainless steel (X5CrNi 18-19, etc.)	-	2125	200	0,08 - 0,11 - 0,15
Cast iron (GG25, GG30, GGG40 etc.)	150 ~ 250	4115	430	0,08 - 0,11 - 0,15

Indivisible package Suggested retail package - Unit price

SPARE PARTS

Tech. Code	GR30 Euro	Description
BRICA001	6,40	Clamping insert screw
BRICA003	9,58	Clamping insert screw
BRICA019	4,30	Clamping insert screw
BRICA023	5,60	Clamping insert screw
BRICA027	2,80	Clamping insert screw
BRICA030	2,80	Clamping insert screw
BRICA032	7,13	Clamping insert screw
BRICA035	2,60	Clamping insert screw
BRICA053	2,80	Clamping insert screw
BRICA055	7,16	Clamping insert screw
BRICA087	9,77	Clamping insert screw
BRICA088	9,77	Clamping insert screw
BRICA089	9,77	Clamping insert screw
BRICA090	9,77	Clamping insert screw
BRICA067	5,05	Clamping insert screw
BRICA071	5,56	Clamping insert screw
BRICA107	3,10	Clamping insert screw
BRICA109	3,85	Clamping insert screw
BRICA111	4,20	Clamping insert screw
BRICA113	6,10	Clamping insert screw
BRICA115	6,10	Clamping insert screw
BRICA136	7,96	Clamping insert screw
BRICA137	7,96	Clamping insert screw
BRICA138	7,96	Clamping insert screw
BRICA147	7,16	Clamping insert screw
BRICA148	7,16	Clamping insert screw
BRICA149	9,08	Clamping insert screw
BRICA155	7,20	Clamping insert screw
BRICA156	7,20	Clamping insert screw
BRICA157	7,20	Clamping insert screw
BRICA158	7,20	Clamping insert screw
BRICA159	7,20	Clamping insert screw
BRICA188	3,95	Clamping insert screw
BRICA190	11,80	Clamping insert screw
BRICA191	10,10	Clamping insert screw
BRICA192	4,17	Clamping insert screw
BRICA193	4,17	Clamping insert screw
BRICA196	6,11	Clamping insert screw
BRICA197	6,11	Clamping insert screw
BRICA198	5,90	Clamping insert screw
BRICA199	4,79	Clamping insert screw
BRICA200	7,43	Clamping insert screw
BRICA211	3,20	Clamping insert screw
BRICA212	3,20	Clamping insert screw
BRICA217	8,09	Clamping insert screw
BRICA220	13,00	Clamping insert screw
BRICA221	11,85	Clamping insert screw
BRICA222	12,35	Clamping insert screw
BRICA223	19,85	Clamping insert screw
BRICA224	21,85	Clamping insert screw
BRICA225	8,90	Clamping insert screw
BRICA236	11,24	Clamping insert screw
BRICA237	6,89	Clamping insert screw
BRICA240	3,95	Clamping insert screw
BRICA241	1,95	Clamping insert screw
BRICA242	1,95	Clamping insert screw
BRICA243	1,95	Clamping insert screw
BRICA252	6,83	Clamping insert screw
BRICA253	5,64	Clamping insert screw

Tech. Code	GR30 Euro	Description
BRICA259	3,30	Clamping insert screw
BRICA260	4,13	Clamping insert screw
BRICA261	5,13	Clamping insert screw
BRICA262	5,13	Clamping insert screw
BRICA029	8,70	Cartridge screw
BRICA008	12,96	Support screw
BRICA049	5,30	Support screw
BRICA068	5,05	Support screw
BRICA072	5,56	Support screw
BRICA096	10,12	Support screw
BRICA145	10,01	Support screw
BRICA146	10,01	Support screw
BRICA048	3,50	Clamping screw
BRICA050	3,50	Clamping screw
BRICA181	7,03	Clamping screw
BRICA195	4,17	Clamping screw
BRICA084	43,89	Bur's fastening screw
BRICA116	43,90	Bur's fastening screw
BRICA238	5,64	Bur's fastening screw
BRICA086	15,12	Lever screw
BRICA092	9,71	Pin screw
BRICA002	10,79	Wrench
BRICA004	10,90	Wrench
BRICA006	12,65	Wrench
BRICA014	0,80	Wrench
BRICA015	0,80	Wrench
BRICA016	7,70	Wrench
BRICA024	1,00	Wrench
BRICA056	6,52	Wrench
BRICA093	13,57	Wrench
BRICA094	9,78	Wrench
BRICA132	7,18	Wrench
BRICA135	7,18	Wrench
BRICA140	22,00	Wrench
BRICA141	15,86	Wrench
BRICA151	9,78	Wrench
BRICA186	11,35	Wrench
BRICA219	10,80	Wrench
BRICA230	7,20	Wrench
BRICA231	7,20	Wrench
BRICA232	7,20	Wrench
BRICA233	8,60	Wrench
BRICA234	17,95	Wrench
BRICA235	2,65	Wrench
BRICA263	5,83	Wrench
BRICA264	7,55	Wrench
BRICA265	8,65	Wrench
BRICA266	8,65	Wrench
BRICA185	10,86	Blade key
BRICA215	53,40	Blade key
BRICA226	7,65	Clamping key
BRICA227	5,70	Clamping key
BRICA228	7,65	Clamping key
BRICA091	9,72	Dowel
BRICA005	33,20	Clamp
BRICA040	13,50	Clamp
BRICA042	18,10	Clamp
BRICA060	28,60	Clamp
BRICA176	17,23	Clamp

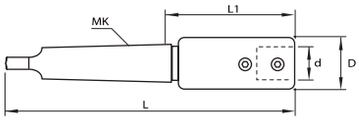
Tech. Code	GR30 Euro	Description
BRICA177	17,23	Clamp
BRICA017	1,30	Spring pin
BRICA021	1,00	Spring pin
BRICA026	1,30	Spring pin
BRICA037	0,60	Spring pin
BRICA046	2,10	Spring pin
BRICA058	9,71	Spring pin
BRICA180	3,71	Spring pin
BRICA254	4,59	Spring
BRICA255	4,59	Spring
BRICA075	131,47	Cartridge
BRICA076	131,47	Cartridge
BRICA007	9,90	Shim
BRICA020	16,20	Shim
BRICA025	21,50	Shim
BRICA028	21,52	Shim
BRICA031	11,90	Shim
BRICA033	9,60	Shim
BRICA036	7,00	Shim
BRICA038	9,10	Shim
BRICA039	18,60	Shim
BRICA044	13,50	Shim
BRICA045	16,40	Shim
BRICA057	23,49	Shim
BRICA062	17,60	Shim
BRICA095	19,60	Shim
BRICA143	21,39	Shim
BRICA144	26,30	Shim
BRICA152	17,25	Shim
BRICA153	17,25	Shim
BRICA154	23,46	Shim
BRICA175	20,50	Shim
BRICA178	12,11	Shim
BRICA179	12,36	Shim
BRICA229	7,10	Shim
BRICA244	14,70	Shim
BRICA245	14,70	Shim
BRICA246	15,81	Shim
BRICA247	12,41	Shim
BRICA248	15,78	Shim
BRICA257	18,03	Shim
BRICA069	14,71	AE Support
BRICA070	14,71	AI Support
BRICA074	20,24	AI Shim
BRICA013	11,10	Lever
BRICA018	16,30	Lever
BRICA022	16,30	Lever
BRICA034	11,80	Lever
BRICA054	19,43	Lever
BRICA059	12,80	Lever
BRICA085	20,02	Lever
BRICA249	24,79	Lever
BRICA250	22,50	Lever
BRICA251	25,86	Lever
BRICA061	11,60	Pin
BRICA081	29,16	Pin
BRICA183	3,18	Pin
BRICA256	4,29	Pin
BRICA258	2,32	Screwdriver

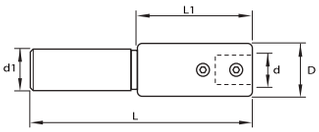
Indivisible package Suggested retail package - Unit price

SIZE 1 MODULAR TOOL HOLDER

GRANLUND

ART. B8G00





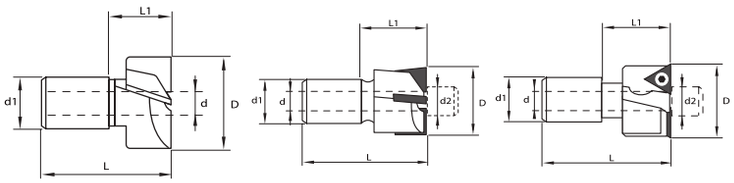
Tech. Code	GR29 Euro	Description	Coupling	D mm	d mm	d1 mm	L mm	L1 mm
B8G00MK1	185,00	1A-MK1	CM1	24	14	-	123	62
B8G00MK2	168,80	1A-MK2	CM2	24	14	-	137	62
B8G00MK3	185,00	1A-MK3	CM3	24	14	-	160	66
B8G00W20	(172,90)	1A-W20	Weldon	24	14	20	110	55

Tech. Code	GR29 Euro	Description	Coupling	D mm	d mm	d1 mm	L mm	L1 mm
B8G00W20NS	(316,60)	1NS-W20	Weldon	24	14	20	86	32
B8G00C10	185,00	1A-10	Cylindrical	24	14	10	110	55
B8G00C12	167,00	1A-12	Cylindrical	24	14	12	120	55

SIZE 1 MODULAR SPOT-FACING END MILLS

GRANLUND

ART. B8G10



Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	L mm	L1 mm
B8G1010	78,80	1N-10,0	10	6	14	48	28
B8G1011	78,80	1N-11,0	11	6	14	48	28
B8G1012	78,80	1N-12,0	12	6	14	48	28
B8G1013	78,80	1N-13,0	13	6	14	48	28
B8G1014	78,80	1N-14,0	14	6	14	48	28
B8G1015	78,80	1N-15,0	15	6	14	48	28
B8G1016	83,20	1N-16,0	16	6	14	48	28
B8G1017	86,90	1N-17,0	17	6	14	48	28
B8G1018	89,90	1N-18,0	18	6	14	48	28
B8G1019	100,00	1N-19,0	19	6	14	48	28
B8G1020	100,00	1N-20,0	20	6	14	48	28
B8G1021	101,90	1N-21,0	21	6	14	48	28
B8G1022	105,30	1N-22,0	22	6	14	48	28

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	L mm	L1 mm
B8G1023	118,10	1N-23,0	23	6	14	48	28
B8G1024	118,10	1N-24,0	24	6	14	48	28
B8G1025	118,10	1N-25,0	25	6	14	48	28
B8G1026	126,30	1N-26,0	26	6	14	48	28
B8G1027	128,70	1N-27,0	27	6	14	48	28
B8G1028	130,00	1N-28,0	28	6	14	48	28
B8G1029	131,00	1N-29,0	29	6	14	48	28
B8G1030	170,60	1N-30,0	30	6	14	48	28
B8G1031	178,30	1N-31,0	31	6	14	48	28
B8G1032	188,00	1N-32,0	32	6	14	48	28
B8G1033	191,60	1N-33,0	33	6	14	48	28
B8G1034	201,60	1N-34,0	34	6	14	48	28
B8G1035	208,70	1N-35,0	35	6	14	48	28

HSS spot-facing end mills allow for both rotating and fixed insert drills and pilots

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G1512	(213,50)	1H-12,0	12	6	14	8	48	28
B8G1513	(213,50)	1H-13,0	13	6	14	8	48	28
B8G1514	213,50	1H-14,0	14	6	14	8	48	28
B8G1515	(213,50)	1H-15,0	15	6	14	8	48	28
B8G1516	(221,40)	1H-16,0	16	6	14	8	48	28
B8G1517	221,40	1H-17,0	17	6	14	8	48	28
B8G1518	223,20	1H-18,0	18	6	14	8	48	28
B8G1519	223,20	1H-19,0	19	6	14	8	48	28
B8G1520	230,20	1H-20,0	20	6	14	8	48	28

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G1521	230,20	1H-21,0	21	6	14	8	48	28
B8G1522	247,70	1H-22,0	22	6	14	8	48	28
B8G1523	238,60	1H-23,0	23	6	14	8	48	28
B8G1524	244,50	1H-24,0	24	6	14	8	48	28
B8G1525	244,50	1H-25,0	25	6	14	8	48	28
B8G1526	246,00	1H-26,0	26	6	14	8	48	28
B8G1528	250,20	1H-28,0	28	6	14	8	48	28
B8G1530	268,30	1H-30,0	30	6	14	8	48	28
B8G1532	297,30	1H-32,0	32	6	14	8	48	28

HM spot-facing mills only allow for rotating pilots

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm	Insert
B8G2020	(536,80)	1WHV-20,0	20	6	14	7,6	48	28	TPMT07...
B8G2022	(536,80)	1WHV-22,0	22	6	14	7,6	48	28	TPMT07...
B8G2025	(541,60)	1WHV-25,0	25	6	14	7,6	48	28	TPMT07...

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm	Insert
B8G2030	(616,10)	1WHV-30,0	30	6	14	7,6	48	28	TPMT10...
B8G2032	(616,10)	1WHV-32,0	32	6	14	7,6	48	28	TPMT10...

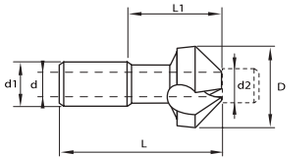
Insert spot-facing end mills only allow for rotating pilots
Widening of an existing hole, guide Ø min 11mm For spot facing, guide Ø min 6mm When an MK spindle is used, the shank should not be less than CM2

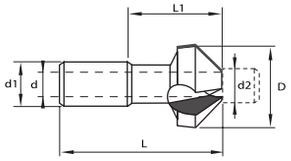
Indivisible package Suggested retail package - Unit price

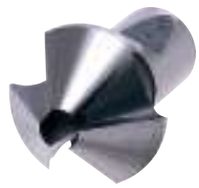
SIZE 1 HSS MODULAR COUNTERSINKING MILLING CUTTERS

GRANLUND

ART. B8G25







Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G2516	(101,70)	1T9-16,0	16	6	14	6,6	48	28
B8G2518	108,50	1T9-18,0	18	6	14	6,6	48	28
B8G2520	110,60	1T9-20,0	20	6	14	6,6	48	28

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G2525	115,10	1T9-25,0	25	6	14	6,6	48	28
B8G2530	137,00	1T9-30,0	30	6	14	6,6	48	28

HSS countersinking milling cutter allow for both rotating and fixed tips/pilots and guides/drills

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G3016	(107,20)	1T6-16,0	16	6	14	6,6	48	28
B8G3018	(113,40)	1T6-18,0	18	6	14	6,6	48	28
B8G3020	115,10	1T6-20,0	20	6	14	6,6	48	28

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G3025	118,70	1T6-25,0	25	6	14	6,6	48	28
B8G3030	137,00	1T6-30,0	25	6	14	6,6	48	28

HSS countersinking milling cutter allow for both rotating and fixed tips/pilots and guides/drills

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G3220	294,50	1TH9-20,0	20	6	14	10	48	28

Tech. Code	GR29 Euro	Description	D mm	d mm	d1 mm	d2 min mm	L mm	L1 mm
B8G3230	303,60	1TH9-30,0	30	6	14	10	48	28

HM countersinking milling cutters only allow for rotating guides/drills

RECOMMENDED TOOL GEOMETRY AND CUTTING CONDITIONS

GRANLUND

TPMT - 07U

TPMT - 10U

			Description	Grade	Tech. Code	GR29 Euro	Feed mm/rev	P <500 N/mm²	P <850 N/mm²	P <1200 N/mm²	M <600 N/mm²	M <850 N/mm²	K <240 HB	K <300 HB	N Alu	S HTA	H <60 HRC
MED. CUT.	UNIVERSAL		TPMT 07U	P30	**B8T01TP07015**	23,60	0,05 0,15 0,25	●	●	●	○	○	●	●	●	○	○
			TPMT 10U		**B8T01TP10015**	21,60		●	●	●	○	○	●	●	●	○	○

Conditions in bold indicate inserts for general machining.

RECOMMENDED CUTTING DATA

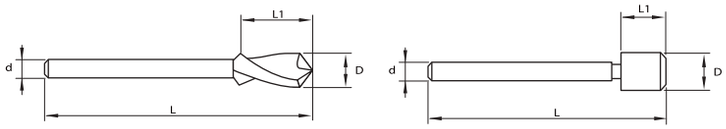
Material	Hardness Brinnel HB	Degrees Recommended	Cutting speed Vc (m/min.)	Feed fz/mm
Low carbon content steel (C15, etc.)	~ 180	P30	150 - 250	0.08 - 0.25
	~ 180	P30	150 - 250	0.08 - 0.25
	~ 180	P30	150 - 250	0.08 - 0.25
Cast iron (GG25, GG30, GGG40 etc.)	150 ~ 250	4L15	160	0.08 - 0.15 - 0.30
Non ferrous alloys (Si < 13%)	-	HT15	300 - 400	0.05 - 0.10

Indivisible package Suggested retail package - Unit price

SIZE 1 MODULAR INSERT DRILLS AND PILOTS

GRANLUND

ART. B8G35



Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G3506,5	55,70	1B-06,5	6,5	6,0	95,0	25,0
B8G3506,8	55,70	1B-06,8	6,8	6,0	95,0	25,0
B8G3507	55,70	1B-07,0	7,0	6,0	95,0	25,0
B8G3508	(59,50)	1B-08,0	8,0	6,0	95,0	25,0
B8G3508,5	59,50	1B-08,5	8,5	6,0	95,0	25,0

Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G3509	59,50	1B-09,0	9,0	6,0	95,0	25,0
B8G3510	67,90	1B-10,0	10,0	6,0	95,0	25,0
B8G3511	67,90	1B-11,0	11,0	6,0	95,0	25,0
B8G3512	(80,50)	1B-12,0	12,0	6,0	95,0	25,0

As for tips/pilots, be sure the hole is clear before starting any operations with the following tools required.

Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G4006,5	(61,90)	1LB-06,5	6,5	6,0	110,0	40,0
B8G4006,8	(61,90)	1LBB-06,8	6,8	6,0	110,0	40,0
B8G4007	(61,90)	1LB-07,0	7,0	6,0	110,0	40,0
B8G4008	(65,10)	1LB-0,8,0	8,0	6,0	110,0	40,0
B8G4008,5	(65,10)	1LB-08,5	8,5	6,0	110,0	40,0

Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G4009	(65,10)	1LB-09,0	9,0	6,0	110,0	40,0
B8G4010	(76,30)	1LB-10,0	10	6,0	110,0	40,0
B8G4011	(76,30)	1LB-11,0	11,0	6,0	110,0	40,0
B8G4012	(91,60)	1LB-12,0	12,0	6,0	110,0	40,0

As for insert drills, be sure the insert drill has completely come out before starting any operations with the following tools required.

Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G4508	26,80	1F-08,0	8,0	6,0	80,0	14,0
B8G4508,5	26,80	1F-08,5	8,5	6,0	80,0	14,0
B8G4509	26,80	1F-09,0	9,0	6,0	80,0	14,0
B8G4510	26,80	1F-10,0	10,0	6,0	80,0	14,0
B8G4510,5	28,70	1F-10,5	10,5	6,0	80,0	14,0
B8G4511	28,70	1F-11,0	11,0	6,0	80,0	14,0
B8G4512	28,70	1F-12,0	12,0	6,0	80,0	14,0
B8G4513	32,70	1F-13,0	13,0	6,0	80,0	14,0

Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G4514	33,00	1F-14,0	14,0	6,0	80,0	14,0
B8G4515	33,00	1F-15,0	15,0	6,0	80,0	14,0
B8G4516	33,00	1F-16,0	16,0	6,0	80,0	14,0
B8G4517	34,00	1F-17,0	17,0	6,0	80,0	14,0
B8G4518	34,00	1F-18,0	18,0	6,0	80,0	14,0
B8G4519	42,10	1F-19,0	19,0	6,0	80,0	14,0
B8G4520	42,10	1F-20,0	20,0	6,0	80,0	14,0

As for use with drills, be sure to properly lubricate with either neat oil or emulsion.

Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G5008	44,10	1R-08,0	8,0	6,0	80,0	14,0
B8G5008,5	44,60	1R-08,5	8,5	6,0	80,0	14,0
B8G5009	44,60	1R-09,0	9,0	6,0	80,0	14,0
B8G5010	45,50	1R-10,0	10,0	6,0	80,0	14,0
B8G5010,5	47,60	1R-10,5	10,5	6,0	80,0	14,0
B8G5011	48,80	1R-11,0	11,0	6,0	80,0	14,0
B8G5012	50,00	1R-12,0	12,0	6,0	80,0	14,0
B8G5013	50,00	1R-13,0	13,0	6,0	80,0	14,0

Tech. Code	GR29 Euro	Description	D mm	d mm	L mm	L1 mm
B8G5014	50,00	1R-14,0	14,0	6,0	80,0	14,0
B8G5015	52,30	1R-15,0	15,0	6,0	80,0	14,0
B8G5016	53,00	1R-16,0	16,0	6,0	80,0	14,0
B8G5017	54,70	1R-17,0	17,0	6,0	80,0	14,0
B8G5018	57,10	1R-18,0	18,0	6,0	80,0	14,0
B8G5019	58,70	1R-19,0	19,0	6,0	80,0	14,0
B8G5020	(59,30)	1R-20,0	20,0	6,0	80,0	14,0

As for use with drills, be sure to properly lubricate with either neat oil or emulsion.

Tech. Code	GR29 Euro	Version	Description	Denomination
BRICA190	11,80	SSK-20/8190.9120	1WHV-20 1WHV-25	1KV-26
BRICA191	10,10	SSK-22/8191.9122	1WHV-30 1WHV-32	1KV-30

Indivisible package Suggested retail package - Unit price

Link partner

RÖHM

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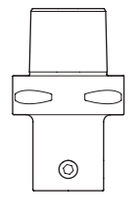
APPLICATION INDEX - BORING

TOOL HOLDERS

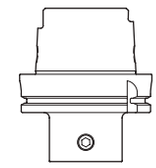
ISO 26623-1



PSC System 20/55

Page 125

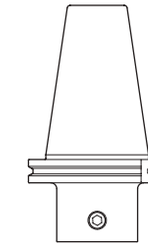
DIN 69893



HSK-A System 20/55

Page 125

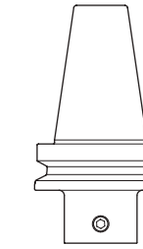
DIN 69871 A/D



SK-A System 20/55

Page 125

MAS403-BT

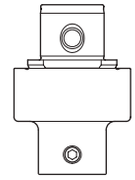


BT-A System 20/55

Page 125

REDUCTION EXTENSION

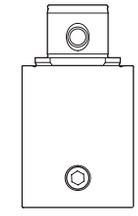
REDUCTION ADAPTERS



System 25/55

Page 126

EXTENSIONS



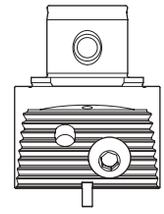
System 20/55

Page 126

ROUGHING SYSTEM

CCMT 0602... LPM
CCMT 09T3... LPM
CCMT 1204... LPM

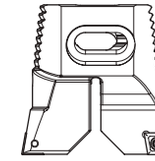
ROUGHING HEADS 142



System 20/55
D 23,50 - 87,50

Page 126

ROUGHING INSERT HOLDERS



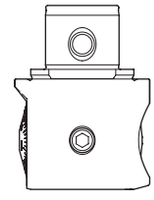
D 23,50 - 87,50

Page 126

FINISHING SYSTEM

CCGT 0602... L
CCGT 09T3... L

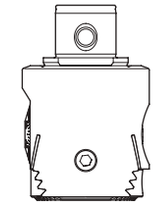
FINISHING HEAD 262



System 55
9,75 - 88,10

Page 127

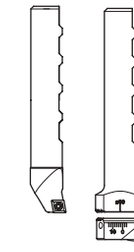
FINISHING HEAD 261



System 55
3,00 - 320,00

Page 127

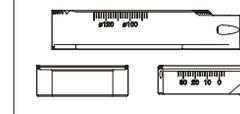
FINISHING BORING BARS



D 9,75 - 88,10

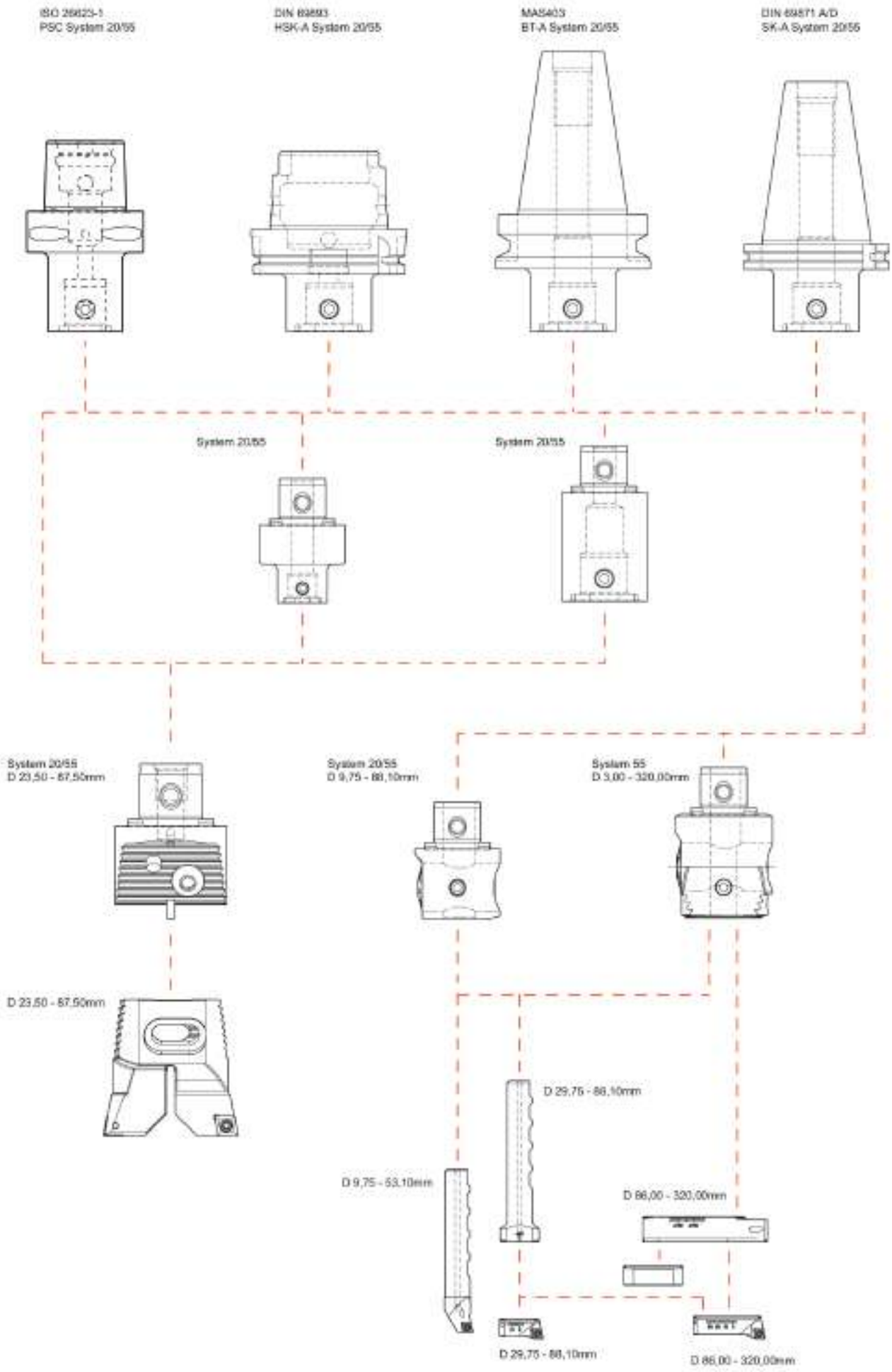
Page 128

FINISHING HOLDERS



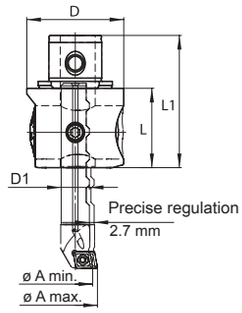
D 86,00 - 320,00

Page 128

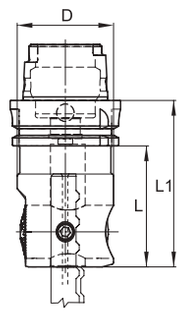

ISO 26623-1
PSC System 20/55
DIN 69893
HSK-A System 20/55
MAS403
BT-A System 20/55
DIN 69871 A/D
SK-A System 20/55
System 20/55
System 20/55
System 20/55
D 23,50 - 67,50mm
System 20/55
D 9,75 - 88,10mm
System 55
D 3,00 - 320,00mm
D 23,50 - 67,50mm
D 29,75 - 88,10mm
D 9,75 - 53,10mm
D 86,00 - 320,00mm
D 29,75 - 88,10mm
D 86,00 - 320,00mm

HIGH-PRECISION BORING TOOL KIT D9,75 - D88,10

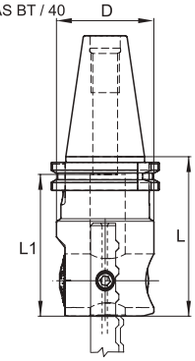
System 55



HSK A63



SK - MAS BT / 40

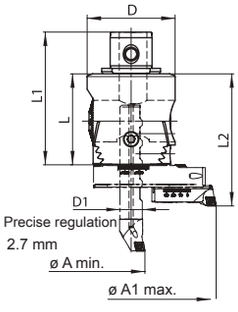


Tech. Code	GR28 Euro	Denomination	Coupling	D mm	D1 mm	A min mm	A max mm	L mm	L1 mm
B9B90M30	(1.668,54)	528.000.030	SYSTEM 55	55	16	9,75	30,1	45	75
B9B90H30	(1.940,84)	528.063.030	HSK-A 63	55	16	9,75	30,1	95	70
B9B90S30	(1.940,84)	528.415.030	SK40 A/D	55	16	9,75	30,1	90	80
B9B90B30	(1.940,84)	528.412.030	BT40 A/D	55	16	9,75	30,1	90	80

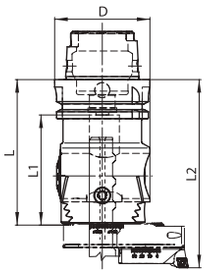
Tech. Code	GR28 Euro	Denomination	Coupling	D mm	D1 mm	A min mm	A max mm	L mm	L1 mm
B9B85M88	(2.269,56)	527.000.088	SYSTEM 55	55	16	9,75	88,1	45	75
B9B85H88	2.622,18	527.063.088	HSK-A 63	55	16	9,75	88,1	95	70
B9B85S88	(2.622,18)	527.415.088	SK40 A/D	55	16	9,75	88,1	90	80
B9B85B88	(2.622,18)	527.412.088	BT40 A/D	55	16	9,75	88,1	90	80

HIGH-PRECISION BORING TOOL KIT D9,75 - D164

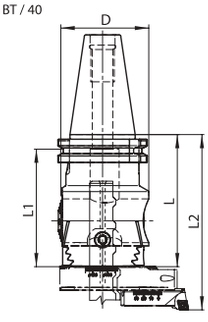
System 55



HSK A63



SK - MAS BT / 40



Tech. Code	GR28 Euro	Denomination	Coupling	D mm	D1 mm	A min mm	A1 max mm	L mm	L1 mm	L2 mm
B9B80M164	2.766,45	530.000.164	SYSTEM 55	63	16	9,75	164	66	96,0	95
B9B80H164	2.857,56	530.063.164	HSK-A 63	63	16	9,75	164	96	72,5	125
B9B80S164	2.857,56	530.415.164	SK40 A/D	63	16	9,75	164	91	81,0	120
B9B80B164	(2.857,56)	530.412.164	BT40 A/D	63	16	9,75	164	91	81,0	120

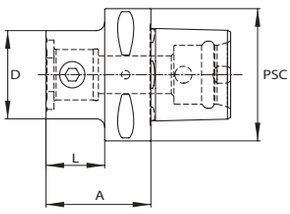
Coupling	Countersinking micrometer head	Boring insert holder	Boring insert holder	Boring insert holder	Boring insert holder	Adjustable boring bars	Adjustable boring bars	Alluminum bridge	Insert holder	Insert holder
9,75 - 30,10	B9B505502	B9B551006	B9B551506	B9B552006	B9B552506	-	-	-	-	-
9,75 - 88,10	B9B505502	B9B551006	B9B551506	B9B552006	B9B552506	B9B601601	B9B601602	-	B9B650106	B9B650206
9,75 - 164,00	B9B455501	B9B551006	B9B551506	B9B552006	B9B552506	B9B601601	B9B601602	B9B70164	B9B650106	B9B650206

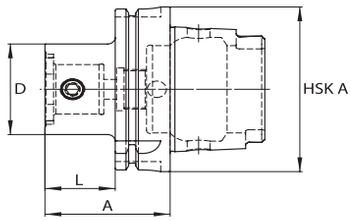
Kit supplied in black plastic box, hex and torx keys.

Indivisible package Suggested retail package - Unit price

PSC ISO 26623-1 AND HSK A DIN 69893 MODULAR MASTER SHANKS

ART. B9B05



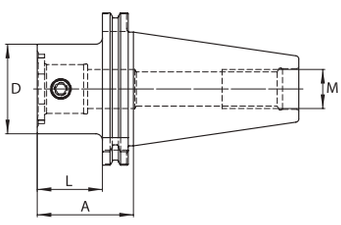


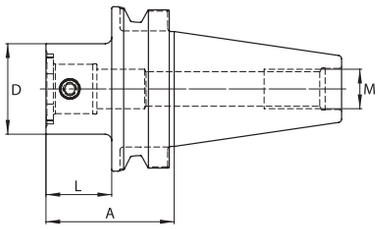
Tech. Code	GR28 Euro	Description	PSC	System D mm	L mm	A mm	Grub screw
B9B050620	(417,70)	102.163.201	63	20	28	50	800.000.200
B9B050625	(417,70)	102.163.251	63	25	28	50	800.000.250
B9B050632	(417,70)	102.163.321	63	32	28	50	800.000.320
B9B050642	(417,70)	102.163.421	63	42	28	50	800.000.420
B9B050655	417,70	102.163.551	63	55	38	60	800.000.550

Tech. Code	GR28 Euro	Description	HSK-A	System D mm	L mm	A mm	Grub screw
B9B100620	(417,70)	102.063.201	63	20	24	50	800.000.200
B9B100625	(417,70)	102.063.251	63	25	24	50	800.000.250
B9B100632	(417,70)	102.063.321	63	32	24	50	800.000.320
B9B100642	(417,70)	102.063.421	63	42	24	50	800.000.420
B9B100655	386,76	102.063.551	63	55	40	66	800.000.550

DIN 69871 A/D AND MAS403 BT MODULAR MASTER SHANKS

ART. B9B15



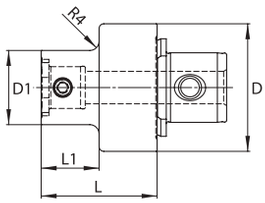


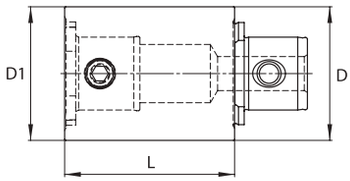
Tech. Code	GR28 Euro	Description	SK A/D	System D mm	L mm	A mm	Grub screw
B9B150420	(331,99)	102.415.201	40	20	15	34,1	800.000.200
B9B150425	(331,99)	102.415.251	40	25	25	44,1	800.000.250
B9B150432	(331,99)	102.415.321	40	32	25	44,1	800.000.320
B9B150442	(331,99)	102.415.421	40	42	30	49,1	800.000.420
B9B150455	285,35	102.415.551	40	55	40	59,1	800.000.550
B9B150455L	(405,77)	102.415.552	40	55	100	119,1	800.000.550

Tech. Code	GR28 Euro	Description	BT A/D	System D mm	L mm	A mm	Grub screw
B9B200420	(331,99)	102.412.201	40	20	15	42	800.000.200
B9B200425	(331,99)	102.412.251	40	25	25	52	800.000.250
B9B200432	(331,99)	102.412.321	40	32	25	52	800.000.320
B9B200442	(339,58)	102.412.421	40	42	30	57	800.000.420
B9B200455	285,33	102.412.551	40	55	40	67	800.000.550
B9B200455L	(405,77)	102.412.552	40	55	100	127	800.000.550

MODULAR REDUCTION AND EXTENSION ADAPTERS

ART. B9B25

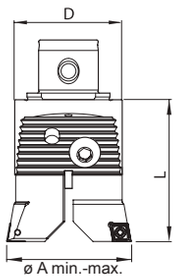


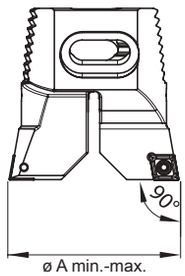


Tech. Code	GR28 Euro	Description	System D mm	System D1 mm	L1 mm	L mm	Grub screw
B9B252520	(208,32)	122.250.201	25	20	15	30	800.000.200
B9B253220	(208,32)	122.320.201	32	20	15	30	800.000.200
B9B253225	(208,32)	122.320.251	32	25	25	40	800.000.250
B9B254225	(208,32)	122.420.251	42	25	25	40	800.000.250
B9B254232	(208,32)	122.420.321	42	32	25	45	800.000.320
B9B255532	246,29	122.550.321	55	32	25	50	800.000.320
B9B255542	(246,29)	122.550.421	55	42	30	55	800.000.420

Tech. Code	GR28 Euro	Description	System D mm	System D1 mm	L mm	Grub screw
B9B302025	(190,96)	132.200.001	20	20	25	800.000.200
B9B302530	(190,96)	132.250.001	25	25	30	800.000.250
B9B303240	201,79	132.320.001	32	32	40	800.000.320
B9B304250	220,27	132.420.001	42	42	50	800.000.420
B9B305570	241,96	132.550.001	55	55	70	800.000.550

TWIN CUTTER BORING ROUGHING HEADS - D23.50 - D87.50



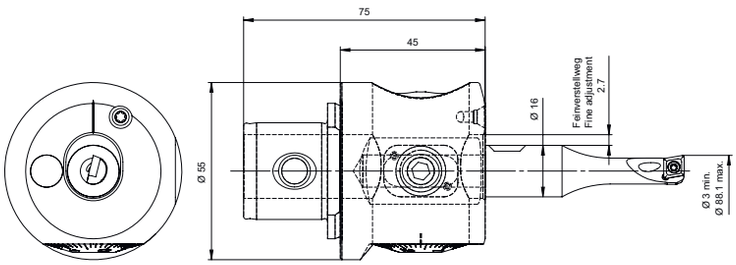


Tech. Code	GR28 Euro	Denomination	Z	System D mm	A min. mm	A max. mm	L mm	Insert holder	Clamping screw	Washer
B9B352040	(326,57)	142.200.000	2	20	23,50	30,50	40	162.200.006	840.142.200	841.142.200
B9B352550	345,02	142.250.000	2	25	29,50	40,10	50	162.250.006	840.142.250	841.142.250
B9B353265	404,37	142.320.000	2	32	39,50	50,50	65	162.320.009	840.142.320	841.142.320
B9B354290	451,35	142.420.000	2	42	49,50	66,50	90	162.420.009	840.142.420	841.142.420
B9B3555115	(516,42)	142.550.000	2	55	65,50	87,50	115	162.550.112	840.142.550	841.142.550

Tech. Code	GR28 Euro	Denomination	Z	A min. mm	A max. mm	Modular head	Insert	Insert screw
B9B402006	366,72	162.200.006	2	23,50	30,50	142.200.000	CC..0602...	843.006.000
B9B402506	383,01	162.250.006	2	29,50	40,10	142.250.000	CC..0602...	843.006.000
B9B403209	411,22	162.320.009	2	39,50	50,50	142.320.000	CC...09T3...	843.009.000
B9B404209	467,61	162.420.009	2	48,50	66,50	142.420.000	CC...09T3...	843.009.000
B9B405512	(610,83)	162.550.112	2	65,50	87,50	142.550.000	CC...1204...	843.012.000

Indivisible package Suggested retail package - Unit price

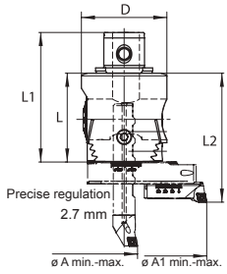
DIGITAL FINE BORING HEADS - D3 - D88.10



Tech. Code	GR28 Euro	Denomination	Z	System D mm	D1 mm	A min. mm	A max. mm	L mm	L1 mm	Clamping screw	Fitting screw	USB memory stick
B9B415502	(1.190,12)	265,550,045	1	55	16	3	88.10	45	75	881,262,420	882,626,420	B9B42USB

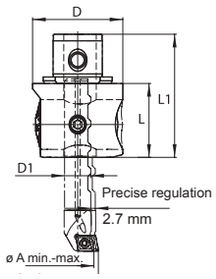
USB memory stick for adjustment not included.

HIGH PRECISION BORING HEADS - D9,75 - D320



Tech. Code	GR28 Euro	Denomination	Z	System D mm	D1 mm	A mm min - max	A1 mm min - max	L mm	L1 mm	L2 mm	Clamping screw	Fitting screw	Fitting screw seat
B9B455501	1.475,43	261.550.065	1	55	63	3 - 88,10	86 - 320	66	96	95	881.261.016	881.261.020	883.261.016

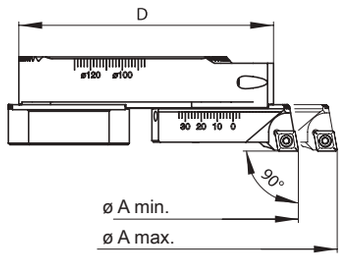
FINE BORING HEADS - D3 - D8,10



Tech. Code	GR28 Euro	Denomination	Z	System D mm	D1 mm	A min. mm	A max. mm	L mm	L1 mm	Clamping screw	Fitting screw
B9B505502	1.163,02	262,550,045	1	55	16	3	88.10	45	75	881,262,420	882,262,420

EXTENSION BRIDGES AND ACCESSORIES - D86 - D320

ART. B9B70



Tech. Code	GR28 Euro	Denomination	D mm	A min. mm	A max. mm	Air hole	Clamping screw
B9B700164	270,16	886.086.164	80	86	164	With	883.261.016
B9B700320	405,77	886.162.320	158	162	320	With	883.261.016

Tech. Code	GR28 Euro	Denomination	Z	A min. mm	A max. mm	Insert	Shank	Air hole	Insert screw
B9B650206	283,18	253.048.006	1	47,75	88,10	CC.. 06 02..	271.048.088	With	843.006.000
B9B650109	293,98	253.048.009	1	47,75	88,10	CC.. 09 T3..	271.048.088	With	843.009.000

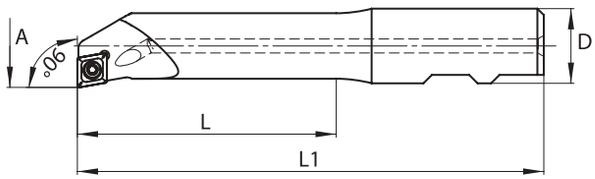
ALUMINUM BRIDGE BARS AND ACCESSORIES- - D86 - D320

ART. B9B75

Tech. Code	GR28 Euro	Denomination	Clamping screw
B9B7501	100,94	886.038.045	883.261.016

BORING BARS - D,75 - D53,10

ART. B9B55

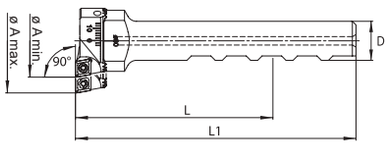


Tech. Code	GR28 Euro	Denomination	Z	D mm	A min mm	A max mm	L mm	L1 mm	Insert	Air hole	Insert screw
B9B551006	210,47	272.010.006	1	16	9,75	15,10	30	75	CC .. 06 02 ..	With	843.007.000
B9B551206	(202,30)	272.012.006	1	16	11,75	17,10	37	80	CC .. 06 02 ..	With	843.007.000
B9B551406	210,47	272.014.006	1	16	13,75	19,10	43	85	CC .. 06 02 ..	With	843.006.000
B9B551506	(210,47)	272.015.006	1	16	14,75	20,10	51	90	CC .. 06 02 ..	With	843.006.000
B9B551606	(210,47)	272.016.006	1	16	15,75	21,10	57	95	CC .. 06 02 ..	With	843.006.000
B9B551806	(210,47)	272.018.006	1	16	17,75	23,10	67	100	CC .. 06 02 ..	With	843.006.000
B9B552006	(241,94)	272.020.006	1	16	19,75	25,10	72	105	CC .. 06 02 ..	With	843.006.000
B9B552009	241,94	272.020.009	1	16	19,75	25,10	72	105	CC .. 09 T3 ..	With	843.009.000
B9B552209	(241,94)	272.022.009	1	16	21,75	27,10	77	110	CC .. 09 T3 ..	With	843.009.000
B9B552506	(241,94)	272.025.006	1	16	24,75	30,10	82	115	CC .. 06 02 ..	With	843.006.000
B9B552509	241,94	272.025.009	1	16	24,75	30,10	82	115	CC .. 09 T3 ..	With	843.009.000
B9B552809	(252,77)	272.028.009	1	16	27,75	33,10	82	115	CC .. 09 T3 ..	With	843.009.000
B9B553009	252,77	272.030.006	1	16	29,75	35,10	82	115	CC .. 06 02 ..	With	843.006.000
B9B553209	(252,77)	272.032.009	1	16	31,75	37,10	82	115	CC .. 09 T3 ..	With	843.009.000
B9B553506	(252,77)	272.035.006	1	16	34,75	40,10	82	115	CC .. 06 02 ..	With	843.006.000
B9B553509	252,77	272.035.009	1	16	34,75	40,10	82	115	CC .. 09 T3 ..	With	843.009.000
B9B553909	(272,31)	272.039.009	1	16	38,75	44,10	82	115	CC .. 09 T3 ..	With	843.009.000
B9B554309	285,35	272.043.009	1	16	42,75	48,10	82	115	CC .. 09 T3 ..	With	843.009.000
B9B554809	(317,86)	272.048.009	1	16	47,75	53,10	82	115	CC .. 09 T3 ..	With	843.009.000

Indivisible package Suggested retail package - Unit price

BORING BARS - D29,75 - D88,10

ART. B9B60



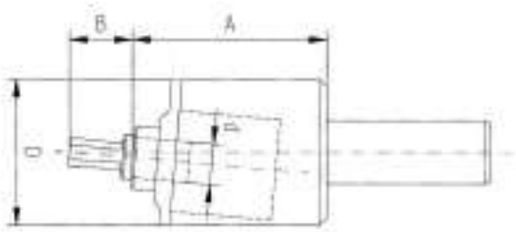
Tech. Code	GR28 Euro	Denomination	D mm	A min. mm	A max. mm	L mm	L1 mm	Holder	Air hole	Clamping screw
B9B601601	171,44	271.030.048	16,00	29,75	48,10	85,00	115,00	253.030.006	With	883.261.016
B9B601602	171,39	271.048.088	16,00	47,75	88,10	85,00	115,00	253.048....	With	883.261.016

Tech. Code	GR28 Euro	Denomination	Z	A min. mm	A max. mm	Insert	Shank	Air hole	Insert screw
B9B650106	257,14	253.030.006	1	29,75	48,10	CC..06 02..	271.030.048	With	843.006.000
B9B650206	283,18	253.048.006	1	47,75	88,10	CC.. 06 02..	271.048.088	With	843.006.000
B9B650109	293,98	253.048.009	1	47,75	88,10	CC.. 09 T3..	271.048.088	With	843.009.000

BROACHING HEADS FOR POLYGONAL HOLES AND SURFACE PROFILES

KERFOLG

ART. B9P10



Tech. Code	GR18 Euro	Cylindrical shank mm	Shank of the broach mm	Hexagonal slot capacity mm	Broaching depth mm	A x D mm	B mm
B9P10G12C25	693,00	25	12	1 ÷ 14	20 max	78 x 58	25
B9P10G16C32	827,40	32	16	1 ÷ 24	21 max	95 x 70	25

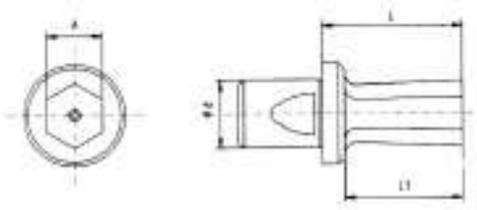
KERFOLG
precision tooling

Technology
Efficiency
Endurance

BROACHES FOR HEXAGONAL HOLES - SHANK 12

KERFOLG

ART. B9P60

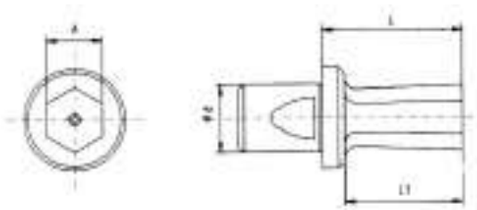


Tech. Code	GR22 Euro	A mm	d mm	L mm	l1 mm
B9P60E03	66,50	3	12	25	7
B9P60E04	66,50	4	12	25	9
B9P60E05	66,50	5	12	25	11
B9P60E06	67,60	6	12	25	13
B9P60E07	68,80	7	12	25	15
B9P60E08	68,80	8	12	25	17
B9P60E09	68,80	9	12	25	19
B9P60E10	68,80	10	12	25	21
B9P60E11	73,60	11	12	25	21
B9P60E12	73,60	12	12	25	21
B9P60E13	74,90	13	12	25	21
B9P60E14	74,90	14	12	25	21

BROACHES FOR HEXAGONAL HOLES - SHANK 16

KERFOLG

ART. B9P65



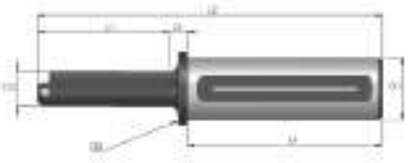
Tech. Code	GR22 Euro	A mm	d mm	L mm	l1 mm
B9P65E03	67,60	3	16	25	7
B9P65E04	67,60	4	16	25	9
B9P65E05	68,80	5	16	25	11
B9P65E06	68,80	6	16	25	13
B9P65E07	68,80	7	16	25	15
B9P65E08	71,30	8	16	25	17
B9P65E09	(71,30)	9	16	25	19
B9P65E10	71,30	10	16	25	21
B9P65E11	(73,60)	11	16	25	21
B9P65E12	73,60	12	16	25	21
B9P65E13	74,90	13	16	25	21
B9P65E14	74,90	14	16	25	21
B9P65E17	80,80	17	16	25	21
B9P65E19	(80,80)	19	16	25	21
B9P65E22	(89,00)	22	16	25	21
B9P65E24	(89,00)	24	16	25	21

Indivisible package Suggested retail package - Unit price

INSERTS TOOL HOLDERS

ART. B9S20

The tools are made of steel for hardened tools. The part where the insert is housed is tempered at 58/60 HRC, as to make it very resistant to compression and to ensure the tools a long life. They are provided with 4 mm holes, for the forced supply of coolant, that in addition allows the lubrication and the cooling of the insert to extract for the blind hole the chip produced from the processing of slotting. The tools are available in two grip sizes, Ø 32 mm standard e Ø 25 mm on request.

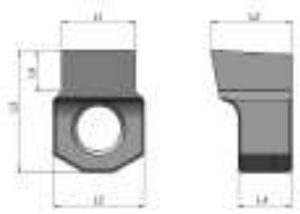


Tech. Code	GR18 Euro	Dimension mm	L1 mm	L2 mm	L3 mm	L4 mm	D1 mm	D2 mm	D3 mm	Hole min. mm	Aligner	Screw
B9S20033230	(191,10)	3	30	139	9	100	32	8	37	8,7	N1	V1
B9S20033240	(191,10)	3	40	149	9	100	32	8	37	8,7	N1	V1
B9S20043240	(191,10)	4	40	149	9	100	32	10	37	11	N1	V1
B9S20043256	(191,10)	4	56	165	9	100	32	10	37	11	N1	V1
B9S20053246	(147,00)	5	46	155	9	100	32	12	37	13	N1	V1
B9S20053266	(191,10)	5	66	175	9	100	32	12	37	13	N1	V1
B9S20063256	(191,10)	6	56	56	9	100	32	16	37	17	N2	V2
B9S20063281	(191,10)	6	81	190	9	100	32	16	37	17	N2	V2
B9S20083268	(191,10)	8	68	177	9	100	32	20	37	21,5	N2	V2
B9S200832100	(191,10)	8	100	209	9	100	32	20	37	21,5	N2	V2
B9S20103286	(210,20)	10	86	195	9	100	32	25	37	28	N3	V3
B9S201032126	(210,20)	10	126	235	9	100	32	25	37	28	N3	V3
B9S201232104	(161,70)	12	104	213	9	100	32	30	37	32	N3	V3
B9S201232161	(210,20)	12	161	270	9	100	32	30	37	32	N3	V3

INSERTS FOR SLOTS

ART. B9S25

The inserts for slots are made in sintered alloy, that after a thermal treatment it reaches a hardness of 70-71 HRC. This material gives the inserts a high toughness which allows them to withstand high pressure. The inserts also undergo a TIN surface coating treatment. The inserts are sharp and tapered on all their sides. This process eliminates flank contact that prevents the cutting perpendicular of all reference axis parts during slotting. Available on request inserts P6 tolerance D10 -D11 or with chamfer holes of 0.2x45° (H7-SM e P6-SM) and the walls of the quarry broached, this leaving the holes free of burrs. This type of bevel is suitable only on the premises for UNI keys.

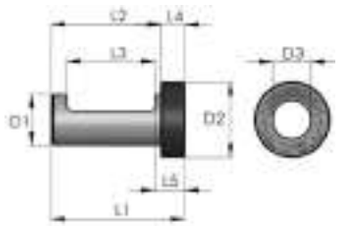


Tech. Code	GR22 Euro	Dimension mm	Tolerance	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm	Tool	
B9S2503H7	(41,40)	3	H7	3,010	6,08	6,5	5	7,5	2	B9S200332xx	2
B9S2504H7	(42,60)	4	H7	4,012	6,08	7	5	8	2,6	B9S200432xx	2
B9S2505H7	(42,60)	5	H7	5,012	6,08	7	5	8	3	B9S200532xx	2
B9S2506H7	(51,20)	6	H7	6,012	10,08	9	6	13,5	4	B9S200632xx	2
B9S2508H7	(51,20)	8	H7	8,015	10,08	9	6	13,5	4,5	B9S200832xx	2
B9S2510H7	(63,90)	10	H7	10,015	13,1	14	10	18,5	6	B9S201032xx	2
B9S2512H7	(63,90)	12	H7	12,018	13,1	14	10	18,5	6,5	B9S201232xx	2

ECCENTRIC BUSHINGS FOR CNC LATHES

ART. B9S70

The eccentric bushing is an essential accessory for all tomes that lack the axis of Y. This bush allows to correct all symmetry errors that may appear in slotting workings and tools made in steel are then hardened and grounded. Its working range varies from 0.5 mm Y+ a 0.5 mm Y-. On request the eccentric bush can be produced in different sizes that enables them to be used on all types of machines on the market.



Tech. Code	GR18 Euro	Model	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	D1 mm	D2 mm	D3 mm
B9S70B32	(147,00)	B32	85	70	58	15	20	32 H7	48	25
B9S70B40	(168,00)	B40	95	80	66	15	20	40 H7	55	32
B9S70B40VDI	(168,00)	B40-VDI	80	65	51	15	20	40 H7	55	32

REPLACEMENT SCREWS FOR FIXING SLOTTING INSERTS

ART. B9S96

Replacement screws for fixing inserts.

Tech. Code	GR30 Euro	Model	Type	Misura mm
B9S96V1	(5,50)	V1	TORX	M 2,5 x 8
B9S96V2	(7,20)	V2	TORX	M 4 x 10
B9S96V3	(8,80)	V3	TORX	M 6 x 15

Indivisible package Suggested retail package - Unit price

KERFOLG
" successfull "

CLAMPING SYSTEM

KERFOLG
SCHÜSSLER
ERDGLU
WRK
SAC

C0
2 - 13
Toolholders
DIN 69871

KERFOLG
SCHÜSSLER
ERDGLU
WRK
SAC

C1
14 - 23
Toolholders
MAS 403 BT

KERFOLG
SCHÜSSLER
ERDGLU
WRK
SAC

C2
24 - 32
Toolholders
HSK DIN 69893A
ISO266Z3-1

KERFOLG
TUKOY
SAC
ERDGLU

C3
33 - 36
Toolholders
DIN 2080, CM, ER
cylindrical

KERFOLG
GERARDI
WRK
SAC
BILZ

C4
37 - 55
Collets
Toolholders accessories

ALGRA

C5
56 - 66
Driven Toolholders
VDI Tool

KERFOLG
GERARDI
OML
ARNOLD
RÖHM

C6
67 - 87
Lathe chucks,
clamping and
live centres,
magnetic plates

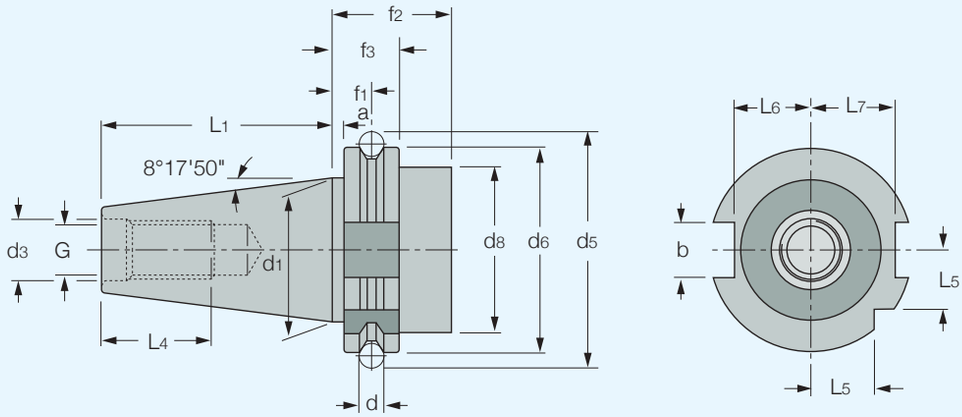
TUKOY

C7
88 - 97
Clamping elements

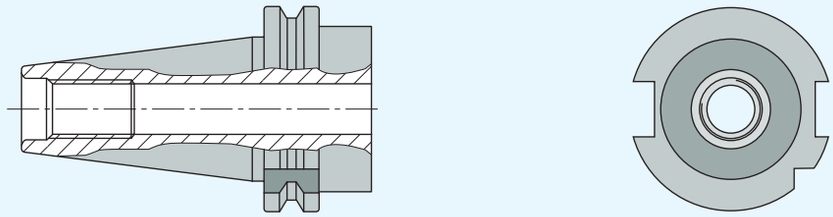
OML

C8
98 - 103
ZERO POINT
clamping system

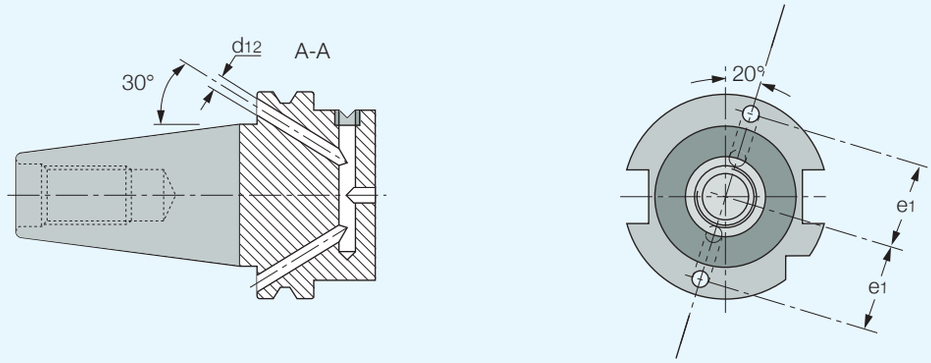
Type A



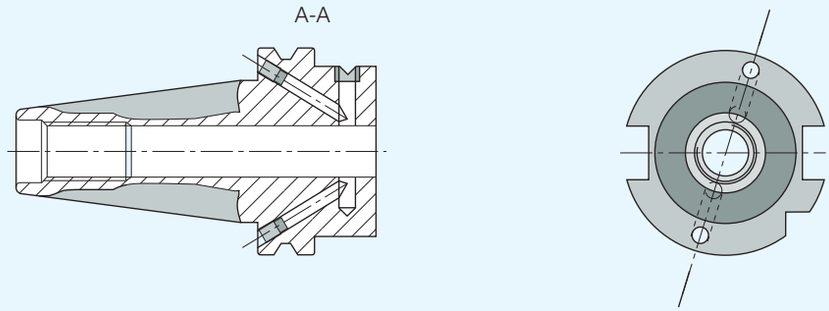
Type AD
Coolant Hole



Type B
Coolant Through Flange



Type ADB
Coolant Hole or Coolant through Flange



DIN69871 Type A/AD/B/ADB

Shank	$a^{\pm 0.1}$	$b_{(H12)}$	d	d_1	G	d_3 (H7)	d_5 ±0.05	d_6	$d_{8\ max}$	f_1 ±0.1
SK 30	3.2	16.1	7	31.75	M12	13	59.30	50	45	11.1
SK 40	3.2	16.1	7	44.45	M16	17	72.30	63.55	50	11.1
SK 50	3.2	25.7	7	69.85	M24	25	107.25	97.50	80	11.1

Shank	$f_{2\ min.}$	$f_{3\ -0.1}$	$L_{1\ -0.3}$	$L_{4\ min.}$	$L_{5\ -0.3}$	$L_{6\ -0.4}$	$L_{7\ -0.4}$	e_1 ±0.1	d_{12}	Taper AT3
SK 30	35	19.1	47.80	24	15.0	16.4	19.0	21	4	0.002
SK 40	35	19.1	68.40	32	18.5	22.8	25.0	27	4	0.003
SK 50	35	19.1	101.75	47	30.0	35.5	37.7	42	6	0.004

ER COLLET CHUCKS DIN 69871 SK AD+B

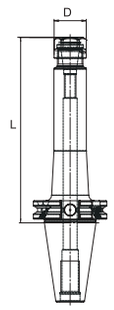
SCHÜSSLER

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0018

Tech. Code	GR34 Euro	SK	ER	D mm	L mm	Ghiera
C0018416070	(95,00)	40	16	28	70	ER16
C0018416100	(103,00)	40	16	28	100	ER16
C0018416160	(125,00)	40	16	28	160	ER16
C0018416200	(212,00)	40	16	28	200	ER16
C0018420070	(95,00)	40	20	34	70	ER20
C0018420100	(103,00)	40	20	34	100	ER20
C0018425070	(98,00)	40	25	42	70	ER25
C0018425100	(107,00)	40	25	42	100	ER25
C0018425160	(147,00)	40	25	42	160	ER25
C0018425200	(212,00)	40	25	42	200	ER25
C0018432070	(101,00)	40	32	50	70	ER32
C0018432100	(109,00)	40	32	50	100	ER32
C0018432160	(160,00)	40	32	50	160	ER32
C0018432200	(228,00)	40	32	50	200	ER32
C0018440070	(109,00)	40	40	63	70	ER40
C0018440100	(130,00)	40	40	63	100	ER40
C0018440160	(167,00)	40	40	63	160	ER40

Tech. Code	GR34 Euro	SK	ER	D mm	L mm	Ghiera
C0018516070	(158,00)	50	16	28	70	ER16
C0018516100	(181,00)	50	16	28	100	ER16
C0018516160	(218,00)	50	16	28	160	ER16
C0018525070	(158,00)	50	25	42	70	ER25
C0018525100	(182,00)	50	25	42	100	ER25
C0018525160	(218,00)	50	25	42	160	ER25
C0018532070	(167,00)	50	32	50	70	ER32
C0018532100	(185,00)	50	32	50	100	ER32
C0018532160	(221,00)	50	32	63	160	ER32
C0018540070	(187,00)	50	40	63	70	ER40
C0018540100	(199,00)	50	40	63	100	ER40
C0018540160	(230,00)	50	40	63	160	ER40



Nut included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.39 - WRENCHES page C.50 - PULL STUDS page C.47

ER COLLET CHUCKS DIN 69871 SK AD+B

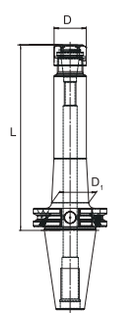
EROGLU

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0016

Tech. Code	GR34 Euro	SK	ER	D mm	D1 mm	L mm	Ghiera
C0016416063	50,50	40	16	28	-	63	ER16
C0016416100	59,00	40	16	28	-	100	ER16
C0016416130	78,00	40	16	28	-	130	ER16
C0016416160	96,50	40	16	28	32	160	ER16
C0016425060	50,50	40	25	42	-	60	ER25
C0016425100	65,50	40	25	42	-	100	ER25
C0016425130	80,50	40	25	42	-	130	ER25
C0016425160	98,50	40	25	42	46	160	ER25
C0016432070	54,00	40	32	50	-	70	ER32
C0016432100	65,50	40	32	50	-	100	ER32
C0016432130	81,50	40	32	50	-	130	ER32
C0016432160	101,50	40	32	50	-	160	ER32
C0016440080	58,00	40	40	63	-	80	ER40
C0016440100	72,50	40	40	63	-	100	ER40
C0016440130	84,50	40	40	63	-	130	ER40
C0016440160	108,00	40	40	63	-	160	ER40

Tech. Code	GR34 Euro	SK	ER	D mm	D1 mm	L mm	Ghiera
C0016525060	80,50	50	25	42	-	60	ER25
C0016525100	98,50	50	25	42	-	100	ER25
C0016525160	133,00	50	25	42	-	160	ER25
C0016532070	84,00	50	32	50	-	70	ER32
C0016532100	116,50	50	32	50	-	100	ER32
C0016532160	133,00	50	32	50	-	160	ER32
C0016540080	84,50	50	40	63	-	80	ER40
C0016540100	119,50	50	40	63	-	100	ER40
C0016540160	136,00	50	40	63	-	160	ER40



Nut included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.38 - WRENCHES page C.49 - PULL STUDS page C.47

ER COLLET CHUCKS DIN 69871 SK AD+B

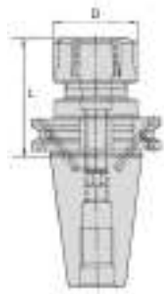
WRK

SK 40 | G 6.3 12.000 rpm | AT3 TAPER

ART. C0010

Tech. Code	GR33 Euro	SK	ER	D mm	L mm	Ghiera
C001043270	53,00	40	32	50	70	ER32

Nut included. Collets ER DIN 6499.
NB.: Chucks with length exceeding 100 mm balancing G 6.3 8.000 rpm.



- NUTS page C.44 - COLLETS ER page C.38 - WRENCHES page C.49 - PULL STUDS page C.47

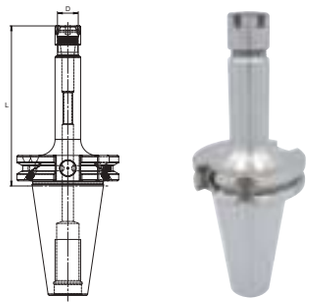
ER MINI COLLET CHUCKS DIN 69871 SK AD+B

SCHÜSSLER

SK 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0019

Tech. Code	GR34 Euro	SK	ER	D mm	L mm
C0019411070	(153,00)	40	11	16	70
C0019411100	(173,00)	40	11	16	100
C0019411130	(194,00)	40	11	16	130
C0019411160	(206,00)	40	11	16	160
C0019416070	(153,00)	40	16	22	70
C0019416100	(173,00)	40	16	22	100
C0019416130	(194,00)	40	16	22	130
C0019416160	(206,00)	40	16	22	160
C0019420100	(173,00)	40	20	28	100
C0019420130	(194,00)	40	20	28	130
C0019420160	(206,00)	40	20	28	160
C0019425100	(173,00)	40	25	35	100
C0019425130	(194,00)	40	25	35	130
C0019425160	(206,00)	40	25	35	160



- NUTS page C.44 - COLLETS ER page C.39 - WRENCHES page C.50 - PULL STUDS page C.47

ER MINI COLLET CHUCKS DIN 69871 SK AD+B

EROGLU

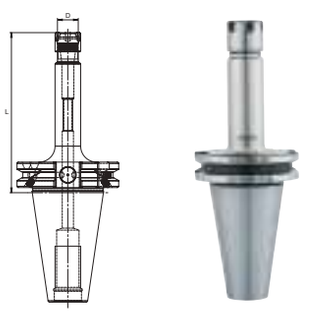
SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0017

Tech. Code	GR34 Euro	SK	ER	D mm	L mm	RING NUT
C0017411100	116,50	40	11 Mini	16	100	ER11
C0017411130	126,50	40	11 Mini	16	130	ER11
C0017416100	87,00	40	16 Mini	22	100	ER16
C0017416130	107,00	40	16 Mini	22	130	ER16

Ring nut included

Tech. Code	GR34 Euro	SK	ER	D mm	L mm	RING NUT
C0017516100	104,50	50	16 Mini	22	100	ER16
C0017516130	129,50	50	16 Mini	22	130	ER16



- NUTS page C.44 - COLLETS ER page C.38 - WRENCHES page C.49 - PULL STUDS page C.47

Indivisible package Suggested retail package - Unit price

HAWK EYE CHUCKS SK AD+B

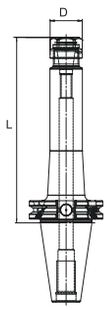
SCHÜSSLER

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0023

Tech. Code	GR34 Euro	SK	ER	D mm	L mm
C0023416070	(162,00)	40	16	34	70
C0023416100	(179,00)	40	16	34	100
C0023416130	(197,00)	40	16	34	130
C0023416160	(219,00)	40	16	34	160
C0023420070	(168,00)	40	20	38	70
C0023425070	(168,00)	40	25	44	70
C0023425100	(187,00)	40	25	44	100
C0023425130	(205,00)	40	25	44	130
C0023425160	(225,00)	40	25	44	160
C0023432070	(171,00)	40	32	52	70
C0023432100	(189,00)	40	32	52	100
C0023432130	(209,00)	40	32	52	130
C0023432160	(228,00)	40	32	52	160
C0023440070	(195,00)	40	40	62	70
C0023440100	(210,00)	40	40	62	100

Tech. Code	GR34 Euro	SK	ER	D mm	L mm
C0023525070	(234,00)	50	25	44	70
C0023525100	(255,00)	50	25	44	100
C0023525130	(277,00)	50	25	44	130
C0023525160	(305,00)	50	25	44	160
C0023532070	(237,00)	50	32	52	70
C0023532100	(263,00)	50	32	52	100
C0023532130	(287,00)	50	32	52	130
C0023532160	(313,00)	50	32	52	160
C0023540070	(269,00)	50	40	62	70
C0023540100	(296,00)	50	40	62	100
C0023540130	(318,00)	50	40	62	130
C0023540160	(342,00)	50	40	62	160



Ring included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.39 - WRENCHES page C.50 - PULL STUDS page C.47

POWER CHUCKS DIN 69871 SK FORMA AD+B

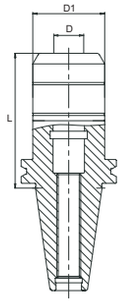
EROGLU

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0026

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm
C002642090	222,50	40	20	90	48
C0026432100	233,50	40	32	100	68

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm
C002652070	(314,00)	50	20	70	48
C002653295	(332,00)	50	32	95	68



- WRENCHES F.S. page C.50 - COLLETS FS page C.44 - PULL STUDS page C.47

HYDRAULIC CHUCKS DIN 69871 SK AD+B

KERFOLG

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

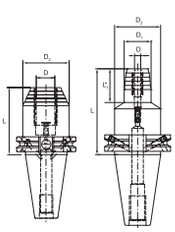
ART. C0031

Tech. Code	GR31 Euro	SK	D mm	L mm	D1 mm	D2 mm	L1 mm	Figure
C0031412080	(419,00)	40	12	80.5	32	49.5	40	2
C0031416080	(419,00)	40	16	80.5	38	49.5	45	2
C0031420080	(419,00)	40	20	80.5	42	49.5	47	2
C0031420064*	(565,00)	40	20	64.5	-	49.5	-	1

* Short heavy duty design.

For tools with cylindrical shank tolerance h6. Always respect minimum clamping depth.

Tech. Code	GR31 Euro	SK	D mm	L mm	D1 mm	D2 mm	L1 mm	Figure
C0031520080	(539,00)	50	20	80.5	42	49.5	42	2
C0031532081*	(601,00)	50	32	81	-	72	-	1



- REDUCTION H.C. page C.44 - PULL STUDS page C.47

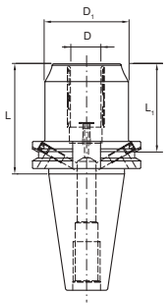
HYDRAULIC CHUCKS STRONG LOCKING DIN 69871 SK AD+B

KERFOLG

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0032

Structural characteristics:
- Extremely high clamping force and radial stiffness
- Anti-vibration effect
- High transferability of twisting
- Used on all types of attachments
- Suitable for roughing and milling operations
- High flexibility with the use of reducing sleeves



Tech. Code	GR31 Euro	SK	D mm	L mm	L1 mm	D1 mm	G
C0032420064	268,00	40	20	64.5	51	49	M16 x 1 x 13,5

Tech. Code	GR31 Euro	SK	D mm	L mm	L1 mm	D1 mm	G
C0032532081	310,00	50	32	81	61	72	M16 x 1 x 13,5

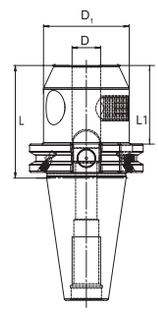
- REDUCTION H.C. page C.44 - PULL STUDS page C.47

WELDON CHUCKS DIN 69871 SK AD+B

SCHÜSSLER

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0039



Tech. Code	GR34 Euro	SK	D mm	D1 mm	L mm	L1 mm
C0039406050	(79,00)	40	6	25	50	35
C0039406100	(97,00)	40	6	25	100	35
C0039406160	(154,00)	40	6	25	160	35
C0039408050	(79,00)	40	8	28	50	35
C0039408100	(97,00)	40	8	28	100	35
C0039408160	(154,00)	40	8	28	160	35
C0039410050	(78,00)	40	10	35	50	41
C0039410100	(95,00)	40	10	35	100	41
C0039410160	(148,00)	40	10	35	160	41
C0039412050	(79,00)	40	12	42	50	48
C0039412100	(95,00)	40	12	42	100	48
C0039412160	(148,00)	40	12	42	160	48
C0039414050	(78,00)	40	14	44	50	48
C0039414100	(95,00)	40	14	44	100	48
C0039414160	(148,00)	40	14	44	160	48
C0039416063	(78,00)	40	16	48	63	51
C0039416100	(95,00)	40	16	48	100	51
C0039416160	(148,00)	40	16	48	160	51
C0039418063	(78,00)	40	18	48	63	51
C0039420063	(78,00)	40	20	52	63	53
C0039420100	(95,00)	40	20	52	100	53
C0039420160	(148,00)	40	20	52	160	53
C0039425100	(101,00)	40	25	65	100	60
C0039432100	(109,00)	40	32	72	100	64

Tech. Code	GR34 Euro	SK	D mm	D1 mm	L mm	L1 mm
C0039506063	(155,00)	50	6	25	63	35
C0039506100	(171,00)	50	6	25	100	35
C0039508063	(155,00)	50	8	28	63	35
C0039508100	(171,00)	50	8	28	100	35
C0039510063	(152,00)	50	10	35	63	41
C0039510100	(169,00)	50	10	35	100	41
C0039512063	(152,00)	50	12	42	63	48
C0039512100	(169,00)	50	12	42	100	48
C0039514063	(152,00)	50	14	44	63	48
C0039514100	(169,00)	50	14	44	100	48
C0039516063	(152,00)	50	16	48	63	51
C0039516100	(169,00)	50	16	48	100	51
C0039520063	(152,00)	50	20	52	63	53
C0039520100	(169,00)	50	20	52	100	53
C0039525080	(176,00)	50	25	65	80	60
C0039525100	(193,00)	50	25	65	100	60
C0039532100	(193,00)	50	32	72	100	64

Clamping screw included.

- PULL STUDS page C.47 - CLAMPING SCREW page C.49

WELDON CHUCKS DIN 69871 SK AD+B

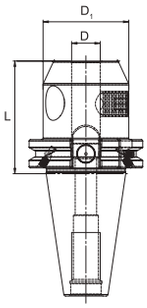
EROGLU

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0046

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm
C0046406050	41,50	40	6	50	25
C0046406100	49,50	40	6	100	25
C0046406160	(100,50)	40	6	160	25
C0046408050	39,50	40	8	50	28
C0046408100	46,00	40	8	100	28
C0046408160	(94,00)	40	8	160	28
C0046410050	39,50	40	10	50	35
C0046410100	46,00	40	10	100	35
C0046410160	(94,00)	40	10	160	35
C0046412050	39,50	40	12	50	42
C0046412100	46,00	40	12	100	42
C0046412160	(94,00)	40	12	160	42
C0046416063	39,50	40	16	63	48
C0046416100	46,00	40	16	100	48
C0046416160	(94,00)	40	16	160	48
C0046420063	39,50	40	20	63	52
C0046420100	46,00	40	20	100	52
C0046420160	(94,00)	40	20	160	52
C0046425100	46,00	40	25	100	63
C0046425160	(102,50)	40	25	160	63
C0046432100	48,00	40	32	100	72
C0046432160	(106,00)	40	32	160	72

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm
C0046512063	58,50	50	12	63	42
C0046516063	58,50	50	16	63	48
C0046520063	58,50	50	20	63	52
C0046525080	65,00	50	25	80	63
C0046532100	72,00	50	32	100	72
C0046540100	76,50	50	40	100	80



Clamping screw included.

- PULL STUDS page C.47 - CLAMPING SCREW page C.49

SHRINK FIT CHUCKS DIN 69871 SKAD+B

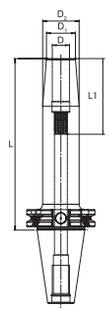
SCHÜSSLER

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0059

Tech. Code	GR34 Euro	SK	D mm	D1 mm	D2 mm	L mm	L1 mm
C0059403080	(168,00)	40	3	12	17	80	-
C0059404080	(168,00)	40	4	12	17	80	-
C0059405080	(168,00)	40	5	12	17	80	-
C0059406080	(135,00)	40	6	21	27	80	37
C0059408080	(135,00)	40	8	21	27	80	37
C0059410080	(135,00)	40	10	24	32	80	42
C0059412080	(135,00)	40	12	24	32	80	48
C0059414080	(135,00)	40	14	27	34	80	48
C0059416080	(135,00)	40	16	27	34	80	51
C0059418080	(135,00)	40	18	33	42	80	51
C0059420080	(135,00)	40	20	33	42	80	53
C0059425100	(138,00)	40	25	44	53	100	59
C0059432100	(146,00)	40	32	44	53	100	63

Tech. Code	GR34 Euro	SK	D mm	D1 mm	D2 mm	L mm	L1 mm
C0059506080	(226,00)	50	6	21	21	80	37
C0059508080	(226,00)	50	8	21	21	80	37
C0059510080	(226,00)	50	10	24	24	80	42
C0059514080	(226,00)	50	14	27	27	80	48
C0059516080	(226,00)	50	16	27	27	80	51
C0059518080	(238,00)	50	18	33	33	80	51
C0059520080	(238,00)	50	20	33	33	80	53
C0059525100	(244,00)	50	25	44	44	100	59
C0059532100	(244,00)	50	32	44	44	100	63



Only for tools with h6 tolerance shank. Adjustment screw included.

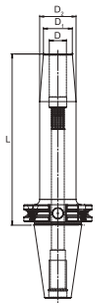
SHRINK FIT CHUCKS DIN 69871 SK AD+B

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0066

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm	D2 mm
C0066404080	122,00	40	4	80	12	20
C0066404120	138,50	40	4	120	12	20
C0066404160	(156,00)	40	4	160	12	20
C0066406080	86,00	40	6	80	21	27
C0066406120*	123,00	40	6	120	21	27
C0066406160*	144,00	40	6	160	21	27
C0066408080	86,00	40	8	80	21	27
C0066408120	123,00	40	8	120	21	27
C0066408160	144,00	40	8	160	21	27
C0066410080	86,00	40	10	80	24	32
C0066410120	123,00	40	10	120	24	32
C0066410160	144,00	40	10	160	24	32
C0066412080	86,00	40	12	80	24	32
C0066412120	123,00	40	12	120	24	32
C0066412160	144,00	40	12	160	24	32
C0066416080	86,00	40	16	80	27	34
C0066416120	123,00	40	16	120	27	34
C0066416160	(144,00)	40	16	160	27	34
C0066420080	86,00	40	20	80	33	42
C0066420120	123,00	40	20	120	33	42
C0066420160	144,00	40	20	160	33	42

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm	D2 mm
C0066506080	159,50	50	6	80	21	27
C0066508080	159,50	50	8	80	21	27
C0066510080	159,50	50	10	80	24	32
C0066512080	159,50	50	12	80	24	32
C0066516080	159,50	50	16	80	27	34
C0066520080	159,50	50	20	80	33	42
C0066525100	159,50	50	25	100	44	53
C0066532100	159,50	50	32	100	44	53



For tools only with shank in tolerance h6. *Pre-set screw not included.

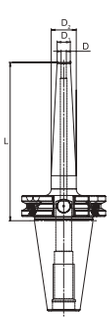
- PULL STUDS page C.47

SLIM SHRINK FIT CHUCKS DIN 69871 SK AD+B

SK 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0067

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm	D2 mm
C0067403120*	(171,50)	40	3	120	09	18
C0067404120*	(167,00)	40	4	120	10	19
C0067406160	(158,00)	40	6	160	12	25
C0067408160	(158,00)	40	8	160	14	27
C0067410160	(158,00)	40	10	160	16	29
C0067412160	(158,00)	40	12	160	18	31



For tools only with shank in tolerance h6. *Pre-set screw not included.

- PULL STUDS page C.47

Indivisible package Suggested retail package - Unit price

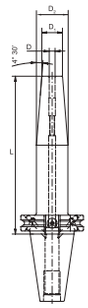
SHRINK FIT CHUCKS DIN 69871 SK AD+B

KERFOLG

SK 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0063

Tech. Code	GR31 Euro	SK	D mm	L mm	D1 mm	D2 mm
C0063403070	221,00	40	3	70	12	17
C0063403120	221,00	40	3	120	12	17
C0063404070	221,00	40	4	70	12	17
C0063404120	221,00	40	4	120	12	17
C0063405070	187,00	40	5	70	12	17
C0063405120	221,00	40	5	120	12	17
C0063406080	151,00	40	6	80	21	31
C0063406120	204,00	40	6	120	21	31
C0063406160	229,00	40	6	160	21	31
C0063408080	151,00	40	8	80	21	31
C0063408120	204,00	40	8	120	21	32
C0063408160	229,00	40	8	160	21	32
C0063410080	151,00	40	10	80	24	34
C0063410120	204,00	40	10	120	24	34
C0063410160	229,00	40	10	160	24	34
C0063412080	151,00	40	12	80	24	34
C0063412120	204,00	40	12	120	24	34
C0063412160	229,00	40	12	160	24	34
C0063414080	151,00	40	14	80	27	37
C0063414160	229,00	40	14	160	27	36
C0063416080	151,00	40	16	80	27	37
C0063416120	204,00	40	16	120	27	36
C0063416160	229,00	40	16	160	27	36
C0063420080	204,00	40	20	80	33	43
C0063420120	204,00	40	20	120	33	44
C0063425100	151,00	40	25	100	44	50



For tools only with shank with tollerance h6. Preset screw included.

- PULL STUDS page C.47

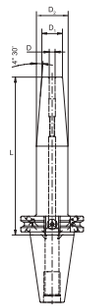
SHRINK FIT CHUCKS DIN 69871 SK AD+B

KERFOLG

SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0064

Tech. Code	GR31 Euro	SK	D mm	L mm	D1 mm	D2 mm
C0064506080	316,00	50	6	80	21	27
C0064508080	246,00	50	8	80	21	27
C0064510080	246,00	50	10	80	24	32
C0064512080	316,00	50	12	80	24	32
C0064520080	316,00	50	20	80	33	42
C0064525100	246,00	50	25	100	44	53
C0064532100	316,00	50	32	100	44	53



For tools only with shank with tollerance h6. Preset screw included.

- PULL STUDS page C.47

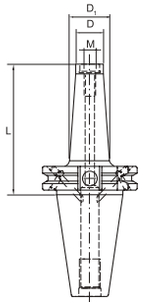
CHUCKS FOR THREADED COUPLING DIN 69871 SK AD+B

SCHÜSSLER

SK 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0102

Tech. Code	GR34 Euro	SK	M	D mm	D1 mm	L mm
C01024M08025	(137,00)	40	M8	13	15	25
C01024M08050	(155,00)	40	M8	13	23	50
C01024M08075	(156,00)	40	M8	13	25	75
C01024M10025	(150,00)	40	M10	18	23	25
C01024M10050	(155,00)	40	M10	18	25	50
C01024M10075	(171,00)	40	M10	18	30	75
C01024M10100	(198,00)	40	M10	18	35	100
C01024M10150	(238,00)	40	M10	18	45	150
C01024M12025	(137,00)	40	M12	21	24	25
C01024M12050	(155,00)	40	M12	21	30	50
C01024M12075	(171,00)	40	M12	21	35	75
C01024M12100	(196,00)	40	M12	21	38	100
C01024M12150	(233,00)	40	M12	21	48	150
C01024M16025	(142,00)	40	M16	29	29	25
C01024M16050	(156,00)	40	M16	29	34	50
C01024M16075	(174,00)	40	M16	29	35	75
C01024M16100	(200,00)	40	M16	29	40	100
C01024M16150	(236,00)	40	M16	29	48	150



CHUCKS FOR THREADED COUPLIN DIN 69871 SK FORM AD+B

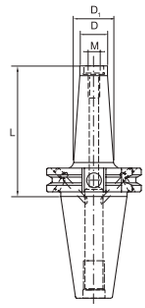
EROGLU

SK 40 | SK 50 | G 2.5 20.000 rpm

ART. C0103

Tech. Code	GR34 Euro	SK	M	D mm	D1 mm	L mm
C0103408044	(86,00)	40	8	13	15	44
C0103408069	(99,50)	40	8	13	22,5	69
C0103408094	(108,50)	40	8	13	23	94
C0103410044	(86,00)	40	10	18	20	44
C0103410069	(94,50)	40	10	18	22,5	69
C0103410094	(108,50)	40	10	18	27,5	94
C0103412044	(86,00)	40	12	21	24	44
C0103412069	(94,50)	40	12	21	24	69
C0103412094	(108,50)	40	12	21	31	94
C0103416044	(89,00)	40	16	29	-	44
C0103416069	(99,50)	40	16	29	34	69
C0103416094	(108,50)	40	16	29	34	94

Tech. Code	GR34 Euro	SK	M	D mm	D1 mm	L mm
C0103510069	(119,00)	50	10	18	23	69
C0103512069	(119,00)	50	12	21	24	69
C0103516069	(119,00)	50	16	29	34	69



FIXED DRIVE MILL HOLDER DIN 69871 SK AD+B

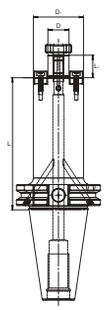
SCHÜSSLER

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0079

Tech. Code	GR34 Euro	SK	D mm	D1 mm	L mm	L1 mm
C0079416035	(124,00)	40	16	38	35	17
C0079416060	(139,00)	40	16	38	60	17
C0079416100	(166,00)	40	16	38	100	17
C0079422035	(125,00)	40	22	48	35	19
C0079422060	(139,00)	40	22	48	60	19
C0079422100	(167,00)	40	22	48	100	19
C0079422160	(210,00)	40	22	48	160	19
C0079427035	(130,00)	40	27	50	35	21
C0079427060	(148,00)	40	27	50	60	21
C0079427100	(175,00)	40	27	50	100	21
C0079427160	(213,00)	40	27	50	160	21
C0079432050	(134,00)	40	32	78	50	24
C0079432070	(166,00)	40	32	78	70	24
C0079432100	(206,00)	40	32	78	100	24
C0079432160	(255,00)	40	32	78	160	24
C0079440070	(203,00)	40	40	89	70	27

Tech. Code	GR34 Euro	SK	D mm	D1 mm	L mm	L1 mm
C0079522035	(199,00)	50	22	48	35	19
C0079522100	(229,00)	50	22	48	100	19
C0079522160	(359,00)	50	22	48	160	19
C0079527035	(199,00)	50	27	60	35	21
C0079527100	(234,00)	50	27	60	100	21
C0079527160	(359,00)	50	27	60	160	21
C0079532035	(207,00)	50	32	78	35	24
C0079532100	(257,00)	50	32	78	100	24
C0079532160	(379,00)	50	32	78	160	24
C0079540050	(237,00)	50	40	89	50	27
C0079540100	(264,00)	50	40	89	100	27
C0079540160	(392,00)	50	40	89	160	27



Drive ring and clamping screw included.

- PULL STUDS page C.47 - SCREWS page C.50 - RINGS page C.50

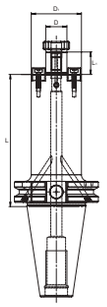
FIXED-DRIVE SHELL MILL HOLDER CHUCKS DIN 69871 SK 40 AD+B

EROGLU

SK 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0084

Tech. Code	GR34 Euro	SK	D mm	L mm	L1 mm	D1 mm
C0084416035	54,50	40	16	35	17	38
C0084416100	63,00	40	16	100	17	38
C0084422035	54,50	40	22	35	19	48
C0084422100	66,00	40	22	100	19	48
C0084427045	55,50	40	27	45	21	60
C0084427100	(67,50)	40	27	100	21	60
C0084432050	59,50	40	32	50	24	78
C0084432100	(71,00)	40	32	100	24	78
C0084440050	(72,00)	40	40	50	27	88



Drive ring and clamping screw included

- PULL STUDS page C.47 - SCREWS page C.50 - RINGS page C.50

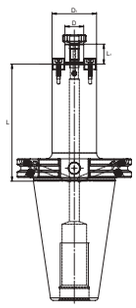
FIXED-DRIVE SHELL MILL HOLDER CHUCKS DIN69871 SK 50 AD+B

EROGLU

SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0085

Tech. Code	GR34 Euro	SK	D mm	L mm	L1 mm	D1 mm
C0085516035	85,50	50	16	35	17	38
C0085516100	92,00	50	16	100	17	38
C0085522035	72,50	50	22	35	19	48
C0085522100	88,50	50	22	100	19	48
C0085527040	72,50	50	27	40	21	60
C0085527100	88,50	50	27	100	21	60
C0085532050	76,50	50	32	50	24	78
C0085532100	94,00	50	32	100	24	78
C0085540050	88,50	50	40	50	27	88
C0085540100	(103,50)	50	40	100	27	88



Drive ring and clamping screw included

- PULL STUDS page C.47 - SCREWS page C.50 - RINGS page C.50

COMBINED MILL HOLDERS DIN 69871 SK AD+B

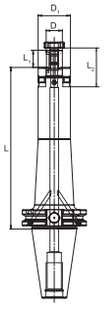
SCHÜSSLER

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0089

Tech. Code	GR34 Euro	SK	D mm	D1 mm	L mm	L1 mm	L2 mm
C0089416055	(115,00)	40	16	32	55	17	27
C0089416100	(121,00)	40	16	32	100	17	27
C0089416160	(171,00)	40	16	32	160	17	27
C0089422055	(116,00)	40	22	40	55	19	31
C0089422100	(124,00)	40	22	40	100	19	31
C0089422160	(178,00)	40	22	40	160	19	31
C0089427055	(125,00)	40	27	48	55	21	33
C0089427100	(134,00)	40	27	48	100	21	33
C0089427160	(184,00)	40	27	48	160	21	33
C0089432060	(131,00)	40	32	58	60	24	38
C0089432100	(139,00)	40	32	58	100	24	38
C0089432160	(202,00)	40	32	58	160	24	38

Tech. Code	GR34 Euro	SK	D mm	D1 mm	L mm	L1 mm	L2 mm
C0089522055	(184,00)	50	22	40	55	19	31
C0089522100	(196,00)	50	22	40	100	19	31
C0089522160	(248,00)	50	22	40	160	19	31
C0089527055	(184,00)	50	27	48	55	21	33
C0089527100	(208,00)	50	27	48	100	21	33
C0089527160	(262,00)	50	27	48	160	21	33
C0089532055	(196,00)	50	32	58	55	24	38
C0089532100	(219,00)	50	32	58	100	24	38
C0089532160	(276,00)	50	32	58	160	24	38
C0089540055	(218,00)	50	40	70	55	27	41
C0089540100	(253,00)	50	40	70	100	27	41
C0089540160	(303,00)	50	40	70	160	27	41



Drive ring and tig clamping screw included.

- PULL STUDS page C.47 - SCREWS page C.50 - RINGS page C.50

COMBI-DRIVE SHELL MILL HOLDER CHUCKS DIN 69871 SK AD+B

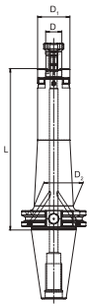
EROGLU

SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0096

Tech. Code	GR34 Euro	SK	D mm	L mm	L1 mm	D1 mm	D2 mm
C0096416055	57,00	40	16	55	17	32	-
C0096416100	72,00	40	16	100	17	32	-
C0096416160	116,50	40	16	160	17	32	39
C0096422055	59,50	40	22	55	19	40	-
C0096422100	73,00	40	22	100	19	40	-
C0096422160	(122,50)	40	22	160	19	40	46,5
C0096427055	59,50	40	27	55	21	48	-
C0096427100	74,00	40	27	100	21	48	-
C0096427160	(128,00)	40	27	160	21	48	-
C0096432060	65,00	40	32	60	24	58	-
C0096432160	(134,50)	40	32	160	24	58	-

Tech. Code	GR34 Euro	SK	D mm	L mm	L1 mm	D1 mm	D2 mm
C0096516055	80,00	50	16	55	17	32	-
C0096516100	(93,00)	50	16	100	17	32	-
C0096516160	(148,50)	50	16	160	17	32	39
C0096522055	80,00	50	22	55	19	40	-
C0096522100	(93,00)	50	22	100	19	40	-
C0096522160	(152,00)	50	22	160	19	40	47
C0096527055	81,00	50	27	55	21	48	-
C0096527100	(94,00)	50	27	100	21	48	-
C0096527160	(157,50)	50	27	160	21	48	55
C0096532055	83,50	50	32	55	24	58	-
C0096532100	(95,00)	50	32	100	24	58	-
C0096532160	(168,00)	50	32	160	24	58	65,5
C0096540055	92,00	50	40	55	27	70	-
C0096540100	(105,00)	50	40	100	27	70	-
C0096540160	(183,50)	50	40	160	27	70	-



Drive ring and clamping screw included.

- PULL STUDS page C.47 - SCREWS page C.50 - RINGS page C.50

QUICK-CLAMPING DRILL CHUCKS DIN 69871 SK AD+B

EROGLU

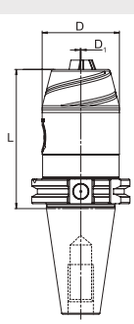
SK 40 | SK 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C0146

Tech. Code	GR34 Euro	SK	D mm	L mm	D1 mm
C014640113	225,00	40	50	90	1-13
C014650113	254,50	50	50	90	1-13

CLOCKWISE COUNTER-CLOCKWISE ROTATION

- PULL STUDS page C.47



QUICK-CLAMPING DRILL CHUCKS DIN 69871 SK A

KERFOLG

SK 40 | SK 50 | G 6.3 25.000 rpm | AT3 TAPER

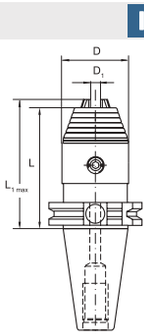
ART. C0141

Tech. Code	GR31 Euro	SK	D mm	L mm	D1 mm	L1 max mm
C014140513	348,00	40	50	90	0.5 - 13	96
C014142516	355,00	40	57	95	2.5 - 16	101

Tech. Code	GR31 Euro	SK	D mm	L mm	D1 mm	L1 max mm
C014152516	406,00	50	57	111	2.5 - 16	117

CLOCKWISE COUNTER-CLOCKWISE ROTATION

- PULL STUDS page C.47



Indivisible package Suggested retail package - Unit price

REDUCER CM FOR BURRS DIN 69871 SK A

EROGLU

SK 40 | SK 50 | G 6.3 15.000 rpm | AT3 TAPER

ART. C0122

Tech. Code	GR34 Euro	SK	CM	D mm	L mm
C01224CM2050	65,50	40	2	32	50
C01224CM3070	65,50	40	3	40	70
C01224CM4095	70,50	40	4	48	95

Tech. Code	GR34 Euro	SK	CM	D mm	L mm
C01225CM3065	85,50	50	3	40	65
C01225CM4070	(93,00)	50	4	48	70
C01225CM5100	95,00	50	5	63	100
C01225CM2060	(85,50)	50	2	32	60

REDUCER CM FOR BITS DIN 69871 SK AD

EROGLU

SK 40 | SK 50 | G 6.3 15.000 rpm | AT3 TAPER

ART. C0123

Tech. Code	GR34 Euro	SK	CM	D mm	L mm
C01234CM1050	37,00	40	1	25	50
C01234CM2050	(37,00)	40	2	32	50
C01234CM3070	(37,00)	40	3	40	70
C01234CM4095	(40,50)	40	4	48	95

Tech. Code	GR34 Euro	SK	CM	D mm	L mm
C01235CM1045	50,50	50	1	25	45
C01235CM2060	50,50	50	2	32	60
C01235CM3065	50,50	50	3	40	65
C01235CM4095	(50,50)	50	4	48	95
C01235CM5105	56,50	50	5	63	105

TAPPING CHUCKS WITH AXIAL COMPENSATION DIN 69871 SK A

SK 40 | SK 50 | AT3 TAPER

ART. C0160

Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity	Ext. mm
C016041960	228,00	SK40 MAS19C L60	38	19	60	M3 - M12	9
C0160431100	292,10	SK40 MAS31C L100	55	31	100	M6 - M20	15
C0160448138	632,50	SK40 MAS48C L138	76	48	138	M14 - M33	24

Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity	Ext. mm
C016051962	338,30	SK50 MAS19C L62	38	19	62	M3 - M12	9
C016053183	366,70	SK50 MAS31C L83	55	31	83	M6 - M20	15
C016048133	672,40	SK50 MAS48C L133	79	48	133	M14 - M33	24

- BUSH WC page C.46 - BUSH WOC page C.46 - PULL STUDS page C.47

TAPPING CHUCKS WITHOUT AXIAL COMPENSATION DIN 69871 SK A

SK 40 | SK 50 | AT3 TAPER

ART. C0150

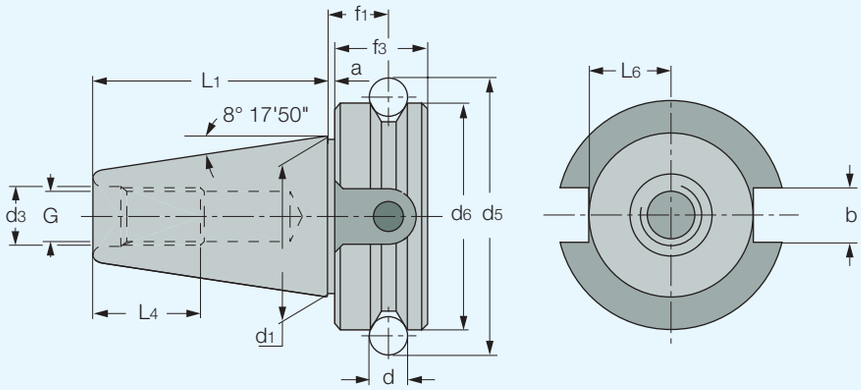
Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C015041959	167,00	SK40 MAS19 L59	33	19	59	M3 - M14
C015043186	177,60	SK40 MAS31 L86	50	31	86	M5 - M22

Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C015053198	(242,70)	SK50 MAS31 L98	50	31	98	M5 - M22

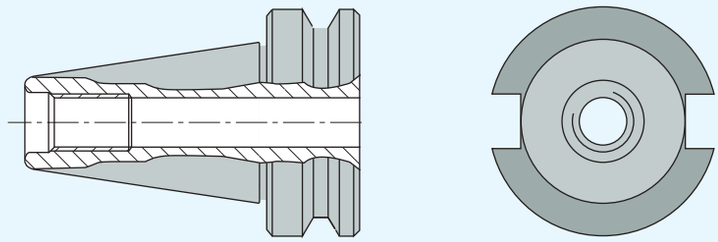
- BUSH WC page C.46 - BUSH WOC page C.46 - PULL STUDS page C.47

MAS 403 BT

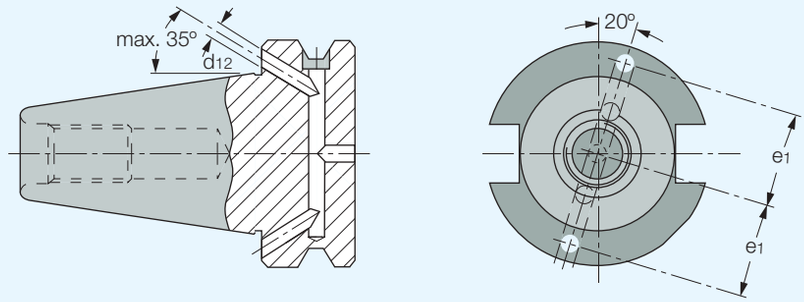
Type A



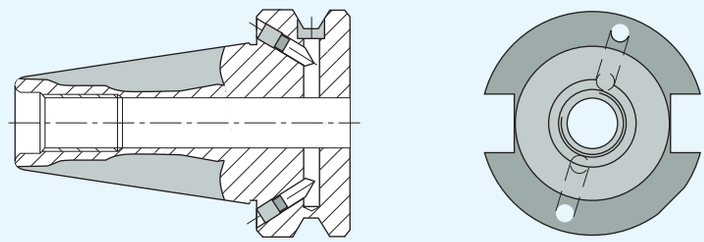
Type AD
Coolant Hole



Type B
Coolant Through Flange



Type ADB
Coolant Hole or Coolant through Flange



Shank	a	b (H12)	d	d_1	G	d_3 (H8)	d_5	d_6 (H8)	f_1 ±0.1
BT 30	2	16.1	8	31.75	M12	12.5	56.144	46	13.6
BT 40	2	16.1	10	44.45	M16	17.0	75.679	63	16.6
BT 50	3	25.7	15	69.85	M24	25.0	119.020	100	23.2

Shank	f_3	L_1 ±0.2	$L_{4\ min}$	$L_{6-0.2}$	e_1 ±0.1	d_{12}	Taper $_{AT3}$
BT 30	20	48.4	24	16.3	21	4	0.002
BT 40	25	65.4	30	22.6	27	4	0.003
BT 50	35	101.8	45	35.4	42	6	0.004

ER COLLECT CHUCKS MAS 403 BT AD+B

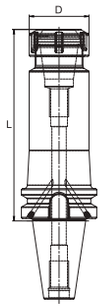
SCHÜSSLER

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1018

Tech. Code	GR34 Euro	BT	ER	D mm	L mm	Ghiera
C1018416070	(95,00)	40	16	28	70	ER16
C1018416100	(103,00)	40	16	28	100	ER16
C1018416160	(125,00)	40	16	28	160	ER16
C1018425070	(95,00)	40	25	42	70	ER25
C1018425100	(103,00)	40	25	42	100	ER25
C1018425160	(147,00)	40	25	42	160	ER25
C1018432070	(98,00)	40	32	50	70	ER32
C1018432100	(109,00)	40	32	50	100	ER32
C1018432160	(160,00)	40	32	50	160	ER32
C1018440070	(109,00)	40	40	63	70	ER40

Tech. Code	GR34 Euro	BT	ER	D mm	L mm	Ghiera
C1018516070	(184,00)	50	16	28	70	ER16
C1018516100	(194,00)	50	16	28	100	ER16
C1018516160	(245,00)	50	16	28	160	ER16
C1018525070	(184,00)	50	25	42	70	ER25
C1018525100	(194,00)	50	25	42	100	ER25
C1018525160	(251,00)	50	25	42	160	ER25
C1018532070	(186,00)	50	32	50	70	ER32
C1018532100	(194,00)	50	32	50	100	ER32
C1018532160	(259,00)	50	32	50	160	ER32
C1018540080	(190,00)	50	40	63	80	ER40
C1018540100	(200,00)	50	40	63	100	ER40
C1018540160	(276,00)	50	40	63	160	ER40



Nut included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.39 - WRENCHES page C.50 - PULL STUDS page C.47

ER COLLECT CHUCKS MAS 403 BT AD+B

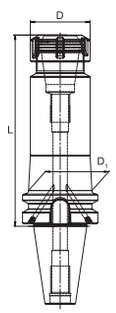
EROGLU

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1016

Tech. Code	GR34 Euro	BT	ER	D mm	D1 mm	L mm	Ghiera
C1016416063	50,50	40	16	28	-	63	ER16
C1016416100	59,00	40	16	28	-	100	ER16
C1016416130	81,00	40	16	28	-	130	ER16
C1016425060	50,50	40	25	42	-	66	ER25
C1016425100	72,00	40	25	42	-	100	ER25
C1016425130	94,00	40	25	42	-	130	ER25
C1016432070	54,00	40	32	50	-	70	ER32
C1016432100	65,50	40	32	50	-	100	ER32
C1016132130	98,00	40	32	50	-	130	ER32
C1016432160	(107,00)	40	32	50	53,5	160	ER32
C1016440080	58,00	40	40	63	-	80	ER40
C1016440100	72,50	40	40	63	-	100	ER40

Tech. Code	GR34 Euro	BT	ER	D mm	D1 mm	L mm	Ghiera
C1016516070	87,50	50	16	28	-	70	ER16
C1016516100	107,00	50	16	28	-	100	ER16
C1016525070	87,00	50	25	42	-	70	ER25
C1016525100	(108,00)	50	25	42	-	100	ER25
C1016532070	90,00	50	32	50	-	70	ER32
C1016532100	(125,00)	50	32	50	-	100	ER32



Nut included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.38 - PULL STUDS page C.47 - WRENCHES page C.49

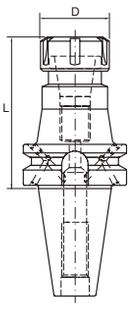
ER COLLET CHUCKS MAS 403 BT AD+B

WRK

BT 40 | G 6.3 12.000 rpm | AT3 TAPER

ART. C1010

Tech. Code	GR33 Euro	BT	ER	D mm	L mm	Ghiera
C101043270	53,00	40	32	50	70	ER32



Nut included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.38 - WRENCHES page C.49

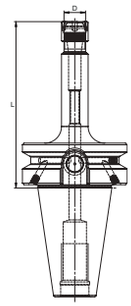
ER COLLET MINI CHUCKS MAS 403 BT AD+B

SCHÜSSLER

BT 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1023

Tech. Code	GR34 Euro	BT	ER	D mm	L mm	Nut
C1023411100	(174,00)	40	11	16	100	ER11
C1023411160	(206,00)	40	11	16	160	ER11
C1023416100	(174,00)	40	16	22	100	ER16
C1023416160	(206,00)	40	16	22	160	ER16
C1023425100	(174,00)	40	25	35	100	ER25
C1023425160	(206,00)	40	25	35	160	ER25



- NUTS page C.44 - COLLETS ER page C.39 - WRENCHES page C.50 - PULL STUDS page C.47

ER MINI COLLET CHUCKS MAS 403 BT AD+B

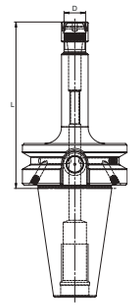
EROGLU

BT 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1017

Ring nut included.

Tech. Code	GR34 Euro	BT	ER	D mm	L mm	Ring nut
C1017410016	116,50	40	11 Mini	16	100	ER 11
C1017410022	71,00	40	16 Mini	22	100	ER16
C1017413022	104,50	40	16 Mini	22	130	ER16
C1017416022	120,50	40	16 Mini	22	160	ER16



- NUTS page C.45 - COLLETS ER page C.38 - WRENCHES page C.49

POWER CHUCKS MAS 403 BT AD+B

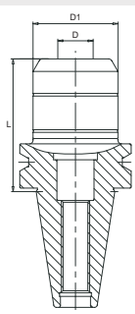
EROGLU

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1026

Tech. Code	GR34 Euro	BT	D mm	L mm	D1 mm
C102642075	222,50	40	20	75	48
C102643290	233,50	40	32	90	68

Tech. Code	GR34 Euro	BT	D mm	L mm	D1 mm
C102652090	314,00	50	20	90	48
C102653295	332,00	50	32	95	68



- WRENCHES F.S. page C.50 - COLLETS FS page C.44 - PULL STUDS page C.47

CHUCKS HAWK EYE BT AD+B

SCHÜSSLER

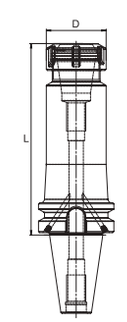
BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1024

Tech. Code	GR34 Euro	BT	ER	D mm	L mm	Ghiera
C1024416070	(162,00)	40	16	34	70	ER16
C1024416100	(179,00)	40	16	34	100	ER16
C1024416130	(197,00)	40	16	34	130	ER16
C1024416160	(219,00)	40	16	34	160	ER16
C1024420070	(168,00)	40	20	38	70	ER20
C1024425070	(168,00)	40	25	44	70	ER25
C1024425100	(187,00)	40	25	44	100	ER25
C1024425130	(205,00)	40	25	44	130	ER25
C1024425160	(225,00)	40	25	44	160	ER25
C1024432070	(171,00)	40	32	52	70	ER32
C1024432100	(189,00)	40	32	52	100	ER32
C1024432130	(209,00)	40	32	52	130	ER32
C1024432160	(228,00)	40	32	52	160	ER32
C1024440070	(195,00)	40	40	62	70	ER40
C1024440100	(210,00)	40	40	62	100	ER40

Tech. Code	GR34 Euro	BT	ER	D mm	L mm	Ghiera
C1024525070	(234,00)	50	25	44	70	ER25
C1024525100	(255,00)	50	25	44	100	ER25
C1024525130	(277,00)	50	25	44	130	ER25
C1024525160	(305,00)	50	25	44	160	ER25
C1024532070	(237,00)	50	32	52	70	ER32
C1024532100	(263,00)	50	32	52	100	ER32
C1024532130	(287,00)	50	32	52	130	ER32
C1024532160	(313,00)	50	32	52	160	ER32
C1024540070	(269,00)	50	40	62	80	ER40
C1024540100	(296,00)	50	40	62	100	ER40
C1024540130	(318,00)	50	40	62	130	ER40
C1024540160	(342,00)	50	40	62	160	ER40

Nut included. Collets ER DIN 6499.



- NUTS page C.44 - COLLETS ER page C.39 - WRENCHES page C.50 - PULL STUDS page C.47

Indivisible package | Suggested retail package - Unit price

WELDON CHUCKS MAS 403 BT AD+B

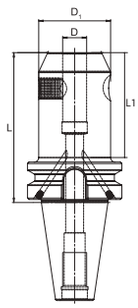
SCHÜSSLER

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1039

Tech. Code	GR34 Euro	BT	D mm	D1 mm	L mm	L1 mm
C1039406050	(79,00)	40	6	25	50	35
C1039406100	(97,00)	40	6	25	100	35
C1039408050	(79,00)	40	8	28	50	35
C1039408100	(97,00)	40	8	28	100	35
C1039410063	(78,00)	40	10	35	63	41
C1039410100	(95,00)	40	10	35	100	41
C1039412063	(78,00)	40	12	42	63	48
C1039412100	(95,00)	40	12	42	100	48
C1039414063	(78,00)	40	14	44	693	48
C1039416063	(78,00)	40	16	48	63	51
C1039416100	(95,00)	40	16	48	100	51
C1039418063	(78,00)	40	18	48	63	51
C1039420063	(78,00)	40	20	52	63	53
C1039420100	(95,00)	40	20	52	100	53
C1039425090	(101,00)	40	25	65	90	60
C1039432100	(109,00)	40	32	72	100	64

Tech. Code	GR34 Euro	BT	D mm	D1 mm	L mm	L1 mm
C1039506063	(167,00)	50	6	25	63	35
C1039508063	(167,00)	50	8	28	63	35
C1039510070	(163,00)	50	10	35	70	41
C1039512080	(163,00)	50	12	42	80	48
C1039516080	(163,00)	50	16	48	80	51
C1039520080	(163,00)	50	20	52	80	53
C1039525100	(187,00)	50	25	65	100	60
C1039532105	(195,00)	50	32	72	105	64



Clamping screw included.

- PULL STUDS page C.47 - CLAMPING SCREW page C.49

WELDON CHUCKS MAS 403 BT AD+B

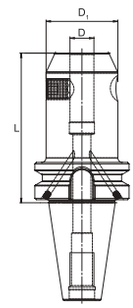
EROGLU

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1046

Tech. Code	GR34 Euro	BT	D mm	L mm	D1 mm
C1046406050	42,00	40	6	50	25
C1046406100	49,50	40	6	100	25
C1046408050	40,00	40	8	50	28
C1046408100	46,50	40	8	100	28
C1046410063	40,00	40	10	63	35
C1046410100	46,50	40	10	100	35
C1046412063	40,00	40	12	63	42
C1046412100	46,50	40	12	100	42
C1046416063	40,00	40	16	63	48
C1046416100	46,50	40	16	100	48
C1046420063	40,00	40	20	63	52
C1046420100	46,50	40	20	100	52
C1046425090	45,00	40	25	90	63
C1046432100	49,00	40	32	100	72

Tech. Code	GR34 Euro	BT	D mm	L mm	D1 mm
C1046512080	(68,50)	50	12	80	42
C1046516080	(68,50)	50	16	80	48
C1046520080	(68,50)	50	20	80	52
C1046525100	(78,50)	50	25	100	63
C1046532105	(80,50)	50	32	105	72
C1046540110	(89,00)	50	40	110	80



Clamping screw included.

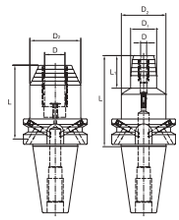
- PULL STUDS page C.47 - CLAMPING SCREW page C.49

HYDRAULIC CHUCKS MAS 403 BT AD+B

KERFOLG

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1031



Tech. Code	GR31 Euro	BT	D mm	L mm	D1 mm	D2 mm	L1 mm	Figure
C1031412090	419,00	40	12	90	32	49.5	40	2
C1031416090	419,00	40	16	90	38	49.5	45	2
C1031420072*	280,00	40	20	72.5	-	49.5	-	1
C1031420090	419,00	40	20	90	42	49.5	47	2

Tech. Code	GR31 Euro	BT	D mm	L mm	D1 mm	D2 mm	L1 mm	Figure
C1031520090	565,00	50	20	90	42	49.5	35	2
C1031532090*	415,00	50	32	90	-	72	-	1

* Short heavy duty design.

For tools with cylindrical shank tolerance h6. Maximum coolant pressure 80 bar. Always respect minimum clamping depth.

- PULL STUDS page C.47 - REDUCTION H.C. page C.44

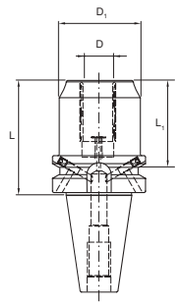
HYDRAULIC CHUCKS STRONG LOCKING MAS 403 BT AD+B

KERFOLG

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1032

Structural characteristics:
- Extremely high clamping force and radial stiffness
- Anti-vibration effect
- High transferability of twisting
- Used on all types of attachments
- Suitable for roughing and milling operations
- High flexibility with the use of reducing sleeves



Tech. Code	GR31 Euro	BT	D mm	L mm	L1 mm	D1 mm	G
C1032420072	268,00	40	20	72,5	51	49	M16 x 1 x 13,5

Tech. Code	GR31 Euro	BT	D mm	L mm	L1 mm	D1 mm	G
C1032532090	324,00	50	32	90	61	72	M16 x 1 x 13,5

- PULL STUDS page C.47 - REDUCTION H.C. page C.44

Related products

WRK CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT

Tech. Code	Size	EU size
K234607	7	S
K234608	8	M
K234609	9	L
K234610	10	XL

Product available in CAP K

Indivisible package Suggested retail package - Unit price

SHRINK FIT CHUCKS MAS 403 BT AD+B

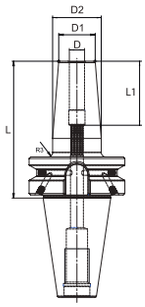
SCHÜSSLER

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1067

Tech. Code	GR34 Euro	BT	D mm	D1 mm	D2 mm	L mm	L1 mm
C1067403090	(181,00)	40	3	12	17	90	-
C1067404090	(181,00)	40	4	12	17	90	-
C1067405090	(181,00)	40	5	12	17	90	-
C1067406090	(140,00)	40	6	21	27	90	37
C1067406120	(189,00)	40	6	21	27	120	37
C1067408090	(140,00)	40	8	21	27	90	37
C1067408120	(189,00)	40	8	21	27	120	37
C1067410090	(140,00)	40	10	24	32	90	42
C1067410120	(189,00)	40	10	24	32	120	42
C1067412090	(140,00)	40	12	24	32	90	48
C1067412120	(189,00)	40	12	24	32	120	48
C1067414090	(140,00)	40	14	27	34	90	48
C1067414120	(189,00)	40	14	27	34	120	48
C1067416090	(140,00)	40	16	27	34	90	51
C1067416120	(189,00)	40	16	27	34	120	51
C1067418090	(140,00)	40	18	33	42	90	51
C1067418120	(189,00)	40	18	33	42	120	51
C1067420090	(140,00)	40	20	33	42	90	53
C1067420120	(189,00)	40	20	33	42	120	53
C1067425100	(144,00)	40	25	44	53	100	59
C1067425120	(189,00)	40	25	44	53	120	59

Tech. Code	GR34 Euro	BT	D mm	D1 mm	D2 mm	L mm	L1 mm
C1067506100	(239,00)	50	6	21	27	100	37
C1067506130	(303,00)	50	6	21	27	130	37
C1067508100	(239,00)	50	8	21	27	100	37
C1067508130	(303,00)	50	8	21	27	130	37
C1067510100	(239,00)	50	10	24	32	100	42
C1067510130	(303,00)	50	10	24	32	130	42
C1067512100	(239,00)	50	12	24	32	100	48
C1067512130	(303,00)	50	12	24	32	130	48
C1067514100	(239,00)	50	14	27	34	100	48
C1067514130	(303,00)	50	14	27	34	130	48
C1067516100	(258,00)	50	16	27	34	100	51
C1067516130	(303,00)	50	16	27	34	130	51
C1067518100	(258,00)	50	18	33	42	100	51
C1067518130	(303,00)	50	18	33	42	130	51
C1067520100	(258,00)	50	20	33	42	100	53
C1067520130	(303,00)	50	20	33	42	130	53
C1067525100	(258,00)	50	25	44	53	100	59
C1067525130	(303,00)	50	25	44	53	130	59
C1067532100	(258,00)	50	32	44	53	100	63
C1067532130	(303,00)	50	32	44	53	130	63



For tools only with shank in tolerance h6. Pre-set screw included.

SHRINK FIT CHUCKS MAS 403 BT AD+B

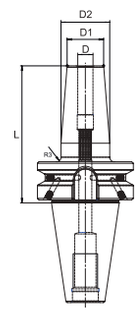
EROGLU

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1066

Tech. Code	GR34 Euro	BT	D mm	L mm	D1 mm	D2 mm
C1066404090	(127,00)	40	4	90	12	20
C1066406090	112,00	40	6	90	21	27
C1066408090	112,00	40	8	90	21	27
C1066408160	(148,00)	40	8	160	21	27
C1066410090	112,00	40	10	90	24	32
C1066410160	(148,00)	40	10	160	24	32
C1066412090	112,00	40	12	90	24	32
C1066412160	(148,00)	40	12	160	24	32
C1066416090	112,00	40	16	90	27	34
C1066420090	112,00	40	20	90	33	42

Tech. Code	GR34 Euro	BT	D mm	L mm	D1 mm	D2 mm
C1066506100	(168,00)	50	6	100	21	27
C1066508100	(168,00)	50	8	100	21	27
C1066510100	(168,00)	50	10	100	24	32
C1066512100	(168,00)	50	12	100	24	32
C1066516100	(168,00)	50	16	100	27	34
C1066520100	(168,00)	50	20	100	33	42
C1066525110	(168,00)	50	25	110	44	53
C1066532110	(168,00)	50	32	110	44	53



For tools only with shank in tolerance h6. Pre-set screw included.

- PULL STUDS page C.47

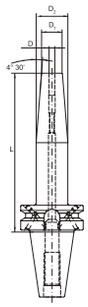
SHRINK FIT CHUCKS MAS 403 BT AD+B

KERFOLG

BT 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1063

Tech. Code	GR31 Euro	BT	D mm	L mm	D1 mm	D2 mm
C1063403090	254,00	40	3	90	10	17
C1063404090	254,00	40	4	90	15	22
C1063405090	196,00	40	5	90	15	22
C1063406090	168,00	40	6	90	21	27
C1063406160	235,00	40	6	160	21	27
C1063408090	168,00	40	8	90	21	27
C1063408160	235,00	40	8	160	21	27
C1063410090	168,00	40	10	90	24	32
C1063410160	235,00	40	10	160	24	32
C1063412090	168,00	40	12	90	24	32
C1063412160	235,00	40	12	160	24	32
C1063416090	168,00	40	16	90	27	34
C1063416160	235,00	40	16	160	27	34
C1063420090	168,00	40	20	90	33	42
C1063420160	235,00	40	20	160	33	42
C1063425100	168,00	40	25	100	44	53
C1063425160	235,00	40	25	160	44	53



For tools only with shank in tollerance h6. Preset screw included.

- PULL STUDS page C.47

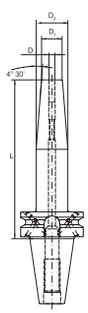
SHRINK FIT CHUCKS MAS 403 BT AD+B

KERFOLG

BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1064

Tech. Code	GR31 Euro	BT	D mm	L mm	D1 mm	D2 mm
C1064506100	392,00	50	6	100	21	27
C1064508100	261,00	50	8	100	21	27
C1064510100	261,00	50	10	100	24	32
C1064512100	392,00	50	12	100	24	32
C1064516100	261,00	50	16	100	27	34
C1064520100	392,00	50	20	100	33	42
C1064525110	261,00	50	25	110	44	53
C1064532100	392,00	50	32	110	44	53



For tools only with shank in tollerance h6. Preset screw included.

- PULL STUDS page C.47

CHUCKS FOR THREADED COUPLING MAS 403 BT AD+B

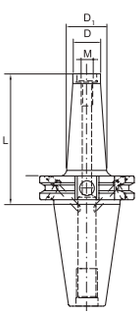
EROGLU

BT 40 | BT 50 | G 2.5 20.000 rpm

ART. C1201

Tech. Code	GR34 Euro	BT	M	D mm	D1 mm	L mm
C1201408052	(89,50)	40	8	13	15	52
C1201408102	(113,00)	40	8	13	23	102
C1201410052	(94,50)	40	10	18	20	52
C1201410102	(113,00)	40	10	18	28	102
C1201412052	(94,50)	40	12	21	24	52
C1201412102	(113,00)	40	12	21	31	102
C1201416052	(98,00)	40	16	29	-	52
C1201416102	(113,00)	40	16	29	34	102

Tech. Code	GR34 Euro	BT	M	D mm	D1 mm	L mm
C1201512088	(120,00)	50	12	21	24	88
C1201516088	(120,00)	50	16	29	34	88



Indivisible package Suggested retail package - Unit price

FIXED-DRIVE SHELL MILL HOLDER CHUCKS MAS 403 BT AD

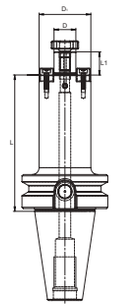
SCHÜSSLER

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1079

Tech. Code	GR34 Euro	BT	D mm	D1 mm	L mm	L1 mm
C1079416035	(124,00)	40	16	38	35	17
C1079416100	(166,00)	40	16	38	100	17
C1079422035	(125,00)	40	22	448	35	19
C1079422100	(167,00)	40	22	48	100	19
C1079427035	(130,00)	40	27	60	35	21
C1079427100	(175,00)	40	27	60	100	21
C1079432050	(134,00)	40	32	78	50	24
C1079432100	(206,00)	40	32	78	100	24
C1079440050	(178,00)	40	40	89	50	27

Tech. Code	GR34 Euro	BT	D mm	D1 mm	L mm	L1 mm
C1079522055	(208,00)	50	22	48	55	19
C1079522100	(239,00)	50	22	48	100	19
C1079527055	(208,00)	50	27	60	55	21
C1079527100	(242,00)	50	27	60	100	21
C1079532055	(214,00)	50	32	78	55	24
C1079532100	(266,00)	50	32	78	100	24
C1079540055	(246,00)	50	40	89	55	27



Drive ring and clamping screw included.

- PULL STUDS page C.47 - SCREWS page C.50 - RINGS page C.50

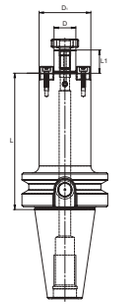
FIXED-DRIVE SHELL MILL HOLDER CHUCKS MAS 403 BT AD

EROGLU

BT 40 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1083

Tech. Code	GR34 Euro	BT	D mm	L mm	L1 mm	D1 mm
C1083416040	48,50	40	16	40	17	38
C1083416100	51,50	40	16	100	17	38
C1083422040	49,00	40	22	40	19	48
C1083422100	51,00	40	22	100	19	48
C1083427040	(49,00)	40	27	40	21	60
C1083427100	(54,50)	40	27	100	21	60
C1083432050	(52,00)	40	32	50	24	78
C1083432100	(63,00)	40	32	100	24	78
C1083440050	(63,50)	40	40	50	27	88



Drive ring and clamping screw included

- RINGS page C.50 - SCREWS page C.50 - PULL STUDS page C.47

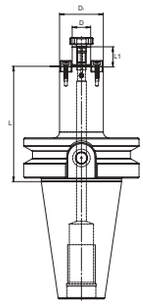
FIXED-DRIVE SHELL MILL HOLDER CHUCKS MAS 403 BT AD

EROGLU

BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1084

Tech. Code	GR34 Euro	BT	D mm	L mm	L1 mm	D1 mm
C1084516100	(80,00)	50	16	100	17	38
C1084522055	(70,00)	50	22	55	19	48
C1084527055	(70,00)	50	27	55	21	60
C1084532055	(74,50)	50	32	55	24	78
C1084540055	(85,50)	50	40	55	27	88



Drive ring and clamping screw included

- RINGS page C.50 - SCREWS page C.50 - PULL STUDS page C.47

COMBINED SHELL MILL HOLDER CHUCKS MAS 403 BT AD+B

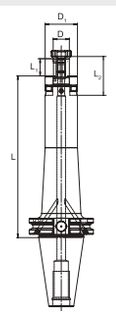
SCHÜSSLER

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1089

Tech. Code	GR34 Euro	BT	D mm	D1 mm	L mm	L1 mm	L2 mm
C1089416055	(115,00)	40	16	32	55	17	27
C1089422055	(116,00)	40	22	40	55	19	31
C1089427055	(125,00)	40	27	48	55	21	33
C1089432060	(131,00)	40	32	58	55	24	38

Tech. Code	GR34 Euro	BT	D mm	D1 mm	L mm	L1 mm	L2 mm
C1089522070	(193,00)	50	22	40	70	19	31
C1089527070	(193,00)	50	27	48	70	21	33
C1089532070	(208,00)	50	32	58	70	24	38
C1089540070	(244,00)	50	40	70	70	27	41



Drive ring and clamping screw supplied.

- PULL STUDS page C.47 - SCREWS page C.50 - RINGS page C.50

COMBINED SHELL MILL HOLDER CHUCKS MAS 403 BT AD+B

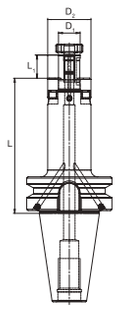
EROGLU

BT 40 | BT 50 | G 2.5 25.000 rpm | AT3 TAPER

ART. C1096

Tech. Code	GR34 Euro	BT	D1 mm	L mm	L1 mm	D2 mm
C1096416055	57,00	40	16	55	17	32
C1096416100	72,00	40	16	100	17	32
C1096422055	59,50	40	22	55	19	40
C1096422100	73,00	40	22	100	19	40
C1096427055	59,50	40	27	55	21	48
C1096427100	74,00	40	27	100	21	48
C1096432060	65,00	40	32	60	24	58
C1096432100	78,50	40	32	100	24	58
C1096440060	(73,00)	40	40	60	27	70

Tech. Code	GR34 Euro	BT	D1 mm	L mm	L1 mm	D2 mm
C1096516070	(86,00)	50	16	70	17	32
C1096522070	(86,00)	50	22	70	19	40
C1096527070	(88,50)	50	27	70	21	48
C1096532070	(90,50)	50	32	70	24	58
C1096540070	(99,50)	50	40	70	27	70



Drive ring and clamping screw included.

- RINGS page C.50 - SCREWS page C.50 - PULL STUDS page C.47

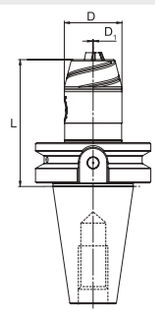
QUICK-CLAMPING DRILL CHUCKS MAS 403 BT AD+B

EROGLU

BT 40 | BT 50 | G 6.3 15.000 rpm | AT3 TAPER

ART. C1146

Tech. Code	GR34 Euro	BT	D mm	L mm	D1 mm
C114640113	209,50	40	50	98	1-13
C114650113	255,50	50	50	110	1-13



CLOCKWISE COUNTER - CLOCKWISE ROTATION

- PULL STUDS page C.47

QUICK-CLAMPING DRILL CHUCKS MAS 403 BT A

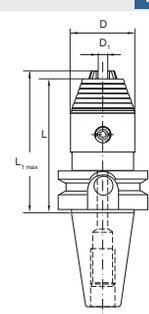
KERFOLG

BT 40 | BT 50 | G 6.3 25.000 rpm | AT3 TAPER

ART. C1141

Tech. Code	GR31 Euro	BT	D mm	L mm	D1 mm	L1 max mm
C114140513	336,00	40	50	98	0.5 - 13	104
C114142516	331,00	40	57	103	2.5 - 16	109

Tech. Code	GR31 Euro	BT	D mm	L mm	D1 mm	L1 max mm
C114152516	403,00	50	57	115	2.5 - 16	121



CLOCKWISE COUNTER-CLOCKWISE ROTATION

- PULL STUDS page C.47

REDUCER CM FOR BURRS MAS 403 BT A

EROGLU

BT 40 | BT 50 | G 2.5 20.000 rpm | AT3 TAPER

ART. C1122

Tech. Code	GR34 Euro	BT	CM	D mm	L mm
C11224CM1050	65,50	40	1	25	50
C11224CM2050	65,50	40	2	32	50
C11224CM3070	65,50	40	3	40	70
C11224CM4095	70,50	40	4	48	95

Tech. Code	GR34 Euro	BT	CM	D mm	L mm
C11225CM2060	85,50	50	2	32	60
C11225CM3065	85,50	50	3	40	65
C11225CM4070	93,00	50	4	48	70

Indivisible package Suggested retail package - Unit price

REDUCER CM FOR BITS MAS 403 BT AD

BT 40 | BT 50 | G 6.3 15.000 rpm | AT3 TAPER

ART. C1132

Tech. Code	GR34 Euro	BT	CM	D mm	L mm
C11324CM1050	37,00	40	1	25	50
C11324CM2050	37,00	40	2	32	50
C11324CM3070	(37,00)	40	3	40	70
C11324CM4095	40,50	40	4	48	95

Tech. Code	GR34 Euro	BT	CM	D mm	L mm
C11325CM3065	(55,50)	50	3	40	65
C11325CM4095	(55,50)	50	4	48	95

TAPPING CHUCKS WITHOUT AXIAL COMPENSATION MAS 403 BT A

BT 40 | AT3 TAPER

ART. C1150

Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C115041967	213,30	BT40 MAS19 L67	33	19	67	M3 - M12
C115043190	(220,60)	BT40 MAS31 L90	50	31	90	M6 - M20

- BUSH WC page C.46 - BUSH WOC page C.46 - PULL STUDS page C.47

TAPPING CHUCKS WITH AXIAL COMPENSATION MAS 403 BT A

BT 40 | BT 50 | AT3 TAPER

ART. C1160

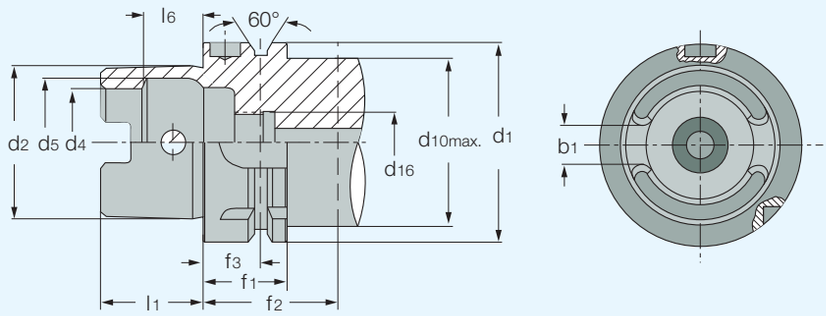
Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C116041968	238,50	BT40 MAS19C L68	38	19	68	M3 - M12
C116043193	306,80	BT40 MAS31C L93	55	31	93	M6 - M20

Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C116051980	(398,20)	BT50 MAS19C L80	38	19	80	M3 - M12
C1160531102	(457,00)	BT50 MAS31C L102	55	31	102	M6 - M20
C1160548133	(788,00)	BT50 MAS48C L133	79	48	133	M14 - M33

- BUSH WC page C.46 - BUSH WOC page C.46 - PULL STUDS page C.47

HSK - STANDARD DIN 69893

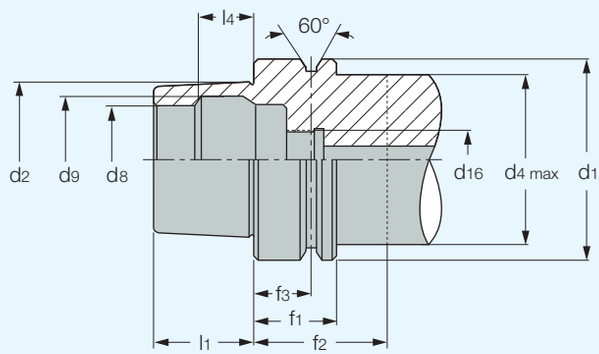
Type A



HSK_{-A}	$d_{1\ h10}$	d_2	$d_{4\ H10}$	$d_{5\ H11}$	$d_{10\ max}$	d_{16}	$l_{1-0.2}$	$l_{6\ Js10}$	$b_1^{\pm 0.04(1)}$	$f_{1\ -0.1}$	$f_{2\ min}$	$f_3^{\pm 0.1}$
40	40	30	21	25.5	34	M12x1	20	11.42	8.05	20	35	16
50	50	38	26	32.0	42	M16x1	25	14.13	10.54	26	42	18
63	63	48	34	40.0	53	M18x1	32	18.13	(12.42) 12.54	26	42	18
80	80	60	42	50.0	67	M20x1.5	40	22.85	16.04	26	42	18
100	100	75	53	63.0	85	M24x1.5	50	28.56	(19.9) 20.02	29	45	20

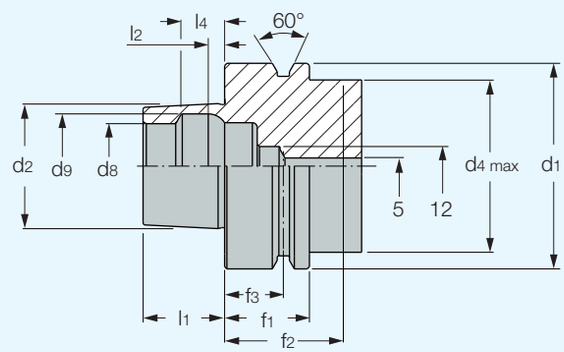
(1) The dimensions in parentheses refer to dimension b1 only for HSK A...WH tools. These tools feature key slot gap and tolerance, used on turning for accurate cutting edge height position, (according to Japanese ICTM standard and ISO 12164/3 standard).

Type E



HSK_{-E}	$d_{1\ h10}$	d_2	$d_{4\ max}$	$d_{8\ H10}$	$d_{9\ H11}$	d_{16}	$l_{1-0.2}$	$L_{4\ Js10}$	$f_{1-0.1}$	$f_{2\ min}$	$f_3^{\pm 0.1}$
32	32	24	26	17	19	M10x1	16	8.92	20	35	16
40	40	30	34	21	25.5	M12x1	20	11.42	20	35	16
50	50	38	42	26	32.0	M16x1	25	14.13	26	42	18
63	63	48	53	34	40.0	M18x1	32	18.13	26	42	18

Type F(1



HSK_{-F}	$d_{1\ h10}$	d_2	$d_{4\ max}$	$d_{8\ H10}$	$d_{9\ H11}$	$l_{1-0.2}$	l_2	$l_{4\ Js10}$	$f_{1-0.1}$	$f_{2\ min}$	$f_3^{\pm 0.1}$
63	63	38	53	26	32	25	5.0	14.13	26	42	18

(1)Without crosshole

ER COLLET CHUCKS DIN 69893 HSK A

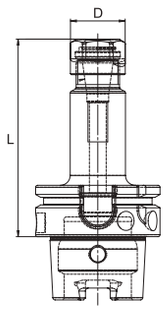
SCHÜSSLER

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2014

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	Ghiera
C2014616100	(134,00)	63	16	28	100	ER16
C2014616130	(145,00)	63	16	28	130	ER16
C2014616160	(149,00)	63	16	28	160	ER16
C2014620100	(141,00)	63	20	34	100	ER20
C2014625100	(141,00)	63	25	42	100	ER25
C2014625130	(156,00)	63	25	42	130	ER25
C2014625160	(161,00)	63	25	42	160	ER25
C2014632100	(142,00)	63	32	50	100	ER32
C2014632130	(163,00)	63	32	50	130	ER32
C2014632160	(180,00)	63	32	50	160	ER32
C2014640120	(160,00)	63	40	63	120	ER40
C2014640130	(177,00)	63	40	63	130	ER40
C2014640160	(199,00)	63	40	63	160	ER40

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	Ghiera
C2014116100	(187,00)	100	16	28	100	ER16
C2014116130	(206,00)	100	16	28	130	ER16
C2014125100	(194,00)	100	25	42	100	ER25
C2014125130	(215,00)	100	25	42	130	ER25
C2014132100	(197,00)	100	32	50	100	ER32
C2014132130	(215,00)	100	32	42	130	ER32
C2014140120	(211,00)	100	40	63	120	ER40
C2014140130	(228,00)	100	40	63	130	ER40



Ring included. ER 6499 collets.

- GHIERE page C.45 - COLLETS ER page C.39 - TUBES page C.49

ER COLLET CHUCKS DIN 69893 HSK A

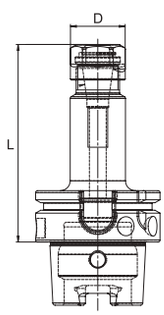
EROGLU

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2016

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	Ghiera
C2016616100	92,00	63	16	28	100	GER16
C2016625100	89,00	63	25	42	100	GER25
C2016632100	92,00	63	32	50	100	GER32
C2016632160	(122,00)	63	32	50	160	GER32

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	Ghiera
C2016125100	(124,00)	100	25	42	100	GER25
C2016132100	(124,00)	100	32	50	100	GER32
C2016140120	(129,00)	100	40	63	120	GER40



Nut included. Cooling tube not included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.38 - TUBES page C.49

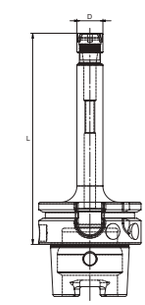
ER MINI COLLET CHUCKS DIN 69893 HSK A

SCHÜSSLER

HSK 63 | G 2.5 25.000 rpm

ART. C2018

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	Ghiera
C2018611100	(224,00)	63	11 Mini	16	100	ER11
C2018611130	(239,00)	63	11 Mini	16	130	ER11
C2018611160	(256,00)	63	11 Mini	16	160	ER11
C2018616100	(224,00)	63	16 Mini	22	100	ER16
C2018616130	(239,00)	63	16 Mini	22	130	ER16
C2018616160	(256,00)	63	16 Mini	22	160	ER16
C2018620100	(224,00)	63	20 Mini	28	100	ER20
C2018620130	(239,00)	63	20 Mini	28	130	ER20
C2018620160	(256,00)	63	20 Mini	28	160	ER20
C2018625100	(224,00)	63	25 Mini	35	100	ER25
C2018625130	(239,00)	63	25 Mini	35	130	ER25
C2018625160	(256,00)	63	25 Mini	35	160	ER25



- NUTS page C.44 - COLLETS ER page C.38 - TUBES page C.49

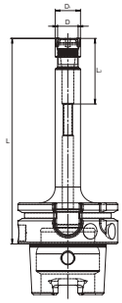
ER MINI COLLET CHUCKS DIN 69893 HSK A

HSK 63 | G 2.5 25.000 rpm

ART. C2017

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	L2 mm	D2 mm
C2017611130	171,50	63	11	16	130	41.5	-
C2017611160	(182,00)	63	11	16	160	41.5	19.5
C2017616100	143,00	63	16	22	100	32	-
C2017616130	(174,50)	63	16	22	130	32	-
C2017616160	(189,00)	63	16	22	160	32	25.5

Ring nut included. Cooling tube not included.



- NUTS page C.44 - COLLETS ER page C.38 - TUBES page C.49

CHUCKS HAWK EYE® DIN 69893 HSK A

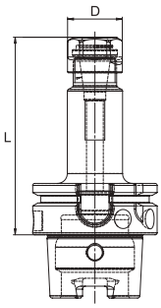
HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2025

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	Ghiera
C2025616100	(204,00)	63	16	34	100	ER16
C2025616130	(224,00)	63	16	34	130	ER16
C2025625100	(209,00)	63	25	44	100	ER25
C2025625130	(228,00)	63	25	44	130	ER25
C2025632100	(216,00)	63	32	52	100	ER32
C2025632130	(238,00)	63	32	52	130	ER32
C2025640120	(249,00)	63	40	62	120	ER40

Tech. Code	GR34 Euro	HSK	ER	D mm	L mm	Ghiera
C2025116100	(294,00)	100	40	62	100	ER40
C2025116130	(322,00)	100	40	62	130	ER40
C2025125100	(294,00)	100	16	34	100	ER16
C2025125130	(322,00)	100	16	34	130	ER16
C2025132100	(309,00)	100	25	44	100	ER25
C2025132130	(337,00)	100	25	44	130	ER25
C2025140120	(355,00)	100	32	52	120	ER32
C2025140130	(385,00)	100	32	52	130	ER32

Ring nut included. Collects ER 6499.



- GHIERE page C.45 - COLLETS ER page C.39 - TUBES page C.49

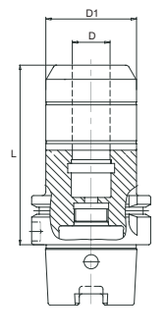
POWER CHUCKS DIN 69893 HSK A

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2026

Tech. Code	GR34 Euro	HSK	D mm	L mm	D1 mm
C2026620095	334,00	63	20	95	48
C2026632105	359,50	63	32	105	68

Tech. Code	GR34 Euro	HSK	D mm	L mm	D1 mm
C2026120105	(402,50)	100	20	105	48
C2026132105	(425,50)	100	32	105	68



- WRENCHES F.S. page C.50

HYDRAULIC CHUCKS DIN 69893 HSK A

HSK 63 | HSK 100 | G 2.5 25.000 rpm

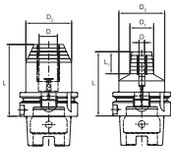
ART. C2031

Tech. Code	GR31 Euro	HSK	D mm	L mm	D1 mm	D2 mm	L1 mm	Figure
C2031612085	425,00	63	12	85	32	50	40	2
C2031616090	690,00	63	16	90	38	50	46	2
C2031620080*	425,00	63	20	80	-	51,5	-	1
C2031620090	425,00	63	20	90	42	50	48	2

* Short heavy duty design.

Tech. Code	GR31 Euro	HSK	D mm	L mm	D1 mm	D2 mm	L1 mm	Figure
C2031120105	(601,00)	100	20	105	42	50	59	2
C2031132100	(601,00)	100	32	110	63	67	60	2

For tools only with shank with tollerance h6. Always respect minimum clamping depth. Cooling tube not included.



- TUBES page C.49

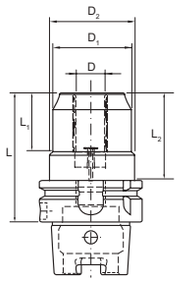
HYDRAULIC CHUCKS STRONG LOCKING DIN 69893 HSK A

KERFOLG

HSK 63 | G 2.5 25.000 rpm

ART. C2032

FEATURES:
- Extremely high clamping force and radial stability
- Vibration damping tool clamping
- Very high transmissible torque
- All cylindrical shank h6 tolerance can be clamped
- Suitable for roughing milling operation
- Quick setup times
- Can be used flexibly by using reducing sleeves
- Narrow design 3°



Tech. Code	GR31 Euro	HSK	D mm	L mm	L1 mm	L2 mm	D1 mm	D2 mm
C2032620080	280,00	63	20	80	36	51	49	52.5

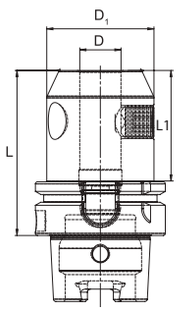
- TUBES page C.49

WELDON CHUCKS DIN 69893 HSK A

SCHÜSSLER

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2039



Tech. Code	GR34 Euro	HSK	D mm	D1 mm	L mm	L1 mm
C2039606065	(125,00)	63	6	26	65	35
C2039608065	(125,00)	63	8	28	65	35
C2039610065	(114,00)	63	10	35	65	41
C2039612080	(114,00)	63	12	42	80	48
C2039614080	(115,00)	63	14	44	80	48
C2039616080	(114,00)	63	16	48	80	51
C2039618080	(114,00)	63	18	50	80	51
C2039620080	(114,00)	63	20	52	80	53
C2039625110	(127,00)	63	25	65	110	60
C2039632110	(130,00)	63	32	72	110	64
C2039640125	(351,00)	63	40	80	125	80

Tech. Code	GR34 Euro	HSK	D mm	D1 mm	L mm	L1 mm
C2039106080	(169,00)	100	6	25	80	35
C2039108080	(169,00)	100	8	28	80	35
C2039110080	(161,00)	100	10	35	80	41
C2039112080	(161,00)	100	12	42	80	48
C2039114080	(161,00)	100	14	44	80	48
C2039116100	(161,00)	100	16	48	100	51
C2039118100	(161,00)	100	18	50	100	51
C2039120100	(161,00)	100	20	52	100	53
C2039125100	(172,00)	100	25	65	100	60
C2039132100	(174,00)	100	32	72	100	64
C2039140120	(383,00)	100	40	80	120	74

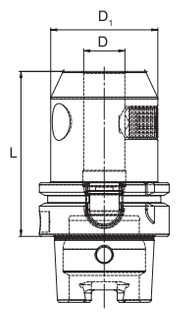
Clamping screw included

WELDON CHUCKS DIN 69893 HSK A

EROGLU

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2046



Tech. Code	GR34 Euro	HSK	D mm	L mm	D1 mm
C2046606065	(93,50)	63	6	65	25
C2046608065	(93,50)	63	8	65	28
C2046610065	93,50	63	10	65	35
C2046612080	93,50	63	12	80	42
C2046616080	93,50	63	16	80	48
C2046620080	93,50	63	20	80	52
C2046625110	103,00	63	25	110	63
C2046632110	108,50	63	32	110	72

Tech. Code	GR34 Euro	HSK	D mm	L mm	D1 mm
C2046106080	(130,50)	100	6	80	25
C2046108080	(130,50)	100	8	80	28
C2046110080	(130,50)	100	10	80	35
C2046112080	(130,50)	100	12	80	42
C2046116100	(130,50)	100	16	100	48
C2046120100	(130,50)	100	20	100	52
C2046125100	(152,00)	100	25	100	63
C2046132100	(158,00)	100	32	100	72
C2046140105	(172,00)	100	40	105	80

Clamping screw included.

SHRINK FIT CHUCKS DIN 69893 HSK A

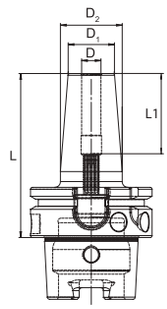
SCHÜSSLER

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2065

Tech. Code	GR34 Euro	HSK	D mm	D1 mm	D2 mm	L mm	L1 mm
C2065603080	(187,00)	63	3	12	17	80	-
C2065604080	(187,00)	63	4	12	17	80	-
C2065605080	(187,00)	63	5	12	17	80	-
C2065606080	(151,00)	63	6	21	27	80	37
C2065608080	(151,00)	63	8	21	27	80	37
C2065610085	(151,00)	63	10	24	32	85	42
C2065612090	(151,00)	63	12	24	32	90	48
C2065614090	(151,00)	63	14	27	34	90	48
C2065616095	(151,00)	63	16	27	34	95	51
C2065618095	(151,00)	63	18	33	42	95	51
C2065620100	(151,00)	63	20	33	42	00	53
C2065625115	(157,00)	63	25	44	53	115	59
C2065632120	(163,00)	63	32	44	53	120	63

Tech. Code	GR34 Euro	HSK	D mm	D1 mm	D2 mm	L mm	L1 mm
C2065106085	(244,00)	100	6	21	27	85	37
C2065108085	(244,00)	100	8	21	27	85	37
C2065110090	(244,00)	100	10	24	32	90	42
C2065112095	(244,00)	100	12	24	32	95	48
C2065114095	(244,00)	100	14	27	34	95	48
C2065116100	(244,00)	100	16	27	34	100	51
C2065118100	(244,00)	100	18	33	42	100	51
C2065120105	(244,00)	100	20	33	42	105	53
C2065125115	(244,00)	100	25	44	53	115	59
C2065132120	(244,00)	100	32	44	53	120	63



For tools only with shank in tolerance h6. Pre-set screw included.

- TUBES page C.49

SHRINK FIT CHUCKS DIN 69893 HSK A

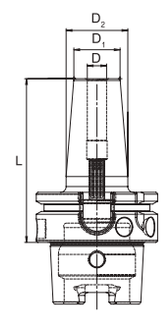
EROGLU

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2066

Tech. Code	GR34 Euro	HSK	D mm	L mm	D1 mm	D2 mm
C2066604080	(152,00)	63	4	80	12	20
C2066606080	(110,50)	63	6	80	21	27
C2066608080	(110,50)	63	8	80	21	27
C2066610085	(110,50)	63	10	85	24	32
C2066612090	(110,50)	63	12	90	24	32
C2066616095	(110,50)	63	16	95	27	34
C2066620100	(110,50)	63	20	100	33	42

Tech. Code	GR34 Euro	HSK	D mm	L mm	D1 mm	D2 mm
C2066106085	(190,00)	100	6	85	21	27
C2066108085	(190,00)	100	8	85	21	27
C2066110090	(190,00)	100	10	90	24	32
C2066112095	(190,00)	100	12	95	24	32
C2066116100	(190,00)	100	16	100	27	34
C2066120105	(190,00)	100	20	105	33	42
C2066125115	(190,00)	100	25	115	44	53
C2066132120	(190,00)	100	32	120	44	53



For tools only with shank in tolerance h6. Pre-set screw included.

- TUBES page C.49

Indivisible package Suggested retail package - Unit price

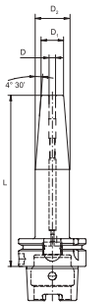
SHRINK FIT CHUCKS DIN 69893 HSK A

KERFOLG

HSK 63 | G 2.5 25.000 rpm

ART. C2063

Tech. Code	GR31 Euro	HSK	D mm	L mm	D1 mm	D2 mm
C2063604080	317,00	63	4	80	15	22
C2063604120	238,00	63	4	120	15	22
C2063604160	288,00	63	4	160	15	22
C2063606080	221,00	63	6	80	21	27
C2063606120	221,00	63	6	120	21	27
C2063606160	246,00	63	6	160	21	27
C2063608080	162,00	63	8	80	21	27
C2063608120	221,00	63	8	120	21	27
C2063608160	246,00	63	8	160	21	27
C2063610085	162,00	63	10	85	24	32
C2063610120	221,00	63	10	120	24	32
C2063610160	246,00	63	10	160	24	32
C2063612090	270,00	63	12	90	24	32
C2063612120	221,00	63	12	120	24	32
C2063612160	246,00	63	12	160	24	32
C2063614090	221,00	63	14	90	27	34
C2063614120	221,00	63	14	120	27	34
C2063614160	(246,00)	63	14	160	27	34
C2063616095	270,00	63	16	95	27	34
C2063616120	(221,00)	63	16	120	27	34
C2063616160	(246,00)	63	16	160	27	34
C2063620100	162,00	63	20	100	33	42
C2063620160	246,00	63	20	160	33	42
C2063625115	162,00	63	25	115	44	53
C2063625160	246,00	63	25	160	44	53
C2063632120	(162,00)	63	32	120	44	53
C2063632160	246,00	63	32	160	44	53



For tools only with shank in tollerance h6. Preset screw included. Cooling tube to be ordered seperately.

- TUBES page C.49

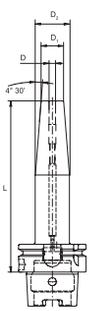
SHRINK FIT CHUCKS DIN 69893 HSK A

KERFOLG

HSK 100 | G 2.5 25.000 rpm

ART. C2064

Tech. Code	GR31 Euro	HSK	D mm	L mm	D1 mm	D2 mm
C2064106085	(352,00)	100	6	85	21	27
C2064106120	(352,00)	100	6	120	21	27
C2064108085	(352,00)	100	8	85	21	27
C2064108120	(352,00)	100	8	120	21	27
C2064110090	(352,00)	100	10	90	24	32
C2064110120	(352,00)	100	10	120	24	32
C2064112095	(271,00)	100	12	95	24	32
C2064112120	(352,00)	100	12	120	24	32
C2064116100	(352,00)	100	16	100	27	34
C2064116160	(386,00)	100	16	160	27	34
C2064120105	(352,00)	100	20	105	33	42
C2064125115	(271,00)	100	25	115	44	53
C2064132120	(437,00)	100	32	120	44	53



For tools only with shank in tollerance h6. Preset screw included. Cooling tube not included.

- TUBES page C.49

FIXED-DRIVE SHELL MILL HOLDER CHUCKS DIN 69893 HSK A

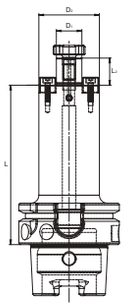
SCHÜSSLER

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2079

Tech. Code	GR34 Euro	HSK	D mm	D1 mm	L mm	L1 mm
C2079616050	(161,00)	63	16	38	50	17
C2079616100	(179,00)	63	16	38	100	17
C2079622050	(161,00)	63	22	48	50	19
C2079622100	(179,00)	63	22	48	100	19
C2079627060	(168,00)	63	27	60	60	21
C2079627100	(182,00)	63	27	60	100	21
C2079632060	(177,00)	63	32	78	60	24
C2079632100	(193,00)	63	32	78	100	24
C2079640060	(192,00)	63	40	89	60	27
C2079640100	(222,00)	63	40	89	100	27

Tech. Code	GR34 Euro	HSK	D mm	D1 mm	L mm	L1 mm
C2079116050	(219,00)	100	16	38	50	17
C2079116100	(230,00)	100	16	38	100	17
C2079122050	(219,00)	100	22	48	50	19
C2079122100	(230,00)	100	22	48	100	19
C2079127050	(220,00)	100	27	60	50	21
C2079127100	(237,00)	100	27	60	100	21
C2079132050	(228,00)	100	32	78	50	24
C2079132100	(246,00)	100	32	78	100	24
C2079140060	(239,00)	100	40	89	60	27
C2079140100	(258,00)	100	40	89	100	27
C2079160070	(486,00)	100	60	140	70	40



- TUBES page C.49 - SCREWS page C.50

FIXED-DRIVE SHELL MILL HOLDER CHUCKS DIN 69893 HSK A

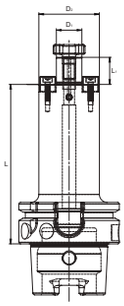
EROGLU

HSK 63 | G 2.5 25.000 rpm

ART. C2082

Tech. Code	GR34 Euro	HSK	D1 mm	L mm	L1 mm	D2 mm
C2082616050	(117,50)	63	16	50	17	38
C2082616100	(139,50)	63	16	100	17	38
C2082622050	(117,50)	63	22	50	19	48
C2082622100	(139,50)	63	22	100	19	48
C2082627060	(126,50)	63	27	60	21	60
C2082627100	(148,50)	63	27	100	21	60
C2082632060	(130,50)	63	32	60	24	78
C2082632100	(153,50)	63	32	100	24	78
C2082640060	(146,50)	63	40	60	27	88
C2082640100	(152,50)	63	40	100	27	88

Drive ring and clamping screw included



- TUBES page C.49 - SCREWS page C.50

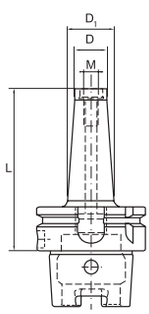
CHUCKS FOR THREADED COUPLING DIN 69893 HSK A

SCHÜSSLER

HSK 63 | G 2.5 25.000 rpm

ART. C2102

Tech. Code	GR34 Euro	HSK	M	D mm	D1 mm	L mm
C21026M10050	(249,00)	63	10	18	25	50
C21026M10075	(271,00)	63	10	18	30	75
C21026M10100	(293,00)	63	10	18	35	100
C21026M12075	(271,00)	63	12	21	35	75
C21026M12100	(307,00)	63	12	21	38	100
C21026M12050	(249,00)	63	12	21	30	50
C21026M16050	(249,00)	63	16	29	34	50
C21026M16075	(271,00)	63	16	29	35	75
C21026M16100	(307,00)	63	16	29	40	100
C21026M8050	(239,00)	63	8	13	23	50
C21026M8075	(261,00)	63	8	13	25	75
C21026M8100	(307,00)	63	8	13	30	100



Indivisible package Suggested retail package - Unit price

CHUCKS FOR THREADED COUPLING DIN 69893 HSK A

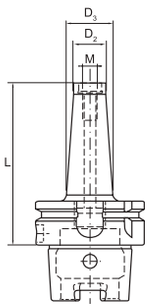
EROGLU

HSK 63 | HSK 100 | G 2.5 20.000 rpm

ART. C2103

Tech. Code	GR34 Euro	HSK	M	D mm	D1 mm	L mm
C21036M08051	(154,00)	63	8	13	15	51
C21036M08076	(169,50)	63	8	13	22,5	76
C21036M10051	(161,00)	63	10	18	20	51
C21036M10076	(176,50)	63	10	18	23	76
C21036M10126	(210,50)	63	10	18	32	126
C21036M12051	(161,00)	63	12	21	24	51
C21036M12076	(176,50)	63	12	21	24	76
C21036M12101	(190,50)	63	12	21	31	101
C21036M16051	(161,00)	63	16	29	-	51
C21036M16076	(176,50)	63	16	29	34	76
C21036M16101	(190,50)	63	16	29	34	101

Tech. Code	GR34 Euro	HSK	M	D mm	D1 mm	L mm
C21031M12079	(227,00)	100	12	21	23	79
C21031M12129	(278,00)	100	12	21	32	129
C21031M16079	(227,00)	100	16	29	33,5	79
C21031M16129	(278,00)	100	16	29	36	129



COMBI SHELL MILL HOLDER CHUCKS DIN 69893 HSK A

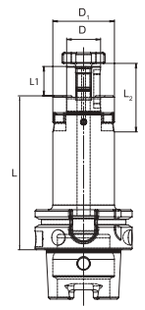
SCHÜSSLER

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2089

Tech. Code	GR34 Euro	HSK	D mm	D1 mm	L mm	L1 mm	L2 mm
C2089616060	(148,00)	63	16	32	60	17	27
C2089616100	(158,00)	63	16	32	100	17	27
C2089622060	(152,00)	63	22	40	60	19	31
C2089622100	(168,00)	63	22	40	100	19	31
C2089627060	(161,00)	63	27	48	60	21	33
C2089627100	(177,00)	63	27	48	100	21	33
C2089632060	(169,00)	63	32	58	60	24	38
C2089632100	(189,00)	63	32	58	100	24	38
C2089640070	(179,00)	63	40	70	70	27	41

Tech. Code	GR34 Euro	HSK	D mm	D1 mm	L mm	L1 mm	L2 mm
C2089116060	(183,00)	100	16	32	60	17	27
C2089116100	(208,00)	100	16	32	100	17	27
C2089122060	(193,00)	100	22	40	60	19	31
C2089122100	(216,00)	100	22	40	100	19	31
C2089127060	(198,00)	100	27	48	60	21	33
C2089127100	(223,00)	100	27	48	100	21	33
C2089132060	(205,00)	100	32	58	60	24	38
C2089132100	(230,00)	100	32	58	100	24	38
C2089140070	(217,00)	100	40	70	70	27	41
C2089140100	(241,00)	100	40	70	100	27	41



Drive ring and clamping screw included.

- TUBES page C.49 - SCREWS page C.50

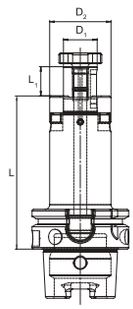
COMBI SHELL MILL HOLDER CHUCKS DIN 69893 HSK A

HSK 63 | HSK 100 | G 2.5 25.000 rpm

ART. C2096

Tech. Code	GR34 Euro	HSK	D1 mm	L mm	L1 mm	D2 mm
C2096616060	(106,00)	63	16	60	17	32
C2096616100	(115,50)	63	16	100	17	32
C2096622060	(106,00)	63	22	60	19	40
C2096622100	(115,50)	63	22	100	19	40
C2096627060	(115,50)	63	27	60	21	48
C2096627100	(124,00)	63	27	100	21	48
C2096632060	(119,50)	63	32	60	24	58
C2096632100	(128,50)	63	32	100	24	58

Tech. Code	GR34 Euro	HSK	D1 mm	L mm	L1 mm	D2 mm
C2096116060	(140,50)	100	16	60	17	32
C2096122060	(140,50)	100	22	60	19	40
C2096127060	(146,50)	100	27	60	21	48
C2096132060	(157,50)	100	32	60	24	58
C2096140070	(163,00)	100	40	70	27	70



Drive ring and clamping screw included.

- TUBES page C.49 - SCREWS page C.50

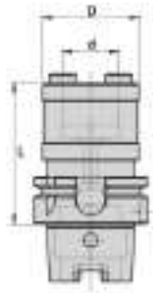
TAPPING CHUCKS WITHOUT AXIAL COMPENSATION DIN 69893 HSK A

HSK 63 | HSK 100

ART. C2150

Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C215061963	325,70	HSK 63 MAS19C L63	33	19	63	M3 - M12
C215063189	407,60	HSK 63 MAS31C L89	50	31	89	M6 - M20

Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C215013192	(500,10)	HSK 100 MAS31C L92	50	31	92	M6 - M20
C2150148116	(542,10)	HSK 100 MAS48C L116	72	48	116	M14 - M33



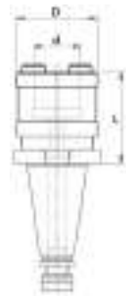
- BUSH WC page C.46 - BUSH WOC page C.46 - TUBES page C.49

TAPPING CHUCKS AXIAL COMPENSATION DIN 2080

ISO 40 | AT3 TAPER

ART. C3160

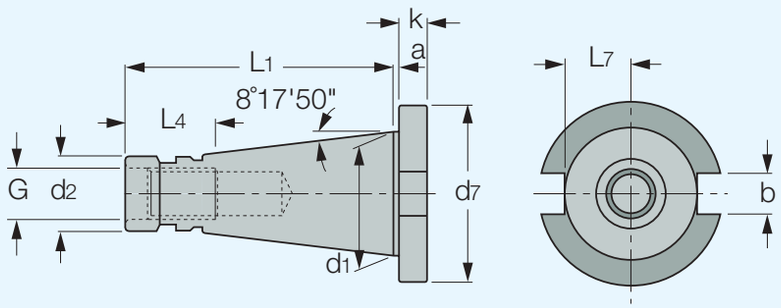
Tech. Code	GR42 Euro	Description	D mm	d mm	L mm	Capacity
C316041953	(267,90)	ISO40 MAS19C L53	38	19	53	M3 - M12
C316043177	(327,80)	ISO40 MAS31C L77	55	31	77	M6 - M20



- BUSH WC page C.46 - BUSH WOC page C.46

Indivisible package Suggested retail package - Unit price

Toolholder Standard



Shank	a±0.2	b (H_{12})	d_1	d_2	G	d_7	K±0.15
SK 30	1.6	16.1	31.75	17.4	M12	50	8
SK 40	1.6	16.1	44.45	25.3	M16	63	10
SK 50	3.2	25.7	69.85	39.6	M24	97.5	12

Shank	L_1	L_4	L_7 MAX	Taper AT3
SK 30	35	19.1	47.80	0.002
SK 40	35	19.1	68.40	0.003
SK 50	35	19.1	101.75	0.004

ER COLLET CHUCKS DIN 2080 AD

EROGLU

ISO 40 | ISO 50

ART. C3020

Tech. Code	GR34 Euro	ISO	ER	D mm	L mm	L1 mm
C3020432050	54,00	40	32	50	50	48
C3020440080	57,50	40	40	63	80	55

Tech. Code	GR34 Euro	ISO	ER	D mm	L mm	L1 mm
C3020532063	(83,50)	50	32	50	63	63
C3020540063	83,50	50	40	63	63	63

WELDON CHUCKS DIN 2080

EROGLU

ISO 40 | ISO 50

ART. C3041

Tech. Code	GR34 Euro	ISO	D mm	D1 mm	L mm	L1 mm
C3041416063	39,00	40	48	16	63	54
C3041420063	(39,00)	40	52	20	63	56
C3041425080	43,00	40	63	25	80	64

Tech. Code	GR34 Euro	ISO	D mm	D1 mm	L mm	L1 mm
C3041520063	(57,50)	50	52	20	63	56
C3041525080	64,00	50	63	25	80	64
C3041532080	68,50	50	72	32	80	68

COMBI SHELL MILL HOLDER CHUCKS DIN 2080

EROGLU

ISO 40

ART. C3091

Tech. Code	GR34 Euro	ISO	D mm	D1 mm	L mm	L1 mm
C3091416052	50,00	40	32	16	52	27
C3091422052	51,00	40	40	22	52	31
C3091427052	51,00	40	48	27	52	33
C3091432052	56,00	40	58	32	52	38

SHRINK FIT EXTENSIONS

EROGLU

ART. C3172

Tech. Code	GR34 Euro	d1 mm	L mm	D mm	d2 mm
C31721203150	93,73	3	150	12	8
C31721204150	(93,73)	4	150	12	8
C31721606150	(86,83)	6	150	16	10
C31722006150	86,83	6	150	20	10
C31722008150	(86,83)	8	150	20	12
C31722010150	86,83	10	150	20	14
C31722012150	(86,83)	12	150	20	16
C31723220150	86,83	20	150	32	27

Extensions can be used with srink fit holders, hydraulic and collet chucks. For tools only with shank in tollerance H6.

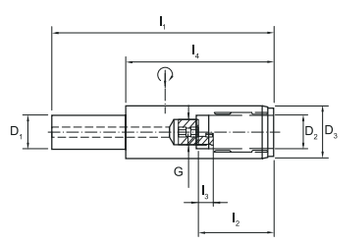
HYDRAULIC ADAPTORS DIN 1835A

KERFOLG

ART. C3175

Tech. Code	GR31 Euro	D1 mm	D2 mm	D3 mm	l1 mm	l2 mm	l3 mm	l4 mm	G mm
C31751215020	(268,00)	20	12	25	150	46	10	100	M10 x 1
C31752015020	(373,00)	20	20	31.5	150	51	10	100	M16 x 1
C31752015032	(373,00)	32	20	31.5	150	51	10	90	M16 x 1
C31752020032	(400,00)	32	20	31.5	200	51	10	90	M16 x 1

For tools only with shank in tolerance h6. Coolant maximum pressure 80 bar. Always respect mimimum depth of clamping.



Indivisible package Suggested retail package - Unit price

ADAPTORS FOR SCREW-ON END MILLS

TUKOY

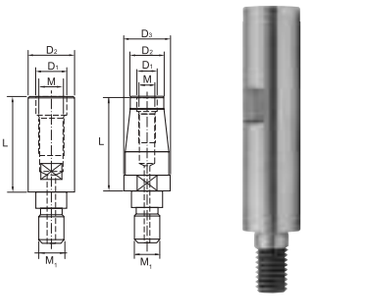
ART. C3176

Tech. Code	GR33 Euro	M	M1	L mm	D1 mm	D2 mm	D3 mm	Figure
C3176M8M830	(196,10)	M8	M8	30	8.5	12.8	-	1
C3176M10M1035	(180,00)	M10	M10	35	10.5	17.8	-	1
C3176M12M1240	(152,60)	M12	M12	40	12.5	20.8	-	1
C3176M16M1640	(183,60)	M16	M16	40	17	28.8	-	1

Extensions

Tech. Code	GR33 Euro	M	M1	L mm	D1 mm	D2 mm	D3 mm	Figure
C3176M8M1035	(152,60)	M8	M8	30	8.5	12.8	17.8	2
C3176M10M1235	(183,60)	M10	M10	35	10.5	17.8	20.8	2
C3176M12M1640	(183,60)	M12	M12	40	12.5	20.8	28.8	2

Reductions

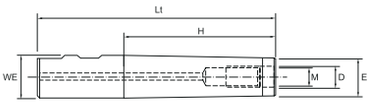


ADAPATOR WITH WELDON SHANKS FOR SCREW-ON END MILLS

TUKOY

ART. C3177

Tech. Code	GR33 Euro	WE mm	M mm	D mm	E mm	H mm	Lt mm
C317716M8115	(121,70)	16	M8	8.5	12.8	60	115
C317716M8160	(127,30)	16	M8	8.5	12.8	100	160
C317720M10120	(121,70)	20	M10	10.5	17.8	60	120
C317720M10160	(127,30)	20	M10	10.5	17.8	100	160
C317725M12160	(127,30)	25	M12	12.5	20.8	100	160
C317732M16160	(127,30)	32	M16	17.0	28.8	100	160



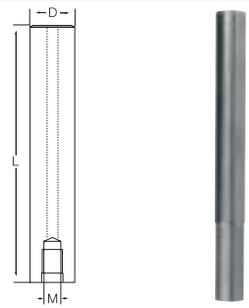
THREADED COUPLING CARBIDE CHUCKS WITH STRAIGHT SHANK

TUKOY

ART. C3184

Tech. Code	GR33 Euro	Description	D mm	L mm	M mm
C318408150	(305,00)	CIL 16 MD M8 L150	16	150	8
C318408200	(406,00)	CIL 16 MD M8 L200	16	200	8
C318410150	(534,50)	CIL 20 MD M10 L150	20	150	10
C318410200	(673,20)	CIL 20 MD M10 L200	20	200	10
C318412200	(925,10)	CIL 25 MD M12 L200	25	200	12
C318412250	(1082,20)	CIL 25 MD M12 L250	25	250	12

On request, threaded coupling with different dimensions, also available.



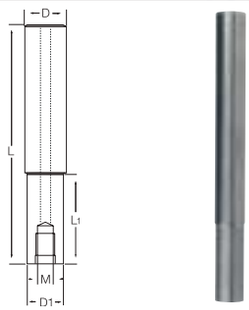
THREADED COUPLING CARBIDE CHUCKS WITH STRAIGHT SHANK - C3180

TUKOY

ART. C3180

Tech. Code	GR33 Euro	Description	D mm	D1 mm	L mm	L1 mm	M mm
C318008150	(364,10)	CIL 16 MDR M8 L150	16	12,8	150	40	8
C318008200	(464,10)	CIL 16 MDR M8 L200	16	12,8	200	60	8
C318010150	(594,70)	CIL 20 MDR M10 L150	20	17,8	150	50	10
C318010200	(732,40)	CIL 20 MDR M10 L200	20	17,8	200	60	10

On request, threaded coupling with different dimensions, also available.



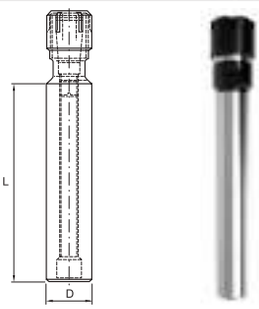
ER MINI COLLET CHUCKS CYLINDRICAL SHANK DIN 1835A

TUKOY

ART. C3191

Tech. Code	GR33 Euro	ER	D mm	L mm	Ghiera
C31911112070	81,40	11 Mini	12	70	ER11
C31911116100	86,00	11 Mini	16	100	ER11
C31911612080	75,80	16 Mini	12	80	ER16
C31911616080	86,00	16 Mini	16	80	ER16
C31911616130	90,70	16 Mini	16	130	ER16
C31911620100	86,00	16 Mini	20	100	ER16
C31911620160	104,40	16 Mini	20	160	ER16
C31912016100	87,30	20 Mini	16	100	ER20
C31912020100	87,30	20 Mini	20	100	ER20
C31912020160	104,40	20 Mini	20	160	ER20

Nut included. Collets ER DIN 6499.



- NUTS page C.44 - COLLETS ER page C.38 - WRENCHES page C.49

ER COLLET CHUCKS FLAT CYLINDRICAL SHANK DIN 1835A

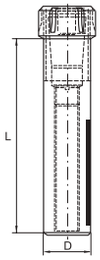
TUKOY

ART. C3192

Tech. Code	GR33 Euro	ER	D mm	L mm	Ghiera
C31922525100	114,80	25	25	100	GER25
C31923225100	114,80	32	25	100	GER32
C31923232050	87,30	32	32	50	GER32
C31923232100	96,30	32	32	100	GER32
C31924040080	117,10	40	40	80	GER40

WITH FLAT CYLINDRICAL SHANK
Nut included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.38 - WRENCHES page C.49



ER COLLET CHUCKS CYLINDRICAL SHANK DIN 1835A

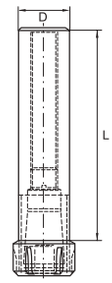
TUKOY

ART. C3193

Tech. Code	GR33 Euro	ER	D mm	L mm	Ghiera
C31933225100	114,80	32	25	100	GER32

WITH CYLINDRICAL SHANK
Nut included. Collets ER DIN 6499.

- NUTS page C.44 - COLLETS ER page C.38 - WRENCHES page C.49



SLITTING SAW HOLDERS DIN 1837-A AND DIN 1838-B

TUKOY

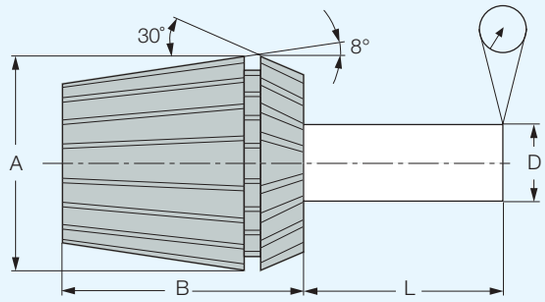
ART. C3230

HSS + HM disk saw holders cilindrical weldon shank grinded surfaces clamp

Tech. Code	GR33 Euro	D1 mm	D2 mm	D3 mm	L mm
C323005	146,00	5	6	16	60
C323008	141,80	8	6	15	60
C323010	141,80	10	8	19	62
C323013	141,80	13	10	24	69
C323016	137,60	16	12	31	78
C323022	146,00	22	16	40	86
C323032	314,20	32	25	88	124

Indivisible package Suggested retail package - Unit price

Standard



ER Collet Type DIN 6499

Basic Dimensions

Type	A	B
ER-11	11.5	18
ER-16	17	27
ER-20	21	31
ER-25	26	35
ER-32	33	40
ER-40	41	46
ER-50	52	60

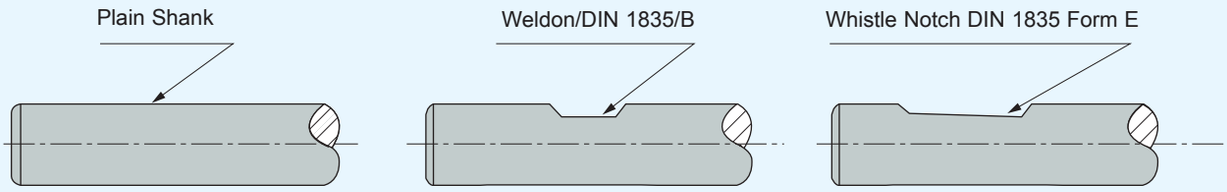
Concentricity Tolerances

L mm	D mm	Standard Precision	AA Ultra Precision	DIN 6499
6	1.0-1.6	0.01	0.005	
10	1.6-3.0	0.01	0.005	0.015
16	3.0-6.0	0.01	0.005	0.015
25	6.0-10.0	0.01	0.005	0.015
40	10.0-18.0	0.01	0.005	0.020
50	18.0-26.0	0.01	0.005	0.020
60	26.0-34.0			0.025

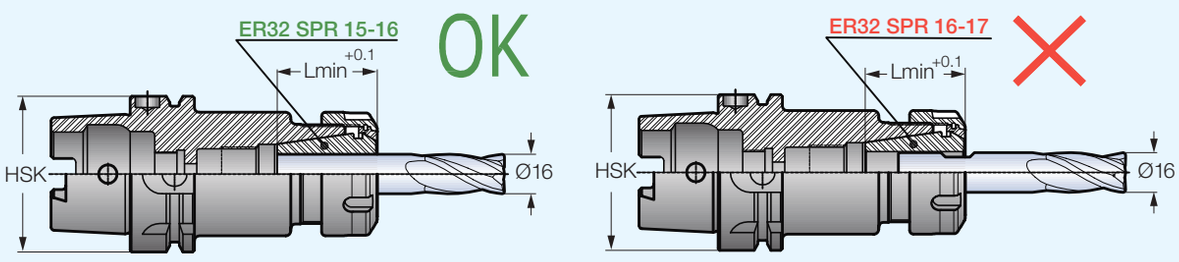
Sealed Collet JET2

With angular double nozzles. Coolant flow is direct to the cutting edge - for use with standard straight shank cutting tools (without coolant hole).

Standard Shank for use in Sealed Collects



Note: The front end of the sealed collet should be located beyond Weldon or the whistle notch.



ER8 SPRING COLLETS - STANDARD

WRK

ART. ER8S DIN 6499

Standard 0.01

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C40108S1	17,90	1	8.5	13.5	0.5	ER8S
C40108S1,5	17,90	1.5	8.5	13.5	0.5	ER8S
C40108S2	17,90	2	8.5	13.5	0.5	ER8S
C40108S2,5	17,90	2.5	8.5	13.5	0.5	ER8S
C40108S3	14,70	3	8.5	13.5	0.5	ER8S

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C40108S3,5	14,70	3.5	8.5	13.5	0.5	ER8S
C40108S4	14,70	4	8.5	13.5	0.5	ER8S
C40108S4,5	15,00	4.5	8.5	13.5	0.5	ER8S
C40108S5	14,70	5	8.5	13.5	0.5	ER8S

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

ER11 SPRING COLLETS - EXTRA-PRECISE

KERFOLG

ART. ER11Q DIN 6499

Extra accurate 0.005

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C402111Q1	19,20	1	11	18	0.5	ER11Q
C402111Q1,5	19,20	1.5	11	18	0.5	ER11Q
C402111Q2	19,20	2	11	18	0.5	ER11Q
C402111Q2,5	19,20	2.5	11	18	0.5	ER11Q
C402111Q3	19,20	3	11	18	0.5	ER11Q
C402111Q3,5	19,20	3.5	11	18	0.5	ER11Q

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C402111Q4	19,20	4	11	18	0.5	ER11Q
C402111Q4,5	19,20	4,5	11	18	0.5	ER11Q
C402111Q5	19,20	5	11	18	0.5	ER11Q
C402111Q5,5	19,20	5.5	11	18	0.5	ER11Q
C402111Q6	19,20	6	11	18	0.5	ER11Q
C402111Q7	19,20	7	11	18	0.5	ER11Q

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

ER11 SPRING COLLETS - EXTRA-PRECISE

ART. ER11AA DIN6499 WITH HARD TOUCH COATING

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C402311AA1	66,70	1	0.5	11	18	ER11AA
C402311AA2	61,20	2	1.0	11	18	ER11AA
C402311AA4	50,70	4	3.0	11	18	ER11AA

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C402311AA5	46,40	5	4.0	11	18	ER11AA
C402311AA6	50,70	6	5.0	11	18	ER11AA
C402311AA7	50,70	7	6.0	11	18	ER11AA

ER11 SPRING COLLETS - STANDARD

WRK

ART. ER11S DIN 6499

Standard 0.01

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C402011S1	18,00	1	11	18	0.5	ER11S
C402011S1,5	18,00	1.5	11	18	0.5	ER11S
C402011S2	18,00	2	11	18	0.5	ER11S
C402011S2,5	17,70	2.5	11	18	0.5	ER11S
C402011S3	14,20	3	11	18	0.5	ER11S
C402011S3,5	14,20	3.5	11	18	0.5	ER11S
C402011S4	14,20	4	11	18	0.5	ER11S

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C402011S4,5	18,00	4.5	11	18	0.5	ER11S
C402011S5	18,00	5	11	18	0.5	ER11S
C402011S5,5	14,20	5.5	11	18	0.5	ER11S
C402011S6	14,20	6	11	18	0.5	ER11S
C402011S6,5	18,00	6.5	11	18	0.5	ER11S
C402011S7	15,10	7	11	18	0.5	ER11S

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

ER11 SPRING COLLETS SET

KERFOLG WRK

ART. ER11

Tech. Code	GR44 Euro	Tipo	d mm	Pieces
C412511QBOX	195,50	ER11Q - KERFOLG	1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 5 - 6 - 7	10

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C412511SBOX	161,60	ER11S - WRK	1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 5 - 6 - 7	10

ER16 SPRING COLLETS - EXTRA-PRECISE

KERFOLG

ART. ER16Q DIN 6499

Extra accurate 0.005

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C403116Q1	20,60	1	16	27.5	0.5	ER16Q
C403116Q1,5	20,60	1.5	16	27.5	0.5	ER16Q
C403116Q2	20,60	2	16	27.5	0.5	ER16Q
C403116Q2,5	20,60	2.5	16	27.5	0.5	ER16Q
C403116Q3	20,60	3	16	27.5	1.0	ER16Q
C403116Q4	20,60	4	16	27.5	1.0	ER16Q

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C403116Q5	20,60	5	16	27.5	1.0	ER16Q
C403116Q6	20,60	6	16	27.5	1.0	ER16Q
C403116Q7	20,60	7	16	27.5	1.0	ER16Q
C403116Q8	20,60	8	16	27.5	1.0	ER16Q
C403116Q9	20,60	9	16	27.5	1.0	ER16Q
C403116Q10	20,60	10	16	27.5	1.0	ER16Q

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

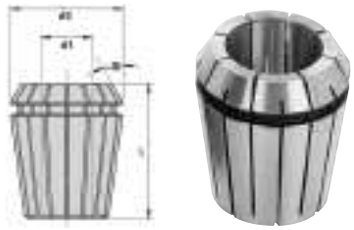
Indivisible package Suggested retail package - Unit price

ER16 SPRING COLLETS - EXTRA-PRECISE

ART. ER16AA DIN6499 WITH HARD TOUCH COATING

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C403316AA1	61,90	1	0.5	16	27.5	ER16AA
C403316AA2	61,90	2	1.0	16	27.5	ER16AA
C403316AA3	48,30	3	2.0	16	27.5	ER16AA
C403316AA4	48,30	4	3.0	16	27.5	ER16AA
C403316AA5	48,30	5	4.0	16	27.5	ER16AA

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C403316AA6	48,30	6	5.0	16	27.5	ER16AA
C403316AA7	48,30	7	6.0	16	27.5	ER16AA
C403316AA8	48,30	8	7.0	16	27.5	ER16AA
C403316AA9	48,30	9	8.0	16	27.5	ER16AA
C403316AA10	48,30	10	9.0	16	27.5	ER16AA



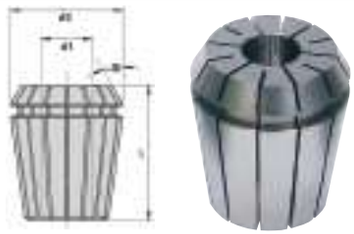
ER16 SPRING COLLETS - STANDARD

ART. ER16S DIN 6499 **Standard 0.01**

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C403016S1	17,10	1	16	27.5	0.5	ER16S
C403016S1,5	17,10	1.5	16	27.5	0.5	ER16S
C403016S2	17,10	2	16	27.5	0.5	ER16S
C403016S2,5	17,10	2.5	16	27.5	0.5	ER16S
C403016S3	17,10	3	16	27.5	1.0	ER16S
C403016S4	17,10	4	16	27.5	1.0	ER16S

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C403016S5	17,10	5	16	27.5	1.0	ER16S
C403016S6	17,10	6	16	27.5	1.0	ER16S
C403016S7	17,10	7	16	27.5	1.0	ER16S
C403016S8	17,10	8	16	27.5	1.0	ER16S
C403016S9	17,10	9	16	27.5	1.0	ER16S
C403016S10	17,10	10	16	27.5	1.0	ER16S

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.



ER16 SPRING COLLETS SET

ART. ER16

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR44 Euro	Tipo	d mm	Pieces
C411116QBOX	230,50	ER16Q - KERFOLG	1 - 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	12

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411116SBOX	192,20	ER16S - WRK	1 - 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	12

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411116SBOX1	125,60	ER16S - WRK	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	8

SPRING COLLECTS ER EXTRA PRECISE

ART. C4038 **Extra accurate 0,002**

Tech. Code	GR34 Euro	ER	L mm	Ø from - a mm	Clamping mm
C4038ER1101	(96,60)	11	18	1 - 6	1
C4038ER1601	(94,00)	16	27,5	1 - 10	1

Tech. Code	GR34 Euro	ER	L mm	Ø from - a mm	Clamping mm
C4038ER2501	(97,00)	25	34	1 - 16	1
C4038ER3202	(79,00)	32	40	2 - 20	1

NOTE - To order a spring collect Ø different from 1: example ER11 Ø 2 the technical code to be requested is C4038ER1102

ER SPRING COLLECTS EXTRA PRECISE

ART. C4039 **Extra accurate 0,005**

Tech. Code	GR34 Euro	ER	L mm	Ø from - a mm	Clamping mm
C4039ER1101	(40,00)	11	18	1 - 7	0,5
C4039ER1601	(42,00)	16	27,5	1 - 10	0,5
C4039ER2001	(43,00)	20	31,5	1 - 13	0,5

Tech. Code	GR34 Euro	ER	L mm	Ø from - a mm	Clamping mm
C4039ER2501	(46,00)	25	34	1 - 17	0,5
C4039ER3202	(58,00)	32	40	2 - 22	0,5
C4039ER4003	(69,00)	40	46	3 - 30	0,5

NOTE - To order a spring collet Ø different from 1 : example ER11 Ø 2 the technical code to be requested is C4038ER1102

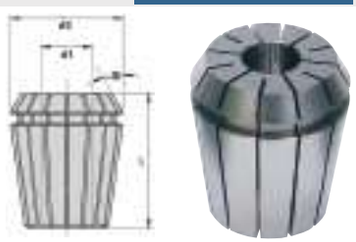
ER20 SPRING COLLETS - EXTRA-PRECISE

ART. ER20Q DIN 6499 **Extra accurate 0.005**

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C404120Q2	19,00	2	20	31.5	0.5	ER20Q
C404120Q2,5	19,00	2.5	20	31.5	0.5	ER20Q
C404120Q3	19,00	3	20	31.5	1.0	ER20Q
C404120Q4	19,00	4	20	31.5	1.0	ER20Q
C404120Q5	18,90	5	20	31.5	1.0	ER20Q
C404120Q6	19,00	6	20	31.5	1.0	ER20Q

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C404120Q8	19,00	8	20	31.5	1.0	ER20Q
C404120Q9	19,00	9	20	31.5	1.0	ER20Q
C404120Q10	19,00	10	20	31.5	1.0	ER20Q
C404120Q11	19,00	11	20	31.5	1.0	ER20Q
C404120Q12	19,00	12	20	31.5	1.0	ER20Q
C404120Q13	18,90	13	20	31.5	1.0	ER20Q

Concentricity precision as shown in the table of values obtained by using a chucks having Ra<0,1 plier seat and max eccentricity of 0,001.



ER20 SPRING COLLETS - EXTRA-PRECISE

ART. ER20AA DIN 6499 WITH HARD TOUCH COATING

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C404320AA2	71,80	2	1	20	31.5	ER20AA
C404320AA3	54,40	3	2	20	31.5	ER20AA
C404320AA4	54,40	4	3	20	31.5	ER20AA
C404320AA5	54,40	5	4	20	31.5	ER20AA
C404320AA6	54,40	6	5	20	31.5	ER20AA
C404320AA7	54,40	7	6	20	31.5	ER20AA

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C404320AA8	54,40	8	7	20	31.5	ER20AA
C404320AA9	54,40	9	8	20	31.5	ER20AA
C404320AA10	54,40	10	9	20	31.5	ER20AA
C404320AA11	54,40	11	10	20	31.5	ER20AA
C404320AA12	54,40	12	11	20	31.5	ER20AA
C404320AA13	54,40	13	12	20	31.5	ER20AA

ER20 SPRING COLLETS - STANDARD

ART. ER20S DIN 6499

Standard 0.01

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C404020S1	17,70	1	20	31.5	0.5	ER20S
C404020S1,5	21,80	1.5	20	31.5	0.5	ER20S
C404020S2	17,70	2	20	31.5	0.5	ER20S
C404020S2,5	17,70	2.5	20	31.5	0.5	ER20S
C404020S3	14,20	3	20	31.5	1.0	ER20S
C404020S4	14,20	4	20	31.5	1.0	ER20S
C404020S5	14,20	5	20	31.5	1.0	ER20S
C404020S6	14,20	6	20	31.5	1.0	ER20S

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C404020S7	14,20	7	20	31.5	1.0	ER20S
C404020S8	14,20	8	20	31.5	1.0	ER20S
C404020S9	14,20	9	20	31.5	1.0	ER20S
C404020S10	14,20	10	20	31.5	1.0	ER20S
C404020S11	14,20	11	20	31.5	1.0	ER20S
C404020S12	14,20	12	20	31.5	1.0	ER20S
C404020S13	14,20	13	20	31.5	1.0	ER20S

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

ER20 SPRING COLLETS SET

ART. ER20

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR44 Euro	Tipo	d mm	Pieces
C411220QBOX	250,10	ER20Q - KERFOLG	2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 -11 - 12 - 13	13

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411220SBOX	205,30	ER20S - WRK	2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 -11 - 12 - 13	13

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411220SBOX1	74,30	ER20S - WRK	4 - 6 - 8 - 10 - 12	5

ER25 SPRING COLLETS - EXTRA-PRECISE

ART. ER25Q DIN 6499

Extra accurate 0.005

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C405125Q2	21,40	2	25	34	0.5	ER25Q
C405125Q2,5	21,40	2.5	25	34	0.5	ER25Q
C405125Q3	21,40	3	25	34	1.0	ER25Q
C405125Q4	21,40	4	25	34	1.0	ER25Q
C405125Q5	21,40	5	25	34	1.0	ER25Q
C405125Q6	21,40	6	25	34	1.0	ER25Q
C405125Q7	21,30	7	25	34	1.0	ER25Q
C405125Q8	21,40	8	25	34	1.0	ER25Q

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C405125Q9	21,40	9	25	34	1.0	ER25Q
C405125Q10	21,40	10	25	34	1.0	ER25Q
C405125Q11	21,40	11	25	34	1.0	ER25Q
C405125Q12	21,40	12	25	34	1.0	ER25Q
C405125Q13	21,40	13	25	34	1.0	ER25Q
C405125Q14	21,40	14	25	34	1.0	ER25Q
C405125Q15	21,40	15	25	34	1.0	ER25Q
C405125Q16	21,40	16	25	34	1.0	ER25Q

Concentricity precision as shown in the table of values obtained by using a chucks having Ra<0,1 plier seat and max eccentricity of 0,001.

ER25 SPRING COLLETS - EXTRA-PRECISE

ART. ER25AA DIN 6499 WITH HARD TOUCH COATING

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C405325AA2	67,90	2	1	25	34	ER25AA
C405325AA3	56,80	3	2	25	34	ER25AA
C405325AA4	56,80	4	3	25	34	ER25AA
C405325AA5	56,80	5	4	25	34	ER25AA
C405325AA6	56,80	6	5	25	34	ER25AA
C405325AA7	56,80	7	6	25	34	ER25AA
C405325AA8	56,80	8	7	25	34	ER25AA
C405325AA9	56,80	9	8	25	34	ER25AA

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C405325AA10	56,80	10	9	25	34	ER25AA
C405325AA11	56,80	11	10	25	34	ER25AA
C405325AA12	56,80	12	11	25	34	ER25AA
C405325AA13	56,80	13	12	25	34	ER25AA
C405325AA14	56,80	14	13	25	34	ER25AA
C405325AA15	56,80	15	14	25	34	ER25AA
C405325AA16	56,80	16	15	25	34	ER25AA

Indivisible package Suggested retail package - Unit price

ER25 SPRING COLLETS - STANDARD

WRK

ART. ER25S DIN 6499

Standard 0.01

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C405025S1	18,40	1	25	34	0.5	ER25S
C405025S1,5	18,40	1,5	25	34	0.5	ER25S
C405025S2	18,90	2	25	34	0.5	ER25S
C405025S2,5	18,90	2.5	25	34	0.5	ER25S
C405025S3	14,70	3	25	34	1.0	ER25S
C405025S4	14,70	4	25	34	1.0	ER25S
C405025S5	14,70	5	25	34	1.0	ER25S
C405025S6	14,70	6	25	34	1.0	ER25S
C405025S7	14,70	7	25	34	1.0	ER25S

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C405025S8	14,70	8	25	34	1.0	ER25S
C405025S9	14,70	9	25	34	1.0	ER25S
C405025S10	14,70	10	25	34	1.0	ER25S
C405025S11	14,70	11	25	34	1.0	ER25S
C405025S12	14,70	12	25	34	1.0	ER25S
C405025S13	14,70	13	25	34	1.0	ER25S
C405025S14	14,70	14	25	34	1.0	ER25S
C405025S15	14,70	15	25	34	1.0	ER25S
C405025S16	14,70	16	25	34	1.0	ER25S

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

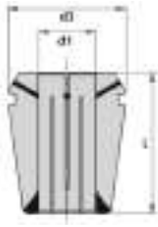
ER25 SPRING COLLETS - SEALED

KERFOLG

ART. DIN 6499 - ER25T

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C408025T4	34,60	4	25	34	0.5	ER25T
C408025T6	34,60	6	25	34	0.5	ER25T
C408025T8	34,60	8	25	34	0.5	ER25T
C408025T10	34,60	10	25	34	0.5	ER25T

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C408025T12	34,60	12	25	34	0.5	ER25T
C408025T14	34,60	14	25	34	0.5	ER25T
C408025T16	34,60	16	25	34	0.5	ER25T



ER25 SPRING COLLETS SET

KERFOLG WRK

ART. ER25

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR44 Euro	Tipo	d mm	Pieces
C411325QBOX	298,20	ER25Q - KERFOLG	2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 -13 - 14 -15 - 16	15

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411325SBOX	185,60	ER25S - WRK	2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 -13 - 14 -15 - 16	15

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411325SBOX1	89,50	ER25S - WRK	4 - 6 - 8 - 10 - 12 - 16	6

ER32 SPRING COLLETS - EXTRA-PRECISE

KERFOLG

ART. ER32Q DIN 6499

Extra accurate 0.005

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C406132Q3	20,10	3.0	32	40	1.0	ER32Q
C406132Q4	20,10	4.0	32	40	1.0	ER32Q
C406132Q5	20,10	5.0	32	40	1.0	ER32Q
C406132Q6	20,10	6.0	32	40	1.0	ER32Q
C406132Q7	20,10	7.0	32	40	1.0	ER32Q
C406132Q8	20,10	8.0	32	40	1.0	ER32Q
C406132Q9	20,10	9.0	32	40	1.0	ER32Q
C406132Q10	20,10	10	32	40	1.0	ER32Q
C406132Q11	20,10	11	32	40	1.0	ER32Q

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C406132Q12	20,10	12	32	40	1.0	ER32Q
C406132Q13	20,10	13	32	40	1.0	ER32Q
C406132Q14	20,10	14	32	40	1.0	ER32Q
C406132Q15	20,10	15	32	40	1.0	ER32Q
C406132Q16	20,10	16	32	40	1.0	ER32Q
C406132Q17	20,10	17	32	40	1.0	ER32Q
C406132Q18	20,10	18	32	40	1.0	ER32Q
C406132Q20	20,10	20	32	40	1.0	ER32Q

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

ER32 SPRING COLLETS - EXTRA-PRECISE

ART. ER32AA DIN 6499 WITH HARD TOUCH COATING

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C406332AA3	61,90	3	2	32	40	ER32AA
C406332AA4	61,90	4	3	32	40	ER32AA
C406332AA5	61,90	5	4	32	40	ER32AA
C406332AA6	61,90	6	5	32	40	ER32AA
C406332AA7	61,90	7	6	32	40	ER32AA
C406332AA8	61,90	8	7	32	40	ER32AA
C406332AA9	61,90	9	8	32	40	ER32AA
C406332AA10	61,90	10	9	32	40	ER32AA
C406332AA11	61,90	11	10	32	40	ER32AA

Tech. Code	GR42 Euro	d1 max mm	d1 min mm	d3 mm	L mm	Tipo
C406332AA12	61,90	12	11	32	40	ER32AA
C406332AA13	61,90	13	12	32	40	ER32AA
C406332AA14	61,90	14	13	32	40	ER32AA
C406332AA15	61,90	15	14	32	40	ER32AA
C406332AA16	61,90	16	15	32	40	ER32AA
C406332AA17	61,90	17	16	32	40	ER32AA
C406332AA18	61,90	18	17	32	40	ER32AA
C406332AA19	61,90	19	18	32	40	ER32AA
C406332AA20	61,90	20	19	32	40	ER32AA

Indivisible package Suggested retail package - Unit price

ER32 SPRING COLLETS - STANDARD

WRK

ART. ER32S DIN 6499 — **Standard 0.01**

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C406032S3	15,00	3	32	40	1.0	ER32S
C406032S4	15,00	4	32	40	1.0	ER32S
C406032S5	15,00	5	32	40	1.0	ER32S
C406032S6	15,00	6	32	40	1.0	ER32S
C406032S7	15,00	7	32	40	1.0	ER32S
C406032S8	15,00	8	32	40	1.0	ER32S
C406032S9	15,00	9	32	40	1.0	ER32S
C406032S10	15,00	10	32	40	1.0	ER32S
C406032S11	15,00	11	32	40	1.0	ER32S

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C406032S12	15,00	12	32	40	1.0	ER32S
C406032S13	15,00	13	32	40	1.0	ER32S
C406032S14	15,00	14	32	40	1.0	ER32S
C406032S15	15,00	15	32	40	1.0	ER32S
C406032S16	15,00	16	32	40	1.0	ER32S
C406032S17	15,00	17	32	40	1.0	ER32S
C406032S18	15,00	18	32	40	1.0	ER32S
C406032S19	15,00	19	32	40	1.0	ER32S
C406032S20	15,00	20	32	40	1.0	ER32S

Concentricity precision as shown in the table of values obtained by using a chucks having Ra<0,1 plier seat and max eccentricity of 0,001.

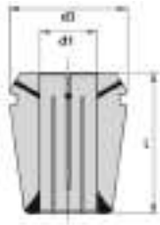
ER32 SPRING COLLETS - SEALED

KERFOLG

ART. DIN 6499 - ER32T

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C409032T6	34,60	6	32	40	0.5	ER32T
C409032T8	34,60	8	32	40	0.5	ER32T
C409032T10	34,60	10	32	40	0.5	ER32T
C409032T12	34,60	12	32	40	0.5	ER32T

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C409032T14	34,60	14	32	40	0.5	ER32T
C409032T16	34,60	16	32	40	0.5	ER32T
C409032T18	34,60	18	32	40	0.5	ER32T
C409032T20	34,60	20	32	40	0.5	ER32T

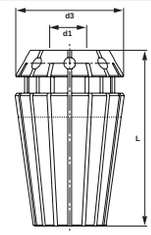


ER32 SPRING COLLETS - SEALED AA

ART. ART. DIN 6499 - ER32SEAL AA

Tech. Code	GR42 Euro	d1 mm	d3 mm	L mm	Tipo
C409532SEAL4	141,40	4	32	40	SEAL AA
C409532SEAL5	141,40	5	32	40	SEAL AA
C409532SEAL6	141,40	6	32	40	SEAL AA
C409532SEAL7	141,40	7	32	40	SEAL AA
C409532SEAL8	(141,40)	8	32	40	SEAL AA
C409532SEAL9	141,40	9	32	40	SEAL AA
C409532SEAL10	141,40	10	32	40	SEAL AA
C409532SEAL11	141,40	11	32	40	SEAL AA
C409532SEAL12	141,40	12	32	40	SEAL AA

Tech. Code	GR42 Euro	d1 mm	d3 mm	L mm	Tipo
C409532SEAL13	141,40	13	32	40	SEAL AA
C409532SEAL14	141,40	14	32	40	SEAL AA
C409532SEAL15	141,40	15	32	40	SEAL AA
C409532SEAL16	141,40	16	32	40	SEAL AA
C409532SEAL17	141,40	17	32	40	SEAL AA
C409532SEAL18	141,40	18	32	40	SEAL AA
C409532SEAL19	141,40	19	32	40	SEAL AA
C409532SEAL20	141,40	20	32	40	SEAL AA



ER32 SPRING COLLETS SET

KERFOLG WRK

ART. ER32

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR44 Euro	Tipo	d mm	Pieces
C411432QBOX	375,60	ER32Q - KERFOLG	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 -11 -12 - 13 - 14 -15 -16 -17 - 18 - 19 - 20	18

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411432SBOX	266,40	ER32S - WRK	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 -11 -12 - 13 - 14 -15 -16 -17 - 18 - 19 - 20	18

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411432SBOX1	95,10	ER32S - WRK	6 - 8 - 10 - 12 - 16 - 20	6

ER40 SPRING COLLETS - EXTRA-PRECISE

KERFOLG

ART. ER40Q DIN 6499 — **Extra accurate 0.005**

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C407140Q4	26,10	4	41	46	1.0	ER40Q
C407140Q5	26,10	5	41	46	1.0	ER40Q
C407140Q6	26,10	6	41	46	1.0	ER40Q
C407140Q7	26,10	7	41	46	1.0	ER40Q
C407140Q8	26,10	8	41	46	1.0	ER40Q
C407140Q9	26,10	9	41	46	1.0	ER40Q
C407140Q10	26,10	10	41	46	1.0	ER40Q
C407140Q11	26,10	11	41	46	1.0	ER40Q
C407140Q12	26,10	12	41	46	1.0	ER40Q
C407140Q13	26,10	13	41	46	1.0	ER40Q
C407140Q14	26,10	14	41	46	1.0	ER40Q

Tech. Code	GR44 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C407140Q15	26,10	15	41	46	1.0	ER40Q
C407140Q16	26,10	16	41	46	1.0	ER40Q
C407140Q17	26,10	17	41	46	1.0	ER40Q
C407140Q18	26,10	18	41	46	1.0	ER40Q
C407140Q19	26,10	19	41	46	1.0	ER40Q
C407140Q20	26,10	20	41	46	1.0	ER40Q
C407140Q21	26,10	21	41	46	1.0	ER40Q
C407140Q22	26,10	22	41	46	1.0	ER40Q
C407140Q23	26,10	23	41	46	1.0	ER40Q
C407140Q24	26,10	24	41	46	1.0	ER40Q
C407140Q25	26,10	25	41	46	1.0	ER40Q

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

Indivisible package Suggested retail package - Unit price

ER40 SPRING COLLETS - STANDARD

WRK

ART. ER40S DIN 6499

Standard 0.01

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C407040S4	21,70	4	41	46	1.0	ER40S
C407040S5	21,70	5	41	46	1.0	ER40S
C407040S6	21,30	6	41	46	1.0	ER40S
C407040S7	21,30	7	41	46	1.0	ER40S
C407040S8	21,30	8	41	46	1.0	ER40S
C407040S9	21,70	9	41	46	1.0	ER40S
C407040S10	21,30	10	41	46	1.0	ER40S
C407040S11	21,30	11	41	46	1.0	ER40S
C407040S12	21,30	12	41	46	1.0	ER40S
C407040S13	21,30	13	41	46	1.0	ER40S
C407040S14	21,30	14	41	46	1.0	ER40S
C407040S15	21,70	15	41	46	1.0	ER40S

Tech. Code	GR33 Euro	d1 mm	d3 mm	L mm	Clamping mm	Tipo
C407040S16	21,30	16	41	46	1.0	ER40S
C407040S17	21,70	17	41	46	1.0	ER40S
C407040S18	21,70	18	41	46	1.0	ER40S
C407040S19	21,30	19	41	46	1.0	ER40S
C407040S20	21,30	20	41	46	1.0	ER40S
C407040S21	21,30	21	41	46	1.0	ER40S
C407040S22	21,70	22	41	46	1.0	ER40S
C407040S23	21,30	23	41	46	1.0	ER40S
C407040S24	21,30	24	41	46	1.0	ER40S
C407040S25	21,30	25	41	46	1.0	ER40S
C407040S26	21,30	26	41	46	1.0	ER40S

Concentricity precision as indicated in the table, values obtained using chucks with collet pocket with Ra < 0.1 and radial run-out max. 0.001.

ER40 SPRING COLLETS SET

WRK

ART. ER40

Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411540SBOX	167,10	ER40S - WRK	8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24 - 25	10

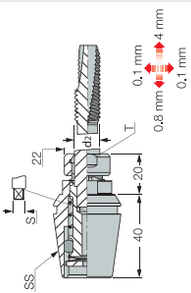
Complete sets for all diameters, recommended as the best solution for all types of milling operations.

Tech. Code	GR33 Euro	Tipo	d mm	Pieces
C411540SBOX1	108,20	ER40S - WRK	6 - 8 - 10 - 12 - 16 - 20 - 25	7

ER TAPPING ATTACHMENTS

ART. C4105

Tech. Code	GR42 Euro	Description	DIN371 - 374/6	d2 mm	S mm	T mm	Tipo
C410503,5	(226,00)	GTIN ER32 DIN 3,50X2,70	M3 - M5	3.5	2.7	20	ER32GTIN
C410504,5	(226,00)	GTIN ER32 DIN 4,50X3,40	M4 - M6	4.5	3.4	20	ER32GTIN
C410506	(226,00)	GTIN ER32 DIN 6,00X4,90	M5 - M8	6.0	4.9	20	ER32GTIN
C410507	(226,00)	GTIN ER32 DIN 7,00X5,50	M10	7.0	5.5	20	ER32GTIN
C410508	(226,00)	GTIN ER32 DIN 8,00X6,20	M8	8.0	6.2	20	ER32GTIN
C410509	(226,00)	GTIN ER32 DIN 9,00X7,00	M12	9.0	7.0	20	ER32GTIN
C410510	(226,00)	GTIN ER32 DIN 10,00X8,00	M10	10.0	8.0	20	ER32GTIN
C410511	(226,00)	GTIN ER32 DIN 11,00X9,00	M14	11.0	9.0	20	ER32GTIN
C410512	(226,00)	GTIN ER32 DIN 12,00X9,00	M16	12.0	9.0	20	ER32GTIN



Ring parts C4105T

ER16 SPRING COLLETS FOR RIGID TAPPING

TUKOY

ART. TYPE DIN 6499 - ER16M

Tech. Code	GR44 Euro	d1 mm	S mm	DIN 371	DIN 374/6
C410016D6	41,00	6.0	4.9	M5-M6	M8

Tech. Code	GR44 Euro	d1 mm	S mm	DIN 371	DIN 374/6
C410016D7	41,00	7.0	5.5	-	M10

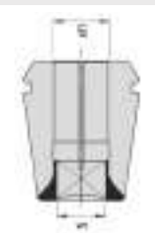
ER25 SPRING COLLETS FOR RIGID TAPPING

TUKOY

ART. DIN 6499 - ER25M

Tech. Code	GR44 Euro	d1 mm	S mm	DIN 371	DIN 374/6
C411025D3,5	41,00	3.5	2.7	M3	M5
C411025D4,5	41,00	4.5	3.4	M4	M6
C411025D6	41,00	6	4.9	M5 - M6	M8
C411025D7	41,00	7	5.5	-	M10

Tech. Code	GR44 Euro	d1 mm	S mm	DIN 371	DIN 374/6
C411025D8	41,00	8	6.2	M8	-
C411025D9	41,00	9	7	-	M12
C411025D10	41,00	10	8	M10	-
C411025D11	41,00	11	9	-	M14



ER32 SPRING COLLETS FOR RIGID TAPPING

TUKOY

ART. DIN 6499 - ER32M

Tech. Code	GR44 Euro	d1 mm	S mm	DIN 371	DIN 374/6
C412032D4,5	38,70	4.5	3.4	M4	M6
C412032D6	38,70	6	4.9	M5 - M6	M8
C412032D7	38,70	7	5.5	-	M10
C412032D8	38,70	8	6.2	M8	-
C412032D9	38,70	9	7	-	M12

Tech. Code	GR44 Euro	d1 mm	S mm	DIN 371	DIN 374/6
C412032D10	38,70	10	8	M10	-
C412032D11	38,70	11	9	-	M14
C412032D12	38,70	12	9	-	M16
C412032D14	38,70	14	11	-	M18
C412032D16	38,70	16	12	-	M20

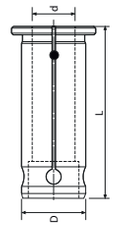
REDUCTION SLEEVES FOR POWER CHUCKS Ø20 - SEALED

WRK

ART. C4210

Tech. Code	GR33 Euro	d mm	D mm	L mm
C4210203	67,30	3	20	50
C4210204	67,30	4	20	50
C4210205	67,30	5	20	50
C4210206	67,30	6	20	50
C4210208	67,30	8	20	50

Tech. Code	GR33 Euro	d mm	D mm	L mm
C42102010	67,30	10	20	50
C42102012	67,30	12	20	50
C42102014	67,30	14	20	50
C42102016	67,30	16	20	50



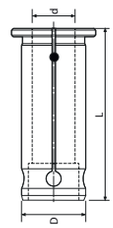
REDUCTION SLEEVES FOR POWER CHUCKS Ø32 - SEALED

WRK

ART. C4220

Tech. Code	GR33 Euro	d mm	D mm	L mm
C4220326	77,70	6	32	63
C4220328	77,70	8	32	63
C42203210	77,70	10	32	63
C42203212	77,70	12	32	63
C42203214	77,70	14	32	63

Tech. Code	GR33 Euro	d mm	D mm	L mm
C42203216	77,70	16	32	63
C42203218	77,70	18	32	63
C42203220	77,70	20	32	63
C42203225	77,70	25	32	63



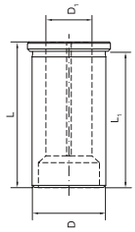
REDUCTION SLEEVES FOR HYDRAULIC CHUCKS

KERFOLG

ART. C4233

Tech. Code	GR44 Euro	D mm	L mm	D1 mm	L1 mm
C42331203	129,00	12	44	3	40
C42331204	122,00	12	44	4	40
C42331205	122,00	12	44	5	40
C42331206	117,00	12	44	6	40
C42331208	117,00	12	44	8	40
C42332003	126,00	20	54	3	50
C42332004	120,00	20	54	4	50
C42332005	120,00	20	54	5	50
C42332006	113,00	20	54	6	50
C42332008	113,00	20	54	8	50
C42332010	113,00	20	54	10	50
C42332012	113,00	20	54	12	50

Tech. Code	GR44 Euro	D mm	L mm	D1 mm	L1 mm
C42332014	113,00	20	54	14	50
C42332016	113,00	20	54	16	50
C42333206	140,00	32	64	6	60
C42333208	140,00	32	64	8	60
C42333210	140,00	32	64	10	60
C42333212	136,00	32	64	12	60
C42333214	136,00	32	64	14	60
C42333216	136,00	32	64	16	60
C42333218	136,00	32	64	18	60
C42333220	136,00	32	64	20	60
C42333225	136,00	32	64	25	60



CLEANERS FOR TAPER COUPLINGS AND COLLET CHUCKS

ART. C4234

Tech. Code	GR33 Euro	Dimension
C4234MT1	13,40	MK 1
C4234MT2	13,40	MK 2
C4234MT3	15,10	MK 3
C4234MT4	20,20	MK 4
C4234MT5	23,50	MK 5
C4234SK30	20,20	SK 30
C4234SK40	21,80	SK 40

Tech. Code	GR33 Euro	Dimension
C4234SK50	27,70	SK 50
C4234HSK32	(65,50)	HSK 32
C4234HSK40	(68,90)	HSK 40
C4234HSK50	(74,80)	HSK 50
C4234HSK63	74,80	HSK 63
C4234HSK80	(86,50)	HSK 80
C4234HSK100	103,30	HSK 100

MINI NUTS FOR ER COLLETS DIN6499

KERFOLG

ART. C4310

Tech. Code	GR44 Euro	Collet	Filettatura interna	Ø external mm	Altezza ghiera mm
C4310ER8	17,30	ER8	M10 x 0,75	10.8	10.8
C4310ER11	17,30	ER11	M13 x 0,75	16	12
C4310ER16	17,30	ER16	M19 x 1	22	18
C4310ER20	19,20	ER20	M24 x 1	28	19
C4310ER25	19,20	ER25	M30 x 1	35	20

Indivisible package Suggested retail package - Unit price

BALANCED STANDARD NUTS FOR ER COLLETS DIN6499

KERFOLG

ART. C4320

Tech. Code	GR44 Euro	Collet	Internal threading	ø External mm	Ring nut height mm
C4320ER16	19,20	ER16	M22 x 1.5	32	22.6
C4320ER20	24,10	ER20	M25 x 1.5	35	23.6
C4320ER25	22,20	ER25	M32 x 1.5	42	24.7
C4320ER32	24,10	ER32	M40 x 1.5	50	24.7
C4320ER40	30,00	ER40	M50 x 1.5	63	30

HEXAGONAL NUTS FOR ER COLLETS DIN6499

KERFOLG

ART. C4325

Tech. Code	GR44 Euro	Collet	Filettatura interna	Ø External mm	Altezza ghiera mm
C4325ER11	19,20	ER11	M14 x 0.75	19	11.30
C4325ER16	19,20	ER16	M22 x 1.5	28	17.50
C4325ER20	21,40	ER20	M25 x 1.5	34	19

STANDARD NUTS FOR ER COLLETS

SCHÜSSLER

ART. C4326

Tech. Code	GR34 Euro	ER	Shape
C43260ER11	(31,00)	11	Cilindrical
C43260ER16	(31,00)	16	Hxagonal
C43260ER20	(31,00)	20	Hexagonal
C43260ER25	(33,00)	25	Hexagonal
C43260ER32	(34,00)	32	Cilindrical
C43260ER40	(40,00)	40	Cilindrical

NUTS FOR HAWK EYE PLIERS

SCHÜSSLER

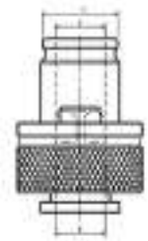
ART. C4327

Tech. Code	GR34 Euro	ER
C43270ER16	(43,00)	16
C43270ER25	(50,00)	25
C43270ER32	(50,00)	32
C43270ER40	(58,00)	40

BUSH WITH CLUTCH FOR TAPPING

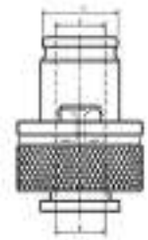
ART. 19 DIN STANDARD

Tech. Code	GR42 Euro	Tap thread	D mm	d mm	S mm	Tap DIN
C435019M2G2,8	73,50	M2	19	2.8	2.1	371
C435019M3G3,5	73,50	M3	19	3.5	2.7	371
C435019M4G4,5	73,50	M4	19	4.5	3.4	371
C435019M5G6	73,50	M5	19	6	4.9	371
C435019M6G6	73,50	M6	19	6	4.9	371
C435019M8G6	73,50	M8	19	6	4.9	376
C435019M8G8	73,50	M8	19	8	6.2	371
C435019M10G7	73,50	M10	19	7	5.5	376
C435019M10G10	73,50	M10	19	10	8	371
C435019M12G9	73,50	M12	19	9	7	376
C435019M14G11	73,50	M14	19	11	9	376



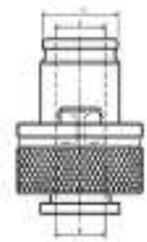
ART. 31 DIN STANDARD

Tech. Code	GR42 Euro	Tap thread	D mm	d mm	S mm	Tap DIN
C435231M6G6	91,40	M6	31	6	4.9	371
C435231M8G8	91,40	M8	31	8	6.2	371
C435231M10G7	91,40	M10	31	7	5.5	376
C435231M10G10	91,40	M10	31	10	8	371
C435231M12G9	91,40	M12	31	9	7	376
C435231M14G11	91,40	M14	31	11	9	376
C435231M16G12	91,40	M16	31	12	9	376
C435231M18G14	91,40	M18	31	14	11	376
C435231M20G16	91,40	M20	31	16	12	376
C435231M24G18	91,40	M24	31	18	14.5	376



ART. 48 DIN STANDARD

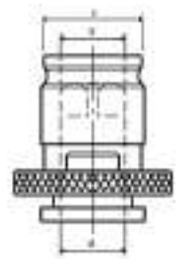
Tech. Code	GR42 Euro	Tap thread	D mm	d mm	S mm	Tap DIN
C4354M12G9	(213,30)	M12	48	9	7	376
C4354M14G11	(213,30)	M14	48	11	9	376
C4354M16G12	(213,30)	M16	48	12	9	376
C4354M18G14	(213,30)	M18	48	14	11	376
C4354M20G16	(213,30)	M20	48	16	12	376
C4354M22G18	(213,30)	M22	48	18	14.5	376
C4354M24G18	(213,30)	M24	48	18	14.5	376
C4354M27G20	(213,30)	M27	48	20	16	376
C4354M30G22	(211,10)	M30	48	22	18	376
C4354M33G25	(213,30)	M33	48	25	20	376
C4354M36G28	(213,30)	M36	48	28	22	376



BUSH WITHOUT CLUTCH FOR TAPPING

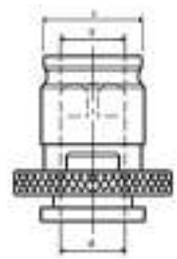
ART. 19 DIN STANDARD

Tech. Code	GR42 Euro	Tap thread	D mm	d mm	S mm	Tap DIN
C435619G3,5	29,40	M3	19	3.5	2.7	371
C435619G4,5	29,40	M4	19	4.5	3.4	371
C435619G2,8	29,40	M2.5 - M4	19	2.8	2.1	371 - 376
C435619G6	29,40	M5 - M6 - M8	19	6	4.9	371 - 376
C435619G7	29,40	M10	19	7	5.5	376
C435619G8	29,40	M8	19	8	6.2	371
C435619G10	29,40	M10	19	10	8	371
C435619G9	29,40	M12	19	9	7	376
C435619G11	29,40	M14	19	11	9	376



ART. 31 DIN STANDARD

Tech. Code	GR42 Euro	Tap thread	D mm	d mm	S mm	Tap DIN
C435731G6	33,60	M5 - M6 - M8	31	6	4.9	371 - 376
C435731G8	33,60	M8	31	8	6.2	371
C435731G10	33,60	M10	31	10	8	371
C435731G7	33,60	M10	31	7	5.5	376
C435731G9	33,60	M12	31	9	7	376
C435731G11	33,60	M14	31	11	9	376
C435731G12	33,60	M16	31	12	9	376
C435731G14	33,60	M18	31	14	11	376
C435731G16	33,60	M20	31	16	12	376
C435731G18	33,60	M22 - M24	31	18	14.5	376

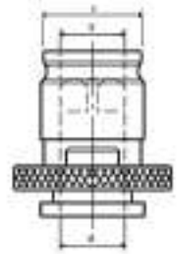


Indivisible package Suggested retail package - Unit price

BUSH WITHOUT CLUTCH FOR TAPPING

ART. 48 DIN STANDARD

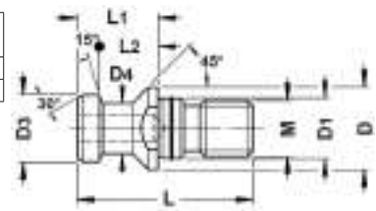
Tech. Code	GR42 Euro	Tap thread	D mm	d mm	S mm	Tap DIN
C435848G18	104,00	M22 - M24	48	18	14.5	376
C435848G20	104,00	M27	48	20	16	376
C435848G22	104,00	M30	48	22	18	376
C435848G25	104,00	M33	48	25	20	376
C435848G28	104,00	M36	48	28	22	376



PULL STUDS

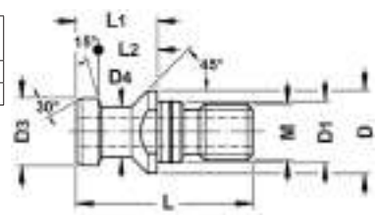
ART. DIN 69872 - WITHOUT BORE - WITH OR

Tech. Code	GR43 Euro	ISO	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm	L2 mm
C441040	11,30	40	16	23	17	19	14	54	26	20
C441050	14,80	50	24	36	25	28	21	74	34	25



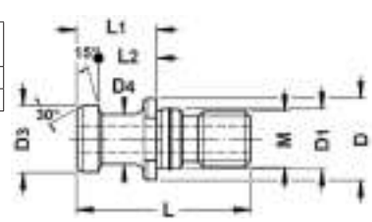
ART. DIN 69872 - WITH BORE - WITH OR

Tech. Code	GR43 Euro	ISO	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm	L2 mm	Hole mm
C441540	11,30	40	16	23	17	19	14	54	26	20	7
C441550	14,80	50	24	36	25	28	21	74	34	25	11.5



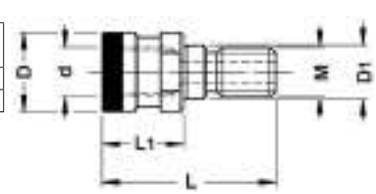
ART. ISO 7388/2A - WITH BORE - WITH OR

Tech. Code	GR43 Euro	ISO	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm	L2 mm	Hole mm
C442040	14,80	40	16	23	17	19	14	54	26	20	7
C442050	14,80	50	24	36	25	28	21	74	34	25	11.5



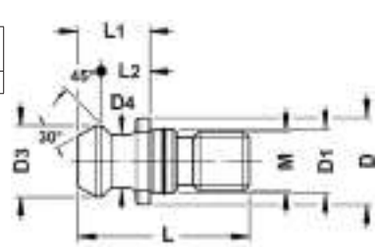
ART. OTT SYSTEM

Tech. Code	GR43 Euro	ISO	M mm	d mm	D mm	D1 mm	L mm	L1 mm
C442540	14,80	40	16	16	25.3	17	53	25
C442550	16,20	50	24	24	39.6	25	65	25



ART. ISO 7388/2B - WITHOUT BORE - WITH OR

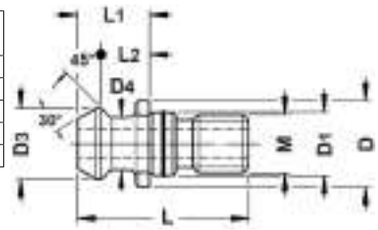
Tech. Code	GR43 Euro	ISO	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm	L2 mm
C443040	11,30	40	16	22.5	17	18.9	12.9	44.5	16.4	11.1



PULL STUDS

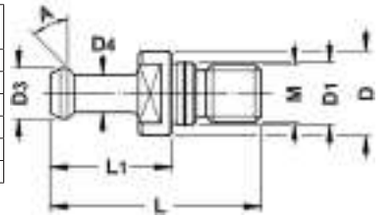
ART. ISO 7388/2B - WITH BORE - WITH OR

Tech. Code	GR43 Euro	ISO	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm	L2 mm	Hole mm	Machine type
C4435401	11,30	40	16	22.5	17	18.9	12.9	44.5	16.4	11.1	7.3	-
C4435402	11,30	40	16	21.8	17	18.79	12.44	41.25	16.25	11.17	7	MZ
C4435403	11,30	40	16	22	17	18.79	12.44	44.1	19.1	14.02	7	MZ
C4435501	16,20	50	24	37	25	29.1	19.6	65.5	25.5	17.9	11.5	-
C4435502	14,80	50	24	35.5	25	28.95	20.82	65.4	25.4	17.78	10	MZ



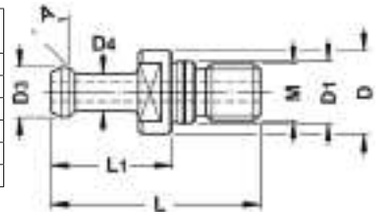
ART. MAS 407 BT - WITHOUT BORE - WITH OR

Tech. Code	GR43 Euro	ISO	A	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm
C44404030	11,30	40	30°	16	23	17	15	10	60	35
C44404045	11,30	40	45°	16	23	17	15	10	60	35
C44404090	11,30	40	90°	16	23	17	15	10	60	35
C44405030	14,80	50	30°	24	38	25	23	17	85	45
C44405045	14,80	50	45°	24	38	25	23	17	85	45
C44405090	14,80	50	90°	24	38	25	23	17	85	45



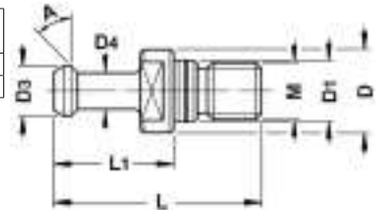
ART. MAS 407 BT - WITH BORE - WITH OR

Tech. Code	GR43 Euro	ISO	A	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm	Hole mm
C44454030	11,30	40	30°	16	23	17	15	10	60	35	4
C44454045	11,30	40	45°	16	23	17	15	10	60	35	4
C44454090	11,30	40	90°	16	23	17	15	10	60	35	4
C44455030	14,80	50	30°	24	38	25	23	17	85	45	6
C44455045	14,80	50	45°	24	38	25	23	17	85	45	6
C44455090	14,80	50	90°	24	38	25	23	17	85	45	6



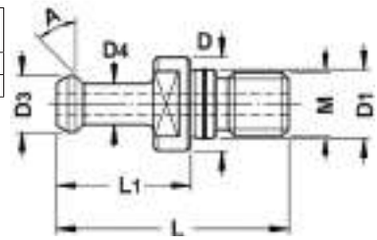
ART. BT FOR DIN 69871 - WITHOUT BORE - WITH OR

Tech. Code	GR33 Euro	ISO	A	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm
C445040	14,70	40	45°	16	23	17	15	10	57	32
C445050	14,70	40	90°	16	23	17	15	10	57	32



ART. BT FOR DIN 69871 - WITH BORE - WITH OR

Tech. Code	GR33 Euro	ISO	A	M mm	D mm	D1 mm	D3 mm	D4 mm	L mm	L1 mm	Hole mm
C445540	14,70	40	45°	16	23	17	15	10	57	32	4
C445550	14,70	40	90°	16	23	17	15	10	57	32	4

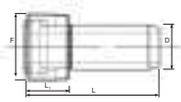


Indivisible package Suggested retail package - Unit price

ADDUCTION COOLING TUBES DIN 69893

ART. C4480

Tech. Code	GR33 Euro	HSK	F	D mm	L mm	L1 mm	α
C448063	19,70	63	M18 x 1	12	36.6	11.5	1.3°
C4480100	26,00	100	M24 x 1.5	16	44,0	15.5	1.4°



T-HANDLE KEYS FOR COOLANT PIPES

EROGLU

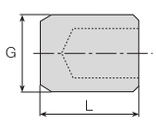
ART. C4482

Tech. Code	GR34 Euro	HSK	L mm
C4482063	(23,00)	63	136
C4482100	25,88	100	136

CLAMPING SCREWS FOR WELDON CHUCKS

ART. C4485

Tech. Code	GR33 Euro	WELDON	G	L mm
C4485W6	5,70	6	M 6 x 1	10
C4485W8	5,70	8	M 8 x 1.25	10
C4485W10	5,70	10	M 10 x 1.5	12
C4485W12	5,70	12	M 12 x 1.75	16
C4485W16	5,70	16	M 14 x 2	16
C4485W20	5,70	20	M 16 x 2	16
C4485W25	7,90	25	M 18 x 2	20
C4485W32	10,20	32	M 20 x 2	20

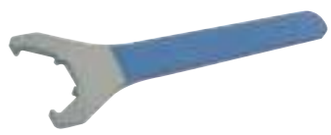


WRENCHES FOR STANDARD AND BALANCED RING NUTS

TUKOY

ART. C4490

Tech. Code	GR33 Euro	Per pinza
C4490ER16	14,80	ER16
C4490ER20	14,80	ER20
C4490ER25	14,80	ER25
C4490ER32	18,20	ER32
C4490ER40	21,70	ER40



WRENCHES FOR MINI NUTS

TUKOY

ART. C4492

Tech. Code	GR33 Euro	Per pinza
C4492ER8	18,10	ER8
C4492ER11	18,10	ER11
C4492ER16	18,10	ER16
C4492ER20	20,40	ER20
C4492ER25	21,50	ER25

WRENCHES FOR HAWK EYE NUTS

SCHÜSSLER

ART. C4493

Tech. Code	GR34 Euro	Per pinza	Innesto
C44930ER16	(137,00)	ER16	9 x 18
C44930ER25	(160,00)	ER25	14 x 18
C44930ER32	(165,00)	ER32	14 x 18
C44930ER40	(194,00)	ER40	14 x 18

WRENCHES FOR HIGH CLAMPING CHUCKS

TUKOY

ART. C4494

Tech. Code	GR33 Euro	Per pinza
C4494ER20	21,50	ER 20
C4494ER32	32,80	ER 32

WRENCHES FOR POWER CHUCKS

EROGLU

ART. C4496

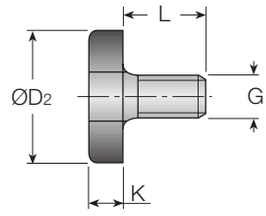
Tech. Code	GR34 Euro	Per pinza	Ø mm
C449620	63,83	ER 20	48
C449632	70,73	ER 32	68

CLAMPING SCREWS FOR SHELL MILL HOLDERS

TUKOY

ART. C4501

Tech. Code	GR33 Euro	K mm	G	L mm	D2 mm
C4501V16	9,20	6	M8	16	20
C4501V22	10,20	7	M10	18	28
C4501V27	13,20	8	M12	22	35
C4501V32	15,30	9	M16	26	42
C4501V40	19,20	10	M20	30	52

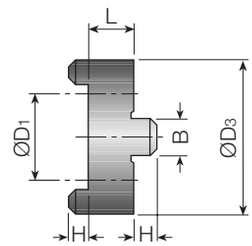


DRIVING RING DIN 6366/1 FOR COMBI SHELL MILL HOLDERS

TUKOY

ART. C4502

Tech. Code	GR33 Euro	H mm	B mm	L mm	D1 mm	D3 mm
C4502A16	19,20	5.0	8	10	16	32
C4502A22	19,20	6.0	10	12	22	40
C4502A27	15,20	6.3	12	12	27	48
C4502A32	31,30	7.0	14	14	32	58
C4502A40	42,60	8.0	16	14	40	70



Indivisible package Suggested retail package - Unit price

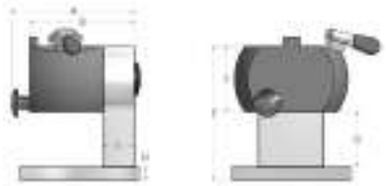
ART. C4525

Our cone disassemblers supports are manufactured with the upmost care to preserve the optimal conditions of your toolholders.

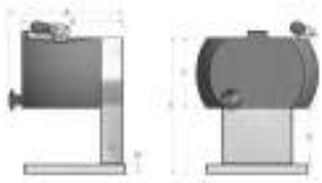
The characteristics of the supports avoids possible contact between the cone and support thanks to the shape and the presence of an O-ring.

Keep clean all surfaces to always ensure maximum performance.

The good condition of the cone will always ensure exact setting and precise machining.



HANDY40



HANDY50

HANDY63

Rotation - positioning

1. Pull the indexing knob to unlock
2. Turn into a new position at 0° 90°
3. Release the knob to block

Toolholders blocking

1. Insert holder making sure the clone is perfectly clean
2. Check the correct positioning into centering dowel
3. Rotate locking knob toward SK or BT according to cone version

Toolholders extraction

1. Rotate locking knob to central positioning
2. Extract holder

Tech. Code	GR33 Euro	Coupling	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Base mm	Weight kg
C4525SK40	371,00	SK40 - BT40	121	97	29	12	122	60	50	110 x 110	5,0
C4525SK50	435,10	SK50 - BT50	152	128	29	12	172	89	71	130 x 130	12,5
C4525HSK63	440,30	HSK63	124	101	29	12	122	60	50	110 x 110	5,2

AUTOMATIC SHRINKING MACHINE

ART. ISG3410 WK

The ISG3410 WK shrink-fit machine performs the shrink function, cooling and drying of the chuck in complete automatism, without any operator intervention.

The graphic and intutive display simplifies every operation.
The machine is supplied with 4 Interchangeable rings d. 3 -32mm,
1 liter of coolant, protective gloves and user manual.

The tool holders must be ordered separately C4610xx

Tech. Code		C46051
GR39	Euro	(15962,00)
Shrinking range	Ø HM	3 - 32
Shrinking range	Ø HSS	6 - 32
Tool length	max mm	400 with HSK63
Cooling time		20"
Power	kW	11
Power supply		400V - 16A - 50Hz
Compressed air	bar	4
Dimension	mm	800 x 560 x 1720

MANUAL SHRINKING MACHINES

ART. ISG1000

The ISG1000 shrink-fit machine is the most advantageous solution either economically or from a performance point of view for a first approach to the use of shrink-fit chuck. It is simple to use, its small size makes it the most versatile shrink-fit machine on the market today.

The machine is supplied with 1 Interchangeable ring 6 - 16 mm, protective gloves and user manual.

The holders must be ordered separately C4625xx

Tech. Code		C46201
GR39	Euro	(4550,00)
Shrinking range	Ø HM	3 - 16
Shrinking range	Ø HSS	12 - 16
Tool length	max mm	290 with HSK63
Cooling		NO
Power	kW	6,5
Power supply		400V - 16A - 50Hz
Dimension	mm	390 x 310 x 640

AIR COOLING UNIT FOR ISG1000

ART. ISGK L 1000

The ISGK L 1000 air cooling unit was designed specifically to be combined with the ISG1000 shrink-fit unit.
It can be assembled together with the shrink unit with a simple manual movement of the tool (together with its holder) in about 20 seconds cooling down is obtained.

For a more effective operation of the equipment we recommend the use of the units C4628xx cooling adapters.

Tech. Code		C46211
GR39	Euro	(651,00)
Power supply		230V - 16A
Dimension	mm	390 x 190 x 110

Indivisible package Suggested retail package - Unit price

HOLDERS FOR ISG WITH LIQUID COOLING

ART. C4610

The positioning units for shrink-fit tool holders are to be used with the shrink machines with the liquid cooling that guarantees the exact positioning of chuck during the whole operation of shrinking and cooling with liquid and drying that take place in complete automatism.

In addition to the most used dimensions it is possible to have the whole range of the tool holders.

Tech. Code	GR39 Euro	For chucks
C461001	(232,82)	SK40-BT40-CAT40
C461002	(232,82)	SK50-BT50-CAT50
C461003	(232,82)	HSK63
C461004	(232,82)	HSK100

TOOL HOLDERS FOR ISG MACHINES WITH AIR COOLING SYSTEM

ART. C4625

The positioning units for shrink-fit tool holders are to be used with the shrinking machines with air cooling that guarantees the exact positioning of the tool holder during the whole operation of shrinking and cooling, while offering greater safety to the operators.

Tech. Code	GR39 Euro	For chucks
C462501	(163,02)	SK40/BT40
C462502	(150,00)	SK50/BT50
C462503	(157,59)	HSK63

ALVELOLAR UNITS FOR AIR-COOLING ISG MACHINES

ART. C4628

The alveolar adaptors enhance the cooling capacity of the air cooling stations that are combined with ISG tool holder units. Their honeycomb structure conveys all the developed air of the units cooling both on the tool holder and on the tool, optimizing the cooling times.

Tech. Code	GR39 Euro	Dimension Ø mm
C462801	(134,00)	3,0 - 5,9
C462802	(134,00)	6,0 - 9,0
C462803	(134,00)	9,1 - 12,0
C462804	(134,00)	12,1 - 16,0

PRESETTING EYE TRIM II

KERFOLG Eye Trim II

ART. C4715

High performance entry level preset. Despite its small size, with a diameter of 260 mm and a height of 360 mm, Eye Trim II contains structural and design features capable of guaranteeing remarkable measurement accuracy, dimensional stability and a high degree of reliability. Base and column in natural granite, one of the materials with the lowest coefficient of thermal expansion (fundamental element in terms of measurement). New 7 " graphic display makes the presetting experience simple and complete, thanks to an intuitive display of the tool data and the practical summary of all the machine functions in a single screen. Interchangeable spindle holders avoid the use of adapters and consequently possible coupling errors.

FEATURES
- X axis measurement resolution 0.001 mm. Z axis 0.001 mm
- Management electronics with 32-bit RISC processor and integrated vision system
- C-MOS sensor, 5x5mm framed image area, 20X magnification
- Telecentric lens and LED illuminator
- 7" LCD color TFT graphic display (image 86x150)
- Full Touch Screen for all presetter functions
- Software with menus represented by icons
- Lifetime free software update
- Display radius / diameter, mm / inch, abs / incr.
- Possibility of measurement with autocollimation on the whole screen
- Automatic calculation cycle of insert radius and angle
- Management nr. 9 digital machine origins
- Management nr. 9 tool tables, each consisting of 99 tools
- Memorization for each tool offset of: T, Lx, Lz, insert radius
- Data storage on flash memory
- Connection with PC via RS-232 port and electronics BIOS update
- 24Vdc power supply with external power supply supplied as standard
- TD236 for managing backup and restore functions of machine origins and tool lists

OPTIONAL
- Additional ISO / BT / HSK / VDI interchangeable spindle holders
- Mini-label printer
- Support table

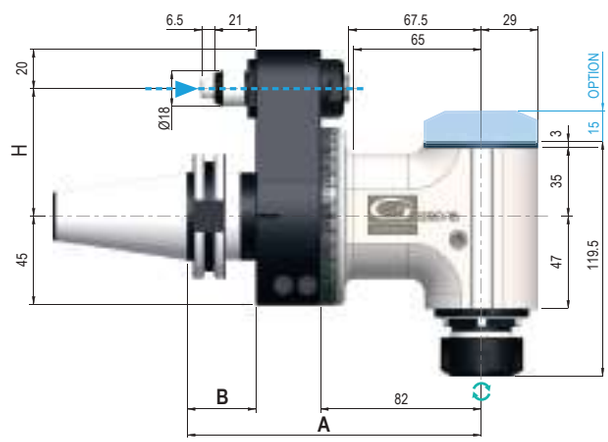
Tech. Code	GR81 Euro	Useful X axis mm	Useful Z axis mm	Spindle	Weight kg
C471540	(6200,00)	130 (ø 260)	360	ISO 40	45
C471550	(6200,00)	130 (ø 260)	360	ISO 50	45
C471563	(7050,00)	130 (ø 260)	360	HSK 63	45

INTEGRAL ANGLE HEADS

GERARDI

ART. G90-16 - G90-20

Body in sandblasted and chromed steel with high resistance. Shaft with intergral attachment shank (cemented, hardended and ground) to guarantee maximum rigidity. Each drive shaft is supported by a pair of angular contact bearings, preloaded in the ABEC 9 precision class and lubricated with lifetime grease. Spiral bevel gears made of high strength material, ground to guarantee lower heating and noise and high revolutions. Computerized calculation of the bevel gear pair (gleason): more teeth engaged, more output torque, greater number of working hours, almost no noise. Weight and reduced dimension compared to the corresponding models of the Evolution line. Double front seal (labyrinth + seal). External coolant supply via pin and internal pressurization included in the price (a) Options: internal coolant supply through the tool: 10 bar via rotary distributor (b) 30 to 70 bar by machine spindle , dry rotation not possible (c) ReCool special ferrules to achieve coolant passage via tool even on heads that do not provide this option (d) High speed up to 10,000 rpm. Compatibility with the heads always installed (anti-rotation pin and identical stop blocks).



Tech. Code	GR36 Euro	Shanks	H mm	Output	Rpm max.	Ratio	A mm	B mm	Weight kg
C4900S4065ER25	(3598,00)	SK40	65	ER 25	8000	1:1	150	35	5,4
C4900S4080ER25	(3598,00)	SK40	80	ER 25	8000	1:1	150	35	5,4
C4900S5080ER25	(3598,00)	SK50	80	ER 25	8000	1:1	150	35	5,4
C4900B4065ER25	(3598,00)	BT40	65	ER 25	8000	1:1	150	35	5,4
C4900B4080ER25	(3598,00)	BT40	80	ER 25	8000	1:1	150	35	5,4
C4900B5080ER25	(3598,00)	BT50	80	ER 25	8000	1:1	156	41	5,4
C4900S5080ER32	(3804,00)	SK50	80	ER 32	4000	1:1	160	35	11
C4900B5080ER32	(3804,00)	BT50	80	ER 32	4000	1:1	166	41	11

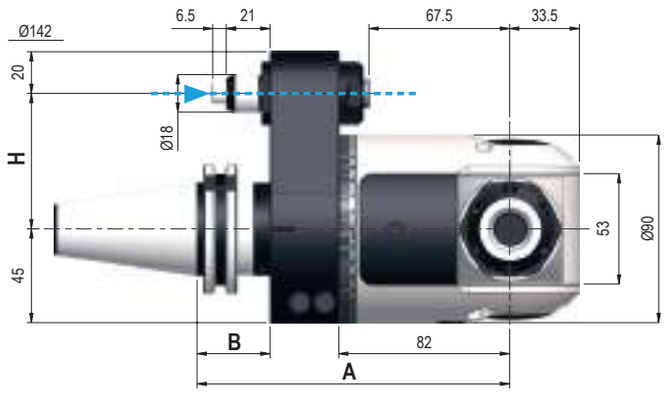
AUTOMATIC TOOL CHANGE - SENSE OF ROTATION EQUAL TO THE SPINDLE.
Supplied with Stop-block, ER ring, service wrenches, grease tube and instruction book - in case

Indivisible package Suggested retail package - Unit price

ANGLE HEADS WITH ADJUSTABLE ANGLES FROM 0° TO 90°

ART. GMU16 - GMU20

Body in sandblasted and chromed steel with high resistance. Main shaft with integral attachment shank (cemented, hardended and ground) to guarantee maximum rigidity. Each drive shaft is supported by a pair of angular contact bearings, preloaded in the ABEC 0 accuracing rating and lubricated with lifetime grease. Spiral bevel gears made of high strength material, ground to guarantee lower heating and noise and high revolutions. Computerized calculation of the bevel gear pair (gleson): more teeth engaged, more output torque, greater number of working hours, almost no noise. Weight and reduced dimension compared to the corresponding models of the Evolution line. Double front seal (labyrinth + seal). External coolant supply via pin and internal pressurization included in the price (a). Options: internal coolant supply through the tool: 10 bar via rotating distributor (b) 30 to 70 bar by machine spindle, dry turning not possible (c) ReCool special nut to achieve coolant passage via tool even on heads that do not provide this option (d) High speed up to 10,000 rpm. Compatibility with the heads always installed (anti-rotation pin and identical stop blocks).



Tech. Code	GR36 Euro	Shanks	H mm	Output	Rpm. max	Ratio	A mm	B mm	Weight kg
C4901S4065ER25	(4216,00)	SK40	65	ER 25	4000	1:1	150	35	6,8
C4901S4080ER25	(4216,00)	SK40	80	ER 25	4000	1:1	150	35	6,8
C4901S5080ER25	(4216,00)	SK50	80	ER 25	4000	1:1	150	35	6,8
C4901B4065ER25	(4216,00)	BT40	65	ER 25	4000	1:1	150	35	6,8
C4901B4080ER25	(4216,00)	BT40	80	ER 25	4000	1:1	150	35	6,8
C4901B5080ER25	(4216,00)	BT50	80	ER 25	4000	1:1	156	41	13
C4901S5080ER32	(4516,00)	SK50	80	ER 32	4000	1:1	160	35	13
C4901B5080ER32	(4516,00)	BT50	80	ER 32	4000	1:1	166	41	13

AUTOMATIC TOOL CHANGE - SENSE OF ROTATION CONTRARY TO THE SPINDLE

Supplied with stop-block, ER ring, service wrenches, grease tube and instruction book - in case

SPINDLE SPEEDERS

ART. GSS 10.HS - GSS 13

The compact construction, the components in heat treated steel, the ground gears on the involute allow the transmission of high power with excellent levels of silence. The spindle is supported by pre-loaded angular contact precision ball bearings that give it a greater strength of rigidity and rotation precision within mm. 0.01. Two planetary ground gears for high transmittable power. Special tool attachment on request (Komet, DIN 1835, etc...).. Coolant supply through the standard or on-demand tool center. Special machine shank connection on request (Morse taper, DIN 69880, etc...). Interchangeable anti-rotating pin and therefore customizable by the customer. RPM spindle speeders can be mounted on traditional machines or with automatic tool changers. Lubrication is ensured with long-life synthetic grease which requires virtually no maintenance. Test certificate attached to each spindle speeder.

Tech. Code	GR36 Euro	Shanks	H mm	Output	Rpm. max	Ratio	A mm	B mm	Weight kg	Kw
C4910S4065ER16	(5117,00)	SK40	65	ER 16	35000	1:8	155	35	6,8	8,5
C4910S5080ER16	(5117,00)	SK50	80	ER 16	35000	1:8	155	42	8	8,5
C4910B4065ER16	(5117,00)	BT40	65	ER 16	35000	1:8	155	35	6,8	8,5
C4910B5080ER16	(5117,00)	BT50	80	ER 16	35000	1:8	163	50	8	8,5
C4910S4065ER20	(2818,00)	SK40	65	ER 20	22000	1:6	135,5	35	3,7	5,8
C4910S5080ER20	(2818,00)	SK50	80	ER 20	22000	1:6	135,5	42	6,5	5,8
C4910B4065ER20	(2818,00)	BT40	65	ER 20	22000	1:6	135,5	35	3,7	5,8
C4910B5080ER20	(2818,00)	BT50	80	ER 20	22000	1:6	143,5	50	6,5	5,8

Supplied with stop-block, ER ring, service wrenches, grease tube and instruction manual - in case

DRIVEN TOOLHOLDERS FOR CNC LATHES

ALGRA

ALGRA manufactures a wide range of driven tooling to cover all functional requirements, with couplings compatible with the best and most popular machine tool brands.

Rotating types:
AMS: for lathes MORI SEIKI - CMZ - GOODWAY - ACCUWAY - NAKARUMA - DAEWOO/DOOSAN - HWACHEON - BMT - HYUNDAY - SAMSUNG - MYANO
CMZ: DOOSAN - GOODWAY - HAAS - HWACHEON - HYUNDAY - MYANO - MAZAK - NAKARUMA - OKUMA - SAMSUNG - SPINNER

A few distinctive features of ALGRA are:
- quality of the bearings used
- internal coolant pressure up to 80BAR
- possibility of aligning the rotating parts of the machine using a dial gauge
- rotating multiplied up to i=1:4
- rotating torque
- wide production range
- spindle output with collet holder, milling holder, Weldon holder and HSK system for all rotating types

Driven Tool Holders

- Coolant
  - Internal
  - External
- Trasmission Ratio
  - Standard (1:1)
  - High (1:4)
  - Low (2:1)
- Mounting
  - Axial
  - Axial Offsset Axis
  - Axial Double
  - Radial
  - Radial Rear Offset
  - Radial Double
  - Adjustable Angle
- Clamping
  - External Collet ER Type
  - Internal Collet ER Type
  - Shell and Milling Cutters
  - Weldon System
  - HSK System
  - CAPTO System ISO26623

Indivisible package Suggested retail package - Unit price

DRIVEN TOOL HOLDERS VDI30 DIN5480

ALGRA

ART. C5515

For lathes: **DMG MORI**: CLX 350, CTV 160, CTX 210, 310, 320, 400 E 400 Twin, 410, CTX 310 eco (DIN5480 turret), CTX alpha 300, 500, CTX beta 500, 800 (VDI30 turret), NEF 400, Sprint 65 linear, Twin 32/42/65/120 (VDI30 turret); **EMCO**: EMCOTURN E45 M, MY, EMCOTURN E65 M, MY, SM, SMY, EMCOTURN 345-II, Concept Turn 450, Hyperturn 645/665, Maxxturn 65 M/SM; **HURCO**: TMM 8; **HYUNDAI**: WIA L150 SY; **VICTOR**: Vturn II-16/20CV, Vturn-A16 CV, Vturn-A20 CV.

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DMQP

Tech. Code	GR36 Euro	Model	Description	Figure
C5515RAPPS25	(916,00)	RAPPS 30 221US3	Driven tool holder, axial 0°, collet ER25, external coolant., 6000 rpm; i=1:1	1
C5515RRPPS2555	(1819,00)	RRPPS 30 121US3	Driven tool holder, axial 90°, collet ER25,r H=55, ,external coolant 6000 rpm; i=1:1	2
C5515RRPPS2585	(1929,00)	RRPPS 30 321US3	Driven tool holder radial 90°, collet ER25, H=85, external coolant, 6000 rpm; i=1:1	2
C5515RRPPS2510	(1984,00)	RRPPS 30 421US3	Driven tool holder radial 90°, collet ER25, H=100, external coolant, 6000 rpm; i=1:1	2
C5515ROPPS20	(4145,00)	ROPPS 30 221SS3	Driven tool holder orientable ± 90°, collet ER20, external coolant, 6000 rpm, i=1:1	3

DRIVEN TOOL HOLDERS VDI40 DIN5480

ALGRA

ART. C5520

For lathes: **DMG MORI**: CTV 200, 250, 315, CTX beta, CTX gamma, CTX 420 linear radial tooling turret, GMX 250 /GMX 300 / 400 / 500, Twin 42 / 65, Twin 102, Twin 500; **EMCO**: Hyperturn 690/95/110, Vertical VT 250/260/400, Maxxturn 95, Maxxturn 65 M/SM; **HYUNDAI**: WIA L200, 250Y/SY / SKT200, 250Y/SY, WIA SKT210SY; **HURCO**: TMX 8, TMX10 MY/MYS, TMM 10, 12, TMM 8; **JYOTI**: Jyoti TMC 350, Jyoti TMX 200; **HARDINGE**: GS 200, 250 MSY; **VICTOR**: VTurn II-23/26 BCV, YCV, CV, VTurn-A26 CV,SCV, YCV, YSCV.

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DMQP

Tech. Code	GR36 Euro	Model	Description	Figure
C5520RAPPS32	(1145,00)	RAPPS 40 221US3	Driven tool holder, axial 0°, collet ER32, external coolant.	1
C5520RRPPS32	(2314,00)	RRPPS 40 121US3	Driven tool holder radial 90°, collet ER32, H=100, external coolant, 6000 rpm; i=1:1	2
C5520ROPPS25	(4606,00)	ROPPS 40 121SS3	Driven tool holder orientable ± 90°, collet ER25, external coolant, 6000 rpm, i=1:1	3

DRIVEN TOOL HOLDERS NL

ALGRA

ART. C5525

For lathes: **DMG MORI** NL / NLX 1500 - 12 station; NL / NLX 2000 - 12 station; NL / NLX 2500 - 12 station; NL / NLX 3000 - 12 station; NLX 4000; NT 4000 / 4200 / 4250 / 4300 / 5000 / 5400; NZL 2000 / 2500; NZX 2500 - 12 station.

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DMQP

Tech. Code	GR36 Euro	Model	Description	Figure
C5525RAPPH32	(1203,00)	RAPPH 32 221UNL	Driven tool holder axial 0°, collet ER32,external coolant, 10000 rpm; i=1:1	1
C5525RAPPH40	(1203,00)	RAPPH 40 121UNL	Driven tool holder axial 0°,collet ER40 external coolant, 10000 rpm; i=1:1	1
C5525RRPPH32	(2425,00)	RRPPH 32 121UNL	Driven tool holder radial 90°, collet ER32, external coolant, 10000 rpm; i=1:1	2
C5525RRPPH40	(2425,00)	RRPPH 40 121UNL	Driven tool holder radial 90°, collet ER40, external coolant, 10000 rpm; i=1:1	2
C5525ROPPH25	(4387,00)	ROPPH 25 121UNL	Driven tool holder orientable ± 90 °, collet ER25, external coolant, 10000 rpm, i=1:1	3

STATIC TOOL HOLDERS NL

ART. C5527

For lathes: **DMG MORI** NL / NLX 1500 - 12 station; NL / NLX 2000 - 12 station; NL / NLX 2500 - 12 station; NL / NLX 3000 - 12 station; NLX 4000; NT 4000 / 4200 / 4250 / 4300 / 5000 / 5400; NZL 2000 / 2500; NZX 2500 - 12 station

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Tech. Code	GR35 Euro	Model	Description	Figure
C5527E10US25	(505,00)	E10/US 25 NLX70	Static tool holder axial, Q=25, external coolant DMG MORI T00186	1
C5527E10BS40	(505,00)	E10/BS 40 NLX80	Static tool holder for boring bars, D=40, H=80 mm., external/Internal coolant, DMG MORI T10097 -T13128	2
C5527E10BD32	(649,00)	E10/BD 32 NLX80/125	Static tool holders for boring bars, D=32, H=80/125 mm., external/Internal coolant, DMG MORI T10096	3

DRIVEN TOOL HOLDERS NZ

ART. C5530

For lathes **DMG MORI** DuraTurn 2050 MC, DuraTurn 2550 MC, NL / NLX 1500 - 20 station, NL / NLX 2000 - 20 station, NL / NLX 2500 - 20 station, NRX2000, NT / NTX 1000, NT / NTX 2000, NT 3000 / 3100 / 3150 / 3200, NZ / NZX 1500, NZ / NZX 2000, NZ / NZX 2500 - 16 station

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Tech. Code	GR36 Euro	Model	Description	Figure
C5530RAPPS25	(1203,00)	RAPPS 25 121UNZ	Driven tool holder 0°, collet ER25, external coolant, 12000 rpm; i=1:1	1
C5530RAPPS32	(1203,00)	RAPPS 32 121UNZ	Driven tool holder axial 0°, collet ER32, external coolant 12000 rpm; i=1:1	1
C5530RRPPS25	(2425,00)	RRPPS 25 121UNZ	Driven tool holder axial 90°, collet ER25, external coolant 12000 rpm; i=1:1	2
C5530RRPPS32	(2425,00)	RRPPS 32 121UNZ	Driven tool holder axial 90°, collet ER32, external coolant 12000 rpm; i=1:1	2
C5530ROPPS20	(4606,00)	ROPPS 20 121UNZ	Driven tool holder axial 90°, collet ER20, external coolant 12000 rpm; i=1:1	3

STATIC TOOL HOLDERS NZ

ART. C5532

For lathes: **DMG MORI** DuraTurn 2050 MC, DuraTurn 2550 MC, NL / NLX 1500 - 20 station, NL / NLX 2000 - 20 station, NL / NLX 2500 - 20 station, NRX2000, NT / NTX 1000, NT / NTX 2000, NT 3000 / 3100 / 3150 / 3200, NZ / NZX 1500, NZ / NZX 2000, NZ / NZX 2500 - 16 station

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Tech. Code	GR35 Euro	Model	Description	Figure
C5532E10US20	(655,00)	E10/US 20 NZX70	Static tool holder axial Q=20, external coolant, DMG MORI T00224	1
C5532E10US25	(484,00)	E10/US 25 NZX70	Static tool holder axial IQ=25, external coolant, DMG MORI T00267	1
C5532E10BS32	(546,00)	E10/BS 32 NZX100	Static tool holder for boring bars, D=32, H=100,Internal/external coolant DMG MORI T10115 -T13132	2
C5532E10BD25	(628,00)	E10/BD 25 NZX75/105	Static tool holder for boring bars, D=25, H=75/105, Internal/external coolant, DMG MORI T10117	3

Indivisible package Suggested retail package - Unit price

DRIVEN TOOL HOLDERS BMT55

ALGRA

ART. C5535

For lathes: **DOOSAN**: Lynx300 (M), Puma 230/240/280 (M,LM,S), Puma 1500/2000/2500 (M,S,Y), Puma 2100 (Y,LY,SY,LSY), Puma GT2100/2600 (M), Puma H250TM, Puma MX1600/2100 (ST/LST), Puma TL2000/2500 (M,LM), Puma TT1500/1800 (MS,SY), Puma TW2600M; **GOODWAY**: GTX-2000, 2600, GTZ-2000, 2600; **HYUNDAI WIA**: HD2200 M/MC, L160, 230MA/LMA/LMSA, LM1600, 1800TTSY, SKT160, 180TTMS/TTSY; **HARDINGE**: T-51/65 Super-Precision; **HWACHEON**: Cutex-160, 180 MC/SMC/YMC/YSMC, VT 450 MC; **SAMSUNG**: SL 1500, 2000 M/SY, PL 240LM; **JYOTI**: AX300; **VICTOR**: Vturn-A16/20 CM, SCM, YCM, YSCM; Vturn-Q200.

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Tech. Code	GR36 Euro	Model	Description	Figure
C5535RAPPS25	(1030,00)	RAPPS 25 121UT55	Driven tool holder axial 0°, collet ER25, external coolant, 8000 rpm; i=1:1	1
C5535ROPPS20	(4145,00)	ROPPS 20 121UT55	Driven tool holder orientable ± 90°, collet ER20, external coolant, 8000 rpm, i=1:1	3
C5535RRPPS2570	(1763,00)	RRPPS 25 321UT55	Driven tool holder radial 90°, collet ER25, H=70,external coolant, 8000 rpm; i=1:1	2
C5535RRPPS2585	(2094,00)	RRPPS 25 421UT55	Driven tool holder radial 90°, collet ER25, H=85, external coolant, 8000 rpm; i=1:1	2

STATIC TOOL HOLDERS BMT55

ALGRA

ART. C5537

For lathes: **DOOSAN**: Lynx300 (M), Puma 230/240/280 (M,LM,S), Puma 1500/2000/2500 (M,S,Y), Puma 2100 (Y,LY,SY,LSY), Puma GT2100/2600 (M), Puma H250TM, Puma MX1600/2100 (ST/LST), Puma TL2000/2500 (M,LM), Puma TT1500/1800 (MS,SY), Puma TW2600M; **GOODWAY**: GTX-2000, 2600, GTZ-2000, 2600; **HYUNDAI WIA**: HD2200 M/MC, L160, 230MA/LMA/LMSA, LM1600, 1800TTSY, SKT160, 180TTMS/TTSY; **HARDINGE**: T-51/65 Super-Precision; **HWACHEON**: Cutex-160, 180 MC/SMC/YMC/YSMC, VT 450 MC; **SAMSUNG**: SL 1500, 2000 M/SY, PL 240LM; **JYOTI**: AX300; **VICTOR**: Vturn-A16/20 CM, SCM, YCM, YSCM; Vturn-Q200.

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Tech. Code	GR35 Euro	Model	Description	Figure
C5537E10U25	(655,00)	E10/U 25 T55X65	Static tool holder axial Q=25,external coolant	1
C5537E10B4060	(824,00)	E10/B 40 T55X60	Static tool holder for boring bars, D=40, H=60, Internal/external coolant	2
C5537E10B4070	(824,00)	E10/B 40 T55X70	Static tool holder for boring bars, D=40, H=70, Internal/external coolant	2
C5537E10BD25	(824,00)	E10/BD 25 T55X/110	Static tool holder for boring bars, D=25, H=65/110, Internal/external coolant	3

DRIVEN TOOL HOLDERS KIT BMT 65

ALGRA

ART. C5510

For lathes: **DOOSAN**: Puma 2100/2600 (M,LM,MS,LMS), Puma 300 (M,MS,MB,MC), Puma 3100(M,LM,LY,XLM,XLY,ULM,ULY), Puma MX2000/2500, Puma MX2600 (T,ST), Puma TT2500 (MS/SY), Puma TX200 (M,Y,YY), Puma V400 (M), Puma VT450 (M,2SP); **GOODWAY**: GLS-2800, 3300, GS-2000, 2800, GLS-2800, 3300, GMS-2000 ST, GMT-2000, GTX/GTZ-2000, 2600; **HYUNDAI WIA**: L300 MA/MC/LMA/LMC/MSA/MSC/LMSA, LM2000, 2500TTM/TTMS/TTSY, L2000, 2100, 2600, 3000 , SKT200, 250 TTSY, SKT250, 300M/MS; **HARDINGE**: GS-65; **HWACHEON**: Cutex-240/HI-TECH200/T2-Series, Hi-Tech 200,230,300,400,450MC/SMC/YMC/YSMC, VT-450, T2-Series MC/SMC/YMC/YSMC; **SAMSUNG**: PL 20/25/35M, PL 2000/2500M, SL 25, 35, 2500M/SY, 3500Y; **VICTOR**: Vturn-A26 CM, SCM, YCM, YSCM.

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Tech. Code	GR36 Euro	Model	Description	Figure
C5510RAPPS32	(1203,00)	RAPPS 32 121UT65	Driven tool holder, axial 0°, collet ER32, external coolant, 6000 rpm; i=1:1	1
C5510RRPPS3272	(1929,00)	RRPPS 32 121UT65	Driven tool holder, radial 90°, collet ER32, H=72, external coolant, 6000 rpm; i=1:1	2
C5510RRPPS3210	(2039,00)	RRPPS 32 321UT65	Driven tool holder, radial 90°, collet ER32, H=100, external coolant, 6000 rpm; i=1:1	2
C5510ROPPS25	(4606,00)	ROPPS 25 121UT65	Driven tool holder orientable ± 90°, collet ER25, external coolant, 6000 rpm, i=1:1	3

STATIC TOOL HOLDERS BMT65

ART. C5512

For lathes: **DOOSAN**: Puma 2100/2600 (M,LM,MS,LMS), Puma 300 (M,MS,MB,MC), Puma 3100(M,LM,LY,XLM,XLY,ULM,ULY), Puma MX2000/2500, Puma MX2600 (T,ST), Puma TT2500 (MS/SY), Puma TX200 (M,Y,YY), Puma V400 (M), Puma VT450 (M,2SP); **GOODWAY**: GLS-2800, 3300, GS-2000, 2800, GLS-2800, 3300, GMS-2000 ST, GMT-2000, GTX/GTZ-2000, 2600; **HYUNDAI WIA**: L300 MA/MC/LMA/LMC/MSA/MSC/LMSA, LM2000, 2500TTM/TTMS/TTSY, L2000, 2100, 2600, 3000 , SKT200, 250 TTSY, SKT250, 300M/MS; **HARDINGE**: GS-65; **HWACHEON**: Cutex-240/HI-TECH200/T2-Series, Hi-Tech 200,230,300,400,450MC/SMC/YMC/YSMC, VT-450, T2-Series MC/SMC/YMC/YSMC; **SAMSUNG**: PL 20/25/35M, PL 2000/2500M, SL 25, 35, 2500M/SY, 3500Y; **VICTOR**: Vturn-A26 CM, SCM, YCM, YSCM.

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Tech. Code	GR35 Euro	Model	Description	Figure
C5512E10U25	(546,00)	E10/U 25 T65X80	Static tool holder axial Q=25, external coolant	1
C5512E10B4072	(597,00)	E10/B 40 T65X72	Static tool holder for boring bars, D=40, H=72, Internal/external	2
C5512E10B5072	(597,00)	E10/B 50 T65X72	Static tool holder for boring bars, D=50, H=72, Internal/external coolant	2
C5512E10B40100	(649,00)	E10/B 40 T65X100	Static tool holer for boring bars D=40, H=100, Internal/external coolant	2

DRIVEN TOOL HOLDERS N44

ART. C5540

For lathes: **Nakamura**: NTJ-100, Super NTMX, Super NTY3, WT-100, WY-100

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Tech. Code	GR36 Euro	Model	Description	Figure
C5540RAPPS25	(974,00)	RAPPS 25 121UN44	Driven tool holder axial 0°, collet ER25, external coolant, 6000 rpm; i=1:1	1
C5540RRPPS2560	(1852,00)	RRPPS 25 121UN44	Driven tool holder radial 90°, collet ER25, H=60, external coolant, 6000 rpm; i=1:1	2
C5540RRPPS2575	(1907,00)	RRPPS 25 321UN44	Driven tool holder radial 90°, collet ER25, H=75, external coolant, 6000 rpm; i=1:1	2
C5540ROPPS16	(3948,00)	ROPPS 16 121UN44	Driven tool holder orientable ± 90°, collet ER16,external coolant, 6000 rpm, i=1:1	3

STATIC TOOL HOLDERS N44

ART. C5542

For lathes: **Nakamura**: NTJ-100, Super NTMX, Super NTY3, WT-100, WY-100

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Tech. Code	GR35 Euro	Model	Description	Figure
C5542E10US20	(443,00)	E10/US 20 N44X62	Static tool holder axial Q=20, H=62, external coolant	1
C5542E10B2560	(494,00)	E10/B 25 N44X60	Static tool holder for boring bars, D=25, H=60, Internal/external coolant	2
C5542E10B3260	(494,00)	E10/B 32 N44X60	Static tool holder for boring bars D=32, H=60, Internal/external coolant	2
C5542E10B2575	(494,00)	E10/B 25 N44X75	Static tool holder for boring bars D=25, H=75, Internal/external coolant	2
C5542E10B3275	(628,00)	E10/B 32 N44X75	Static tool holder for boring bars D=32, H=75, Internal/external coolant	2

Indivisible package Suggested retail package - Unit price

DRIVEN TOOL HOLDERS N55

ALGRA

ART. C5545

For lathes: **Nakamura**: AS-200 L/LS (12, 15 station turret), NTY3 -150, 250, SC-150, 200, 250, Super NTJ, NTJX, NTM3, TW-10, TW-20 (16 stations turret), WT-150, 150II, 250, 250II, WTS-150, WTW-150, WY-150, 250; **CMZ**: TX 52, 66

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Tech. Code	GR36 Euro	Model	Description	Figure
C5545RAPPS25	(1088,00)	RAPPS 25 121UN55	Driven tool holder axial 0°, collet ER25, external coolant, 6000 rpm; i=1:1	1
C5545RAPPS32	(1017,00)	RAPPS 32 121UN55	Driven tool holder axial 0°, collet ER32, external coolant, 6000 rpm; i=1:1	1
C5545RRPPS2555	(1907,00)	RRPPS 25 121UN55	Driven tool holder radial 90°,collet ER25, H=55, external coolant, 6000 rpm; i=1:1	2
C5545RRPPS3255	(1907,00)	RRPPS 32 121UN55	Driven tool holder radial 90°, collet ER32, H=55, external coolant, 6000 rpm; i=1:1	2
C5545RRPPS2565	(1907,00)	RRPPS 25 321UN55	Driven tool holder radial 90°, collet ER25, H=65, external coolant, 6000 rpm; i=1:1	2
C5545RRPPS3265	(1907,00)	RRPPS 32 321UN55	Driven tool holder radial 90°, collet ER32, H=65, external coolant, 6000 rpm; i=1:1	2
C5545RRPPS2575	(1907,00)	RRPPS 25 421UN55	Driven tool holder radial 90°, ollet ER25, H=75, external coolant, 6000 rpm; i=1:1	2
C5545RRPPS3275	(1907,00)	RRPPS 32 421UN55	Driven tool holder radial 90°, collet ER32, H=75, external coolant, 6000 rpm; i=1:1	2
C5545ROPPS20	(3948,00)	ROPPS 20 121UN55	Driven tool holder orientable ± 90°, collet ER20, external coolant, 6000 rpm, i=1:1	3

STATIC TOOL HOLDERS N55

ALGRA

ART. C5547

For lathes **Nakamura**: AS-200 L/LS (12, 15 station turret), NTY3 -150, 250, SC-150, 200, 250, Super NTJ, NTJX, NTM3, TW-10, TW-20 (16 stations turret), WT-150, 150II, 250, 250II, WTS-150, WTW-150, WY-150, 250; **CMZ**: TX 52, 66

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Tech. Code	GR35 Euro	Model	Description	Figure
C5547E10US2520	(494,00)	E10/US 25/20 N55X62	Static tool holder axial Q=25/20, H=62, external coolant	1
C5547110B2555	(546,00)	E10/B 25 N55X55	Static tool holder for boring bars, D=25, H=55, Internal/external coolant	2
C5547E10B3255	(546,00)	E10/B 32 N55X55	Static tool holder for boring bars, D=32, H=55, Internal/external coolant	2
C5547E10B2575	(546,00)	E10/B 25 N55X75	Static tool holder for boring bars,, D=25, H=75, Internal/external coolant	2
C5547E10B3275	(546,00)	E10/B 32 N55X75	Static tool holder for boring bars, D=32, H=75,Internal/external coolant	2
C5547E10BD25	(824,00)	E10/BD 25 N55X39/75	Static tool holder for boring bars, D=25, H=39/75, Internal/external coolant	3

DRIVEN TOOL HOLDERS MZ1

ALGRA

ART. C5554

For lathes: **MAZAK**: Quick Turn Nexus (QTN) 100, 150 M/MS, Quick Turn Nexus (QTN) 200, 250, M/MS/MY/MSY (16 station turret), Super Quick Turn (SQT) 100 M/MY/MS/MSY, Super Quick Turn (SQT) 15,18, 200, 250 M/MY/MS/MSY.

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Tech. Code	GR36 Euro	Model	Description	Figure
C5554RAPPD25	(2160,00)	RAPPD 40 121DMZ1	Driven tool holder axial 0° offset, collet ER25, external coolant, 6000 rpm; i=1:1	1
C5554RRPPS25	(2070,00)	RRPPS 40 121DMZ1	Driven tool holder radial 90°, collet ER25, H=100, external coolant, 6000 rpm; i=1:1	2
C5554ROPPS25	(4606,00)	ROPPS 40 121DMZ1	Driven tool holder orientable ± 90°, collet ER25, external coolant, 6000 rpm, i=1:1	3

DRIVEN TOOL HOLDERS MZ2

ART. C5552

For lathes: **MAZAK**: Quick Turn Nexus (QTN) 200, 250 M/MS/MY/MSY 12 station, Super Quick Turn (SQT) 15, 18, 200, 250 M/MY/MS/MSY 12 station, Super Quadrex 200, 250 M.

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Tech. Code	GR36 Euro	Model	Description	Figure
C5552RAPPD32	(2160,00)	RAPPD 40 121DMZ2	Driven tool holder axial 0°offset, collet ER32, external coolant, 6000 rpm; i=1:1	1
C5552RRPPS32	(2600,00)	RRPPS 40 421DMZ2	Driven tool holder radial 90°,collet ER32, H=130, external coolant,, 6000 rpm; i=1:1	2
C5552ROPPS25	(4606,00)	ROPPS 40 121DMZ2	Driven tool holder orientable ± 90°, collet ER25, external coolant, 6000 rpm, i=1:1	3

DRIVEN TOOL HOLDERS S68

ART. C5550

For lathes: **MAZAK**: Quick Turn (QT) 200, 250 M, Quick Turn Smart (QTS) 100, 150, 200, 250 M, Quick Turn Compact (QTC) 100, 200, 300 M, Quick Turn Universal (QTU) 200, 250, 350 MY, MSY.

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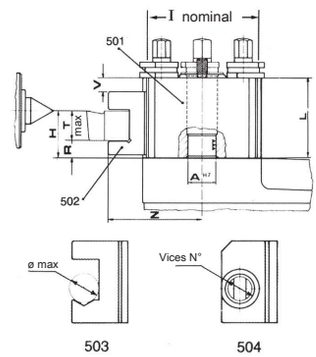
Tech. Code	GR36 Euro	Model	Description	Figure
C5550RAPPS32	(1710,00)	RAPPS 32 121US68	Driven tool holder axial 0°, collet ER32, external coolant, 6000 rpm; i=1:1	1
C5550RRPPS32	(2340,00)	RRPPS 32 121US68	Driven tool holder radial 90°, collet ER32, H=80, external coolant, 6000 rpm; i=1:1	2
C5550ROPPS25	(3690,00)	ROPPS 25 121US68	Driven tool holder orientable ± 90°, collet ER25, external coolant, 6000 rpm, i=1:1	3

QUICK CHANGE STATIC TOOL HOLDER TURRETS

ART. C5210

Quick change static tool holder turret

Standard equipment 5 tool holders:
- 4 flat seats
- 1 prismatic seat



Tech. Code	GR35 Euro	TURRET TYPE	l mm	H7 A mm	Min H mm	Max H mm	L mm	R mm	Max T mm	Z mm	Max Ø mm	Clamp n°
C5210100B	(1232,00)	B	100	30	47	61	85	15	32	100	24	3
C5210115,3C	(1287,00)	C	115.3	38	51	72	94	19	32	108	26	4

Indivisible package Suggested retail package - Unit price

RADIAL TOOLHOLDERS VDI DIN 69880

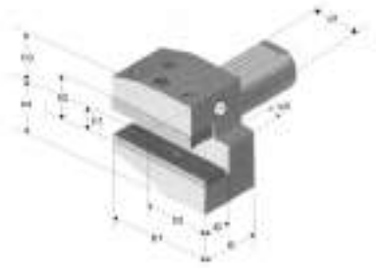
ALGRA

ART. B1

Radial tool holder DIN 69880, right-hand, short, external coolant adduction.

Tech. Code	GR35 Euro	d1 mm	b1 mm	b2 mm	b3 mm	h1 mm	h2 mm	h3 mm	h4 mm	l5 mm	l6 mm
C501040	(151,00)	40	85	42.5	12.5	25/20	34	32.5	48	44	22

Note: On request with 25 diameter shank (DIN 69880), tool holder housing in inches.



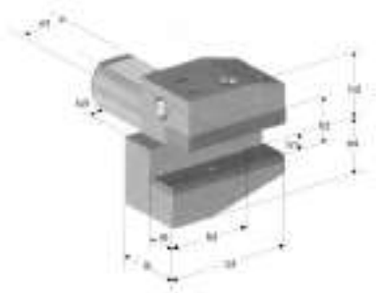
RADIAL TOOLHOLDERS VDI DIN 69880

ALGRA

ART. B2

Radial tool holder DIN 69880, left-hand, short, external coolant adduction.

Tech. Code	GR35 Euro	d1 mm	b1 mm	b2 mm	b3 mm	h1 mm	h2 mm	h3 mm	h4 mm	l5 mm	l6 mm
C501130	(150,00)	30	70	35	10	20/16	29	28	38	40	18
C501140	(172,00)	40	85	42.5	12.5	25/20	34	32.5	48	44	22



UPSIDE DOWN RADIAL TOOLHOLDERS VDI DIN 69880

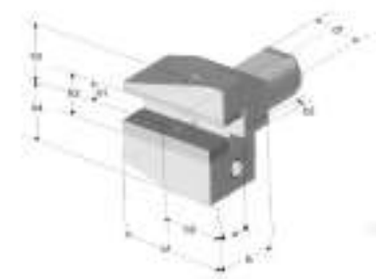
ALGRA

ART. B3

Radial tool holder DIN 69880, right-hand, upside down, short, external coolant adduction.

Tech. Code	GR35 Euro	d1 mm	b1 mm	b2 mm	b3 mm	h1 mm	h2 mm	h3 mm	h4 mm	l5 mm	l6 mm
C502030	(153,00)	30	70	35	10	20/16	29	28	38	40	18
C502040	(179,00)	40	85	42.5	12.5	25/20	34	32.5	48	44	22

Note: On request with 25 diameter shank (DIN 69880), tool holder housing in inches.



AXIAL TOOLHOLDERS VDI DIN 69880

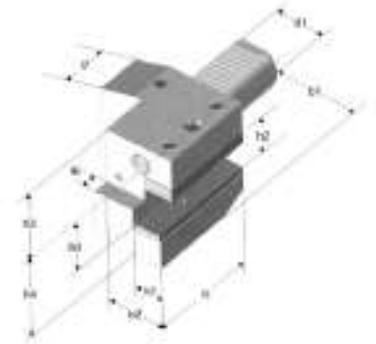
ALGRA

ART. C1

Axial tool holder DIN 69880, right-hand, external coolant adduction.

Tech. Code	GR35 Euro	d1 mm	b1 mm	b2 mm	b3 mm	h1 mm	h2 mm	h3 mm	h4 mm	l5 mm	l6 mm	l7 mm
C503040	(186,00)	40	85	42.5	22	25/20	34	32.5	48	85	12.5	30

Note: On request with 25 diameter shank (DIN 69880), tool holder housing in inches.



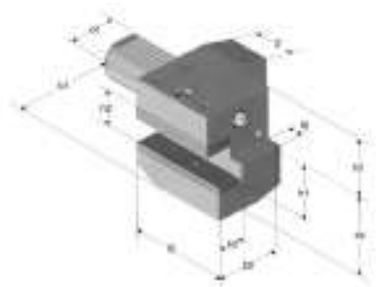
AXIAL TOOLHOLDERS VDI DIN 69880

ALGRA

ART. C2

Axial tool holder DIN 69880, left-hand, external coolant adduction.

Tech. Code	GR35 Euro	d1 mm	b1 mm	b2 mm	b3 mm	h1 mm	h2 mm	h3 mm	h4 mm	l5 mm	l6 mm	l7 mm
C503130	(182,00)	30	76	41	18	20/16	29	28	38	70	10	30
C503140	(186,00)	40	90	47.5	22	25/20	34	32.5	48	85	12.5	30



AXIAL TOOLHOLDERS VDI FOR DRILLING DIN 69880

ART. E1

Tool holder for drilling tools, internal coolant.

Tech. Code	GR35 Euro	d1 mm	d2 mm	d3 mm	d4 mm	b1 mm	l1 mm	l2 mm	l3 mm
C50604020	(136,00)	40	40	83	20	32.5	67	22	54
C50604025	(136,00)	40	45	83	25	32.5	75	22	59
C50604032	(136,00)	40	52	83	32	32.5	75	22	63
C50604040	(136,00)	40	60	83	40	32.5	90	22	73

Note: On request with 25 diameter shank (DIN 69880), tool holder housing in inches.

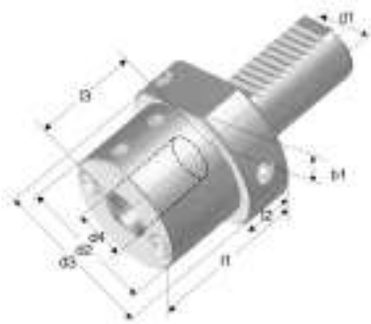
AXIAL TOOLHOLDERS VDI FOR BORING BAR DIN 69880

ART. E2

Tool holder for boring bar DIN 69880, external coolant.

Tech. Code	GR35 Euro	d1 mm	d2 mm	d3 mm	d4 mm	b1 mm	l1 mm	l2 mm	l3 mm
C5070408	(143,00)	40	55	83	8	32.5	75	22	61
C50704010	(147,00)	40	55	83	10	32.5	75	22	61
C50704012	(147,00)	40	55	83	12	32.5	75	22	61
C50704016	(147,00)	40	55	83	16	32.5	75	22	61
C50704020	(147,00)	40	55	83	20	32.5	75	22	61
C50704025	(147,00)	40	55	83	25	32.5	75	22	61
C50704032	(147,00)	40	83	83	32	32.5	75	-	61
C50704040	(161,00)	40	83	83	40	32.5	90	-	76

Note: On request with 25 diameter shank (DIN 69880), tool holder housing in inches.



ER/EX COLLET CHUCKS VDI DIN 6499/B

ART. E4

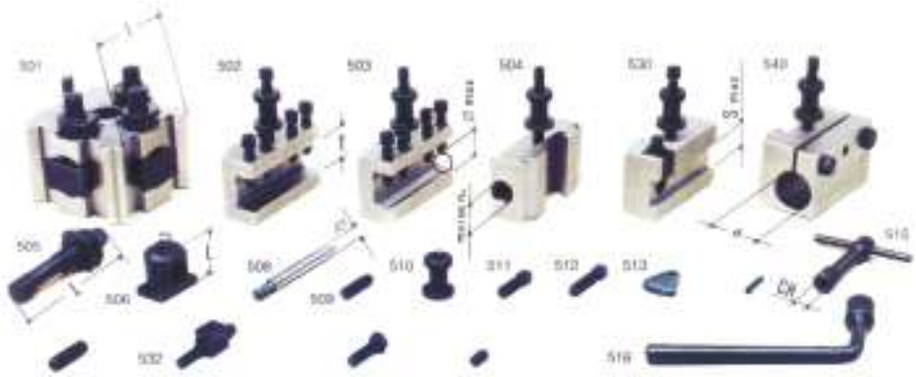
Collet holder DIN 69880, for collets of the type ER DIN 6499/B

Tech. Code	GR35 Euro	d1 mm	d2 mm	d3 mm	d4 mm	b1 mm	l1 mm	l2 mm	ER
C50803032	(225,40)	30	50	68	2.5÷20	28	65	22	32
C50804032	(246,10)	40	50	83	2.5÷20	32.5	65	22	32
C50805032	(276,00)	50	50	98	2.5÷20	35	84	30	25

ACCESSORIES:
- Collets page C.38

Note: On request with 25 diameter shank (DIN 69880), tool holder housing in inches.

Indivisible package Suggested retail package - Unit price



ART. C5220

STATIC TOOL HOLDER TURRET COMPONENTS

TURRET TYPE		A	BR - BP	B	C
502 - Tool holder for tool bits	**Tech. Code**	**C5220502A**	**C5220502BRBP**	**C5220502B**	**C5220502C**
GR35	**Euro**	**(125,00)**	**(148,00)**	**(152,00)**	**(203,00)**
T Max	mm	20	25	32	32
503 - Tool holder for round shank	**Tech. Code**	**C5220503A**	**C5220503BRBP**	**C5220503B**	**C5220503C**
GR35	**Euro**	**(125,00)**	**(148,00)**	**(152,00)**	**(203,00)**
Diameter	mm	18	20	24	26
504 - Tool holder for morse taper shank	**Tech. Code**	**C5220504A**	**C5220504BRBP**	**C5220504B**	**C5220504C**
GR35	**Euro**	**(218,00)**	**(234,00)**	**(281,00)**	**(359,00)**
MK	mm	2	3	3	4
505 - Eccentric clamp bolt	**Tech. Code**	**C5220505A**	**C5220505BRBP**	**C5220505B**	**C5220505C**
GR35	**Euro**	**(136,80)**	**(156,00)**	**(175,20)**	**(184,80)**
L	mm	90	108	123	141
506 - Draw-in block with spring	**Tech. Code**	**C5220506A**	**C5220506BRBP**	**C5220506B**	**C5220506C**
GR35	**Euro**	**(136,80)**	**(156,00)**	**(175,20)**	**(195,60)**
L	mm	31	37	42	47
508 - Dowel pin	**Tech. Code**	**C5220508A**	**C5220508BRBP**	**C5220508B**	**C5220508C**
GR35	**Euro**	**(58,80)**	**(58,80)**	**(58,80)**	**(78,00)**
Diameter	mm	10	10	12	14
509 - Stud	**Tech. Code**	**C5220509A**	**C5220509BRBP**	**C5220509B**	**C5220509C**
GR35	**Euro**	**(13,20)**	**(13,20)**	**(13,20)**	**(19,20)**
Thread	mm	3/8"	3/8"	7/16"	1/2"
510 - Adjustment sleeve	**Tech. Code**	**C5220510A**	**C5220510BRBP**	**C5220510B**	**C5220510C**
GR35	**Euro**	**(39,60)**	**(58,80)**	**(58,80)**	**(78,00)**
Thread	mm	3/8"	3/8"	7/16"	1/2"
511 - Sleeve locking screw	**Tech. Code**	**C5220511A**	**C5220511BRBP**	**C5220511B**	**C5220511C**
GR35	**Euro**	**(13,20)**	**(13,20)**	**(19,20)**	**(27,60)**
Thread	mm	3/8"	3/8"	7/16"	1/2"
512 - Tool locking screw	**Tech. Code**	**C5220512A**	**C5220512BRBP**	**C5220512B**	**C5220512C**
GR35	**Euro**	**(18,00)**	**(18,00)**	**(18,00)**	**(28,80)**
Thread	mm	3/8"	3/8"	7/16"	1/2"
515 - Square socket wrench	**Tech. Code**	**C5220515A**	**C5220515BRBP**	**C5220515B**	**C5220515C**
GR35	**Euro**	**(58,80)**	**(58,80)**	**(97,20)**	**(97,20)**
Ch	mm	9	9	10	12
516 - Hexagonal socket wrench	**Tech. Code**	**C5220516A**	**C5220516BRBP**	**C5220516B**	**C5220516C**
GR35	**Euro**	**(78,00)**	**(97,20)**	**(97,20)**	**(175,20)**
Size	mm	14	17	17	21
540 - Boring bar tool holder	**Tech. Code**	**C5220540A**	**C5220540BRBP**	**C5220540B**	**C5220540C**
GR35	**Euro**	**(593,00)**	**(718,00)**	**(936,00)**	**(1092,00)**
Diameter	mm	25	32	40	50

BA SINGLE CONE COLLETS WITH SMOOTH BORE

ART. C5084

Impulse type collet in galvanized steel, tempered and adjusted to be used in chucks either for the main head (main spindle) or the counter head (sub spindle). For milling bars and reinforcement. Model with smoot bore.

Tech. Code	GR43 Euro	Model	Ø mm	A mm	B mm	C mm	L mm	α
C508436T03	64,30	BA36-171E	3 - 36	42	55	42	94	15°
C508442T03	64,30	BA42-173E	3 - 42	48	60	50	94	15°
C508452T03	168,00	BA52-177E	3 - 52	58	70	60	94	15°
C508460T03	210,00	BA60-185E	3 - 60	66	84	73	110	15°
C508470T03	192,70	BA70	3 - 70	80	98	85	115	15°

BA SINGLE CONE COLLETS WITH RIBBED BORE

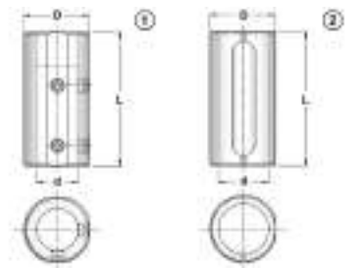
ART. C5085

Impulse type collet in galvanized steel, tempered and adjusted to be used in chucks either for the main head (main spindle) or the counter head (sub spindle). For milling bars and reinforcement. Model with ribbed bore.

Tech. Code	GR43 Euro	Model	Ø mm	A mm	B mm	C mm	L mm	α
C508536T08	61,20	BA36-171E	8 - 36	42	55	42	94	15°
C508542T08	61,20	BA42-173E	8 - 42	48	60	50	94	15°
C508552T08	84,10	BA52-177E	8 - 52	58	70	60	94	15°
C508560T08	112,00	BA60-185E	8 - 60	66	84	73	110	15°
C508570T08	172,80	BA70	8 - 70	80	98	85	115	15°

UNIVERSAL REDUCTION SLEEVES

ART. C5110

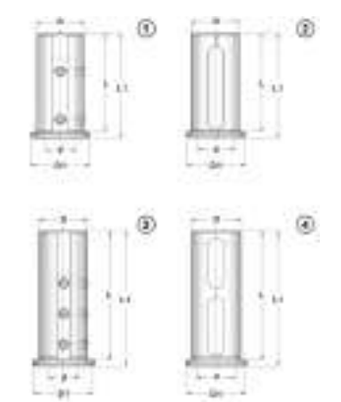


Tech. Code	GR43 Euro	D mm	d mm	L mm	Figure
C5110208	(65,10)	20	8	60	1
C51102010	65,10	20	10	60	1
C51102012	65,10	20	12	60	1
C5110258	65,10	25	8	60	1
C51102510	65,10	25	10	60	1
C51102512	(65,10)	25	12	60	1
C5110328	(68,20)	32	8	70	1
C51103210	68,20	32	10	70	1
C51103212	68,20	32	12	70	1
C51103216	68,20	32	16	70	1

Tech. Code	GR43 Euro	D mm	d mm	L mm	Figure
C51103220	68,20	32	20	70	1
C51103225	78,90	32	25	70	2
C51104016	73,60	40	16	80	1
C51104020	73,60	40	20	80	1
C51104025	73,60	40	25	80	1
C51105012	(82,20)	50	12	90	1
C51105016	(82,20)	50	16	90	1
C51105020	(82,20)	50	20	90	1
C51105025	(82,20)	50	25	90	1
C51105032	(82,20)	50	32	90	1

HEADED REDUCTION SLEEVES

ART. C5115



Tech. Code	GR43 Euro	D mm	d mm	D1 mm	L mm	L1 mm	Fig.
C5115256	71,40	25	6	33	60	65	1
C5115258	71,40	25	8	33	60	65	1
C51152510	76,40	25	10	33	60	65	1
C51152512	71,40	25	12	33	60	65	1
C51152516*	71,40	25	16	33	60	65	2
C5115326	75,80	32	6	40	85	90	3
C5115328	75,80	32	8	40	85	90	3
C51153210	75,80	32	10	40	85	90	3
C51153212	75,80	32	12	40	85	90	3
C51153216	75,80	32	16	40	85	90	3
C51153220	77,90	32	20	40	85	90	3
C51153225*	76,30	32	25	40	85	90	4
C5115408	81,00	40	8	50	105	110	3
C51154010	81,00	40	10	50	105	110	3
C51154012	81,50	40	12	50	105	110	3

Tech. Code	GR43 Euro	D mm	d mm	D1 mm	L mm	L1 mm	Fig.
C51154016	81,00	40	16	50	105	110	3
C51154020	81,50	40	20	50	105	110	3
C51154025	81,00	40	25	50	105	110	3
C51154032*	96,80	40	32	50	105	110	4
C51155012	91,50	50	12	60	125	130	3
C51155016	88,50	50	16	60	125	130	3
C51155020	88,50	50	20	60	125	130	3
C51155025	88,50	50	25	60	125	130	3
C51155032	91,50	50	32	60	125	130	3
C51155040*	91,50	50	40	60	125	130	4
C51156025	(168,50)	60	25	70	135	140	3
C51156032	(168,50)	60	32	70	135	140	3
C51156040	(168,50)	60	40	70	135	140	3
C51156050	(168,50)	60	50	70	135	140	4

*** Bush with carving**

Indivisible package Suggested retail package - Unit price

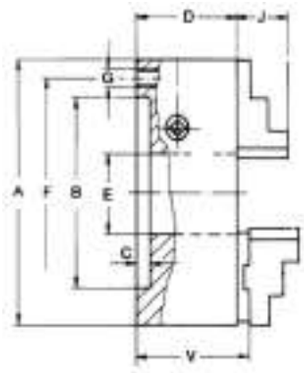
SELF-CENTERING CHUCKS 3 JAWS

ART. DURO M/3

Manually operated self-centering chuck equipped with a flat spiral and a through hole. Mainly used on traditional horizontal and vertical lathes, milling machines and rotary tables. All-steel body, designed to ensure optimal accessibility. Reduced weight and level of inertia. High concentricity accuracy up to 0.02. Available in versions with cylindrical connection, short cone connection, Camlock, bayonet. Burnished jaws, ground under preload on the chuck to obtain greater precision.

APPLICATION:
Clamping of asymmetrical components for turning and milling

EQUIPMENT:
Set of claws for inside and outside or set of base claws and reversible inserts operating key and fixing screws



Tech. Code	GR37 Euro	A mm	B mm	E mm	C mm	D mm	V mm	J mm	G mm	F mm	Torque Nm	Force kN	Revolution min/max
C6230100	(610,00)	100	70	20	3	50	53.6	18	3 x M8	83	60	27	6300
C6230125	(614,00)	125	95	32	4	56	61	22.5	3 x M8	108	80	31	5500
C6230160	(672,00)	160	125	42	4	65	69.7	26	3 x M10	140	110	47	4600
C6230200	(830,00)	200	160	55	4	73.5	80.2	32.5	3 x M10	176	140	55	4000
C6230250	(1125,00)	250	200	76	5	82	89.9	40	3 x M12	224	150	63	3000
C6230315	(1845,00)	315	260	103	5	95	100.4	46	3 x M16	286	180	69	2300

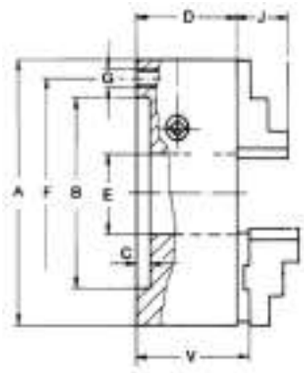
SELF-CENTERING CHUCKS 4 JAWS

ART. DURO M/4

Manually operated self-centering chuck equipped with a flat spiral and a through hole. Mainly used on traditional horizontal and vertical lathes, milling machines and rotary tables. All-steel body, designed to ensure optimal accessibility. Reduced weight and level of inertia. High concentricity accuracy up to 0.02. Available in versions with cylindrical connection, short cone connection, Camlock, bayonet. Burnished jaws, ground under preload on the chuck to obtain greater precision.

APPLICATION:
Clamping of asymmetrical components for turning and milling.

EQUIPMENT:
Set of claws for inside and outside or set of base claws and reversible inserts operating key and fixing screws



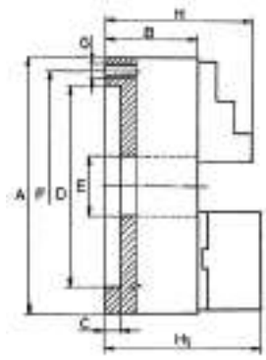
Tech. Code	GR37 Euro	A mm	B mm	E mm	C mm	D mm	V mm	J mm	G mm	F mm	Torque Nm	Force kN	Revolution min/max
C6231100	(613,00)	100	70	20	3	50	53,6	18	3 x M8	83	60	27	6300
C6231125	(758,00)	125	95	32	4	56	61	22,5	3 x M8	108	80	31	5500
C6231160	(926,00)	160	125	42	4	65	69,7	26	3 x M10	140	110	47	4600
C6231200	(1050,00)	200	160	55	4	73.5	80,2	32,5	3 x M10	176	140	55	4000
C6231250	(1335,00)	250	200	76	5	82	89,9	40	3 x M12	224	150	63	3000
C6231315	(2135,00)	315	260	103	5	95	100,4	46	3 x M16	286	180	69	2300

DOUBLE GUIDED SELF-CENTERING CHUCKS 3 JAWS

ART. 263

Self-centering chucks, art. 263 with 3 double guided jaws. Flange connection. Cast iron body.

EQUIPMENT:
Supplied with internal claws series and external claw series (DIN 6350 stepped and hardened), operating key and fixing screws.



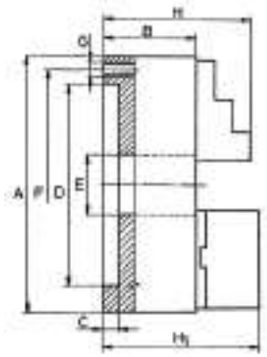
Tech. Code	GR38 Euro	A mm	B mm	C mm	D - H7 mm	E mm	F mm	G mm	H mm	H1 mm	Weight kg
C6232160	(1000,00)	160	74,5	6,5	125	42	140	6xM10	99,5	117,6	9,7
C6232200	(1130,00)	200	83	6,5	160	55	176	6xM10	112	128	17,2
C6232230	(1220,00)	230	83	6,5	191	80	208	6xM12	112	130	22
C6232315	(1800,00)	315	110	6,3	260	103	286	6xM16	154	168	50

DOUBLE GUIDED SELF-CENTERING CHUCKS 3 JAWS AND 3 CLAMPS

ART. 264

Self-centering chucks, art 264 with 3 double guided jaws. Flange connection. Cast Iron body.

EQUIPMENT:
Supplied with internal claws series and external claw series (DIN 6350 stepped and hardened), operating key and fixing screws, jaws and soft blocks.



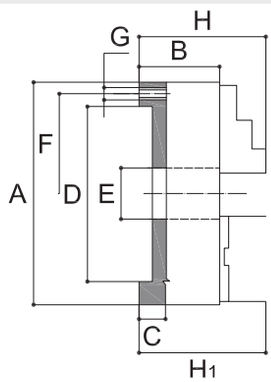
Tech. Code	GR38 Euro	A mm	B mm	C mm	D - H7 mm	E mm	F mm	G mm	H mm	H1 mm	Weight kg
C6233200	(1550,00)	200	83	5,5	160	55	176	6xM10	112	128	17,2
C6233230	(1740,00)	230	83	5,5	191	80	208	6xM10	112	130	22
C6233250	(1750,00)	250	96	6	200	76	224	6xM12	131	149	29,3

DOUBLE GUIDED SELF-CENTERING CHUCKS 4 JAWS

ART. 273

Self-centering chuck, art 273 with 4 double guided jaws. Flange connection. Cast Iron body.

EQUIPMENT:
Supplied with internal claws series and external claw series (DIN 6350 stepped and hardened), operating key and fixing screws.



Tech. Code	GR38 Euro	A mm	B mm	C mm	D - H7 mm	E mm	F mm	G mm	H mm	H1 mm	Weight kg
C6234200	(1700,00)	200	83	6,5	160	55	176	6xM10	112	128	19
C6234250	(2000,00)	250	96	6	200	76	224	6xM12	131	149	33
C6234315	(3000,00)	315	110	6,3	260	103	286	6xM16	154	168	60

SOFT TOP JAWS SERIES

ART. 317/337

Tech. Code	GR38 Euro	Dimension mm	For chucks
C62353125	100,00	125	C6238125
C62353160	105,00	160	C6232160/C6238160
C62353200	115,00	200	C6232200/C6238200
C62353230	115,00	230	C6232230
C62353250	150,00	250	C6238250
C62353315	220,00	315	C6232315/C6238315
C62354125	130,00	125	C6281125
C62354160	135,00	160	C6281160
C62354200	140,00	200	C6234200/C6281200
C62354250	200,00	250	C6234250/C6281250
C62354315	300,00	315	C6234315/C6281315

MASTER JAWS DOUBLE GUIDED SERIES

ART. 268/278

Tech. Code	GR38 Euro	Dimension mm	For chucks
C62363160	(530,00)	160	C6232160
C62363200	(540,00)	200	C6232200
C62363230	(540,00)	230	C6232230
C62363315	(1000,00)	315	C6232315
C62364200	(900,00)	200	C6234200
C62364250	(950,00)	250	C6234250
C62364315	(1600,00)	315	C6234315

Indivisible package Suggested retail package - Unit price

SPARE PARTS FOR DOUBLE GUIDED SELF-CENTERING CHUCKS

ART. 267/277

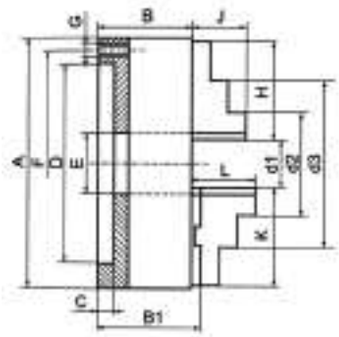
Tech. Code	GR38 Euro	Dimension mm	For chucks
C62373160	(600,00)	160	C6232160
C62373200	(620,00)	200	C6232200
C62373230	(620,00)	230	C6232230
C62373315	(1150,00)	315	C6232315
C62374200	(1000,00)	200	C6234200
C62374250	(1100,00)	250	C6234250
C62374315	(1800,00)	315	C6234315

SELF-CENTERING CHUCKS 3 JAWS

ART. 301

Self-centering chucks, art 301, 3 jaw guided. Flange connection. Cast Iron body.

EQUIPMENT:
Supplied with internal claws series and external claw series (DIN 6350 stepped and hardened), operating key and fixing screws.



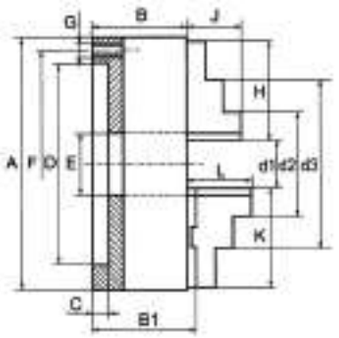
Tech. Code	GR38 Euro	A mm	B mm	B1 mm	C mm	D - H7 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	Weight kg
C6238125	340,00	125	56	60,8	4	95	32	108	3 x M8	51	20	56	40	4,8
C6238160	370,00	160	64,5	69,3	4	125	42	140	3 x M10	70	32	67	43	8,5
C6238200	470,00	200	75	79,8	4	160	55	176	3 x M10	85	29	80	45	16
C6238250	650,00	250	85	88,8	5	200	76	224	3 x M12	105	34	95	53	26
C6238315	950,00	315	94	99,1	5	260	103	286	3 x M16	125	43	110	57	43

SELF-CENTERING CHUCKS 4 JAWS

ART. HOL302

Self-centering chuck, art HOL302 with 4 jaws simple guide. Flange connection. Cast Iron body.

EQUIPMENT:
Supplied with internal claws series and external claw series (DIN 6350 stepped and hardened), operating key and fixing screws.



Tech. Code	GR38 Euro	A mm	B mm	B1 mm	C mm	D - H7 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	Weight kg
C6281125	(430,00)	125	56	60,8	4	95	32	108	3 x M8	51	20	56	40	4,8
C6281160	(520,00)	160	64,5	69,3	4	125	42	140	3 x M10	70	32	67	43	8,5
C6281200	(600,00)	200	75	79,8	4	160	55	176	3 x M10	85	29	80	45	16
C6281250	(850,00)	250	85	88,8	5	200	76	224	3 x M12	105	34	95	53	26
C6281315	(1200,00)	315	94	99,1	5	260	103	286	3 x M16	125	43	110	57	43

MASTER JAWS SERIES

ART. 318

Tech. Code	GR38 Euro	Dimension mm	For chucks
C62393125	(180,00)	125	C6238125
C62393160	(190,00)	160	C6238160
C62393200	(210,00)	200	C6238200
C62393250	(250,00)	250	C6238250
C62393315	(390,00)	315	C6238315

MASTER JAWS SERIES

ART. 338

Tech. Code	GR38 Euro	Dimension mm	For chucks
C62823125	(250,00)	125	C6281125
C62823160	(280,00)	160	C6281160
C62823200	(300,00)	200	C6281200
C62823250	(390,00)	250	C6281250
C62823315	(620,00)	315	C6281315

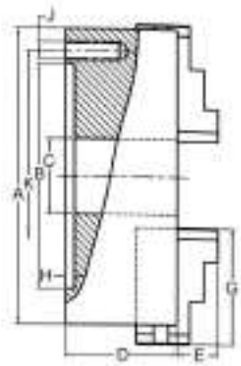
SIMPLE GUIDE SELF-CENTERING CHUCKS

ART. C6243

3 + 3 JAWS FOR INTERNAL/EXTERNAL

Flange, cast iron body, hardened steel jaws and sliding parts, supplied with operating wrench.

EQUIPMENT:
Supplied with internal claws series and external claw series (DIN 6350 stepped and hardened), operating key and fixing screws.



Tech. Code	GR43 Euro	A mm	B H7 mm	C mm	D mm	E mm	G mm	H mm	J mm	K mm	Wrench
C6243160	377,00	160	130	45	65	30	70	5	M10	142	11
C6243200	429,00	200	165	65	75	29	85	6	M10	180	11
C6243250	485,00	250	206	80	85	34	105	6	M12	226	14
C6243315	911,00	315	260	100	94	43	125	7	M16	285	14

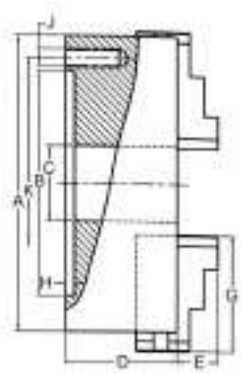
SIMPLE GUIDE SELF-CENTERING CHUCKS

ART. C6244

4 + 4 JAWS FOR INTERNAL/EXTERNAL

Flange, cast iron body, hardened steel jaws and sliding parts, supplied with operating wrench.

EQUIPMENT:
Supplied with internal claws series and external claw series (DIN 6350 stepped and hardened), operating key and fixing screws.

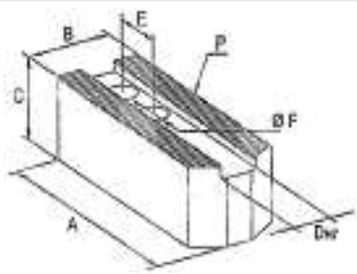


Tech. Code	GR43 Euro	A mm	B H7 mm	C mm	D mm	E mm	G mm	H mm	J mm	K mm	Wrench
C6244160	440,00	160	130	45	65	30	70	5	M10	142	11
C6244200	560,00	200	165	65	75	29	85	6	M10	180	11
C6244250	755,00	250	206	80	85	34	105	6	M12	226	14
C6244315	1240,00	315	260	100	94	43	125	7	M12	285	14

SOFT JAWS - 1,5 X 60°

ART. STANDARD JAWS

Standard jaws for self-centering Kitagawa chucks.



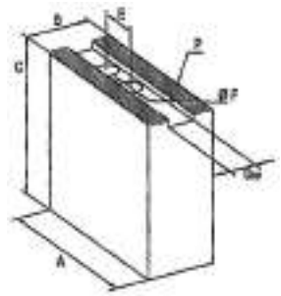
Tech. Code	GR43 Euro	Self-centering chucks Ø mm	A mm	B mm	C mm	D H7 mm	E mm	F Ø mm	P	
C6270165	13,50	165	72	30	30	12	20	11	1.5 x 60°	3
C6270210	17,20	210	95	35	35	14	25	13	1.5 x 60°	3
C6270254	22,20	254	110	40	40	16	30	13	1.5 x 60°	3
C6270304	29,10	304	130	50	50	21	30	17	1.5 x 60°	3
C6270381	47,80	381 - 454	165	60	70	22	43	21	1.5 x 60°	3

Indivisible package Suggested retail package - Unit price

SOFT JAWS

ART. HIGH VERSION

High version jaws for self-centering Kitagawa chucks.

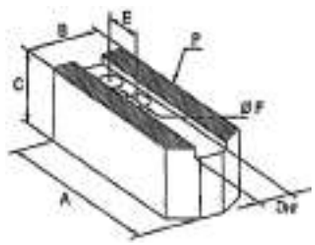


Tech. Code	GR43 Euro	Self-centering chucks Ø mm	A mm	B mm	C mm	D H7 mm	E mm	F Ø mm	P	
C6275165	20,40	165	72	30	50	12	20	11	1.5 x 60°	3
C6275210	22,20	210	95	35	50	14	25	13	1.5 x 60°	3

SOFT JAWS

ART. STANDARD JAWS

Standard jaws for self-centering Autoblock SMW pneumatic - hydraulic chucks.

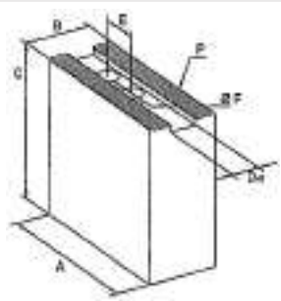


Tech. Code	GR43 Euro	Self-centering chucks Ø mm	A mm	B mm	C mm	D H7 mm	E mm	F Ø mm	P	
C6280200210	17,20	200 - 210	90	40	40	17	23	13	1/16" x 90°	3
C6280200225	17,90	200 - 210 - 225	105	40	40	17	23	13	1/16" x 90°	3
C6280250X45	20,50	250	110	45	45	21	30	17	1/16" x 90°	3
C6280250X50	21,80	250	110	50	50	21	30	17	1/16" x 90°	3
C6280315	22,20	315	125	50	50	21	30	17	1/16" x 90°	3
C6280400	34,00	400	140	60	60	21	30	17	1/16" x 90°	3

SOFT JAWS

ART. HIGH VERSION

High version jaws for self-centering Autoblock SMW pneumatic - hydraulic chucks.



Tech. Code	GR43 Euro	Self-centering chucks Ø mm	A mm	B mm	C mm	D H7 mm	E mm	F mm	
C6285165	24,00	165 - 175	70	35	50	14	16.5	1/16" x 90°	3
C6285200	27,30	200 - 210	90	40	60	17	23	1/16" x 90°	3

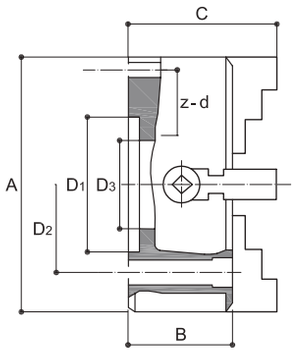
Indivisible package Suggested retail package - Unit price

DIRECT MOUNTING INDEPENDENT CHUCKS

ART. C6283

Platform with 4 independent jaws, cast Iron body up to 800 mm, 1000 mm steel body, simple guide. Flange connection.

Basic jaws are not available.



Tech. Code	GR38 Euro	A mm	B mm	C mm	D1 mm	D2 mm	D3 mm	z-d mm	RPM	Tightening force kgm	Tightening position	Capacity with support kg	Weight kg
C62834400	(990,00)	400	95	143	160	185	125	4-M16	810	6600	25-400	2000	70
C62834500	(1600,00)	500	106	161	200	236	160	4-M20	510	7000	35-500	3500	105
C62834630	(2500,00)	630	115	180	220	258	180	4-M20	400	8000	50-630	4000	175

SELF-CENTERING CHUCK KEYS

ART. C6248

Standard series

Tech. Code	GR43 Euro	■ mm	Body length mm	Lever length mm
C624806	(36,00)	6	86	150
C624807	(36,00)	7	86	150
C624808	(36,00)	8	86	150
C624810	(38,40)	10	100	200
C624812	(45,60)	12	110	250
C624813	(51,60)	13	120	300
C624814	(57,60)	14	120	350
C624815	(61,20)	15	160	430
C624816	(63,60)	16	130	450
C624817	(73,20)	17	135	450
C624819	(92,40)	19	150	450

ART. C6249

Safety series.

Tech. Code	GR43 Euro	■ mm	Body length mm	Lever length mm
C624910	(78,00)	10	110	210
C624912	(84,00)	12	123	300
C624913	(84,00)	13	123	300
C624914	(84,00)	14	123	350
C624915	(106,80)	15	160	430
C624916	(106,80)	16	160	450
C624917	(106,80)	17	170	450

Related products

OKS BEARINGS GREASE

Tech. Code	Package	Weight kg
H2204B	Jar	1

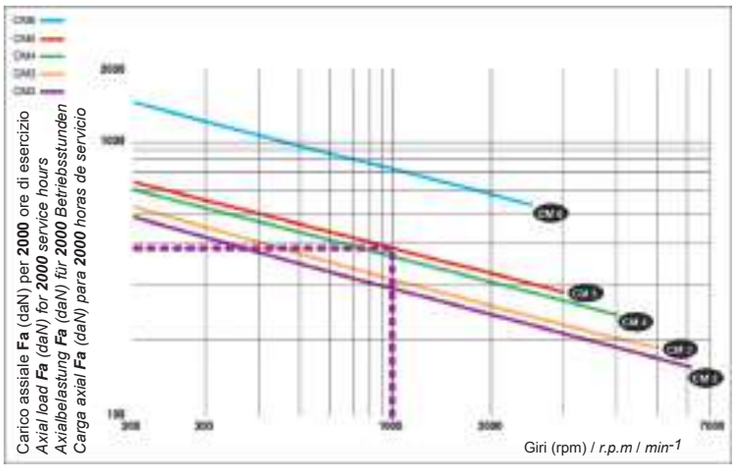
The products are available in chapter H

Indivisible package Suggested retail package - Unit price

LIVE CENTRES FOR LIGHT LOAD OPERATIONS

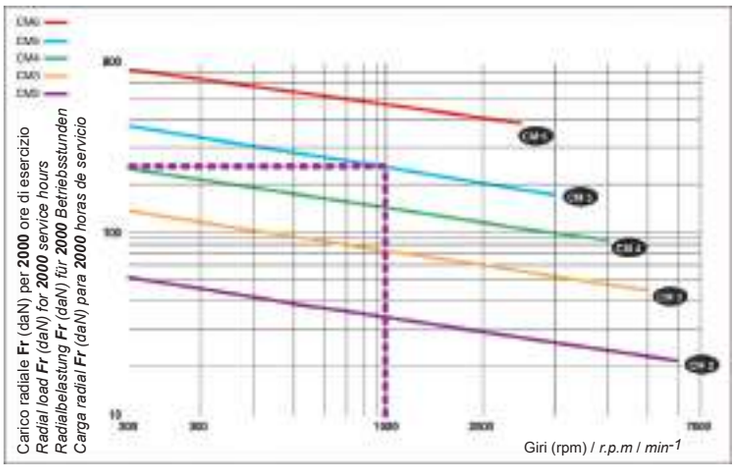
KERFOLG

Shaped live centres with precision bearings, reccomended for lathes with light load machining and low speeds. Hardened and rectified body and shaft, permanently lubricated with special grease.



AXEL LOAD

Example of live centre CM 5 a 1.000 Rpm/min
Axel load(Fa)= 376 (daN)



RADIAL LOAD

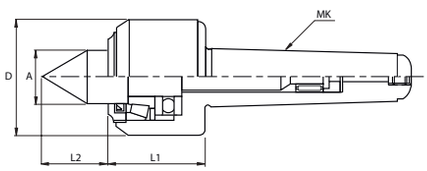
Example of live centre CM 5 a 1.000 Rpm/min
Radial load (Fr)= 230 (daN) - Fr x 2 = WEIGHT PRICE

LIVE CENTRES FOR LIGHT LOAD OPERATIONS

KERFOLG

ART. C6251

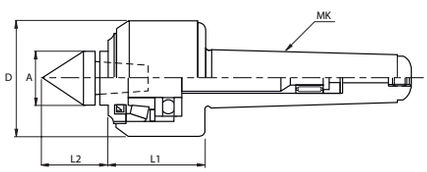
Revolving live centre with integral shaft.



Tech. Code	GR32 Euro	CM	Concentricity error	L1 mm	D mm	A mm	L2 mm	Capacity kg	Rpm/min	Weight kg
C6251CM2	227,00	2	0.005	42	48	22	25	110	6000	0.9
C6251CM3	247,00	3	0.005	43	55	22	27	280	5000	1.0
C6251CM4	318,00	4	0.005	51	61	29	38	460	4000	1.6
C6251CM5	405,00	5	0.005	55	80	38	45	780	3000	3.8

ART. C6252

Revolving live centre for interchangeable cusp.
Standard cusp C6255.

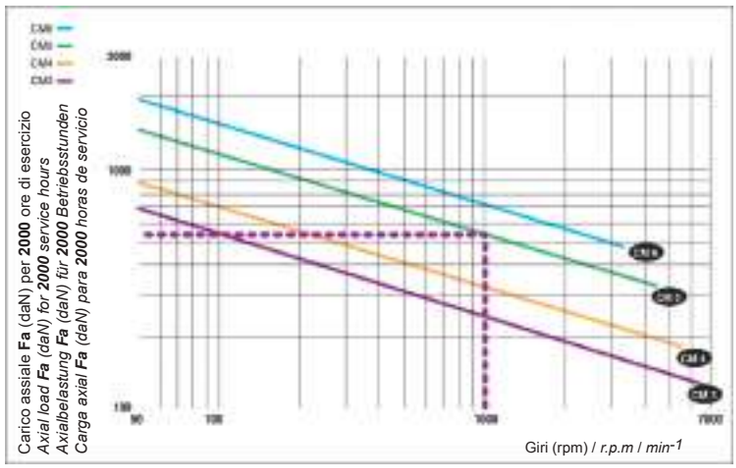


Tech. Code	GR32 Euro	CM	Concentricity error	L1 mm	D mm	A mm	L2 mm	Capacity kg	Rpm/min	Weight kg
C6252CM2	278,00	2	0.01	42	48	25	35	110	6000	0.9
C6252CM3	319,00	3	0.01	43	55	25	36	280	5000	1.0
C6252CM4	378,00	4	0.01	51	61	29	40	460	4000	1.6
C6252CM5	462,00	5	0.01	55	80	35	48	780	3000	3.8

LIVE CENTRES FOR MEDIUM LOAD OPERATIONS

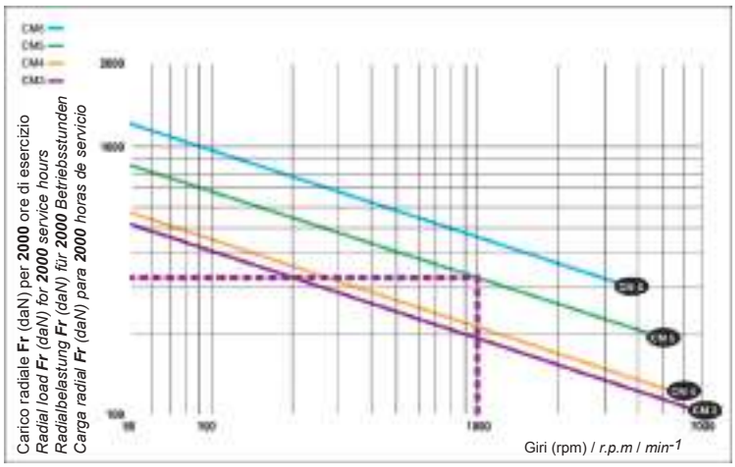
KERFOLG

Shaped live centre with precision bearings, reccomended for lathes with light and medium machinings and not high speeds. Hardened and rectified body and shaft, permanently lubricated with special grease.



AXEL LOAD

Example of live centre CM 5 a 1.000 Rpm/min
Axel load (Fa)= 546 (daN)



AXEL LOAD

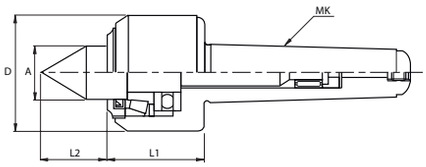
Example of live centre CM 5 a 1.000 Rpm/min
Axel load (Fr)= 320 (daN) - Fr x 2 = WEIGHT PRICE

LIVE CENTRES FOR MEDIUM LOAD

KERFOLG

ART. C6253

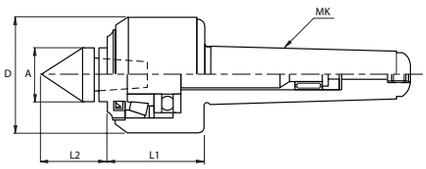
Revolving live centre with integral shaft.



Tech. Code	GR32 Euro	CM	Concetricity error	L1 mm	D mm	A mm	L2 mm	Capacity kg	Rpm/min	Weight kg
C6253CM3	303,00	3	0.005	47	55	22	28	640	7000	1.0
C6253CM4	376,00	4	0.005	55	61	29	40	700	5500	1.65
C6253CM5	456,00	5	0.005	63	80	38	48	1000	4500	3.55

ART. C6254

Revolving live centre with interchangeable cusp.
Standard cusp C6255.



Tech. Code	GR32 Euro	CM	Concetricity error	L1 mm	D mm	A mm	L2 mm	Capacity kg	Rpm/min	Weight kg
C6254CM3	383,00	3	0.01	47	55	25	37	640	7000	1.0
C6254CM4	453,00	4	0.01	55	61	29	40,5	700	5500	1.65
C6254CM5	(544,00)	5	0.01	63	80	35	46	1000	4500	3.55

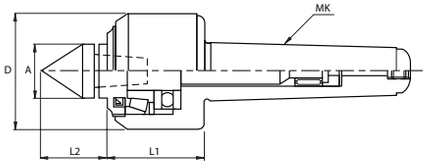
LIVE CENTRES IN WOODEN BOX WITH INTERCHANGEABLE TIPS KIT

KERFOLG

ART. C6269

Revolving live centre for light load operations with interchangeable tips in wooden box kit.

Composition standard:
- 1 live centre C6252
- 1 cusp C6255
- 1 cusp C6257
- 2 cusp C6259
- 1 cusp C6262
- 1 wrench for tips assembly



Tech. Code	GR32 Euro	CM	Concentricity error	L1 mm	D mm	A mm	L2 mm	Capacity Kg	Rpm/min	Weight kg
C6269CM3	653,00	3	0.01	43	55	25	36	280	5000	2.6
C6269CM4	720,00	4	0.01	51	61	29	40	460	4000	3.5
C6269CM5	880,00	5	0.01	55	80	35	48	780	3000	5.3

Indivisible package Suggested retail package - Unit price

EXTRACTION WRENCH FOR TIPS

KERFOLG

ART. C6268

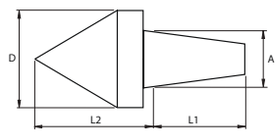
Tech. Code	GR32 Euro	For tailstocks
C6268CM2/3	(32,00)	CM2 - CM3
C6268CM4	(32,00)	CM4
C6268CM5	(45,00)	CM5

INTERCHANGEABLE TIPS FOR LIVE CENTRES

KERFOLG

ART. C6255

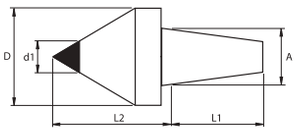
Interchangeable tips for live centre standard.



Tech. Code	GR32 Euro	For tailstocks	D mm	A mm	L1 mm	L2 mm
C6255CM3	(53,00)	CM2 - CM3	25	13.458	25	30
C6255CM4	(56,00)	CM4	29	15.303	27	33
C6255CM5	(61,00)	CM5	35	20.625	28	38

ART. C6256

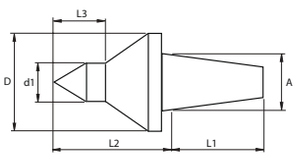
Interchangeable tips for live centre with carbide point.



Tech. Code	GR32 Euro	For tailstocks	D mm	d1 mm	A mm	L1 mm	L2 mm
C6256CM3	(120,00)	CM2 - CM3	25	10	13.458	25	30
C6256CM4	(120,00)	CM4	29	12	15.303	27	33
C6256CM5	(110,00)	CM5	35	14	20.625	28	38

ART. C6257

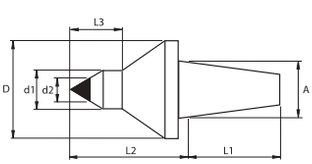
Interchangeable tips for live centre with slim point and reduced diameter.



Tech. Code	GR32 Euro	For tailstocks	D mm	d1 mm	A mm	L1 m	L2 mm	L3 mm
C6257CM3	(55,00)	CM2 - CM3	25	12	13.458	25	36	16
C6257CM4	(61,00)	CM4	29	12	15.303	27	39	16
C6257CM5	(63,00)	CM5	35	15	20.625	28	44	19

ART. C6258

Interchangeable tips for live centre with carbide point and reduced diameter.



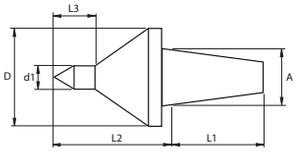
Tech. Code	GR32 Euro	For tailstocks	D mm	d1 mm	d2 mm	A mm	L1 mm	L2 mm	L3 mm
C6258CM3	(107,00)	CM2 - CM3	25	12	7	13.458	25	36	16
C6258CM4	(108,00)	CM4	29	12	8	15.303	27	39	16
C6258CM5	(109,00)	CM5	35	15	12	20.625	28	44	19

INTERCHANGEABLE TIPS FOR LIVE CENTRES

KERFOLG

ART. C6259

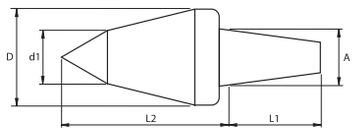
Interchangeable tips for live centre with extra reduced point.



Tech. Code	GR32 Euro	For tailstocks	D mm	d1 mm	A mm	L1 mm	L2 mm	L3 mm
C6259CM3	(55,00)	CM2 - CM3	25	7	13.458	25	36	12
C6259CM4	(61,00)	CM4	29	7	15.303	27	39	12
C6259CM5	(63,00)	CM5	35	7	20.625	28	44	12

ART. C6260

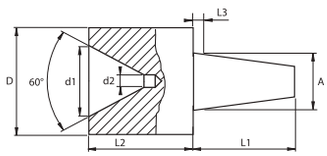
Extended interchangeable tips for live centre.



Tech. Code	GR32 Euro	For tailstocks	D mm	d1 mm	A mm	L1 mm	L2 mm
C6260CM3	(59,00)	CM2 - CM3	25	8	13.458	25	47
C6260CM4	(61,00)	CM4	29	10	15.303	27	52
C6260CM5	(67,00)	CM5	35	12	20.625	28	61

ART. C6261

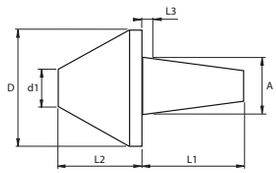
Interchangeable tips truncated cone for live centre.



Tech. Code	GR32 Euro	For tailstocks	D mm	d1 mm	A mm	L1 mm	L2 mm	L3 mm
C6261CM3	(85,00)	CM2 - CM3	29	23	13.458	27	30	2
C6261CM4	(85,00)	CM4	29	23	15.303	29	30	2
C6261CM5	(89,00)	CM5	35	27	20.625	30	35	2

ART. C6262

Interchangeable tips for tubolar workpieces for live centre.



Tech. Code	GR32 Euro	For tailstocks	D mm	d1 mm	A mm	L1 mm	L2 mm	L3 mm
C6262CM3	(84,00)	CM2 - CM3	59	26	13.458	27	35	2
C6262CM4	(84,00)	CM4	59	26	15.303	29	35	2
C6262CM5	(84,00)	CM5	59	26	20.625	30	35	2

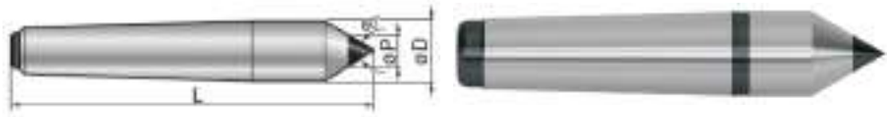
Indivisible package Suggested retail package - Unit price

DEAD CENTRES

KERFOLG

ART. C6265

Dead centres at 60° in hardened steel with a hardened steel metal point.



Tech. Code	GR32 Euro	CM	D mm	L mm	P mm	Weight kg
C6265CM3	(124,00)	3	24.1	125	11	0.4
C6265CM4	(229,00)	4	31.6	160	14	0.75
C6265CM5	(266,00)	5	44.7	200	18	1.95

ART. C6266

Dead centres at 60° in hardened steel with a hardened steel metal point.

Tech. Code	GR32 Euro	CM	D mm	L mm	C mm	B mm	P mm	Weight kg
C6266CM3	(172,00)	3	24.1	125	3	38	11	0.4
C6266CM4	(230,00)	4	31.6	160	5	50	14	0.75
C6266CM5	(291,00)	5	44.7	200	7	63	18	1.95

FACE DRIVERS

KERFOLG

ART. C6295

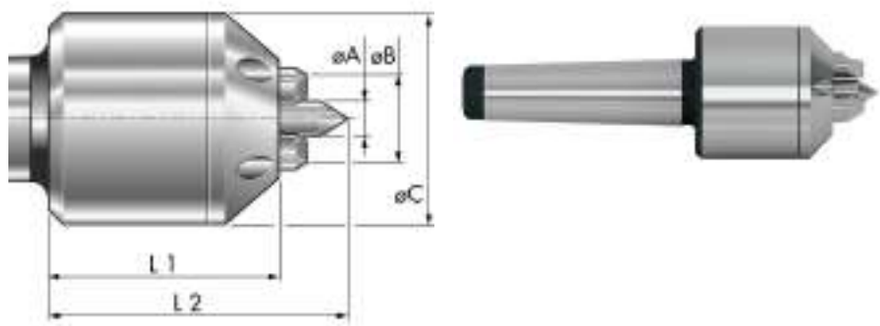
Face drivers with mechanical action.

Features:
- Hardened tempered steel
- Special balancing system of the claws
- Profile adapted for processing at both ends

Advantages:
- Possibility of processes on surfaces non perpendicular

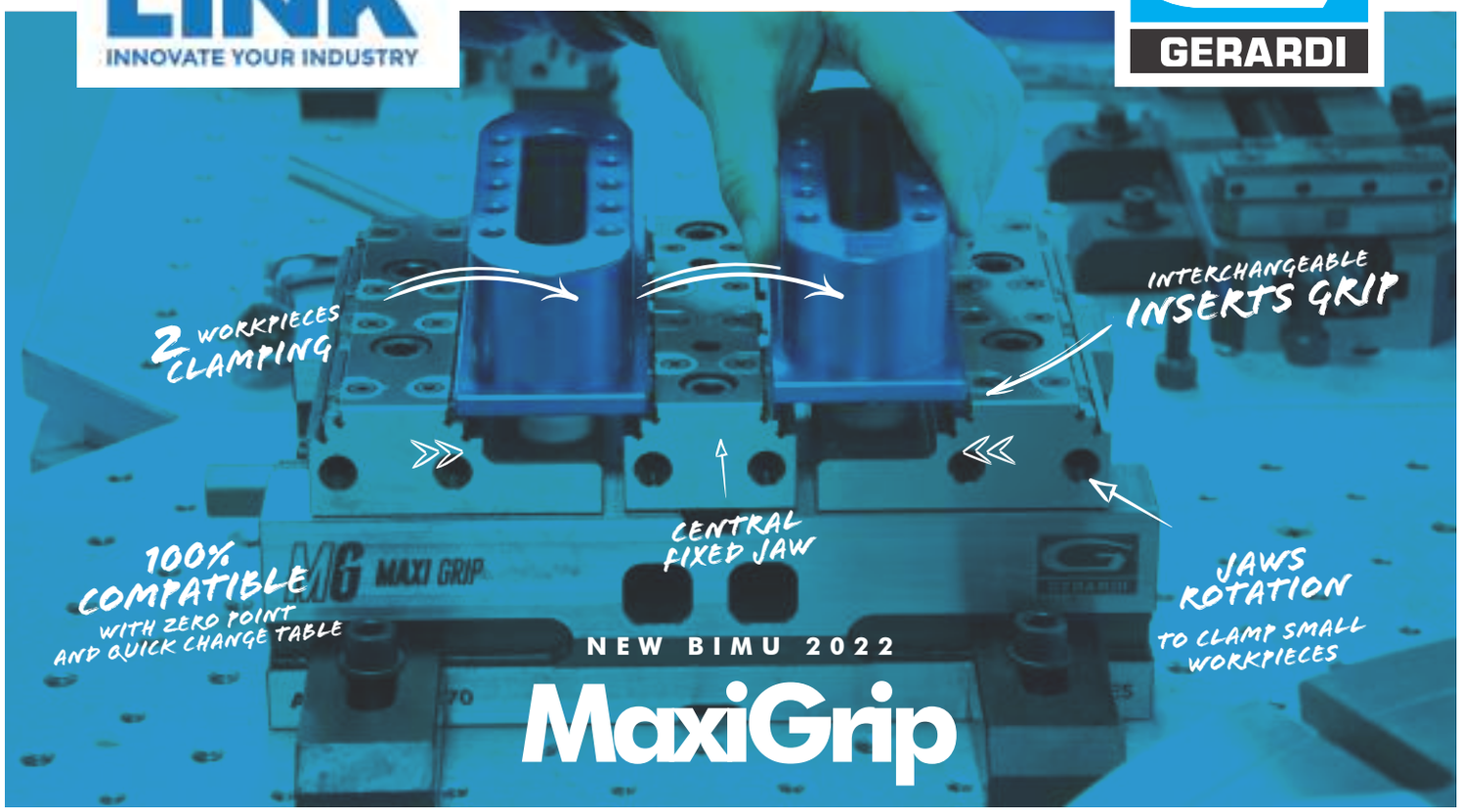
Standard adaption:
- The face drivers are provided with the tip centered and neutral claws

Face driver CLAW-25 - used for 12-25 mm field of application



Tech. Code	GR32 Euro	Ø min mm	Ø max mm	Coupling	A mm	B mm	C mm	L1 mm	L2 mm	Weight kg
C6295D30	(538,00)	12	25	D30 x 65	8	20	48	52	67	0.9
C6295CM3	(518,00)	12	25	CM3	8	20	48	52	67	0.9
C6295CM4	(555,00)	12	25	CM4	8	20	48	52	67	1.2

Tech. Code	GR32 Euro	Description
C6295ARNT	(29,00)	Neutral claws spare parts - Right and left rotation
C6295ARSX	(35,00)	Left claws spare parts - anti-clockwise rotation
C6295ARDX	(35,00)	Right cloaws spare parts - Clockwise rotation
C6295PUA	(31,00)	Adaptor for central tips spare parts
C6295PUN	(57,00)	Center tip spare parts



NEW SELF-CENTERING VISES - **3** CLAMPINGS IN **1**

WORKHOLDING 2023 GENERAL CATALOGUE

You can purchase any product from WORKHOLDING GERARDI catalogue by contacting our sales department. The delivery time depends on the availability of the supplier, you will receive an order confirmation with the detailed delivery dates.

A COMPLETE MODULAR SYSTEM FOR YOUR MACHINE TOOL

DuoDux
Double Guide Self-Centering Chucks

STD Series CompactGrip Series

Precision Modular
Vise Series

Tombstones, Modular Plates
and Zero Point System

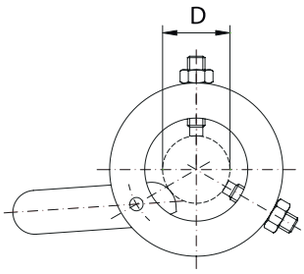
GRINDING CARRIERS IN STEEL

ART. C6287

The fast clamp grinding carriers are used to pull the work piece when it is fixed between two drills.
They are highly useful in mass grinding processes; in fact their high speed opening and closing allows a significant reduction in the time necessary for changing the piece on the machine tool, which also means cost savings.

Tech. Code	GR43 Euro	D mm
C6287000	(93,90)	0 - 8
C6287008	(98,40)	8 - 16
C6287016	(102,90)	16 - 24
C6287024	(104,10)	24 - 32
C6287032	(108,60)	32 - 40
C6287040	(114,70)	40 - 48
C6287048	(119,10)	48 - 56

Tech. Code	GR43 Euro	D mm
C6287056	(122,20)	56 - 64
C6287064	(123,60)	64 - 72
C6287072	(126,70)	72 - 80
C6287080	(151,90)	80 - 90
C6287090	(159,40)	90 - 100
C6287100	(166,70)	100 - 110
C6287110	(172,70)	110 - 120

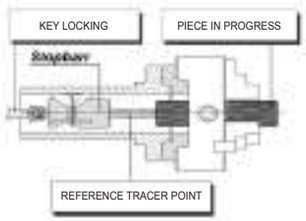


ADJUSTABLE STOP BARR DEVICES

ART. C6288

Device for maintaining constant references related to all the operations of turning. To mount the STOPBARR it is necessary to be introduced into the hollow shaft of the cable a lathe spindle, arranging in the position desired and to rotate anti-clockwise with the supplied key up to blocking securely. Other dimensions are available on request.

Tech. Code	GR43 Euro	Adjustment range mm	Adjustment range inc.
C6288032	(215,00)	32 - 41	1-1/4" - 1-5/8"
C6288041	(267,00)	41 - 52	1-5/8" - 2-1/16"
C6288051	(275,00)	51 - 62	2" - 2-7/16"
C6288062	(347,00)	62 - 82	2-7/16" - 3-1/4"

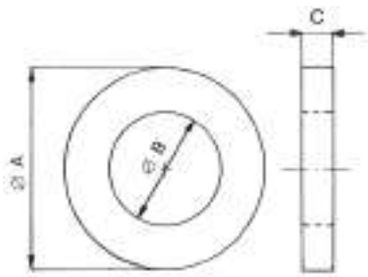


RINGS FOR TURNING JAWS

ART. C6290

Complete set of 67 increasing hardened rings, 2 mm from Ø 14 mm up to Ø 146 mm, unmatched jaw turning precision, highly effective due to the ring choice, reduced set-up time, a minor investment easy to depreciate.

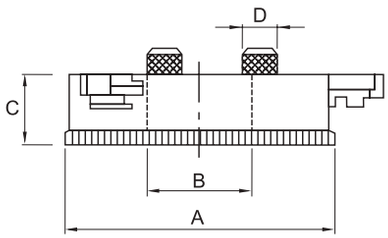
Tech. Code	GR43 Euro	Ø A mm	Ø B mm	C mm
C629014-146	(750,00)	14 - 22	7	7
		24 - 40	12	7
		42 - 58	22	9
		60 - 66	30	9
		68 - 86	40	9
		88 - 106	50	9
		108 - 126	60	9
		128 - 146	80	9



DEVICES FOR THE TURNING OF SOFT JAWS OUTLOCK

ART. C6292

Devices for the turning of soft jaws for manual chucks. Outlock ensures an high precision and concentricity of the gripping of the workpiece with a considerable reduction of the time of the preparation of the soft jaws.
Available on request orther versions and measurements NC for automatic chucks.

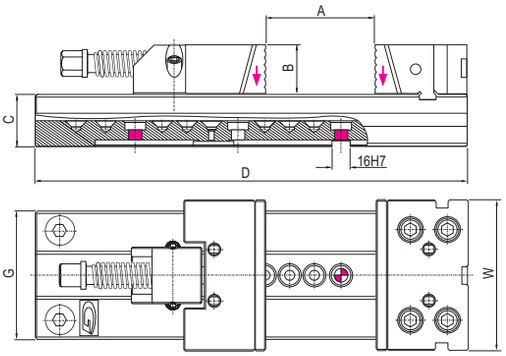


Tech. Code	GR43 Euro	Expansion with jaws normal mm	Expansion with jaws reversed mm	Max grip load Kg	A mm	B mm	C mm	D mm
C6292450	(669,00)	1 - 107	159 - 220	2.000 / 2.400	158	107	24	10

CLAMPING VICES STANDARD FLEX

ART. 1A

Vice with quick manual jaw plate changeover without the need for tools (Comb system). Increased and improved pull-down action during clamping (the comb system pulls the piece against the slide, ensuring greater repositioning precision). Complete with lateral stop, two positioning dowels (standard for 16 mm slot, other dimensions on request at no additional cost); box wrench; T-wrench. Ground and calibrated holes with an F7 tolerance F7 already included in the price.



Tech. Code	GR36 Euro	Mod mm	A mm	B mm	C mm	D mm	W mm	G mm	Weight kg
C6302150121	(898,00)	150 x 121	150	38	40	345	121	95	12.9
C6302200146	(1079,00)	200 x 146	200	48	50	420	146	125	25.5
C6302200171	(1372,00)	200 x 171	200	58	58	455	171	145	37
C6302300146	(1245,00)	300 x 146	300	48	50	520	146	125	29
C6302300171	(1509,00)	300 x 171	300	58	58	555	171	145	42
C6302400171	(1646,00)	400 x 171	400	58	58	655	171	145	47
C6302500171	(1751,00)	500 x 171	500	58	58	755	171	145	52

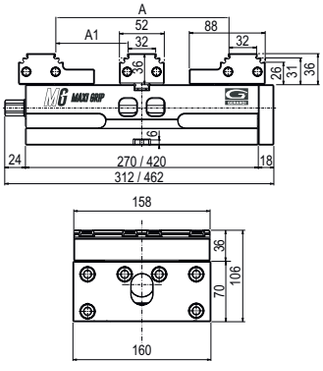
PRECISION MODULAR CLAMPING VICES MAXIGRIP

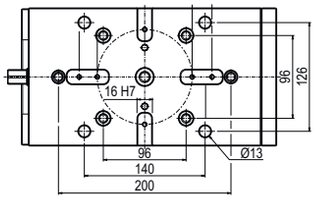
ART. 685 MAXIGRIP

NEW

The Maxigrip vice combines maximum clamping stability with the best versatility of use in a single product. Possibility to switch from the clamping of a single piece to double or self-centering mode quickly and intuitively for use on any type of machine, from 3 to 5 axes. Base body, slides and screw in case-hardened, tempered and ground steel. Compatibility with Zeropoint systems. Interchangeable GRIP inserts with different types of GRIP teeth suitable for clamping different materials.

Supplied with:
Pipe wrench
Pair of positioning dowels
Locating pin or Zero Point tie rod





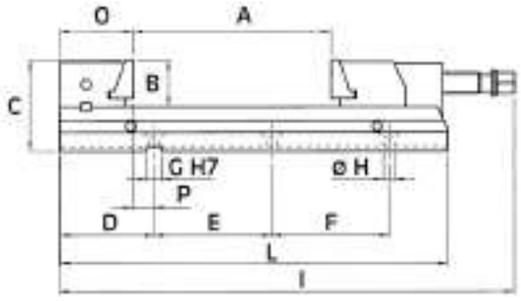
Tech. Code	GR36 Euro	A	A1
C63264X270	(2920,00)	Min 19 / Max 200	Min 19 / Max 200
C63264X420	(3870,00)	Min 19 / Max 350	Min 19 / Max 158

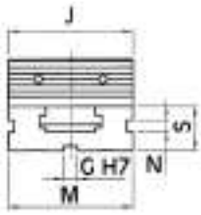
Indivisible package Suggested retail package - Unit price

PRECISION VICE TCT

ART. C6310

TCT clamping equipment complete with wrench, work stop, rigid slide way, floating slide way (for raw workpiece), pair of positioning keys h6 (optionally), pair of CLAK parallels, cover for screw protection, eye bolt for lifting. Wooden packing case.
Supplied with Sintergrip standard jaw pair.



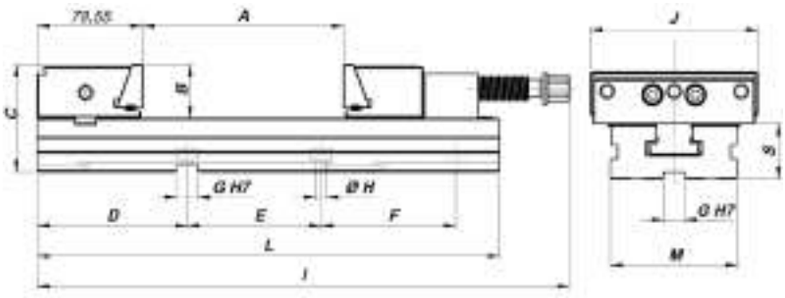


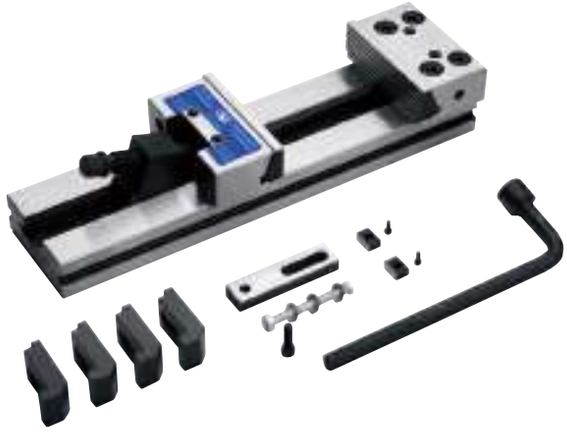
Tech. Code	GR40 Euro	Mod. mm	A mm	B mm	C mm	G mm	H mm	I mm	J mm	L mm	M mm	N mm	O mm	P mm	S mm	Weight kg
C6310110100	(1452,00)	110 x 100	100	40	78	12	9	338	110	280	110	10	63	18	38	11,5
C6310110150	(1534,00)	110 x 150	150	40	78	12	9	388	110	330	110	10	63	18	38	12,5
C6310150200	(1832,00)	150 x 200	200	50	98	18	12,5	481	150	413	150	13	85	30	48	27
C6310150250	(1903,00)	150 x 250	250	50	98	18	12,5	531	150	463	150	13	85	30	48	29
C6310150300	(2158,00)	150 x 300	300	50	98	18	12.5	588	150	520	150	13	85	30	48	31.5
C6310200300	(2987,00)	200 x 300	300	70	138	18	12,5	697	200	610	200	15,5	123	27	68	78

CLAMPING VICE LC

ART. C6325

LC clamping equipment complete with wrench, rigid slide way, work stop, pair of positioning keys h6, cover for screw protection, 4 clamps. Supplied in cardboard box.



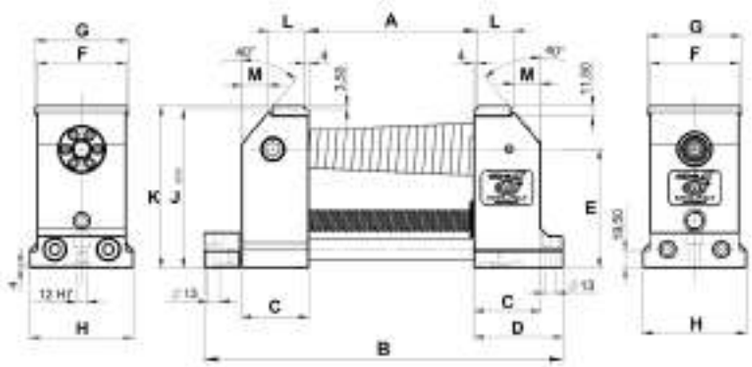


Tech. Code	GR40 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	L mm	M mm	S mm	Weight kg
C6325125150	(805,00)	150	40	80	111	100	100	16	8.5	410	125	345	95	40	13
C6325150200	974,00	200	50	100	122.5	100	100	16	12.5	500	150	420	125	50	26
C6325150300	1189,00	300	50	100	122.5	100	100	16	12.5	600	150	520	125	50	29
C6325200400	(2324,00)	400	65	135	145	100	100	16	12.5	780	200	695	170	70	74

5-AXIS CLAMPING SYSTEM

ART. C6331

Genius is a clamping system engineered for 5-axis machining centers, thanks to its clamping repeat accuracy, it guarantees high-precision performances.
Genius clamping units **are provided complete with SinterGrip jaws**, the innovative clamping system with hard metal inserts, enabling the workpiece grip with only 3,5 mm clamping
This makes Genius the ideal system in case of 5-axis machining centers.
Its innovative shear clamping system provides a clamping force (up to 40kN) which is functionally directed on the clamped workpiece.
Locking can be performed in a single step, up to 200 mm.
Its jaws travel along cemented as well as rectified shafts, instead of surfaces, therefore enabling a faster and more accurate positioning on axis with the machine centre point. Standard provided with 12x18 mm keys.



Tech. Code	GR40 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	Weight kg
C6331100	(1868,00)	100	312	75	100	133	100	104	116	178	181,50	41	30	23
C6331200	(2293,00)	200	412	75	100	133	100	104	116	178	181,50	41	30	25

SINTERGRIP LOCKING SYSTEM

ART. C6335

Sintergrip is a safe locking method conceived to avoid work piece deformations. The system comprises two different elements: a pair of jaws and a set of carbide inserts featuring a special patented profiling so to efficiently lock the work piece avoiding any need for premachining or special clamping.
Sintergrip also allows to lock for as few millimeters as possible the work piece in the clamping unit (3,5 mm grip) therefore enabling:
- complete item machining in a single phase (especially for 5-axis units)
- a cost-effective approach to the use of raw materials, especially when these have a significant impact on the costs (aluminum, titanium, etc.)

ALL IN ONE
1. Shape of the self-centering seat of the inserts with dovetail interlocking
2. Fixing holes to the vise
3. Tungsten carbide coating for better grip in the second operation
4. Seat for Clak system
5. Made on steel with tensile strength ~ 1.080 N/mm² + nitriding.

Tech. Code	GR40 Euro	Description
C6335ALL150	(414,00)	Pair of jaws TC/MC 150 ALL IN ONE
C6335ALL200	(602,00)	Pair of jaws TC/MC 200 ALL IN ONE
C6335STD150	(355,00)	Pair of jaws TC/MC 150 STANDARD
C6335STD200	(496,00)	Pair of jaws TC/MC 200 STANDARD

SINTERGRIP INSERTS

ART. C6336

SinterGrip inserts are made in ISO P30:P35 carbide PVD-method coated.
The cutting edges of its teeth is patented, the lower angle being greater than the upper one, jointed by a special cone-shaped insert section, generate two ideal thrust forces ensure a pull-down effect on the clamped workpiece, allowing a decreased clamping force for significantly reduced deformation phenomena and vibration risks.

Tech. Code	GR40 Euro	Description
C6336ACC	244,00	Set of 10 Sintergrip STD inserts for steel
C6336ALU	244,00	Set of 10 Sintergrip STD inserts for aluminum
C6336TEMP	283,00	Set of 10 Sintergrip STD inserts for hardened steel

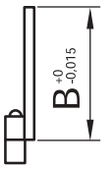
Indivisible package Suggested retail package - Unit price

CLAK QUICK CHANGE MODULAR FLAT PARALLELS - SET OF 6 PAIRS

ART. C6340

Set of 6 parallel pairs.

Exclusive quick change modular parallel system.
Advantages:
• Allows quick change of parallel jaws
• Eliminates clamps and locks thanks to a self-lock system.
• Precision maintenance



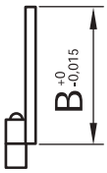
Tech. Code	GR40 Euro	Per modelli	B mm
C6340SET150	540,00	TC 150x.../MC 150x....	20 - 25 - 30 - 35 - 40 - 45

CLAK QUICK CHANGE MODULAR FLAT PARALLELS - SET OF 10 PAIRS

ART. C6345

Set of 10 pairs of flat parallels.

Exclusive quick change modular parallel system.
Advantages:
• Allows quick change of parallel jaws
• Eliminates clamps and locks thanks to a self-lock system.
• Precision maintenance

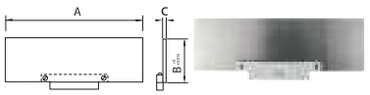


Tech. Code	GR40 Euro	Per modelli	B mm
C6345SET150	678,00	TC 150x.../MC 150x....	10 - 15 - 20 - 25 - 30 - 35 - 40 - 43 - 45 - 47
C6345SET200	800,00	TC 200x.../MC 200x....	20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65

CLAK QUICK CHANGE MODULAR FLAT PARALLELS

ART. C6375

Flat parallels

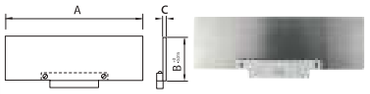


Tech. Code	GR40 Euro	B mm	A mm	C mm	Per modelli
C637512	(138,00)	12	146	3	TC 150x... MC 150x....
C637515	(138,00)	15	146	3	TC 150x... MC 150x....
C637520	138,00	20	146	3	TC 150x... MC 150x....
C637525	138,00	25	146	3	TC 150x... MC 150x....
C637535	138,00	35	146	3	TC 150x... MC 150x....
C637540	138,00	40	146	3	TC 150x... MC 150x....
C637543	138,00	43	146	3	TC 150x... MC 150x....
C637545	138,00	45	146	3	TC 150x... MC 150x....
C637547	138,00	47	146	3	TC 150x... MC 150x....

CLAK QUICK CHANGE MODULAR FLAT PARALLELS

ART. C6380

Flat parallels



Tech. Code	GR40 Euro	B mm	A mm	C mm	Per modelli
C638060	(165,00)	60	196	4	TC 200x... MC 200x....
C638065	(165,00)	65	196	4	TC 200x... MC 200x....

PRECISION PARALLELS

ART. C6398

Tempered and ground steel in pairs. Wooden packing case.

Pairs Heigth:
14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 - 32 - 35 - 40 - 45 - 50 mm

Tech. Code	GR43 Euro	Length mm	Spessore mm	Pairs n°
C6398150X10	490,35	150	10	14

IMG CLAMPING SYSTEM

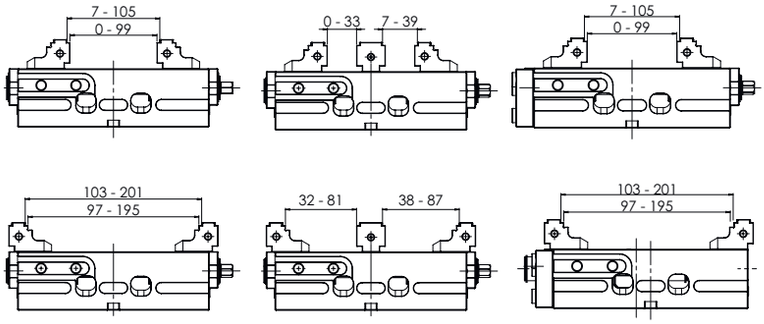
ART. IMG 125-220/320

The IMG self-centring vices can be easily transformed into fixed or double clamping vices. The vices have a fully protected operating screw with a patented telescopic system. This innovation makes it possible to avoid having to remove the jaws in order to find the clamping position. The clamping force (70 Nm) combined with the patented Sintergrip system guarantees high performance. Parallels with quick change Clak System.

APPLICATIONS / ADVANTAGES:
- Highly precise self-centring clamping with maximum repeatability
- Compact design for greater accessibility and very large drainage slots for chippings
- Jaws with Sintergrip clamping inserts for minimum workpiece clamping depth without pre-machining (jaw width 125 mm)
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

STANDARD EQUIPMENT:
- 1 Wrench
- Jaws
- Sintergrip inserts

Clamping keys to be ordered separately



Tech. Code	GR40 Euro	Description
C6381125220	(1720,00)	Vice IMG 125-220 with sintergrip jaws STD
C6381125320	(2151,00)	Vice IMG 125-320 with sintergrip jaws STD
C6381125	(245,00)	Double clamping jaws IMG 125
C6381PIASTRA	(89,00)	Retainer plate IMG 125
C638112H6	(27,00)	Pair of positioning keys MG 12h6
C638114H6	(49,00)	Pair of positioning keys MG 14h6
C638116H6	(49,00)	Pair of positioning keys MG 16h6
C638118H6	(53,00)	Pair of positioning keys MG 18h6
C638120H6	(49,00)	Pair of positioning keys MG 20h6
C638122H6	(49,00)	Pair of positioning keys MG 22h6

Related products

PROTECTIVE EYEWEAR

Tech. Code	Filter	Gradation	Optical class
K4120100	2C - UV plus FIlter	1.2 – Clear lens	Class 1

The products are available in chapter K

Indivisible package Suggested retail package - Unit price

HIGH-PRESSURE MANUAL VICES FOR 5-AXES MACHING CENTER - SELF-CENTERING SC

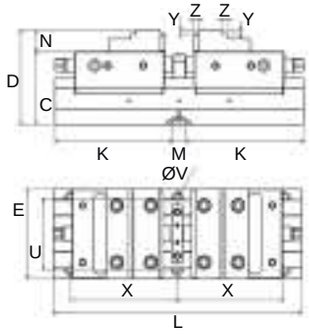
ARNOLD

ART. SELF-CENTERING SC

The ARNOLD SC vices are compact, tall, self-centring and highly precise vices that maintain their constant length, which makes them particularly suitable for work on machining centers with 5 controlled axes.

SET SUPPLIED WITH:

- base body
- mechanical worm without high pressure
- 1 set of jaws
- 1 set of plain jaws
- 1 ratchet key
- 1 crank
- 4 flanges
- instruction manual



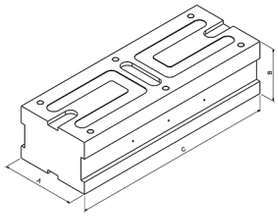
Tech. Code	GR38 Euro	Dim. mm	A mm	C mm	D mm	E mm	K mm	M H7 mm	N mm	U mm	V mm	X mm	Y mm	Weight kg
C6700090	(2023,00)	90	250	100	130	93	115	20	30	71	11	100	5	6
C6700125	(2456,00)	125	350	103	133	125	165	20	30	100	11	150	5	7

BASE FOR ARNOLD SC VICES

ARNOLD

ART. BASE SC

Base for 5 axes vice.



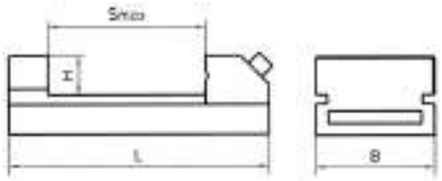
Tech. Code	GR38 Euro	C mm	B mm	A mm
C6725090	(707,00)	250	90	91
C6725125	(759,00)	350	90	126

PRECISION VICE

ART. C6396

Quick-lock precision vice, tempered and ground steel. Clamping through hexagonal wrench. Ideal for grinding, milling, measuring and electro discharge machines. V-jaws for a reliable grip.

Parallel error: ± 0.005 mm / 100 mm
Orthogonality error: ± 0.005 mm



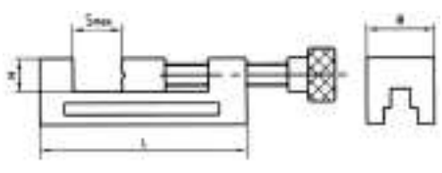
Tech. Code	GR43 Euro	L mm	S max mm	B mm	H mm	Weight kg
C6396025X025	94,00	65	25	25	10	0,3
C6396036X040	106,00	100	40	36	20	1
C6396050X065	118,00	140	65	50	25	2
C6396063X085	129,00	175	85	63	32	4,1
C6396100X125	302,00	245	125	100	45	10
C6396125X160	396,00	285	160	125	50	21
C6396150X200	604,00	330	200	150	50	20

PRECISION VICE

ART. C6397

Tempered and ground steel, screw clamping, V-jaws for a reliable grip. For workpiece machining of grinding, milling, measuring and electro discharge machines.

Parallelism error: ± 0.005mm / 100 mm
Orthogonality error: ± 0.005mm



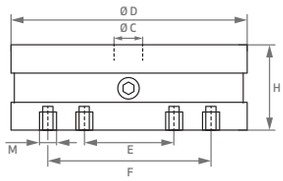
Tech. Code	GR43 Euro	Total length L mm	Jaw opening mm	Jaw width mm	Jaw height mm	Weight kg
C6397050X065	157,00	155	65	50	25	2.3
C6397063X085	173,00	190	85	63	32	4
C6397073X100	240,00	210	100	73	35	5.8
C6397088X125	275,00	250	125	88	40	9.5
C6397100X125	381,00	250	125	100	45	12

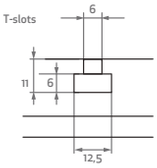
MAGNETIC PLATES

ART. C6500

Sturdy upper top deck with radial poles, 5 mm upper rework threshold. Double high-power neodymium magnetic system. Solid steel base equipped with a robust drive mechanism. Maximum holding force upt to 140 N/cm², depending on the size of the clamping system and the machined components. Supplied with switching key but without central hole.

Use
Turning and grinding of circular components.



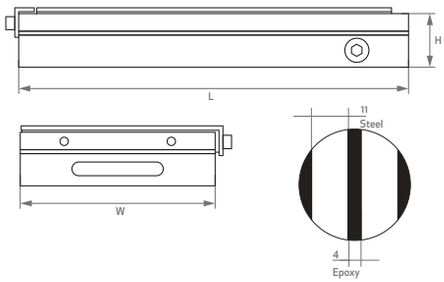


Tech. Code	GR40 Euro	D mm	H mm	C mm	M	E mm	F mm	n°of poles	Weight kg	Seal force N/cm²
C6500150	(1031,20)	150	57	15	M6	80	120	10	7,3	140
C6500200	(1199,50)	200	57	20	M6	110	180	12	13	140
C6500250	(1734,00)	250	70	30	M6	140	220	16	25	140
C6500300	(1898,20)	300	73	38	M8	180	260	16	37	140

ART. C6510

Upper top deck worked from a single piece of steel, watertight structure. Nominal holding force 160 N/cm². Distribution of magnetic force up to the edges of the system. Minimum residual magnetism following shutdown. Cross-poles, polar pitch 11 mm steel + 4 mm epoxide or brass. 10 mm grinding limit, the references on the plane indicate the replacement intervals. Supplied with side and rear stop, set of clamps and Allen key.

Use
Milling, drilling, planing, heavy grinding.



Tech. Code	GR40 Euro	W mm	L mm	H mm	Weight kg	Polar pitch	Seal force N/cm²
C6510250	(853,70)	150	250	50	14	T1511+4	160
C6510300	(1269,90)	200	300	55	25	T1511+4	160
C6510400	(1436,20)	200	400	55	33	T1511+4	160
C6510500	(1705,40)	200	500	55	41	T1511+4	160

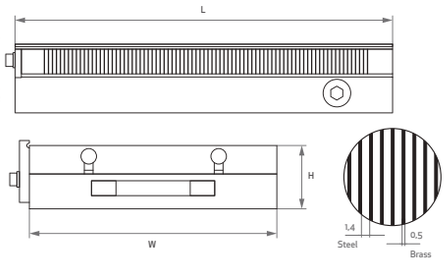
MAGNETIC PLATES

ART. C6520

Solid top with transverse poles, 1.4 mm steel and 0.5 mm brass polar pitch. Duration (limit correction): 7mm. Neodymium magnetic system, nominal holding force 100 N/cm². Solid steel base equipped with a robust drive mechanisim structure. Supplied with side and rear stop, set of clamps and Allen Key.

Use
Precision grinding of thin and small parts as well as larger components. Minimum recommended work piece size 4x4x1 mm. Can also be used for EDM.

Also available in stainless steel - high wear resistance.

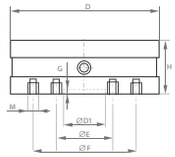


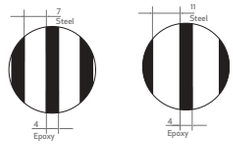
Tech. Code	GR40 Euro	W mm	L mm	H mm	Weight kg	Seal force N/cm²
C6520175	(765,00)	100	175	49	7	100
C6520255	(872,10)	130	255	49	13	100
C6520300	(834,40)	150	300	51	18	100
C6520450	(1150,60)	150	450	51	28	100

ART. C6530

Sturdy steel uppler plate with parallel poles. Polar pitch: 7 mm steel + 4 mm epoxy resin or 11 mm steel + 4 mm epoxy resin. Duration (correction limit): 10 mm. Neodymium magnet system. Watertight structure. High nominal holding force up to 150 N/cm², depending on the size of the clamping system. Variable force with increasing/decreasing holding force. Supplied with Allen key.

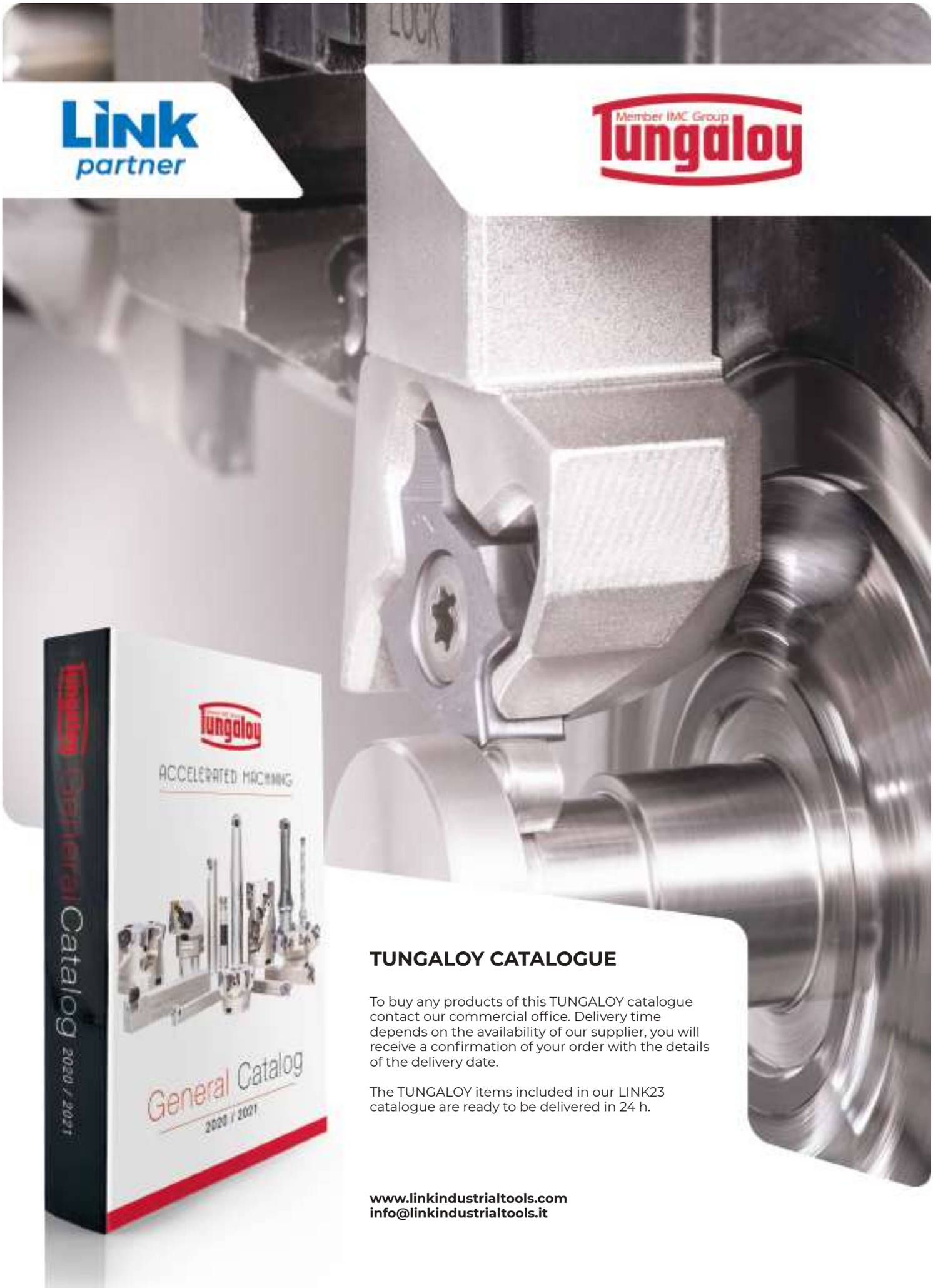
Use
Turning and grinding. Optimum thickness of the workpiece: 8 and 12 mm





Tech. Code	GR40 Euro	D mm	H mm	D1 mm	G mm	E mm	F mm	M	Weight kg	Polar pitch	Seal force N/cm²
C6530200	(1253,60)	200	57	60	5	110	180	M6	15	T117+4	120
C6530250	(1535,10)	250	57	80	5	140	220	M6	22	T117+4	120
C6530300	(2341,90)	300	57	150	6	180	260	M8	32	T1511+4	150
C6530350	(2855,00)	350	57	170	6	220	300	M8	43	T1511+4	150
C6530400	(3876,00)	400	57	200	8	260	340	M8	56	T1511+4	150

Indivisible package Suggested retail package - Unit price



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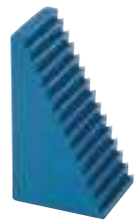
info@linkindustrialtools.it

TOOTHED SUPPORTS

ART. C7200

Hardened painted steel.



Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	H min. mm	H max. mm
C720031,5	7,20	31.5	22	30	38	31.5	53
C720064,5	12,30	64.5	36.5	30	70	64.5	105
C7200128	20,30	128	68	30	132	128	208

TOOTHED SUPPORT SET

ART. C7210

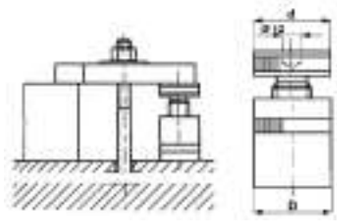
Supplied in wooden box.

Tech. Code	GR43 Euro	Model	Weight kg
C7210SET24	241,40	8 pcs. N720031,5 8 pcs. N720064,5 4 pcs. N7200128	8.5

SCREW SUPPORTS

ART. C7250

Hardened painted steel.



Tech. Code	GR43 Euro	Min. height mm	Max height mm	d mm	D mm	F max. kN
C725050	21,00	40	50	34	34	20
C725070	31,80	54	70	50	50	60
C7250100	42,80	73	100	50	50	60
C7250140	63,00	100	140	65	70	105
C7250210	107,20	140	210	70	80	180
C7250300	177,70	190	300	80	100	360

SCREW SUPPORTS WITH MAGNETIC BASE

ART. C7260

The magnetic base allows this item to be used as an adjustable vertical or horizontal support. Base material: “ERGAL” aluminium alloy.

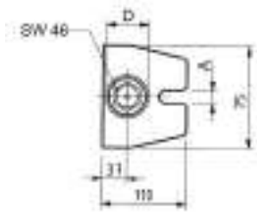
Tech. Code	GR43 Euro	Min. height mm	Max height mm	d mm	D mm	F max. kN
C72605764	63,00	57	64	50	50	30
C72607584	65,80	75	84	50	50	30
C726085112	80,40	85	112	50	50	30

Indivisible package Suggested retail package - Unit price

SCREW SUPPORTS - “ATLAS” TYPE

ART. C7270

Hardened painted steel. Trapezoidal thread 30x6.

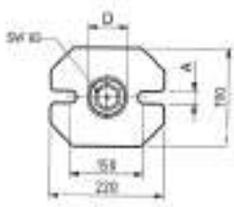


Tech. Code	GR43 Euro	Min. height mm	Max height mm	A mm	D mm	F max. kN
C7270140	79,00	100	140	18	50	60
C7270200	102,10	140	200	18	50	60
C7270320	139,10	200	320	22	50	40
C7270550	192,80	320	550	22	50	25

SCREW SUPPORTS HEAVY TYPE

ART. C7280

Hardened painted steel. Trapezoidal thread 40x6.



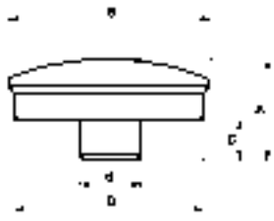
Tech. Code	GR43 Euro	Min. height mm	Max height mm	A mm	D mm	F max. kN
C7280300	301,70	200	300	26	70	80
C7280460	371,30	280	460	26	70	60
C7280750	463,10	430	750	26	70	50

CONVEX CAPS

ART. C7300

Hardened burnished steel.

Used on items S120-S121-S122-S130-S131.



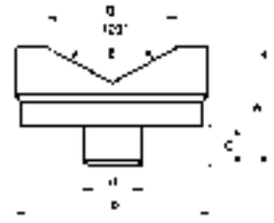
Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	d mm
C730035	15,90	18	37	8	35	12

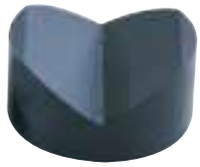
“V” GROOVE CAPS

ART. C7310

Hardened burnished steel.

Used on items S120-S121-S122-S130-S131.



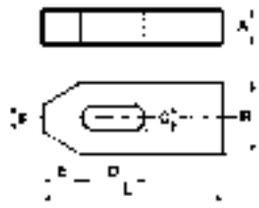


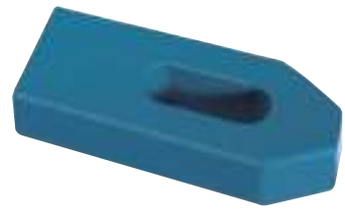
Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	d mm
C731045	25,30	23	32	8	45	12
C731065	34,80	38	56	8	65	12

STANDARD CLAMPS

ART. C7400

Hardened painted steel. R > 700 N/mm².



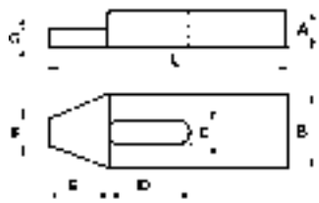


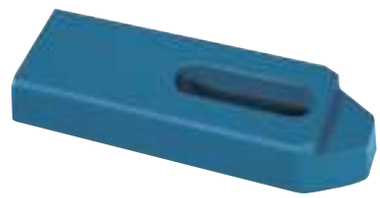
Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	E mm	F mm	L mm	Per vite M
C740007050	10,20	10	20	7	20	10	8	50	6
C740011080	10,20	15	30	11	30	15	12	80	10
C740014100	12,30	20	40	14	40	21	14	100	12 - 14
C740014125	13,80	20	40	14	50	21	14	125	12 - 14
C740014160	15,90	20	40	14	65	21	14	160	12 - 14
C740018125	16,60	25	50	18	45	26	18	125	16 - 18
C740018160	20,30	25	50	18	65	26	18	160	16 - 18
C740022160	25,30	30	60	22	60	30	22	160	20 - 22
C740022200	31,80	30	60	22	80	30	22	200	20 - 22
C740026250	45,60	30	70	26	105	35	26	250	24

SHAPED STANDARD CLAMPS

ART. C7415

Hardened painted steel. R > 700 N/mm².



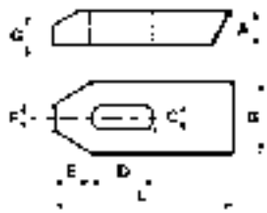


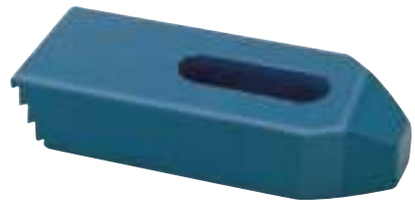
Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	L mm	Per vite M
C741509060	11,60	12	25	9	22	13	10	7	60	8
C741511080	13,00	15	30	11	30	15	12	9	80	10
C741514100	15,90	20	40	14	40	21	14	12	100	12 - 14
C741514125	17,40	20	40	14	50	21	14	12	125	12 - 14
C741514160	18,90	20	40	14	65	26	14	12	160	12 - 14
C741518125	21,00	25	50	18	45	26	18	15	125	16 - 18
C741518160	22,50	25	50	18	65	26	18	15	160	16 - 18
C741518200	31,20	25	50	18	80	26	18	15	200	16 - 18
C741522160	30,40	30	60	22	60	30	22	20	160	20 - 22
C741522200	33,30	30	60	22	80	30	22	20	200	20 - 22
C741526250	44,20	30	70	26	105	35	26	20	250	24

TOOTHED CLAMPS

ART. C7424

Hardened painted steel. R > 700 N/mm².





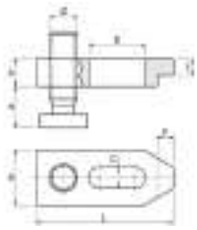
Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	L mm	Per vite M
C742407050	15,30	10	20	7	20	10	8	6	50	6
C742409060	15,30	12	25	9	22	13	10	8	60	8
C742414100	18,90	20	40	14	40	21	14	12	100	12 - 14
C742418125	27,80	25	50	18	45	26	18	15	125	16 - 18
C742422160	33,30	30	60	22	60	30	22	18	160	20 - 22
C742426200	47,10	30	70	26	80	35	26	18	200	24

Indivisible package Suggested retail package - Unit price

ADJUSTABLE CLAMPS WITH SQUARE THREAD SCREW

ART. C7430

Hardened painted steel. R > 700 N/mm².

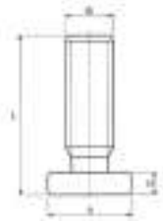


Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	E mm	F mm	L mm	H mm	Ø mm	For screw M
C743015100	25,30	20	40	15	40	12	12	100	15 - 50	20 x 4	12 - 14
C743015125	26,80	20	40	15	45	12	12	125	15 - 50	20 x 4	12 - 14
C743015160	28,20	20	40	15	60	12	12	160	15 - 50	20 x 4	12 - 14
C743019125	30,40	25	50	19	45	15	15	125	15 - 70	20 x 4	16 - 18
C743019160	37,60	25	50	19	60	15	15	160	15 - 70	30 x 6	16 - 18
C743019200	41,20	25	50	19	80	15	15	200	15 - 70	30 x 6	16 - 18
C743023160	44,20	30	60	23	60	15	20	160	15 - 70	30 x 6	20 - 22
C743023200	49,20	30	60	23	80	15	20	200	15 - 70	30 x 6	20 - 22
C743027200	58,60	40	70	27	80	25	23	200	15 - 70	30 x 6	24
C743027250	64,50	40	70	27	100	25	23	250	15 - 70	30 x 6	24
C743027300	73,90	40	70	27	100	25	23	300	15 - 70	30 x 6	24

SPARE SCREWS FOR ADJUSTABLE CLAMPS

ART. C7440

Spare screws for adjustable clamps.



Tech. Code	GR43 Euro	A mm	B mm	H mm	L mm
C744020070	11,60	35	20 x 4	10	70
C744030100	15,90	45	30 x 6	15	100
C744030125	23,80	70	30 x 6	15	125

Related products

WORKS SAFETY SHOES

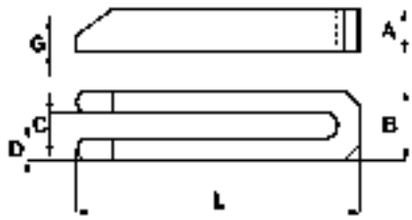
Tech. Code	EU size	US size
K164243	43	10
K164244	44	10,5
K164245	45	11
K164246	46	11,5

Product available in CAP K

FORKED CLAMPS WITH BEVEL

ART. C7460

Hardened painted steel. R > 600 N/mm². This item is produced by milling a steel block.

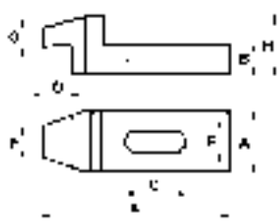


Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	G mm	L mm	Per vite M
C746011100	16,90	20	30	11	5	5	100	10
C746014160	26,10	25	40	14	6	6	160	12-14
C746014200	29,60	25	40	14	6	6	200	12-14
C746018160	31,20	30	50	18	8	8	160	16-18
C746018200	37,10	30	50	18	8	8	200	16-18
C746018250	44,20	40	50	18	10	10	250	16-18
C746022200	41,20	40	50	22	10	10	200	20-22
C746022250	52,20	40	60	22	10	10	250	20-22
C746022315	60,10	40	60	22	10	10	315	20-22
C746026200	50,70	40	70	26	10	10	200	24
C746026250	56,50	40	70	26	10	10	250	24
C746026315	68,10	40	70	26	10	10	315	24
C746040600	262,40	60	100	40	12	12	600	36

CRANKED CLAMPS

ART. C7470

Hardened painted steel. R > 700 N/mm². This item is produced by milling a steel block.



Tech. Code	GR43 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	Per vite M
C747014125	34,80	40	20	30	20	14	20	23	40	125	12-14
C747018160	45,60	50	25	40	25	18	25	28	50	160	16-18
C747022200	63,00	60	30	60	30	22	30	35	60	200	20-22
C747026200	76,80	70	35	50	35	26	35	38	70	200	24
C747026250	89,80	70	35	75	35	26	35	38	70	250	24

CLAMP SET T-SLOT 16MM

ART. C7490

Composition:
Toothed support: C720031.5 - 2pcs.
Toothed support: C720064.5 - 4pcs.
Toothed support: C7200128 - 2pcs.
Standard clamps: C740018125 - 4pcs.
Toothed clamps: C742418125 - 4pcs.
Complete hammered bolts: C751016X100 - 4pcs.
Complete hammered bolts: C751016X150 - 2pcs.
Complete stud: C752014x100 - 2pcs.
Complete stud: C752014X160 - 2pcs.
Extension nuts: C754014 - 4pcs.
Tall nuts: C753516 - 6pcs.
Nuts for slot: C75501416 - 4pcs.
Washers: C757017 - 6pcs.

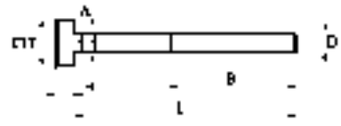
Tech. Code	GR43 Euro	Pieces n°
C7490SET16	524,80	46

Indivisible package Suggested retail package - Unit price

HAMMERHEAD BOLTS

ART. C7510

Din 787 - UNI 42CrMo4. In accordance with ASTM A193-B7, class 10.9.



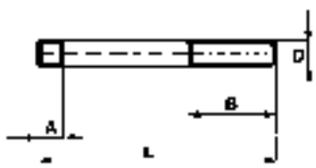
Tech. Code	GR43 Euro	D mm	L mm	B mm	A mm	C mm	H mm	Slotting mm
C751010X40	4,70	M10	40	30	9.7	15	6	10
C751010X63	4,80	M10	63	45	9.7	15	6	10
C751010X80	4,90	M10	80	55	9.7	15	6	10
C751010X100	5,10	M10	100	60	9.7	15	6	10
C751012X50	4,90	M12	50	35	11.7	18	7	12
C751012X63	5,10	M12	63	45	11.7	18	7	12
C751012X80	5,20	M12	80	55	11.7	18	7	12
C751012X100	5,40	M12	100	60	11.7	18	7	12
C751012X125	5,50	M12	125	75	11.7	18	7	12
C751012X150	5,60	M12	150	100	11.7	18	7	12
C751012X170	5,90	M12	170	100	11.7	18	7	12
C751012X200	6,00	M12	200	120	11.7	18	7	12
C751014X63	5,20	M14	63	40	13.7	22	8	14
C751014X80	5,40	M14	80	55	13.7	22	8	14
C751014X100	5,50	M14	100	65	13.7	22	8	14
C751014X125	5,60	M14	125	75	13.7	22	8	14
C751014X150	5,90	M14	150	100	13.7	22	8	14
C751016X63	5,60	M16	63	45	15.7	25	9	16
C751016X80	5,90	M16	80	55	15.7	25	9	16
C751016X100	6,60	M16	100	63	15.7	25	9	16
C751016X125	6,80	M16	125	75	15.7	25	9	16
C751016X150	7,10	M16	150	100	15.7	25	9	16
C751016X160	7,20	M16	160	100	15.7	25	9	16

Tech. Code	GR43 Euro	D mm	L mm	B mm	A mm	C mm	H mm	Slotting mm
C751016X170	7,40	M16	170	100	15.7	25	9	16
C751016X200	7,90	M16	200	125	15.7	25	9	16
C751018X80	6,00	M18	80	55	17.7	28	10	18
C751018X100	6,40	M18	100	65	17.7	28	10	18
C751018X125	6,80	M18	125	85	17.7	28	10	18
C751018X150	7,40	M18	150	100	17.7	28	10	18
C751018X170	8,00	M18	170	100	17.7	28	10	18
C751018X200	8,70	M18	200	125	17.7	28	10	18
C751018X230	9,40	M18	230	150	17.7	28	10	18
C751020X80	8,40	M20	80	55	19.7	32	12	20
C751020X100	8,80	M20	100	63	19.7	32	12	20
C751020X125	9,40	M20	125	85	19.7	32	12	20
C751020X150	10,00	M20	150	100	19.7	32	12	20
C751020X160	10,30	M20	160	100	19.7	32	12	20
C751020X170	11,00	M20	170	100	19.7	32	12	20
C751020X200	12,60	M20	200	125	19.7	32	12	20
C751020X230	14,20	M20	230	150	19.7	32	12	20
C751020X315	15,80	M20	315	190	19.7	32	12	20
C751024X160	16,50	M24	160	100	23.7	40	16	24
C751024X170	18,90	M24	170	100	23.7	40	16	24
C751024X200	21,30	M24	200	125	23.7	40	16	24
C751024X230	21,90	M24	230	150	23.7	40	16	24
C751024X250	24,40	M24	250	150	23.7	40	16	24

SINGLE STUDS

ART. C7520

Din 6379 - UNI 42CrMo4. In accordance with ASTM A193-B7, class 10.9.



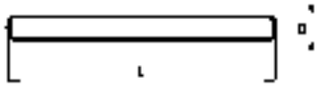
Tech. Code	GR43 Euro	D mm	L mm	A mm	B mm
C75208X40	1,90	M8	40	11	20
C75208X63	1,90	M8	63	11	40
C75208X80	2,00	M8	80	11	50
C75208X100	2,00	M8	100	11	63
C752010X50	2,00	M10	50	13	25
C752010X63	2,00	M10	63	13	35
C752010X80	2,00	M10	80	13	50
C752010X100	2,10	M10	100	13	75
C752010X125	2,30	M10	125	13	75
C752010X160	2,50	M10	160	13	100
C752012X50	2,00	M12	50	15	25
C752012X63	2,00	M12	63	15	32
C752012X80	2,30	M12	80	15	50
C752012X100	2,30	M12	100	15	63
C752012X125	2,40	M12	125	15	75
C752012X160	2,80	M12	160	15	100
C752012X200	2,90	M12	200	15	125
C752012X225	3,20	M12	225	15	160
C752012X250	3,30	M12	250	15	160
C752014X63	2,30	M14	63	17	32
C752014X160	2,90	M14	160	17	100
C752014X200	3,60	M14	200	17	125
C752014X225	3,80	M14	225	17	160
C752016X63	2,40	M16	63	19	35
C752016X80	2,50	M16	80	19	50
C752016X100	2,70	M16	100	19	63
C752016X125	2,90	M16	125	19	75
C752016X160	3,80	M16	160	19	100
C752016X200	4,30	M16	200	19	125
C752016X225	4,60	M16	225	19	160
C752016X250	4,80	M16	250	19	160

Tech. Code	GR43 Euro	D mm	L mm	A mm	B mm
C752016X315	5,60	M16	315	19	180
C752018X100	3,10	M18	100	23	50
C752018X125	3,30	M18	125	23	75
C752018X160	4,10	M18	160	23	100
C752018X200	4,80	M18	200	23	125
C752018X225	5,10	M18	225	23	150
C752018X250	5,50	M18	250	23	150
C752018X315	6,40	M18	315	23	180
C752020X80	3,20	M20	80	27	32
C752020X100	3,60	M20	100	27	50
C752020X125	3,90	M20	125	27	70
C752020X160	4,80	M20	160	27	100
C752020X200	5,50	M20	200	27	125
C752020X225	6,00	M20	225	27	160
C752020X250	6,40	M20	250	27	160
C752020X315	7,50	M20	315	27	200
C752022X100	4,10	M22	100	31	45
C752022X160	5,80	M22	160	31	100
C752022X200	6,40	M22	200	31	125
C752022X250	8,00	M22	250	31	160
C752022X315	8,70	M22	315	31	250
C752024X160	6,00	M24	160	35	100
C752024X200	7,00	M24	200	35	125
C752024X225	8,00	M24	225	35	125
C752024X250	8,60	M24	250	35	160
C752024X315	13,60	M24	315	35	180
C752027X200	11,00	M27	200	39	125
C752027X225	12,60	M27	225	39	160
C752027X250	14,20	M27	250	39	160
C752030X150	9,90	M30	150	43	80
C752030X200	11,60	M30	200	43	125

THREADED BARS

ART. C7525

UNI 42CrMo4. In accordance with ASTM A193-B7, class 10.9.



Tech. Code	GR43 Euro	D mm	L mm
C75256	6,30	M6	1000
C75258	7,10	M8	1000
C752510	10,50	M10	1000
C752512	12,20	M12	1000
C752514	17,30	M14	1000
C752516	21,90	M16	1000

Tech. Code	GR43 Euro	D mm	L mm
C752518	25,20	M18	1000
C752520	31,40	M20	1000
C752522	39,20	M22	1000
C752524	50,20	M24	1000
C752527	67,40	M27	1000
C752530	84,70	M30	1000

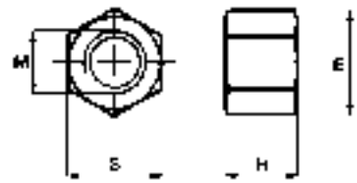
TURNED SHORT NUTS

ART. C7530

Automatic Alloy Steel.

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm
C753010	0,80	10	17	19.6	10
C753012	0,90	12	19	21.5	12
C753014	1,20	14	22	25	14
C753016	1,70	16	24	27.5	16
C753018	2,30	18	27	31	18

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm
C753020	2,70	20	30	34.6	20
C753022	3,20	22	32	36.9	22
C753024	3,90	24	36	41.6	24
C753027	8,70	27	41	47.3	27
C753030	9,40	30	46	53.1	30



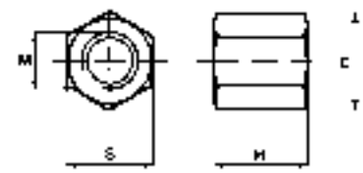
TURNED TALL NUTS

ART. C7535

Automatic Alloy Steel.

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm
C75356	0,80	6	10	11.5	9
C75358	0,90	8	13	14.8	12
C753510	1,20	10	17	19.6	15
C753512	1,30	12	19	21.5	18
C753514	1,90	14	22	25	21
C753516	2,30	16	24	27.5	24

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm
C753518	3,20	18	27	31	27
C753520	3,60	20	30	34.6	30
C753522	4,70	22	32	36.9	33
C753524	5,40	24	36	41.6	36
C753527	10,30	27	41	47.3	40
C753530	12,60	30	46	53.1	45



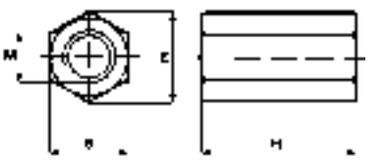
EXTENSION NUTS

ART. C7540

Automatic Alloy Steel.

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm
C75406	1,70	6	10	11.5	18
C75408	1,90	8	13	14.8	24
C754010	2,10	10	17	19.6	30
C754012	2,40	12	19	21.5	36
C754014	3,10	14	22	25	42

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm
C754016	4,00	16	24	27.5	48
C754018	4,80	18	27	31	54
C754020	5,80	20	30	34.6	60
C754022	6,80	22	32	36.9	66



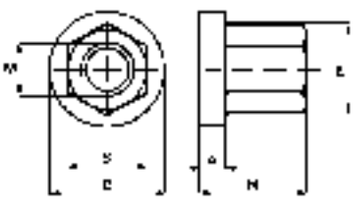
NUTS WITH WASHER

ART. C7545

Automatic Alloy Steel.

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm	A mm	D mm
C75458	2,70	8	13	14.8	12	3.5	18
C754510	3,20	10	17	19.6	15	4	22
C754512	3,60	12	19	21.5	18	4	25
C754514	4,30	14	22	25	21	4.5	28
C754516	4,80	16	24	27.5	24	5	31
C754518	6,70	18	27	31	27	5	34

Tech. Code	GR43 Euro	M mm	S mm	E mm	H mm	A mm	D mm
C754520	7,60	20	30	34.6	30	6	37
C754522	10,60	22	32	36.9	33	6	40
C754524	12,30	24	36	41.6	36	6	45
C754527	26,60	27	41	47.3	40	8	51
C754530	33,10	30	46	53.1	45	8	58



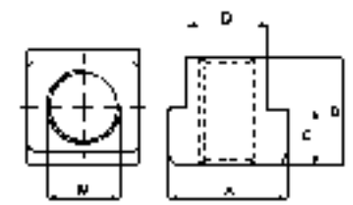
NUTS FOR T-SLOTS

ART. C7550

Alloy Steel.

Tech. Code	GR43 Euro	M mm	D mm	A mm	B mm	C mm	Slotting mm
C75500608	2,00	6	7.7	13	10	6	8
C75500810	2,10	8	9.7	15	12	6	10
C75500812	2,30	8	11.7	18	14	7	12
C75501012	2,30	10	11.7	18	14	7	12
C75500814	2,70	8	13.7	22	16	8	14
C75501014	2,70	10	13.7	22	16	8	14
C75501214	2,70	12	13.7	22	16	8	14
C75500816	3,30	8	15.7	25	18	9	16
C75501016	3,30	10	15.7	25	18	9	16
C75501216	3,30	12	15.7	25	18	9	16
C75501416	3,30	14	15.7	25	18	9	16
C75500818	4,10	8	17.7	28	20	10	18
C75501018	4,10	10	17.7	28	20	10	18
C75501218	4,10	12	17.7	28	20	10	18
C75501418	4,10	14	17.7	28	20	10	18
C75501618	4,10	16	17.7	28	20	10	18

Tech. Code	GR43 Euro	M mm	D mm	A mm	B mm	C mm	Slotting mm
C75501620	5,60	16	19.7	32	24	12	20
C75501820	5,60	18	19.7	32	24	12	20
C75501622	6,40	16	21.7	35	28	14	22
C75501822	6,40	18	21.7	35	28	14	22
C75502022	6,40	20	21.7	35	28	14	22
C75501624	11,00	16	23.7	40	32	16	24
C75502024	11,00	20	23.7	40	32	16	24
C75502224	11,00	22	23.7	40	32	16	24
C75501628	14,20	16	27.7	44	36	18	28
C75502028	14,20	20	27.7	44	36	18	28
C75502228	14,20	22	27.7	44	36	18	28
C75502428	14,20	24	27.7	44	36	18	28
C75502430	36,00	24	29.7	48	38	19	30
C75502732	42,40	27	31.6	50	40	20	32
C75503036	25,20	30	35.6	54	44	22	36
C75503642	65,80	36	41.6	65	52	26	42



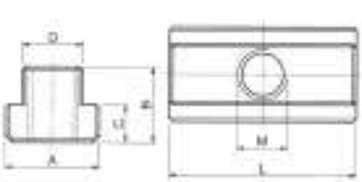
EXTENDED NUTS FOR T-SLOTS

ART. C7555

Alloy Steel.

Tech. Code	GR43 Euro	M mm	D mm	L mm	A mm	B mm	C mm	Slotting mm
C75550608	3,20	6	7.7	26	13	10	5	8
C75550810	3,20	8	9.7	30	15	12	6	10
C75551012	3,60	10	11.7	36	18	14	7	12

Tech. Code	GR43 Euro	M mm	D mm	L mm	A mm	B mm	C mm	Slotting mm
C75551214	5,20	12	13.7	44	22	16	8	14
C75551618	7,10	16	17.7	56	28	20	10	18
C75551820	9,90	18	19.7	64	32	24	12	20



Indivisible package Suggested retail package - Unit price

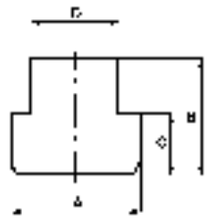
BLANK T-NUTS

ART. C7560

Alloy Steel.

Tech. Code	GR43 Euro	D mm	A mm	B mm	C mm	Slotting mm
C75608	1,60	7.7	13	10	6	8
C756010	1,60	9.7	15	12	6	10
C756012	1,70	11.7	18	14	7	12
C756014	2,00	13.7	22	16	8	14

Tech. Code	GR43 Euro	D mm	A mm	B mm	C mm	Slotting mm
C756016	2,50	15.7	25	18	9	16
C756018	2,90	17.7	28	20	10	18
C756020	4,10	19.7	32	24	12	20
C756022	5,20	21.7	35	28	14	22



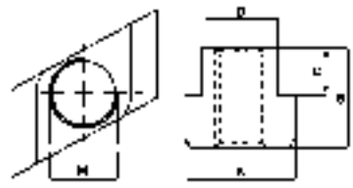
RHOMBOIDAL NUTS FOR T-SLOTS

ART. C7565

Alloy Steel.

Tech. Code	GR43 Euro	M mm	D mm	A mm	B mm	C mm	Slotting mm
C75651014	7,10	10	13.7	22	16	8	14
C75651018	9,40	10	17.7	28	20	10	18
C75651416	8,00	14	15.7	25	18	9	16
C75651618	8,80	16	17.7	28	20	10	18

Tech. Code	GR43 Euro	M mm	D mm	A mm	B mm	C mm	Slotting mm
C75651820	12,60	18	19.7	32	24	12	20
C75652022	14,20	20	21.7	35	28	14	22
C75651628	18,90	16	27.7	44	36	18	28



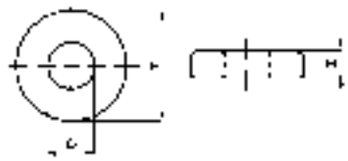
FLAT WASHERS

ART. C7570

Automatic Alloy Steel.

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C75706,6	0,50	6	6,6	13	3,5
C75708,4	0,80	8	8,4	18	4
C757010,5	0,90	10	10,5	22	4
C757013	0,90	12	13	28	5
C757015	1,20	14	15	35	6
C757017	1,30	16	17	35	6

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C757019	1,60	18	19	40	6
C757021	1,60	20	21	40	6
C757023	1,70	22	23	45	8
C757025	1,90	24	25	45	8
C757028	3,90	27	28	60	10
C757031	5,40	30	31	60	10



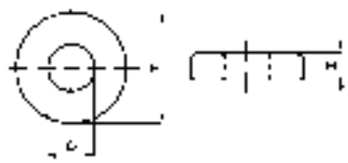
THICK WASHERS

ART. C7575

Automatic Alloy Steel.

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C75758,4	2,00	8	8,4	35	8
C757510,5	2,40	10	10,5	35	8
C757513	2,40	12	13	40	8
C757515	2,50	14	15	40	10
C757517	2,90	16	17	45	10

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C757519	3,60	18	19	45	10
C757521	4,60	20	21	50	12
C757523	4,80	22	23	50	12
C757525	4,90	24	25	50	12
C757528	8,70	27	28	60	14



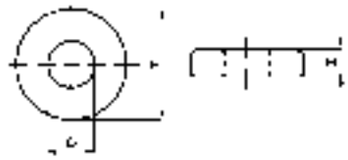
BROAD WASHERS

ART. C7580

Automatic Alloy Steel.

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C75806,6	0,80	6	6,6	17	3,5
C75808,4	1,30	8	8,4	23	4
C758010,5	1,60	10	10,5	28	4
C758013	1,60	12	13	35	5
C758015	1,70	14	15	40	5

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C758017	2,00	16	17	45	6
C758019	2,40	18	19	45	6
C758021	2,80	20	21	50	6
C758023	2,90	22	23	50	8
C758025	3,90	24	25	60	8



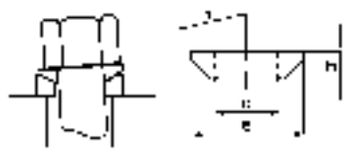
SPHERICAL SEAT WASHERS

ART. C7585

Automatic Alloy Steel.

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	r mm	H mm
C75856,4	0,90	6	6,4	12	9	2,3
C75858,4	1,10	8	8,4	17	12	3,2
C758510,5	1,20	10	10,5	21	15	4
C758513	1,20	12	13	24	17	4,6

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	r mm	H mm
C758515	1,70	14	15	28	22	5
C758517	1,70	16	17	30	22	5,3
C758521	2,00	20	21	36	27	6,3
C758525	2,80	24	25	44	32	8,2



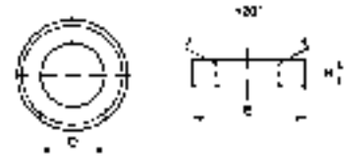
DISHED WASHERS

ART. C7590

Automatic Alloy Steel.

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C75907,1	0,90	6	7,1	12	2,8
C75909,6	1,10	8	9,6	17	3,5
C759012	1,20	10	12	21	4,2
C759014,2	1,20	12	14,2	24	5

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C759016,5	1,70	14	16,5	28	5,6
C759019	1,70	16	19	30	6,2
C759023,2	2,00	20	23,2	36	7,5

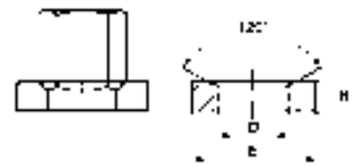


ART. C7595

Automatic Alloy Steel.

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C75957,1	1,20	6	7,1	17	4
C75959,6	1,30	8	9,6	23	4
C759512	1,60	10	12	28	5
C759514,2	1,60	12	14,2	35	5

Tech. Code	GR43 Euro	Screw Ø	D mm	E mm	H mm
C759516,5	1,70	14	16,5	40	5
C759519	2,00	16	19	45	6
C759523,2	4,30	20	23,2	50	8



MAGNETIC "V" PRISMS

ART. C7600

Fit for a quick positioning during machining and testing operations.
Single supplied.

Tech. Code	GR43 Euro	Dimension mm	Magnetic force V-shaped surface	Magnetic force flat surface	Ø work pieces mm
C7600080095	228,90	70 x 80 x 95	55 kg	80 kg	5 - 70
C7600130085	305,00	75 x 100 x 115	90 kg	110 kg	5 - 70

PERMANENT MAGNETIC SQUARES

ART. C7602

Suitable for a fast 90° workpiece positioning, ideal for welding and marking operations.

Tech. Code	GR43 Euro	Dimension mm	Forza magnetica Kg
C7602150	103,95	150 x 150 x 50	100
C7602200	153,30	200 x 200 x 50	130
C7602300	201,60	300 x 300 x 50	150

Indivisible package Suggested retail package - Unit price

We present our new A5 OML General Catalogue, also available on our website: www.omlspa.it.

In this 640-page catalogue, we collect all our products, with the aim of providing our customers with an effective consultation tool, 640 pages of innovative products suitable for any milling machine tool (3-axis, 5-axis, horizontal) but also compatible with industry 4.0 and automation.

www.omlspa.it
omlspa@omlspa.it

AUTOMATIC POSITIONING SYSTEM WITH 3 JAWS AT 120°

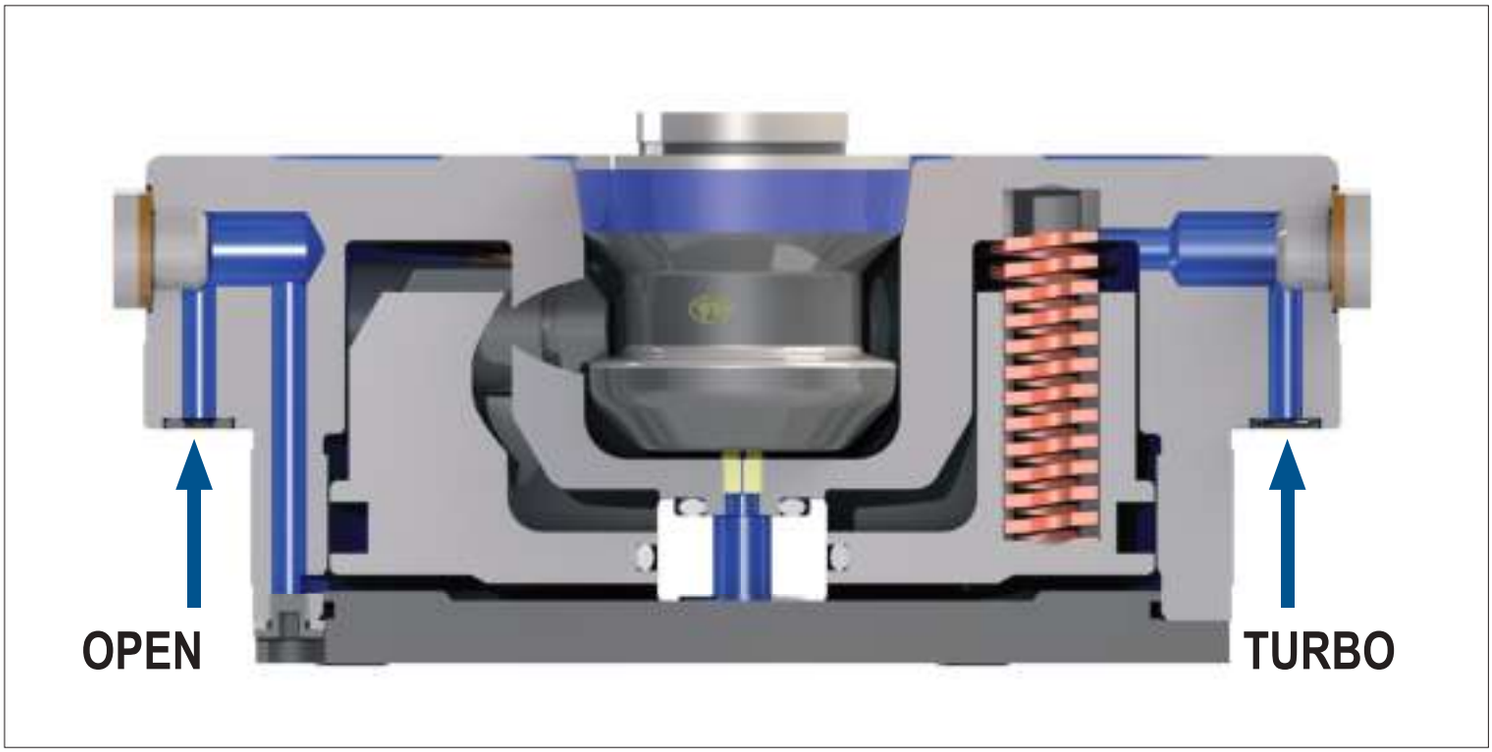
APS is the only ZERO POINT locking system with 3 jaws at 120° thanks to the special anti-friction and anti-corrosion treatment of the pins and the clamping jaws. (Already preliminarily treated to 62 HRC) which further improves its performance.

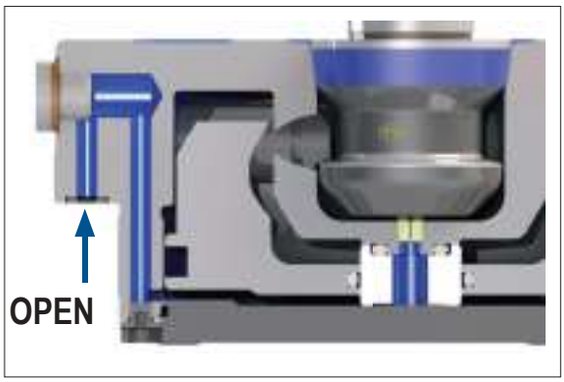
MAXIMUM RIGIDITY!

- Monolithic piston with inclined planes
- Jaws with double inclined plane that generates the “PULL DOWN” effect.

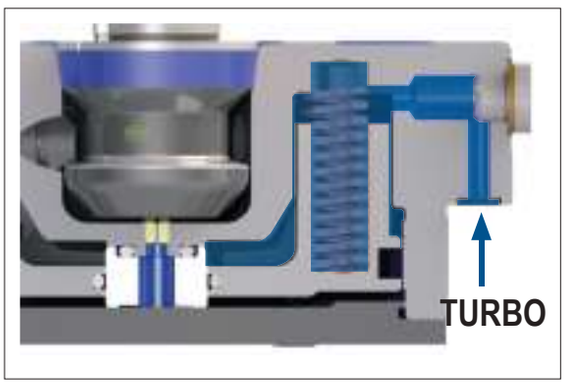
MAXIMUM ACCURACY!

Maximum accuracy of the tapered coupling between the pin and the module.



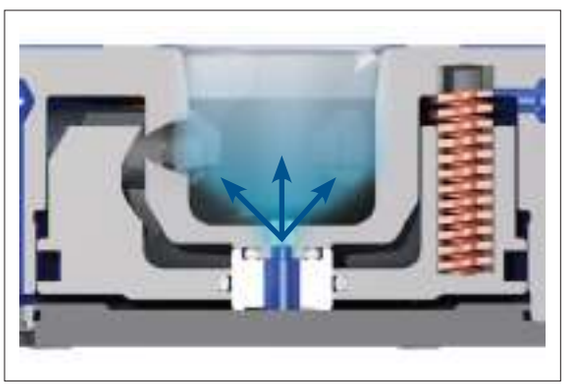


UNLOCKING FUNCTION AT 6 BAR



TURBO FUNCTION

The turbo function is always intergrated in the module APS PREMIUM. Turbo is the function by means of which the compressed air increases the clamping force applied by the springs (12.000 N) until reaching the "PULL DOWN" clamping force of 30,000 N.



AUTOMATIC CLEANING FUNCTION (APS PREMIUM)

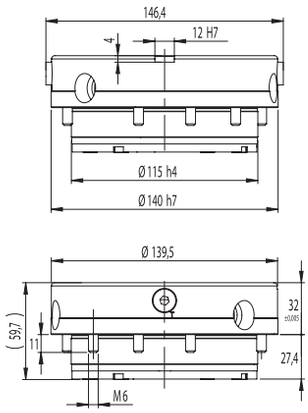
MODULES APS-140 E - PREMIUM

ART. C8010

For external mounting with turbo effect.

Tech. Code		C8010140E
GR41	Euro	(1179,00)
Clamping force**	N	30.000
Holding force*	N	M10/35.000 - M12/50.000 - M16/75.000
Unlocking pressure	bar	6
Repeatability	mm	< 0,005
Weight	kg	4,5

* With screws DIN EN ISO 4762 - 12.9
** With turbo effect



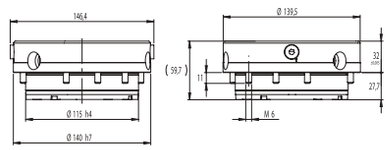
MODULES APS-140 E - PREMIUM LIGHT

ART. C8015

For external mounting with turbo effect.

Tech. Code		C8015140EL
GR41	Euro	(978,00)
Clamping force**	N	30.000
Holding force*	N	M10/35.000 - M12/50.000 - M16/75.000
Unlocking pressure	bar	6
Repeatability	mm	< 0,005
Weight	kg	4,5

* With screws DIN EN ISO 4762 - 12.9
** With turbo effect



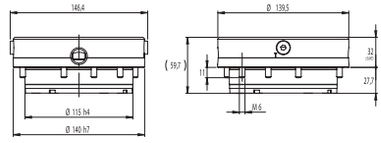
MODULES APS-140 E BASIC

ART. C8020

For external mounting.

Tech. Code		C8020140B
GR41	Euro	(756,00)
Clamping force	N	12.000
Holding force*	N	M10/35.000 - M12/50.000 - M16/75.000
Unlocking pressure	bar	6
Repeatability	mm	< 0,005
Weight	kg	4,5

* With screws DIN EN ISO 4762 - 12.9



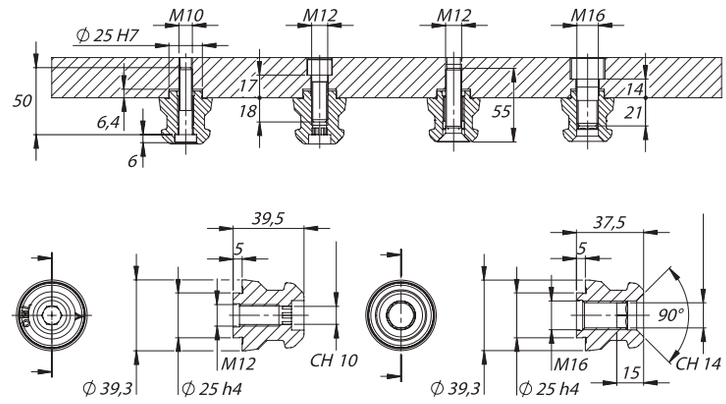
CLAMPING PINS APS-140

ART. C8030

With special anti-corrosion and anti-friction treatment.

Tech. Code		C8030M12A	C8030M12B	C8030M12C
GR41	Euro	(62,00)	(76,00)	(54,00)
Model		M12-A	M12-B	M12-C
Weight	kg	0,3	0,3	0,3

Tech. Code		C8030M16A	C8030M16B	C8030M16C
GR41	Euro	(89,00)	(116,00)	(76,00)
Model		M16-A	M16-B	M16-C
Weight	kg	0,3	0,3	0,3



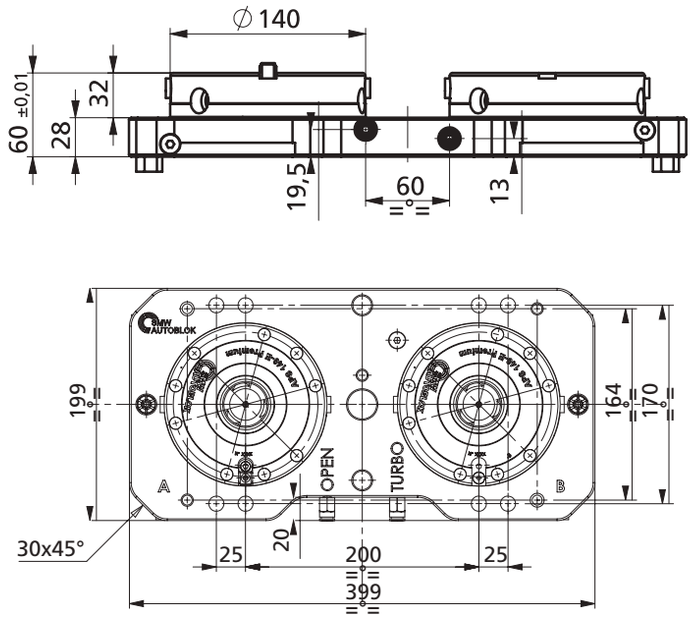
Indivisible package Suggested retail package - Unit price

PLATES A 2 MODULES APS-140 E

ART. C8040

Tech. Code		C8040140B	C8040140E
GR41	Euro	(2889,00)	(3302,00)
Model		BASIC	PREMIUM LIGHT
Weight	kg	21	21

With "TURBO" effect



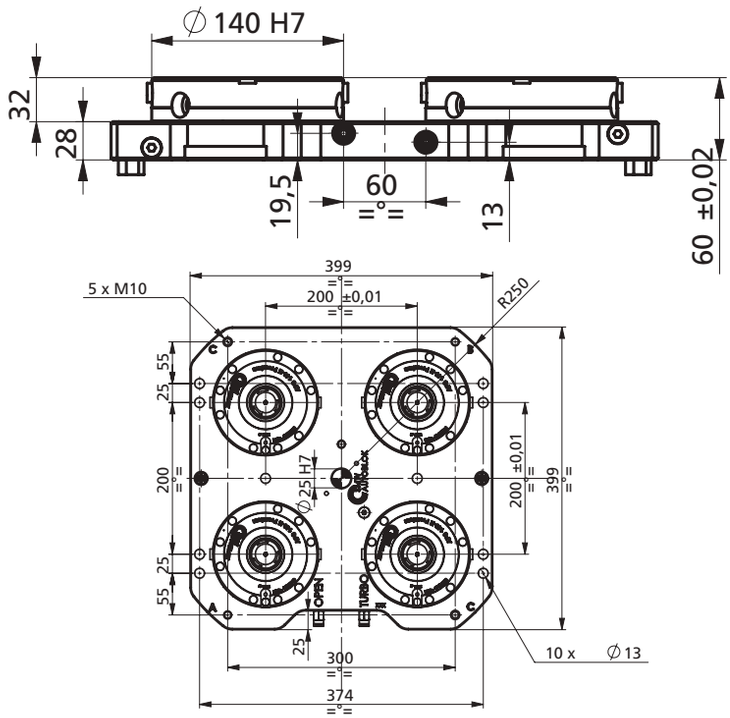
PLATES A 4 MODULES APS-140 E

ART. C8045

For vertical machining centers.

Tech. Code		C8045140B	C8045140E
GR41	Euro	(5089,00)	(5640,00)
Model		BASIC	PREMIUM LIGHT
Weight	kg	41	41

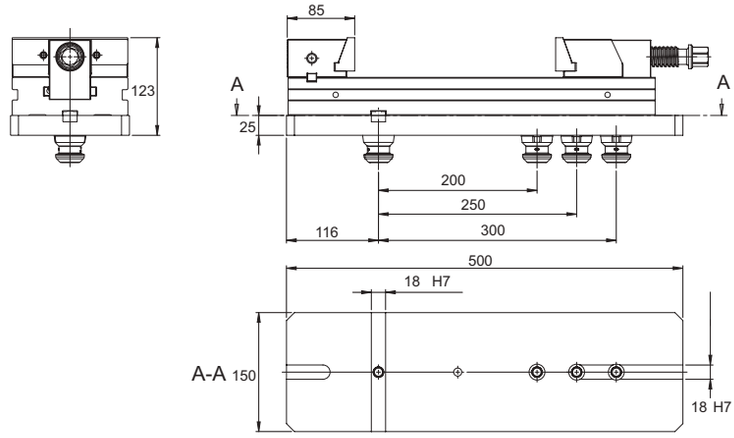
With "TURBO" effect



INTERFACE PLATES FOR APS-140 CON TCT 150

ART. C8050

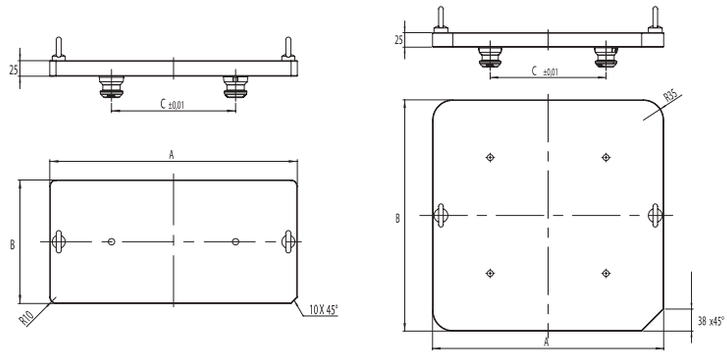
Tech. Code		C8050140TCT
GR41	Euro	(688,00)
Weight	kg	14



STEEL PALLETS APS-140

ART. C8060

Tech. Code		C8060399199	C8060399399
GR41	Euro	(663,00)	(964,00)
Type		100	140
A	mm	299	399
B	mm	149	199
C	mm	150	200



AUTOMATIC POSITION SYSTEM

Type	3 Clamping slides	2 Clamping slides	Turbo	Pull-in force with Turbo (without Turbo) kN	Any Rotation key (for single use)	Automatic cleaning function	Monitoring via air control	Protective coating
APS 100-E PREMIUM	-	●	●	15,0 (4)	●	●	●	●
APS 100-E BASIC	-	●	●	15,0 (4)	-	-	-	●
APS 140-E PREMIUM	●	-	●	26,0 (7,5)	●	●	●	●
APS 140-E PREMIUM LIGHT	●	-	●	26,0 (7,5)	-	●	-	●
APS 140-E PREMIUM INOX	●	-	●	26,0 (7,5)	●	●	●	●
APS 140-I PREMIUM	●	-	●	26,0 (7,5)	●	●	●	●
APS 140-E BASIC	-	●	●	26,0 (7,5)	-	-	-	●
APS 140-E BASIC INOX	-	●	●	26,0 (7,5)	-	-	-	●
APS 190-E PREMIUM	●	-	●	45,0 (13,5)	●	●	●	●

Indivisible package Suggested retail package - Unit price

VACUUM PLATES

SOLFORMEC

ART. MULTI HOLES

Vacuum plates are a flexible alternative to traditional clamping systems, for those processes that require a type of vacuum clamping. They are made entirely of aluminium and allow a simple repositioning of the workpieces. They do not require any type of preparation and allow you to clamp one or more pieces anywhere on the plate.

Included:
1 On/Off device
1 perforated rubber mat
1 smooth rubber mat
1 set of connecting tubes
2 sliding stops

Tech. Code		C8016300200	C8016400300	C8016600400
GR39	Euro	(1420,00)	(2588,00)	(3050,00)
Vacuum areas		2	4	6
External dim.	mm	316 x 216 x 26	416 x 316 x 26	616x416x26
Clamping dim.	mm	300 x 200	400 x 300	400 x 300
Hole positioning	mm	10 x 10	10 x 10	10 x 10
Position of fixed stops		6 holes M6	12 holes M6	24 holes M6
Clamping edge	mm	8	8	8

VACUUM PUMP

SOLFORMEC

ART. P550L

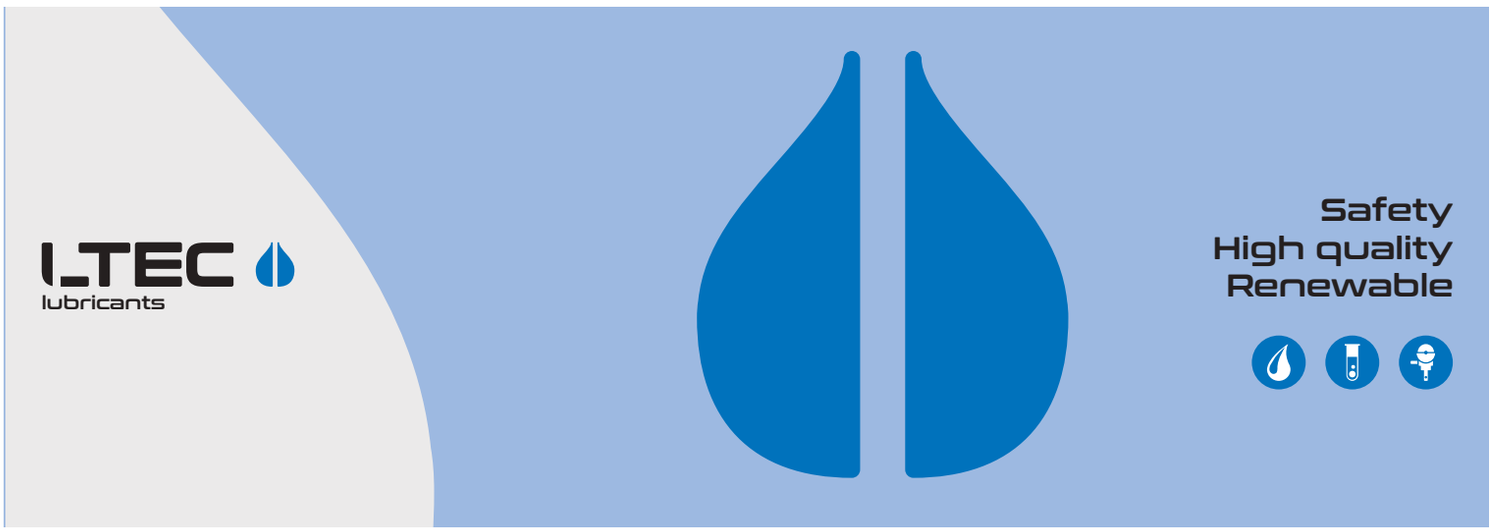
Hydraulic pump for use with the Multi Hole plate when machining with both liquid coolant and dry.

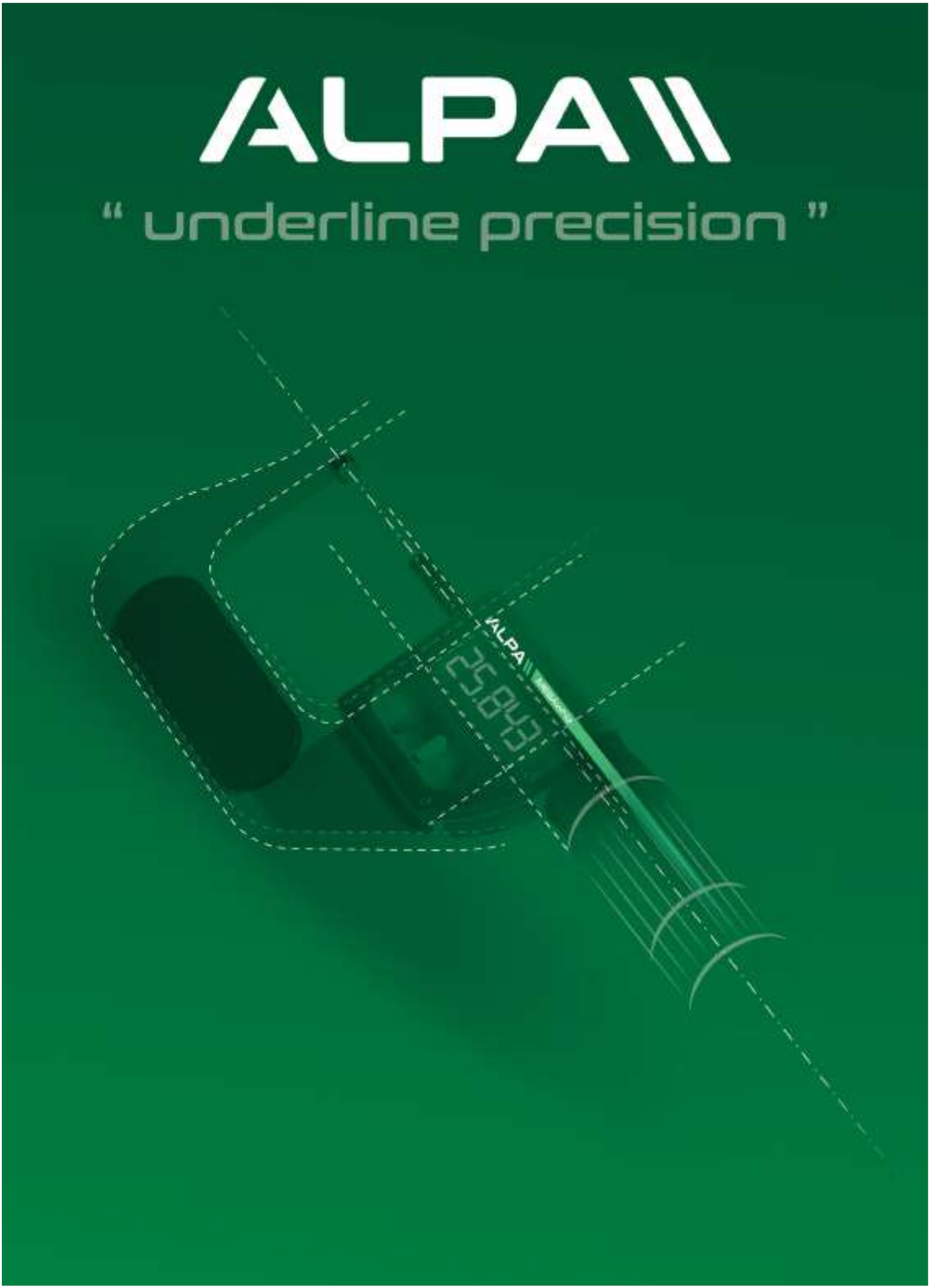
Tech. Code		C801750L
GR39	Euro	(4010,00)
Capacity	L/h	50

ART. P350ES/P510ES

Hydraulic pump for use with the Multi Hole plate for dry machining only

Tech. Code		C801835M3/H	C801850M3/H
GR39	Euro	(2037,00)	(2352,00)
Capacity	m3/h	35	50




ALPA
" underline precision "
ALPA

MEASURING INSTRUMENTS

D

ALPA
Mitutoyo
TESA

D0
2 - 16
Digital and vernier calipers

ALPA
Mitutoyo
BOWERS

D1
17 - 29
Digital and analogue micrometers

ALPA
Mitutoyo
TECLOCK
KANETEC

D2
30 - 45
Dial gauges, bore gauges, dial gauges stands

ALPA
KERFOLG
HAIMER
TSCHORN

D3
45 - 49
Digital and analogic sensors, centering devices, zero setters, inspection plates

ALPA
Mitutoyo
TRIMOS

D4
49 - 58
Protractors, height gauges, dividers, prisms, parallels, squares, rulers and levels

ALPA
GPOS

D5
59 - 64
Threaded plug and gauges, pin gauges, gauge blocks

ALPA
FASTBAND

D6
65 - 67
Screws pitch gauges, thickness gauges

ALPA
Mitutoyo
Visi-On

D7
68 - 85
Hardness testers microscopes, lenses, profile projectors, measuring machines

ALPA
KERN

D8
86 - 89
Dynamometers and scales

elcometer
KERN

D9
89 - 95
Non destructive testing

MEASUREMENT INSTRUMENTATION ICONS

- 0,1 mm — Decimal measurement
- 0,01 mm — Centesimal measurement
- 0,001 mm — Millesimal measurement
- 0,002 mm — Millesimal measurement
- 0,005 mm — Millesimal measurement
- 0,0001 mm — Deci-Millesimal measurement
- 6,5 mm — Spindle Ø 6.5 mm
- 8 mm — Spindle Ø 8 mm
- 10 mm — Spindle Ø 10 mm
- Soft case
- IP 40 — Standard IP40
- IP 54 — Standard IP54
- IP 65 — Standard IP65
- IP 66 — Standard IP66
- IP 67 — Standard IP67
- DIN — Standard DIN
- 10°C 40°C — Operating temperature
- -10°C 60°C — Storage temperature
- Inspection report with declaration of conformity
- Hard case (metal, wood or plastic)
- 1,5V AAA — Lithium battery 1,5V - AAA
- 1,5V AA — Lithium battery 1,5V - AA
- 1,5V LR44 — Lithium battery 1,5V - LR44
- 1,5V SR44 — Lithium battery 1,5V - SR44
- 3V CR2025 — Lithium battery 3V - CR2025
- 3V CR2032 — Lithium battery 3V - CR2032
- 9V MN1604 — Lithium battery 9V - MN1604
- SHOCK PROOF — Shock resistant
- ABS — ABS (Absolute zero)
- INOX — Stainless steel hardened
- LCD — LCD Display
- LCD — Large LCD display
- mm inch — Conversion
- Roating dial
- Rod Depth (flat)
- Rod Depth (round)
- Contact surfaces in hard metal
- Data Output
- Bluetooth

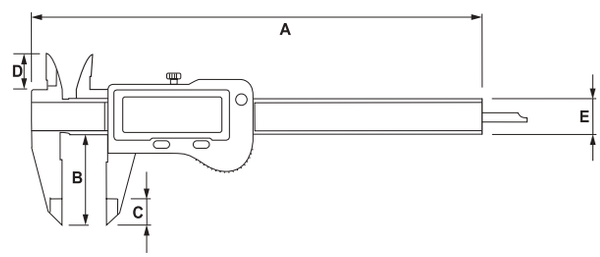
DIGITAL CALIPERS IP67 WITH PRESET

ALPA MEGAtry EVO

IP 67 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA014

0,01 mm Resolution - Digital caliper with Swiss technology, unrivaled protection against penetration of particles and liquids. Vernier with locking screw system, automatic on/off button, auto power off after 20 minutes of inactivity, incremental measuring and zero-setting at any position, data output. Memorized position in pause mode with maximum speed displacement of 2.5 m/sec. Structure mechanics tempered, rectified stainless steel, superior comfort thanks to its ergonomic design and sturdy structure, 3,5 mm. Preset function included.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	E mm	Rod
D0010150NDP	161,00	0 ÷ 150	235	40	11	16	16 x 3,5	■
D0010150P	185,00	0 ÷ 150	235	40	11	16	16 x 3.5	■
D0010150NDT	170,00	0 ÷ 150	235	40	11	16	16 x 3,5	●
D0010150T	180,00	0 ÷ 150	235	40	11	16	16 x 3.5	●
D0010200	290,00	0 ÷ 200	290	50	14	19	16 x 4	■
D0010300	355,00	0 ÷ 300	388	64	14	19	16 x 4	-

The products are available in chapter D

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232
D0002USB	201,00	Proximity - cable USB

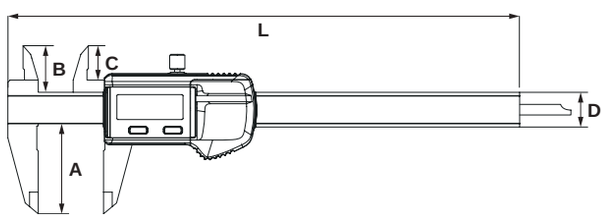
DIGITAL CALIPERS IP67

ALPA PRO67

IP 67 | 0,01 mm | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA017

0.01mm resolution - Digital caliper with electronics of a very high degree of protection against particles and liquids, even while in temporary submersion. Vernier with locking screw system, ON/OFF button, incremental measuring and zero-setting at any position.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	L mm	Rod
D0007150T	141,00	0 ÷ 150	40	22	16	16	235	●
D0007150P	141,00	0 ÷ 150	40	22	16	16	235	■
D0007200	185,00	0 ÷ 200	50	24	19	16	285	■
D0007300	236,00	0 ÷ 300	60	26	21	16	400	■

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

Indivisible package — Suggested retail package - Unit price

DIGITAL CALIPERS IP67

Mitutoyo

IP 67 | 0,01 mm | ABS | LCD | INOX | 1,5V SR44

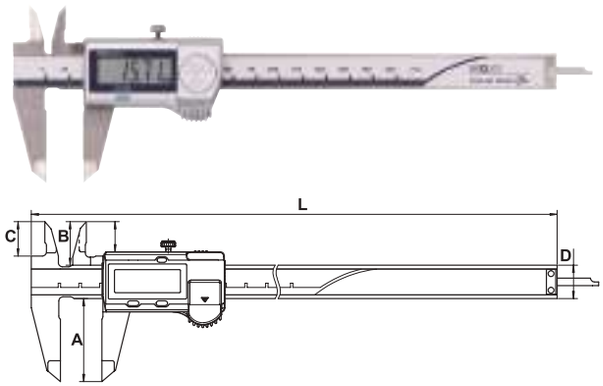
ART. SERIES 500

Resolution 0.01 mm - Robust caliper for use in a wide range of applications. The IP67 protection rating allows it to be used in the presence of lubricants, powders and coolants. Exceptional battery life.

Tech. Code	GR47 Euro	Range mm	A mm	B mm	C mm	d Ø mm	L mm	Rod
D0012150PND	196,00	0 ÷ 150	40	21	16.5	16	233	■
D0012150TND	197,00	0 ÷ 150	40	21	16.5	16	233	●
D0012150	249,00	0 ÷ 150	40	21	16.5	16	233	■
D0012200ND	271,00	0 ÷ 200	50	24.5	20	16	290	■
D0012200	316,00	0 ÷ 200	50	24.5	20	16	290	■
D0012300ND	390,00	0 ÷ 300	64	27.5	21.8	20	404	■
D0012300	(418,00)	0 ÷ 300	64	27.5	21.8	20	404	■

Model D0012...ND without data output.

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44
D0004USBA	138,00	Digimatic cable Input Tool Direct, model IP67, 2 m - USB
D0001RS232A	98,00	Digimatic cable with data key, model IP, 1 mt - RS232



DIGITAL CALIPERS IP54 WITH ABSOLUTE FUNCTION

ALPA ABSolutus

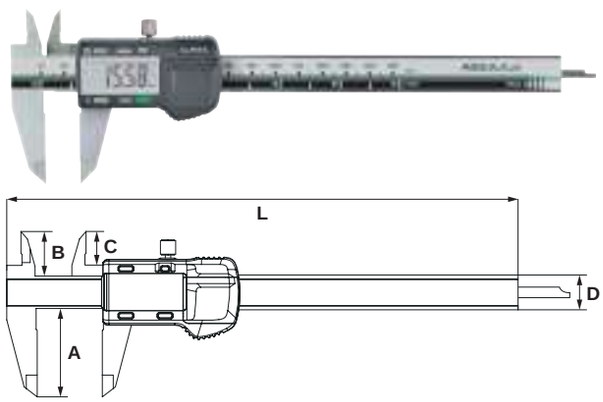
IP 54 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA019

0.01mm resolution - Digital caliper with electronics of a very high degree of protection against penetration of particles and liquids. Vernier with locking screw system, ON/OFF button, incremental measuring and zero-setting at any position. Absolute origin measuring function.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	L mm	Rod
D0009150P	80,00	0 ÷ 150	40	19	16	16	235	■
D0009150T	80,00	0 ÷ 150	40	19	16	16	235	●
D0009200	112,00	0 ÷ 200	50	24	19	16	285	■
D0009300	158,00	0 ÷ 300	60	28	21	16	390	■

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



DIGITAL CALIPERS

ALPA PICKall

IP 40 | 0,01 mm | LCD | INOX | mm inch | 3V CR2032 | PDF

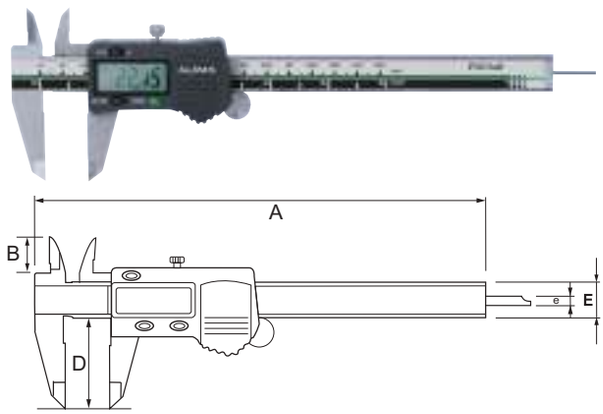
ART. AA020

0.01mm resolution (ON/OFF) button and automatic switch ON, four measuring functions, zero setting at any position, vernier with wheel drive and locking screw (round rod only for D0026150T, flat rod for other models).

Tech. Code	GR45 Euro	Range mm	A mm	B mm	D mm	e mm	E mm
D0026150T	76,00	0 ÷ 150	235	16	40	ø 1,5	1.5
D0026150P	76,00	0 ÷ 150	235	16	40	3,8 x 1,3	1.5
D0026200	105,00	0 ÷ 200	290	18	50	3,8 x 1,3	3.5
D0026300	158,00	0 ÷ 300	380	18	62	4,8 x 2,8	3.5

D0026150T - Flat rod

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



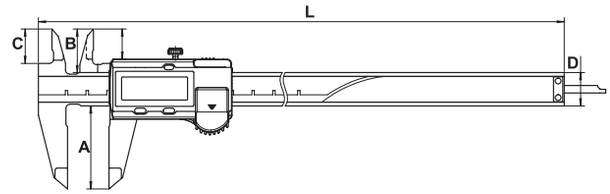
DIGITAL CALIPERS WITH ABSOLUTE FUNCTION

Mitutoyo

0,01 mm | LCD | INOX | 1,5V SR44

ART. SERIE 500

Resolution 0,01 mm Digimatic AOS Calibers for quick and accurate measurements: Equipped with a new AOS Inductive encoder (Advance Onsite Sensor) already present on the waterproof gauges.
Thanks to the adoption of the electromagnetic Induction encoder ABS, these guages are not affected by the presence of oil or water (except 300 mm field) on the surface of the scale. The ABSOLUTE system eliminates the need to reset the Instrument to every switch on.The high quality finish of the sliding surfaces generates smooth and accurate slinging. 9 mm character height dimension for easy reading. Long lasting battery.



Tech. Code	GR47 Euro	Range mm	A mm	B mm	C mm	D mm	L mm	Rod
D0034150PND	130,00	0 ÷ 150	40	21	16,5	16	233	■
D0034150TND	130,00	0 ÷ 150	40	21	16,5	16	233	●
D0034150P	166,00	0 ÷ 150	40	21	16,5	16	233	■
D0034200ND	209,00	0 ÷ 200	50	24,5	20	16	290	■
D0034200	234,00	0 ÷ 200	50	24,5	20	16	290	■
D0034300	328,00	0 ÷ 300	64	27,5	22	20	404	■

Model D0034...ND without data output.

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44
D0004USBC	(121,00)	Digimatic cable Input Tool Direct, 2 m - USB

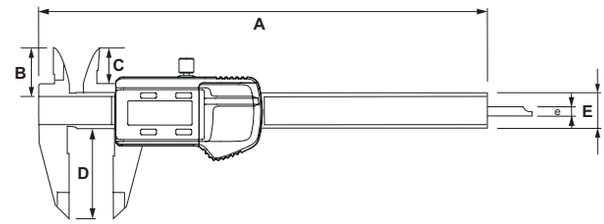
DIGITAL CALIPERS WITH PRESET

ALPA

IP 40 | 0,01 mm | LCD | INOX | 3V CR2032 | PDF

ART. AA021

Resolution 0.01mm - ON/OFF button, zero setting at any position, slider with thumb wheel and locking screw. Preset function included.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	e mm	E mm
D0024150	52,00	0 ÷ 150	235	18	15	40	3.7	16
D0024200	75,00	0 ÷ 200	285	18	16	50	3.7	16
D0024300	120,00	0 ÷ 300	400	21	17	62	3.7	16

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

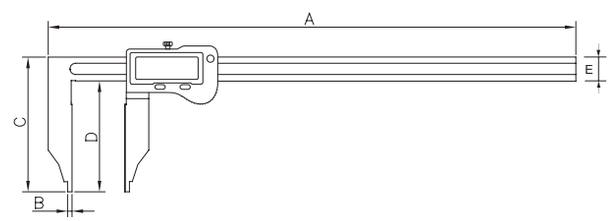
DIGITAL CALIPERS IP67

ALPA MEGAline

IP 67 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA029

0,01mm resolution - Swiss technology with data output and protection IP67 (full submersion) also cable connected. Automatic power on, by moving the vernier along its rod (SIS system), pausing after 20 min, when not in use, pause setting kept stored with max movement speed of 2,5 m / sec. Structure mechanics in tempered, rectified stainless steel.
Function preset included. Wooden box package.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	E mm
D0049300	625,00	0 ÷ 300	425	5	117	100	17 x 5
D0049400	695,00	0 ÷ 400	525	5	117	100	17 x 5
D0049500	750,00	0 ÷ 500	625	5	117	100	17 x 5
D0049600	853,00	0 ÷ 600	725	5	117	100	17 x 5

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

Indivisible package | Suggested retail package - Unit price

DIGITAL CALIPERS IP67

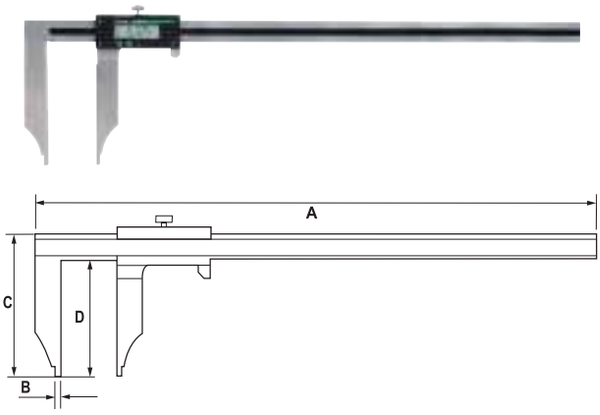
ALPA MEGAline

IP 67 | 0,01 mm | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA033

Resolution 0,01mm -Swiss technology, hardened stainless steel, protected against the penetration of dust and water resistant, caliper with locking screw. Provided with wooden case.

- Preset function
- SIS: Smart Inductive System (patent)
- Conversion mm/inch
- Control report with a statement of compliance



Tech. Code	GR45 Euro	Range mm	D mm	A mm	B mm	C mm	Weight kg
D0057500/125	1181,00	0 ÷ 500	0.04	660	5	148	2,05
D0057500/150	(1219,00)	0 ÷ 500	0.04	660	5	177	2,25
D0057600/125	(1219,00)	0 ÷ 600	0.04	800	5	148	2,45
D0057600/150	(1417,00)	0 ÷ 600	0.04	800	5	177	2,65
D0057800	(1733,00)	0 ÷ 800	0.04	1000	5	177	2,95
D00571000	(2071,00)	0 ÷ 1000	0.04	1200	10	182	3,15

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

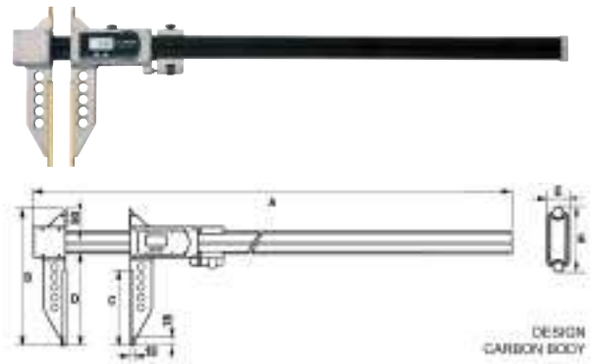
CARBON FIBRE DIGITAL CALIPERS

ALPA MEGAline

IP 54 | 0,01 mm | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA040

Resolution 0.01 mm - TiN coated jaws, data output, mm/in conversion, water-resistant electronics, screw locking.
Wooden box package.



Tech. Code	GR45 Euro	Range mm	D mm	A mm	B mm	C mm	E mm	Weight kg
D00541000/150	(2180,00)	0 ÷ 1000	150	1310	247	125	47 x 16	2.5
D00541000/300	(3600,00)	0 ÷ 1000	300	1310	397	240	47 x 16	2.8
D00541000/500	(4400,00)	0 ÷ 1000	500	1310	597	440	47 x 16	3.2
D00541500/150	(3395,00)	0 ÷ 1500	150	1810	247	125	47 x 16	3.2
D00541500/200	(3700,00)	0 ÷ 1500	200	1810	297	160	47 x 16	3.3
D00541500/300	(4255,00)	0 ÷ 1500	300	1810	397	240	47 x 16	3.5
D00541500/500	(5172,00)	0 ÷ 1500	500	1810	597	440	47 x 16	3.9
D00542000/150	(3654,00)	0 ÷ 2000	150	2310	247	125	47 x 16	3.3
D00542000/200	(4073,00)	0 ÷ 2000	200	2310	297	160	47 x 16	3.5
D00542000/300	(5152,00)	0 ÷ 2000	300	2310	397	240	47 x 16	3.7
D00542000/500	(5931,00)	0 ÷ 2000	500	2310	597	440	47 x 16	4.1
D00542500/200	(5332,00)	0 ÷ 2500	200	2810	297	160	47 x 16	3.7
D00542500/300	(5966,00)	0 ÷ 2500	300	2810	397	240	47 x 16	3.9
D00543000/200	(6051,00)	0 ÷ 3000	200	3310	297	160	47 x 16	4.0
D00543000/300	(6531,00)	0 ÷ 3000	300	3310	397	240	47 x 16	4.2

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232

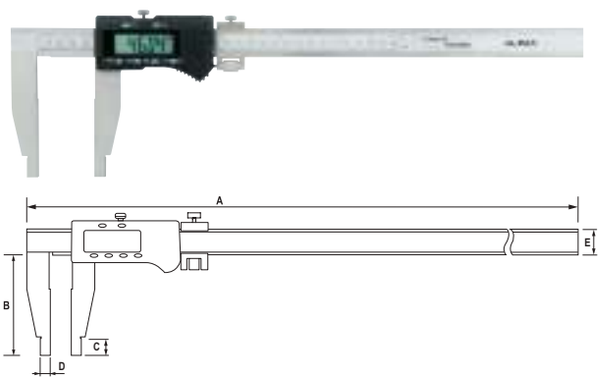
DIGITAL CALIPERS

ALPA

IP 40 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA050

0.01mm resolution - Chromium plated satin scale(ON/OFF) button, incremental zero setting or restoration of absolute scale (ABS), Micrometric adjustment and locking screw vernier.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	E mm	Weight kg
D0050300	222,00	0 ÷ 300	440	100	18	10	24	0,8
D0050500	325,00	0 ÷ 500	680	150	18	10	24	1
D0050600	470,00	0 ÷ 600	780	150	18	10	24	1,3
D0050600/300	720,00	0 ÷ 600	800	300	18	10	24	4,5
D0050800/150	592,00	0 ÷ 800	1000	150	16	10	31	2
D00501000	860,00	0 ÷ 1000	1230	150	16	10	31	2,5
D00501000/300	1580,00	0 ÷ 1000	1230	300	16	10	42	6
D00501500	2219,00	0 ÷ 1500	1800	300	16	10	42	6,5
D00502000	(2602,00)	0 ÷ 2000	2300	300	16	10	42	8
D00503000	(4834,00)	0 ÷ 3000	3300	300	16	10	42	10,5

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

DIGITAL CALIPERS IP66

ALPA

IP 66 | 0,01 mm | LCD | INOX | mm inch | 3V CR2032 | PDF

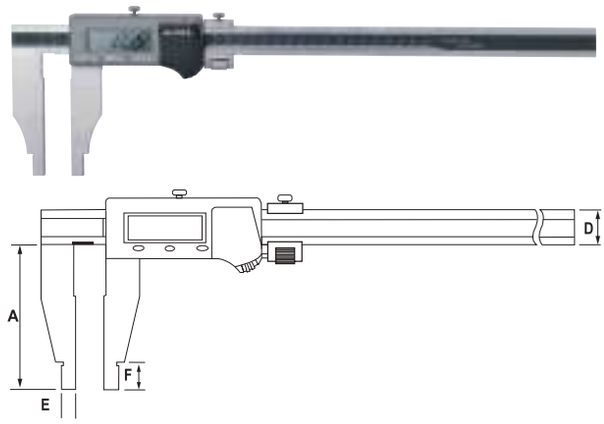
ART. AA045

0.01mm resolution - Stainless steel caliper equipped with a large display and micrometric adjustment, water-proof.

Tech. Code	GR45 Euro	Range mm	A mm	D mm	E mm	F mm
D0052300	325,00	0 ÷ 300	100	24	10	18
D0052500	559,00	0 ÷ 500	150	24	10	18
D0052600	645,00	0 ÷ 600	150	24	10	18
D00521000	(1030,00)	0 ÷ 1000	150	31	10	24

While stocks last

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



DIGITAL DEPTH CALIPERS IP67

ALPA MEGAline

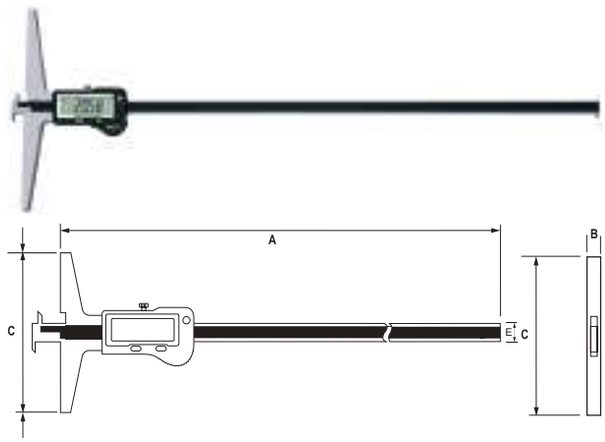
IP 67 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA059

0,01mm resolution - Swiss technology with data output and protection IP67. (full submersion) also cable connected. Automatic power on, by moving the vernier along its rod. (SIS system) pausing after 20 min when not in use, pause setting kept stored with max movement speed of 2.5 m/sec. Tempered rectified stainless steel structure with interchangeable plunger pull/push on the same floor, block screw and double hook. Provided with wooden case.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	E mm
D0104300	750,00	0 ÷ 300	410	12	150	12 x 4
D0104400	(781,00)	0 ÷ 400	510	12	150	12 x 4
D0104500	(864,00)	0 ÷ 500	610	12	150	12 x 4
D0104600	(952,00)	0 ÷ 600	710	12	150	12 x 4

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232



DIGITAL DEPTH CALIPERS WITH PUSH ROD IP67

ALPA MEGAline

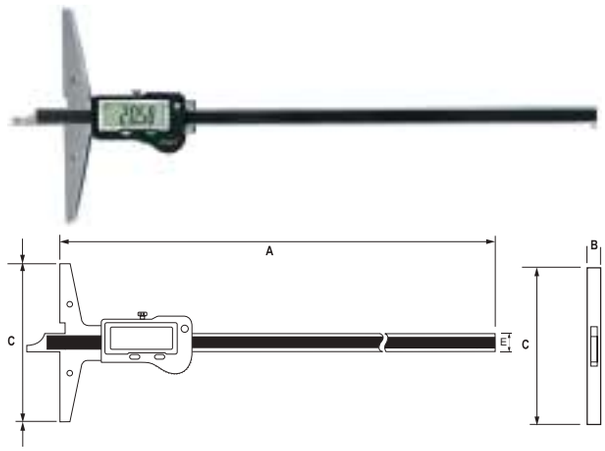
IP 67 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA054

0,01mm resolution - Swiss technology with data output and protection IP67. (full submersion) also cable connected. Automatic power on, by moving the vernier along its rod. (SIS system) pausing after 20 min when not in use, pause setting kept stored with max movement speed of 2.5 m/sec. tempered structure with pushing tip. Provided with wooden case.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	E mm
D0106300	675,00	0 ÷ 300	410	12	150	12 x 4
D0106400	(781,00)	0 ÷ 400	510	12	150	12 x 4
D0106500	(864,00)	0 ÷ 500	610	12	150	12 x 4
D0106600	(952,00)	0 ÷ 600	710	12	150	12 x 4

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232



Indivisible package Suggested retail package - Unit price

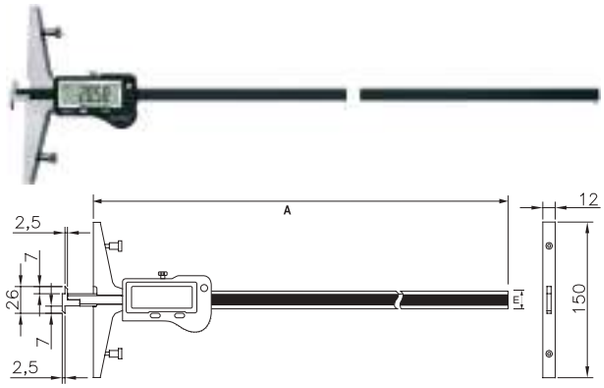
DIGITAL DEPTH CALIPERS WITH MOBILE BRIDGE IP67

ALPA MEGAline

IP 67 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA064

0,01mm resolution - Swiss technology with data output and protection IP67. (full submersion) also cable connected. Automatic power on, by moving the vernier along its rod. (SIS system) pausing after 20 min when not in use, pause setting kept stored with max movement speed of 2.5 m/sec. Structure mechanics in tempered, rectified stainless steel with interchangeable plungers pull/push on the same floor, block screw and double hook. Provided with wooden case.



Tech. Code	GR45 Euro	Range mm	A mm	E mm
D0103300	900,00	0 ÷ 300	410	12 x 4
D0103400	(939,00)	0 ÷ 400	510	12 x 4
D0103500	(1103,00)	0 ÷ 500	610	12 x 4
D0103600	(1221,00)	0 ÷ 600	710	12 x 4
D0103800	(1774,00)	0 ÷ 800	910	12 x 4
D01031000	(2187,00)	0 ÷ 1000	1110	12 x 4

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

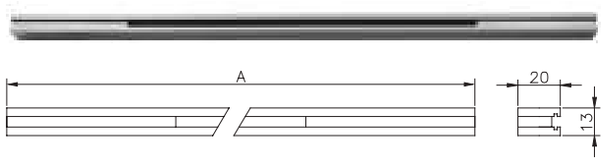
MOVABLE BRIDGES

ALPA

INOX

ART. ACC08

Movable bridge for mounting depth caliper code D0103.



Tech. Code	GR45 Euro	A mm	Weight kg
D0112400	597,00	400	0.570
D0112500	(690,00)	500	0.690
D0112600	(892,00)	600	0.830

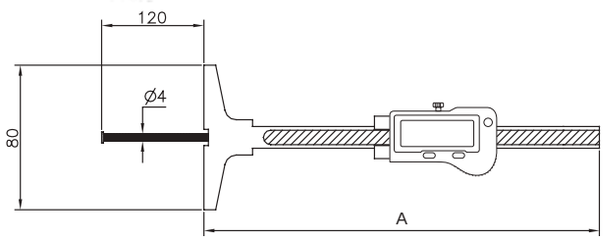
SMALL HOLES DEPTH DIGITAL CALIPERS IP67

ALPA MEGAline

IP 67 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA083

0,01mm resolution - Swiss technology with data output and protection IP67. (full submersion) also cable connected. Automatic power on, by moving the vernier along its rod. (SIS system) pausing after 20 min when not in use, pause setting kept stored with max movement speed of 2.5 m/sec. Structure mechanics in tempered, rectified stainless steel. Hole diameter minimum from 6 mm. Provided with wooden case.



Tech. Code	GR45 Euro	Range mm	A mm	Bar section mm	Pin mm
D0111120	(720,00)	0 ÷ 120	220	4	7,8 x 0,9
D0111120S	(646,00)	0 ÷ 120	220	4	5,8 x 0,6

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

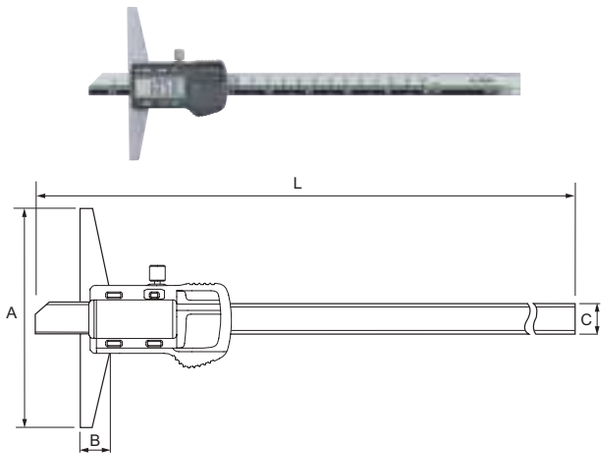
DIGITAL DEPTH CALIPERS IP54

ALPA

IP 54 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA101

0.01mm resolution - Vernier with locking screw system, ON/OFF button, incremental measuring and zero-setting at any position. Absolute origin measuring function. mm/inch conversion.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	L mm
D0021200	137,00	0 ÷ 200	100	11	14,5	285
D0021300	220,00	0 ÷ 300	150	13,5	14,5	390

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

DOUBLE HOOK DIGITAL DEPTH CALIPERS IP54

ALPA

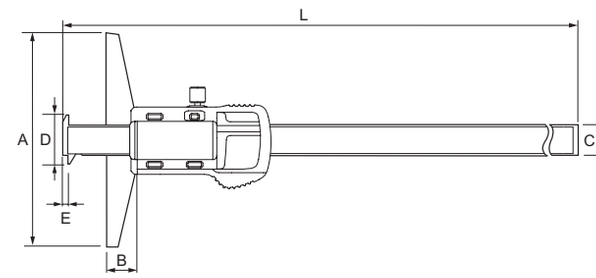
IP 54 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA103

0.01mm resolution - Vernier with locking screw system, ON/OFF button, incremental measuring and zero-setting at any position. Absolute origin measuring function. mm/inch conversion.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	E mm	L mm
D0022200	202,00	0 ÷ 200	100	11	14,5	26,4	4	285
D0022300	270,00	0 ÷ 300	150	13,5	14,5	26,4	4	390

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



PIN TYPE DIGITAL DEPTH CALIPERS IP54

ALPA

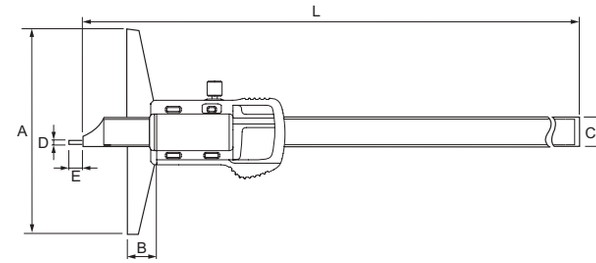
IP 54 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA105

0.01mm resolution - Vernier with locking screw system, ON/OFF button, incremental measuring and zero-setting at any position. Absolute origin measuring function. mm/inch conversion.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	E mm	L mm
D0023200	169,00	0 ÷ 200	100	11	14,5	Ø 1,5	6	285
D0023300	235,00	0 ÷ 300	150	13,5	14,5	Ø 1,5	6	390

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



INSIDE GROOVES DIGITAL CALIPERS IP67

ALPA MEGAline

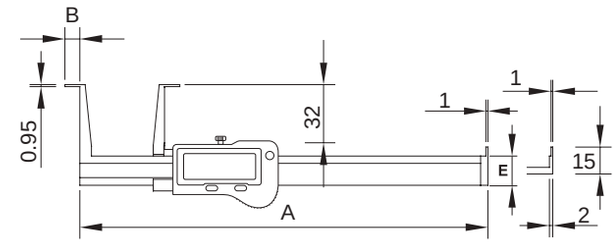
IP 67 | 0,01 mm | ABS | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA086

0,01mm resolution - Swiss technology with data output and protection IP67. (full submersion) also cable connected. Automatic power on, by moving the vernier along its rod. (SIS system) pausing after 20 min when not in use, pause setting kept stored with max movement speed of 2.5 m/sec. Structure mechanics in tempered, rectified stainless steel. Locking screw. Provided with ABS casing.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	E mm
D014610170	(680,00)	10 ÷ 170	230	3,5	16,5 x 4
D014620180	(651,00)	20 ÷ 180	230	8,5	16,5 x 4

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232



INSIDE GROOVES DIGITAL CALIPERS

ALPA

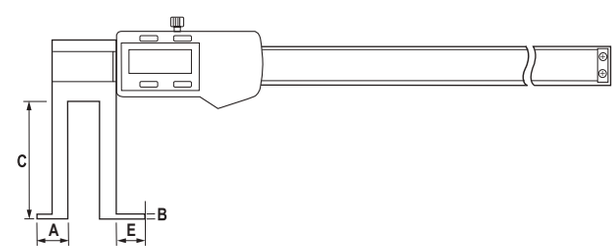
IP 40 | 0,01 mm | LCD | INOX | 3V CR2032 | PDF

ART. AA179

0.01mm resolution - Metal casing, ON/OFF button, vernier with locking screw, pre-setting function.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	E mm
D0156150	155,00	14 ÷ 150	12	1	30	5
D0156200	205,00	18.5 ÷ 200	13	1	40	5
D0156300	284,00	17 ÷ 300	15	1.5	50	5
D0156500	404,00	35 ÷ 500	33	1.5	120	8

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



Indivisible package | Suggested retail package - Unit price

DIGITAL CALIPERS WITH INTERCHANGEABLE TIPS

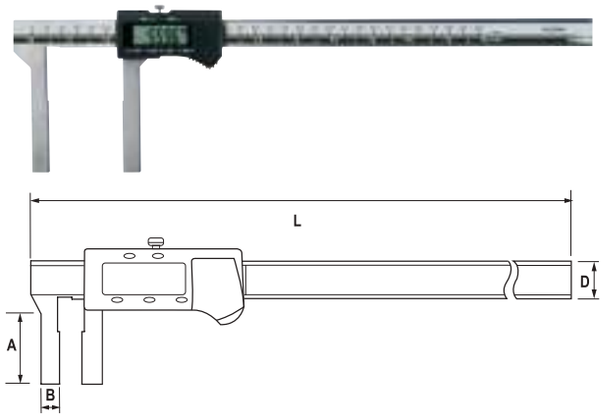
ALPA

IP	0,01	LCD	INOX	mm	3V		
40	mm			inch	CR2032		i PDF

ART. AA077

0.01mm resolution (ON/OFF) button, zero setting at any position and incremental zero setting (ABS), vernier with locking screw, complete with a set of M2.5 thread probe tips. Useful for external and internal measure.

Different tips to be ordered separately, see table at page D.41



Tech. Code	GR45 Euro	Range internal mm	Range External mm	A mm	B mm	D mm	L mm
D0160300	490,00	40 ÷ 300	0 ÷ 300	75	12	19	430
D0160500	650,00	50 ÷ 500	0 ÷ 500	88	16	23	680

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

INSIDE/OUTSIDE GROOVES DIGITAL CALIPERS IP67

ALPA MEGAline

IP		0,01	LCD	INOX	mm	3V		
67		mm	⬅ ➡		inch	CR2032		i PDF

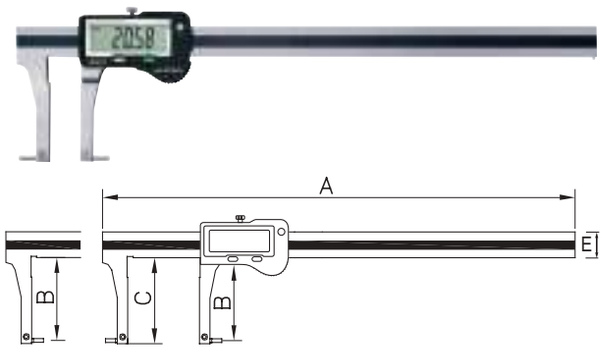
ART. AA084

Swiss made electronics, resolution 0,01 mm with data output and protection IP67 - Hardened stainless steel structure, ON/OFF button, zero setting at any position, cursor with locking screw, interchangeable threaded caps. Provided with couple of spherical threaded caps 3 mm and wooden case.

D0182250 - Complete with a pair of terminal cylindricals with spherical contact Ø 2,5mm

D0182350 and D0182450 - Complete with a pair of terminal cylindricals with spherical contact Ø 3mm and adapting sleeves M2,5

Different tips to be ordered separately, see page D.41



Tech. Code	GR45 Euro	Range int./ext. mm	A mm	B int./est. mm	C mm	E mm
D0182250	960,00	24 ÷ 250/0 ÷ 210	332	52 / 61	64	16.5 x 4
D0182350	1100,00	42 ÷ 400/0 ÷ 320	470	96 / 100	103	17 x 5
D0182450	1180,00	42 ÷ 500/0 ÷ 420	570	96 / 100	103	17 x 5

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

INSIDE/OUTSIDE GROOVES DIGITAL CALIPERS IP54

ALPA MEGAline

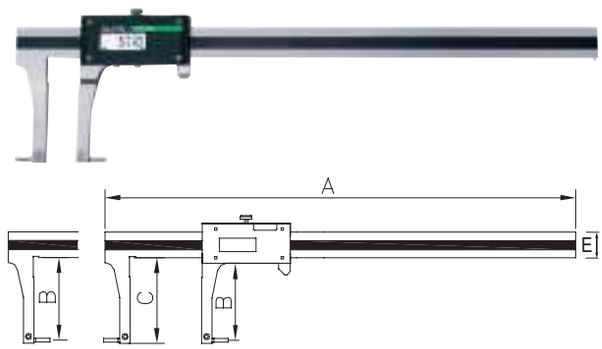
IP		0,01	LCD	INOX	mm	3V		
54		mm			inch	CR2032		i PDF

ART. AA081

Swiss made electronics, resolution 0,01 mm - Hardened stainless steel structure, protected against dust, water resistant, ON/OFF button, zero setting at any position, cursor with locking screw, interchangeable threaded caps. Provided with couple of spherical threaded caps and wooden case.

D0181650 - Complete with a pair of cylindrical terminals Ø 3mm and adapting sleeves M2,5

Different tips to be ordered separately, see page D.41



Tech. Code	GR45 Euro	Range int./ext. mm	A mm	B int./est. mm	C mm	E mm
D0181650	(1539,00)	44 ÷ 650/0 ÷ 570	720	96 / 100	103	22x5

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232

UNIVERSAL DIGITAL CALIPERS WITH DIAL INDICATOR IP54

ALPA MEGAline

IP 54 | 0,01 mm | LCD | INOX | mm inch | 3V CR2032 | PDF

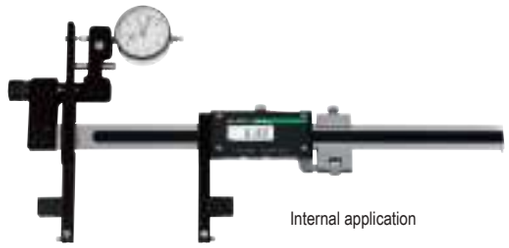
ART. AA120

Accuracy ± 0,02 mm. Resolution 0,01 mm.
Protected against dust, water resistant, Swiss made electronics, ON/OFF button, zero setting at any position, cursor with locking screw, fine adjustment, interchangeable threaded caps. Provided with dial gauge 0,01 ø 40 mm, pair of spherical threaded caps ø 3 mm. Analogical version available on request.

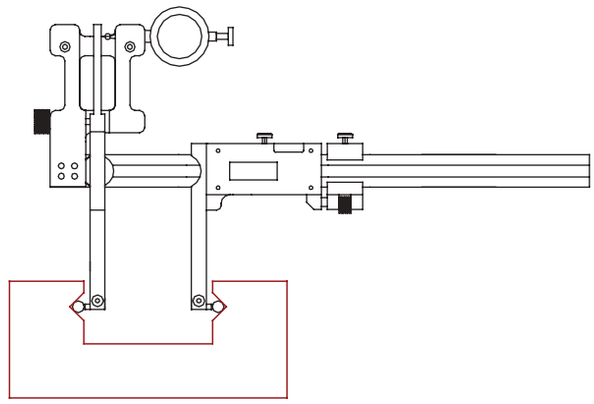
Different tips to be ordered separately, see page D.41

Tech. Code	GR45 Euro	Range mm	Bar section mm	Resolution mm
D0325200	2069,00	20 ÷ 200 x 60	18 x 4	0.01
D0325300	2650,00	24 ÷ 300 x 80	22 x 5	0.01
D0325500	2770,00	24 ÷ 500 x 80	22 x 5	0.01

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232



Internal application



INSIDE/OUTSIDE DIGITAL CALIPERS WITH LONG POINTS

ALPA

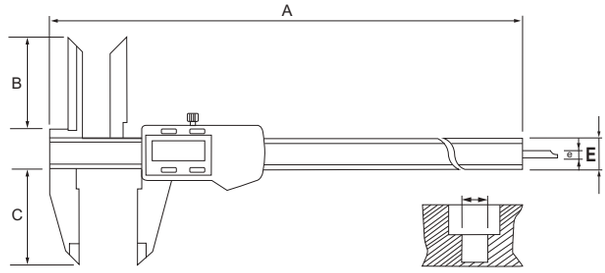
IP 40 | 0,01 mm | LCD | INOX | mm inch | 3V CR2032 | PDF

ART. AA104

0.01mm resolution - metal casing, satin-chromed scale, ON/OFF button, zero setting at any position, vernier with locking screw.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	e mm	E mm
D0061150	191,00	0 ÷ 150	235	45	40	3,7 x 1,5	16 x 4
D0061200	185,00	0 ÷ 200	285	45	50	3,7 x 1,5	16 x 4
D0061300	279,00	0 ÷ 300	400	45	62	3,7 x 1,5	16 x 4

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



INSIDE GROOVES DIGITAL CALIPERS WITH INTERCHANGEABLE TIPS

ALPA

IP 40 | 0,01 mm | LCD | INOX | 3V CR2032 | PDF

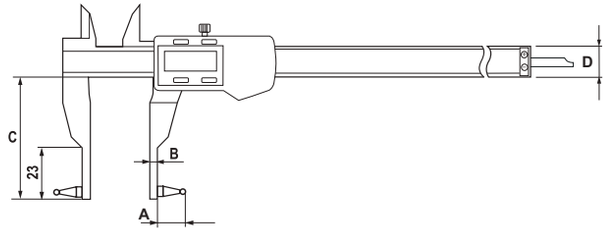
ART. AA176

0.01mm resolution - metal casing, ON/OFF button, zero setting at any position, vernier with locking screw, pre-setting function.

Tips to be ordered separately, see table page D.41

Tech. Code	GR45 Euro	Measuring range x sphere Ø1 - Ø6.5	Measuring range x sphere Ø7 - Ø12	A mm	B mm	C mm	D mm
D0151150	224,00	34 ÷ 150 mm	46 ÷ 150 mm	12/18	5	50	23
D0151200	262,00	34 ÷ 200 mm	46 ÷ 200 mm	12/18	5	50	23

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



Indivisible package Suggested retail package - Unit price

DIAL CALIPERS

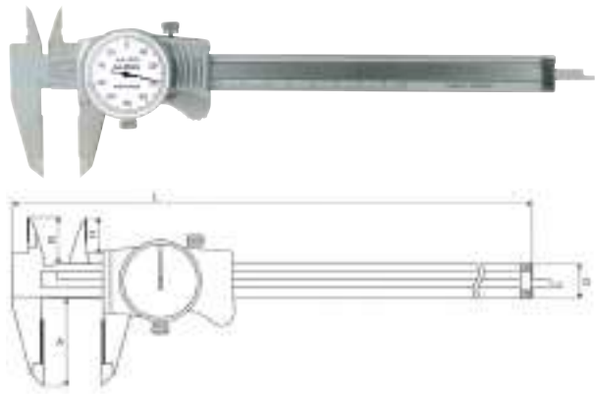
ALPA

INOX

ART. D0210

Rotating dial device with locking screw, satin-chromed scale and guarded rack, vernier with locking-screw.

Tech. Code	GR45 Euro	Range mm	Resolution mm	A mm	B mm	C mm	D mm	L mm
D021015002	60,00	0 ÷ 150	0.02	40	20	14	16	235
D021015001	64,00	0 ÷ 150	0.01	40	20	14	16	235
D021020002	80,00	0 ÷ 200	0.02	50	21	17	16	285
D021020001	85,00	0 ÷ 200	0.01	50	21	17	16	285
D021030002	125,00	0 ÷ 300	0.02	62	22	16	16,5	400
D021030001	151,00	0 ÷ 300	0.01	62	22	16	16,5	400



DIAL CALIPERS

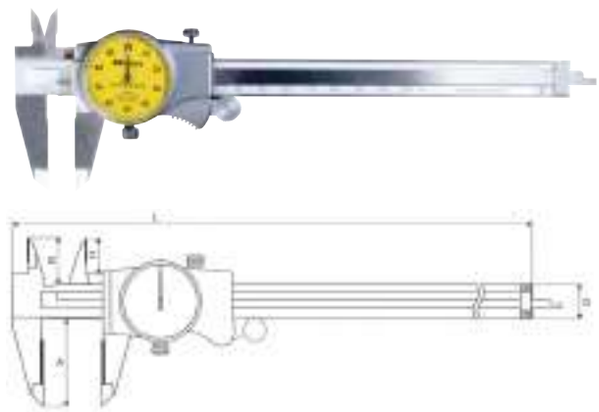
Mitutoyo

INOX

ART. SERIE 500

Rotating dial with locking screw and new font more readable characters, rod in hardened ground steel, slide guage with locking screw.

Tech. Code	GR47 Euro	Range mm	Resolution mm	A mm	B mm	C mm	D mm	L mm
D0213150001	136,00	0 ÷ 150	0,01	40	21	16,5	16	231
D0213200001	258,00	0 ÷ 200	0,01	50	24,5	20	16	288



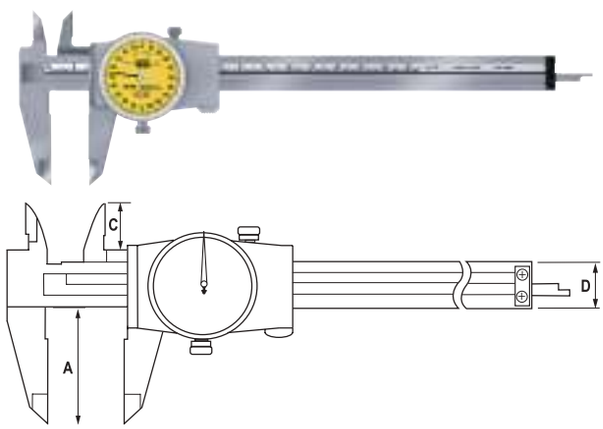
DIAL CALIPERS

ABS INOX

ART. CCMA-M

Rotating dial device with locking screw, patented shock-proof device, satin-chromed scale and hardened, ground guarded rack, vernier with locking-screw.

Tech. Code	GR49 Euro	Range mm	Resolution mm	A mm	C mm	D mm
D0216150001	(138,00)	0 ÷ 150	0.01	40	13	15.5
D0216150002	(130,00)	0 ÷ 150	0.02	40	13	15.5



MONOBLOCK VERNIER CALIPERS

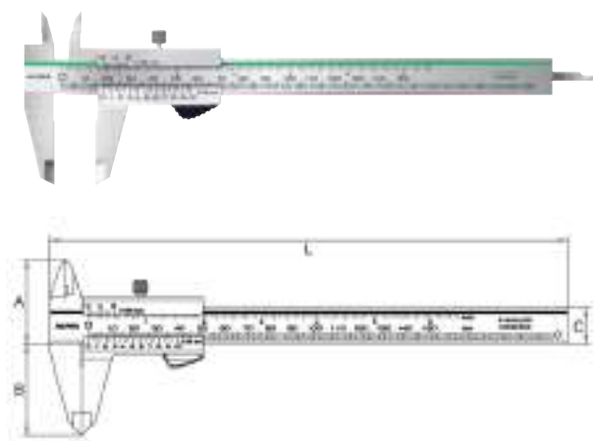
ALPA

INOX mm inch

ART. AB012

Vernier 1/20 resolution 0,05 mm, high precision, caliper and cursor in hardened steel, matt chrome scale, cursor with locking screw.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	L mm
D0205100	41,00	0 ÷ 100	30	30	13 x 3	170
D0205150	41,00	0 ÷ 150	37	40	16 x 3	228
D0205200	65,00	0 ÷ 200	40	50	16 x 3,6	286
D0205300	131,00	0 ÷ 300	42	60	16 x 4	400



MONOBLOCK VERNIER CALIPERS

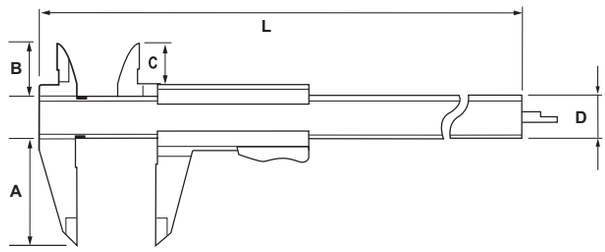
ALPA

INOX mm inch

ART. AB011

Vernier 1/20 reading 0.05 mm, matt chrome scale, latch with lever locking.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	L mm
D0206150	47,00	0 ÷ 150	40	20	15	16 x 3	230
D0206200	65,00	0 ÷ 200	50	21	17	16 x 3	280

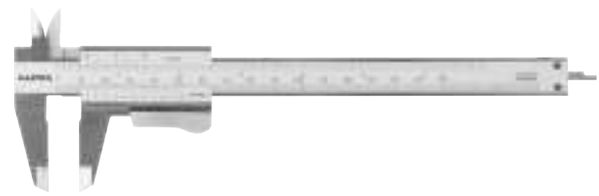


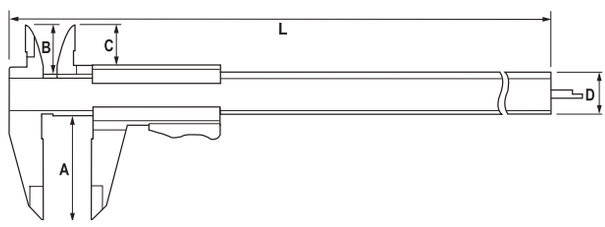
INOX mm inch

ART. AB025

Vernier 1/20 reading 0.05 mm, matt chrome scale, slider with lever lock.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	L mm
D0225150	29,00	0 ÷ 150	40	20	15	16	230
D0225200	43,00	0 ÷ 200	50	21	17	16	280



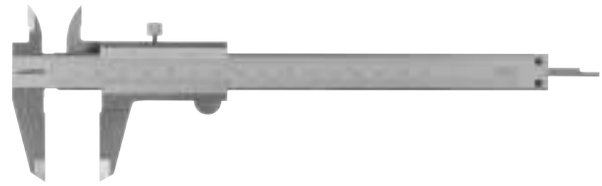


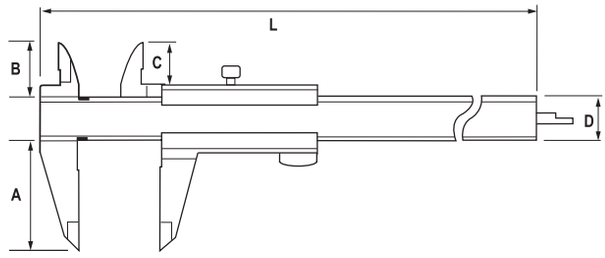
INOX mm inch

ART. AB017

Monoblock stainless steel structure, vernier 1/20, graduation 0.05 mm. Matt-chrome finish scale. Locking screw.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	L mm
D0235100	28,00	0 ÷ 100	40	18	13	11	160
D0235150	27,00	0 ÷ 150	40	20	15	16	230
D0235200	38,00	0 ÷ 200	50	21	17	16	280
D0235300	78,00	0 ÷ 300	60	17	27	19	400





MONOBLOC VERNIER CALIPERS

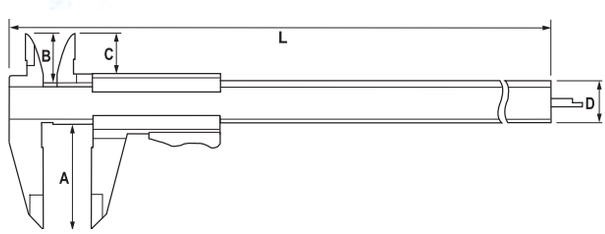
Mitutoyo

INOX mm inch

ART. SERIES 531

Nonius 1/20 reading 0.05 mm. Matt chrome scale. Slider with lever lock. Standard version.

Tech. Code	GR47 Euro	Range mm	A mm	B mm	C mm	D mm	L mm
D0226150	45,00	0 ÷ 150	40	21.5	17	16	229



Indivisible package Suggested retail package - Unit price

MONOBLOCK VERNIER CALIPERS

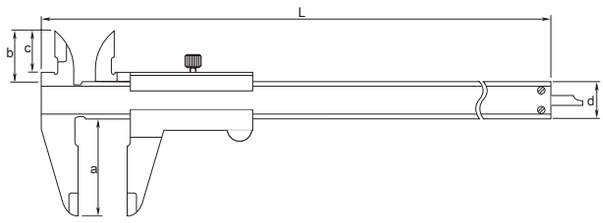
Mitutoyo

INOX

ART. SERIE 530

Vernier 1/50 resolution 0,02 mm, high precision, caliper and cursor in hardened steel, matt chrome scale, cursor with locking screw.

Tech. Code	GR47 Euro	Range mm	a mm	b mm	c mm	d mm	L mm
D0227150	44,00	0 ÷ 150	40	21	17	16	229
D0227200	72,00	0 ÷ 200	50	24,5	20,5	16	288
D0227300	222,00	0 ÷ 300	64	27,5	22	20	404

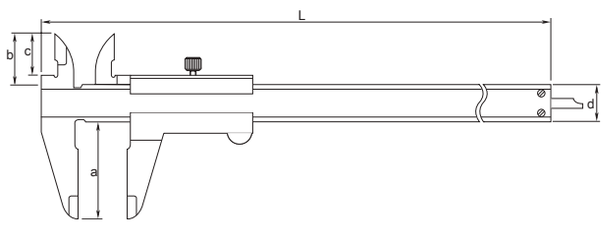


INOX mm inch

ART. SERIE 530

Vernier 1/20 resolution 0,05 mm, caliper and cursor in hardened steel, matt chrome scale, cursor with locking screw.

Tech. Code	GR47 Euro	Range mm	a mm	b mm	c mm	d mm	L mm
D0228150	36,00	0 ÷ 150	40	21	17	16	229
D0228200	92,00	0 ÷ 200	50	24,5	20,5	16	288



MONOBLOCK VERNIER CALIPERS

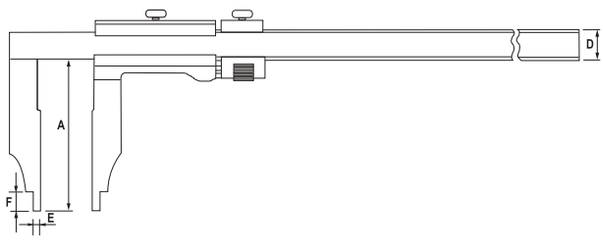
ALPA

mm inch INOX

ART. AB035

Monoblock Stainless steel structure, vernier 1/50, 0.02 mm reading, satin-chromed scale, vernier with micrometric-adjustment, locking-screw.

Tech. Code	GR45 Euro	Range mm	A mm	D mm	E mm	F mm
D0240300/90	158,00	0 ÷ 300	90	20	5	12
D0240300/150	273,00	0 ÷ 300	150	24	5	12
D0240400/125	300,00	0 ÷ 400	125	25	10	15
D0240500/150	325,00	0 ÷ 500	150	28	10	15
D0240600/150	390,00	0 ÷ 600	150	28	10	15
D0240600/200	492,00	0 ÷ 600	200	28	10	15
D0240600/300	780,00	0 ÷ 600	300	30	10	15
D0240800/150	513,00	0 ÷ 800	150	32	10	20
D02401000/150	740,00	0 ÷ 1000	150	32	10	20
D02401000/300	1125,00	0 ÷ 1000	300	32	10	20
D02401000/500	1900,00	0 ÷ 1000	500	32	10	20
D02401500/200	1594,00	0 ÷ 1500	200	40	10	20
D02401500/300	(2052,00)	0 ÷ 1500	300	40	10	20
D02402000/300	(2780,00)	0 ÷ 2000	300	40	10	20
D02403000/300	(4400,00)	0 ÷ 3000	300	40	10	20

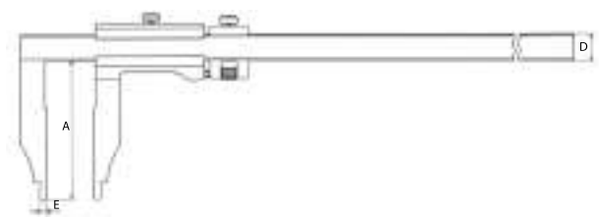


INOX

ART. AB030

Hardened stainless steel monoblock caliper. Satin-chromed readout scale. Etched, precision graduation, easy to read and long-lasting. Raised slider for easy movement. Slider locking screw with micrometric adjustment and lapped contact surfaces. Slide stop at beam end. Serial number. Manufactured according to DIN 862.
Supplied in case.

Tech. Code	GR45 Euro	Range mm	Accuracy mm	A mm	E mm	D mm
D0250300	(629,00)	0 ÷ 300	± 0.02	90	5	24 x 5
D0250400	(699,00)	0 ÷ 400	± 0.02	90	5	24 x 5
D0250500	(830,00)	0 ÷ 500	± 0.02	115	10	28.5 x 6
D0250600	(1013,00)	0 ÷ 600	± 0.02	115	10	28.5 x 6
D0250800	(1205,00)	0 ÷ 800	± 0.02	150	10	38.5 x 8
D02501000	(1336,00)	0 ÷ 1000	± 0.02	150	10	38.5 x 8
D02501200	(1923,00)	0 ÷ 1200	± 0.02	150	10	38.5 x 8
D02501500	(2564,00)	0 ÷ 1500	± 0.02	150	10	38.5 x 8
D02502000	(3855,00)	0 ÷ 2000	± 0.02	200	10	48 x 10.5



Indivisible package Suggested retail package - Unit price

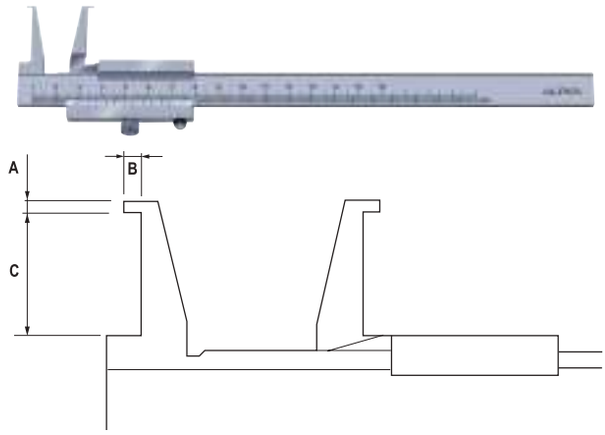
INSIDE GROOVES VERNIER CALIPERS

INOX

ART. AB067

Stainless steel structure, vernier 1/20, 0.05 mm reading, satin-chromed scale, vernier with locking-screw.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	Weight g
D0270160	92,00	9.5 ÷ 160	0.9	3	25	190
D0270200	148,00	26 ÷ 200	3	7	60	200
D0270300	231,00	60 ÷ 300	5	10	100	250



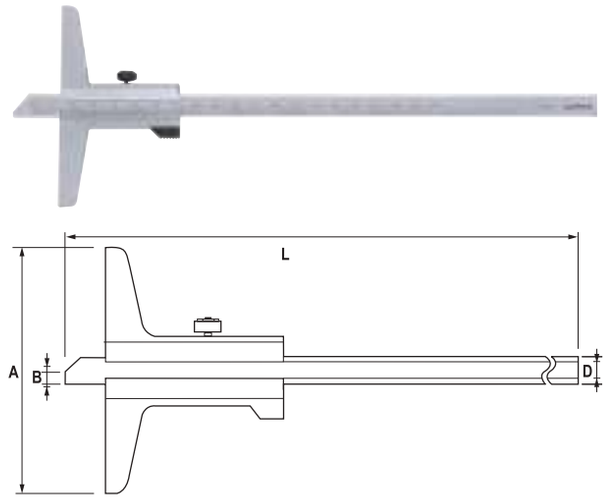
DEPTH VERNIER CALIPERS

INOX

ART. AB055

Stainless steel structure, vernier 1/20, 0.05 mm reading, satin-chromed scale, vernier with locking-screw.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	D mm	L mm
D0310150	41,00	0 ÷ 150	100	5	10	250
D0310200	55,00	0 ÷ 200	100	5	10	300
D0310400	131,00	0 ÷ 400	150	4	11	500
D0310500	180,00	0 ÷ 500	150	4	11	600
D03101000	683,00	0 ÷ 1000	200	7.5	18	1160



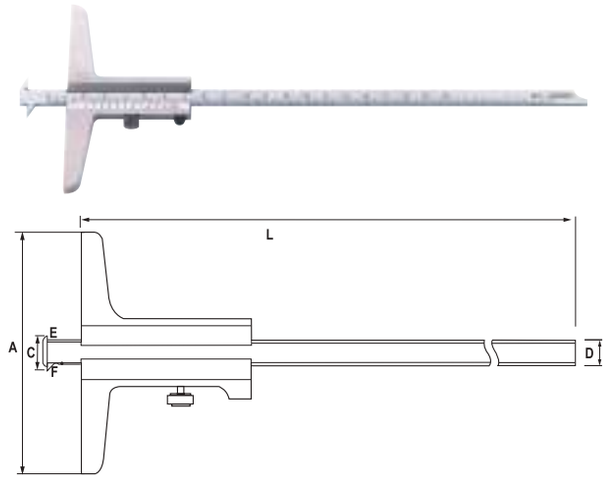
DOUBLE HOOK DEPTH VERNIER CALIPERS

INOX

ART. AB062

Stainless steel structure, vernier 1/20, 0.05 mm reading, satin-chromed scale, vernier with locking-screw.

Tech. Code	GR45 Euro	Range mm	A mm	C mm	D mm	E mm	F mm	L mm
D0320200	129,00	0 ÷ 200	100	22	10	6	6	260
D0320300	152,00	0 ÷ 300	100	22	10	6	6	370



Indivisible package Suggested retail package - Unit price

GEAR TOOTH DIGITAL CALIPERS

IP	0,01	LCD	INOX	mm	1,5V
40	mm			inch	SR44

ART. AA140

Stainless steel digital caliper monoblock, suitable for measuring the thickness of the teeth of the spur gears bevel with straight or helical teeth. LCD display 8 mm.
Carbide jaws. Locking and fine adjustment screw system on both sides, micrometric adjustment, on/off button, zero setting at any position, mm/inch conversion.

Tech. Code	GR45 Euro	Module	Resolution mm	Weight g
D03311/25DIG	251,00	1 - 25	0.01	400
D03315/50DIG	317,00	5 - 50	0.01	400

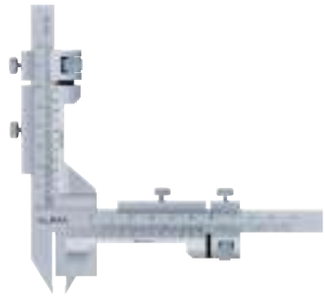
Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

GEAR TOOTH VERNIER CALIPERS

INOX

ART. AB140

Stainless steel structure, graduation 0,02mm double vernier caliper.
Locking screw system, Micrometric movement, carbide measurement surfaces.



Tech. Code	GR45 Euro	Module	Resolution mm
D03301/25	120,00	1 - 25	0.02
D03305/50	213,00	5 - 50	0.02

WELD SEAM CALIPERS

IP	0,01	LCD	INOX	1,5V
40	mm			SR44

ART. D0335

Chromed stainless steel, 60° - 70° - 80° - 90° angles

Tech. Code	GR45 Euro	Range mm	Model
D03350/20DIG	101,00	0 ÷ 20	Digital
D03350/20MEC	39,00	0 ÷ 20	Mechanical

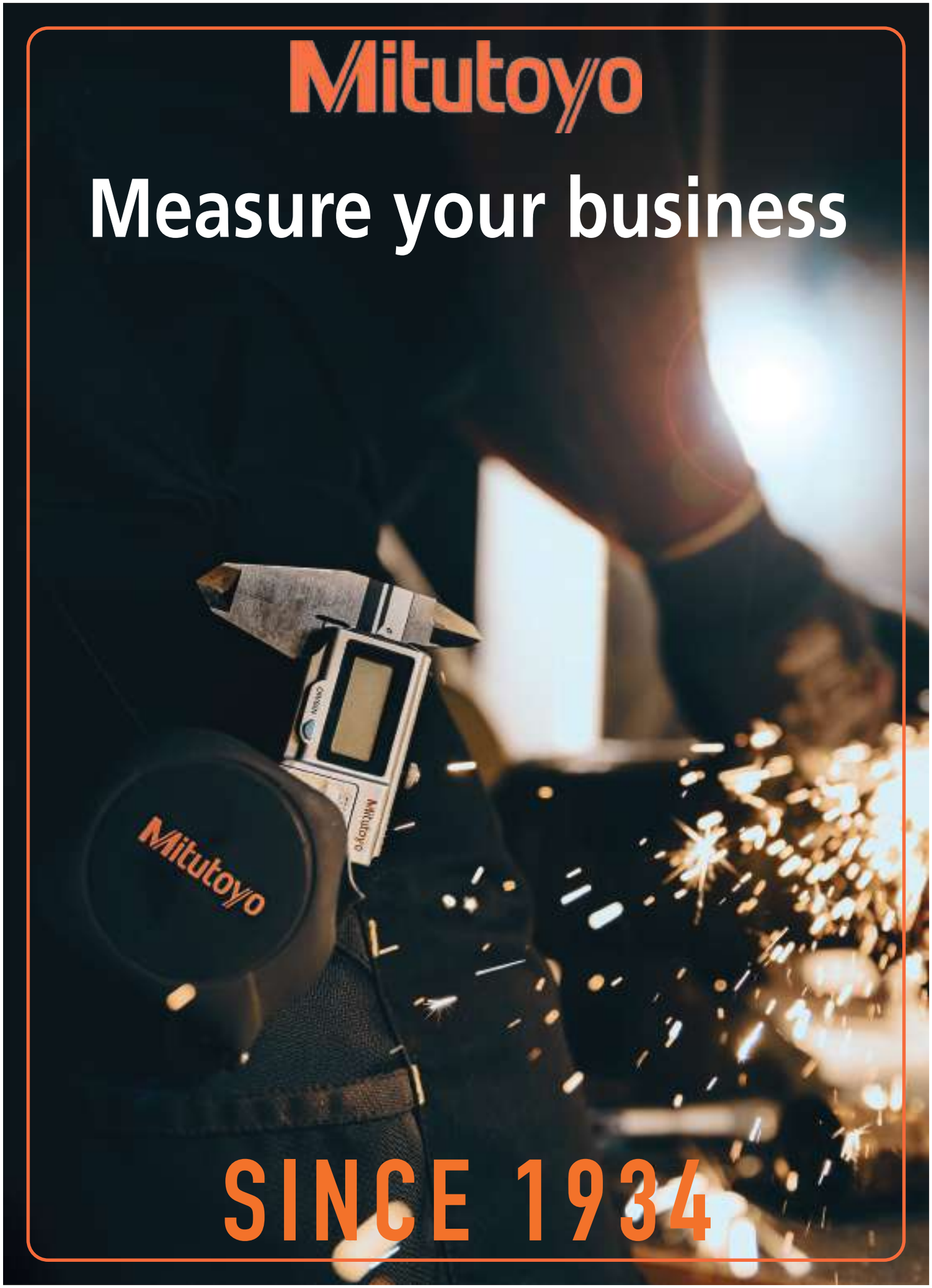
Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

Related products

WRK CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT

Tech. Code	Size	EU size
K234607	7	S
K234608	8	M
K234609	9	L
K234610	10	XL

Product available in CAP K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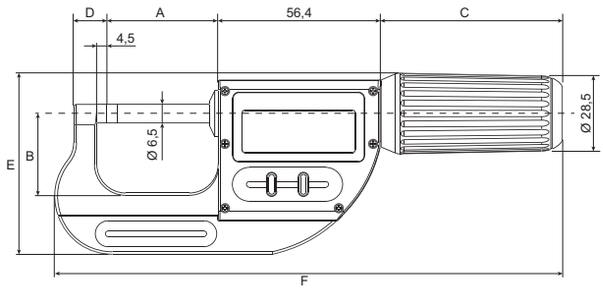
DIGITAL MICROMETERS IP67

ALPA MEGAwhiz

IP 67 | 0,001 mm | 6.5 mm | ABS | LCD | 3V CR2032 | PDF

ART. BA010

Automatic wake-up by moving the thimble, sleeping mode after 20 min. when not in use.
Position memorized in sleeping mode (S.I.S. system), absolute system.
Water protected for heavy work with coolants and lubricants, protection rating IP67 according to IEC 60529, even when connected.
Measuring range 0-102 mm covered by just 3 instruments, set of 3 micrometers available 0-102 mm. Quick measuring cylinder displacement (10 mm / rotation).
Adjustable measuring force 5N/10N (D1111000030), repeatability never achieved before.
Thimble made of special material. Proximity cable. Non-rotating spindle.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	E mm	F mm
D1111000030	451,00	0 ÷ 30	37.3	27.5	68	12.5	63	181
D1111030060	649,00	30 ÷ 66	73.3	43	74	13.5	86	230
D1111066102	802,00	66 ÷ 102	109.3	60	74	14.5	106	269

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

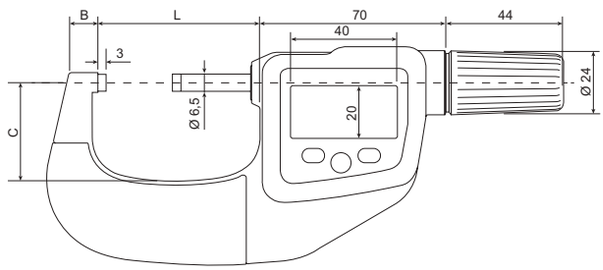
DIGITAL MICROMETERS IP67

BOWERS

IP 67 | 0,001 mm | 6.5 mm | ABS | LCD | mm inch

ART. BA015

Resolution 0.001 mm - Automatic wake-up by moving the thimble. Automatic power off.
Protection rating IP67. Data transfer via Bluetooth. Displacement of thimble 1 mm / turn.



Tech. Code	GR45 Euro	Range mm	B mm	C mm	L mm
D1113025	(560,00)	0 ÷ 25	7.5	25	32.5
D1113050	(710,00)	25 ÷ 50	11	37	61
D1113075	(770,00)	50 ÷ 75	11.5	50	86
D1113100	(810,00)	75 ÷ 100	13.5	63	112

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

QUICK FEED DIGITAL MICROMETERS IP65

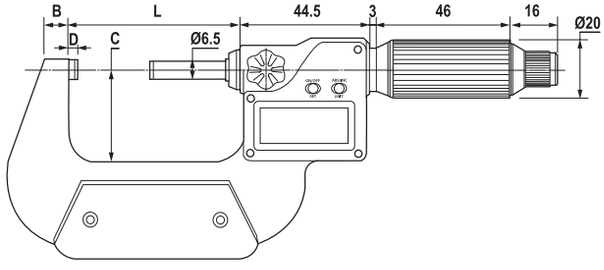
ALPA Exacto

IP 65 | 0,001 mm | 6.5 mm | LCD | mm inch | 1,5V SR44 | PDF

ART. BA020

0.001mm resolution - Protection against water splash and particles, equipped with hardened metal contact surfaces.
Ø 6,5 mm spindle, ON/OFF button - zero/ABS - mm/inch

Each rotation is equal to 2mm.



Tech. Code	GR45 Euro	Range mm	B mm	C mm	D mm	L mm
D1105025	185,00	0 ÷ 25	6	25	3	34.5

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

Indivisible package Suggested retail package - Unit price

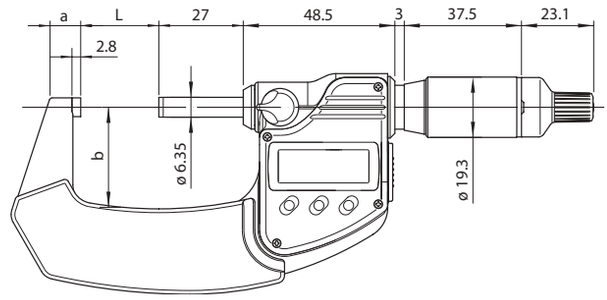
DIGITAL MICROMETERS IP65

Mitutoyo

IP 65 | 0,001 mm | LCD | 1,5V SR44

ART. SERIE 293 - QUANTUMIKE

This micrometer, with a screw pitch of 2mm/rev, offers a speed of displacement of the stem four times higher than that of a common micrometer. The QuantuMike offers an Instrumental error of only ±1µm (for models with 75mm or less).The double clutch allows the use of the Instrument with one hand. The IP65 protection grants an excellent resistance to liquids and powders. Data output.



Tech. Code	GR47 Euro	Range mm	a mm	b mm	L min. mm
D110700025	369,00	0 ÷ 25	9	25	0

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44
D0004USBB	(138,00)	Digimatic cable Input Tool Direct, model IP65, 2 mt - USB
D0001RS232B	102,00	Digimatic cable with data key model IP6x, 1 mt-RS232

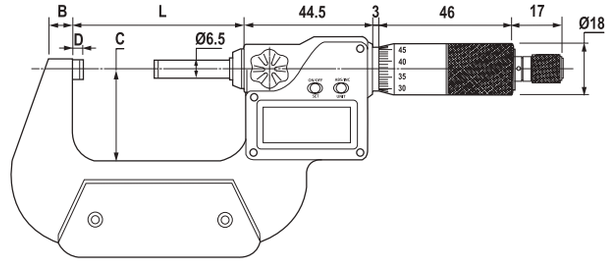
DIGITAL MICROMETERS IP65

ALPA Exacto

IP 65 | 0,001 mm | 6,5 mm | LCD | mm inch | 1,5V SR44 | PDF

ART. BA025

0.01 mm resolution - excellent protection against penetration of particles and splash, absolute/incremental measuring at any position, satin-chromed graduated thimble with sensitive friction, click-stop device, heat-insulated frame cover. Function to return to absolute scale.



Tech. Code	GR45 Euro	Range mm	B mm	C mm	D mm	L mm
D1110000025	141,00	0 ÷ 25	6	25	3	34.5
D1110025050	165,00	25 ÷ 50	8	32	3	59.5
D1110050075	222,00	50 ÷ 75	8	44.5	3	84.5
D1110075100	265,00	75 ÷ 100	8	57	3	109.5
D1110100125	282,00	100 ÷ 125	10	70	3	135
D1110125150	297,00	125 ÷ 150	10	82	3	160.5
D1110150175	333,00	150 ÷ 175	12	94,5	5,5	186
D1110175200	355,00	175 ÷ 200	12	107	5,5	211.5
D1110200225	393,00	200 ÷ 225	23	129	5,5	236
D1110225250	426,00	225 ÷ 250	23	142,5	5,5	261,5
D1110250275	453,00	250 ÷ 275	23	155	5,5	287
D1110275300	480,00	275 ÷ 300	23	170	5,5	310

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

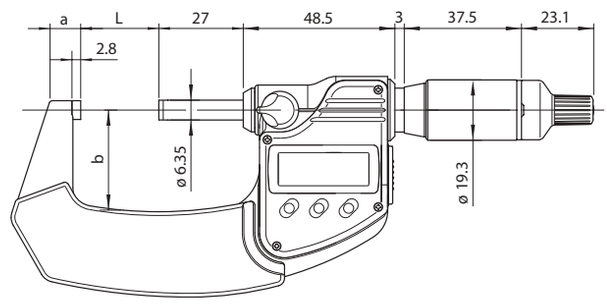
DIGITAL MICROMETERS IP65

Mitutoyo

IP 65 | 0,001 mm | LCD | 1,5V SR44

ART. SERIE 293

High accuracy micrometer. Offers a high resistant structure structure and IP65 protection. Incredible accuracy with ±1µm of Instrument error (models with measuring range75 mm or less). Clutch on the shank.



Tech. Code	GR47 Euro	Range mm	a mm	b mm	L min. mm
D1109000025	237,00	0 ÷ 25	6,5	25	0
D1109025050	332,00	25 ÷ 50	7,5	32,5	25
D1109050075	400,00	50 ÷ 75	10,1	47	50
D1109075100	456,00	75 ÷ 100	11,5	60	75

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

Indivisible package Suggested retail package - Unit price

DIGITAL MICROMETERS

ALPA Exacto

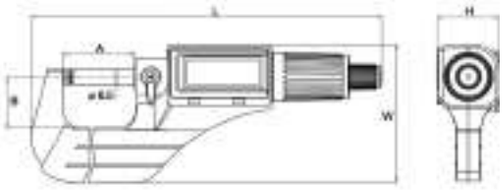
0,001 mm | 6,5 mm | LCD | mm inch | 3V CR2032 | PDF

ART. BA027

Resolution 0.001 mm - Tungsten carbide tipped, heat-insulated painted frame cover.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	L mm	W mm	H mm
D111225	90,00	0 ÷ 25	31.5	22.5	155	60.2	27.3
D111250	120,00	25 ÷ 50	56.5	31	185.4	77.9	27.3

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032



EXTERNAL MICROMETERS WITH DIAL INDICATOR

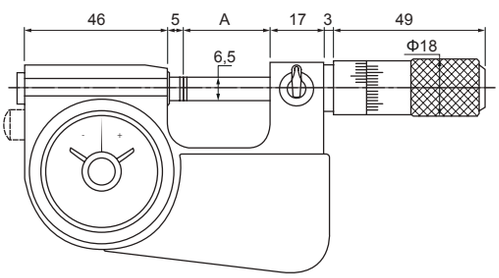
ALPA Exacto

0,001 mm | 6,5 mm

ART. BB040

Tungsten carbide tipped retractable anvil with indicator for precision measurement of mass-produced parts, 0.001 mm resolution. Tolerance reference values in relation to the go/not go based measurements, adjustable anvil control switch, satin-chromed graduated thimble with sensitive friction, stop lever, heat-insulated frame cover.

Tech. Code	GR45 Euro	Range mm	A mm	L mm
D1120000025	376,00	0 ÷ 25	28.50	96.50
D1120025050	400,00	25 ÷ 50	53.50	121.50



EXTERNAL MICROMETERS

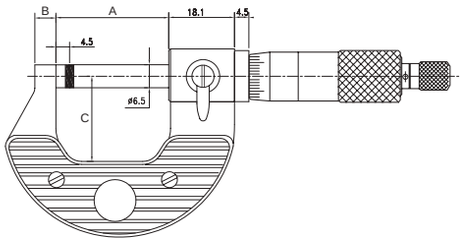
ALPA Exacto

0,01 mm | 6,5 mm | PDF

ART. BB002

0.01 mm resolution - Ø 6,5 mm spindle.Sensitive clutch on the graduated drum to allow measurement with one hand, bow with thermo-insulating pillows.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm
D1125000025	42,00	0 ÷ 25	7.1	32.5	25.5
D1125025050	64,00	25 ÷ 50	7.1	57.5	30.5
D1125050075	83,00	50 ÷ 75	8	83	45
D1125075100	88,00	75 ÷ 100	8	108	58
D1125100125	108,00	100 ÷ 125	8	133	67.5
D1125125150	120,00	125 ÷ 150	8	158	82
D1125150175	158,00	150 ÷ 175	8	183	93
D1125175200	206,00	175 ÷ 200	8	208	108



EXTERNAL MICROMETERS

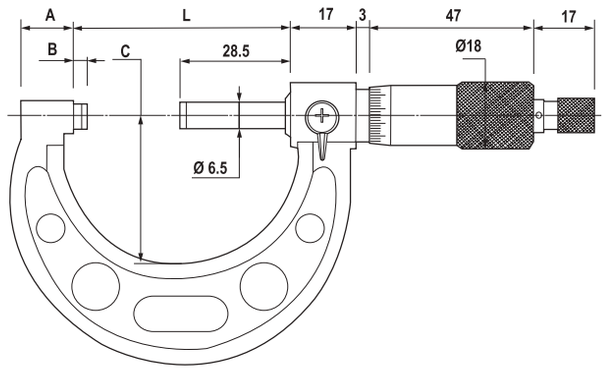
ALPA Exacto

0,01 mm | 6,5 mm

ART. BB015

0.01 mm resolution - 6,50 mm ø spindle - satin-chromed graduated feeding unit assay, sensitive friction, stop lever, painted frame cover.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	L mm
D1160000025	35,00	0 ÷ 25	9	3	28	32
D1160025050	38,00	25 ÷ 50	14	3	38	57
D1160050075	41,00	50 ÷ 75	15	3	49	82
D1160075100	45,00	75 ÷ 100	15	3	60	107
D1160100125	51,00	100 ÷ 125	16.5	3	73	133
D1160125150	58,00	125 ÷ 150	16.5	3	85	158
D1160150175	70,00	150 ÷ 175	19.4	3	104	183
D1160175200	73,00	175 ÷ 200	19.4	3	117	209
D1160200225	85,00	200 ÷ 225	19.4	3	130	234
D1160225250	93,00	225 ÷ 250	19.4	3	142	260
D1160250275	104,00	250 ÷ 275	19.4	3	155	285
D1160275300	112,00	275 ÷ 300	19.4	3	168	310



EXTERNAL MICROMETERS

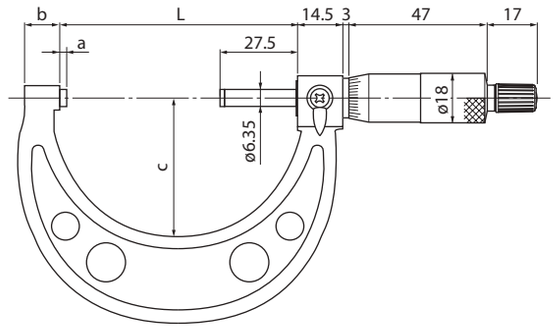
Mitutoyo

0,01 mm

ART. SERIE 103

Resolution 0,01 mm - spindle diameter 6,35mm. Matt graduated thimble, sensitive friction, locking lever, painted frame.

Tech. Code	GR47 Euro	Range mm	a mm	b mm	c mm	L mm
D1165000025	57,00	0 ÷ 25	2.8	9	28	30,3
D1165025050	81,00	25 ÷ 50	2.8	10	38	55,3
D1165050075	107,00	50 ÷ 75	2.8	12	46	80,3
D1165075100	115,00	75 ÷ 100	2.8	14	57	105,3
D1165100125	180,00	100 ÷ 125	5.3	17	76	132,8
D1165125150	201,00	125 ÷ 150	5.7	19	90	158,2
D1165150175	223,00	150 ÷ 175	6.1	20	102	183,6
D1165175200	244,00	175 ÷ 200	6.3	19	115	208,8



EXTERNAL MICROMETERS SET

ALPA

0,01 mm | 6,5 mm

ART. BB020

0.01mm resolution - satin-chromed graduated feeding unit assay sensitive friction, stop lever, painted frame cover.

Tech. Code	GR45 Euro	Range mm	Instruments n°
D1175SET4	135,00	0 ÷ 100	4
D1175SET6	230,00	0 ÷ 150	6
D1175SET12	710,00	0 ÷ 300	12

Indivisible package Suggested retail package - Unit price

EXTERNAL MICROMETERS IN SET

Mitutoyo

0,01 mm

ART. SERIE 103

Resolution 0,01 mm - Spindle diameter 6,35mm. Matt graduated thimble, sensitive friction, locking lever, painted frame.

Tech. Code	GR47 Euro	Range mm	Instruments n°
D1177SET6	581,00	0 ÷ 150	6

EXTERNAL MICROMETERS

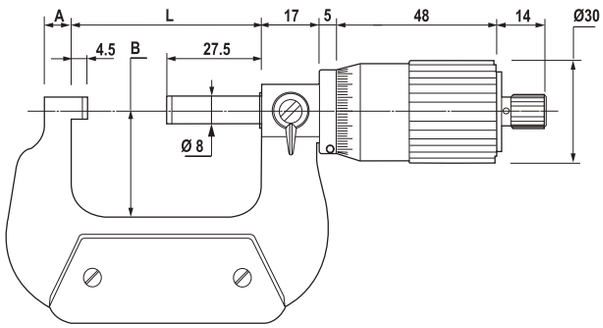
ALPA Exacto

0,01 mm | 8 mm

ART. BB030

Resolution 0.01 mm - Spindle diameter 8 mm.
Screw thread pitch 1 mm, large satin chrome finish graduated thimble, sensitive friction drive, lever lock, heat-insulating frame cover.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	L mm
D1140000025	82,00	0 ÷ 25	6	24	32
D1140025050	86,00	25 ÷ 50	8	32	57
D1140050075	96,00	50 ÷ 75	8	45	82
D1140075100	120,00	75 ÷ 100	8	57	107
D1140100125	147,00	100 ÷ 125	8	70	133
D1140125150	(160,00)	125 ÷ 150	8	82	173
D1140150175	(180,00)	150 ÷ 175	8	95	183
D1140175200	(213,00)	175 ÷ 200	8	107	209



MICROMETER HOLDER BASE

ALPA

ART. BC060

Cast iron painted base, with light alloy clamps.
For micrometers designed for up to 100mm measuring range.

Tech. Code	GR45 Euro	Material	Dimension mm
D12501	31,00	Cast Iron	165 x 115

LARGE EXTERNAL MICROMETERS

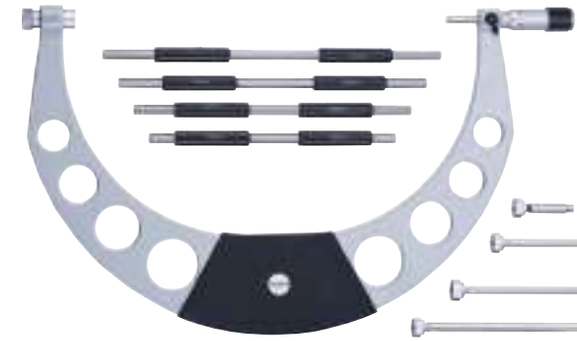
ALPA Exacto

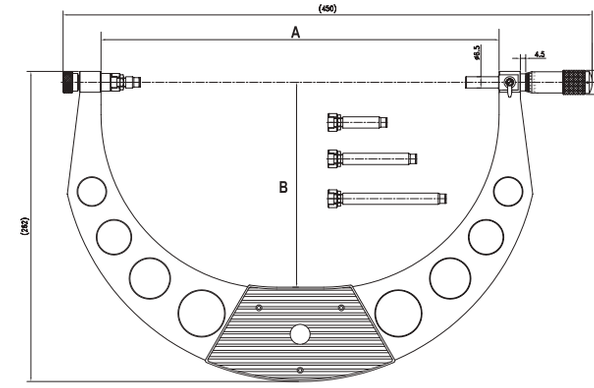
0,01 mm | 6,5 mm | PDF

ART. BB004

Ø 8 mm spindle, 0.01 mm resolution.
Satin-chromed graduated feeding unit assay, sensitive friction positioned onto the feeding unit assay, heat-insulating frame cover.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	Weight kg
D1123200300	501,00	200 ÷ 300	337	175	1.7
D1123300400	850,00	300 ÷ 400	437	225	2.5
D1123400500	932,00	400 ÷ 500	537	275	3





LARGE EXTERNAL MICROMETERS

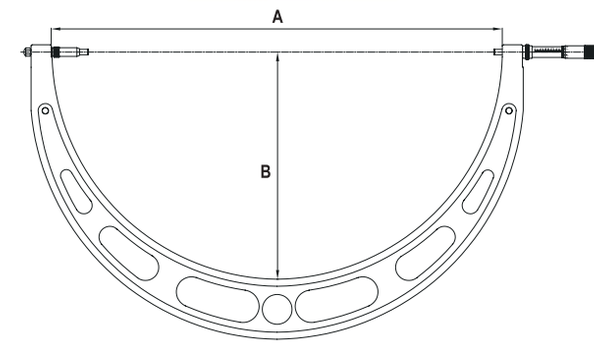
ALPA Exacto

0,01 mm | 10 mm

ART. BB008

Ø 10 mm spindle, 0.01 mm resolution.
Satin-chromed graduated thimble with sensitive friction, heat-insulating frame cover.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	Weight kg
D1124500600	1309,00	500 ÷ 600	644	325	3.7
D1124600700	1750,00	600 ÷ 700	745	375	4.3
D1124700800	2050,00	700 ÷ 800	846	425	4.6
D1124800900	2350,00	800 ÷ 900	948	475	5.6
D11249001000	2780,00	900 ÷ 1000	1050	525	6.8



Indivisible package Suggested retail package - Unit price

LARGE EXTERNAL MICROMETERS

ALPA

0,01 mm | 8 mm

ART. BB006

Tungsten carbide tipped, 0.01mm reading - Satin-chromed graduated thimble with sensitive friction, stop lever, painted frame cover. Complete with zero-setting standards. Provided with interchangeable anvils

Tech. Code	GR45 Euro	Range mm	Arc structure
D12100100	180,00	0 ÷ 100	Full
D1210100200	279,00	100 ÷ 200	Full
D1210200300	295,00	200 ÷ 300	Full

Tech. Code	GR45 Euro	Range mm	Arc structure
D1210300400	347,00	300 ÷ 400	Tubular
D1210400500	403,00	400 ÷ 500	Tubular
D1210500600	475,00	500 ÷ 600	Tubular
D1210600700	561,00	600 ÷ 700	Tubular
D1210700800	653,00	700 ÷ 800	Tubular
D1210800900	787,00	800 ÷ 900	Tubular
D12109001000	879,00	900 ÷ 1000	Tubular
D121010001200	1525,00	1000 ÷ 1200	Tubular
D121012001400	1703,00	1200 ÷ 1400	Tubular
D121014001600	(1837,00)	1400 ÷ 1600	Tubular
D121016001800	(2037,00)	1600 ÷ 1800	Tubular
D121018002000	(2276,00)	1800 ÷ 2000	Tubular

Related products

WRK POLYESTER GLOVES POLYURETHANE COATED

Tech. Code	Size	EU size
K23117	7	M
K23118	8	L
K23119	9	XL

The products are available in chapter K

Indivisible package Suggested retail package - Unit price

CALIBRATION LAB

Our experience in the field of measuring instruments goes back a long way to when companies started talking about ISO 9000 quality certification and the consequent need to periodically calibrate measuring and testing instruments.
This increasingly pressing need of our customers led to the LINK CALIBRATION SERVICE LAB being established, which guarantees a high reliability and speed of the services provided.
Our laboratory is able to calibrate instruments for the most varied applications in the various industrial sectors such as aerospace, automotive, medical, food and beverage and mechanical engineering in general.

INSPECTION CERTIFICATE UNI EN ISO 9001:2008

Document issued by which reference to primary national standards is ensured.

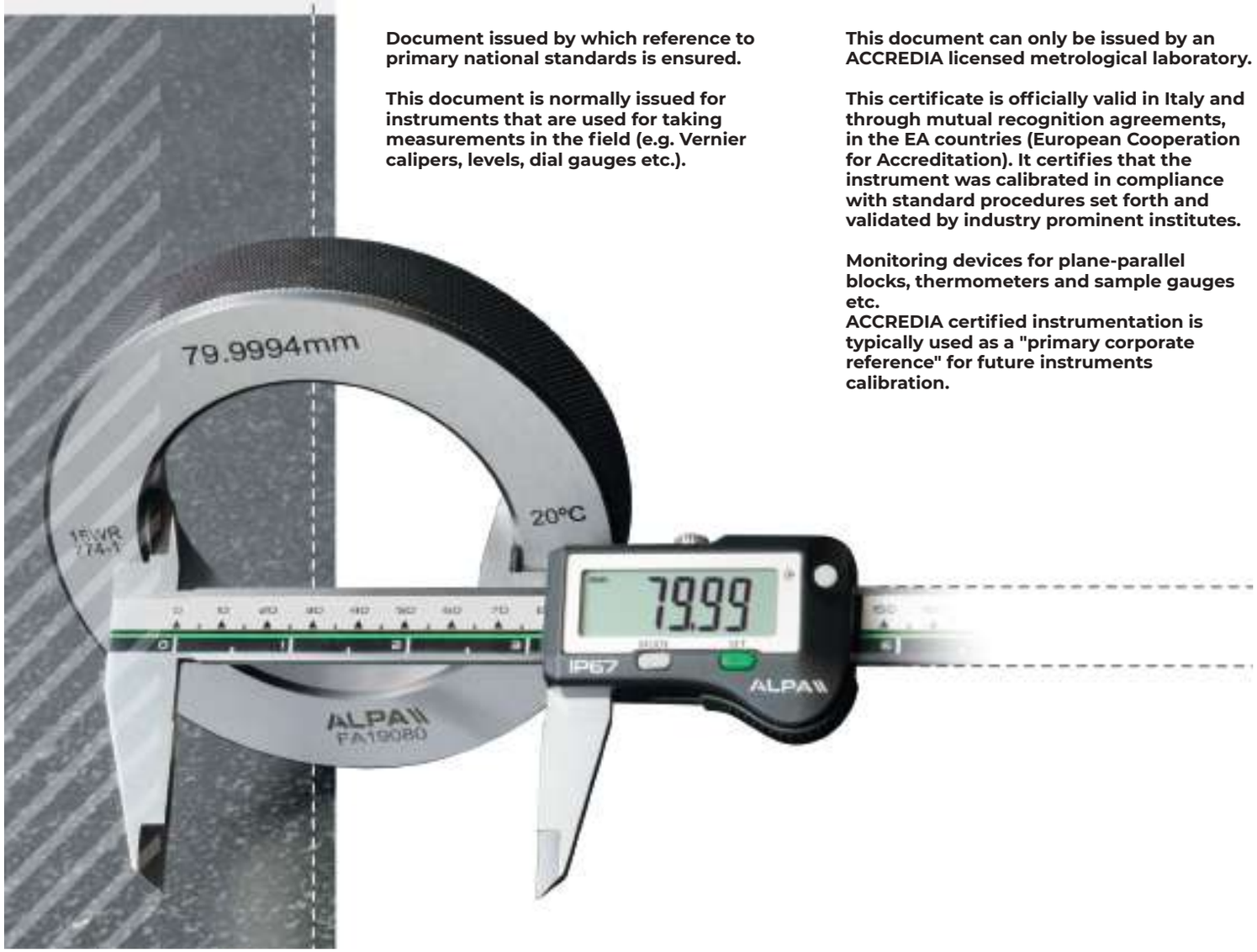
This document is normally issued for instruments that are used for taking measurements in the field (e.g. Vernier calipers, levels, dial gauges etc.).

ACCREDIA CALIBRATION CERTIFICATE

This document can only be issued by an ACCREDIA licensed metrological laboratory.

This certificate is officially valid in Italy and through mutual recognition agreements, in the EA countries (European Cooperation for Accreditation). It certifies that the instrument was calibrated in compliance with standard procedures set forth and validated by industry prominent institutes.

Monitoring devices for plane-parallel blocks, thermometers and sample gauges etc.
ACCREDIA certified instrumentation is typically used as a "primary corporate reference" for future instruments calibration.



THREE POINTS INTERNAL MICROMETERS - BLUETOOTH - IP67

BOWERS

IP 67 | 0,001 mm | LCD | 3V CR2032 | PDF

ART. BA211

The digital micrometers XT give the operator the benefit of the traditional quality of Bowers tools combined electronic IP67 advance. The large range of the XT mechanical range allows, upon request of special heads, to solve the most different measurements issues. Heads to measure threads, grooves, deep holes and many other applications available on request.

Compositions in a wooden case complete with calibration rings.
UKAS calibration certificates of micrometers and rings.

Tech. Code	GR45 Euro	Range mm	Depth mm	Accuracy µm	Ø ring mm
D1269025035	1952,75	25 ÷ 35	66	4	35
D1269035050	2022,30	35 ÷ 50	80	4	35
D1269050065	2247,00	50 ÷ 65	80	5	65
D1269065080	2245,93	65 ÷ 80	80	5	65
D1269080100	2210,00	80 ÷ 100	100	5	80

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

THREE POINTS INTERNAL MICROMETERS SET - BLUETOOTH - IP67

BOWERS

IP 67 | 0,001 mm | LCD | 3V CR2032 | PDF

ART. BA212

Bowers Internal micrometers XT series are also available in kits.
This way it is possible to economize on the cost of the rings: a ring can calibrate two instruments. New bluetooth technoogy. Each composition is equipped with calibration rings and UKAS related certification on both micrometers and rings.

Supplied in a wooden case.

Tech. Code	GR45 Euro	Range mm	Measuring heads pcs	Setting ring pcs
D1277006010SET	1714,00	6 ÷ 10	2	1
D1277010020SET	2264,90	10 ÷ 20	3	2
D1277020050SET	3097,60	20 ÷ 50	3	2
D1277050100SET	3437,50	50 ÷ 100	3	2
D1277100150SET	2890,80	100 ÷ 150	2	1
D1277100200SET	(5554,00)	100 ÷ 200	4	2
D1277150200SET	(3493,00)	150 ÷ 200	2	1

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

FAST ACTION DIGITAL MICROMETERS - BLUETOOTH - IP67

BOWERS

IP 67 | 0,001 mm | LCD | 3V CR2032 | PDF

ART. BA225

Electronic micrometers for internal use. Fast action gun of high repeatability ideal for series checks. Electronic IP67 with 3 pre-set, tolerance, min/max.
Contacts in hard metal. Measurement of holes starting from Ø25 mm.
Resolution 0,001 mm.

Compositions in a wooden case complete with calibration rings.
UKAS calibration certificates of micrometers and rings.

Tech. Code	GR45 Euro	Range mm	Depth mm	Accuracy µm	Ø ring mm
D1276025035	1948,00	25 ÷ 35	66	4	35
D1276035050	1996,00	35 ÷ 50	80	4	35
D1276050065	2044,00	50 ÷ 65	80	5	65
D1276065080	2044,00	65 ÷ 80	80	5	65
D1276080100	2325,11	80 ÷ 100	85	5	80

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

FAST ACTION DIGITAL MICROMETERS SET - BLUETOOTH - IP67

IP 67 | 0,001 mm | LCD | 3V CR2032 | PDF

ART. BA242

Internal micrometers Bowers series XTH in kits. In this way it is possible to save on the costs of the rings. A ring can calibrate two instruments. Each composition is supplied with calibration rings and UKAS calibration certificate relative to both.

Supplied in a wooden case.

Tech. Code	GR45 Euro	Range mm	Measuring heads pcs	Setting ring pcs
D1286006010SET	1776,00	6 ÷ 10	2	1
D1286006020SET	2745,60	6 ÷ 20	5	3
D1286010020SET	2291,30	10 ÷ 20	3	3
D1286020050SET	2978,80	20 ÷ 50	3	3
D1286020100SET	4892,80	20 ÷ 100	6	4
D1286050100SET	3324,20	50 ÷ 100	3	2
D1286100150SET	2978,80	100 ÷ 150	2	1
D1286100200SET	(6299,70)	100 ÷ 200	4	2
D1286150200SET	(3955,60)	150 ÷ 200	2	1

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

DIGITAL MICROMETERS FOR SMALL HOLES IN SET - IP65

IP 65 | 0,001 mm | LCD | 3V CR2032 | PDF

ART. BA270

Digital bore gauge to check diameters, ovalization and conicity. New slimline digital display. Switchable resolution 0,01/0,001/0,0005 mm. Data output with proximity sensor. Repeatability 0,001 mm. Supplied with setting rings and UKAS certificates. Hard chromed contact points.

Depht stop and stand on request.

Tech. Code	GR45 Euro	Range mm
D1288150245	(2042,00)	1.50 ÷ 2.45
D1288365635	(2467,42)	3.65 ÷ 6.35
D1288225635	(4034,97)	2.25 ÷ 6.35

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232

BOREHOLE MICROMETERS WITH ANALOGUE READOUT

0,005 mm | PDF

ART. BB300

Resolution 0.005 mm, carbide contacts analogue micrometer heads with auto-centering, blind bore measurements starting from Ø 12.5 mm.

Compositions in a wooden case, complete with calibration rings.
UKAS calibration certificates of micrometers and rings.

Tech. Code	GR45 Euro	Range mm	Depth mm	Accuracy µm	Ø ring mm
D1290006008	493,00	6 ÷ 8	58	4	8
D1290008010	454,00	8 ÷ 10	58	4	8
D1290010012,5	454,00	10 ÷ 12,5	58	4	12.5
D1290012,5016	454,00	12,5 ÷ 16	62	4	12.5
D1290016020	460,00	16 ÷ 20	62	4	20
D1290020025	512,00	20 ÷ 25	66	4	20
D1290025030	726,00	25 ÷ 35	66	4	35
D1290035050	740,00	35 ÷ 50	80	4	35
D1290050065	830,00	50 ÷ 65	80	5	65
D1290065080	887,00	65 ÷ 80	80	5	65
D1290080100	1125,00	80 ÷ 100	100	5	80
D1290100125	(1130,00)	100 ÷ 125	115	6	125
D1290125150	(1308,00)	125 ÷ 150	115	6	125
D1290150175	(1681,00)	150 ÷ 175	115	7	175
D1290175200	(2055,87)	175 ÷ 200	115	7	175
D1290200225	(2589,00)	200 ÷ 225	118	8	225
D1290225250	(2863,31)	225 ÷ 250	118	8	225
D1290250275	(3116,82)	250 ÷ 275	118	9	275
D1290275300	(3256,93)	275 ÷ 300	118	9	275

Indivisible package Suggested retail package - Unit price

BOREHOLE MICROMETERS WITH ANALOGUE READOUT IN SET

BOWERS

0,005 mm

ART. BB310

Bowers SXTA analogue bore gauges in set.
An economical solution considering the possibility of calibrating two gauges with only one ring.
Every set is supplied with micrometers, rings and UKAS certificates.

Supplied in a wooden case.

Tech. Code	GR45 Euro	Range mm	Measuring heads pieces	Setting ring pieces
D1295006010SET	773,00	6 ÷ 10	2	1
D1295010020SET	1164,73	10 ÷ 20	3	2
D1295020050SET	1840,00	20 ÷ 50	3	2
D1295050100SET	2481,00	50 ÷ 100	3	2
D1295100150SET	1950,00	100 ÷ 150	2	1

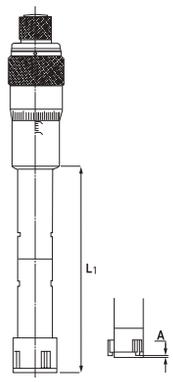
THREE POINTS INTERNAL MICROMETERS

ALPA

0,001 mm | 0,005 mm

ART. BB270

Measurement range 6-12 mm reading 0.001, over 0.005 mm.
Graduated thimble with sensitive friction, satin-chromed version.
Complete with setting ring and extension rod.



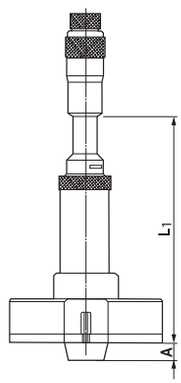
Tech. Code	GR45 Euro	Range mm	Ring Ø mm	Extension mm	L1 mm	A mm
D1310006008	355,00	6 ÷ 8	6	100	54.5	1.5
D1310008010	355,00	8 ÷ 10	8	100	54.5	1.5
D1310010012	355,00	10 ÷ 12	10	100	54.5	1.5
D1310012016	260,00	12 ÷ 16	16	150	80	0.5
D1310016020	260,00	16 ÷ 20	16	150	80	0.5
D1310020025	328,00	20 ÷ 25	25	150	90	0.5
D1310025030	328,00	25 ÷ 30	25	150	90	0.5
D1310030040	383,00	30 ÷ 40	40	150	97	0.5
D1310040050	437,00	40 ÷ 50	40	150	97	0.5
D1310050063	437,00	50 ÷ 63	62	150	114	0.5
D1310062075	465,00	62 ÷ 75	62	150	114	0.5
D1310075088	492,00	75 ÷ 88	87	150	114	0.5
D1310087100	524,00	87 ÷ 100	87	150	114	0.5

NOTE: DIGITAL VERSION ALSO AVAILABLE

0,005 mm

ART. BB271

0.005 mm resolution.
Graduated thimble with sensitive friction, chromed version.
Rings to be ordered separately. See page D.59



Tech. Code	GR45 Euro	Range mm	Extension mm	L1 mm	A mm
D1311100125	570,00	100 ÷ 125	150	145	16
D1311125150	570,00	125 ÷ 150	150	145	16
D1311150175	560,00	150 ÷ 175	150	145	16
D1311175200	560,00	175 ÷ 200	150	145	16
D1311200225	790,00	200 ÷ 225	150	145	16
D1311225250	790,00	225 ÷ 250	150	145	16
D1311250275	790,00	250 ÷ 275	150	145	16
D1311275300	790,00	275 ÷ 300	150	145	16

NOTE: DIGITAL VERSION ALSO AVAILABLE

THREE POINTS INTERNAL MICROMETERS SET

ALPA

ART. BB272

Complete with zero-setting rings and extension rods (100 mm -150 mm).

Tech. Code	GR45 Euro	Range mm	Single tools mm	Rings Ø mm	Extension mm
D1315006012	742,00	6 ÷ 12	6-8 / 8-10 / 10-12	6 / 8 / 10	100
D1315012020	480,00	12 ÷ 20	12-16 / 16-20	16	150
D1315020040	900,00	20 ÷ 40	20-25 / 25-30 / 30-40	25 / 40	150
D1315040100	1760,00	40 ÷ 100	40-50 / 50-63 / 62-75 75-88 / 87-100	40 / 62 / 87	150

INSIDE MICROMETERS WITH MODULARS EXTENSION RODS

ALPA

0,01 mm

ART. BB250

0.01 mm resolution - modular inside micrometers including an inside micrometric head and several extension rods. Micrometric head features a hardened steel contact surface. Supplied in a wooden box package.

Tech. Code	GR45 Euro	Range mm	Micron. head mm	Ø mm	Extensions mm
D137550300	164,00	50 ÷ 300	50 ÷ 65	16	13 - 25 - 50 (2pcs) - 100
D137550600	224,00	50 ÷ 600	50 ÷ 65	16	13 - 25 - 50 100 - 150 - 200
D1375501000	590,00	50 ÷ 1000	50 ÷ 65	16	13 - 25 - 50 - 100 (2pcs) 150 - 200 - 300
D1375501500	1050,00	50 ÷ 1500	50 ÷ 65	16	13 - 25 - 50 - 100 (2pcs) 150 - 200 (2pcs) - 300 (2pcs)
D13751502000	1200,00	150 ÷ 2000	150 ÷ 175	23	25 - 50 (2pcs) - 100 200 (2pcs) - 400 (3pcs)
D137510003000	2130,00	1000 ÷ 3000	150 ÷ 175	28	50 - 100 (2pcs) - 200 500 - 1000

EXTERNAL THREADS DIGITAL MICROMETERS IP65

ALPA Exacto

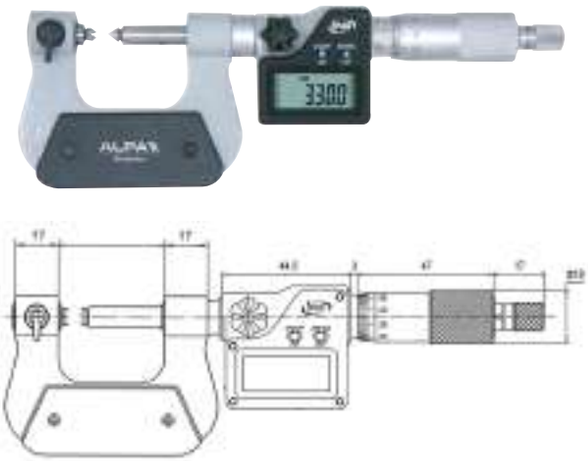
IP 65 | 0,001 mm | LCD | mm inch | 1,5V SR44 | PDF

ART. BA080

0.001 mm resolution - digital micrometer with IP65 protection against particles, supplied with 60° metric anvils.

Tech. Code	GR45 Euro	Range mm	Anvils 60° Included	Accuracy mm
D1340025	295,00	0 ÷ 25	1 - 2 - 3 - 4 - 5	± 0.002
D13402550	317,00	25 ÷ 50	2 - 3 - 4 - 5 - 6	± 0.002
D13405075	343,00	50 ÷ 75	3 - 4 - 5 - 6	± 0.002
D134075100	358,00	75 ÷ 100	3 - 4 - 5 - 6	± 0.003
D1340100125	404,00	100 ÷ 125	4 - 5 - 6	± 0.003
D1340125150	437,00	125 ÷ 150	4 - 5 - 6	± 0.003

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44



Anvils 60°		
n°	Metric thread Pitch / mm	Thread UN - UNC - UNF Pitch / inch
1	0,4 - 0,5	64 - 48
2	0,6 - 0,9	44 - 28
3	1,0 - 1,75	24 - 14
4	2,0 - 3,0	13 - 9
5	3,5 - 5,0	8 - 5
6	5,5 - 7,0	4,5 - 3,5

SPARE ANVILS SET

ALPA

ART. BC010

Set measuring threaded inserts metric and whitworth

Tech. Code	GR45 Euro	Set	Thread
D1350SET	164,00	0.4 ÷ 0.5 - 0.6 ÷ 0.9 - 1.0 ÷ 1.75 2.0 ÷ 3.0 - 3.5 ÷ 5.0 - 5.5 ÷ 7.0	Metric
D1355SET	241,00	60 ÷ 48 TPI - 48 ÷ 40 TPI - 40 ÷ 32 TPI - 32 ÷ 24 TPI 24 ÷ 18 TPI - 18 ÷ 14 TPI - 14 ÷ 10 TPI 10 ÷ 7 TPI - 7 ÷ 4,5 TPI - 4,5 ÷ 3,5 TPI	Whitworth

Indivisible package Suggested retail package - Unit price

EXTERNAL THREADS MICROMETERS

ALPA Exacto

0,01 mm | INOX

ART. BB105

Used for 60° thread setting (metric and UN) or 55°(Whitworth standards), average diameter measures. 0.01mm resolution - Graduated thimble with sensitive friction, locking screw system, provided with 60° metric anvils and setting stand. Non- rotating spindle.

Tech. Code	GR45 Euro	Range mm	Anvils 60° Included
D1345025	147,00	0 ÷ 25	1 - 2 - 3 - 4 - 5
D13452550	153,00	25 ÷ 50	2 - 3 - 4 - 5 - 6
D13455075	162,00	50 ÷ 75	3 - 4 - 5 - 6
D134575100	208,00	75 ÷ 100	3 - 4 - 5 - 6
D1345100125	222,00	100 ÷ 125	4 - 5 - 6
D1345125150	241,00	125 ÷ 150	4 - 5 - 6
D1345150175	266,00	150 ÷ 175	4 - 5 - 6
D1345175200	302,00	175 ÷ 200	4 - 5 - 6

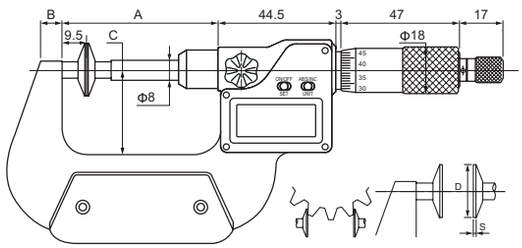
DIGITAL DISK MICROMETERS FOR GEARS IP65

ALPA Exacto

IP 65 | 0,001 mm | 8 mm | LCD | INOX | mm inch | 1,5V SR44 | PDF

ART. BA050

0.001mm resolution - Digital Micrometer with disk contact surfaces and 8mm-diam non rotating spindle. Zero-setting function, ABS/INC, IP65 protection against particles, ON/OFF button, mm/inch conversion.



Tech. Code	GR45 Euro	Range mm	D Ø mm	A mm	B mm	C mm	S mm
D1365025	250,00	0 ÷ 25	20	59.5	8	32	0.7
D13652550	294,00	25 ÷ 50	20	85.5	8	44.5	0.7
D13655075	312,00	50 ÷ 75	20	109.5	8	57	0.7
D136575100	322,00	75 ÷ 100	20	134.5	10	70	0.7

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

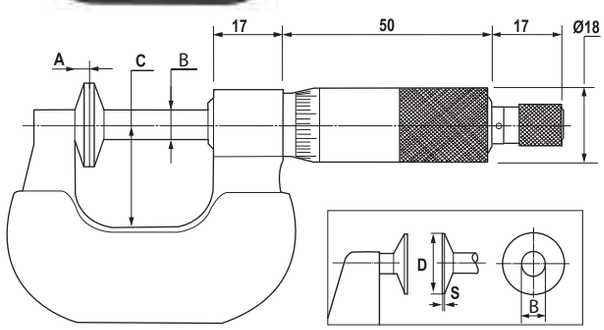
DISK MICROMETERS FOR GEARS

ALPA Exacto

0,01 mm

ART. BB075

0.01mm resolution - with disk measuring faces, lapped measuring surfaces, lock lever.



Tech. Code	GR45 Euro	Range mm	Backing pad Ø mm	A mm	B mm	C mm	S mm
D1370025	104,00	0 ÷ 25	20	32	8	32	0.7
D13702550	121,00	25 ÷ 50	20	57	8	44.5	0.7
D13705075	140,00	50 ÷ 75	20	85	8	57	0.7
D137075100	160,00	75 ÷ 100	20	107	10	70	0.7
D1370100125	174,00	100 ÷ 125	30	133	10	82	0.9
D1370125150	190,00	125 ÷ 150	30	158	12	94.54	0.9
D1370150175	208,00	150 ÷ 175	30	183	12	107	0.9
D1370175200	243,00	175 ÷ 200	30	209	12	120	0.9

ELECTRONIC MEASURING GAUGES FOR INTERNAL MEASUREMENT - IP54

ALPA MEGAline

IP 54 | 0,01 mm | LCD | mm inch | 3V CR2032 | PDF

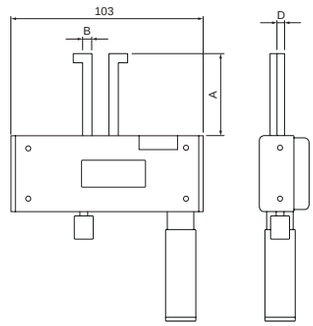
ART. BA390

Sylvac electronic with preset, 0.01 mm resolution. Supplied with interchangeable tips with threaded attachment M 2.5. Calibrated spherical head 3 mm diameter plus 2 threaded extensions (20 mm\40 mm) with M 2.5 attachment.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	D mm
D21002246	(693,00)	22 ÷ 114	50	4.5	3.5

For extensions see range D2388

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232



ELECTRONIC MEASURING GAUGES FOR INTERNAL MEASUREMENT - IP54

ALPA MEGAline

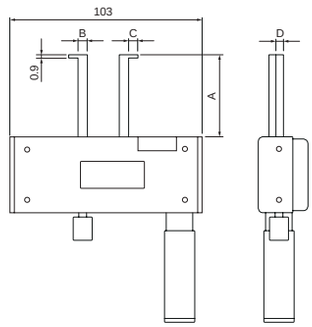
IP 54 | 0,01 mm | LCD | mm inch | 3V CR2032 | PDF

ART. BA370

Sylvac electronic with preset, 0.01 mm resolution.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm	Ø min hole mm
D21010630	(616,00)	6 ÷ 29	50	4.0	2.0	3.0	8
D21010832	(700,00)	8 ÷ 32	50	4.5	3.5	3.0	10
D21011236	(616,00)	12 ÷ 36	50	4.5	5.5	3.5	12
D21013256	(700,00)	32 ÷ 56	50	4.5	5.5	3.5	32
D21014266	(700,00)	42 ÷ 66	50	4.5	5.5	3.5	42

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232



ELECTRONIC MEASURING GAUGES FOR EXTERNAL MEASUREMENT - IP54

ALPA MEGAline

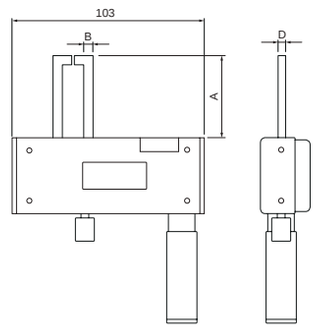
IP 54 | 0,01 mm | LCD | mm inch | 3V CR2032 | PDF

ART. BA380

Sylvac electronic with preset, 0.01 mm resolution.
Supplied with Interchangeable tips with threaded attachment M 2,5 calibrated spherical head 3 mm diameter.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	D mm
D21040024	(616,00)	0 ÷ 22	50	4.5	3.5
D21041741	(700,00)	19 ÷ 44	50	4.5	3.5

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232



DIGITAL INSTRUMENTS FOR EXTERNAL SEEGER MEASUREMENTS WITH ON-AXIS NOZZLES - IP54

ALPA MEGAline

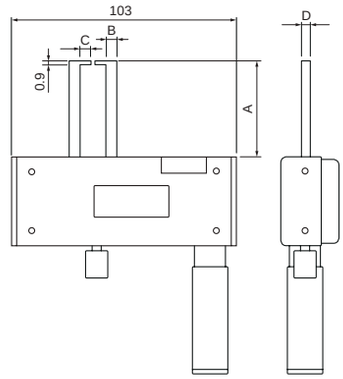
IP 54 | 0,01 mm | LCD | mm inch | 3V CR2032 | PDF

ART. BA395

External electronic measuring gauge seeger.
Sylvac electronics. 0.01 mm resolution.

Tech. Code	GR45 Euro	Range mm	A mm	B mm	C mm	D mm
D21070024	(700,00)	0 ÷ 24	50	4.5	5.5	3.5
D21072044	(710,00)	20 ÷ 44	50	4.5	5.5	3.5

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232



Indivisible package Suggested retail package - Unit price

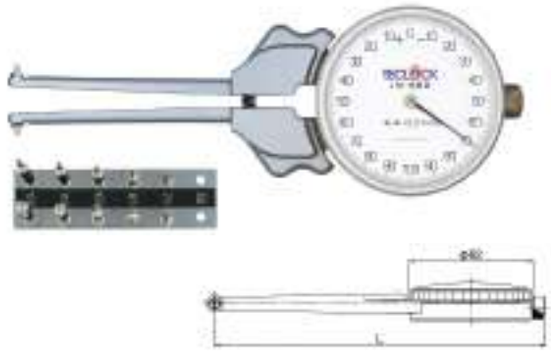
HIGH PRECISION FAST INTERNAL DIAL SNAP GAUGES

TECLOCK

0,01 mm

ART. BB365

Registered anti-shock 2 mm movement for high precision measurement. Cast iron frame, maximum stability and repeateability, large, easy to read dial. Interchangeable pointed anvils to measure deep and narrow grooves. Accuracy 0.02 mm.



Tech. Code	GR45 Euro	Range mm	L mm	Spare contact points
D2115020034	426,00	20 ÷ 34	165	7 sets M2,5
D2115030060	400,00	30 ÷ 60	170	5 sets M3,5
D2115055150	420,00	55 ÷ 150	183	6 set M3,5

FAST INTERNAL DIAL SNAP GAUGES

Deltas

0,01 mm

ART. BB360 - BB362

A saving costs economy thanks to its mass production, light weight frame, hardened stainless steel spherical contacts, rotable dial.
Accuracy ± 0,04 mm, resolution 0.01 mm

Tech. Code	GR45 Euro	Range mm	L mm	A mm	B mm	C mm
D2116003009	(369,00)	3 ÷ 9	40	2.3	1.1	2.4
D2116006018	(226,00)	6 ÷ 18	40	2.3	1.1	2.8
D2116010030	(339,00)	10 ÷ 30	64	2.3	2.2	4.5
D2116030050	(339,00)	30 ÷ 50	64	2.3	14.5	17.0
D2116050070	(399,00)	50 ÷ 70	64	2.3	11.5	14.0

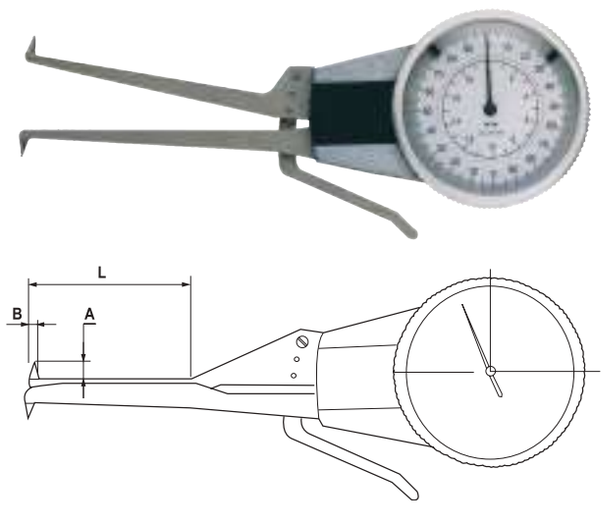
DIAL GAUGES FOR INTERNAL MEASUREMENTS

ALPA

0,01 mm

ART. BB367

0.01mm resolution - arms are specifically engineered to perform hard-to-access locations measurements.



Tech. Code	GR45 Euro	Range mm	L mm	B mm	A mm
D21100515	220,00	5 ÷ 15	20	1.0	1.5
D21101020	234,00	10 ÷ 20	25	1.5	3.0
D21101030	284,00	10 ÷ 30	55	2.0	3.5
D21102030	234,00	20 ÷ 30	30	2.0	6.5
D21103040	234,00	30 ÷ 40	30	2.5	9.0
D21104050	250,38	40 ÷ 50	30	2.5	9.0
D21104060	313,51	40 ÷ 60	80	3.0	8.5

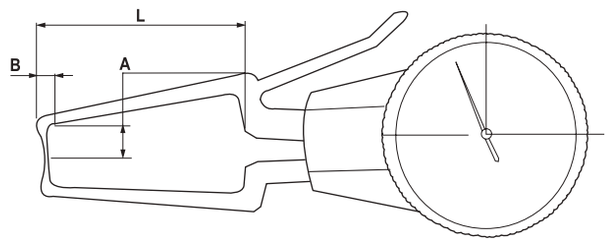
DIAL GAUGES FOR EXTERNAL MEASUREMENTS

ALPA

0,01 mm

ART. BB377

0.01 mm resolution - Ensuring measuring pressure all along the entire measuring range.



Tech. Code	GR45 Euro	Range mm	A mm	B mm	L mm
D21200020	246,00	0 ÷ 20	25	6.5	80
D21202040	273,00	20 ÷ 40	25	6.5	80
D21204060	315,65	40 ÷ 60	25	6.5	80

BORE GAUGES RANGE 18 - 150 MM 0.001 RESOLUTION

TECLOCK

0,001 mm

ART. DA042

Maximum accuracy and reliability for high accuracy tests (Japanese class A), Traditional bore gauge measuring system, Low dilatation frame, Non-conducting material handle. Carbide moving contact, interchangeable anvils with hardened stainless steel sphere, ø 8 mm dial gauge clamping shank.
Accuracy 2 µm, repeatability 2 µm.

Tech. Code	GR45 Euro	Range mm	Measuring depth mm	N° contacts
D22221835	331,00	18 ÷ 35	150	9
D22223560	348,00	35 ÷ 60	150	6
D222250150	410,00	50 ÷ 150	150	11

NOTE: Dial gauge not included

BORE GAUGES FOR BLIND HOLES

TECLOCK

0,001 mm

ART. DA045

The special head allows to inspect bores at 2,5 mm from the bottom.
Maximum accuracy and reliability for high accuracy tests (Japanese class A), traditional bore gauge measuring system, low dilatation frame, non-conducting material handle. Carbide moving contact, interchangeable anvils with hardened stainless steel sphere, ø 8 mm dial gauge clamping shank.
Accuracy 2 µm, repeatability 2 µm.

Tech. Code	GR45 Euro	Range mm	Measuring depth mm	Meas. from the bottom mm
D22241535	400,00	15 ÷ 35	150	2.5
D22243560	420,00	35 ÷ 60	150	2.5
D222450150	470,00	50 ÷ 150	150	2.5

NOTE: Dial gauge not included

BORE GAUGES RANGE 6-18 MM 0.001 RESOLUTION

TECLOCK

0,001 mm

ART. DA040

Maximum accuracy and reliability for high accuracy tests (Japanese class A).
Carbide moving contact, interchangeable anvils with hardened steel sphere (9 pieces).
Low dilatation frame, non-conducting material handle, ø 8 mm dial gauge clamping shank.
Accuracy 2 µm, repeatability 2 µm.

Tech. Code	GR45 Euro	Range mm	Measuring depth mm	N° contacts
D22210610	505,00	6 ÷ 10	50	9
D22211018	456,00	10 ÷ 18	100	9

NOTE: Dial gauge not included

Indivisible package Suggested retail package - Unit price

BORE GAUGES WITH STEEL CONTACTS

ALPA

INOX

ART. DA010A

Supplied without indicator, hardened steel head, heat-insulating handle, Ø 8mm clamping shank for dial gauge.

Tech. Code	GR45 Euro	Range mm	Depth mm	Contacts
D22251535	340,00	15 ÷ 35	175	Steel
D222530100	355,00	30 ÷ 100	250	Steel
D222550160	390,00	50 ÷ 160	250	Steel
D2225100300	635,00	100 ÷ 300	350	Steel
D2225100500	869,00	100 ÷ 500	650	Steel
D2225100500S	760,00	100 ÷ 500	350	Steel

BORE GAUGES WITH CARBIDE CONTACTS

ALPA

INOX

ART. DA010W

Great strength and reliability for heavy duty in the workshops and in testing, transmission granted by the anchor movement.
Carbide moving contact, ø 8 mm clamping shank for dial gauge.

Tech. Code	GR45 Euro	Range mm	Depth mm	Contacts
D22261535	337,00	15 ÷ 35	175	HM
D222630100	373,00	30 ÷ 100	250	HM
D222650160	428,00	50 ÷ 160	250	HM
D2226100300	750,00	100 ÷ 300	350	HM
D2226100500	974,00	100 ÷ 500	650	HM
D2226100500S	946,00	100 ÷ 500	350	HM

DIAL BORE GAUGES

0,01 mm

ART. D2210

Steel heads and contact points, heat-insulating handle, Ø 8mm dial indicator coupling point, 0.01 dial gauge included.

Tech. Code	GR45 Euro	Range mm	Depth mm
D2210018035	120,00	18 ÷ 35	125
D2210035050	100,00	35 ÷ 50	150
D2210050160	120,00	50 ÷ 160	150
D22100160250	150,00	160 ÷ 250	400
D22100250450	166,70	250 ÷ 450	400

BORE GAUGES SET

Mitutoyo

0,001 mm

ART. SERIES 511

Supplied with digital comparator.

Tech. Code	GR47 Euro	Range mm	Single tools mm
D2230018150	(1011,00)	18 ÷ 150	18-35 / 35-50 / 50-150

BORE GAUGES SET

0,01 mm

ART. D2215

Dial holder ø 8mm. 0,01 dial gauge included.

Tech. Code	GR45 Euro	Range mm	Single tools mm
D2215018160	300,00	18 ÷ 160	18-35 / 35-50 / 50-160

DIGITAL INDICATORS IP67

ALPA MEGArod

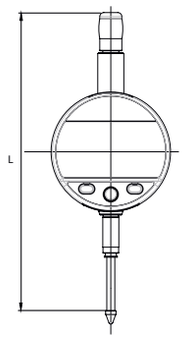
IP 67 | 8 mm | 0,001 mm | ABS | LCD | 3V CR2032 | PDF

ART. CA010

Robust construction, water resistant. IP67 protection according to IEC 60529, even connected. New technology with configurable menus. Broad choice of functions (min/max, delta, tol, factor, preset, auto off, ecc.). Automatic wake-up and sleeping mode, Absolute system. Ø 8 mm stem.

Tech. Code	GR45 Euro	Range mm	Resolution mm	L mm
D23291250001	653,00	0 ÷ 12,5	0.001	138
D2329250001	721,00	0 ÷ 25	0.001	185.6
D2329500001	1244,00	0 ÷ 50	0.001	279.8

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232



MULTIFUNCTION DIGITAL INDICATORS

ALPA MEGArod

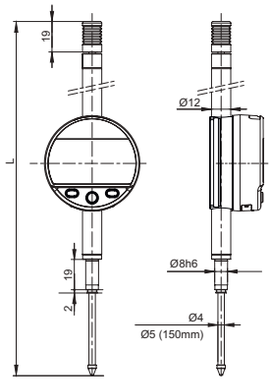
IP 54 | 0,01 mm | 0,001 mm | 8 mm | ABS | LCD | 3V CR2032 | PDF

ART. CA015

Robust frame, water and coolant resistant. New technology with configurable menus. wide selection of features (min/max, delta, tol, factor, preset, auto off, etc.). Automatic wake-up and sleeping mode, Absolute system.
Wide choice of options: Min/Max/Delta, Factor, Preset, Auto Off, etc...

Tech. Code	GR45 Euro	Range mm	Resolution mm	L mm
D23311250001	540,00	0 ÷ 12.5	0.001	122.8
D2331125001	490,00	0 ÷ 12.5	0.01	122.8
D2331250001	670,00	0 ÷ 25	0.001	138.8
D233125001	495,00	0 ÷ 25	0.01	138.8
D2331500001	987,00	0 ÷ 50	0.001	242
D233150001	898,00	0 ÷ 50	0.01	242

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232



DIGITAL DIAL INDICATORS

ALPA MEGArod

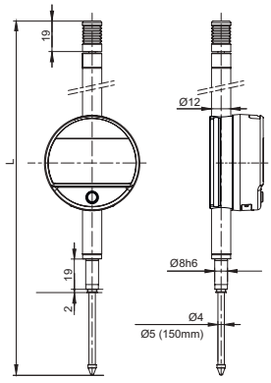
IP 54 | 0,01 mm | 0,001 mm | 8 mm | ABS | LCD | 3V CR2032 | PDF

ART. CA018

Robust construction, water and coolant resistant. New technology with configurable menus. Automatic wake-up and sleeping mode, Absolute system.
ø 8 mm stem.

Tech. Code	GR45 Euro	Range mm	Resolution mm	L mm
D23301250001	453,00	0 ÷ 12,5	0.001	122.7
D2330125001	371,00	0 ÷ 12,5	0.01	122.7
D2330250001	485,00	0 ÷ 25	0.001	148.3
D233025001	420,00	0 ÷ 25	0.01	148.3
D2330500001	920,00	0 ÷ 50	0.001	263
D233050001	830,00	0 ÷ 50	0.01	263

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0002RS232	201,00	Proximity -cable RS232



DIGITAL DIAL INDICATORS

Mitutoyo

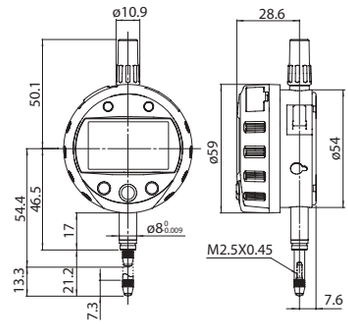
0,001 mm | 8 mm | LCD | 1,5V SR44

ART. SERIES 543

Multifunctional ABSOLUTE Digimatic dial indicators, robust and easy to use. ABSOLUTE scale, which means there is no need to reset the instrument every time you switch it on.
Large font size for easy reading.
330° rotatable display.
Display block function against unwanted use. Spindle Ø 8 mm.

Tech. Code	GR47 Euro	Range mm	Resolution mm
D23562540001	498,00	0 - 25.4	0.001

While stocks last



Indivisible package | Suggested retail package - Unit price

DIGITAL DIAL INDICATORS

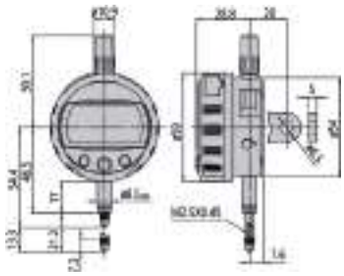
Mitutoyo

0,01 mm | 8 mm | LCD | 1,5V SR44

ART. SERIE 543

ABSOLUTE Digital dial indicators. The zero setting takes place only once with storage until the next battery replacement. Measurement accuracy even at maximum speeds. Large display with easy to read characters. Stem Ø 8 mm.

Tech. Code	GR47 Euro	Range mm	Resolution mm
D2354127001	177,00	0 - 12,7	0,01



DIGITAL DIAL INDICATORS

ALPA 5 Functions

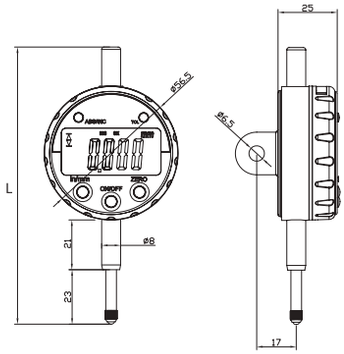
0,01 mm | 0,001 mm | 8 mm | LCD | mm inch | 3V CR2025 | PDF

ART. CA020 - CA021

Digital dial gauge with large display, zero setting at any position, conversion mm/inch, Ø 8 mm stem, ON/OFF button.

Tech. Code	GR45 Euro	Range mm	Resolution mm	L mm
D222912,5	120,00	0 ÷ 12.5	0.01	117
D222912,50,001	145,00	0 ÷ 12.5	0.001	117
D222925	167,00	0 ÷ 25	0.01	117
D222950	295,00	0 ÷ 50	0.01	117

Tech. Code	GR49 Euro	Model
D99133V	5,30	Battery 3V CR 2025



DIGITAL COMPARATORS

Mitutoyo

NEW

0,01 mm | 8 mm | LCD | 1,5V SR44

ART. SERIE 543

Multifunctional digital comparators sturdy and easy to use ABSOLUTE Digimatic. ABSOLUTE scale which allows you not to reset the instrument each time you turn it on. Large font size for easy reading.
New function for programming calibrations. Possibility to customize the keys for setting the comparator.
Display lock function against unwanted use, display rotates 330°, stem Ø 8 mm
New bi-directional S1 data output.

Tech. Code	GR47 Euro	Range mm	Resolution mm
D23471270001	433,00	0 - 12,7	0,0005
D23475080001	824,00	0 - 50,8	0,0005

DIGITAL DIAL INDICATORS

Mitutoyo

IP 66 | 0,001 mm | 8 mm | ABS | LCD | 1,5V SR44

ART. SERIES 543

ABSOLUTE Digimatic dial indicator ID-N. Its slim body design makes it ideal for multi-point measurements. The ABSOLUTE system means there is no need to reset the instrument every time you switch it on. It has excellent resistance against water and dust (IP66) that allows it to be used in the presence of lubricants and coolants. Switchable display orientation provides more mounting options. GO/±NG judgement function

Tech. Code	GR47 Euro	Range mm	Resolution mm
D23481270001	378,00	0 - 12.7	0.001

DIGITAL DIAL INDICATORS

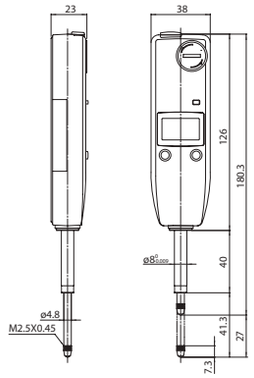
Mitutoyo

0,01 mm | 8 mm | LCD | 1,5V SR44

ART. SERIE 575

ABSOLUTE Digital dial Indicators resistant and easy to use. The zero setting takes place only once with storage until the next battery replacement. Measurement accuracy even at maximum speeds. Large display with easy to read characters. Stem Ø 8 mm.

Tech. Code	GR47 Euro	Range mm	Resolution mm
D2349254001	247,00	0 - 25,4	0,01



DIAL INDICATOR Ø 58

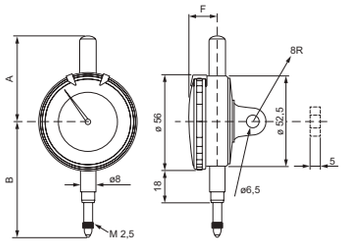
ALPA

0,001 mm | 8 mm

ART. CB026

Analogue dial indicator ø 58 mm. Range 1 mm. Stainless steel stem and hardened steel tip, ø 8 mm stem.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm	F mm
D23611	101,00	1	0.001	42.8	60.7	18.5



DIAL INDICATOR Ø 56

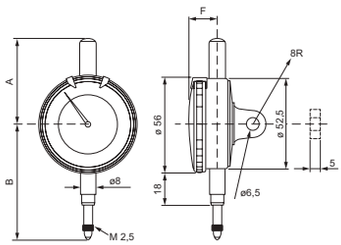
TECLOCK

0,001 mm | 8 mm

ART. CB022

Movement on jewel bearings, aluminium no-glare satin finish on case. Total range 1mm, hardened stainless steel stem. ø 8 mm stem.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm	F mm	G mm	H mm
D23631	166,00	1	0.001	40	62	15.5	20	7.5



DIAL INDICATORS Ø 58

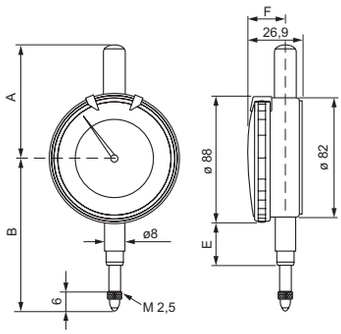
ALPA

0,001 mm | 8 mm

ART. CB023

Shock-proof movement on jeweled bearings, no-glare satin finish on case, hardened stainless steel stem. Accuracy between 3 µm.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm
D23551	78,00	1	0.001	40	59



Indivisible package | Suggested retail package - Unit price

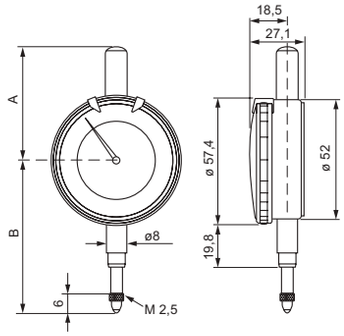
DIAL INDICATORS Ø 58

0,002 mm | 8 mm

ART. CB008

Metal casing and ring nut - tolerance indicators DIN 879, quality movement, Ø 8 mm cylindrical stem.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm
D235912	218,00	12	0.002	42.8	68.5



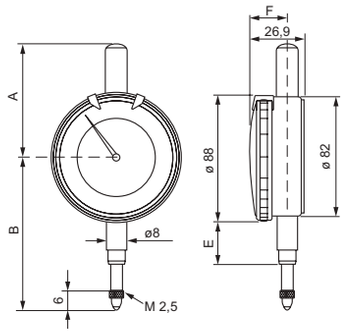
DIAL INDICATORS Ø 40

0,01 mm | 8 mm

ART. CB006

Travel 5 mm. Accuracy according to UNI 4180. Stainless Steel rod and shaft, Ø 8 mm cylindrical stem.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm
D23525	57,00	5	0.01	28.6	48.5



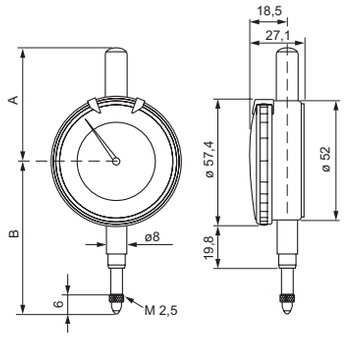
DIAL INDICATORS Ø 58

0,01 mm | 8 mm | SHOCK PROOF

ART. CB005

Shock-proof mechanism (only for D235110), accuracy according to UNI4180, stainless steel rod and shaft, Ø 8mm cylindrical mount.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm
D235110	43,00	10	0.01	42.8	68.5
D235125	87,00	25	0.01	42.8	80.9
D235130	95,00	30	0.01	42.8	80.9



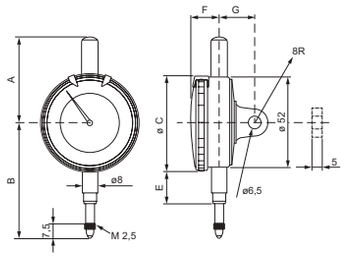
DIAL INDICATORS Ø 60

0,01 mm | 8 mm

ART. CB010

Japan made, Ø 56mm dial, registered mechanism, accuracy according to DIN 878.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm	C mm	E mm	F mm	G mm
D236210	49,00	0 ÷ 10	0.01	48	65	56	18	15.8	20
D236210FP	49,00	0 ÷ 10	0,01	48	65	56	18	15,8	-



DIAL INDICATORS Ø 88

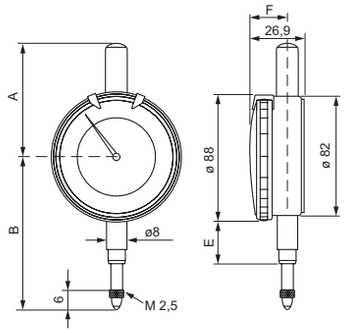
ALPA

0,01 mm | 8 mm

ART. CB007

Movement on jewel bearings, hardened stainless steel stem and spindle. Double dial reading.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm
D235350	207,00	0 ÷ 50	0.01	61.1	130.7



DIAL INDICATORS Ø 80

ALPA

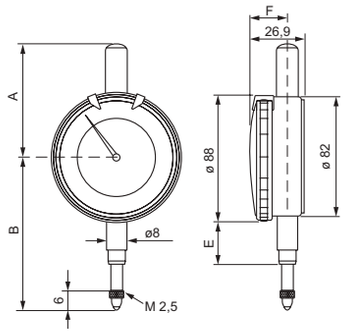
0,01 mm | 8 mm

ART. CB020

Movement on rubies, stainless steel stem and spindle. Ø 8 mm stem.

Tech. Code	GR45 Euro	Excursion mm	Resolution mm	A mm	B mm	D mm	E mm	F mm
D235710	161,00	10	0,01	41	85	52	30	15
D235730	(240,00)	30	0,01	60	110	52	30	15
D235750	(370,00)	50	0,01	105	127	60	70	19
D2357100	(601,00)	100	0,01	164	218	60	24	17

D2357100 cylindrical stem Ø 10 mm h6.



DIAL INDICATORS Ø 40

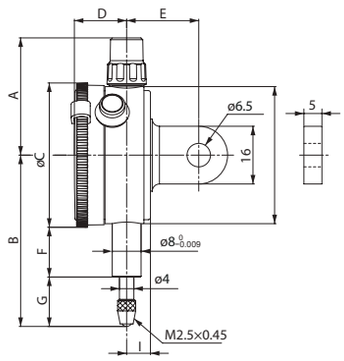
Mitutoyo

0,01 mm | 8 mm

ART. SERIE 1

Compact metric model, dial Ø 40 mm, rod and shank in stainless steel,cylindrical shank Ø 8. Accuracy according to DIN 878

Tech. Code	GR47 Euro	Excursion mm	A mm	B mm	C mm	D mm	F mm	G mm	I mm
D23695	74,00	0 ÷ 5	32,5	47,5	40	14,5	13,8	13,7	6,6



DIAL INDICATORS Ø 57

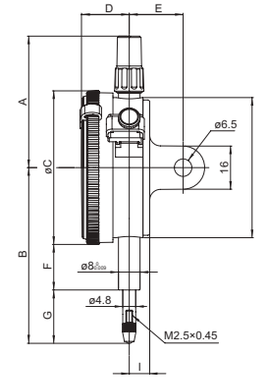
Mitutoyo

0,01 mm | 8 mm

ART. SERIE 2

Standard metric model Ø 57mm,stainless steel stem, cylindrical connection , Ø 8mm. Accuracy according to DIN 878.

Tech. Code	GR47 Euro	Excursion mm	B mm	C mm	D mm	E mm	F mm	G mm	I mm
D236810	46,00	0 ÷ 10	47,2	65,2	57	18,1	20	16,9	19,8



Indivisible package | Suggested retail package - Unit price

ANALOG PRECISION DIAL INDICATORS

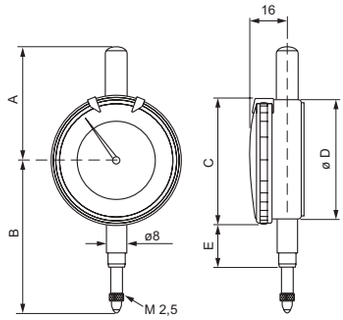
ALPA

0,01 mm | 8 mm

ART. CB014

0.01 mm resolution - Metal casing and ring nut, steel tips. ø 8 mm stem.

Tech. Code	GR45 Euro	Range mm	Diameter mm	A mm	B mm	C mm	D mm	E mm
D237005	35,00	0 ÷ 5	0.01	38.5	49	40	35	13
D237010	30,00	0 ÷ 10	0.01	41	69	56	52.5	15.5
D237025	43,00	0 ÷ 25	0.01	40	85	60	53	17
D237030	70,00	0 ÷ 30	0.01	44.5	90	60	53	18
D237050	100,00	0 ÷ 50	0.01	50	129.5	80	75	30.5



DIAL TEST ACCESSORIES

ALPA

ART. CC070

DIAL TEST ACCESSORIES

Tech. Code	GR45 Euro	Description	Meas. mm
D2312A1	19,00	1. Fixing shank with dovetail clamp	Ø 4
D2312A2	19,00	2. Fixing shank with dovetail clamp	Ø 8
D2312A3	(99,00)	3. Long swivel holder, cylindrical shank and dovetail clamp.	Ø 8 x 90
D2312A4	28,00	4. Holding shoulder for perpendicular models with cylindrical shank. Clamping point for fixing shank and dovetail clamp.	Ø 8 x 25 Ø 4
D2312A5	(180,00)	5. Long swivel holder, cylindrical shank, dovetail clamp and fine adjustment.	Ø 8 x 125

PRECISION LEVER TEST INDICATORS

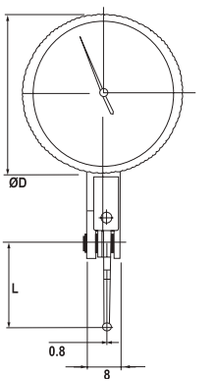
ALPA MEGAtast

0,01 mm | 0,002 mm | PDF

ART. CB050

Swiss made high quality lever dial indicator (according to DIN 2270).
Automatic reversal of the stylus direction of rotation. Rotable bezel for zero setting.
High precision movement mounted on 6 ruby bearings. Carbide ball stylus Ø 2 mm, adjustable within 270° and interchangeable mounted on micro ball bearings. 1 dove tail 8mm Ø.

Tech. Code	GR45 Euro	Excursion mm	Ø D mm	Resolution mm	L mm
D2290022812	153,00	0.2	27.4	0.002	12
D2290023712	189,00	0.2	37	0.002	12
D2290052836	173,00	0.5	27.4	0.01	36
D2290053736	212,00	0.5	37	0.01	36
D2290082812	142,00	0.8	27.4	0.01	12
D2290083712	160,00	0.8	37	0.01	12



LEVER TEST INDICATORS

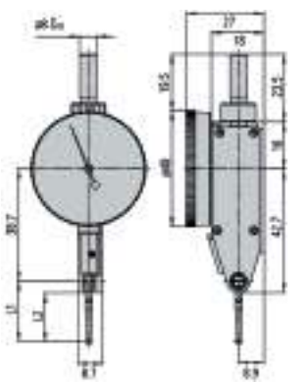
Mitutoyo

0,01 mm

ART. SERIE 513

Quality lever test Indicators (in compliance with the DIN 2270 standard). The structure is without friction that allows automatic reversal of the stylus direction of rotation. The roating bevel and crystal, built in a single piece increase resistance to water and dust. Anti-reflective crystal with anti-scratch coating. Rotable bezel for zero setting. High precision movement mounted on rubies and bearings, gears and pinions that guarantee fluid movements, silent, rapid and precise measurements. Ø 2mm hard metal sphere. Dovetail connection Ø 8mm

Tech. Code	GR47 Euro	Excursion mm	Measurement force N	Ø mm	Resolution mm	L1 mm	L2 mm
D2320084021	102,00	0,8	0,01 ÷ 0,3	40	0,01	20,9	17,4



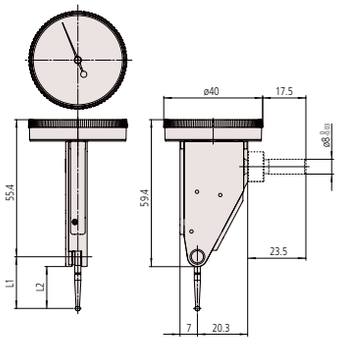
VERTICAL LEVER TEST INDICATORS

Mitutoyo

0,01 mm

ART. SERIE 513

Quality lever test Indicators (in compliance with the DIN 2270 standard). The structure is without friction that allows automatic reversal of the stylus direction of rotation. The roating bevel and crystal, built in a single piece increase resistance to water and dust. Anti-reflective crystal with anti-scratch coating. Rotable bezel for zero setting. High precision movement mounted on rubies and bearings, gears and pinions that guarantee fluid movements, silent, rapid and precise measurements. Ø 2mm hard metal sphere. Dovetail connection Ø 8mm.



Tech. Code	GR47 Euro	Excursion mm	Measurement force N	Diameter mm	Resolution mm	L1 mm	L2 mm
D2325084021	126,00	0,8	0,01 ÷ 0,3	40	0,01	20,9	17,4

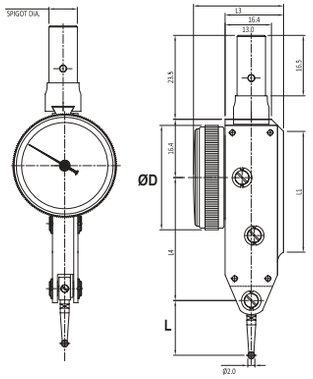
LEVER TEST INDICATORS

ALPA

0,01 mm | 0,002 mm | PDF

ART. CB052

High quality and reliability dial lever test indicator, swiss made components (according to DIN 2270). Rotable bezel for zero setting. Dove tail snug. Carbide ball stylus Ø 2 mm.



Tech. Code	GR45 Euro	Excursion mm	Ø D mm	Resolution mm	L mm
D2316022913	159,00	0.2	29	0.002	13
D2316023813	165,00	0.2	38	0.002	13
D2316082912	97,00	0.8	29	0.01	12
D2316082934	136,00	0.8	29	0.01	34
D2316083812	112,00	0.8	38	0.01	12
D2316083834	156,00	0.8	38	0.01	34

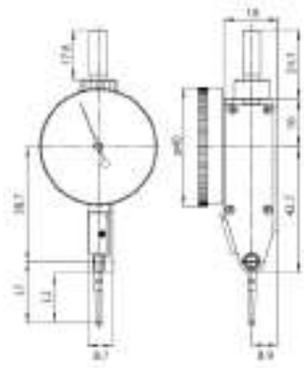
LEVER TEST INDICATORS

Mitutoyo

0,01 mm

ART. SERIES 513

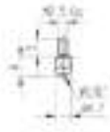
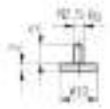
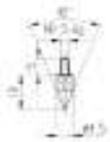
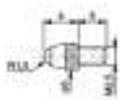
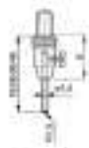
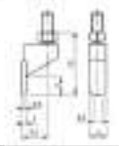
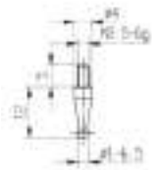
Drastically improved durability, sensitivity and visibility. The flat glare-free dial face allows the graduations to be read easily. The O-ring seal on the bezel has provides a smooth rotation and prevents dust and oil from getting into the instrument. Multi-layer scratch resistant coating on the dial

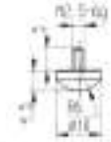
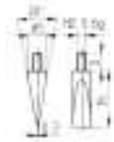
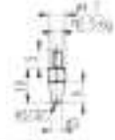
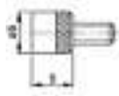
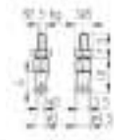
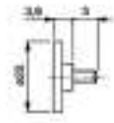
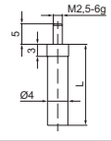


Tech. Code	GR47 Euro	Range mm	Measuring force N	Ø mm	Resolution mm	L1 mm	L2 mm
D232114045	167,00	1	0.01-0.2	40	0.01	44.5	41

Indivisible package Suggested retail package - Unit price

INTERCHANGEABLE MEASUREMENT TIPS

Tech. Code	GR45 Euro	Description	
D2388010	3,00	Ball point tips Steel M2,5 - 6g	
D2388012AC D2388012MD	8,00 86,00	Flat tips Steel M2,5 - 6g Flat tips HM M2,5 - 6g	
D2388016	12,00	Conical tips 45° Steel M2,5 - 6g	
D2388018	17,00	Spherical probe tips Ruby M2,5 - 6g	
D2388020	13,00	Cylindrical tips Ø 1,5mm M2,5 - 6g	
D2388022	56,00	Cylindrical rounded tips R 1,5mm M2,5 - 6g	
D2388024	12,00	Conical tips M2,5 - 6g	
D2388026	6,00	Spherical tips 16 mm length - M2,5 - 6g	
D2388028	125,00	Tips 90° M2,5 - 6g	
D2388030	139,00	Offset contact tips HM M2,5 - 6g	
D2388054D1 D2388054D1,5 D2388054D2 D2388054D2,5 D2388054D3 D2388054D3,5 D2388054D4 D2388054D4,5 D2388054D5 D2388054D5,5 D2388054D6 D2388054D6,5	17,00	Spherical tips M2,5 - 6g Series from Ø 1 - 6,5 Progression 0,5	

Tech. Code	GR45 Euro	Description	
D2388032	52,00	Angular contact tips M2,5 - 6g - ball ø 2mm	
D2388034	12,00	Spherical tips with bent contact point M2,5 - 6g	
D2388038	17,00	Revolving blade tips	
D2388040	6,00	Blade tips profile Ø 3mm M2,5 - 6g	
D2388042	10,00	Flat tips Ø 4,5mm M2,5 - 6g	
D2388044AC D2388044MD	6,00 46,00	Cylindrical Steel tips M2,5 - 6g Cylindrical HM tips M2,5 - 6g	
D2388048	23,00	Cylindrical tips M2,5 - 6g	
D2388050	148,00	Roller point length 8,7mm M2,5 - 6g	
D2388052	37,00	Flat tips Ø 20mm M2,5 - 6g	
D2388058L10 D2388058L15 D2388058L20 D2388058L30 D2388058L40 D2388058L50	10,00	Steel extensions M2,5 - 6g L 10, 15, 20, 30, 40, 50 mm	
D2388056D7 D2388056D7,5 D2388056D8 D2388056D8,5 D2388056D9 D2388056D9,5 D2388056D10 D2388056D10,5 D2388056D11	20,00	Spherical tips M2,5 - 6g Series from Ø 7 - 11 Progression 0,5	

SET OF DEPTH EXTENSIONS AND BASE FOR DIAL INDICATORS

ALPA

ART. D2390

Hardened chromed steel and lapped measuring surface, complete with extension units.

Tech. Code	GR45 Euro	Extensions mm	Base mm
D2390SET1	153,00	10/20/30/40/50/60/70/80/90	80 x 16
D2390SET2	71,00	Only base	100 x 19

MAGNETIC DIAL INDICATOR STANDS MB-B

KANETEC

ART. CD010

Featuring a superior quality pure-cobalt magnetic base, it's a highly dependable KANATEC Japanese product, designed for heavy-duty by a leader in the marketplace.
Magnetic base with V-groove, chromed arm, clamping shaft ø 8 mm.

Tech. Code	GR45 Euro	Magnetic force kg	Column dimension mm	Arm dimension mm	Micrometrical adjustment	Base mm
D250580160	72,00	80	12 x 160	10 x 150	No	60 x 50 x 55

MAGNETIC DIAL INDICATOR STANDS MB-BV

KANETEC

ART. CD010

Featuring a superior quality pure-cobalt magnetic base, it's a highly dependable KANATEC Japanese product, designed for heavy-duty by a leader in the marketplace.
Magnetic base with V-groove, chromed arm, clamping shaft ø 8 mm.

Tech. Code	GR45 Euro	Magnetic force kg	Column dimension mm	Arm dimension mm	Micrometrical adjustment	Base mm
D250680180	(96,00)	80	12 x 180	10 x 150	Yes	60 x 50 x 55

MAGNETIC DIAL INDICATOR STANDS MB-F2

KANETEC

ART. CD010

Featuring a superior quality pure-cobalt magnetic base, it's a highly dependable KANATEC Japanese product, designed for heavy-duty by a leader in the marketplace.
Magnetic base with V-groove, chromed arm, clamping shaft ø 8 mm.

Tech. Code	GR45 Euro	Magnetic force kg	Column dimension mm	Arm dimension mm	Micrometrical adjustment	Base mm
D250780194	164,00	80	12 x 194	10 x 150	No	60x50x55

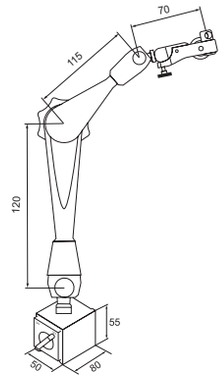
Indivisible package Suggested retail package - Unit price

FLEXIBLE MAGNETIC DIAL INDICATOR STANDS

ART. CD016

Flexible anvils, centre locking device and micrometric adjustment, magnetic base with flat and V-shaped, rectified surfaces, ø 8 mm dial gauge coupling.

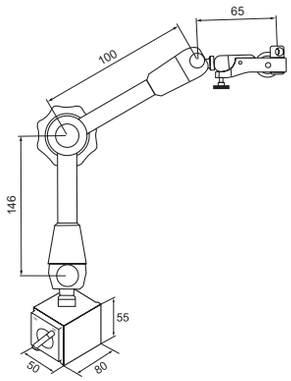
Tech. Code	GR45 Euro	Locking	Base mm	Magnetic force kg	Max. extension mm
D2512MEC100	228,00	Mechanical	80 x 50 x 55	100	340
D2512R100	72,00	Only base	80 x 50 x 55	100	-



ART. CD018

Flexible anvils, centre locking device and micrometric adjustment, magnetic base with flat and V-shaped, rectified surfaces, ø 8 mm dial gauge coupling.

Tech. Code	GR45 Euro	Locking	Base mm	Magnetic force kg	Max. extension mm
D2513IDR100	220,00	Hydraulic	80 x 50 x 55	100	340
D2512R100	72,00	Only base	80 x 50 x 55	100	-

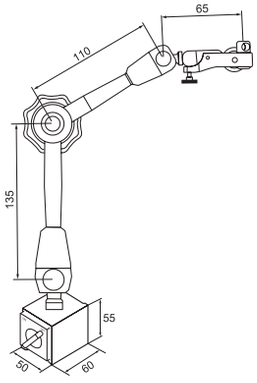


JOINTED MAGNETIC KEY SWITCH HOLDER

ART. CD021

Flexible anvils, centre locking device and micrometric adjustment, magnetic base with flat and V-shaped, rectified surfaces, ø 8 mm dial gauge coupling.

Tech. Code	GR45 Euro	Locking	Base mm	Magnetic force kg	Max. extension mm
D2516MEC80	114,00	Mechanical	60 x 50 x 55	80	340
D2516R80	67,00	Solo base	60 x 50 x 55	80	-



EXTENDED MAGNETIC DIAL INDICATOR STANDS

ART. CD022

Arms 500x500 mm, gauge holder ø 8 mm, magnetic base 100 Kg, fine adjustment device.

Tech. Code	GR45 Euro	Base mm	Magnetic force kg	Max. extension mm
D2522MECC500	(257,00)	80 x 50 x 55	100	1000

MAGNETIC DIAL INDICATOR STANDS

ALPA

ART. CD022

MAGNETIC DIAL INDICATOR STANDS

Tech. Code	GR45 Euro	Base mm	Magnetic force kg	Max. extension mm
D2523MECC100	(164,00)	80 x 50 x 55	100	490

MAGNETIC DIAL GAUGE STANDS

ALPA

ART. D2520

Magnetic base with flat and V-shaped surfaces and ø 8 mm dial gauge coupling.

Tech. Code	GR45 Euro	Base mm	Magnetic force kg	Max. extension mm
D2520MEC60	25,00	50 x 65 x 70	60	340

MEASURING STANDS

ALPA

ART. D2530

Painted cast iron base and dial gauge locking, fine grinded column and plate, Ø 8 mm dial gauge coupling.

Tech. Code	GR45 Euro	Base mm	Column h mm	Arm mm
D2530070200	(178,00)	Ø 78	230	75

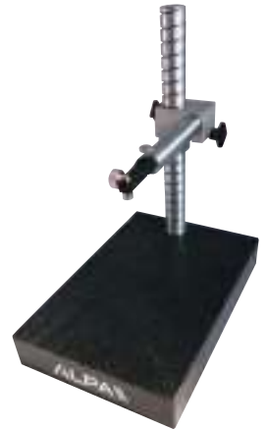
Indivisible package Suggested retail package - Unit price

MEASURING STANDS WITH GRANITE TABLE

ART. CD040

DIN 876/00 compliant flatness and accuracy, sturdy, highly stable structure, hardened and grinded stainless steel stand column and fine-lapped surface, Ø 8 mm dial gauge coupling.

Tech. Code	GR45 Euro	Base mm	Column Ø x h mm	Column	Arm mm
D253520	(366,00)	300 x 200	30 x 300	Chrome-plated	Useful 180 - Ø 25 with micrometric screw
D253530	(225,00)	250 x 160	25 x 200	Nickel-plated	Useful 75 without micrometric screw
D253540	(450,00)	300 x 200	30 x 300	Chrome-plated and threaded	Useful 180 - Ø 25 with micrometric screw

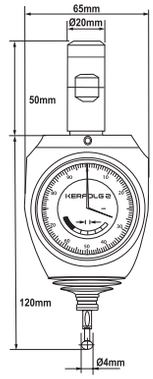


ANALOG 3D DIAL TASTERS IP67

ART. D3006

Highly accurate and versatile instrument for workstations, milling machines and electrical discharge machines. Engineered to make it easy to position the axes of the mandrel precisely and to quickly determine the "zero" point of the workpiece. Works on all axes (x - y - z). The indicator always moves in the same direction, displaying the distance from the workpiece without having to make any calculations. Easy to read dial, sturdy structure; it can be stored next to the machine along with other tools.

Tech. Code	GR49 Euro	Indication accuracy mm	Shank Ø mm
D30061	364,00	0.01	20

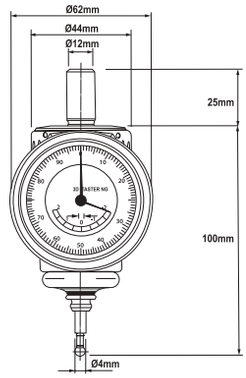


ANALOG 3D TASTERS IP67

ART. 3D NEW GENERATION

3D UNIVERSAL technical features, enhanced mechanics, compact design.

Tech. Code	GR49 Euro	Indication accuracy mm	Shank Ø mm
D30161	364,00	0,01	12

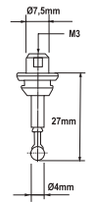


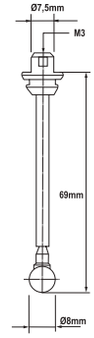
PROBE TIPS SPARE PARTS

ART. 80362 - 80363

PROBE TIPS SPARE PARTS
Compatible with D3006 and D3016

Tech. Code	GR49 Euro	Ø mm	Length mm	Material
D30184	39,00	4	27	Ceramic
D30188	69,00	8	69	Ceramic

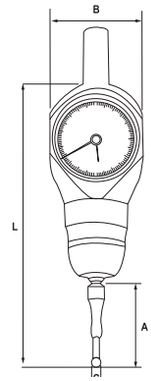




ANALOG 3D DIAL TASTERS

ART. P00163D012

Tschorn 3D-taster stands out for its sturdy structure and engaging compact design. Its unique mechanism ensures great versatility when accurate measuring of a work piece is required.
Measuring of all axle directions (X / Y / Z) by simple reading on the indicator itself. The "0" indicator allows for the vertical axle to exactly match the work piece edge. Indication accuracy 0,01 mm.



Tech. Code	GR49 Euro	A mm	B mm	C mm	L mm	Shank Ø mm
D30172	356,00	27	44	3	118	12

PROBE TIPS - SPARE PARTS

ART. P00163D003-6

PROBE TIPS - SPARE PARTS

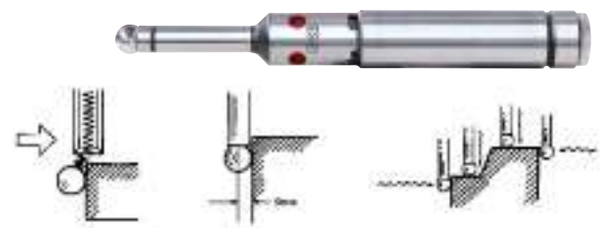
Tech. Code	GR49 Euro	Sup. art.	Material	Ø x L mm
D30193C	38,00	P00163C003	Ceramic	3 x 27
D30196C	(69,00)	P00163C006	Ceramic	6 x 62

ELECTRONIC EDGE FINDERS

1,5V SR44

ART. D3020

LED light and audible electronic centering devices, LED-lit 360° display with audible beep allowing centering or alignment of a workpiece with tool holder axis and height and depth measurements, specifically suitable for "zero" start point search on machine tools, 1.5V SUM5 R1 micro batteries (included).



Tech. Code	GR45 Euro	Shank Ø mm	Contact ball Ø mm
D30201	145,00	20	10
D3020R1	9,00	Spring	-

ELECTRONIC EDGE FINDERS LUMINOUS

ART. D3023

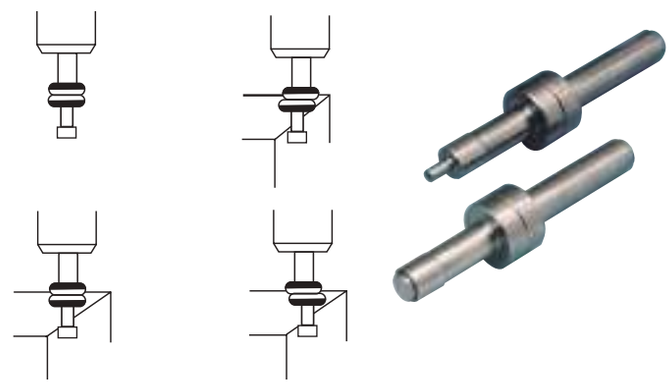
Accurate measurement with probing accuracy of less than 5µm on all three axes. 360 ° bright display. 23A 12V battery power supply (included).

Tech. Code	GR45 Euro	Shank Ø mm	Contact ball Ø mm
D30231	242,00	20	10

HIGH ACCURACY MECHANICAL EDGE FINDERS

ART. D3021

High precision visual centering system (+/- 0,005) (through lower face movement upon workpiece contact), suitable for typical centering operations (recommended speed 600/800 rpm).



Tech. Code	GR49 Euro	Shank Ø mm	Contact ball Ø mm
D30211	57,50	10	10
D30212	62,40	10	10 / 4
D3021R1	12,40	Molla	Spare part Ø 10
D3021R2	12,40	Molla	Spare part Ø 10/4

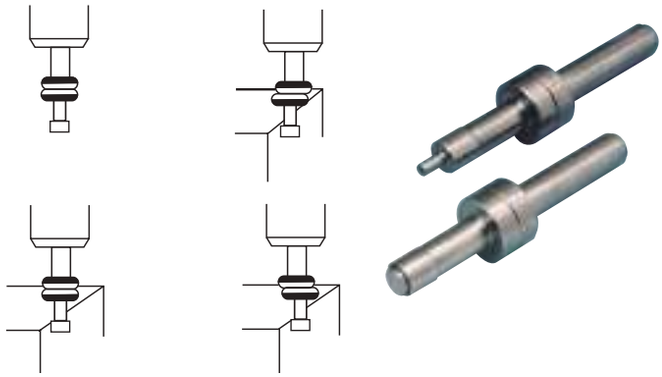
Indivisible package Suggested retail package - Unit price

MECHANICAL EDGE FINDERS

ART. D3025

Simple and fast visual centering system (through lower face movement upon workpiece contact), suitable for typical centering operations (recommended speed 400/600 rpm).

Tech. Code	GR45 Euro	Shank Ø mm	Contact ball Ø mm
D30251	21,30	10	10
D30252	22,00	10	10 / 4
D3020R1	9,00	Spring	-



ZERO SETTERS WITH LED

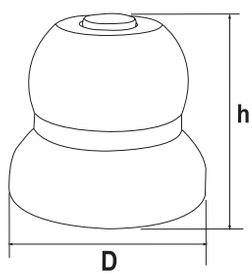
1,5V SR44

ART. D3030

A fast and accurate device for zero setting procedures of tools on standard and CNC machines. After positioning the setting instrument onto the machine bench, approach tool until it lightly touches the plate, a luminous LED will be turned on upon all throughout its range. Chromed steel stand with magnetic insert block for horizontal-position.

Tech. Code	GR49 Euro	D mm	h mm	Tolerance mm
D30301	174,30	55	50	± 0.005

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44



ZERO SETTERS

ALPA

0,01 mm

ART. HA200

Fast and accurate gauge to zero-set tools on traditional and CNC machines.
Put the gauge on machine plane, approach with the tool and push the plate until dial gauge goes to the preset value. Hardened aluminium construction, with hardened stainless steel plate, reading 0,01 mm, magnetic base for horizontal use, ± 0.005 mm tolerance on zero-set height.

Tech. Code	GR45 Euro	Excursion mm	Zero-set mm
D31351	200,00	5	50
D31352	229,00	5	100

BLACK GRANITE INSPECTION PLATES WITH STAND

ART. HA122

DIN 876/0 compliant flatness and accuracy. Non-magnetic and electrically insulated black granite allows a higher accuracy on surface finishing and internal stress absence.
Painted recangular section structure made from stainless steel, designed for both cast iron and granite surfaces, adjustable swing brake leveling foot/tips system.

Tech. Code	GR45 Euro	Dimension mm	Weight kg
D3205630	(675,00)	630 x 400 x 80	92
D32051000	(1300,00)	1000 x 630 x 140	315

GRANITE INSPECTION PLATES

ART. HA120

DIN 876/0 compliant flatness and accuracy. Non-magnetic and electrically insulated black granite allows a higher accuracy on surface finishing and internal stress absence.

Tech. Code	GR45 Euro	Dimension mm	Accuracy ± µm	Weight kg
D3200250	(87,78)	250 x 160 x 40	3,0	5
D3200300	(119,00)	300 x 200 x 50	3.0	9
D3200400	(201,00)	400 x 400 x 60	3.0	32
D3200630	(284,00)	630 x 400 x 80	4.0	62
D3200800	(445,00)	800 x 500 x 100	4.0	130
D32001000	(820,00)	1000 x 630 x 140	4.0	260
D32001200	(1413,00)	1200 x 800 x 160	5.0	460
D32001600	(2900,16)	1600 x 1000 x 180	6.0	900
D32002000	(3504,00)	2000 x 1000 x 220	6.0	1300

MORE SIZES AVAILABLE UPON REQUEST

IRON STANDS FOR INSPECTION PLATES

ART. HA125

Steel structure with painted rectangular section, suitable for both cast iron and granite plates,
adjustment levelling and anti-fitting tips.
On request drawer with lock.

Tech. Code	GR45 Euro	Dimension mm	Weight kg
D3210600*	(394,00)	600 x 400	30
D32101000	(489,00)	1000 x 630	55
D32101200	(551,00)	1200 x 800	80
D32101500	(780,00)	1500 x 1000	100
D32102000	(810,00)	2000 x 1000	120

*** Suitable for 630x400x80 e 800x500x100 surfaces**

ENGINEER'S BLUE

ART. HA154

Ideal for locating high areas while scraping or components contact points so to obtain assembly accuracy. It operates by having the reference surface, which is blue, contacting the surface to be measured; the areas to be scraped will be highlighted in blue. Will not dry out nor harden, long service life.

Tech. Code	GR45 Euro	Weight g
D3250200	67,00	200

Indivisible package Suggested retail package - Unit price

DETERGENT FOR LAPPED SURFACES

ART. HA155

Special liquid detergent for lapped surfaces.

Tech. Code	GR45 Euro	Package	Quantity L
D3252500	19,00	Jar	0,5
D32525KG	67,00	Can	5

POLISHING OIL FOR GRANITE

ART. BLACK LIGHT

BLACK LIGHT is a product studied and formulated to protect, revive, preserve and polish the floors in diabase granite.
The product can be used on any granite surface even outside controlled environments, therefore usable in any metalworking work shops.
BLACK LIGHT contains only chemically Improved components of vegetable origin to maximize the protective, revitalizing and product safety features.
The product, being formulated only with compounds having plant origin, is without a safety data sheet, therefore is not dangerous for humans.
The product does not contain substances classified as dangerous for the health of the environment in accordance with the provisions of the regulation of the (UE) 1272/2008 (CLP) (and subsequent amendments and adjustments) in quantities that require the declaration.

Tech. Code	GR45 Euro	Package	Quantity ml
D32570500	13,00	Jar	500
D32575000	67,00	Can	5000

UNIVERSAL DIGITAL BEVEL PROTRACTORS

LCD | INOX | 3V CR2032 | PDF

ART. EA012

30" and 5/1000° resolution - ON/OFF button, zero setting at any position, 360° / 180° x 2 / 90° x 4 display mode, micrometric adjustment, adjustable square for undersquare and small angles.

Tech. Code	GR45 Euro	Rod mm
D4110300	465,00	300

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

BEVEL PROTRACTORS WITH MAGNIFIER

INOX

ART. EB022

5' arc resolution - satin-chromed vernier gauge, micrometric adjustment, adjustable square for undersquare and small angles.

Tech. Code	GR45 Euro	Rod mm
D4115300	90,00	200 - 300

BEVEL PROTRACTORS

INOX

ART. D4120

5' arc resolution - satin-chromed vernier gauge.

Tech. Code	GR45 Euro	Rod mm
D4120300	58,30	300

DIGITAL UNIVERSAL PROTRACTORS WITH SPIRIT LEVEL

LCD | 3V CR2032

ART. D4130

0.05° resolution - aluminium body, ON/OFF button.

Tech. Code	GR45 Euro	Range	Accuracy	Dimension mm
D4130360	(90,00)	360°	± 0,2°	254 x 50 x 36

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

WORKSHOP ALTIMETER

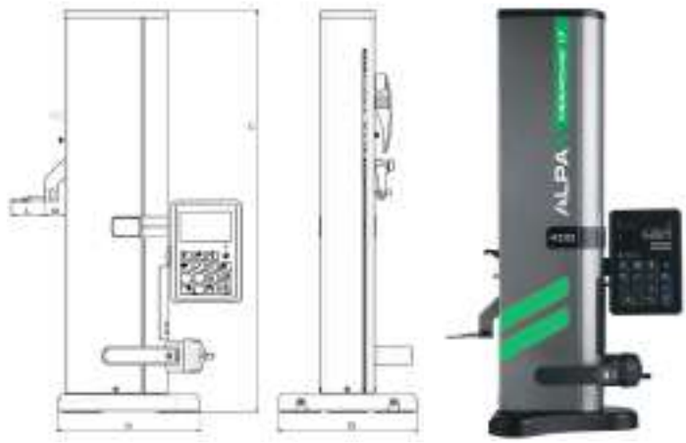
ALPA MEGAtower LT

0,001 mm | PDF

ART. GA040

Resolution 0.001 mm.
Measurement force N 0.75 ÷ 1.5. Swiss-built altimeter, sturdy, accurate and reliable. High contrast and easy to use display with RS232 and USB interface. Supplied with Ø 4 mm probe in ruby, calibration sample and protective sheet.

Functionality:
- Measuring range 400 mm
- Resolution 0.001 mm
- Repeatability 3 µm (Ø: 5)
- Measurement force N 0.75 ÷ 1.5
- Extremely easy to use



Tech. Code	GR46 Euro	Range mm	A mm	B mm	C mm
D4100400	4010,00	400	278	270	780

HEIGHT GAUGES IP67

ALPA MEGAtower

IP 67 | 0,001 mm | LCD | PDF

ART. GA050

Totally made in Switzerland, IP67 enclosed, it guarantees high durability, accuracy and repeatability.
The easy to use display provides directly accessible functions.
This feature allows everyone an easy and quick handling.
To make easier the displacement all along measuring table, it is equipped with air cushion.

Functionality:
- Measuring ranges 400 and 700 mm
- Resolution 0.001 mm
- Repeatability 2 (Ø : 4)
- Measuring force N 0.75 ÷ 1.5 mm
- Extremely easy to use
- Electronically adjustable measuring force
- Autonomy: 40 h (lithium-ion batteries)
- RS232 et USB interfaces

Supplied with:
- Insert with ruby ball Ø4 mm L90 mm (D4206RB490)
- Calibration report on master
- Calibration report on measuring rule
- Calibration report on orthogonality
- Protection cover

Tech. Code	GR46 Euro	Measuring range with extension mm	Max error µm	Perpendicularity error µm
D4200400	5552,00	508	5	10
D4200700	6000,00	812	5	15

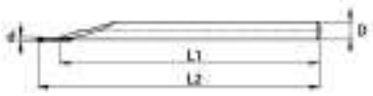
Tech. Code	GR45 Euro	MODEL
D4201USB	33,00	USB - Mini cable

Indivisible package Suggested retail package - Unit price

PROBES WITH HM SPHERE

ART. GA052

PROBES WITH HM SPHERE

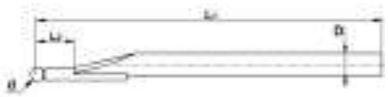


Tech. Code	GR45 Euro	d mm	D mm	L1 mm	L2 mm
D4203MD175	(457,00)	1	8	70	75
D4203MD280	(467,00)	2	8	70	80
D4203MD2130	(769,00)	2	8	120	130

PROBES WITH RUBY SPHERE

ART. GA052

PROBES WITH RUBY SPHERE



Tech. Code	GR45 Euro	d Ø mm	D mm	L1 mm	L2 mm
D4206RB490	(257,00)	4	8	90	14
D4206RB5129	(350,00)	5	8	129	14

PROBE HOLDER EXTENSIONS

ART. GA051

PROBE HOLDER EXTENSIONS

Tech. Code	GR45 Euro	Ø mm	Material	Length mm
D4202PROL	(1690,70)	8	Ceramic	330

ACCESSORIES FOR HEIGHT GAUGES - KIT 7 PIECES

ALPA

ART. GA052

Equipment:	Pieces:
- Measuring insert with carbide ball Ø4mm L=80mm	1
- Insert holder 90° Ø4mm L=65mm	1
- Insert holder with pin Ø2mm L=97mm	1
- Measutring insert holder L=124mm M2.5	1
- Measuring insert with ball contact Ø2mm M2.5	1
- Disc shaped measuring insert Ø18mm	1
- Hexagonal wrenches 2.5mm	1

Tech. Code	GR45 Euro	Pieces
D4204KIT7	(881,10)	7

ACCESSORIES FOR HEIGHT GAUGES - KIT 16 PIECES

ALPA

ART. GA052

Equipment:	Pieces:
- Measuring insert with carbide ball Ø4mm	1
- Measuring insert with carbide ball Ø4mm L=80mm	1
- Measuring insert with carbide pin 1mm L=78mm	1
- Swivel holder Ø8mm and Ø4mm L=150mm	1
- Insert holder 90° Ø4mm L=65mm	1
- Insert holder with pin Ø2mm L=97mm	1
- Measuring insert holder L=95mm M2.5	1
- Measuring insert holder L=124mm M2.5	1
- Measuring insert holder L=200mm M2.5	1
- Measuring insert with ball contact Ø2mm M2.5	1
- Disc shaped insert Ø18mm	1
- Measuring insert with ball M1.4 1mm	1
- Measuring insert with ball M1.4 2mm	1
- Measuring insert with ball M1.4 3mm	1
- Wrench open hand 1.5mm	1
- Hexagonal wrenches 2.5mm	1

Tech. Code	GR45 Euro	Pieces
D4207KIT16	(2143,90)	16

ACCESSORIES FOR HEIGHT GAUGES - KIT 20 PIECES

ALPA

ART. GA052

Equipment:	Pieces:
- Measuring insert with ball contact Ø2mm M2.5	1
- Measuring insert with 4 pins M2.5 Ø1.5mm	1
- Disc shaped insert Ø7.7mm	1
- Disc shaped insert Ø11.5mm	1
- Corner insert 1mm	1
- Measuring insert with carbide ball M1.4 1mm	1
- Measuring insert with carbide ball M1.4 2mm	1
- Measuring insert with carbide ball M1.4 3mm	1
- Holder M2.5 measuring insert for M2.5 and M1.4	1
- Measuring insert holder L=80mm M2.5	1
- Measuring insert holder with pin Ø1mm x 10mm	1
- Measuring insert with ruby ball Ø2mm	1
- Measuring insert with holder Ø1mm	1
- Knife edge insert L=88mm	1
- Measuring insert holder Ø4mm	1
- Swivel insert holder Ø8mm e Ø4mm	1
- Wrench open hand 1.5mm	1
- Hexagonal wrench insert 1.5mm	1
- Hexagonal wrench insert 2.5mm	1
- Plastic hose with protective cap Ø12mm L=50mm	1

Tech. Code	GR45 Euro	Pieces
D4208KIT20	(2561,00)	20

Indivisible package Suggested retail package - Unit price

HEIGHT GAUGES WITH 2D ELECTRONIC

IP 67 | 0,0001 mm | LCD

ART. D4215

Totally manufactured in Switzerland extremely accurate and reliable.
Manual and two speed motorized handlings integrated into the same control.
2D New electronic with interface touch-screen intuitive easy and simple to use.
Air cushion for easy displacement.

Functionality:
- Measuring ranges: 400 - 700 - 1100 mm
- Resolution: 0,0001 mm
- Repeatability:pm 1 (Ø : 2)
- Measuring force: N 0,75 ÷ 1,5
- Extremely easy to use
- Electronically adjustable measuring force
- Autonomy 12 ore (battery lithium-ion)
- Interfaces RS232 e USB

Supplied with:
- Probe in ruby Ø4 mm L90 mm (D4206RB490)
- RDT on master
- RDT on measurement line
- RDT on ortogonlità
- Protective cover

Tech. Code	GR50 Euro	Measuring range extended mm	Max error mm	Perpendicularity error mm
D4215400	(-)	719	2 + L/400	5
D4215700	(-)	1023	2 + L/400	8
D42151100	(-)	1422	2 + L/400	11

AVAILABILITY LIMITED TO CERTAIN COUNTRIES ONLY

DOUBLE COLUMN DIGITAL HEIGHT GAUGES

ALPA Exacto

IP 54 | 0,01 mm | LCD | INOX | 3V CR2032

ART. GA075

0.01mm resolution - Rectified cast iron base on 4 support points.
Polished chrome steel columns, supplied with squared stainless steel scriber adjustable by using housed key.
Silvac electronics system provided with preset and RS232 data output.
Rapid movement button.

Tech. Code	GR45 Euro	Range mm
D4205300	(1199,00)	0 ÷ 300
D4205600	(1496,00)	0 ÷ 600
D42051000	(1802,00)	0 ÷ 1000
D4205AC	(315,00)	Dial and probe snug

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032
D0003USB	261,00	Cable Opto - USB
D0003RS232	175,00	Cable Opto - RS232

DOUBLE COLUMN DIGITAL HEIGHT GAUGES

Mitutoyo

0,01 mm | 0,005 mm | LCD | INOX | 1,5V SR44

ART. SERIE 192

Resolution 0.01 / 0.005 mm - Digital height guages, high accuracy performance but simple to use. The double column structure ensures high measurement accuracy. Supplied with micrometri adjustment , carbide tip scriber.
Data Output.

Tech. Code	GR47 Euro	Range mm
D4209300	1030,00	0 ÷ 300
D4209600	1414,00	0 ÷ 600

DIGITAL HEIGHT GAUGES

ALPA

0,01 mm | LCD | INOX | mm inch | 1,5V SR44

ART. GA080

0.01mm resolution - Satin-chromed scale, ON/OFF button, zero-setting at any position, incremental zero setting and restoration of absolute scale (ABS), last displayed value hold feature (HOLD mode), micrometric adjustment, marker with HM tip. Suitable for marking and height testing procedures.

Tech. Code	GR45 Euro	Range mm
D4210300	271,00	0 ÷ 300
D4210500	420,00	0 ÷ 500
D42101000	1100,00	0 ÷ 1000
D42101500	1780,00	0 ÷ 1500
D4210AC	55,00	Gauge holder coupling
D4220AT	52,00	Sensor coupling

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

DIGITAL HEIGHT GAUGES WITH CHROMED STEEL CASING

ALPA

0,01 mm | LCD | INOX | mm inch | 1,5V SR44

ART. GA095

0.01mm resolution - Chromed steel casing, satin-chromed scale, ON/OFF button, zero-setting at any position, rapid thumb wheel movement, micrometric adjustment, with carbide tip scriber. Suitable for scribing and height testing procedures.

Tech. Code	GR45 Euro	Range mm
D4220300	421,00	0 ÷ 300
D4220600	770,00	0 ÷ 600
D4220AC	55,00	Gauge holder coupling
D4220AT	52,00	Sensor coupling

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

DIAL HEIGHT GAUGES

ALPA

0,01 mm | INOX

ART. GB010

0.01mm resolution - Double counter reading and zero setting at any position, handle-operated double guiding column, carbide tip scriber. Suitable for scribing and height testing procedures.

Tech. Code	GR45 Euro	Range mm
D4230300	306,00	0 ÷ 300
D4230600	557,00	0 ÷ 600
D4230AC	51,00	Gauge holder coupling
D4230AT	50,00	Sensor coupling

Indivisible package Suggested retail package - Unit price

HEIGHT GAUGES

INOX

ART. GB020

Height gauge cast iron base, graduated stainless steel rod with fine adjustament. Carbide-tipped scriber. Resolution 0.02mm.

Tech. Code	GR45 Euro	Range mm
D4240300	257,00	0 ÷ 300
D4240600	356,00	0 ÷ 600
D4240RP300	52,00	Spare tip 300
D4240RP600	57,00	Spare tip 600

PAIRS OF PARALLEL X-BLOCKS

ART. HA035

1/100mm tolerance - Stress-resistant steel, 4 V-shaped 90°grooves.

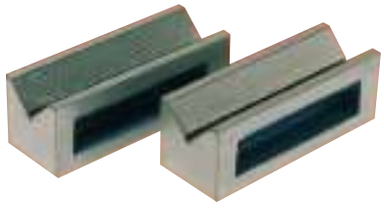
Tech. Code	GR45 Euro	Dimension mm	Lodging diameters mm
D4510075075	(120,00)	75 x 75	5 ÷ 60
D4510100080	(170,00)	100 x 80	5 ÷ 80
D4510120090	(186,00)	120 x 90	5 ÷ 80
D4510150100	(250,00)	150 x 100	5 ÷ 85

PAIRS OF PARALLEL V-BLOCKS

ART. HA050

1/100mm tolerance - Stress- resistant steel, V-shaped 90°grooves.

Tech. Code	GR45 Euro	Dimension mm	Lodging diameters mm
D4520150055	(115,00)	150 x 55	5 ÷ 42
D4520200070	(150,00)	200 x 70	5 ÷ 56



STAINLESS STEEL FLAT EDGE SQUARES 90°

INOX

ART. HA085

Hardened flat square stainless steel. Entirely grinded faces. High precision, made and tested to very strict procedures. Serial number. Manufactured according to DIN 875/0. Supplied in case.

Tech. Code	GR45 Euro	Dimension mm	Section mm
D46115040	(78,00)	50 x 40	15 x 5
D4611075050	(105,00)	75 x 50	20 x 8
D4611100070	(113,00)	100 x 70	20 x 8
D4611150100	(140,00)	150 x 100	25 x 8
D4611200130	(235,00)	200 x 130	30 x 8
D4611250165	(280,00)	250 x 165	40 x 9
D4611300200	(367,00)	300 x 200	40 x 9

BEVELED EDGE SQUARES 90°

INOX

ART. HA090

Two-bevelled edge square flat version stainless steel.
The two chamfered and lapped sides allow more accurate visual control.
Entirely grinded. High precision, made and tested to very strict procedures.
Serial number. Manufactured as per DIN 875/00. Supplied in case.

Tech. Code	GR45 Euro	Dimension mm	Section mm
D46135040	(96,00)	50 x 40	15 x 5
D4613075050	(113,00)	75 x 50	20 x 8
D4613100070	(122,00)	100 x 70	20 x 8
D4613150100	(166,00)	150 x 100	25 x 8
D4613200130	(235,00)	200 x 130	30 x 8
D4613250165	(288,00)	250 x 165	40 x 9
D4613300200	(445,00)	300 x 200	40 x 9

STAINLESS STEEL SQUARES WITH BASE

INOX

ART. HA075

90° hardened stainless steel square with base.
Entirely grinded faces. High precision, made and tested to very strict procedures. Serial number. Manufactured according to DIN 875/0. Supplied in case.

Tech. Code	GR45 Euro	Dimension mm	Section mm
D46165040	(131,00)	50 x 40	15 x 5
D4616075050	(148,00)	75 x 50	20 x 8
D4616100070	(175,00)	100 x 70	20 x 8
D4616150100	(218,00)	150 x 100	25 x 8
D4616200130	(262,00)	200 x 130	30 x 8
D4616250165	(315,00)	250 x 165	40 x 9
D4616300200	(420,00)	300 x 200	40 x 9

BEVELED STRAIGHT EDGES

INOX

ART. D4620

Ruler to control flatness. In stainless steel with insulated handle.
In compliance with DIN 874/00 standards.

Tech. Code	GR49 Euro	Dimension mm
D462050	12,00	50
D462075	17,60	75
D4620100	21,30	100
D4620125	22,20	125
D4620150	26,90	150
D4620200	33,30	200
D4620250	44,40	250
D4620300	56,00	300
D4620400	75,00	400
D4620500	133,30	500

HORIZONTAL SPIRIT LEVELS

ART. EB051

Special frame made of nickel-chrome cast iron with natural curing, prismatic base for perfect support on flat and cylindrical surfaces, vial sensibility 0.02 mm, second transverse vial, hand scraped contact surface, aluminum case.

Tech. Code	GR45 Euro	Length mm	Sensitivity mm/m
D4701150	(273,00)	150	0,02
D4701200	(295,00)	200	0,02
D4701250	(350,00)	250	0,02

Indivisible package Suggested retail package - Unit price

HORIZONTAL SPIRIT LEVELS

ART. EB055

Corrugated alloy cast iron body with prismatic base, shock-proof vials, heat-insulating clamps. With aluminum case.

Tech. Code	GR45 Euro	Length mm	Sensitivity mm/m
D4700150002	170,00	150	0.02
D4700200002	192,60	200	0.02
D4700250002	196,00	250	0.02
D4700300002	218,00	300	0.02

HORIZONTAL SPIRIT LEVELS GRINDED

ART. EB060

Base V-groove suitable for flat surfaces or cylinders, delivered in rigid case.

Tech. Code	GR45 Euro	Length mm	Sensitivity mm/m
D4702100	120,00	100	0.05
D4702150	142,00	150	0.05
D4702200	169,06	200	0.05
D4702250	170,00	250	0.05
D4702300	195,00	300	0.05

HORIZONTAL SPIRIT LEVELS

ART. EB035

Manufactured in nichel-chrome cast iron frame. Fine grinded surface. Flat base with V-groove. Serially numbered, manufactured according to DIN 877.
Thermal-insulated grip. The vial is visible both from above and laterally.

Tech. Code	GR45 Euro	Length mm	Sensitivity mm/m
D4703150	(454,00)	150	0.02
D4703200	(490,00)	200	0.02
D4703300	(600,00)	300	0.02

SQUARED SCRAPED SPIRIT LEVELS

ART. EB040

Special frame made of nickel-chrome cast iron, four 90° fine grinded surfaces, 2 flat and 2 V-shaped for checking flat and cylindrical, horizontal and vertical surfaces, vial sensibility 0,02 mm, insulation board handle with vial protection. Supplied in hard box.

Tech. Code	GR45 Euro	Dimension mm	Sensitivity mm/m
D4706150	390,00	150 x 150	0.02
D4706200	502,00	200 x 200	0.02

SQUARE SPIRIT LEVELS

ART. D4705

Corrugated alloy cast iron frame, 90° surfaces, two flat and two prismatic surfaces from 150 x 150 mm to 250 x 250 mm, only in range 100 x 100 one prismatic surface. Shock-proof vials, heat-insulating handle.

Tech. Code	GR45 Euro	Dimension mm	Sensitivity mm/m
D4705100005	252,00	100 x 100	0.05
D4705150005	241,00	150 x 150	0.05
D4705200005	262,00	200 x 200	0.05
D4705250005	325,28	250 x 250	0.05
D4705150002	251,00	150 x 150	0.02
D4705200002	289,00	200 x 200	0.02
D4705250002	316,00	250 x 250	0.02

SQUARE SPIRIT LEVELS

ALPA

ART. EB030

Manufactured in nichel-chrome cast iron frame.
Fine grinded surface, 2 plane and 2 prismatic faces.
Serial number, manufactured according to DIN 877.
Thermal-insulated grip.
The vial is visible both from above and laterally.

Tech. Code	GR45 Euro	Dimension mm	Sensitivity mm/m
D4707150	(820,00)	150 x 150	0,02
D4707200	(752,00)	200 x 200	0,02

DIGITAL PROTACTOR/ INCLINOMETERS

ALPA

LCD 3V CR2032

ART. EA021

0.1° resolution 360° (4 x 90°) protractor level and inclinometer, ON/OFF button. Zero setting at any position, last displayed value hold feature (HOLD mode). 3V battery supply (included).

Tech. Code	GR45 Euro	Dimension mm	Accuracy	Repeatability
D47101	108,00	150 x 30 x 50	0° - 10° ± 0,1° 10° - 90° ± 1.5%	± 0.1°

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

DIGITAL PROTACTOR/INCLINOMETERS

SPI

LCD 3V CR2032

ART. EA020

Digital level, 360° (4x90°) protractor and inclinometer.
Zero setting at any position.

Tech. Code	GR45 Euro	Resolution
D4713001	760,00	0.01°
D471301	473,00	0.1°

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

MINI DIGITAL INCLINOMETERS WITH MAGNETIC FIXING SYSTEM

LCD 3V CR2032

ART. D4715

Portable device for angle monitoring, zero-setting at any position, supplied along with storage case, measurement range 180°.

Tech. Code	GR49 Euro	Dimension mm	Resolution	Accuracy	Repeatability
D471501	67,00	50 x 50 x 32	0.10°	± 0.20°	± 0.10°

Tech. Code	GR49 Euro	Model
D99113V	5,50	Battery 3v cr2032

MAGNETIC SPIRIT LEVELS

ART. D4720

0-360° range of usage, permanent vertical position indicator, ideal to check pieces in any position.

Tech. Code	GR49 Euro	Dimension mm	Sensitivity
D47201	117,00	93 x 79 x 16	0,083°
D47202	240,00	140 x 130 x 20	0.05°

Indivisible package Suggested retail package - Unit price

GO/ NO GO PLUG GAUGES

ART. FA187

Hardened steel, H7 tolerance.

Tech. Code	GR45 Euro	Ø mm
D55103	(29,00)	3
D55104	(29,00)	4
D55105	(29,00)	5
D55106	(29,00)	6
D55107	(29,00)	7
D55108	(29,00)	8
D55109	(29,00)	9
D551010	(29,00)	10
D551011	(29,00)	11
D551012	(29,00)	12
D551013	(29,00)	13
D551014	(29,00)	14
D551015	(29,00)	15
D551016	(29,00)	16
D551017	(29,00)	17
D551018	(29,00)	18
D551019	(29,00)	19
D551020	(29,00)	20
D551021	(33,00)	21
D551022	(33,00)	22
D551023	(33,00)	23
D551024	(33,00)	24

Tech. Code	GR45 Euro	Ø mm
D551025	(33,00)	25
D551026	(33,00)	26
D551027	(33,00)	27
D551028	(33,00)	28
D551029	(33,00)	29
D551030	(33,00)	30
D551032	(40,00)	32
D551033	(40,00)	33
D551034	(40,00)	34
D551035	(40,00)	35
D551036	(40,00)	36
D551037	(40,00)	37
D551038	(40,00)	38
D551040	(40,00)	40
D551042	(49,00)	42
D551044	(49,00)	44
D551045	(49,00)	45
D551046	(49,00)	46
D551047	(49,00)	47
D551048	(49,00)	48
D551050	(49,00)	50
D551052	(67,00)	52

Tech. Code	GR45 Euro	Ø mm
D551055	(67,00)	55
D551056	(67,00)	56
D551058	(67,00)	58
D551060	(67,00)	60
D551062	(67,00)	62
D551065	(67,00)	65
D551068	(84,00)	68
D551070	(76,00)	70
D551072	(94,00)	72
D551075	(88,00)	75
D551078	(94,00)	78
D551080	(88,00)	80
D551082	(101,00)	82
D551085	(111,00)	85
D551088	(111,00)	88
D551090	(101,00)	90
D551092	(118,00)	92
D551095	(112,00)	95
D551098	(118,00)	98
D5510100	(112,00)	100

GO/NG LIMIT PLUG GAUGES SET

ART. FA188

GO/NG limit plug gauges set in hardened steel. Tollerance H7.
Supplied in wooden case.

Composition
D551615: Ø 32 - 34 - 35 - 36 - 38 - 40 - 42 - 44 - 46 - 48 - 50 - 52 - 55 - 58 - 60 mm
D551626: Ø 3 - 4 - 5 - 6 - 7 - 8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 20 - 21 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 mm

Tech. Code	GR45 Euro	Pieces n°
D551615	(790,00)	15
D551626	(830,00)	26

SETTING RINGS FOR BORE GUAGES AND MICROMETERS

ART. FA190

Manufactured according to DIN 2250-C standard.

Tech. Code	GR45 Euro	Ø mm
D551704	(59,00)	4
D551705	(59,00)	5
D551706	(61,00)	6
D551707	(59,00)	7
D551708	(59,00)	8
D551709	(59,00)	9
D551710	(57,00)	10
D551711	(57,00)	11
D551712	(57,00)	12
D551713	(57,00)	13
D551714	(57,00)	14
D551715	(57,00)	15
D551716	(57,00)	16
D551717	(57,00)	17
D551718	(57,00)	18
D551719	(57,00)	19
D551720	(61,00)	20
D551721	(61,00)	21
D551722	(61,00)	22
D551723	(61,00)	23
D551724	(61,00)	24
D551725	(61,00)	25
D551726	(61,00)	26
D551727	(61,00)	27
D551728	(61,00)	28

Tech. Code	GR45 Euro	Ø mm
D551729	(61,00)	29
D551730	(61,00)	30
D551732	(61,00)	32
D551733	(62,00)	33
D551734	(61,00)	34
D551735	(61,00)	35
D551736	(62,00)	36
D551737	(61,00)	37
D551738	(61,00)	38
D551740	(77,00)	40
D551742	(77,00)	42
D551744	(77,00)	44
D551745	(77,00)	45
D551746	(82,00)	46
D551747	(77,00)	47
D551748	(77,00)	48
D551750	(77,00)	50
D551752	(87,00)	52
D551755	(87,00)	55
D551756	(87,00)	56
D551758	(87,00)	58
D551760	(104,00)	60
D551762	(114,00)	62
D551765	(114,00)	65
D551768	(114,00)	68

Tech. Code	GR45 Euro	Ø mm
D551770	(114,00)	70
D551772	(114,00)	72
D551775	(114,00)	75
D551778	(114,00)	78
D551780	(125,00)	80
D551782	(125,00)	82
D551785	(162,00)	85
D551788	(155,00)	88
D551790	(155,00)	90
D551792	(155,00)	92
D551795	(162,00)	95
D551798	(155,00)	98
D5517100	(201,00)	100
D5517110	(229,00)	110
D5517120	(259,00)	120
D5517125	(259,00)	125
D5517130	(292,00)	130
D5517140	(360,00)	140
D5517150	(322,00)	150
D5517175	(492,00)	175
D5517225	(742,00)	225
D5517250	(827,00)	250
D5517275	(954,00)	275

COARSE PITCH THREADED GAUGES

ALPA

ART. FA225

Hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Gauges	Type
D5520T204	(52,00)	2 x 0.4	6H	Plug	G/NG
D5520AP204	(74,00)	2 x 0.4	6G	Ring	GO
D5520ANP204	(74,00)	2 x 0.4	6G	Ring	NG
D5520T2,5045	(52,00)	2.5 x 0.45	6H	Plug	G/NG
D5520AP2,5045	(74,00)	2.5 x 0.45	6G	Ring	GO
D5520ANP2,5045	(74,00)	2.5 x 0.45	6G	Ring	NG
D5520T305	(39,00)	3 x 0.5	6H	Plug	G/NG
D5520AP305	(43,00)	3 x 0.5	6G	Ring	GO
D5520ANP305	(43,00)	3 x 0.5	6G	Ring	NG
D5520T407	(37,00)	4 x 0.7	6H	Plug	G/NG
D5520AP407	(41,00)	4 x 0.7	6G	Ring	GO
D5520ANP407	(41,00)	4 x 0.7	6G	Ring	NG
D5520T508	(37,00)	5 x 0.8	6H	Plug	G/NG
D5520AP508	(41,00)	5 x 0.8	6G	Ring	GO
D5520ANP508	(41,00)	5 x 0.8	6G	Ring	NG
D5520T61	(37,00)	6 x 1	6H	Plug	G/NG
D5520AP61	(41,00)	6 x 1	6G	Ring	GO
D5520ANP61	(41,00)	6 x 1	6G	Ring	NG
D5520T8125	(37,00)	8 x 1.25	6H	Plug	G/NG
D5520AP8125	(41,00)	8 x 1.25	6G	Ring	GO
D5520ANP8125	(41,00)	8 x 1.25	6G	Ring	NG
D5520T1015	(37,00)	10 x 1.5	6H	Plug	G/NG
D5520AP1015	(46,00)	10 x 1.5	6G	Ring	GO
D5520ANP1015	(46,00)	10 x 1.5	6G	Ring	NG
D5520T12175	(37,00)	12 x 1.75	6H	Plug	G/NG
D5520AP12175	(46,00)	12 x 1.75	6G	Ring	GO
D5520ANP12175	(46,00)	12 x 1.75	6G	Ring	NG
D5520T142	(46,00)	14 x 2	6H	Plug	G/NG
D5520AP142	(61,00)	14 x 2	6G	Ring	GO
D5520ANP142	(61,00)	14 x 2	6G	Ring	NG
D5520T162	(46,00)	16 x 2	6H	Plug	G/NG
D5520AP162	(61,00)	16 x 2	6G	Ring	GO
D5520ANP162	(61,00)	16 x 2	6G	Ring	NG
D5520T1825	(65,00)	18 x 2.5	6H	Plug	G/NG
D5520AP1825	(72,00)	18 x 2.5	6G	Ring	GO
D5520ANP1825	(72,00)	18 x 2.5	6G	Ring	NG
D5520T2025	(66,00)	20 x 2.5	6H	Plug	G/NG
D5520AP2025	(90,00)	20 x 2.5	6G	Ring	GO
D5520ANP2025	(90,00)	20 x 2.5	6G	Ring	NG
D5520T2225	(66,00)	22 x 2.5	6H	Plug	G/NG
D5520AP2225	(90,00)	22 x 2.5	6G	Ring	GO
D5520ANP2225	(89,00)	22 x 2.5	6G	Ring	NG
D5520T243	(66,00)	24 x 3	6H	Plug	G/NG
D5520AP243	(95,00)	24 x 3	6G	Ring	GO
D5520ANP243	(95,00)	24 x 3	6G	Ring	NG
D5520T273	(91,00)	27 x 3	6H	Plug	G/NG
D5520AP273	(117,00)	27 x 3	6G	Ring	GO
D5520ANP273	(117,00)	27 x 3	6G	Ring	NG
D5520T3035	(106,00)	30 x 3.5	6H	Plug	G/NG
D5520AP3035	(127,00)	30 x 3.5	6G	Ring	GO
D5520ANP3035	(127,00)	30 x 3.5	6G	Ring	NG

FINE PITCH THREADED GAUGES

ALPA

ART. FA210 - FA215 - FA220

G/NG pads, G rings, NG rings in hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Gauges	Type
D5530T81	(41,00)	8 x 1	6H	Plug	G/NG
D5530AP81	(73,00)	8 x 1	6G	Ring	GO
D5530ANP81	(73,00)	8 x 1	6G	Ring	NG
D5530T10075	(64,00)	10 x 0.75	6H	Plug	G/NG
D5530AP10075	(76,00)	10 x 0.75	6G	Ring	GO
D5530ANP10075	(89,00)	10 x 0.75	6G	Ring	NG
D5530T101	(41,00)	10 x 1	6H	Plug	G/NG
D5530AP101	(47,00)	10 x 1	6G	Ring	GO
D5530ANP101	(47,00)	10 x 1	6G	Ring	NG
D5530T10125	(41,00)	10 x 1.25	6H	Plug	G/NG
D5530AP10125	(47,00)	10 x 1.25	6G	Ring	GO
D5530ANP10125	(47,00)	10 x 1.25	6G	Ring	NG
D5530T121	(41,00)	12 x 1	6H	Plug	G/NG
D5530AP121	(47,00)	12 x 1	6G	Ring	GO
D5530ANP121	(47,00)	12 x 1	6G	Ring	NG
D5530T12125	(41,00)	12 x 1.25	6H	Plug	G/NG
D5530AP12125	(47,00)	12 x 1.25	6G	Ring	GO
D5530ANP12125	(47,00)	12 x 1.25	6G	Ring	NG
D5530T1215	(41,00)	12 x 1.5	6H	Plug	G/NG
D5530AP1215	(47,00)	12 x 1.5	6G	Ring	GO
D5530ANP1215	(47,00)	12 x 1.5	6G	Ring	NG
D5530T141	(47,00)	14 x 1	6H	Plug	G/NG
D5530AP141	(53,00)	14 x 1	6G	Ring	GO
D5530ANP141	(53,00)	14 x 1	6G	Ring	NG
D5530T14125	(47,00)	14 x 1.25	6H	Plug	G/NG
D5530AP14125	(53,00)	14 x 1.25	6G	Ring	GO
D5530ANP14125	(53,00)	14 x 1.25	6G	Ring	NG
D5530T1415	(47,00)	14 x 1.5	6H	Plug	G/NG
D5530AP1415	(53,00)	14 x 1.5	6G	Ring	GO
D5530ANP1415	(53,00)	14 x 1.5	6G	Ring	NG
D5530T161	(47,00)	16 x 1	6H	Plug	G/NG
D5530AP161	(53,00)	16 x 1	6G	Ring	GO
D5530ANP161	(53,00)	16 x 1	6G	Ring	NG
D5530T1615	(47,00)	16 x 1.5	6H	Plug	G/NG
D5530AP1615	(53,00)	16 x 1.5	6G	Ring	GO
D5530ANP1615	(53,00)	16 x 1.5	6G	Ring	NG
D5530T181	(60,00)	18 x 1	6H	Plug	G/NG
D5530AP181	(63,00)	18 x 1	6G	Ring	GO
D5530ANP181	(63,00)	18 x 1	6G	Ring	NG
D5530T1815	(60,00)	18 x 1.5	6H	Plug	G/NG
D5530AP1815	(63,00)	18 x 1.5	6G	Ring	GO
D5530ANP1815	(63,00)	18 x 1.5	6G	Ring	NG
D5530T201	(60,00)	20 x 1	6H	Plug	G/NG
D5530AP201	(69,00)	20 x 1	6G	Ring	GO
D5530ANP201	(69,00)	20 x 1	6G	Ring	NG
D5530T2015	(60,00)	20 x 1.5	6H	Plug	G/NG
D5530AP2015	(69,00)	20 x 1.5	6G	Ring	GO
D5530ANP2015	(69,00)	20 x 1.5	6G	Ring	NG
D5530T2215	(60,00)	22 x 1.5	6H	Plug	G/NG
D5530AP2215	(77,00)	22 x 1.5	6G	Ring	GO
D5530ANP2215	(77,00)	22 x 1.5	6G	Ring	NG
D5530T241	(60,00)	24 x 1	6H	Plug	G/NG
D5530AP241	(77,00)	24 x 1	6G	Ring	GO
D5530ANP241	(77,00)	24 x 1	6G	Ring	NG
D5530T2415	(60,00)	24 x 1.5	6H	Plug	G/NG
D5530AP2415	(77,00)	24 x 1.5	6G	Ring	GO
D5530ANP2415	(77,00)	24 x 1.5	6G	Ring	NG
D5530T242	(73,00)	24 x 2	6H	Plug	G/NG
D5530AP242	(97,00)	24 x 2	6G	Ring	GO
D5530ANP242	(97,00)	24 x 2	6G	Ring	NG
D5530T2515	(73,00)	25 x 1.5	6H	Plug	G/NG
D5530AP2515	(97,00)	25 x 1.5	6G	Ring	GO
D5530ANP2515	(97,00)	25 x 1.5	6G	Ring	NG
D5530T2615	(73,00)	26 x 1.5	6H	Plug	G/NG
D5530AP2615	(69,00)	26 x 1.5	6G	Ring	GO
D5530ANP2615	(69,00)	26 x 1.5	6G	Ring	NG
D5530T2715	(76,00)	27 x 1.5	6H	Plug	G/NG
D5530AP2715	(86,00)	27 x 1.5	6G	Ring	GO
D5530ANP2715	(86,00)	27 x 1.5	6G	Ring	NG
D5530T2815	(76,00)	28 x 1.5	6H	Plug	G/NG
D5530AP2815	(86,00)	28 x 1.5	6G	Ring	GO
D5530ANP2815	(86,00)	28 x 1.5	6G	Ring	NG
D5530T301	(101,00)	30 x 1	6H	Plug	G/NG
D5530AP301	(135,00)	30 x 1	6G	Ring	GO
D5530ANP301	(135,00)	30 x 1	6G	Ring	NG
D5530T3015	(90,00)	30 x 1.5	6H	Plug	G/NG
D5530AP3015	(111,00)	30 x 1.5	6G	Ring	GO
D5530ANP3015	(111,00)	30 x 1.5	6G	Ring	NG
D5530T3215	(90,00)	32 x 1.5	6H	Plug	G/NG
D5530AP3215	(111,00)	32 x 1.5	6G	Ring	GO
D5530ANP3215	(114,00)	32 x 1.5	6G	Ring	NG
D5530T3415	(114,00)	34 x 1.5	6H	Plug	G/NG
D5530AP3415	(126,00)	34 x 1.5	6G	Ring	GO
D5530ANP3415	(126,00)	34 x 1.5	6G	Ring	NG
D5530T3615	(114,00)	36 x 1.5	6H	Plug	G/NG
D5530AP3615	(125,00)	36 x 1.5	6G	Ring	GO
D5530ANP3615	(125,00)	36 x 1.5	6G	Ring	NG
D5530T362	(90,00)	36 x 2	6H	Plug	G/NG
D5530AP362	(114,00)	36 x 2	6G	Ring	GO
D5530ANP362	(114,00)	36 x 2	6G	Ring	NG
D5530T4015	(90,00)	40 x 1.5	6H	Plug	G/NG
D5530AP4015	(127,00)	40 x 1.5	6G	Ring	GO
D5530ANP4015	(127,00)	40 x 1.5	6G	Ring	NG

Indivisible package Suggested retail package - Unit price

UNC THREADED GAUGES

ALPA

ART. FA255

Hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Plug
D5525348	(206,70)	# 3 - 48	2B	G/NG
D5525440	(81,62)	# 4 - 40	2B	Go/NoGo
D5525540	(81,62)	# 5 - 40	2B	G/NG
D5525632	(67,84)	# 6 - 32	2B	G/NG
D5525832	(67,84)	# 8 - 32	2B	G/NG
D55251024	(81,62)	# 10 - 24	2B	G/NG
D55251224	(67,84)	# 12 - 24	2B	G/NG
D55251420	(64,00)	1/4" x 20	2B	G/NG
D55251618	(64,00)	5/16" x 18	2B	G/NG
D55253816	(64,00)	3/8" x 16	2B	G/NG

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Plug
D552571614	(67,84)	7/16" x 14	2B	G/NG
D55251213	(67,84)	1/2" x 13	2B	Go/NoGo
D552591612	(89,04)	9/16" x 12	2B	G/NG
D55255811	(89,04)	5/8" x 11	2B	G/NG
D55253410	(106,00)	3/4" x 10	2B	G/NG
D5525789	(127,00)	7/8" x 9	2B	G/NG
D552518	(148,00)	1" x 8	2B	G/NG
D55251147	(187,62)	1" 1/4 x 7	2B	G/NG
D55251126	(206,70)	1" 1/2 x 6	2B	G/NG

ART. FA260

Hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D5526348	(170,00)	# 3 - 48	2A	GO
D5526440	(85,00)	# 4 - 40	2A	GO
D5526540	(90,00)	# 5 - 40	2A	GO
D5526632	(56,00)	# 6 - 32	2A	GO
D5526832	(80,00)	# 8 - 32	2A	GO
D55261024	(80,00)	# 10 - 24	2A	GO
D55261224	(80,00)	# 12 -24	2A	GO
D55261420	(80,00)	1/4" x 20	2A	GO
D552651618	(80,00)	5/16" x 18	2A	GO
D55263816	(56,00)	3/8" x 16	2A	GO

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D552671614	(80,00)	7/16" x 14	2A	GO
D55261213	(71,02)	1/2" x 13	2A	GO
D552691612	(97,00)	9/16" x 12	2A	GO
D55265811	(97,00)	5/8" x 11	2A	GO
D55263410	(120,00)	3/4" x 10	2A	GO
D5526789	(129,32)	7/8" x 9	2A	GO
D5526018	(180,00)	1" x 8	2A	GO
D55261147	(230,00)	1" 1/4 x 7	2A	GO
D55261126	(260,00)	1" 1/2 x 6	2A	GO

ART. FA265

Hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D5527348	(170,00)	# 3 - 48	2A	NG
D5527440	(90,00)	# 4 - 40	2A	NG
D5527540	(90,00)	# 5 - 40	2A	NG
D5527632	(56,00)	# 6 - 32	2A	NG
D5527832	(80,00)	# 8 - 32	2A	NG
D55271024	(80,00)	# 10 - 24	2A	NG
D55271224	(80,00)	# 12 - 24	2A	NG
D55271420	(80,00)	1/4" x 20	2A	NG
D552751618	(80,00)	5/16" x 18	2A	NG
D55273816	(80,00)	3/8" x 16	2A	NG

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D552771614	(80,00)	7/16" x 14	2A	NG
D55271213	(80,00)	1/2" x 13	2A	NG
D552791612	(97,00)	9/16" x 12	2A	NG
D55275811	(97,00)	5/8" x 11	2A	NG
D55273410	(120,00)	3/4" x 10	2A	NG
D5527789	(153,70)	7/8" x 9	2A	NG
D552718	(180,00)	1" x 8	2A	NG
D55271147	(230,00)	1" 1/4 x 7	2A	NG
D55271126	(260,00)	1" 1/2 x 6	2A	NG

UNF THREADED GAUGES

ALPA

ART. FA240

Hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Plug
D5528356	(206,70)	# 3 - 56	2B	G/NG
D5528448	(81,62)	# 4 - 48	2B	G/NG
D5528544	(81,62)	# 5 - 44	2B	G/NG
D5528640	(67,84)	# 6 - 40	2B	G/NG
D5528836	(67,84)	# 8 - 36	2B	G/NG
D55281032	(64,00)	# 10 - 32	2B	G/NG
D55281228	(67,84)	# 12 - 28	2B	G/NG
D55281428	(64,00)	1/4" x 28	2B	G/NG
D552851624	(64,00)	5//16" x 24	2B	G/NG
D55283824	(64,00)	3/8" x 24	2B	G/NG

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Plug
D552871620	(64,00)	7/16" x 20	2B	Go/NoGo
D55281220	(64,00)	1/2" x 20	2B	G/NG
D552891618	(71,00)	9/16" x 18	2B	G/NG
D55285818	(71,00)	5/8" x 18	2B	G/NG
D55283416	(84,00)	3/4" x 16	2B	Go/NoGo
D55287814	(84,00)	7/8" x 14	2B	Go/NoGo
D5528112	(128,26)	1" x 12	2B	G/NG
D552811412	(128,26)	1" 1/4 x 12	2B	G/NG
D552811212	(127,00)	1" 1/2 x 12	2B	G/NG

ART. FA245

Hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D5529356	(106,00)	# 3 - 56	2A	GO
D5529448	(89,04)	# 4 - 48	2A	GO
D5529544	(89,04)	# 5 - 44	2A	GO
D5529640	(71,02)	# 6 - 40	2A	GO
D5529836	(71,02)	# 8 - 36	2A	GO
D55291032	(71,02)	# 10 - 32	2A	GO
D55291228	(71,02)	# 12 - 28	2A	GO
D55291428	(67,00)	1/4" x 28	2A	GO
D552951624	(71,02)	5/16" x 24	2A	GO
D55293824	(71,02)	3/8" x 24	2A	GO

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D552971620	(67,00)	7/16" x 20	2A	GO
D55291220	(67,00)	1/2" x 20	2A	GO
D552991618	(77,38)	9/16" x 18	2A	GO
D55295818	(77,38)	5/8" x 18	2A	GO
D55293416	(91,00)	3/4" x 16	2A	GO
D55297814	(91,00)	7/8" x 14	2A	GO
D55290112	(144,16)	1" x 12	2A	GO
D552911412	(144,16)	1" 1/4 x 12	2A	GO
D552911212	(145,00)	1" 1/2 x 12	2A	GO

UNF THREADED GAUGES

ART. FA250

NG ring in hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D55310356	(106,00)	# 3 - 56	2A	NG
D55310448	(89,04)	# 4 - 48	2A	NG
D55310544	(90,00)	# 5 - 44	2A	NG
D55310640	(71,02)	# 6 - 40	2A	NG
D55310836	(71,02)	# 8 - 36	2A	NG
D553101032	(71,02)	# 10 - 32	2A	NG
D553101228	(71,02)	# 12 - 28	2A	NG
D553101428	(71,02)	1/4" x 28	2A	NG
D5531051624	(71,02)	5/16" x 24	2A	NG
D553103824	(71,02)	3/8" x 24	2A	NG

Tech. Code	GR45 Euro	Ø for pitch	Tolerance	Ring
D5531071620	(71,02)	7/16" x 20	2A	NG
D553101220	(67,00)	1/2" x 20	2A	NG
D5531091618	(73,00)	9/16" x 18	2A	NG
D553105818	(77,38)	5/8" x 18	2A	NG
D553103416	(96,46)	3/4" x 16	2A	NG
D553107814	(91,00)	7/8" x 14	2A	NG
D55310112	(144,16)	1" x 12	2A	NG
D5531011412	(144,16)	1" 1/4 x 12	2A	NG
D5531011212	(145,00)	1" 1/2 x 12	2A	NG

GAS ISO 228 THREADED GAUGES

ART. FA270 - FA275 - FA280

Hardened steel.

Tech. Code	GR45 Euro	Ø for pitch	Gauges	Type
D5540T1/8	(82,00)	1/8" - 28	Plug	G/NG
D5540AP1/8	(103,00)	1/8" - 28	Ring	Go
D5540ANP1/8	(103,00)	1/8" - 28	Ring	NG
D5540T1/4	(85,00)	1/4" - 19	Plug	G/NG
D5540AP1/4	(98,00)	1/4" - 19	Ring	Go
D5540ANP1/4	(98,00)	1/4" - 19	Ring	NG
D5540T3/8	(86,00)	3/8" - 19	Plug	G/NG
D5540AP3/8	(105,00)	3/8" - 19	Ring	Go
D5540ANP3/8	(105,00)	3/8" - 19	Ring	NG
D5540T1/2	(88,00)	1/2" - 14	Plug	G/NG
D5540AP1/2	(118,00)	1/2" - 14	Ring	Go

Tech. Code	GR45 Euro	Ø for pitch	Gauges	Type
D5540ANP1/2	(118,00)	1/2" - 14	Ring	NG
D5540T3/4	(101,00)	3/4" - 14	Plug	G/NG
D5540AP3/4	(120,00)	3/4" - 14	Ring	Go
D5540ANP3/4	(120,00)	3/4" - 14	Ring	NG
D5540T1	(127,00)	1" - 11	Plug	G/NG
D5540AP1	(165,00)	1" - 11	Ring	Go
D5540ANP1	(165,00)	1" - 11	Ring	NG
D5540T11/8	(170,00)	1"1/8 - 11	Plug	G/NG
D5540AP11/8	(168,00)	1"1/8 - 11	Ring	Go
D5540ANP11/8	(168,00)	1"1/8 - 11	Ring	NG

Note: From 1"3/4 diameter, G/NG plugs are supplied in pairs

NPT THREADED GAUGES

ART. FA285

Plug with conical thread.

Tech. Code	GR45 Euro	Ø for pitch
D553511627	(161,00)	1/16" x 27
D553501827	(137,00)	1/8" x 27
D553501418	(138,00)	1/4" x 18
D553503818	(141,00)	3/8" x 18
D553501214	(146,00)	1/2" x 14
D553503414	(151,00)	3/4" x 14

Tech. Code	GR45 Euro	Ø for pitch
D553501115	(176,00)	1" x 11,5
D5535114115	(255,00)	1" 1/4 x 11,5
D5535112115	(295,00)	1" 1/2 x 11,5
D553502115	(306,00)	2" x 11,5
D553502128	(373,12)	2" 1/2 x 8
D5535038	(401,00)	3" x 8

ART. FA286

Ring with conical thread.

Tech. Code	GR45 Euro	Ø for pitch
D553611627	(319,06)	1/16" x 27
D553601827	(275,00)	1/8" x 27
D553601418	(254,00)	1/4" x 18
D553603818	(254,00)	3/8" x 18
D553601214	(258,00)	1/2" x 14
D553603414	(263,00)	3/4" x 14

Tech. Code	GR45 Euro	Ø for pitch
D553601115	(283,00)	1" x 11,5
D5536114115	(415,52)	1" 1/4 x 11,5
D5536112115	(443,00)	1" 1/2 x 11,5
D553602115	(469,58)	2" x 11,5
D55362128	(586,18)	2" 1/2 x 8
D5536038	(692,18)	3" x 8

Indivisible package Suggested retail package - Unit price

2 IN 1 THREADED GAUGES - GO/NO GO

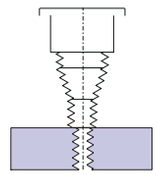
ART. FA305

Innovative tool that improves the efficiency of the thread control through Go/No Go test with one simple operation.

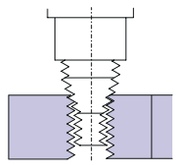
Errors of entrance is cancelled by the section driven GO.

- Hexagon handle removable aluminium
- Special steel 58 HRC
- Control certificate included

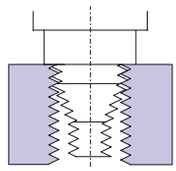
Tech. Code	GR45 Euro	Thread	P pitch mm	L1 mm	L2 mm	D mm	L3 mm	H mm
D5550M3	(134,82)	M3	0.2	5	6	7	30	10
D5550M4	(125,19)	M4	0.7	7	9	8	40	10
D5550M5	(121,98)	M5	0.8	8	8	8	40	10
D5550M6	(117,70)	M6	1.0	10	9	10	40	10
D5550M7	(117,70)	M7	1.0	10	9	10	40	10
D5550M8	(120,91)	M8	1.25	12.5	10	12	40	10
D5550M10	(126,26)	M10	1.5	15	11	14	40	12
D5550M12	(138,03)	M12	1.75	17.5	11.5	16	40	12
D5550M14	(142,31)	M14	2.0	20	12	18	40	17
D5550M16	(189,39)	M16	2.0	20	12	20	40	17
D5550M18	(211,86)	M18	2.5	25	13	22	40	17
D5550M20	(230,05)	M20	2.5	25	13	24	40	17



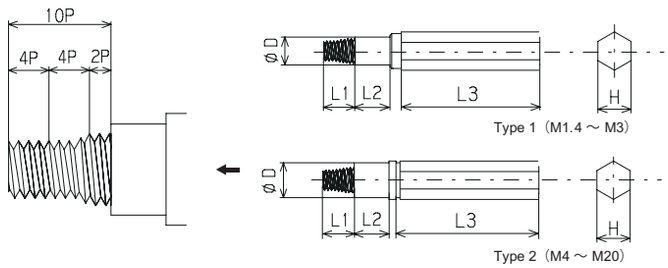
FAIL
Go side insertion not possible



PASS
Stop at tapered section
Pass



FAIL
Reaches the end face of the gauge stopper



PIN GAUGE SETS

ART. FA185

HRC 61/64 steel, ± 0.002mm tolerance, roughness set at 0.025 micron Ra, roundness set at 0.0005 mm, taper at 0.001mm.

Tech. Code	GR45 Euro	No. of pieces	Dim. mm	Progr. mm
D56100,51001	280,00	51	0,50÷1	0,01
D561011001	379,00	91	1÷10	0.1
D5610101601	350,00	61	10÷16	0.1
D5610162001	350,00	41	16÷20	0.1
D561018005	562,00	141	1÷8	0.05
D5610812005	379,00	81	8÷12	0.05
D561012005	337,00	39	1÷20	0.5
D56101,012001	358,00	100	1,01÷2	0.01
D56102,013001	358,00	100	2.01÷3	0.01
D56103,014001	358,00	100	3.01÷4	0.01
D56104,015001	370,00	100	4.01÷5	0.01
D56105,016001	370,00	100	5.01÷6	0.01
D56106,017001	411,00	100	6.01÷7	0.01
D56107,018001	411,00	100	7.01÷8	0.01
D56108,019001	411,00	100	8.01÷9	0.01
D56109,0110001	411,00	100	9.01÷10	0.01

CERAMIC GAUGE BLOCK SETS

OPUS

ART. FA100

Impressive specifications, the best offered by research on materials, thanks to an exclusive process of molecular transformation, OPUS ceramic zircon offers a mechanical strength which preserves its entirety in case of accident fall.
- excellent abrasion resistance, with wear up to 10 times less compared to hardened steel.
- excellent corrosion resistance
- low thermal conductivity
- high dimensional stability
- hand-lapped surfaces

Every block has a serial number.
Dimensional tolerance conformed to DIN 861, ISO 3650 and BS 4311 standards.
Compositions available in wooden box, or singles, always with **UKAS calibration certificate** in C class on 5 points included in the price.

Available, on demand, different compositions and single box.

Tech. Code	GR45 Euro	Degree of accuracy	No. of pieces
D5690470	(4050,00)	0	47
D5690471	(3500,00)	1	47

GAUGE BLOCK SETS

ALPA

ART. FA010

Special stainless steel gauge blocks. Hardness more than 63HRC.

Tech. Code	GR45 Euro	Degree of accuracy	No. of pieces
D57101030	1158,00	0	103
D57101031	750,00	1	103
D57101032	430,00	2	103
D5710870	889,00	0	87
D5710871	610,00	1	87
D5710872	341,00	2	87
D5710470	614,00	0	47
D5710471	390,00	1	47
D5710472	246,00	2	47
D5710320	449,00	0	32
D5710321	286,00	1	32
D5710322	177,00	2	32

ART. FA050

Special stainless steel gauge blocks. Hardness more than 63HRC.

Tech. Code	GR45 Euro	Degree of accuracy	No. of pieces
D571581	1400,00	1	8

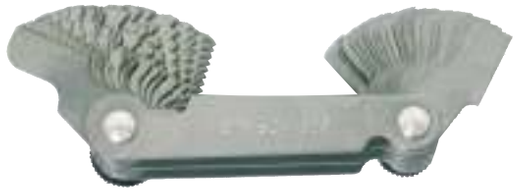
Indivisible package Suggested retail package - Unit price

THREAD PITCH GAUGES

ART. D6150

Steel blades.

Tech. Code	GR49 Euro	Type	Checkable threads
D61501	8,30	52 blades	METRIC - WHIT. 55°
D61502	11,10	Triple	METRIC - GAS - WHIT. 55°



RADIUS GAUGES FOR CONCAVE AND CONVEX MEASUREMENTS

ART. D6160

Steel blades.

Tech. Code	GR49 Euro	Radius
D616017	9,30	1 - 7
D61607,515	14,00	7.5 - 15
D616015,525	15,70	15.5 - 25

WELD SEAM CALIPERS

ART. AB149

Stainless steel, punched on both sides.

Tech. Code	GR45 Euro	Fillet size mm	Accuracy mm
D616510	33,00	4, 5, 6, 7, 8, 9, 10	0,5

FILLET WELD GAUGES 7 BLADES

ART. AB150

To measure concave and convex welds. 7 blades are included. Two concave and convex sizes of welds for each blade.
Stainless steel made. Size marked on both faces.

Tech. Code	GR45 Euro	Fillet size mm	Accuracy mm
D616725	57,00	3, 4, 5, 6, 8, 9, 10, 11, 12, 14, 16, 19, 22, 25	± 0.5

JET GAUGES WITH STEEL PINS

ART. D6180

Steel pins, resin stands.

Tech. Code	GR49 Euro	Pin no.	Ø mm	Progression mm
D618020	8,30	20	0.45 - 1.5	0.05
D618016	9,00	16	1.5 - 3.0	0.10

THICKNESS GAUGES

ART. D6170

Hardened and grounded steel blades, metal housing.

Tech. Code	GR49 Euro	Blade no.	Thickness mm
D617013	3,00	13	0.05 - 0.10 - 0.15 - 0.20 - 0.25 - 0.30 - 0.40 0.50 - 0.60 - 0.70 - 0.80 - 0.90 - 1.00
D617020	3,90	20	0.05 - 0.10 - 0.15 - 0.20 - 0.25 - 0.30 - 0.40 0.50 - 0.55 - 0.60 - 0.65 - 0.70 - 0.75 - 0.80 0.85 - 0.90 - 0.95 - 1.00

BRASS SHIM ROLLS MS 63

ART. D6210

Plastic housing.

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62100,025	33,00	0.025	150	2.5
D62100,050	36,70	0.050	150	2.5
D62100,075	38,30	0.075	150	2.5
D62100,100	42,50	0.100	150	2.5
D62100,150	47,60	0.150	150	2.5
D62100,200	55,50	0.200	150	2.5
D62100,250	63,40	0.250	150	2.5
D62100,300	71,50	0.300	150	2.5
D62100,400	79,40	0.400	150	2.5
D62100,500	89,90	0.500	150	2.5

STAINLESS STEEL SHIM ROLLS 18CR 9 NI

ART. D6215

Plastic housing.

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62150,050	81,90	0.050	150	2.5
D62150,100	83,20	0.100	150	2.5
D62150,150	89,90	0.150	150	2.5
D62150,200	107,10	0.200	150	2.5
D62150,300	131,00	0.300	150	2.5

CARBON STEEL TAPES

FASTBAND

ART. D6220

Tapes in 1,1274 carbon steel, width 13 mm (* thickness 0,01 and 0,02 mm in stainless steel).
Tape length 5 metres. Plastic housing case.

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62200,01*	100,40	0.01	13	5
D62200,02*	51,40	0.02	13	5
D62200,03	16,80	0.03	13	5
D62200,04	16,80	0.04	13	5
D62200,05	15,70	0.05	13	5
D62200,06	15,70	0.06	13	5
D62200,07	15,70	0.07	13	5
D62200,08	15,70	0.08	13	5
D62200,09	15,70	0.09	13	5
D62200,10	15,70	0.10	13	5
D62200,15	18,10	0.15	13	5
D62200,20	15,70	0.20	13	5
D62200,25	15,70	0.25	13	5
D62200,30	15,70	0.30	13	5

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62200,35	15,70	0.35	13	5
D62200,40	15,70	0.40	13	5
D62200,45	15,70	0.45	13	5
D62200,50	15,70	0.50	13	5
D62200,55	19,60	0.55	13	5
D62200,60	19,60	0.60	13	5
D62200,65	19,60	0.65	13	5
D62200,70	19,60	0.70	13	5
D62200,80	19,60	0.80	13	5
D62200,85	19,60	0.85	13	5
D62200,90	19,60	0.90	13	5
D62200,95	19,60	0.95	13	5
D62201,00	19,60	1.00	13	5

Indivisible package Suggested retail package - Unit price

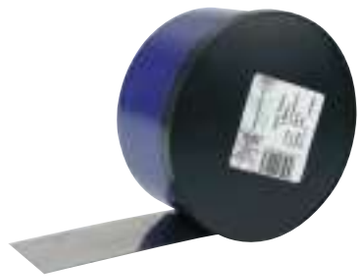
CALIBRATED CARBON STEEL TAPES

ART. D6226

Precision carbon steel tape roll 1,1274 50 mm width and 5 meters length.

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62260,03	59,70	0.03	50	5
D62260,04	58,50	0.04	50	5
D62260,05	55,50	0.05	50	5
D62260,06	41,10	0.06	50	5
D62260,07	41,10	0.07	50	5
D62260,08	41,10	0.08	50	5
D62260,09	41,10	0.09	50	5
D62260,10	40,00	0.10	50	5
D62260,12	43,40	0.12	50	5
D62260,15	43,40	0.15	50	5
D62260,18	42,60	0.18	50	5
D62260,20	42,10	0.20	50	5

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62260,25	42,60	0.25	50	5
D62260,30	43,40	0.30	50	5
D62260,35	46,60	0.35	50	5
D62260,40	46,60	0.40	50	5
D62260,45	46,60	0.45	50	5
D62260,50	46,60	0.50	50	5
D62260,60	74,00	0.60	50	5
D62260,70	74,00	0.70	50	5
D62260,80	74,80	0.80	50	5
D62260,90	74,80	0.90	50	5
D62261,00	74,80	1.00	50	5



CALIBRATED STAINLESS STEEL TAPES

ART. D6230

Precision stainless steel tape rolls 1,4310 100 mm width and 5 meters length.

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62300,01	200,80	0.01	100	5
D62300,02	130,10	0.02	100	5
D62300,03	103,10	0.03	100	5
D62300,04	96,50	0.04	100	5
D62300,05	87,90	0.05	100	5
D62300,06	87,90	0.06	100	5
D62300,07	87,90	0.07	100	5
D62300,08	87,90	0.08	100	5
D62300,09	87,90	0.09	100	5
D62300,10	83,20	0.10	100	5
D62300,12	83,20	0.12	100	5
D62300,15	83,20	0.15	100	5
D62300,20	102,70	0.20	100	5
D62300,25	107,70	0.25	100	5
D62300,30	102,70	0.30	100	5

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length m
D62300,35	125,00	0.35	100	5
D62300,40	119,60	0.40	100	5
D62300,45	142,00	0.45	100	5
D62300,50	137,60	0.50	100	5
D62300,55	182,00	0.55	100	5
D62300,60	182,00	0.60	100	5
D62300,65	208,70	0.65	100	5
D62300,70	205,70	0.70	100	5
D62300,75	236,30	0.75	100	5
D62300,80	221,00	0.80	100	5
D62300,85	236,30	0.85	100	5
D62300,90	223,80	0.90	100	5
D62300,95	239,10	0.95	100	5
D62301,00	229,70	1.00	100	5

CALIBRATED STAINLESS STEEL STRIPES

ART. D6236

Precision carbon steel stripes 1,1274 - 1,2003 in packages of 10 pieces 50 mm width and 300 mm length.

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length mm
D62360,03	42,10	0.03	50	300
D62360,04	42,10	0.04	50	300
D62360,05	35,00	0.05	50	300
D62360,06	28,20	0.06	50	300
D62360,07	28,50	0.07	50	300
D62360,08	28,50	0.08	50	300
D62360,09	28,50	0.09	50	300
D62360,10	28,50	0.10	50	300
D62360,12	29,00	0.12	50	300
D62360,15	29,00	0.15	50	300
D62360,18	29,80	0.18	50	300
D62360,20	29,80	0.20	50	300

Tech. Code	GR49 Euro	Thickness mm	Width mm	Length mm
D62360,25	29,80	0.25	50	300
D62360,30	29,80	0.30	50	300
D62360,35	32,20	0.35	50	300
D62360,40	32,20	0.40	50	300
D62360,45	32,20	0.45	50	300
D62360,50	32,20	0.50	50	300
D62360,60	52,80	0.60	50	300
D62360,70	52,80	0.70	50	300
D62360,80	52,50	0.80	50	300
D62360,90	52,80	0.90	50	300
D62361,00	52,80	1.00	50	300

CALIBRATED CARBON STEEL STRIPES KIT

ART. D6245

Precision carbon steel stripe 1,1274 - 1,2003 kit.

Tech. Code	GR49 Euro	Assortment mm	Width mm	Length mm
D6245KIT1	57,60	21 pieces from 0,01 to 1,00	25	300
D6245KIT2	99,10	25 pieces from 0,01 to 1,00	50	300
D6245KIT3	82,30	23 pieces from 0,03 to 1,00	50	300
D6245KIT4	41,10	11 pieces from 0,02 to 1,00	50	300

DIGITAL SHORE HARDNESS TESTERS

0,1 mm | LCD | 1,5V AAA

ART. D7120

A large display allows instant SHORE value reading, by lightly pressing the instrument onto the piece for a few seconds, AGV function enables the average detection of several points (max 9), automatic switch off. Power supply: 4 AAA-type 1.5V batteries (included).
Weight: 160 g.

Tech. Code	GR49 Euro	Shore	Use HA (HC, HD)	Res	Dimensions mm
D7120A	(608,00)	A	Soft rubber and plastic, elastomers	0.1	162 x 65 x 28
D7120D	(659,00)	D	Hard and thermoplastic rubbers	0.1	162 x 65 x 28

Tech. Code	GR49 Euro	Model
D99251,5V	5,40	- AAA-type 1.5 battery

HARDNESS SHORE TEST BLOCKS

ART. D7130

Hardness test plates to be used with Shore A and D Hardness testers in their analogue and digital versions

Tech. Code	GR49 Euro	Version	Content set pcs
D7130A	(238,00)	SHORE A	7
D7130D	(159,00)	SHORE D	3

SHORE HARDNESS TESTERS

0,01 mm

ART. LB202

Specifically designed used to detect non-destructively the hardness of rubber, plastic, sponges and related materials.
The Shore is the scale most widely used in the field of hardness measurements of temoplastic elastomers. The symbol 0 indicates that penetration has entered up to the mximun depth while as the symbol of 100 indicates a lack of penetration in the sample.
When Shore A is above 90 Shore D is recommended, applied with a sharper measurement.
When Shore A is below 5 Shore E is recommended.
The Shore hardness testers are suitable for the quality control in the production of rubber and plastic also for the maintenance of sockets\gaskets.

Tech. Code	GR45 Euro	Scale HA (HL, HD)	Use
D7110A	(220,00)	SHORE A 0-100	Neoprene, common rubber, soft pvc, elastomers, leather, etc.
D7110D	(295,00)	SHORE D 0-100	Formica, plexiglass, hard plastic, plastic fibers, polyethylene, etc.
D7110E	(299,00)	SHORE E 0-100	Hard foam, rubber, plastics, etc.

MANUAL STANDS FOR SHORE ANALOG HARDNESS TESTERS

INOX

ART. D7140

Shore hardness tester stands (analogue) - the measuring method is just as important as the instruments used.
This stands series allows to operate in optimal conditions to ensure realistic readings with the max repeatability.

Tech. Code	GR49 Euro	Dimension mm	For models	Weight kg
D7140A	(494,00)	100 x 212 x 2 x 250	A - C	5

Indivisible package | Suggested retail package - Unit price

ROCKWELL HARDNESS TESTERS

ALPA Schwer

ART. LB060

Universal hardness tester for ROCKWELL scale measurement on ferrous materials, main features as follows:
- Cast iron support structure, testing max height 170mm, depth capacity 165mm
- Hydraulic load application system with weight method, UNI-DIN-ASTM standard compliant 60/100/150kgf loads for ROCKWELL A, B, and C scales
- N. 1 Ø 150mm flat surface for workpiece positioning, N.1 Ø 55mm flat surface and N. 1 flat surface with V-shaped adapter to measure cylindrical objects

Equipment:	Pieces
- Indenter with diamond cone	1
- Ball indenter Ø 1/16"	1
- Spare balls	5
- HRC 20-30 specimen	1
- HRC 60-70 specimen	1
- HRB 20-30 specimen	1

Tech. Code	GR46 Euro	Composition Pieces	Weight kg
D722001	(1746,00)	10	80

DIGITAL MANUAL ROCKWELL HARDNESS TESTERS

ALPA Schwer

LCD

ART. LA720

Hardness tester for ROCKWELL scale measurement on ferrous materials, main features as follows:
- Cast iron support structure, testing max height 170mm, depth capacity 165mm
- Hydraulic load application system with weight method, UNI-DIN-ASTM standard compliant 60/100/150kgf loads for ROCKWELL A, B and C scales
- Reading on digital display with USB output
- N.1 Ø 150mm flat surface for workpiece positioning, N.1 Ø 55mm flat surface and N.1 flat surface with V-shaped adapter to measure cylindrical objects.
- Supplied complete with user manual.

Equipment:	Pieces
- Indenter with diamond cone	1
- Sphere indenter Ø 1/16"	1
- HRC 20-30 specimen	1
- HRC 60-70 specimen	1
- HRB 20-30 specimen	1

Tech. Code	GR46 Euro	Composition Pieces	Weight kg
D722101	2392,00	10	87

UNIVERSAL ANALOGIC HARDNESS TESTERS

ALPA H-Master

ART. LB151

Universal analogic hardness test with the following features:
- Rockwell (hra,hrb,hrc), Brinell, Vickers scales
- Cast iron structure, maximum height testing piece 170 mm, max depht 165 mm
- Motorized and temporized load application
- Pre-load 10 kgf, load 60-100-150 kfg for Rockwell A, B,C scales
- Load 31.2-62.5-187.5 kgf for Brinell scales
- Load 30-100 kgf for Vickers scales
- For Rockwell scales reading on analogue dial gauge
- For Brinell and Vickers scales reading with microscope included in the base scope

Equipment:	Pieces
Diamond Rockwell Indenter	1
Diamond Vickers Indenter	1
Ball Indenter Ø 1/16" for Rockwell B scale	1
Ball Brinell Indenter 2,5 mm	1
Ball Brinell Indenter 5 mm	1
Specimen HRC 20-33	1
Specimen HRC 57-70	1
Specimen HRB 85-100	1
Specimen HV 30	1

Tech. Code	GR46 Euro	Composition Pieces	Weight kg
D723101	4253,00	9	96

"TOUCH SCREEN" PORTABLE HARDNESS TESTERS - WITH PRINTER

ALPA

LCD

ART. LA760

Rebound impact device for hardness testing, an all new approach to measure anything that cannot be measured by using a static durometer. Used to monitor flat and cylindrical surfaces on different kinds of material, its stand device allows piece-counting for specific workpieces or small sets requiring a bearing area.
Heavy load portable durometer, allows to obtain results similar to those of a universal hardness tester.
It can be easily operated in different positions and suit several test situations, allows hard-to-access location measurements also on workpieces of different sizes.
Especially suited for internal hollow sections, involute gears and uneven shapes, it can operate in tight areas and in any position, for pieces of whatever shape and size.

- Leeb scale measurement range and hardness conversion in Rockwell (HRC and HRB), Brinell (HB), Vickers (HV) and Shore (HS) scales
- Control keyboard, protected from penetration of particles and liquids, suitable for workshop use
- Integrated data storage processor
- Working temperature 0°C ~ 50°C (32°F - 122°F)
- Processed workpiece: Min weight: 5kg, Min thickness: 5mm, Min thickness of layers: 0.8mm
- Min. radius of curved surface: 11mm
- Infrared and USB data output for printer connection
- Power supply: 3.7V rechargeable lithium battery (included)

Tech. Code	GR45 Euro	Resolution	Accuracy	Dimension mm	Weight g
D721501	(2061,00)	1HL, 1HV, 1HB 0.1HRC, 0.1HRB 1HS, 1MPa	±6HL (HL=800)	135 x 83 x 24	230

LEEB IMPACT HARDNESS TESTERS

LCD | INOX | 1,5V AA

ART. LA758

Scale measurement range: Leeb and scales HL, HB, HRB, HRC, HV, HS, σb.
Measuring range: HLD (200-960) - HRC (19.8-68.5) - HRB (13.5-100) - HB (30-651) - HV (80-976) - HS (26.4-99.5) - σb (375-2639), with D type probe (Standard). Accuracy: ± 6 HLD (HLD=800), repeatability < 6 HLD (HLD=800). Impact direction: 360° selectable. Materials: iron, cast iron, stainles steel, aluminium, etc. Minimum measurable piece weight: 5 Kg. Display: luminated LCD display in english. Memory: 100 groups. USB connection (Standard) with software included and 2 1.5V AA type batteries.

Standard GB/T 17394-1998, ASTM A956.

Tech. Code	GR45 Euro	Resolution	Dimension mm	Weight g
D7216STR	1650,00	1 HL - 1 HV - 1 HB 0.1 HRB - 0.1 HRC - 0.1 HS	76 x 37 x 153 h	280

Indivisible package Suggested retail package - Unit price

LEEB IMPACT HARDNESS TESTERS

LCD | INOX | 1.5V AAA

ART. LA759

Scale measurement range: Leeb and scales HL, HB, HRB, HRC, HV, HS, σb.
Measuring range: HLD (200-960) - HRC (19.8-68.5) - HRB (13.5-100) - HB (30-651) - HV (80-976) - HS (26.4-99.5) - σb (375-2639), with D type probe (Standard) and DL probe (Optional). Accuracy: ± 6 HLD (HLD=800), repeatability < 6 HLD (HLD=800). Impact direction: 360° selectable. Materials: iron, cast iron, stainles steel, aluminium, etc. Minimum measurable piece weight: 5 Kg. Display: 45 mm OLED display withn 169x128 pixels resolution in english. Memory: 1000 groups. 6 results per group and 1 average value, USB connection for research, data output. Equipped with software for data transmission, storage and print out. AAA type lithium battery, with automatic power off after 3 minutes of not use.

Standard GB/T 17394-1998, ASTM A956.

Tech. Code	GR45 Euro	Resolution	Dimension mm	Weight g
D7217INT	1800,00	1HL - 1HV - 1HB 0.1HRB - 0.1HRC - 0.1HS	46 x 23 x 150 h	110

PORTABLE ROUGHNESS TESTER

ALPA

0,001 mm | LCD | PDF

ART. LA251LITE

PORTABLE ROUGHNESS TESTER with 90° rotating diamond probe and optical signal transmission. Gauss filter. Interchangeable tip. 8 parameters, ISO 4287 compliant (Ra; Rq; Rt; Rz; Rc; Rmax; Rsm; Rpc), 5 parameters ISO 12085 compliant (Pt, R, AR, Rx, PPc). The extremely small size (the smallest available) and fast battery charging, via the USB cable, make this instrument a turning point in the conception of shape-measuring instruments. The application can be downloaded to your mobile phone and computer in order to download data via Bluetooth.

Tech. Code	GR46 Euro	Dimension mm
D7240LITE	2350,00	125 x 31 x 30

PORTABLE ROUGHNESS TESTERS

ALPA FACEtest 25

0,001 mm | LCD | PDF

ART. LA250

Face Test 25 roughness is a highly-versatile hand-held device. Suitable for both horizontal and vertical measuring, 90°, V-shaped, flat surfaces, internal and external diameters, mounted on stand supports. Gauss filter, 8 parameters, ISO 4287 compliant (Ra, Rq, RMS), Rt, Rz, Rc, Rmax, Rsm, Rpc, 5 parameters ISO 12085 compliant (Pt, R, AR, Rx, PPL), profile and capacity curve data transmission to the printer (printer supplied as optional). Output connection to PC with advanced computing program (optional) and graphs printing, new electronics with large display, 0,001 µm resolution, Z400/mm measurement range designed for higher friction coefficient measurements (sanding, embossing etc.). Supplied with standard tester, roughness samples and instruction manual. Face test 25 plus may also mount special interchangeable testers as well as extensions for depth drilling measurement. Basic software and USB cable are included.

Optional
- ST1 stand with granite plate 300 x 200

Tech. Code	GR46 Euro	Description	Measuring range Z µm	Display
D7241GRAF	2100,00	Interchangeable pick up	± 300	Graphic

ROUGHNESS TESTERS SJ-210

Mitutoyo

LCD

ART. 178-560-11D

This is a portable measuring instrument that allows you to easily and accurately measure surface roughness.
The SJ-210 offers you the following benefits:
- Skid system gives you user friendly and intuitive menu navigation
- It works independently of mains power, allowing you to make on-site measurements
- The 6.0 cm [2.4"] colour graphic, back-lit LCD gives you excellent readability
- It performs roughness analyses conform to various international standards (EN ISO, VDA, ANSI, JIS) and customized settings
- Data memory: up to 10 measurement conditions and a measurement profile can be stored
- Optional memory card: to expand the range of applications
- Calculation results, assessed profiles, bearing and amplitude curves can be displayed
- Operation by keys on the front and under the sliding cover
- Support of 21 languages

Tech. Code	GR50 Euro	Detector measurement force M	Angle point stylus	Radius of stylus point µm
D7232210	2410,00	0,75	60°	2

STANDS FOR ROUGHNESS TESTERS

Mitutoyo

ART. SERIES 178

Stand for roughness testers with granite base and column with micrometric positioning.

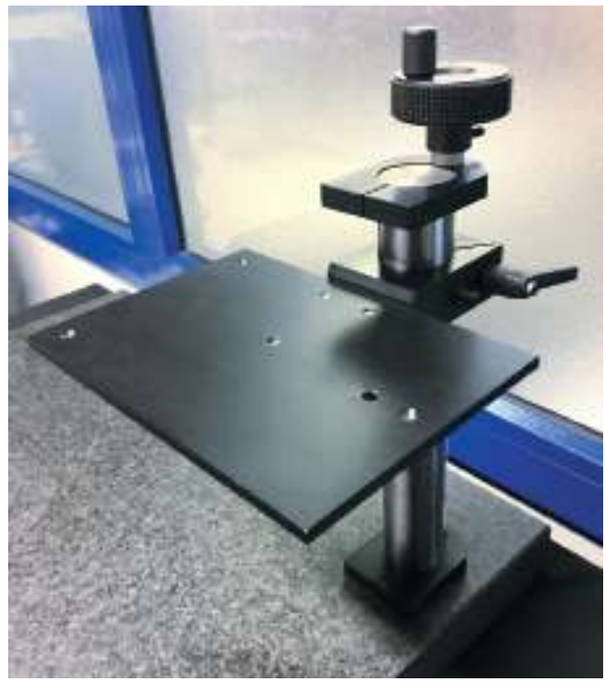
Tech. Code	GR50 Euro	Column Ø mm	Column h mm	Granite base mm
D7237STAT	(905,00)	50	506	400 x 250 x 60

STANDS FOR ROUGHNESS TESTERS

ALPA

ART. LA255

Stand for roughness testers with granite base and colum with micrometric positioning.



Tech. Code	GR46 Euro	Column Ø mm	Column h mm	Granite base mm
D7244STAT	(776,00)	40	300	600 x 400 x 40

ROUGHNESS SPECIMENS KIT

ALPA

ART. LA265

The set consists of 30 plates reproducing the most important and widespread machining works, such as lapping, grinding, drilling, milling and turning, with different roughness between 0,05 and 12,5 µm in Ra. Useful for corresponding indicative comparison.
(NB Not suitable for roughness tester calibration or verification).

Tech. Code	GR45 Euro	Description
D724530	340,00	30 Comparison specimens set

Indivisible package Suggested retail package - Unit price

HIGH PERFORMANCES ROUGHNESS TESTERS

ALPA FACEtest 80

ART. LA255

Backlit liquid crystal TFT 5.7" 256 -colour display with touch screen technology; 46 parameters measured according to the international Roughness Index - profile-waveness 1000µm measurement range, auto travel according to cut-off, also selectable from 1 up to 10 times the cut-off (0.8 mm). Built-in thermal printer to display graph and numerical data reports, 0.001µm resolution, USB output.

Portable laboratory roughness tester- Professional translator with internal metrological reference. Maximum traverse length of 50 mm. Precision measurement with 0.32 mm min traverse length (4 x 0.08 + 0.20 mm) SB10 and SB60 dual pick-up. For accurate roughness measurement: radial roughness (pipes, balls). With diamond sensor stylus.

Tech. Code	GR46 Euro	Range µm	Type
D724301	(4750,00)	1000	Portable travel unit
D724302	(7150,00)	1000	Table travel unit

PORTABLE ROUGHNESS/SURFACE PROFILER TESTERS

ALPA WRP

ART. LA253

This new roughness/surface profiler tester has a revolutionary approach to roughness measurements. 7 Inches wide 16 million colour touch screen display. 75 roughness parameters following the principle international regulations. Integrated CAD system for profile analysis. Measuring range 3000µm roughness and profilometry probe. Resolution 0.1 nm (0.0001 µm) on 3000 µm. Automatic saving of last 6 measure, manual saving up to 1000 measurements for profilometry and 4000 measurements for roughness (graphics+parameters).

- Measurement range: Z=3000 µm for roughness Z=3000 µm for profile tester
- Resolution: 0.1 nm (0.0001 µm) on ± 1500 µm
- Cut-off lenght: 0.08 – 0.25 - 0.8 – 2.5 – 8mm
- Cut-off number: from 1 to 20 cut-off (within 60mm)
- Traverse lenght: X = 60 mm
- Pick-up: interchangeable inductive (only carbon tips)
- Measurement parameters: 75 parameters
- ISO Ra, Rq, Rt, Rz, Rp, Rv, Rc, Rsk, Rku, RSm, RΔq, RΔa, Rδc, Rmr, RPc, RLo, Rlr, Rzjis, RHSC, Pa, Pq, Pq, Pv, Pc, Psk, Pku, PSm, PΔq, Pδc, PPc, PLo, Plr, PHSC, Wa, Wq, Wt, Wz, Wp, Wv, Wc, Wsk, Wku, WSm, WΔq, Wδc, WPc, WLo, Wlr, WHSC, Rk, Rpk, Rvk, Mr1, Mr2, A1, A2, W, Wx, Rke, Rpke, Rvke, Mr1e, Mr2e, A1e, A2e
- ISO 12085: Pt, R, AR, Rx, Wte, Aw
- DIN 4768: Rmax
- VDA2007: WDSm, WDc, WDt
- Unit of measurement: millimeters and inches
- Interface: graphic 7" touch screen display
- Languages: Italian, French, English, German, Spanish, Portuguese, Japanese, Chinese, Korean
- Memory: Up to 4000 roughness measurements and 1000 profilometry measurement

Standard equipment:
- Probe for roughness with diamond cone angle 90 ° radius 2 µm, probe for profile with a chisel angle 11°, the profile software are included
- Calibration specimen for the roughness Ra = 2.97 µm
- Charger

Tech. Code	GR46 Euro	Description
D7246RP	(14100,00)	Rugoprofilometro portatile
D7246KITP	(973,00)	3mm Profile tester set (specimens for calibration)

DIGITAL MICROSCOPES COMPLETE WITH STAND

GAZE 200

ART. D7255

A user-friendly microscope, ideal for image capture and footage.
Integrated LED illumination, two focus phases, can also be used without stand.
Equipped with a specific software featuring comprehensive measurement functionalities, such as distance, range, etc.

TECHNICAL SPECIFICATIONS:
- 10x to 200x magnification
- 1.3 megapixel resolution camera
- Adjustable light LED
- USB power supply
- Windows XP and Vista compatible.

Tech. Code	GR45 Euro	Resolution	Dimension mm	Plan mm	Weight g
D7255C/SOFTW	199,00	1280 x 1024	150 x 175	120 x 175	110

Picture is used for purely demonstrative purposes, supplied without computer.

STEREO MICROSCOPES

KERN

NEW

ART. OSF

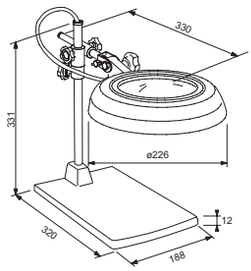
Practical and robust binocular microscope, with integrated handle and fixed mechanical stand. The ergonomic shape and the high-precision adjustable mechanics offer a high level of functionality and allow you to work quickly and efficiently. The standard incident and transmitted light LED illuminator ensures continuously adjustable illumination of the specimen.
A dust cap and eye shields are included.
Technical data:
Greenough Optics
45° inclined tube
Interpupillary distance: 55 - 75 mm
Diopter compensation on one side only

Tech. Code	GR50 Euro	Magnification STD	Lens	Field of View mm	Dimension mm	Weight kg
D725810X	(410,00)	10X	1X - 2X - 3X	20	230 x 180 x 275	2,3

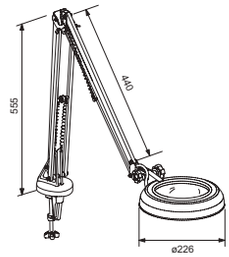
LED ILLUMINATED MAGNIFIERS

ART. LA900

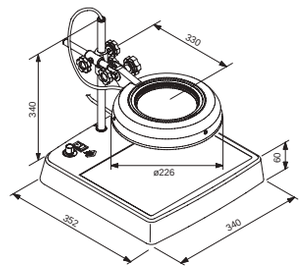
Illuminated magnifier full LED lamp unit with dimming, with a wide magnification range from 2x to 15x (on demand), thanks to interchangable circular lenses.
LED light source stimated life time 40.000 hours (life time estimated/not guaranteed).
75% energy consumption reduction compared to standard fluorescent lamps.



Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7247A2X	690,00	2x	2.2	-	A



Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7247B2X	840,00	2x	2.8	1.000	B



Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7247C2X	1250,00	2x	3.2	-	C

Indivisible package Suggested retail package - Unit price

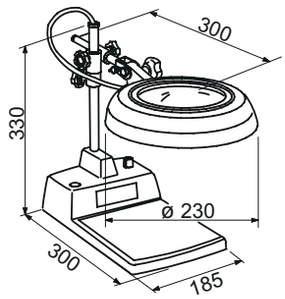
HALOGEN MAGNIFIERS

ART. LA950

Halogen magnifying lenses. Simple and reliable, combines high quality components and competitive price.

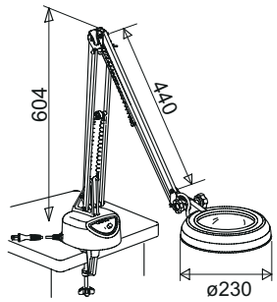
Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7248A2X	264,00	2x	2.7	-	A

While stocks last



Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7248B2X	367,00	2x	3.0	1.000	B

While stocks last



LED ILLUMINATED MAGNIFIERS

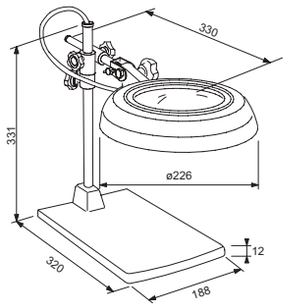
ART. LA920

Illuminated magnifier full LED lamp unit, with a wide magnification range from 2x to 15x (on demand), thanks to interchangable circular lenses.

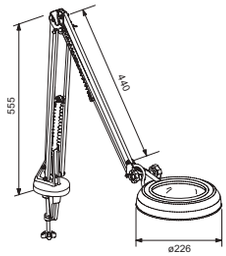
LED light source stimated life time 40.000 hours (life time estimated/not guaranteed).

75% energy consumption reduction compared to standard fluorescent lamps.

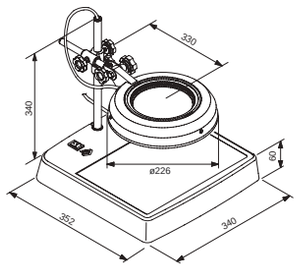
Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7249A2X	342,00	2x	2.1	-	A
D7249A4X	585,00	4x	2.1	-	A



Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7249B2X	436,00	2x	2.7	1.000	B
D7249B4X	654,00	4x	2.7	1.000	B



Tech. Code	GR45 Euro	Magnification	Weight kg	Arm dimension mm	Shape
D7249C2X	865,00	2x	3.2	-	C
D7249C4X	1080,00	4x	3.2	-	C



MAGNETIC MAGNIFIERS 5X

ART. D7260

Scratch-resistant lens, shock-proof transparent plastic body, provided with two magnets on both sides for a safe and easy positioning even upright wherever data or image enhanced visibility is required.

Tech. Code	GR49 Euro	Magnification	Ø lens mm
D7260305X	50,00	5x	30

MAGNIFYING GLASSES

ART. D7262

Plastic acrylic lens.

Tech. Code	GR49 Euro	Magnification	Dimension mm
D726250	14,20	3x - 6x	50
D726275	16,80	2,5x - 5x	75

DOUBLE MAGNIFYING GLASSES

ART. D7265

Glass lens with anti-scratch coating, metal framing; Ø 20mm lens being inserted into the Ø 75mm one, its two different magnifications provide a near-universal application in precision work.

Tech. Code	GR49 Euro	Magnification lens Ø 75	Magnification lens Ø 20
D726575205X	92,00	2,5x	5x

ART. D7266

Ergonomical rubber grip wire stand for hand-free uses.

Tech. Code	GR49 Euro	Magnification	Dimension mm
D72668550	31,30	2x - 6x - 10x	85 x 50

FOLDING MAGNIFIERS

ART. D7267

Plastic acrylic lens.

Tech. Code	GR49 Euro	Magnification	Ø lens mm
D726730	13,20	5x	30

ART. D7268

Plastic acrylic lens.

Tech. Code	GR49 Euro	Magnification	Ø lens mm
D726820	24,70	6x	20

While stocks last

MAGNIFYING GLASSES

ART. D7269

Plastic magnifying glasses

Tech. Code	GR49 Euro	Magnification	Ø lens mm	External dimension mm
D726925	16,30	10x	25	Ø 50 x 45

Indivisible package Suggested retail package - Unit price

STANDING MAGNIFIERS 10X

ART. D7270

A high-magnification capacity coupled with a large viewing area, shock-proof cylindrical plastic body, transparent base.

Tech. Code	GR49 Euro	Magnifications	Visual field mm	Ø lens mm
D7270302510X	49,00	10x	30	25

ADJUSTABLE FOCUS MAGNIFYING GLASSES

ART. D7271

Achromatic lens system, scale measuring reticle in mm, shock-proof plastic body, focus adjustment function, transparent, removable reticle holder base.
* Additional reticles for different scale measurements can be supplied.

Tech. Code	GR49 Euro	Magnifications	Visual field mm	Ø lens mm
D7271282010X	177,00	10x	28	46

ART. D7272

Plastic magnifying glasses.

Tech. Code	GR49 Euro	Magnification	Ø lens mm
D727230	17,50	5x - 10x - 15x	30

LED MAGNIFIERS

ART. D7273

With LED-light and glass lens batteries included (2 x LR14).

Tech. Code	GR49 Euro	Magnification	Ø lens mm	Total length mm
D727350	23,40	3,5x	50	195
D727390	31,00	2,5x	90	230

LIGHT MAGNIFIERS 10X

ART. D7275

A model that combines the excellent power of magnification and the field of view with the possibility to illuminate when the point to be examined is needed,
body in shock-proof plastic body, transparent base. Power supply 2 C-type 1.5 V batteries (not included).

Tech. Code	GR49 Euro	Magnifications	Visual field mm	Ø lens mm
D7275302510X	64,00	10x	30	25

SCALE MAGNIFIER KIT 10X

ART. D7277

Achromatic lens system, shock-proof plastic body, focus adjustment function, transparent, removable reticle holder base.

Tech. Code	GR49 Euro	Magnifications	Visual field mm	Ø lens mm
D7277262010X	(342,00)	10x	26	20

Radius, lengths and holes reticle | Thicknesses reticle | holes and polar grid | Lengths mm/in | Metric pitch

PEN MICROSCOPES

ART. D7278

A limited dimension, practical microscope, also supplied complete with measuring reticles.

Tech. Code	GR49 Euro	Magnification
D727825X	110,00	25x

ART. D7279

3 mm viewing area Complete with focus adjustment and measuring reticle.

Tech. Code	GR49 Euro	Magnification	Visual field mm
D727925X	267,00	25x	3

ILLUMINATION FOR POCKET MAGNIFYING LENSES

ART. D7280

Lighting device for a clear and sharp observation of the object to be measured.
Supplied without lens

Tech. Code	GR49 Euro	Magnification	Visual field mm	Ø lens mm
D72802044	49,00	10x	32	47

OPTICAL AND CONTCT DIGITAL TACHOMETERS

LCD | 1,5V AA

ART. D7310

Optical/contact model - instrument equipped with removable head for contact and distance rotating pieces checking procedures by using a laser beam and a small portion of reflecting seal tape applied onto a rotating workpiece; storage device enables a display viewing after last measurement reading and min/max values. Optical model only for laser beam measurements.
Power supply: 4 AA-type 1.5 batteries (included).

Main features:
- 2.5 rpm ÷ 99.999 (optical) measurement range
- rpm 0.5 ÷ 19.999 measurement range (contact measurements)
- m/min 0.05 ÷ 1999.9 measurement range (tapeline measurements).

Tech. Code	GR49 Euro	Type	Measuring distance mm	Accuracy
D73101	250,00	Optical/Mechanical	50 ÷ 500	± 0.05% + 1 dgt

Tech. Code	GR49 Euro	TIpo
D99301,5V	5,30	AA 1.5V

Indivisible package | Suggested retail package - Unit price

CONTACT DIGITAL TACHOMETERS

0,01 mm | LCD | 1,5V AA

ART. D7325

To measure either rotational or traveling speed. Operating by means of contact sensors. Extremely useful in workshop environments and in the manufacturing industry. Extremely sturdy, energy efficient instrument, ideal for in-field measuring.

Dimensions. 205 x 72 x 36mm Weight 158g

Tech. Code	GR49 Euro	Resolution	Speed Rot. Contact
D7325TACHIM03	168,00	0.01/0.1/1	0.5 ÷ 19.999

Tech. Code	GR49 Euro	TIpo
D99301,5V	5,30	AA 1.5V

VIDEOENDOSCOPES

IP 67 | PDF

ART. LA490

Compact portable inspection camera to display the applications for a clear view in tight spots, not visible at glance.
3.5", wide angle LCD screen, to view, store and review pictures and footage.
Images can also be displayed directly on a TV screen, or stored and transferred to a PC using a USB cable.
SD mini card allows direct video recording or picture storage. An easy-to-transport standalone device, excellent for assessing damages, or simple diagnosis. Instant viewing of footage and image captures directly recorded on a high resolution TFT screen or external monitor. File transferred to computer by using a USB interface. Flexible 3m cable camera, 5.5mm diameter micro wide angle. Adjustable LED light for optimal view in all applications. In addition to the 45° and 90°mirrors supplied, the instrument can be easily equipped with several mirrors featuring different angles.
Cables of different sizes can also be supplied, as an optional item.

Equipment:

- Basic device with USB cable
- Probe diam. 5,5 with front cam
- AV2 cable for TV display
- 2GB SD card
- Spare battery
- Power adapter

Included

* Optional

* Optional

Tech. Code	GR45 Euro	Equipment	Probe m
D72906404801	1119,00	Basic device with USB cable + Probe + AV2 cable + SD card + Battery + Power adapter	1
D72906404803	1473,00	Basic device with USB cable + Probe + AV2 cable + SD card + Battery + Power adapter	3

Performance:
- Semi-rigid cable, oil-proof and abrasion resistant
- N.4 enhanced illumination LEDs
- High speed video recording and image capture
- 2GB memory
- 300,000 pixel high definition resolution

VIDEOENDOSCOPES PROBES

ART. D7295

VIDEOENDOSCOPES PROBES

Tech. Code	GR45 Euro	Description
D7295CAVO1	576,00	Probe 1 m
D7295CAVO3	808,00	Probe 3 m

DIGITAL CHRONOMETERS

LCD

ART. PROFIL 5

Seven digits display for 1/100 sec readings, watch and calendar functions. MODE - LIGHT button, SPLIT-RESET button, addition, interval detection, clearing functions. Power supply: 1 AA-type 1.5 battery (included).

Tech. Code	GR49 Euro	Description	Dimension mm
D75101	76,00	Sturdy ABS shock-proof and splash-proof casing.	80 x 57 x 17

Tech. Code	GR49 Euro	TIpo
D99301,5V	5,30	AA 1.5V

INFRARED THERMOMETERS

IP 54 | LCD | 9V MN1604

ART. D7620

Remote temperature measuring instrument with a built-in laser pointer, large backlit LCD display, °C (Celsius) to °F (Fahrenheit) switching, min. / max. alarm threshold setting, automatic switch off. IP54.
Power supply: 9V battery (included).

Tech. Code	GR49 Euro	Range	Measuring ratio	Accuracy
D76201	(286,00)	-50°+800°(C) / -58° +1472°(F)	16:1	-50° - 0° ± 2.5° 0° - +1370° ±1.5%

TYPE-K DIGITAL THERMOMETERS

LCD

ART. D7630

Instruments used for K-probe temperature measuring. A wide selection of probes to fit a variety of fields of application: surface temperature, single point tempt, within fluids or materials, environment
Celsius/Fahrenheit automatic conversion, suitable for any industrial requirements.
Weight: 192 g.

Resolution ± :
- 0,1°C from -50 ~ 199,9°C
- 1°C from 200°C ~ 1300°C

Tech. Code	GR49 Euro	Range	Accuracy	Dimension mm
D7630TERMDIGK	(176,00)	-50 ~ 1300°C Varying according to probe type	0,3% + 1°C from -50 ~ 799,9°C 0,3% + 2°C from 200°C ~ 1300°C	160 x 79 x 43

Indivisible package Suggested retail package - Unit price

PROBES FOR K-TYPE DIGITAL THERMOMETERS

ART. D7631

PROBES FOR K-TYPE DIGITAL THERMOMETERS

Tech. Code	GR49 Euro	Model	Application
D7631SONDA01	(34,00)	SATP-01 (-50-200°C)	Surfaces

ART. D7632

PROBES FOR K-TYPE DIGITAL THERMOMETERS

Tech. Code	GR49 Euro	Model	Sensor mm
D7632SONDA02	(52,00)	SATP-02 (-50-500°C)	80

ART. D7635

PROBES FOR K-TYPE DIGITAL THERMOMETERS

Tech. Code	GR49 Euro	Model	Application
D7635SONDA202	(132,00)	SATP-202 (-50-750°C)	Surfaces

PROBES FOR DIGITAL THERMOMETERS

ART. D7633

PROBES FOR DIGITAL THERMOMETERS

Tech. Code	GR49 Euro	Model	Sensor mm
D7633SONDA03	(107,00)	SATP-03 (-50-750°C)	500

ART. D7634

PROBES FOR K-TYPE DIGITAL THERMOMETERS

Tech. Code	GR49 Euro	Model	Sensor mm
D7634SONDA04	(109,00)	SATP-04 (-50-1000°C)	500

INFRARED THERMOMETERS

LCD | 9V MN1604

ART. D7640

Non-contact temperature measurement instruments Infrared thermometers are extremely easy to use, nearly immediate feedback time, safe data measurement (Celsius and Fahrenheit scales) even in cases where standard instruments would not operate. Compact, user friendly, complete with its carrying pouch with belt clip, make it usable even by less-experienced users. Suitable for any industrial sector.

Tech. Code	GR49 Euro	Range	Resolution
D7640TERMOINFR	184,00	-25°C ~ 560°C	0,2°C

Tech. Code	GR49 Euro	Model
D99159V	5,30	Battery 9V Transistor

THERMOMETERS BY PROBE

LCD | 1,5V AA

NEW

ART. D7651

One channel instrument for rapid temperature detection, provides continuous display of min/max values, acoustic alarm indicates when the threshold values are exceeded, HOLD button to lock the instantaneous measurement on the display. Large backlit LCD display.
Power supply: 3xAA transistor battery (included).
TOPSAVE shockproof housing (optional).

Tech. Code	GR49 Euro	Temperature range °C	Resolution °C	Readout accuracy °C
D76511	216,00	-50 +1000	-50 ~ +500 0,1 +500 ~ +1000 1	-50 ~ +900 ±0,5 +900 ~ +1000 ±0,7

THERMOCOUPLE PROBES FOR PROBE THERMOMETERS

ART. 0602 - 1993

Watertight probe with widened measuring tip for flat surfaces.

Tech. Code	GR49 Euro	Temperature range °C	Accuracy class
D76521	110,30	-60 ~ +400	2

ART. 0602 - 0393

Spring loaded thermocouple rapid probe suited to provide positive contact also with irregular surfaces.

Tech. Code	GR49 Euro	Temperature range °C	Accuracy class
D76541	229,00	-60 ~ +300	2

ART. 0602 - 1293

Waterproof immersion/penetration probe suitable for semisolid materials.
Ideal in plastic measurements.

Tech. Code	GR49 Euro	Temperature range °C	Accuracy class
D76561	72,50	-60 ~ +400	2

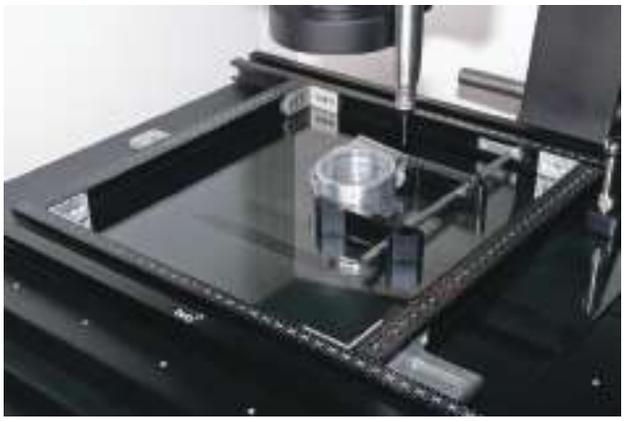
Indivisible package Suggested retail package - Unit price

VISION SYSTEM 3D

LA110

The new ALPA SCOPE is the maximum expression of Baty technology applied to optical machines.
The measuring range (250 x 125 x 150 mm and 300 x 300 x 200 mm), the completeness of the equipment, the FUSION software and the ultra-high-resolution camera (3.22 Megapixels) allow fast, complete, reliable and very precise measurements. The non-contact measurement is carried out by means of a microzoom lens of the highest quality, motorised and software-controlled, with parfocal and paracentric optics. Optical magnification from 30X to 200X and digital magnification up to 350X with double monitor.

Contact with Renishaw TP20 touch probe softwear lighting system, with 64 ring white leds with collimated profile lighting. WINDOWS operating system and FUSION programme.



- High resolution 0.5µm scales for increased accuracy E1 (2+L/100) µm
- Plate with light alloy column
- 3.2 Megapixels camera, motorized micro-zoom optics
- Renishaw TP20 touch probe and accessories
- TP20 contact probe
- Double monitor as standard
- Master for setting pixels as standard, accuracy E1(2+L/100) µm

PRICES ON REQUEST

SETTING CALIBRATION AND MEASURING BENCH

LCD

ART. LA015

- Fastest, easiest to use, most reliable, precise, solid and long lasting
- Made of stabilized cast iron
- Light alloy heads
- Hard metal reset switches (HM lapped finish)
- Glass support optical scales with absolute and incremental correction
- Large display with settings keyboard, frictioned handwheel, high precision adjustment sliding block
- Push and pull preload for reliable measurements
- Wide array of accessories available on request for a variety of control operations

Tech. Code	GR46 Euro	Range mm	Accuracy µm	Weight kg
D7710400	(-)	1 ÷ 400	1,5 + L/400	50
D7710700	(-)	1 ÷ 700	1,5 + L/400	60
D77101000	(-)	1 ÷ 1000	1,5 + L/400	70

- Price on request

MANTIS COMPACT STEREO VIEWERS

ART. COMPACT

Mantis Compact is a stereo viewer able to provide 3-dimensional images designed for freedom of head movement employing patented eyepieceless technology. Ideal instrument for all inspection, manipulation and rework tasks requiring low magnification.

- Fast lens replacement 2x, 4x, 6x e 8x (not included).
- LED cool white light, actual colour viewing, for over 10.000 shadeless viewing hours.
- A wide range of supports. Articulating arm for tasks requiring greater extension, high-stability column support, diascopic lighting.

Tech. Code	GR48 Euro	Description	Magnifications
D7830MANTISCO	(1905,00)	Basic Instrument	2X - 8X
D7830COMP4X	(118,00)	Objective lens	4X
D7830COMP6X	(189,00)	Objective lens	6X
D7830COMP8X	(453,00)	Objective lens	8X

MANTIS ELITE STEREO VIEWERS

ART. ELITE

Mantis is a patented eyepieceless stereo microscope ensuring great 3D images with the highest levels of comfort, for a fatigue-free, high quality productive viewing Up to 20x magnifiers make Mantis Elite a high-performance stereoscopic viewer fit to a wide range of tasks.

- 2 x up to 20x with quick replacement table stand (not included).
- Cool white LED light source, actual colour viewing, over 10.000 shadeless viewing hours.
- Superior ergonomics for an increased quality and productivity.
- Outstanding hand/eye coordination for inspection and manipulation tasks.
- Long working distances and excellent large field of view for manipulation and reworks sample tasks.
  Articulated arm for applications requiring extened reach.
- Vast choice of high-stability column support. Articulated arm for application which need more extension.
  High-stability column support with optional diascopic lighting.

Fatigue-free viewing
Patented technology ensuring the operators superior freedom of head movement, great ergonomics and hand/eye coordination, the ability to wear eyeglasses if required.

State of the art optical performances is what Mantis Elite represents. It is also a great alternative to traditional stereo microscopes, for a wide range of inspections, manipulation and rework requiring excellent hand/eye coordination.

Tech. Code	GR48 Euro	Description	Magnifications
D7850MANTISEL	(3480,00)	Basic Instrument	2X - 20X
D7850ELITE4X	(205,00)	Objective lens	4X
D7850ELITE6X	(532,00)	Objective lens	6X
D7850ELITE8X	(689,00)	Objective lens	8X
D7850ELITE10X	(721,00)	Objective lens	10X

EVOCAM VIDEO-MICROSCOPES II

ART. EVOCAM II

Exceptional digital video inspection system of FULL-HD 1080p, designed to capture images and create reports in all simplicity at a push of a button. Superb clarity of live video images at up to 60 FPS: interchangeable image frequency (50 fps and 60 fps). Wide field vision with 30.1 zoom.
Ideal for quality control, testing, inspection and documentation.

- A base with a high stability arm for larger samples
- Monitor 24" FULL LED HD included
- HDMI output and USB 3.0

Wide range of lens not included

Tech. Code	GR48 Euro	Maginifications	Working distance mm
D789003	(6010,00)	EVOCAM II Machine	106

Tech. Code	GR48 Euro	Max digital
D7890063X	(322,00)	0,62X

Indivisible package Suggested retail package - Unit price

OPTICAL MEASURING SYSTEM

ART. SWIFT

The simplest and most intuitive measuring two-axis system. The most cost-effective alternative to the simplest and most intuitive measuring two-axis system. The most cost-effective alternative to a standard optical profile projector, an outstanding quality price ratio

- Measuring range 200 x 100 mm
- Transmitted and reflected source of light
- Image display on 22" touch-screen
- Windows 10 operating system computer

Two-axis measuring, Measures exporting in standard format and Excel, photo included

- System installation and assembly
- Basic knowledge training for the software and system operators provided

Tech. Code	GR48 Euro	Description	Magnifications
D7905K2S11	(15850,00)	SWIFT PRO CAM Machine	20x

VERTICAL PROFILE PROJECTOR

ALPA Profil

LCD

ART. LA050

Robust vertical profile projector, stage travel 155 x 55 mm, with fast movement handle, 0,5 µm optical scales, 3 axis digital display (X Y and angles), data processing unit with functions like radius, angles, distance between objects, etc., backlit LCD display.
Screen diameter ø 300 mm, profile illumination and 2000 programming elements, IRDA port, RS232 output, DFX file transmission, lens magnificaation 10X. Maximum heigh for piece to measure 43 mm, maximum weight on the stage 15 kg.

Tech. Code	GR46 Euro	Measuring range mm	Lens magnification
D7952300	7900,00	150 x 50	10x

HORIZONTAL PROFILE PROJECTOR

ALPA Profil

LCD

ART. LA020

Horizontal profile projector with new structure and metal cabinet for increased stability and rigidity.
Heidenhain 0.5 µm scales, Heidenhain Quadra-Check 220 viewer with large backlit LCD screen and geometric processor and two-coordinate measuring program for calculating angles, radii, centre distances, references, with 2000 programming blocks, IRDA port, RS232 output, DXF file transmission.
High brightness 340 mm diameter screen.
Equipped with angle reader. Chromium-plated steel table, 175x100 mm strokes on high-precision guides.
Dual-fibre diascopic and episcopic lighting.
The objective can be chosen between 10X - 20X - 50X to be purchased separately.

Installation and training not included.

Tech. Code	GR46 Euro	Measuring range mm	Ø Screen mm	Measurement system
D7954FT2E	(15800,00)	175 x 100	340	FT2E

Indivisible package Suggested retail package - Unit price

DIGITAL HANGING SCALES

KERN

LCD | 1,5V AAA

ART. HDB

Stainless steel hook, LCD display with 12mm high digits, HOLD mode button freezing load value for 5 seconds; automatic shutdown if no load change occurs within 5 minutes. Power supply: 2 AAA-type 1.5V batteries (included).

Tech. Code	GR50 Euro	Max capacity kg	Division g
D85105K5	65,00	5	5
D851010K10	65,00	10	10

Tech. Code	GR49 Euro	Model
D99251,5V	5,40	- AAA-type 1.5 battery

LCD | 9V MN1604

ART. CH

Stainless steel hook, LCD display with 11mm high digits, 100 cm-retractable measuring tape, HOLD mode multi-function button freezing load value for 5 seconds until any key is pressed; automatic shutdown if no load change occurs within 3 minutes (this function can be disabled). Power supply: transistor-type 9V battery (included).

Tech. Code	GR50 Euro	Max capacity kg	Division g
D852015K20	80,00	15	20

Tech. Code	GR49 Euro	Model
D99159V	5,30	Battery 9V Transistor

LCD | 1,5V AA

NEW

ART. HCN

Practical digital crane scale, ideal for quick checkweighing at incoming and outgoing goods.
Possibility of displaying the peak load.
Stainless steel housing, IP65 dust and splash protection.
Convenient second display on the back of the scale.
Supplied with 2 1.5 V AA batteries, autonomy up to 200 h

Tech. Code	GR50 Euro	Max. capacity kg	Division g
D8525050K100	150,00	100	200
D8525100K200	150,00	50	100

ANALOG FORCE GAUGES

ALPA

ART. LB300

Accessory series which is essential to obtain max performances from your dynamometer. Ideal to operate if paired with internal load cell dynamometers and related supports. Special clamps upon request.

Tech. Code	GR45 Euro	Range N	Resolution N	Accuracy ±	Excursion
D8550DINAN20N	180,00	20	0.001	1%	Variable according to model
D8550DINAN50N	180,00	50	0.01	1%	Variable according to model
D8550DINAN100N	180,00	100	0.01	1%	Variable according to model
D8550DINAN200N	180,00	200	0.1	1%	Variable according to model
D8550DINAN500N	180,00	500	0.1	1%	Variable according to model

Indivisible package Suggested retail package - Unit price

PRECISION DIGITAL SCALES

KERN

LCD | INOX | 1,5V AA

ART. EMB

Platform scale, good performances, large LCD display, 15mm high digits, ON-TARE button and display clears up digits when weighing (ex. when tare weight is removed), automatic shutdown if no load change occurs within 3 minutes (this function can be disabled). Power supply: two AA-type 1.5V batteries (included), 230V adapter (optional).

Tech. Code	GR50 Euro	Max capacity g	Division g	Plate Ø
D86205000,1	63,00	500	0.1	150
D86202201	60,00	2200	1.0	150

Tech. Code	GR49 Euro	TIpo
D99301,5V	5,30	AA 1.5V

LABORATORY SCALES

KERN

LCD | INOX

ART. PCD

Precision laboratory scales with separate platform. PRE-TARE function for the advance manual deduction of a known container weight, useful for filling controls. Programmable measuring unit (eg. direct display in filament length g/m² weight, etc.) Level and adjustable feet for exact leveling of the scale; for maximum precision weighing results.Standard windproof cage.
Rigid protection cover included in the supply.
Power supply: 230V / 50 Hz current.

Tech. Code	GR50 Euro	Max capacity g	Resolution step g	Plate Ø mm
D8625250	385,00	250	0,001	105

LCD | INOX

ART. 440

Suitable for industrial and laboratory purposes, stainless steel weighing platform, large backlit LCD display, featuring 15mm high digits; automatic shutdown if no load change occurs within 3 minutes (this function can be disabled). Power supply: 230V/50 Hz (also powered by 9V batteries, not included).

Functions:
- ON/OFF: switch on and shutdown
- PRINT: data transfer and printing:
- TARE: tare zero setting
- MODE/CAL: calibration, piece counting, percentage weighing and selection of the unit of measurement
- SET/M: weight control of each single ingredient of a mixture

Tech. Code	GR50 Euro	Max capacity g	Division g	Plate mm
D86302000	315,00	2000	0.1	130 x 130
D86306000	240,00	6000	1.0	150 x 170

DIGITAL COUNTING SCALES

KERN

LCD | INOX | 10°C 40°C

ART. CXB

Basic model for professional use, with EC type approval (M) counting resolution of 30,000 points. Certificated by OPTIONAL.

Accurate counting guaranteed by the automatic reference optimization for an improved average value of the single piece weighing; known reference weight and amount of required pieces are configurable from keyboard.
Programmable quantities and weights, fill-to-target acoustic signal upon reaching required value. Sum-by-lot and sum-by-weight totalization function.
Power supply with internal battery, approx 60 hour useful working duration, standard; charging time of approx 8h, charge condition indicator on display. Backlighting turns off after 5 seconds for increased energy saving.
The outer structure is ribbed with grooves for an effective water removal, provided with packing rings on upper inlet holes. PRE-TARE function for manual subtraction of a known container weight.

TECHNICAL SPECIFICATIONS
- Large backlit LCD display, 18mm high digits
- Weighing platform dimensions (stainless steel): 300 x 225mm
- Scale dimensions LxDxH 300 x 330 x 110mm
- Net weight ca. 4kg
- Room temperature -10°C/40°C

Tech. Code	GR50 Euro	Max capacity kg	Division (d) g	Repeatability g	Min piece weight g/piece
D8655K3G02	350,00	3	0.2	0.2	1
D8655K6G05	350,00	6	0.5	0.5	2
D8655K15G1	355,00	15	1	1	5
D8655K30G2	350,00	30	2	2	10

PLATFORM SCALE

KERN

LCD | INOX

ART. EOB

Classic model between balances for parcels and for veterinary use. Stainless steel weighing plate with painted steel structure. 4-key command. Wall bracket, standard, for mounting the indicator device. Weighing surface (WxD): 305 x 315 mm. Net weight approx.: 3,8 Kg.

Functions:
- ON/OFF: switching on and off
- HOLD: allows the calulation of a stable average weight value in case of movement
- UNIT: unit measurement switching
- TARE: tare reset

Tech. Code	GR50 Euro	Max capacity kg	Resolution step g	Reproducibility g	Linearity g
D8660035K10	(200,00)	35	10	10	±10
D8660060K20	(200,00)	60	20	20	±40
D8660150K50	(200,00)	150	50	50	±50

DIGITAL COUNTING SYSTEMS

KERN

IP 65 | LCD | INOX

ART. CCS

COUNTING LARGE AMOUNTS OF SMALL PIECES
COUNTING RESOLUTION ≥ 3 MILLION POINTS

This highly accurate KERN CCS counting system, comprising a KERN KFP counting scale and a KERN CFS, can successfully replace a wide range of piece counting scales.

KERN KFP quantity scale
Counting of piece quantities can be conducted with the most accuracy on its weighing platform (= weighing bridge).

- Stainless steel platform, painted steel sub-framing
- Single-point aluminum load cell (1x3000 e)
- IP65 Protection
- Weighing platform (stainless steel).
  400 x 300 x 128mm (CCS 30K0.1 - CCS 60K0.1)
  500 x 400 x 137mm (CCS 60K0.1L - CCS 150K0.1)
  650 x 500 x 142mm (CCS 150LK0.1L - CCS 300K0.1)

KERN CFS reference scale
This professional KERN CFS piece counting scale can also be used as a standalone unit thanks to the weighing platform connection, successfully meeting the most stringent standards with regards to accuracy, weighing area and volume of goods.
- Large backlit LCD display, 20mm high digits
- Keyboard setting, number of reference units required, known reference weight
- PLU memory for one hundred pieces totalization function with additional text
- Tolerance range for check weighting
- Fill-to- target function. Programmable target weight
- Optical and acoustic signaling upon reaching target value
- Accurate Counting. Automatic reference optimization gradually improves the average value of the single piece weighing
- Dimensions (LxPxA) 320 x 330 x 125mm
- Weighing platform (stainless steel 320 x 230mm)
- Net weight approx. 3.8kg.

Tech. Code	GR50 Euro	Max cap. KFP kg	Max cap. CFS kg	Division (d) g	Min pcs weight g/piece
D8650K30G10	(720,00)	30	6	0.1	1
D8650K60G20	(770,00)	60	3	0.01	0.5
D8650K150G50	(810,00)	150	6	0.1	1
D8650K300G100	(1220,00)	300	3	0.01	0.5

SCALES FOR PALLETS

KERN

IP 67 | LCD | INOX

ART. UIB

Pallet scale in powder coated steel, 4 aluminum load cells coated with silicone, IP67 protection. It can be easily transported thanks to the presence of wheels and handles. Rigid protection cover included. Weighing surface (LxP): 1195 X 840 mm.

- Large LCD display, digit height 25 mm
- Indicator device size: W x D x H 260 x 115 x 70 mm
- Indicator cable length 5m
- Tamb: 10/+40
- Possible battery operation, 4x1.5 V AA (on request)

Tech. Code	GR50 Euro	Port. max kg	Resolution step kg	Net weight approx. kg
D86800600	(1110,00)	600	0.2	55
D86801500	(1110,00)	1500	0.5	55
D86803000	(1110,00)	3000	1	55

Indivisible package Suggested retail package - Unit price

FLOOR SCALES

KERN

IP	LCD	INOX
67	⬅ ➡	

ART. BFB

Ideal for weighing cases, boxes, small-sized pallets, painted milled steel non-skid platform, level and adjustable feet, large back lit LCD display, 52 mm digits, the indicator can be placed away from the base by using its 5m cable complete with wall stand, auto power off, load unaltered for three minutes, function can be disabled. 230V/50 Hz electric power supply.

Functions:
- ON/OFF: switch on and shutdown
- HOLD: allows for a stable weighing value even in presence of scale movement, holds the displayed weight value until Hold button is pressed again
- UNIT: unit of measurement conversion
- TARE: tare zero setting

Tech. Code	GR50 Euro	Description	Max capacity kg	Dimension mm
D86901500	(1640,00)	Platform	1500	1000x1000x85
D8690AR	(430,00)	Ramp up	-	1000x760x85
D8690AS	(170,00)	Stand	-	750 h

DIGITAL MULTIMETERS

ART. D9111

Professional all-purpose multimeter able to perform many measurements that are not possible with traditional instruments. CE marked, compliant with standards IEC EN 61010-1 CAT. III 1000V - CAT. IV 600V. Backlit LCD display, light shows which connections to use.
Auto power off after 15 min.
Power supply: 1 x 9V battery (not included).

Tech. Code		D91111
GR49	Euro	151,00
Tension (AC/DC)	V	400m, 4, 40, 100, 250
Current (AC/DC)	A	400µ, 4m, 40m, 400m, 10
Frequency	Hz	5, 50, 500, 5k, 50k, 500k, 10M
Continuity	Ω	<50
Resistance	Ω	400, 4k, 40k, 400k, 4M, 40M
Brightness	Lux	4000 - 40000
Capacity	F	50n, 500n, 5µ, 50µ, 100µ
Noise level	dB	35 - 100
RH Humidity		33 - 99
Temperature	°C	-20 +1300 (Thermocouple)
Temperature	°C	-20 +40 (Internal sensor)

Tech. Code		D99159V
GR49	Euro	5,30
Model		Battery 9V Transistor

DIGITAL AMPEROMETRIC PLIERS

ART. D9216

Amperometric pliers/Multimeter, allow to perform current measuremnts (up to 1000A) without disconnecting the user CE, CAT. III 600V. 16mm LCD display with back-lightening illuminated pliers. Supplied with custody case. Auto-off function after 30 min. Power supply 3 batteries x 1,5V AAA (not Included).

Tech. Code		D921601
GR49	Euro	166,00
Tension (DC)	V	4V - 40V - 400V - 600V - 1000V
Tension (AC)	V	4V - 40V - 400V - 600V - 700V
Current (ac/dc)	Ah	400A - 600A - 1000A
Duty cycle		0,1 - 99,9%
Resistance	Ω	400 - 4K - 40K - 400K - 4M - 40M

Tech. Code		D99251,5V
GR49	Euro	5,40
Model		- AAA-type 1.5 battery

DIGITAL AMPEROMETRIC PLIERS

ART. D9217

Amperometric pliers specific for precise measurements at low current values. Ideal for measuring leakage current or absorptions on cars without having to disconnect the load. CE marked, CAT. III 600V, CAT. III 300V. It is equipped with a useful forch function for working in dark areas.The large LCD display with LED eases reading. Supplied with custody case. Auto-off function after 7 min. Power supply: 2 x 1,5V AAA (not included).

Tech. Code		D921701
GR49	Euro	177,00
Current (dc)	Ah	1mA - 80 A
Current (ac)	Ah	1mA - 80 A

Tech. Code		D99251,5V
GR49	Euro	5,40
Model		- AAA-type 1.5 battery

D

DIGITAL COATING THICKNESS GAUGES

elcometer

IP 65 | LCD

ART. D9305

The brand new portable instrument by Elcometer features a high contrast colour LCD display with auto rotation, thickness measurement capability to ±1%, dust and waterproof equivalent to IP65, USB and Bluetooth data output for accurate coating thickness measurement (Chrome, paint, galvanizing, rubber, etc.) on ferrous or non-ferrous metals. There are available three different models,each gauge provides the user with increasing functionality and could have integral or separate probe.
Large easy to read high contrast auto-rotating display, language selectable and easy to use menu, measuring range 0-1500 µm, IP65 protection, supplied with calibation masters and factory conformity certificate.

Tech. Code	GR46 Euro	Description
D9305FEES	1110,00	Digital coating thickness gauges with external probe
D9305FEIN	920,00	Integral ferrous coating thickness gauge
D9305FENFES	1652,00	Separate probe ferrous/non ferrous coating thickness gauge

DIGITAL COATING THICKNESS GAUGES

LCD | 1,5V AAA

ART. D9320

INTERNAL PROBE. Instrument is used for non-destructive measurement of coating thickness on metallic bases. With an operating principle (parasite magnetic inductive) these instruments may detect thickness in insulating coating (e.g. enamel, paint, etc.) not ferromagnetic ones (aluminum, zinc, etc.) used as ferromagnetic coating (e.g. steel, iron, etc.).Furthermore, they can detect insulation thickness (e.g. enamel, paint, etc.) of non ferromagnetic coating (aluminum, zinc, etc.). Ideal for quality control in production lines and in any other industrial sector where coating control is required (galvanic, automotive, nautical, construction, etc.).

Note: Instruments measure also tungsten carbide coating on stainless steel.
Compliant to standards: ISO2178, ISO-2361, DIN, ASTM, BS.

Dimensions: 126 x 65 x 27 mm Weight 81 g

Tech. Code	GR49 Euro	Mode	Measuring range µm	Measureale thickness min. mm	Resolution µm	Accuracy µm
D9320INT	(697,00)	Ferroso Non Ferroso	0~1250	0.3	0,1	±1~3%n / ±2.5±1~3%n / ±2.5

Tech. Code	GR49 Euro	Model
D99251,5V	5,40	- AAA-type 1.5 battery

DIGITAL COATING THICKNESS GAUGES

LCD | 1,5V AAA

ART. D9325

EXTERNAL PROBE - Instruments used for non-destructive measurement of coating thickness of magnetic and non-magnetic metallic bases. With an operating principle (parasite magnetic inductive) these instruments may detect thickness in insulating coating (e.g. enamel, paint, etc.) not ferromagnetic ones (aluminum, zinc, etc.) used as ferromagnetic coating (e.g. steel, iron, etc.).Furthermore, they can detect insulation thickness (e.g. enamel, paint, etc.) of non ferromagnetic coating (aluminum, zinc, etc.). Ideal for quality control in production lines and in any other industrial sector where coatings control is required (galvanic, automotive, nautical, construction, etc.)
Equipment: 1 probe Fe, 1 probe NFe, reference standards set, 1 iron zero setting base.

Note: Instruments measure also tungsten carbide coating on stainless steel.
Compliant to standards: ISO2178, ISO-2361, DIN, ASTM, BS.

Dimensions: 126 x 65 x 27mm Weight 81 g

Tech. Code	GR49 Euro	Mode	Measuring range µm	Measureale thickness min. mm	Resolution µm	Accuracy µm
D9325EST	(697,00)	Ferrous Non Ferrous	0~1250	0.3	0,1	±1~3%n / ±2.5±1~3%n / ±2.5

Tech. Code	GR49 Euro	Model
D99251,5V	5,40	- AAA-type 1.5 battery

Indivisible package Suggested retail package - Unit price

ULTRASONIC THICKNESS GAUGES

KERN

NEW

LCD | 1,5V AA

ART. TO-EE

Ultrasonic thickness gauges for the non-destructive thickness control of metals, plastics, ceramics, composite materials, epoxides, glass and others.
New technology with automatic sensor adaptation.
Double measuring mode to detect the thickness of the material, ECO-ECO and PLUS-ECO.
Detection of material thickness regardless of the presence of a coating.
Large color display, internal memory capable of accommodating up to 100 sets of data and USB port for conveniently downloading them to the PC.
Triple measurement mode: point measurement, continuous scan measurement and calculation of the difference between the measured value and a manually determined thickness.
Alarm when a manually programmed limit value (upper and lower) is exceeded.
Operation with 2 AA batteries and autonomy of at least 100 hours, adjustable pause time and settable display shutdown.
Supplied with:
ATU-US12 measuring probe
2 AA batteries
Contact gel approx. 60ml
Sturdy case

Tech. Code	GR50 Euro	Renge ECO-ECO mm	Renge PLUS-ECO mm	Division mm	Probe l x Ø cm	Precision	Head Ø cm
D9340075600	(1490,00)	3 - 100	0,75 - 600	0,01	100 x 1	+-0,4%	1

ULTRASONIC THICKNESS GAUGES

0,01 mm | LCD | 1,5V SR44 | PDF

ART. D9338

Ultrasonic thickness gauges - instrument designed for a non-destructive thickness measuring of ultrasound conductive materials Mainly used to measure thickness of boxed structures, centre sections of large sheets, tubing, tanks, pressurized containers, panels Mainly used for quality management in production lines and maintenance inspections so to detect samples corrosion conditions, data output upon request.
Dimensions 149 x 73 x 32 Weight 160g, power supply 2 AA 1.5 battery set (included).

Standard equipment:
- Instrument body
- SAPBN-90°probe (1,2 - 230 mm)
- Coupling fluids
- Shock-proof casing

Tech. Code	GR49 Euro	Range mm	Accuracy mm	Resolution mm	Speed m/s	Main storage	In-use conditions
D9338075300	(921,00)	0.75 ÷ 300 (ref. steel)	±0.5% n + 0.04 (ref. steel)	0.1/0.01	1000 - 9999	20 allocations (99 values each.)	0 - 40 °C / 10 - 90% RH

Tech. Code	GR49 Euro	Model
D99051,5V	5,30	Battery 1.5V SR44

ART. D9342

PROBES FOR ULTRASONIC THICKNESS GAUGES

Tech. Code	GR49 Euro	Frequency MHz	Ø mm	Measuring range (steel) mm	min Ø mm	Use
D93421223090	(319,00)	5	10	1.2 ÷ 230	20 x 3	Standard /90°

COUPLING FLUIDS

ART. USTM

Coupling fluid specific for ultrasonic instruments. Completely soluble in water, recommended for all procedures where gel is required. Suitable for acoustic transmission, non-irritating, non-corrosive, non-abrasive, salt-free and dermatologically tested.
For external use only.

Tech. Code	GR49 Euro	Weight g
D9347FLUIDO	(23,00)	50

VIBRATION METERS

mm / inch | LCD | 1,5V AA

ART. D9610

Instruments used for non-destructive measurement of vibration parameters such as acceleration, average quadratic value of speed (effective value) and deviation. This type of vibro meters are extremely fit to perform bearing, machinery, plants and related components maintenance checks Compact design, user friendly, ideal for in-field measurement Compliant to standard: ISO2954.

Acceleration (10Hz - 1Khz / 10HZ - 10Khz) 0.1 ~ 400 m/s2
RMS speed (10Hz - 1Khz) 0.1 ~ 400 mm/s
Deviation (10Hz - 1Khz) 0.001 ~ 4.0 mm

Power supply 4 x 1.5V AAA (UM4) battery set - Battery level
Dimensions 124 x 62 x 30 mm
Weight 120 g (battery set not included)

Equipment: - Casing - Magnetic base - Piezoelectric pressure transducer - 2 tips
Optional accessories: Cable and software - headset - SIT and/or RDT certificate

Tech. Code	GR49 Euro	RPM	Frequency	Accuracy	In use conditions
D9610VIBROMT	(808,00)	60 ~ 99990 r/min	from 0.1 up to 20 KHz	± 5%+2	0 ~ 50 °C ≤ 90%RH

Tech. Code	GR49 Euro	Tipo
D99301,5V	5,30	AA 1.5V

GLOSSMETER

LCD | 1,5V AA

ART. D9450

Instrument used for non-destructive control. Used to measure gloss of materials such as painted and /or polished surfaces Depending on detection system, measures will be optimal for several degrees of gloss intensity. In order to further enhance their versatility some instruments also feature multiple detection methods. Gloss meters can suit several tasks: furniture manufacturers, automotive and all those industry sectors where surface gloss intensity is essential. Compliant to standards: ISO2813, ASTMD523, DIN-67530, ISO7668, GB9754.

Features:
- Automatic calibration
- Type A light
- 20°, 60°, 85° angles
- 10mm high LCD display
- Silicon photodiode sensor
- Measurement surface 11 x 54 mm
- Measured area 20°=10x10mm 65°=10x20mm 80°=7x24
- Power supply: 1 AA type battery

Equipment:
Hard casing - Calibration plate
Optional accessories: Calibration ratio

Dimensions: 142 x 32 x 64 mm - weight 320 g

Tech. Code	GR49 Euro	Repeatability Gloss points	Measuring range Gloss units	Resolution Gloss units	Accuracy Gloss points
D9450GLOSSMT	(1292,00)	± 0.4	0 ÷ 199.9	0.1	± 1.5

Indivisible package Suggested retail package - Unit price

HYGRO METERS FOR MATERIALS

LCD | 1,5V AAA

ART. D9710

Instrument used for non-destructive measuring of relative moisture content in materials According to type of sensor, contact or in fission ones, the instrument detects relative moisture content employing two different physical principles, capacitive and resistance. Instruments can measure a wide range of materials such as wood (over 150 species), fibreglass, sand, leather, gravel, paper, brickwork, etc.

Tech. Code	GR49 Euro	Measuring range moisture	Moisture accuracy ±	Dimension mm	Weight g
D9710IGRO01	(319,00)	0 ~ 80%	0.5%	165 x 62 x 26	175

Tech. Code	GR49 Euro	Model
D99251,5V	5,40	- AAA-type 1.5 battery

HYGROMETERS FOR MATERIALS - PROBES

ART. D9720

HYGROMETERS FOR MATERIALS - PROBES

Tech. Code	GR49 Euro	Model
D9720SOND-2	(134,00)	G type probe

THERMO HYGROMETERS FOR ENVIRONMENTS WITH INTERNAL SENSOR

LCD | 9V MN1604

ART. D9755

Instruments used to measure environmental humidity with reference to temperature and relative moisture content parameters Superior accuracy, user friendly, compact design, ideal instrument for all production line tasks, for construction works, in industrial agriculture, wherever such parameter need to be monitored, such as in workshops, plants, office premises, libraries, laboratories, warehouses, IT unit storage premises.

Thermo hygrometer with 01 resolution internal sensor

Dimensions: 202 x 72 x 37 mm - Weight 215 g

Tech. Code	GR49 Euro	Measuring range moisture	Measuring range Temperature	Accuracy moisture	Accuracy Temperature
D9755TERMOIG02	(200,00)	10 ~ 95% RH	-10 ~ 65°C	2.5% ± 1% RH	± 0.5°C

Tech. Code	GR49 Euro	Model
D99159V	5,30	Battery 9V Transistor

ANEMOMETERS

LCD | 1,5V AAA

ART. D9770

Instrument for measuring wind speed According to model, several data can be measured such as, speed, temperature, direction, Beaufort scale (indirect) and flow rate. User friendly, compact dimensions, sturdy: ideal for all in-field measurements. Suited for any areas with wind flows.

±2%n+0.1 Accuracy - 0.1 Resolution.
Dimensions: 156 x 67 x 28 mm - Weight 375 g

Tech. Code	GR49 Euro	Measuring range Air speed	Measuring range Air flow	Measuring range Scale intervals	Measuring range Temperature
D9770ANEMOMT	(262,00)	0.4~45.0 m/s 1.4~162.0 km/h 80~8860 ft/min 0.8~88.0 knots	0.004~9999 m3/min 0.013~9999 ft3/min	0~12	0~60°C / 32~140°F

Tech. Code	GR49 Euro	Model
D99251,5V	5,40	- AAA-type 1.5 battery

BATTERIES

ART. D9905
- D357/303 SR44 1,5V button cell battery

Tech. Code	GR49 Euro
D99051,5V	5,30

ART. D9911
- DL2032 - CR2032 3V button cell battery

Tech. Code	GR49 Euro
D99113V	5,50

ART. D9936
- DL1632 - CR1632 3V button cell battery

Tech. Code	GR49 Euro
D99360,3V	5,60

ART. D9913
- DL2025 - CR2025 3V button cell battery

Tech. Code	GR49 Euro
D99133V	5,30

ART. D9915
- MN1604 Transistor-type 9V battery

Tech. Code	GR49 Euro
D99159V	5,30

ART. D9920
- C-type 1,5V battery

Tech. Code	GR49 Euro
D99201,5V	5,30

ART. D9925
- AAA-type 1,5V battery

Tech. Code	GR49 Euro
D99251,5V	5,40

ART. D9930
- AA-type 1,5V battery

Tech. Code	GR49 Euro
D99301,5V	5,30

ART. D9935
- D-type 1,5V battery

Tech. Code	GR49 Euro
D99351,5V	7,75

ACCORDING TO IN-STOCK PRODUCT AVAILABILITY, PRODUCTS BRANDS DELIVERED MAY VARY WHILE MAINTAINING THEIR QUALITY UNALTERED.

Indivisible package Suggested retail package - Unit price

CALIBRATION REPORTS FOR CALIPERS NEW

Description	Size mm	GR46 Euro
Calibration reports for vernier calipers	0 ÷ 200	22,00
	201 ÷ 300	28,00
	301 ÷ 500	36,00
	501 ÷ 1000	50,00

Description	Size mm	GR46 Euro
Calibration reports for depth vernier calipers	0 ÷ 300	28,00

CALIBRATION REPORTS MICROMETERS NEW

Description	Size mm	GR46 Euro
Calibration reports for external micrometers	0 ÷ 25	22,00
	26 ÷ 50	24,00
	50 ÷ 75	26,00
	75 ÷ 100	28,00
	100 ÷ 125	35,00
	125 ÷ 150	39,00
	150 ÷ 175	43,00
	175 ÷ 200	47,00
	200 ÷ 225	53,00
	225 ÷ 250	59,00
	250 ÷ 275	66,00
	275 ÷ 300	73,00

Description	Size mm	GR46 Euro
Calibration reports for two / three points inside micrometers	0 ÷ 100	43,00
	101 ÷ 200	59,00
	201 ÷ 300	69,00

CALIBRATION REPORTS FOR INDICATORS NEW

Description	Size mm	GR46 Euro
Calibration reports for mechanical indicators	0 ÷ 100	27,00

Description	Size mm	GR46 Euro
Calibration reports for digital indicators	0 ÷ 100	27,00

Description	Size mm	GR46 Euro
Calibration reports for lever test indicators	-	27,00

CALIBRATION REPORTS FOR PLUG GAUGES NEW

Description	Size mm	GR46 Euro
Calibration reports for plug gauges	0 ÷ 50	14,00
	50 ÷ 75	20,00
	75 ÷ 100	22,00

Description	Size mm	GR46 Euro
Calibration reports for GO/ NO GO plug thread gauges	0 ÷ 20	21,00
	20 ÷ 50	24,00

Description	Size	GR46 Euro
Calibration reports for NTP go plug thread gauges	0" ÷ 1"	33,00
	1" ÷ 2"	54,00
	2" ÷ 3"	65,00

CALIBRATION REPORTS FOR RINGS NEW

Description	Size mm	GR46 Euro
Calibration reports for gauges	1 ÷ 5	14,00
	5 ÷ 50	14,00
	50 ÷ 100	22,00
	100 ÷ 150	26,00
	150 ÷ 200	33,00
	200 ÷ 275	46,00

Description	Size mm	GR46 Euro
Calibration reports for threaded gauges	2 ÷ 20	16,00
	20 ÷ 40	19,00

Description	Size	GR46 Euro
Calibration reports for threaded gauges NPT	0" ÷ 3/4"	29,00
	1"÷ 1 1/2"	36,00
	2" ÷ 2 1/2"	45,00
	3" ÷ 6"	53,00

WODEX
" HANDsome "
WODEX

WODEX STAHLWILLE WRK

E0
2 - 10

Combination wrenches, ratchet combination wrenches, single and double ended open wrenches

WODEX STAHLWILLE WRK Wera

E1
10 - 17

Hook wrenches, tubolar socket wrenches

WODEX STAHLWILLE WRK Wera wiha

E2
17 - 27

Hexagonal key, L-wrenches ball point key, T-handle wrenches, hexagonal screwdrivers

WODEX WRK Wera KNIPEX

E3
28 - 34

Torx key wrenches, Torx screwdrivers T-handle Torx wrenches

WODEX STAHLWILLE WRK Wera

E4
35 - 54

Socket ratchet assortments, reversible ratchets, accessories for socket

WODEX STAHLWILLE WRK Wera

E5
54 - 67

Impact sockets, sockets for nuts, screwdrivers, screwdrivers set

WODEX STAHLWILLE Wera wiha

E6
67 - 87

Torque wrenches and accessories

WODEX STAHLWILLE Wera

E7
88 - 103

Toolholders, adapters, bits assortments

WODEX STAHLWILLE WRK

E8
104 - 123

Assortment for trolley-suitcase and for roller cabinets

COMBINATION WRENCHES

WODEX

ART. WX1060

Standard DIN 3113 form A - ISO 7738 form A

Combination wrenches **PREMIUM QUALITY** with profiled anti-slip body and rounded edges, chrome-vanadium steel, chrome satin finish. The ring side with **Plus-Drive** profile allows high force to be transmitted to the shoulders of screws and nuts without damaging the edges.

Tech. Code	GR51 Euro	⬣ mm	a mm	a2 mm	L mm	◈
E000505	5,41	5	3.4	5.1	90	10
E0005055	5,89	5.5	3.4	5.1	90	10
E000506	5,96	6	3.4	5.1	100	10
E000507	6,00	7	3.6	5.5	110	10
E000508	6,25	8	3.8	5.9	120	10
E000509	6,49	9	4.0	6.3	130	10
E000510	6,67	10	4.3	6.9	140	10
E000511	7,10	11	4.5	7.3	150	10
E000512	7,17	12	4.9	7.7	160	10
E000513	7,31	13	5.2	7.9	170	10
E000514	8,30	14	5.5	8.7	180	10
E000515	9,16	15	5.8	9.1	190	10
E000516	10,23	16	6.1	9.6	200	10
E000517	10,50	17	6.4	9.8	210	10

Tech. Code	GR51 Euro	⬣ mm	a mm	a2 mm	L mm	◈
E000518	10,71	18	6.8	10.4	220	10
E000519	10,93	19	7.0	11.0	232	10
E000520	12,28	20	7.2	11.4	240	10
E000521	13,27	21	7.4	12.1	250	10
E000522	13,63	22	8.2	12.6	260	10
E000523	14,76	23	8.3	13.0	270	5
E000524	15,79	24	8.5	13.6	280	5
E000525	16,47	25	8.8	14.0	290	5
E000526	17,74	26	9.0	14.8	300	5
E000527	19,16	27	9.3	15.0	310	5
E000528	20,15	28	9.4	15.4	320	5
E000529	21,65	29	10.0	15.6	330	5
E000530	22,71	30	10.3	16.0	340	5
E000532	24,84	32	10.5	16.2	370	5

ART. - WX1060/S10 - WX1060/S12 - WX1060/S21 - WX1060/S27

Standard DIN 3113 form A - ISO 7738 form A

Set of wrenches complete with a practical fabric roll-up tool holder.

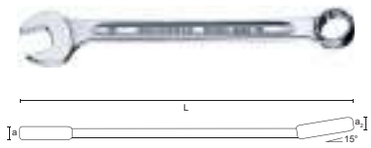
Composition:

WX1060/S10 8 - 10 - 11 - 12 - 13 - 14 - 15 - 17 - 19 - 22 mm
WX1060/S12 10 - 11 - 12 - 13 - 14 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm
WX1060/S21 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 - 27 - 30 - 32 mm
WX1060/S27 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 32 mm

Tech. Code	GR51 Euro	Pieces
E000610	80,67	10
E000612	144,27	12
E000621	243,59	21
E000627	333,45	27

COMBINATION WRENCHES

STAHLWILLE



ART. 13

Standard DIN 3113 FORM A - ISO 7738 FORM A

Combination wrenches with profiled anti-slip body and rounded edges, chrome-vanadium steel and chorme finish. he ring side with AS-Drive profile allows high force to be transmitted to the shoulders of screws and nuts without damaging the edges.

Tech. Code	GR55 Euro	⬣ mm	a1 mm	a2 mm	L mm	◈
E001005,5	9,81	5.5	3.5	5,8	100	10
E001006	9,53	6	3.6	6	105	10
E001007	9,37	7	3.9	6	110	10
E001008	9,20	8	4.2	7	115	10
E001009	10,42	9	4.5	7	120	10
E001010	10,42	10	4.8	7	125	10
E001011	11,35	11	4.8	8	135	10
E001012	11,90	12	5.3	8,5	140	10
E001013	12,90	13	5.3	8,5	160	10
E001014	13,01	14	5.3	8,5	165	10
E001015	15,21	15	5.3	8,5	170	10
E001016	16,76	16	5.8	10	180	10
E001017	17,20	17	5.8	10	190	10
E001018	19,08	18	6.7	11,5	200	10
E001019	19,78	19	6.7	11,5	230	10
E001020	21,73	20	7	13	230	10
E001021	23,06	21	7.3	13	260	10
E001022	23,90	22	7.3	13	260	10

Tech. Code	GR55 Euro	⬣ mm	a1 mm	a2 mm	L mm	◈
E001023	28,51	23	7.8	14	280	5
E001024	28,33	24	7.8	14	280	5
E001025	30,26	25	8.4	14,5	300	5
E001026	31,30	26	8.4	14,5	300	5
E001027	32,53	27	8.4	14,5	300	5
E001028	36,78	28	8.4	14,5	320	5
E001029	38,26	29	8.9	16	330	5
E001030	40,02	30	8.9	16	330	5
E001032	43,98	32	9.4	16,5	360	5
E001034	63,74	34	9.4	17	450	1
E001036	75,15	36	10	18	460	1
E001038	84,70	38	11	19	480	1
E001041	99,72	41	11	19	480	1
E001046	138,90	46	13	20	500	1
E001050	181,90	50	14	21	530	1
E001055	224,90	55	15	22	560	1
E001060	297,66	60	16	24	590	1

◈ Indivisible package ◈ Suggested retail package - Unit price

COMBINATION WRENCHES IN SET

STAHLWILLE

ART. 1326

Standard DIN 3113A - ISO 7738A
Combination wrenches sets OPEN-BOX with antislip profiled body and rounded edges.The profile AS-Drive (Anti-Slip-Drive) allows the transmission of strong forces on the sides of the screws and nuts without damaging the edges.

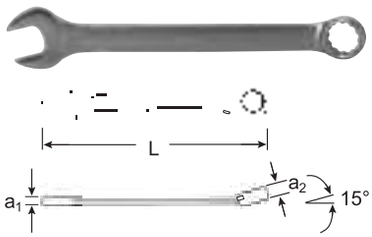
Composition:
E0011SET11 8-9-10-11-12-13-14-15-17-19-22 mm
E0011SET26 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32 mm

Tech. Code	GR55 Euro	Package	Pieces
E0011SET11	149,93	Roll-up tool bag	11
E0011SET26	574,37	Wrenches provided in a cardboard box	26

COMBINATION WRENCHES

WRK

ART. E0140



Standard DIN 3113 FORM A - ISO 7738 FORM A
Combination wrenches with profiled anti-slip and rounded edges, chorme-vanadium steel, satin finish.

Tech. Code	GR52 Euro	⬣ mm	a1 mm	a2 mm	L mm	◈
E01406	3,49	6	3.6	5	100	10
E01407	3,56	7	3.6	5	110	10
E01408	3,74	8	4.1	6,3	120	10
E01409	3,83	9	4.1	6,1	130	10
E014010	4,48	10	4.6	7,9	140	10
E014011	4,55	11	5.1	8,3	150	10
E014012	4,71	12	5.1	8	160	10
E014013	4,86	13	5.9	8,2	170	10
E014014	5,28	14	5.9	9,2	180	10
E014015	5,86	15	5.9	9,2	190	10
E014016	6,26	16	6.3	10,5	200	10
E014017	6,66	17	6.5	10,5	210	10
E014018	7,07	18	6.7	11,1	220	10
E014019	7,16	19	7.2	12	230	10

Tech. Code	GR52 Euro	⬣ mm	a1 mm	a2 mm	L mm	◈
E014020	7,80	20	7.7	12,2	240	10
E014021	8,37	21	8.2	12,2	250	10
E014022	8,70	22	8.7	12,6	260	10
E014023	11,20	23	8.9	13	270	10
E014024	12,22	24	8.9	13,9	280	10
E014025	13,37	25	9.2	14	290	10
E014026	13,94	26	9.2	15	300	10
E014027	12,44	27	9.7	15	310	10
E014028	15,75	28	9.7	16,4	320	5
E014029	16,50	29	9.9	16,4	330	5
E014030	15,36	30	10.2	16,4	340	5
E014032	18,13	32	10.2	16,5	360	5
E014036	34,16	36	13,3	21,8	400	1
E014041	38,78	41	13,3	21,8	440	1

ART. E0150

Standard DIN 3113A - ISO 7738A
Combination wrenches in set in rolled tool holder.

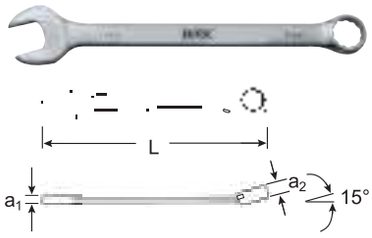
Composition:
E0150SET17 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22 mm
E0150SET26 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32 mm

Tech. Code	GR52 Euro	Pieces
E0150SET17	103,00	17
E0150SET26	230,00	26

COMBINATION WRENCHES

WRK

ART. E0141



Standard DIN 3113 FORM A - ISO 7738 FORM A
Chrome vanadium steel combination wrenches with chrome-satin finish.

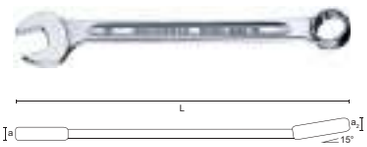
Tech. Code	GR52 Euro	⬣ mm	a1 mm	a2 mm	L mm	◈
E014134	38,94	34	14	18	380	1
E014136	53,41	36	14	18	400	1
E014138	58,76	38	14	20	400	1
E014140	58,76	40	17	20	450	1
E014141	68,21	41	16	20	440	1
E014142	68,21	42	16	21	440	1
E014144	87,91	44	16	21	500	1

Tech. Code	GR52 Euro	⬣ mm	a1 mm	a2 mm	L mm	◈
E014146	87,91	46	16	21	500	1
E014148	108,44	48	19	22	530	1
E014150	110,65	50	19	22	600	1
E014155	155,08	55	19	23	600	1
E014160	187,14	60	21	24	650	1
E014165	207,55	65	23	24	700	1

◈ Indivisible package ◈ Suggested retail package - Unit price

COMBINATION WRENCHES INCH

STAHLWILLE



ART. 13A

Standard DIN 3113 FORM A ISO 7738 FORM A

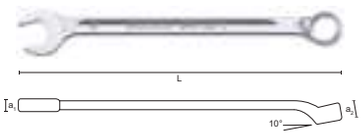
Combination wrenches with anti-slip profile and rounded edges, chrome-vanadium steel and chrome finish. Ring side with AS-Drive profile allows high force to be transmitted to the shoulders of screws and nuts without damaging the edges..

Tech. Code	GR55 Euro	⬢ Inches	⬢ mm	a1 mm	L mm	◈
E001310	13,23	3/16	4,76	3	95	1
E001312	13,23	13/64	5,16	3	95	1
E001314	12,67	7/32	5,56	3	95	1
E001316	13,45	15/64	5,95	3	95	1
E001318	10,15	1/4	6,35	3,6	105	1
E001320	11,90	9/32	7,14	3,9	110	1
E001322	10,53	5/16	7,94	4,2	115	1
E001324	12,02	11/32	8,73	4,5	120	1
E001326	12,35	3/8	9,53	4,8	125	1
E001328	12,90	7/16	11,11	4,8	135	1
E001330	13,45	1/2	12,70	5,3	160	1
E001332	15,21	9/16	14,29	5,3	165	1
E001334	18,85	19/32	15,08	5,3	170	1
E001336	17,20	5/8	15,88	5,8	180	1
E001338	21,86	11/16	17,46	6,7	200	1
E001340	22,15	3/4	19,05	6,7	230	1
E001342	27,56	25/32	19,85	7	235	1

Tech. Code	GR55 Euro	⬢ Inches	⬢ mm	a1 mm	L mm	◈
E001344	26,34	13/16	20,64	7,3	260	1
E001346	28,11	7/8	22,23	7,3	260	1
E001348	32,08	15/16	23,81	7,8	280	1
E001350	30,87	1	25,40	8,4	300	1
E001352	36,16	1-1/16	26,99	8,4	300	1
E001354	42,22	1-1/8	28,58	8,9	330	1
E001356	50,71	1-3/16	30,16	8,9	332	1
E001358	48,84	1-1/4	31,75	9,4	360	1
E001360	59,94	1-5/16	33,34	9,6	450	1
E001362	78,99	1-3/8	34,93	10	460	1
E001364	83,47	1-7/16	36,51	10	461	1
E001366	91,38	1-1/2	38,10	11	480	1
E001368	112,11	1-5/8	41,28	11	480	1
E001370	149,93	1-13/16	46,04	13	500	1
E001372	171,98	1-7/8	47,63	14	530	1
E001374	196,24	2	50,80	14	530	1

LONG COMBINATION WRENCHES

STAHLWILLE



ART. 14

Standard DIN 3113 FORM B - ISO 7738 FORM B

Long combination wrenches with anti-slip profiled body and rounded edges, chrome-vanadium steel and chrome finish. The profile AS-Drive (Anti-Slip-Drive) allows the transmission of force on the sides of the screws and nuts without damaging the edges.

Tech. Code	GR55 Euro	⬢ mm	a1 mm	a2 mm	L mm	◈
E017210	11,13	10	5.5	8	165	10
E017213	13,45	13	6.5	10	195	10
E017217	18,08	17	7.5	12	240	10
E017219	20,83	19	8	13	265	10
E017222	25,14	22	8.5	14	300	10
E017224	29,33	24	9.5	14	330	5

Tech. Code	GR55 Euro	⬢ mm	a1 mm	a2 mm	L mm	◈
E017227	33,30	27	10.5	16	385	5
E017230	42,22	30	12	18	415	5
E017232	44,76	32	12	18	430	5
E017236	81,03	36	13	19	480	1
E017241	99,22	41	14	20	560	1

COMBINATION RATCHET WRENCHES 72T

WODEX

ART. WX1300

Standard ISO 691

Combination ratchet wrenches with 72T standard teeth in chrome-vanadium steel, hardness 42-48 HRC, high torque transmission, 5° return angle, high resistance chrome-satin steel finish. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⬢ mm	a mm	L mm	◈
E019008	12,32	8	4.7	136	5
E019010	12,61	10	5.5	160	5
E019011	12,61	11	6.1	168	5
E019012	12,61	12	6.4	174	5
E019013	12,61	13	6.5	180	5
E019014	14,90	14	7.0	193	5
E019015	15,54	15	7.5	200	5

Tech. Code	GR51 Euro	⬢ mm	a mm	L mm	◈
E019016	15,69	16	7.8	216	5
E019017	15,69	17	8.0	233	5
E019019	20,03	19	8.8	250	5
E019022	24,38	22	9.5	285	2
E019024	29,04	24	9.9	325	2
E019030	46,11	30	13.8	425	2

COMBINATION RATCHET WRENCHES 72T IN SET

WODEX

ART. WX1300/K5 - WX1300/K10 - WX1300/K12

Standard ISO 691

Composition:

WX1300/K5 8 - 10 - 13 - 17 - 19 mm

WX1300/K10 8 - 10 - 13 - 14 - 15 - 16 - 17 - 19 - 22 - 24 mm

WX1300/K12 8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 19 - 22 - 24 mm

Tech. Code	GR51 Euro	Pieces
E019305	67,84	5
E019310	148,40	10
E019312	169,60	12

Boxed set

◈ Indivisible package ◈ Suggested retail package - Unit price

COMBINATION RATCHET WRENCHES 72T IN SET

ART. WX1300/S5

Standard ISO 691
Set of wrenches complete with a practical fabric roll-up tool holder with Velcro closure.

Composition:
8-10-13-17-19 m

Tech. Code	GR51 Euro	Pieces
E019105	84,80	5

COMBINATION RATCHET WRENCHES 144T

ART. WX1310

Standard ISO 691
Combination ratchet wrenches with 144T fine teeth in chrome-vanadium steel, hardness 42-48 HRC, high torque transmission, 2.5° return angle, high resistance chrome-satin steel finish. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm	◈
E019508	13,55	8	4.7	136	5
E019510	13,89	10	5.5	160	5
E019513	13,89	13	6.0	180	5

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm	◈
E019517	17,28	17	8.0	233	5
E019519	22,05	19	8.8	250	5

ART. WX1310/K5

Standard ISO 691

Composition:
8 - 10 - 13 - 17 - 19 mm

Tech. Code	GR51 Euro	Pieces
E019705	67,84	5

Boxed set

ART. WX1310/S5

Standard ISO 691
Set of wrenches complete with a practical fabric roll-up tool holder with Velcro closure.

Composition:
8-10-13-17-19 mm

Tech. Code	GR51 Euro	Pieces
E019605	84,80	5

COMBINATION WRENCHES WITH REVERSIBLE RATCHET

ART. WX1350

Standard ISO 691
Set of combination wrenches with reversible ratchet and 72T standard teeth in chrome-vanadium steel, hardness 42-48 HRC. High torque transmission, 5° return angle, 15° bent polygonal ratchet head for working in hard-to-reach spaces, high resistance chrome-satin finish. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm	◈
E020007	13,54	7	4.5	135	5
E020008	13,54	8	4.6	135	5
E020010	14,95	10	5.3	158	5
E020011	15,37	11	5.9	167	5
E020012	15,90	12	6.1	173	5
E020013	16,50	13	6.4	179	5

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm	◈
E020014	17,17	14	7.0	189	5
E020015	18,13	15	7.3	199	5
E020016	20,14	16	7.5	215	5
E020017	20,50	17	7.7	232	5
E020018	22,00	18	8.4	238	5
E020019	22,00	19	8.8	247	5

COMBINATION WRENCHES WITH REVERSIBLE RATCHET IN SET

WODEX

ART. WX1350/K5 - WX1350/K11

Standard ISO 691

Composition:

WX1350/K5 8 - 10 - 13 - 17 - 19 mm

WX1350/K11 8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm

Tech. Code	GR51 Euro	Pieces
E020305	86,92	5
E020311	195,04	11

Boxed set

ART. WX1350/S5 - WX1350/S9

Standard ISO 691

Set of wrenches complete with a practical fabric roll-up tool holder with Velcro closure.

Composition:

WX1350/S5 8 - 10 - 13 - 17 - 19 mm

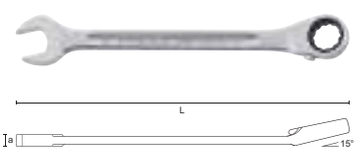
WX1350/S9 8 - 10 - 11 - 13 - 14 - 16 - 17 - 18 - 19 mm

Tech. Code	GR51 Euro	Pieces
E020105	101,76	5
E020109	193,98	9

COMBINATION WRENCHES WITH REVERSIBLE RATCHET

STAHLWILLE

ART. 17



OPEN-RATCH, combination wrenches with reversible polygonal ratchet, 72 teeth for working in hard to reach places turning angle of 5° bent head of 15°. Chrome steel.

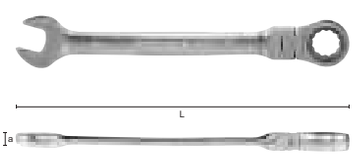
Tech. Code	GR55 Euro	⬢ mm	a mm	L mm	◈
E017708	21,72	8	4,7	144	5
E017709	22,72	9	5,3	150	5
E017710	23,37	10	5,7	158	5
E017711	(25,14)	11	6,1	165	5
E017712	(26,13)	12	6,4	173	5
E017713	26,34	13	6,6	182	5

Tech. Code	GR55 Euro	⬢ mm	a mm	L mm	◈
E017714	(28,11)	14	7,3	190	5
E017715	(29,98)	15	7,5	202	5
E017716	(31,75)	16	7,7	215	5
E017717	32,63	17	7,9	229	5
E017718	(35,72)	18	8,4	240	5
E017719	36,93	19	8,7	252	5

COMBINATION RATCHET WRENCHES WITH SWIVEL HEAD

WODEX

ART. WX1400



Standard ISO 691

Combination wrenches with articulated ratchet and adjustable working angle of up to 180°. 15° inclined open end, 12-point polygonal ratchet with 72T standard teeth and 5° return angle. Chrome-vanadium steel hardness 42-48 HRC, high resistance chrome-satin finish. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⬢ mm	a mm	L mm	◈
E020508	16,01	8	4.7	136	5
E020510	17,00	10	5.5	160	5
E020512	19,19	12	6.4	174	5
E020513	19,19	13	6.5	180	5

Tech. Code	GR51 Euro	⬢ mm	a mm	L mm	◈
E020514	20,56	14	7.0	193	5
E020517	23,64	17	8.0	233	5
E020519	25,50	19	8.8	250	5

ART. WX1400/K7

Standard ISO 691

Composition:

8 - 10 - 12 -13 - 14 - 17 - 19 mm

Tech. Code	GR51 Euro	Pieces
E020607	136,74	7

Boxed set

COMBINATION RATCHET WRENCHES WITH SWIVEL HEAD IN SET

WODEX

ART. WX1400/S5

Standard ISO 691

Set of wrenches complete with a practical fabric roll-up tool holder with Velcro closure.

Composition:

8 - 10 - 13 - 17 - 19 mm

Tech. Code	GR51 Euro	Pieces
E020805	118,72	5

◈ Indivisible package ◈ Suggested retail package - Unit price

REVERSIBLE RATCHET WRENCHES 4 IN 1

ART. WX1460

Standard ISO 691

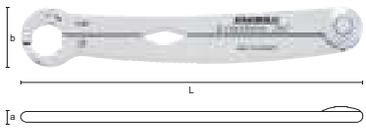
Reversible ratchet wrenches with 4 different sizes in one tool, chrome-vanadium steel, hardness 42-48 HRC. High torque transmission, 72T with 5° return angle and high resistance chrome-satin finish. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⬣ mm	⬣ mm	L mm
E021404	27,98	10 x 13	17 x 19	230

RATCHET WRENCHES WITH FRONTAL ACCESS

ART. 240

With **FastRatch** ratchet wrenches, it is possible to intervene in the most critical situations where access to the nuts or to the joints to be screwed on is only feasible on the front. Also recommended for use on particular and very ruined where the standard wrenches tend to turn blank. Made of hardended tempered stainless steel.



Tech. Code	GR55 Euro	⬣ mm	⬣ Inches	a mm	b mm	L mm
E022208	(44,65)	8	5/16	4	16	121,4
E022210	(44,76)	10	3/8	4	20	133,3
E022211	(46,41)	11	7/16	5	23	140,2
E022212	(49,50)	12	15/32	5	25	143,3
E022213	(50,05)	13	1/2	6	26,8	168,4

Tech. Code	GR55 Euro	⬣ mm	⬣ Inches	a mm	b mm	L mm
E022214	(50,93)	14	9/16	6	29,6	174,6
E022216	(55,67)	16	5/8	7	32,8	191,3
E022217	(60,08)	17	21/32	7	34,3	201,7
E022218	(63,95)	18	11/16	7	36,2	212,8
E022219	(65,60)	19	3/4	7	38,5	238,5

DOUBLE OPEN ENDED WRENCHES

ART. WX1010

Standard DIN 3110 - ISO 10102

Double **PREMIUM QUALITY** open ended wrenches with profiled anti-slip body and rounded edges, chrome-vanadium steel with chrome-satin finish.

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm	🔷
E02600607	3,76	6 x 7	3.5	125	10
E02600809	3,83	8 x 9	4	140	10
E02600810	3,83	8 x 10	4.5	152	10
E02601011	4,05	10 x 11	4.5	155	10
E02601213	4,66	12 x 13	5	172	10
E02601317	5,94	13 x 17	6.3	198	10
E02601415	5,70	14 x 15	5.5	188	10
E02601617	6,50	16 x 17	6.3	205	10

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm	🔷
E02601719	8,87	17 x 19	7	220	10
E02601819	8,87	18 x 19	7	220	10
E02602022	9,05	20 x 22	7.5	235	10
E02602123	9,40	21 x 23	8.3	248	10
E02602224	10,93	22 x 24	8.3	248	10
E02602427	12,70	24 x 27	8.8	265	10
E02602528	12,70	25 x 28	9.3	282	5
E02603032	16,00	30 x 32	9.8	300	5

ART. WX1010/S8 - WX1010/S10 - WX1010/S12

Standard DIN 3110 - ISO 10102

Set of wrenches complete with a practical fabric roll-up tool holder.

Composition:

WX1010/S8 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 mm

WX1010/S12 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32 mm

Tech. Code	GR51 Euro	Pieces
E026108	47,49	8
E026112	88,62	12

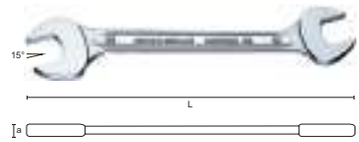
🔴 Indivisible package 🔷 Suggested retail package - Unit price

DOUBLE OPEN ENDED WRENCHES

STAHLWILLE

ART. 10

Standard DIN 3110 - ISO 10102
Double open ended wrenches with profiled anti-slip body and rounded edges, chrome-vanadium steel and chrome finish.



Tech. Code	GR55 Euro	⬢ mm	a mm	L mm	
E02734X5	8,71	4 x 5	3.4	100	10
E02735,5X7	7,55	5.5 x 7	3.7	120	10
E02736X7	6,18	6 x 7	3.7	120	10
E02737X8	8,27	7 x 8	4.0	140	10
E02738X9	6,73	8 x 9	4.0	140	10
E02738X10	7,61	8 x 10	4.5	140	10
E027310X11	6,94	10 x 11	4.8	155	10
E027310X12	9,10	10 x 12	5.3	170	10
E027310X13	9,20	10 x 13	5.3	170	10
E027311X13	10,20	11 x 13	5.3	170	10
E027312X13	8,27	12 x 13	5.3	170	10
E027312X14	9,81	12 x 14	5.3	170	10
E027313X14	10,08	13 x 14	5.3	190	10
E027313X15	10,53	13 x 15	5.3	190	10
E027313X17	10,86	13 x 17	5.8	205	10
E027314X15	8,98	14 x 15	5.3	190	10
E027316X17	9,60	16 x 17	5.8	205	10

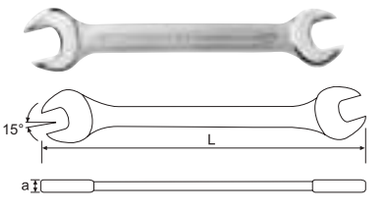
Tech. Code	GR55 Euro	⬢ mm	a mm	L mm	
E027317X19	11,80	17 x 19	6.7	220	10
E027318X19	11,47	18 x 19	6.7	220	10
E027319X22	(13,79)	19 x 22	7.3	235	10
E027320X22	13,23	20 x 22	7.3	235	10
E027321X23	14,77	21 x 23	7.8	250	5
E027321X24	17,86	21 x 24	7.8	250	5
E027322X24	15,66	22 x 24	7.8	250	5
E027324X26	18,74	24 x 26	8.3	270	5
E027324X27	17,86	24 x 27	8.3	280	5
E027325X28	21,49	25 x 28	8.3	285	5
E027327X30	26,13	27 x 30	9,4	300	5
E027327X32	26,13	27 x 32	9,4	300	5
E027330X32	25,02	30 x 32	9.4	300	5
E027330X34	28,88	30 x 34	9.4	300	5
E027332X36	45,09	32 x 36	10	325	5
E027336X41	60,63	36 x 41	11	375	1
E027341X46	80,48	41 x 46	12	425	1

DOUBLE OPEN ENDED WRENCHES

WRK

ART. E0270

Standard DIN 3110 ISO 10102
Double open ended wrenches anti-slip profile and rounded edges, chrome-vanadium and satin finish.



Tech. Code	GR52 Euro	⬢ mm	a mm	L mm	
E02705,5X7	3,57	5.5 x 7	3.9	125	10
E027067	2,42	6 x 7	3.3	122	10
E027089	2,65	8 x 9	3.7	136	10
E0270810	2,87	8 x 10	5,5	140	10
E02701011	3,27	10 x 11	4.5	151	10
E02701213	3,74	12 x 13	5.1	171	10
E02701415	4,56	14 x 15	5.5	186	10
E02701617	5,13	16 x 17	5.9	201	10
E02701719	6,55	17 x 19	6.9	220	10

Tech. Code	GR52 Euro	⬢ mm	a mm	L mm	
E02701819	6,05	18 x 19	6.9	220	10
E02701922	6,88	19 x 22	7,2	236	10
E02702022	6,80	20 x 22	7.2	235	10
E02702123	6,95	21 x 23	7.4	245	10
E02702224	8,40	22 x 24	7,4	245	10
E02702426	9,61	24 x 26	8.4	265	10
E02702427	10,26	24 x 27	8.4	265	10
E02702528	11,40	25 x 28	8.4	274	5
E02703032	13,09	30 x 32	9.4	299	5

DOUBLE OPEN ENDED WRENCHES INCH

STAHLWILLE

ART. 10A
Double open ended wrenches anti-slip profile and rounded edges, measurement in inches.
Chrome vanadium steel chrome plated.

Tech. Code	GR55 Euro	⬢ Inches	⬢ mm	a mm	L mm	
E029310	7,23	1/4 x 5/16	6,35 x 7,94	4	140	1
E029315	10,05	5/16 x 3/8	7,94 x 9,53	4,5	140	1
E029320	8,88	3/8 x 7/16	9,53 x 11,11	4,8	155	1
E029325	11,55	7/16 x 1/2	11,11 x 12,70	5,3	170	1
E029330	10,42	1/2 x 9/16	12,70 x 14,29	5,3	190	1
E029335	11,69	9/16 x 5/8	14,29 x 15,88	5,8	205	1
E029340	12,35	19/32 x 11/16	15,08 x 17,46	5,8	205	1

Tech. Code	GR55 Euro	⬢ Inches	⬢ mm	a mm	L mm	
E029345	13,01	5/8 x 3/4	15,88 x 19,05	6,7	220	1
E029350	14,89	11/16 x 13/16	17,46 x 20,64	7,3	235	1
E029355	15,87	3/4 x 7/8	19,05 x 22,26	7,3	235	1
E029360	15,87	25/32 x 13/16	19,85 x 20,64	7,3	235	1
E029365	18,53	7/8 x 15/16	19,05 x 23,81	7,8	250	1
E029370	21,05	15/16 x 1	23,81 x 25,40	8,3	270	1
E029375	28,44	1-1/8 x 1-5/16	28,58 x 33,34	9,4	300	1

SMALL DOUBLE OPEN ENDED WRENCHES

STAHLWILLE

ART. 12
Small double open ended wrenches **ELECTRIC** model in chrome steel.

Tech. Code	GR55 Euro	⬢ mm	L mm	b mm	a mm	
E028503,2	10,42	3,2	70	10,5	2	10
E028503,5	10,42	3,5	70	10,5	2	10
E028504	10,15	4	70	10,5	2	10
E028504,5	10,15	4,5	70	10,5	2	10
E028505	10,15	5	78	12,6	2	10
E028505,5	10,15	5,5	78	12,6	2	10
E028506	10,30	6	78	12,6	2	10
E028507	10,15	7	91	14,7	2	10

Tech. Code	GR55 Euro	⬢ mm	L mm	b mm	a mm	
E028508	10,30	8	96	16,8	3	10
E028509	10,53	9	103	18,9	3	10
E028510	10,53	10	105	21	3	10
E028511	10,70	11	116	24,2	3	10
E028512	11,57	12	116	24,2	3	10
E028513	11,90	13	131	28,3	3	10
E028514	13,67	14	131	28,3	3	10

Indivisible package Suggested retail package - Unit price

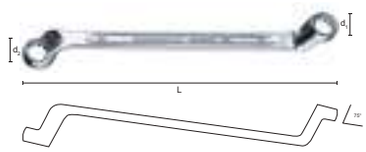
DOUBLE ENDED OFFSET RING WRENCHES

STAHLWILLE

ART. 20

Standard DIN 838 ISO 10104

Double ended offset ring wrenches STABIL® in chrome steel with a deep curvature. The AS-Drive profile (Anti-Slip-Drive) allows the transmission of strong forces on the sides of the screws and bolts without damaging the edges.



Tech. Code	GR55 Euro	⬣ mm	L mm	d1 mm	d2 mm	
E03510607	12,12	6 x 7	165	10,5	11,8	10
E03510809	12,35	8 x 9	180	13,1	14,5	10
E03510810	15,76	8 x 10	180	13,1	15,8	10
E03511011	13,45	10 x 11	200	15,8	17,2	10
E03511013	16,14	10 x 13	220	15,8	20,0	10
E03511213	14,66	12 x 13	220	18,6	20,0	10
E03511317	19,40	13 x 17	245	20,0	25,3	10
E03511415	15,66	14 x 15	245	21,3	22,6	10
E03511617	17,41	16 x 17	255	23,9	25,3	10
E03511719	20,06	17 x 19	270	25,3	28,0	10
E03511819	19,63	18 x 19	275	26,6	28,0	10
E03511821	27,56	18 x 21	300	26,6	30,7	10
E03511922	25,14	19 x 22	300	28,0	32,1	10

Tech. Code	GR55 Euro	⬣ mm	L mm	d1 mm	d2 mm	
E03512022	23,15	20 x 22	300	29,4	32,1	5
E03512123	28,88	21 x 23	315	30,7	33,4	5
E03512124	31,97	21 x 24	330	30,7	34,7	5
E03512224	31,42	22 x 24	330	32,1	34,7	5
E03512426	33,46	24 x 26	330	34,7	37,3	5
E03512427	30,21	24 x 27	330	34,7	38,6	5
E03512528	36,16	25 x 28	350	36,0	40,0	5
E03512730	42,45	27 x 30	360	38,3	42,6	5
E03512732	40,79	27 x 32	360	39,3	47,2	5
E03513032	38,36	30 x 32	365	42,6	45,4	5
E03513034	45,42	30 x 34	365	42,6	48,0	1
E03513641	87,64	36 x 41	440	53,0	60,0	1
E03514650	(154,34)	46 x 50	535	65,2	73,0	1

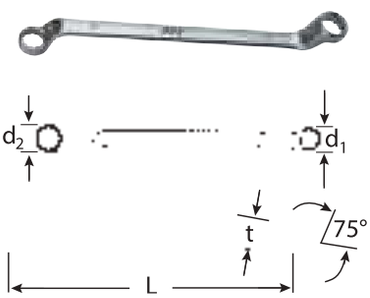
DOUBLE ENDED OFFSET RING WRENCHES

WRK

ART. E0350

Standard DIN 838 ISO 10104

Double ended offset ring wrenches made, chrome vanadium steel and satin finish.



Tech. Code	GR52 Euro	⬣ mm	L mm	d_1 mm	d_2 mm	
E03500607	7,71	6 x 7	170	12	11	10
E03500809	8,47	8 x 9	180	17	15	10
E03501011	9,02	10 x 11	200	19	17	10
E03501213	9,59	12 x 13	220	21	19	10
E03501415	10,29	14 x 15	240	24	21	10
E03501617	12,38	16 x 17	260	27	25	10
E03501719	14,23	17 x 19	290	29	27	5
E03501819	14,23	18 x 19	290	29	28	5
E03502022	16,45	20 x 22	320	34	32	5
E03502123	18,60	21 x 23	330	39	35	5
E03502224	21,34	22 x 24	330	39	36	5

Tech. Code	GR52 Euro	⬣ mm	L mm	d_1 mm	d_2 mm	
E03502426	21,40	24 x 26	340	41	36	5
E03502427	22,91	24 x 27	340	42	37	5
E03502528	24,41	25 x 28	350	43	39	5
E03502729	27,04	27 x 29	350	43	39	5
E03503032	30,10	30 x 32	370	47	44	5
E03503236	(30,10)	32 x 36	400	48	55	5
E03503436	(34,88)	34 x 36	420	55	50	1
E03503641	70,70	36 x 41	450	65	55	1
E03504146	(88,91)	41 x 46	460	70	65	1
E03504650	(107,86)	46 x 50	550	75	70	1

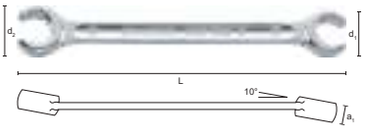
DOUBLE OPEN ENDED WRENCHES FOR FITTINGS

STAHLWILLE

ART. 24 OPEN-RING

Standard DIN 3118 ISO 3318

Double open bent ended wrenches for fittings OPEN-RING, chrome-vanadium steel and chorme finish.



Tech. Code	GR55 Euro	⬣ mm	L mm	d1 mm	d2 mm	a1 mm	a2 mm	
E03530810	(20,83)	8 x 10	145	17,5	19,5	7	8,5	10
E03530911	(23,59)	9 x 11	155	18,5	21,5	8,5	9	10
E03531011	(21,94)	10 x 11	155	19,5	21,5	8,5	9	10
E03531012	(23,27)	10 x 12	160	19,5	22,5	8,5	9,5	10
E03531113	(22,72)	11 x 13	170	21,5	24	9	10	10
E03531214	(23,59)	12 x 14	180	24	26	9,5	10,5	10
E03531417	(25,24)	14 x 17	200	26	30	10,5	12	10

Tech. Code	GR55 Euro	⬣ mm	L mm	d1 mm	d2 mm	a1 mm	a2 mm	
E03531719	(27,78)	17 x 19	220	30	33	12	13	10
E03531922	(34,40)	19 x 22	230	33	37	13	15	5
E03532224	(38,36)	22 x 24	245	37	40,5	15	16	5
E03532427	(46,74)	24 x 27	270	40,5	44,5	16	17,5	5
E03532736	(57,88)	27 x 36	300	42	54	16	19	5
E03533032	(61,73)	30 x 32	300	48,5	50,5	20	22	5

SINGLE OPEN ENDED WRENCHES

STAHLWILLE

ART. 4004

Standard DIN 894

Single open ended wrenches in steel, colour grey Iron.

Tech. Code	GR55 Euro	⬣ mm	a mm	L mm	
E0295024	9,70	24	8,9	215	10
E0295027	11,13	27	9,8	238	10
E0295030	12,90	30	10,8	261	5
E0295032	14,77	32	11,8	273	5
E0295036	20,28	36	12,8	300	1
E0295041	26,24	41	12,8	335	1
E0295046	32,85	46	14,8	369	1
E0295050	42,00	50	17	412	1
E0295055	45,42	55	18	457	1

Tech. Code	GR55 Euro	⬣ mm	a mm	L mm	
E0295060	58,43	60	18	492	1
E0295065	(73,86)	65	19	528	1
E0295070	(85,99)	70	20	572	1
E0295075	(108,59)	75	21	608	1
E0295080	(132,29)	80	22	645	1
E0295085	(171,98)	85	23	690	1
E0295090	(198,44)	90	23	690	1
E0295095	(280,02)	95	25	847	1
E0295100	(292,15)	100	25	847	1

Indivisible package Suggested retail package - Unit price

SINGLE OPEN ENDED WRENCHES

ART. E0299

Standard DIN 894
Single open ended wrenches in alloy galvanized steel.

Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	🔷
E029906	1,73	6	3.5	75	10
E029907	1,73	7	3.5	80	10
E029908	1,73	8	4	90	10
E029909	1,84	9	4.5	100	10
E029910	1,95	10	4.5	110	10
E029911	1,95	11	5	120	10
E029912	2,05	12	5	125	10
E029913	2,05	13	5	130	10
E029914	2,16	14	5.5	140	10
E029915	2,38	15	5.5	150	10
E029916	2,59	16	6	160	10
E029917	2,59	17	6	160	10
E029918	2,70	18	6	170	10
E029919	2,70	19	7.5	180	10
E029921	3,03	21	7,5	190	10
E029922	3,36	22	7.5	200	10
E029923	3,57	23	8	210	10
E029924	3,90	24	9	220	10

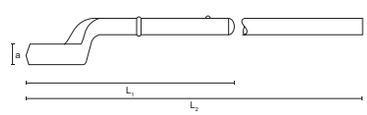
Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	🔷
E029927	5,08	27	9.5	240	5
E029930	6,27	30	10.5	260	5
E029932	7,78	32	12	280	5
E029936	9,84	36	13	320	5
E029938	14,17	38	13.5	330	1
E029941	15,46	41	14.5	350	1
E029942	19,57	42	15	360	1
E029946	21,59	46	15	380	1
E029950	24,44	50	16	420	1
E029955	33,84	55	17	460	1
E029960	43,79	60	17.5	500	1
E029965	65,20	65	18	540	1
E029970	77,63	70	18.5	540	1
E029975	102,71	75	21	580	1
E029980	162,18	80	22	620	1
E029985	183,80	85	22	670	1
E029990	241,11	90	22	700	1

CURVED POLYGONAL WRENCHES HEAVY DUTY

STAHLWILLE

ART. 5

Standard DIN ISO 691
Curved polygonal wrenches Heavy Duty for high tightening torques, to be used with the operating levers Art. 5 1/2. Chrome-vanadium steel, chrome finish.



Tech. Code	GR55 Euro	⬣ mm	L1 mm	L2 mm	a mm	Lever N.	🔷
E0362024	44,65	24	180	555	17	1	1
E0362027	46,86	27	190	560	17	1	1
E0362030	50,28	30	200	565	18	1	1
E0362032	59,53	32	235	730	18	2	1
E0362036	65,60	36	245	735	20	2	1
E0362038	(92,61)	38	250	740	21	2	1
E0362041	(78,27)	41	265	750	22	2	1
E0362042	(89,30)	42	265	750	22	2	1
E0362046	88,19	46	280	910	23	3	1
E0362050	(104,18)	50	290	920	25,5	3	1

Tech. Code	GR55 Euro	⬣ mm	L1 mm	L2 mm	a mm	Lever N.	🔷
E0362055	(114,66)	55	300	925	28	3	1
E0362060	(147,73)	60	345	1050	30,5	4	1
E0362065	(159,85)	65	355	1060	33	4	1
E0362070	(190,73)	70	365	1065	35,5	4	1
E0362075	(207,26)	75	375	1070	38	4	1
E0362080	(255,76)	80	385	1075	40,5	4	1
E0362085	(264,58)	85	385	1075	40,5	4	1
E0362090	(487,27)	90	410	1100	45	4	1
E0362095	(523,66)	95	410	1100	45	4	1
E0362100	(537,99)	100	412	1100	45	4	1

ART. 5-1/2
Maneuver levers for polygonal wrenches Art.5 Chrome vanadium steel, chrome finish.

Tech. Code	GR55 Euro	N.	⬣ mm	L mm	Ø mm	🔷
E036301	38,81	1	24 - 30	460	19	1
E036302	48,29	2	32 - 42	610	22	1

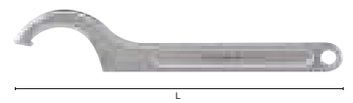
Tech. Code	GR55 Euro	N.	⬣ mm	L mm	Ø mm	🔷
E036303	79,37	3	46 - 55	760	25	1
E036304	(104,18)	4	60 - 100	860	30	1

HOOK WRENCHES

WODEX

ART. WX1980

Standard UNI 6752 DIN 1810 A
Hook wrenches **PREMIUM QUALITY** with square nose for locking rings with radial notches.
Internal profile with multiple teeth to grip the unified locking rings perfectly. Chrome molybdenum steel, chrome-satin finish.



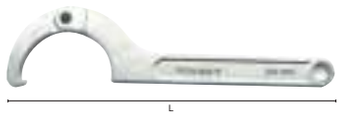
Tech. Code	GR51 Euro	For external Ø locking rings mm	Nose mm	L mm
E1200022	11,63	22 - 25 - 28	2.5	136
E1200030	11,63	30 - 32	2.5	136
E1200034	13,35	34 - 36 - 38	3.0	170
E1200040	13,36	40 - 42	3.0	170
E1200045	15,95	45 - 50	3.5	205
E1200052	15,95	52 - 55	3.5	205
E1200058	19,50	58 - 62 - 65	4.0	240
E1200068	19,50	68 - 70 - 75	4.0	240
E1200080	22,51	80 - 85 - 90	5.0	280
E1200092	22,51	92 - 95	5.0	280
E1200098	22,51	98 - 100	5.0	280
E1200105	37,00	105 - 110 - 115	5.0	320
E1200120	37,00	120 - 125 - 130	5.0	320
E1200135	61,00	135 - 145	6.0	380

🔷 Indivisible package 🔷 Suggested retail package - Unit price

ADJUSTABLE HOOK WRENCHES

ART. WX1982

Adjustable hook wrenches **PREMIUM QUALITY** with square nose for locking rings with radial notches.
Chrome molybdenum steel, chrome-satin finish.



Tech. Code	GR51 Euro	For external Ø locking rings mm	Nose mm	L mm
E1210015	22,06	15 - 35	3.5	170
E1210035	25,58	35 - 50	4.0	210
E1210050	32,76	50 - 80	5.0	280
E1210080	45,92	80 - 120	5.5	345
E1210120	58,24	120 - 180	9.5	492

ART. WX1987

Adjustable hook wrenches **PREMIUM QUALITY** with round pin for locking rings with radial holes.
Chrome molybdenum steel, chrome-satin finish.

Tech. Code	GR51 Euro	For external Ø locking rings mm	Nose Ø mm	L mm
E1220015	22,37	15 - 35	3	170
E1220035	26,98	35 - 50	4	210
E1220050	34,56	50 - 80	5	280
E1220080	48,18	80 - 120	6	345
E1220120	59,89	120 - 180	8	475

ROUND PINS FOR ADJUSTABLE HOOK WRENCHES

ART. WX1987/P

Replacement **PREMIUM QUALITY** pins for adjustable hook wrenches with round pin.

Tech. Code	GR51 Euro	For wrenches mm	Nose Ø mm
E1221015	6,00	15 - 35	3
E1221035	6,80	35 - 50	4
E1221050	8,40	50 - 80	5
E1221080	9,70	80 - 120	6
E1221120	12,70	120 - 180	8

ADJUSTABLE HOOK WRENCHES

ART. 12910

Adjustable hook wrenches with square lug for radial notched locking rings.

Tech. Code	GR55 Euro	For external Ø ring nuts mm	Nose mm	Length mm	
E12304590	44,20	45 - 90	6	250	5
E123095165	78,82	95 - 165	10	335	5

SOCKET WRENCHES FOR RING NUTS KM

ART. WX1990

NEW

Socket wrenches **Premium Quality** in hardened steel for radiale notched ring nuts model KM according to DIN 981.

Features:
External drive teeth
For manual use with ratchets and squre drive levers

Tech. Code	GR51 Euro	Ring nut Type	Ring nut M	D mm	S mm	D2 mm	L mm	Teeth Nr	Coupling ■
E1240010	29,79	KM 0	10 x 0,75	18	4	23,5	60	4	3/8"
E1240012	30,60	KM 1	12 x 1	22	4	27,5	60	4	3/8"
E1240015	31,44	KM 2	15 x 1	25	5	30	60	4	1/2"
E1240017	33,10	KM 3	17 x 1	28	5	33	60	4	1/2"
E1240020	36,40	KM 4	20 x 1	32	6	38	60	4	1/2"
E1240025	37,24	KM 5	25 x 1,5	38	7	44	60	4	3/4"
E1240030	38,05	KM 6	30 x 1,5	45	7	51	60	4	3/4"
E1240035	40,43	KM 7	35 x 1,5	52	8	58	60	4	3/4"
E1240040	45,00	KM 8	40 x 1,5	58	9	64	60	4	3/4"
E1240045	50,32	KM 9	45 x 1,5	65	10	69	60	4	3/4"
E1240050	57,93	KM 10	50 x 1,5	70	11	75	60	4	3/4"
E1240055	68,60	KM 11	55 x 2	75	11	80	60	4	3/4"
E1240060	74,70	KM 12	60 x 2	80	11	85	60	4	1"
E1240065	88,42	KM 13	65 x 2	85	12	90	60	4	1"

SOCKET WRENCHES FOR RING NUTS KM

WODEX

NEW

ART. WX1992

Socket Wrenches Premium Quality in hardened steel for nuts with radiale notches model KM compliant with DIN 981.

Features:
Internal drive teeth
For use with pneumatic and electric impact wrenches

Tech. Code	GR51 Euro	Ring nuts Type	Ring nuts M	D mm	S mm	D2 mm	L mm	Teeth Nr	Coupling ■
E1242010	49,62	KM 0	10 x 0,75	18	4	28	60	4	3/8"
E1242012	53,73	KM 1	12 x 1	22	4	32	60	4	3/8"
E1242015	59,44	KM 2	15 x 1	25	5	34	60	4	1/2"
E1242017	62,83	KM 3	17 x 1	28	5	39	60	4	1/2"
E1242020	67,79	KM 4	20 x 1	32	6	44	60	4	1/2"
E1242025	71,93	KM 5	25 x 1,5	38	7	49	60	4	3/4"
E1242030	74,42	KM 6	30 x 1,5	45	7	56	60	4	3/4"
E1242035	82,71	KM 7	35 x 1,5	52	8	63	60	4	3/4"
E1242040	87,61	KM 8	40 x 1,5	58	9	69	60	4	3/4"
E1242045	93,44	KM 9	45 x 1,5	65	10	76	60	4	3/4"
E1242050	96,74	KM 10	50 x 1,5	70	11	81	60	4	3/4"
E1242055	105,84	KM 11	55 x 2	75	11	86	60	4	3/4"
E1242060	112,45	KM 12	60 x 2	80	11	91	60	4	1"
E1242065	144,68	KM 13	65 x 2	85	12	96	60	4	1"

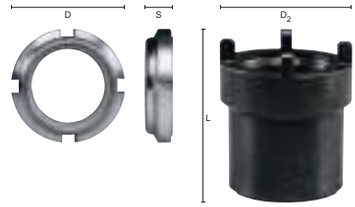
SOCKET WRENCHES FOR SELF LOCKING RING NUTS GUK

WODEX

NEW

ART. WX1994

Socket wrenches **Premium Quality** in hardened steel with self locking ring nuts with radial notches GUK model nylon ring.



Features:
External drive teeth
For manual use for ratchets and square drive levers

Tech. Code	GR51 Euro	Ring nuts Type	Ring nuts M	D mm	S mm	D2 mm	L mm	Teeth Nr	Coupling ■
E1244010	29,79	GUK 0	10 x 0,75	18	7,6	23,5	60	4	3/8"
E1244012	30,60	GUK 1	12 x 1	21	7,6	27,5	60	4	3/8"
E1244015	31,44	GUK 2	15 x 1	24	8,6	30	60	4	1/2"
E1244017	33,10	GUK 3	17 x 1	28	8,6	33	60	4	1/2"
E1244020	36,40	GUK 4	20 x 1	32	9,6	38	60	4	1/2"
E1244025	37,24	GUK 5	25 x 1,5	38	10,5	44	60	4	3/4"
E1244030	38,05	GUK 6	30 x 1,5	44	10,7	51	60	4	3/4"
E1244035	40,43	GUK 7	35 x 1,5	50	11,3	55	60	4	3/4"
E1244040	45,00	GUK 8	40 x 1,5	56	12,3	60	60	4	3/4"
E1244045	50,32	GUK 9	45 x 1,5	62	12,3	67	60	4	3/4"
E1244050	57,93	GUK 10	50 x 1,5	68	12,9	73	60	4	3/4"
E1244055	68,60	GUK 11	55 x 2	75	13,4	80	60	6	3/4"
E1244060	74,70	GUK 12	60 x 2	80	13,4	85	60	6	1"
E1244065	88,42	GUK 13	65 x 2	85	14,5	90	60	6	1"

ART. WX1996

Socket wrenches **Premium Quality** in hardened steel for self locking nuts with radiale notches and GUK model nylon ring.

NEW

Features:
Internal drive teeth
For use of pnuematic and electric impact wrenches

Tech. Code	GR51 Euro	Ring nuts Type	Ring nuts M	D mm	S mm	D2 mm	L mm	Teeth Nr	Coupling ■
E1246010	54,18	GUK 0	10 x 0,75	18	7,6	28	60	4	3/8"
E1246012	53,73	GUK 1	12 x 1	21	7,6	32	60	4	3/8"
E1246015	59,44	GUK 2	15 x 1	24	8,6	34	60	4	1/2"
E1246017	62,83	GUK 3	17 x 1	28	8,6	39	60	4	1/2"
E1246020	67,79	GUK 4	20 x 1	32	9,6	44	60	4	1/2"
E1246025	71,93	GUK 5	25 x 1,5	38	10,5	49	60	4	3/4"
E1246030	74,42	GUK 6	30 x 1,5	44	10,7	56	60	4	3/4"
E1246035	82,71	GUK 7	35 x 1,5	50	11,3	63	60	4	3/4"
E1246040	87,61	GUK 8	40 x 1,5	56	12,3	69	60	4	3/4"
E1246045	93,44	GUK 9	45 x 1,5	62	12,3	76	60	4	3/4"
E1246050	96,74	GUK 10	50 x 1,5	68	12,9	81	60	4	3/4"
E1246055	105,84	GUK 11	55 x 2	75	13,4	86	60	6	3/4"
E1246060	112,45	GUK 12	60 x 2	80	13,4	91	60	6	1"
E1246065	144,68	GUK 13	65 x 2	85	14,5	96	60	6	1"

Indivisible package Suggested retail package - Unit price

ADJUSTABLE CALIPER PIN WRENCHES

ART. E1279

Round nosepiece model with variable nut opening and threaded rings with front holes, special steel and burnished finish.

Tech. Code	GR52 Euro	Hole distance mm	Ø Stud mm	⊕ mm	◈
E127901,5	17,65	7÷40	1,5	115	5
E127902	17,74	7÷40	2	115	5
E127902,5	17,84	7÷40	2,5	115	5
E127903	18,20	11÷60	3	160	5
E127904	19,18	11÷60	4	160	5
E127905	19,40	11÷60	5	160	5
E127905L	27,63	14÷100	5	215	2
E127906	27,73	14÷100	6	215	2
E127908	28,87	14÷100	8	215	2

DOUBLE ENDED TUBULAR BOX WRENCHES

WODEX

ART. WX1840

Standard UNI 6745 - ISO 2236 - DIN 896

Heavy duty series tubular box wrenches in chrome-vanadium steel with hexagonal socket and transversal holes for Tommy bars, hexagonal profile body for use with open ended wrenches.

Tech. Code	GR51 Euro	O mm	a mm	b mm	L mm	◈
E13400607	12,56	6 x 7	10	11	105	10
E13400809	12,92	8 x 9	13	14	110	10
E13401011	13,69	10 x 11	15	16	120	10
E13401213	16,02	12 x 13	18	19	140	10
E13401415	17,81	14 x 15	20	22	145	10
E13401617	20,53	16 x 17	23	24	155	10
E13401819	23,69	18 x 19	25	26	165	10

Tech. Code	GR51 Euro	O mm	a mm	b mm	L mm	◈
E13402022	27,73	20 x 22	28	30	170	10
E13402123	31,55	21 x 23	29	31	185	5
E13402426	34,17	24 x 26	33	33	190	5
E13402427	38,53	24 x 27	33	35	190	5
E13402528	37,67	25 x 28	34	37	200	5
E13402729	43,34	27 x 29	37	39	210	2
E13403032	50,42	30 x 32	40	42	210	2

TOMMY BARS FOR HEAVY DUTY TUBULAR BOX WRENCHES

WODEX

ART. WX1842/01 - WX1842/02

Multi-diameter Tommy bars, chrome-vanadium steel, usable with WX1840 tubular box wrenches.

Features:

E134201 - WX1842/01 Ø 2.5 - 4.5 - 5.5 - 5.9 mm

E134202 - WX1842/02 Ø 6.4 - 7.5 - 9.5 - 11.5 - 12.5 - 13 mm

Tech. Code	GR51 Euro	Size N.	For wrenches mm	L mm	◈
E134201	9,04	01	from 6x7 to 14x15	180	2
E134202	12,23	02	from 16x17 to 30x32	280	2

DOUBLE ENDED TUBULAR BOX WRENCHES HEAVY DUTY IN SET

WODEX

ART. WX1840/S8 - WX1840/S12

Standard UNI 6745 - ISO 2236 - DIN 896

Composition E134408 - WX1840/S8:

WX1840 Tubular box wrenches 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 mm

WX1842/01 Tommy bar for wrenches from 6x7 to 14x15 mm

WX1842/02 Tommy bar for wrenches from 16x17 to 30x32 mm

Composition E134412A - WX1840/S12A:

WX1840 Tubular box wrenches 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32 mm

WX1842/01 Tommy bar for wrenches from 6x7 to 14x15 mm

WX1842/02 Tommy bar for wrenches from 16x17 to 30x32 mm

Composition E134412B - WX1840/S12B:

WX1840 Tubular box wrenches 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x26 - 25x28 - 30x32 mm

WX1842/01 Tommy bar for wrenches from 6x7 to 14x15 mm

WX1842/02 Tommy bar for wrenches from 16x17 to 30x32 mm

Tech. Code	GR51 Euro	Pieces
E134408	190,16	8 + 2
E134412A	362,04	12 + 2
E134412B	362,04	12 + 2

Boxed set

DOUBLE SOCKET WRENCHES LIGHT MODEL

ART. E1370

Steel tube wrenches with hexagonal ports, galvanized finish.

Tech. Code	GR52 Euro	⌀ mm	Length mm	
E13700607	2,06	6 x 7	90	10
E13700809	2,06	8 x 9	94	10
E13700810	2,25	8 x 10	94	10
E13701011	2,25	10 x 11	104	10
E13701213	2,40	12 x 13	109	10
E13701317	2,93	13 x 17	124	10
E13701415	2,84	14 x 15	114	10
E13701617	3,02	16 x 17	124	10
E13701719	3,18	17 x 19	129	10
E13701819	3,18	18 x 19	129	5
E13701922	3,86	19 x 22	134	5
E13702022	3,86	20 x 22	134	5
E13702123	4,12	21 x 23	139	5

Tech. Code	GR52 Euro	⌀ mm	Length mm	
E13702426	4,56	24 x 26	144	5
E13702427	4,99	24 x 27	155	5
E13702528	5,23	25 x 28	160	5
E13702729	5,83	27 x 29	165	5
E13703032	5,83	30 x 32	165	5
E13703236	7,17	32 x 36	175	1
E13703437	8,76	34 x 37	180	1
E13703538	8,95	35 x 38	185	1
E13703641	9,10	36 x 41	190	1
E13704042	10,47	40 x 42	195	1
E13704650	13,90	46 x 50	195	1
E13705055	15,87	50 x 55	195	1
E13705560	17,45	55 x 60	195	1

HEAVY DUTY DOUBLE ENDED OFFSET SOCKET WRENCHES

WODEX

ART. WX1860

Double ended heavy duty offset socket wrenches in chrome-vanadium steel with hexagonal sockets and through hole on the short side for access to the nut even in the presence of protruding threads.

Tech. Code	GR51 Euro	⌀ mm	a mm	L mm	
E140005,5	10,28	5.5 x 5.5	11	110	6
E140006	7,63	6 x 6	11	110	6
E140007	7,63	7 x 7	12	115	6
E140008	7,63	8 x 8	13	120	6
E140009	7,63	9 x 9	14	125	6
E140010	8,16	10 x 10	16	130	6
E140011	9,45	11 x 11	17	135	6
E140012	9,90	12 x 12	18	145	6
E140013	10,05	13 x 13	19	150	6
E140014	11,24	14 x 14	21	160	6
E140015	11,98	15 x 15	22	175	6
E140016	12,72	16 x 16	24	185	6
E140017	12,93	17 x 17	25	200	6
E140018	19,50	18 x 18	26	210	6
E140019	21,00	19 x 19	28	220	6

Tech. Code	GR51 Euro	⌀ mm	a mm	L mm	
E140020	21,00	20 x 20	30	222	6
E140021	25,50	21 x 21	31	230	6
E140022	28,90	22 x 22	32	240	6
E140023	30,80	23 x 23	33	250	2
E140024	33,50	24 x 24	34	260	2
E140025	35,50	25 x 25	36	280	2
E140026	39,20	26 x 26	37	290	1
E140027	39,20	27 x 27	38	300	1
E140028	39,20	28 x 28	39	310	1
E140029	40,28	29 x 29	41	320	1
E140030	55,00	30 x 30	42	330	1
E140032	62,00	32 x 32	45	360	1
E140034	(68,37)	34 x 34	48	370	1
E140036	76,00	36 x 36	50	390	1
E140038	(95,72)	38 x 38	50	400	1

HEAVY DUTY DOUBLE ENDED OFFSET SOCKET WRENCHES IN SET

WODEX

ART. WX1860/S5 - WX1860/S6 - WX1860/S17

Composition:

WX1860/S5 7x7 - 8x8 - 10x10 - 13x13 - 17x17 mm

WX1860/S6 7x7 - 8x8 - 10x10 - 13x13 - 17x17 - 19x19 mm

WX1860/S17 6x6 - 7x7 - 8x8 - 9x9 - 10x10 - 11x11 - 12x12 - 13x13 - 14x14 - 15x15 - 16x16 - 17x17 - 18x18 - 19x19 - 20x20 - 21x11 - 22x22 mm

Tech. Code	GR51 Euro	Pieces
E140205	50,88	5
E140206	66,78	6
E140217	209,88	17

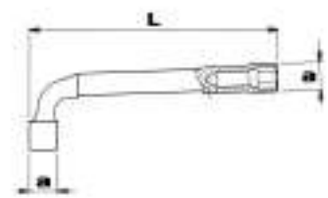
Boxed set

DOUBLE HEADED SOCKET WRENCHES

WRK

ART. E1420

Bent head with hexagonal opening, hollow profile for projecting screws or drive bars, chrome vanadium steel, chrome plated.



Tech. Code	GR52 Euro	⌀ mm	a mm	L mm	
E14206	7,63	6	11	110	6
E14207	7,63	7	12	115	6
E14208	7,63	8	13	120	6
E142010	8,16	10	16	130	6
E142011	9,45	11	17	135	6
E142012	9,90	12	18	145	6
E142013	10,05	13	19	150	6
E142014	11,24	14	21	160	6

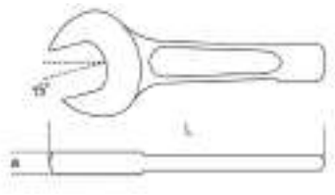
Tech. Code	GR52 Euro	⌀ mm	a mm	L mm	
E142015	11,98	15	22	175	6
E142016	12,72	16	24	185	6
E142017	12,93	17	25	200	6
E142019	21,00	19	28	220	6
E142021	25,50	21	30	230	6
E142022	28,90	22	32	245	6
E142023	30,80	23	33	255	6
E142024	33,50	24	34	265	6

Indivisible package Suggested retail package - Unit price

OPEN ENDED SLOGGING WRENCHES

ART. E1440

Standard DIN 133
Single open ended for using with hammers, chrome vanadium steel.



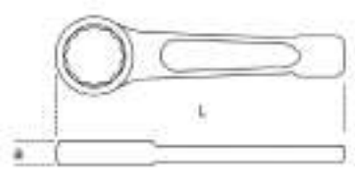
Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	Weight g
E1440024	(14,41)	24	15	160	280
E1440027	(16,85)	27	15	180	350
E1440030	(17,43)	30	16	190	542
E1440032	(23,85)	32	17	196	770
E1440036	(30,27)	36	18	210	900
E1440041	(35,23)	41	19	225	1065
E1440046	(44,71)	46	20	251	1114

Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	Weight g
E1440050	(63,79)	50	20	260	1650
E1440055	(113,11)	55	23	270	2200
E1440060	(157,40)	60	24	305	2600
E1440065	(267,00)	65	28	305	2700
E1440070	(292,95)	70	30	335	4000
E1440075	(357,83)	75	30	335	5000
E1440080	(356,16)	80	37	380	5700

RING ENDED SLOGGING WRENCHES

ART. E1442

Standard DIN 7444
Single open ended polygonal for using with hammers, chrome vanadium steel.



Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	Weight g
E1442024	16,28	24	14	167	296
E1442027	16,66	27	16	179	303
E1442030	17,46	30	17	191	383
E1442032	18,19	32	17	197	474
E1442036	21,97	36	19	206	522
E1442041	28,78	41	22	231	758
E1442046	31,83	46	22	241	853

Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	Weight g
E1442050	(44,30)	50	24	255	1134
E1442055	(60,07)	55	25	270	1560
E1442060	(80,07)	60	25	280	1600
E1442065	(135,78)	65	28	280	2100
E1442070	(209,43)	70	35	280	3100
E1442075	(219,55)	75	35	300	3100
E1442080	(520,25)	80	37	330	3200

HEXAGONAL NUT DRIVERS WITH HANDLE

WODEX

ART. WX1950

Hexagonal extended nut drivers with **PREMIUM QUALITY** handle for hexagonal head screws and nuts. Satin chrome-vanadium steel blade, hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** grip made of **SANTOPRENE®** that guarantees maximum grip for fast and accurate work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	○ mm	a mm	L mm	P mm
E145005	10,29	5	125	235	25
E145005,5	11,64	5.5	125	235	25
E145006	11,64	6	125	235	25
E145007	12,21	7	125	235	25

Tech. Code	GR51 Euro	○ mm	a mm	L mm	P mm
E145008	12,21	8	125	235	25
E145009	12,21	9	125	235	25
E145010	12,99	10	125	235	25
E145013	14,69	13	125	235	25

ART. WX1950/S8

Composition:
5x125 - 5.5x125 - 6x125 - 7x125 - 8x125 - 9x125 - 10x125 - 13x125 mm

Tech. Code	GR51 Euro	Pieces
E145208	85,86	8

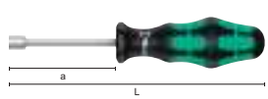
Boxed set

HEXAGONAL NUTDRIVERS WITH HANDLE 395 HO

Wera

ART. 395 HO

Hexagonal nutdriver with hollow shaft for hexagonal screws and long threaded. Matt nickel-chrome and **Kraftform Plus** grip handle multi-component anti-rolling.



Tech. Code	GR53 Euro	○ mm	a mm	L mm
E145805	14,56	5,0	90	188
E145805,5	14,56	5,5	90	188
E145806	14,56	6,0	90	188
E145807	15,01	7,0	90	195

Tech. Code	GR53 Euro	○ mm	a mm	L mm
E145808	16,57	8,0	90	195
E145810	18,26	10	90	202
E145813	19,83	13	90	202

HEXAGONAL NUTDRIVERS WITH HANDLE 395 HO/7 SM IN SET

ART. 395 HO/7 SM

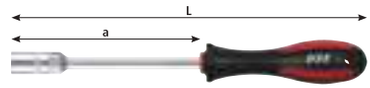
Composition:
O 395 HO 5 - 5,5 - 6 - 7 - 8 - 10 - 13 mm

Tech. Code	GR53 Euro	Pieces
E146507	90,48	7

Boxed set

HEXAGONAL NUTDRIVERS WITH HANDLE

ART. E1455
Hexagonal socket handle with bicomponent grip, vanadium chrome and satin steel.



Tech. Code	GR52 Euro	O mm	a mm	L mm
E145503	5,77	3	125	225
E145503,5	5,77	3.5	125	225
E145504	5,77	4	125	225
E145504,5	5,77	4.5	125	225
E145505	6,06	5	125	225
E145505,5	6,06	5.5	125	225
E145506	6,40	6	125	235
E145507	6,61	7	125	235

Tech. Code	GR52 Euro	O mm	a mm	L mm
E145508	6,53	8	125	235
E145509	7,00	9	125	235
E145510	7,76	10	125	245
E145511	7,76	11	125	245
E145512	7,80	12	125	245
E145513	8,18	13	125	245
E145514	8,14	14	125	245
E145517	8,44	17	125	245

While stocks last

INSULATED NUTDRIVERS 1000 VOLTS WITH HEXAGONAL SOCKETS WITH HANDLE

ART. 190 I VDE
Insulated nutdriver up to 1000 Volts, compliant with standard regulations IEC 60900, with socket for hexagonal head screws. Matt nickel-chrome steel and **Kraftform Plus** multi-component anti-rolling handle.

Tech. Code	GR53 Euro	O mm	a mm	L mm
E146005,5	21,55	5,5	125	223
E146006	23,64	6	125	223
E146007	25,52	7	125	230
E146008	27,90	8	125	230
E146009	30,35	9	125	230

Tech. Code	GR53 Euro	O mm	a mm	L mm
E146010	32,82	10	125	237
E146011	35,23	11	125	237
E146012	40,19	12	125	237
E146013	45,52	13	125	237

MICRO SCREWDRIVERS WITH HEXAGONAL SOCKET

ART. WX1957
Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for hexagonal head screws and nuts, satin chrome-vanadium steel blades. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	O mm	Blade Ø mm	a mm	L mm
E14802,5X60	5,94	2.5	4.0	60	155
E14803,0X60	5,94	3.0	5.0	60	155
E14803,5X60	5,94	3.5	5.3	60	155

Tech. Code	GR51 Euro	O mm	Blade Ø mm	a mm	L mm
E14804,0X60	5,94	4.0	5.5	60	155
E14805,0X60	6,04	5.0	7.0	60	155
E14806,0X60	6,04	6.0	8.5	60	155

T-HANDLE WRENCHES WITH HEXAGONAL SOCKET

NEW

ART. WX1900

Standard DIN 3112 - UNI 6742 - ISO 691
Wrenches **PREMIUM QUALITY** in chrome molybdenum steel with hexagonal socket. The high precision and high quality of the materials ensure tightening torques higher than those specified in the ISO reference standard. Sliding bar with limit stops. Chrome-satin finish.

Tech. Code	GR51 Euro	O mm	a mm	L mm
E262507	23,44	7	165	215
E262508	23,44	8	165	230
E262510	25,26	10	180	240
E262513	27,36	13	180	260
E262517	35,03	17	240	280
E262519	37,63	19	240	300

Indivisible package Suggested retail package - Unit price

T-HANDLE SWIVEL HEXAGONAL SOCKET WRENCHES

ART. WX1910

Standard UNI 6743

Wrenches **PREMIUM QUALITY** in chrome-vanadium steel with hexagonal socket and universal joint. The high precision and high quality of the materials ensure tightening torques higher than those specified in the ISO reference standard. The universal joint is fitted with a spring for controlled positioning and can be tilted by up to 90°. Sliding bar with limit stops. Chrome-satin finish with phosphate coated joints.

Tech. Code	GR51 Euro	○ mm	a mm	L mm
E263006	36,32	6	165	400
E263007	36,32	7	165	400
E263008	36,32	8	165	400
E263010	43,24	10	180	445
E263012	43,24	12	180	450

Tech. Code	GR51 Euro	○ mm	a mm	L mm
E263013	43,24	13	180	450
E263014	43,24	14	180	450
E263017	50,71	17	180	480
E263019	63,95	19	230	510
E263022	63,90	22	230	510

ART. WX1910/S7 - WX1910/S10

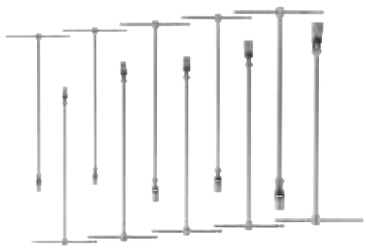
Standard UNI 6743

Composition E2663307 - WX1910/S7

7 - 8 - 10 - 13 - 14 - 17 - 19 mm

Composition E2663310 - WX1910/S10

6 - 7 - 8 - 10 - 12 - 13 - 14 - 17 - 19 - 22 mm



Tech. Code	GR51 Euro	Pieces
E263307	328,35	7
E263310	470,13	10

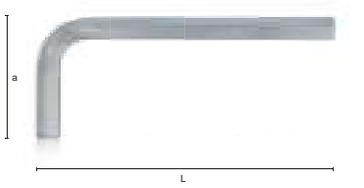
Boxed set

HEXAGONAL L KEYS

ART. WX2560

Standard DIN 911 - ISO 2936

Hexagonal L keys **Premium Quality** made of chrome-vanadium steel. High strength and hardness.
The precise chrome plating ensures adequate protection against corrosion.



Tech. Code	GR51 Euro	⬢ mm	a mm	L mm
E229501,5	1,30	1.5	14	45
E229502	1,30	2	16	50
E229502,5	1,34	2.5	18	56
E229503	1,37	3	20	63
E229503,5	1,40	3.5	22	66
E229504	1,49	4	25	70
E229504,5	1,62	4.5	26	75
E229505	1,69	5	28	80
E229506	1,97	6	32	90

Tech. Code	GR51 Euro	⬢ mm	a mm	L mm
E229507	2,23	7	34	95
E229508	2,54	8	36	100
E229510	3,34	10	40	112
E229512	5,02	12	45	125
E229514	6,90	14	56	140
E229517	11,21	17	63	160
E229519	15,00	19	70	180
E229522	19,05	22	80	200
E229524	30,50	24	90	224

ART. WX2560/S9

Standard DIN 911 - ISO 2936

Complete set of keys in a practical **PREMIUM QUALITY** two-component case.

Composition:

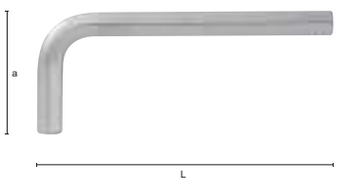
1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR51 Euro	Pieces
E229609	18,97	9

HEXAGONAL L KEYS FOR EQUIPMENT

ART. E2396

Galvanized hexagonal L keys indicated for equipment or assembly kits.



Tech. Code	GR52 Euro	⬢ mm	a mm	L mm	
E239602	0,16	2	16	50	100
E239602,5	0,20	2.5	18	56	100
E239603	0,25	3	20	63	100
E239604	0,29	4	25	70	100
E239605	0,57	5	28	80	100

Tech. Code	GR52 Euro	⬢ mm	a mm	L mm	
E239606	0,86	6	32	90	50
E239608	1,27	8	36	100	50
E239610	2,75	10	40	112	10
E239612	4,81	12	45	125	10

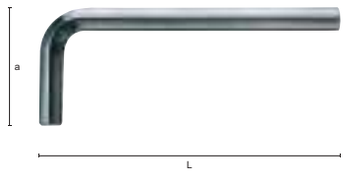
Indivisible package Suggested retail package - Unit price

HEXAGONAL L KEYS

Wera

ART. 950

Hexagonal keys L-wrenches in chromed steel. Hexagonal profile with more supported surface Hex-Plus
The measures 1.5 - 14 - 17 - 19 - 22 - 24 - 27 mm have hexagonal standard profile.



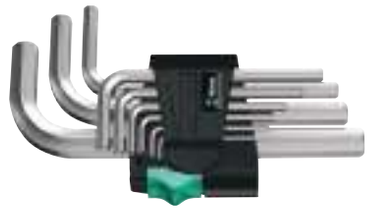
Tech. Code	GR53 Euro	⬢ mm	a mm	L mm	🔧
E220001,5	0,94	1.5	14	45	10
E220002	0,94	2	16	50	10
E220002,5	0,98	2.5	18	56	10
E220003	1,23	3	20	63	10
E220004	1,51	4	25	70	10
E220005	1,76	5	28	80	10
E220006	2,48	6	32	90	10
E220007	3,19	7	34	95	10

Tech. Code	GR53 Euro	⬢ mm	a mm	L mm	🔧
E220008	4,14	8	36	100	10
E220009	4,64	9	38	106	10
E220010	6,08	10	40	112	10
E220012	9,14	12	45	125	5
E220014	15,07	14	56	140	1
E220017	25,23	17	63	160	1
E220019	35,11	19	70	180	1

ART. 950/9 HEX-PLUS 5

Set of L keys completed with practical case in wear-resistant plastic material.

Composition:
950 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm



Tech. Code	GR53 Euro	Pieces
E222009	19,47	9

HEXAGONAL KEYS MALE WITH POCKET SUPPORT IN SET

ART. E2298

Standard ISO 2936
Set of 7 hexagonal keys male burnished in high quality chrome vanadium steel inserted in a pocket holder in bi-component plastic **with device for easy opening of the keys.**

Composition:
⬢ 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR60 Euro	Pieces
E229807B	26,11	7

HEXAGONAL KEYS MALE IN INCHES WITH POCKET SUPPORT IN SET

ART. E2299

Composition:
⬢ 3/32" - 1/8" - 5/32" - 3/16" - 1/4" - 5/16" - 3/8"

Tech. Code	GR60 Euro	Pieces
E229907	26,11	7

HEXAGONAL L KEYS WITH BALL POINT END IN SET 950 PKS/9 SM N

Wera

ART. 950/9 HEX-PLUS 3

Set of 9 keys 950 PKS in chromed steel hexagonal with ball point end. The material of the wear-resistant clip guarantees a perfect grip of the keys and easy removal.

Composition:
950 PKS 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR53 Euro	Pieces
E222509	34,14	9

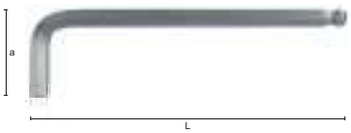
Indivisible package Suggested retail package - Unit price

LONG HEXAGONAL L KEYS WITH BALL END AND MAGNET

WODEX

ART. WX2600

Long hexagonal keys with ball end and permanent magnet. The magnet inserted in the long side holds the steel screws reliably and securely, even in a vertical position, while the ball end allows you to incline the key by up to 25° with respect to the axis of the screw. The precise chrome-plating ensures a high level of protection against corrosion. Sizes 1.5 - 2 - 2.5 mm are without magnets.



Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E230001,5	3,52	1.5	14	62
E230002	3,52	2	16	75
E230002,5	3,52	2.5	18	85
E230003	3,52	3	20	90
E230004	3,64	4	25	100

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E230005	3,83	5	28	115
E230006	4,49	6	32	135
E230008	5,58	8	36	150
E230010	7,39	10	40	170

ART. WX2600/S9

Complete set of keys in a practical **PREMIUM QUALITY** two-component case.

Composition:

1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR51 Euro	Pieces
E230109	37,00	9

LONG HEXAGONAL L KEYS WITH BALL POINT END

Wera

ART. 950 PKL BM

Long ball point end male hexagonal keys L keys in steel blacklaser finish, spherical end on long side Hexagonal profile with more supported surface Hex-Plus. (measurement 1.5 standard hexagonal profile).

Tech. Code	GR53 Euro	⬣ mm	a mm	L mm	🔷
E225001,5	2,01	1.5	14	90	10
E225002	2,01	2	16	100	10
E225002,5	2,01	2.5	18	112	10
E225003	2,47	3	20	126	10
E225004	2,86	4	25	140	10
E225005	3,23	5	28	160	10

Tech. Code	GR53 Euro	⬣ mm	a mm	L mm	🔷
E225006	4,07	6	32	180	10
E225007	5,24	7	34	190	10
E225008	6,60	8	36	200	10
E225010	9,16	10	40	219	10
E225012	13,60	12	45	248	5

ART. 950/9 HEX-PLUS 6

Set of keys complete with practical case in wear-resistandt plastic material.

Composition:

950 PKL BM 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm

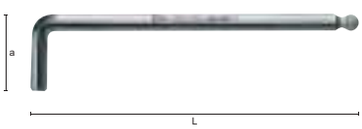
Tech. Code	GR53 Euro	Pieces
E226009	31,91	9

LONG HEXAGONAL L KEYS WITH BALL POINT END

Wera

ART. 950 PKL

Hexagonal keys L-wrenches in chromed steel, ball point end on long side. Hexagonal profile with more supported surface Hex-Plus (measurement 1.5 standard hexagonal profile).

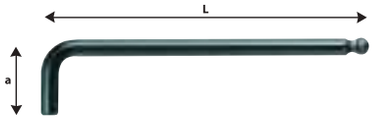


Tech. Code	GR53 Euro	⬣ mm	a mm	L mm	🔷
E225101,5	3,45	1,5	14	90	10
E225102	3,45	2	16	100	10
E225102,5	3,86	2,5	18	112	10
E225103	4,82	3	20	126	10
E225104	4,82	4	25	140	10

Tech. Code	GR53 Euro	⬣ mm	a mm	L mm	🔷
E225105	5,45	5	28	160	10
E225106	6,29	6	32	180	10
E225107	7,38	7	34	190	1
E225108	8,72	8	36	200	1
E225110	11,49	10	40	219	1

LONG HEXAGONAL L KEYS WITH BALL END

WRK



ART. E2283

L keys for driving bolts and cap screws.
Vanadium chrome steel. Made in Germany - Black finish.

Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	🔷
E228301,5	1,80	1.5	14	81	10
E228302	1,80	2	18	87	10
E228302,5	1,90	2.5	19	92	10
E228303	1,90	3	22	103	10
E228304	2,10	4	29	114	10

Tech. Code	GR52 Euro	⬣ mm	a mm	L mm	🔷
E228305	2,18	5	32	133	10
E228306	2,61	6	36	156	10
E228308	4,61	8	43	178	10
E228310	6,58	10	50	200	10
E228312	10,87	12	57	226	10

ART. E2284

Set of L keys complete with practical bi-component case.

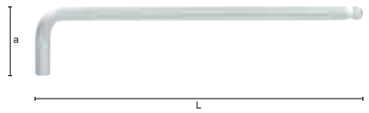
Composition:

E2283 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR52 Euro	Pieces
E2284SET9	25,98	9

LONG HEXAGONAL L KEYS WITH BALL END

WODEX



ART. WX2580

Long hexagonal L keys with a ball end on the long side that allows you to incline the key by up to 25° with respect to the axis of the screw. The precise chrome-plating ensures a high level of protection against corrosion.

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E230701,5	2,29	1.5	14	90
E230702	2,29	2	16	100
E230702,5	2,63	2.5	18	112
E230703	2,76	3	20	126
E230704	2,88	4	25	140

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E230705	3,43	5	28	160
E230706	4,62	6	32	180
E230708	5,95	8	36	200
E230710	8,95	10	40	224

ART. WX2580/S9

Complete set of keys in a practical **PREMIUM QUALITY** two-component case.

Composition:

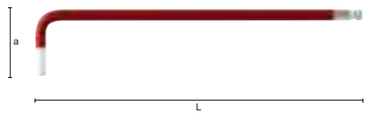
1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR51 Euro	Pieces
E230809	26,80	9

LONG HEXAGONAL L KEYS WITH BALL END AND MAGNET

WODEX

fast 10



ART. WX2602

Long hexagonal keys with ball end and permanent magnet. The magnet inserted in the long side holds the steel screws reliably and securely, even in a vertical position, while the ball end allows you to incline the key by up to 25° with respect to the axis of the screw. The precise chrome-plating ensures a high level of protection against corrosion and the additional non-slip powder coated colour coding means that the keys can be selected quickly and easily. Sizes 1.5 - 2 - 2.5 mm are without magnets.

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E231001,5	3,88	1.5	14	90
E231002	3,88	2	16	100
E231002,5	3,88	2.5	18	112
E231003	3,88	3	20	126
E231004	4,06	4	25	140

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E231005	4,74	5	28	160
E231006	6,18	6	32	180
E231008	8,00	8	36	200
E231010	10,56	10	40	224

Indivisible package Suggested retail package - Unit price

LONG HEXAGONAL L KEYS WITH MAGNET IN SET

WODEX

ART. WX2602/S9

Complete set of keys in a practical **PREMIUM QUALITY** two-component case.

Composition:
1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR51 Euro	Pieces
E231109	39,50	9

The products are available in CAP E

LONG HEXAGONAL L KEYS WITH RETAINING FUNCTION IN SET

wiha

NEW

ART. 41979

Set of 9 long hexagonal L key wrenches with ball end and Wiha MagicRing® retaining function which locks all hexagon socket screws without the use of magnets. Thanks to the glow-in-the-dark coating, the colored hex keys can also be easily found in the dark with the Wiha torch with UV light.

Composition:
369F 1,5x91 - 2x101 - 2,5x113 - 3x128 - 4x142 - 5x163 - 6x184 - 8x206 - 10x231 mm

Tech. Code	GR53 Euro	Pieces
E231509	77,74	9

Sizes 1.5 - 2 - 2.5 mm do not have the MagicRing® retaining function

LONG HEXAGONAL L KEYS IN SET 950 SPKL/9 SM N

Wera

ART. 950/9 HEX-PLUS MULTICOLOUR 1

Set of 9 keys in Blacklaser steel finish long hexagonal ball point end and sleeve in thermoplastic material. All the keys are handy thanks to the colour code with the indication of the dimension. The material of the wear-resistant clip guarantees a perfect grip of the keys and easy removal.

Composition:
950 SPKL COLOR 1,5x90 - 2x101 - 2,5x112 - 3x123 - 4x137 - 5x154 - 6x172 - 8x195 - 10x224 mm

Tech. Code	GR53 Euro	Pieces
E226109	54,77	9

L-KEYS HEX-PLUS MULIT COLOUR HF 1, METRIC, BLACKLASER, WITH HOLDING FUNCTION IN SET 950/9

Wera

ART. 950/9 HEX-PLUS MULTICOLOUR HF 1

Set of 9 keys (3 x 950 SPKL + 6 x 950 SPKL HF) in steel with BlackLaser finish, long hexagonal male with ball ends and plastic durable sheath. The contrasting inscriptions on the colour-coded sleeves mean that it is easy to recognise the correct sizes and this makes it simpler to find the right tool. The retaining function (available in sizes from 3 to 10 mm) prevents the screws from falling off the tool.

Composition:
950 SPKL COLOR 1,5x90 - 2x101 - 2,5x112 mm
950 SPKL HF COLOR 3x123 - 4x137 - 5x154 - 6x172 - 8x195 - 10x224 mm

Tech. Code	GR53 Euro	Pieces
E226209	62,89	9

LONG HEXAGONAL L KEYS IN STAINLESS STEEL IN SET 3950 PKL/9

Wera

ART. 3950/9 HEX-PLUS STAINLESS 1

Set of 9 keys 3950 PKL in stainless steel long hexagonal with ball point end. The wear-resistant material of the clip guarantees a perfect grip of the keys and easy removal.

Composition:
3950 SPKL 1,5x90 - 2x101 - 2,5x112 - 3x123 - 4x137 - 5x154 - 6x172 - 8x195 - 10x224 mm

Tech. Code	GR53 Euro	Pieces
E226409	61,69	9

LONG HEXAGONAL L KEYS IN STAINLESS STEEL IN SET 3950 SPK/9 SM

Wera

ART. 3950/9 HEX-PLUS MULTICOLOUR STAINLESS 1

Kit of 9 keys 3950 SPKL in stainless steel long hexagonal ball point end and sleeve thermoplastic material. All the keys are handy thanks to the colour code with the indication of the dimension. The wear-resistant material clip guarantees a perfect grip of the keys and easy removal.

Composition:
3950 SPKL COLOR 1,5x90 - 2x101 - 2,5x112 - 3x123 - 4x137 - 5x154 - 6x172 - 8x195 - 10x224 mm

Tech. Code	GR53 Euro	Pieces
E226509	67,41	9

LONG HEXAGONAL L KEYS WITH BALL END MEASUREMENT IN INCHES

ART. 950 PKL INCH

Hexagonal keys with measurement in inches, long L-wrenches in steel with BlackLaser finish, ball end on the long side. Hexagonal profile with more supported surface Hex-Plus (measurement 0,5" and 1/16" standard hexagonal profile).

Tech. Code	GR53 Euro	⬢ Inches	⬢ mm	a mm	L mm	◈
E226910	3,45	0,05	1,27	14	83	10
E226915	3,45	1/16	1,59	15	92	10
E226920	3,45	5/64	1,98	13	100	10
E226925	3,86	3/32	2,38	18	112	10
E226930	4,82	7/64	2,78	19	119	10
E226935	4,82	1/8	3,18	20	126	10
E226940	5,22	9/64	3,57	23	132	10

Tech. Code	GR53 Euro	⬢ Inches	⬢ mm	a mm	L mm	◈
E226945	5,22	5/32	3,97	25	140	10
E226950	5,45	3/16	4,76	25	160	10
E226955	5,78	7/32	5,56	27	180	1
E226960	6,29	1/4	6,35	34	190	1
E226965	8,72	5/16	7,94	36	200	1
E226970	11,98	3/8	9,53	38	212	1
E226975	14,03	1/2	12,70	40	224	1

LONG HEXAGONAL L KEYS MEASUREMENT IN INCHES IN SET 950PKL/9 SZ N

ART. 950 PKL/9 SZN

Set of hexagonal L keys complete with practical case in wear-resistant plastic material.

Composition:

950 PKL INCH 5/64" - 3/32" - 1/8"- 5/32" - 3/16" - 7/32"- 1/4"- 5/16"- 3/8"

Tech. Code	GR53 Euro	Pieces
E227009	34,88	9

LONG HEXAGONAL L KEYS MEASUREMENT IN INCHES IN SET 950 PKL/13 SZ N

ART. 950/13 HEX-PLUS IMPERIAL 1

Set of hexagonal L keys complete with practical case in wear-resistant plastic.

Composition:

950 PKL INCH 0,05" - 1/16" - 5/64" - 3/32" - 7/64" - 1/8" - 9/64" - 5/32" - 3/16" - 7/32" - 1/4" - 5/16" - 3/8"

Tech. Code	GR53 Euro	Pieces
E227113	40,25	13

HEXAGONAL L KEYS WITH EXTRA SHORT SIDE IN SET 950 PKLS/9 SM

ART. 950/9 HEX-PLUS 4

Set of keys 950 PKL in chrome steel hexagonal with extra short side to intervene in difficult spaces, long side with ball point end. The wear-resistant material of the clip guarantees a perfect grip of the keys and easy removal.

Composition:

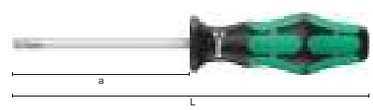
950 PKLS 1,5x90 - 2x100 - 2,5x112 - 3x126 - 4x140 - 5x160 - 6x180 - 8x200 - 10x219 mm

Tech. Code	GR53 Euro	Pieces
E226709	49,92	9

HEXAGONAL SCREWDRIVERS

ART. 354

Hexagonal end screwdrivers in matt chrome-nickel and tip Black Point. Kraftform Plus serie 300 multicomponent anti-rolling.



Tech. Code	GR53 Euro	⬢ mm	a mm	L mm
E250002	6,48	2	75	145
E250002,5	6,67	2.5	75	156
E250003	6,91	3	75	156
E250004	7,89	4	75	173

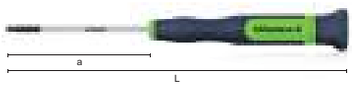
Tech. Code	GR53 Euro	⬢ mm	a mm	L mm
E250005	9,28	5	80	185
E250006	10,84	6	80	185
E250008	13,11	8	100	212

◈ Indivisible package ◈ Suggested retail package - Unit price

MICRO HEXAGONAL SCREWDRIVERS

ART. WX2847

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for hexagonal socket head screws, satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



Tech. Code	GR51 Euro	⬣ mm	Blade Ø mm	a mm	L mm
E25500,9X60	4,40	0.9	2.5	60	155
E25501,3X60	4,13	1.3	2.5	60	155
E25501,5X60	4,13	1.5	2.5	60	155

Tech. Code	GR51 Euro	⬣ mm	Blade Ø mm	a mm	L mm
E25502,0X60	4,13	2.0	2.5	60	155
E25502,5X60	4,13	2.5	3.0	60	155
E25503,0X60	4,13	3.0	4.0	60	155

ART. WX2847/S6

Set of screwdrivers complete with plastic holder.

Composition:

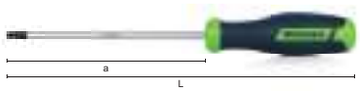
0.9x60 - 1.3x60 - 1.5x60 - 2.0x60 - 2.5x60 - 3.0x60 mm

Tech. Code	GR51 Euro	Pieces
E255506	25,44	6

HEXAGONAL SCREWDRIVERS WITH BALL END

ART. WX2810

Hexagonal screwdrivers **PREMIUM QUALITY** with ball end, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.



Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E251902,5	5,05	2.5	100	185
E251903	5,05	3	125	210
E251904	5,60	4	125	225

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E251905	6,65	5	150	255
E251906	8,75	6	150	265

ART. WX2810/S5

Composition:

2.5x100 - 3x125 - 4x125 - 5x150 - 6x150 mm

Tech. Code	GR51 Euro	Pieces
E252205	27,56	5

Boxed set

HEXAGONAL SCREWDRIVERS WITH BALL HEAD

ART. 352

Hexagonal screwdrivers with spherical end in matt chrome-nickel and Black Point.
Kraftform Plus handle multi-component anti-rolling. (Measurement 12 mm with monocomponent handle).

Tech. Code	GR53 Euro	⬣ mm	a mm	L mm
E25201,5	8,65	1.5	60	130
E252002	8,65	2	100	170
E252002,5	8,65	2.5	100	181
E252003	8,77	3	100	181
E252004	9,72	4	100	198

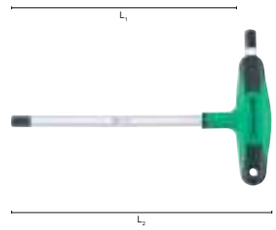
Tech. Code	GR53 Euro	⬣ mm	a mm	L mm
E252005	12,13	5	100	205
E252006	14,56	6	125	230
E252008	21,19	8	150	262
E252010	26,96	10	150	262
E252012	31,74	12	150	267

HEXAGONAL WRENCHES WITH HANDLE

STAHLWILLE

ART. 10768-2K

Hexagonal wrenches in chrome vanadium steel, chrome plated, bi-component ergonomic handle.



Tech. Code	GR55 Euro	⬣ mm	L1 mm	L2 mm
E256902	12,57	2	100	125
E256902,5	13,01	2,5	100	125
E256903	13,56	3	150	174
E256904	15,99	4	150	176

Tech. Code	GR55 Euro	⬣ mm	L1 mm	L2 mm
E256905	16,86	5	200	227
E256906	18,08	6	200	228
E256908	23,59	8	200	235
E256910	33,62	10	200	235

HEXAGONAL WRENCHES WITH HANDLE

WODEX

ART. WX2750

Hexagonal wrenches **PREMIUM QUALITY** with spherical ends, bi-component, hypoallergenic and anti-slip **ERGOFORM** handles made of **SANTOPRENE**® with high-density polypropylene core. Hexagonal blades in special chrome vanadium steel with satin finish.

Tech. Code	GR51 Euro	⬣ mm	D mm	F mm	E mm	G mm	C mm
E256002,5	8,45	2.5	110	32	55	15	3
E256003	8,87	3	110	32	55	15	3.5
E256004	9,16	4	110	32	55	15	5

Tech. Code	GR51 Euro	⬣ mm	D mm	F mm	E mm	G mm	C mm
E256005	9,16	5	160	46	75	18	6
E256006	10,07	6	160	46	75	18	7
E256008	13,25	8	200	46	75	18	9.5

ART. WX2750/S6

Composition:

2.5 - 3 - 4 - 5 - 6 - 8 mm

Tech. Code	GR51 Euro	Pieces
E256306	57,03	6

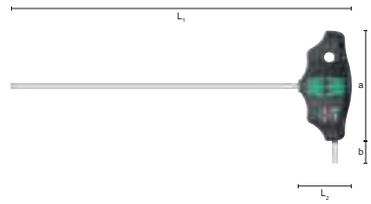
Boxed set

HEXAGONAL WRENCHES WITH HANDLE

Wera

ART. 454 - 454 HF

Hexagonal wrenches **Hex-Plus** with bi-component handle and holding function which holds the screw throught a ball with spring. The retaining function is located at the end of the long side of the tool in sizes 3 to 10 mm.



Tech. Code	GR53 Euro	⬣ mm	L1 mm	L2 mm	a mm	b mm
E256502100	8,94	2	100	32	65	12
E256502,5100	9,23	2,5	100	32	65	12
E256503100	12,39	3	100	38	77	15
E256504100	12,80	4	100	38	77	15
E256504150	12,97	4	150	38	77	15
E256504200	13,27	4	200	38	77	15
E256505100	13,91	5	100	49	99	20
E256505150	14,49	5	150	49	99	20
E256505200	15,08	5	200	49	99	20

Tech. Code	GR53 Euro	⬣ mm	L1 mm	L2 mm	a mm	b mm
E256506100	14,49	6	100	49	99	20
E256506150	15,08	6	150	49	99	20
E256506200	15,90	6	200	49	99	20
E256507200	14,76	7	200	49	99	20
E256508100	16,60	8	100	49	99	20
E256508150	17,54	8	150	49	99	20
E256508200	18,40	8	200	49	99	20
E256510100	18,82	10	100	49	99	20
E256510200	21,86	10	200	49	99	20

For 2 mm and 2.5 mm wrenches, the retaining funcition is not provided.

SLIDING T-HANDLE HEXAGONAL WRENCHES

WODEX

ART. WX2700

PREMIUM QUALITY Sliding T-handle wrenches for hexagonal socket head screws. The high precision and high quality of the materials ensure very high tightening torques.

Features:

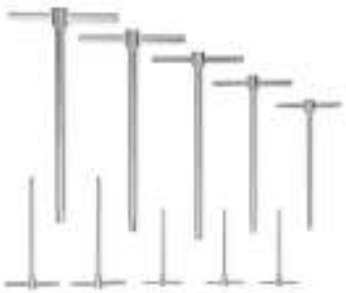
- Special high-alloy chrome vanadium steel
- Safety limit stops that prevent sliding rod from being removed
- Ends designed so that they fit the screw perfectly
- Chrome-satin finish

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E265002	14,59	2	65	125
E265002,5	14,59	2.5	65	125
E265003	14,59	3	65	125
E265003,5	14,59	3.5	65	125
E265004	14,59	4	90	180
E265005	15,98	5	90	180

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E265006	18,23	6	105	210
E265007	19,61	7	105	210
E265008	19,61	8	125	250
E265010	24,38	10	145	300
E265012	32,65	12	165	320
E265014	39,03	14	170	340

Indivisible package Suggested retail package - Unit price

SLIDING T-HANDLE HEXAGONAL WRENCHES IN SET



ART. WX2700/S7 - WX2700/S8 - WX2700/S10 - WX2700/S12

Composition:
WX2700/S7 2 - 2.5 - 3 - 4 - 5 - 6 - 8 mm
WX2700/S8 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm
WX2700/S10 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 - 12 - 14 mm
WX2700/S12 2 - 2.5 - 3 - 3.5 - 4 - 5 - 6 - 7 - 8 - 10 - 12 - 14 mm

Tech. Code	GR51 Euro	Pieces
E265207	107,06	7
E265208	132,00	8
E265210	199,28	10
E265212	233,20	12

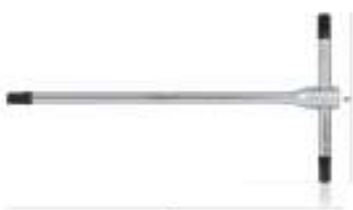
Boxed set

QUICK TOOL IDENTIFICATION

The colour coded rapid tool identification system makes choosing the correct tool very quick and easy, maximizing productivity and optimising the operator's time.

FastID saves you time when carrying out manual work with low added value and high operator cost.

FIXED T-HANDLE HEXAGONAL WRENCHES



ART. WX2717

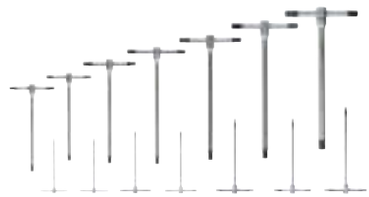
Wrenches **PREMIUM QUALITY** fixed T-handle for hexagonal socket head screws. The high precision and high quality of the materials ensure very high tightening torques. Colour coded wrenches for quick size selection.
Features:
- High-alloy chrome-vanadium steel **58CrV4**
- Double oil hardening treatment
- Surface hardness **53 - 55 HRC**
- Torsional strength higher than ISO 2936
- Ends designed so that they fit the screw perfectly
- Chrome-satin finish with phosphate coated ends

Tech. Code	GR51 Euro	⬢ mm	a mm	L mm
E264302	14,36	2	66	130
E264302,5	14,36	2.5	66	130
E264303	14,36	3	76	150
E264303,5	14,52	3.5	76	150
E264304	15,07	4	91	180
E264304,5	15,40	4.5	91	180
E264305	15,72	5	105	210

Tech. Code	GR51 Euro	⬢ mm	a mm	L mm
E264306	18,56	6	105	210
E264307	19,32	7	105	210
E264308	20,41	8	126	250
E264309	24,02	9	140	280
E264310	25,11	10	150	300
E264312	31,66	12	160	330
E264314	39,30	14	170	340

FIXED T-HANDLE HEXAGONAL WRENCHES IN SET

WODEX



ART. WX2717/S7 - WX2717/S8 - WX2717/S10 - WX2717/S14

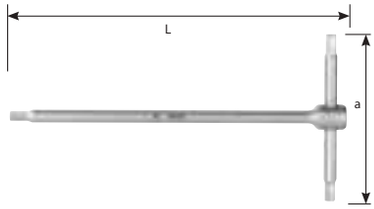
Composition E264407 - WX2717/S7
2 - 2.5 - 3 - 4 - 5 - 6 - 8 mm
Composition E264408 - WX2717/S8
2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm
Composition E264410 - WX2717/S10
2 - 2.5 - 3 - 3.5 - 4 - 5 - 6 - 8 - 10 - 12 mm
Composition E264414 - WX2717/S14
2 - 2.5 - 3 - 3.5 - 4 - 4.5 - 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14 mm

Tech. Code	GR51 Euro	Pieces
E264407	110,00	7
E264408	135,00	8
E264410	182,00	10
E264414	282,00	14

Boxed set

FIXED T-HANDLE HEXAGONAL WRENCHES

WRK



ART. E2629
Vanadium chromium coated steel, burnished ends, up to 5 mm.

Tech. Code	GR52 Euro	⬣ mm	a mm	L mm
E262902	16,20	2	62	127
E262902,5	16,20	2,5	62	127
E262903	16,20	3	75	148
E262903,5	16,78	3,5	75	148
E262904	18,35	4	90	175
E262904,5	19,83	4,5	90	175
E262905	18,61	5	105	210

Tech. Code	GR52 Euro	⬣ mm	a mm	L mm
E262906	20,93	6	105	210
E262907	22,04	7	105	210
E262908	24,16	8	125	245
E262909	33,25	9	140	275
E262910	31,90	10	150	295
E262912	38,58	12	160	322
E262914	46,81	14	170	334

SLIDING T-HANDLE SWIVEL HEAD HEXAGONAL WRENCHES

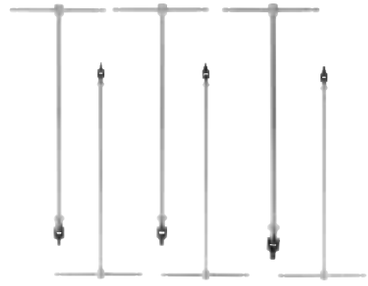
WODEX

ART. WX2745

Standard ISO 1171-1 C
Wrenches **PREMIUM QUALITY** in chrome-vanadium steel with male hex driver and universal joint. The high precision and high quality of the materials ensure tightening torques higher than those specified in the ISO reference standard. The universal joint is fitted with a spring for controlled positioning and can be tilted by up to 50°.
Sliding bar with limit stops. Chrome-satin finish with phosphate coated joints.

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E266803	35,68	3	165	395
E266804	35,68	4	165	395
E266805	35,68	5	165	395

Tech. Code	GR51 Euro	⬣ mm	a mm	L mm
E266806	42,49	6	180	445
E266808	42,49	8	180	445
E266810	51,46	10	180	480



ART. WX2745/S5 - WX2745/S6

Standard ISO 1171-1 C
Composition E266905 - WX2745/S5
3 - 4 - 5 - 6 - 8 mm
Composition E266906 - WX2745/S6
3 - 4 - 5 - 6 - 8 - 10 mm

Tech. Code	GR51 Euro	Pieces
E266905	202,00	5
E266906	253,00	6

Boxed set

Indivisible package Suggested retail package - Unit price

LISTA

LISTA AS A PARTNER

LISTA offers organisation. With success, experience and a systemic approach. For more than 75 years, we have offered our customers concepts for more organised and efficient working. Because we offer more than just a high-quality product, competent advice and a wide range of services: the LISTA system creates perfect interlocking solutions for smooth work processes. And this makes us a leading partner in the area of workspace and storage equipment worldwide.

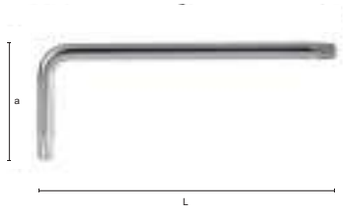
BENEFITS AT A GLANCE

- **Comprehensive range**
  from A for access control to W for workstation systems
- **Modular system**
  all products can be freely combined
- **Maximum flexibility**
  with a choice of colours, configuration options and more
- **Tailor-made solutions**
  for customers with specific needs
- **Expert planning**
  including visualisation with LISTA Draw
- **10-year guarantee**
  unique in the industry
- **Wide range of services**
  such as training, assembly, labelling etc.
- **Worldwide distribution and service network**
  for customer service without borders
- **First-class references**
  from more than 100,000 prestigious companies worldwide

L KEYS FOR TORX® SCREWS

ART. E3350

L keys for Torx® screws in satin chrome-vanadium steel.



Tech. Code	GR52 Euro	○	a mm	L mm	◈
E335006	3,55	T6	18,5	44,5	10
E335007	3,55	T7	18,5	50,5	10
E335008	3,55	T8	19	51	10
E335009	3,62	T9	19	51	10
E335010	3,67	T10	20	54	10
E335015	3,67	T15	21,5	57,5	10
E335020	3,96	T20	23	61	10

Tech. Code	GR52 Euro	○	a mm	L mm	◈
E335025	3,96	T25	24,5	64,5	10
E335027	3,74	T27	26,5	69,5	10
E335030	3,96	T30	30	76	10
E335040	5,06	T40	33	83	10
E335045	5,72	T45	37	91	10
E335050	7,15	T50	41	104	10

ART. E3352

Set of L keys with practical plastic case.

Composition:

E3350 T9 - T10 - T15 - T20 - T25 - T27 - T30 - T40

Tech. Code	GR60 Euro	Pieces
E335208	28,71	8

L KEYS FOR TORQUE® SCREWS IN SET

wiha NEW

ART. 36461

Set of 8 keys for TORX® screws in high performance steel with black oxidation.
Composition:
363 T9x51 - T10x54 - T15x57 - T20x62 - T25x67 - T27x72 - T30x79 - T40x86 mm

Tech. Code	GR53 Euro	Pieces
E335408	35,45	8

SCREWDRIVERS FOR TORX® SCREWS WITH POCKET SUPPORT IN SET

ART. E3359

Set of 8 screwdrivers for Torx® screws burnished in high quality chrome vanadium steel in a pocket holder in bi-component plastic with **device for easy opening of the screwdrivers.**

Composition:

T9 - T10 - T15 - T20 - T25 - T27 - T30 - T40

Tech. Code	GR60 Euro	Pieces
E335908	28,49	8

LONG L KEYS FOR TORQUE® SCREWS IN SET

wiha NEW

ART. 36503

Set of 13 long keys for TORX® screws with Wiha MagicSpring® holding function that locks all screws without the use of magnets. Keys in high performance steel with black oxidation.
Composition:
366 T5x72
366R T6x80 - T7x88 - T8x101 - T9x111 - T10x121 - T15x136 - T20x148 - T25x163 - T27x176 - T30x191 - T40x210 - T45x232 mm

Tech. Code	GR53 Euro	Pieces
E336013	86,91	13

Size T5 does not have the MagicSpring® retainer feature

◈ Indivisible package ◈ Suggested retail package - Unit price

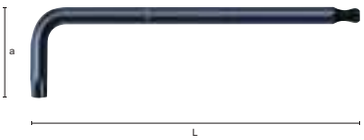
LONG L KEYS FOR TORX® SCREWS WITH BALL POINT END

ART. 967 PKL TORX®

967 PKL L keys in steel with BlackLaser finish for TORX® screws, long series with ball point end.
Sizes T8 - T9 - T10 have no ball point end.

Tech. Code	GR53 Euro	✪	a mm	L mm	
E336308	5,41	T8	16	76	5
E336309	5,41	T9	16	79	5
E336310	5,41	T10	17	85	5
E336315	7,38	T15	18	90	5
E336320	7,61	T20	19	96	5

Tech. Code	GR53 Euro	✪	a mm	L mm	
E336325	8,43	T25	21	104	5
E336327	8,59	T27	22	112	5
E336330	8,95	T30	24	122	5
E336340	9,89	T40	27	132	5



ART. 967/9 TX 1

Composition:
967 PKL TORX® T8x76 - T9x79 - T10x85 - T15x90 - T20x96 - T25x104 - T27x112 - T30x122 - T40x132

Tech. Code	GR53 Euro	Pieces
E336509	50,89	9

L KEYS MULTICOLOUR HF1 WITH HOLDING FUNCTION FOR TORX® SCREWS IN SET 967 SL/9 TX

ART. 967/9 TX MULTICOLOUR HF 1

Kit of 9 967 SL TORX® HF keys with retainer, in steel with BlackLaser finish and multicolor plastic durable sheath, for TORX® screws. The contrasting inscriptions on the colour-coded sleeves mean that it is easy to recognise the correct sizes and this makes it simpler to find the right tool.

Composition:
967 SL TORX® HF COLOR T8x76 - T9x79 - T10x85 - T15x90 - T20x96 - T25x104 - T27x112 - T30x122 - T40x132

Tech. Code	GR53 Euro	Pieces
E336609	52,10	9

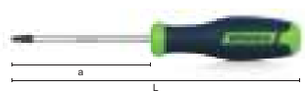
SCREWDRIVERS FOR TORX® SCREWS

ART. WX2940

Screwdrivers **PREMIUM QUALITY** for TORX® screws, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	✪	a mm	L mm
E336806	5,37	T6	75	160
E336807	5,37	T7	75	160
E336808	5,48	T8	75	160
E336809	5,48	T9	75	160
E336810	6,18	T10	100	205
E336815	6,18	T15	100	205

Tech. Code	GR51 Euro	✪	a mm	L mm
E336820	6,18	T20	100	205
E336825	7,00	T25	100	215
E336827	7,23	T27	100	215
E336830	7,58	T30	100	215
E336840	8,87	T40	100	215



ART. WX2940/S9 - WX2940/S11

Composition E337309 - WX2940/S9:
T8x75 - T9x75 - T10x100 - T15x100 - T20x100 - T25x100 - T27x100 - T30x100 - T40x100 mm
Composition E337311 - WX2940/S11:
T6x75 - T7x75 - T8x75 - T9x75 - T10x100 - T15x100 - T20x100 - T25x100 - T27x100 - T30x100 - T40x100 mm

Tech. Code	GR51 Euro	Pieces
E337309	58,00	9
E337311	70,00	11

Boxed set

SCREWDRIVERS FOR TORX® SCREWS 367

ART. 367 TORX®

Screwdrivers for Torx® screws blade in matt nickel-chrome and Black-Point. **Kraftform Plus** grip handle multi-component anti-rolling.

Tech. Code	GR53 Euro	○	a mm	L mm
E340005	11,08	T5	60	130
E340006	11,08	T6	60	130
E340007	10,98	T7	60	130
E340008	10,98	T8	60	141
E340009	10,98	T9	60	141
E340010	10,98	T10	80	161

Tech. Code	GR53 Euro	○	a mm	L mm
E340015	11,37	T15	80	178
E340020	11,58	T20	100	198
E340025	12,20	T25	100	205
E340027	13,40	T27	115	220
E340030	14,15	T30	115	220
E340040	15,81	T40	130	242

ART. 367/6 TORX®

Screwdrivers for Torx® screws blade in matt nickel-chrome and Black-Point. **Kraftform Plus** grip handle multi-component anti-rolling.

Set of screwdrivers with wall support.

Composition:

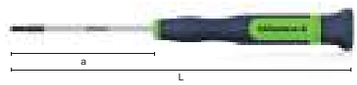
○ **367 TORX®** T10x80 - T15x80 - T20x100 - T25x100 - T30x115 - T40x130

Tech. Code	GR53 Euro	Pieces
E341506	60,89	6

MICRO SCREWDRIVERS FOR TORX® SCREWS

ART. WX2947

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for TORX® screws, satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



Tech. Code	GR51 Euro	○	Blade Ø mm	a mm	L mm
E341405X60	4,88	T5	2.5	60	155
E341406X60	4,88	T6	2.5	60	155
E341407X60	4,88	T7	2.5	60	155
E341408X60	4,88	T8	3.0	60	155

Tech. Code	GR51 Euro	○	Blade Ø mm	a mm	L mm
E341409X60	4,88	T9	3.0	60	155
E341410X60	4,88	T10	3.0	60	155
E341415X60	4,88	T15	4.0	60	155
E341420X60	4,88	T20	4.0	60	155

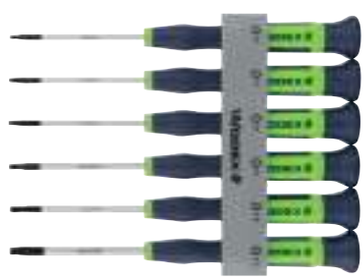
ART. WX2947/S6

Set of 6 **PREMIUM QUALITY** micro screwdrivers for electronics and fine mechanics with satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Set of screwdrivers complete with plastic holder.

Composition:

T6x60 - T7x60 - T8x60 - T9x60 - T10x60 - T15x60 mm

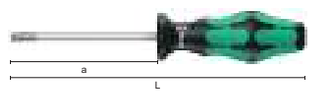


Tech. Code	GR51 Euro	Pieces
E341906	31,91	6

SCREWDRIVERS WITH HOLDING FUNCTION FOR TORX® SCREWS 367 HF

ART. 367 TORX® HF

Screwdrivers with holding function forTorx® screws, stainless steel blade, matt chrome-nickel. **Kraftform Plus** multi-component anti-rolling. The holding function avoids that the screws fall from the tool.



Tech. Code	GR53 Euro	○	a mm	L mm
E340510080	12,13	T10	80	161
E340515080	12,54	T15	80	178
E340520100	12,73	T20	100	198
E340520300	(19,90)	T20	300	398
E340525100	13,40	T25	100	205
E340525300	(20,68)	T25	300	405

Tech. Code	GR53 Euro	○	a mm	L mm
E340527115	(14,82)	T27	115	220
E340527300	(21,37)	T27	300	405
E340530115	15,52	T30	115	220
E340530300	(21,74)	T30	300	405
E340540130	17,42	T40	130	242

Indivisible package Suggested retail package - Unit price

SCREWDRIVERS KRAFTFORM PLUS 367/6 TORX® HF IN SET

ART. 367/6 TORX® HF

Set of screwdrivers with wall support.

Composition:

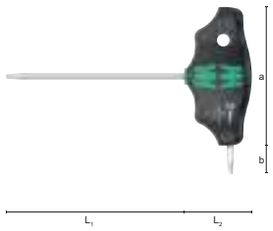
367 TORX HF T10x80 - T15x80 - T20x100 - T25x100 - T30x115 - T40x130 mm

Tech. Code	GR53 Euro	Pieces
E342006	(71,69)	6

HEXAGONAL WRENCHES WITH HANDLE FOR TORX® SCREWS

ART. 467 TORX® HF

Hexagonal wrenches with handle bi-componente and retaining function for **TORX®** screws.
The Wera HF retention function, thanks to a special blade geometry, holds the screw securely at the tip of the tool.



Tech. Code	GR53 Euro	○	L1 mm	L2 mm	a mm	b mm
E345006100	13,79	T6	100	32	65	12
E345007100	13,79	T7	100	32	65	12
E345008100	13,79	T8	100	32	65	12
E345009100	13,79	T9	100	32	65	12
E345010100	14,08	T10	100	32	65	12
E345015100	14,49	T15	100	38	77	15
E345020100	15,61	T20	100	38	77	15

Tech. Code	GR53 Euro	○	L1 mm	L2 mm	a mm	b mm
E345020200	16,83	T20	200	38	77	15
E345025100	16,19	T25	100	38	77	15
E345025200	17,01	T25	200	38	77	15
E345027200	17,30	T27	200	49	99	20
E345030200	17,30	T30	200	49	99	20
E345040200	19,63	T40	200	49	99	20
E345045200	19,63	T45	200	49	99	20

T-HANDLE WRENCHES WITH FIXED SHAFT FOR TORX® SCREWS

ART. WX2927

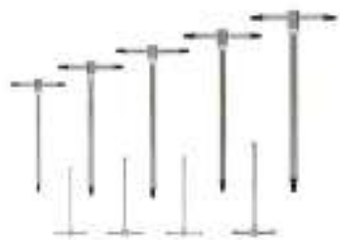
Fixed **PREMIUM QUALITY** T-handle wrenches for **TORX®** and **Torx® Tamper Resistant** screws on the right side of the handle. The high precision and high quality of the materials ensure very high tightening torques. Colour coded wrenches for quick size selection.
Features:
- Superior quality high-alloy chrome-vanadium steel
- Controlled atmosphere hardening
- Surface hardness **58 HRC**
- Torsional strength higher than ISO 2936
- Ends designed so that they fit the screw perfectly
- Chrome-satin finish with phosphate coated ends

Tech. Code	GR51 Euro	○	⊙	a mm	L mm
E346010	19,50	T10	T10	76	150
E346015	19,50	T15	T15	76	150
E346020	19,50	T20	T20	90	180
E346025	21,20	T25	T25	90	180
E346027	24,91	T27	T27	105	210

Tech. Code	GR51 Euro	○	⊙	a mm	L mm
E346030	24,91	T30	T30	105	210
E346040	26,71	T40	T40	125	250
E346045	26,71	T45	T45	125	250
E346050	30,32	T50	T50	150	300

ART. WX2927/S6 - WX2927/S9

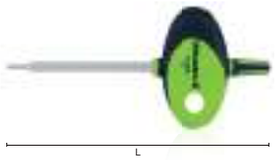
Composition E346106 - WX2927/S6 T10 - T15 - T20 - T25 - 27 - T30
Composition E346109 - WX2927/S9 T10 - T15 - T20 - T25 - 27 - T30 - T40 - T45 - T50



Tech. Code	GR51 Euro	Pieces
E346106	129,32	6
E346109	210,94	9

FLAGDRIVERS FOR TORX® SCREWS

WODEX



ART. WX2938

Flagdrivers **PREMIUM QUALITY** for TORX® screws, chrome-vanadium steel blades and precision hardened tips. The flag type handle is recommended when using small screws with a high closing torque, especially when replacing turning and milling inserts.

Tech. Code	GR51 Euro	⊙	L mm
E355006	3,76	T6	50
E355007	3,76	T7	50
E355008	3,76	T8	50
E355009	3,76	T9	50

Tech. Code	GR51 Euro	⊙	L mm
E355010	3,76	T10	50
E355015	3,76	T15	50
E355020	3,76	T20	50

ART. WX2938/S7

Composition:

T6x50 - T7x50 - T8x50 - T9x50 - T10x50 - T15x50 - T20x50 mm

Tech. Code	GR51 Euro	Pieces
E355107	25,39	7

Boxed set

L KEYS FOR TAMPER TORX® SCREWS IN A SET

ART. E3371

Set of 8 L keys made of satin chrome-vanadium steel for Tamper Torx® screws. Practical plastic case.

Composition:

⊙ T9x59 - T10x65 - T15x75 - T20x87 - T25x97 - T27x105 - T30x111 - T40x114 mm

Tech. Code	GR60 Euro	Pieces
E337108	39,27	8

LONG L KEYS FOR TAMPER TORX® SCREWS - SET 967 SPKL/9 BO

Wera

ART. 967/9 TX BO MULTICOLOUR 1

Set of 9 L keys 967 SPKL TORX® BO with axial hole and ball end. Made of steel with BlackLaser finish and multicolour thermoplastic sleeve for Tamper-Torx® screws and safety pin. The wear-resistant clip material ensures secure grip and easy removal of the keys.

Composition:

967 SPKL TORX® COLOR T8x76 - T9x79

967 SPKL TORX® BO COLOR T10x85 - T15x90 - T20x96 - T25x104 - T27x112 - T30x122 - T40x132

Tech. Code	GR53 Euro	Pieces
E336709	66,59	9

SCREWDRIVERS FOR TAMPER TORX® WITH POCKET SUPPORT IN SET

ART. E3372

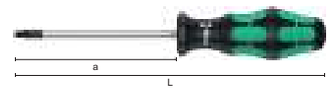
Set of 8 screwdrivers for Tamper-Torx® burnished in high quality chrome vanadium steel inserted in a pocket holder in two-component plastic with **device for easy opening of the screwdrivers.**

Composition:

⊙ T9 - T10 - T15 - T20 - T25 - T27 - T30 - T40

Tech. Code	GR60 Euro	Pieces
E337208	33,77	8

SCREWDRIVERS FOR TAMPER TORX® SCREWS 367 BO



ART. 367 TORX® BO

Screwdrivers for Tamper Torx® screws, matt nickel-chrome blade and Black-Point tip.
Multi-component **Kraftform Plus** grip handle. Anti-roll protection.

Tech. Code	GR53 Euro	⊙	a mm	L mm
E337507	14,68	T7	60	130
E337508	14,68	T8	60	141
E337509	14,68	T9	60	141
E337510	14,68	T10	80	141
E337515	15,29	T15	80	178

Tech. Code	GR53 Euro	⊙	a mm	L mm
E337520	15,49	T20	100	198
E337525	16,47	T25	100	205
E337527	17,86	T27	115	220
E337530	18,85	T30	115	220
E337540	21,19	T40	130	242

SCREWDRIVERS FOR TAMPER TORX® SCREWS KIT 367/6 TORX® BO

ART. 367/6 TORX® BO

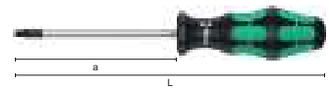
Set of screwdrivers and wall rack.

Composition:

⊙ **367 TORX® BO** T10x80 - T15x80 - T20x100 - T25x100 - T30x115 - T40x130 mm

Tech. Code	GR53 Euro	Pieces
E337606	70,98	6

SCREWDRIVERS FOR TORX® PLUS SCREWS 367 IP



ART. 367 IP TORX-PLUS®

Screwdrivers for IP Torx-Plus® screws blade in matt nickel-chrome and Black-Point tip. **Kraftform Plus** grip handle multi-component anti-rolling.

Tech. Code	GR53 Euro	✪	a mm	L mm
E343005	15,49	5IP	60	130
E343006	15,49	6IP	60	130
E343007	15,96	7IP	60	130
E343008	16,37	8IP	60	130
E343009	16,83	9IP	60	141

Tech. Code	GR53 Euro	✪	a mm	L mm
E343010	17,26	10IP	80	161
E343015	17,73	15IP	80	178
E343020	18,12	20IP	100	198
E343025	18,64	25IP	100	205
E343030	19,03	30IP	115	220

KEYS FOR ELECTRICAL PANELS AND CABINETS

NEW

ART. WX1970

Universal multifunction keys for electrical cabinets and panels, zinc alloy body with plastic insert holder.

Features:

- Square wrenches 5 - 6 - 8 mm
- Triangular key 9 mm
- Wing spanner Ø 3 - 5 mm
- Bit holder for 1/4" hexagonal bits according to DIN ISO 1173-C 6.3
- Phillips® PH2 and slotted insert 7x1.2 mm

Tech. Code	GR51 Euro	L mm	Weight g
E357000	11,20	72	68

MULTI-TASKING TWINKEY® WRENCHES

ART. 00 11 01 TWINKEY®

Multi-tasking universal wrenches for electrical panels and cabinets, for closing systems of gas and water, air conditioning and building ventiliation systems, shut off valves.
Version with 2 wrenches joined by a magnet.

Features:

- 5 / 6 - 7 / 8 - 9 / 10 - 11 mm
- 7 - 8 / 9 10 / 11 - 12 mm
- 3 - 5 mm
- 6 mm
- 6 - 9 mm
- Insert holders 1/4" HEX
- Phillips® inserts PH2 slotted inserts 7x1,2 mm

Tech. Code	GR54 Euro	Length mm	Weight g
E358001	33,60	92	135

WRENCHES FOR ELECTRICAL PANELS AND CABINETS

ART. 00 11 02 - 00 11 03

Features E358202 - 00 11 02:
- 6 - 8 mm
- 9 mm
- 3 - 5 mm
- Bits holder 1/4" HEX
- Phillips® bits PH2 and slotted bits 7x1,2 mm

Features E358203 - 00 11 03:
- 5 - 6 - 8 mm
- 9 mm
- 3 - 5 mm
- Bits holder 1/4" HEX
- Phillips® bits PH2 and slotted bits 7x1,2 mm

Tech. Code	GR54 Euro	Length mm	Weight g
E358202	24,85	44	65
E358203	24,40	76	88

WRENCHES FOR ELECTRICAL PANELS AND CABINETS

ART. 00 11 07

Features:
- 5 - 6 - 8 mm
- 9 mm
- 3 - 5 mm
- Magnetic bit holder 1/4" HEX
- Phillips® insert PH2 e a taglio 7x1,2 mm
- Torx insert® T20 e T25
- Pocket clilp

Tech. Code	GR54 Euro	Length mm	Weight g
E359007	26,35	145	95

Indivisible package Suggested retail package - Unit price

POLYGONAL SOCKETS 1/4"

1/4"

ART. WX2000

Standard DIN 3124 ISO 2725-1 DIN EN 3709

Polygonal sockets **PREMIUM QUALITY** high performance chrome-vanadium steel with satin finish. The tight tolerance polygonal **Plus-Drive** profile allows a high force to be transmitted to the shoulders of screws and nuts without damaging them.

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E417104	3,50	4	6.9	25
E417104,5	3,50	4.5	7.5	25
E417105	3,50	5	8.2	25
E417105,5	3,50	5.5	8.8	25
E417106	3,50	6	9.6	25
E417107	3,50	7	10.9	25

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E417108	3,50	8	12	25
E417109	3,50	9	13	25
E417110	3,50	10	14	25
E417111	3,50	11	16	25
E417112	3,50	12	17	25
E417113	3,50	13	18	25

HEXAGONAL SOCKETS 14"

1/4"

ART. E4170

Standard DIN 3124 ISO 2725-1

Hexagonal socket chrome-vanadium steel with chrome-satin finish.

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E41704	2,78	4	6.7	25
E41705	2,78	5	8.0	25
E41706	2,78	6	9.3	25
E41707	2,78	7	10.6	25

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E41708	2,78	8	11.9	25
E417010	2,78	10	13.8	25
E417013	2,78	13	17.8	25

SOCKET WRENCHES WITH 1/4" HEXAGONAL END

1/4"

ART. 40

Standard DIN 3124 ISO 2725-1

HPQ® high-performance steel socket spanners with chrome finish, hexagon mouth.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E417403	5,45	3	5.6	23
E417404	5,47	4	6.7	23
E41744,5	5,56	4.5	7.3	23
E417405	5,47	5	7.9	23
E41745,5	5,47	5.5	8.5	23
E417406	5,47	6	9.2	23
E417407	5,47	7	10.7	23

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E417408	5,47	8	11.6	23
E417409	5,45	9	12.8	23
E417410	5,47	10	14.3	23
E417411	5,60	11	15.5	23
E417412	5,44	12	16.5	23
E417413	5,45	13	17.8	23
E417414	5,50	14	18.8	24

LONG HEXAGONAL SOCKETS 1/4"

1/4"

ART. WX2008

Standard DIN 3124 ISO 2725-1

Long hexagonal sockets **PREMIUM QUALITY** in high performance chrome-vanadium steel with satin finish.

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E4176055	7,21	5.5	8.7	50
E417606	7,21	6	9.3	50
E417607	7,21	7	10.6	50

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E417608	7,21	8	11.9	50
E417610	7,53	10	13.8	50
E417613	7,53	13	17.8	50

LONG HEXAGONAL SOCKETS 1/4"

1/4"

ART. 40L

Standard DIN 3124 ISO 2725-1

Long hexagonal socket in high performance chrome steel HPQ® with chrome finish.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E417704	18,79	4	6,7	50
E417704,5	18,79	4,5	7,3	50
E417705	17,67	5	7,9	50
E417705,5	17,67	5,5	8,5	50
E417706	17,67	6	9,2	50
E417707	16,52	7	10,7	50

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E417708	16,84	8	11,6	50
E417709	18,50	9	12,8	50
E417710	16,87	10	14,3	50
E417711	18,50	11	15,5	50
E417712	17,36	12	16,5	50
E417713	17,01	13	17,8	50

SOCKET DRIVERS 1/4" FOR HEXAGONAL SOCKET HEAD SCREWS

WODEX

1/4"

ART. WX2010

Standard DIN 7422 ISO 2936 ISO 1174-1

Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish, hexagonal insert in high strength phosphated steel for screws with hexagon socket.

Tech. Code	GR51 Euro	◉ mm	a mm	L mm
E450002	6,14	2	12	32
E450002,5	6,14	2.5	12	32
E450003	6,14	3	12	32
E450004	6,14	4	12	32

Tech. Code	GR51 Euro	◉ mm	a mm	L mm
E450005	6,14	5	12	32
E450006	6,14	6	12	32
E450008	6,14	8	12	32

SOCKET DRIVERS 1/4" FOR HEXAGONAL SOCKET HEAD SCREWS

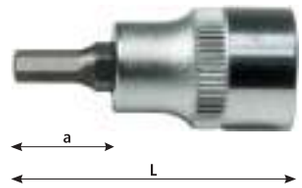
WRK

1/4"

ART. E4509

Standard DIN 7422 ISO 2936 ISO 1174-1

Socket drivers in chrome-vanadium steel with satin-chrome finish, hexagonal insert in phosphated steel for screws with hexagon socket.



Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E45092	4,66	2	11.9	32
E45092,5	4,66	2.5	11.9	32
E45093	4,66	3	11.9	32
E45094	4,66	4	11.9	32
E45095	4,66	5	11.9	32

Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E45096	4,66	6	11.9	32
E45097	4,66	7	11.9	32
E45098	4,66	8	11.9	32
E450910	5,19	10	11.9	32

While stocks last

SOCKET DRIVERS 1/4" FOR HEXAGONAL SOCKET HEAD SCREWS

STAHLWILLE

1/4"

ART. 44

Standard DIN 7422

Socket drivers in chrome-vanadium steel with chrome finish, for long hexagonal insert in phosphated steel for screws with hexagon socket.

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451103	11,71	3	30	55
E451104	11,71	4	30	55

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451105	11,71	5	30	55
E451106	11,71	6	30	55

SOCKET DRIVERS 1/4" FOR TORX® SCREWS

WODEX

1/4"

ART. WX2020

Standard ISO 1174-1

Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish, insert in high strength phosphated steel for Torx® screws

Tech. Code	GR51 Euro	✪	a mm	L mm
E450608	7,58	T8	12	32
E450610	7,58	T10	12	32
E450615	7,58	T15	12	32
E450620	7,58	T20	12	32

Tech. Code	GR51 Euro	✪	a mm	L mm
E450625	7,58	T25	12	32
E450630	7,58	T30	12	32
E450640	7,58	T40	12	32

SOCKET DRIVERS 1/4" FOR SLOTTED SCREWS

WODEX

1/4"

ART. WX2030

Standard ISO 2380-1 ISO 1174-1

Socket drivers **PREMIUM QUALITY** high performance chrome-vanadium steel with chrome-satin finish, high strength phosphated steel insert for slotted screws

Tech. Code	GR51 Euro	⬭ mm	a mm	L mm
E417804	6,53	4.0	12	32
E417805,5	6,53	5.5	12	32

Tech. Code	GR51 Euro	⬭ mm	a mm	L mm
E417806,5	6,53	6.5	12	32
E417808	6,53	8.0	12	32

Indivisible package Suggested retail package - Unit price

SOCKET DRIVERS 1/4" FOR PHILLIPS® SCREWS

WODEX

1/4"

ART. WX2032

Standard ISO 8764-1 ISO 1174-1
Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with chrome-satin finish, high strength phosphated steel insert for Phillips® screws

Tech. Code	GR51 Euro	⊕ PH	a mm	L mm
E417901	7,10	1	12	32
E417902	7,10	2	12	32

Tech. Code	GR51 Euro	⊕ PH	a mm	L mm
E417903	7,10	3	12	32

POLYGONAL SOCKETS 3/8"

WODEX

3/8"

ART. WX2100

Standard DIN 3124 ISO 2725-1 DIN EN 3709
Polygonal sockets **PREMIUM QUALITY** high performance chrome-vanadium steel with satin finish. The tight tolerance polygonal **Plus-Drive** profile allows a high force to be transmitted to the shoulders of screws and nuts without damaging them.

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E419006	5,35	6	10	28
E419007	5,35	7	11	28
E419008	5,35	8	12.2	28
E419009	5,35	9	13.5	28
E419010	5,35	10	14.7	28
E419011	5,35	11	16	28
E419012	5,35	12	17	28
E419013	5,35	13	18	28
E419014	5,35	14	19.7	28

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E419015	5,99	15	21	28
E419016	6,25	16	22	28
E419017	6,25	17	23.5	30
E419018	6,25	18	24.7	30
E419019	6,25	19	26	30
E419020	6,36	20	27.2	30
E419021	6,52	21	28	30
E419022	6,89	22	29.7	30
E419024	7,31	24	32	30

POLYGONAL SOCKETS 3/8"

WRK

3/8"

ART. E4359

Standard DIN 3124 ISO 2725-1
Polygonal sockets chrome-vanadium steel with satin finish.

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E43596	4,50	6	9,6	28
E43597	4,50	7	11	28
E43598	4,50	8	12.2	28
E43599	4,50	9	13,5	28
E435910	4,50	10	14.7	28
E435911	4,50	11	16	28
E435912	4,50	12	17.8	28
E435913	4,50	13	18.8	28
E435914	4,50	14	19,8	28

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E435915	5,06	15	21.8	28
E435916	5,29	16	21,8	28
E435917	5,29	17	23.8	28
E435918	5,29	18	25,8	30
E435919	5,29	19	25.8	30
E435920	5,34	20	27,8	30
E435921	5,51	21	27,8	30
E435922	5,79	22	29.8	30

HEXAGONAL SOCKETS 3/8"

WRK

3/8"

ART. E4180

Standard DIN 3124 ISO 2725-1
Hexagonal sockets chrome-vanadium steel with satin finish.

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E41806	4,50	6	9,6	28
E41807	4,50	7	11	28
E41808	4,50	8	12.2	28
E41809	4,50	9	13,5	28
E418010	4,50	10	14.7	28
E418011	4,50	11	16	28
E418012	4,50	12	17.8	28
E418013	4,50	13	18.8	28
E418014	4,50	14	19,8	28

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E418015	5,06	15	21.8	28
E418016	5,29	16	21,8	28
E418017	5,29	17	23.8	28
E418018	5,29	18	25,8	30
E418019	5,29	19	25.8	30
E418020	5,34	20	27,8	30
E418021	5,51	21	27,8	30
E418022	7,79	22	29.8	30

SOCKET WRENCHES WITH 3/8" HEXAGONAL END

STAHLWILLE

3/8"

ART. 456

Standard DIN 3124 ISO 2725-1
Hexagonal socket in high performance chrome steel HPQ® with chrome finish.

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E419407	9,49	7	10.5	24
E419408	9,20	8	11.7	25
E419409	9,15	9	13	25
E419410	8,82	10	14.3	27
E419411	9,37	11	15.6	27
E419412	9,20	12	16.9	28
E419413	9,04	13	18	30
E419414	9,53	14	19.4	30

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E419415	9,98	15	20.6	31
E419416	10,08	16	21.7	31
E419417	9,70	17	23	31
E419418	10,08	18	24.2	32
E419419	9,70	19	25.2	32
E419420	11,10	20	26.2	34
E419421	11,59	21	27.7	34
E419422	11,69	22	28.7	35

LONG POLYGONAL SOCKETS 3/8"

STAHLWILLE

3/8"

ART. 46

Standard DIN 3124 ISO 2725-1 DIN EN 3709
Long polygonal sockets in chrome steel at HPQ® high performance. The AS-Drive* allows the transmission of strong forces on the sides of the screws and bolts without damaging the edges.

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E436710	(18,76)	10	14,3	54
E436711	(18,94)	11	15,6	54
E436712	(18,79)	12	16,9	54
E436713	(18,82)	13	18	54
E436714	(19,35)	14	19,4	60

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E436715	(18,94)	15	20,6	60
E436716	(21,17)	16	21,7	60
E436717	(21,70)	17	23	65
E436718	(21,78)	18	24,2	65
E436719	(21,87)	19	25,2	65

LONG HEXAGONAL SOCKETS 3/8"

WODEX

3/8"

ART. WX2108

Standard DIN 3124 ISO 2725-1
STANDARD: DIN 3124 ISO 2725-1
Long hexagonal sockets PREMIUM QUALITY in high performance chrome-vanadium steel with satin finish.

Tech. Code	GR51 Euro	○ mm	ø External mm	L mm
E419608	10,70	8	12.2	63
E419609	10,39	9	13.5	63
E419610	10,39	10	14.7	63
E419611	10,39	11	16	63
E419612	10,39	12	17.8	63
E419613	11,34	13	18.8	63

Tech. Code	GR51 Euro	○ mm	ø External mm	L mm
E419614	11,34	14	19.8	63
E419615	11,34	15	21.8	63
E419616	11,34	16	21.8	63
E419617	11,34	17	23.8	63
E419619	12,40	19	25.8	63

SOCKETS 3/8" FOR SPARK-PLUGS

WODEX

3/8"

ART. WX2109
Premium Quality sockets for spark-plug replacement, chrome-satin finish.

Tech. Code	GR51 Euro	○ mm	ø External mm	L mm
E420016	12,03	16	22	65

Tech. Code	GR51 Euro	○ mm	ø External mm	L mm
E420021	13,20	21	28	67

SOCKET DRIVERS 3/8" FOR HEXAGONAL SOCKET HEAD SCREWS

WODEX

3/8"

ART. WX2110

Standard DIN 7422 ISO 2936 ISO 1174-1
Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish, hexagonal insert in high strength phosphated steel for screws with hexagon socket.

Tech. Code	GR51 Euro	◉ mm	a mm	L mm
E451003	9,60	3	22	48
E451004	9,60	4	22	48
E451005	9,60	5	22	48
E451006	9,60	6	22	48

Tech. Code	GR51 Euro	◉ mm	a mm	L mm
E451007	9,60	7	22	48
E451008	9,60	8	22	48
E451010	9,60	10	22	48

Indivisible package Suggested retail package - Unit price

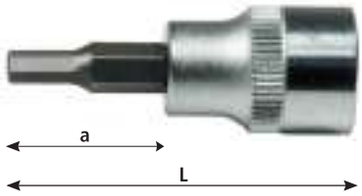
COMBINATION DRIVERS 3/8" FOR HEXAGONAL SOCKET HEAD SCREWS

WRK

3/8"

ART. E4527

Standard DIN 7422 ISO 2936 ISO 1174-1
Socket drivers chrome-vanadium steel with satin finish, hexagonal insert in phosphated steel for screws with hexagon socket.



Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E45273	6,68	3	18	48
E45274	6,68	4	18	48
E45275	6,68	5	18	48
E45276	6,68	6	18	48

Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E45277	6,68	7	18	48
E45278	6,68	8	18	48
E452710	6,68	10	18	48

While stocks last

SOCKET DRIVERS 3/8" FOR HEXAGONAL SOCKET HEAD SCREWS

STAHLWILLE

3/8"

ART. 2049

Standard DIN 7422
Socket drivers chrome-vanadium steel with chrome finish, hexagonal insert in phosphated steel for screws with hexagon socket.

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451504	15,21	4	68	100
E451505	15,21	5	68	100
E451506	15,21	6	68	100

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451508	15,76	8	88	120
E451510	(16,43)	10	88	120

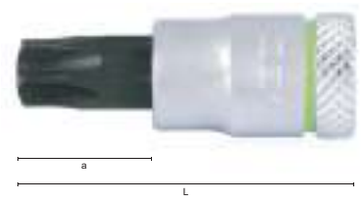
SOCKET DRIVERS 3/8" FOR TORX® SCREWS

WODEX

3/8"

ART. WX2120

Standard ISO 1174-1
Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish, insert in high strength phosphated steel for Torx® screws



Tech. Code	GR51 Euro	✪	a mm	L mm
E450810	11,10	T10	22	48
E450815	11,10	T15	22	48
E450820	11,10	T20	22	48
E450825	11,10	T25	22	48

Tech. Code	GR51 Euro	✪	a mm	L mm
E450827	11,10	T27	22	48
E450830	11,10	T30	22	48
E450840	11,10	T40	22	48

POLYGONAL SOCKETS 1/2"

WODEX

1/2"

ART. WX2200

Standard DIN 3124 ISO 2725-1 DIN EN 3709
Polygonal sockets **PREMIUM QUALITY** high performance chrome-vanadium steel with satin finish. The tight tolerance polygonal **Plus-Drive** profile allows a high force to be transmitted to the shoulders of screws and nuts without damaging them.

Tech. Code	GR51 Euro	✪ mm	ø External mm	L mm
E426108	4,98	8	14	38
E426109	4,98	9	14.3	38
E426110	4,98	10	15.5	38
E426111	4,98	11	16.7	38
E426112	4,98	12	18	38
E426113	5,19	13	19.2	38
E426114	5,19	14	20.5	38
E426115	5,19	15	21.7	38
E426116	5,83	16	22	38
E426117	5,83	17	24	38

Tech. Code	GR51 Euro	✪ mm	ø External mm	L mm
E426118	5,83	18	25.5	38
E426119	5,83	19	26	38
E426120	6,36	20	28	38
E426121	6,36	21	28	38
E426122	6,36	22	30	38
E426124	7,53	24	32	40
E426127	7,74	27	36	42
E426130	8,16	30	40	45
E426132	8,48	32	42	45

POLYGONAL SOCKET 1/2"

WRK

1/2"

ART. E4415

Standard DIN 3124 ISO 2725-1
Hexagonal sockets in chrome-vanadium steel with satin finish.

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E44158	4,12	8	13	38
E44159	4,12	9	14.3	38
E441510	4,12	10	15.3	38
E441511	4,12	11	16.6	38
E441512	4,12	12	17.6	38
E441513	4,34	13	19.1	38
E441514	4,34	14	20.3	38
E441515	4,34	15	21.7	38
E441516	4,89	16	21.8	38
E441517	4,89	17	23.8	38
E441518	4,89	18	25.5	38
E441519	4,89	19	25.7	38

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E441520	5,34	20	27.8	38
E441521	5,34	21	27.8	38
E441522	5,34	22	29.9	38
E441523	5,34	23	31.8	38
E441524	6,24	24	31.8	40
E441525	6,24	25	33.8	42
E441526	6,24	26	33.8	42
E441527	6,46	27	35.8	42
E441528	6,46	28	37.8	42
E441529	6,46	29	37.8	42
E441530	6,79	30	39.9	45
E441532	7,12	32	41.8	45

HEXAGONAL SOCKETS 1/2”

WODEX

1/2"

ART. WX2205

Standard DIN 3124 ISO 2725-1
Hexagonal sockets **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish.

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E426308	4,98	8	14	38
E426309	4,98	9	14.3	38
E426310	4,98	10	15.5	38
E426311	4,98	11	16.7	38
E426312	4,98	12	18	38
E426313	5,19	13	19.2	38
E426314	5,19	14	20.5	38
E426315	5,19	15	21.7	38
E426316	5,83	16	22	38
E426317	5,83	17	24	38

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E426318	5,83	18	25.5	38
E426319	5,83	19	26	38
E426320	6,36	20	28	38
E426321	6,36	21	28	38
E426322	6,36	22	30	38
E426324	7,53	24	32	40
E426327	7,74	27	36	42
E426330	8,16	30	40	45
E426332	8,48	32	42	45

HEXAGONAL SOCKETS 1/ 2”

STAHLWILLE

1/2"

ART. 52

Standard DIN 3124 ISO 2725-1
Hexagonal sockets HPQ® high performance steel with satin finish.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E426408	9,14	8	13	38
E426409	9,19	9	13,7	38
E426410	8,76	10	14,5	38
E426411	9,35	11	15,8	38
E426412	9,36	12	17	38
E426413	8,60	13	18,3	38
E426414	9,98	14	19,9	38
E426415	9,43	15	21,2	38
E426416	9,04	16	22,4	38
E426417	9,53	17	24	38
E426418	10,20	18	24,7	38

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E426419	9,53	19	26,2	38
E426420	11,57	20	27,2	42
E426421	11,47	21	28,7	42
E426422	10,75	22	29,7	42
E426423	13,56	23	30,7	42
E426424	11,69	24	32	42
E426426	14,66	26	34,4	42
E426427	14,77	27	36,2	45
E426428	14,84	28	37,4	45
E426430	15,76	30	39,7	45
E426432	16,42	32	42,2	47

Indivisible package Suggested retail package - Unit price

HEXAGONAL SOCKETS 1/2”

WRK

1/2”

ART. E4240

Standard DIN 3124 ISO 2725-1
Hexagonal sockets in chrome-vanadium steel with satin finish.

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E42408	4,12	8	13	38
E42409	4,12	9	14.3	38
E424010	4,12	10	15.3	38
E424011	4,12	11	16.6	38
E424012	4,12	12	17.6	38
E424013	4,34	13	19.1	38
E424014	4,34	14	20.3	38
E424015	4,34	15	21.7	38
E424016	4,89	16	21.8	38
E424017	4,89	17	23.8	38
E424018	4,89	18	25.5	38
E424019	4,89	19	25.7	38

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E424020	5,34	20	27.8	38
E424021	5,34	21	27.8	38
E424022	5,34	22	29.9	38
E424023	5,34	23	31.8	38
E424024	6,24	24	31.8	40
E424025	6,24	25	33.8	42
E424026	6,24	26	33.8	42
E424027	6,46	27	35.8	42
E424028	6,46	28	37.8	42
E424029	6,46	29	37.8	42
E424030	6,79	30	39.9	45
E424032	7,12	32	41.8	45

LONG HEXAGONAL SOCKETS 1/2"

WODEX

1/2”

ART. WX2208

Standard DIN 3124 ISO 2725-1
Long hexagonal sockets **PREMIUM QUALITY** in high performance chrome-vanadium steel with satin finish.

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E426710	13,14	10	15.3	77
E426711	13,14	11	16.6	77
E426712	13,14	12	17.6	77
E426713	13,14	13	19.1	77
E426714	13,14	14	20.3	77
E426715	13,14	15	21.7	77
E426716	14,42	16	21.8	77
E426717	14,42	17	23.8	77

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E426718	15,16	18	25.5	77
E426719	15,16	19	25.7	77
E426721	16,96	21	27.8	77
E426722	16,96	22	29.9	77
E426724	18,10	24	31.8	77
E426727	19,08	27	35.8	77
E426730	22,71	30	39.9	77
E426732	23,07	32	41.8	77

LONG POLYGONAL SOCKETS 1/2"

STAHLWILLE

1/2”

ART. 51

Standard DIN 3124 ISO 2725-1 DIN EN 3709
Long polygonal sockets in chrome steel at HPQ® high performance. The AS-Drive* allows the transmission of strong forces on the sides of the screws and bolts without damaging the edges.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E423010	22,96	10	14,5	83
E423013	22,38	13	18,3	83
E423017	25,36	17	24	83
E423019	24,59	19	26,2	83

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E423022	27,56	22	29,7	83
E423024	27,56	24	32	83
E423027	30,65	27	36,2	83
E423030	31,97	30	39,7	83

SOCKETS 1/2" FOR SPARK-PLUGS

WODEX

1/2”

ART. WX2209

Sockets **Premium Quality** for spark-plug replacement, chrome-satin finish.

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E427016	12,08	16	23	65

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E427021	13,25	21	28	67

SOCKET DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS

WODEX

1/2"

ART. WX2210

Standard DIN 7422 ISO 2936 ISO 1174-1

Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish, hexagonal insert in high strength phosphated steel for screws with hexagon socket.

Tech. Code	GR51 Euro	◉ mm	a mm	L mm
E452104	9,94	4	17	55
E452105	9,94	5	17	55
E452106	9,94	6	17	55
E452107	9,94	7	17	55
E452108	9,94	8	17	55

Tech. Code	GR51 Euro	◉ mm	a mm	L mm
E452110	9,94	10	17	55
E452112	11,57	12	17	55
E452114	11,57	14	17	55
E452117	14,12	17	17	55
E452119	14,12	19	17	55

SOCKET DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS

STAHLWILLE

1/2"

ART. 54

Standard DIN 7422 ISO 2936 ISO 1174-1

Socket drivers chrome-vanadium steel with satin finish, hexagonal insert in high strength phosphated steel for screws with hexagon socket.

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451904	13,23	4	22.7	60
E451905	13,23	5	22.7	60
E451906	13,23	6	22.7	60
E451907	13,23	7	22.7	60
E451908	13,45	8	22.7	60

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451910	14,55	10	22.7	60
E451912	15,99	12	23.7	60
E451914	17,53	14	23.7	60
E451917	19,51	17	27.5	60
E451919	24,93	19	20	60

SOCKET DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS

WRK

1/2"

ART. E4542

Standard DIN 7422 ISO 2936 ISO 1174-1

Socket drivers chrome-vanadium steel with satin finish, hexagonal insert in phosphated steel for screws with hexagon socket.

Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E45424	7,00	4	24	55
E45425	7,00	5	24	55
E45426	7,00	6	24	55
E45428	7,00	8	24	55

Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E454212	7,90	12	24	55
E454214	8,74	14	24	55
E454217	9,75	17	24	55

While stocks last

SOCKET DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS

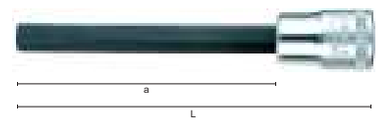
STAHLWILLE

1/2"

ART. 1054-2054

Standard DIN 7422

Socket drivers chrome-vanadium steel with chrome finish, hexagonal insert in phosphated steel for screws with hexagon socket.



Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451705	13,79	5	82	120
E451705L2	25,69	5	142	180
E451706	13,79	6	22.7	120
E451706L2	28,78	6	182	220
E451708	14,99	8	22.7	120

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451708L1	24,37	8	102	140
E451710	15,87	10	22.7	140
E451712	18,63	12	23.7	140
E451714	19,63	14	23.7	140

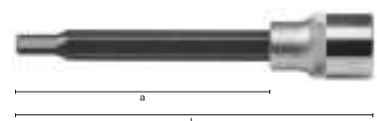
SOCKET DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS

1/2"

ART. E4543

Standard DIN 7422

Socket drivers chrome-vanadium steel with chrome-finish, hexagonal insert in phosphated steel for screws with hexagon socket.



Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E45438	7,63	8	104	140
E454310	9,33	10	104	140

Tech. Code	GR52 Euro	◉ mm	a mm	L mm
E454312	9,33	12	104	140

While stocks last

Indivisible package Suggested retail package - Unit price

SOCKETS DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS - SPHERICAL HEAD

STAHLWILLE

1/2"

ART. 54KK

Socket drivers chrome-vanadium steel with chrome-finish, hexagonal insert in phosphated steel for screws with hexagon socket. Spherical extremity with angle of osciliation up to 25°.

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451805	17,53	5	62	100
E451806	17,53	6	62	100

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E451808	18,53	8	62	100
E451810	20,28	10	62	100

SOCKET DRIVERS 1/2" FOR TORX® SCREWS

WODEX

1/2"

ART. WX2220

Standard ISO 1174-1

Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish, insert in high strength phosphated steel for Torx® screws

Tech. Code	GR51 Euro	✪	a mm	L mm
E452230	12,19	T30	17	55
E452240	12,19	T40	17	55
E452245	12,19	T45	17	55

Tech. Code	GR51 Euro	✪	a mm	L mm
E452250	12,19	T50	17	55
E452255	16,25	T55	17	55
E452260	16,25	T60	17	55

SOCKET DRIVERS 1/2" FOR TORX SCREWS

WRK

1/2"

ART. E4608

Standard ISO 1174-1

Socket drivers chrome-vanadium steel with satin finish, insert in phosphated steel for Torx®.

Tech. Code	GR52 Euro	✪	a mm	L mm
E460815	9,75	T15	24	55
E460820	9,75	T20	24	55
E460825	9,75	T25	24	55
E460827	9,75	T27	24	55
E460830	9,75	T30	24	55
E460840	9,75	T40	24	55

Tech. Code	GR52 Euro	✪	a mm	L mm
E460845	10,07	T45	24	55
E460850	10,07	T50	24	55
E460855	10,07	T55	24	55
E460860	10,81	T60	24	55
E460870	12,93	T70	24	55

While stocks last

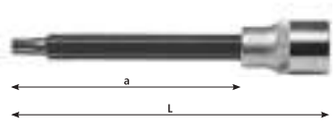
SOCKET DRIVERS 1/2" FOR TORX® SCREWS

WRK

1/2"

ART. E4609

Socket drivers chrome-vanadium steel with satin finish, long insert in phosphated steel for Torx®.



Tech. Code	GR52 Euro	✪	a mm	L mm
E460915	13,04	T15	104	140
E460920	13,04	T20	104	140
E460925	13,04	T25	104	140
E460927	13,04	T27	104	140
E460930	13,04	T30	104	140

Tech. Code	GR52 Euro	✪	a mm	L mm
E460940	14,95	T40	104	140
E460945	14,95	T45	104	140
E460950	15,90	T50	104	140
E460955	16,43	T55	104	140

While stocks last

SOCKET DRIVERS 1/2" FOR SCREWS WITH XZN® PROFILE

STAHLWILLE

1/2"

ART. 54X

Standard DIN 2324

Socket drivers chrome-vanadium steel with chrome finish, insert in phosphated steel for **XZN®**.

Tech. Code	GR55 Euro	Dimension	a mm	L mm
E455005	(16,09)	M5	22	60
E455006	(15,76)	M6	22	60
E455008	(15,87)	M8	22	60
E455010	(17,96)	M10	22	60

Tech. Code	GR55 Euro	Dimension	a mm	L mm
E455012	(19,95)	M12	20	60
E455014	(21,17)	M14	20	60
E455016	(21,05)	M16	20	60

SOCKET DRIVERS 1/2" FOR PHILIPS® SCREWS

WODEX

1/2"

ART. WX2232

Standard ISO 8764-1 ISO 1174-1
Socket drivers **PREMIUM QUALITY**, high performance chrome-vanadium steel with chrome-satin finish, high strength phosphated steel insert for Phillips® screws

Tech. Code	GR51 Euro	⊕ PH	a mm	L mm
E461503	10,93	3	22	55

Tech. Code	GR51 Euro	⊕ PH	a mm	L mm
E461504	10,93	4	22	55

HEXAGONAL SOCKETS 3/4"

WODEX

3/4"

ART. WX2305

Standard DIN 3124 ISO 2725-1
Hexagonal sockets **PREMIUM QUALITY**, high performance chrome-vanadium steel with satin finish.

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E460019	12,93	19	29	50
E460021	12,93	21	31	50
E460022	12,93	22	32	50
E460023	12,93	23	33	50
E460024	12,93	24	34	51
E460026	14,52	26	38	52
E460027	14,52	27	38	52
E460028	15,37	28	40	52
E460029	15,69	29	40	52
E460030	16,11	30	42	54
E460032	16,96	32	44	56
E460033	16,96	33	46	60

Tech. Code	GR51 Euro	O mm	ø External mm	L mm
E460034	16,96	34	46	56
E460035	18,02	35	48	58
E460036	18,02	36	50	58
E460038	20,03	38	52	60
E460040	21,09	40	54	62
E460041	22,26	41	56	64
E460042	22,26	42	57	64
E460043	24,91	43	58	65
E460046	27,56	46	62	68
E460050	32,86	50	68	72
E460055	40,28	55	74	76
E460060	46,87	60	80	78

SOCKET WRENCHES WITH 3/4" HEXAGONAL END

STAHLWILLE

3/4"

ART. 55

Standard DIN 3124 ISO 2725-1
Hexagonal sockets HPQ® high performance steel with chrome finish.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E430222	19,30	22	32	51
E430224	20,40	24	34	51
E430227	22,15	27	38.5	54
E430230	22,72	30	42	58
E430232	22,72	32	44.5	58
E430234	27,34	34	47	60
E430236	27,89	36	49.5	60

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E430238	29,98	38	52	64
E430241	37,43	41	55.5	67
E430246	46,64	46	61	73
E430250	52,37	50	66	80
E430255	(65,05)	55	72	80
E430260	(76,62)	60	78	80

LONG HEXAGONAL SOCKETS 3/4"

STAHLWILLE

3/4"

ART. 56

Standard DIN 3124 ISO 2725-1
Long hexagonal sockets HPQ® high performance steel with chrome finish.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E430522	43,33	22	32	90
E430524	40,57	24	34	90
E430527	44,87	27	38,5	90
E430530	50,38	30	42	90

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E430532	53,13	32	44,5	90
E430534	56,77	34	47	90
E430536	61,73	36	49,5	90
E430541	73,31	41	55,5	90

SOCKET DRIVERS 3/4" FOR HEXAGONAL SOCKET HEAD SCREWS

STAHLWILLE

3/4"

ART. 59

Standard DIN 7422 ISO 2936 ISO 1174-1
Socket drivers chrome-vanadium steel with chrome-finish, hexagonal insert in phosphated steel for screws with hexagon socket.

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E452014	46,63	14	34.7	80
E452017	45,56	17	34.7	80

Tech. Code	GR55 Euro	◉ mm	a mm	L mm
E452019	45,33	19	34.7	80
E452022	48,07	22	40	80

Indivisible package Suggested retail package - Unit price

SOCKET DRIVERS 3/4" FOR TORX® SCREWS

STAHLWILLE

3/4"

ART. 59TX

Standard ISO 1174-1
Socket drivers chrome-vanadium steel with satin finish, insert in phosphated steel for TORX®.

Tech. Code	GR55 Euro	○	a mm	L mm
E4524T60	(48,51)	TX60	25	80
E4524T70	(51,48)	TX70	25	80

Tech. Code	GR55 Euro	○	a mm	L mm
E4524T80	(53,80)	TX80	25	80
E4524T90	(57,88)	TX90	25	80

POLYGONAL SOCKETS 1"

STAHLWILLE

1"

ART. 60

Standard DIN 3124 ISO 2725-1
Polygonal sockents AS-drive and high performance HPQ steel up to 36 mm, chrome plated.

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E445232	(38,91)	32	45	67
E445234	(42,67)	34	47	67
E445236	(39,36)	36	49.5	67
E445241	(62,28)	41	55.5	70

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E445246	(73,31)	46	61	75
E445250	(83,23)	50	66	80
E445255	(99,77)	55	72	85
E445260	(114,66)	60	78	90

HEXAGONAL SOCKETS 1"

1"

ART. E4450

Standard DIN 3124 ISO 2725-1
Hexagonal sockets in chrome-vanadium steel with satin finish.

Tech. Code	GR52 Euro	○ mm	Ø External mm	Length mm
E445036	22,49	36	51	65
E445041	29,76	41	57	70
E445046	39,19	46	65	76
E445050	40,97	50	70	78
E445055	51,40	55	76	80

Tech. Code	GR52 Euro	○ mm	Ø External mm	Length mm
E445060	54,90	60	82	88
E445065	65,48	65	88	90
E445070	67,75	70	94	98
E445075	90,98	75	100	102
E445080	100,30	80	105	108

HEXAGONAL SOCKETS 1"

STAHLWILLE

1"

ART. 60

Standard DIN 3124 ISO 2725-1
Hexagonal sockets HPQ® high performance steel with chrome finish.

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E445465	(148,83)	65	87	105
E445470	(167,57)	70	94	110

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E445480	(214,98)	80	108	120

REVERSIBLE RATCHETS

WODEX

ART. WX2040 - WX2140 - WX2240

Standard DIN 3122 ISO 3315

Sturdy and resistant **PREMIUM QUALITY** reversible ratchets in chrome-vanadium steel, chrome-satin finish. Square drive DIN 3120/ ISO 1174 and reversing lever for clockwise and anti-clockwise operation. Quick socket release via a button on the ratchet head. Soft and comfortable anti-slip, **ERGOFORM** grip made of two-component plastic.

Tech. Code	GR51 Euro	Coupling ■	Teeth	Head width mm	L mm
E47101/4	33,36	1/4"	72	23	139
E47103/8	37,38	3/8"	72	18	195
E47101/2	42,19	1/2"	72	36	243

STUBBY REVERSIBLE RATCHETS

WODEX

ART. WX2045

Standard DIN 3122 ISO 3315

Stubby reversible ratchets **PREMIUM QUALITY** sturdy and resistant in chrome-vanadium steel, chrome-satin finish. Square drive DIN 3120 / ISO 1174 and reversing lever for clockwise and anti-clockwise operation. Quick socket release via a button on the ratchet head.

Tech. Code	GR51 Euro	Coupling ■	Teeth	Head width mm	L mm
E47111/4	20,03	1/4"	60	18	95

REVERSIBLE RATCHETS

STAHLWILLE

ART. 415 - 435 - 512

Standard DIN 3122 ISO 3315

Reversible ratchets with bi-component handle and chrome steel stem.

Tech. Code	GR55 Euro	Coupling ■	Teeth	Head width mm	Length mm
E47131/4	67,25	1/4"	1/4"	22	117
E47133/8	75,52	3/8"	3/8"	29	193
E47131/2	86,54	1/2"	1/2"	41	266

REVERSIBLE RATCHETS

WRK

ART. E4701

Standard DIN 3122 ISO 3315

Reversible ratchets with button for quick mount/release of the socket, chrome vanadium chrome plated steel body, ergonomic grip in bi-component plastic.

Tech. Code	GR52 Euro	Coupling ■	Teeth	Head width mm	Length mm
E47011/436T	24,38	1/4"	36	25	147
E47013/836T	27,56	3/8"	36	31	202
E47011/236T	31,91	1/2"	36	40	260

While stocks last

ART. E4702

Tech. Code	GR52 Euro	Coupling ■	Teeth	Head width mm	Length mm
E47021/472T	28,62	1/4"	72	25	147
E47023/872T	32,86	3/8"	72	31	202

While stocks last

LONG REVERSIBLE RATCHETS 1/2"

STAHLWILLE

ART. 532

Long reversible ratchets version, with bi-component grip.

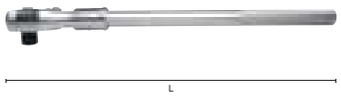
Tech. Code	GR55 Euro	Coupling ■	Teeth	Head width mm	Length mm
E47461/2	117,96	1/2"	36	41	380

Indivisible package Suggested retail package - Unit price

REVERSIBLE RATCHETS

ART. WX2340

Standard DIN 3122 ISO 3315
Sturdy and resistant **PREMIUM QUALITY** reversible ratchets in chrome-vanadium steel, chrome-satin finish. Square drive DIN 3120/ISO 1174 and reversing lever for clockwise and anti-clockwise operation.



Tech. Code	GR51 Euro	Coupling ■	Teeth	Head width mm	L mm
E47153/4	114,26	3/4"	24	62	500

RATCHET HEADS WITH SAFETY LOCK

ART. 552 - 882

Reversible ratchet heads with **Quick Release** safety lock in chrome steel, usable with Art. 558 e 888 levers to be ordered separately.

Tech. Code	GR55 Euro	Coupling ■	Teeth	Head width mm	Length mm
E47173/4	198,44	3/4"	36	70	165
E47171	237,02	1"	36	70	185

ART. 558 - 888

Usable for ratchet heads Art. 552 e 882.

Tech. Code	GR55 Euro	Ø mm	Length mm
E47193/4	41,23	20	510
E47191	68,91	28	700

REVERSIBLE RATCHETS

ART. E4703

Standard DIN 3122 ISO 3315
Model with button for quick mount/release of the socket, chrome vanadium chrome plated steel body.

Tech. Code	GR52 Euro	Coupling ■	Teeth	Head width mm	Length mm
E4703136T	252,00	1"	36	70	690

REVERSIBLE RATCHETS

ART. ZIKLOP SPEED

The Zyklop Speed ratchets have a swivel head for working in difficult-to-reach spaces, the default lock positions are 0° - 15° - 90° right-left. In the 0° position, the ratchet can be used like a normal screwdriver. The bi-component anti-slip handles allow a high power transmission.

Tech. Code	GR53 Euro	Coupling ■	Teeth	Length mm	Length mm
E47201/4	103,49	1/4"	72T	31	152
E47203/8	113,12	3/8"	72T	39	199
E47201/2	124,55	1/2"	72T	48	277

T-HANDLE LEVERS WITH SLIDING SQUARE DRIVE

ART. WX2048 - WX2148 - WX2248 - WX2348

Standard DIN 3122 ISO 3315
T-handle levers with sliding square drive **PREMIUM QUALITY** for manual socket drive wrenches, square drive DIN 3120 / ISO 1174 and ball locking mechanism. Sturdy and durable in chrome-vanadium steel, chrome-satin finish.

Tech. Code	GR51 Euro	Coupling ■	L mm
E47481/4	6,96	1/4"	115
E47483/8	10,71	3/8"	160
E47481/2	20,56	1/2"	250
E47483/4	36,00	3/4"	460

T-HANDLE LEVERS WITH SLIDING SQUARE DIRVE AND SAFETY LOCK

ART. 404QR - 425QR - 506QR

T-handle with sliding square drive and **QuickRelease** safety lock in chrome steel for sockets.

Tech. Code	GR55 Euro	Coupling ■	Length mm
E47521/4	(14,77)	1/4"	116
E47523/8	(21,94)	3/8"	165
E47521/2	28,66	1/2"	300

Indivisible package Suggested retail package - Unit price

EXTENSIONS WITH SAFETY LOCK FOR SOCKETS

STAHLWILLE

ART. 405QR - 427QR - 509QR

Standard DIN 3123 ISO 3316
Extensions in chrome steel with **QuickRelease** safety lock for sockets.

Tech. Code	GR55 Euro	Coupling ■	Length mm
E47661/4054	11,02	1/4"	54
E47661/4102	11,25	1/4"	102
E47661/4150	12,12	1/4"	150
E47661/4356	23,28	1/4"	356
E47663/8076	18,08	3/8"	76

Tech. Code	GR55 Euro	Coupling ■	Length mm
E47663/8160	20,62	3/8"	160
E47663/8240	22,82	3/8"	240
E47661/2075	18,96	1/2"	75
E47661/2130	20,06	1/2"	130
E47661/2255	26,13	1/2"	255

ANGULAR EXTENSIONS FOR SOCKETS

WODEX

ART. WX2052 - WX2152 - WX2252

Standard DIN 3123 - ISO 3316
Extensions **PREMIUM QUALITY** for manual socket drive wrenches, square drive DIN 3120 / ISO 1174 and ball locking mechanism. **WOBBLE** model with male connection that allows an inclinations of up to 15° with respect to the axis of the socket wrench. Sturdy and durable in chrome-vanadium steel, chrome-satin finish.

Tech. Code	GR51 Euro	Coupling ■	L mm
E47671/4050	7,95	1/4"	50
E47671/4100	8,27	1/4"	100
E47671/4150	8,69	1/4"	150
E47673/8075	9,86	3/8"	75
E47673/8150	11,87	3/8"	150
E47673/8250	15,61	3/8"	250

Tech. Code	GR51 Euro	Coupling ■	L mm
E47671/2075	11,45	1/2"	75
E47671/2125	14,05	1/2"	125
E47671/2150	15,16	1/2"	150
E47671/2200	16,75	1/2"	200
E47671/2250	19,87	1/2"	250

EXTENSIONS FOR SOCKETS

WODEX

ART. WX2050 - WX2150 - WX2250 - WX2350

Standard DIN 3123 - ISO 3316
Extensions **PREMIUM QUALITY** for manual socket drive wrenches, square drive DIN 3120/ISO 1174 and ball locking mechanism. Sturdy and durable in chrome-vanadium steel, chrome-satin finish.

Tech. Code	GR51 Euro	Coupling ■	L mm
E47701/4050	6,68	1/4"	50
E47701/4100	6,89	1/4"	100
E47701/4150	7,21	1/4"	150
E47703/8075	8,27	3/8"	75

Tech. Code	GR51 Euro	Coupling ■	L mm
E47703/8250	11,98	3/8"	250
E47701/2075	9,54	1/2"	75
E47701/2125	11,64	1/2"	125
E47703/4200	24,38	3/4"	200

CARDAN JOINTS FOR DRIVE SOCKETS

WODEX

ART. WX2054 - WX2154 - WX2254

Standard DIN 3123 ISO 3316
Cardan joints **PREMIUM QUALITY** for manual socket drive wrenches, square drive DIN 3120 / ISO 1174 and ball locking mechanism. Sturdy and resistant in chrome-vanadium steel, chrome-satin finish.

Tech. Code	GR51 Euro	Coupling ■	ø External mm	L mm
E47931/4	13,57	1/4"	14	40
E47933/8	18,07	3/8"	18	55
E47931/2	20,03	1/2"	25	78

CARDAN JOINTS FOR DRIVE SOCKETS

WODEX

ART. WX2354

Standard DIN 3123 ISO 3316
Cardan joints **PREMIUM QUALITY** for manual socket drive wrenches, square drive DIN 3120/ISO 1174 and ball locking mechanism. Sturdy and resistant in chrome-vanadium steel, chrome-satin finish.

Tech. Code	GR51 Euro	Coupling ■	ø External mm	L mm
E47943/4	61,48	3/4"	40	100

Indivisible package Suggested retail package - Unit price

CARDAN JOINTS FOR DRIVE SOCKETS WITH SECURITY LOCK

STAHLWILLE

ART. 407QR - 428QR - 510QR

Standard DIN 3123 ISO 3316
Joints in chrome steel with **QuickRelease** security lock for sockets.

Tech. Code	GR55 Euro	Coupling ■	Ø External mm	Length mm
E47961/4	33,95	1/4"	13	45
E47963/8	40,57	3/8"	19	60
E47961/2	41,23	1/2"	25	80

REDUCER JOINTS FOR SOCKET WRENCHES

WODEX

ART. WX2158

Standard DIN 3123 ISO 3316
Reducer joints for manual socket drive wrenches, square drive DIN 3120 / ISO 1174 and ball locking mechanism. Chrome-satin finish.

Tech. Code	GR51 Euro	Coupling □	Coupling ■	ø External mm	L mm
E48153/8-1/4	7,31	3/8"	1/4"	19	26
E48151/2-3/8	8,27	1/2"	3/8"	22	36
E48153/4-1/2	15,37	3/4"	1/2"	36	56

REDUCER JOINTS WITH TRANSVERSE HOLE

WODEX

ART. WX2159

Reducer joints for manual socket drive wrenches, square drive DIN 3120 / ISO 1174 and ball locking mechanism. Model with transversal hole for Inserting the extension. Sturdy and resistant in chrome-vanadium steel, chrome-satin finish.

Tech. Code	GR51 Euro	Coupling □	Coupling ■	ø External mm	L mm
E48161/2-3/8	9,12	1/2"	3/8"	24	40

ADAPTER JOINTS FOR SOCKET WRENCHES

WODEX

ART. WX2160

Standard DIN 3123 ISO 3316
Adapter joints for manual socket drive wrenches, square drive DIN 3120 / ISO 1174 and ball locking mechanism.
Chrome-satin finish.

Tech. Code	GR51 Euro	Coupling □	Coupling ■	ø External mm	L mm
E48441/4-3/8	5,19	1/4"	3/8"	14	26
E48443/8-1/2	7,31	3/8"	1/2"	19	36
E48441/2-3/4	10,81	1/2"	3/4"	26	48

ADAPTER JOINTS WITH TRANSVERSE HOLE

WODEX

ART. WX2161

Adapter joints for manual socket drive wrenches, square drive DIN 3120 / ISO 1174 and ball locking mechanism. Model with transversal hole for Inserting the extension. Sturdy and resistant in chrome-vanadium steel, chrome-satin finish.

Tech. Code	GR51 Euro	Coupling □	Coupling ■	ø External mm	L mm
E48453/8-1/2	8,06	3/8"	1/2"	24	40

ADAPTER JOINTS FOR SOCKETS

STAHLWILLE

ART. 409 - 410 - 432 - 514 - 569

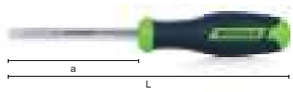
Standard DIN 3123 ISO 3316
Square drive socket adapters in chrome steel **HPQ**® high performance for sockets.

Tech. Code	GR55 Euro	Coupling □	Coupling ■	Ø External mm	Length mm
E48471/4-3/8	12,02	1/4"	3/8"	12,8	25
E48471/4-1/2	17,64	1/4"	1/2"	16,5	28
E48473/8-1/2	13,01	3/8"	1/2"	17,2	31
E48471/2-3/4	17,31	1/2"	3/4"	25	44
E48473/4-1	36,38	3/4"	1"	34,7	61

SCREWDRIVERS FOR SOCKETS 1/4"

WODEX

ART. WX2047



Standard DIN 3122 ISO 3315
Screwdrivers **PREMIUM QUALITY** with square drive connection for 1/4" socket wrenches, sturdy and resistant in chrome-vanadium steel, chrome-satin finish. Square drive DIN 3120 / ISO 1174 and ball locking mechanism. Soft and comfortable non-slip two-component **ERGOFORM** grip.

Tech. Code	GR51 Euro	Coupling ■	a mm	L mm
E48681/4	6,89	1/4"	75	175

FLEXIBLE SCREWDRIVERS FOR SOCKETS 1/4"

WRK

ART. E4955

Steel blade and flexible plastic sleeved layer
Ergonomic bi-component grip.

Tech. Code	GR52 Euro	Coupling ■	Length mm
E49551/4160	14,70	1/4"	270

While stocks last

COMPACT SYKLOP RATCHETS WITH TOOL KIT

Wera

NEW

ART. 8009 ZYKLOP POCKET SET 2

Zyklop ratchets with magnetic connection for 1/4" DIN 3126-C 6.3 bits and 3/8" socket wrenches. The head with pre-set 0°, 15° and 90° lock allows the use as a ratchet or as a ratchet screwdriver, the fine toothing with 72 teeth guarantees a return angle of only 5°. Includes a textile support attachment to the belt; also suitable for connection to the Wera 2go system.

Composition
Ratchet wrench 1/8009 Zyklop Pocket
Universal bit holder 893/1/1 1/4" - 75 mm
Philips Insert bits 851/1 BTZ PH1X25 mm - PH2x25 mm
Philips Insert bits 855/1 BTZ PZ1x25 mm - PZ2x25 mm
TORX® Insert bits 867/1 BTZ T 10x25 mm - T15x25 mm - T20x25 mm - T25x25 mm
Hexagonal Insert bits 840/1BTZ HEX 3x25 mm - 4x25 mm - 5x25 mm - 6x25 mm
Hex socket wrenches 3/8" 8790 HMB 8 mm - 10 mm - 13 mm
Zyklop Pocket case 9468

Tech. Code	GR53 Euro	Pieces
E487218	(183,60)	18

SOCKET SET 1/4" - 44 TOOLS

WODEX

1/6 WMS

ART. WX2080/SE44

Set of 44 **WODEX PREMIUM QUALITY** tools with 1/4" square drive in practical shock-resistant ABS case. The set contains a ratchet, a T-handle lever with sliding square drive, a socket wrench screwdriver, a cardan joint, extensions, adapters, **PLUS-DRIVE** polygonal sockets, screwdriver bits for slotted, Phillips®, Pozidriv®, hexagonal and Torx® screws and a bit holder.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 200x223.5 mm - Vertical position

Composition:

WX2040	Reversible ratchet 1/4"
WX2000	Sockets 1/4" 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX2048	T-handle lever with 1/4" sliding square drive
WX2052	Extensions Wobble 1/4"x50 - 1/4"x100
WX2054	Cardan joint 1/4"
WX2047	Socket screwdriver 1/4"
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4400	Insert bits 1/4"x25 Phillips® PH1 - PH2 - PH3
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 - PZ2 - PZ3
WX4430	Insert bits 1/4"x25 slotted 3.0 - 4.0 - 4.5 - 5.5 - 6.5 mm
WX4445	Insert bits 1/4"x25 hexagonal HEX 3 - 4 - 5 - 6 - 8 mm
WX4475	Insert bits 1/4"x25 Torx® T8 - T10 - T15 - T20 -T25 - T27 - T30 - T40

Tech. Code	GR51 Euro	Pieces
E489044	135,68	44

Indivisible package Suggested retail package - Unit price

SOCKET SET 1/4" - 55 TOOLS

1/6 WMS

ART. WX2085/SE55

Set of 55 **WODEX PREMIUM QUALITY** tools with 1/4" square drive in practical shock-resistant ABS case. The set contains a stubby ratchet, a quick change bit holder screwdriver, adapters, **PLUS-DRIVE** polygonal sockets, screwdriver bits for slotted, Phillips®, Pozidriv®, hexagonal and Torx® and Tamper Torx® screws with hole and a bit holder.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 200x223.5 mm - Vertical position

Composition:

WX2045	Reversible stubby ratchet 1/4"
WX2000	Sockets 1/4" 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4630	Bit holder 1/4"- 1/4"x60 mm
WX4620	Bit holder screwdriver quick change 1/4"
WX4400	Insert bits 1/4"x25 Phillips® PH1 (2) - PH2 (3) - PH3 (1)
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 (3) - PZ2 (3) - PZ3 (1)
WX4430	Insert bits 1/4"x25 slotted 4 (1) - 4.5 (1) - 5.5 (2) - 6.5 (2) mm
WX4445	Insert bits 1/4"x25 hexagonal HEX 2 - 2.5 - 3 - 4 - 5 - 6 - 8 mm
WX4475	Insert bits 1/4"x25 Torx® T10 - T15 - T20 - T25 - T30 - T40
WX4505	Insert bits 1/4"x25 Tamper Torx® T10 - T15 - T20 -T25 - T30 - T40

Tech. Code	GR51 Euro	Pieces
E489255	139,92	55

HEXAGONAL SOCKETS 1/4" SET 19 PIECES IN ABS CASE

ART. 40/13/6

Hexagonal sockets in a sturdy plastic stackable ABS case.
Composition:
- Hexagonal socket wrenches Art. 40 3.5 - 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
- Ratchet lever Art. 415
- Extensions Art. 405 54 mm - 150
- Universal joint Art. 407
- Socket holder Art. 400
- Lever with sliding drive Art. 404

Tech. Code	GR55 Euro	Pieces
E490319	246,67	19

SOCKET SET 1/4" AND 1/2" - 66 TOOLS

1/3 H WMS

ART. WX2090/SE66

Set of 66 **WODEX PREMIUM QUALITY** tools with 1/4" and 1/2" square drive in practical shock-resistant ABS case. The set contains 2 ratchets, a T-handle lever with sliding square drive, cardan joints, a socket wrench screwdriver, extensions, joints, adapters, **PLUS-DRIVE** polygonal sockets, screwdriver bits for slotted, Phillips®, Pozidriv®, hexagonal and Torx® screws with a bit holder.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2040	Reversible ratchet 1/4"
WX2000	Sockets 1/4" 4 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX2048	T-handle lever with 1/4" sliding square drive
WX2052	Extensions Wobble 1/4"x50 - 1/4"x150
WX2054	Cardan joint 1/4"
WX2047	Socket screwdriver 1/4"
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4430	Insert bits 1/4"x25 slotted 4 - 5.5 mm
WX4400	Insert bits 1/4"x25 Phillips® PH1 - PH2 - PH3
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 - PZ2
WX4445	Insert bits 1/4"x25 hexagonal HEX 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm
WX4475	Insert bits 1/4"x25 Torx® T10 - T15 - T20 -T25 - T30
WX2240	Reversible ratchet 1/2"
WX2200	Socket drivers 1/2" 10-11-12-13-14-15-17-19-22-24-30-32 mm
WX2210	Socket drivers 1/2" HEX 8 - 10 - 12 - 14 mm
WX2220	Socket drivers 1/2" Torx® T40 - T45 - T50
WX2252	Extensions Wobble 1/2"x150 - 1/2"x200
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension
WX2209	Sockets 1/2" for spark plugs 16- 21 mm

Tech. Code	GR51 Euro	Pieces
E489466	280,00	66

SOCKET WRENCHES 1/4" AND 1/2" - SET OF 71 TOOLS

WODEX

NEW

1/3 H WMS

ART. WX2095/SE71

Set of 71 **WODEX PREMIUM QUALITY** tools with 1/4" and 1/2" square drive in practical shock-resistant ABS case. The set contains 2 ratchets, a T-handle lever with sliding square drive, cardan joints, a socket wrench screwdriver, extensions, joints, adapters, hexagonal sockets, screwdriver bit for slotted, Phillips®, Pozidriv®, hexagonal and Torx® screws with a bit holder.
Set complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2040	Reversible ratchet 1/4"
WX2200	Sockets 1/4" 4 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX2048	T-handle lever with 1/4" sliding square drive
WX2052	Extensions Wobble 1/4"x50 - 1/4"x150
WX2054	Cardan joint 1/4"
WX2047	Socket screwdriver 1/4"
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4430	Insert bits 1/4"x25 slotted 3 - 4 - 5.5 - 6.5 mm
WX4400	Insert bits 1/4"x25 Phillips® PH1 - PH2 - PH3
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 - PZ2
WX4445	Insert bits 1/4"x25 hexagonal HEX 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm
WX4475	Insert bits 1/4"x25 Torx® T8 - T9 - T10 - T15 - T20 -T25 - T27 - T30
WX2240	Reversible ratchet 1/2"
WX2205	Sockets 1/2" 10 - 12 - 13 - 14 - 15 - 17 - 19 - 22 - 24 -27 - 30 - 32 mm
WX2210	Socket drivers 1/2" HEX 5 - 6 - 8 - 10 - 12 mm
WX2220	Socket drivers 1/2" Torx® T30 - T40 - T45 - T50
WX2252	Extensions Wobble 1/2"x125 - 1/2"x200
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension

Tech. Code	GR51 Euro	Pieces
E489671	298,00	71

SOCKET SET 3/8" - 39 TOOLS

WODEX

1/3 H WMS

ART. WX2180/SE39

Set of 39 **WODEX PREMIUM QUALITY** tools with 3/8" square drive in practical shock-resistant ABS case. The set contains a ratchet, a cardan joint, extensions, joints **PLUS-DRIVE** polygonal sockets, socket drivers for hexagonal socket head screws and Torx® screws, sockets for spark plugs.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2140	Reversible ratchet 3/8"
WX2100	Sockets 3/8" 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 mm
WX2110	Socket drivers 3/8" HEX 3 - 4 - 5 - 6 - 7 - 8 - 10 mm
WX2120	Socket drivers 3/8" Torx® T10 - T15 - T20 - T25 - T27 - T30 - T40
WX2152	Extensions Wobble 3/8"x75 - 3/8"x250
WX2154	Cardan joint 3/8"
WX2159	Reducer joint 1/2'F-3/8'M with hole for extensions
WX2109	Sockets 3/8" for spark plugs 16- 21 mm

Tech. Code	GR51 Euro	Pieces
E490939	186,56	39

POLYGONAL SOCKETS 3/8" SET OF 19 PIECES IN ABS CASE

STAHLWILLE

ART. 45/14/5I

Set of polygonal sockets in sturdy plastic stackable ABS case.
Composition:
- Polygonal socket wrenches Art. 45 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 mm
- Riversible ratchet Art. 435
- Extensions Art. 427 76 - 240 mm
- Lever with sliding drive Art. 425
- Universal joint Art. 428

Tech. Code	GR55 Euro	Pieces
E491319	(328,53)	19

Indivisible package Suggested retail package - Unit price

HEXAGONAL SOCKETS 3/8" SET 19 PIECES IN ABS CASE

STAHLWILLE

ART. 456/14/5I

Set of hexagonal sockets in sturdy plastic ABS case.
Composition:
- Socket hexagonal wrenches Art. 45 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 mm
- Ratchet lever Art. 435
- Extensions Art. 427 76 - 240 mm
- Lever with sliding drive Art. 425
- Universal joint Art. 428

Tech. Code	GR55 Euro	Pieces
E491219	(328,53)	19

SOCKET SET 1/2" - 36 TOOLS

WODEX

1/3 H WMS

ART. WX2280/SE36

Set of 36 **WODEX PREMIUM QUALITY** tools with 1/2" square drive in practical shock-resistant ABS case. The set contains a ratchet cardan joint, extensions, joints **PLUS-DRIVE** polygonal sockets, socket drivers for hexagonal socket head screws and Torx® screws.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2240	Reversible ratchet 1/2"
WX2200	Sockets 1/2" 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 -27 - 30 - 32 mm
WX2210	Socket drivers 1/2" HEX 6 - 8 - 10 - 12 - 14 mm
WX2220	Socket drivers 1/2" Torx® T30 - T40 - T45 - T55 - T60
WX2232	Socket drivers 1/2" for Phillips® screws PH3 - PH4
WX2252	Extensions Wobble 1/2"x125 - 1/2"x250
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension

Tech. Code	GR51 Euro	Pieces
E492036	263,00	36

SOCKET WRENCHES 1/2" - SET OF 40 TOOLS

WODEX

NEW

1/3 H WMS

ART. WX2290/SE40

Set of 40 **PREMIUM QUALITY** tools with 1/2" square drive in practical shock-resistant ABS case. The set contains a ratchet, a cardan joint, extensions, joints, hexagonal sockets, socket drivers for hexagonal socket head screws and Torx® screws.
Set complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2240	Reversible ratchet 1/2"
WX2205	Sockets 1/2" 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 -27 - 30 - 32 mm
WX2210	Socket drivers 1/2" HEX 4 - 5 - 6 - 7 - 8 - 10 - 12 - 14 - 17 - 19 mm
WX2220	Socket drivers 1/2" Torx® T30 - T40 - T45 - T50 - T55 - T60
WX2252	Extensions Wobble 1/2"x125 - 1/2"x250
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension

Tech. Code	GR51 Euro	Pieces
E492340	260,00	40

HEXAGONAL SOCKETS 1/2" SET 22 PIECES IN ABS CASE

STAHLWILLE

ART. 52/16/6

Set of hexagonal sockets in sturdy plastic stackable ABS case.
Equipment:
- Hexagonal socket wrenches Art. 52 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 - 27 - 30 - 32 mm
- Reversible ratchet Art. 512
- Extension Art. 509/3 (75 mm), Art. 509/5 (130 mm), Art. 50/10 (255 mm)
- Universal joint Art. 510
- Lever with sliding drive Art. 506

Tech. Code	GR55 Euro	Pieces
E492422	449,80	22

HEXAGONAL SOCKETS 3/4" SET 14 PIECES IN METAL CASE

ART. E4990

Set of sockets in a metal box.
Equipment:
- Hexagon socket wrenches 22 - 24 - 27 - 30 - 32 - 36 - 38 - 41 - 46 - 50 mm
- Reversible ratchet
- Extensions 100-200 mm
- Sliding T-lever

Tech. Code	GR52 Euro	Pieces
E4990SET14	401,00	14

T-HANDLE WRENCHES WITH SQUARE SWIVEL DRIVE

WODEX

NEW

ART. WX2049 - WX2149 - WX2249

Standard ISO 1174-1

Wrenches **PREMIUM QUALITY** in chrome-vanadium steel with square swivel drive for sockets. The high precision and high quality of the materials ensure tightening torques higher than those specified in the ISO reference standard. Sliding bar with limit stops. Chrome-satin finish.

Tech. Code	GR51 Euro	Coupling ■	a mm	L mm
E475314	45,84	1/4"	165	400
E475338	51,52	3/8"	180	450
E475312	76,83	1/2"	230	500

HEXAGONAL IMPACT SOCKETS 1/2"

STAHLWILLE

1/2"

ART. 50IMP

With 1/2" drive, DIN 3129/ISO 2725-2, burnished chrome vanadium steel.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E540008	(13,67)	8	14.3	38
E540010	13,34	10	16.8	38
E540011	(13,34)	11	18.1	38
E540012	(13,34)	12	19.5	38
E540013	13,34	13	20.8	38
E540014	(13,34)	14	22.1	38
E540015	(14,11)	15	23.5	38
E540016	(14,66)	16	24.8	38
E540017	14,66	17	26.2	38
E540018	(14,66)	18	27.5	38

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E540019	14,44	19	28.8	40
E540021	(16,76)	21	31.3	40
E540022	16,76	22	32.5	42
E540023	(16,76)	23	33.8	42
E540024	16,09	24	35	44
E540025	(17,64)	25	36.3	44
E540027	20,28	27	38.8	45
E540030	(21,17)	30	42	50
E540032	(21,17)	32	44	50

HEXAGONAL IMPACT SOCKETS 1/2"

WRK

1/2"

ART. E5000

With 1/2" drive, DIN 3129/ISO 2725-2, burnished chrome molibdenum steel.

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E500010	7,21	10	17	38
E500013	7,21	13	20	38
E500017	7,92	17	26	38
E500019	8,37	19	28	38
E500022	10,13	22	32	38

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E500024	11,52	24	34	40
E500027	15,23	27	38	43
E500030	18,62	30	42	43
E500032	20,78	32	44	43

HEXAGONAL IMPACT SOCKETS 1/2" LONG VERSION

STAHLWILLE

1/2"

ART. 51IMP

With 1/2" drive, DIN 3129/ISO 2725-2, long version, burnished chrome vanadium steel.

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E542013	32,75	13	20.8	85
E542015	(33,52)	15	23.5	85
E542016	(33,52)	16	24.8	85
E542017	32,19	17	26.2	85
E542018	(33,52)	18	27.5	85

Tech. Code	GR55 Euro	O mm	Ø External mm	Length mm
E542019	32,19	19	28.8	85
E542021	(36,27)	21	31.3	85
E542022	35,50	22	32.5	85
E542024	34,50	24	35	85
E542027	40,79	27	38.8	85

HEXAGONAL IMPACT SOCKETS 1/2" LONG VERSION

WRK

1/2"

ART. E5020

With 1/2" drive, DIN 3129/ISO 2725-2, long version, burnished chrome molybdenum steel.

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E502010	13,46	10	17	78
E502013	13,46	13	20	78
E502017	14,23	17	26	78
E502019	14,73	19	28	78
E502022	17,85	22	32	78

Tech. Code	GR52 Euro	O mm	Ø External mm	Length mm
E502024	19,13	24	34	78
E502027	22,00	27	38	78
E502030	23,27	30	42	78
E502032	23,92	32	44	78

Indivisible package Suggested retail package - Unit price

HEXAGONAL IMPACT SOCKETS 1/2" LONG AND REDUCED VERSION

STAHLWILLE

1/2"

ART. 2309

With 1/2" drive, long version, reduced diameter burnished chrome vanadium steel.

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E543017	38,81	17	25.7	85
E543019	38,81	19	28.2	85

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E543022	43,43	22	32	85

IMPACT SOCKET WRENCHES 1/2" FOR SCREWS WITH HEX SOCKET

STAHLWILLE

1/2"

ART. 54IMP

Impact socket wrenches with 1/2" connection for screws with hexagon socket, chrome vanadium steel, burnished.

Tech. Code	GR55 Euro	⬢ mm	Ø External mm	Length mm
E543505	14,11	5	25	38
E543506	14,11	6	25	38
E543507	(14,11)	7	25	38
E543508	15,21	8	25	38
E543510	15,44	10	25	40

Tech. Code	GR55 Euro	⬢ mm	Ø External mm	Length mm
E543512	17,64	12	30	42
E543514	18,53	14	30	43
E543517	21,50	17	30	45
E543519	30,53	19	30	50

HEXAGONAL IMPACT SOCKETS 3/4"

STAHLWILLE

3/4"

ART. 55IMP

With 3/4" drive, DIN 3129/ISO 2725-2.
Burnished chrome vanadium steel.

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E548017	(33,40)	17	29	48
E548018	(33,30)	18	30.5	48
E548019	(33,40)	19	32	48
E548021	(34,84)	21	35	50
E548022	(34,84)	22	36.5	50
E548024	(35,72)	24	39.5	50
E548027	(37,92)	27	43.5	51
E548029	(39,36)	29	46	54

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E548030	(38,36)	30	47.5	54
E548032	(44,10)	32	49.9	54
E548033	(47,84)	33	51.5	54
E548036	(50,05)	36	54.9	57
E548038	(58,98)	38	58	58
E548041	(60,08)	41	57	59
E548046	(75,52)	46	67	64

HEXAGONAL IMPACT SOCKETS 3/4"

WRK

3/4"

ART. E5100

With 3/4" drive, DIN 3129/ISO 2725-2. Burnished chrome molybdenum steel.

Tech. Code	GR52 Euro	○ mm	Ø External mm	Length mm
E510024	18,96	24	38	50
E510027	18,96	27	42	50
E510030	20,12	30	46	53
E510032	21,41	32	48	53

Tech. Code	GR52 Euro	○ mm	Ø External mm	Length mm
E510036	24,90	36	54	55
E510041	29,67	41	60	57
E510046	35,61	46	67	62

HEXAGONAL IMPACT SOCKETS 3/4" LONG VERSION

STAHLWILLE

3/4"

ART. 56IMP

With 3/4" drive, long version.
Burnished chrome vanadium steel.

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E548517	(50,38)	17	32	100
E548519	(50,38)	19	32	100
E548521	(50,93)	21	35	100
E548522	(50,93)	22	36.5	100
E548524	(50,93)	24	39.5	100
E548527	(52,58)	27	43.5	100

Tech. Code	GR55 Euro	○ mm	Ø External mm	Length mm
E548530	(64,50)	30	47.4	100
E548532	(67,80)	32	49.9	100
E548534	(88,19)	34	52.4	100
E548536	(86,54)	36	54.9	100
E548541	(87,64)	41	57	100
E548546	(99,22)	46	67	100

HEXAGONAL IMPACT SOCKETS 3/4" LONG VERSION

WRK

3/4"

ART. E5120

With 3/4" drive, long version. Burnished chrome molybdenum steel.

Tech. Code	GR52 Euro	○ mm	Ø External mm	Length mm
E512024	29,49	24	39	90
E512027	29,49	27	43	90
E512030	29,49	30	46	90
E512032	33,21	32	49	90

Tech. Code	GR52 Euro	○ mm	Ø External mm	Length mm
E512036	38,73	36	54	90
E512041	44,35	41	60	90
E512046	44,35	46	66	90

COUPLINGS EXTENSION FOR IMPACT SOCKETS

WRK

ART. E5340

Tech. Code	GR52 Euro	Coupling ■	Ø External mm	Length mm
E53401/2125	15,54	1/2"	25	125
E53401/2250	25,73	1/2"	25	250

Tech. Code	GR52 Euro	Coupling ■	Ø External mm	Length mm
E53403/4175	42,03	3/4"	44	175
E53403/4250	50,44	3/4"	44	250

UNIVERSAL JOINTS FOR IMPACT SOCKETS

WRK

ART. E5300

Universal joints for IMPACT socket spanners.

Tech. Code	GR52 Euro	Coupling ■	Ø External mm	Length mm
E53001/2	29,49	1/2"	28	63

Tech. Code	GR52 Euro	Coupling ■	Ø External mm	Length mm
E53003/4	57,40	3/4"	44	96

ADAPTER FITTINGS FOR IMPACT SOCKETS

WRK

ART. E5320

Tech. Code	GR52 Euro	Coupling □	Coupling ■	Ø External mm
E532002	15,39	1/2"	3/8"	25
E532003	29,87	3/4"	1/2"	44

Tech. Code	GR52 Euro	Coupling □	Coupling ■	Ø External mm
E532004	45,12	1"	3/4"	54

SCREWDRIVERS FOR SLOTTED SCREWS

WODEX

ART. WX4000

Screwdrivers **PREMIUM QUALITY** for slotted screws, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⊖ mm	⬣ blade mm	a mm	L mm
E56302,5X075	4,14	2.5 x 0.4	2.5	75	160
E56303,0X075	4,29	3.0 x 0.5	3.0	75	160
E56303,5X100	4,51	3.5 x 0.6	3.5	100	185
E56304,0X100	4,98	4.0 x 0.8	4.0	100	185

Tech. Code	GR51 Euro	⊖ mm	⬣ blade mm	a mm	L mm
E56305,5X100	5,78	5.5 x 1.0	4.8	100	200
E56306,5X125	7,20	6.5 x 1.2	6.3	125	235
E56308,0X175	10,71	8.0 x 1.2	8.0	175	295

2.5x75 - 3.0x75 - 3.5x100 - 4.0x100 mm with round blade

ART. WX4000/SE6

Composition:

2.5x75 - 3x75 - 3.5x100 - 4x100 - 5.5x100 - 6.5x125 mm

Tech. Code	GR51 Euro	Pieces
E563306	29,70	6

Boxed set

Indivisible package Suggested retail package - Unit price

SCREWDRIVERS FOR SLOTTED SCREWS 334 SK

ART. 334 SK

Screwdrivers for slotted screws, additional hexagonal for maneuver with socket, matt nickel chrome steel and lasertip treatment **Kraftform Plus** multi-component anti-rolling.

Tech. Code	GR53 Euro	⬌ mm	⬢ lama mm	a mm	L mm
E55653,5X075	8,69	3,5 x 0,6	4,0	75	156
E55654,0X090	10,72	4,0 x 0,8	4,0	90	171
E55654,5X090	12,05	4,5 x 0,8	5,0	90	188
E55655,5X100	15,40	5,5 x 1,0	5,5	100	198

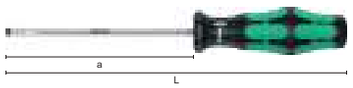
Tech. Code	GR53 Euro	⬌ mm	⬢ lama mm	a mm	L mm
E55656,5X125	17,73	6,5 x 1,2	6,0	125	230
E55657,0X125	23,20	7,0 x 1,2	6,0	125	230
E55659,0X150	25,37	9,0 x 1,6	8,0	150	262
E556510X175	27,36	10,0 x 1,6	8,0	175	287

3,5x75 e 4,0x90 mm without hexagonal maneuvering

SCREWDRIVERS FOR SLOTTED SCREWS 335

ART. 335

Screwdriver for slotted screws, round blade in matt nickel-chrome steel with Lasertip treatment. **Kraftform Plus** multi-component anti-rolling.



Tech. Code	GR53 Euro	⬌ mm	Ø blade mm	a mm	L mm
E55602,0X060	5,70	2,0 x 0,4	2,5	60	130
E55602,5X060	5,70	2,5 x 0,4	2,5	60	130
E55602,5X075	6,54	2,5 x 0,4	2,5	75	145
E55603,0X080	6,83	3,0 x 0,5	3,0	80	161
E55603,0X150	9,19	3,0 x 0,5	4,0	150	231
E55603,0X200	10,84	3,0 x 0,5	4,0	200	281
E55603,5X100	7,52	3,5 x 0,6	3,5	100	181
E55603,5X125	8,48	3,5 x 0,6	3,5	125	206
E55603,5X200	11,90	3,5 x 0,6	3,5	200	281

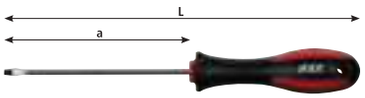
Tech. Code	GR53 Euro	⬌ mm	Ø blade mm	a mm	L mm
E55604,0X100	8,72	4,0 x 0,8	4,0	100	198
E55604,0X150	10,80	4,0 x 0,8	4,0	150	248
E55604,0X200	13,50	4,0 x 0,8	4,0	200	298
E55604,0X300	16,59	4,0 x 0,8	4,0	300	398
E55605,5X125	13,37	5,5 x 1,0	5,5	125	223
E55605,5X150	14,52	5,5 x 1,0	5,5	150	248
E55605,5X200	15,68	5,5 x 1,0	5,5	200	298
E55605,5X300	18,67	5,5 x 1,0	5,5	300	398
E55606,0X100	14,52	6,0 x 1,2	6,0	100	205

2,0 - 2,5 - 3,0 mm all lengths without Lasertip treatment - 4,0x300 e 5,5x300 mm

SCREWDRIVERS FOR SLOTTED SCREWS

ART. E5640

Chrome vanadium steel blade with burnished tip. Ergonomic bi-component grip.



Tech. Code	GR52 Euro	Dimension mm	Ø blade mm	a mm	L mm
E56404X75	3,36	4,0 x 0,8	4,0	75	175
E56404X150	3,74	4,0 x 0,8	4,0	150	250
E56406,5X100	5,13	6,5 x 1,2	6,0	100	210

Tech. Code	GR52 Euro	Dimension mm	Ø blade mm	a mm	L mm
E56408X150	7,24	8,0 x 1,2	7,0	150	270
E56408X175	7,97	8,0 x 1,2	7,0	175	296

While stocks last

SCREWDRIVERS STUBBY FOR SLOTTED SCREWS

ART. WX4020

Screwdrivers **PREMIUM QUALITY** for slotted screws, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⬌ mm	Ø blade mm	a mm	L mm
E56355,5X38	5,19	5.5 x 1.0	4.8	38	90

Tech. Code	GR51 Euro	⬌ mm	Ø blade mm	a mm	L mm
E56356,5X38	6,31	6.5 x 1.2	6.3	38	90

SCREWDRIVERS VDE 1000 VOLT INSULATED SERIES FOR SLOTTED SCREWS

ART. WX4030

Screwdrivers **PREMIUM QUALITY** for slotted screws with insulated blade and handle up to 1000 V DIN EN 60900 / VDE 0682-201. Blade in chrome-vanadium steel and hardened precision **BLACK-TIP** with surface hardness 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⬌ mm	a mm	L mm
E56452,5X075	6,99	2.5x0.4	75	160
E56453,0X100	7,31	3.0x0.5	100	185

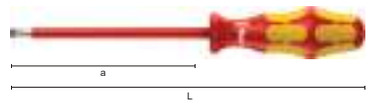
Tech. Code	GR51 Euro	⬌ mm	a mm	L mm
E56454,0X100	8,66	4.0x0.8	100	200
E56455,5X125	9,23	5.5x1.0	125	225

SCREWDRIVERS INSULATED SERIES FOR SLOTTED SCREWS 160I VDE

Wera

ART. 160 I VDE 1000 VOLT

Screwdrivers VDE Isolated up to 1000 volts, compliant with standard regulations IEC 60900 for slotted screws, Isolated round blade with Lasertip surface treatment of the tip. **Kraftform Plus** grip handle multi-component anti-rolling (measurement 2,5x80 and 3,0x100 without Lasertip treatment).



Tech. Code	GR53 Euro	⊖ mm	a mm	L mm
E56502,5X080	10,72	2,5x0,4	2,5	80
E56503,0X100	11,08	3,0x0,5	100	181
E56503,5X100	11,62	3,5x0,6	3,5	100
E56504,0X100	13,78	4,0x0,8	4	100

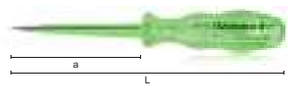
Tech. Code	GR53 Euro	⊖ mm	a mm	L mm
E56505,5X125	16,65	5,5x1,0	5,5	125
E56506,5X150	21,62	6,5x1,2	6,5	150
E56508,0X175	23,28	8,0x1,2	7	175
E565010X200	28,46	10,0x1,6	200	312

The Ø blade refers to terminal part without Isolation.

SINGLE-POLE VOLTAGE TESTERS STANDARD VDE

WODEX

ART. WX4190



Standard VDE 0680/6

Single-pole voltage testers **PREMIUM QUALITY** standard VDE 0680/6 with plastic handle, insulated blade and pocket clip, control range 105-250 Volt.

Tech. Code	GR51 Euro	⊖ mm	Ø blade mm	a mm	L mm
E589703	7,17	3.0 x 0.5	3	70	145

The products are available in CAP E

CONTACTLESS VOLT DETECTOR

wiha

ART. VOLT DETECTOR

Standard EN 61010-1 / IEC 61326 CAT IV 1.000 V AC

Contactless phase detector for the detection and localization of live conductors, interruptions and cable breaks, blown fuses, defective lamps and detection of single wires.

Features:

- Quick voltage checked by contactless measurement
- Can be used worldwide thanks to the measuring tip, suitable for all sockets
- Intergrated high brightness LED pocket lamp
- Auto-off function after 4 minutes of inactivity

Tech. Code	GR53 Euro	Tension Volt AC	Ø Tip mm	L mm	Ø max mm
E590412	62,89	12 - 1000	2	150	28,5
E590490	35,75	90 - 1000	2	150	28,5

The standard equipment includes 2 AAA batteries.

SCREWDRIVERS FOR PHILLIPS® SCREWS

WODEX

ART. WX4050

Screwdrivers **PREMIUM QUALITY** for Phillips® screws, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	⊕ PH	⬢ blade mm	a mm	L mm
E56900X060	4,82	0	3.0	60	145
E56901X080	5,60	1	5.0	80	180

Tech. Code	GR51 Euro	⊕ PH	⬢ blade mm	a mm	L mm
E56902X100	8,27	2	6.0	100	210
E56903X150	10,92	3	8.0	150	272

PH0x60 with round stem

ART. WX4050/S4

Composition:

PH0x60 - PH1x80 - PH2x100 - PH3x150 mm

Tech. Code	GR51 Euro	Pieces
E569304	29,15	4

Boxed set

Indivisible package Suggested retail package - Unit price

SCREWDRIVERS FOR PHILLIPS® SCREWS 350 SK PH

ART. 350 SK PH

Screwdrivers for phillips screws hexagonal blade, additional hexagonal to maneuver with socket, matt chrome-nickel and tip with surface treatment Lasertip. **Kraftform Plus** handle multi-component anti-rolling.

Tech. Code	GR53 Euro	⊕ PH	⬣ blade mm	a mm	L mm
E58120X060	11,20	0	4,0	60	141
E58121X080	12,43	1	5,0	80	178

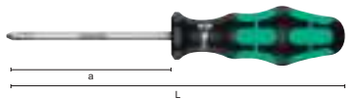
Tech. Code	GR53 Euro	⊕ PH	⬣ blade mm	a mm	L mm
E58122X100	17,42	2	6,0	100	205
E58123X150	25,67	3	8,0	150	262

PH0x60 mm without lasertip treatment and without hexagonal maneuver.

SCREWDRIVERS FOR PHILLIPS® SCREWS 350 PH

ART. 350 PH

Screwdrivers for phillips screws, round blade in matt chrome-nickel steel and surface treatment Lasertip.
Kraftform Plus multi-component handle anti-rolling.



Tech. Code	GR53 Euro	⊕ PH	Ø blade mm	a mm	L mm
E58100X060	9,61	0	3,0	60	141
E58100X100	10,10	0	3,0	100	181
E58101X080	11,86	1	4,5	80	178
E58101X200	13,62	1	4,5	200	298
E58102X100	16,57	2	6,0	100	205
E58102X150	18,33	2	6,0	150	255

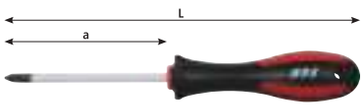
Tech. Code	GR53 Euro	⊕ PH	Ø blade mm	a mm	L mm
E58102X200	20,34	2	6,0	200	305
E58101X300	15,44	1	4,5	300	398
E58102X300	22,33	2	6,0	300	405
E58103X150	21,38	3	8,0	150	262
E58104X200	26,71	4	10,0	200	312

PH0x60 - PH1x300 - PH2x300 mm - without laser tip treatment)

SCREWDRIVERS FOR PHILLIPS® SCREWS

ART. E5700

Chrome vanadium steel blade with burnished tip. Bi-component ergonomic grip.



Tech. Code	GR52 Euro	⊕ PH	Ø blade mm	a mm	L mm
E57000X60	3,31	0	3,0	60	150
E57001X80	4,67	1	4,5	80	180
E57001X200	5,68	1	4,5	200	300
E57001X300	6,70	1	4,5	300	400
E57002X150	6,06	2	6,0	150	260

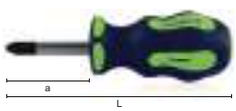
Tech. Code	GR52 Euro	⊕ PH	Ø blade mm	a mm	L mm
E57002X200	6,43	2	6,0	200	310
E57002X300	7,62	2	6,0	300	410
E57003X150	7,48	3	8,0	150	270
E57004X200	9,21	4	200	200	320
E57004X300	10,92	4	300	300	420

While stocks last

SCREWDRIVERS STUBBY SERIES FOR PHILLIPS® SCREWS

ART. WX4070

Screwdrivers **PREMIUM QUALITY** for Phillips® screws, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.



Tech. Code	GR51 Euro	⊕ PH	Ø blade mm	a mm	L mm
E56951X38	5,19	1	5.0	38	90

Tech. Code	GR51 Euro	⊕ PH	Ø blade mm	a mm	L mm
E56952X38	6,31	2	6.0	38	90

SCREWDRIVERS VDE 1000 VOLT INSULATED SERIES FOR PHILLIPS® SCREWS

ART. WX4080

Screwdrivers **PREMIUM QUALITY** for Phillips® screws with insulated blade and handle up to 1000 V DIN EN 60900 / VDE 0682-201. Blade in chrome-vanadium steel and hardened precision **BLACK-TIP** with surface hardness 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

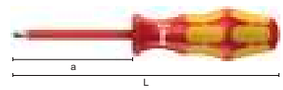
Tech. Code	GR51 Euro	⊕ PH	a mm	L mm
E58150X060	7,17	0	60	145
E58151X080	8,80	1	80	180

Tech. Code	GR51 Euro	⊕ PH	a mm	L mm
E58152X100	10,08	2	100	210

Indivisible package Suggested retail package - Unit price

SCREWDRIVERS INSULATED SERIES FOR PHILLIPS® SCREWS 162I PH VDE

Wera



ART. 162I PH VDE

VDE Isolated screwdrivers up to 1000 volt compliant with the standard regulations IEC 60900 for phillips screws with Isolated round blade and lasertip treatment of the tip **Kraftform Plus** grip handle muti-component, anti-rolling.
(Measurement PHO-80 without laser tip treatment).

Tech. Code	GR53 Euro	PH	a mm	L mm
E58200X080	12,13	0	80	161
E58201X080	15,37	1	80	178
E58202X100	20,76	2	100	205

Tech. Code	GR53 Euro	PH	a mm	L mm
E58202X200	(21,82)	2	200	305
E58203X150	22,28	3	150	262
E58204X200	(31,46)	4	200	312

The Ø blade refers to the terminal part without isolation.

SCREWDRIVERS FOR POZIDRIV® SCREWS

WODEX

ART. WX4100

Screwdrivers **PREMIUM QUALITY** for POZIDRIV® screws, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	PZ	⬣ blade mm	a mm	L mm
E57600X060	4,90	0	3.0	60	145
E57601X080	5,46	1	5.0	80	180

Tech. Code	GR51 Euro	PZ	⬣ blade mm	a mm	L mm
E57602X100	8,27	2	6.0	100	210
E57603X150	10,81	3	8.0	150	272

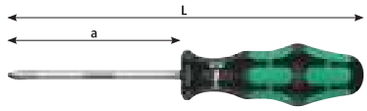
PZ0x60 mm with round stem

SCREWDRIVERS FOR POZIDRIV® SCREWS 355 PZ

Wera

ART. 335 PZ

Screwdrivers for POZIDRIV® screws, round blade in matt chrome-nickel steel and tip with lasertip treatment **Kraftform Plus** multi-component anti-rolling.



Tech. Code	GR53 Euro	PZ	Ø blade mm	a mm	L mm
E57770X060	(11,98)	0	3,0	60	141
E57771X080	13,81	1	4,5	80	178
E57771X200	(16,18)	1	4,5	200	298
E57771X300	(17,09)	1	4,5	300	398

Tech. Code	GR53 Euro	PZ	Ø blade mm	a mm	L mm
E57772X100	19,03	2	6,0	100	205
E57772X200	(22,28)	2	6,0	200	305
E57772X300	(23,04)	2	6,0	300	405
E57773X150	26,38	3	8,0	150	262

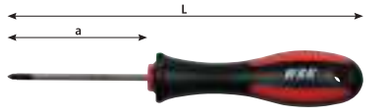
PZ0x60 - PZ1x300 - PZ2x300 mm without laser tip treatment

SCREWDRIVERS FOR POZIDRIV® SCREWS

WRK

ART. E5765

Chrome vanadium steel blade, with burnished tip, bi-component ergonomic grip.



Tech. Code	GR52 Euro	PZ	Ø blade mm	a mm	L mm
E57650X60	3,45	0	3,0	60	150
E57651X80	4,20	1	4,5	80	180
E57651X100	5,14	1	4,5	100	200
E57651X150	5,63	1	4,5	150	250
E57651X200	6,03	1	4,5	200	300
E57651X300	7,07	1	4,5	300	400
E57652X100	5,14	2	6,0	100	210

Tech. Code	GR52 Euro	PZ	Ø blade mm	a mm	L mm
E57652X125	5,38	2	6,0	125	235
E57652X150	6,42	2	6,0	150	260
E57652X200	6,83	2	6,0	200	310
E57652X300	7,95	2	6,0	300	410
E57653X150	8,35	3	8,0	150	270
E57654X200	11,11	4	10,0	200	320
E57654X300	12,30	4	10,0	300	420

While stocks last

SCREWDRIVERS VDE 1000 VOLT INSULATED SERIES FOR POZIDRIV® SCREWS

WODEX

ART. WX4130

Screwdrivers **PREMIUM QUALITY** for POZIDRIV® screws with insulated blade and handle up to 1000 V DIN EN 60900 / VDE 0682-201. Blade in chrome-vanadium steel and hardened precision **BLACK-TIP** with surface hardness 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantee maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	PZ	a mm	L mm
E57700X060	7,17	0	60	145
E57701X080	8,80	1	80	180

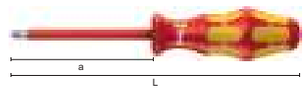
Tech. Code	GR51 Euro	PZ	a mm	L mm
E57702X100	10,08	2	100	210

Indivisible package Suggested retail package - Unit price

SCREWDRIVERS INSULATED SERIES FOR POZIDRIV® SCREWS 165I PZ VDE

ART. 165I PZ VDE

VDE Isolated screwdrivers up to 1000 Volt, compliant with the standard regulation IEC 60900, for POZIDRIV® screws, round Isolated blade and lasertip treatment tip **Kraftform Plus** grip handle multi-component anti-rolling.



Tech. Code	GR53 Euro	⊕ PZ	a mm	L mm
E57850X080	14,23	0	80	161
E57851X080	16,96	1	80	178
E57852X100	23,36	2	100	205

Tech. Code	GR53 Euro	⊕ PZ	a mm	L mm
E57853X150	25,40	3	150	262
E57854X200	(33,04)	4	200	312

The Ø blade refers to the terminal part without isolation

MICRO SCREWDRIVERS FOR SLOTTED SCREWS

ART. WX4040

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for slotted screws, satin chrome-vanadium steel blades and precision **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

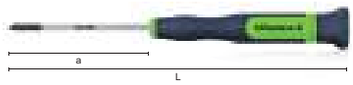
Tech. Code	GR51 Euro	⊖ mm	Ø blade mm	a mm	L mm
E58451,5X60	3,95	1.5 x 0.23	2.5	60	155
E58452,0X60	3,95	2.0 x 0.40	2.5	60	155
E58452,5X60	3,95	2.5 x 0.40	2.5	60	155

Tech. Code	GR51 Euro	⊖ mm	Ø blade mm	a mm	L mm
E58453,0X60	3,95	3.0 x 0.50	3.0	60	155
E58454,0X60	3,95	4.0 x 0.80	4.0	60	155

MICRO SCREWDRIVERS FOR PHILLIPS® SCREWS

ART. WX4090

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for Phillips® screws, satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



Tech. Code	GR51 Euro	⊕ PH	Ø blade mm	a mm	L mm
E584600X60	3,90	00	2.5	60	155
E58460X60	3,90	0	3.0	60	155

Tech. Code	GR51 Euro	⊕ PH	Ø blade mm	a mm	L mm
E58461X60	3,90	1	4.0	60	155

MICRO SCREWDRIVERS FOR POZIDRIV® SCREWS

ART. WX4140

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for Pozidriv® screws, satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

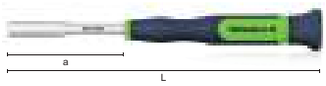
Tech. Code	GR51 Euro	⊕ PZ	Ø blade mm	a mm	L mm
E58470X60	3,90	0	3.0	60	155

Tech. Code	GR51 Euro	⊕ PZ	Ø blade mm	a mm	L mm
E58471X60	3,90	1	4.0	60	155

MICRO SCREWDRIVERS WITH HEXAGONAL SOCKET

ART. WX1957

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for hexagonal head screws and nuts, satin chrome-vanadium steel blades. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



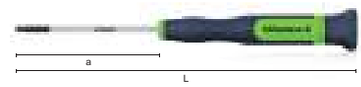
Tech. Code	GR51 Euro	○ mm	Blade Ø mm	a mm	L mm
E14802,5X60	5,94	2.5	4.0	60	155
E14803,0X60	5,94	3.0	5.0	60	155
E14803,5X60	5,94	3.5	5.3	60	155

Tech. Code	GR51 Euro	○ mm	Blade Ø mm	a mm	L mm
E14804,0X60	5,94	4.0	5.5	60	155
E14805,0X60	6,04	5.0	7.0	60	155
E14806,0X60	6,04	6.0	8.5	60	155

MICRO HEXAGONAL SCREWDRIVERS

ART. WX2847

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for hexagonal socket head screws, satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



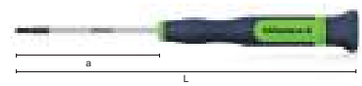
Tech. Code	GR51 Euro	⬢ mm	Blade Ø mm	a mm	L mm
E25500,9X60	4,40	0.9	2.5	60	155
E25501,3X60	4,13	1.3	2.5	60	155
E25501,5X60	4,13	1.5	2.5	60	155

Tech. Code	GR51 Euro	⬢ mm	Blade Ø mm	a mm	L mm
E25502,0X60	4,13	2.0	2.5	60	155
E25502,5X60	4,13	2.5	3.0	60	155
E25503,0X60	4,13	3.0	4.0	60	155

MICRO SCREWDRIVERS FOR TORX® SCREWS

ART. WX2947

Micro screwdrivers for electronics and fine mechanics **PREMIUM QUALITY** for TORX® screws, satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



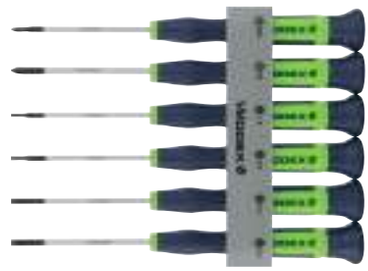
Tech. Code	GR51 Euro	✪	Blade Ø mm	a mm	L mm
E341405X60	4,88	T5	2.5	60	155
E341406X60	4,88	T6	2.5	60	155
E341407X60	4,88	T7	2.5	60	155
E341408X60	4,88	T8	3.0	60	155

Tech. Code	GR51 Euro	✪	Blade Ø mm	a mm	L mm
E341409X60	4,88	T9	3.0	60	155
E341410X60	4,88	T10	3.0	60	155
E341415X60	4,88	T15	4.0	60	155
E341420X60	4,88	T20	4.0	60	155

MICRO SCREWDRIVERS FOR SLOTTED AND PHILLIPS® SCREWS IN SET

ART. WX4380/S6

Set of 6 **PREMIUM QUALITY** micro screwdrivers for electronics and fine mechanics with support, satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



Composition:

WX4040 1.50x60 - 2.0x60 - 2.5x60 - 3.0x60 mm

WX4090 PH00x60 - PH0x60 mm

Tech. Code	GR51 Euro	Pieces
E588906	22,26	6

ART. WX2947/S6

Set of 6 **PREMIUM QUALITY** micro screwdrivers for electronics and fine mechanics with satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Set of screwdrivers complete with plastic holder.

Composition:

T6x60 - T7x60 - T8x60 - T9x60 - T10x60 - T15x60 mm

Tech. Code	GR51 Euro	Pieces
E341906	31,91	6

ART. WX2847/S6

Set of screwdrivers complete with plastic holder.

Composition:

0.9x60 - 1.3x60 - 1.5x60 - 2.0x60 - 2.5x60 - 3.0x60 mm

Tech. Code	GR51 Euro	Pieces
E255506	25,44	6

Indivisible package Suggested retail package - Unit price

MICRO SCREWDRIVERS KRAFTFORM-SET 2035/6 A

ART. 2035/6 A

Set of 6 screwdrivers **Kraftform Micro** for electronics and fine mechanics with practical bench rack support.

Composizione:
2050 PH MICRO PH00x60 - PH0x60 mm
2035 MICRO 1,8x0,30x60 - 2,0x0,40x60 - 2,5x0,40x80 - 3,0x0,50x80 mm

Tech. Code	GR53 Euro	Pieces
E589006	45,35	6

VOLTAGE AND CONTINUITY TESTER

ART. 45216

NEW

Voltage and continuity testers Wiha's CAT III to 1,000 V AC and CAT IV to 600 V AC allows you to check voltage in a wide range, from 12 to 1,000 V AC or 1,500 V DC, allows you to check continuity, the rotating optical field, unipolarity and automatic polarity detection. The measurement results are easy to read thanks to the LED display, an additional acoustic tone signals the current flow in the continuity check, and one-handed checking on the sockets is also possible, via the integrated spacer. By simultaneously pressing the buttons on the two handles of the tips, it is possible to test the operation of the circuit breaker.
Features:
- Single-phase 100 - 700 V AC phase test
- Rotating field test 170 - 1000 V phase to phase AC 50/60 Hz
- Continuity test 0 - 500 kΩ + 50%
- Own time < 0.5 s at 100% of the nominal value
- Safety current < 3.5 mA at 1.000 V
- Measurement mode 30 s ON operating time - 240 s OFF reset time
- Standard equipment includes 2 AAA batteries

Tech. Code	GR53 Euro	Tension AC	Tension DC	Protection IP	L mm
E621000	(138,00)	12 - 1000 V	12 - 1500 V	64	282

Measurement category CAT III up to 1,000 V and CAT IV up to 600 V - IEC 61243-3:2014

DIGITAL MULTIMETERS

ART. 45218

NEW

The digital multimeters Wiha CAT III up to 600 V and CAT IV up to 300 V allows you to measure voltage, current, resistance, frequency, capacitance and temperature, it also allows you to check continuity and carry out diode tests. The measurement results are readable immediately and during the measurement, thanks to a large LCD display and data hold function. An additional beep signals current flow in the continuity check. Thanks to the automatic selection of the measuring range, it is not necessary to pre-select the measuring ranges manually. Another benefit is relative value measurement. The storage of previous measurement results and the comparison with future ones enables the most diverse control possibilities.
Features:
- Temperature measurement -20°C to 500°C
- Diode test up to 2V
- Data storage
- Relative value measurement
- Standard equipment includes 2 AAA batteries

Tech. Code	GR53 Euro	Electrical current AC	Electrical current DC	Tension AC	Tension DC	Resistance MΩ	Frequence MHz	Capacity nF	L mm
E621200	(220,80)	10 A	10 A	0 - 600 V	0 - 600 V	40	5	100	150

Measurement categories IP40 CAT III 600 V and CAT IV 300 V

CLAMP METERS

ART. 45219

NEW

With the Wiha CAT IV 1000V clamp meters it is possible to carry out measurements via the fork without interrupting the electrical circuit, the one-handed and non-contact test is decidedly simplified, the sensors allow other AC and DC voltage measurement tests to be carried out , resistance, frequency and capacitance measurement, it is also possible to check continuity and carry out diode tests. This multifunctionality drastically increases efficiency, the measurement results are readable immediately and during the measurement, thanks to a large LCD display with backlighting and data hold function. An additional beep signals current flow in the continuity check. The LPF function together with the True RMS function increases the process reliability of your tests by providing interference-free actual values.
Features:
- Data storage
- Min/Max measurement
- Backlight
- Standard equipment includes 2 AAA batteries

Tech. Code	GR53 Euro	Tension DC	Tension AC	Current DC	Current AC	Resistance MΩ	Frequence MHz	Capacity µF	L mm
E621400	(506,00)	0 - 1500 V	0 - 1000 V	400 A	400 A	40	5	100	220

Measurement category IP40 CAT IV 1000 V

KRAFTFORM MICRO SCREWDRIVERS - KIT 12 FOR ELECTRONICS WITH POUCH

Wera

ART. 12 ELECTRONICS 1

Kit of 12 **Kraftform Micro** screwdrivers for electronics and fine mechanics with a practical pouch.

Composition:
- **2050 PH MICRO** PH000x40 - PH00x40 - PH0x40
- **2067 IPR MICRO** 1 IPRx44
- **2035 MICRO** 1,5x0,23x40 - 2,5x0,35x40
- **2069 MICRO** 2,5x60 - 3,0x60
- **2072** Microstix® mx40
- **1429** Estrattore 3,5x1,0
- **2067 MICRO - TORX BO** TX8x60 - TX10x60

Tech. Code	GR53 Euro	Pieces
E591012	109,51	12

SCREWDRIVERS PREMIUM QUALITY IN SET

WODEX

ART. WX4255/S5 - WX4255/S7 - WX4255/S8 - WX4255/S11

Set of **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head.
Compliant with RoHS and REACH directives.

Composition E608805 - WX4255/S5
- **WX4000** 3x75 - 4x100 - 5.5x100 mm
- **WX4050** PH1x80 - PH2x100 mm

Composition E608808 - WX4255/S8
- **WX4000** 2.5x75 - 3x75 - 4x100 - 5.5x100 6.5x125 mm
- **WX4050** PH0x60 - PH1x80 - PH2x100 mm

Composition E608807 - WX4255/S7
- **WX4000** 3x75 - 4x100 - 5.5x100 - 6.5x125 - 8x175 mm
- **WX4050** PH1x80 - PH2x100 mm

Composition E608811 - WX4255/S11
- **WX4000** 2.5x75 - 3x75 - 3.5x100 - 4x100 - 5.5x100 - 6.5x125 - 8x175 mm
- **WX4050** PH0x60 - PH1x80 - PH2x100 - PH3x150 mm

Tech. Code	GR51 Euro	Pieces
E608805	28,09	5
E608807	46,11	7
E608808	43,99	8
E608811	69,96	11

Boxed set

SCREWDRIVERS PREMIUM QUALITY IN SET

WODEX

ART. WX4260/S10 - WX4260/S15

Composition E609007 - WX4260/S7
- **WX4000** 3x75 - 4x100 - 5.5x100
- **WX4050** PH1x80 - PH2x100 mm
- **WX4100** PZ1x80 - PZ2x100 mm

Composition E609010 - WX4260/S10
- **WX4000** 2.5x75 - 3x75 - 4x100 - 5.5x100 - 6.5x125 mm
- **WX4050** PH0x60 - PH1x80 - PH2x100 mm
- **WX4100** PZ1x80 - PZ2x100 mm

Composition E609008 - WX4260/S8
- **WX4000** 3x75 - 4x100 - 5.5x100 - 6.5x125 mm
- **WX4050** PH1x80 - PH2x100 mm
- **WX4100** PZ1x80 - PZ2x100 mm

Composition E609015 - WX4260/S15
- **WX4000** 2.5x75 - 3x75 - 3.5x100 - 4x100 - 5.5x100 - 6.5x125 - 8x175 mm
- **WX4050** PH0x60 - PH1x80 - PH2x100 - PH3x150 mme
- **WX4100** PZ0x60 - PZ1x80 - PZ2x100 - PZ3x150 mm

Tech. Code	GR51 Euro	Pieces
E609007	41,87	7
E609008	48,76	8
E609010	57,77	10
E609015	99,11	15

Boxed set

Indivisible package Suggested retail package - Unit price

SCREWDRIVERS KRAFTFORM PLUS - SET 334/6

ART. 334/6

Set of 6 screwdrivers with **Kraftform Plus** handle and wall rack.

Composition:

- **334** 6,5x150
- **335** 3x80 - 4x100 - 5,5x125
- **350PH** 1x80 - PH 2x100

Tech. Code	GR53 Euro	Pieces
E610006	58,84	6

SCREWDRIVERS KRAFTFORM PLUS - SET

ART. 334/355/6

Set of screwdrivers **Kraftform Plus** grip handle and wall rack.

Composition:

- **355 PZ** PZ1x80 - PZ2x100 mm
- **335** 3,0x80 - 4,0x100 - 5,5x125 mm
- **334** 6,5x150 mm

Tech. Code	GR53 Euro	Pieces
E610506	58,84	6

SCREWDRIVERS KRAFTFROM PLUS - SET 335/350/355/6

ART. 335/350/355/6

Set of 6 screwdrivers **Kraftform** grip handle and wall support.

Composition:

- **350 PH** PH1x80 - PH2x100 mm
- **355 PZ** PZ1x80 - PZ2x100 mm
- **335** 4,0x100 - 5,5x125 mm

Tech. Code	GR53 Euro	Pieces
E611506	58,84	6

SCREWDRIVERS KRAFTFORM PLUS - SET 932/6

ART. 932/6

Set of 6 reinforced screwdrivers with **Kraftform Plus** handle and wall bracket rack.

Composition:

- **917 SPH** PH1x80 - PH2x100 mm
- **932 A** 3,5x80 - 4,5x90 - 5,5x100 - 7,0x125 mm

Tech. Code	GR53 Euro	Pieces
E614006	75,69	6

SCREWDRIVERS VDE 1000 VOLT INSULATED IN SET

ART. WX4350/S7 - WX4350/S8

Set of **PREMIUM QUALITY** screwdrivers with insulated blade and handle up to 1000 V DIN EN 60900 / VDE 0682-201. Blade in chrome-vanadium steel with hardened precision **BLACK-TIP** with surface hardness 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head.
Compliant with RoHS and REACH directives.

Composition E616707 - WX4350/S7

- **WX4030** 2.5x75 - 3.0x100 - 4.0x100 - 5.5x125 mm
- **WX4080** PH0x60 - PH1x80 - PH2x100 mm

Composition E616708 - WX4350/S8

- **WX4030** 2.5x75 - 3.0x100 - 4.0x100 - 5.5x125 mm
- **WX4080** PH0x60 - PH1x80 - PH2x100 mm
- **WX4190** Voltage tester 105-250 Volt 3.0x70 mm

Tech. Code	GR51 Euro	Pieces
E616707	43,99	7
E616708	49,82	8

Boxed set

Indivisible package Suggested retail package - Unit price

SCREWDRIVERS VDE 1000 VOLT INSULATED IN SET

WODEX

ART. WX4355/S7 - WX4355/S8

Composition E616807 - WX4355/S7
- **WX4030** 2.5x75 - 3.0x100 - 4.0x100 - 5.5x125 mm
- **WX4130** PZ0x60 - PZ1x80 - PZ2x100 mm

Composition E616808 - WX4355/S8
- **WX4030** 2.5x75 - 3.0x100 - 4.0x100 - 5.5x125 mm
- **WX4130** PZ0x60 - PZ1x80 - PZ2x100 mm
- **WX4190** Voltage tester 3.0x70 mm

Tech. Code	GR51 Euro	Pieces
E616807	43,99	7
E616808	49,82	8

Boxed set

ART. WX4360/S8 - WX4360/S10

Composition E616908 - WX4360/S8
- WX4030 2,5x75 - 3,0x100 - 4,0x100 - 5,5x125 mm
- WX4080 PH1x80 - PH2x100 mm
- WX4130 PZ1x80 - PZ2x100 mm

Composition E616910 - WX4360/S10
- WX4030 2,5x75 - 3,0x100 - 4,0x100 - 5,5x125 mm
- WX4080 PH0x60 - PH1x80 - PH2x100 mm
- WX4130 PZ0x60 - PZ1x80 - PZ2x100 mm

Tech. Code	GR51 Euro	Pieces
E616908	42,00	8
E616910	48,00	10

Boxed assortment

SCREWDRIVERS INSULATED SERIES - SET 160 I/6 VDE

Wera

ART. 160 I/6 VDE

Set of 6 Insulated screwdrivers 1000 Volts, compliant with the standard regulations IEC 60900, **Kraftform Plus** grip handle and wall support.

Composition:
- **162 i PH VDE** PH1x80 - PH2x100 mm
- **160 i VDE** 2,5x80 - 3,5x100 - 4,0x100 - 5,5x125 mm

Tech. Code	GR53 Euro	Pieces
E618006	51,79	6

ART. 160 I/7 VDE

Set of 7 VDE screwdrivers, insulated up to 1000 Volts, compliant with the standare regulations IEC 60900 standard, with **Kraftform Plus** handle and wall rack bracket.

Composition:
- **160I** 2,5x80 - 3,5x100 - 4x100 - 5,5x125
- **162I PH** 1x80 - PH 2x100
- **247** 3x70 PHASE-TESTING

Tech. Code	GR53 Euro	Pieces
E618507	65,28	7

ART. 160 I/165 I/7 VDE

Set of 7 VDE screwdrivers, insulated up to 1000 Volt, compliant with the standard regulations IEC 60900 standard, with **Kraftform Plus** grip handle and wall rack bracket.

Composition:
- **165 i PZ VDE** PZ1x80 - PZ2x100 mm
- **160 i VDE** 2,5x80 - 3,5x100 - 4,0x100 - 5,5x125 mm
- **247** 3,0x70 mm Single-pole

Tech. Code	GR53 Euro	Pieces
E619007	65,28	7

Indivisible package Suggested retail package - Unit price

SET OF SCREWDRIVERS STUBBY FOR SLOTTED AND PHILLIPS® SCREWS

ART. WX4270/S4

Set of **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Composition:

WX4020 5.5x38 - 6.5x38 mm
WX4070 PH1x38 - PH2x38 mm

Tech. Code	GR51 Euro	Pieces
E609404	20,14	4

Boxed set

SUPPORT FOR SCREWDRIVERS

ART. E6099

Wall mount supports for standard screwdrivers with provision for 7 assorted tools.
For round or hexagonal blades from 2 to 7 mm.
Holes for wall mounting Ø 4,8 mm - between holes 170 mm.

Tech. Code	GR53 Euro	Dimension mm
E609900	5,98	188 x 80 x 50

PERCUSSION IMPACT SCREWDRIVERS

ART. KRAFTFORM KOMPAKT 900 SET 1

NEW

Percussion impact screwdrivers 921 Kraftform Plus with interchangeable blade set.The impact of the hammer is converted into a rotary movement with a loosening torque of up to 25 Nm, if necessary it is possible to deativate the impact function and use the tool as a normal screwdriver.

Composition

Percussion handle 921 Kraftform Plus
Philips Insert bits 851S PH1x70 mm - PH2x70 mm - PH3X70 mm
Philips insert bits 855S PZ1z70 mm - PZ2x70 mm - Pz3x70 mm
TORX® Insert bits 867S T15x70 mm - T20x70 mm -T25x70 mm - T30x70 mm - T40x70 mm
Hexagonal Insert bits 840S HEX 2x70 mm - 4x70 mm - 5x70 mm - 6x70 mm
Slotted Insert bits 800S 4,0x70 mm - 5,5x70 mm - 6,5x70 mm
Textile case K 120

Tech. Code	GR53 Euro	Pieces
E630019	(154,44)	19

DYNAMOMETRIC SCREWDRIVERS

ART. ITORQUE®

Standard DIN EN ISO 6789

Dynamometric screwdrivers with interchangeable blade for right-handed controlled tightening with mechanical torque adjustment and large digital display for easy reading of torque values. Can also be used for unscrewing operations with a maximun force 30% higher than the preset torque.

Features:
- Adjustable mechanical torque on the end of the handle
- Easy to read digital display with torque indicaton
- Clearly audible click sound when preset torque is reached
- Counter of applications excuted "Click Control"
- Calibration Alarm" function upon reaching 5000 applications
- Switchable unit of measurement Nn- in.1b - cNm - in. oz
- Can be used with adapter for 1/4" hexagonal shank bits DIN 3126-C 6.3 (supplied)
- Can be used with adapter for 1/4" socket wrenches (optional)
- Can be used with extra thin interchangeable blades (optional)

Tech. Code	GR53 Euro	Capacity Nm	Tolerance +/-	Coupling O	Length mm	Ø max mm	For blades Series
E640015	307,80	0,4 - 1,5	6%	4	134	34	2859
E640030	307,80	0,8 - 3,0	6%	4	134	34	2859
E640050	316,60	1,0 - 5,0	6%	4	134	40	2859

Tools re-calibrated by the manufacture.

DYNAMOMETRIC SCREWDRIVERS

ART. TORQUEVARIO®-S

Standard DIN EN ISO 6789

Torque screwdrivers with interchangeable blade for right-handed controlled tightening with mechanical torque adjustment. Can also be used for unscrewing operations with a maximum force 30% higher than the preset torque.
Features:
- Value of the mechanical torque adjustable using the Torque-Setter adjustment tool
- Clear audible click when preset torque is reached
- Can be used with adapter for 1/4" hexagonal shank bits DIN 3126-C 6.3 (Optional)
- Can be used with adapter for 1/4" socket wrenches (Optional)
- Can be used with extra thin interchangeable blades (Optional)

Tech. Code	GR53 Euro	Capacity Nm	Tolerance +/-	Coupling ◉	Length mm	Ø max mm	For blade series
E64050410	(165,47)	0,04 - 0,46 *	10%	4	127	23	2859
E64050610	165,47	0,1 - 0,6	10%	4	127	23	2859
E6405066	224,55	0,1 - 0,6	6%	4	127	23	2859
E6405106	165,47	0,4 - 1,0	6%	4	127	23	2859
E6405206	183,77	0,5 - 2,0	6%	4	131	30	2859
E6405506	188,57	0,8 - 5,0	6%	4	138	36	2859
E6405706	202,84	2,0 - 7,0	6%	4	142	41	2859

*** Accuracy guaranteed in the torque range 0.1 - 0.46 Nm**
Torque adjustment tool included.

DYNAMOMETRIC SCREWDRIVERS IN SET

ART. TORQUEVARIO®-S

Standard DIN EN ISO 6789

Assortment in case complete with adapter and set of hexagonal shank inserts 1/4" DIN 3126-C 6,3.
Composizione **E601013A**:
- TorqueVario®-S screwdriver with adjustable torque 0,8 - 5,0 Nm
- Adapter for inserts with 1/4" hexagonal shank DIN 3126-C 6.3
- Tool for adjusting the Torque-Setter torque
-1/4"x25 Phillips® PH1 - PH2 bits
-1/4"x25 Pozidriv® PZ1- PZ2 bits
- 1/4"x25 hexagonal bits HEX 3 - HEX 4 mm
- 1/4"x25 Torx® T10 - T15 - T20 - T30 bits

Composition **E601013B**:
- TorqueVario®-S screwdriver with adjustable torque 0,8 - 5,0 Nm
- Adapter for bits with 1/4" hexagonal shank DIN 3126-C 6.3
- Tool for adjusting the Torque-Setter torque
- 1/4"x25 Torx® T7 - T8 - T9 - T10 - T15 bits
- 1/4"x25 Torx-Plus® 7IP - 8IP - 9IP - 10IP - 15IP bits

Tech. Code	GR53 Euro	Pieces
E641013A	224,54	13
E641013B	224,54	13

DYNAMOMETRIC SCREWDRIVERS

ART. TORQUEFIX®

Standard DIN EN ISO 6789

Interchangeable blade dynamometric screwdrivers with fixed mechanical torque for right-handed controlled tightening in series production and repetitive applications. Can also be used for unscrewing operations with a maximum force 30% higher than the fixed torque.
Features:
- Clearly audible click when factory set torque is reached
- Can be used with adapter for 1/4" hexagonal shank bits DIN 3126-C 6.3 (Optional)
- Can be used with adapter for 1/4" socket wrenches (Optional)
- Can be used with extra thin interchangeable blades Series 2859 (Optional)

Tech. Code	GR53 Euro	Capacity Nm	Tolerance +/-	Coupling ◉	Length mm	Ø max mm	For blade series
E641504	(135,97)	0,4	6%	4	112	23	2859
E641505	135,97	0,5	6%	4	112	23	2859
E641506	(135,97)	0,6	6%	4	112	23	2859
E641508	(135,97)	0,8	6%	4	112	23	2859
E641509	(135,97)	0,9	6%	4	112	23	2859
E641511	147,02	1,1	6%	4	119	30	2859
E641512	(147,02)	1,2	6%	4	119	30	2859
E641515	147,02	1,5	6%	4	119	30	2859
E641520	147,02	2,0	6%	4	119	30	2859
E641525	147,02	2,5	6%	4	119	30	2859
E641530	157,85	3,0	6%	4	126	36	2859
E641538	157,85	3,8	6%	4	126	36	2859
E641550	168,30	5,0	6%	4	132	41	2859
E641555	168,30	5,5	6%	4	132	41	2859
E641560	(168,30)	6,0	6%	4	132	41	2859
E641572	(168,30)	7,2	6%	4	132	41	2859

Indivisible package Suggested retail package - Unit price

BIT HOLDERS ADAPATORS SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

ART. 27526

Bit holder adapators 1/4 " hex shank DIN 3126-C 6.3 for **iTtorque**®, **TorqueVario**®**-S** and **TorqueFix**® torque screwdrivers.

Tech. Code	GR53 Euro	For Bits ◉	Coupling ◉	Ø max mm	Length mm
E642000	22,36	1/4"	4	11	162

ART. 285992

Socket wrench adapters for **iTtorque**®, **TorqueVario**®**-S** and **TorqueFix**® torque screwdrivers.

Tech. Code	GR53 Euro	For Sockets ■	Coupling ⬢	Length mm
E642200	12,57	1/4"	4	155

INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

ART. 28590 SLOTTED

Standard DIN ISO 2380-1

Interchangeable blades for **iTtorque**®**, TorqueVario**®**-S and TorqueFix**® torque. Version for slotted screws.

Tech. Code	GR53 Euro	mm	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E642515	8,10	1,5 x 0,25	4	175	42	0,15
E642520	8,10	2,0 x 0,4	4	175	42	0,4
E642525	8,10	2,5 x 0,4	4	175	42	0,4
E642530	8,10	3,0 x 0,5	4	175	42	0,6
E642535	8,10	3,5 x 0,6	4	175	42	1,1
E642540	8,10	4,0 x 0,8	4	175	42	2,5

(*) Maximum torque supported by the blade

ART. 28591 PHILLIPS®

Standard DIN ISO 8764-1

Interchangeable blades for dynamometric screwdrivers **iTtorque**®, **TorqueVario**®**-S** and **TorqueFix**® torque. Version for Phillips® screws

Tech. Code	GR53 Euro	⊕	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E6428A	8,10	PH000	4	175	42	0,4
E6428B	8,10	PH00	4	175	42	0,4
E6428C	8,10	PH0	4	175	42	0,9
E6428D	8,10	PH1	4	175	42	3,8
E6428E	8,10	PH2	4	175	42	5,5

***) Maximum torque supported by the blade**

INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

ART. 28593 HEX

Interchangeable blades for dynamometric screwdrivers **iTtorque**®, **TorqueVario**®**-S** and **TorqueFix**® torque. Version for screws with internal hexagon.

Tech. Code	GR53 Euro	⬢ mm	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E643413	8,10	1,3	4	175	42	0,4
E643415	8,10	1,5	4	175	42	0,9
E643420	8,10	2,0	4	175	42	1,8
E643425	8,10	2,5	4	175	42	3,8
E643430	8,10	3,0	4	175	42	5,5
E643440	8,10	4,0	4	175	42	8,0

***) Maximum torque supported by the blade**

INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

NEW

ART. 28597 HEX BALL POINT

Interchangeable blades for **iTorque®, TorqueVario®-S and TorqueFix®** screwdrivers
Version with spherical head for hexagon socket screws.

Tech. Code	GR53 Euro	⬢ mm	Coupling ⬢ mm	Total length mm	Usefull length mm	Torque max (*) Nm
E643715	8,10	1,5	4	175	42	0,4
E643720	8,10	2	4	175	42	0,9
E643725	8,10	2,5	4	175	42	2,0
E643730	8,10	3	4	175	42	3,8
E643740	8,10	4	4	175	42	8,0

(*) Maximum torque supported by the blade

INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

ART. 28595 TORX®

Interchangeable blades for dynamometric screwdrivers **iTtorque®**, **TorqueVario®-S** and **TorqueFix®** torque. Version for Torx® screws

Tech. Code	GR53 Euro	✪	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E643904	8,10	T4	4	175	42	0,25
E643905	8,10	T5	4	175	42	0,4
E643906	8,10	T6	4	175	42	0,6
E643907	8,10	T7	4	175	42	0,9
E643908	8,10	T8	4	175	42	1,3
E643909	8,10	T9	4	175	42	2,5
E643910	8,10	T10	4	175	42	3,8
E643915	8,10	T15	4	175	42	5,5
E643920	8,10	T20	4	175	42	8,0
E643925	8,10	T25	4	175	42	8,0

(*) Maximum torque supported by the blade

INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

ART. 28595R TORX® MAGICSPRING®

Interchangeable blades for dynamometric screwdrivers **iTtorque®, TorqueVario®-S and TorqueFix®.**
Version with stainless steel spring that reliably holds Torx® screws.

Tech. Code	GR53 Euro	✪	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E644006	10,46	T6	4	175	42	0,6
E644007	10,46	T7	4	175	42	0,9
E644008	10,46	T8	4	175	42	1,3
E644009	10,46	T9	4	175	42	2,5
E644010	10,46	T10	4	175	42	3,8
E644015	10,46	T15	4	175	42	5,5
E644020	10,46	T20	4	175	42	8,0
E644025	10,46	T25	4	175	42	8,0

(*) Maximum torque supported by the blade

INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

ART. 28596 TORX-PLUS®

Interchangeable blades for dynamometric screwdrivers **iTtorque®**, **TorqueVario®-S** and **TorqueFix®** torque. Version for screws with Torx-Plus® head

Tech. Code	GR53 Euro	✪	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E644405	8,26	5IP	4	175	42	0,5
E644406	8,26	6IP	4	175	42	0,8
E644407	8,26	7IP	4	175	42	1,3
E644408	8,26	8IP	4	175	42	2.0
E644409	8,26	9IP	4	175	42	3,0
E644410	8,26	10IP	4	175	42	4,5
E644415	8,26	15IP	4	175	42	6,6
E644420	8,26	20IP	4	175	42	8,0
E644425	8,26	25IP	4	175	42	8,0

(*) Maximum torque supported by the blade

Indivisible package Suggested retail package - Unit price

INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS

ART. 28596R TORX-PLUS® MAGICSPRING®

Interchangeable blades for dynamometric screwdrivers **iTtorque®**, **TorqueVario®-S** and **TorqueFix®** torque. Version with stainless steel spring that reliably holds Torx-Plus® screws

Tech. Code	GR53 Euro	○	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E644506	10,62	6IP	4	175	42	0,8
E644507	10,62	7IP	4	175	42	1,3
E644508	10,62	8IP	4	175	42	2,0
E644509	10,62	9IP	4	175	42	3,0
E644510	10,62	10IP	4	175	42	4,5
E644515	10,62	15IP	4	175	42	6,6
E644520	10,62	20IP	4	175	42	8,0
E644525	10,62	25IP	4	175	42	8,0

(*) Maximum torque supported by the blade

TORQUE WRENCHES WITH HANDLE

ART. TORQUEVARIO®-ST

Standard DIN EN ISO 6789

Torque wrenches with interchangeable blade for right-hand controlled tightening with mechanical torque adjustment. It can also be used for unscrewing operations with a maximum force 30% higher than the preset torque

Features:
- Value of the mechanical torque adjustable using the Torque-Setter adjustment tool
- Clear audible click when preset torque is reached
- Can be used with adapter for 1/4 "hexagonal shank bits DIN 3126-C 6.3 (supplied)
- Can be used with 1/4 "and 3/8" socket wrench adapters (Included)
- Can be used with interchangeable blades Series 2899 (Optional)

Composition of the set in case:
- TorqueVario®-ST adjustable torque wrench 5.0 - 14 Nm Toll. +/- 6%
- Adapter for inserts with 1/4 "hexagonal shank DIN 3126-C 6.3 Series 2899
- Adapter for 1/4 "x 120 mm socket wrenches Series 2899
- Adapter for 3/8 "x 120 mm socket wrenches Series 2899
- Tool for adjusting the Torque-Setter torque
- 1/4 "x25 hexagonal bits HEX 3 - HEX 4 - HEX 5 mm
- 1/4 "x25 Torx® T25 - T30 - T40 bits

Tech. Code	GR53 Euro	Pieces
E646211	377,27	11

TORQUE WRENCHES WITH HANDLE

ART. TORQUEFIX® KEY

Standard DIN EN ISO 6789

Extra compact interchangeable blade torque wrenches with fixed mechanical torque for right-handed controlled tightening of precision fasteners in critical situations with little room for maneuver, such as changing inserts for turning and milling. Can also be used for unscrewing operations with a maximum force 30% higher than the fixed torque.

Features:
- Clearly audible click when factory set torque is reached
- Can be used with interchangeable blades Series 28369 (Optional)

Tech. Code	GR53 Euro	Capacity Nm	Tolerance +/-	Coupling ◉	Length mm	Width mm	For blade series
E648005	86,44	0,5	6%	4	68	50	28369
E648006	(86,44)	0,6	6%	4	68	50	28369
E648009	86,44	0,9	6%	4	68	50	28369
E648011	86,44	1,1	6%	4	68	50	28369
E648012	86,44	1,2	6%	4	68	50	28369
E648014	86,44	1,4	6%	4	68	50	28369
E648020	86,44	2,0	6%	4	68	50	28369
E648025	86,44	2,5	6%	4	68	50	28369
E648030	86,44	3,0	6%	4	68	50	28369
E648038	86,44	3,8	6%	4	68	50	28369
E648040	86,88	4,0	6%	4	68	50	28369

INTERCHANGEABLE BLADES SERIES 28369 FOR TORQUE WRENCHES

ART. 283695 TORX®

Interchangeable blades for torque wrenches with TorqueFix® Key handle.
Version for Torx® screws

Tech. Code	GR53 Euro	○	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E648406	7,39	T6	4	75	20	0,6
E648407	7,39	T7	4	75	20	0,9
E648408	7,39	T8	4	75	20	1,3
E648409	7,39	T9	4	75	20	2,5
E648410	7,39	T10	4	75	20	3,8
E648415	7,39	T15	4	75	20	5,5
E648420	7,39	T20	4	75	20	8,0
E648425	7,39	T25	4	75	20	8,0

(*) Maximum torque supported by the blade

INTERCHANGEABLE BLADES SERIES 28369 FOR TORQUE WRENCHES

ART. 283696 TORX-PLUS®

Interchangeable blades for torque wrenches with **TorqueFix® Key** handle
Version for Torx-Plus® screws

Tech. Code	GR53 Euro	○	Coupling ⬢	Total length mm	Useful length mm	Torque max(*) Nm
E648606	7,06	6IP	4	75	20	0,8
E648607	7,06	7IP	4	75	20	1,3
E648608	7,06	8IP	4	75	20	2,0
E648609	7,06	9IP	4	75	20	3,0
E648610	7,06	10IP	4	75	20	4,5
E648615	7,06	15IP	4	75	20	6,6
E648620	7,06	20IP	4	75	20	8,0
E648625	7,06	25IP	4	75	20	8,0

(*) Maximum torque supported by the blade

DYNAMOMETRIC SCREWDRIVERS INSULATED UP TO 1000 VOLTS IN SET

ART. TORQUEVARIO®-S ELECTRIC

Standard IEC 60900 DIN EN ISO 6789
Insulated torque screwdrivers up to 1000 Volts with interchangeable blade for right-hand controlled tightening with mechanical torque adjustment. Can also be used for unscrewing operations with a maximum force 30% higher than the preset torque.
Features:
- Value of the mechanical torque adjustable using the Torque-Setter adjustment tool
- Clear audible click when preset torque is reached

Compostion **E654513**:
- Screwdriver dyamometric TorqueVario®-S Electric VDE adjustable torque 0.8 - 5.0 Nm
- Tool for adjusting the Torque-Setter torque
- Bit holder screwdriver SoftFinish® Electric VDE Slimario for Series 2831 Electric
- Adapter SlimTorque VDE Electric for Series 2831 Electric
- Blades Series 2831 Electric VDE 1000V blades with 2,5 - 3,5 - 5,5 mm cut
- Blades Series 2831 Electric VDE 1000V Phillips® PH1- PH2
- Blades Series 2831 Electric VDE 1000V Pozidriv® PZ1- PZ2 cross
- Blades Series 2831 Electric VDE 1000V blades with combined profile SL / PZ1 - SL / PZ2

Composition **E654518**:
- Screwdriver dynamometric TorqueVario®-S Electric VDE adjustable torque 0.8 - 5.0 Nm
- Tool for adjusting the Torque-Setter torque
- Adapter SlimTorque VDE Electric for Series 2831 Electric
- Blades Series 2831 Electric VDE 1000V blades with 2,5 - 3,5 - 5,5 - 6,5 mm cut
- Blades Series 2831 Electric VDE 1000V Phillips® PH1 - PH2
- Blades Series 2831 Electric VDE 1000V Pozidriv® PZ1 - PZ2 cross
- Blades Series 2831 Electric VDE 1000V blades with combined profile SL / PZ1 - SL / PZ2
- Blades Series 2831 Electric VDE 1000V Torx® T9 - T10 - T15 - T20 - T25

Torque Vario®-
S Electric torque screwdrivers in combination with the supplied Slim Torque VDE adapater, must only be used with series 2831 Electric interchangeable blades.

Tech. Code	GR53 Euro	Pieces
E654513	(310,78)	13
E654518	(365,00)	18

Indivisible package Suggested retail package - Unit price

STAHLWILLE®

QUALITY.
MADE IN STAHLWILLE

Stahlwille Perfect Control automated calibrating and adjusting unit

For the calibration and adjustment of all indication and trigger torque wrenches. Allows you to optimize the processes required by DIN EN ISO 6789-1:2017 and 6789-2:2017.

The Stahlwille laboratory

Your quality guarantee for periodic calibration services and extraordinary maintenance.
Ask your contact person for information.

MANOSKOP® 730 Quick service torque wrenches

with plug-in tool connection

If you are looking for a mechanical torque wrench that can be adjusted quickly for the next tightening operation, the MANOSKOP® 730 Quick is the ideal tool.

NO RESETTING
There is no need to reset the setting, as the load is only applied to the measuring element during tightening.

QUICK
Quick adjustment from the outside, without having to remove the torque wrench with the help of two adjustment points for the upper and lower value.

QUICK ADJUSTMENT
thanks to the easy-to-operate locking lever on the handle.

MADE IN CRONENBERG
MADE IN GERMANY

TORQUE INDICATOR SCREWDRIVERS PRE-SET FOR HEXAGON SOCKET SCREWS 300 HEX

ART. 300 HEX

Torque Indicators pre-set for **hexagon socket** screws, with excess load signal that is distinct audible and perceptible when the pre-set torque value is reached, unlimited torque loosening to unscrew blocked screws. Kraftform grip handle multi-component with anti-rolling protection. Precision: ± 10%

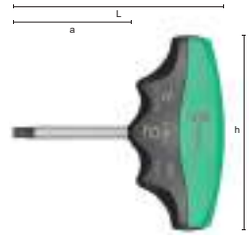
Tech. Code	GR53 Euro	○	Torque Nm	a mm	L mm
E662002	67,76	2	1,4	65	105
E662002,5	69,72	2,5	2	65	105
E662003	74,36	3	3	65	105

ART. 300 HEX

With pistol grip.

Tech. Code	GR53 Euro	⬢	Torque Nm	a mm	L mm	h mm
E662104	102,59	4	5	65	160	100

ART. 400 HEX



Torque Indicators with pre-set **hexagon socket** screws, with excess load signal that is distinct audible and perceptible when the pre-set torque value is reached, unlimited torque loosening to unscrew blocked screws. Grip T-handle multi-component with anti-rolling protection. Precision: ± 10%

Tech. Code	GR53 Euro	⬢	Torque Nm	a mm	L mm	h mm
E662704	91,64	4	4	60	108	100
E662705	91,64	5	5	60	108	100

ART. 300 TX

Factory pre-set fixed torque indicator screwdrivers for **TORX**® screws based on the recommended torques provided by leading hard metal tool manufactures. With a clearly audible and perceptible excess load signal when the pre-set torque is reached, unlimited torque for loosening seized screws. Multi-component **Kraftform** handle with anti-roll protection. Accuracy: ± 10%

Tech. Code	GR53 Euro	✪	Torque Nm	a mm	L mm
E66306	62,13	T6	0,6	65	170
E66307	62,77	T7	0,9	65	170
E66308	63,71	T8	1,2	65	170
E66309	67,76	T9	1,4	65	170
E663010	69,72	T10	2	65	170
E663015	74,36	T15	3	65	170

ART. 300 TX

With pistol grip.

Tech. Code	GR53 Euro	✪	Torque Nm	a mm	L mm	h mm
E663520	102,59	TX 20	0,5	65	160	100

Indivisible package Suggested retail package - Unit price

TORQUE INDICATOR SCREWDRIVERS

ART. 300 IP

Torque Indicators with pre-set for **TORX PLUS®** screws, set by the factory on the recommended torque by the largest hard metal tool manufactures with excess load signal that is distinct audible and perceptible when the pre-set torque value is reached, unlimited torque loosening to unscrew blocked screws. **Kraftform** grip handle multi-component with anti-rolling protection. Precision: ± 10%

Tech. Code	GR53 Euro	○	Torque Nm	a mm	L mm
E66606	65,23	6IP	0,6	65	170
E66607	65,80	7IP	0,9	65	170
E66608	66,36	8IP	1,2	65	170
E66609	70,77	9IP	1,4	65	170
E666010	73,38	10IP	2	65	170
E666015	77,70	15IP	3	65	170

ART. 300 IP

With pistol grip.

Tech. Code	GR53 Euro	○	Torque Nm	a mm	L mm	h mm
E666520	108,23	20 IP	5	65	160	100

ART. 7430 - 7431 - 7432 - 7440 - 7441

Torque screwdrivers series Kraftform 7400 with adjustable torque value without any special tools. Precision of measuremnt of ± 6% DIN EN ISO 6789 with excess load signal distinct audible and perceptible when the torque set value is reached. Model with rapidaptor technology with 1/4" hexagonal drive DIN ISO 1173-C 6.3 - E 6,3.

Tech. Code	GR53 Euro	○	Capacity Nm	Resolution step Nm	L mm
E66900,34	(143,29)	1/4"	0,1 - 0,34	0,015	142
E66901	143,29	1/4"	0,3 - 1,0	0,05	142
E66901,2	143,29	1/4"	0.3-1.2	0,05	155
E66901,5	(143,29)	1/4"	0,9 - 1,5	0,05	142
E66903	143,29	1/4"	1.2-3.0	0,10	155

ART. 7442 - 7443

With pistol grip.

Tech. Code	GR53 Euro	○	Capacity Nm	Resolution step Nm	L mm
E66916	206,07	1/4"	3,0 - 6,0	0,25	150
E66918,8	214,05	1/4"	4,0 - 8,8	0,40	150

TORQUE WRENCHES SLIP TYPE

ART. SAFE-TORQUE A 2

Ratchet torque wrenches with slip mechanism, for right-hand and left-hand tightening with 1/4" hexagonal drive bits DIN 3126 Form C 6.3. When the set torque value is reached, the tool locks, consequently it is not possible to apply excessive force Audible and sensitive click when the set torque values are reached The Torque-Lock function also allows the tool to be used as a standard ratchet wrench.

Tech. Code	GR53 Euro	Capacity Nm	Coupling ◉	Resolution Nm	L mm	Weight kg
E6692012	(393,12)	2 - 12	1/4"	0,10	244	0,55

The wrenches are supplied with the UNI EN ISO 6789 1-2017 calibration certificate

TORQUE WRENCHES CLICK-ACTION

Wera NEW

ART. CLICK-TORQUE A6

Torque wrenches Click-action for right-hand tightening with bits 1/4" hexagon drive DIN 3126 Form C 6.3, window with easily readable scale in Nm / lbf. ft., additional micrometer scale for setting the intermediate value, button for locking in reliable torque setting, audible and sensitive click mechanism when the preset torque is reached, ergonomic bi-component handle, torque tolerance +/- 4%

Tech. Code	GR53 Euro	Capacity Nm	Coupling ◉	Resolution Nm	L mm	Weight g
E6693025	268,23	2,5 - 25	1/4"	0,10	290	517

The wrenches are supplied with the UNI EN ISO 6789 1-2017 calibration certificate

CLICK TYPE TORQUE SCREWDRIVERS

STAHLWILLE

ART. 775

TORSIOMAX 775 click type torque screwdrivers for controlled anti-clockwise or clockwise tightening in cNm and·lb ranges. Adjustable via micrometer scale with disengaging clutch that prevents the pre-set values from being exceeded.
The shape of the handle and its surface texture ensure safe and accurate transmission of torque.
Display deviation value ± 6%. 1/4" Internal hex drive (F 6.3 DIN 3126/ISO1173) for bits. Supplied with test certificate.
Specifications:
E6695003 - With swivel handle
E6695012/030/050 - With additional locking mechanism for selected torque
E6695100 - With additional screw-on handle

Tech. Code	GR56 Euro	Capacity	Internal Nm	Resolution step Nm	Weight mm	Figure n°
E6695003	370,42	0.02 - 0.3	0,02 - 0,3	0,002	105	1
E6695012	393,57	0.2 - 1.2	0,2 - 1,2	0,01	157	2
E6695030	437,66	0.4 - 3	0,4 - 3,0	0,01	160	2
E6695050	446,49	1/4"	1,0 - 5,0	0,025	205	2
E6695100	(626,19)	1/4"	4,0 -10,0	0,05	235	3

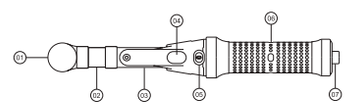
I giraviti vengono forniti con il certificato di taratura UNI EN ISO 6789 1-2017

TORQUE WRENCHES SLIP TYPE

WODEX

ART. WX6350

Standard DIN ISO 6789 - 1:2017
Slipping mechanical torque wrenches, the exclusive slip mechanism continuously eliminates the risk of over-tightening. 36-tooth mechanism with ratchet function for controlled clockwise direction, window with easily readable Nm scale, additional micrometre scale for setting the intermediate value, button that allows to reliably lock the torque setting way. Ergonomic handle. Torque tolerance +/- 6%.



Features:
01 - Ratchet mechanism for clockwise applications
02 - Sturdy and resistant chromed steel tube Ideal for Industrial use
03 - Serial number for traceability
04 - Window with scale in N-m
05 - Micrometre scale for precise torque
06 - NBR anti-slip ergonomic handle
07 - Button for locking the torque setting

Tech. Code	GR57 Euro	Capacity Nm	Coupling ■	Resolution Nm	L mm	Weight g
E6696005	195,04	1 - 5	1/4"	0.05	260	520
E6696010	207,76	2 - 10	1/4"	0.10	260	520

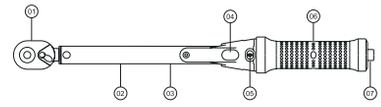
The wrenches are supplied with a UNI EN ISO 6789 1-2017 calibration certificate

TORQUE WRENCHES CLICK-ACTION

WODEX

ART. WX6361

Standard DIN ISO 6789 - 1:2017
Mechanical ratchet torque wrenches for right-hand tightening with socket wrenches. Ratchet with "Quick release" device for quick tool change, window with easily readable Nm scale, additional micrometre scale for setting the intermediate value, button that allows you to reliably lock the torque setting. Ergonomic handle in plastic material. Torque tolerance +/- 3%.



Features:
01 - Ratchet mechanism
02 - Sturdy and resistant chromed steel tube Ideal for Industrial use
03 - Serial number for traceability
04 - Window with scale in N-m
05 - Micrometre scale for precise torque
06 - NBR anti-slip ergonomic handle
07 - Button for locking the torque setting

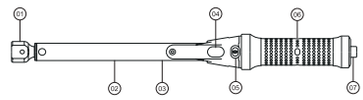
Tech. Code	GR57 Euro	Capacity Nm	Coupling ■	Resolution Nm	L mm	Weight g
E6702025	145,00	5 - 25	1/4"	0.10	296	410
E6702050	154,00	10 - 50	3/8"	0.25	333	470
E6702100	170,66	20 - 100	1/2"	0.50	400	820
E6702200	185,50	40 - 200	1/2"	1.00	500	1300
E6702300	194,00	60 - 300	1/2"	1.00	635	1470

The wrenches are supplied with a UNI EN ISO 6789 1-2017 calibration certificate

Indivisible package Suggested retail package - Unit price

TORQUE WRENCHES CLICK-ACTION

ART. WX6370



Standard DIN ISO 6789 - 1:2017

Mechanical click-action torque wrenches for tightening with standard tool coupling 9x12mm. Quick-release mechanism for quick tool removal, window with scale easily readable in Nm, additional micrometre scale for setting the intermediate value, a button that reliably locks the torque setting. Ergonomic plastic handle. Torque tolerance +/- 4%.

Features:

01 - Connection with rectangular cavity 9x12 mm
02 - Sturdy and resistant chromed steel tube Ideal for Industrial use
03 - Serial number for traceability
04 - Window with scale in N-m
05 - Micrometre scale for precise torque
06 - NBR anti-slip ergonomic handle
07 - Button for locking the torque setting

Tech. Code	GR57 Euro	Capacity Nm	Coupling mm	Resolution Nm	L mm	Weight g
E6698025	124,02	5 - 25	9 x 12	0.10	265	440
E6698050	134,00	10 - 50	9 x 12	0.25	330	530
E6698100	144,16	20 - 100	9 x 12	0.50	410	1030

The wrenches are supplied with a UNI EN ISO 6789 1-2017 calibration certificate

TORQUE WRENCHES SLIP TYPE

ART. SAFE-TORQUE A 1

Ratchet torque wrenches with slip mechanism, for right-hand and left-hand tightening with 1/4" square drive sockets. When the set torque value is reached, the tool locks, meaning that excessive force cannot be applied. Click audible and sensitive to the achievement of the set torque values.The Torque-Lock function allows the tool to be used also as a standard ratchet wrench.

Tech. Code	GR53 Euro	Capacity Nm	Coupling ■	Resolution Nm	L mm	Weight kg
E670312	(383,40)	2 - 12	1/4"	0,10	244	0,55

The wrenches are supplied with the UNI EN ISO 6789 1-2017 calibration certificate

TORQUE WRENCHES CLICK-ACTION

ART. CLICK-TORQUE A5 - B1 - C2 - C3

Torque wrenches click-action for right-hand tightening with socket wrenches, window with easily readable scale in Nm / lbf. ft., additional micrometer scale for setting the intermediate value, button for reliably locking the torque setting, audible and sensory click mechanism when the preset torque is reached, ergonomic two-component handle. Torque tolerance +/- 3% (E6704025 Tolerance +/- 4%).

Tech. Code	GR53 Euro	Capacity Nm	Coupling ■	Resolution Nm	L mm	Weight g
E6704025	257,16	2,5 - 25	1/4"	0,10	290	522
E6704050	274,38	10 - 50	3/8"	0,25	360	1056
E6704100	290,38	20 - 100	1/2"	0,50	405	1240
E6704200	(306,37)	40 - 200	1/2"	1,00	510	1457

The wrenches are supplied with the UNI EN ISO 6789 1-2017 calibration certificate

TORQUE WRENCHES CLICK-ACTION

ART. WX6380

Standard DIN ISO 6789 - 1:2017

Mechanical torque wrenches **Premium Quality** with sliding square drive for bidirectional tightening. Torque adjustment is quick and precise thanks to a retractable jointed lever housed in the handle. Once the lever is removed, it is rotated until the required tightening torque is reached. The handle of the wrench rotates freely to avoid accidentally altering the preset torque.

Features:

- Sturdy structure in satin-chrome steel
- Ergonomic plastic handle for wrenches with max torque up to 400 Nm
- Phosphated steel handle for wrenches with max torque from 600 to 2000 Nm
- Thrust bearing for simple, fast and precise adjustments
- Acoustic release signal when the pre-set torque is reached
- Relief of effort when the pre-set torque is reached
- Automatic reset for the subsequent closing operation
- Graduated scale in Nm - Kgfm - Lbf.in - Lbf.ft
-Tightening accuracy ± 4% according to the standard requirements of the ISO 6789 1-2017

Tech. Code	GR57 Euro	Capacity Nm	Coupling ■	Resolution Nm	A mm	B mm	L mm	Weight kg
E66990033	243,00	5 - 33	3/8"	1	32.5	12.5	403	0.7
E66990068	243,00	12 - 68	3/8"	2	32.5	15	475	1.0
E66990150	245,00	25 - 150	1/2"	5	48.5	15	587	1.7
E66990250	280,00	50 - 250	1/2"	10	48.5	15	605	2.3
E66990350	344,00	70 - 350	1/2"	10	51.5	15	776	3.0
E66990600	684,00	100 - 600	3/4"	20	62.1	25	860	5.5
E66990800	877,00	140 - 800	3/4"	20	62.1	25	930	6.5
E66991000	1072,00	200 - 1000	1"	25	78.1	30	1025	9.7
E66992000	2904,00	500 - 2000	1"	50	88.1	30	1395	18

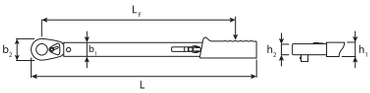
The wrenches are supplied with an ISO 6789 1-2017 calibration certificate

TORQUE WRENCHES WITH RATCHET

STAHLWILLE

ART. 721 QUICK

Torque wrenches standard **MANOSKOP® 721 Quick release**, double stop signal, perfect readability of the dual reading scale in N•m/ft•lb thanks to the magnifying glass. Body made from a sturdy steel tube, protects all delicate components, erogomic bi-component handle, equipped with practical soft inserts, resistant to oil, grease, fuel, brake fluids and phosphate based fluids. Deviation of indication ± 4%.



Tech. Code	GR56 Euro	Capacity Nm	Coupling ■	b1 mm	b2 mm	h1 mm	h2 mm	L mm	LF mm
E6708005	396,88	6 ÷ 50	3/8"	28	27,5	23	14,5	352	293
E6708015	399,08	30 ÷ 150	1/2"	28	41	23	18	452	387
E6708020	428,85	40 ÷ 200	1/2"	28	41	23	18	483	418
E6708030	493,90	60 ÷ 300	1/2"	28	44	23	27,5	552	486

The torque wrenches are supplied with a UNI EN ISO 6789 1-2017 certificate

TORQUE WRENCHES CLICK-ACTION

STAHLWILLE

ART. 730 QUICK

NEW

Torque wrenches click-action **MANOSKOP® 730 Quick** with holder for interchangeable pin tools,**QuickRelease** safety lock, fast and precise setting thanks to magnifying glass integrated in the reading window, double stop signal, anti-clockwise clamping option with reversible pin tools, ergonomic 2-component handle equipped with soft inserts resistant to oils and greases. Indication deviation ± 4%

Tech. Code	GR56 Euro	Capacity Nm	Connection mm	b mm	h mm	L mm	LF mm	SF mm
E6706002	316,39	4 ÷ 20	9 x 12	27,5	23,6	179	157,2	17,5
E6706004	321,91	8 ÷ 40	9 x 12	27,5	23,6	223	200,8	17,5

The wrenches are supplied with the UNI EN ISO 6789 1-2017 calibration certificate

ART. 730 QUICK

NEW

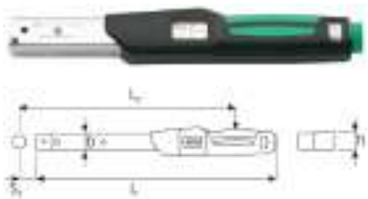
Tech. Code	GR56 Euro	Capacity Nm	Connection mm	b mm	h mm	L mm	LF mm	SF mm
E6707005	321,91	6 ÷ 50	9 x 12	28	23	315	288	17,5
E6707010	341,76	20 ÷ 100	9 x 12	28	23	370	370	17,5
E6707012	(353,88)	25 ÷ 130	14 x 18	28	23	410	390	25
E6707020	(389,16)	40 ÷ 200	14 x 18	28	23	455	435	25
E6707040	(566,65)	80 ÷ 400	14 x 18	28	23	590	570	25
E6707065	(840,05)	130 ÷ 650	14 x 18	30,6	25,6	875	855	25

The wrenches are supplied with the UNI EN ISO 6789 1-2017 calibration certificate

TORQUE WRENCHES FOR INSERT TOOLS

STAHLWILLE

ART. 730N



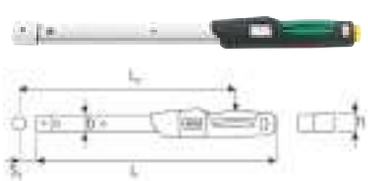
Torque wrenches **MANOSKOP® 730N** with tool holder for male interchangeable insert tools, **QuickRelease,** safety lock, quick and precised settings thanks to **QuickSelect** adjustment.
Double stop signal, perfect readability of the dual reading scale chromatic difference of the directions in Nm/ftlb and ftlb/inch, possibility of left-handed clamping with reversible male Insert tools.
Erogomic handle of 2 components, equipped with practical soft inserts, resistant to oil,grease,fuel
brake fluids and phosphate based fluids. Devation of Indication ± 3%. Supplied with calibration ratio.

Tech. Code	GR56 Euro	Capacity Nm	Connection mm	b mm	h mm	L mm	L F mm	S F mm
E6710002	341,76	4 ÷ 20	9 x 12	28	23	275	226	17.5
E6710005	350,58	10 ÷ 50	9 x 12	28	23	330	280.5	17.5
E6710010	391,36	20 ÷ 100	9 x 12	28	23	386	336	17.5
E6710012	414,51	25 ÷ 130	14 x 18	28	23	421	379	25
E6710020	446,49	40 ÷ 200	14 x 18	28	23	467	424	25
E6710040	650,44	80 ÷ 400	14 x 18	28	23	607	564.5	25
E6710065	(970,14)	130 ÷ 650	14 x 18	30.6	25.6	890	848	25
E6710066	(996,60)	130 ÷ 650	22 x 28	30.6	25,6	911	900	55
E6710080	(1257,88)	160 ÷ 800	22 x 28	30.6	25,6	1178	1167	55
E6710100	(1570,97)	200 ÷ 1000	22 x 28	30.6	25,6	1363	1352	55

The torque wrenches are supplied with a UNI EN ISO 6789 1-2017 certificate

ART. 730 FIX

Recommended wrenches for work in series production thanks to the removable adjustment button thus avoiding unintentional changes of the preset nominal torque.



Tech. Code	GR56 Euro	Capacity Nm	Connection mm	b mm	h mm	L mm	LF mm	SF mm
E6713005	(461,92)	10-50	9 x 12	28	23	330	280,5	17,5
E6713010	(493,90)	20-100	9 x 12	28	23	386	336	17,5
E6713012	(511,53)	25-130	14 x 18	28	23	421	379	25
E6713020	(523,66)	40-200	14 x 18	28	23	467	424,5	25
E6713040	(767,29)	80-400	14 x 18	28	23	607	564,5	25
E6713065	(1157,56)	130-650	14 x 18	30,6	25,6	890	848	25

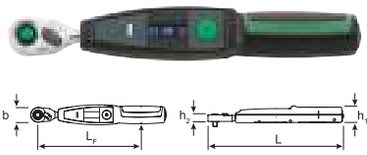
The wrenches are supplied with calibration certificate UNI EN ISO 6789 1-201

Indivisible package Suggested retail package - Unit price

ELECTRONIC TORQUE WRENCHES

STAHLWILLE

ART. 701/2



Electronic torque wrenches **SENSOTORK® 701** from a very slim and compact shape to pairs reduced from 1 Nm, unit of measure: N·m, cN·m, ft·lb, in·lb, Idependent measurement of the point of attachment of the force, additional functions with SENSOMASTER 4 downloadable software for free, possibility to set the screwing situation, process evaluation screwing with coloured LED buzzer and vibration. Deviation of indication ± 4%. Equipped with calibration ratio. Standard equipment includes 1 lithium Battery 3,6 V, type 14500.

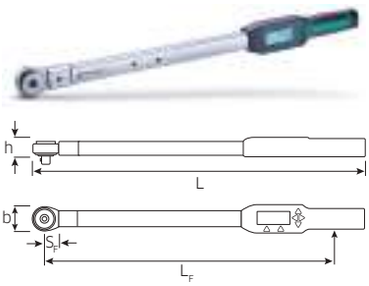
Tech. Code	GR56 Euro	Capacity Nm	Coupling ■	b mm	h1 mm	h2 mm	L mm	LF mm
E6715002	573,27	1-20	1/4"	22,6	26	10	210	160

The torque wrenches are supplied with UNI EN ISO 6789 1-2017 certificate

TORQUE WRENCHES INDICATING AND CLICK-TYPE ANGLE-CONTROLLED

STAHLWILLE

ART. SENSOTORK® 713R.



SENSOTORK® 713R rotary angle controlled rotating angle wrenches, simple and flexible, controlled by wide-screen menus, particularly wide range ranges (from 5% to 100% of nominal value) **QuickRelease** lock for right and left-hand clamping, measurement independent of the force attachment point, measurement unit: N·m, ft·lb, in·lb, possibility of adjusting the moment of notice of visual signals, tactile and acoustic, torque and angle of rotation visible simultaneously, practical rotation angle measurement without reference arm in an extremely wide range of rotation angles, possibility of adjusting the individual lengths of the clamping tools, recapitulation of recurrent screwing events in a menu controlled flow control, rescue of screwing or unscrewing processes, possibility of individual identification, protection from in voluntary modification of the set regulation and password intervention, according to DKD-R 3-7, class 2
Deviation of rotation angle indication ± 1°, indication deviation ± 1%. Equipped with calibration ratio. The standard equipment includes the ratchet 735 and 2 1.5V mignon batteries.

Tech. Code	GR56 Euro	Capacity Nm	Connection mm	Coupling ■	b mm	h mm	L mm	LF mm	SF mm
E6714006	(1778,23)	3 ÷ 60	9 x 12	3/8"	50	33,5	378	299	17,5
E6714020	(1887,37)	10 ÷ 200	14 x 18	1/2"	50	33,5	608	524	25
E6714040	(2070,38)	20 ÷ 400	14 x 18	3/4"	50	33,5	838	750	25

The torque wrenches are supplied with UNI EN ISO 6789 1-2017 certificate

TORQUE WRENCHES INDICATING AND CLICK-TYPE ANGLE-CONTROLLED

STAHLWILLE

ART. MANOSKOP® 714R

Torque wrenches **MANOSKOP® 714R** Indicating and cut-out angle controlled,4 measurement modes (torque, angle of rotation, torque with measurement of control, angle of rotation with torque measurment control), high resolution color display with additional side indicator lights, freely configurable menu structure, 3 operating modes: cut-out type, Peak Hold (Peak Hold Indication) and Track (Momentary Display) Micro USB Interface, QuickRelease Lockout, Rotation Angle Measurement Without reference arm , data storage (≤ 2,500 screwing or unscrewing processes), up to 200 programmable screw or unscrewing cases in max. 25 programs, choice of different tolerance limits depending on the specific situation of screwing, acoustic and visual evaluation in the case of the screws, quick and precise keyboard setting, automatic key lock, overload protection by acoustic and optical signal warning (dx), automatic warning for the next calibration after the time interval and / or the number of stresses, calibration and fully automatic adjustment with the calibration and adjustment device perfect Control n. 7794-2 (torque) or 7794-3 (torque and angle of rotation), unit of measurement:
N · m, ft · lb, in · lb, simple insertion of lever extension for clamping tools, right-hand clamping left-hand side, torque and angle of rotation visible simultaneously. Rotation angle indication resolution 0.1°, angle of rotation angle difference ± 1%, ± 1 digitTorque indication resolution <60 N·m: 0,01 N·m; > 60 N·m: 0,1 N·m, torque deviation ± 2%, ± 1 digitEquipped with 2 calibration ratios (torque, angle of rotation). Standard equipment includes 725/4 ratchet for 1/4 "and 735 for other measurements, **SENSOMASTER** Basic software, USB cable, 4 Micro AAA / LR03 1.5 V batteries

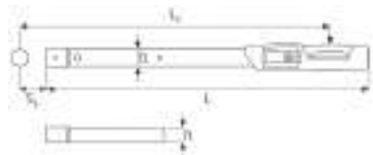
Tech. Code	GR56 Euro	Capacity Nm	Connection mm	Coupling ■	b mm	h mm	L mm	LF mm	SF mm
E6712001	(1643,73)	1 ÷ 10	9 x 12	1/4"	28	23	226	188	17,5
E6712002	(1643,73)	2 ÷ 20	9 x 12	1/4"	28	23	226	188	17,5
E6712004	(1728,62)	4 ÷ 40	9 x 12	1/4"	28	23	252	214	17,5
E6712006	(1728,62)	6 ÷ 60	9 x 12	3/8"	28	23	393	355	17,5
E6712010	(1802,48)	10 ÷ 100	9 x 12	1/2"	28	23	466	428	17,5
E6712020	(1825,63)	20 ÷ 200	14 x 18	1/2"	28	23	547	516	25
E6712040	(2033,99)	40 ÷ 400	14 x 18	3/4"	28	23	687	656	25
E6712065	(2471,66)	65 ÷ 650	22 x 28	3/4"	30,6	25,6	890	890	55
E6712080	(2958,94)	80 ÷ 800	22 x 28	3/4"	30,6	25,6	1158	1158	55
E6712100	(3117,69)	100 ÷ 1000	22 x 28	3/4"	30,6	25,6	1343	1343	55

The torque wrenches are supplied with 2 certificates of calibration, torque and rotation angle

TORQUE WRENCHES ELECTROMECHANICAL WITH MOUNT FOR INSERTS

STAHLWILLE

ART. 730D



Electromechanical torque wrench with tactile and acoustic signal,mount for interchangeable insert tools with **QuickRelease** safety lock, quick setting keyboard.Overload protection with acoustic and visual warning signal, automatic block to prevent unintentional adjustment of the setting, measurement angle of rotation without reference arm thanks to the use of angular module ofrotation n. 7395-1, anti-clockwise torque. Measurement Units: N · m,ft · lb, in · lb with the possibility of choosing between different tolerance limits depending on the specific situation of screwing, visual evaluation of the specific screw situation by means of a green and red warning on the display. Additional protection of pre-sets by PIN code possibility tostore, up to 7,500 clamping data, USB interface, automatic calibration alertnext. Deviation of indication ± 2%, handle with knob ± 1 digit 2-component handle practical soft and oil-resistant inserts, grease, fuel, brake fluids and phosphate-based fluids.
Supplied with Sturdy plastic case (40-100 in steel sheet cassettes), battery 1.5V (Rechargeable mignon batteries can also be used, NiMH AA / LR6 12V).

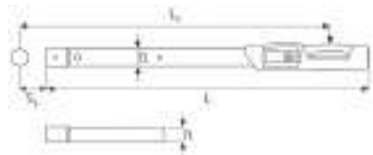
Tech. Code	GR56 Euro	Capacity Nm	Connection mm	b mm	h mm	L mm	LF mm	SF mm
E6705010	(627,29)	10 ÷ 100	9 x 12	28	23	467	426,5	11,5
E6705020	(674,69)	20 ÷ 200	14 x 18	28	23	548	515	25
E6705040	(937,07)	40 ÷ 400	14 x 18	28	23	688	655	25
E6705050	(1157,56)	65 ÷ 650	14 x 18	30,6	25,6	870	837	25

The torque wrenches are supplied with UNI EN ISO 6789 1-2017 certificate

TORQUE WRENCHES ELECTROMECHANICAL

STAHLWILLE

ART. MANOSKOP® 730DR



Specific:
Torque wrenches 730D equipped with ratchet model 735, in version HD for the wrenches 65-650 Nm

Tech. Code	GR56 Euro	Capacity Nm	Connection mm	Coupling ■	b mm	h mm	L mm	LF mm	SF mm
E6709010	(729,81)	10 ÷ 100	9 x 12	1/2"	28	23	467	426,5	17,5
E6709020	(779,42)	20 ÷ 200	14 x 18	1/2"	28	23	548	515	25
E6709040	(1082,59)	40 ÷ 400	14 x 18	3/4"	28	23	688	655	25
E6709065	(1327,34)	65 ÷ 650	14 x 18	3/4"	30,6	25,6	870	837	25

The torque wrences are supplied with calibration UNI EN ISO 6789 1-2017 certificate

ELECTRICALLY OPERATED DIGITAL TORQUE WRENCHES

ART. M12 ONEFTR12-201C

The electrically operated digital torque wrenches offer the possibility of pre-tightening the screw by electric drive and subsequent manual precision tightening up to the present torque, with a speed increase of 50% compared to traditional torque wrenches.
Features:
Tightening report thanks to the ONE KEY system, adjustable torque level to avoid tightening over the limit, four measurement systems (ft-1b, in-1b, Nm, kg-cm), tightening accuracy ± 2% clockwise and ± 3% counterclockwise, audio, visual and tactile notifications to signal that the set level has been reached. The REDLINK PLUS™ intelligent system provides advanced digital protection against tool and battery overload. Works with all Milwaukee® M12™ batteries.

Standard equipment includes:
1 battery 12V 2 Ah
1 battery charger
1 carrying case

Tech. Code	GR64 Euro	Capacity Nm	Coupling ■	No-load speed Revolution/min	Battery type	Tension Voltage	Length mm	Weight kg
E671112V	(1400,00)	16,9 - 203,4	1/2"	0-100	Li-ion	12	597	2,6

The torque wrenches are supplied with a calibration certificate UNI EN ISO 6789 1-2017

Indivisible package Suggested retail package - Unit price

GENERAL CATALOGUE

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The WERA items included in our LINK23 catalogue are ready to be delivered in 24 h.

www.linkindustrialtools.com
info@linkindustrialtools.it

RATCHET INSERTS FOR TORQUE WRENCHES

WODEX

ART. WX6550

Ratchet inserts 9X12 mm for torque wrenches.

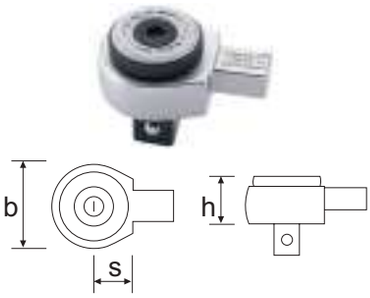
Tech. Code	GR57 Euro	Capacity Nm	Coupling mm	Coupling ■	Teeth	b mm	h mm	s mm
E6716004	41,00	25	9 x 12	1/4"	52	25	15	17.5
E6716005	47,00	50	9 x 12	3/8"	52	34	22	17.5
E6716010	59,90	100	9 x 12	1/2"	52	34	24	17.5

RATCHET INSERTS WITH FINE TOOTH DENTURE

STAHLWILLE

ART. 735 - 735HD

Reversible ratchet Insert tools with fine tooth for torque wrenches.



Tech. Code	GR56 Euro	Capacity Nm	Connection mm	Coupling ■	Teeth	b mm	h mm	s mm
E6717005	97,02	100	9 x 12	3/8"	60	33	24	17,5
E6717010	100,87	100	9 x 12	1/2"	60	33	24	17,5
E6717020	103,63	300	14 x 18	1/2"	60	43	26	25
E6717040	154,34	400	14 x 18	3/4"	60	50	31,5	25
E6717065	175,29	650	14 x 18	3/4"	60	58	36	30
E6717066	(243,64)	650	22 x 28	3/4"	60	61	35	55

ART. 735/100

Reversible ratchet Insert tools with push through square drive for torque wrenches.

Tech. Code	GR56 Euro	Capacity Nm	Connection mm	Coupling ■	Teeth	b mm	h mm	s mm
E6718100	(531,37)	1000	22 x 28	3/4"	30	76	42	55

RATCHET INSERTS WITH SAFETY LOCK

STAHLWILLE

ART. 725QR

Reversible ratchet Insert tools with **QuickRelease** safety lock for torque wrenches.

Tech. Code	GR56 Euro	Capacity Nm	Connection mm	Coupling ■	Teeth	b mm	h mm	s mm
E6720004	114,66	40	9 x 12	1/4"	22	22	13,8	17,5
E6720005	116,86	100	9 x 12	3/8"	30	29	18	28
E6720010	124,58	100	9 x 12	1/2"	30	29	18	28
E6720020	128,98	200	14 x 18	1/2"	36	41	22,3	38,5

PLUG-IN OPEN ENDED WRENCHES FOR TORQUE WRENCHES

WODEX

ART. WX6500

Plug-In open ended wrenches 9x12 mm for torque wrenches. Chrome-vanadium steel, satin finish.

Tech. Code	GR57 Euro	⬢ mm	Coupling mm	b mm	h mm	s mm	Weight g
E671907	37,50	7	9 x 12	20.5	5.7	17.5	37
E671908	37,50	8	9 x 12	22.1	5.7	17.5	38
E671910	37,50	10	9 x 12	24.8	5.7	17.5	42
E671912	37,50	12	9 x 12	27.5	5.7	17.5	41
E671913	37,50	13	9 x 12	28.8	5.7	17.5	46
E671914	37,50	14	9 x 12	31.5	7.7	20	55
E671915	37,50	15	9 x 12	33.5	7.7	20	56
E671916	37,50	16	9 x 12	36	7.7	20	58

Tech. Code	GR57 Euro	⬢ mm	Coupling mm	b mm	h mm	s mm	Weight g
E671917	37,50	17	9 x 12	37.7	7.7	20	58
E671919	37,50	19	9 x 12	41.6	7.7	20	64
E671922	67,50	22	9 x 12	47.3	11.5	25	119
E671924	67,50	24	9 x 12	50.8	11.5	25	121
E671927	95,00	27	9 x 12	58.7	13.5	32.5	198
E671930	95,00	30	9 x 12	63.7	13.5	32.5	200
E671932	95,00	32	9 x 12	65	13.5	32.5	198

Indivisible package Suggested retail package - Unit price

PLUG-IN OPEN ENDED WRENCHES FOR TORQUE WRENCHES

WODEX

ART. WX6510

Plug-In ring wrenches 9x12 mm for torque wrenches. Chrome-vanadium steel, satin finish.

Tech. Code	GR57 Euro	⬢ mm	Coupling mm	b mm	h mm	s mm	Weight g
E672707	(40,00)	7	9 x 12	19.8	8	17.5	38
E672708	40,00	8	9 x 12	19.8	8	17.5	37
E672710	40,00	10	9 x 12	20	8	17.5	40
E672711	(40,00)	11	9 x 12	20.2	8	17.5	42
E672712	(40,00)	12	9 x 12	22.2	12	17.5	51
E672713	40,00	13	9 x 12	22.2	12	17.5	52
E672714	(40,00)	14	9 x 12	23.5	12	17.5	53

Tech. Code	GR57 Euro	⬢ mm	Coupling mm	b mm	h mm	s mm	Weight g
E672715	(40,00)	15	9 x 12	24.6	12	17.5	54
E672716	(40,00)	16	9 x 12	26.4	13	17.5	56
E672717	40,00	17	9 x 12	27.3	13	17.5	55
E672718	(40,00)	18	9 x 12	29	13	17.5	60
E672719	40,00	19	9 x 12	31	13	17.5	64
E672721	(42,00)	21	9 x 12	33.4	14.7	17.5	68
E672722	(42,00)	22	9 x 12	35	14.7	17.5	71

PLUG-IN OPEN ENDED WRENCHES 9X12 MM FOR TORQUE WRENCHES

STAHLWILLE

ART. 731/10

Plug-In open ended wrenches 9x12 mm for torque wrenches.

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672107	47,19	7	9 x 12	22	5.0	17.5	40
E672108	42,77	8	9 x 12	22	5,0	17,5	39
E672109	46,09	9	9 x 12	26	5.5	17.5	38
E672110	40,79	10	9 x 12	26	5.5	17.5	42
E672111	42,22	11	9 x 12	26	5.5	17.5	41
E672112	44,54	12	9 x 12	30	7,0	17,5	43
E672113	40,68	13	9 x 12	30	7.0	17.5	48

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672114	40,68	14	9 x 12	35	8,0	17,5	52
E672115	42,77	15	9 x 12	35	8.0	17.5	51
E672116	40,68	16	9 x 12	38	8.5	17.5	58
E672117	40,68	17	9 x 12	38	8.5	17.5	60
E672118	41,23	18	9 x 12	42	9.0	20.0	71
E672119	40,79	19	9 x 12	42	9.0	20.0	74

ART. 731/40

Plug-In open ended wrenches 14x18 mm for torque wrenches.

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672213	46,30	13	14 x 18	30	7	25	128
E672214	47,41	14	14 x 18	35	8	25	129
E672215	51,26	15	14 x 18	35	8	25	132
E672216	46,96	16	14 x 18	38	9	25	140
E672217	46,30	17	14 x 18	38	9	25	136
E672218	47,19	18	14 x 18	42	10	25	147
E672219	46,30	19	14 x 18	42	10	25	145
E672221	56,22	21	14 x 18	50	11	25	171
E672222	56,22	22	14 x 18	50	11	25	165

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672224	54,90	24	14 x 18	53	12	25	167
E672225	61,73	25	14 x 18	53	12	25	170
E672227	54,90	27	14 x 18	60	13	30	219
E672230	62,83	30	14 x 18	66	14	30	245
E672232	62,83	32	14 x 18	66	14	32,5	246
E672234	69,46	34	14 x 18	66	14	32,5	239
E672236	68,91	36	14 x 18	74	15	32,5	275
E672238	71,66	38	14 x 18	74	15	32,5	265
E672241	69,46	41	14 x 18	82	15	36,5	307

ART. 732/10

Plug-In ring wrenches 9x12 mm for torque wrenches.

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672307	(44,10)	7	9 x 12	13	8	17.5	37
E672308	(43,00)	8	9 x 12	14.2	8	17.5	40
E672310	(43,10)	10	9 x 12	17.2	9	17.5	44
E672311	(44,10)	11	9 x 12	18,5	11	17.5	41
E672312	(44,10)	12	9 x 12	20,5	11	17.5	49
E672313	(43,10)	13	9 x 12	21.5	11	17.5	55
E672314	(44,10)	14	9 x 12	22,5	11	17.5	52

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672315	(43,00)	15	9 x 12	24,5	12	17.5	52
E672316	(43,10)	16	9 x 12	26	12	17.5	54
E672317	(43,10)	17	9 x 12	27	13	17.5	59
E672318	(43,10)	18	9 x 12	28	13	17.5	56
E672319	(43,10)	19	9 x 12	30.5	13	17.5	65
E672321	(45,09)	21	9 x 12	33	15	17.5	71
E672322	(43,10)	22	9 x 12	34,5	15	17.5	74

PLUG-IN RING WRENCHES 14X18 MM FOR TORQUE WRENCHES

STAHLWILLE

ART. 732/40

Plug-In ring wrenches 14x18 mm for torque wrenches.

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672413	(46,41)	13	14 x 18	22,5	11	25	13
E672414	(46,41)	14	14 x 18	23	11	25	123
E672415	(47,41)	15	14 x 18	24	11	25	128
E672416	(46,41)	16	14 x 18	25,5	12	25	133
E672417	(46,41)	17	14 x 18	27	12	25	135
E672418	(46,41)	18	14 x 18	29	13	25	134
E672419	(46,41)	19	14 x 18	30.5	13	25	138
E672421	(55,67)	21	14 x 18	33	15	25	144
E672422	(55,67)	22	14 x 18	34.5	15	25	145

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672424	(55,67)	24	14 x 18	37.5	15	25	153
E672427	(55,67)	27	14 x 18	42.5	17	25	162
E672428	(67,25)	28	14 x 18	45,5	19	25	175
E672430	(62,83)	30	14 x 18	46	19	25	182
E672432	(62,83)	32	14 x 18	47,5	19	25	181
E672434	(68,91)	34	14 x 18	52	19	28	210
E672436	(68,91)	36	14 x 18	54	19	28	203
E672441	(68,91)	41	14 x 18	60	20	30	240

ART. 733/10

Plug-In open head wrenches 9x12 mm for torque wrenches.

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	W mm	S mm
E672510	(46,74)	10	9 x 12	21,5	11	7,1	17,5
E672511	(46,74)	11	9 x 12	22,5	11	8,6	17.5
E672512	(46,74)	12	9 x 12	24,5	12	9	17.5
E672513	(46,74)	13	9 x 12	26	12	10	17.5
E672514	(46,74)	14	9 x 12	27	13	11	17.5
E672516	(48,18)	16	9 x 12	30,5	13	13	17.5

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	W mm	S mm
E672517	(46,74)	17	9 x 12	31,5	13	14	17,5
E672518	(49,17)	18	9 x 12	33	15	14,8	17.5
E672519	(46,74)	19	9 x 12	34	15	15.8	17.5
E672521	(50,49)	21	9 x 12	38,5	15	16,2	20
E672522	(46,74)	22	9 x 12	39.5	15	17	20
E672524	(46,74)	24	9 x 12	40	15	18	20

ART. 731/100

Plug-In open ended wrenches 22x28 mm for torque wrenches.

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672624	(67,25)	24	22 x 28	50	13	55	628
E672627	(72,21)	27	22 x 28	56	14	55	648
E672630	(74,97)	30	22 x 28	63	15	55	695
E672632	(78,82)	32	22 x 28	67	15	55	713
E672634	(82,68)	34	22 x 28	72	15	55	739
E672636	(87,64)	36	22 x 28	74	15	55	727

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	S mm	Weight g
E672641	(138,90)	41	22 x 28	84	16	55	902
E672646	(144,42)	46	22 x 28	94	17	55	952
E672650	(146,63)	50	22 x 28	104	18	55	1074
E672655	(151,03)	55	22 x 28	114	19	55	1174
E672660	(154,34)	60	22 x 28	124	20	55	1230

ART. 732/100

Plug-in ring wrenches 22x28 mm for torque wrenches.

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	s mm	Weight g
E672824	(67,25)	24	22 x 28	43	15	55	629
E672827	(72,21)	27	22 x 28	43	15	55	619
E672830	(74,97)	30	22 x 28	46	16	55	632
E672832	(78,82)	32	22 x 28	49	16	55	625
E672834	(82,68)	34	22 x 28	52	17	55	638
E672836	(87,64)	36	22 x 28	54	17	55	631

Tech. Code	GR56 Euro	⬢ mm	Connection mm	b mm	h mm	s mm	Weight g
E672841	(138,90)	41	22 x 28	61	18	55	642
E672846	(144,42)	46	22 x 28	66	19	55	640
E672850	(146,63)	50	22 x 28	75	20	55	713
E672855	(151,03)	55	22 x 28	84	21	55	791
E672860	(154,34)	60	22 x 28	93	22	55	885

Indivisible package Suggested retail package - Unit price

TESTING INSTRUMENTS FOR TORQUE TOOLS

STAHLWILLE

ART. SMARTCHECK DAPTIQ®

NEW

The **SmartCheck DAPTIQ®** torque tester for torque tools is equipped with an interface and uses RFID technology to detect other tools in proximity, this relieves the operator from performing unnecessary operations, ensures a faster check and guarantees that the readings are always correctly attributed to the tool being inspected.

Features:

- Compact design suitable for horizontal or vertical mounting
- The display, display stand and base can be rotated 180°
- Setting and integration of parameters through the open-source interface
- Real-time data exchange between the device and the control system
- CheckMaster Lite software downloadable for free upon registration
- CheckMaster PRO software that can be purchased separately
- Target values, tolerances and operating mode can be set by the system
- 3 operating modes (Track, First Peak, Peak Hold) and 3 measurement units (Nm, ft lb, in lb)
- Internal storage of up to 200 data records
- Can also be used to test torque screwdrivers
- The target torque and the tolerances for the evaluation of the measured value can be specified individually
- Operation via supplied power supply or battery (4 AAA batteries or 1 9V battery - Adapter included)
- Display deviation ± 1%

Features of the CheckMaster Lite Software:

- 2 individually configurable armings
- Possibility to download up to 10 measurements

Tech. Code	GR56 Euro	Torque range Nm	Coupling ■	b mm	h mm	t mm	Weight Kg
E67310010	(6471,34)	1 - 10	1/4"	120	124	167	5,2
E67310100	(6731,32)	10 - 100	3/8"	120	124	167	5,3
E67310400	(6989,12)	40 - 400	3/4"	120	124	167	5,7
E67310800	(7114,79)	80 - 800	3/4"	120	124	167	5,7
E67311500	(7769,07)	150 - 1500	1"	120	124	167	5,9

CHECKMASTER SOFTWARE PRO

STAHLWILLE

ART. 7759-8

NEW

CheckMaster software is a PC software that allows you to establish a connection between your computer and the STAHLWILLE SmartCheck series of testers quickly and easily, while the PC and the SmartCheck device are connected, you can read the test data from the tester for registration form, create test certificates, conveniently create and manage a customer database and easily change the basic settings of the SmartCheck tester and then upload them to the device.

Software features:

- Online Test
- Barcode scanner support for online testing
- 6 individually configurable armings
- Connecting multiple SmartCheck devices with automatic selection
- Centralized data storage
- Data protection by password
- Configurable visibility of the various menus
- Possibility to download up to 90 measurements
- Automatic signing for certificates
- Manual restore of data backup
- Ability to import and export data by customer, specification or individual fields
- Limitation of permitted measured values
- Switchable menu items in groups
- Manual sending of device commands

Tech. Code	GR56 Euro	Code
E673200	(1194,18)	91 44 01 14

MECHANICAL CALIBRATION SYSTEMS MANUTORK®

STAHLWILLE

NEW

ART. 7706-9PC - 7706-10PC

Mechanical drive device

Transducer

Cable
n. 7757-1

USB adapter
n. 7757-1

USB cable

PC and Printer
NOT INCLUDED

Complete calibration systems, consisting of a mechanically operated calibration device, laboratory transducers, square drive adapters, plug-in calibration tools, calibration software, connection cables and an extension stand for the range 2 version only -1000Nm.

Features:

- Measurement without displacement of the force application point
- The 7791 mechanical actuation device avoids shifting of the force application point during the calibration process
- The lever operated by the handwheel and mounted under the control guide, is moved linearly by a spindle
- The linear movement is transformed into a rotary movement which acts on the transducer
- The torque wrench to be calibrated remains constantly in its position during the entire calibration
- This prevents measuring errors resulting from a shift of the point of application of force
- By means of a low-friction spherical bushing, the torque wrench is automatically oriented horizontally
- An additional ball sleeve provides frictionless support of the torque wrench
- The resulting reduction of the shear force on the measured value detector and the friction on the key holder lead to a decrease of the measurement error
- System protected by national and international patents
- Transducers equipped with DAkkS calibration certificates
- Installation and start-up course carried out by a specialized Stahlwille technician (To be agreed when ordering)

Tech. Code	GR56 Euro	Complete system Cod.	Torque range Nm	Calbriation software	Calibration certificates DAkkS N.	Weight kg
E67330100	(10910,80)	96 52 10 69	2 - 100	TORKMASTER	2	67,6
E67331000	(18228,78)	96 52 10 70	2 - 1000	TORKMASTER	4	70,6

Features E67330100		**96 52 10 69**
Mechanical drive device	Cod.	7791
Extension	Cod.	-
Transducers	Cod.	7728-2 (2-20 N·m) 7728-10 (10-100 N·m)
USB adapter	Cod.	7757-1
Cable with jack connector	Cod.	7751
Transducer cable	Cod.	7751-1
Square adapters	Cod.	431 (3/8" O x 1/4" ■) 409M (1/4" O x 3/8" ■)
Insert tools	Cod.	734K/4 (1/4" ■) 734K/5 (3/8" ■)

Characteristics E67331000		**96 52 10 70**
Mechanical drive device	Cod.	7791
Extension	Cod.	7791-1
Transducers	Cod.	7728-2 (2-20 N·m) 7728-10 (10-100 N·m) 7728-40 (40-400 N·m) 7728-100 (100-1000 N·m)
USB adapter	Cod.	7757-1
Cable with jack connector	Cod.	7751
Transducer cable	Cod.	7751-1
Square adapters	Cod.	7787 (1/4" O x 3/4" ■) 7788 (3/8" O x 3/4" ■) 7789 (1/2" O x 3/4" ■) 409M (1/4" O x 3/8" ■)
Insert tools	Cod.	734K/4 (1/4" ■) 734K/5 (3/8" ■) 734K/20 (1/2" ■) 734K/40 (3/4" ■)

Indivisible package Suggested retail package - Unit price

ELECTRONIC CALIBRATION SYSTEMS PERFECTCONTROL®

STAHLWILLE

ART. 7794-2/400 - 7794-2/1000

NEW

Motorized calibration device
n. 7794-2

Laboratory
transducer

Cable
n. 7751-1

USB adapator
n. 7757-1

USB cable

PC and Printer
NOT INCLUDED

Calibration systems **PerfectControl®** complete, consisting of an electrically operated calibration device, laboratory transducers, square drive adapters, push-fit calibration tools, calibration software, connection cables and an extension stand for the version with range 1-1000Nm.

Features:
- Measurement without displacement of the force attachment point
- Exclusion of incorrect measurements with the aid of the properly supported worm and micro-controlled motor
- Maximum precision calibrations thanks to the optimization of the transducer support and square housing
- Quick and easy transducer replacement thanks to Quick-Release locking
- Convenient keystroke operation for clockwise and counterclockwise measurements with automatic speed adjustment
- Time saving thanks to the fastening of the bridge support with one-handed eccentric tensioner
- Transmission of measured values via USB interface to a PC for further processing and archiving
- After performing the calibrations, a calibration certificate can be printed or stored as a PDF file
- The values measured before and after the calibration can be documented
- For calibration, DIN EN ISO 6789 is supported in numerous languages
- Calibrations up to 1000Nm with the aid of the 7791-1 extension
- Transducers equipped with DAkkS calibration certificates
- **Installation and start-up course carried out by a specialized Stahlwille technician** (To be agreed when ordering)

Tech. Code	GR56 Euro	Complete system Cod.	Torque range Nm	Calibration software	Calibration certificates DAkkS N.	Weight kg
E67370400	(-)	96 52 10 78	1 - 400	TORKMASTER	3	62,1
E67371000	(-)	96 52 10 79	1 - 1000	TORKMASTER	4	69,8

Features E6737400		96 52 10 78
Motorized device	Cod.	7794-2
Extension	Cod.	-
Transducers	Cod.	7728-1 1-10 N·m 7728-6 6-60 N·m 7728-40 40-400 N·m
USB adapter	Cod.	7757-1
Cable with jack connector	Cod.	7751
Coiled cable	Cod.	7752
Transducer cable	Cod.	7751-2
Square adapters	Cod.	409M (1/4" O x 3/8" ■) 7787 (1/4" O x 3/4" ■) 7788 (3/8" O x 3/4" ■) 7789 (1/2" O x 3/4" ■) 7789-4 (1/4" O x 1/2" ■) 7789-5 (3/8" O x 1/2" ■)
Fitting tools	Cod.	734K/4 (1/4" ■) 734K/5 (3/8" ■) 734K/12 (3/8" ■) 734K/20 (1/2" ■) 734K/40 (3/4" ■) 734K/100 (3/4" ■)

Features E67371000		96 52 10 79
Motorized device	Cod.	7794-2
Extension	Cod.	7791-1
Transducers	Cod.	7728-1 (1-10 N·m) 7728-6 (6-60 N·m) 7728-40 (40-400 N·m) 7728-100 (100-1000 N·m)
USB adapter	Cod.	7757-1
Cable with jack connector	Cod.	7751
Coiled cable	Cod.	7752
Transducer cable	Cod.	7751-2
Square adapters	Cod.	409M (1/4" O x 3/8" ■) 7787 (1/4" O x 3/4" ■) 7788 (3/8" O x 3/4" ■) 7789 (1/2" O x 3/4" ■) 7789-4 (1/4" O x 1/2" ■) 7789-5 (3/8" O x 1/2" ■)
Insert tools	Cod.	734K/4 (1/4" ■) 734K/5 (3/8" ■) 734K/12 (3/8" ■) 734K/20 (1/2" ■) 734K/40 (3/4" ■) 734K/100 (3/4" ■)

INSERT BITS FOR SLOTTED SCREWS

WODEX

ART. WX4430

Bits for slotted screws, hexagonal drive 1/4" DIN 3126 - C 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	mm		L mm	
E70003005	1,04	3.0x0.5	1/4"	25	10
E70003506	1,04	3.5x0.6	1/4"	25	10
E70004005	1,04	4.0x0.5	1/4"	25	10
E70004506	1,04	4.5x0.6	1/4"	25	10

Tech. Code	GR51 Euro	mm		L mm	
E70005508	1,04	5.5x0.8	1/4"	25	10
E70006512	1,18	6.5x1.2	1/4"	25	10
E70008012	2,22	8.0x1.2	1/4"	25	10

BITS FOR SLOTTED SCREWS 800/1 Z

Wera

ART. 800/1 Z

Bits for slotted screws 1/4" hexagonal drive DIN ISO 1173-D 6,3. Tencious version for universal use.

Tech. Code	GR53 Euro	mm		Length mm	
E70043005	1,57	3,0x0,5	1/4"	25	10
E70044005	1,57	4,0x0,5	1/4"	25	10
E70044506	1,57	4,5x0,6	1/4"	25	10
E70045508	1,57	5,5x0,8	1/4"	25	10

Tech. Code	GR53 Euro	mm		Length mm	
E70045510	1,57	5,5x1,0	1/4"	25	10
E70046512	1,57	6,5x1,2	1/4"	25	10
E70048012	3,80	8,0x1,2	1/4"	25	10
E70048016	3,80	8,0x1,6	1/4"	25	10

INSERT BITS FOR SLOTTED SCREWS

WODEX

ART. WX4435

Bits for slotted screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	mm		L mm	
E70102504	3,06	2.5 x 0.4	1/4"	50	10
E70103506	3,06	3.5 x 0.6	1/4"	50	10
E70104008	3,06	4.0 x 0.8	1/4"	50	10
E70104506	3,06	4.5 x 0.6	1/4"	50	10

Tech. Code	GR51 Euro	mm		L mm	
E70105510	3,06	5.5 x 1.0	1/4"	50	10
E70106512	3,05	6.5 x 1.2	1/4"	50	10
E70108012	3,37	8.0 x 1.2	1/4"	50	10

Special inserts are available on request with a minimum production batch of 100 pieces.

BITS FOR SLOTTED SCREWS 800/4 Z

Wera

ART. 800/4 Z

Bits for slotted screws 1/4" hexagonal for bit holders DIN ISO 1173-D 6,3. Tough viscous for universal use.

Tech. Code	GR53 Euro	mm		Length mm	
E70143005	5,67	3,0x0,5	1/4"	50	10
E70143506	5,67	3,5x0,6	1/4"	50	10
E70144008	5,67	4,0x0,8	1/4"	50	10

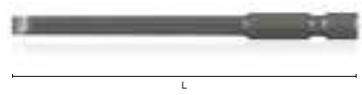
Tech. Code	GR53 Euro	mm		Length mm	
E70145510	5,67	5,5x1,0	1/4"	50	10
E70146512	5,67	6,5x1,2	1/4"	50	10
E70148012	5,67	8,0x1,2	1/4"	50	10

INSERT BITS FOR SLOTTED SCREWS

WODEX

ART. WX4440

Bits for slotted screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.



Tech. Code	GR51 Euro	mm		L mm	
E70153506070	4,66	3.5 x 0.6	1/4"	70	10

Tech. Code	GR51 Euro	mm		L mm	
E70154008070	4,66	4.0 x 0.8	1/4"	70	10

Special inserts are available on request with a minimum production batch of 100 pieces.

Indivisible package Suggested retail package - Unit price

INSERT BITS FOR PHILLIPS® SCREWS

ART. WX4400

Bits for Phillips® screws, hexagonal drive 1/4" DIN 3126 - C 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	⊕	⬢	L mm	
E70300	0,97	PH0	1/4"	25	10
E70301	0,64	PH1	1/4"	25	10

Tech. Code	GR51 Euro	⊕	⬢	L mm	
E70302	0,64	PH2	1/4"	25	10
E70303	0,64	PH3	1/4"	25	10

BITS FOR PHILLIPS® SCREWS 851/1 Z

ART. 851/1 Z

Bits for Phillips screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Tenacious version for universal use.

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70340	1,45	PH0	1/4"	25	10
E70341	0,94	PH1	1/4"	25	10
E70342	0,94	PH2	1/4"	25	10

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70343	0,94	PH3	1/4"	25	10
E70344	4,84	PH4	1/4"	32	10

BITS FOR PHILLIPS® SCREWS 851/1 BTZ

ART. 851/1 BTZ BITORSION

Bits for Phillips screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Bi-Torsion tenacious version for a longer duration.
With chromatic indentification depending on the profile (Red = Phillips) and Indication of the measurement.

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70351	2,99	PH1	1/4"	25	10
E70352	2,99	PH2	1/4"	25	10

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70353	2,99	PH3	1/4"	25	10

BITS FOR PHILLIPS® SCREWS 851/1 BDC

ART. 851/1 BDC

Bits for Phillips screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Bi-Torsion tenacious version for a longer duration.Diamond coating for a safe fit in the screw.
With chromatic indentification depending on the profile (Red = Phillips) and Indication of the measurement.

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70361	4,88	PH1	1/4"	25	10
E70362	4,88	PH2	1/4"	25	10

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70363	4,88	PH3	1/4"	25	10

INSERT BITS FOR PHILLIPS® SCREWS

ART. WX4405

Bits for Phillips® screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	⊕	⬢	Ø mm	L mm	
E70401	2,25	PH1	1/4"	4.5	50	10
E70402	2,25	PH2	1/4"	6	50	10

Tech. Code	GR51 Euro	⊕	⬢	Ø mm	L mm	
E70403	2,25	PH3	1/4"	8	50	10

BITS FOR PHILLIPS® SCREWS 851/4 J

ART. 851/4 J

Bits for Philips screws, hexagonal drive 1/4" for Insert holders DIN ISO 1173-D 6,3.
Tenacious twist version to prevent early wear, for universal use.

Tech. Code	GR53 Euro	⊕	⬢	Ø mm	Length mm	
E70440	5,81	PH0	1/4"	2,5	50	10

Tech. Code	GR53 Euro	⊕	⬢	Ø mm	Length mm	
E70441	5,81	PH1	1/4"	4,5	50	10

BITS FOR PHILLIPS® SCREWS 851/4 TZ

Wera

ART. 851/4 TZ

Bits for Philips screws, hexagonal drive 1/4" for Insert holders DIN ISO 1173-D6,3. Tenacious twist version to prevent early wear for universal use.

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70451	3,86	PH1	1/4"	50	10
E70452	3,86	PH2	1/4"	50	10

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70453	3,86	PH3	1/4"	50	10

BITS FOR PHILLIPS® SCREWS 851/4 BTZ

Wera

ART. 851/4 BTZ

Bits for Phillips screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Bi-Torsion tenacious version for a longer duration.
With chromatic indentification depending on the profile (Red = Phillips) and Indication of the measurement.

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70461	5,78	PH1	1/4"	50	10
E70462	5,78	PH2	1/4"	50	10

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70463	5,78	PH3	1/4"	50	10

ART. 851/4 BTH

Bits for Phillips screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Bi-Torsion tenacious version for a longer duration.
With chromatic indentification depending on the profile (Red = Phillips) and Indication of the measurement.

Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70471	5,78	PH1	1/4"	50	10
E70472	5,78	PH2	1/4"	50	10

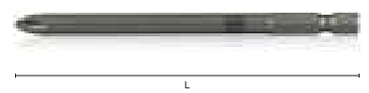
Tech. Code	GR53 Euro	⊕	⬢	Length mm	
E70473	5,78	PH3	1/4"	50	10

INSERT BITS FOR PHILLIPS® SCREWS

WODEX

ART. WX4410

Bits for Phillips® screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.



Tech. Code	GR51 Euro	⊕	⬢	Ø mm	L mm	
E70501070	3,41	PH1	1/4"	4.5	70	10
E70501110	3,67	PH1	1/4"	4.5	110	10
E70501152	4,66	PH1	1/4"	4.5	152	10
E70502070	3,41	PH2	1/4"	6	70	10
E70502100	3,67	PH2	1/4"	6	100	10

Tech. Code	GR51 Euro	⊕	⬢	Ø mm	L mm	
E70502110	3,67	PH2	1/4"	6	110	10
E70502152	4,66	PH2	1/4"	6	152	10
E70503070	3,42	PH3	1/4"	8	70	10
E70503110	3,83	PH3	1/4"	8	110	10
E70503152	6,12	PH3	1/4"	8	152	10

Special inserts are available on request with a minimum production batch of 100 pieces.

INSERT BITS FOR PHILLIPS® SCREWS

WODEX

ART. WX4411

Bits with wide shank for Phillips® screws, hexagonal drive 1/4" DIN 3126-E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	⊕	⬢	Ø mm	L mm	
E705111005	4,30	PH1	1/4"	5	100	10

Tech. Code	GR51 Euro	⊕	⬢	Ø mm	L mm	
E705122007	7,54	PH2	1/4"	7	200	5

Special inserts are available on request with a minimum production batch of 100 pieces.

BITS FOR PHILLIPS® SCREWS 851/4 Z

Wera

ART. 851/4 Z

Bits for Phillips screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	⊕	⬢	Ø mm	Length mm	
E70541070	6,59	PH1	1/4"	4,5	70	10
E70541089	8,15	PH1	1/4"	4,5	89	10
E70541152	11,91	PH1	1/4"	4,5	152	10
E70542070	6,59	PH2	1/4"	6	70	10
E70542089	8,15	PH2	1/4"	6	89	10

Tech. Code	GR53 Euro	⊕	⬢	Ø mm	Length mm	
E70542110	9,19	PH2	1/4"	6	110	10
E70542152	11,91	PH2	1/4"	6	152	10
E70543089	8,15	PH3	1/4"	-	89	10
E70543152	11,91	PH3	1/4"	-	152	10

Indivisible package Suggested retail package - Unit price

INSERT BITS FOR POZIDRIV® SCREWS

WODEX

ART. WX4415

Bits for Pozidriv® screws, hexagonal drive 1/4" DIN 3126 - C 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	✪	⬢	L mm	
E70601	0,64	PZ1	1/4"	25	10
E70602	0,64	PZ2	1/4"	25	10

Tech. Code	GR51 Euro	✪	⬢	L mm	
E70603	0,64	PZ3	1/4"	25	10

BITS FOR POZIDRIV® SCREWS 855/1 Z

Wera

ART. 855/1 Z

Bits for Pozidriv® screws with hexagonal drive 1/4" for Insert holders DIN ISO 1173-D 6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70640	1,45	PZ0	1/4"	25	10
E70641	0,94	PZ1	1/4"	25	10

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70642	0,94	PZ2	1/4"	25	10
E70643	0,94	PZ3	1/4"	32	10

ART. 855/1 BDC

Bits for Pozidriv® screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Bi-Torsion tenacious version for a longer duration, diamond coating for a safe fit in the screw.
With chromatic indentification depending on the profile (Black = Pozidriv) and Indication of the measurement.

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70651	4,88	PZ1	1/4"	25	10
E70652	4,88	PZ2	1/4"	25	10

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70653	4,88	PZ3	1/4"	25	10

INSERT BITS FOR POZIDRIV® SCREWS

WODEX

ART. WX4420

Bits for Pozidriv® screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	✪	⬢	Ø mm	L mm	
E70701	2,25	PZ1	1/4"	4.5	50	10
E70702	2,25	PZ2	1/4"	6	50	10

Tech. Code	GR51 Euro	✪	⬢	Ø mm	L mm	
E70703	2,25	PZ3	1/4"	8	50	10

Special inserts are available on request with a minimum production batch of 100 pieces.

BITS FOR POZIDRIV® SCREWS 855/4 TZ

Wera

ART. 855/4 TZ

Bits for Pozidriv® screws, hexagonal drive 1/4" for Insert holders DIN ISO 1173-D6,3.
Tenacious twist version to prevent early wear for universal use.

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70741	3,86	PZ 1	1/4"	50	10
E70742	3,86	PZ 2	1/4"	50	10

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70743	3,86	PZ 3	1/4"	50	10

BITS FOR POZIDRIV® SCREWS 855/4 BTZ

Wera

ART. 855/4 BTZ

Bits for Pozidriv® screws, hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Bi-Torsion tenacious version for a longer duration.
With chromatic indentification depending on the profile (Black = Pozidriv) and Indication of the measurement.

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70751	5,78	PZ 1	1/4"	50	10

Tech. Code	GR53 Euro	✪	⬢	Length mm	
E70752	5,78	PZ 2	1/4"	50	10

BITS FOR POZIDRIV® SCREWS 855/4 Z

ART. 855/4 Z

Bits for Pozidriv® screws, with hexagonal drive 1/4" for Insert holders DIN ISO 1173-D 6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	✪	⬢	Ø mm	Length mm	
E70841089	8,37	PZ1	1/4"	4,5	89	10
E70842089	8,37	PZ2	1/4"	6	89	10

Tech. Code	GR53 Euro	✪	⬢	Ø mm	Length mm	
E70843089	8,37	PZ3	1/4"	-	89	10

BITS FOR HEXAGONAL SOCKET HEAD SCREWS

ART. WX4445

Bits for hexagonal socket head screws, hexagonal drive 1/4" DIN 3126 - C 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	⬢ mm	⬢	L mm	
E7090015	1,06	1.5	1/4"	25	10
E709002	1,06	2	1/4"	25	10
E7090025	1,06	2.5	1/4"	25	10
E709003	1,06	3	1/4"	25	10
E709004	1,06	4	1/4"	25	10

Tech. Code	GR51 Euro	⬢ mm	⬢	L mm	
E709005	1,06	5	1/4"	25	10
E709006	1,06	6	1/4"	25	10
E709007	1,40	7	1/4"	25	10
E709008	1,40	8	1/4"	25	10
E709010	2,72	10	1/4"	25	10

BITS FOR HEXAGONAL SOCKET HEAD SCREWS 840/1 Z

ART. 840/1 Z

Bits for hexagonal head screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	⬢ mm	⬢	Length mm	
E7094015	3,22	1.5	1/4"	25	10
E709402	3,22	2	1/4"	25	10
E7094025	3,22	2.5	1/4"	25	10
E709403	3,22	3	1/4"	25	10
E709404	3,22	4	1/4"	25	10

Tech. Code	GR53 Euro	⬢ mm	⬢	Length mm	
E709405	3,22	5	1/4"	25	10
E709406	3,22	6	1/4"	25	20
E709407	4,56	7	1/4"	25	10
E709408	4,56	8	1/4"	25	10
E709410	4,56	10	1/4"	25	10

BITS FOR HEXAGONAL SOCKET HEAD SCREWS

ART. WX4450

Bits for hexagonal socket head screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	⬢ mm	⬢	L mm	
E7100015	3,16	1.5	1/4"	50	10
E710002	3,14	2	1/4"	50	10
E7100025	3,16	2.5	1/4"	50	10
E710003	3,16	3	1/4"	50	10

Tech. Code	GR51 Euro	⬢ mm	⬢	L mm	
E710004	3,16	4	1/4"	50	10
E710005	3,16	5	1/4"	50	10
E710006	3,14	6	1/4"	50	10
E710008	4,27	8	1/4"	50	10

BITS FOR HEXAGONAL SOCKET HEAD SCREWS 840/4 Z

ART. 840/4 Z

Bits for hexagonal socket head screws, hexagonal drive 1/4"for Insert holders DIN ISO 1173-D 6,3.
Tenacious version for universal use.

Tech. Code	GR53 Euro	⬢ mm	⬢	Length mm	
E7104015050	6,10	1,5	1/4"	50	10
E710402050	6,10	2	1/4"	50	10
E7104025050	6,10	2,5	1/4"	50	10
E710403050	6,10	3	1/4"	50	10
E710403089	13,10	3	1/4"	89	10
E710403152	14,40	3	1/4"	152	10
E710404050	6,10	4	1/4"	50	10
E710404089	13,10	4	1/4"	89	10

Tech. Code	GR53 Euro	⬢ mm	⬢	Length mm	
E710404152	14,40	4	1/4"	152	10
E710405050	6,10	5	1/4"	50	10
E710405089	13,10	5	1/4"	89	10
E710405152	14,40	5	1/4"	152	10
E710406050	6,10	6	1/4"	50	10
E710406089	13,10	6	1/4"	89	10
E710406152	14,40	6	1/4"	152	10
E710408050	10,07	8	1/4"	50	10

Indivisible package Suggested retail package - Unit price

BITS FOR HEXAGONAL SOCKET HEAD SCREWS

ART. WX4455

Bits for hexagonal socket head screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	⬢ mm	⬢	L mm	
E7110015070	4,02	1.5	1/4"	70	10
E711002070	4,02	2	1/4"	70	10
E7110025070	4,02	2.5	1/4"	70	10
E711003070	4,02	3	1/4"	70	10

Tech. Code	GR51 Euro	⬢ mm	⬢	L mm	
E711004070	3,85	4	1/4"	70	10
E711005070	4,02	5	1/4"	70	10
E711006070	4,06	6	1/4"	70	10
E711008070	5,36	8	1/4"	70	10

Special inserts are available on request with a minimum production batch of 100 pieces.

BITS WITH SPHERICAL HEAD FOR SOCKET HEAD SCREWS 842/1 Z

ART. 842/1 Z

Bits with spherical ball point end for socket head screws 1/4" hexagoanl drive for Inserts holders DIN ISO 1173-D 6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	⬢ mm	⬢	Length mm	
E7123025	5,97	2,5	1/4"	25	10
E712303	5,97	3	1/4"	25	10
E712304	5,97	4	1/4"	25	10

Tech. Code	GR53 Euro	⬢ mm	⬢	Length mm	
E712305	5,97	5	1/4"	25	10
E712306	5,97	6	1/4"	25	10

INSERT BITS FOR TORX® SCREWS

ART. WX4475

Bits for Torx® screws, hexagonal drive 1/4" DIN 3126 - C 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	○	⬢	L mm	
E714006	1,28	T6	1/4"	25	10
E714007	1,28	T7	1/4"	25	10
E714008	1,28	T8	1/4"	25	10
E714009	1,28	T9	1/4"	25	10
E714010	1,28	T10	1/4"	25	10
E714015	1,28	T15	1/4"	25	10

Tech. Code	GR51 Euro	○	⬢	L mm	
E714020	1,28	T20	1/4"	25	10
E714025	1,28	T25	1/4"	25	10
E714027	1,28	T27	1/4"	25	10
E714030	1,28	T30	1/4"	25	10
E714040	1,28	T40	1/4"	25	10

BITS FOR TORX® SCREWS 867/1

ART. 867/1

Bits for Torx® screws, hexagonal drive 1/4" for Insert holders DIN ISO 1173-D6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	○	⬢	Length mm	
E714405	1,67	T5	1/4"	25	10
E714406	1,67	T6	1/4"	25	10
E714407	1,67	T7	1/4"	25	10
E714408	1,67	T8	1/4"	25	10
E714409	1,67	T9	1/4"	25	10
E714410	1,67	T10	1/4"	25	10

Tech. Code	GR53 Euro	○	⬢	Length mm	
E714415	1,67	T15	1/4"	25	10
E714420	1,67	T20	1/4"	25	10
E714425	1,67	T25	1/4"	25	10
E714427	1,67	T27	1/4"	25	10
E714430	1,67	T30	1/4"	25	10

BITS FOR TORX® SCREWS 867/1 BTZ

ART. 867/1 BTZ

Bits for Torx® screws with hexagonal drive 1/4" for Inserts holders DIN ISO 1173-D 6,3.
Bi-Torsion tenacious version for a longer duration.
With chromatic indentification depending on the profile (Green = Torx) and Indication of the measurement.

Tech. Code	GR53 Euro	○	⬢	Length mm	
E714510	5,14	T10	1/4"	25	10
E714515	5,14	T15	1/4"	25	10
E714520	5,14	T20	1/4"	25	10

Tech. Code	GR53 Euro	○	⬢	Length mm	
E714525	5,14	T25	1/4"	25	10
E714530	5,14	T30	1/4"	25	10
E714540	5,14	T40	1/4"	25	10

BITS FOR TORX® SCREWS 867/1 BDC

ART. 867/1 BDC

Bits for Torx® screws with hexagonal drive 1/4" for Insert holders DIN ISO 1173-D 6,3. Bi-Torsion version for a longer duration, diamond coating for a safe fix of the screws. With chromatic indentification depending on the profile (Green = Torx) and indication of the measurement.

Tech. Code	GR53 Euro	○	⬢	Length mm	
E714610	5,53	T10	1/4"	25	10
E714615	(5,53)	T15	1/4"	25	10
E714620	5,53	T20	1/4"	25	10

Tech. Code	GR53 Euro	○	⬢	Length mm	
E714625	5,53	T25	1/4"	25	10
E714630	5,53	T30	1/4"	25	10
E714640	(5,53)	T40	1/4"	25	10

INSERT BITS FOR TORX® SCREWS

ART. WX4480

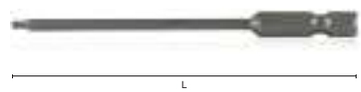
Bits for Torx® screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	○	⬢	L mm	
E715008	3,62	T8	1/4"	50	10
E715009	3,62	T9	1/4"	50	10
E715010	3,62	T10	1/4"	50	10
E715015	3,62	T15	1/4"	50	10

Tech. Code	GR51 Euro	○	⬢	L mm	
E715020	3,62	T20	1/4"	50	10
E715025	3,62	T25	1/4"	50	10
E715030	3,62	T30	1/4"	50	10
E715040	3,62	T40	1/4"	50	10

INSERT BITS FOR TORX® SCREWS

ART. WX4485



Bits for Torx® screws, hexagonal drive 1/4" DIN 3126 - E 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	○	⬢	L mm	
E716008089	5,51	T8	1/4"	89	10
E716010089	5,51	T10	1/4"	89	10
E716010152	7,00	T10	1/4"	152	10

Tech. Code	GR51 Euro	○	⬢	L mm	
E716020089	5,51	T20	1/4"	89	10
E716020152	7,00	T20	1/4"	152	10
E716030089	5,51	T30	1/4"	89	10

Special inserts are available on request with a minimum production batch of 100 pieces.

BITS FOR TORX® SCREWS 867/4 Z

ART. 867/4 Z

Bits for Torx® screws with hexagonal drive 1/4" for Insert holders DIN ISO 1173-D6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	○	⬢	Length mm	
E716406070	8,40	T6	1/4"	70	10
E716408070	8,40	T8	1/4"	70	10
E716410070	8,40	T10	1/4"	70	10
E716410089	10,36	T10	1/4"	89	10
E716410152	12,54	T10	1/4"	152	10
E716415070	8,40	T15	1/4"	70	10
E716418089	10,36	T15	1/4"	89	10
E716415152	12,54	T15	1/4"	152	10
E716420070	8,40	T20	1/4"	70	10

Tech. Code	GR53 Euro	○	⬢	Length mm	
E716420089	10,36	T20	1/4"	89	10
E716420152	12,54	T20	1/4"	152	10
E716425070	8,40	T25	1/4"	70	10
E716425089	10,36	T25	1/4"	89	10
E716425152	12,54	T25	1/4"	152	10
E716430070	8,40	T30	1/4"	70	10
E716430089	10,36	T30	1/4"	89	10
E716430152	12,54	T30	1/4"	152	10
E716440070	(8,40)	T40	1/4"	70	10

BITS FOR TORX PLUS® SCREWS 867/1 IP

ART. 867/1 IP

Bits for Torx Plus® screws, with hexagonal drive 1/4" for insert holders DIN ISO 1173-D6,3. Tenacious version for universal use.

Tech. Code	GR53 Euro	○	⬢	Length mm	
E717306	4,44	6IP	1/4"	25	10
E717307	4,44	7IP	1/4"	25	10
E717308	4,44	8IP	1/4"	25	10
E717309	4,44	9IP	1/4"	25	10
E717310	4,44	10IP	1/4"	25	10
E717315	4,44	15IP	1/4"	25	10

Tech. Code	GR53 Euro	○	⬢	Length mm	
E717320	4,44	20IP	1/4"	25	10
E717325	4,44	25IP	1/4"	25	10
E717327	4,44	27IP	1/4"	25	10
E717330	4,44	30IP	1/4"	25	10
E717340	4,44	40IP	1/4"	25	10

Indivisible package Suggested retail package - Unit price

INSERT BITS FOR TAMPER TORX® SCREWS

ART. WX4505

Bits with axial hole for Tamper-Torx® screws, hexagonal drive 1/4" DIN 3126 - C 6.3. Strong version for universal use.

Tech. Code	GR51 Euro	⊙	⬢	L mm	
E718510	2,30	T10	1/4"	25	10
E718515	2,30	T15	1/4"	25	10
E718520	2,30	T20	1/4"	25	10
E718525	2,30	T25	1/4"	25	10

Tech. Code	GR51 Euro	⊙	⬢	L mm	
E718527	2,30	T27	1/4"	25	10
E718530	2,30	T30	1/4"	25	10
E718540	3,02	T40	1/4"	25	10

Special inserts are available on request with a minimum production batch of 100 pieces.

BITS FOR TAMPER TORX® SCREWS 867/1 Z BO

ART. 867/1 Z BO

Torx® bits with axial hole for Tamper Torx® screws, hexagonal drive 1/4" for Insert holders DIN ISO 1173-D 6,3. Strong version for universal use.

Tech. Code	GR53 Euro	⊙	⬢	Length mm	
E718810	4,13	T10 BO	1/4"	25	10
E718815	4,13	T15 BO	1/4"	25	10
E718820	4,13	T20 BO	1/4"	25	10

Tech. Code	GR53 Euro	⊙	⬢	Length mm	
E718825	4,13	T25 BO	1/4"	25	10
E718830	4,13	T30 BO	1/4"	25	10
E718840	4,13	T40 BO	1/4"	25	10

NUTSETTERS

ART. WX4600

Nutsetters for hexagonal head screws, hexagonal drive 1/4" DIN ISO 1173-E 6.3.

Tech. Code	GR51 Euro	◉ mm	⬢	L mm	Ø Ext. mm
E7200055050	5,30	5.5	1/4"	50	10
E7200055075	8,56	5.5	1/4"	75	10
E720006050	5,29	6	1/4"	50	10
E720006075	8,60	6	1/4"	75	10
E720006100	11,24	6	1/4"	100	10
E720007050	5,29	7	1/4"	50	12
E720007075	8,60	7	1/4"	75	12
E720007100	11,24	7	1/4"	100	12
E720008050	5,29	8	1/4"	50	13

Tech. Code	GR51 Euro	◉ mm	⬢	L mm	Ø Ext. mm
E720008075	8,60	8	1/4"	75	13
E720008100	11,24	8	1/4"	100	13
E720010050	5,29	10	1/4"	50	15
E720010075	8,60	10	1/4"	75	15
E720010100	11,24	10	1/4"	100	15
E720013050	8,21	13	1/4"	50	19.5
E720013075	10,46	13	1/4"	75	19.5
E720017050	9,83	17	1/4"	50	25

NUTSETTERS

ART. 869/4

Nutsetters for hexagonal head screws.1/4" Hexagonal drive DIN ISO 1173-F 6,3.

Tech. Code	GR53 Euro	◉	⬢	Length mm	Ø Ext. mm	
E720405550	(7,99)	5,5	1/4"	50	11	1
E720405565	(14,37)	5,5	1/4"	65	9,5	1
E72040650	(7,99)	6	1/4"	50	11	1
E72040665	(14,37)	6	1/4"	65	11	1
E72040750	7,99	7	1/4"	50	11	1
E72040765	14,37	7	1/4"	65	11	1
E72040850	7,99	8	1/4"	50	12,5	1
E72040865	14,37	8	1/4"	65	12,5	1
E72040950	(7,99)	9	1/4"	50	14	1

Tech. Code	GR53 Euro	◉	⬢	Length mm	Ø Ext. mm	
E72040965	(14,37)	9	1/4"	65	14	1
E72041050	7,99	10	1/4"	50	14	1
E72041065	14,37	10	1/4"	65	14	1
E72041150	(9,66)	11	1/4"	50	16	1
E72041165	(15,03)	11	1/4"	65	16	1
E72041250	9,66	12	1/4"	50	18	1
E72041265	15,03	12	1/4"	65	17	1
E72041350	9,66	13	1/4"	50	18	1
E72041365	15,03	13	1/4"	65	19	1

NUTSETTERS MAGNETIC DESIGN

WODEX

ART. WX4601

Magnetic nutsetters for hexagonal head screws, hexagonal drive 1/4" DIN ISO 1173-E 6.3.

Tech. Code	GR51 Euro	◉ mm	⬢	L mm	Ø Ext. mm
E7210055050	6,75	5.5	1/4"	50	10
E7210055075	10,05	5.5	1/4"	75	10
E721006050	6,24	6	1/4"	50	10
E721006075	10,05	6	1/4"	75	10
E721007050	6,24	7	1/4"	50	12
E721007075	10,05	7	1/4"	75	12
E721007100	13,12	7	1/4"	100	12
E721008050	6,24	8	1/4"	50	13
E721008075	10,05	8	1/4"	75	13

Tech. Code	GR51 Euro	◉ mm	⬢	L mm	Ø Ext. mm
E721008100	13,12	8	1/4"	100	13
E721010050	6,24	10	1/4"	50	15
E721010075	10,05	10	1/4"	75	15
E721010100	13,12	10	1/4"	100	15
E721013050	9,56	13	1/4"	50	19.5
E721013075	12,25	13	1/4"	75	19.5
E721013100	15,81	13	1/4"	100	19.5
E721017050	11,52	17	1/4"	50	25

NUTSETTERS MAGNETIC DESIGN

Wera

ART. 869/4 M

Nutsetters with permanent magnet for hexagonal head screws 1/4" hexagonal drive DIN ISO 1173-F 6,3.

Tech. Code	GR53 Euro	◉	⬢	Length mm	Ø Ext. mm	📦
E721405550	(9,55)	5,5	1/4"	50	11	1
E721405565	(18,76)	5,5	1/4"	65	11	1
E72140650	(9,55)	6	1/4"	50	11	1
E72140750	9,55	7	1/4"	50	11	1
E72140765	18,76	7	1/4"	65	11	1
E72140850	9,55	8	1/4"	50	12,5	1
E72140865	18,76	8	1/4"	65	12,5	1
E72140950	(9,55)	9	1/4"	50	14	1
E72140965	(18,76)	9	1/4"	65	14	1

Tech. Code	GR53 Euro	◉	⬢	Length mm	Ø Ext. mm	📦
E72141050	9,55	10	1/4"	50	14	1
E72141065	18,76	10	1/4"	65	14	1
E72141150	(11,67)	11	1/4"	50	16	1
E72141165	(21,56)	11	1/4"	65	16	1
E72141250	(11,67)	12	1/4"	50	18	1
E72141265	(21,56)	12	1/4"	65	17	1
E72141350	11,67	13	1/4"	50	18	1
E72141365	21,56	13	1/4"	65	19	1

NUTSETTERS IN STAINLESS STEEL

Wera

ART. 3869/4

Nutsetters in stainless steel with retaining spring for hexagonal headed screws. 1/4" Hexagonal drive DIN ISO 1173-F 6,3.

Tech. Code	GR53 Euro	◉	⬢	Length mm	Ø Ext. mm	📦
E72170750	17,14	7	1/4"	50	12,5	1
E72170850	18,39	8	1/4"	50	14	1

Tech. Code	GR53 Euro	◉	⬢	Length mm	Ø Ext. mm	📦
E72171050	20,07	10	1/4"	50	16	1
E72171350	27,52	13	1/4"	50	19,5	1

TAP WRENCHES

WODEX

ART. WX4605

Tap wrenches with locking screw, hexagonal drive 1/4" DIN ISO 1173-E 6.3. Square drive for taps with reinforced shank DIN 371

Tech. Code	GR51 Euro	Taps DIN371	O mm	Shank Ø mm	⬢	L mm
E7231028	22,56	M3	2.8	3.6	1/4"	75
E7231035	22,56	M4	3.5	4.6	1/4"	75

Tech. Code	GR51 Euro	Taps DIN371	O mm	Shank Ø mm	⬢	L mm
E7231050	22,56	M5/M6	5.0	6.1	1/4"	75
E7231063	22,56	M8	6.3	8.1	1/4"	75

MAGNETIC BIT HOLDERS

WODEX

ART. WX4630

Magnetic bit holders **PREMIUM QUALITY** for hexagonal bits 1/4" DIN ISO 1173-C 6.3. **Quick Release** version with powerful permanent magnet, 1/4" hexagonal drive DIN ISO 1173-E 6.3.
Features:
- Change of inserts with one hand
- External ring in aluminium

Tech. Code	GR51 Euro	◉	⬢	Ø mm	L mm
E7401060	14,67	1/4"	1/4"	15	60

Indivisible package Suggested retail package - Unit price

MAGNETIC BIT HOLDERS

ART. WX4625

Standard DIN 7427 FORMA B
Magnetic bit holders for hexagonal drive insert bits 1/4” DIN 3126-Form C 6.3. Version with stainless steel sleeve.
Hexagonal drive 1/4" DIN ISO 1173-E 6.3.

Tech. Code	GR51 Euro	◉	⬢	Ø mm	L mm	
E7405050	4,28	1/4"	1/4"	10	50	2
E7405060	4,40	1/4"	1/4"	10	60	2
E7405075	6,14	1/4"	1/4"	10	75	2
E7405100	9,79	1/4"	1/4"	10	100	1
E7405150	14,73	1/4"	1/4"	10	150	1
E7405200	18,38	1/4"	1/4"	10	200	1
E7405250	20,84	1/4"	1/4"	10	250	1

MAGNETIC BIT HOLDERS WITH RETAINING RING 899/4/1

ART. 899/4/1

Magnetic bit holders for hexagonal bit holders DIN ISO 1173-C 6,3. With sleeve in stainless steel, retaining ring and strong permanent magnet, hexagonal drive of 1/4" for power screwdrivers DIN ISO 1173-F 6,3.

Tech. Code	GR53 Euro	◉	⬢	Ø mm	Length mm
E7420050	11,06	1/4”	1/4”	10,5	50
E7420075	18,10	1/4”	1/4”	10,5	75
E7420100	19,31	1/4”	1/4”	10,5	100
E7420152	21,61	1/4”	1/4”	10,5	152

BIT HOLDERS

ART. WX4640

Hexagonal adapter bit holders 1/4” DIN ISO 1173-C 6.3. Female square socket drive of 1/4".

Tech. Code	GR51 Euro	◉	⬢	Ø mm	L mm
E74241/4	5,47	1/4"	1/4"	12	25

ADAPTOR WITH QUICK-RELEASE CHUCK 784 A/1

ART. 784 A/1 - 784 B/1 - 784 C/1

Adaptor with quick-release chuck hexagonal bit holders 1/4" DIN ISO 1173-C 6,3. Female square socket drive of 1/4".

Tech. Code	GR53 Euro	◉	○	Length mm
E74251/4	24,22	1/4"	1/4"	30
E74253/8	27,23	1/4"	3/8"	43
E74251/2	27,78	1/4"	1/2"	50

ADAPTERS FOR SOCKET BITS

ART. WX4642

Standard DIN 7428
Adapters for socket bits. Hexagonal drive 1/4" DIN ISO 1173-E 6.3.

Tech. Code	GR51 Euro	■	⬢	L mm	Specification
E74291/4	5,47	1/4"	1/4"	25	With ball

ADAPTERS FOR SOCKET BITS

ART. WX4643

Standard DIN 7428
Adapters for socket bits with hexagonal drive 1/4" DIN ISO 1173-E 6.3.

Tech. Code	GR51 Euro	■	⬢	L mm	Specification
E74311/4	8,08	1/4"	1/4"	50	With ball
E74313/8	9,18	3/8"	1/4"	50	With ball
E74311/2	12,72	1/2"	1/4"	50	With ball

Indivisible package Suggested retail package - Unit price

ADAPTERS FOR SOCKET BITS

ART. WX4644

Standard DIN 7428

Adapters for impact socket bits with hexagonal drive 1/4" DIN ISO 1173-E 6.3

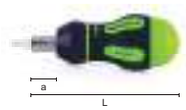
Tech. Code	GR51 Euro	■	⬢	L mm	Specification
E74331/4	9,05	1/4"	1/4"	50	With pin
E74333/8	10,17	3/8"	1/4"	50	With pin

BIT-HOLDER SCREWDRIVERS STUBBY WITH INSERT SET

ART. WX4622

Standard DIN 3126 ISO 1173 - C 6.3

1/4" Hexagonal bit-holder screwdrivers DIN 3126 ISO 1173-C 6.3. Extra short stubby version with reversible ratchet and housing in the handle containing 7 assorted Inserts. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.



Composition:

WX4400 Insert bits 1/4"x25 Phillips® PH1 - PH2 - PH3
WX4430 Insert bits 1/4"x25 slotted 4.5 - 6.5 mm
WX4475 Insert bits 1/4"x25 Torx® T15 - T20

Tech. Code	GR51 Euro	◉	a mm	L mm
E749078	20,48	1/4"	18	98

BIT-HOLDER SCREWDRIVERS

ART. WX4635

Bit-holder screwdrivers **PREMIUM QUALITY** for electronics, eyewear and fine mechanics. Corrosion resistant aluminium body Ø 11.5 mm, shaped gripping area and rotating head Ø 25 mm for quick and precise assembly, 4-jaw brass gripper for inserts with cylindrical shank Ø 2.5 mm.

Tech. Code	GR51 Euro	Ø Joint mm	L mm	📦
E749500	22,00	2.5	105	5

INSERT BITS FOR PHILLIPS® SCREWS

ART. WX4636

Bits for Phillips® screws, cylindrical shank Ø 3/32" for bit-holder screwdrivers Wodex WX4635. Strong version for universal use.

Tech. Code	GR51 Euro	⊕	Ø Joint mm	L mm	📦
E74960030	3,71	PH00	2.5	30	5

Tech. Code	GR51 Euro	⊕	Ø Joint mm	L mm	📦
E7496030	3,71	PH0	2.5	30	5

INSERT BITS FOR SLOTTED SCREWS

ART. WX4637

Bits for slotted screws, cylindrical shank Ø 3/32" for bit-holder screwdrivers Wodex WX4635. Strong version for universal use.

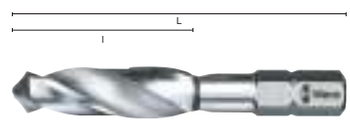
Tech. Code	GR51 Euro	⊖ mm	Ø Joint mm	L mm	📦
E74970930	3,18	0.9	2.5	30	5
E74971530	3,18	1.5	2.5	30	5
E74971830	3,50	1.8	2.5	30	5

Tech. Code	GR51 Euro	⊖ mm	Ø Joint mm	L mm	📦
E74972030	3,50	2.0	2.5	30	5
E74972530	3,50	2.5	2.5	30	5
E74973030	3,50	3.0	2.5	30	5

DRILL BITS FOR METAL WITH "HEXAGONAL DRIVE 1/4"

ART. 848 HSS

Twist drill bits made of high quality HSS steel for precise drilling in metal. The elasticity of the material guarantees a long tool life. Drill bits with 1/4" hexagonal shank for bit holders DIN ISO 1173-D 6,3.



Tech. Code	GR53 Euro	Ø mm	l mm	L mm
E750203	(8,02)	3	16	38
E750203,1	(8,10)	3,1	18	40
E750203,3	(8,10)	3,3	18	40
E750204	(8,25)	4	20	44
E750204,1	(8,25)	4,1	20	44
E750204,2	8,31	4,2	20	45
E750205	8,40	5	26	50

Tech. Code	GR53 Euro	Ø mm	l mm	L mm
E750205,1	(10,25)	5,1	26	50
E750206	(8,99)	6	26	50
E750206,8	(9,21)	6,8	30	50
E750208	(10,24)	8	32	51
E750208,5	10,60	8,5	33	53
E750210	11,72	10	38	54

📦 Indivisible package 📦 Suggested retail package - Unit price

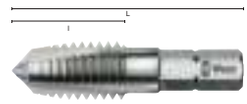
TAP BITS WITH HEXAGONAL DRIVE 1/4"

ART. 844

Tap bits in high quality steel for metric threads on metal. The elasticity of the material guarantees a long tool life. Tap bits with 1/4" hexagonal shank for bit holders DIN ISO 1173-D 6.3.

Tech. Code	GR53 Euro	M	l mm	L mm
E750603	11,33	3	10	33
E750604	11,33	4	11	35
E750605	12,92	5	12	36

Tech. Code	GR53 Euro	M	l mm	L mm
E750606	13,42	6	18	40
E750608	17,13	8	20	40
E750610	20,83	10	20	40



TAP BITS WITH HEXAGONAL DRIVE 1/4" - SET

ART. 844/7

Tool set with sturdy case made of impact-resistant plastic.

Composition:

844 M3 - M4 - M5 - M6 - M8- M10

888/4/1 K Rapidaptor magnetic bit holder quick change bit holder

Tech. Code	GR53 Euro	Pieces
E750707	112,69	7

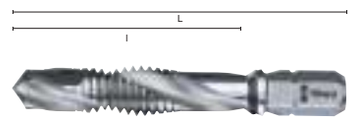
COMBINED THREADED DRILLING TAP BITS WITH HEXAGONAL DRIVE 1/4"

ART. 847 HSS

Combined threaded-drilling tap bits made of high quality HSS steel, for drilling, threading and countersinking with a single tool. The elasticity of the material guarantees a long tool life.
Tap bits with 1/4" hexagonal shank for bit holders DIN ISO 1173-D 6,3.

Tech. Code	GR53 Euro	M	l mm	L mm
E750803	19,39	3	24	36
E750804	19,60	4	27	39
E750805	19,75	5	29	41

Tech. Code	GR53 Euro	M	l mm	L mm
E750806	20,00	6	32	44
E750808	26,67	8	39	51
E750810	32,45	10	47	59



COMBINDED THREADED-DRILLING TAP BITS WITH HEXAGONAL DRIVE 1/4" - SET

ART. 847/7

Tool set with sturdy case made of impact-resistant plastic.

Composition:

847 Combined taps M3 - M4 - M5 - M6 - M8 - M10

888/4/1 K Rapidaptor magnetic quick-change bit holder

Tech. Code	GR53 Euro	Pieces
E750907	146,36	7

COUNTERSINKS 90° Z3 WITH HEXAGONAL DRIVE 1/4"

ART. 846/3

Countersinks DIN 335C 90° with 3 high quality HSS steel cutting edges for countersinking on metal. The elasticity of the material guarantees a long tool life. Countersinks with 1/4" hexagonal shank for bit holders DIN ISO 1173-D 6,3.

Tech. Code	GR53 Euro	Ø mm	l mm	L mm
E751006	18,69	6,3	11	31
E751008	18,94	8,3	11	31
E751010	21,63	10,4	14	34

Tech. Code	GR53 Euro	Ø mm	l mm	L mm
E751012	24,40	12,4	15	35
E751016	26,98	16,5	20	40
E751020	30,79	20,5	21	41

MULTI-DIAMETER CUTTER WITH HEXAGONAL DRIVE 1/4"

ART. 843 HSS

Multi-diameter cutters in HSS steel for drilling on ferrous and plastic materials up to 4.5 mm thick. The elasticity of the material guarantees a long tool life.
Features:
Drilling diameters 4 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 mm
10 mm diameter with bevelling machine for 1 mm thick sheets
1/4" hex shank cutters for bit holder DIN ISO 1173-F 6,3.

Tech. Code	GR53 Euro	Ø min mm	Ø max mm	Progression mm	Length mm
E751320	93,44	4	20	2	75

BIT-HOLDER SCREWDRIVERS

WODEX

ART. WX4620

Standard DIN 3126 - ISO 1173 - C 6.3

1/4" Hexagonal bit-holder screwdrivers DIN ISO 1173-C 6.3. **PREMIUM QUALITY** quick change model for one-handed use. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	◉	L mm
E7515119	16,96	1/4"	142

BIT HOLDER SCREWDRIVERS WITH TELESCOPIC BLADE 817 R

Wera

ART. 817R

Bit holders 1/4" hexagonal drive DIN ISO 1173-C 6,3 - E 6,3 and Wera series 1 and 4. Telescopic blade version, magnet and Rapidaptor quick release chuck function rapid-in, rapid-out, rapid-spin, chuck-all and can be used with one hand only. **Kraftform** grip handle multi-component with anti-rolling protection.

Tech. Code	GR53 Euro	◉	Length mm
E7520133	(50,45)	1/4"	133

BIT HOLDER SCREWDRIVERS WITH MAGNET 821/1

Wera

ART. 812/1

Bit holder for bits 1/4" hexagonal drive DIN ISO 1173-C 6,3 - E 6,3 and Wera series Inserts. Hexagonal blade version, matt nickel chrome with permanent magnet of high resistence. **Kraftform** grip handle multi-component with anti-rolling protection.

Tech. Code	GR53 Euro	◉	a mm	L mm
E752600	33,17	1/4"	120	232

INSERT BITS AND INSERT HOLDERS - INDUSTRIAL SET 31 PIECES

WODEX

ART. WX4590/31

Assortment consisting of 1 magnetic bit holder with stainless steel sleeve and 30 bits for universal use.
Sturdy case made of impact-resistant plastic.

Composition:

- ✪ **WX4400** 1 x PH0-25 - 2 x PH1-25 - 2 x PH2-25 - 1 x PH3-25 mm
- ✪ **WX4415** 1 x PZ1-25 - PZ2-25 - PZ3-25 mm
- ⬬ **WX4430** 1 x Slotted 3.0x25 - 4.5x25 - 6.5x25 mm
- ○ **WX4445** 1 x HEX 2-25 - 1 x 2.5-25 - 2 x 3-25 - 2 x 4-25 - 2 x 5-25 - 1 x 6-25 - 1 x 8-25 mm
- ✪ **WX4475** 1 x Torx T9-25 - T10-25 - T15-25 - T20-25 - T25-25 - T27-25 - T30-25 - T40-25 mm
- ◉ **WX4625** 1 x Magnetic bit holder with hexagonal drive 1/4" 60 mm

Tech. Code	GR51 Euro	Pieces
E752931	33,26	31

BITS AND HOLDERS BIT-CHECK SET 30 METAL 1

Wera

ART. BIT-CHECK 30 METAL 1

Assortiment composed of 1 universal holder with stainless steel sleeve, and permanent magnet, 29 tough viscous bits for universal use.

Composition:

- ◉ ○ **899/4/1** 1 x 1/4"x50
- ✪ **851/1 Z PH** 3 x PH 1x25; 3 x PH 2x25; 2 x PH 3x25
- ✪ **855/1 Z PZ** 3 x PZ 1x25; 3 x PZ 2x25; 3 x PZ 3x25
- ✪ **867/1 TORX**® 1 x TX 10x25; 1 x TX 15x25; 1 x TX 20x25; 1 x TX 25x25; 1 x TX 30x25; 1 x TX 40x25
- ⬬ **800/1 Z**
- ○ **840/1 Z** Hex-Plus 1 x 4,0x25; 1 x 5,0x25; 1 x 6,0x25

Tech. Code	GR53 Euro	Pieces
E753630	33,58	30

Indivisible package Suggested retail package - Unit price

BITS AND HOLDERS BIT-CHECK SET 10 UNIVERSAL 1

ART. BIT-CHECK 10 UNIVERSAL 1

Assortment composed of 1 bit holder with permanent magnet and quick-release chuck, 9 torsion bits to prevent premature wear, tough viscous for universal use.

Composition:

- **O 895/4/1 K** 1 x 1/4"x52
- **851/1 TZ PH** 1 x PH 1x25; 1 x PH 2x25; 1 x PH 3x25
- **855/1 TZ PZ** 1 x PZ 1x25; 1 x PZ 2x25; 1 x PZ 3x25
- **800/1 TZ** 1 x 0,8x5,5x25; 1 x 1,0x5,5x25; 1 x 1,2x6,5x25

Tech. Code	GR53 Euro	Pieces
E753810	51,27	10

BITS AND HOLDERS - BIT-CHECK SET 10 TX UNIVERSAL 1

ART. BIT-CHECK 10 TX UNIVERSAL 1

Set composed of 1 universal rapid release chuck and 9 tough torsion bits to prevent premature wear, for universal use.

Composition:

- **O 894/4/1 K** 1 x 1/4"x51
- **867/1 TX** 1 x TX 8x25; 1 x TX 9x25; 1 x TX 10x25
  TORX® 1 x TX 15x25; 1 x TX 20x25; 1 x TX 25x25; 1 x TX 27x25; 1 x TX 30x25; 1 x TX 40x25

Tech. Code	GR53 Euro	Pieces
E754010	51,27	10

BITS AND HOLDERS - BIT-CHECK SET 10 UNIVERSAL 4

ART. BIT-CHECK 10 UNIVERSAL 4

Set consisting of 1 universal chuck with a stainless steel sleeve, retaining ring and permanent magnet, 9 tough torsion bits to prevent premature wear, for universal use.

Composition:

- **O 899/4/1** 1 x 899/4/1 Kx1/4"x50
- **851/1 TZ PH** 1 x PH 1x25; 1 x PH 2x25; 1 x PH 3x25
- **855/1 TZ PZ** 1 x PZ 1x25; 1 x PZ 2x25; 1 x PZ 3x25
- **800/1 TZ** 1 x 0,8x5,5x25; 1 x 1,0x5,5x25; 1 x 1,2x6,5x25

Tech. Code	GR53 Euro	Pieces
E756010	37,62	10

BITS AND HOLDERS BIT-CHECK SET 30 UNIVERSAL 1

ART. BIT-CHECK 30 UNIVERSAL 1

Assortment composed of 1 rapidaptor holder for rapid change, 29 torsion bits to prevent premature wear, tough vicous for universal use.

Composition:

- **O 889/4/1 K** 1 x 1/4"x50
- **851/1 TX PH** 2 x PH 1x25; 3 x PH 2x25; 1 x PH 3x25
- **855/1 TH PZ** 2 x PZ 1x25; 3 x PZ 2x25; 1 x PZ 3x25
- **867/1 TZ** 1 x TX 10x25; 1 x TX 15x25; 1 x TX 20x25
  TORX® 1 x TX 25x25; 1 x TX 30x25; 1 x TX 40x25
- **867/1 Z** 1 x TX 10x25; 1 x TX 15x25; 1 x TX 20x25
  TORX® BO 1 x TX 25x25; 1 x TX 30x25
- **800/1 TZ** 1 x 1,0x5,5x25
- **840/1 Z** 1 x 3,0x25; 1 x 4,0x25; 1 x 5,0x25; 1 x 6,0x25; 1 x 8,0x25

Tech. Code	GR53 Euro	Pieces
E757030	64,45	30

BITS AND HOLDERS BIT-CHECK SET 30 TX UNIVERSAL 1

ART. BIT-CHECK 30 TX UNIVERSAL 1

Assortiment composed of 1 universal holder with stainless steel sleeve and permanent magnet. 29 torsion bits for universal use.

Composition:

- **O 899/4/1** 1 x 899/4/1 Kx1/4"x50
- **867/1 TORX®** 3 x TX 10x25; 5 x TX 15x25; 8 x TX 20x25; 7 x TX 25x25; 4 x TX 30x25; 2 x TX 40x25

Tech. Code	GR53 Euro	Pieces
E757530	33,58	30

ART. BIT-CHECK 12 BITORSION 1

Assortment composed of 1 rapidaptor rapid change, 11 BiTorsion for a longer duration, tough viscous for universal use.

Composition:

- **O 889/14/1 K** 1 x 1/4"x50
- **851/1 BTZ PH** 1 x PH 1x25; 2 x PH 2x25
- **855/1 BTX PZ** 1 x PZ 1x25; 2 x PZ 2x25
- **867/1** 1 x TX 10x25; 1 x TX 15x25; 1 x TX 20x25
  TORX® BTZ 1 x TX 25x25; 1 x TX 30x25

Tech. Code	GR53 Euro	Pieces
E758212	50,54	12

ART. BIT-CHECK 30 BITORSION 1

Assortiment composed of 1BItorsion holder Rapidaptor and rapid change and 29 BiTorsion bits for longer duration, tough, viscous for universal use.

Composition:

- **889/4/1 K** 1 x 1/4"x50
- **851/1 BTZ PH** 2 x PH 1x25; 5 x PH 2x25; 2 x PH 3x25
- **855/1 BTZ PZ** 2 x PZ 1x25; 6 x PZ 2x25; 2 x PZ 3x25
- **867/1 TORX® BTZ** 1 x TX 10x25; 2 x TX 15x25; 2 x TX 20x25; 2 x TX 25x25; 2 x TX 30x25; 1 x TX 40x25

Tech. Code	GR53 Euro	Pieces
E758630	(80,85)	30

ART. BIT-CHECK 7 DIAMOND 1

Assortment composed of 1 rapidator holder rapid change and 6 BiTorsion bits for a longer duration, diamond coated for secure fit of the screws.

Composizione:

- **O 889/4/1 K** 1 x 1/4"x50
- **851/1 BDC PH** 1 x PH 1x25; 1 x PH 2x25
- **851/1 BDC PH** 1 x PH 1x25; 1 x PH 2x25
- **855/1 BDC PZ** 1 x PZ 1x25; 1 x PZ 2x25
- **800/1 BDC** 1 x 1,0x5,5x25; 1 x 1,2x6,5x25

Tech. Code	GR53 Euro	Pieces
E759007	(50,54)	7

ART. KRAFTFORM KOMPAKT 50

Assortment composed of 1 **Kraftform** grip handle Rapidaptor 817 R rapid change with 1 holder and 12 tough viscous for universal use.

Composition:

- **817 R** 1 x 1/4"x133
- **O 889/4 R** 1 x 1/4"x100
- **851/1 Z PH** 1 x PH 1x25; 1 x PH 2x25
- **855/1 Z PH** 1 x PZ 1x25; 1 x PZ 2x25
- **867/1 Z** 1 x TX 10x25; 1 x TX 15x25; 1 x TX 20x25
  TORX® BO 1 x TX 25x25; 1 x TX 30x25; 1 x TX 40x25
- **800/1 Z** 1 x 0,6x4,5x25; 1 x 1,0x5,5x25

Tech. Code	GR53 Euro	Pieces
E763014	98,26	14

While stocks last

Indivisible package Suggested retail package - Unit price

TELESCOPIC RODS WITH MAGNETIC TERMINAL

WODEX

NEW

ART. WX6060/6

Gripping tools with telescopic rod and magnetic end, handle with pocket clip and scribing tip protected by a special screwed cap.

Tech. Code	GR51 Euro	Ø magnet mm	mm	Length mm	Capacity g
E770206	8,55	6	7,5	150 - 665	500

MAGNETIC FLEXIBLE RODS

WODEX

NEW

ART. WX6062

Magnetic gripping tools with PVC-coated flexible shaft and ergonomic plastic handle.

Tech. Code	GR51 Euro	Ø magnet mm	Ø max mm	Useful length mm	Capacity g
E770404	10,35	4	5	330	270

ART. WX6063

Magnetic gripping tools with flexible chromed shaft and ergonomic plastic handle.

NEW

Tech. Code	GR51 Euro	Ø magnet mm	Ø max mm	Useful length mm	Capacity g
E770606	23,75	6	7,5	400	500
E770612	25,50	12	13	400	1000
E770615	33,85	15	16	400	1800

FLEXIBLE MAGNETIC PICK-UP TOOLS

STAHLWILLE

ART. 12600

Flexible pick-up tools with incorporated magnet, screwdriver handle.

Tech. Code	GR55 Euro	Ø magnet mm	Ø max mm	Maximum capacity mm	Load capacity g
E770905	10,08	4	5	425	270
E770908	35,17	6	8	380	500
E770915	50,38	12	15	425	1800
E770919	74,97	16	19	410	3000

FLEXIBLE MAGNETIC PICK UP TOOLS

ART. E7710

Flexible magnetic pick up tool with built-in magnet, screwdriver handle.

Tech. Code	GR52 Euro	Ø magnet mm	Ø max mm	Useful length mm	Maximum capacity g
E771006	21,56	6	6,5	400	500

FLEXIBLE MAGNECTIC SPRING PICK UP CLAWS

ART. E7722

Flexible claws with prehensile spring with 4 blades and magnet, suitable for retaining hexagonal head screws up to size M12.

Tech. Code	GR52 Euro	Ø mm	Useful length mm	Total length mm	Load capacity g
E7722700	35,81	15	20	635	500

ART. E7723

Flexible spring pick up claws a gripping spring with 3 claws indicated to hold hexagonal and cylindrical head screws up to size M8.

Tech. Code	GR60 Euro	Ø mm	Max opening mm	Useful length mm	Load capacity g
E772345	37,74	9	15	390	250
E772370	40,24	9	15	640	250

WODEX MODULAR SYSTEM

With the WODEX MODULAR SYSTEM you can rationalize the space inside every single drawer of your tool cabinet.
The modularity of our FOAM inserts means that there are multiple ways to arrange your tools and optimize the drawers without wasting space.

If you see this icon, it means that the drawers are compatible with our Wodex FOAM sets.

1/6 1/6 vertical
200 x 223.5 mm
Vertical position

1/3 H 1/3 horizontal
400 x 223.5 mm
Horizontal position

1/3 V 1/3 vertical
200 x 447 mm
Vertical position

2/3 2/3 vertical
400 x 447 mm
Vertical position

TOOL CABINETS WITH ABS TOP

ART. WX9410/B7 - WX9410/B7-SCS

Tool trolley cabinets **PREMIUM QUALITY** in sheet steel with blue RAL 5004 epoxy paint and drawer handles in green RAL 6018 steel. Fitted with high resistance ABS top, a sturdy ergonomic handle, full extension drawers with telescopic ball bearing guides, central locking with key lock, oil-resistant rubber wheels Ø 125 mm, 2 fixed and 2 swivelling, one with brake. The side and rear walls are designed for mounting optional accessories, the drawers can be fitted with sets for internal division. A simple and effective safety device integrated in the handles stops the drawers from being opened involuntarily while the trolley is being moved.

Technical specifications:
E8215B7 - WX9410/B7
Standard version

E8215B7S - WX9410/B7-SCS
Version **Top Quality** fitted with anti-tip device **"Safety Control System"** that prevents more than one drawer from being opened at the same time, guaranteeing trolley stability and maximum operator safety.

Tech. Code		E8215B7	E8215B7S
GR58	Euro	980,00	1080,00
Ext. dimensions	mm	760 x 560 x 980 h	760 x 560 x 980 h
Drawers	n°	7	7
Drawer int. dim.	mm	600 x 450	600 x 450
Drawer height	mm	5x75 - 1x150 - 1x200	5x75 - 1x150 - 1x200
Drawer capacity	kg	40	40
Cabinet capacity	kg	400	400
Static load	kg	1000	1000
Weight	kg	78	78

Made in Europe

Indivisible package Suggested retail package - Unit price

TOOL CABINETS WITH WOODEN TOP

ART. WX9416/B6 - WX9416/B8

PREMIUM QUALITY tool trolley cabinet with wooden top. Maximum work safety guaranteed by the central lock and by the safety hook against the unintentional opening of the drawers when the trolley is being moved. Fitted with a sturdy ergonomic handle, full-extension drawers with telescopic guides, 2 fixed wheels Ø 160 mm and 2 swivel wheels with brake Ø 100 mm in vulcanized rubber. Perforated side and back walls that allow positioning of tools and accessories. Additional work area provided by a 40 mm thick multilayer wooden top. Colour blue RAL 5004.

GS - TUV certification

Tech. Code		E8221B6	E8221B8
GR58	Euro	1839,71	2013,68
Ext. dimensions	mm	892 x 653 x 927 h	892 x 653 x 927 h
Drawers	n°	6	8
Drawer int. dim.	mm	600 x 450	600 x 450
Drawer height	mm	2x75 - 2x100 - 1x150 - 1x200	6x75 - 1x100 - 1x150
Drawer capacity	kg	40	40
Cabinet capacity	kg	400	400
Weight	kg	83	90

8 drawer version

While stocks last

TOOL CABINETS WITH ABS TOP

ART. WX9421/B6 - WX9421/B8

Tool trolley cabinets **PREMIUM QUALITY** with high resistance ABS top. Maximum work safety guaranteed by the central lock and by the safety hook against the unintentional opening of the drawers when the trolley is being moved. Fitted with a sturdy ergonomic handle, full-extension drawers with telescopic guides, 2 fixed wheels Ø 160 mm and 2 swivel wheels with brake Ø 100 mm in vulcanized rubber. Perforated side and back walls that allow positioning of tools and accessories with anti-slip ABS top, storage compartments for small parts and holes for screwdrivers. Colour blue RAL 5004.

GS - TUV certification

Tech. Code		E8226B6	E8226B8
GR58	Euro	1705,62	1815,46
Ext. dimensions	mm	892 x 653 x 927 h	892 x 653 x 927 h
Drawers	n°	6	8
Drawer int. dim.	mm	600 x 450	600 x 450
Drawer height	mm	2x75 - 2x100 - 1x150 - 1x200	6x75 - 1x100 - 1x150
Drawer capacity	kg	40	40
Cabinet capacity	kg	400	400
Weight	kg	73	80

8 drawer version

While stocks last

TOOL TROLLEY CABINETS WITH ABS TOP AND PROTECTIVE-EDGE PROFILES

ART. WX9431/B6 - WX9431/B8

Tool trolley cabinets **PREMIUM QUALITY** with high resistance ABS top and rubber bumper profiles on the uprights. Maximum work safety guaranteed by the central lock and by the safety hook against the unintentional opening of the drawers when the trolley is being moved. Fitted with a sturdy ergonomic handle, full-extension drawers with telescopic guides, 2 fixed wheels Ø 160 mm and 2 swivel wheels with brake Ø 100 mm in vulcanized rubber. Perforated side and back walls that allow positioning of tools and accessories with anti-slip ABS top, storage compartments for small parts and holes for screwdrivers. Colour blue RAL 5004.

GS - TUV certification

Tech. Code		E8231B6	E8231B8
GR58	Euro	1873,24	2048,66
Ext. dimensions	mm	892 x 653 x 927 h	892 x 653 x 927 h
Drawers	n°	6	8
Drawer int. dim.	mm	600 x 450	600 x 450
Drawer height	mm	2x75 - 2x100 - 1x150 - 1x200	6x75 - 1x100 - 1x150
Drawer capacity	kg	40	40
Cabinet capacity	kg	400	400
Weight	kg	75	82

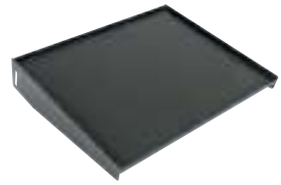
8 drawer version

While stocks last

ART. WX9432

Accessories for Wodex tool trolleys, supplementary shelves in black painted sheet steel with non-slip ribbed rubber mat.

Tech. Code	GR58 Euro	Dimensions mm
E823500	106,14	380 x 310



ART. WX9433

Accessories for Wodex tool trolleys, waste containers in black painted sheet steel.

Tech. Code	GR58 Euro	Dimensions mm
E823700	90,85	380 x 310

ART. WX9434

Accessories for Wodex tool trolleys, roll holder supports Ø 400 mm black painted sheet steel.

Tech. Code	GR58 Euro	Dimension mm
E823900	96,78	380 x 230

ART. WX9435

Accessories for Wodex tool trolleys, black painted sheet steel extension socket supports type D 4 socket, cable length 1.5m.

Tech. Code	GR58 Euro	Dimensions mm
E824100	149,00	200 x 380 x 50

ART. WX9436

Accessories for Wodex tool trolleys, support for spray cans in black painted sheet steel.

Tech. Code	GR58 Euro	Dimensions mm
E824300	34,41	70 x 380 x 74

ART. WX9437

Accessories for Wodex tool trolleys, notice board in sheet steel with perforated internal panel, door and lock.

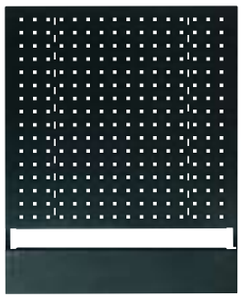
Tech. Code	GR58 Euro	Dimensions mm
E824500	304,38	667 x 380 x 50

Indivisible package Suggested retail package - Unit price

TROLLEY ACCESSORIES

ART. WX9438

Accessories for Wodex tool trolleys, perforated back panel, made of black painted sheet steel, square perforated 10 x 10 mm, pitch 38 mm.



Tech. Code	GR58 Euro	Dimensions mm
E824700	142,76	660 x 640h

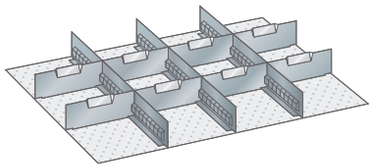
ART. WX9439

Accessories for Wodex tool trolleys, non-slip PVC and Nylon mats to be placed at the bottom of the drawer for placing delicate tools on.

Tech. Code	GR58 Euro	Dimension mm
E824800	16,04	600 x 450 x 3

ART. WX9440

Accessories for Wodex trolleys, set of partitions for drawers composed of 3 longitudinal partitions in painted steel and 8 transversal dividers in aluminium with which it is possible to create up to 12 140x140 mm compartments.



Tech. Code	GR58 Euro	Drawer height mm
E8249075	49,82	75
E8249100	64,41	100
E8249150	76,27	150
E8249200	96,47	200

PLASTIC TRAYS

ART. WX9495

Trays in ESD antistatic plastic, ideal for dividing electronic components, tube terminals, cable lugs and small metal parts, in the drawers of all types of Wodex trolleys. Thanks to the modularity of the trays, the entire drawer can be filled in an organized manner without leaving empty spaces (useful internal dimension of the drawers 600 x 450 mm).

Tech. Code	GR51 Euro	Length mm	Width mm	Height mm	
E4885075075B	5,37	75	75	46	12
E4885150075B	9,56	150	75	46	6
E4885150150B	12,95	150	150	46	6

TOOL CABINETS NEW GRAND PRIX

ART. E8400

Sheet steel tool cabinets with 10 mm thick EVA top.

Features:
- Full extension drawers with telescopic guides
- Central locking with key
- Side handle
- Can compartment
- Polyamide wheels Ø 125 mm including 2 swivel wheels with brakes
- Black, embossed scratch-resistant external casing

Tech. Code		E8400P5	E8400P7
GR52	Euro	759,00	795,00
Dimensions	mm	760 x 506 x 1000 h	760 x 506 x 1000 h
Drawers	n°	5	7
Drawer int. dim.	mm	600 x 447	600 x 447
Drawer height	mm	3x75 h; 1x150 h; 1x300 h	5x75 h; 2x150 h
Drawer capacity	kg	30	30
Cabinet capacity	kg	400	400
Colour		RAL 3020	RAL 3020
Weight	kg	64	65

While stocks last

Indivisible package Suggested retail package - Unit price

COMBINATION WRENCHES IN FOAM

1/3 V | 2/3 | WMS

ART. WX1060/SE12 - WX1060/SE16

Standard DIN 3113A - ISO 7738A
Set of **PREMIUM QUALITY>** combination wenches with profiled anti-slip body and rounded edges, chrome-vanadium steel with chrome-satin finish. The ring side with **Plus-Drive** profile allows high force to be transmitted to the shoulders of screws and nuts without damaging the edges.
Set complete with Eva Tray module for Wodex trolleys.

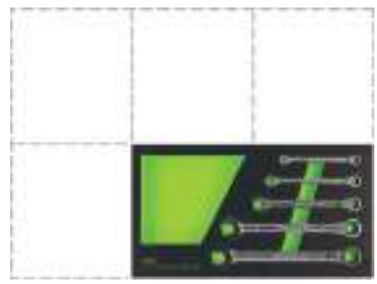
Composition:
WX1060/SE12 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 17 - 19 - 22 mm
WX1060/SE16 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm

Tech. Code	GR51 Euro	Pieces	Module size mm
E000712	96,46	12	400 x 223.5 - 1/3 Horizontal position
E000716	175,00	16	400 x 447- 2/3 Vertical position

COMBINATION RATCHET WRENCHES 72T IN FOAM

1/3 H | WMS

ART. WX1300/SE5



Standard ISO 691
Set of 5 combination ratchet wrenches with 72T standard teeth in chrome-vanadium steel, hardness 42-48 HRC, high torque transmission, 5° return angle, high resistance chrome-satin steel finish. Compliant with RoHS and REACH directives.

Set of wrenches complete with Eva Tray module for Wodex trolleys. Module dimensions 400x223.5 mm - Horizontal Position.

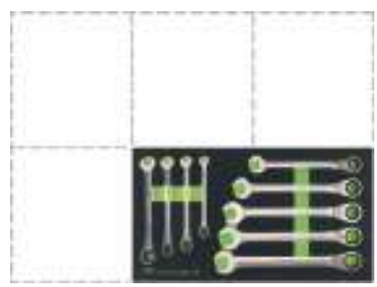
Composition:
8-10-13-17-19 mm

Tech. Code	GR51 Euro	Pieces
E019205	89,04	5

COMBINATION WRENCHES WITH REVERSIBLE RATCHET IN FOAM

1/3 H | WMS

ART. WX1350/SE5 - WX1350/SE9



Standard ISO 691
Set of combination wrenches with reversible ratchet with 72T standard teeth in chrome-vanadium steel, hardness 42-48 HRC. High torque transmission, 5° return angle, 15° bent polygonal ratchet head for working in hard-to-reach spaces, high resistance chrome-satin finish. Compliant with RoHS and REACH directives.

Set of wrenches complete with Eva Tray module for Wodex trolleys. Module dimensions 400x223.5 mm - Horizontal Position.

Composition:
WX1350/SE5 8 - 10 - 13 - 17 - 19 mm
WX1350/SE9 8 - 10 - 11 - 13 - 14 - 16 - 17 - 18 - 19 mm

Tech. Code	GR51 Euro	Pieces
E020205	99,64	5
E020209	169,60	9

DOUBLE OPEN ENDED WRENCHES IN FOAM

1/3 H | 2/3 | WMS

ART. WX1010/SE8 - WX1010/SE12

Standard DIN 3110 - ISO 10102
Set of double open ended wrenches with profiled anti-slip body and rounded edges in chrome-vanadium steel, chrome-satin finish.

Set of wrenches complete with Eva Tray module for Wodex trolleys.

Composition:
WX1010/SE8 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 mm
WX1010/SE12 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32 mm

Tech. Code	GR51 Euro	Pieces	Module size mm
E026208	52,79	8	400 x 223.5 - 1/3 Horizontal position
E026212	93,81	12	400 x 447- 2/3 Vertical position

Indivisible package Suggested retail package - Unit price

HEXAGONAL NUT DRIVERS WITH HANDLE IN FOAM

1/3 H

ART. WX1950/SE8

Set of 8 nut drivers with **PREMIUM QUALITY** handle for hexagonal head screws or nuts. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** grip made of **SANTOPRENE**® that guarantee maximum grip for fast and accurate work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Set of wrenches complete with Eva Tray module for Wodex trolleys. Module dimensions 400x223.5 mm - Horizontal Position.

Composition:

5x125 - 5.5x125 - 6x125 - 7x125 - 8x125 - 9x125 - 10x125 - 13x125 mm

Tech. Code	GR51 Euro	Pieces
E145108	106,74	8

MICRO SCREWDRIVERS WITH HEXAGONAL SOCKET IN FOAM

1/6

ART. WX1957/SE6

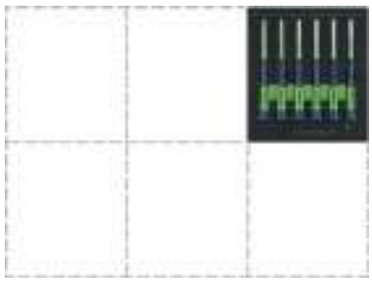
Set of 6 **PREMIUM QUALITY** micro screwdrivers for electronics and fine mechanics with satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Set of screwdrivers complete with Eva Tray module for Wodex trolleys. Module size 200x223.5 mm - Vertical position.

Composition:

2.5x60 - 3x60 - 3.5x60 - 4x60 - 5x60 - 6x60 mm.

Tech. Code	GR51 Euro	Pieces
E148106	50,35	6



HEXAGONAL L KEYS AND STUBBY SCREWDRIVER IN FOAM

1/6

ART. WX9520/SE2

Kit composed of a set of long hexagonal keys with magnet and a Stubby bit holder screwdriver complete with a set of insert bits.
Set of tools complete with Eva Tray module for Wodex tool trolleys - Module size 200x223.5 mm - Vertical position

Composition:

WX2600/S9 Set of long hexagonal L keys with magnet
WX4622 Stubby bit holder screwdriver with set of inserts

Tech. Code	GR51 Euro	Pieces
E230202	65,00	2

HEXAGONAL SCREWDRIVERS WITH BALL END IN FOAM

1/3 H

ART. WX2810/SE5

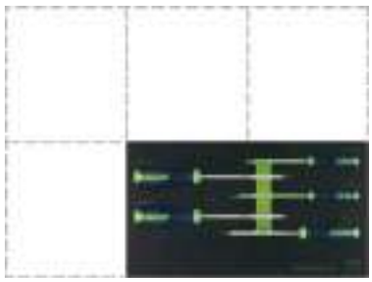
Set of 5 **PREMIUM QUALITY** hexagonal screwdrivers with ball end, blades in satin chrome-vanadium steel, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Set of screwdrivers complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal Position.

Composition:

2.5x100 - 3x125 - 4x125 - 5x150 - 6x150 mm

Tech. Code	GR51 Euro	Pieces
E252105	47,14	5



SET OF MICRO HEXAGONAL SCREWDRIVERS IN FOAM

1/6

ART. WX2847/SE6

Set of 6 **PREMIUM QUALITY** micro screwdrivers for electronics and fine mechanics with satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Set of screwdrivers complete with Eva Tray module for Wodex trolleys. Module size 200x223.5 mm - Vertical position.

Composition:

0.9x60 - 1.3x60 - 1.5x60 - 2.0x60 - 2.5x60 - 3.0x60 mm

Tech. Code	GR51 Euro	Pieces
E255606	47,14	6

SLIDING T-HANDLE HEXAGONAL WRENCHES IN FOAM

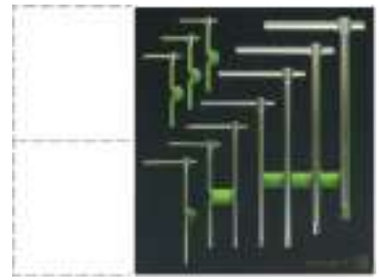
2/3 WMS

ART. WX2700/SE10

Set of 10 **PREMIUM QUALITY**sliding T-handle wrenches for hexagonal socket head screws. The high precision and high quality of the materials ensure very high tightening torques.

Features:
- Special high-alloy chrome vanadium steel
- Safety limit stops that prevent sliding rod from being removed
- Ends designed so that they fit the screw perfectly
- Chrome-satin finish

Set of wrenches complete with Eva Tray module for Wodex tool trolleys - Module size 400x447 mm - Vertical Position.



Composition:
2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 - 12 - 14 mm

Tech. Code	GR51 Euro	Pieces
E265410	230,00	10

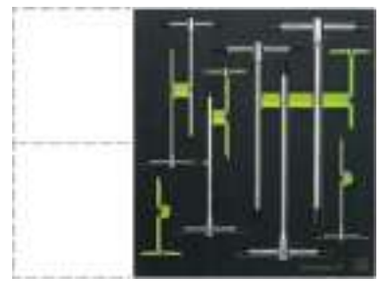
FIXED T-HANDLE HEXAGONAL WRENCHES IN FOAM

2/3 WMS fast ID

ART. WX2717/SE10

Set of **PREMIUM QUALITY** fixed T-handle wrenches for hexagonal socket head screws. The high precision and high quality of the materials ensure very high tightening torques. Colour coded wrenches for quick size selection.

Features:
- High-alloy chrome vanadium steel **58CrV5**- Double oil hardening treatment
- Surface hardness **53 - 55 HRC**
- Torsional strength higher than ISO 2936
- Ends designed so that they fit the screw perfectly
- Chrome-satin finish with phosphate coated ends



Set of wrenches complete with Eva Tray module for Wodex tool trolleys - Module size 400x447 mm - Vertical Position.

Composition:
2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 - 12 - 14 mm

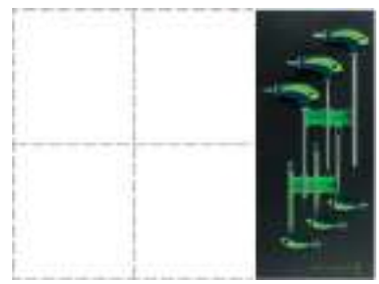
Tech. Code	GR51 Euro	Pieces
E264510	243,80	10

HEXAGONAL WRENCHES WITH HANDLE IN FOAM

1/3 V ERGO FORM WMS

ART. WX2750/SE6

Set of 6**PREMIUM QUALITY** hexagonal wrenches with ball end, bi-component hypoallergenic and anti-slip **ERGOFORM** handles made of <> **SANTOPRENE**® with high density Polypropylene core. Hexagonal blades in special chrome vanadium steel with satin finish.



Set of wrenches complete with Eva Tray module for Wodex tool trolleys - Module size 200 x 447 mm - Vertical position.

Composition:
2.5 - 3 - 4 - 5 - 6 - 8 mm

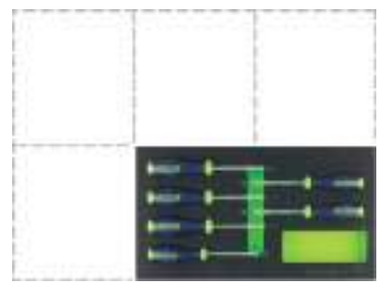
Tech. Code	GR51 Euro	Pieces
E256106	78,44	6

SCREWDRIVERS FOR TORX® SCREWS IN FOAM

1/3 H ERGO FORM WMS

ART. WX2940/SE6

Set of 6 **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.



Set of screwdrivers complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal position.

Composition:
T10x100 - T15x100 - T20x100 - T25x100 - T27x100 - T30x100 mm

Tech. Code	GR51 Euro	Pieces
E336906	59,36	6

Indivisible package Suggested retail package - Unit price

MICRO SCREWDRIVERS FOR TORX® SCREWS IN FOAM

1/6

ART. WX2947/SE6

Set of 6 **PREMIUM QUALITY** micro screwdrivers for electronics and fine mechanics with satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Set of screwdrivers complete with Eva Tray module for Wodex tool trolleys - Module size 200x223.5 mm - Vertical Position.

Composition:

T6x60 - T7x60 - T8x60 - T9x60 - T10x60 - T15x60 mm

Tech. Code	GR51 Euro	Pieces
E342106	42,33	6

EVA TRAY MODULES WITH 2 EMPTY TRAYS

1/6

ART. WX9490

Eva Tray modules for Wodex trolleys, version with 2 empty trays for storing small tools.
Module size 200x223.5 mm - Vertical position.

Tech. Code	GR51 Euro	Tray size mm
E488002	11,87	165 x 85

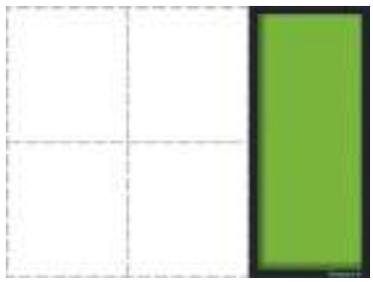
EVA TRAY MODULES WITH 1 EMPTY TRAY

1/3 V

ART. WX9492

Eva Tray modules for Wodex trolleys, version with empty tray for storing large tools.
Module size 200x447 mm - Vertical position.

Tech. Code	GR51 Euro	Tray size mm
E488201	17,91	150 x 375



EVA TRAY MODULES WITH PLASTIC TRAY

1/3 V

ART. WX9492/B3 - WX9492/B5 - WX9492/B10

Eva Tray modules for Wodex tool trolleys, fitted with ESD antistatic plastic trays, organized in the special housing. The trays can be removed if necessary.
Module size 200x447 mm - Vertical position.

Tech. Code	GR51 Euro	Empty module 200x447 mm	Trays 150x150x46 mm	Trays 150x75x46 mm	Trays 75x75x46 mm
E488303	50,88	1	2	1	-
E488305	57,24	1	-	5	-
E488310	62,54	1	-	-	10

MICRO SCREWDRIVERS FOR SLOTTED AND PH-PZ SCREWS IN FOAM

1/6

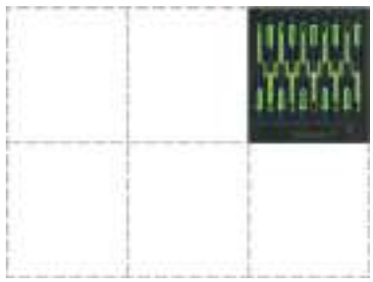
ART. WX9600/SE10

Set of 10 **PREMIUM QUALITY** micro screwdrivers for electronics and fine mechanics with satin chrome-vanadium steel blades and precision hardened **BLACK-TIP**. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles with swivel cap, made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Compliant with RoHS and REACH directives.
Set of screwdrivers complete with Eva Tray module for Wodex trolleys - Module size 200x223.5 mm - Vertical Position

Composition:

- **WX4040** 1.5x60 - 2.0x60 - 2.5x60 - 3.0x60 - 4.0x60 mm
- **WX4090** PH00x60 - PH0x60 - PH1x60
- **WX4140** PZ0x60 - PZ1x60

Tech. Code	GR51 Euro	Pieces
E584810	51,94	10



SCREWDRIVERS PREMIUM QUALITY - SET IN FOAM

WODEX

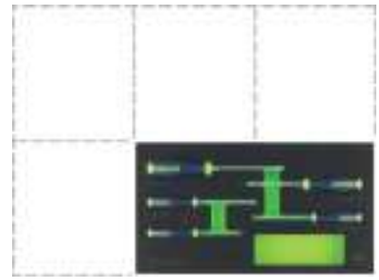
1/3 H

ART. WX4200/SE5

Set of **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.
Set of screwdrivers complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal Position.

Composition:
2.5x75 - 3.5x100 - 4.0x100 - 5.5x100 - 6.5x125 mm

Tech. Code	GR51 Euro	Pieces
E608005	40,22	5



SCREWDRIVERS PREMIUM QUALITY - SET IN FOAM

WODEX

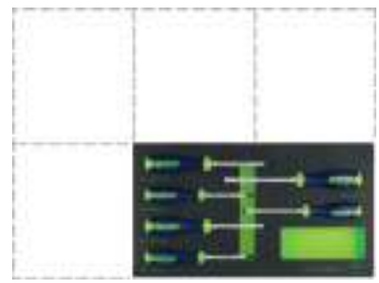
1/3 H

ART. WX4210/SE6

Set of **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.
Set of screwdrivers complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal Position.

Composition:
WX4000 5.5x100 - 6.5x125 mm
WX4050 PH1x80 - PH2x100 mm
WX4100 PZ1x80 - PZ2x100 mm

Tech. Code	GR51 Euro	Pieces
E608206	52,47	6



SCREWDRIVERS PREMIUM QUALITY - SET IN FOAM

WODEX

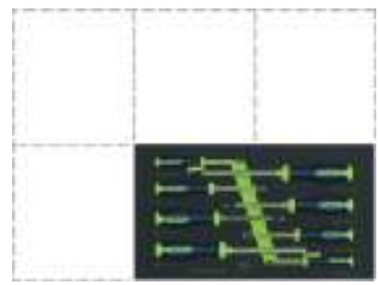
1/3 H

ART. WX4205/SE8

Set of **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.
Set of screwdrivers complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal position.

Composition:
WX4050 PH0x60 - PH1x80 - PH2x100 - PH3x150 mm
WX4100 PZ0x60 - PZ1x80 - PZ2x100 - PZ3x150 mm

Tech. Code	GR51 Euro	Pieces
E608108	61,14	8



SCREWDRIVERS PREMIUM QUALITY - SET IN FOAM

WODEX

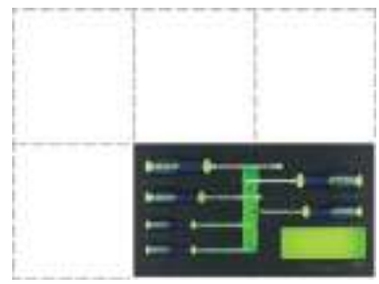
1/3 H

ART. WX4220/SE6

Set of **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE**® that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.
Set of screwdrivers complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal position.

Composition:
WX4000 3.5x100 - 4.0x100 - 5.5x100 - 6.5x125 mm
WX4100 PZ1x80 - PZ2x100 mm

Tech. Code	GR51 Euro	Pieces
E608406	48,23	6



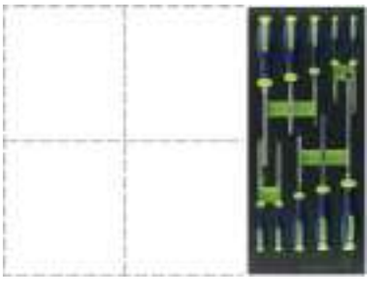
Indivisible package Suggested retail package - Unit price

SCREWDRIVERS PREMIUM QUALITY - SET IN FOAM

WODEX

1/3 V

ART. WX4230/SE10



Set of 10 **PREMIUM QUALITY** screwdrivers with satin chrome-vanadium steel blades, precision hardened **BLACK-TIP** with surface hardness of 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.
Set of screwdrivers complete with Eva Tray module for Wodex trolleys for Wodex trolleys. Module size 200x447 mm - Vertical position.

Composition:

WX4000 3.0x75 - 3.5x100 - 4.0x100 - 5.5x100 - 6.5x125 - 8.0x175 mm
WX4050 PH0x60 - PH1x80 - PH2x100 - PH3x150 mm

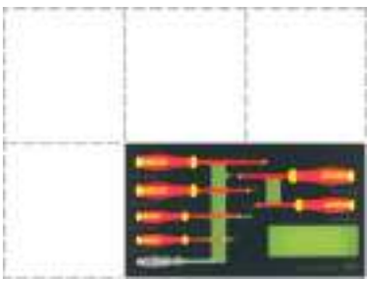
Tech. Code	GR51 Euro	Pieces
E608610	69,96	10

SCREWDRIVERS 1000 VOLT INSULATED IN FOAM

WODEX

1/3 H

ART. WX4300/SE7



Set of 7 **PREMIUM QUALITY** screwdrivers with insulated blade and handle up to 1000 V DIN EN 60900 / VDE 0682-201. Blade in chrome-vanadium steel with hardened precision **BLACK-TIP** with surface hardness 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.
Set of tools complete with Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position.

Composition:

WX4030 2.5x75 - 3.0x100 - 4.0x100 - 5.5x125 mm
WX4130 PZ1x80 - PZ2x100 mm
WX4190 Voltage tester 105-250 Volt 3.0x70 mm

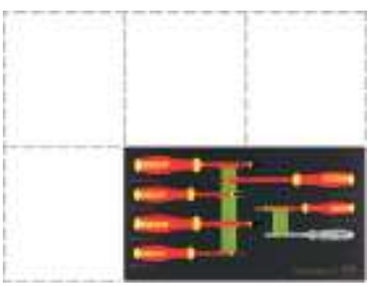
Tech. Code	GR51 Euro	Pieces
E617007	53,00	7

SCREWDRIVERS 1000 VOLT INSULATED IN FOAM

WODEX

1/3 H

ART. WX4310/SE7



Set of 7 **PREMIUM QUALITY** screwdrivers with insulated blade and handle up to 1000 V DIN EN 60900 / VDE 0682-201. Blade in chrome-vanadium steel with hardened precision **BLACK-TIP** with surface hardness 58 ± 2 HRC and torque 20% higher than DIN 8764. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles made of **SANTOPRENE®** that guarantees maximum grip for fast and precise work. Size indication on the handle head. Compliant with RoHS and REACH directives.

Set of tools complete with Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal Position

Composition:

WX4030 2.5x75 - 5.5x125 mm
WX4080 PH1x80 - PH2x100 mm
WX4130 PZ1x80 - PZ2x100 mm
WX4190 Voltage tester 105-250 Volt 3.0x70 mm

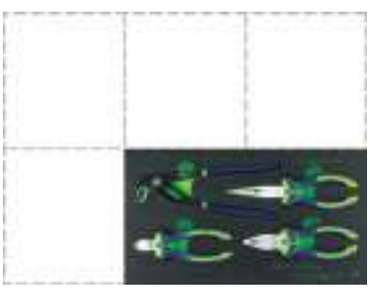
Tech. Code	GR51 Euro	Pieces
E617507	57,24	7

PLIERS AND CUTTING NIPPERS IN FOAM

WODEX

1/3 H

ART. WX3750/SE4



Set of 4 **PREMIUM QUALITY** pliers and cutting nippers with **ERGOFORM** hypoallergenic, non-slip, soft and comfortable handles, made of **SANTOPRENE®** that guarantee maximum grip for fast and accurate work. Compliant with RoHS and REACH directives.
Set of tools complete with Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal Position

Composition:

WX3050 Universal pliers 180 mm
WX3200 Half round bent nose pliers 200 mm
WX3600 Diagonal cutting nippers 160 mm
WX3300 Adjustable pliers 250 mm

Tech. Code	GR51 Euro	Pieces
F030004	98,58	4

PLIERS AND CUTTING NIPPERS VDE INSULATED 1000 VOLTS IN FOAM

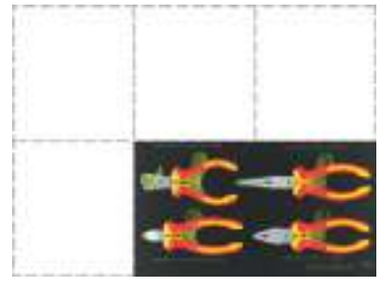
1/3 H

ART. WX3760/SE4

Set of **PREMIUM QUALITY** of pliers and cutting nippers insulated up to 1000 V according to DIN EN 60900 / VDE 0682-201, Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handle made of **SANTOPRENE**® that guarantee maximum grip for fast and accurate work. Compliant with RoHS and REACH directives.
Set of tools complete with Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal Position

Composition:

WX3060 Universal pliers VDE 180 mm
WX3210 Half round bent nose pliers VDE 200 mm
WX3610 Diagonal cutting nippers VDE 160 mm
WX3430 Wire strippers VDE 160 mm



Tech. Code	GR51 Euro	Pieces
F031004	113,42	4

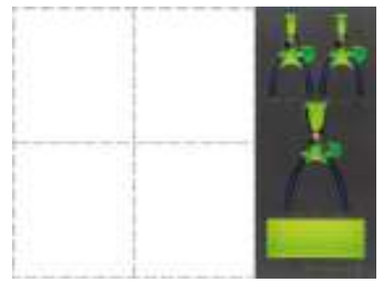
STRAIGHT NOSE PLIERS FOR INTERNAL CIRCLIPS IN FOAM

1/3 V

ART. WX3400/SE3

Standard DIN ISO 5256
Set of 3 **AUTOMOTIVE LINE** straight nose pliers for internal circlips. Hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. **ERGOFORM** grip handles with anti-slip coating.
Set of pliers complete with Eva Tray module for Wodex trolleys - Module size 200x447 mm - Vertical Position

Composition:
Pliers for internal circlips - straight nose Ø 8-13 - Ø 12-25 - Ø 19-60 mm



Tech. Code	GR51 Euro	Pieces	Dimensions
F041603	66,78	3	J0 - J1 - J2

90° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS IN FOAM

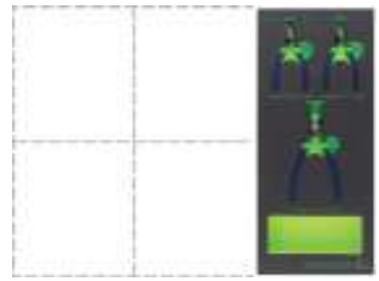
1/3 V

ART. WX3405/SE3

Standard DIN ISO 5256
Set of 3 **AUTOMOTIVE LINE** 90° bent nose pliers for internal circlips. Hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. **ERGOFORM** grip handles with anti-slip coating.

Set of pliers complete with Eva Tray module for Wodex trolleys - Module size 200x447 mm - Vertical Position

Composition:
Pliers for internal circlips - noses 90° Ø 8-13 - Ø 12-25 - Ø 19-60 mm



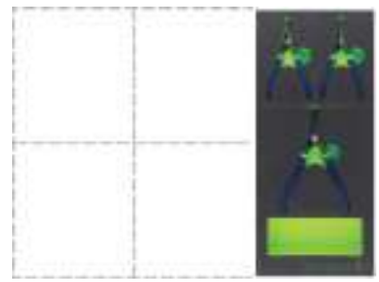
Tech. Code	GR51 Euro	Pieces	Dimensions
F043103	74,20	3	J01 - J11 - J21

STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS IN FOAM

1/3 V

ART. WX3410/SE3

Set di pinze completi di modulo Eva Tray per carrelli Wodex - Dimensione del modulo 200x447 mm - Posizione Verticale
Composizione:
WX3410 Pinze per anelli elastici esterni - becchi dritti Ø 3-10 - Ø 10-25 - Ø 19-60 mm



Tech. Code	GR51 Euro	Pieces	Dimension
F045603	73,14	3	A0 - A1 - A2

90° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS IN FOAM

1/3 V

ART. WX3415/SE3

Standard DIN ISO 5254
Set of 3 **AUTOMOTIVE LINE** 90° bent nose pliers for external circlips. Hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during expansion. **ERGOFORM** grip handles with anti-slip coating.

Set of pliers complete with Eva Tray module for Wodex trolleys - Module size 200x447 mm - Vertical Position

Composition:
Pliers for external circlips - noses 90° Ø 3-10 - Ø 10-25 - Ø 19-60 mm

Tech. Code	GR51 Euro	Pieces	Dimensions
F047603	78,44	3	A01 - A11 - A21

Indivisible package Suggested retail package - Unit price

SET OF CUTTING TOOLS AND ILLUMINATION IN FOAM

1/6 WMS

ART. WX9510/SE3

Set consisting of a pair of electrician's scissors, a safety cutter and a **PREMIUM QUALITY** adjustable LED PEN-LIGHT torch.
Complete with Eva Tray module for Wodex trolleys - Module size 200x223.5 mm - Vertical Position.

Composition:

WX4770 Electrician's scissors 155 mm
WX4720 Multifunctional cutters with trapezoid blade
WX6610 Adjustable LED torch

Tech. Code	GR51 Euro	Pieces
F267503	80,14	3

PIN PUNCH SET IN FOAM

1/6 WMS FIRST ID

ART. WX4950/SE6

Standard DIN 6450 - DIN 7255
Set of 6 **PREMIUM QUALITY** pin punches in tool steel hardened to ≥ 58 HRC. The specially treated head prevents chipping and complies with **DIN 7255**. The precise chrome plating ensures high protection against corrosion and the painted colour coding means that they can be selected quickly and easily.
Set of pin punches complete with Eva Tray module for Wodex trolleys - Module size 200x223.5 mm - Vertical Position

Composition:
Ø 3x150 - 4x150 - 5x150 - 6x150 - 8x150 - 10x150 mm

Tech. Code	GR51 Euro	Pieces
F451206	68,90	6

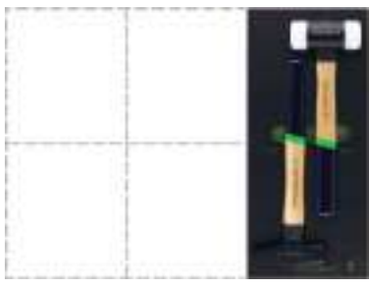
HAMMERS AND MALLETS IN FOAM

1/3 V WMS

ART. WX9500/SE2

Kit consisting of a German type hammer with a protective collar and an aluminium mallet with 100 SH Nylon heads.

Set of tools complete with Eva Tray module for Wodex trolleys - Module size 200x447 mm - Vertical Position.



Composition:

WX5100 German type hammer 600 g
WX5400 Aluminium mallets with nylon heads Ø 50 mm

Tech. Code	GR51 Euro	Pieces
F529002	83,91	2

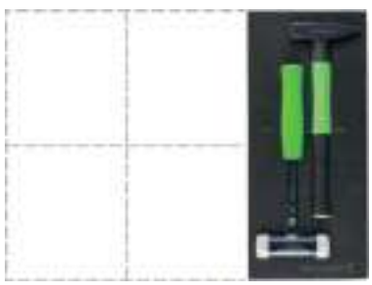
HAMMERS AND MALLETS NON-REBOUND IN FOAM

1/3 V WMS

ART. WX9503/SE2

Set consisting of a German type hammer with three-component handle and a non-rebound mallet with polyurethane heads.

Set of tools complete with Eva Tray module for Wodex trolleys - Module size 200x447 mm - Vertical Position.



Composition:

WX5110 German type hammer with three-component handle 500 g
WX5600 Non-rebound mallet with polyurethane heads Ø 40 mm

Tech. Code	GR51 Euro	Pieces
F529102	83,74	2

SET OF ASSORTED TOOLS IN FOAM

2/3 WMS

ART. WX9505/SE6

Set consisting of a German type hammer with protective collar, an aluminium mallet with 100 SH Nylon heads, a roller wrench, a pair of electrician scissors, a tape measure and a **Premium Quality** cutter.
Set of tools complete with Eva Tray module for Wodex trolleys - Module size 400x447 mm - Vertical Position.

Composition:

WX5100 German type hammer 500 g
WX5400 Aluminium mallets with nylon heads Ø 40 mm
WX1170 Roller wrench 250 mm
WX4770 Electrician's scissors 155 mm
WX6110 Pocket tape measure Profi-Line 5 m
WX4680 Premium cutter with snap-off blades 18 mm

Tech. Code	GR51 Euro	Pieces
F529206	149,46	6

HACKSAW AND CUTTING NIPPERS IN FOAM

1/3 V WMS

ART. WX9512/SE12

Set comprising a **PREMIUM QUALITY** hacksaw, 10 Bi-Metal blades 300 mm 24Z and a pair of HEAVY DUTY **cutting nippers.**
Set of tools complete with Eva Tray module for Wodex trolleys - Module size 200x447 mm - Vertical Position

Composition:

WX4780	Hacksaw ERGOFORM 300 mm
WX3620	Cutting nippers Heavy-Duty VDE 180 mm
WX4788	10 Saw blades 300 mm 24Z Bi-Metal

Tech. Code	GR51 Euro	Pieces
F408212	89,04	12

SET OF ASSORTED TOOLS IN FOAM

1/3 V WMS

ART. WX9515/SE12

Set consisting of mini aluminium alloy saw complete with 150 mm blade, a pair of self-locking pliers 240 mm, diagonal cutting nippers 160 mm and a set of hex keys in a practical two component holder.
Set of tools complete with Eva Tray module for Wodex trolleys - Module size 200x447 mm - Vertical Position.

Composition:

WX4790	Mini hacksaw complete with blade
WX3350	Self-locking pliers, adjustable up to 240 mm
WX3600	Diagonal cutting nippers 160 mm
WX2560/S9	Hex key set, short, 9-piece

Tech. Code	GR51 Euro	Pieces
F415212	73,14	12

MEASURING AND CUTTING TOOL SET

1/3 V WMS

ART. WX9690/SE7

Set comprising a **Top Quality ALPA** IP54 digital calliper 150 mm, a millimetre ruler 300 mm, 20-blade feeler gauge, **Rico MarKer scribe**with HM retractable tip, a pair of electrician's scissors, a 5m Profi-Line pocket tape measure and a Premium Quality cutter with an 18 mm snap-off blade.
Set of tools complete with Eva Tray module for Wodex trolleys. Module size 200x447 mm - Vertical position

Composition:

AA019150P	Digital calliper IP54 150 mm
RMB1	Scribe with HM tip
81.21101	Semi-rigid ruler 30 x 1 x 300 mm
37.46704	20-blade feeler gauge 0.05 - 1.00
WX4770	Electrician's scissors 155 mm
WX6110	Pocket tape measure Profi-Line 5 m
WX4680	Premium cutter with snap-off blades 18 mm

Tech. Code	GR51 Euro	Pieces
F904807	243,80	7

LED TORCHES

1/3 H WMS

ART. WX6620

High performance **PREMIUM QUALITY** modular LED torches with rechargeable battery (not included) and magnet for positioning on metal walls. Impact resistant aluminium construction with a quick-change component system and USB socket for charging even during use. ON-OFF button with ECO 30% and 100% FULL function. Operating time max 5 hours.
Set complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal Position.
Composition:
- Handle with magnet Ø 35x140 mm
- Flexible bulb Ø 20x400 mm LED XPG 180 Lumen with Zoom function **WX6620-B**
- Fixed bulb Ø 35x50 mm LED XPG 250 Lumens with Zoom function **WX6620-A**
- Multiled adjustable bulb 20x190 mm COB LED 350 Lumens **WX6620-C**
- USB battery charger 230V
-USB cable

- Charging time 4 hours

Tech. Code	GR76 Euro	Pieces
N708001	82,00	6

Battery not included (The torch requires one 18650 3.7 Volt battery Model WX6621)

Indivisible package Suggested retail package - Unit price

SOCKET SET 1/4" - 44 TOOLS

1/6 WMS

ART. WX2080/SE44

Set of 44 **WODEX PREMIUM QUALITY** tools with 1/4" square drive in practical shock-resistant ABS case. The set contains a ratchet, a T-handle lever with sliding square drive, a socket wrench screwdriver, a cardan joint, extensions, adapters, **PLUS-DRIVE** polygonal sockets, screwdriver bits for slotted, Phillips®, Pozidriv®, hexagonal and Torx® screws and a bit holder.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 200x223.5 mm - Vertical position

Composition:

WX2040	Reversible ratchet 1/4"
WX2000	Sockets 1/4" 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX2048	T-handle lever with 1/4" sliding square drive
WX2052	Extensions Wobble 1/4"x50 - 1/4"x100
WX2054	Cardan joint 1/4"
WX2047	Socket screwdriver 1/4"
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4400	Insert bits 1/4"x25 Phillips® PH1 - PH2 - PH3
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 - PZ2 - PZ3
WX4430	Insert bits 1/4"x25 slotted 3.0 - 4.0 - 4.5 - 5.5 - 6.5 mm
WX4445	Insert bits 1/4"x25 hexagonal HEX 3 - 4 - 5 - 6 - 8 mm
WX4475	Insert bits 1/4"x25 Torx® T8 - T10 - T15 - T20 -T25 - T27 - T30 - T40

Tech. Code	GR51 Euro	Pieces
E489044	135,68	44

SOCKET SET 1/4" - 55 TOOLS

1/6 WMS

ART. WX2085/SE55

Set of 55 **WODEX PREMIUM QUALITY** tools with 1/4" square drive in practical shock-resistant ABS case. The set contains a stubby ratchet, a quick change bit holder screwdriver, adapters, **PLUS-DRIVE** polygonal sockets, screwdriver bits for slotted, Phillips®, Pozidriv®, hexagonal and Torx® and Tamper Torx® screws with hole and a bit holder.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 200x223.5 mm - Vertical position

Composition:

WX2045	Reversible stubby ratchet 1/4"
WX2000	Sockets 1/4" 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4630	Bit holder 1/4"- 1/4"x60 mm
WX4620	Bit holder screwdriver quick change 1/4"
WX4400	Insert bits 1/4"x25 Phillips® PH1 (2) - PH2 (3) - PH3 (1)
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 (3) - PZ2 (3) - PZ3 (1)
WX4430	Insert bits 1/4"x25 slotted 4 (1) - 4.5 (1) - 5.5 (2) - 6.5 (2) mm
WX4445	Insert bits 1/4"x25 hexagonal HEX 2 - 2.5 - 3 - 4 - 5 - 6 - 8 mm
WX4475	Insert bits 1/4"x25 Torx® T10 - T15 - T20 - T25 - T30 - T40
WX4505	Insert bits 1/4"x25 Tamper Torx® T10 - T15 - T20 -T25 - T30 - T40

Tech. Code	GR51 Euro	Pieces
E489255	139,92	55

SOCKET SET 3/8" - 39 TOOLS

1/3 H WMS

ART. WX2180/SE39

Set of 39 **WODEX PREMIUM QUALITY** tools with 3/8" square drive in practical shock-resistant ABS case. The set contains a ratchet, a cardan joint, extensions, joints **PLUS-DRIVE** polygonal sockets, socket drivers for hexagonal socket head screws and Torx® screws, sockets for spark plugs.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2140	Reversible ratchet 3/8"
WX2100	Sockets 3/8" 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 mm
WX2110	Socket drivers 3/8" HEX 3 - 4 - 5 - 6 - 7 - 8 - 10 mm
WX2120	Socket drivers 3/8" Torx® T10 - T15 - T20 - T25 - T27 - T30 - T40
WX2152	Extensions Wobble 3/8"x75 - 3/8"x250
WX2154	Cardan joint 3/8"
WX2159	Reducer joint 1/2'F-3/8'M with hole for extensions
WX2109	Sockets 3/8" for spark plugs 16- 21 mm

Tech. Code	GR51 Euro	Pieces
E490939	186,56	39

SOCKET SET 1/4" AND 1/2" - 66 TOOLS

1/3 H WMS

ART. WX2090/SE66

Set of 66 **WODEX PREMIUM QUALITY** tools with 1/4" and 1/2" square drive in practical shock-resistant ABS case. The set contains 2 ratchets, a T-handle lever with sliding square drive, cardan joints, a socket wrench screwdriver, extensions, joints, adapters, **PLUS-DRIVE** polygonal sockets, screwdriver bits for slotted, Phillips®, Pozidriv®, hexagonal and Torx® screws with a bit holder.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2040	Reversible ratchet 1/4"
WX2000	Sockets 1/4" 4 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX2048	T-handle lever with 1/4" sliding square drive
WX2052	Extensions Wobble 1/4"x50 - 1/4"x150
WX2054	Cardan joint 1/4"
WX2047	Socket screwdriver 1/4"
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4430	Insert bits 1/4"x25 slotted 4 - 5.5 mm
WX4400	Insert bits 1/4"x25 Phillips® PH1 - PH2 - PH3
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 - PZ2
WX4445	Insert bits 1/4"x25 hexagonal HEX 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm
WX4475	Insert bits 1/4"x25 Torx® T10 - T15 - T20 -T25 - T30
WX2240	Reversible ratchet 1/2"
WX2200	Socket drivers 1/2" 10-11-12-13-14-15-17-19-22-24-30-32 mm
WX2210	Socket drivers 1/2" HEX 8 - 10 - 12 - 14 mm
WX2220	Socket drivers 1/2" Torx® T40 - T45 - T50
WX2252	Extensions Wobble 1/2"x150 - 1/2"x200
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension
WX2209	Sockets 1/2" for spark plugs 16- 21 mm

Tech. Code	GR51 Euro	Pieces
E489466	280,00	66

SOCKET WRENCHES 1/4" AND 1/2" - SET OF 71 TOOLS

1/3 H WMS

NEW

ART. WX2095/SE71

Set of 71 **WODEX PREMIUM QUALITY** tools with 1/4" and 1/2" square drive in practical shock-resistant ABS case. The set contains 2 ratchets, a T-handle lever with sliding square drive, cardan joints, a socket wrench screwdriver, extensions, joints, adapters, hexagonal sockets, screwdriver bit for slotted, Phillips®, Pozidriv®, hexagonal and Torx® screws with a bit holder.
Set complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2040	Reversible ratchet 1/4"
WX2200	Sockets 1/4" 4 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
WX2048	T-handle lever with 1/4" sliding square drive
WX2052	Extensions Wobble 1/4"x50 - 1/4"x150
WX2054	Cardan joint 1/4"
WX2047	Socket screwdriver 1/4"
WX4642	Socket bit adapter 1/4" hex drive 1/4" x 25 mm
WX4640	Hexagonal insert holder sockets 1/4"
WX4430	Insert bits 1/4"x25 slotted 3 - 4 - 5.5 - 6.5 mm
WX4400	Insert bits 1/4"x25 Phillips® PH1 - PH2 - PH3
WX4415	Insert bits 1/4"x25 Pozidriv® PZ1 - PZ2
WX4445	Insert bits 1/4"x25 hexagonal HEX 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm
WX4475	Insert bits 1/4"x25 Torx® T8 - T9 - T10 - T15 - T20 -T25 - T27 - T30
WX2240	Reversible ratchet 1/2"
WX2205	Sockets 1/2" 10 - 12 - 13 - 14 - 15 - 17 - 19 - 22 - 24 -27 - 30 - 32 mm
WX2210	Socket drivers 1/2" HEX 5 - 6 - 8 - 10 - 12 mm
WX2220	Socket drivers 1/2" Torx® T30 - T40 - T45 - T50
WX2252	Extensions Wobble 1/2"x125 - 1/2"x200
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension

Tech. Code	GR51 Euro	Pieces
E489671	298,00	71

Indivisible package Suggested retail package - Unit price

SOCKET SET 1/2" - 36 TOOLS

1/3 H

ART. WX2280/SE36

Set of 36 **WODEX PREMIUM QUALITY** tools with 1/2" square drive in practical shock-resistant ABS case. The set contains a ratchet cardan joint, extensions, joints **PLUS-DRIVE** polygonal sockets, socket drivers for hexagonal socket head screws and Torx® screws.
Kit complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2240	Reversible ratchet 1/2"
WX2200	Sockets 1/2" 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 -27 - 30 - 32 mm
WX2210	Socket drivers 1/2" HEX 6 - 8 - 10 - 12 - 14 mm
WX2220	Socket drivers 1/2" Torx® T30 - T40 - T45 - T55 - T60
WX2232	Socket drivers 1/2" for Phillips® screws PH3 - PH4
WX2252	Extensions Wobble 1/2"x125 - 1/2"x250
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension

Tech. Code	GR51 Euro	Pieces
E492036	263,00	36

SOCKET WRENCHES 1/2" - SET OF 40 TOOLS

1/3 H

NEW

ART. WX2290/SE40

Set of 40 **PREMIUM QUALITY** tools with 1/2" square drive in practical shock-resistant ABS case. The set contains a ratchet, a cardan joint, extensions, joints, hexagonal sockets, socket drivers for hexagonal socket head screws and Torx® screws.
Set complete with removable Eva Tray module for Wodex trolleys - Module size 400x223.5 mm - Horizontal position

Composition:

WX2240	Reversible ratchet 1/2"
WX2205	Sockets 1/2" 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 -27 - 30 - 32 mm
WX2210	Socket drivers 1/2" HEX 4 - 5 - 6 - 7 - 8 - 10 - 12 - 14 - 17 - 19 mm
WX2220	Socket drivers 1/2" Torx® T30 - T40 - T45 - T50 - T55 - T60
WX2252	Extensions Wobble 1/2"x125 - 1/2"x250
WX2254	Cardan joint 1/2"
WX2161	Adapter joint 3/8'F-1/2'M with hole for extension

Tech. Code	GR51 Euro	Pieces
E492340	260,00	40

FILES FOR MECHANICS IN FOAM

2/3

ART. WX7620/SE5

Set of 5 files complete with Eva Tray module for Wodex trolleys - module size 400x223.5 mm - Horizontal position.

Composition:

WX7600	Flat file 8" - 200 mm T2 cut 2
WX7602	Half round file 8" - 200 mm T2 cut 2
WX7604	Round file 8" - 200 mm T2 cut 2
WX7606	Square file 8" - 200 mm T2 cut 2
WX7608	Triangular file 8" - 200 mm T2 cut 2
WX7742	Wooden handles - 2 x 120 mm - 3 x 130 mm

Tech. Code	GR61 Euro	Pieces
G832805	76,32	10

WODEX

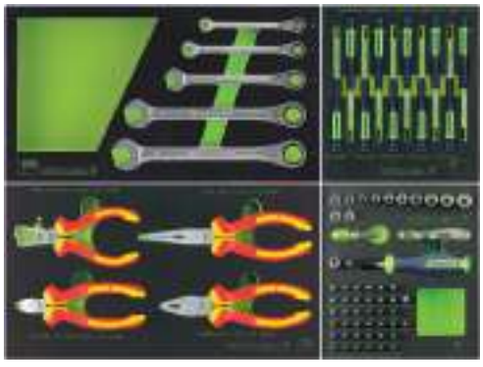
Tech. Code	GR51 Euro	Model
E8570112	(1460,00)	Trolley WX9410/B7 + set of 112 tools

Tech. Code	GR51 Euro	Model
E8571112	(2150,00)	Trolley WX9416/B6 + set of 112 tools

DRAWER 1 - 38 PEZZI

WX1060/SE12 Set of combination wrenches 12 pieces
WX4310/SE7 Set of VDE screwdrivers and voltage tester 105-250 V
WX9510/SE3 Scissors, cutter and torch
WX9520/SE2 Hex wrenches and stubby bit holder

DRAWER 2 - 74 PIECES



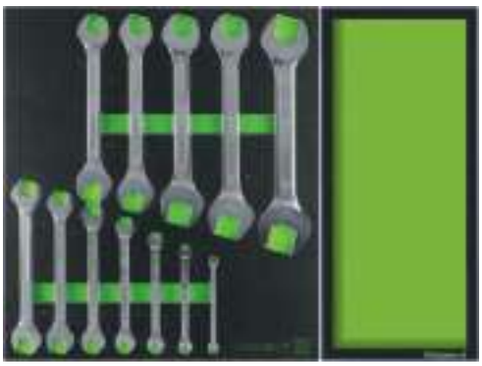
WX1350/SE5 Reversible ratchet combination wrench set
WX3760/SE4 Pliers and cutting nippers VDE
WX9600/SE10 Set of micro screwdrivers for slotted, Phillips® and Pozidriv® screws
WX2085/SE55 Set of socket wrenches 1/4"

TROLLEYS WITH 155 ASSORTMENT OF TOOLS

Tech. Code	GR51 Euro	Model
E8563155	(2648,80)	Trolley WX9416/B6 + Set of 155 tools

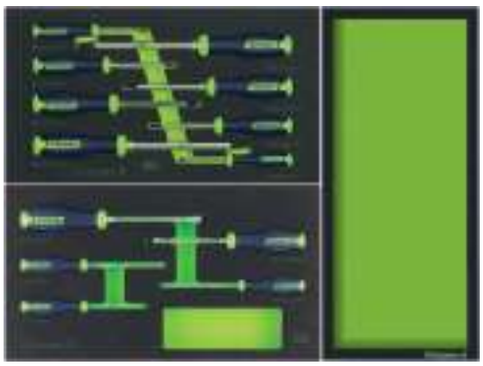
Tech. Code	GR51 Euro	Model
E8562155	(1860,00)	Trolley WODEX WX9410/B7 7 drawers + WODEX 155 tools

DRAWER 1 - 12 PIECES



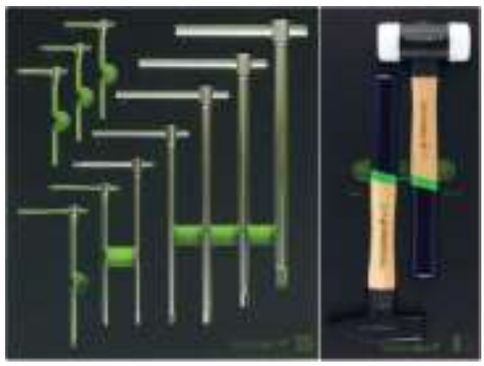
WX1010/SE12 Set of wrenches 12 piece
WX9492 Empty tray

DRAWER 2 - 13 PIECES



WX4205/SE8 Set of philips screwdrivers
WX4200/SE5 Set of slotted screwdrivers
WX9492 Empty tray

DRAWER 3 - 12 PIECES

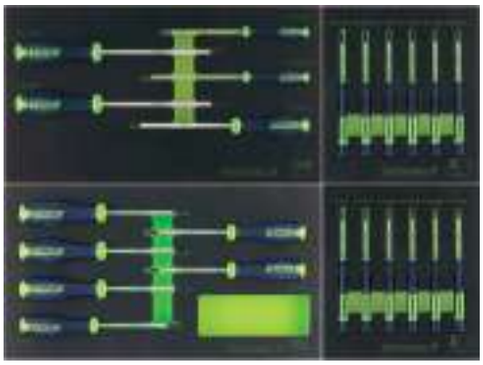


WX2700/SE10 Hexagonal T-wrenches sliding rod
WX9500/SE2 Hammers and mallets

DRAWER 4 - 63 PIECES

WX2180/SE39 Set of socket wrenches
WX3750/SE4 Set of pliers
WX9520/SE2 Exagonal keys and stubby
WX9510/SE3 Scissor, cutter e torch

DRAWER 5 - 23 PIECES



WX2810/SE5 Set of hexagonal screwdrivers
WX2940/SE6 Set of Torx screwdrivers
WX2847/SE6 Set of micro hexagonal screwdrivers
WX2947/SE6 Set of micro Torx screwdrivers

32 PIECES

WX4590/31 Set of inserts 1/4"
WX1460 Ratchet wrenches 4 in 1

Indivisible package Suggested retail package - Unit price

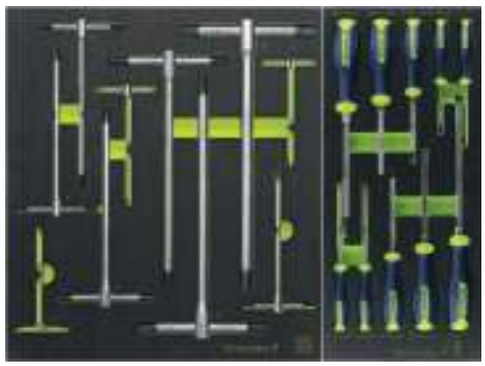
Tech. Code	GR51 Euro	MODEL
E8564238	(2800,00)	Wodex trolleys WX9410/B7 + Set of 238 tools

Tech. Code	GR51 Euro	MODEL
E8566238	(3095,00)	Wodex trolleys WX9416/B6 - Set of 238 tools

DRAWER 1 - 18 PIECES

WX1060/SE16 Set of combination wrenches 16 pieces
WX9503/SE2 Hammers and mallets

DRAWER 2 - 20 PIECES



WX2717/SW10 Set of hex. male t-handle wrenches with fixed shaft
WX4230/SE10 Set of slotted and phillips screwdrivers

DRAWER 3 - 84 PIECES

WX1350/SE9 Set of combination wrenches reversible ratchet
WX4950/SE6 Set of pin punches
WX2090/SE66 Set of socket wrenches 1/4 "and 1/2"
WX9510/SE3 Scissors, cutter and torch

DRAWER 4 - 21 PIECES

WX3750/SE4 Pliers and nippers
WX9512/SE12 Saws and bolt cutters
WX7620/SE5 Set of files for mechanics

DRAWER 5 - 13 PIECES

WX3400/SE3 Set of straight nose pliers for internal circlips
WX3410/SE3 Set of straight nose pliers for external circlips
WX9690/SE7 Set of measuring and cutting tools

82 PIECES

WX4590/31 Set of bits 1/4"
N5225SET3 Set of countersinks and drill bits

WODEX

" HANDsome "

WODEX KNIPEX BESSEY WRK

F0
2 - 19
Pliers, pliers for circlips, adjustable pliers, self locking pliers

WODEX KNIPEX VBW WRK Weidmüller

F1
19 - 35
Crimping pliers, cable strippers, arc punches, tweezers, cutting nippers

WODEX KNIPEX VBW martor WRK

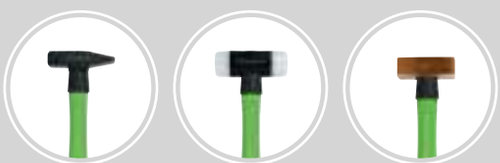
F2
35 - 43
Scissors, shears and bolt cutters

WODEX KNIPEX VBW martor WRK STANLEY

F3
44 - 52
Pipe wrenches, adjustable wrenches, cutters, pipe cutters

WODEX KNIPEX ErgoBurr RENNSTEIG rico marker WRK

F4
53 - 65
Hacksaws, deburring tools, pinpunch, chisels



WODEX WRK HALDER

F5
66 - 73
Hammers, mallets, crowbars

WODEX BESSEY WRK

F6
74 - 79
Pullers, rack clamps

WODEX STANLEY

F7
79 - 88
Metal and plastic boxes and trolleys

WODEX FAR WRK OMER

F8
88 - 101
Tap wrenches, die stocks, riveters and cable ties

WODEX ALPA STANLEY Silverline WRK

F9
102 - 119
Tape rulers, compasses, square, markers, punches, brushes and assortment, rulers

PLIERS AND CUTTING NIPPERS IN SET

WODEX

ITEM: WX3735/S3

Set of **PREMIUM QUALITY** pliers and cutting nippers in chrome-molybdenum steel with extremely precise high strength induction-hardened cutting edges. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Composition:

WX3050 Universal pliers 180 mm
WX3200 Half round bent nose pliers 200 mm
WX3600 Diagonal cutting nippers 160 mm

Tech. Code	GR51 Euro	Pieces
F008003	68,90	3

Boxed set

ITEM: WX3740/S3

Composition:

WX3050 Universal pliers 200 mm
WX3200 Half round bent nose pliers 200 mm
WX3620 Cutting nippers DUTY 180 mm

Tech. Code	GR51 Euro	Pieces
F008503	76,32	3

Boxed set

SET OF UNIVERSAL AND ADJUSTABLE PLIERS

WODEX

ITEM: WX3745/S3

Set of **PREMIUM QUALITY** pliers containing a pair of universal combination pliers in chrome molybdenum steel, a pair of adjustable pliers with fine adjustment in chrome-vanadium steel and a pair of self-locking pliers in chrome-vanadium steel with concave jaws for clamping flat and round materials.

Composition:

WX3050 Universal pliers 180 mm
WX3300 Adjustable pliers for tubes and nuts 250 mm
WX3350 Adjustable self-locking pliers 240 mm

Tech. Code	GR51 Euro	Pieces
F008703	71,02	3

Boxed set

ITEM: WX3746/S3

Composition:

WX3050 Universal pliers 200 mm
WX3300 Adjustable pliers for tubes and nuts 300 mm
WX3350 Adjustable self-locking pliers 300 mm

Tech. Code	GR51 Euro	Pieces
F008803	95,40	3

UNIVERSAL COMBINATION PLIERS

WODEX

ITEM: WX3050

Standard DIN ISO 5746

Universal combination pliers **PREMIUM QUALITY** in chrome-molybdenum steel with extremely precise high strength induction-hardened cutting edges, satin finish. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work.
Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F0090160	20,45	160	3.1	2.0
F0090180	23,00	180	3.4	2.2
F0090200	25,27	200	3.8	2.5

Indivisible package Suggested retail package - Unit price

UNIVERSAL COMBINATION PLIERS

ITEM: F0101

Standard DIN ISO 5746

Universal combination pliers made of chrome-vanadium steel, with satin finish and induction hardened cutting hedges. Hypoallergenic ergonomic grips in TPR soft-Touch.

Tech. Code	GR52 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0101180	11,80	180	3,0	1,7
F0101200	12,90	200	3,4	2,0

UNIVERSAL COMBINATION PLIERS STRONG TYPE

ITEM: 02 05 180/200/225

Standard DIN ISO 5746

Special steel pliers for quenched tools, forged and oil-hardened high tempered Induction cutting with hardness approx. 63 HRC, for high resistant metallic wire and piano wire, handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F0142180	31,45	180	2,5	2,0
F0142200	33,70	200	2,8	2,2
F0142225	38,35	225	3,0	2,5

PLIERS AND CUTTING NIPPERS VDE INSULATED 1000 VOLTS IN SET

ITEM: WX3752/S3

Set of **PREMIUM QUALITY** pliers and cutting nippers, insulated up to 1000V according to DIN EN 60900 / VDE 0682--201. **ERGOFORM** hypoallergenic, anti-slip, soft and comfortable grip handles. Compliant with RoHS and REACH directives.

Composition:

WX3060 Universal pliers VDE 180 mm
WX3210 Half round bent nose pliers VDE 200 mm
WX3610 Diagonal cutting nippers VDE 160 mm

Tech. Code	GR51 Euro	Pieces
F010203	68,90	3

Boxed set

SET OF INSULATED TOOLS VDE 1000 VOLTS

ITEM: WX3755/S16

Set of **PREMIUM QUALITY** pliers, cutting nippers, scissors and screwdrivers insulated up to 1000V according to DIN EN 60900 / VDE 0682--201. **ERGOFORM** hypoallergenic, anti-slip, soft and comfortable grip handles. Compliant with RoHS and REACH directives.

Composition:

WX3060 Universal pliers VDE 180 mm
WX3210 Half round bent nose pliers VDE 200 mm
WX3630 Cutting nippers Heavy-Duty VDE 180 mm
WX3430 Wire strippers VDE 160 mm
WX4775 Electrician's scissors VDE 155 mm
WX4190 Voltage tester 105-250 Volt 3-70 mm
WX4030 Screwdrivers for slotted screws VDE 2.5x75 - 3.0x100 - 4.0x100 - 5.5x125 mm
WX4080 Phillips® screwdrivers VDE PH0x60 - PH1x80 - PH2x100 mm
WX4130 Pozidriv® screwdrivers VDE PZ0x60 - PZ1x80 - PZ2x100 mm

Tech. Code	GR51 Euro	Pieces
F010516	189,74	16

Boxed set

UNIVERSAL COMBINATION PLIERS VDE INSULATED 1000 VOLTS

ITEM: WX3060

Standard DIN ISO 5746

Universal combination pliers **PREMIUM QUALITY** in chrome-molybdenum steel with extremely precise high strength induction-hardened cutting edges, satin finish. Insulated handles up to 1000 V according to DIN EN 60900 / VDE 0682-201. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F0110180	38,00	180	3.4	2.2

UNIVERSAL PLIERS HIGH LEVERAGE VDE INSULATED TYPE 1000 VOLTS

ITEM: 02 06 180 - 02 06 200

Standard DIN ISO 5746

Chrome-plated pliers, high leverage type with Insulated grip handles, bi-component coated material VDE tested, compliant with EC 60900 DIN EN 60900. Induction tempered cutting edges with approx. 64 HRC hardness, for high resistant metallic wire and piano wire.

Tech. Code	GR54 Euro	Length mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F0116180	35,10	180	2,5	2,0
F0116200	37,00	200	2,8	2,0

FLAT NOSE PLIERS FOR MECHANICS

ITEM: 20 01 140 - 20 01 160

Standard DIN ISO 5745

Pliers for mechanics flat straight nose with knurled tips, made of special steel quenched, forged and oil-hardened.

Version with synthetic resin coated handles.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0360140	15,70	140	28	9,5
F0360160	16,40	160	30	9,5

ITEM: 20 02 140 - 20 02 160

Standard DIN ISO 5745

Version with handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0362140	19,30	140	28	9,5
F0362160	19,60	160	30	9,5

ITEM: 30 11 160

Standard DIN ISO 5745

Pliers for mechanics fiat, straight nose with knurled tips, made of special steel for tools quenched, forged oil-

Version with handles coated in synthetic resin.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0364160	20,30	160	46,5	9,5

FLAT NOSE PLIERS

ITEM: 30 15 140

Standard DIN ISO 5745

Version chrome plated with handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0355140	27,40	140	42	8,0 - 4,0
F0355160	28,70	160	46	9,5 - 5,0

ITEM: 38 41 190

Standard DIN ISO 5745

Clean head, synthetic resin coated handles. High-torsion resistant noses and tips, knurled internal noses, vanadium steel, oil-hardened and tempered.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0205190	24,70	190	50	8,0

FLAT NOSE PLIERS VDE INSULATED 1000 VOLTS

ITEM: 30 16 160

Standard DIN ISO 5745

Pliers for mechanics flat, straight, long with knurled tips, made in special steel for tools quenched, forged and oil-hardened, Insulated handles coated in multi-component material VDE tested, compliant with EC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0365160	31,70	160	46	9,5 - 5,0

Indivisible package Suggested retail package - Unit price

HALF ROUND NOSE PLIERS

WODEX

ITEM: WX3200

Standard DIN ISO 5745

Half round long nose pliers with nippers **PREMIUM QUALITY** made of chromium-molybdenum steel with satin finish, extremely precise high strength induction-hardened cutting edges, nose with a knurled grip. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE®** that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F0230160	21,50	160	48	2,5	1,6
F0230200	26,50	200	73	3.2	2.2

HALF-ROUND NOSE PLIERS

KNIPEX

ITEM: 25 01 125/140/160

Standard DIN ISO 5745

Pliers for fine mechanics with cutter, half round nose with knurled tips and cutting edges for metallic wire of medium and high resistance. Cutting edges further tempered with induction hardness approx. 61 HRC.

Version with handles coated with synthetic resin.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0235125	20,50	125	27	2,2	1,6
F0235140	(19,50)	140	42	2,5	1,6
F0235160	19,65	160	50	2,5	1,6

ITEM: 25 02 140/160

Standard DIN ISO 5745

Version with long jaws handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0236140	23,05	140	42	2,5	1,6
F0236160	23,30	160	50	2,5	1,6

ITEM: 26 11 200

Standard DIN ISO 5745

Version with long jaws handles coated with synthetic resin.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0237200	25,05	200	73	3,2	2,2

ITEM: 26 12 200

Standard DIN ISO 5745

Version with long jaws handles coated in multi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0238200	28,45	200	73	3,2	2,2

ITEM: 26 15 200

Standard DIN ISO 5745

Version chrome-plated with long jaws handles covered in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel wire Ø max mm	Steel 1800 n/mm² Ø max mm
F0255200	32,25	200	73	2.2	2,2

ITEM: 30 25 140

Standard DIN ISO 5745

Pliers for mechanics with straight half-round jaws and knurled tips. Forged and oil-hardened chrome vanadium steel.

Version chrome-plated handles covered in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0375140	27,40	140	42	8,0 - 2,5

ITEM: 38 15 200

Standard DIN ISO 5745

Version chrome-plated with long jaws and handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0239200	35,35	200	73	9,5 - 2,5

F

HALF ROUND NOSE PLIERS VDE INSULATED 1000 VOLTS

WODEX

ITEM: WX3210

Standard DIN ISO 5745

Half round long nose pliers with nippers **PREMIUM QUALITY** made of chromium-molybdenum steel with satin finish, extremely precise high strength induction-hardened cutting edges, nose with a knurled grip surface. Insulated handles up to 1000 V according to DIN EN 60900 / VDE 0682-201. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE®** that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F0245200	33,00	200	73	3.2	2.2

HALF ROUND NOSE PLIERS VDE INSULATED 1000 VOLTS

KNIPEX

ITEM: 25 06 160

Standard DIN ISO 5745

Chrome-plated pliers with cutter, half-round nose pliers with knurled tips and cutting edges for metallic wire of medium and high resistance. Cutting edges further tempered with Induction hardness approx. 61 HRC.
Forged and oil-hardened chrome-vanadium steel Insulated handles coated in multi-component material VDE tested, compliant with EC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0247160	30,70	160	50	2,5	1,6

ITEM: 26 16 200

Standard DIN ISO 5745

Version with long jaws.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0248200	(37,35)	200	73	3,2	2,2

HALF ROUND BENT NOSE PLIERS

WODEX

ITEM: WX3220

Standard DIN ISO 5745

Long half round bent nose pliers with nippers **PREMIUM QUALITY** made of chromium-molybdenum steel with satin finish, extremely precise high strength induction-hardened cutting edges, nose with a knurled grip surface. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE®** that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F0275200	28,20	200	73	3.2	2.2

HALF ROUND BENT NOSE PLIERS

KNIPEX

ITEM: 25 21 160

Standard DIN ISO 5745

Pliers with cutter half-round bent nose pliers with knurled tips and cutting edges for matallic wire of medium and high resistance. Cutting edges furthered tempered with Induction hardness of approx. 61 HRC.
Forged and oil-hardened chrome-vanadium steel.
Version with synthetic resin coated handles.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0276160	23,45	160	50	2,5	1,6

ITEM: 25 25 160

Version chrome-plated with handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0218160	31,40	160	50	2,5	1.6

ITEM: 26 25 200

Standard DIN ISO 5745

Version chrome-plated with long jaws and handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0219200	37,65	200	73	3,2	2.2

Indivisible package Suggested retail package - Unit price

HALF ROUND LONG BENT NOSE PLIERS

ITEM: 38 25 200

Standard DIN ISO 5745

Pliers for fine mechanics with half-round long bent nose and knurled tips.
Chrome-vanadium steel forged and oil-hardened, handles coated in multil-component material.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0285200	38,70	200	73	9,5 - 2,5

HALF ROUND BENT NOSE PLIERS VDE INSULATED 1000 V

ITEM: WX3230

Standard DIN ISO 5745

Long half round bent nose pliers with nippers **PREMIUM QUALITY** made of chromium-molybdenum steel with satin finish, extremely precise high strength induction-hardened cutting edges, nose with a knurled grip surface. Insulated handles up to 1000 V according to DIN EN 60900 / VDE 0682-201. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F0278200	36,00	200	73	3.2	2.2

HALF ROUND BENT NOSE PLIERS VDE INSULATED 1000 VOLTS

ITEM: 25 26 160

Standard DIN ISO 5745

Chrome-plated pliers with cutter, half-round bent nose with knurled tips and cutting edges for metallic wire of medium and high resistance. Cutting edges further tempered with Induction hardness approx. 61 HRC.
Forged and oil-hardened chrome-vanadium steel Insulated handles coated in multi-component material VDE tested, compliant with EC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0279160	34,60	160	50	2,5	1,6

ITEM: 26 26 200

Standard DIN ISO 5745

Version with long jaws.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F0281200	(42,00)	200	73	3,2	2,2

ROUND NOSE PLIERS VDE INSULATED 1000 VOLTS

ITEM: 30 36 160

Standard DIN ISO 5745

Chrome-plated pliers with round, long nose, precision ground, for bending eyelets.
Chrome-vanadium steel, forged, oil-hardened, Insulated handles coated in bi-component material, VDE tested, compliant with EC 60900 DIN EN 60900 standard.

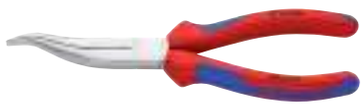
Tech. Code	GR54 Euro	Length mm	Jaws length mm	Ø Jaws mm
F0411160	31,35	160	41	9,5 - 2,5

PLIERS FOR MECHANICS WITH HALF-ROUND ARCHING NOSE

ITEM: 38 35 200

Standard DIN ISO 5745

Pliers for fine mechanics with half-round arching nose and knurled tips.
Chrome-vandadium steel forged and oil-hardened, handles coated in multi-component material.



Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0290200	(38,85)	200	73	9,5 - 2,5

LONG NOSE BENT PLIERS

ITEM: 31 21 160

Precision pliers particularly suitbable for assembly, bending and registration work particulary long jaws internally smooth with rounded edges. Special forged and oil-hardened chrome-vanadium steel, handles coated in synthetic resin.

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0398160	(33,70)	160	55	7,5 - 2,5

PLIERS FOR ELECTRONICS AND PRECISION MECHANICS

ITEM: WX3250

Standard DIN ISO 9655

Pliers **PREMIUM QUALITY** particularly suitable for precision work in the field of electronics, eyewear and fine mechanics. Made of forged oil-hardened chrome-vanadium steel with double friction-free spring for smooth and uniform opening and closing. The tapered grips covered in Soft-tex non-slip vinyl ensure high comfort and are suitable for prolonged use in assembly departments.

Specification: Flat, internally smooth jaws.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Jaw width mm
F0345120	28,09	120	23	4.2 - 7.3

ITEM: WX3255

Standard DIN ISO 9655

Pliers **PREMIUM QUALITY** particularly suitable for precision work in the field of electronics, eyewear and fine mechanics. Made of forged oil-hardened chrome-vanadium steel with double friction-free spring for smooth and uniform opening and closing. The tapered grips covered in Soft-tex non-slip vinyl ensure high comfort and are suitable for prolonged use in assembly departments.

Specification: Half-round, internally smooth jaws.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Jaw width mm
F0356120	28,73	120	25	1.5 - 7.3

ITEM: WX3256

Standard DIN ISO 9655

Specification: Half-round long nose internally knurled jaws.

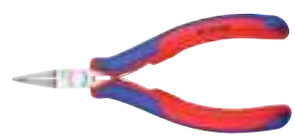
Tech. Code	GR51 Euro	L mm	Jaw length mm	Jaw width mm
F0357130	34,45	130	34	1.5 - 7.3

FLAT NOSE PLIERS FOR FINE MECHANICS

ITEM: 35 12 115

Standard DIN ISO 9655

Pliers particularly suitable for precision assembly and disassembly in electronics and fine mechanics, smooth and rectified Internal jaws with perfectly rounded edges, double spring by friction for a soft and uniform opening and closing.
Special steel for forged and oil-hardened tools, handles coated in multi-component material.



Specific:
Internally smooth flat jaws

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0347115	35,80	115	22,5	4,0 - 7,0

ITEM: 35 22 115

Standard DIN ISO 9655

Pliers particularly suitable for precision assembly and disassembly in electronics and fine mechanics, smooth and rectified Internal jaws with perfectly rounded edges, double spring by friction for a soft and uniform opening and closing.
Special steel for forged and oil-hardened tools, handles coated in multi-component material.

Specific:
Internally smooth half-round nose jaws

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0367115	35,80	115	22,5	1,3 - 7,0

ITEM: 35 62 145

Standard DIN ISO 9655

Specific:
Long half-round nose jaws internally smooth

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0385145	42,40	145	40	1,5 - 7,5

Indivisible package Suggested retail package - Unit price

PLIERS FOR ELECTRONICS AND PRECISION MECHANICS

ITEM: WX3260

Standard DIN ISO 9655

Pliers **PREMIUM QUALITY** particularly suitable for precision work in the field of electronics, eyewear and fine mechanics. Made of forged oil-hardened chrome-vanadium steel with double friction-free spring for smooth and uniform opening and closing. The tapered grips covered in Soft-tex non-slip vinyl ensure high comfort and are suitable for prolonged use in assembly departments.

Specification: Half-round bent nose internally smooth jaws.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Jaw width mm
F0380120	28,73	120	20	2.0 - 7.3

ITEM: WX3261

Standard DIN ISO 9655

Specification: Half-round long bent nose internally smooth jaws.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Jaw width mm
F0381130	42,46	130	30	2.0 - 7.3

ITEM: WX3265

Standard DIN ISO 9655

Pliers **PREMIUM QUALITY** particularly suitable for precision work in the field of electronics, eyewear and fine mechanics. Made of forged oil-hardened chrome-vanadium steel with double friction-free spring for smooth and uniform opening and closing. The tapered grips covered in Soft-tex non-slip vinyl ensure high comfort and are suitable for prolonged use in assembly departments.

Specification: Smooth round jaws.

Tech. Code	GR51 Euro	L mm	Jaw length mm	Jaw Ø mm
F0389120	28,09	120	22	1.1 - 5.0

HALF-ROUND BENT NOSE PLIERS FOR MECHANICS

ITEM: 35 42 115

Standard DIN ISO 9655

Pliers particularly suitable for precision assembly and disassembly in electronics and fine mechanics, smooth and rectified Internal jaws with perfectly rounded edges, double spring by friction for a soft and uniform opening and closing.
Special steel for forged and oil-hardened tools, handles coated in multi-component material.
Specific:
Smooth internally half-round bent nose jaws

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0394115	(38,65)	115	18,5	1,3 - 7,0

ITEM: 35 82 145

Standard DIN ISO 9655

Specific:
Long half-round bent nose jaws internally smooth

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Width mm
F0395145	45,80	145	35	1,0 - 7,5

ITEM: 35 32 115

Standard DIN ISO 9655

Pliers particularly suitable for precision assembly and disassembly in electronics and fine mechanics, smooth and rectified internal jaws with perfectly rounded edges, double spring by friction for a soft and uniform opening and closing.
Special steel for forged and oil-hardened tools, handles coated in multi-component material.

Specific:
Round nose jaws

Tech. Code	GR54 Euro	Length mm	Jaws length mm	Ø jaws mm
F0390115	35,80	115	22,5	1,0 - 7,0

STRAIGHT NOSE PLIERS FOR INTERNAL CIRCLIPS

ITEM: WX3400

Standard DIN ISO 5256 FORM C

Straight nose **Automotive Line** pliers for internal circlips, hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. **ERGOFORM** grip handles with anti-slip coating.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04150813	17,17	8 - 13	0.9	140	J0
F04151225	17,17	12 - 25	1.3	140	J1
F04151960	18,13	19 - 60	1.8	180	J2

STRAIGHT NOSE PLIERS FOR INTERNAL CIRCLIPS

ITEM: WX3402

Standard DIN ISO 5256 - FORM C

Integral **PREMIUM QUALITY** straight nose pliers in chrome-vanadium steel for internal circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04170813	21,46	8 - 13	0.9	135	J0
F04171225	21,36	12 - 25	1.3	135	J1
F04171960	22,42	19 - 60	1.8	180	J2
F041740100	25,84	40 - 100	2.3	225	J3

ITEM: WX3402/S4

Standard DIN ISO 5256 FORM C

Composition:

WX3402 Pliers for external circlips - straight nose Ø 8-13 - Ø 12-25 - Ø 19-60 - Ø 40-100 mm

Tech. Code	GR51 Euro	Pieces
F041804	78,44	4

Boxed set

STRAIGHT NOSE PLIERS FOR INTERNAL CIRCLIPS

ITEM: 48 11 J0/J1/J2/J3/J4

Standard DIN 5256 C

Straight nose pliers for internal elastic circlips for holes, chrome-vanadium steel, oil-hardened for high stresses in continuous use, high precision and optimal movement. Handles with non-slip synthetic resin coating.

Tech. Code	GR54 Euro	ø Capacity mm	Tips mm	Length mm	Dimension
F04288-13	20,50	8 - 13	0,9	140	J0
F042812-25	20,30	12 - 25	1,3	140	J1
F042819-60	21,40	19 - 60	1,8	180	J2
F042840-100	24,05	40 - 100	2,3	225	J3
F042885-140	41,50	85 - 140	3,2	320	J4

ITEM: 44 10 J5 - 44 10 J6

Pliers for internal safety circlips of large dimension. Pliers in laminated steel, high resistance and special steel tips for oil-hardened tools.

- With locking mechanisim
- Interchangeable tips

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F0425300	146,20	122 - 300	3,5	570	J5
F0425400	146,20	252 - 400	4,5	580	J6

REPLACEMENT TIPS FOR PLIERS FOR CIRCLIPS

ITEM: 44 19 J5 - 44 19 J6

Pair of replacement tips for pliers 46 10 J5 e 46 10 J6.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Dimension
F0426300	17,90	122 - 300	3,5	J5
F0426400	17,90	252 - 400	4,5	J6

45° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS

ITEM: 44 31 J02/J12/J22/J32/J42

45° bent nose pliers for internal circlips, oil-hardened chrome-vanadium steel, handles with synthetic resin coating.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F04290813	17,65	8 - 13	0,9	140	J02
F04291225	17,65	12 - 25	1,3	140	J12
F04291960	18,20	19 - 60	1,8	180	J22
F042940100	(20,05)	40 - 100	2,3	225	J32
F042985140	(33,60)	85 - 140	3,2	310	J42

90° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS

ITEM: WX3405

Standard DIN ISO 5256 FORM D

Bent nose **Automotive Line** pliers 90° for internal circlips, hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. **ERGOFORM** grip handles with anti-slip coating.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04300813	19,72	8 - 13	0.9	130	J01
F04301225	19,72	12 - 25	1.3	130	J11
F04301960	19,93	19 - 60	1.8	170	J21

Indivisible package Suggested retail package - Unit price

90° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS

WODEX

NEW

ITEM: WX3407

Standard DIN ISO 5256 FORM D

Integral **PREMIUM QUALITY** bent nose pliers 90° in chrome-vanadium steel for internal circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04320813	22,68	8 - 13	0.9	135	J01
F04321225	22,55	12 - 25	1.3	135	J11
F04321960	23,77	19 - 60	1.8	180	J21
F043240100	27,43	40 - 100	2.3	225	J31

ITEM: WX3407/S4

Standard DIN ISO 5256 FORM D

Composition:

Pliers for internal circlips - noses 90° - Ø 8-13 - Ø 12-25 - Ø 19-60 Ø 40-100 mm

Tech. Code	GR51 Euro	Pieces
F043304	83,74	4

Boxed set

90° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS

KNIPEX

ITEM: 48 21 J01/J11/J21/J31/J41

Standard DIN 5256 D

90° bent nose pliers for internal circlips for holes, oil-chrome vanadium steel, oil-hardened for high stresses in continuous use, high precision and optimal movement. Handles with anti-slip synthetic resin coating.

Tech. Code	GR54 Euro	ø Capacity mm	Tips mm	Length mm	Dimension
F04488-13	23,45	8 - 13	0,9	130	J01
F044812-25	23,20	12 - 25	1,3	130	J11
F044819-60	23,45	19 - 60	1,8	165	J21
F044840-100	26,15	40 - 100	2,3	210	J31
F044885-140	44,25	85 - 140	3,2	305	J41

BENT NOSE PLIERS FOR INTERNAL CIRCLIPS

KNIPEX

ITEM: 44 20 J51 - 44 20 J61

Bent nose pliers for Internal circlips of large dimension. Clamp body in high-resistant laminated steel and oil-hardened special tool tips.

- With locking mechansim
- With Interchangeable tips

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F0453300	(146,75)	122 - 300	3,5	590	J51
F0453400	(146,75)	252 - 400	4,5	600	J61

REPLACEMENT TIPS FOR PLIERS FOR CIRCLIPS

KNIPEX

ITEM: 44 29 J51 - 44 29 J61

Pair of replacement tips for pliers 44 20 J51 e 44 20 J61.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Dimension
F0454300	(18,15)	122 - 300	3,5	J51
F0454400	(18,15)	252 - 400	4,5	J61

STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS

WODEX

ITEM: WX3410

Standard DIN ISO 5254 FORM A

Straight nose **Automotive Line** pliers for external circlips, hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during expansion. **ERGOFORM** grip handles with anti-slip coating.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04550310	18,97	3 - 10	0.9	140	A0
F04551025	18,97	10 - 25	1.3	140	A1
F04551960	19,29	19 - 60	1.8	180	A2

STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS

WODEX

ITEM: WX3412

Standard DIN ISO 5254 FORM A

Integral **PREMIUM QUALITY** straight nose pliers in chrome-vanadium steel for external circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04570310	24,75	3 - 10	0.9	135	A0
F04571025	24,64	10 - 25	1.3	135	A1
F04571960	25,84	19 - 60	1.8	180	A2
F045740100	29,39	40 - 100	2.3	225	A3

ITEM: WX3412/S4

Standard DIN ISO 5254 FORM A

Set of **PREMIUM QUALITY** integral straight nose pliers in chrome-vanadium steel for external circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Composition:

Pliers for external circlips - straight nose Ø 3-10 - Ø 10-25 - Ø 19-60 - Ø 40-100 mm

Tech. Code	GR51 Euro	Pieces
F045804	90,10	4

Boxed set

STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS

KNIPEX

ITEM: 49 11 A0/A1/A2/A3/A4

Standard DIN 5254 A

Straight nose pliers for external elastic circlips for shafts, chrome-vanadium steel, oil-hardened for high stresses in continuous use, high precision and optimal movement. Handles with anti-slip synthetic resin coating.

Tech. Code	GR54 Euro	ø Capacity mm	Tips mm	Length mm	Dimension
F04683-10	23,45	3 - 10	0,9	140	A0
F046810-25	21,90	10 - 25	1,3	140	A1
F046819-60	24,30	19 - 60	1,8	180	A2
F046840-100	26,55	40 - 100	2,3	225	A3
F046885-140	46,10	85 - 140	3,2	320	A4

STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS

KNIPEX

ITEM: 49 31 A0/A1/A2

Standard DIN 5254 A

Straight nose pliers for external circlips for shafts, chrome-vanadium steel, oil-hardened for high stresses in continuous use, high precision and optimal movement. With gripper opening/closing limitation mechanism adjustable in stop. Adjustment using a hexagon socket screw. Ideal for mass production, it effectively prevents excessive expansion of the circlips. Handles with anti-slip synthetic resin coating.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F047003-10	29,15	3 - 10	0,9	140	A0
F047010-25	32,45	10 - 25	1,3	140	A1
F047019-60	35,00	19 - 60	1,8	170	A2

STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS

KNIPEX

ITEM: 46 10 A5 - 46 10 A6

Straight nose pliers for external circlips of large dimension. Clamp body in high-resistant laminated steel and oil-hardened special tool tips

- With locking mechanism
- With Interchangeable tips

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F0473300	146,20	122 - 300	3,5	560	A5
F0473400	146,20	252 - 400	4,5	570	A6

REPLACEMENT TIPS FOR PLIERS FOR CIRCLIPS

KNIPEX

ITEM: 44 19 A5 - 44 19 A6

Pair of replacement tips for pliers 46 10 A5 e 46 10 A6.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Dimension
F0474300	17,90	122 - 300	3,5	A5
F0474400	17,90	252 - 400	4,5	A6

Indivisible package Suggested retail package - Unit price

45° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS

ITEM: 46 31 A02/A12/A22/A32/A42

45° Bent nose pliers for external circlips, for mounting on shafts, oil-hardened chrome-vanadium steel, handles with synthetic resin coating.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F04720310	19,60	3 - 10	0,9	130	A02
F04721025	18,75	10 - 25	1,3	130	A12
F04721960	20,35	19 - 60	1,8	185	A22
F047240100	(22,90)	40 - 100	2,3	210	A32
F047285140	(38,70)	85 - 140	3,2	310	A42

90° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS

ITEM: WX3415

Standard DIN ISO 5254 FORM B

Bent nose **Automotive Line** pliers 90° for external circlips, hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during expansion. **ERGOFORM** grip handles with anti-slip coating.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04750310	20,56	3 - 10	0.9	130	A01
F04751025	20,56	10 - 25	1.3	130	A11
F04751960	22,05	19 - 60	1.8	170	A21

90° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS

ITEM: WX3417

Standard DIN ISO 5254 FORM B

Integral **PREMIUM QUALITY** bent nose pliers 90° in chrome-vanadium steel for external circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Tech. Code	GR51 Euro	Capacity Ø mm	Tip Ø mm	L mm	Dimension
F04770310	27,19	3 - 10	0.9	135	A01
F04771025	25,40	10 - 25	1.3	135	A11
F04771960	28,33	19 - 60	1.8	180	A21
F047740100	30,72	40 - 100	2.3	225	A31

ITEM: WX3417/S4

Standard DIN ISO 5254 FORM B

Set of **PREMIUM QUALITY** integral 90° bent nose pliers in chrome-vanadium steel for external circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Composition:

Pliers for external circlips - noses 90° - Ø 3-10 - Ø 10-25 - Ø 19-60 - Ø 40-100 mm

Tech. Code	GR51 Euro	Pieces
F047804	98,58	4

Boxed set

90° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS

ITEM: 49 21 A01/A11/A21/A31/A41

Standard DIN 5254 B

90° bent pliers for external elastic circlips for shafts, chrome-vanadium steel, oil-hardened for high stresses in continuous use, high precision and optimal movement. Handles with anti-slip synthetic resin coating.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F04883-10	25,50	3 - 10	0,9	130	A01
F048810-25	24,05	10 - 25	1,3	130	A11
F048819-60	26,55	19 - 60	1,8	165	A21
F048840-100	29,10	40 - 100	2,3	210	A31
F048885-140	50,15	85 - 140	3,2	305	A41

BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS

ITEM: 46 20 A51 - 46 20 A61

Bent nose pliers for external circlips of large dimension.
Clamp body in high-resistant laminated steel and oil-hardened special tool tips.

- With locking mechanism
- Interchangeable tips

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Length mm	Dimension
F0486300	(146,75)	122 - 300	3,5	570	A51
F0486400	(146,75)	252 - 400	4,5	580	A61

REPLACEMENT TIPS FOR PLIERS FOR CIRCLIPS

ITEM: 46 29 A51 - 46 29 A61

Pair of replacement tips for pliers 46 20 A51 e 46 20 A61.

Tech. Code	GR54 Euro	Capacity Ø mm	Tips mm	Dimension
F0487300	(18,15)	122 - 300	3,5	A51
F0487400	(18,15)	252 - 400	4,5	A61

SET OF PLIERS FOR INTERNAL AND EXTERNAL CIRCLIPS

ITEM: WX3420/S4 - WX3420/S8 - WX3420/S12

Standard DIN ISO 5256 - DIN ISO 5254

Set of **AUTOMOTIVE LINE** straight nose pliers for internal and external circlips. Hardened chrome-vanadium steel body, high performance steel tips for high stress continuous use. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression or expansion. **ERGOFORM** grip handles with anti-slip coating.

Composition F045904 - WX3420/S4:

WX3400 Pliers for internal circlips - straight nose Ø 19-60 mm
WX3405 Pliers for internal circlips - noses 90° Ø 19-60 mm
WX3410 Pliers for external circlips - straight nose Ø 19-60 mm
WX3415 Pliers for external circlips - straight nose 90° Ø 19-60 mm

Composition F045908 - WX3420/S8:

WX3400 Pliers for internal circlips - straight nose Ø 12-25 - Ø 19-60 mm
WX3405 Pliers for internal circlips - noses 90° Ø 12-25 - Ø 19-60 mm
WX3410 Pliers for external circlips - straight nose Ø 10-25 - Ø 19-60 mm
WX3415 Pliers for external circlips - noses 90° Ø 10-25 - Ø 19-60 mm

Composition F045912 - WX3420/S12:

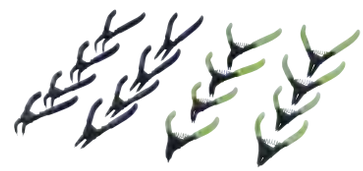
WX3400 Pliers for internal circlips - straight nose Ø 8-13 - Ø 12-25 - Ø 19-60 mm
WX3405 Pliers for internal circlips - noses 90° Ø 8-13 - Ø 12-25 - Ø 19-60 mm
WX3410 Pliers for external circlips - straight nose Ø 3-10 - Ø 10-25 - Ø 19-60 mm
WX3415 Pliers for external circlips - noses 90° Ø 3-10 - Ø 10-25 - Ø 19-60 mm

Tech. Code	GR51 Euro	Pieces
F045904	78,44	4
F045908	148,40	8
F045912	222,60	12

Boxed set

SET OF PLIERS FOR INTERNAL AND EXTERNAL CIRCLIPS

ITEM: WX3422/S8 - WX3422/S12 - WX3422/S16



Standard DIN ISO 5256 - DIN ISO 5254

Straight nose pliers **PREMIUM QUALITY** in chrome-vanadium steel for internal and external circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Composition F046108 - WX3422/S8:

WX3402 Pliers for internal circlips - straight nose Ø 12-25 - Ø 19-60 mm
WX3407 Pliers for internal circlips - noses 90° Ø 12-25 - Ø 19-60 mm
WX3412 Pliers for external circlips - straight nose Ø 10-25 - Ø 19-60 mm
WX3417 Pliers for external circlips - noses 90° Ø 10-25 - Ø 19-60 mm

Composition F046112 - WX3422/S12:

WX3402 Pliers for internal circlips - straight nose Ø 8-13 - Ø 12-25 - Ø 19-60 mm
WX3407 Pliers for internal circlips - noses 90° Ø 8-13 - Ø 12-25 - Ø 19-60 mm
WX3412 Pliers for external circlips - straight nose Ø 3-10 - Ø 10-25 - Ø 19-60 mm
WX3417 Pliers for external circlips - noses 90° Ø 3-10 - Ø 10-25 - Ø 19-60 mm

Composition F046116 - WX3422/S16:

WX3402 Pliers for external circlips - straight nose Ø 8-13 - Ø 12-25 - Ø 19-60 - Ø 40-100 mm
WX3407 Pliers for internal circlips - noses 90° Ø 8-13 - Ø 12-25 - Ø 19-60 - Ø 40-100 mm
WX3412 Pliers for external circlips - straight nose Ø 3-10 - Ø 10-25 - Ø 19-60 - Ø 40-100 mm
WX3417 Pliers for external circlips - straight nose 90° Ø 3-10 - Ø 10-25 - Ø 19-60 - Ø 40-100 mm

Tech. Code	GR51 Euro	Pieces
F046108	153,70	8
F046112	234,26	12
F046116	331,78	16

Boxed set

Indivisible package Suggested retail package - Unit price

PLIERS FOR INTERNAL AND EXTERNAL ELASTIC CIRCLIPS IN SET

ITEM: 00 19 57

Set of 4 precision pliers for Internal and external circlips in a folding roll-up tool case made of hard-wearing polyester fabric with practical adjustable quick release fastener.

Composition:

48 11 J1 Circlip pliers for Internal circlips mm 12-25 straight
48 11 J2 Circlip pliers for Internal circlips mm 19-60 straight
49 11 A1 Circlip pliers for external circlips mm 12-25 straight
49 11 A2 Circlip pliers for external circlips mm 19-60 straight

Tech. Code	GR54 Euro	Pieces
F049004	103,50	4

PILERS FOR EXTERNAL CIRCLIPS WITHOUT HOLES

ITEM: 45 10 170

Straight nose plilers for mounting circlips without holes on shafts,shoulder rings and circlips. Oil-hardened chrome vanadium steel for high stress.

Specifications:
- For circlips with a minimum opening of 3,6 mm.
- Knurled jaws for the safe grip of the rings.

Tech. Code	GR54 Euro	Length mm
F0492170	41,85	170

ITEM: 45 21 200

Features:
- For standard circlips from Ø 12 mm with a minimum ring opening of 2,2 mm.
- Bent nose jaws at 30° with non-slip centering for safe grip of the circlips
- Handles coated in synthetic resin.

Tech. Code	GR54 Euro	Length mm
F0493200	49,30	200

ADJUSTABLE PLIERS FOR TUBES AND NUTS

ITEM: WX3300

STANDARD DIN ISO 8976
Adjustable pliers **PREMIUM QUALITY** double guide pliers, for tubes and nuts, made of forged chrome-vanadium steel, phosphate surface finish.
- Tempered and toothed jaws approx. 58 HRC.
- Fine adjustment by pressing the button
- Soft and comfortable anti-slip grips
- Safety catch against crushing injuries

Tech. Code	GR51 Euro	L mm	Max opening mm
F0510250	25,02	250	50
F0510300	31,22	300	70

ITEM: WX3290

Standard DIN ISO 8976
Adjustable pliers with double pass-through guide for tubes and nuts, made of forged chrome-vanadium steel, phosphate finish.
- Tempered and toothed jaws with approx. 58 HRC
- Simple 7-position adjustment
- Soft and comfortable anti-slip grips
- Safety catch against crushing injuries

Tech. Code	GR51 Euro	L mm	Max opening mm
F0515250	17,49	250	36

ITEM: WX3285

Standard DIN ISO 8976
Adjustable pliers with double pass-through guide for tubes and nuts, made of forged chrome-vanadium steel, painted finish.
- Tempered and toothed jaws approx. 58 HRC.
- Simple 6-position adjustment
- Safety catch against crushing injuries

Tech. Code	GR51 Euro	L mm	Max opening mm
F0517250	14,31	250	36

ADJUSTABLE PLIERS FOR TUBES AND NUTS

ITEM: F0552

Standard DIN ISO 8976
7-positions model, special high-alloy steel body, polished chrome vanadium

Painted version.

Tech. Code	GR52 Euro	Length mm	Max opening mm
F0552170	8,98	170	30
F0552250	12,65	250	36
F0552300	17,09	300	46

While stocks last

ADJUSTABLE PLIERS FOR PIPES AND NUTS

ITEM: 88 01 180/250/300/400 ALLIGATOR®

Standard DIN ISO 8976
Adjustable self-locking pliers for pipes and nuts, pass through hinge and double guide for high stability, sturdy structure susceptible to dirt, particularly suitable for external work, stop contrast to prevent accidental crushing of the fingers.
Forged chrome-vanadium steel oil-hardened, hardness of the teeth approx. 61 HRC, handles coated with synthetic resin.

Tech. Code	GR54 Euro	Supplier code mm	Max opening mm
F05475180	22,20	180	42
F05475250	23,40	250	50
F05475300	35,10	300	70
F05475400	68,65	400	90

ITEM: 00 20 09 V03 ALLIGATOR®

Set of 3 Alligator adjustable pliers self-locking on pipes and nuts, black bonderized, synthetic resin coated, slip resistant handles.

Composition:
88 01 180 - 250 - 300 mm

Tech. Code	GR54 Euro	Pieces
F0603SET	80,70	3

ITEM: 87 00 100 COBRA® XS

Adjustable self-locking pliers for tubes and nuts, suitable for working in confined spaces or handling of very small parts. One-handed precision adjustment for optimal adaptation to different workpiece sizes. Opening up to 24 mm and gripping capacity of round pieces up to Ø 28 mm. Forged and oil-hardened chrome vanadium steel, tooth hardness approx. 61 HRC.

Tech. Code	GR54 Euro	Length mm	Max opening mm
F0546100	28,05	100	24

ITEM: 87 01 125/150/180/250/300/400/560 COBRA®

Standard DIN ISO 8976
Adjustable self-locking pliers for pipes and nuts with adjustment by pressing the button directly on the workpiece, fine adjustment that allows you to adapt to the pieces to tighten even in the most diverse forms. Double guide through hinge for high stability, stop contrast to avoid accidental crushing of the fingers. Forged chrome-vanadium steel oil-hardened, hardness of the teeth approx. 61 HRC, chrome-finish.
Version with synthetic resin-coated handles.

Tech. Code	GR54 Euro	Length mm	Max opening mm
F05480125	26,95	125	27
F05480150	27,65	150	32
F05480180	29,00	180	42
F05480250	30,80	250	50
F05480300	42,90	300	70
F05480400	75,00	400	90
F05480560	125,45	560	115

ITEM: 00 20 09 V02 COBRA®

Set of 3 adjustable pliers, for pipes with polished head and synthetic resin coated grip handle

Composition:
87 01 180 - 250 - 300 mm

Tech. Code	GR54 Euro	Pieces
F0600SET	102,70	3

ITEM: 87 05 250/300 COBRA®

Standard DIN ISO 8976
Chrome-plated version with bi-component coated handles.

Tech. Code	GR54 Euro	Length mm	Max opening mm
F0578250	45,50	250	50
F0578300	58,75	300	70

ADJUSTABLE PLIERS TAPERED FOR PIPES - COBRA® ES

ITEM: 87 51 250 COBRA® ES

Standard DIN ISO 8976
Self-locking pliers with long and tapered nose for pipes and nuts, access to the piece particularly easy thanks to the very thin shape in the whole section of the head and of the articulation, passing hinge and double guide for high stability, stop contrast to avoid accidental crushing of the fingers.
Forged chrome-vanadium steel, oil-hardened, hardness of the teeth approx. 61 HRC, handles coated in synthetic resin.

Tech. Code	GR54 Euro	Length mm	Max opening mm
F0564250	33,30	250	32

Indivisible package Suggested retail package - Unit price

ADJUSTABLE PLIERS - RAPTOR®

ITEM: 87 41 250

Standard DIN ISO 5743
Pliers with opening from 10 to 32 mm, self- locking from 17 to 32 mm. Fine adjustment by pressing the button directly on the workpiece, even with just one hand, pass through hinge with double guide for high stability, contrast stop to prevent accidental crushing of the fingers. Forged chrome-vanadium steel, oil hardened, tooth hardness approx. 61 HRC.

Version with synthetic resin-coated handles.

Tech. Code	GR54 Euro	Length mm	Max opening mm
F0565250	35,10	250	32

ADJUSTABLE PLIERS WITH FRONT GRIP

ITEM: 82 01 200 TWINGRIP

NEW

Adjustable pliers for pipes and nuts with front and side grip, five position movement by pressing the button, contrast stop to avoid accidental crushing of the fingers, forged-chrome vanaidum steel oil hardened, tooth hardness approx. 61 HRC.
Version with handles coated in synthetic resin.

Tech. Code	GR54 Euro	Length mm	Max. opening mm
F0570200	25,45	200	22

ADJUSTABLE PLIERS

ITEM: 86 01 250

Adjustable tool for screwing, clamping, supporting, pressing and bending workpieces, without damaging the edges of sanitary fittings with delicate surfaces. Adjustment directly on the workpiece by pressing the button. The parallel jaws allows flexible adjustment of all gripping widths up to the specified maximum size.
Forged and oil-hardened chrome-vanadium steel with grey bonderized finish, graduated scale.
Version with synthetic resin-coated handles.

Tech. Code	GR54 Euro	Length mm	Max. capacity mm
F0575250	56,25	250	52

ITEM: 86 03 125/150/180/250/300/400

Chrome version with synthetic resin-coated handles.

Tech. Code	GR54 Euro	Length mm	Max opening mm
F0580125	51,40	125	23
F0580150	57,40	150	27
F0580180	57,80	180	35
F0580250	66,20	250	46
F0580300	82,30	300	60
F0580400	145,20	400	85

PLIERS FOR PLASTIC PIPES AND SIPHONS 81 01 250

ITEM: 81 01 250

Pliers for siphons, plastic pipes, connectors, fittings and ferrules in plastic up to Ø 80 mm, regulation end for an optimal adaptation to the various diameters. Adjustable hinge which is adjustable in 25 positions, knurled jaws.
Chrome-vanadium steel, forged and oil-hardened, handles coated with synthetic resin.

Tech. Code	GR54 Euro	Length mm	Opening ø mm
F0597250	(35,25)	250	25 - 80

ITEM: 81 11 250

Version with interchangeable jaws in synthetic material for delicate surfaces.

Tech. Code	GR54 Euro	Length mm	Opening ø mm
F0598250	52,10	250	10 - 75

Pair of spare jaws in synthetic material code 1227643

PLIERS IN SET

ITEM: 00 20 09 V01

Set of 3 tools 1 Combination pliers, 1 side cutter, 1 adjustable pliers model Cobra.

Composition:
03 02 180 Universal Pliers 180 mm
70 02 160 Side cutter 160 mm
87 01 250 Adjustable pliers COBRA® 250 mm

Tech. Code	GR54 Euro	Pieces
F0601SET	75,95	3

F

ADJUSTABLE SELF-LOCKING GRIP PLIERS

ITEM: WX3350

Adjustable self-locking pliers **PREMIUM QUALITY** with adjustable deep drawn chrome-vanadium steel jaws, chrome-satin finish.
- Forged chrome-vanadium steel toothed jaws
- Articulated lever for high clamping forces
- Adjustable pressure closure with rear screw

Specification:
Concave jaws for clamping round and flat pieces

Tech. Code	GR51 Euro	L mm	Max opening mm
F0625180	21,09	180	38
F0625240	23,11	240	48
F0625300	39,75	300	65

ITEM: WX3355

Specification:
Straight jaws for clamping flat, square or hexagonal pieces.

Tech. Code	GR51 Euro	L mm	Max opening mm
F0630240	27,00	240	40

ADJUSTABLE SELF-LOCKING GRIP PLIERS

ITEM: 40 04 250

Adjustable self-locking pliers for locking flat and round material.
- Toothed jaws in chrome-vanadium steel
- Articulated lever for high clamping forces
- Adjustable pressure closure with rear screw

Tech. Code	GR54 Euro	Length mm	Max opening mm
F0677250	28,80	250	35

SELF-LOCKING PLIERS WITH DOUBLE ADJUSTMENT

ITEM: WX3360

Self-locking pliers **PREMIUM QUALITY** with double adjustment for clamping medium size sections, angles and pipes.
- Forged chromium molybdenum steel toothed jaws
- Quick adjustment by 4-position rack
- Adjustable pressure closing by means of upper ring nut
- Articulated lever for strong clamping forces

Tech. Code	GR51 Euro	L mm	Max opening mm
F0671275	61,80	275	80

ADJUSTABLE SELF-LOCKING PLIERS WITH SWAN COLLAR JAWS

ITEM: WX3370

Adjustable self-locking pliers **PREMIUM QUALITY** for clamping profiles with large ribs and corners.
- Robust forged chrome-vanadium steel jaws
- Articulated lever for high clamping forces
- Adjustable pressure closure with rear screw

Tech. Code	GR51 Euro	L mm	Max opening mm
F0701275	32,50	275	90

ITEM: WX3372

Specification:
Version with adjustable locking plates with increased section for clamping delicate pieces.

Tech. Code	GR51 Euro	L mm	Max opening mm
F0703275	37,10	275	80

SELF-LOCKING PLIERS WITH FORK JAWS

ITEM: WX3380

Adjustable self-locking pliers **PREMIUM QUALITY** with fork jaws for clamping sheets and profiles during welding operations.
- Fork jaws in chromium-molybdenum steel
- Upper jaw bent at 90°
- Articulated lever for high clamping forces
- Adjustable pressure closure with rear screw

Tech. Code	GR51 Euro	L mm	Max opening mm
F0708275	40,28	275	55

Indivisible package Suggested retail package - Unit price

CLAMP GRIP PLIERS

ITEM: GRZ10-20

Model designed for parallel fastening, prismatic grooving for small and round pieces

Tech. Code	GR60 Euro	Clamping capacity mm	Length mm	Length mm
F0711260-100	106,03	100	65	260
F0711260-200	116,35	200	65	260

CRIMPING PLIERS

ITEM: 97 22 240

High resistant steel pliers for cutting cables, stripping wires and tightening male and female terminals, with holes for truncating threaded screws in copper and brass M2.6; M3; M3.5; M4 and M5.

Usage:

non-Insulated cable lugs and cable connectors

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1010240	27,35	0.70 - 6	20 - 10	240

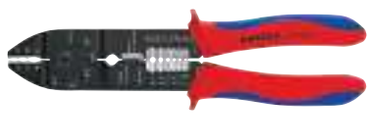
ITEM: 97 21 215

High resistant steel pliers for cutting cables, stripping wires and tightening male and female terminals, with holes for truncating threaded screws in copper and brass M2.6; M3; M3.5; M4 and M5.

Usage:

non-Insulated cable lugs and cable connectors

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1012215	24,25	0.75 - 6	20 - 10	215



ITEM: 97 52 36

Crimping pliers with precision profiles and forced stop device (self releasing maechanism). Increased clamping force from the articulated lever transmission, excellent maneuverability. Chrome vanadium oil-hardened tempered steel, handles coated in bi-component material.

Usage:

Male, female terminals and pre-Insulated head connectors.

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1015220	118,60	0.5 - 6	20 - 10	220

ITEM: 97 52 30 PRECIFORCE®

Usage:

Non-Insulated compression connectors DIN 46267

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1016220	126,25	1,5 - 4	15 - 11	220

ITEM: 97 52 33 PRECIFORCE®

Usage:

Female terminals non Insulated compression, tubulars and terminals, DIN 46234 and DIN 46235 standard so as crimp not Insulated to compression, butt and press connectors DIN 46341 and DIN 46267 standard

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1017220	126,25	0,5 - 10	20 - 7	220

PRECIFORCE® CRIMPING PLIERS

ITEM: 97 52 34 PRECIFORCE®

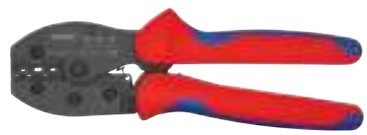
Usage:
- Non-Insulated open plug type connectors (plug with 2,8 + 4,8 mm)

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1018220	145,35	0,1 - 2,5	27 - 13	220

ITEM: 97 52 35 PRECIFORCE®

Usage:
- Non-Insulated open plug type (plug with 4,8 + 6,3 mm)

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1019220	(145,35)	0,5 - 6	20 - 10	220



CRIMPING PLIERS FOR END SLEEVES

ITEM: 97 52 38 PRECIFORCE®

Usage:
- Insulated and non-Insulated end sleeves (ferrules)

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1020220	126,25	0,25 - 6	23 - 10	220

ITEM: 97 53 08

Crimping pliers for end sleeves, DIN 46228 (part 1+4), Automatic adaptation to the size of the end sleeves, no climping errors using the wrong matrix, frontal Insertion of the sockets in the pincer, constant quality of crimping with force stop device (self-releasing mechanism). Increased clamping force from the articulated lever transmission. Chrome-vanadium oil-hardend tempered steel, handles coated in bi-component material.

Usage:
- Square section pressing of end sleeves up to10 mm²
- Possibility of Introducing laterally end sleeves up to 2,5 mm²
- For all Twin end sleeves up to 2 x 4 mm² o 2 x AWG 10

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1030190	183,05	0,08 - 10	28 - 7	190

ITEM: 97 53 09

Model with selector lever for adjusting the clamping range 0,08 - 10 o 16 mm²

Usage:
- Square section pressing of end sleeves up to 16 mm²
- For all Twin end sleeves up to 2 x 6 mm²

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1031190	194,50	0,08 - 10 + 16	28 - 5	190

ITEM: 97 53 04

Crimping pliers for end sleeves DIN 46228 (part 1+4), automatic adaptation to the size of the end sleeves, quality of constant crimping with force stop device (self releasing maechanism) Increased clamping force from the articulated lever transmission. Chrome-vanadium oil-hardened tempered steel, handles coated in bi-component material.

Usage:
- Square pressing section of the end sleeves up to16 mm²
- Square section pressing for opimal surfaces regardless of the positioning of the connection
- Pressing of all twin end sleeves up to 2 x 6 mm² o 2 x AWG 8

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1035180	180,35	0,08 - 10 + 16	28 - 5	180

ITEM: 97 53 14

Usage:
- Pressing with hexagonal section of end sleeves up to10 mm²
- Hexagonal section pressing for difficult to access areas
- Pressing of all twin end sleeves up to 2 x 4 mm² o 2 x AWG 10

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1036180	189,60	0,08 - 10	28 - 7	180

Indivisible package Suggested retail package - Unit price

CRIMPING PILERS FOR END SLEEVES

ITEM: 97 53 18 TWISTOR 16

Crimping pliers for end sleeves Din 46228 (part 1 + 4), Square crimping profile, 360° rotating crimp matrix with 8 trip positions, automatic adaptation to the desired dimensions of the sleeves. Tightening of Twin sleeve terminals up to 2x6 mm² . Constant crimping quality with a forced stop device (self releasing mechanism). Tempered and oil-hardened vanadium chrome steel, handles coated in bi-component material.

Usage:
- Square setion pressing of sleeve terminals up to 16 mm²
- Square section pressing of optimal surfaces regardless of connection placement
- Pressing of all Twin sockets up to 2 x 6 mm²

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1038200	(200,65)	0,14 - 16	26 - 5	200

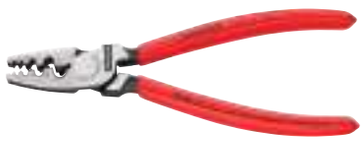
ITEM: 97 62 145 A

High resistant steel pliers for tightening socket terminals compliant with DIN 46228 (part 1+4) with nominal section from 0,25 to 2,5 mm², Tightening with trapezoidal profiles for a strong joint between conductor and terminal.
Chrome-vanadium steel, forged and oil-hardened, handles coated in bi-component material.

Usage:
- For end sleeves (ferrules)

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1041145	32,00	0,25 - 2,5	23 - 13	145

ITEM: 97 71 180



High resistant steel pliers for tightening socket terminals compliant with DIN 46228 (part 1+4) nominal section from 0,25 a 16 mm², clamping with semi-circular profiles for a strong joint between conductor and terminal with 9 deep grooves, conical side surfaces.
Chrome-vanadium steel, forged and oil-hardened.

Usage:
- For end sleeves (ferrules)

Version with resin coated handles.

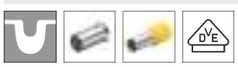
Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1050180	38,60	0,25 - 16	23 - 5	180

ITEM: 97 72 180

Version with handles coated in bi-component material.

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1051180	42,40	0,25 - 16	23 - 5	180

CRIMPING PLIERS FOR END SLEEVES (FERRULES) 1000 VOLTS VDE



ITEM: 97 78 180

High resistant steel pliers for tightening socket terminals compliant with DIN 46228 (part 1+4) with nominal section from 0,25 to 2,5 mm², tightening with trapezoidal profiles for a strong joint between conductor and terminal. Chrome Vanadium steel, forged and oil-hardened, handles coated in bi-component material,VDE 1000 Volts compliant with IEC 60900 DIN EN 60900 standard.

Usage:
- For end sleeves (ferrules)

Tech. Code	GR54 Euro	Section mm²	AWG	Length mm
F1052180	45,10	0,25 - 16	23 - 5	180

MULTIFUNCTIONAL PLIERS FOR PROFESSIONAL ELECTRICIAN'S

ITEM: 13 96 200

Multifunctional pliers for professional electrician's indicated for gripping flat and rounded materials, for bending, removing burrs, stripping cables and crimping bushing terminals. The sharp outer edge of the nose allows working on recessed electrical boxes and removing the burrs from the cable holes. Usable as shears for multi-strand copper cables up to Ø 15 mm. Chrome-forged and oil-hardened chrome-vanadium steel, handles coated in two-component material, isolated 1000 Volt **VDE** compliant with **IEC 60900 DIN EN 60900.**

Tech. Code	GR54 Euro	Stripper mm²	cutters mm²	Crimping mm²	Length mm
F1055200	66,75	0,75 - 1,5 - 2,5	2,5	0,5 - 2,5	200

COMBINATION PLIERS FOR ELECTRIANS AND CABLING

KNIPEX

ITEM: 13 02 160

Pliers for cabling work, for clamping and bending wires, for cutting hard and medium strength wire, with precision holes for stripping cables, for crimping socket terminals.Chrome-vanadium steel, forged and oil-hardened, precision cutting edges further tempered Induction hardness approx. 60 HRC handles coated in bi-component material.

Tech. Code	GR54 Euro	Cables mm²	High resistant wire Ø max mm	Length mm
F1218160	(41,80)	0,5 - 0,75 - 1,5 - 2,5	1,6	160

INSULATION AND CUTTING STRIPPER PLIERS AUTOMATIC

Weidmüller

ITEM: 9005000000 STRIPAX

Stripping tools with automatic self-regulation for flexible and rigid conductors with PVC insulation, the ideal solution for the mechanical and plant engineering industry.
Features:
- Stripping length adjustable by stop
- Automatic opening of the jaws after stripping
- Adjustable on various insulation thicknesses
- Double insulation cables in two processing stages without special regulation
- Self-adjusting cutting unit

Tech. Code	GR60 Euro	Cable section mm²	Stripping length max mm	AWG	Length mm
F1190190	130,00	0,08 - 10	25	28-8	190

ITEM: 1468880000 STRIPAX ULTIMATE

Tech. Code	GR60 Euro	Cable section mm²	Stripping length max mm	AWG	Length mm
F1195190	170,44	0,25 - 6	25	24-10	190

AUTOMATIC SELF-ADJUSTING FRONT INSULATION STRIPPER PLIERS

KNIPEX

ITEM: 12 40 200 - 12 50 200

Automatic stripping pliers for unipolar conductors, multi-strand, thin wires with resin Insulation synthetic or rubber, it automatically adapts to different thicknesses of Insulation, avoiding any damage to the conductors, the cutting depth is adjustable according to the various Insulating materials, with cutter for cutting multi-core conductors in copper and aluminum up to 10 mm² and unipolar for up to 6 mm². Body in synthetic resin reinforced with fiberglass and steel blade for hardened tools.

Tech. Code	GR54 Euro	Cable section mm²	Stripping length max mm	AWG	Length mm
F119710	76,50	0,03-10	20	32-7	200
F119716	(117,50)	2,5-16	20	13-5	200

ITEM: 12 42 195

Fully automatic stripping pliers for all single-wire, multi-wire and thin-wire conductors with standard Insulation, capacities between 0,03 and 10 mm², does not require manual adjustment. The steel jaws hold the cable in place without the risk of slipping or damage to the residual Insulation with wire cutters located deep for cutting multi-core conductors in copper and aluminum to to 10 mm² and unipolar to 6 mm².
Body in synthetic resin reinforced with fiberglass and blade for hardened steel.

Tech. Code	GR54 Euro	Cable section mm²	Stripping length max mm	AWG	Length mm
F1198195	101,65	0.03 - 10	20	32-7	195

MULTIFUNCTION STRIPER PLIERS FOR ELECTRICIANS AND CABLE TECHNICIANS

KNIPEX

NEW

ITEM: 12 72 190 NEXSTRIP

Multiunction tools suitable for cutting, stripping and crimping conductive wires. Safe cutting thanks to the non-slip handle, precise stripping of the wire insulation by means of fine adjustment, square crimping with locking device that guarantees the required crimping pressure.
Features:
- Clean cutting of conductors up to 10 mm² (AWG 8).
- Stripping with fine adjustment, for conductors with a cross section between 0,03 e 10 mm² (AWG 32 - 8).
- Square section crimping single sleeve terminals according to DIN 46228 with automatic adjustment.

Tech. Code	GR54 Euro	Cut mm²	Stripping mm²	Crimping mm²	Length mm
F120110	141,20	10	0,03 - 10	0,25 - 4 / 2 x 2,5	170

Indivisible package Suggested retail package - Unit price

STRIPPER PLIERS

ITEM: 12 21 180

Stripping pliers for six different conductor sections. Precise stripping without damage to cables thanks to ground blades, also suitable for thin-core cables
Features:
- The gripping jaws keep the wire locked during stripping
- The stop bracket ensures uniform lengths in series work
- The spring always returns the caliper to the initial position
- Interchangeable blades in special steel for oil-hardened tools

Tech. Code	GR54 Euro	Cables mm²	Length mm
F1207180	75,45	0,5 - 0,75 - 1,0 - 1,5 - 2,5 - 4,0 - 6,0	180

Pair of spare blades 12 29 180 Code F1207SB

STRIPPER PLIERS

ITEM: 12 11 180

Stripping pliers for four different conductor diameters. Precise stripping without damage to cables thanks to ground blades, also suitable for thin-core cables.
Features:
- The gripping jaws keep the wire locked during stripping
- The stop bracket ensures uniform lengths in series work
- The spring always returns the caliper to the initial position
- Interchangeable blades in special steel for oil-hardened tools

Tech. Code	GR54 Euro	Cables Ø mm	Length mm
F1208180	(74,65)	0,5 - 1,2 - 1,6 - 2,0	180

Pair of spare blades 12 19 180 Code F1208SB

AUTOMATIC WIRE STRIPPERS

ITEM: F1220

Designed for front stripping of simple insulated cables, stripping length adjustment, and automatic fitting to the different cable diameters, side insertion nipper, hardened steel blades, filled resin glass and sheet steel body.

Tech. Code	GR60 Euro	Cables mm²	Max stripping mm	Length mm
F12200,02-10	23,05	0.2 - 6	20	175

WIRE STRIPPERS

ITEM: F1211

Chrome plated pliers, handles with bi-component grips

Tech. Code	GR52 Euro	Cables mm²	Length mm
F1211160	20,40	10	160

While stocks last

WIRE STRIPPERS INSULATED 1000 VOLTS

ITEM: WX3430

Standard DIN 8979
Wire strippers **PREMIUM QUALITY** made of chromium-molybdenum steel, satin finish. Insulated handles up to 1000 V according to DIN EN 60900 / VDE 0682-201. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. For resin or rubber insulated wires Ø 5 mm max. Adjustment to the required diameter with knurled screw and locknut. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE®** that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	Cables mm²	L mm
F121510	29,00	10	160

SIDE-CUTTER PLIERS WITH STRIPPER VDE INSULATED 1000 VOLTS

ITEM: 14 26 160

Chrome-plated side-cutter pliers with wire stripper function for 1,5 and 2,5 mm²,single core conductors cutting of NYM up to 5 x 2,5 mm², long tips for the most accurate cutting jobs even in condictions of restricted space, precision Induction hardened cutting 60 HRC. Chrome-vanadium steel, forged and hardened, Insulated handles coated in bi-component material, VDE tested, compliant with EC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Cables mm²	Medium resistance wire Ø max mm	Length mm
F1217160	49,55	1,5 - 2,5	1,5	160

UNIVERSAL DISMANTLING STRIPPER TOOL-ERGOSTRIP®

ITEM: 16 95 01 SB

Tool for stripping round electric cables and cables for damp enviroments (cable NYM 3x1,5 mm² - 5x2,5 mm²), data transmission cables (Twisted-Pair), and coaxial cables with return spring and pawl stop. body in synthetic resin reinforced with fiberglass.
Usage:
- Cable section stripping with round section Ø 8-13 mm
- Conductor stripping and cables 0,2 - 4 mm²
- Cable stripping for CAT 5 - 7, Twisted Pair (UTP/STP)
- Coaxial cable strippingi Ø 4,8 - 7,5 mm

Tech. Code	GR54 Euro	Cables ø mm	Length mm
F1225135	44,40	8 - 13	135

CABLE STRIPPERS

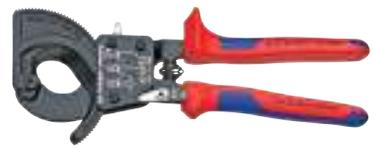
ITEM: 16 30 135 SB - 16 39 135

Shock-proof, synthetic resin body. Designed for round-section cable stripping, PVC, rubber, silicon, Ø 6 - 29 mm. PTFE.

Tech. Code	GR54 Euro	Cables ø mm	Length mm
F12686-29	60,40	6 - 29	135
F1268R1	13,50	Spare blade/knife	Spare blade/knife

RATCHET ACTION CABLE CUTTERS FOR COPPER AND ALUMINUM CABLES

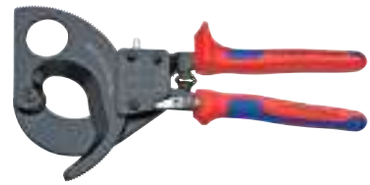
ITEM: 95 31 250



Ratchet action cable cutters for cutting single core or multi-core hardened ground cutting edges. Clean cut without crushing, one-handed operation thanks to ratchet system, adjustable blade feed in two positions, contrast stop to avoid accidental crushing of the fingers. Special steel for forged and oil-hardened tools, handles coated in bi-component material.

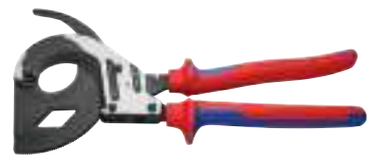
Tech. Code	GR54 Euro	Multi-strand cable Ø max mm	Multi-strand cable mm²	Length mm
F1080250	239,85	32	240	250

ITEM: 95 31 280



Tech. Code	GR54 Euro	Multi-strand cable Ø max mm	Multi-strand cable mm²	Length mm
F1082280	321,95	52	380	280

ITEM: 95 32 320



Tech. Code	GR54 Euro	Multi-strand cable Ø max mm	Multi-strand cable mm²	Length mm
F1084320	(397,75)	60	600	320

STRIPPING KNIVES INSULATED 1000 VOLTS VDE

ITEM: 98 55

Knives for electrians and maintenance personnel with ergonomic anti-slip grip handle, good transmission of strength thanks to the particular shape of the handle,
fixed straight blade with protective transparent cap. Hawk-shaped stainless steel blade with blade guard, Insulated handle 1000 volts in bi-component material, VDE tested, compliant with IEC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Blade length mm	Total length mm
F1075180	(41,20)	38	180

ELECTRICIAN'S KNIFE INSULATED 1000 VOLTS VDE

ITEM: 98 52

Knives for electrians and maintenance personnel with ergonomic anti-slip grip handle, good transmission of strength thanks to the particular shape of the handle, fixed straight blade with protective transparent cap. Special steel blade for oil-hardened and chrome-plated tools, Insulated handle 1000 volts in bi-component material, VDE tested, compliant with IEC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Blade length mm	Total length mm
F1070190	(15,80)	50	190

Indivisible package Suggested retail package - Unit price

PLIERS FOR METAL CLAMPS WITH EARS

ITEM: 10 99 I220

Pliers for securing bands with one or two ears (system Oetiker o simili), does not damage compressed points on the ear clamps, the tapered head allows good accessibility in restricted space conditions. Model for universal use thanks to the additional base of lateral compression.
Special steel for tempered, forged, oil-hardened tools. Handles coated with synthetic resin.

Tech. Code	GR54 Euro	Length mm
F1290220	33,35	220

HOLLOW PUNCH DIES

ITEM: WX3995

NEW

Standard DIN 7200-A
Hollow punch dies **PREMIUM QUALITY** in forged steel with hardened and ground cutting edge, suitable for die-cutting of rubber, leather, cardboard, plastic and other soft materials.

Tech. Code	GR51 Euro	Ø mm	Weight g
F130202	9,00	2	47
F130203	9,00	3	47
F130204	9,00	4	48
F130205	9,00	5	55
F130206	9,30	6	68
F130207	9,30	7	92
F130208	9,30	8	97
F130209	9,60	9	97
F130210	9,60	10	135
F130211	10,20	11	129
F130212	10,20	12	135
F130213	11,30	13	165
F130214	11,30	14	169
F130215	13,00	15	173
F130216	13,00	16	175
F130217	14,60	17	226
F130218	14,60	18	228

Tech. Code	GR51 Euro	Ø mm	Weight g
F130219	15,70	19	228
F130220	15,70	20	317
F130221	16,70	21	313
F130222	16,70	22	313
F130223	18,50	23	366
F130224	18,50	24	376
F130225	21,80	25	388
F130226	21,80	26	376
F130227	25,70	27	470
F130228	25,70	28	470
F130229	31,20	29	446
F130230	31,20	30	575
F130232	34,70	32	588
F130240	45,00	40	1000
F130250	76,00	50	1234
F130260	136,00	60	1850

HOLLOW PUNCH DIES IN SET

ITEM: WX3995/S12 - WX3995/S19

NEW

Standard DIN 7200-A
Set of hollow punch dies complete with practical roll-up case.
Composition:
WX3995/S12 Ø 3-5-7-8-10-12-13-14-16-19-22-25 mm
WX3995/S19 Ø 2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20 mm

Tech. Code	GR51 Euro	Pieces
F130412	152,00	12
F130419	198,00	19

INTERCHANGEABLE PUNCH DIES WITH HANDLE

ITEM: 0800330

Set of interchangeable dies in hardened steel, hardness 56-58 HRC. The ergonomic handle reduces the strain, absorbs vibrations and allows the hand to be kept away from the hammer striking area, and also offers the possibility of mounting 2 dies to make ring seals with just one stop. The dies from 3 to 10 mm have the threaded connection, while from the 12 mm diameter they are locked by bayonet. Suitable for punching leather, rubber, reinforced rubber, cardboard, flexible plastics and synthetic materials.

Composition:
0892030 Ergonomic handle
089 Dies 3 - 4 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 mm

Tech. Code	GR60 Euro	Pieces
F1312SET16	189,00	16

INTERCHANGEABLE PUNCH DIES WITH HANDLE

ITEM: 0800250

Composition:
0893100 Erogononic handle
0892050 Adaptor support
0880100 Retractable centering tip
089 Dies 2-3-4-5-6-7-8-9-10-12-14-16-18-20-22-24-26-28-30-32-34-36-38-40-42-44-46-48-50 mm

Tech. Code	GR60 Euro	Pieces
F1315SET32	340,00	32

F

INTERCHANGEABLE PUNCH DIES

ITEM: 089

Interchangeable dies in hardened steel, hardness 56-58 HRC. The dies from 2 to 10 mm have the threaded connection, while from the 12 mm diameter they are locked by bayonet.

Tech. Code	GR60 Euro	Ø mm
F132002	9,81	2
F132003	9,81	3
F132004	9,81	4
F132005	9,81	5
F132006	9,81	6
F132007	9,81	7
F132008	9,81	8
F132009	9,81	9
F132010	9,81	10
F132012	11,95	12
F132014	11,95	14
F132016	11,95	16
F132018	11,95	18
F132020	12,86	20
F132022	16,07	22

Tech. Code	GR60 Euro	Ø mm
F132024	16,07	24
F132026	15,90	26
F132028	16,07	28
F132030	16,07	30
F132032	21,00	32
F132034	21,00	34
F132036	21,00	36
F132038	21,00	38
F132040	22,90	40
F132042	22,90	42
F132044	22,90	44
F132046	22,90	46
F132048	22,90	48
F132050	22,90	50

TWEEZERS - STAINLESS STEEL

ITEM: WX3504

PREMIUM QUALITY acid-resistant and anti-magnetic tweezers made of **AISI 316L** stainless steel.

AA-SA shape with fine points, smooth interior.

Tech. Code	GR51 Euro	L mm
F1411120	18,55	120

ITEM: WX3506

Shape **2A-SA** with slightly angled fine tips, internally smooth.

Tech. Code	GR51 Euro	L mm
F1412120	14,31	120

ITEM: WX3508

Shape **5A-SA** with slightly angled extra fine tips, internally smooth.

Tech. Code	GR51 Euro	L mm
F1415115	14,31	115

ITEM: WX3510

Shape **7-SA** with extra fine tips bent at 45°, internally smooth.

Tech. Code	GR51 Euro	L mm
F1425120	16,70	120

ITEM: WX3520

Shape **001-SA** with slightly rounded fine tips, internally smooth. Version with guide pin for optimum tip alignment at all times.

Tech. Code	GR51 Euro	L mm
F1435160	14,95	160

ITEM: WX3522

Shape **002-SA** with fine tips angled at 40°, internally knurled.
Version with guide pin for optimum tip alignment at all times.

Tech. Code	GR51 Euro	L mm
F1437160	15,53	160

ITEM: WX3530

Shape **35A-SA** with internally smooth spatula tips. Width of spatula tips about 6 mm.

Tech. Code	GR51 Euro	L mm
F1450120	14,31	120

SPRING BAR TWEEZERS WITH CARBON FIBRE TIPS

ITEM: WX3540

Tweezers **PREMIUM QUALITY** with non-magnetic AISI 316L stainless steel handle and antistatic **carbon fibre** tips, suitable for handling very delicate electronic components.
Shape **76-CV** with extra fine tips.

Tech. Code	GR51 Euro	L mm
F1470125	26,61	125

Indivisible package Suggested retail package - Unit price

SPRING BAR TWEEZERS WITH CARBON FIBRE TIPS

ITEM: WX3542

Shape **86-CV**with slightly rounded fine tips, internally smooth.

Tech. Code	GR51 Euro	L mm
F1472125	26,61	125

ITEM: WX3544

Shape **84-CV** with fine tips angled at 45°.

Tech. Code	GR51 Euro	L mm
F1474125	26,61	125

CUTTING TWEEZERS

ITEM: WX3550

Tweezers **PREMIUM QUALITY** with cutting edges in special hardened steel **55 HRC** suitable for cutting extra thin copper wires with extreme precision.

Shape **15-AP** with front net cut, length of the cutting part about 10 mm.

Tech. Code	GR51 Euro	L mm
F1480115	30,42	115

DIAGONAL CUTTING NIPPERS

ITEM: WX3600

Standard DIN ISO 5749

Diagonal cutting nippers **PREMIUM QUALITY** made of chromium-molybdenum steel with high precision and high strength induction-hardened cutting edges, satin finish. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE®** that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Copper 220 N/mm² Ø max mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F1690125	19,61	125	3.0	2.3	1.5
F1690160	21,84	160	4.0	3.0	2.0

DIAGONAL CUTTING NIPPERS

ITEM: 70 01 110/125/140/160/180

Standard DIN ISO 5749

Diagonal cutting nippers for versatile use with precision cutting edges for low and high resistant wire and thin copper wire, narrow head for use in difficult-to-reach locations. Chrome-vanadium steel, forged, oil-hardened, additional hardened Induction with hardness approx. 62 HRC.

Version with synthetic resin coated handles.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1750110	(19,60)	110	3,0	2,0	1,2
F1750125	(19,60)	125	3,0	2,3	1,5
F1750140	19,60	140	4,0	2,5	1,8
F1750160	19,95	160	4,0	3,0	2,0
F1750180	21,75	180	4,0	3,0	2,5

ITEM: 70 02 125/140/160/180

Standard DIN ISO 5749

Version with handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1752125	23,90	125	3,0	2,3	1,5
F1752140	24,30	140	4,0	2,5	1,8
F1752160	25,10	160	4,0	3,0	2,0
F1752180	26,70	180	4,0	3,0	2,5

ITEM: 70 05 160

Standard DIN ISO 5749

Version chrome plated with handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Cutting force 1800 N/mm² Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1705160	29,80	160	4	3,0	2,0

DIAGONAL CUTTING NIPPERS VDE INSULATED 1000 VOLTS

WODEX

ITEM: WX3610

Standard DIN ISO 5749

Diagonal cutting nippers **PREMIUM QUALITY** made of chromium-molybdenum steel with high precision and high strength induction-hardened cutting edges, satin finish. Insulated handles up to 1000 V according to DIN EN 60900 / VDE 0682-201. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Copper 220 N/mm² Ø max mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F1708125	26,00	125	3.0	2.3	1.5
F1708160	29,00	160	4.0	3.0	2.0

DIAGONAL CUTTING NIPPERS VDE INSULATED 1000 VOLTS

KNIPEX

ITEM: 70 06 125/140/160/180

Standard DIN ISO 5749

Diagonal cutting nippers with precision cutting edges for metal wire of hard and soft resistance, copper wire, narrow head for use in difficult-to-reach locations. Chrome-vanadium steel, forged, oil-hardened, additional hardened Induction with hardness approx. 62 HRC, Insulated handles coated with bi-component material VDE tested, compliant with EC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1753125	(31,25)	125	3,0	2,3	1,5
F1753140	(31,50)	140	4,0	2,5	1,8
F1753160	(34,00)	160	4,0	3,0	2,0
F1753180	(36,40)	180	4,0	3,0	2,5

F

HEAVY-DUTY DIAGONAL CUTTING NIPPERS

WODEX

ITEM: WX3620

Standard DIN ISO 5749

Diagonal cutting nippers, heavy duty **PREMIUM QUALITY** made of chromium-molybdenum steel with high precision and high strength induction-hardened cutting edges, satin finish. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm	Steel 2300 N/mm² Ø max mm
F1735180	27,45	180	3.8	2.7	2.2

HEAVY-DUTY CUTTING NIPPERS VDE INSULATED 1000 VOLTS

WODEX

ITEM: WX3630

Standard DIN ISO 5749

Diagonal cutting nippers, heavy duty **PREMIUM QUALITY** made of chromium-molybdenum steel with high precision and high strength induction-hardened cutting edges, satin finish. Insulated handles up to 1000 V according to DIN EN 60900 / VDE 0682-201. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work.
Compliant with RoHS and REACH directives.

Tech. Code	GR51 Euro	L mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm	Steel 2300 N/mm² Ø max mm
F1745180	39,00	180	3.8	2.7	2.2

HEAVY-DUTY DIAGONAL CUTTING NIPPERS

KNIPEX

ITEM: 74 01 140/160/180/200/250

Standard DIN ISO 5749

Side cutting nippers "STRONG" for maximum continuous stresses with high load capacity and long life, can be used with minimum effort thaks to the optimal combination of the lever ratio and the geometry of the cutting edges.High performance forged and hardened chrome-vanadium steel, further precision cutting edges, hardened Induction hardness approx. 64 HRC.

Version with synthetic resin coated handles.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1736140	(23,65)	140	3,1	2,0	1,5
F1736160	24,10	160	3,4	2,5	2,0
F1736180	26,45	180	3,8	2,7	2,2
F1736200	29,15	200	4,2	3,0	2,5
F1736250	36,90	250	4,6	3,5	3,0

Indivisible package Suggested retail package - Unit price

HEAVY-DUTY DIAGONAL CUTTING NIPPERS

ITEM: 74 02 140/160/180/200/250

Standard DIN ISO 5749
Version with handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1737140	(28,65)	140	3,1	2,0	1,5
F1737160	(29,15)	160	3,4	2,5	2,0
F1737180	32,15	180	3,8	2,7	2,2
F1737200	34,25	200	4,2	3,0	2,5
F1737250	41,40	250	4,6	3,5	3,0

ITEM: 74 05 160/180/200

Standard DIN ISO 5749
Version chrome-plated with handles in bi-component material.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Cutting force 2300 N/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1748160	(36,80)	160	3,4	2,5	2,0
F1748180	(40,10)	180	3,8	2.2	2,2
F1748200	42,00	200	4,2	2.5	2,5

ITEM: 73 72 180 TWINFORCE®

Standard DIN ISO 5749
Diagonal cutting nippers with high-quality side cutting edge, optimum power transmission ratio thanks to the patented double-joint structure, It cuts all types of wire in a clean and safe way. High cutting stability and no backlash in the joint that is forged and milled with high precision. High performance chrome-vanadium steel, forged, oil-hardened, bi-component coated handles.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1739180	70,40	180	4,6	3,2	3,0

DOUBLE LEVER ACTION CUTTING NIPPERS COBOLT®

ITEM: 71 01 200/250 COBOLT®

Standard DIN ISO 5743
Double lever cutting nippers with precision cutting edges for low and high resistant wire, piano wire, for cutting bolts, nails and rivets up to Ø 5,2 mm. High performance chrome-vanadium steel, forged, oil-hardened with additional cutting edges Induction hardened, hardness approx. 64 HRC.
Handles coated in synthetic resin.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1746200	42,95	200	5,2	4,0	3,6
F1746250	52,35	250	5,6	4,0	3,8

ITEM: 71 02 200 COBOLT®

Standard DIN ISO 5743
Handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1747200	46,00	200	5,2	4,0	3,6

ITEM: 71 12 200

Standard DIN ISO 5743
Version with spring for comfortable working and locking system for safe transport.
Handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1749200	52,05	200	3.6	4,0	3,6

ITEM: 71 22 200 COBOLT®

Standard DIN ISO 5743
Version with bent head at 20° with spring for comfortable working and locking system for safet transport.
Handles coated in bi-component material.

Tech. Code	GR54 Euro	Length mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Steel 2300 ²n/mm Ø max mm
F1751200	63,35	200	5,2	4,0	3,6

DOUBLE LEVER ACTION CUTTING NIPPERS

ITEM: WX3650

Standard DIN ISO 5749
Diagonal cutting nippers, heavy duty **PREMIUM QUALITY** made of chromium-molybdenum steel, chamfered high strength induction hardened cutting edges suitable for cutting high strength piano steel wire. The double lever joint structure with integrated spring guarantees fast cuts with 50% less effort. Handles in deep drawn sheet metal with locking device, strong and comfortable in Soft-tex vinyl.

Tech. Code	GR51 Euro	L mm	Steel 800 N/mm² Ø max mm	Steel 1600 N/mm² Ø max mm	Steel 2000 N/mm² Ø max mm
F1771160	67,79	160	3.0	2.7	2.2

END CUTTING NIPPERS FOR MECHANICS

ITEM: 68 01 200

Standard DIN ISO 5748

End cutting nippers for metal wire of low and high resistance, also used to tie metal wires.
High performance chrome-vanadium steel, forged, oil-hardened, handles coated in resin.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1795160	13,85	160	4,0	2,8	2,3
F1795200	20,55	200	4,0	3,5	2,8

ITEM: 61 02 200

Cutting nippers with 85° angled front cutting edges for high-strength wire and piano wire. Chrome vanadium high-performance steel, with oil-hardened cutting edges, hardness approx. 64 HRC. Handles coated with bi-component material.

Tech. Code	GR54 Euro	Length mm	Cutting force 2300 N/mm² Ø max mm	Steel 1800 n/mm² Ø max mm	Cutting value 2300 n/mm² Ø max mm
F1798200	60,45	200	4,0	3,5	3,0

DIAGONAL CUTTING NIPPERS FOR PLASTIC MATERIALS

ITEM: 72 01 140/160/180

Standard DIN ISO 5743

Diagonal cutting nippers rectified cutting edges for sharp cuts without smearing of synthetic resins, with return spring.
Chrome-vanadium steel, forged, oil.hardened, handles coated wtih synthetic resin.

Version with lateral cutting edges.

Tech. Code	GR54 Euro	Length mm
F1758140	27,55	140
F1758160	28,30	160
F1758180	30,30	180

ITEM: 72 11 160

Standard DIN ISO 5743

Version with 45° inclined cutting edges.

Tech. Code	GR54 Euro	Length mm
F1760160	44,20	160

ITEM: 72 21 160

Standard DIN ISO 5743

Version with 85° inclined cutting edges.

Tech. Code	GR54 Euro	Length mm
F1761160	50,40	160

CUTTING NIPPERS FOR ELECTRONICS AND PRECISION MECHANICS

ITEM: WX3660

Standard DIN ISO 9654

Cutting nippers **PREMIUM QUALITY** particularly suitable for making precision cuts in the field of electronics, eyewear and fine mechanics. Made of forged oil-hardened chrome-vanadium steel with double friction-free spring for smooth and uniform opening and closing. The tapered grips covered in Soft-tex non-slip vinyl ensure high comfort and are suitable for prolonged use in assembly departments.

Specification: Rounded head with extra hard cutting edges hardness approx. 60 HRC, net cut.

Tech. Code	GR51 Euro	L mm	Copper 220 N/mm² Ø min/max mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F1603115	33,39	115	0.3 - 1.3	1.0	-

ITEM: WX3661

Standard DIN ISO 9654

Specification: Rounded head with extra hard cutting edges hardness approx. 60 HRC, net cut.

Tech. Code	GR51 Euro	L mm	Copper 220 N/mm² Ø min/max mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F1604130	34,98	130	0.3 - 1.6	1.3	-

CUTTING NIPPERS FOR ELECTRONICS AND PRECISION MECHANICS

ITEM: WX3665

Standard DIN ISO 9654

Specification: Pointed head with extra hard cutting edges hardness approx. 60 HRC, net cut.

Tech. Code	GR51 Euro	L mm	Copper 220 N/mm² Ø min/max mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F1611130	34,98	130	0.3 - 1.6	1.3	-

Indivisible package Suggested retail package - Unit price

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: 77 02 115

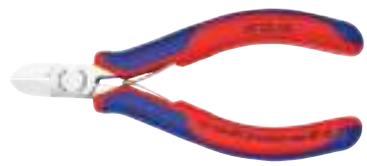
Standard DIN ISO 9654

Cutting nipppers suitable for precise cutting in electronics and fine mechanics, pass-through hinge and low friction and double spring for a soft and uniform opening/closing. Special steel for hardened, forged, oil-hardened tools, further Induction cutting edges with hardness approx. 60 HRC, handles coated in bi-component material.

Specific:
Round head with semi-flush cutting edge.

Tech. Code	GR54 Euro	Length mm	High resistance wire Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1608115	42,75	115	0,6	1,2	0,6

ITEM: 77 22 115



Standard DIN ISO 9654

Specific:
Round head with satin cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1614115	42,95	115	0,3 - 1,3	1,0	-

ITEM: 77 02 130

Standard DIN ISO 9654

Specific:
Round head with semi-flush cutting edge.

Tech. Code	GR54 Euro	Length mm	High resistance wire Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1609130	45,55	130	0,8	1,5	0,8

ITEM: 77 72 115

Standard DIN ISO 9654

Cutting nippers suitable for precise cutting in electronics and fine mechanics, pass through hinge and low friction and double spring for a soft and uniform opening/closing. Special steel for hardened, forged, oil-hardened tools, additional Induction cutting edges with hardness approx. 60 HRC, Handles coated in bi-component material.

Specific:
Small pointed head with semi-flush cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1613115	45,90	115	0,3 - 0,8	-	-

ITEM: 77 42 115

Standard DIN ISO 9654

Specific:
Pointed head with satin cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1615115	45,90	115	0,3 - 1,3	0,8	-

DIAGONAL CUTTING NIPPERS SEMI-FLUSH

ITEM: F1607

Standard DIN ISO 9654

Diagonal cutting nippers for micro mechanics, electronics, optical glasses, nipper cutters, Chrome vanadium steel, satin chrome plated body, semiflush diagonal cutter, rebound double springs. Ergonomically designed bi-component material grip handles, for a superior comfort partcularyl suited for extended use.

Specific:
Pointed head with semi-flush cutting edge.

Tech. Code	GR60 Euro	Length mm	Cutting force 220 N/mm² Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1607125	47,80	125	0.4 - 1.0	1,0	0,5

CUTTING NIPPERS FOR ELECTRONICS AND PRECISION MECHANICS

ITEM: WX3670

Standard DIN ISO 9654

Cutting nippers **PREMIUM QUALITY** particularly suitable for making precision cuts in the field of electronics, eyewear and fine mechanics. Made of forged oil-hardened chrome-vanadium steel with double friction-free spring for smooth and uniform opening and closing. The tapered grips covered in Soft-tex non-slip vinyl ensure high comfort and are suitable for prolonged use in assembly departments.

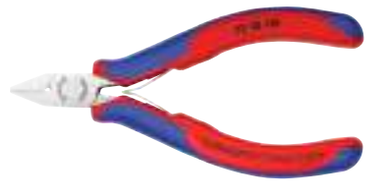
Specification: Extra hard front edges inclined at 20° hardness approx. 60 HRC, net cut.

Tech. Code	GR51 Euro	L mm	Copper 220 N/mm² Ø min/max mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm
F1653120	35,72	120	0.3 - 1.3	0.3	-

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: 77 32 115

Standard DIN ISO 9654
Specific:
Pointed head with semi-flush cutting edge.



Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1617115	47,10	115	0,3 - 1,3	1,0	0,5

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: 77 52 115

Standard DIN ISO 9654
Specific:
Pointed flat head with semi-flush cutting edge.

Tech. Code	GR54 Euro	Length mm	High resistance wire Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1618115	48,20	115	0,5	0,8	0,5

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: 77 42 130

Standard DIN ISO 9654
Specific:
Pointed head with flush cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1616130	47,65	130	0,3 - 1,6	1,3	-

ITEM: 64 32 120

Standard DIN ISO 9654
Specific:
Form 3 Head inclined at 15° with semi-flush cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1652120	52,95	120	1,5	1,0	0,5

ITEM: 62 12 120

Standard DIN ISO 9654
Specific:
Head inclined at 15° with flush cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1646120	42,20	120	0,3 - 1,0	0,7	-

ITEM: 64 42 115

Standard DIN ISO 9654
Cutting nippers suitable for precise cutting in electronics and fine mechanics, pass-through hinge, low friction and double spring for a soft and uniform opening/closing. Special steel for hardened, forged, oil-hardened tools, additional Induction hardened cutting edges with hardness approx, handles coated in bi-component material.
Specific:
Form 4 Inclined head at 27° with semi-flush cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1654115	52,00	115	1,5	1,0	0,5

ITEM: 64 52 115

Standard DIN ISO 9654
Specific:
Form 5 Head inclined at 27° with flush cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1656115	53,80	115	1,3	-	-

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: F1660

Standard DIN ISO 9654
Precison cutting nippers, micro-mechanics, electronics optical glasses. Chrome vandium steel, satin chrome plated body, double rebound springs. Ergonomically designed bi-component grip handles for a superior comfort particularly suited during exteded use.

Specific:
Head inclined at 45° with flush cutting edge.

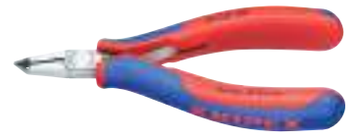
Tech. Code	GR60 Euro	Length mm	Cutting force 220 N/mm² Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1660130	48,05	130	0.8	0,6	-

Indivisible package Suggested retail package - Unit price

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: 64 62 120

Standard DIN ISO 9654
Specific:
Form 6 65° inclined head with semi-flush cutting edge.



Tech. Code	GR54 Euro	Length mm	Copper 220 N/mm² mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1648120	54,50	120	0.6	-	-

ITEM: 64 02 115

Standard DIN ISO 9654
Specific:
Form 0 Head with semi-flush front edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1650115	49,55	115	2,0	1,0	0,6

ITEM: 64 11 115

Standard DIN ISO 9654
Specific:
Form 1 Head with satin front edge and handles coated in synthetic resin.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1651115	40,20	115	1,4	0,8	-

ITEM: 64 22 115

Standard DIN ISO 9654
Specific:
Form 2 Head with semi-flush edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1649115	49,25	115	0,8	-	-

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: F1640

Standard DIN ISO 9654
Cutting nippers suitable for precise cutting in fine mechanics, hinge without play and double spring for a soft and uniform opening and closing. Special tool steel tempered, forged and oil-hardened, cutting edges additional induction hardened, handles coated in bi-component material.
Specific:
Form 0 with semi-satin front edge.

Tech. Code	GR52 Euro	Length mm	Cutting force 220 N/mm² mm Ø	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1640RASF	37,20	120	0.3 - 2	1,0	0,6

While stocks last

CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS

ITEM: 75 02 125

Standard DIN ISO 9654
Cutting nippers suitable for precise cutting in electronics and fine mechanics, with screwed hinge for high precision and additional induction-hardened cutting edges with a hardness of approx. 64 HRC, double-fiction-free spring for soft and uniform opening and cloasing. Handles coated in synthetic resin.
Specific:
Form 0 with blunt precision cutting edges also suitable for cutting harmonic wire.

Tech. Code	GR54 Euro	Length mm	Steel 750 N/mm² Ø max mm	Steel 1800 N/mm² Ø max mm	Steel 2300 N/mm² Ø max mm
F1639125	44,00	125	1,0	0,6	0,4

CUTTING NIPPERS FOR ELECTRONICS SUPER KNIPS®

ITEM: 78 03 125

Standard DIN ISO 9654
Cutting nippers for precise cutting in electronics and fine mechanics, cutting section with micro movement of the cutting edges controlled for an ultra-precise cut also of the finest metal wires articulation with alloy steel rivet, return spring and delimitation of opening. Stainless steel, cutting with approx. 54 HRC, handles coated in bi-component material.

Specific:
Flush cutting edge for mild and medium strength steel.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1619125	22,20	125	1,0	1,0	-

ITEM: 78 13 125

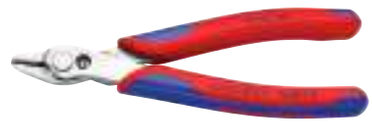
Standard DIN ISO 9654
Specific:
Flush cutting edge and retaining device for the severed fragment.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1622125	24,95	125	0,2 - 1,6	1,0	-

CUTTING NIPPERS FOR ELECTRONICS SUPER KNIPS® XL

ITEM: 78 03 140

Standard DIN ISO 9654
Specific:
Version XL with flush cutting edge.



Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1620140	27,25	140	0,2 - 2,1	1,2	-

ITEM: 78 23 125

Standard DIN ISO 9654
Flush cutting edge inclined at 60°

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1623125	26,60	125	0,2 - 1,0	0,6	-

ITEM: 78 31 125

Standard DIN ISO 9654
Cutting nippers for precise cutting in electronics and fine mechanics, cutting section with micro-movement of the cutting edges controlled for an ultra-precise cut also of the finest metal wires articulation with alloy steel rivet, return spring and delimitation of opening.
Stainless steel, cutting with approx, handles coated in bi-component material.

Specific: Cutting edges additonal hardened, hardness approx. 60 HRC, flush cutting edge.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1624125	24,70	125	0,2 - 1,0	-	-

ITEM: 78 41 125

Standard DIN ISO 9654
Specific:
Cutting edges additional hardened, hardness approx. 60 HRC, flush cut with retaing device for the severed fragment.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1625125	28,20	125	0,2 - 1,0	-	-

ITEM: 78 61 125

Standard DIN ISO 9654
Specific:
Cutting edges additional hardened, hardness approx. 64 HRC satin cut.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1626125	23,10	125	0,2 - 1,6	1,2	-

ITEM: 78 71 125

Standard DIN ISO 9654
Specific:
Cutting edges additional hardened, hardness approx. 64 HRC, flush cut with retaining device for the severed fragment.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1632125	26,30	125	0,2 - 1,6	1,2	-

ITEM: 78 81 125

Standard DIN ISO 9654
Specific:
Cutting edges additional hardened, hardness approx. 64 HRC, semi-satin cut.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Medium / High resistance wire Ø max mm	Steel 1800 n/mm² Ø max mm
F1633125	24,25	125	0,2 - 1,6	1,2	0,6

ITEM: 78 91 125

Standard DIN ISO 9654
Specific:
Cutting edges additional hardened, hardness approx. 64 HRC, semi-flush cut with severed fragment holding device.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Medium / High resistance wire Ø max mm	Steel 1800 n/mm² Ø max mm
F1634125	27,05	125	0,2 - 1,6	1,2	0,6

ITEM: 78 61 140

Standard DIN ISO 9654
Specific:
Version XL with additional hardened cutting edges hardness approx. 60 HRC, satin cut.

Tech. Code	GR54 Euro	Length mm	Copper 22²0 n/mm Ø min/max mm	Steel 750 n/mm² Ø max mm	Steel 1800 n/mm² Ø max mm
F1630140	(28,00)	140	0,2 - 2,1	1,4	-

Indivisible package Suggested retail package - Unit price

NIPPERS FOR BLACKSMITHS AND CONCRETERS

WODEX

NEW

ITEM: WX3858

Nippers made of tempered tool steel, forged and induction hardened. Suitable for twisting and cutting steel wires.
Precision cutting edges with 60 HRC surface hardness.

Tech. Code	GR51 Euro	L mm
F1841220	12,10	220
F1841250	13,10	250

ITEM: WX3860

Standard DIN/ISO 9242

Special steel nippers **Premium Quality** in special tempered tool steel, forged and induction hardened. Suitable for twisting and cutting steel wires. Precision cutting edges with surface hardness 61 HRC, strong and comfortable Softtex vinyl handles

Tech. Code	GR51 Euro	L mm
F1843250	23,28	250

NIPPERS FOR BLACKSMITHS AND CONCRETERS

KNIPEX

ITEM: 99 00 200/220/250/280/300

Standard DIN/ISO 9242

Nippers forged from special tool steel, oil hardened and tempered, for twisting and cutting steel wires.
Cutting edge hardness approx. 61 HRC.

Tech. Code	GR54 Euro	Length mm
F1842200	15,50	200
F1842220	15,85	220
F1842250	17,30	250
F1842280	18,95	280
F1842300	22,60	300

REINFORCED NIPPERS FOR BLACKSMITHS AND CONCRETERS

KNIPEX

ITEM: 99 10 250/300

Standard DIN/ISO 9242

Special steel nippers for tempered, forged and oil hardened tools, for twisting and cutting steel wires. Articulation with a high transmission ratio, therefore less tiring work also using thicker metal wires, better absorption of vibrations due to cutting.
Cutting edge hardness approx. 61 HRC.

Tech. Code	GR54 Euro	Length mm
F1846250	23,05	250
F1846300	28,65	300

HEAVY DUTY PINCERS

KNIPEX

ITEM: 50 00 160/180/210/225/250/300

Standard DIN/ISO 9243

Special steel pincers for tools, forged and oil-hardened for maximum stress, appreciated by professionals thanks to the limited wear and balanced weight.
Cutting edge hardness approx. 60 HRC.

Tech. Code	GR54 Euro	Length mm
F1860210	17,20	210

CABLE SHEARS

KNIPEX

ITEM: 95 11 160

StepCut shears for cutting multipolar copper and aluminum cables with section up to 50 mm², not usable for steel wire and cold drawn copper cables. The shaped shape of the cutting edges allows an optimal cut without crushing with a much lower effort than standard shears of the same length. With contrast stop to avoid accidental pinching of fingers. Special tool steel tempered, forged and oil-hardened, handles coated with synthetic resin.

Tech. Code	GR54 Euro	Cables Ø max mm	Length mm
F2193160	(33,45)	15	160

ITEM: 95 12 165

Shears for cutting copper and aluminum cables, which can not be used for steel wire or cold drawn copper cables, cold, clean, cut without crushing.
With contrast stop to avoid accidental finger crushing. Special steel for tempered, forged oil-hardened tools, handles coated in bi-componement material.

Tech. Code	GR54 Euro	Cables Ø max mm	Length mm
F2197165	36,95	15	165

F

CABLE SHEARS

ITEM: 95 12 200

Shears for cutting copper and aluminum cables which can not be used for steel wire or cold drawn copper cables. Cold, clean cut without crushing, subdividing the cutting operation in the first cut (for Insulating sheath, in front area of the cutting edge) and finishing cut (for the conductor, in the rear area of the cutting edge) It is possible to cut cables up to 20 Ø with one single hand. With contrast stop to avoid accidental finger crushing.
Special steel for tempered, forged, oil-hardened tools, handle coated in bi-component material.

Tech. Code	GR54 Euro	Cables Ø max mm	Length mm
F2198200	60,10	20	200

ITEM: 95 12 500

Shears for cables with reduced weight to cut unipolar or multi-core copper and aluminum cables not usable for rope and steel wire Cold clean cut without crushing. With contrast stop to prevent accidental crushing of the fingers. Adjustable screw joint, stainless steel head. Chrome vanadium forged, oil-hardened, handles in highly resistant tubular aluminum, grip handles in bi-component material.

Tech. Code	GR54 Euro	Cables Ø max mm	Length mm
F2199500	140,85	27	500

CABLE SHEARS VDE INSULATED 1000 VOLT

ITEM: 95 16 160

StepCut shears for cutting multipolar copper and aluminum cables with section up to 50 mm², not usable for steel wire and cold drawn copper cables. The shaped shape of the cutting edges allows an optimal cut without crushing with a much lower effort than standard shears of the same length. With contrast stop to avoid accidental pinching of fingers. Special tool steel tempered, forged and oil-hardened, VDE-tested insulated handles made of two-component material, according to EC 60900 DIN EN 60900.

Tech. Code	GR54 Euro	Cables Ø max mm	Length mm
F2203160	54,60	15	165

ITEM: 95 16 165

Shears for cutting copper and aluminum cables, which can not be used for steel wire or cold drawn copper cables. Cold,clean cut without crushing with contrast stop to avoid accidental crushing of the fingers. Special steel for hardened, forged and oil-hardened tools, VDE tested, compliant with EC 60900 DIN EN 60900 standard.

Tech. Code	GR54 Euro	Cables Ø max mm	Length mm
F2201165	53,40	15	165

CABLE SHEARS

ITEM: 95 06 230

Shears for cutting single-core copper conductors with cross-section up to 16 mm², multipolar up to 50 mm² and thin wire up to 70 mm², not usable for steel wire or cold drawn copper cables, with contrast stop to prevent accidental cutting of the fingers. Adjustable screw joint, with return spring and pawl. Tempered stainless steel, Insulated coated handles with thermoplastic resin VDE tested, compliant with EC 60900 DIN EN 60900.

Tech. Code	GR54 Euro	Cables Ø max mm	Length mm
F2210230	60,40	16	230

CABLE SHEARS FOR ROPES AND STEEL WIRE

ITEM: 95 61 190

Shears for ropes, cables and steel wire with two crimping profiles for the bowden cable caps and for wire rope terminals. Screw joint for precise guidance of the adjustable blade, optimum transmission ratio for cutting with minimum effort. Forged chrome-vanadium steel with cutting hardness approx. 64 HRC, handles coated with synthetic resin.

Usage:
- Copper wires with thin wires Ø 6 mm max
- Wire rope Ø 6 mm max
- Medium hard steel wire Ø 4 mm max
- Harmonic steel wire Ø 2,5 mm max

Tech. Code	GR54 Euro	Length mm
F2200190	49,55	190

Indivisible package Suggested retail package - Unit price

TYPICAL MARTOR:
CUTTING WITHOUT CUTTING YOURSELF.

QUALITY MADE IN GERMANY

The company MARTOR based in Solingen is the leading international manufacturer of high-quality safety knives. These are equipped with reliable safety technologies that effectively protect against cutting accidents. The MARTOR range has the right safety knife for virtually every cutting application – from the versatile all-rounder to the perfect specialist. Also advantageous for customers and users: the ergonomics of the handles, the sharpness of the blades and the simplicity of the blade change.

OUR SAFETY KNIVES = ACTIVE ACCIDENT PREVENTION.

SECUMAX
Concealed blade = Highest safety

The blade is safely shielded – and therefore does not come into contact with the user and the goods.

SECUPRO
Fully automatic blade retraction = Very high safety

After the cut, the blade disappears immediately into the handle – even if you continue to press the trigger.

SECUNORM
Automatic blade retraction = High safety

Thumb off the slider – and the blade retracts in a flash after cutting.

THE SAFER WAY TO CUT.

martor

BOLT CUTTERS COMBICUT® 433

VBW

ITEM: COMBICUT® 433

Compact and handy bolt cutters with head in special high quality forged tempered steel, top of the range distinguished by a yellow dot, to cut medium and strength steel.
- Cutting force up to 48 HRc
- No need for blade adjustments
- Reduction of separation effort due to optimal geometry
- Small dimension for Insertion of tool boxes

Tech. Code	GR60 Euro	Length mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23000390	95,59	390	7	5	4

ITEM: COMBICUT® 433/1

Spare cutter heads for bolt cutters VBW Combicut® 433 complete with pins and elastic rings.

Tech. Code	GR60 Euro	For bolt cutters mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23010390	(65,96)	390	7	5	4

ITEM: COMBICUT® 433V

End-cutting bolt cutters, compact and handy with head in special forged steel, high quality tempered steel, top of the range, distinguished by a yellow dot, to cut steel of medium and high resistance.
- Cutting force up to 48 HRc
- No need for blade adjustment
- Reduction of separation effort thanks to optimal geometry
- Small dimensions for Insertion of tool boxes

Tech. Code	GR60 Euro	Length mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23020370	(105,18)	370	7	5	4

ITEM: COMBICUT® 433V/1

Spare cutter heads for bolt cutters VBW Combicut® 433V complete with pins and elastic rings

Tech. Code	GR60 Euro	For bolt cutters mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23030370	(72,65)	370	7	5	4

BOLT CUTTERS

WODEX

ITEM: WX3870

Bolt cutters **PREMIUM QUALITY** with forged chrome-vanadium steel blades, induction hardened.
- Surface hardness of cutting edges 62 HRC
- Cutting force up to 48 HRC - recommended up to 40 HRC
- Simple and precise adjustment of the blades via the eccentric screws
- Lever handles in tubular steel with ergonomic movement
- Comfortable and non-slip handles in plastic material

Tech. Code	GR51 Euro	L mm	19 HRC Ø max mm	40 HRC Ø max mm	48 HRC Ø max mm
F23050460	85,45	460	8	7	5
F23050620	107,09	620	9	8	7
F23050780	160,01	780	11	9	8

ITEM: WX3870/IH

Exchangeable cutter heads for bolt cutters **PREMIUM QUALITY WX3870** complete with self-locking screws and nuts.

Tech. Code	GR51 Euro	For bolt cutters mm	19 HRC Ø max mm	40 HRC Ø max mm	48 HRC Ø max mm
F23060460	44,87	460	8	7	5
F23060620	57,00	620	9	8	7
F23060780	75,04	780	11	9	8

BOLT CUTTERS

KNIPEX

ITEM: 71 72 460/610/760/910

Bonderized grey head, bi-component coated handles. Induction hardened cutting edges, 62 HRC hardness, screw-on, exchangeable head. High-quality vanadium chrome, oil hardened, tempered steel blade. Special steel, tempered joint, tubular, powder coated handles.

Tech. Code	GR54 Euro	Length mm	19 HRC ø max mm	40 HRC ø max mm	48 HRC Ø max mm
F2318460	110,35	460	8	6	5
F2318610	127,70	610	9	8	7

ITEM: 71 79 460/610/760/910

Exchangeable cutter heads for Knipex model 71 72 bolt cutters complete with self-locking screws and nuts.

Tech. Code	GR54 Euro	For bolt cutters mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F2319460	(60,90)	460	8	6	5
F2319610	(77,20)	610	9	8	7

Indivisible package Suggested retail package - Unit price

BOLT CUTTERS WAGGONIT® 980

ITEM: WAGGONIT® 980

Bolt cutters with head in special high quality forged tempered steel, high quality top of the range distinguished by a yellow dot, to cut low and medium strength steel.
- Cutting capacity up to 48 HRc - recommended up to 40 HRc
- Simple and precise adjustment of the blade thanks to eccentric bolts
- Reduction of separation effort due to optimal quality

Tech. Code	GR60 Euro	Length mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23100460	106,12	460	8	6	5
F23100610	123,81	610	9	8	7
F23100760	162,14	760	11	9	8
F23100910	(228,46)	910	13	11	9

ITEM: WAGGONIT® 980/1

Exchangeable cutter heads for bolt cutters VBW Waggonit® 980 e 980LC complete with retaining screws and bolts.

Tech. Code	GR60 Euro	For bolt cutters mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23110460	(58,79)	460	8	6	5
F23110610	(74,86)	610	9	8	7
F23110760	(104,09)	760	11	9	8
F23110910	(119,81)	910	13	11	9

ITEM: UNIBOLT® 430

Bolt cutters with head in special high quality forged and tempered steel,
top of the range distinguished by the yellow dot, to cut medium and high strength steel.
- Cutting capacity up to 48 HRc
- Simple and precise adjustment of the blades thanks to the eccentric screws (*)
- Reduction of separation effort due to optimal geometry

Tech. Code	GR60 Euro	Length mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23200460	140,64	460	8	6	5
F23200610	190,87	610	9	8	7
F23200760	265,29	760	11	9	8
F23200910	(373,78)	910	13	11	9
F23201070	(561,37)	1070	16	11	10

(*) The 1070 mm size is supplied in a traditional version with lateral adjustment of the blades

ITEM: UNIBOLT® 430/1

Exchangeable cutter heads for bolt cutters VBW Unibolt® 430 and 430LC complete with retaining screws and bolts.

Tech. Code	GR60 Euro	For bolt cutters mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23210460	(91,84)	460	8	6	5
F23210610	(137,18)	610	9	8	7
F23210760	(185,69)	760	11	9	8
F23210910	(226,05)	910	13	11	9
F23211070	(377,66)	1070	16	11	10

BOLT CUTTERS WITH INCLINED BLADES FLUSH-CUT 437

ITEM: FLUSH-CUT 437

Bolt cutters with head in special high quality forged and tempered steel, inclined blades range of 40° (460 mm) and 30° (610 mm) for the cutting of bolts and round steel constructions, top of the range marked by a yellow dot.
- With adjustable blades
- Cutting force up to 48 HRc
- Simple and precise adjustment of the blades thanks to eccentric screws (*)
- Reduction of separation effort due to optimal geometry

Tech. Code	GR60 Euro	Length mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23220460	176,45	460	8	6	5
F23220610	(248,41)	610	9	8	7

(*) The 460 mm size is supplied in a traditional version with lateral adjustment of the blades

ITEM: FLUSH-CUT 437/1

Exchangeable cutter heads for bolt cutters VBW 437 and 438LC complete with retaining screws and bolts.

Tech. Code	GR60 Euro	For bolt cutters mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23230460	(133,43)	460	8	6	5
F23230610	(204,02)	610	9	8	7

CUTTERS FOR WELDED WIRE-MESH WAGGONIT® 985

VBW

ITEM: WAGGONIT® 985

Welded wire-mesh and bolt cutters for cutting rounded steel, head in special forged high quality tempered steel, top of the range distinguished by a yellow dot.
- Cutting force up to 48 HRc
- Simple and precise adjustment of the blades by side bolts
- Reduction of separation effort due to optimal geometry

Tech. Code	GR60 Euro	Length mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23240950	(159,19)	950	11	9	6

ITEM: WAGGONIT® 985/1

Exchangeable cutter heads for welded wire-mesh and bolt cutters VBW Waggonit® 985 complete with retaining screws and bolts.

Tech. Code	GR60 Euro	For welded wire-mesh and bolt cutters mm	19 HRc Ø max mm	40 HRc Ø max mm	48 HRc Ø max mm
F23250950	(113,38)	950	11	9	6

NIBBLING SHEARS

KNIPEX

ITEM: 90 55 280

Nibbling shears for deformation-free cutting of iron, copper or aluminium sheets up to a maximum thickness of 1.2 mm, synthetic resin up to a maximum thickness of 2 mm.
Interchangeable blade made of special tool steel with chip breaker, bi-component plastic plastic handles.

Tech. Code	GR54 Euro	Length mm	Cutting width mm	Weight g
F2398280	(64,00)	280	2,7	461

Spare blade 90 59 280 Code F2398SB

DOUBLE LEVER SHEARS FOR SHEET METAL

WODEX

ITEM: WX3910-R

Double lever shears with micro-toothed blades in induction hardened hot forged steel.
Ergonomic handles in plastic material.
Features:
Suitable for right-handed cuts.

Tech. Code	GR51 Euro	L mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Cutting value 800 N/mm² max mm	Weight g
F2405250	25,50	250	1.2	1.0	0.8	370

ITEM: WX3910-L

Features:
Suitable for left-handed cuts.

Tech. Code	GR51 Euro	L mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Cutting value 800 N/mm² max mm	Weight g
F2406250	25,50	250	1.2	1.0	0.8	370

ITEM: WX3910-S

Features:
Suitable for straight cuts.

Tech. Code	GR51 Euro	L mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Cutting value 800 N/mm² max mm	Weight g
F2407250	26,83	250	1.2	1.0	0.8	370

PREMIUM QUALITY DOUBLE LEVER SHEARS FOR SHEET METAL

WODEX

ITEM: WX3900-R

Shears **PREMIUM QUALITY** double lever with micro-toothed blades in special hot forged induction hardened steel.
Ergonomic handles in plastic material.

Features:
Suitable for right-handed cuts.

Tech. Code	GR51 Euro	L mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Cutting value 800 N/mm² max mm	Weight g
F2410250	45,48	250	1.5	1.2	1.0	510

Indivisible package Suggested retail package - Unit price

PREMIUM QUALITY DOUBLE LEVER SHEARS FOR SHEET METAL

ITEM: WX3900-L

Features:
Suitable for left-handed cuts.

Tech. Code	GR51 Euro	L mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Cutting value 800 N/mm² max mm	Weight g
F2411250	41,55	250	1.5	1.2	1.0	510

ITEM: WX3905-R

Shears **PREMIUM QUALITY** double lever with micro-toothed blades in special hot forged induction hardened steel.
Ergonomic handles in plastic material.

Features:
Suitable for through cuts and right-hand contouring.

Tech. Code	GR51 Euro	L mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Cutting value 800 N/mm² max mm	Weight g
F2415250	47,09	250	1.5	1.2	1.0	560

ITEM: WX3905-L

Features:
Suitable for through cuts and left-hand contouring.

Tech. Code	GR51 Euro	L mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Cutting value 800 N/mm² max mm	Weight g
F2416250	43,04	250	1.5	1.2	1.0	560

SHEARS FOR SHEET METAL AMERICAN MODEL

ITEM: WX3950

Shears for sheet metal **PREMIUM QUALITY** American model in hot forged steel. Induction hardened straight blades (R = 600 N/mm²) suitable for through cuts. Comfortable and resistant PVC coated handles.

Tech. Code	GR51 Euro	L mm	Blade mm	Cutting value 400 N/mm² max mm	Cutting value 600 N/mm² max mm	Weight g
F2495200	19,00	200	48	1	0.7	280
F2495250	23,00	250	58	1.2	0.8	490
F2495300	29,50	300	75	1.5	1	750
F2495350	43,00	350	95	1.5	1	1100

ELECTRICIAN'S SCISSORS

ITEM: WX4770

Professional use **PREMIUM QUALITY** electrician's scissors with stainless steel blades, ergonomic two-component grip handles with anti-pinch finger safe stop.
- Vacuum-hardened blades approx. 56 HRC
- Anti-slip micro-toothing on one of the blades
- Double profile for cutting cables with cross-section up to 70 mm²
- Metal crimping system for wires from 1 to 6 mm² - AWG 22-14
- TPR coated nylon handle.

Tech. Code	GR51 Euro	L mm
F2504155	24,00	155

PROTECTIVE COVER FOR SCISSORS WX4770

ITEM: WX4770/H

NEW

Protective cover for electricians scissors WX4770 complete with belt clip.

Tech. Code	GR51 Euro	L mm
F250600	3,90	130

ELECTRICIAN'S SCISSORS

ITEM: WX4764

NEW

Professional Electrician's scissors **PREMIUM QUALITY** with stainless steel blades, ergonomic material handles bi-component with anti-pinch stop to save fingers.
- Hardened blades with 52-54 HRC hardness
- Non-slip micro-toothing on one blade
- Profile for stripping and cutting single core cables
- Nylon handle with non-slip TPR coating

Tech. Code	GR51 Euro	L mm
F2517150	19,00	150

F

ELECTRICIAN'S SCISSORS

WODEX

NEW

ITEM: WX4766

Professional electrician's scissors **PREMIUM QUALITY** with stainless steel blades, ergonomic handles in bi-component material with anti-pinch finger-safe stop.
- Hardened blades with 52-54 HRC hardness
- Non-slip micro-toothing on one blade
- Nylon handle with non-slip TPR coating.

Tech. Code	GR51 Euro	L mm
F2518150	18,20	150

ITEM: WX4768

Electrician's scissors **PREMIUM QUALITY** with stainless steel blades, ergonomic material handles bi-component with anti-pinch stop to save fingers.
- Vacuum hardened blades with approx. 56HRC
- Non-slip micro-toothing on one blade
- Double profile for cutting cables with section up to 50 mm²
- Nylon handle with non-slip TPR coating

Tech. Code	GR51 Euro	L mm
F2520150	20,20	150

ELECTRICIAN'S SCISSORS - STAINLESS STEEL BLADES

WRK

ITEM: F2505

Professional electrician's scissors made of stainless steel hardness 58-60 HRC, straight blades of which one micro-toothed with cable cutter notch, ergonomic nylon and fibreglass handles.

Tech. Code	GR52 Euro	Length mm
F2505145	23,27	145

ITEM: F2620

Electrician's scissors, in nickel-plated steel, micro-toothed blade with cable cutting notch and plastic handles.

Version:
F2620LD Model with straight blades
F2620LC Model with curved blades

Tech. Code	GR52 Euro	Length mm	Blade type
F2620LD	9,87	145	Straight
F2620LC	11,00	145	Rounded

ITEM: F2510

Stainless steel blades, one provided with micro anti- slip toothing, ergonomic bi-component handles.

Tech. Code	GR52 Euro	Length mm
F2510145	11,84	145

ELECTRICIAN'S SCISSORS INSULATED 1000V

WODEX

ITEM: WX4775

Standard IEC 60900 DIN EN 60900
Professional use electrician's scissors with stainless steel blades and ergonomic grip handles, insulated up to 1000V, VDE tested.
- High cutting capacity blades
- Anti-slip micro-toothing on one of the blades
- Profile for cutting single core cables
- Anti-slip TPR coated grip handle
- Finger pinch safety stop

Tech. Code	GR51 Euro	L mm
F2640155	36,50	155

Indivisible package Suggested retail package - Unit price

MULTIPURPOSE SHEARS

WODEX

NEW

ITEM: WX4776

Shears **Premium Quality** with straight blades in 60 HRC stainless steel, one of which with fine teeth, return spring and bi-component handle. The adjustable opening in 2 different positions helps the operator, the safety lock prevents any accidental opening.

Tech. Code	GR51 Euro	Cutting blades mm	L mm
F2656205	18,30	50	205

SHEARS FOR CUTTING COPPER AND ALUMINUM CABLES

WODEX

NEW

ITEM: WX4777

Shears **Premium Quality** with 60 HRC stainless steel blades for cutting copper and aluminum cables with section up to 10 mm², return spring and BI-component handle. the safety lock prevents any accidental opening.

Tech. Code	GR51 Euro	Cable Ø max mm	L mm
F2657165	18,30	12	165

PROFESSIONAL MULTIPURPOSE SCISSORS

WODEX

NEW

ITEM: WX4778

Multipurpose scissors **Premium Quality** with blades made of manganese steel, suitable for cutting rubber, cardboard and synthetic fabrics.
Vinyl coated handles suitable for comfortable and extended use.

Tech. Code	GR51 Euro	L mm
F2658200	24,00	200
F2658250	30,00	250
F2658300	36,00	300

MULTIPURPOSE SCISSORS

WRK

ITEM: F2660

Titanium coated blades, anti-loose screws, bimaterial ergonomically designed grip

Tech. Code	GR52 Euro	Length mm
F2660165	8,80	165
F2660230	9,50	230

MULTIPURPOSE SCISSORS SECUMAX 565

martor

ITEM: 565001.00 SECUMAX 565

Multi-use scissors for professional cutting, ideal for big hands or when working with gloves, for cutting cardboard, film, fabrics. Maximum protection provided by special sharpening and rounded tips. The additional recess can be used to cut wires and cables, the teeth on the handle enable you to open various types of closures. Stainless steel blades.

Tech. Code	GR59 Euro	Length mm
F2670216	48,72	216

ITEM: 564001.00 SECUMAX 564

Multi-purpose scissors with stainless steel blades for professional use. Recommended for long cuts on surfaces such as paper, cardboard, cling film, fabric and plastic straps. Maximum protection thanks to special sharpening and rounded tips.

Tech. Code	GR59 Euro	Length mm
F2672218	39,36	218

OFFICE SCISSORS

WRK

ITEM: F2680

Nickel carbon steel office scissors

Tech. Code	GR52 Euro	Length mm
F2680UFF	11,52	180

ITEM: F2681

Excution with rounded tips.

Tech. Code	GR60 Euro	Length mm
F2681125	8,09	125

F

AMERICAN STYLE PIPE WRENCHES

WRK

ITEM: F3250

Twin spring device for instant tube lock and a fast resuming of operations, carbon steel jaws.

Specific:
Coated malleable cast iron body.

Tech. Code	GR52 Euro	Tube max Ø	Length mm
F32502	25,62	2"	350
F325021/2	51,24	2-1/2"	450
F32503	75,03	3"	600

ITEM: F3265

Specific:
Coated aluminum body.

Tech. Code	GR52 Euro	Tube max Ø	Length mm
F32652	48,87	2"	350
F326521/2	76,11	2-1/2"	450
F32653	123,14	3"	600

90° BENT JAW SWEDISH MODEL PIPE WRENCHES

WRK

ITEM: F3300

Chrome vanadium coated steel.

Tech. Code	GR52 Euro	Tube max Ø	Length mm
F33001	28,87	1"	305
F330011/2	45,74	1-1/2"	405
F33002	64,87	2"	560
F33003	140,23	3"	650
F33004	171,40	4"	750

45° BENT SHAPED JAW PIPE WRENCHES - 100

VBW

ITEM: 100

Standard DIN 5234 C

Pipe wrenches with shaped jaws inclined at 45° Slim-line series, stable grip thanks to the contact a 3 points, also optimal in the presence of smooth tubes, top range model distinguished by a yellow dot.
- Completely forged with Induction hardened grip surfaces.
- Reinforced handles with double T grip
- Automatic gripping function of the piece
- Safety protection against crushing injuries

Tech. Code	GR60 Euro	Tube max Ø	Length mm
F33151	(82,75)	1"	320
F331511/2	(104,12)	1-1/2"	440
F33152	144,88	2"	560
F33153	(222,10)	3"	675

45° BENT SLIM-LINE JAW SWEDISH MODEL PIPE WRENCHES

WRK

ITEM: F3319

Chrome vanadium coated steel.

Tech. Code	GR52 Euro	Tube max Ø	Length mm
F33191/2	24,16	1/2"	265
F33191	32,55	1"	330
F331911/2	40,43	1-1/2"	425
F33192	73,52	2"	535
F33193	127,58	3"	680

45° BENT JAW PIPE WRENCHES - 111

VBW

ITEM: 111

Standard DIN 5234 B

Pipe wrenches with 45° inclined jaws series Slim-line, stable grip thanks to the three-point contact, also optimal in the presence of smooth tubes, top range model distinguished by a yellow dot.
- Completely forged with Induction hardened grip surfaces
- Reinforced handles with double T grip
- Automatic gripping function on the piece
- Safety protection against crushing Injuries

Tech. Code	GR60 Euro	Tube max Ø	Length mm
F33251/2	(65,02)	1/2"	240
F33251	(88,22)	1"	320
F332511/2	(110,71)	1-1/2"	445
F33252	(156,35)	2"	565
F33253	(248,02)	3"	705

Indivisible package Suggested retail package - Unit price

45° BENT THIN JAW SWEDISH MODEL PIPE WRENCHES

WRK

ITEM: F3328

Chrome vanadium coated steel.

Tech. Code	GR52 Euro	Tube max Ø	Length mm
F33281/2	24,16	1/2"	265
F33281	29,52	1"	310
F332811/2	40,43	1-1/2"	410
F33282	73,74	2"	570
F33283	127,58	3"	695

REVERSIBLE CHAIN PIPE WRENCHES

WRK

ITEM: F3280

Bi-directional rotation maneuvering, without removing the tool, vanadium chrome painted steel lever.

Tech. Code	GR52 Euro	Max opening	Length mm
F32804	47,03	4"	300

ITEM: F3281

Double chain usefull in 2 directions of rotations, made of chrome vanadium coated.

Tech. Code	GR52 Euro	Max opening	Length mm
F32816	209,75	6"	900

STRAP WRENCHES FOR OIL FILTERS

WRK

ITEM: F3283

Heavy-duty strap wrench for oil filters.

Tech. Code	GR52 Euro	Opening mm	Grip length mm
F3283140	20,00	140	230

ITEM: F3285

Ajustable wrenches for oil and dryer filters (40-145).

Tech. Code	GR52 Euro	Ø mm	Spare parts
F3285105	41,75	40 - 105	-
F3285105R	6,95	-	Spare band 40 - 105
F3285145	49,58	40 - 145	-
F3285145R	7,11	-	Spare band 40 - 145

ADJUSTABLE ROLLER WRENCHES

WODEX

ITEM: WX1170

Standard DIN 3117 ISO 6787

Roller wrenches **PREMIUM QUALITY** forged oil-hardened chrome-vanadium steel, chrome-satin finish. 15° angled mouth, millimetre scale, movable jaw opening by rotating the roller.

Tech. Code	GR51 Euro	a mm	L mm
F3420200	21,95	32	200
F3420250	27,03	43	250

ADJUSTABLE ROLLER WRENCHES

WRK

ITEM: F3421

22,5°-inclined head model, with millimeter scale, sliding jaw opening by rotating knurl, chrome vanadium chromed, satin plated body.

Tech. Code	GR52 Euro	Opening mm	Length mm
F3421150	11,35	20	150
F3421200	15,35	25	200
F3421250	19,79	30	250
F3421300	26,82	35	300
F3421380	54,17	45	380
F3421450	96,98	55	450

SELF-ADJUSTABLE WRENCHES VDE ISOLATED 1000 VOLTS

Wera

NEW

ITEM: 6004 JOKER VDE

The self adjusting Joker 6004 VDE insulated wrenches up to 1000 volts offer a continuous automatic gripping of screws and hexagonal nuts. The additional protection of the sliding function allows the opening of the non insulated jaws without hand contact, the triangle prisms of the fork allow a return angle of 30°.

Tech. Code	GR53 Euro	Opening mm	Length mm
F343010	(61,56)	7 - 10	119
F343013	(68,04)	10 - 13	155
F343016	(75,60)	13 - 16	190
F343019	(96,12)	16 - 19	226

F

UNIVERSAL PIPE CUTTERS

ITEM: WX3800

Small **Hydraulic-Line** pipe cutters suitable for use in hard-to-reach areas, suitable for cutting pipes in stainless steel, copper, aluminium, brass and PVC. Die-cast aluminium body with device for quick cutter wheel changes.
Features:
2 rollers to slide the pipe mounted on bearings
Cutter wheel in special cobalt steel mounted on bearing
Adjustment handwheel with housing for spare wheel

Tech. Code	GR51 Euro	Opening inches	Opening mm	Cutting depth max. mm	Weight g
F351130	30,16	1/8" - 1-1/8"	3 - 30	2.5	215

The tool is equipped with a spare wheel

ITEM: WX3810

Ergonomic and compact **Hydraulic-Line** pipe cutters suitable for cutting pipes in stainless steel, copper, aluminium, brass and PVC with maximum precision. Body in magnesium with device for quick cutter wheel changes, practical deburring tool for finishing operations.
Features:
4 rollers to slide the pipe mounted on bearings
Cutter wheel in special cobalt steel mounted on bearing
Removable deburring tool with cobalt blade **E100S**
Adjustment handwheel with housing for spare wheel

Tech. Code	GR51 Euro	Opening inches	Opening mm	Cutting depth max. mm	Weight g
F352135	54,44	1/8" - 1-3/8"	3 - 35	2.5	335

The tool is equipped with a spare wheel

ITEM: WX3840

Spare wheels for pipe cutters WX3800 and WX3810 in special cobalt steel, suitable for cutting pipes in stainless steel, copper, aluminium, brass and plastics in general. The wheels are equipped with a roller bearing for maximum smoothness, even in the toughest jobs.

Tech. Code	GR51 Euro	Ø mm	Thickness mm	Hole mm
F351219	6,50	19	5	5

Self-locking pin for wheels WX3840 - Code F3512PA

PIPE CUTTERS FOR FLEXIBLE PIPES

ITEM: 90 20 185

Reinforced plastic material and fibreglass body, not fit to cut rebound spring and stop ratchet cables. Synthetic resin, reinforced fibreglass body, special oil hardened steel exchangeable blade.

Tech. Code	GR54 Euro	Pipe Ø max mm	Length mm
F3558185	50,45	25	185
F3558RIC1	(17,20)	90 20 185 spare blades	-

PIPE CUTTERS FOR PLASTIC PIPES

ITEM: F3570

PVC - Nylon - PE cutting, nickel plated body, hardened ground steel knife.

Tech. Code	GR60 Euro	Pipe ø mm	Length mm
F35703-15	19,57	3 - 15	130
F357012-25	29,25	12-25	185
F3570R6	6,08	Spare blade for 3 -15 mm ø tubes	-
F3570R7	9,58	Spare blade for 12 - 25 mm ø tubes	-

RATCHET PIPE CUTTERS FOR PLASTIC PIPES

ITEM: F3571

Heavy Duty Ratchet Pipe Cutters for PE, PP, PB, VPE, PVDF, MLP, PPR, PEX and Multilayer pipes. Easy cutting with less deformation of the tube, steel blade.

Tech. Code	GR52 Euro	Pipe ø max mm/inc.	Length mm
F357142	43,46	42 - 1-5/8"	200
F357142R	(19,60)	Spare blade	-

PIPE CUTTERS FOR PLASTIC PIPES

ITEM: 90 23 01 BK DP50

Pipe cutters for plastic waste pipes with Ø 32, 40 o 50 mm and wall thickness up to 2,4 mm.
Features:
- Easy positioning of the tool thanks to the clear view of the cutting point
- Hight quality steel reversible blade replaceable without the use of tools
- Optimal guide of the pipe thanks to the rollers with self-adjusting bearings

Tech. Code	GR54 Euro	Pipes Ø mm	Length mm
F357650	52,40	32 - 40 - 50	202

Indivisible package Suggested retail package - Unit price

REPLACEMENT BLADES FOR PIPES CUTTERS DP50

ITEM: 90 23 01 E01

Replacement blades reversible for pipe cutters 90 23 01

Tech. Code	GR54 Euro	Dimension mm	Weight g
F357750	13,60	25 x 10 x 6	4

BENDERS FOR LIGHT METALS

ITEM: F3580

Manual tube benders to bend aluminum,brass, annealed copper and thin steel tubes up to 180 °, with indication of the degree of curvature on the die. Equipped with a tube clamp that facilitates bending and a fixed matrix that allows you to make very close bends. Aluminum structure and double steel handle with non-slip rubber grip on the mobile lever.

Tech. Code	GR52 Euro	For external Ø pipes mm	Radius of curvature mm	Weight kg
F358006	66,93	6	15	0,5
F358008	72,72	8	20	0,6
F358010	84,18	10	25	0,9
F358012	90,07	12	30	0,9

PORTABLE MANUAL PIPE BENDERS

ITEM: P/22A

The F3595 pipe bender is the lightest and the fastest in its range of tools and thus the easiest to handle. At the same time, it is very powerful and able to bend big diameter pipes with the minimum effort.

Technical features: Light-alloy, high-resistance die cast block (kg. 1,15), Die-cast brass operating lever, Die-cast aluminium formers,Steel counterformers with die-cast aluminium laterals for quick coupling.

Tech. Code	GR60 Euro	Copper pipes Ø mm	Composition
F3595SET	404,00	10-12-14-16 18-20-22	1 pipe-bending machine 1 former and counterformer for copper pipes Ø 10-12-14-16-18-20-22 in kit 1 ABS suitcase

PORTABLE HYDRAULIC PIPE BENDER

ITEM: OB/85S

The F3597 hydraulic pipe bender is the smallest in its range of tools and thus the easiest to handle. At the same time, it is very powerful and able to bend big diameter pipes with the minimum effort.

Technical features: Die-cast aluminium and stainless steel pump body with double hydraulic circuit (kg. 2,3), high working range thanks to the very long piston stroke, adjustable operating lever according to hand size, die-cast aluminium formers, steel counterformers with die-cast aluminium laterals for quick coupling.

Tech. Code	GR60 Euro	Copper pipes Ø mm	Composition
F3597SET	647,00	10-12-14-16 18-20-22	1 pipe-bending machine 1 former and counterformer for copper pipes Ø 10-12-14-16-18-20-22 in kit 1 ABS suitcase

MANUAL THREADERS FOR HYDRAULIC MAINTENANCE

ITEM: FM-ECO

Ratchet manual threaders complete with heads in a practical metal box

Tech. Code	GR60 Euro	Tips
F3651BSPT	511,00	3/8" - 1/2" - 3/4" - 1" - 1-1/4" BSPT DX

SPARE CUTTING HEADS FOR HAND THREADERS

ITEM: F3652

Spare cutting heads for hand threaders FM-ECO

Tech. Code	GR60 Euro	BSPT
F3652BSPT3/8	(155,00)	3/8"
F3652BSPT1/2	(155,00)	1/2"
F3652BSPT3/4	(180,00)	3/4"
F3652BSPT1	(196,00)	1"
F3652BSPT1-1/4	(213,00)	1" - 1/4"

TELESCOPIC MIRRORS

WODEX

ITEM: WX6070/40

NEW

Articulated telescopic inspection mirrors complete with magnet at the end of the handle.
Magnet Ø 5 mm, holding force 5 N. Metal handle with pocket clip.

Tech. Code	GR51 Euro	Ø mm	min - max extension mm
F359840	16,60	40	136 - 545

ITEM: WX6075

Articulated telescopic mirrors for inspection with ergonomic plastic handle.

NEW

Tech. Code	GR51 Euro	Ø mm	Extension min - max mm
F359930	23,45	30	250 - 680
F359950	30,65	50	310 - 720

TELESCOPIC MIRRORS

ITEM: F3630

Articulated, telescopic mirrors, pocket version with clip.

Tech. Code	GR52 Euro	min - max extension mm	Extension min - max mm
F363050X26	23,81	50 x 26	125 - 470

While stocks last

TELESCOPIC MIRRORS WITH LED LIGHT

STAHLWILLE

ITEM: 13120N

Articulated telescopic mirrors with LED battery light, the LED lighting source is removable and can be used as a separate light. The concave mirror offers a 5x magnification. Battery life approximately 150 hours.

Tech. Code	GR55 Euro	Ø mm	Extension min - max mm
F360155	(134,49)	55	310 - 750

ITEM: 12921M

Unbreakable telescopic mirrors in stainless steel with 180° swiveling ball joint. Version without connection screws according to FOD for use in absolute safety.

Tech. Code	GR55 Euro	Ø mm	Extension min - max mm
F360232	36,49	32	171 - 699
F360257	36,49	57	178 - 921

ITEM: 12921M

Unbreakable telescopic mirrors in stainless steel with 180° swiveling ball joint. Version without connection screws according to FOD for use in absolute safety.

Tech. Code	GR55 Euro	Dimension mm	Extension min - max mm
F36034570	37,92	45 x 70	178 - 927

CUTTERS WITH SNAP-OFF BLADES

WODEX

ITEM: WX4650

Cutters with 9 mm snap-off blades **PREMIUM QUALITY** strong and resistant. Metal body and zinc alloy, anti-slip ergonomic TPR Soft-Grip handle.
Features:
- Container with 5 replacement blades integrated in the handle
- Automatic blade change
- High quality blades in carbon steel SK2, extremely sharp and long lasting

Tech. Code	GR51 Euro	Dimensions mm	Snap-off blades mm	Weight g
F366009	5,51	137 x 35 x 21	80 x 9 x 0.4	86

ITEM: WX4670

Pack of 10 snap-off blades 9 mm in carbon steel SK2, extremely sharp and long lasting.

Tech. Code	GR51 Euro	Dimensions mm	Material
F367910	2,67	80 x 9 x 0.4	Steel SK2

ITEM: WX4672

Pack of 10 **PREMIUM QUALITY** snap-off blades 9 mm. Made in Germany. Advanced very high temperature hardening process to obtain a fine and homogeneous molecular structure, rapid cooling for further hardening and tempering to reduce excessive hardness and increase ductility. Extremely precise sharpening for a clean cut without burrs.

Tech. Code	GR51 Euro	Dimensions mm	Material
F368110	5,09	80 x 9 x 0.4	C95

Indivisible package Suggested retail package - Unit price

CUTTERS WITH SNAP-OFF BLADES

ITEM: WX4680

Cutters with **PREMIUM QUALITY** snap-off blades 18 mm, strong and resistant. Metal body and zinc alloy, anti-slip ergonomic TPR Soft-Grip handle.
Features:
- Container with 3 replacement blades integrated in the handle
- High quality blades in carbon steel SK2 extremely sharp and long lasting

Tech. Code	GR51 Euro	Dimensions mm	Snap-off blades mm	Weight g
F368018	13,00	167 x 37 x 23	100 x 18 x 0.5	237

ITEM: WX4710

Pack of 10 snap-off blades 18 mm in carbon steel SK2, extremely sharp and long lasting.

Tech. Code	GR51 Euro	Dimensions mm	Material
F369910	3,55	100 x 18 x 0.5	Steel SK2

ITEM: WX4712

Pack of 10 **PREMIUM QUALITY** snap-off blades 18 mm. Made in Germany. Advanced very high temperature hardening process to obtain a fine and homogeneous molecular structure, rapid cooling for further hardening and tempering to reduce excessive hardness and increase ductility. Extremely precise sharpening for a clean cut without burrs.

Tech. Code	GR51 Euro	Dimensions mm	Material
F370110	5,94	100 x 18 x 0.5	C95

CUTTERS WITH SNAP-OFF BLADES 9MM

ITEM: F3710

Metal body, 9 mm snap- off blade.

Tech. Code	GR52 Euro	Length mm	Snapp off blades mm	Weight g
F3710MET9	1,80	135	80 x 9 x 0,4	18

ITEM: F3720

ABS body, 18 mm snap- off blade.

Tech. Code	GR52 Euro	Length mm	Snapp off blades mm	Weight g
F3720ABS18	4,21	160	100 x 18 x 0,5	15

ITEM: F3725

ABS and thermoplastic rubber body, steel blade slide, 18 mm snap-off sections.

Tech. Code	GR52 Euro	Length mm	Snapp off blades mm	Weight g
F3725MET18	7,14	170	100 x 18 x 0,5	73

ITEM: F3730

ABS body, steel blade guide, 18 mm snap- off blade

Tech. Code	GR52 Euro	Length mm	Snapp off blades mm	Weight g
F3730ABSACC	5,52	165	100 x 18 x 0,5	61

ITEM: F3740

Bi-component ABS and termoplastic rubber body, steel blade guide, blade holder/loader with six 18mm splitting blades included.

Tech. Code	GR52 Euro	Length mm	Snapp off blades mm	Weight g
F3740ABSBIC	9,95	155	100 x 18 x 0,5	137

MULTIPURPOSE SCRAPERS

ITEM: 0-28-590

Scrapers in synthetic material with non-slip handle, supplied with a 60x19x0,6 trapezoidel blade and a blade guard.

Tech. Code	GR60 Euro	Width mm	Length mm	
F377500	5,00	60	170	12

Indivisible package Suggested retail package - Unit price

CUTTERS WITH SNAP-OFF BLADES-INTERLOCK

STANLEY

ITEM: 1-10-018

Shaped metal body, patented system of locking and blade change, 18 mm snap-off blade.

Tech. Code	GR60 Euro	Length mm	Snapp off blades mm	Weight g	
F3780165	16,30	165	100 x 18 x 0,5	178	12

ITEM: 10-820

Aluminum housing, knurled grip, 25mm blade cartridges.
Automatic blade loading with auto-blade lock system, interlocking nose design. Supplied with 4 blades stored in the handle.

Tech. Code	GR60 Euro	Length mm	Snapp off blades mm	Weight g	
F3785210	32,40	210	140x25x0,7	330	1

ITEM: 2-11-725

Pack of 10 extremely sharp and long-lasting 25 mm FATMAX® segment saw blades.

Tech. Code	GR60 Euro	Dimension mm	Material	
F3895140	22,50	140 x 25 x 0,7	Hardened Steel	1

SAFETY CUTTERS WITH TRAPEZOID BLADE

WODEX

ITEM: WX4725

Safety cutter **PREMIUM QUALITY** robust and resistant, zinc alloy body, ergonomic TPR Soft-Grip handle.
Features:
- Slider to extract the blade with **automatic retraction**- Simple and intuitive blade replacement
- Can be used by right and left handed people
- High quality trapezoid blade in SK2 carbon steel

Blade extraction adjustable by side wheel:
- Position 1 extraction 8 mm
- Position 2 extraction 15 mm
- Position 3 extraction 25 mm
- Position 0 blade extraction not permitted

Tech. Code	GR51 Euro	Dimensions mm	Trapezoid blade mm	Weight g
F374760	13,70	155 x 48 x 20	60 x 19 x 0.6	164

TUV Test Report N. 70.435.14.680.03-01 Ref. SX2010G

MULTIFUNCTIONAL CUTTERS WITH TRAPEZOID BLADE

WODEX

ITEM: WX4720

Multifunctional Safety cutters with **PREMIUM QUALITY** trapezium blades 60x19 mm, robust and resistant. Zinc alloy body, anti-slip ergonomic TPR Soft-Grip handle.
Features:
- Lateral slider for blade extraction
- Upper slider for blade extraction with automatic retraction
- Integrated device for cutting nylon threads and films
- Button for a quick-change of the blade
- Container with 3 replacement blades integrated in the handle
- High quality blades in carbon steel SK2 extremely sharp and long duration

Tech. Code	GR51 Euro	Dimensions mm	Trapezoid blade mm	Weight g
F374560	13,20	174 x 46 x 26	60 x 19 x 0.6	208

ITEM: WX4730

Pack of 10 SK2 60x19 mm carbon steel trapezoid blades, extremely sharp and long lasting.

Tech. Code	GR51 Euro	Dimensions mm	Material
F374810	3,30	60 x 19 x 0.6	Steel SK2

ITEM: WX4732

Pack of 10 **PREMIUM QUALITY** steel 60x19 mm trapezoid blades. Made in Germany. Advanced very high temperature hardening process to obtain a fine and homogeneous molecular structure, rapid cooling for further hardening and tempering to reduce excessive hardness and increase ductility. Extremely precise sharpening for a clean cut without burrs.

Tech. Code	GR51 Euro	Dimensions mm	Material
F375010	7,00	60 x 19 x 0.6	C125

Indivisible package Suggested retail package - Unit price

ITEM: 145001.12 SECUMAX 145

Safety cutters small and thin with a plastic handle reinforced unexposed blade. Recommended for engraving and cutting cardboard of mono-layers, cellulose roller films, adhesive tapes. Blade not replaceable.
GS-Certification 602578-6075-55094-2016/2 C

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F390001	3,70	118 x 4 x 35,4	3,8	12	10

ITEM: 150001.12 SECUMAX 150

Safety cutters with a plastic handle reinforced unexposed blade. Recommended for engraving and cutting cardboard of mono-layers, cellulose roller films, adhesive tapes, plastic braids, fabric. Also Indicated for scrapering adhesive labels. Blade not replaceable.
GS-Certification S 60082479

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F391001	4,50	148 x 11 x 37,2	6,2	24,4	10

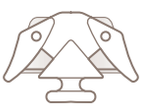
ITEM: 350001.02 SECUMAX 350

Safety cutters with plastic handle reinforced unexposed blade. Recommended for engraving and cutting cardboard of mono-layers, cellulose roller films, adhesive tapes, plastic braids, fabric. Double-use blade head both the blade and the tape cutter are two-sided and can be extracted in a simple way to Invert or replace it. In the handle there has been created a housing containing a replacement blade.
GS-Certification S 60082479

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F392001	16,32	154 x 12 x 40	6	37	1

ITEM: 3550.20

Package of 10 blades for Secumax 350 safety cutters.



Tech. Code	GR59 Euro	Dimension mm	Material	
F392510	11,44	38,9 x 5,8 x 0,3	Steel	10

ITEM: 32000110.02 SECUMAX 320

Safety cutters ideal for cutting films and plastic straps, the hidden blade and rounded nose protect the operator and the goods in a particularly reliable way. Ergononic handle with Soft-Grip inserts.
GS-Certificate 603646-6680-55094-2018/1

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F393101	13,12	158 x 13 x 56	4	47,4	1

ITEM: 92043.66

Pack of 10 blades with rounded tips for Secumax safety cutters.

Tech. Code	GR59 Euro	Dimension mm	Material	
F393210	9,76	26 x 18,5 x 0,40	Steel	1

ITEM: 121001.02 SECUMAX EASYSAFE

Safety cutters with a pronounced tip of the cutting tool which eases pentration and opening of bags or pallets banded with cellulose film. The Intergration plastic spring eases the cutting of thin films and sheets of paper even in Individual layers. Recommended for engraving and cutting cardboard of mono-layers, cellulose roller films, adhesive tapes, plastic braids, fabric and felt. Blade with 4-sided cutting edges. Removable by means of a safety key.
GS-Certification S 60077225

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F394001	18,08	207 x 10 x 66	6,6	67	1

ITEM: 9890.74

Package of 5 safety keys for changing the blades of the EASYSAFE cutters. Only authorized personnel can work with this key, an additional safety measurement that prevents accidental accidents..

Tech. Code	GR59 Euro	Dimension mm	
F394505	4,16	31 x 9,8 x 14,5	1

ITEM: 45.60

Package of 10 blades for Secumax Easysafe - Secunorm 175.

Tech. Code	GR59 Euro	Dimension mm	Material	
F403510	5,19	39 x 18,4 x 0,30	Steel	1

SAFETY CUTTERS SECUPRO 625

martor

ITEM: 625001.02 SECUPRO 625

The SECUPRO cutter 625 stands out among the erogonomic lever handle cutters and brings together all the features required by professionals. Aluminum handle, sliding lever to unlock the blade, cutting depth particularly wide, an automatic return of the blade, changing of the blade very practical. An automatic blade return ensures maximum protection during cutting. The blade immediately enters the handle when it does not come to contact with the material even if you continue to actuate the lever.
GS-Certification 602091-5862-55094-2015/2 C

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F396001	49,52	154 x 22 x 67	21	151	1

ITEM: 60099.70

Package of 10 blades for Secumax 625 and Secupro Maxisafe safety cutters.

Tech. Code	GR59 Euro	Dimension mm	Materiali	
F396510	7,52	55,5 x 19 x 0,63	Steel	1

ITEM: 122001.02 SECUPRO MARTEGO

Aluminum cutter with pincushion grip handle and fully automatic blade retraction. Safe, robust, ergonomic, versatile and of very high quality, suitable for right and left handed users, for operators with very large hands.The automatic blade return ensures maximum protection during cutting, the blade immediately enters the handle when it does not come to contact with the material, even if you continue to actuate the lever.
GS-Certification S 60077225

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F397001	39,04	155 x 18 x 48,5	9	105	1

ITEM: 124001.02 SECUPRO MERAK

Plastic cutter with pincushion grip handle and fully automatic blade retraction. Safe, light weight ergonomic handle, versatile and of very high quality, suitable for right and left handed users. The automatic blade return ensures maximum protection during cutting, the blade immediately enters the handle when it does not come to contact with the material, even if you continue to actuate the lever.
GS-Certification S 60112078

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F398001	22,80	128 x 18 x 50	9	59	1

ITEM: 92.66

Package of 10 blades for Secupro Martego e Merak safety cutters.

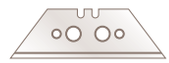
Tech. Code	GR59 Euro	Dimension mm	Material	
F397510	6,32	26 x 18,5 x 0,40	Steel	1

ITEM: 10139910.02 SECUPRO MAXISAFE

Safety cutter with automatic blade retraction. Very high cutting depth with the possibility of cuts up to 3 layers of cardboard, carpets or cellulose films. Extremely handy for right and left handed users. High security. The automatic blade return ensures maximum protection during cutting, the blade immediately enters the hankdle when it does not come to contact with material, even if you continue to actuate the lever.
GS-Ceritification 603523-6639-55094-2018

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F399001	18,16	148 x 18 x 42	16	64	1

ITEM: 99.70



Package of 10 blades for Secumax 625 and Secupro Maxisafe safety cutters 525.

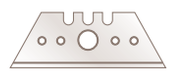
Tech. Code	GR59 Euro	Dimension mm	Material	
F399510	7,20	60 x 19 x 0,63	Steel	1

ITEM: 125001.02 SECUNORM MIZAR

Safety cutters with automatic blade retraction. Very high cutting depth with the possibility of cutting on cardboard up to 3 layers, carpet or film. Extremely comfortable to handle, thanks to the gripper handle it is suitable for both right and left-handed users. High safety, the automatic blade retraction guarantees high protection against cutting injuries because it falls back into the handle immediately after releasing the lever. The SECUNORM MIZAR 3-in one safety is unique in its kind, with the latter you can not only lock and unlock your cutting tool, but also proceed with changing the blade in a simple and safe way.
GS-Certificate 179274-7111-55094-2020

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F399701	14,88	139 x 15,6 x 50,5	15	59	1

ITEM: 5232.70



Package of 10 blades for Secunorm 500, Secunorm Mizar, Secunorm 300 security cutter.

Tech. Code	GR59 Euro	Dimension mm	Material	
F404510	6,80	53 x 19 x 0,63	Steel	1

Indivisible package Suggested retail package - Unit price

ITEM: 380001.02 SECUNORM 380

Plastic safety cutters with a blade extension of almost 8 cm with an automatic blade retraction. A valid alternative to conventional cutters, moreover a safety mechanism that prevents the blade to come out without your Intervention. As soon as you put the blade onto the material to be cut, it is sufficient to remove your thumb from the mechanism and the blade will re-enter into the handle immediately after leaving the material cut.
GS-Certification S 60095195

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F400001	22,64	170,5 x 20 x 34	73	78	1

ITEM: 383001.02 SECUBASE 383

Safety cutters that also work as a fixed blade cutter, this cutting tool is equipped with an automatic blade retraction to avoid cutting injuries, if necessary it is possible to lock the exposed blade on seven different levels (from 7 to 73 mm).

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F400201	23,76	170,5 x 25 x 34	73	79	1

ITEM: 79.60

Package of 10 blades for Secunorm 380 and Secubase 383 safety cutters.

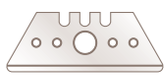
Tech. Code	GR59 Euro	Dimension mm	Material	
F400510	8,40	109,5 x 17,9 x 0,5	Steel	1

ITEM: 50000110.02 SECUNORM 500

Safety cutters sturdy and ergonomic with a trapezoidal blade with rounded tips. Newly designed aluminum handle with operating slider mechanism that can be used flexibly on both sides. During cutting, the automatic retraction of the blade protects the user from being cut and wounded.
GS-Certificate 603574-6653-55094-2018/2

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F401101	18,56	143 x 16 x 36	17	72,5	1

ITEM: 65232.70



Pack of 10 blades with rounded tips for Secunorm and Argentax safety cutters.

Tech. Code	GR59 Euro	Dimension mm	Material	
F401210	7,92	50,1 x 19 x 0,63	Steel	1

ITEM: 52500410.02 SECUNORM 525

Safety cutters robust and ergonomic equipped with a blade with cutting capacity up to 21 mm, a newly designed aluminum handle with a particularly large maneuvering cursor that we can operate even wearing reinforced gloves. While cutting, the automatic blade retraction protects the user from cutting injuries.

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F401301	20,08	143 x 17 x 31	21	81	1

ITEM: 99.70

Package of 10 blades for Secumax 625 and Secupro Maxisafe safety cutters 525.

Tech. Code	GR59 Euro	Dimension mm	Material	
F399510	7,20	60 x 19 x 0,63	Steel	1

ITEM: 54000410.02 SECUNORM 540

Safety cutters robust and ergonomic equipped with a blade with cutting capacity up to 36 mm, aluminum handle of new conception with particularly large maneuvering cursor that we can operate even when wearing reinforced gloves. While cutting, the automatic blade retraction protects the user from cutting injuries.

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F401401	22,08	143 x 17 x 31	36	79	1

ITEM: 7940.60

Package of 10 blades for Secunorm Profi40 safety cutters.

Tech. Code	GR59 Euro	Dimension mm	Material	
F401510	9,20	71,2 x 17,9 x 0,5	Steel	1

ITEM: 300004.10 SECUNORM 300

Safety cutters easy to use with automatic blade retraction. As soon as you put the blade onto the material to be cut it is sufficient enough to remove your thumb from the mechanism and the blade will re-enter into the handle after leaving the material cut. Can be used by right and left handed people to cut all the most common materials.
GS-Certificate 178531-7034-55094-2019/1

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F401801	13,20	143 x 16 x 36	19	52	1

SAFETY CUTTERS SECUNORM 175

martor

ITEM: 175001.02 SECUNORM 175

Plastic safety cutters, practical, light-weighted with erogonomic handle suitable for also left-handed users. As soon as you put the blade onto the material to be cut it is sufficient enough to remove your thumb from the mechanism and the blade will re-enter into the handle after leaving the material cut.
GS-Certification S 60087371

Tech. Code	GR59 Euro	Dimension mm	Cutting depth mm	Weight g	
F403001	6,00	109,5 x 13,5 x 34	10	31	1

ITEM: 45.60

Package of 10 blades for Secumax Easysafe - Secunorm 175.

Tech. Code	GR59 Euro	Dimension mm	Material	
F403510	5,20	39 x 18,4 x 0,30	Steel	1

SMALL GRAFIX CUTTERS

martor

ITEM: 32132.00

Cutter in aluminium for cutting and deburring,easy to manage the handle and the avaiilable blades allows you to work with more precision.

Tech. Code	GR59 Euro	Dimension mm	Weight g	
F405001	18,64	120 x 8 x 8	19,2	1

ITEM: 32.50

Package of 10 blades for Small Gafix cutters.

Tech. Code	GR59 Euro	Dimension mm	Material	
F405510	42,16	51,5 x 5,7 x 0,63	Steel	1

DEBURRERS WITH CERAMIC BLADE

martor

ITEM: 170170.00 TRIMMEX CERACUT

NEW

Deburrers with ceramic blade ideal for deburring plastic and metal with TIMMEX CERACUT it is possible to chamfer the angles, remove the injection points and dividing lines of two halves of a mold. The special sharpening of the Martor ceramic blade minimize the strain and risk of injury.

Tech. Code	GR59 Euro	Dimensions mm	Weight g	
F404701	63,44	175 x 16 x 26	39	1

ITEM: 170.55

Ceramic blades for Trimmex Ceracut deburrers

NEW

Tech. Code	GR59 Euro	Dimension mm	Material	
F404801	46,56	60 x 15 x 1,7	Ceramic	1

Indivisible package Suggested retail package - Unit price

HACKSAWS

ITEM: WX4780

Manual hacksaws **PREMIUM QUALITY** robust and ergonomic made of aluminium alloy with soft non-slip rubber inserts to work safely with minimum effort even in the most difficult situations. Maximum cutting precision with the possibility to tilt the blade to 40°. Easily adjustable blade tension through the clamping device integrated in the lower part of the handle. Supplied with **BI-METAL** 24 Z blade.

Tech. Code	GR51 Euro	Blade mm	Blade Inc.	Weight g	
F4080300	27,35	300	12"	650	5

ITEM: WX4785

Manual hacksaws made of 18x10 mm rectangular steel tube and zinc alloy handle with non-slip rubber coating, to work in safety and with minimum effort. Blade tension easily adjusted by wing nut.
Supplied with BI-METAL 24 Z blade.

Tech. Code	GR51 Euro	Blade mm	Blade Inc.	Weight g	
F4085300	16,90	300	12"	430	10

ITEM: WX4788

HIGH PERFORMANCE high cobalt **HSS BIMETAL** hacksaw blades.

Tech. Code	GR51 Euro	Blade mm	Blade Inc.	Z	Weight g	
F4145300	2,71	300	12"	24	18	10

HACKSAWS

ITEM: F4130

Hacksaws with 16x10x1.35 mm section rolled steel frame and aluminium handle. The couplings allow the blade to be inserted either vertically or horizontally. Wing nut type blade tensioning.
Supplied with a 24 Z blade.
Arch with 16x10 mm section and aluminum handle.

Tech. Code	GR52 Euro	Blade mm	Blade Inc.	Weight g
F4130300	13,00	300	12"	815

While stocks last

ITEM: F4135

Arch with 18x8 mm section and wooden handle.

Tech. Code	GR52 Euro	Blade mm	Blade Inc.	Weight g
F4135300	13,50	300	12"	560

While stocks last

MINI HACKSAWS

ITEM: WX4790

Mini hacksaws **PREMIUM QUALITY** sturdy and ergonomic made of aluminium alloy with non-slip plastic handle, to work safely and with minimum effort in difficult to access areas. Maximum cutting precision with the possibility of orienting the blade in 6 different positions. Blade tension by knurled clamping knob. Supplied with a 32 Z blade.

Tech. Code	GR51 Euro	Blade mm / inc.	Weight g
F4150150	9,59	150 / 6"	130

ITEM: WX4798

Pack of 10 **PREMIUM QUALITY** mini hacksaws blades in HSS steel.

Tech. Code	GR51 Euro	Blade mm	Blade Inc.	Z	Weight g
F4158150	7,00	150	6"	32	14

Price refers to a pack of 10

F

ERGONOMIC HANDLES

ErgoBurr™ Deburring Tools

ITEM: ART. F4205

Tech. Code	GR60 Euro	For blades	For blade holders
F420501	11,32	B	-
F420502	11,32	E	-
F420503	11,32	-	F4300

DEBURRING TOOLS TYPE 1 IN SET

ErgoBurr™ Deburring Tools

ITEM: ART. 1/E

For deburring holes and edges, axial mounting of the blade, the compact coupling handle/blade makes it suitable for heavy duty works, supplied with E100 E200 E300 blades, mounts all E- type blades.

Tech. Code	GR60 Euro	Blades holder
F4210SET1	17,81	E

ITEM: ART. B

For deburring holes and edges, blades can be mounted on the telescopic holder axially or perpendicular, supplied with B10 e B20, mounts all B- type blades.

Tech. Code	GR60 Euro	Blades holder
F4220SET2	18,77	B

ITEM: ART. E

For deburring holes and edges on both sides, axial mounting of the blade on the telescopic holder, supplied with E100 E200 E300 blades, mounts all E- type blades.

Tech. Code	GR60 Euro	Blades holder
F4230SET3	23,74	E

ITEM: ART. BURR-BI

For linear edges on difficult machining materials, can deburr single or double straight edges up to 14 mm thick. Round blades R10 can be used singularly or in couple, hand guard included.

Tech. Code	GR60 Euro	Supplied with
F4240SET4	33,60	2 R10 round blades

ITEM: ART. D

For simultaneous deburring on both side of sheet metal up to 3 mm thick, flat side 8 mm, supplied with M.D. D80 blade.

Tech. Code	GR60 Euro	Blades holder
F4250SET5	29,66	D

ITEM: ART. C

Scraper with triangular blade, 3 cutting edges for high quality scraping of flat, edges and holes, the telescopic holder enables access to difficult-to-reach areas, it is recommended to use the included key to disassemble the blade, supplied with C40 blade.

Tech. Code	GR60 Euro	Blades holder
F4260SET6	28,85	C

ITEM: ART. F

Strong tool for chamfering and deburring holes up to 20 mm, the telescopic holder enable to access depth areas, supplied with F20 countersink.

Tech. Code	GR60 Euro	Blades holder
F4270SET7	37,57	F

ITEM: ART. FR-ID

Holder with ratchet, ideal for rotational countersinking even when workspace is limited. For holes up to 20 mm of diameter, supplied with F20 countersink.

Tech. Code	GR60 Euro	Blades holder
F4280SET8	53,27	FR

ITEM: ART. FR-OD

Holder with ratchet, ideal for rotational countersinking even when workspace is limited. For external diameter up to 26 mm, supplied with F26X countersink.

Tech. Code	GR60 Euro	Blades holder
F4290SET9	57,45	FR

Indivisible package Suggested retail package - Unit price

TYPE G DEBURRING TOOL

ITEM: ART. G

Ideal for deburring up to 15mm slotting internal and external sharp edges. Blade features 8 cutting edges.

Tech. Code	GR60 Euro	Blades holder
F4291SET10	30,67	G10

ITEM: ART. G/3

Ideal tool for deburring and machining shredding residues, ensure smooth finish of adjoining surfaces. Specifically angled blade holder enables easy access to work area. Blades feature 3 deburring cutting edges.

Tech. Code	GR60 Euro	Blades holder
F4292SET11	43,51	G30

DEBURRING TOOLS SET TYPE E ERGOBURR

ITEM: ART. E/11

Ideal kit for all reaming and scraping operations.

Set includes:
- Mango II grip
- Blade holder E
- Blade holder C
- Blade C42
- Blade E100P
- C Key
- Blade E200
- Blade E300
- Blade E600
- Blade E700
- Blade E111

Tech. Code	GR60 Euro	Blade holder
F4295SET11	48,57	E/C

UNIBURR DEBURRING TOOLS

ITEM: UB1

To deburr holes and edges, aluminium handle with coupling clip.

Tech. Code	GR60 Euro	Supplied with
F4201A	7,18	Disposable E100 blade

ITEM: MB2000

To deburr holes and edges, hexagonal aluminium handle, it mounts all E- type blades.

Tech. Code	GR60 Euro	Supplied with
F4200B	12,59	E100 blade

HOLDERS FOR DEBURRING BLADES

ErgoBurr™ Deburring Tools

Tech. Code	GR60 Euro	Type	Mod.
F4300B	8,99	B	
F4300C	8,99	C	
F4300E	8,99	E	

Tech. Code	GR60 Euro	Type	Mod.
F4300F	8,99	F	
F4300FR	19,76	FR	

BLADES FOR DEBURRING TOOLS

ErgoBurr™ Deburring Tools

Tech. Code	GR60 Euro	Type	Description	Mod.	🔷
F4310B10	2,26	B10	HSS. For long chips materials.		10
F4310B10P	3,40	B10P	TiN coated, high wear resistant. B10 geometry.		10
F4310B20	2,26	B20	HSS. Bidirectional rotation.		10
F4310B20P	4,48	B20P	TiN coated, high wear resistant. B20 geometry.		10
F4310B30	3,39	B30	Simultaneous internal and external hole's edge deburring Up to 4 mm thickness.		10
F4310C40	12,36	C40	4 mm scraper with triangular section HSS for high precision works.		10
F4310C42	20,23	C42	8mm scraper with HSS triangular section		10
F4310D80	12,36	D80	HM, 6 edges. Designed for up to 3 mm thick metal sheet deburring		10
F4310E100	2,32	E100	HSS for heavy- duty works. For long chips materials.		10
F4310E100S	3,52	E100S	With Cobalt for increased durability E100 geometry.		10
F4310E100P	4,68	E100P	PVD TiN coated, high wear resistant. E100 geometry.		10
F4310E110	3,53	E110	Cutting edge B- type blade. For long chips materials. To deburr holes with a minimum diameter of 2 mm.		10

Tech. Code	GR60 Euro	Type	Description	Mod.	🔷
F4310E111	3,53	E111	Thin made from HSS. To deburr holes with a minimum diameter of 1.5 mm.		10
F4310E200	2,32	E200	HHS, to deburr short chips materials. Bidirectional rotation.		10
F4310E200P	4,68	E200P	PVD TiN coated, high wear resistant. E200 geometry.		10
F4310E300	3,50	E300	HSS, long chips materials. Simultaneous deburring of internal and external hole's edge up to 6mm thickness.		10
F4310E350	3,54	E350	HHS, to deburr short chips materials. Bidirectional rotation.		10
F4310E600	4,66	E600	HSS. To deburr difficult- to- reach areas for holes up to 20 mm thick.		10
F4310F20	35,07	F20	Countersink for internal holes edges up to 20 mm of diameter.		1
F4310F30	54,93	F30	Countersink for internal holes edges up to 30 mm of diameter.		1
F4310F26X	32,72	F26X	Countersink for external edges of pipes up to 26 mm in diameter.		1
F4310G10	8,64	G10	HSS. Deburrs slots up to 0.6" (15mm) wide.		10
F4310G30	22,67	G30	HSS. 3 deburring edges. Cleans comers and removes radaii after machining for smooth flush mating.		10
F4310R10	6,73	R10	Double round blade. Side A for long chips materials. Side B for short chips materials.		10

🔷 Indivisible package 🔷 Suggested retail package - Unit price

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FLAT SCRAPERS WITH HM INSERT

RENNSTEIG

ITEM: 465

Flat scrapers with hard metal inserts suitable for metal scraping. Chrome steel blade with screw bracket for insert locking. Supplied with 4-sided cutting insert.

Tech. Code	GR60 Euro	Insert width mm	Blade holder mm	Total length mm
F440020	95,03	20	300 x 5	420
F440025	109,10	25	330 x 5	450
F440030	138,08	30	330 x 5	450

ITEM: 465-0

Replacement inserts for flat scrapers art. 465.

Tech. Code	GR60 Euro	Insert width mm	Insert thickness mm	Insert length mm
F440120	53,76	20	2	25
F440125	61,11	25	2	25
F440130	73,13	30	2	25

FLAT SCRAPERS

WRK

ITEM: F4409

Chrome vanadium, polished steel, clean cutters, wooden handle.

Tech. Code	GR52 Euro	a mm	b mm	L mm
F4409150	9,91	150	20	280
F4409200	10,58	200	20	320
F4409250	11,13	250	25	370
F4409300	12,07	300	25	420

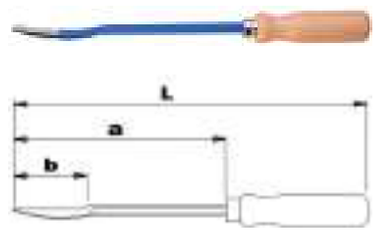
While stocks last

TRIANGULAR SCRAPERS

WRK

ITEM: F4419

Chrome vanadium, polished steel, clean cutters, wooden handle.



Tech. Code	GR52 Euro	a mm	b mm	L mm
F4419150	(10,02)	150	70	260
F4419200	10,85	200	85	310
F4419250	11,58	250	100	360
F4419300	12,91	300	110	420

While stocks last

RIBBED CHISELS FOR MECHANICS

WODEX

ITEM: WX4900

Ribbed chisels in forged chrome-vanadium steel with resharpenable blade. Chrome-satin finish.

Tech. Code	GR51 Euro	L mm	Cutting edge mm
F443021	11,24	150	21
F443026	17,91	200	26
F443029	26,50	250	29
F443034	36,50	300	34

EXTRA-FLAT CHISELS FOR MECHANICS

WODEX

ITEM: WX4905

Standard DIN 7255
Chisels **PREMIUM QUALITY** in self-hardening chrome-vanadium steel, the special treatment of the head prevents chipping and complies with **DIN 7255**. Resharpenable blade, extra thin painted handle.

Tech. Code	GR51 Euro	L mm	Cutting edge mm
F4440240	13,57	240	26

ITEM: WX4905/H

Chisels complete with hand guard

Tech. Code	GR51 Euro	L mm	Cutting edge mm
F4441240	20,67	240	26

Indivisible package Suggested retail package - Unit price

CHISELS WITH HAND PROTECTION GUARD FOR METAL

ITEM: F4451

Chisels complete with hand guard.

Tech. Code	GR52 Euro	Length mm	Cutting edge mm
F4451250	14,25	250	25
F4451350	19,81	350	27

While stocks last

CHISELS FOR MECHANICS

ITEM: WX4908

Standard DIN 6453 - DIN 7255
Chisels **PREMIUM QUALITY** in self-hardening chrome-vanadium steel, the special treatment of the head prevents chipping and complies with **DIN 7255**. Resharpenable blade, octagonal painted handle.

Tech. Code	GR51 Euro	L mm	Cutting edge mm
F4443125	8,48	125	12
F4443150	9,27	150	12

CHISELS, PUNCHES AND BURINS IN SET

ITEM: WX4980/S6PS

Standard DIN 7255
Set of chisels, punches and burins **PREMIUM QUALITY** in self-hardening chrome-vanadium steel. The special treatment of the head prevents chipping and complies with **DIN 7255**. Resharpenable blade, octagonal painted handle.
Practical plastic bench stand.

Composition:

WX4908 Flat chisels 12x125 - 12x150 mm
WX4925 Hook chisels 4x125 mm
WX4970 Conical punches 3x120 - 4x120 mm
WX4960 Burins 4x120 mm

Tech. Code	GR51 Euro	Pieces
F447006	37,63	6

CHISELS FOR MECHANICS

ITEM: WX4910

Standard DIN 6453 - DIN 7255
Chisels **PREMIUM QUALITY** in self-hardening chrome-vanadium steel, the special treatment of the head prevents chipping and complies with **DIN 7255**. Resharpenable blade, painted oval handle.

Tech. Code	GR51 Euro	L mm	Cutting edge mm
F4446100	8,00	100	15
F4446175	11,20	175	21
F4446200	12,61	200	24
F4446250	12,30	250	25
F4446300	19,29	300	26

ITEM: WX4910/H

Standard DIN 6453 - DIN 7255
Chisels complete with hand guard

Tech. Code	GR51 Euro	L mm	Cutting edge mm
F4447300	24,91	300	26

CHISELS FOR METAL

ITEM: F4449

Vanadium chrome zinc chromed tempered steel, regrindable edge.

Tech. Code	GR52 Euro	Length mm	Cutting edge mm
F4449100	5,34	100	15
F4449150	6,23	150	18
F4449175	7,46	175	21
F4449250	10,13	250	25
F4449300	12,58	300	26
F4449350	14,69	350	27
F4449400	16,70	400	27
F4449500	20,03	500	30

While stocks last

HOOK CHISELS FOR MECHANICS

ITEM: WX4925

Standard DIN 6451 - DIN 7255
Chisels **PREMIUM QUALITY** in self-hardening chrome-vanadium steel, the special treatment of the head prevents chipping and complies with DIN 7255. Resharpenable blade, octagonal painted handle.

Tech. Code	GR51 Euro	L mm	Cutting edge mm
F4465125	9,50	125	5

CHISELS FOR METAL

WRK

ITEM: F4489

Vanadium chrome zinc chromed tempered steel, octagonal handle, regrindable edge.

Tech. Code	GR52 Euro	Length mm	Cutting edge mm
F4489100	5,12	100	10
F4489125	5,12	125	12

While stocks last

CHISELS FOR ELECTRICIANS

WODEX

ITEM: WX4930

Self-tempering chisels for electricians in chrome-vanadium steel with thin 10 mm octagonal section shank.
Version with flat cutting edge.

Tech. Code	GR51 Euro	L mm	Cutting edge mm	⬢ mm	👓
F4500200	6,27	200	14	10	6
F4500250	7,35	250	14	10	6
F4500300	7,85	300	14	10	6

ITEM: WX4931

Self-tempering chisels for electricians in chrome-vanadium steel with thin 10 mm octagonal section shank.
Pointed version

Tech. Code	GR51 Euro	L mm	⬢ mm	👓
F4501200	6,27	200	10	6
F4501250	7,35	250	10	6
F4501300	7,85	300	10	6

CHISELS FOR BUILDERS

WODEX

ITEM: WX4932

Chisels for bricklayers in hardened steel with 16 mm octagonal section shank.
Version with flat cutting edge

Tech. Code	GR51 Euro	L mm	Cutting edge mm	⬢ mm	👓
F4502300	7,88	300	22	16	6
F4502400	9,82	400	22	16	6

ITEM: WX4933

Chisels for bricklayers in hardened steel with 16 mm octagonal section shank.
Pointed version

Tech. Code	GR51 Euro	L mm	⬢ mm	👓
F4503300	7,88	300	16	6
F4503400	9,82	400	16	6

ITEM: WX4934

Chisels for bricklayers in self-tempering chrome-vanadium steel with Ø 16 mm shank.
Version with flat cutting edge

Tech. Code	GR51 Euro	L mm	Cutting edge mm	Ø mm	👓
F4504250	12,90	250	22	16	6
F4504300	13,80	300	22	16	6

CHISELS FOR BUILDERS

WODEX

ITEM: WX4934/P

Chisels for bricklayers in self-tempering chrome-vanadium steel with Ø 16 mm shank.
Version with flat cutting edge and hand guard safety grip

Tech. Code	GR51 Euro	L mm	Cutting edge mm	Ø mm	👓
F4505250	16,50	250	22	16	6
F4505300	18,50	300	22	16	6

CHISELS FOR BUILDERS

WODEX

ITEM: WX4935

Chisels for bricklayers in self-tempering chrome-vanadium steel with Ø 16 mm shank.
Pointed version

Tech. Code	GR51 Euro	L mm	Ø mm	👓
F4506250	11,90	250	16	6
F4506300	12,94	300	16	6

Indivisible package Suggested retail package - Unit price

CHISELS FOR BUILDERS

ITEM: WX4935/P

Chisels for bricklayers in self-tempering chrome-vanadium steel with Ø 16 mm shank.
Version with pointed cutting edge and hand guard safety grip

Tech. Code	GR51 Euro	L mm	Ø mm	
F4507250	14,48	250	16	6
F4507300	18,50	300	16	6

ITEM: WX4937

Steel chisels with extra wide hardened and resharpenable cutting edge.

Tech. Code	GR51 Euro	L mm	Cutting edge mm	Stem section mm
F450850	16,80	245	50	12 x 25
F450870	17,00	245	70	12 x 25

ITEM: WX4937/P

Steel chisels with extra wide hardened and resharpenable cutting edge, version with hand guard safety grip.

Tech. Code	GR51 Euro	L mm	Cutting edge mm	Stem section mm
F450950	18,67	245	50	12 x 25
F450970	22,50	245	70	12 x 25

CHISELS FOR WOOD

ITEM: 0-16-870 0-16-880

NEW

Chisels for wood DYNAGRIP with forged and tempered steel blade along the entire length, ground surfaces and re-sharpenable blade. Bi-component handle in rigid synthetic material and soft polypropylene, upper end in steel for working with a hammer and increasing the applied force.

Tech. Code	GR60 Euro	Blade width mm	Blade length mm	
F451106	23,40	6	125	6
F451108	23,40	8	125	6
F451110	24,70	10	125	6
F451115	26,50	15	131	6
F451120	27,20	20	141	6
F451124	31,70	24	143	6
F451132	42,60	32	159	6

PIN PUNCHES

ITEM: WX4950

Standard DIN 6450 - DIN 7255
Pin punches **PREMIUM QUALITY** made of tool steel hardened to **≥ 58 HRC**. The specially treated head prevents chipping and complies with **DIN 7255**. The precise chrome plating ensures high protection against corrosion and the painted colour coding means that they can be selected quickly and easily.

Tech. Code	GR51 Euro	Ø mm	Total length mm	Useful length mm	⬢ mm	
F451003	9,02	3	150	40	10	10
F451004	9,02	4	150	40	10	10
F451005	9,02	5	150	40	10	10
F451006	9,02	6	150	40	10	10
F451008	9,46	8	150	40	12	10
F451010	9,43	10	150	40	12	10

ITEM: WX4948

Standard DIN 6450 - DIN 7255
Pin punches **PREMIUM QUALITY** in hardened tool steel. The specially treated head prevents chipping and complies with **DIN 7255**. The precise chrome plating ensures high protection against corrosion. Octagonal painted handle.

Tech. Code	GR51 Euro	Ø mm	Total length mm	Useful length mm	⬢ mm	
F452002	6,41	2	150	40	10	10
F452003	6,41	3	150	40	10	10
F452004	6,41	4	150	40	10	10
F452005	6,41	5	150	40	10	10
F452006	6,41	6	150	40	10	10
F452007	6,73	7	150	40	12	10
F452008	6,73	8	150	40	12	10
F452009	7,05	9	150	40	12	10
F452010	7,05	10	150	40	12	10
F452012	10,39	12	150	40	14	10

F

PIN PUNCHES IN SET

ITEM: WX4948/S6-PS

Standard DIN 6450 - DIN 7255
Set of 6 pin punches with white plastic stand.

Composition:
2x150 - 3x150 - 4x150 - 5x150 - 6x150 - 8x150 mm

Tech. Code	GR51 Euro	Pieces
F452206	35,51	6

ITEM: WX4948/S6-MC

Standard DIN 6450 - DIN 7255
Set 6 of pin punches in a practical metal box.

Composition:
3x150 - 4x150 - 5x150 - 6x150 - 8x150 - 10x150 mm

Tech. Code	GR51 Euro	Pieces
F452406	49,71	6

CONICAL PIN PUNCHES

ITEM: WX4970

Standard DIN 6450 - DIN 7255
Conical pin punches **PREMIUM QUALITY** in hardened tool steel. The specially treated head prevents chipping and complies with **DIN 7255**. Ground and polished tip, octagonal painted handle.

Tech. Code	GR51 Euro	Ø mm	L mm	⬣ mm	👁
F452803	4,35	3	120	10	10
F452804	4,35	4	120	10	10

BURINS

ITEM: WX4960

Standard DIN 7250
Burins **PREMIUM QUALITY** in chrome-vanadium steel uniformly hardened over the entire length. The specially treated head prevents chipping and complies with **DIN 7255**. Ground and polished tip, octagonal painted handle.

Tech. Code	GR51 Euro	Ø mm	L mm	⬣ mm	👁
F453003	4,77	3	100	8	10
F453004	5,51	4	120	10	10
F453005	6,68	5	150	12	10
F453006	9,22	6	150	14	10

AUTOMATIC PUNCHES

ITEM: WX4965

Automatic punches **PREMIUM QUALITY** with spring-loaded, pressure-activated striking mechanism. Adjustable percussion force via knurled ring, replaceable hardened steel tip and ergonomic bi-component plastic handle.

Tech. Code	GR51 Euro	Impact force N	Tip Ø mm	L mm
F4535050	37,42	20 - 50	3.5	95
F4535130	42,42	60 - 130	4	125
F4535250	47,06	180 - 250	6	130

ITEM: WX4965/SP

Spare tips for automatic punches WX4965

Tech. Code	GR51 Euro	Tip Ø mm	For burins Force N
F453635	6,15	3.5	20 - 50
F453640	8,53	4	60 - 130
F453660	10,28	6	180 - 250

AUTOMATIC CENTRE PUNCHES, MICRO SERIES

ITEM: F9315

Deep, fast stroke marking for characters, numbers, symbols and custom logo on metal, alloy, plastic and light cardboard materials. Automatic centre punches, Micro series stand as the smallest stroke marking system in the world, adjustable force up to 50 kg.
Spring system activated by hand pressure. Standard version supplied with tips for punch marking
Characters and numbers for MICRO serie centre punches. Font size 25/10

Tech. Code	GR60 Euro	Max. impact force N	Tip Ø mm	Length mm
F9315140	48,60	500	6	140
F9315PS	18,00	Spare tip	6	58

Indivisible package Suggested retail package - Unit price

SCRIBERS

ITEM: F4570

Nickel steel body with pocket clip, replaceable tungsten carbide tip

Tech. Code	GR60 Euro	Length mm
F4570145	10,92	145
F4570145R	5,36	Spare part

ITEM: F4590

Zinc steel monoblock body, pocket clip, tungsten carbide tip.

Tech. Code	GR60 Euro	Length mm
F4590145	6,62	145

ITEM: F4580

Special burnished hardened steel monoblock body, plastic handle.

Tech. Code	GR60 Euro	Length mm
F4580200	5,04	200

ITEM: F4565

Scribers with tungsten carbide coated removable tip and pocket clip.

Tech. Code	GR60 Euro	Length mm
F4565200	11,03	200
F4565200R	4,10	Spare part

ITEM: F4575

Top quality swiss made cardbrid scribers, steel body with pocket clip with changeable tips. Carbide tip diameter 1.5mm easily sharpened or replaced.

Tech. Code	GR60 Euro	Length mm
F4575165	48,00	165
F4575165R	22,00	Spare part

Related products

WRK CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT

Tech. Code	Size	EU size
K234607	7	S
K234608	8	M
K234609	9	L
K234610	10	XL

Product available in CAP K

GERMAN TYPE HAMMERS

ITEM: WX5110

Standard DIN 1041 - 1193 - 1195 - 5111

German type bench hammers with three component handle and safety collar in C45 steel, induction hardened, ground and stove enamelled, head with polished striking faces and chamfered edges. Additional nylon sleeve and permanent mechanical fastening with steel wedge and epoxy resin. The ergonomic and anti-slip handle is composed of an aluminium core covered in Nylon and an anti-vibration and anti-slip rubber grip.

Tech. Code	GR51 Euro	Weight g	Handle mm	
F51000300	24,38	300	300	6
F51000500	29,75	500	320	6
F51001000	40,68	1000	360	6
F51001500	54,35	1500	360	6

ITEM: WX5100

Standard DIN 1041 - 1193 - 1195 - 5111

German type bench hammers with protective safety collar in C45 steel, induction hardened, ground and stove enamelled, head with polished striking faces and chamfered edges. Additional nylon handle protection sleeve and steel wedge fastening. Shaped HICKORY hardwood handles, flexible and resistant, lacquered.

Tech. Code	GR51 Euro	Weight g	Handle mm	
F51100300	12,22	300	300	12
F51100400	13,44	400	310	12
F51100500	15,58	500	320	12
F51100600	18,31	600	330	6
F51100800	21,43	800	350	6
F51101000	23,86	1000	360	6

ITEM: WX5000

Standard DIN 1041 - 1193 - 1195 - 5111

German type bench hammers in induction hardened C45 steel, ground and stove enamelled, head with polished striking faces and chamfered edges. Nylon handle protection sleeve and steel wedge fastening. Shaped varnished ash wood handles.

Tech. Code	GR51 Euro	Weight g	Handle mm	
F51150100	7,59	100	260	12
F51150200	8,35	200	280	12
F51150300	9,32	300	300	12
F51150400	11,01	400	310	12
F51150500	12,26	500	320	12
F51150600	14,19	600	330	6
F51150800	16,38	800	350	6
F51151000	18,94	1000	360	6
F51151500	24,55	1500	380	6
F51152000	32,73	2000	400	6

HANDLES FOR HAMMERS AND MALLETS

ITEM: WX5580

Standard DIN 5111

Shaped HICKORY hardwood handles, flexible and resistant, transparent varnished, complete with nylon bush and round steel wedge. Spare parts for WX5000 - WX5100 hammers and WX5400 - WX5500 mallets.

Tech. Code	GR51 Euro	Length mm	WX5000 g	WX5100 g	WX5400 Ø mm	WX5500 g
F5390260	4,51	260	100	-	-	-
F5390280	4,67	280	200	-	-	-
F5390300	4,88	300	300	300	32	500
F5390310	5,09	310	400	400	-	-
F5390320	5,44	320	500	500	40 - 50	750
F5390330	5,92	330	600	600	-	-
F5390350	6,47	350	800	800	-	1000
F5390360	6,68	360	1000	1000	-	-
F5390380	7,48	380	1500	-	-	-
F5390400	8,01	400	2000	-	-	-

HAMMERS FOR CARPENTERS

ITEM: WX5200

Standard UNI 664.0

Hammers for carpenters in C45 steel with nail holder fitted with magnet, induction hardened and stove enamelled. Transparent varnished ash handle.

Tech. Code	GR51 Euro	Weight g	Handle mm	
F5293400	15,86	400	450	6

HANDLES FOR CARPENTER'S HAMMERS

ITEM: WX5201

Oval handles in transparent painted ash wood for carpenter's hammers WX5200.

Tech. Code	GR51 Euro	Length mm	WX5200 g	
F5294450	3,50	450	400	6

Indivisible package Suggested retail package - Unit price

STEEL MALLETS WITH NYLON HEAD 100 SH

ITEM: WX5350

Standard DIN 5136 - 1195 - 5111
Mallets with burnished 11SMnPb37 steel head, interchangeable nylon tips 100 Shore hardness and three-component handle.
The innovative mechanical double coupling fastening system of the striking tips ensures complete safety of the tool when in use. Additional nylon sleeve and permanent mechanical fastening with steel wedge and epoxy resin. The ergonomic and anti-slip handle is composed of an aluminium core covered in Nylon and an anti-vibration and anti-slip rubber grip.

Tech. Code	GR51 Euro	Ø head mm	Handle mm	Weight g	
F529532	41,14	32	300	455	6
F529540	56,60	40	300	740	6
F529550	78,46	50	320	950	6

Replacement tips code WX5400/RN

ALUMINIUM MALLETS WITH NYLON HEADS 100 SH

ITEM: WX5400

Standard DIN 5136 - 1195 - 5111
Mallets with anodized 6026 aluminium alloy head and interchangeable striking tips in 100 nylon shore. The innovative mechanical double coupling fastening system of the striking tips ensures complete safety of the tool when in use. Additional nylon handle protection sleeve and steel wedge fastening. Shaped HICKORY hardwood handle, flexible and resistant, transparent varnished.

Tech. Code	GR51 Euro	Ø head mm	Handle mm	Weight g	
F530032	26,01	32	300	230	6
F530040	37,57	40	320	375	6
F530050	52,13	50	320	490	6

ITEM: WX5400/RN

Nylon replacement tips 100 Shore, double coupling for Wodex mallets WX5350 and WX5400.

Tech. Code	GR51 Euro	Ø head mm
F530132	4,73	32
F530140	6,67	40
F530150	8,61	50

Price refers to one face

HANDLES FOR HAMMERS AND MALLETS

ITEM: WX5580

Standard DIN 5111
Shaped HICKORY hardwood handles, flexible and resistant, transparent varnished, complete with nylon bush and round steel wedge. Spare parts for WX5000 - WX5100 hammers and WX5400 - WX5500 mallets.

Tech. Code	GR51 Euro	Length mm	WX5000 g	WX5100 g	WX5400 Ø mm	WX5500 g
F5390260	4,51	260	100	-	-	-
F5390280	4,67	280	200	-	-	-
F5390300	4,88	300	300	300	32	500
F5390310	5,09	310	400	400	-	-
F5390320	5,44	320	500	500	40 - 50	750
F5390330	5,92	330	600	600	-	-
F5390350	6,47	350	800	800	-	1000
F5390360	6,68	360	1000	1000	-	-
F5390380	7,48	380	1500	-	-	-
F5390400	8,01	400	2000	-	-	-

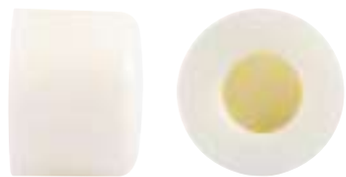
STEEL MALLETS WITH POLYURETHANE HEAD 95 SH

ITEM: WX5450

Standard UNI 7784
Mallets with painted steel head and interchangeable polyurethane striking tips hardness 95 Shore.
Shaped ash wood handle and steel wedge fastening.

Tech. Code	GR51 Euro	Ø head mm	Handle mm	Weight g	
F533122	17,60	22	260	140	6
F533128	18,97	28	280	250	6
F533135	23,00	35	305	350	6
F533142	26,50	42	310	620	6
F533150	36,04	50	345	900	6
F533160	50,88	60	380	1300	6

ITEM: WX5450/RN
Polyurethane tips 95 Shore for mallets WODEX WX5450



Tech. Code	GR51 Euro	Ø head mm
F533222	2,80	22
F533228	3,16	28
F533235	3,74	35

Tech. Code	GR51 Euro	Ø head mm
F533242	4,90	42
F533250	7,34	50
F533260	10,77	60

Price refers to one face

ITEM: WX5450/RM

Shaped ash wood handles. Spare parts for polyurethane mallets WX5450S

Tech. Code	GR51 Euro	Length mm	WX5450 Ø mm
F533322	6,70	260	22
F533328	6,70	280	28
F533335	7,39	305	35
F533342	7,39	310	42
F533350	8,18	345	50
F533360	8,59	380	60

MALLETS IN DRAWN COPPER 80 BRINELL

ITEM: WX5510

Standard DIN 5130 - 1195 - 5111
Mallets **PREMIUM QUALITY** with double hardened copper head obtained from drawn bar with 80/100 BRINELL hardness.

Three-component handle with protective nylon collar and permanent mechanical fastening with steel wedge and epoxy resin.
The ergonomic handle is composed of an aluminium core covered in Nylon and an anti-vibration grip in non-slip rubber.

Tech. Code	GR51 Euro	Weight g	Handle mm	
F53780500	60,10	500	300	6
F53780750	79,50	750	320	6
F53781000	99,85	1000	320	6
F53781500	146,92	1500	360	6

ITEM: WX5500

Standard DIN 5130 - 1195 - 5111
Shaped HICKORY hardwood handle, flexible and resistant, transparent varnished. Steel wedge fastening.

Tech. Code	GR51 Euro	Weight g	Handle mm	
F53800500	48,12	500	300	6
F53800750	65,30	750	320	6
F53801000	85,65	1000	350	6

HANDLES FOR HAMMERS AND MALLETS

ITEM: WX5580

Standard DIN 5111
Shaped HICKORY hardwood handles, flexible and resistant, transparent varnished, complete with nylon bush and round steel wedge.
Spare parts for WX5000 - WX5100 hammers and WX5400 - WX5500 mallets.

Tech. Code	GR51 Euro	Length mm	WX5000 g	WX5100 g	WX5400 Ø mm	WX5500 g
F5390260	4,51	260	100	-	-	-
F5390280	4,67	280	200	-	-	-
F5390300	4,88	300	300	300	32	500
F5390310	5,09	310	400	400	-	-
F5390320	5,44	320	500	500	40 - 50	750
F5390330	5,92	330	600	600	-	-
F5390350	6,47	350	800	800	-	1000
F5390360	6,68	360	1000	1000	-	-
F5390380	7,48	380	1500	-	-	-
F5390400	8,01	400	2000	-	-	-

Indivisible package Suggested retail package - Unit price

COPPER HAMMERS

ITEM: WX5495

Mallets with copper head and shaped ash wood handle. Handle with steel wedge fastening and locking pin.

Tech. Code	GR51 Euro	Weight g	Handle mm	
F53910200	27,30	200	230	6
F53910300	32,30	300	255	6
F53910400	37,78	400	275	6
F53910500	46,20	500	275	6
F53910600	50,49	600	275	6
F53910800	64,56	800	280	6
F53911000	76,47	1000	280	6
F53911500	106,92	1500	295	6
F53912000	131,31	2000	295	6

ITEM: WX5495/RM

Shaped ash wood handles. Spare parts for copper hammers WX5495

Tech. Code	GR51 Euro	Length mm	WX5495 g
F53920200	3,38	230	200
F53920300	3,38	255	300
F53920400	6,99	275	400 - 500 - 600
F53920800	7,62	280	800 - 1000
F53921500	8,87	295	1500 - 2000

NON-REBOUND POLYURETHANE MALLETS

ITEM: WX5600

Mallets with replaceable polyurethane heads, head partially filled with metal pellets to absorb rebound, painted steel body and handle, anti-slip rubber grip.

Tech. Code	GR51 Euro	Ø head mm	Weight g	
F539335	38,00	35	740	8
F539340	44,00	40	875	6
F539350	51,50	50	1250	5
F539360	52,34	60	1710	4

ITEM: WX5600-RED

Tech. Code	GR51 Euro	Ø head mm	Weight g	
F539735	38,00	35	740	8
F539740	47,19	40	875	6
F539750	53,22	50	1250	5
F539760	55,89	60	1710	4

ITEM: WX5610

Mallets with replaceable polyurethane heads, head partially filled with metal pellets to absorb rebound, painted steel body and ash wood handle.

Tech. Code	GR51 Euro	Ø head mm	Weight g	
F539435	32,57	35	525	8
F539440	34,26	40	630	6
F539450	42,90	50	1020	5
F539460	49,92	60	1310	4

POLYURETHANE FACES FOR NON-REBOUND MALLETS

ITEM: WX5600/RN

Polyurethane faces for Wodex WX5600 and WX5610 mallets.

Tech. Code	GR51 Euro	Ø head mm
F539535	3,50	35
F539540	3,81	40

Tech. Code	GR51 Euro	Ø head mm
F539550	6,50	50
F539560	8,50	60

Price refers to one face.

ITEM: WX5610/RM

Shaped varnished ash wood handles. Spare parts for non-rebound mallets WX5610

Tech. Code	GR51 Euro	Length mm	WX5610 Ø mm
F539635	8,16	300	35
F539640	8,16	300	40
F539650	9,02	300	50
F539660	9,02	300	60

F

MALLETS NON-REBOUND WITH NYLON HEADS 100 SH

ITEM: WX5650

Standard DIN 1041 - 1195

Non-rebound mallets **Quality Premium** with 6026 aluminium head subjected to oxidation treatment, patented sliding part in E235 EN10305-1 steel, interchangeable nylon tips, 100 Shore hardness. **The innovative sliding impact mass system** guarantees complete shock absorption when using the tool.
The ergonomic and non-slip handle is composed of an aluminium core covered in Nylon and an anti-vibration grip in non-slip rubber.

Tech. Code	GR51 Euro	Ø head mm	Handle mm	Weight g
F539840	73,14	40	300	570
F539850	90,10	50	320	990
F539860	117,66	60	360	1500

ITEM: WX5650/RN

Nylon tips for mallets 100 Shore with double safety coupling. Spare parts for non-rebound mallets Wodex WX5650

Tech. Code	GR51 Euro	Ø head mm
F539940	6,73	40
F539950	8,96	50
F539960	12,93	60

Price refers to one face.

SUPERCRAFT HAMMERS NO REBOUND

ITEM: EH 3377 SUPERCRAFT

Hammers no rebound in steel with replaceable heads in high resistance white nylon.
Version with tubular steel handle and ergonmic rubber grip.

Tech. Code	GR60 Euro	Ø head mm	Length mm	Width mm	Weight g
F541125	46,62	25	270	110	385
F541130	50,04	30	295	110	585
F541135	52,57	35	300	110	690
F541140	61,06	40	305	115	805
F541145	69,55	45	310	120	935
F541150	76,26	50	315	120	1150
F541160	122,00	60	325	145	1750
F541170	191,44	70	335	150	2250

ITEM: EH 3366 SUPERCRAFT

No-rebound hammers in steel with replaceable heads in high resistance white nylon.
Version with handle in HICKORY, flexible and resistant hard wood.

Tech. Code	GR60 Euro	Ø head mm	Length mm	Width mm	Weight g
F541320	(39,79)	20	300	105	245
F541325	39,79	25	305	105	325
F541330	42,44	30	330	110	460
F541335	46,62	35	335	110	560
F541340	53,46	40	355	115	715
F541345	61,93	45	360	120	830
F541350	67,78	50	365	120	990
F541360	116,94	60	360	145	1705
F541370	149,11	70	370	150	2215
F541380	(252,49)	80	380	168	3210

NO-REBOUND HAMMERS SUPERCRAFT

ITEM: EH 3366 SUPERCRAFT

No-rebound hammers in steel with replaceable heads in hight-resistant white nylon.
Version with handle in HICKORY, flexible and resistant hard wood.

Tech. Code	GR60 Euro	Ø head mm	Length mm	Width mm	Weight g
F5415080	301,65	80	880	200	4410
F541510007	(464,31)	100	1000	210	7050
F541510010	(505,86)	100	1000	265	9300

NYLON REPLACEMENT TIPS SUPERCRAFT

ITEM: 3508

Nylon replacement tips, high resistant for hammers and mallets Supercraft.

Tech. Code	GR60 Euro	Ø mm
F5420020	(5,07)	20
F5420025	5,07	25
F5420030	(5,07)	30
F5420035	6,83	35
F5420040	7,93	40
F5420045	8,37	45

Tech. Code	GR60 Euro	Ø mm
F5420050	9,37	50
F5420060	16,75	60
F5420070	(23,70)	70
F5420080	(32,18)	80
F5420100	51,69	100

Price refers to a single head

Indivisible package Suggested retail package - Unit price

HANDLES FOR MALLETS AND HAMMERS SUPERCRAFT

HALDER

ITEM: 3566

Handles in HICKORY, flexible and resistant hard wood, transparent varnished. Replacements for mallets and hammers Supercraft EH 3366.

Tech. Code	GR60 Euro	EH 3366 Ø mm	Length mm	Specification
F5422020	(6,83)	20 / 25	280	Each hammer
F5422030	(7,60)	30 / 35	300	Each hammer
F5422040	(9,37)	40 / 45 / 50	315	Each hammer
F5422060	(11,91)	60 / 70 / 80	300	Each hammer
F5422080	(29,64)	80	800	Each hammer
F5422100	(38,13)	100	900	Each hammer

NO REBOUND MALLETS SECURAL

HALDER

ITEM: EH 3380 SECURAL

No rebound mallets with medium hard yellow polyurethane heads. The rectangular shape of the inserts greatly facilitates machining in the presence of right angles and edges. Monoblock steel structure and ergonomic rubber handle.

Tech. Code	GR60 Euro	Head mm	Length mm	Width mm	Weight g
F542530	58,52	30 x 40	300	117	680
F542535	68,44	35 x 45	310	140	1000

ITEM: 3511

Yellow polyurethane striking tips for Secur mallets.

Tech. Code	GR60 Euro	mm mm
F542630	7,39	30 x 40
F542635	8,60	35 x 45

Price refers to each head

ITEM: EH 3379 BLACKCRAFT

Blackcraft hammers no-rebound, made of steel with polyurethane coating and ergonomic non-slip handle, suitable for processing components with very delicate surfaces.

Tech. Code	GR60 Euro	Ø head mm	Length mm	Width mm	Weight g
F542940	(72,85)	40	300	110	640
F542950	93,24	50	310	115	900
F542960	(144,05)	60	315	120	1300

POLYURETHANE COATED HAMMERS NO REBOUND

ITEM: F5355

Hammers with internal metal soul with a cartridge containing micro steel constructed with polyurethane coating. Resistant to oil, acid and weak fluids. No visible metal
Coating hardness: 95 Shore
Resistant to heat: - 24°C + 90°C

Tech. Code	GR60 Euro	Ø External mm	Ø knocker mm	Length mm	Weight g
F535542	81,00	42	32	280	500
F535552	96,00	52	40	310	800
F535560	106,00	60	48	350	1000
F535565	133,00	65	50	350	1500

ITEM: F5352

Monolithic mallets, black rubber and safety grip.

Tech. Code	GR52 Euro	Ø mm	Weight g
F535260	27,38	60	500

RUBBER HAMMERS

WODEX

ITEM: WX5690-B

Standard DIN 5128
Hammers **PREMIUM QUALITY** in non-deformable black rubber hardness 90 Shore, ash wood handle

Tech. Code	GR51 Euro	Ø head mm	Length mm	Width mm	Weight g
F543555	12,50	55	320	90	300
F543565	16,92	65	340	115	480

ITEM: WX5690-W

Standard DIN 5128
Hammers **PREMIUM QUALITY** in non-deformable white rubber hardness 70 Shore, ash wood handle.

Tech. Code	GR51 Euro	Ø head mm	Length mm	Width mm	Weight g
F543655	13,66	55	320	90	300
F543665	18,67	65	340	115	480

F

SLEDGE HAMMERS WITH TWO FLAT HEADS

WRK

ITEM: F5450

Sledge hammers DIN6475. Induction hardened steel C45 forged head painted with epoxy powder knockers gleaned and polished, shaped ash wood handle with hand-guard collar, locking with wedge and resin.

Tech. Code	GR52 Euro	Weight g
F54501000	10,49	1000
F54501500	13,04	1500

While stocks last

HAMMERS WITH SAFETY GUARD COLLAR

WODEX

ITEM: WX5695

Standard DIN 6475 - UNI 7777

Hammers with 2 flat heads and safety guard collar, induction hardened steel C45, ground and stove enamelled, head with polished striking faces and chamfered edges. Additional nylon handle protection sleeve and steel wedge fastening. Shaped HICKORY hardwood handles, flexible and resistant, lacquered.

Tech. Code	GR51 Euro	Weight g	Handle mm	📦
F54610800	18,28	800	260	6
F54611250	21,79	1250	260	6
F54612000	30,51	2000	300	6

ITEM: WX5695/RM

Shaped HICKORY hardwood handles, flexible and resistant, transparent varnished, complete with nylon bush and round steel wedge. Spare parts for WX5695 hammers.

Tech. Code	GR51 Euro	Length mm	WX5695 g
F54620800	5,40	260	800
F54621250	5,67	260	1250
F54622000	6,71	300	2000

SLEDGE HAMMERS

WODEX

ITEM: WX5700

Standard DIN 6475

Sledge hammers DIN standard, induction hardened and epoxy powder coated. Shaped ash wood handle and steel wedge fastening.

Tech. Code	GR51 Euro	Weight kg	Handle mm
F547303	45,53	3	900
F547305	64,00	5	900

DRAWN COPPER HAMMERS 80 BRINELL

WODEX

ITEM: WX5710

Standard DIN 5130

Hammers **PREMIUM QUALITY** with double hardened copper head obtained from drawn bar, hardness 80/100 BRINELL, chamfered striking faces and DIN standard eye. Steel wedge handle fastening. Shaped transparent varnished ash wood handle.

Tech. Code	GR51 Euro	Weight kg	Handle mm
F548003	272,42	3	900
F548005	420,82	5	900

ITEM: WX5720

Shaped transparent varnished ash wood handles. Spare part for steel and copper hammers, DIN standard eye.

Tech. Code	GR51 Euro	Length mm	WX5700 kg	WX5710 kg
F548503	12,25	900	3	3
F548505	12,54	910	5	5

CROWBARS FOR CARPENTERS

WODEX

ITEM: WX4940

Crowbars for carpenters **PREMIUM QUALITY** in C40 steel with hexagonal section, moulded and hardened according to the highest quality standards. With one curved end with slotted claw and one slightly inclined with closed claw. Anti-corrosion painted finish.

German type

Tech. Code	GR51 Euro	L mm	⬢ mm
F56250500	21,50	500	18
F56250600	24,00	600	18
F56250700	22,31	700	18
F56250800	24,21	800	18
F56251000	26,77	1000	18

📦 Indivisible package 📦 Suggested retail package - Unit price

CROWBARS FOR CARPENTERS

ITEM: WX4941

French type

Tech. Code	GR51 Euro	L mm	⬢ mm
F56260600	21,69	600	18

CROWBARS

ITEM: WX4942

Crowbars **PREMIUM QUALITY** in forged steel with closed angled claw for lifting very heavy parts.

Tech. Code	GR51 Euro	L mm	Weight kg
F56271000	53,34	1000	4
F56271200	75,21	1200	6
F56271500	110,10	1500	9

ITEM: WX4943

Crowbars **PREMIUM QUALITY** in forged steel with slotted angled claw for lifting very heavy parts.

Tech. Code	GR51 Euro	L mm	Weight kg
F56281000	53,34	1000	4
F56281200	78,19	1200	6
F56281500	115,29	1500	9

CROWBARS

ITEM: WX4944

Crowbars **PREMIUM QUALITY** in chrome-vanadium steel, hexagonal section with pointed and flat curved ends.
Chrome-satin finish.

Tech. Code	GR51 Euro	L mm
F5632400	27,00	400

ITEM: WX4945

Crowbars **PREMIUM QUALITY** in chrome-vanadium steel, round section with pointed ends and 90° bent nail.
Chrome-satin finish.

Tech. Code	GR51 Euro	L mm
F5634400	25,65	400

CROWBARS

ITEM: F5599

Vanadium chrome steel.

Tech. Code	GR52 Euro	Length mm
F5599500	24,75	500

Related products

WRK CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT

Tech. Code	Size	EU size
K234607	7	S
K234608	8	M
K234609	9	L
K234610	10	XL

Product available in CAP K

MECHANICAL PULLERS WITH 2 JAWS

WODEX

ITEM: WX5900

Mechanical pullers **PREMIUM QUALITY** with a wide range of uses, both internal and external, sliding jaws on ground guides, the quality of the jaws guarantees parallel traction force. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	W mm	Force max kN	Weight kg	Replacement arm F6400	Replacement screw F6497
F6400095	75,60	1	90	100	92-130	30	1.1	..B100	..040
F6400135	82,65	2	135	100	100-175	30	1.3	..B100	..040
F6400165	123,10	3	165	150	130-225	70	3.5	..B150	..080
F6400190	148,00	4	190	150	135-250	120	3.6	..B150	..080
F6400240	210,00	5	240	200	175-325	120	7.5	..B200	..120
F6400350	230,00	6	350	200	175-425	120	8.5	..B200	..120
F6400510	475,00	7	510	200	220-580	120	14	..B200	..160
F6400640	(981,00)	8	640	225	310-740	150	24	..B225	..160

ITEM: WX5902

Long series.

Tech. Code	GR51 Euro	N.	B mm	A mm	W mm	Force max kN	Weight kg	Spare arm F6402	Replacement screw F6497
F6402095	98,86	1	95	200	92 - 130	30	1.3	..B200	..040
F6402135	103,99	2	135	200	95 - 175	30	1.4	..B200	..040
F6402165	154,88	3	165	305	130 - 225	70	3.9	..B305	..080
F6402190	160,76	4	190	305	130 - 270	120	4.1	..B305	..080
F6402250	268,78	5	250	380	175 - 340	120	8.5	..B380	..120
F6402350	289,04	6	350	380	180 - 425	120	10	..B380	..120
F6402510	(542,37)	7	510	380	220 - 580	120	16	..B380	..160
F6402640	(1182,25)	8	640	350	310 - 740	150	26	..B350	..160

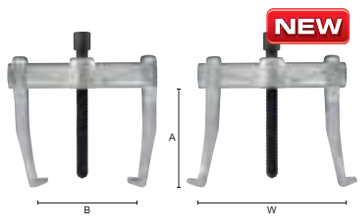
ITEM: WX5905

Mechanical pullers **PREMIUM QUALITY** with a vast range of uses, internal and external, sliding jaws with fast clamping via the upper nut. The quality of the jaws guarantees parallel traction force. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	W mm	Force max kN	Weight kg	Replacement arm F6404	Replacement screw F6497
F6404060	71,15	1	60	50	55 - 80	10	0.3	..B050	..010
F6404080	92,15	2	80	80	105 - 130	20	1	..B080	..030
F6404115	101,88	3	115	80	105 - 160	20	1.1	..B080	..030
F6404155	188,21	4	155	160	160 - 220	100	2.4	..B160	..090
F6404195	237,26	5	195	220	175 - 270	100	4.4	..B220	..090
F6404250	409,18	6	250	260	225 - 335	200	10.5	..B260	..110
F6404390	(543,12)	7	390	260	280 - 465	200	13	..B260	..110
F6404600	(838,59)	8	600	260	295 - 675	200	20	..B260	..110

ITEM: WX5907

Mechanical pullers **PREMIUM QUALITY** with a vast range of uses, both for internal and external, sliding jaws on ground guides, the quality of the jaws guarantees parrellel traction forces. Zinc-chromed finished.



Tech. Code	GR51 Euro	N.	B mm	A mm	W mm	Max force kN	Weight Kg	Replacement arm F6406	Replacement screw F6497
F6406060	33,00	0	60	70	90	10	0,3	..B070	..025
F6406080	38,20	1	80	95	130	20	0,8	..B095	..038
F6406120	51,50	2	120	95	170	25	0,9	..B095	..038
F6406160	135,00	3	160	150	210	70	2,5	..B150	..105
F6406200	154,14	4	200	150	250	120	2,7	..B150	..105
F6406250	(242,23)	5	250	200	320	120	7	..B200	..107

ITEM: WX5910

Mechanical pullers **PREMIUM QUALITY** with 2 height adjustable jaws. In traction it engages automatically with the parts to be extracted. Jaws with extension holes and grooved ends for possible attachment to a screw. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	Force max kN	Weight kg	Replacement arm F6410	Replacement screw F6497
F6410110	53,75	1	110	105	10	0.4	..B105	..020
F6410175	79,64	2	175	185	40	1.3	..B185	..050

ITEM: WX5920

Mechanical extractors with 2 arms, light scissor model. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	C mm	D mm	Weight kg	Replacement screw F6497
F6420055	78,83	1	55	90	90	95	0.3	..020
F6420070	110,00	2	70	125	120	125	0.8	..050
F6420080	133,00	3	80	125	160	125	1	..055

Indivisible package Suggested retail package - Unit price

MECHANICAL PULLERS WITH 2 JAWS

ITEM: WX5930

Mechanical extractors **PREMIUM QUALITY** with a wide range of uses, both internal and external, ideal for the separation of matched bearings. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	Weight kg	Replacement arm F6425	Replacement screw F6497
F6425095	237,96	1	95	175	2.4	..B175	..070

MECHANICAL PULLERS WITH 3 JAWS

ITEM: WX5950

Mechanical pullers **PREMIUM QUALITY** with a vast range of uses, both internal and external, sliding jaws on ground guides. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	W mm	Force max kN	Weight kg	Replacement arm F6400	Replacement screw F6497
F6450095	138,07	1	95	100	100 - 125	30	1.3	..B100	..040
F6450135	143,51	2	135	100	110 - 170	30	1.7	..B100	..040
F6450165	219,15	3	165	150	140 - 220	70	4.7	..B150	..080

ITEM: WX5960

Mechanical pullers **PREMIUM QUALITY** with 3 self-centring jaws, external model with forged jaws and extension holes. Fitted with simultaneous jaw closing device. This series of extractors is designed to be used even with only 2 jaws (apart from sizes N.5 and N.6).

Tech. Code	GR51 Euro	N.	B mm	A mm	Force max kN	Weight kg	Replacement arm F6460	Replacement screw F6497
F6460110	152,40	1	110	105	10	1.0	..B105	..020
F6460175	194,03	2	175	185	40	2.5	..B185	..050
F6460240	284,59	3	240	225	70	6.5	..B225	..060
F6460350	(563,95)	4	350	410	100	14.5	..B410	..100
F6460480	(942,17)	5	480	500	170	31.5	..B500	..110
F6460680	(1535,39)	6	680	600	300	55.5	..B600	..150

ITEM: WX5970

Mechanical extractors **PREMIUM QUALITY** . In traction it engages automatically with the parts to be extracted. Jaws with extension holes. Grooved ends for possible attachment to a screw. This series of extractors is designed to be used even with only 2 jaws. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	Force max kN	Weight kg	Replacement arm F6410	Replacement screw F6497
F6470110	78,09	1	110	105	10	0.7	..B105	..020
F6470175	119,88	2	175	185	40	1.9	..B185	..050
F6470240	160,18	3	240	225	70	3.5	..B225	..060
F6470290	200,00	4	290	225	70	3.9	..B225	..060

ITEM: WX5973

Mechanical pullers **PREMIUM QUALITY** reversible for internal or external use, in traction it automatically engages with the parts to be extracted. Grooved ends for possible attachment to a screw. This series of extractors is designed to be used even with only 2 jaws. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	Force max kN	Weight kg	Replacement arm F6473	Replacement screw F6497
F6473080	69,40	1	80	65	10	0.6	..B065	..020
F6473150	100,61	2	150	85	40	1.5	..B085	..050

ITEM: WX5975

Mechanical extractors **PREMIUM QUALITY** reversible for indoors and outdoors, in traction it is automatically fixed to the parts to be extracted. Grooved ends for possible attachment to a screw. This series of extractors is designed to be used even with only 2 jaws. Chrome-satin finish.

Tech. Code	GR51 Euro	N.	B mm	A mm	Force max kN	Weight kg	Spare arm F6475	Replacement screw F6497
F6475130	78,38	1	130	85	10	0.6	..B085	..020
F6475185	115,42	2	185	135	40	1.2	..B135	..050
F6475240	(168,40)	3	240	180	70	3.8	..B180	..060
F6475285	(187,54)	4	285	180	80	4.1	..B180	..060

EXTRACTOR-SEPARATORS FOR BEARINGS

ITEM: WX5985

Extractor-separators for bearings with 2 threaded arms, to be used with separators WX5986 of the same size for removing bearings, bushings and toothed wheels positioned at the stop.

Tech. Code	GR51 Euro	N.	B mm	A mm	Force max kN	F Inc.	Weight kg	Replacement arm F6498	Replacement screw F6497
F6498110	70,02	1	47 - 110	115	20	3/8"	1	..8B115	..035
F6498140	82,00	2	47 - 140	115	20	3/8"	1.1	..B115	..035
F6498165	161,50	3	62 - 195	175	100	5/8"	3	..B175	..090

ITEM: WX5986

Separators to be used with the threaded arm extractors WX5985 of the same size for the extraction of bearings, bushings and toothed wheels positioned at the stop.

Tech. Code	GR51 Euro	N.	A mm	B mm	R mm	E mm	Weight kg	Replacement screw F6499
F6499060	78,83	1	4 - 60	60	3/8"	1	0.7	..V130
F6499081	101,49	2	6 - 80	80	3/8"	2.5	1.3	..V157
F6499110	142,00	3	10 - 110	110	5/8"	2.5	2.7	..V210

HYDRAULIC EXTRACTORS

ITEM: WX5965

Hydraulic extractors **PREMIUM QUALITY** with 3 self-centring jaws, external model with forged jaws and extension holes. Fitted with simultaneous jaw closing device. This series of extractors is designed to be used even with only 2 jaws.
Hydraulic extractors allow high thrust forces with minimal operator effort.

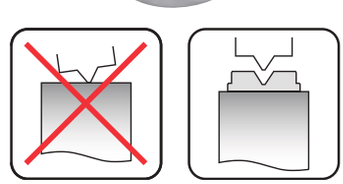
Features:
F646528008 - WX5965/1-80 Activation of hydraulic pressure by crank
F646528012 - WX5965/1-120 Activation of hydraulic pressure by means of a 17 mm wrench

Tech. Code	GR51 Euro	N.	B mm	A mm	Force max kN	Weight kg	Replacement arm F6465	Repl. hydraulic device F6465
F646528008	509,64	1-80 Kn	280	270	80	7.5	..B270	..HS080
F646528012	(629,18)	1-120 kN	280	270	120	7.5	..B270	..HS120

PROTECTIONS FOR PULLERS

ITEM: WX5988

Hardened protectors with centring hole to protect the end of the screw of the puller.



Tech. Code	GR51 Euro	N.	For pullers Force max kN	Weight kg
F649510	9,19	1	100	0.1
F649520	10,70	2	200	0.15
F649530	(14,47)	3	300	0.2

Related products

LED TORCHES

Tech. Code	Light output Lm	Beam distance m	Dimensions a x b x L mm
N708101	45 - 70 - 240	10 - 20 - 24	52 x 30 x 164

Product available in CAP N

Indivisible package Suggested retail package - Unit price

SCREW CLAMPS STANDARD SERIES

ITEM: F6611

High quality galvanized steel, burnished screw with tommy bar and tilting pressure plate.

Tech. Code	GR52 Euro	Opening mm	Depth mm	Rod diameter mm	Weight kg
F6611160	20,39	160	80	16 x 7.5	0.5
F6611200	29,92	200	120	19.5 x 9.5	0.9
F6611250	33,18	250	120	25 x 12	1.2
F6611300	40,78	300	120	25 x 12	1.5
F6611400	47,95	400	120	25 x 12	1.9
F6611500	51,65	500	120	25 x 12	2.1
F6611600	55,47	600	120	25 x 12	2.3

SCREW CLAMPS REINFORCED SERIES

ITEM: F6615

Screw clamps made of galvanized steel, clamping force up to 11,000 N with a tightening torque of 40 Nm. Pressure plate with swiveling insert in hardened steel.

Tech. Code	GR52 Euro	Opening mm	Depth mm	Rod section mm	Weight kg
F66150300	76,21	300	140	30 x 15	2,9
F66150500	86,71	500	140	30 x 15	3,7
F66150600	92,22	600	140	30 x 15	3,8
F66150800	99,64	800	140	30 x 15	4,7

While stocks last

SCREW CLAMPS

ITEM: GZ-K

Screw clamps made of high-quality galvanized steel, clamping force up to 6,000 N. The optimized profile shape guarantees greater clamping force, greater stability and safety. Replaceable pressure plate.

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod section mm	Weight kg
F66130200	49,68	200	100	22 x 8,5	0,93
F66130250	59,85	250	120	24,5 x 9,5	1,31
F66130300	74,64	300	140	28 x 11	1,89
F66130400	85,94	400	120	28 x 11	2,00
F66130500	92,08	500	120	28 x 11	2,20
F66130600	96,96	600	120	28 x 11	2,42
F66130800	(116,78)	800	120	28 x 11	2,76
F66131000	(130,85)	1000	120	28 x 11	3,18

ITEM: CLASSIX GSM

Screw clamps made of galvanized steel, clamping force up to 11,000 N with a tightening torque of 40 Nm. Pressure plate with swiveling insert in hardened steel.

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod section mm	Weight kg
F66160250	110,08	250	140	30 x 15	2,58
F66160300	112,73	300	140	30 x 15	3,00
F66160400	126,96	400	140	30 x 15	3,17
F66160500	141,33	500	140	30 x 15	3,40
F66160600	148,71	600	140	30 x 15	3,80

ITEM: SGM

High quality galvanized steel, clamping force up to 12,000 N at a tightening torque of 40 Nm, long service life due to the tilting pressure plate with hardened steel insert. Pressure plate with swivelling insert made of sintered steel.

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod diameter mm	Weight kg
F66170250	134,21	250	140	34 x 13	2.5
F66170300	137,41	300	140	34 x 13	3.0
F66170400	154,86	400	140	34 x 13	3.1
F66170500	172,29	500	140	34 x 13	3.4
F66170600	181,36	600	140	34 x 13	3.8
F66170800	198,66	800	140	34 x 13	4.4
F66171000	223,64	1000	140	34 x 13	4.9
F66171250	(259,06)	1250	140	34 x 13	5.8
F66171500	(293,25)	1500	140	34 x 13	6.6

ITEM: STBM

High performance screw clamps for heavy metal fabrication. High quality galvanized steel, clamping force up to 22,000 N at a tightening torque of 70 Nm, long service life due to the tilting pressure plate with hardened steel insert.
Screw with 19 mm hexagonal nut.

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod diameter mm	Weight kg
F66190300	257,54	300	175	40 x 20	5.6
F66190400	271,20	400	175	40 x 20	6.1
F66190500	282,79	500	175	40 x 20	6.6
F66190600	292,70	600	175	40 x 20	7.2
F66190800	(311,94)	800	175	40 x 20	8.3
F66191000	(337,34)	1000	175	40 x 20	9.3
F66191250	(412,53)	1250	175	40 x 20	10.7
F66191500	(464,00)	1500	175	40 x 20	12.2

SCREW CLAMPS WITH DEEP THROAT SGTM

ITEM: SGTM

High quality galvanized steel, clamping force up to 8,500 N at a tightening torque of 40 Nm, long service life due to the tilting pressure plate with hardened steel insert.
Throat depth up to 200 mm

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod diameter mm	Weight kg
F6621300	157,79	300	200	30 x 15	3.4
F6621600	206,90	600	200	30 x 15	4.3

SCREW CLAMPS

ITEM: CLASSIX GSH

Screw lever clamps in galvanized steel, clamping force up to 7,500 N. Release lever with anti-skid mechanism.

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod section mm	Weight kg
F66250160	(67,66)	160	80	16 x 7,5	0,64
F66250200	77,70	200	100	19,5 x 9,5	1,11
F66250250	89,43	250	120	22 x 10,5	1,44
F66250300	106,31	300	140	25 x 12	2,27
F66250400	(111,61)	400	120	25 x 12	2,41
F66250500	119,85	500	120	25 x 12	2,61
F66250600	(124,30)	600	120	25 x 12	2,84

ITEM: GH

High quality galvanized steel, movable jaw with tilting pressure plate and quick clamping lever at the end of the stroke, the lever is vertical.
Clamping force up to 8,500 N

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod diameter mm	Weight kg
F6600120	75,34	120	60	15 x 6	0.49
F6600160	82,45	160	80	17.5 x 6.8	0.64
F6600200	94,73	200	100	22 x 8.5	1.11
F6600200S	(85,65)	200	80	17,5 x 6,8	0,68
F6600250	109,10	250	120	24.5 x 9.5	1.44
F6600300	129,60	300	140	28 x 11	2.22
F6600300S	113,98	300	120	24,5 x 9,5	1,51
F6600400	136,16	400	120	28 x 11	2.41
F6600400S	(119,70)	400	120	24,5 x 9,5	1,67
F6600500	146,06	500	120	28 x 11	2.61
F6600600	151,65	600	120	28 x 11	2.78
F6600800	168,94	800	120	28 x 11	3.14
F66001000	179,55	1000	120	28 x 11	3.59

ITEM: KLIKLAMP KLI

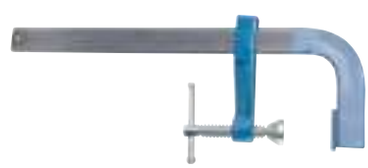
Screw lever clamps practical and light with rod and slide in magnesium, ergonomic clamping lever in polyamide reinforced with glass fibers, robust notched mechanism, quick to lock and extremely simple to adjust. Clamping force up to 1,200 N.

Tech. Code	GR60 Euro	Opening mm	Depth mm	Rod section mm	Weight kg
F66280120	33,90	120	80	20 x 5	0,26
F66280160	35,01	160	80	20 x 5	0,29
F66280200	35,85	200	80	20 x 5	0,32
F66280250	37,53	250	80	20 x 5	0,35
F66280300	38,65	300	80	20 x 5	0,38
F66280400	41,58	400	80	20 x 5	0,45

SCREW CLAMPS ROLLED STEEL

ITEM: F6633

Rolled steel body, forged steel movable jaw, screw with tommy bar and swivel pressure plate.



Tech. Code	GR52 Euro	Opening mm	Depth mm	Rod diameter mm	Weight kg
F6633200	16,71	200	80	25 x 6	0.8
F6633250	17,05	250	80	25 x 6	0.9
F6633300	21,75	300	90	30 x 6	1.2
F6633400	22,75	400	100	30 x 6	1.7
F6633500	29,76	500	100	35 x 7	1.9
F6633600	30,33	600	100	35 x 7	2.1
F6633800	32,96	800	100	35 x 7	2.5
F66331000	43,84	1000	110	40 x 7	3.5

CAST IRON SCREW CLAMPS

ITEM: F6644

High resistant painted cast iron body, burnished screw with move stud and rocker tip.

Tech. Code	GR52 Euro	Opening mm	Depth mm
F664450	9,00	50	30
F664475	18,01	75	52
F6644100	22,53	100	60
F6644150	37,53	150	65
F6644200	54,04	200	83

Indivisible package Suggested retail package - Unit price

STEEL SCREW CLAMPS

ITEM: F6645

Tempered, polished steel body, galvanized screw and sliding rod, articulated probe tip.

Tech. Code	GR52 Euro	Opening mm	Depth mm
F664550	27,69	50	28
F664575	33,07	75	38
F6645100	41,78	100	45

LEVER CLAMPS EZS

ITEM: EZS

The extremely sophisticated technology makes it possible to clamp and spread workpieces up to a 2,000 N clamping force with just one hand, the upper section can be quickly converted from clamping to spreading. Ergonomic two-component handle.

Tech. Code	GR60 Euro	Opening mm	Spacing mm	Depth mm	Rod diameter mm	Weight kg
F6650150	36,28	150	170 - 360	170 - 360	19 x 6	0,7
F6650300	40,45	300	170 - 510	170 - 510	19 x 6	0.8
F6650450	43,53	450	170 - 660	170 - 660	19 x 6	0.9
F6650600	48,84	600	170 - 810	170 - 810	19 x 6	1.0
F6650900	55,24	900	170 - 1110	170 - 1110	19 x 6	1.2

SPRING CLAMPS

ITEM: XM

Spring clamps in nickel-plated steel with PVC coated tips and handles, high performance springs for stable and resistant clamping.

Tech. Code	GR60 Euro	Opening mm	Depth mm	Clamping force max N	Weight g	
F666203	4,04	25	32	100	7	48
F666205	6,00	50	57	120	17	24

SUCTION CUPS FOR TRANSPORT

ITEM: 2-14-053

NEW

Suction cups for lifting and transporting sheets with smooth glass, plastic and metal surfaces.

Tech. Code	GR60 Euro	Diameter mm	Capacity kg	
F669040	23,50	120	40	2

ITEM: 2-14-054

Suction cups for lifting and transporting sheets with smooth glass, plastic and metal surfaces.

NEW

Tech. Code	GR60 Euro	Diameter mm	Capacity kg	
F669580	39,50	2 x 120	80	2

TOOL BOXES

ITEM: WX9000/1S

Tool boxes in epoxy powder coated sheet steel, folding tubular handle, designed to be locked with a padlock.

One compartment version

Tech. Code	GR51 Euro	Dimensions mm	Weight kg
F7001S	31,79	450 x 210 x 100	1.5

Indivisible package Suggested retail package - Unit price

TOOL BOXES

ITEM: WX9000/3S

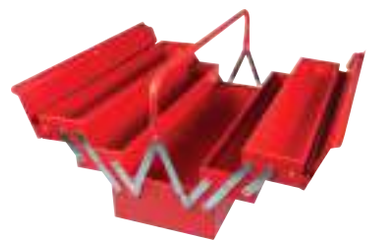
3 compartment version

Tech. Code	GR51 Euro	Dimensions mm	Weight kg
F7002S	42,00	450 x 210 x 150	3

ITEM: WX9000/5S - WX9000/5L

5 compartment version

Tech. Code	GR51 Euro	Dimensions mm	Weight kg
F7003S	59,50	450 x 210 x 200	4.5
F7003L	65,00	550 x 210 x 200	5.8



SMALL PARTS CASES

ITEM: WX9010/1S

Small parts cases in epoxy coated sheet steel with practical carrying handle, lid with internal sponge to prevent small parts from falling out of the special containers, double lever closure and additional central spring closure against accidental opening. The cases are fitted with removable plastic containers for the optimal division of the contents.

Tech. Code	GR51 Euro	Dimensions mm	Containers 50x50 mm pcs	Containers 50x100 mm pcs	Containers 100x100 mm pcs	Containers 100x150 mm pcs	Weight kg
F70221S	38,40	320 x 220 x 70	16	4	-	-	1.5

ITEM: WX9010/1M

Tech. Code	GR51 Euro	Dimensions mm	Containers 50x50 mm pcs	Containers 50x100 mm pcs	Containers 100x100 mm pcs	Containers 100x150 mm pcs	Weight kg
F70231M	50,56	370x270x70	5	7	4	-	2.4

ITEM: WX9010/1B

Tech. Code	GR51 Euro	Dimensions mm	Containers 50x50 mm pcs	Containers 50x100 mm pcs	Containers 100x100 mm pcs	Containers 100x150 mm pcs	Weight kg
F70241B	62,96	420x320x70	12	6	3	2	3

ITEM: WX9010/2B

Tech. Code	GR51 Euro	Dimensions mm	Containers 50x50 mm pcs	Containers 50x100 mm pcs	Containers 100x100 mm pcs	Containers 100x150 mm pcs	Weight kg
F70252B	94,45	420x320x140	12	30	3	2	5.8

Indivisible package Suggested retail package - Unit price

WHEELED SERVICE TOOL CASES

ITEM: WX9200

Wheeled service tool cases **PREMIUM QUALITY** in injection-moulded polypropylene, reinforced with an aluminium profile for greater impact resistance. Extremely light compact cases suitable for technicians that need to transport hand tools, power tools or electronic instruments.
Features:
- 2 locks with keys
- lid support stay
- telescopic handle
- 2 wheels with ball bearings
- bottom compartment with adjustable dividers
- rubber coated ergonomic handle
- document compartment
- 2 panels with elastic tool holders
- 2 drawers for small parts

Tech. Code	GR58 Euro	A mm	B mm	C mm	D mm	E mm	Weight kg
F705000	220,37	460	380	200	100	100	3

WHEELED SERVICE TOOL CASES - 62 TOOLS

ITEM: WX9210/TS62

NEW

Wheeled service tool cases **PREMIUM QUALITY** in injection-moulded polypropylene, reinforced with an aluminium profile for greater impact resistance. Extremely light compact cases suitable for technicians that need to transport hand tools, power tools or electronic instruments.
Features:
- 2 locks with keys
- lid support stay
- telescopic handle
- 2 wheels with ball bearings
- bottom compartment with adjustable dividers
- rubber coated ergonomic handle
- document compartment
- 2 panels with elastic tool holders
- 2 drawers for small parts

WHEELED SERVICE TOOL CASE containing a set of 62 tools for maintenance work.

Composition:

WX9200	Wheeled service tool case
WX4070	Stubby screwdrivers for Phillips screws PH1 - PH2
WX4020	Stubby screwdrivers for slotted screws 5.5x1.0 - 6.5x1.2 mm
WX3050	Universal combination pliers 160 mm
WX5100	Hammer 400g with wooden handle
WX4000	Screwdrivers for slotted screws 2.5x75 - 3x75 - 3.5x100 - 4x100 - 5.5x100 - 6.5x125 - 8x175 mm
WX4050	Screwdrivers for Philips screws PH1x80 - PH2x100 - PH3x150 mm
WX3290	Adjustable pliers 250 mm
WX3600	Diagonal cutting nippers 125 mm
WX4650	Cutter with snap-off blades 9 mm
WX3350	Self-locking pliers, adjustable up to 240 mm
WX4770	Electrician's scissors 155 mm
WX4190	Voltage tester 105-250 Volt 3-70 mm
WX2580/S9	Hex key set, long, 9-piece
WX4590/31	Insert bit set 1/4"

Tech. Code	GR58 Euro	A mm	B mm	C mm	D mm	E mm	Weight kg
F705262	420,00	460	380	200	100	100	3

WHEELED SERVICE TOOL CASES TSA APPROVED

TSA

ITEM: WX9250

Wheeled service tool cases **PREMIUM QUALITY** with external shell made of impact resistant roto-moulded high density polyethylene. The double wall construction of the shell ensures maximum resistance to impact, extremes of temperature and corrosive chemical substances. Cases suitable for technicians that need to transport hand tools, power tools or electronic tools. The **TSA approved locks** allow the cases to be inspected by authorized airport personnel.
Features:
- 2 TSA approved locks
- 2 lid support stays
- telescopic handle
- 2 wheels with ball bearings
- bottom compartment with adjustable dividers
- rubber coated ergonomic handle
- document pocket
- 2 panels with elastic tool holders
- 2 drawers for small parts

Tech. Code	GR58 Euro	A mm	B mm	C mm	D mm	E mm	Weight kg
F710000	450,00	555	440	250	90	160	7.5

WHEELED SERVICE TOOL CASES TSA - 51 TOOLS

WODEX

TSA

ITEM: WX9260/TS51

WHEELED SERVICE TOOL CASES TSA containing a set of 51 tools for maintenance work.

Composition:

WX9250	Wheeled service tool case TSA
WX1060	Combination wrenches 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 22 mm
WX4190	Voltage tester VDE 3.0x70 mm
WX4050	Screwdrivers for Philips screws PH0x60 - PH1x80 - PH2x100 mm
WX4000	Screwdrivers for slotted screws 2.5x75 - 3x75 - 3.5x100 - 4x100 - 5.5x100 - 6.5x125 - 8x175 mm
WX4770	Electricians scissors 155 mm
WX4680	Cutter with snap-off blades 18 mm
WX4622	Stubby screwdriver in set of 7 bits
WX3300	Adjustable pliers for pipes 250 mm
WX5100	Hammer 300 g with wooden handle
WX5400	Mallet with nylon head Ø 32 mm
WX2602/S9	Set of 9 long hex keys
WX3050	Universal combination pliers 160 mm
WX3600	Diagonal cutting nippers 125 mm
WX3350	Self-locking adjustable pliers 240 mm

Tech. Code	GR58 Euro	A mm	B mm	C mm	D mm	E mm	Weight kg
F710251	779,10	555	440	250	90	160	12.4

WHEELED SERVICE TOOL CASES TSA APPROVED

WODEX

TSA

ITEM: WX9300

Wheeled service tool cases **PREMIUM QUALITY** in high thickness polyethylene. Large capacity containers suitable for technicians that need to transport hand tools, power tools or electronic instruments. The **TSA** approved locks allow the cases to be inspected by authorized airport personnel.

Features:

- Aluminium profile
- 2 lid supports stays
- 2 TSA approved locks
- 2 wheels with bearings
- Telescopic handle
- Superior ergonomic handle
- Ergonomic side handle
- Document pocket
- 2 panels with elastic tool holders
- 3 small drawers for small parts

Tech. Code	GR58 Euro	A mm	B mm	C mm	D mm	E mm	Weight kg
F715500	610,00	511	446	363	149	214	8.5

The products are available in chapter F

WHEELED SERVICE TOOL CASES TSA APPROVED WITH KIT FOR MECHANICS - 51 TOOLS

WODEX

TSA

ITEM: WX9310/TS51

SERVICE TOOL TROLLEY TSA APPROVED Containing a set of 51 tools for general mechanics.

Composition:

WX9300	Wheeled service tool case TSA
WX1060	Combination wrenches (2 per size) 7 - 8 - 10 - 13 - 17 - 19 mm
WX1060	Combination wrenches 9 - 11 - 12 - 14 - 15 mm
WX2600/S9	Set of 9 long hex keys
WX3050	Universal combination pliers 180 mm
WX3200	Half round nose pliers 200 mm
WX3300	Adjustable pliers for pipes 250 mm
WX3600	Diagonal cutting nippers 125 mm
WX4770	Electricians scissors 155 mm
WX6610	LED PEN-LIGHT torch 150 lm
WX6110	Pocket tape measure Profi-Line 5 m
WX4650	Cutter with snap-off blades 9 mm
WX4190	Voltage tester VDE 3.0x70 mm
WX4000	Screwdrivers for slotted screws 3x75 - 4x100 - 5.5x100 - 6.5x125 8x175 mm
WX4050	Screwdrivers for Philips screws PH0x60 - PH1x80 - PH2x100 - PH3x150 mm
WX4622	Stubby screwdriver in set of 7 bits

Tech. Code	GR58 Euro	A mm	B mm	C mm	D mm	E mm	Weight kg
F715751	903,18	511	446	363	149	214	12.5

Indivisible package Suggested retail package - Unit price

WHEELED SERVICE TOOL CASES TSA WITH SET FOR ELECTRICIANS - 45 TOOLS

WODEX

TSA

ITEM: WX9320/TS45

WHEELED SERVICE TOOL CASE TSA FOR ELECTRICIANS Containing a set of 45 tools for electricians.

Composition:

WX9300	Wheeled service tool case TSA
WX1060	Combination wrenches (2 per size) 7 - 8 - 10 - 13 - 17 - 19 mm
WX1060	Combination wrenches 9 - 11 - 12 - 14 - 15 mm
WX2602/S9	Set of 9 coloured hex keys
WX3060	Universal pliers VDE 180 mm
WX3210	Bent nose pliers 1/2t VDE 200 mm
WX3430	Stripping pliers VDE 160 mm
WX3610	Diagonal cutting nippers VDE 125 mm
WX4770	Electricians scissors 155 mm
WX6600	LED torch 150 lm
WX6110	Pocket tape measure Profi-Line 5 m
WX4650	Cutter with snap-off blades 9 mm
WX4190	Voltage tester VDE 3.0x70 mm
WX4030	VDE slotted screwdrivers 2.5x75 - 3.0x100 - 4.0x100 - 5.5x125 mm
WX4080	VDE screwdrivers for Philips screws PH0x60 - PH1x80 - PH2x100 mm
WX4130	VDE Screwdrivers for Pozidriv screws PZ0x60 - PZ1x80 - PZ2x100 mm

Tech. Code	GR58 Euro	A mm	B mm	C mm	D mm	E mm	Weight kg
F715945	920,00	511	446	363	149	214	12.5

TOOL BOX ROLLING WORKSHOP

STANLEY

NEW

ITEM: 1-70-326

Tool box rolling workshop consisting of a large chest, a fully separable central organizer with 12 compartments, an upper case with two organizers in the lid and a removable tool tray. Steel side coupling hinges with slot for padlock, telescopic handle and Ø 175 mm wheels.

Tech. Code	GR60 Euro	Dimension mm	Load capacity kg	
F717901	95,60	475 x 284 x 630	30	2

ITEM: STST83319-1

Set of 3-piece modular consisting of a large tool tray, an intermediate tool box with removable tray and a low case box for storing hand tools. Telescopic handle and rubber coated wheels Ø 175 mm. Quick and easy connection and disconnection of the 3 modules thanks to the Auto-Lock front coupling hinges.

NEW

Tech. Code	GR60 Euro	Dimension mm	Load capacity kg
F718001	180,70	500 × 400 × 740	40

WHEELED SERVICE TOOL CHESTS

STANLEY

NEW

ITEM: FMST1-73601

Wheeled service tool chest FatMax® Mid-Size in polypropylene with 175 mm rubber coated wheels, pull-out metal handle, lid with metal locks and "V" groove for cutting boards, removable tool tray, vertical housing for removable hand tools, rubber gasket for protection against dust and humidity.

Tech. Code	GR60 Euro	Dimension mm	Capacity L	Weight kg
F718201	219,70	748 x 516 x 430	90	2,6

F

WHEELED SERVICE TOOL CASES

ITEM: 4932464078

Packout trolley is part of the PACKOUT modular storage system. Constructed with resistant polymer that increases the impact resistance on the construction site. Capacity up to 113 kg. Extensible handle. 9 " wheels, rain protection system, IP65 debris, reinforced metal corners and clasp, internal compartments for storing objects, Ready for the Bluetooth® ONE-KEY™ TICK™ tracking system.

Tech. Code	GR64 Euro	Dimension mm	Load capacity kg
F71851	(297,90)	560 x 410 x 480	113

TOOL BOXES

ITEM: 4932464079

Tool boxes Packout is part of the PACKOUT™ modular storage system. Constructed with resistant polymer that increases the impact resistance on the construction site. Rain protection system, IP65 debris. Reinforced metal corners and closure. Internal compartments for storing objects. Predisposition for the Bluetooth® ONE-KEY™ TICK™ tracking system.

Tech. Code	GR64 Euro	Dimension mm	Load capacity kg
F71861	(195,90)	560 x 410 x 290	45

ITEM: 4932464080

Tech. Code	GR64 Euro	Dimension mm	Load capacity kg
F71871	(169,20)	560 x 410 x 170	34

SMALL PARTS TOOLBOX

ITEM: 4932464082

PACKOUT™ organizer is part of the PACKOUT™ modular storage system. Constructed with a resistant polymer that increases the impact resistance on the construction site. Rain protection system, IP65 debris. The interior has 10 removable compartments. The compartments are sealed so that the contents do not disperse during transport.

Tech. Code	GR64 Euro	Dimension mm	Scomparti removibili
F71881	(104,80)	560 x 380 x 120	10

ITEM: 4932464083

Tech. Code	GR64 Euro	Dimension mm	Removable compartments
F71891	(65,70)	250 x 380 x 120	5

TOOL HOLDER BAGS

ITEM: 4932464084

PACKOUT™ compact tool bags is part of the PACKOUT™ modular storage system. Constructed with heavy duty 1680 ballistic nylon. Shock-resistant molded base. Reinforcement shell in metal. Comfortable and durable carrying handle.

Tech. Code	GR64 Euro	Dimension mm	Pocket tool holder
F71901	(138,20)	250 x 280 x 320	28

TOOL BOXES

STANLEY

NEW

ITEM: 1-79-216 1-79-217 1-79-218

Tool boxes with one-hand opening and closing system, sturdy structure, handle covered in soft rubber (F728019 and F728024), removable tray for small tools, Organizers in the lid for storing small parts.

Tech. Code	GR60 Euro	Dimension mm	Weight kg	
F728016	27,00	394 x 220 x 162	0,90	6
F728019	40,80	486 x 266 x 236	0,98	6
F728024	55,40	595 x 281 x 260	1,10	6

Indivisible package Suggested retail package - Unit price

TOOL BOXES

STANLEY

NEW

ITEM: FMST1-75792 FMST1-75791

Tool boxes PRO FATMAX® with aluminum handle and metal hinges, trays of different sizes for small parts, sliding tray, slots for padlocking and transparent windows in the lid for complete visibility of the contents. IP54 water and dust protection.

Tech. Code	GR60 Euro	Dimension mm	Weight kg	
F728220	70,20	515 x 300 x 275	0,9	3
F728226	78,70	660 x 300 x 275	1,0	3

ITEM: 1-95-616

Metal-Plastic Fatmax® tool boxes with metal and polypropylene structure, lid with "V" groove for cutting boards, removable tool tray, vertical tool holder housings, metal hinges with padlock slot, ergonomic bi-material handle.

NEW

Tech. Code	GR60 Euro	Dimension mm	Weight kg	
F728423	85,80	584 x 293 x 295	2,1	3

COMPARTMENT ORGANIZERS

STANLEY

NEW

ITEM: FMST81077-1

Portable organizers with 12 tilting trays and locking mechanism placed near the handle. Maximum accessibility and visibility of the contents thanks to the vertical position of the box, the additional hinges allow the attachment of two organizers back to back. Load capacity up to 7 kg.

Tech. Code	GR60 Euro	Dimension mm	Weight kg	
F728812	66,10	450 x 356 x 108	1	4

PLASTIC TOOL BOXES

ITEM: EKO 13

Polypropylene, removable internal tray for small objects, on-top organizer, retractable handle. Colours available: Black and Red

Tech. Code	GR60 Euro	Dimension mm	Weight kg
F7290320	12,00	320 x 160 x 130	0,497

ITEM: EKO 19

Polypropylene, removable internal tray for small objects, on-top organizer, retractable handle. Colours available: Black and Red

Tech. Code	GR60 Euro	Dimension mm	Weight kg
F7292480	35,00	480 x 255 x 230h	1,509

F

PLASTIC TOOL BOXES

ITEM: CLUB CLASSIC 1210V

Polypropylene, internal removable tray for small objects, retractable handle, colour black and yellow.

Tech. Code	GR60 Euro	Dimension mm	Weight kg
F7300289	19,00	289 x 190 x 185h	0.681

ITEM: CLUB CLASSIC 1622

Polypropylene, internal removable tray for small objects, retractable handle, colour black and yellow.

Tech. Code	GR60 Euro	Dimension mm	Weight kg
F7310395	34,00	395 x 255 x 237h	1,427

ITEM: CLUB CLASSIC 2033 V

Polypropylene, internal removable tray for small objects, retractable handle, colour black and yellow.

Tech. Code	GR60 Euro	Dimension mm	Weight kg
F7320505	44,00	505 x 255 x 270h	2,056

ITEM: 18

Tool box with removable cover, organizer on top and inside tray.

Tech. Code	GR60 Euro	Dimension mm	Weight kg
F7321440	42,00	445 x 265 x 250h	2.056

Important Note: Tools shown in picture are intended purely for demonstration purposes

TOOL HOLDER BELT BAGS

ITEM: F7230

WORK LINE tool belt bags adjustable with foldable bib inside. Inner area with padded pockets for storing tools.

Tech. Code	GR60 Euro	Dimension mm	Weight g
F723000	48,00	320 x 140 x 180	600

Supplied without tools, demonstration only, image of possible preparation.

TOOL HOLDER BAGS

ITEM: F7232

WORK LINE tool bag with padded pockets for storing tools and adjustable shoulder strap. Impact resistant bottom.

Tech. Code	GR60 Euro	Dimension mm	Weight g
F723200	65,00	410 x 230 x 300	1300

Supplied without tools, demonstration image of possible preparation.

Indivisible package Suggested retail package - Unit price

TOOL BAGS WITH REMOVABLE PANELS

ITEM: F7234

WORK LINE tool bag with 2 removable tool holders, 2 small boxes for small parts and side pockets. Adjustable shoulder strap and handle

Tech. Code	GR60 Euro	Dimension mm	Weight g
F723400	(73,00)	230 x 110 x 320	1500

Supplied without tools. Demonstratio only, image of possible prepartion.

TOOL HOLDER TROLLEYS AND 15" NOTEBOOK

ITEM: F7236

WORK LINE trolley for tools and notebooks 15" , with removable shoulders that transform the trolley into a practical back pack.

Standard equipment:
- Front pocket for documents and accessories.
- Panel with tool pockets
- Panel with padded pocket for stroring the laptop
- Telescopic handle and wheels

Tech. Code	GR60 Euro	Dimension mm	Weight g
F723600	(178,00)	360 x 200 x 480	4250

Supplied without tools. Demonstration image, of possible preparation.

PADLOCKS

ITEM: F8000

One-piece ground brass. Carbonitrurated and nickel-plated steel shackle with double-lock shackle.
Standard supply: 2 keys.

Tech. Code	GR60 Euro	A mm	C mm	D mm	L mm	S mm
F800020	8,65	20	9.6	3.5	11.3	10.4
F800025	8,65	25	13.5	3.9	13.1	12.0
F800030	10,27	30	16.2	4.7	16.9	13.8
F800040	11,91	40	22.1	6.3	22.4	13.8
F800050	16,40	50	27.9	7.9	28.7	17.0
F800060	23,05	60	33.5	9.5	34.7	17.2
F800070	32,80	70	39.0	11.0	36.0	18.0

ITEM: F8005

One-piece ground brass. Carbonitrurated and nickel-plated long steel shackle.
Double-lock shackle.
Standard supply: 2 keys.

Tech. Code	GR60 Euro	A mm	C mm	D mm	L mm	S mm
F800530	11,90	30	16.2	4.7	24	13.8
F800540	14,06	40	22.1	6.3	40	13.8
F800550	21,84	50	27.9	7.9	80	17.0

FOLDING WORKBENCHES

STANLEY

NEW

ITEM: STST83492-1

Workbenches ESSENTIAL with folding top in polypropylene and metal legs with non-slip feet, load capacity of 320 kg, carrying handle, tray for small parts obtained in the support surface. The clips placed on the long side of the top allow you to hook more benches to lengthen the support surface.

Tech. Code	GR60 Euro	Dimension opened mm	Dimension closed mm	Weight kg
F750001	162,50	800 x 610 x 736	800 x 305 x 160	6,7

FOLDING WORKBENCHES

STANLEY

NEW

ITEM: FMST1-75672

Folding workbenches FATMAX® EXPRESS™ sturdy and very stable, with polypropylene top and metal legs with non-slip feet, load capacity of 450 kg, practical and fast opening/closing system using the sliding side handle.

Tech. Code	GR60 Euro	Dimension opened mm	Dimension closed mm	Weight kg
F750501	228,80	850 x 600 x 800	850 x 600 x 105	12

FOLDING SAWHORSES

STANLEY

NEW

ITEM: STST1-70355

Pair of folding sawhorses JUNIOR in polypropylene with non-slip rubber feet, light and space-saving, they are a valid support for many jobs. Base plate with grooves for cutting planks.

Tech. Code	GR60 Euro	Width mm	Height mm	Capacity kg	
F750802	64,60	581	818	362 (*)	4

(*) Weight uniformly distributed on 2 trestles
The displayed price refers to a pair of trestels

ITEM: 1-92-980

Pair of folding sawhorses FATMAX® with high quality metal and polypropylene structure, separately adjustable legs at different heights to ensure maximum stability even in the presence of uneven surfaces, adjustment mechanism with telescopic movement, feet and support base with non-slip rubber inserts.

NEW

Tech. Code	GR60 Euro	Width mm	Height mm	Capacity kg
F751002	219,70	615	810 - 1010	1150 (*)

(*) Weight uniformly distributed on 2 trestles
The displayed price refers to a pair of trestles

ADJUSTABLE TAP WRENCHES IN ZINC ALLOY

WODEX

NEW

ITEM: WX5848

Standard DIN 1814
Adjustable tap wrenches with hardened jaws, zinc alloy body and handles zinc-chromed steel.

Tech. Code	GR51 Euro	Size N.	Square mm	For taps M	L mm
F819800	8,60	0	2 - 5	1 - 8	130
F819810	10,40	1	2 - 6,3	1 - 10	180
F819815	10,90	1-1/2	2 - 8	1 - 12	180
F819820	17,90	2	3 - 9	4 - 12	280
F819830	28,70	3	4,9 - 12	5 - 20	380
F819840	45,90	4	5,5 - 16	11 - 27	500
F819850	72,50	5	7 - 20	13 - 32	700
F819860	111,00	6	11 - 24	19 - 39	1000

ADJUSTABLE TAP WRENCHES IN STEEL

WODEX

ITEM: WX5850

Standard DIN 1814
Adjustable tap wrenches **Premium Quality** with high strength nitrided jaws. Stove-enamelled forged steel body and handles in zinc-chromed steel.

Tech. Code	GR51 Euro	Size N.	Square mm	For taps M	L mm
F82000	22,37	0	2 - 5	1 - 8	130
F82001	24,30	1	2 - 6.3	1 - 10	180
F82002	35,01	2	3 - 9	4 - 12	280
F82003	49,57	3	4.9 - 12	5 - 20	380
F82004	64,76	4	5.5 - 16	11 - 27	490
F82005	121,00	5	7 - 20	13 - 32	630
F82006	153,52	6	11 - 24	19 - 39	820
F82007	155,45	7	16 - 39	27 - 64	820

Indivisible package Suggested retail package - Unit price

T-HANDLE TAP WRENCHES

ITEM: WX5860/S

T-handle Tap wrenches reversible for right and left use or with lock. Hardened 2 jaw pliers for clamping with square section shank tools and sliding T-handle, very useful for threading in difficult to access points.

Features:
Short version

Tech. Code	GR51 Euro	Size N.	Square mm	For taps M	L mm
F82101	13,10	1	2,5 - 5,5	3 - 10	85
F82102	16,20	2	4,5 - 7	5 - 12	110
F82103	108,00	3	9 - 12	13 - 20	115

Size N.3 Reinforced execution Ø 45 mm, 22 mm hexagon and 310 mm long sliding handle

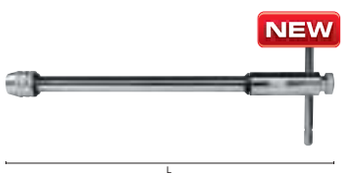
ITEM: WX5861/S

T-handle tap wrenches reversible ratchet for right-hand, left-hand or locking use. Hardened 2-jaw pliers for clamping tools with square section tang and sliding T-handle, very useful for threading in difficult to access points.
Premium Quality Made in Germany execution for heavy machining.
Features:
Short version

Tech. Code	GR51 Euro	Size N.	Square mm	For taps M	L mm
F82111	26,18	1	2,5 - 5,5	3 - 10	85
F82112	32,17	2	4,5 - 7	5 - 12	100

ITEM: WX5860/L

Features:
Long version for deep threading in difficult to access points



Tech. Code	GR51 Euro	Size N.	Square mm	For taps M	L mm
F82141	21,60	1	2,5 - 5,5	3 - 10	250
F82142	26,10	2	4,5 - 7	5 - 12	300

T-HANDLE TAP WRENCHES

ITEM: F8245

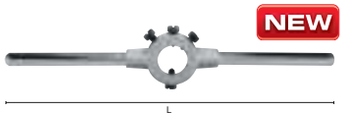
Zinc- chromed hardened steel.

Tech. Code	GR52 Euro	Width N.	Width mm	Square M	Length mm
F82450C	8,26	0	0,5 - 2	1 - 2	60
F82451C	16,14	1	2,2 - 4	2 - 4	80
F82452C	18,15	2	3 - 5	5 - 7	90
F82453C	21,21	3	5 - 7	8 - 9	100
F82454C	32,29	4	6 - 8	10 - 12	100
F82451M	18,15	1M	2,2 - 4	2 - 4	150
F82452M	21,21	2M	3 - 5	5 - 7	150
F82453M	23,23	3M	5 - 7	8 - 9	150
F82454M	33,33	4M	6 - 8	10 - 12	150
F82451L	25,25	1L	2,2 - 4	2 - 4	200
F82452L	28,27	2L	3 - 5	5 - 7	200
F82453L	31,30	3L	5 - 7	8 - 9	200
F82454L	43,44	4L	6 - 8	10 - 12	200

DIE STOCKS IN ZINC ALLOY

ITEM: WX5868

Standard DIN 225
Die stocks usable with EN 22568 standard dies. Zinc alloy body and zinc-chromed steel handles. Complete with screws for adjusting and fixing the die.



Tech. Code	GR51 Euro	For dies Ø x H mm	L mm
F8258160	5,90	16 x 5	160
F8258200A	6,20	20 x 5	180
F8258200B	6,20	20 x 7	180
F8258250	7,70	25 x 9	210
F8258300	10,80	30 x 11	260
F8258380A	17,20	38 x 10	315

Tech. Code	GR51 Euro	For dies Ø x H mm	L mm
F8258380B	17,20	38 x 14	315
F8258450A	23,50	45 x 14	450
F8258450B	23,50	45 x 18	450
F8258550A	29,30	55 x 16	500
F8258550B	29,30	55 x 22	500

DIE STOCKS IN STEEL

ITEM: WX5870

Standard DIN 225

Die stocks **Premium Quality** usable with dies in accordance with EN 22568. Stove-enamelled forged steel body and handles in zinc-chromed steel. Complete with adjusting screws and fasteners.

Tech. Code	GR51 Euro	For dies Ø x H mm	L mm
F8260160	12,74	16 x 5	200
F8260162	12,74	16.2 x 6.5	200
F8260200A	15,79	20 x 5	205
F8260200B	15,79	20 x 7	205
F8260206	15,79	20.6 x 7	205
F8260250	17,73	25 x 9	225
F8260254	17,55	25.4 x 9.5	225
F8260300	20,65	30 x 11	280
F8260317	20,65	31.7 x 11	280
F8260380A	24,00	38 x 10	335
F8260380B	24,00	38 x 14	335
F8260381	24,00	38.1 x 12.7	335

Tech. Code	GR51 Euro	For dies Ø x H mm	L mm
F8260450A	34,00	45 x 14	405
F8260450B	34,00	45 x 18	405
F8260508	36,94	50.8 x 15.9	500
F8260550A	38,86	55 x 16	500
F8260550B	38,86	55 x 22	500
F8260635	53,64	63.5 x 17	625
F8260650A	53,64	65 x 18	625
F8260650B	61,24	65 x 25	625
F8260750A	103,10	75 x 20	705
F8260750B	103,10	75 x 30	705
F8260762	103,10	76.2 x 23	705
F8260900	263,34	90 x 36	900

CONICAL EXTRACTORS FOR SCREWS AND STUDS

ITEM: WX5880

Conical chrome-vanadium steel extractors for the removal of broken screws and studs that cannot be gripped. The WX5880 extractors can only be used on right-hand threaded screws and require a pre-hole for inserting the tool.

Tech. Code	GR51 Euro	N.	For screws M	Pre-hole Ø mm	Ø A mm	Ø B mm	L mm
F827501	3,07	1	3 - 6	2.5	1.7	3.6	50
F827502	3,07	2	6 - 8	3.0	2.2	5.0	57
F827503	3,50	3	8 - 11	4.5	3.3	6.5	64
F827504	4,35	4	11 - 14	6.0	4.7	8.8	71

Tech. Code	GR51 Euro	N.	For screws M	Pre-hole Ø mm	Ø A mm	Ø B mm	L mm
F827505	5,41	5	14 - 18	8.0	6.3	11.0	78
F827506	7,63	6	18 - 24	11.0	9.5	15.0	85
F827507	13,36	7	24 - 33	13.5	12.7	19.0	92
F827508	20,11	8	33 - 45	18.5	17.5	24.0	100

CONICAL EXTRACTORS FOR SCREWS AND STUDS IN SET

ITEM: WX5880/S5 - WX5880/S6 - WX5880/S8

Composition:

F827605 - WX5880/S5 Extractors N. 1 - 2 - 3 - 4 - 5
F827606 - WX5880/S6 Extractors N. 1 - 2 - 3 - 4 - 5 - 6
F827608 - WX5880/S8 Extractors N. 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

Tech. Code	GR51 Euro	Pieces
F827605	22,26	5
F827606	29,68	6
F827608	64,13	8

THREAD REPAIR FILES

ITEM: F8230

Used to restore worn internal and external, right or left hand threads.

Tech. Code	GR60 Euro	Threads	Description
F8230M	72,45	Metric	Pitches 0,8 - 1 - 1,25 - 1,5 - 1,75 - 2 - 2,5 - 3 mm
F8230W	74,55	Whitworth	10" - 11" - 12" - 14" - 16" - 18" - 20" - 24"
F8230G	72,45	GAS - BSP	Ø 1/8" - 1/4" - 3/8" - 1/2" - 5/8" - 3/4" - 7/8" - 1"
F8230U	72,45	UNC - UNF	11" - 12" - 13" - 14" - 16" - 18" - 20" - 24"

RIVETING TOOLS FOR BLIND RIVETS

ITEM: DX5

Hand riveters.

Tech. Code	GR60 Euro	Rivets - aluminium mm	Rivets - steel - copper - stainless steel mm	Weight g
F8298DX5	32,20	2,4 - 3 - 3,2 - 4 - 4,8	3 - 3,2 - 4	540

ITEM: CDX5

Hand riveter DX5 with an assortment of aluminium rivets in a metal box.

Tech. Code	GR60 Euro	Rivets - aluminium mm	Rivets - steel - copper - stainless steel mm	Weight g
F8299CDX5	67,00	2,4 - 3 - 3,2 - 4 - 4,8	3 - 3,2 - 4	2900

Indivisible package Suggested retail package - Unit price

RIVETING TOOLS FOR BLIND RIVETS

ITEM: SUPER 5

Professional hand riveter for blind rivets.

Tech. Code	GR60 Euro	Rivets - aluminium mm	Rivets - steel - copper - stainless steel mm	Weight g
F8309SUPER5	53,00	2,4 - 3 - 3,2 - 4 - 4,8	2,4 - 3 - 3,2 - 4 - 4,8	600

ITEM: DX65

Long handle riveter with sheared nail collection.

Tech. Code	GR60 Euro	Rivets - aluminium mm	Rivets - steel - copper - stainless steel mm	Weight g
F8319DX65	75,00	3 - 3,2 - 4 - 4,8 - 6 - 6,4	3 - 3,2 - 4 - 4,8 - 6 - 6,4	1750

ITEM: K39

Painted aluminum structure, painted steel lever, plastic handgrips. Supplied complete with four nozzles.

Tech. Code	GR60 Euro	Rivets ø mm	Weight g
F8300R/1	55,20	2,4 ÷ 4,8	550

ITEM: K14

Highly professional model. Bronze body, sheet steel levers, plastic handgrips. Supplied complete with four nozzles.

Tech. Code	GR60 Euro	Rivets ø mm	Weight g
F8310SETR/1	90,17	2,4 ÷ 4,8	1000

ITEM: K25

Manual riveters with long levers with nail recovery, cast aluminum head with steel plunger, sheet steel levers, plastic handles. Supplied complete with five nozzles.

Tech. Code	GR60 Euro	Rivets ø mm	Weight g
F8320R/2	124,48	2,4 ÷ 7,8 *	1500

*** 7,8 ø only made from aluminium**

BATTERY RIVETERS

ITEM: M12 BPRT-201X

M12 BPRT-201X cordless riveting machine applies up to 325 4.8 mm stainless steel rivets with a single charge of a 2.0 Ah battery. Suitable for the application of rivets in aluminum, stainless steel and copper, with a diameter of Ø 2.4 mm up to a solid piece of Ø 4.8 mm. Stroke length of 20 mm. Clamps accessible without the use of tools. Possibility of storing the nozzles in the practical compartment placed on the tool.
Works with all Milwaukee® M12 ™ batteries.

Tech. Code		F834012
GR64	Euro	637,00
Battery capacity	Ah	2
Blade stroke	mm	20,32
Ø jaw max.	mm	2,4 - 4,8
Traction force	N	9000
Weight with battery	kg	2,1
Battery charging time	min	40
Battery type		Li-ion
Voltage	V	12

Supplied with:
- 1 battery 12V da 2,0 Ah
- 1 battery charger
- carrying case

PNEUMATIC RIVETERS FOR BLIND RIVETS

ITEM: RAC 83/95

Cast aluminum body, steel operating parts.
Supplied complete with four nozzles.

Tech. Code	GR60 Euro	Rivets ø mm	Weight g
F8350RP/1	299,20	2,4 ÷ 4,8 *	1500

*** 4,8 ø only made from aluminium**

PNEUMATIC RIVETERS FOR BLIND RIVETS

ITEM: RAC 83 AX

Model with rivet retention and sliced nail recovery.
Cast aluminum body, steel operating parts, supplied complete with four nozzles.

Tech. Code	GR60 Euro	Rivets ø mm	Weight g
F8360RP/2	360,63	2,4 ÷ 4,8 *	1500

*** 4,8 ø in aluminium only**

OLEOPNEUMATIC RIVETERS FOR RIVETS

ITEM: RAC 182

- Lightweight and ergonomic hydropneumatic riveting tools for standard blind rivets, Farbolt high performance rivets and similar by mounting the accessory kit code 74000090 (optional) or for high performance X/S Trifar rivets by mounting the nozzle code 71345652 (optional) .

Features:
- Safety system in the recovery of the cut nail
- Connection for compressed air on both sides
- Maximum traction force 10500 N
- 20.5 mm stroke
- Weighted acoustic power (A) 87 dBA

Power supply: Lubricated compressed air - Recommended pressure 6 BAR - Tube ø int. 8 mm

Tech. Code	GR60 Euro	Standard rivets ø mm	High performance rivets ø mm	Weight kg
F838100	797,62	2,4 - 6,0 (*)	3,2 - 4,8	1,7

(*) ø 6,0 in aluminium only

ITEM: RAC 171

Hydro-pneumatic riveting tools for standard blind rivets, Farbolt high performance rivets and similar or for high performance X/S Trifar rivets by fitting the nozzel code 71345652 (optional).

Features:
- Rivet retention system and recovery of the cut nail
- Maximum traction force 12273 N
- Stroke 25.5 mm
- Weighted acoustic power (A) 80 dBA

Power supply: Lubricated compressed air - Recommended pressure 6 BAR - tube - ø int. 8 mm

Tech. Code	GR60 Euro	Standard rivets ø mm	High performance rivets ø mm	Weight kg
F838500	1070,09	4,8 - 7,8 (*)	4,8 - 6,4	2,75

(*) ø 4,8 included in aluminum - ø 7,8 only in aluminum

ALUMINUM ALLOY RIVETS

ITEM: F8387

Standard EN ISO15977
Aluminum alloy rivets in self-service packaging.
Aluminum bushing AlMg3,5 - EN AW 5154A.
Nail in white galvanized steel Chrome **III.**

Tech. Code	GR60 Euro	Ø mm	Length mm	Ø head mm	Ø Chiodo mm	Pieces per pack
F83873008	2,89	3	8	6	1,7	100
F83873010	3,17	3	10	6	1,7	100
F83874010	3,75	4	10	8	2,2	100
F83874012	4,13	4	12	8	2,2	100
F83874016	4,79	4	16	8	2,2	100
F83874810	4,34	4,8	10	10	2,6	100
F83874812	4,72	4,8	12	10	2,6	100
F83874816	6,33	4,8	16	10	2,6	100

The displayed price refers to a 100 piece pack.

HAND RIVETERS FOR THREADED INSERTS

ITEM: NX55

Hand riveter for threaded inserts complete with tie rods and heads.

Tech. Code	GR60 Euro	Threaded inserts	Weight g
F8398NX55	102,00	M3 - M4 - M5 - M6	910

Spare tie rods code F8398TM_

Indivisible package Suggested retail package - Unit price

HAND RIVETERS FOR THREADED INSERTS

ITEM: CNX55

Hand riveter for threaded inserts NX55 with an assortment of inserts in a metal box.

Tech. Code	GR60 Euro	Threaded inserts	Weight g
F8399CNX55	188,50	M3 - M4 - M5 - M6	3500

Spare tie rods code F8398TM_

ITEM: NX65

Long handled riveter for threaded inserts complete with tie rods and heads.

Tech. Code	GR60 Euro	Threaded inserts	Weight g
F8409CNX65	248,00	M3 - M4 - M5 - M6 - M8 - M10	4500

Spare tie rods code F8409TM_

HAND RIVETERS FOR THREADED INSERTS

ITEM: KJ21

Painted sheet steel body, plastic handgrips.
Plastic case containing KJ21 riveter with tie rods and heads M3 ÷ M8.

Tech. Code	GR60 Euro	Insert capacity
F8400R/4	212,82	M3 ÷ M8

Spare tie rods code F8400TM_

OLEO-PNEUMATIC RIVETERS FOR THREADED INSERTS

ITEM: EXTRA KJ60

Plastic shock- proof body, steel operating parts.
Plastic case containing riveter KJ60 with nozzles and heads M3 ÷ M8.

Tech. Code	GR60 Euro	Inserts capacity	Weight g
F8450ROP/2	1824,58	M3 ÷ M8	2200

The weight refers to each single machine.

ITEM: EXTRA KJ45 S

Body in shock-resistant plastic and steel operating parts.
Plastic case containing riveter KJ45 with rods and heads M4 ÷ M12.

Tech. Code	GR60 Euro	Inserts capacity	Weight g
F8460ROP/3	2607,91	M4 ÷ M12	2860

The weight refers to each single machine

SPARE TIE ROD FOR KJ60

ITEM: F8455

Spare tie rod for KJ60

Tech. Code	GR60 Euro	Dimension
F8455M3	30,96	M3
F8455M4	30,96	M4
F8455M5	30,96	M5

Tech. Code	GR60 Euro	Dimension
F8455M6	30,96	M6
F8455M8	30,96	M8

SPARE TIE ROD FOR KJ45 S

ITEM: F8465

Spare tie rod for KJ45 S

Tech. Code	GR60 Euro	Dimension
F8465M4	5,40	M4
F8465M5	5,40	M5
F8465M6	5,40	M6

Tech. Code	GR60 Euro	Dimension
F8465M8	11,70	M8
F8465M10	5,40	M10
F8465M12	14,22	M12

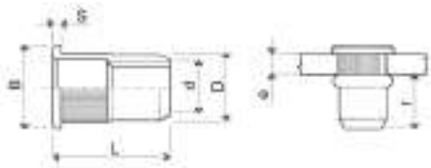
THREADED INSERTS WITH ROUND HEAD IN GALVANIZED STEEL

ITEM: F8480

Threaded inserts short version with round head in C43 steel (EN 1.0303) / C10C (EN1.0214)

Surface treatment:
White zinc plating with a minimum thickness of 7Micron (Fe / Zn 7 IV).

M3 size without knurling on the stem.



Tech. Code	GR60 Euro	M	L mm	Hole mm	e mm	D mm	B mm	S mm	r mm	Pieces per pack
F848003	11,18	3	9	5	0,3 ÷ 1,8	4,9	7	0,8	6,0	200
F848004	11,79	4	11	6	0,3 ÷ 1,8	5,9	9	1,0	7,5	200
F848005	13,46	5	13	7	0,5 ÷ 3,0	6,9	10	1,2	9,5	200
F848006	16,77	6	14,5	9	0,5 ÷ 3,0	8,9	12	1,5	10,0	200
F848008	22,65	8	17,5	11	0,8 ÷ 3,5	10,9	15	1,5	11,4	200
F848010	30,92	10	21	13	1,0 ÷ 3,5	12,9	17	1,7	14,5	200

The displayed price refers to the 200 piece pack.

MANUAL STAPLERS SERIES 113

ITEM: LT-33

Manual staplers for staples Series 113 made with wire with a rectangular section 0.50x0.75 mm, internal width 9.5 mm and length from 6 to 14 mm.

Tech. Code	GR60 Euro	Model	Staples Serie / mm	Magazine capacity	Weight kg	L x W x H mm
F850133	53,00	LT-33	113/06 ÷ 113/14	170	0,83	188 x 31 x 154

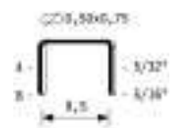
ITEM: G-19

Manual hammer staplers for 113 Series staples made with wire with rectangular section 0.50x0.75 mm, internal width 9.5 mm and length 6 and 8 mm.

Tech. Code	GR60 Euro	Model	Staples Serie / mm	Magazine capacity	Weight kg	L x W x H mm
F850319	51,50	G-19	113/06 ÷ 113/08	157	0,41	274 x 32 x 53

ITEM: 113

Metallic staples Series 113 Zinc finish.



Tech. Code	GR60 Euro	Model	Length mm	Width Int. mm	Cross Section mm	Pack quantity
F850506	7,30	113/06	6	9,5	0,50 x 0,75	5000

The displayed price is for one pack.

MANUAL STAPLERS SERIES T50

ITEM: G-54A

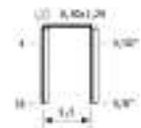
Manual hammer staplers **Top Quality** for T50 Series staples made with wire with rectangular section 0.50x1.25 mm, internal width 9.5 mm and length from 8 to 14 mm.

Tech. Code	GR60 Euro	Model	Staples Serie / mm	Magazine capacity	Weight kg	L x W x H mm
F851054A	95,50	G-54A	T50/08 ÷ T50/14	168	1,13	305 x 40 x 56

METTALLIC STAPLES SERIES T50

ITEM: T50/10 ZINCATE

Mettallic staples series T50 Zinc finish Also available in stainless steel and aluminum.



Tech. Code	GR60 Euro	Model	Length mm	Width Int. mm	Cross Section mm	Pack quantity
F851508	(205,30)	T50/08	8	9,5	0,50 x 1,25	140.000
F851510	195,70	T50/10	10	9,5	0,50 x 1,25	120.000
F851512	(178,20)	T50/12	12	9,5	0,50 x 1,25	100.000
F851514	(175,20)	T50/14	14	9,5	0,50 x 1,25	90.000

The displayed price is for one pack

PNEUMATIC STAPLERS SERIES 80

ITEM: 80

Pneumatic staplers **Top Quality** Made in Italy for Series 80 staples made with wire with rectangular section 0,65x0,95 mm, internal width 11,4 mm and length from 4 to 16 mm. Specification of models:
1/4 "BSP compressed air inlet connection.

Specification of models:

80.16 Standard stapler
80.16-NF Stapler with thin nose
80.16-S Stapler with contact safety
80.16-SL Stapler with 50 mm long nose
80.16-SLS Stapler with long nose and safe in contact
80.16-V Automatic stapler

Tech. Code	GR60 Euro	Model	Staples Serie / mm	Magazine capacity	Pressure Bar	Consumption Litries/Stroke	Weight kg	L x W x H mm
F852016	317,50	80.16	80/04 ÷ 80/16	145	4 ÷ 6	0,13	0,9	223 x 43 x 148
F852016NF	(430,00)	80.16-NF	80/04 ÷ 80/16	145	4 ÷ 6	0,13	0,9	223 x 43 x 148
F852016S	(406,20)	80.16-S	80/04 ÷ 80/16	145	4 ÷ 6	0,13	0,9	223 x 43 x 153
F852016SL	(399,60)	80.16-SL	80/04 ÷ 80/16	145	4 ÷ 6	0,18	1,0	223 x 43 x 198
F852016SLS	(469,70)	80.16-SLS	80/04 ÷ 80/16	145	4 ÷ 6	0,18	1,0	223 x 43 x 205
F852016V	(742,20)	80.16-V	80/04 ÷ 80/16	145	4 ÷ 6	0,13	0,9	223 x 43 x 151

For other models consult the manufacturer's catalog.

ITEM: 80 STANOX

Matallic staples Series 80 Stanox finish (Liquor finish). Also available with other finishes, painted, stainless steel and aluminum.

Tech. Code	GR60 Euro	Model	Length mm	Width Int. mm	Cross Section mm	Pack quantity
F852504	(250,10)	80/04	4	11,4	0,65 x 0,95	300.000
F852506	200,00	80/06	6	11,4	0,65 x 0,95	240.000
F852508	170,40	80/08	8	11,4	0,65 x 0,95	180.000
F852510	192,80	80/10	10	11,4	0,65 x 0,95	180.000
F852512	141,50	80/12	12	11,4	0,65 x 0,95	120.000
F852514	156,20	80/14	14	11,4	0,65 x 0,95	120.000
F852516	180,50	80/16	16	11,4	0,65 x 0,95	120.000

Thee displayed price refers to a package.

PNEUMATIC STAPLERS SERIES 92

ITEM: 92

Pneumatic staplers **Top Quality** Made in Italy for 92 Series staples made with wire with rectangular section 1.00x1.25 mm, internal width 6.5 mm and length from 15 to 40 mm.
1/4 "BSP compressed air inlet connection.

Specification of models:

92.38-B Bottom loading stapler
92.38-BDA Stapler with bottom loading and depth adjustment

Tech. Code	GR60 Euro	Model	Staples Serie / mm	Magazine capacity	Pressure Bar	Consumption Litres/Stroke	Weight kg	L x W x H mm
F854038B	(601,90)	92.38-B	92/15 ÷ 92/40	105	5 ÷ 7,5	0,54	1,5	242 x 58 x 245
F854038BDA	(676,10)	92.38-BDA	92/15 ÷ 92/40	105	5 ÷ 7,5	0,54	1,5	242 x 58 x 245

For other models, consult the manufacturer's catalog.

ITEM: 92 BRIGHT GOLD

Metallic staples 92 Series Bright Gold finish. Also available with other finishes, in stainless steel or aluminum.

Tech. Code	GR60 Euro	Model	Length mm	Width Int mm	Cross Section mm	Pack quantity
F854515	(228,60)	92/15	15	6,5	1,00 x 1,25	80.000
F854518	(194,00)	92/18	18	6,5	1,00 x 1,25	60.000
F854520	(209,50)	92/20	20	6,5	1,00 x 1,25	60.000
F854522	(185,50)	92/22	22	6,5	1,00 x 1,25	50.000
F854525	(204,40)	92/25	25	6,5	1,00 x 1,25	50.000
F854528	(178,60)	92/28	28	6,5	1,00 x 1,25	40.000
F854530	(187,30)	92/30	30	6,5	1,00 x 1,25	40.000
F854532	(196,10)	92/32	32	6,5	1,00 x 1,25	40.000
F854535	(210,40)	92/35	35	6,5	1,00 x 1,25	40.000
F854538	(169,70)	92/38	38	6,5	1,00 x 1,25	30.000
F854540	(176,80)	92/40	40	6,5	1,00 x 1,25	30.000

The displayed price refers to a package.

PNEUMATIC STAPLERS WP SERIES

ITEM: WP.738

Pneumatic staplers Top Quality Made in Italy for WP Series staples made with 1.40x1.60 mm rectangular section wire, 23.6 mm internal width and 15 to 38 mm length.

1/4 "BSP compressed air inlet connection.

Tech. Code	GR60 Euro	Model	Staples Serie / mm	Magazine capacity	Pressure Bar	Consumption Litres/Stroke	Weight kg	L x W x H mm
F8570738	(897,00)	WP.738	WP/15 ÷ WP/38	150	5 ÷ 7,5	0,75	2	345 x 77 x 243

ITEM: WP BRIGHT GOLD

Metallic staples WP Series with Bright Gold finish. Also available with other finishes, in stainless steel and aluminum

Tech. Code	GR60 Euro	Model	Length mm	Width Int. mm	Cross Section mm	Pack quantity
F857515	(124,70)	WP/15	15	23,6	1,40 x 1,60	20.000
F857518	(68,90)	WP/18	18	23,6	1,40 x 1,60	10.000
F857520	(73,10)	WP/20	20	23,6	1,40 x 1,60	10.000
F857522	(77,20)	WP/22	22	23,6	1,40 x 1,60	10.000
F857525	(82,60)	WP/25	25	23,6	1,40 x 1,60	10.000
F857528	(88,70)	WP/28	28	23,6	1,40 x 1,60	10.000
F857530	93,10	WP/30	30	23,6	1,40 x 1,60	10.000
F857532	(97,20)	WP/32	32	23,6	1,40 x 1,60	10.000
F857535	(103,60)	WP/35	35	23,6	1,40 x 1,60	10.000
F857538	(109,00)	WP/38	38	23,6	1,40 x 1,60	10.000

The displayed price refers to a package.

MANUAL STAPLERS 35-M SERIES

ITEM: 35.18-M

Manual staplers Made in Italy for Series 35 staples suitable for closing cardboard boxes, made with wire with rectangular section 0.80x2.20 mm, external width 35 mm and length from 15 to 18 mm.

Tech. Code	GR60 Euro	Model	Staples Serie / mm	Magazine capacity	Weight kg	L x W x H mm
F857918M	(324,10)	35.18-M	35/15 ÷ 35/18	100	2,25	380 x 115 x 290

PNEUMATIC STAPLERS SERIES 35

ITEM: 35

Pneumatic staplers Top Quality Made in Italy for Series 35 staples suitable for closing cardboard boxes, made with wire with rectangular section 0.80x2.20 mm, external width 35 mm and length from 15 to 22 mm.
1/4 "BSP compressed air inlet connection.

Specification of models:

35.18 Standard stapler for staples length 15 ÷ 18 mm
35.22 Standard stapler for staples length 18 ÷ 22 mm

Tech. Code	GR60 Euro	Model	Staples Series / mm	Magazine capacity	Pressure Bar	Consumption Litres/Stroke	Weight kg	L x W x H mm
F858018	621,80	35.18	35/15 ÷ 35/18	100	5 ÷ 7	1,32	2,45	342 x 115 x 222
F858022	698,50	35.22	35/18 ÷ 35/22	100	5 ÷ 7	1,32	2,45	342 x 115 x 222

For other models, consult the manufacturer's catalog.

ITEM: 35 RAMATO

Metallic staples series 35 with copper finish, suitable for closing cardboard boxes.

Tech. Code	GR60 Euro	Model	Length mm	Width Ext. mm	Cross Section mm	Pack quantity
F858515	186,60	35/15	15	35	0,80 x 2,25	25.000
F858518	162,40	35/18	18	35	0,80 x 2,25	20.000
F858522	136,10	35/22	22	35	0,80 x 2,25	15.000

The displayed price refers to a package.

Indivisible package Suggested retail package - Unit price

PNEUMATIC STAPLERS 35.19-E

ITEM: 35.19-E

Pneumatic staplers for staples Series 35 suitable for closing cardboard boxes, made with wire with rectangular section 0.80x2.20 mm, external width 35 mm and length from 15 to 18 mm.

1/4 "BSP compressed air inlet connection.

Tech. Code	GR60 Euro	Model	Staples Series / mm	Loading capacity	Pressure Bar	Consumption Litres/Stroke	Weight kg	L x W x H mm
F858219E	420,00	35.19-E	35/15 ÷ 35/18	100	4 ÷ 7	1,25	1,63	310 x 100 x 210

ITEM: 35 RAMATO

Metallic staples series 35 with copper finish, suitable for closing cardboard boxes.

Tech. Code	GR60 Euro	Model	Length mm	Width Ext. mm	Cross Section mm	Pack quantity
F858515	186,60	35/15	15	35	0,80 x 2,25	25.000
F858518	162,40	35/18	18	35	0,80 x 2,25	20.000
F858522	136,10	35/22	22	35	0,80 x 2,25	15.000

The displayed price refers to a package.

PNEUMATIC STAPLERS ROLL-A SERIES

ITEM: ROLL-A

Pneumatic staplers **Top Quality** Made in Italy for staples in roll Series ROLL-A suitable for closing cardboard boxes, made with wire with rectangular section0.90x2.20 mm, external width 35 mm (with closed clip) and length of 15 to 22 mm.
1/4 "BSP compressed air inlet connection

Specification of models:

A.18-ROLL Stapler for staples length 15 ÷ 18 mm
A.22-ROLL Stapler for staples length 18 ÷ 22 mm

Tech. Code	GR60 Euro	Model	Staples Series / mm	Magazine capacity	Pressure Bar	Consumption Litres/Stroke	Weight kg	L x W x H mm
F859018	(826,90)	A.18-Roll	RollA/15 ÷ RollA/18	1000	5 ÷ 7	1,32	2,35	237 x 115 x 222
F859022	(832,20)	A.22-Roll	RollA/18 ÷ RollA/22	1000	5 ÷ 7	1,32	2,35	237 x 115 x 222

METALLIC STAPLES SERIES ROLL-A

ITEM: ROLL-A

Metallic staples in rolls of 1000 pieces Roll-A Series stanox finish (Liquor finish), suitable for closing cardboard boxes.

Tech. Code	GR60 Euro	Model	Length mm	Width Ext. (*) mm	Cross Section mm	Pack quantity
F859515	(257,20)	Roll-A/15	15	35	0,90 x 2,20	24.000
F859518	(267,70)	Roll-A/18	18	35	0,90 x 2,20	24.000
F859522	(294,80)	Roll-A/22	22	35	0,90 x 2,20	24.000

The displayed price refers to a package. (*) External width with closed clip.

Related products

GLOVES IN CONTINUOUS DYNEEMA® WIRE COATED IN POLYURETHANE

Tech. Code	Size	EU size
K23208	M	8
K23209	L	9
K232010	XL	10

The products are available in chapter K

CABLE TIES FOR STANDARD CABLING POLYAMIDE 6.6

ITEM: F8701

These cable ties are made of polyamide 6.6 so as not to cause interferences with electronic devices. The black cable ties are made with the addition of carbon black, which gives a higher resistance to UV light compared to natural coloured cable ties.

Technical data:
- Halogen free polyamide 6.6
- Moisture absorbency: 2.7% (at 50% relative humidity)
- Operating temperature: -40°C to 85°C
- Flame resistance: UL 94 class V2
- Resistance to external agents: excellent resistance to aromatic solvents, oils, greases, oil based products, good resistance to bases, limited resistance to acids, not resistant to phenol and chlorinated solvents. Tested according to IEC EN 62275.

Tech. Code	GR60 Euro	Dimensions mm	Colour	Clamping Ø max mm	Pieces per pack
F8701B15	2,00	2.5 x 98	Natural	21	100
F8701B20	4,00	2.5 x 135	Natural	32	100
F8701B25	5,00	2.6 x 160	Natural	40	100
F8701B30	6,00	2.6 x 200	Natural	52	100
F8701B35	5,00	3.5 x 140	Natural	32	100
F8701B40	7,00	3.5 x 200	Natural	50	100
F8701B45	10,00	3.5 x 290	Natural	80	100
F8701B55	14,00	4.5 x 290	Natural	78	100
F8701B60	17,00	4.5 x 360	Natural	100	100
F8701B65	8,00	4.8 x 178	Natural	45	100
F8701B68	9,00	4.5 x 200	Natural	50	100
F8701B70	13,00	4.8 x 250	Natural	50	100
F8701B75	25,00	4.8 x 390	Natural	68	100
F8701B80	33,00	7.5 x 365	Natural	100	100
F8701B85	82,00	7.5 x 750	Natural	220	100
F8701N15	2,00	2.5 x 98	Black	21	100
F8701N20	4,00	2.5 x 135	Black	32	100
F8701N25	5,00	2.6 x 160	Black	40	100
F8701N30	6,00	2.6 x 200	Black	52	100
F8701N35	5,00	3.5 x 140	Black	32	100
F8701N40	7,00	3.5 x 200	Black	50	100
F8701N45	10,00	3.5 x 290	Black	80	100
F8701N50	9,00	4.5 x 200	Black	50	100
F8701N55	14,00	4.5 x 290	Black	78	100
F8701N60	17,00	4.5 x 360	Black	100	100
F8701N65	8,00	4.8 x 178	Black	45	100
F8701N70	13,00	4.8 x 250	Black	50	100
F8701N75	25,00	4.5 x 390	Black	68	100
F8701N80	33,00	7.5 x 365	Black	100	100
F8701N83	66,00	7,5 x 540	Black	158	100
F8701N85	82,00	7.5 x 750	Black	220	100

The price shown refers to a pack of 100 pieces

CABLE TIES FOR STANDARD CABLING POLYAMIDE 6.6

ITEM: F8703

These cable ties are made of polyamide 6.6 so as not to cause interference with electronic devices. Available in four different colours for differentiation and identification of cables or circuits.

Technical data:
- Halogen free polyamide 6.6
- Moisture absorbency: 2,7% (al 50% di umidità relativa)
- Operating temperature: -40°C ÷ 85°C
- Flame resistance: UL 94 classe HB
- Resistance to external agents: excellent resistance to aromatic solvents, oils, greases, oil based products, good resistance to bases, limited resistance to acids, not resistant to phenol and chlorinated solvents. Tested according CEI EN 62275.

Tech. Code	GR60 Euro	Dimension mm	Colour	Clamping (tightening) mm	Pieces
F8703B35	6,00	3,5 x 140	Blue	32	100
F8703B40	10,00	3,5 x 200	Blue	50	100
F8703B65	11,00	4,8 x 200	Blue	50	100
F8703B75	18,00	4,5 x 290	Blue	78	100
F8703G35	6,00	3,5 x 140	Giallo	32	100
F8703G40	10,00	3,5 x 200	Giallo	50	100
F8703G65	11,00	4,8 x 200	Giallo	50	100
F8703G75	18,00	4,5 x 290	Giallo	78	100
F8703R35	6,00	3,5 x 140	Rosso	32	100
F8703R40	10,00	3,5 x 200	Rosso	50	100
F8703R65	11,00	4,8 x 200	Rosso	50	100
F8703R75	18,00	4,5 x 290	Rosso	78	100
F8703V35	6,00	3,5 x 140	Green	32	100
F8703V40	10,00	3,5 x 200	Green	50	100
F8703V65	11,00	4,8 x 200	Green	50	100
F8703V75	18,00	4,5 x 290	Green	78	100

The price shown refers to a pack of 100 pieces

Indivisible package Suggested retail package - Unit price

CABLE TIES PLIERS

ITEM: F8709

Professional version suitable to pull and cut nylon straps up to 9,5 mm wide.
Polished sheet steel body, weight 300 gr

Tech. Code	GR52 Euro	Dimension mm	Weight g
F8709180	40,63	180	300

HOSE CLAMPS MM 9 W2B AISI 430 IN SET

ITEM: F8805

Set of hose clamps W2B AISI 430 in roll width 9 mm with trunnion. An instant solution for making any length of clip bands, ideal for maintance and assistance. Stamped threaded band with trunnion closure reversable quick thread release.

Material:
- Clip band in stainless steel AISI 430 TI
- Screw and pawl in carbon zinc steel.

Tech. Code	GR60 Euro	Width mm	Length m	Screw pcs
F88050905	20,45	9	5	8

ITEM: F8806

Set of hoseband W2B AISI 430 in roll width 14 mm con with trunnion. An instant solution for making any lengths of clip bands, ideal for maitenance and assistance. Perforated band clip bands with trunnion closure reversable quick thread release.

Material:
- Clip band in stainless steel AISI 430 TI
- Screw and pawl in carbon zinc steel

Tech. Code	GR60 Euro	Width mm	Length m	Screw pcs
F88061403	27,66	14	3	6

HOSE CLAMPS MM 12 W2B AISI 430 IN ROLLS

ITEM: F8807

Hose clamps W2B AISI 430 in roll length 12 mm. An instant solution, for making any length of clip bands, ideal for mantenance and assistance. Perforated band clips,trunnio closure to be ordered seperately code F8808.

Tech. Code	GR60 Euro	Width mm	Length m	Screw pcs
F88071225	93,80	12	25	-

ITEM: F8808

Trunnion of quick closure reversable thread release, screw and pawl in carbon zinc steel. Usable with hose clamps width 12 mm code F8807.

Tech. Code	GR60 Euro	Width mm	Screw pcs
F88081225	28,25	12	25

HOSE CLAMPS STAINLESS STEEL W2B AISI 430 DIN 3017

ITEM: F8812

Stainless steel hose clamps Standard DIN 3017. They are made with a perforated band and rounded edges to avoid damaging the tubes. Mechanical seam of the tape to grarantee an effective seal. The tie has an high flexibility in the adaptment of the circumference of the tube and it is suitable for all industrial applications..

Material: Stainless steel tape AISI 430 TI - Screws and band in carbon zinc steel.

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8812008	71,29	8 - 12	9	7	100
F8812010	71,29	10 - 16	9	7	100
F8812012	72,63	12 - 22	9	7	100
F8812016	75,32	16 - 27	9	7	100
F8812020	76,67	20 - 32	9	7	100
F8812025	78,01	25 - 40	9	7	100
F8812030	82,05	30 - 45	9	7	100
F8812032	83,39	32 - 50	9	7	100

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8812040	86,08	40 - 60	9	7	100
F8812050	86,08	50 - 70	9	7	50
F8812060	88,77	60 - 80	9	7	50
F8812070	91,46	70 - 90	9	7	50
F8812080	(95,50)	80 - 100	9	7	50
F8812090	(102,22)	90 - 110	9	7	50
F8812100	(104,91)	100 - 120	9	7	50
F8812110	(112,98)	110 - 130	9	7	50

NOTE: Price shown refers to a 100-piece lot

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8813016	112,25	16 - 27	12	7	50
F8813020	112,25	20 - 32	12	7	50
F8813023	117,53	23 - 35	12	7	50
F8813025	117,53	25 - 40	12	7	50
F8813030	120,17	30 - 45	12	7	50
F8813035	120,17	35 - 50	12	7	50
F8813040	122,81	40 - 60	12	7	50
F8813050	128,10	50 - 70	12	7	50
F8813060	130,74	60 - 80	12	7	50

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8813070	137,34	70 - 90	12	7	50
F8813080	146,59	80 - 100	12	7	50
F8813090	147,91	90 - 110	12	7	50
F8813100	151,87	100 - 120	12	7	50
F8813110	(155,83)	110 - 130	12	7	20
F8813120	(166,39)	120 - 140	12	7	20
F8813130	(171,68)	130 - 150	12	7	20
F8813140	(176,96)	140 - 160	12	7	20
F8813150	(178,28)	150 - 170	12	7	20

NOTE: Price shown refers to a 100-piece lot

F

HOSE CLAMPS STAINLESS STEEL W4 AISI 304 DIN 3017

ITEM: F8827

Stainless steel hose clamps standard DIN 3017 They are made with a perforated band and rounded edges to avoid damaging the tubes. Mechanical seam of the tape to guarantee an effective seal. The tie has an high flexibility in the adaptment of the circumference of the tube and it is suitable for all industrial applications.

Material: Stainless steel hose clamps AISI 304 - Screws and band in carbon zinc steel AISI 304

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8827008	178,28	8 - 12	9	7	100
F8827010	180,92	10 - 16	9	7	100
F8827012	188,84	12 - 22	9	7	100
F8827016	191,48	16 - 27	9	7	100
F8827020	194,13	20 - 32	9	7	100
F8827025	202,05	25 - 40	9	7	100
F8827030	206,01	30 - 45	9	7	100
F8827032	207,33	32 - 50	9	7	100
F8827040	211,29	40 - 60	9	7	100

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8827050	213,93	50 - 70	9	7	50
F8827060	(221,86)	60 - 80	9	7	50
F8827070	(227,14)	70 - 90	9	7	50
F8827080	(236,38)	80 - 100	9	7	50
F8827090	(241,67)	90 - 110	9	7	50
F8827100	(245,63)	100 - 120	9	7	50
F8827110	(253,55)	110 - 130	9	7	50
F8827120	(258,83)	120 - 140	9	7	50

NOTE: Price shown refers to a 100-piece lot

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8828016	293,17	16 - 27	12	7	50
F8828020	301,09	20 - 32	12	7	50
F8828023	305,06	23 - 35	12	7	50
F8828025	305,06	25 - 40	12	7	50
F8828030	309,02	30 - 45	12	7	50
F8828032	310,34	32 - 50	12	7	50
F8828040	318,26	40 - 60	12	7	50
F8828050	323,54	50 - 70	12	7	50
F8828060	332,79	60 - 80	12	7	50

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8828070	336,75	70 - 90	12	7	50
F8828080	345,99	80 - 100	12	7	50
F8828090	(355,24)	90 - 110	12	7	50
F8828100	(360,52)	100 - 120	12	7	50
F8828110	(368,44)	110 - 130	12	7	20
F8828120	(373,73)	120 - 140	12	7	20
F8828130	(381,65)	130 - 150	12	7	20
F8828140	(385,61)	140 - 160	12	7	20
F8828150	(406,74)	150 - 170	12	7	20

NOTE: Price shown refers to a 100-piece lot

Indivisible package Suggested retail package - Unit price

HOSE CLAMPS STAINLESS STEEL BAND WITH TRUNNION W2 AISI 430

ITEM: F8830

Stainless steel band hoses are partically indicated when there is a request of action of tightening. Strong tightening or re-inforced tubes.
The wide range available allows usage in many sectors and applications.

Material: Stainless steel band AISI 430 TI - Screw and pawl in carbon zinc steel.

Available on request in galvanized steel (W1), AISI 304 (W4) carbon zinc steel AISI 316 (W5)

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8830023	2,49	23 - 25	21	6 x 50	10
F8830026	2,53	26 - 28	21	6 x 50	10
F8830029	2,61	29 - 31	21	6 x 50	10
F8830032	2,65	32 - 35	21	6 x 50	10
F8830036	2,76	36 - 39	21	6 x 50	10
F8830040	2,85	40 - 43	21	6 x 50	10
F8830044	3,01	44 - 47	21	6 x 50	10
F8830048	3,05	48 - 51	21	6 x 60	10
F8830052	(3,44)	52 - 55	21	6 x 60	10
F8830056	(3,53)	56 - 59	21	6 x 60	10
F8830060	(3,61)	60 - 63	21	6 x 60	10
F8830064	(3,72)	64 - 73	21	6 x 60	10
F8830068	(4,18)	68 - 73	24	8 x 70	10
F8830074	(4,32)	74 - 79	24	8 x 70	10

Tech. Code	GR60 Euro	Min - max clamping mm	Belt mm	Screw T.E. mm	
F8830080	(4,43)	80 - 85	24	8 x 70	10
F8830086	(4,72)	86 - 91	24	8 x 80	10
F8830092	(4,72)	92 - 97	24	8 x 80	10
F8830098	(5,06)	98 - 103	24	8 x 80	10
F8830104	(5,09)	104 - 112	24	8 x 90	10
F8830113	(5,19)	113 - 121	24	8 x 90	10
F8830122	(5,26)	122 - 130	24	8 x 90	10
F8830131	(7,64)	131 - 139	26	10 x 100	5
F8830140	(7,81)	140 - 148	26	10 x 100	5
F8830149	(7,97)	149 - 161	26	10 x 100	5
F8830162	(8,08)	162 - 174	26	10 x 100	5
F8830175	(8,38)	175 - 187	26	10 x 100	5
F8830188	(8,58)	188 - 200	26	10 x 100	5
F8830201	(9,67)	201 - 213	26	10 x 100	5

PROTRACTORS

ITEM: F9001

Satin-chromed, stress-resistant steel, engraved scale.

Tech. Code	GR52 Euro	Arc structure mm	Rod mm	Resolution
F9001120	27,20	80	120	1°
F9001150	27,60	120	150	1°
F9001200	36,25	150	200	1°
F9001300	43,67	200	300	1°
F9001500	80,00	250	500	1°
F9001600	92,00	300	600	1°

ITEM: F9003

Sliding rod protractors in non-deformable chromed anti-reflective steel, laser engraved scale and ring nut for locking the rod.

Tech. Code	GR52 Euro	Arc mm	Rod mm	Resolution
F9003120	24,10	120	240	1°
F9003150	54,98	150	300	1°
F9003200	67,22	200	400	1°

MONOBLOCK DRAWING VERNIER CALIPERS

ITEM: F9005

1/10 vernier gauge, 0.1mm reading - satin-chromed scale, hardened steel tip.

Tech. Code	GR52 Euro	Useful mm	Accessories
F9005200	58,10	200	-
F9005400	101,72	400	-
F9005RP	7,01	-	Spare tip

TRAMMELS FOR TRACING

ITEM: F9007

Graduate round rod, hardened steel tip.

Tech. Code	GR52 Euro	Useful mm	Base mm
F9007200	84,25	200	100 x 50
F9007300	98,84	300	100 x 50
F9007500	116,31	500	100 x 50
F9007RP	29,05	Spare tip	-

DIVIDERS WITH SETTING WING

ITEM: F9017

Hardened scriber with click-stop device.

Tech. Code	GR52 Euro	Length mm
F9017150	20,37	150
F9017200	26,16	200
F9017250	29,05	250
F9017300	37,84	300
F9017400	58,10	400

Indivisible package Suggested retail package - Unit price

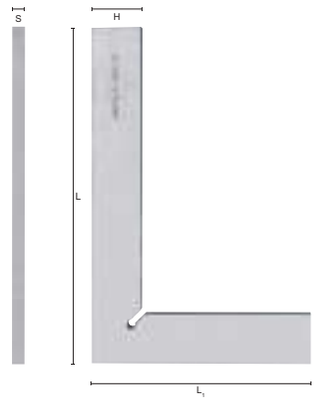
HIGH PRECISION SQUARES

ITEM: F9031

Standard DIN 875/0

Simple 90° squares compliant with **DIN 875 precision grade 0** in hardened stainless steel, fully retified, suitable for maximum precision in the mechanical workshops.

Tech. Code	GR52 Euro	Dimension mm	Accuracy mm	H mm	S mm
F9031050040S	43,63	50	40	15	4
F9031075050S	52,31	75	50	15	4
F9031100070S	58,10	100	70	20	5
F9031150100S	72,68	150	100	30	6
F9031200130S	101,72	200	130	30	6
F9031250165S	116,31	250	165	35	7
F9031300200S	136,23	300	200	40	8



ITEM: F9034

Standard DIN 875/00

Simple 90° bevelled edge squares conforming to **DIN 875 Precision grade 00** in hardened stainless steel, fully rectified, suitable for maximum precision checks in the mechanical workshop.

Tech. Code	GR52 Euro	Dimension mm	Accuracy mm	H mm	S mm
F90345040	49,41	50	40	13,5	4,5
F90347550	52,87	75	50	15,5	4,5
F903410070	61,10	100	70	20	5
F9034150100	66,78	150	100	30	6
F9034200130	91,71	200	130	32	7
F9034250165	180,75	250	165	35	7
F9034300200	222,48	300	200	38	9

FLAT SQUARES FOR MECHANICS

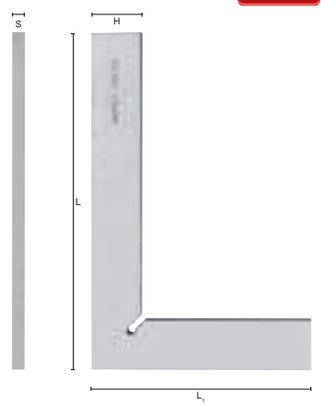
ITEM: F9033

NEW

Standard DIN 875/1

Flat squares simple 90° compliant with **DIN 875 Precision grade 1** in hardened stainless steel, fully rectified,suitable for checks in the mechanical workshop.

Tech. Code	GR52 Euro	L mm	L1 mm	H mm	S mm
F90330100	10,20	100	70	20	5
F90330150	13,90	150	100	25	6
F90330200	20,40	200	130	30	7
F90330250	25,00	250	165	35	8
F90330300	30,60	300	170	35	8
F90330400	50,00	400	230	45	10
F90330500	58,30	500	280	45	10
F90330600	75,00	600	350	45	10



SQUARES FOR CARPENTRY

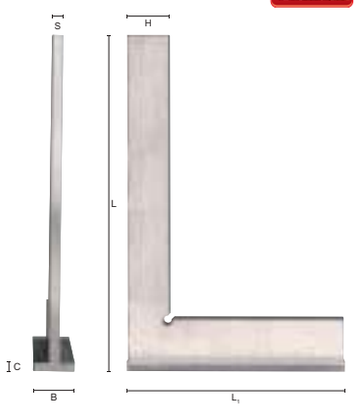
ITEM: F9037

NEW

90° squares non standardized with screwed cap in ground steel, suitable for marking and alighnment work in the workshop.

Tech. Code	GR52 Euro	L mm	L1 mm	B mm	H mm	S mm
F90370100	9,00	100	70	19	21	5
F90370150	11,00	150	100	19	21	6
F90370200	13,00	200	130	25	25	6
F90370250	15,00	250	160	25	25	6
F90370300	18,00	300	180	25	25	6
F90370400	23,00	400	210	30	30	6
F90370500	26,00	500	260	30	30	6
F90370600	32,00	600	300	30	30	6

Dimensions "B" - "H" are indicative



90° STAINLESS STEEL SQUARES WITH BASE

ITEM: F9032

Standard DIN 875/1
90° squares with base in hardened stainless steel.

Tech. Code	GR52 Euro	Dimension mm	Accuracy mm	B mm	H mm	S mm
F9032100070A	23,15	100	70	20	20	5
F9032150100A	30,94	150	100	24	24	6
F9032200130A	37,40	200	130	24	26	6
F9032250165A	59,33	250	165	30	30	6
F9032300200A	74,69	300	200	30	30	6
F9032400250A	110,86	400	230	39	39	9
F9032500300A	141,69	500	280	39	44	11

Standard DIN 875/0
Squadre a 90° con cappello avvitato conformi alla norma **DIN 875 Grado di precisione 0** in acciaio inossidabile temprato e rettificato, indicate per controlli di precisione in officina meccanica.

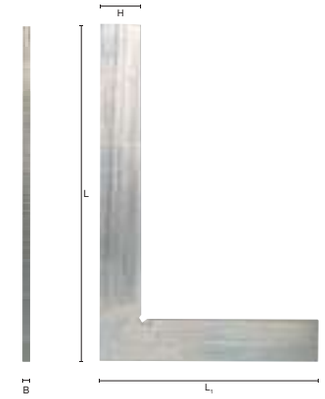
Tech. Code	GR52 Euro	Dimension mm	Accuracy mm	B mm	H mm	S mm
F9032050040S	51,53	50	40	15	15	4
F9032075050S	50,09	75	50	15	15	4
F90321000705	50,09	100	70	20	20	5
F9032150100S	75,13	150	100	30	30	6
F9032200130S	90,15	200	130	30	30	6
F9032250165S	139,13	250	165	35	35	7
F9032300200S	170,07	300	200	40	40	8

GALVANIZED STEEL SQUARES FOR BLACKSMITHS

NEW

ITEM: F9038

Simple **non-standard 90°** squares in galvanized steel.



Tech. Code	GR52 Euro	L mm	L1 mm	H mm	S mm
F90380100	6,00	100	70	19	5
F90380150	8,00	150	100	19	5
F90380200	9,00	200	130	24	5
F90380250	11,00	250	160	24	5
F90380300	13,00	300	180	29	6
F90380400	15,00	400	230	29	6
F90380500	18,00	500	280	29	6
F90380600	21,00	600	330	29	6

Dimensions "H" and "S" are indicative

ITEM: F9039

Flat squares 90° **not standanized** in zinc steel.

NEW

Tech. Code	GR52 Euro	L mm	L1 mm	B mm	H mm	S mm
F90390100	8,00	100	70	20	19	5
F90390150	10,00	150	100	20	19	5
F90390200	14,00	200	130	25	24	5
F90390250	16,00	250	160	25	24	5
F90390300	18,00	300	180	30	29	6
F90390400	20,00	400	230	30	29	6
F90390500	22,00	500	280	30	29	6
F90390600	26,00	600	330	30	29	6

Dimension "H" AND "S" are indicative

SQUARES FOR CARPENTRY

STANLEY

NEW

ITEM: 1-45-685 1-45-686 1-45-687

Squares 90° with stainless steel blade graduated in millimeters on 2 sides and die-cast aluminum base.

Tech. Code	GR60 Euro	L mm	L1 mm	
F9042250	37,60	250	140	6
F9042300	40,80	300	200	6
F9042400	48,50	400	200	6

Indivisible package Suggested retail package - Unit price

VERNIER CALIPERS

ITEM: F9045

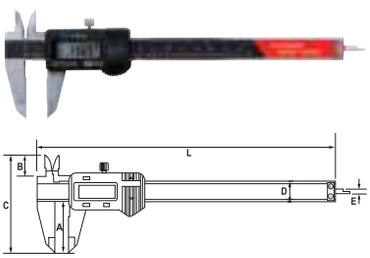
Vernier 1/20, graduation 0,05 – 4 functions: inside, outside, depth and marking. Cursor with locking button.

Tech. Code	GR52 Euro	Measuring range mm	A mm	B mm	C mm	D mm	L mm
F9045150	20,25	0 ÷ 150	40	20	15	16	230

DIGITAL CALIPERS WORK SERIES

ITEM: F9040

0.01mm resolution - ON/OFF button, zero setting at any position (ABS), vernier with locking screw.



Tech. Code	GR52 Euro	Measurement range mm	Jaw length mm	B mm	C mm	D mm	E mm	L mm
F9040150	32,83	0 ÷ 150	40	16.5	76.5	16	4	236

ECONOMIC VERSION

MAGNETIC POCKET SPIRIT LEVELS WITH 360° ADJUSTABLE VIAL

ITEM: 4932459597

Magnetic pocket spirit level with 360° adjustable vial and locking mechanism.
Milled edge and V-groove
Compact size for greater functionality.

Tech. Code	GR64 Euro	Length mm	N° vials	
F904308	33,70	78	1	6

MAGNETIC POCKET SPIRT LEVELS

STANLEY

NEW

ITEM: 0-42-130

Compact size spirt levels with structure in very resistant synthetic material, magnetic metal base with "V" groove, 2 high visibility bubbles and hooking clip.

Tech. Code	GR60 Euro	Length mm	N° vials	
F904487	9,00	87	2	6

SPIRIT LEVELS SLIM - 2 VIALS

ITEM: 4932459090 - 4932459091 - 4932459092

Aluminium spirit levels with 2 shockproof and UV resistant acrylic vials.
Milled measuring surface for maximum accuracy. The anti-slip grip prevents the spirit level from slipping whilst the reading is being taken.
Accurate to 0.029° (0.0005"/in, 0.5mm/m) in standard position.

Tech. Code	GR64 Euro	Length mm	N° vials
F9046040	21,50	400	2
F9046060	24,50	600	2
F9046080	30,70	800	2

MAGNETIC SPIRIT LEVELS SLIM - 2 VIALS

ITEM: 4932464854 - 4932464855

Magnetic aluminium spirit levels with 2 shockproof and UV resistant acrylic vials.
Milled measuring surface for maximum accuracy. The anti-slip grip prevents the spirit level from slipping whilst the reading is being taken.
Accurate to 0.029° (0.0005"/in, 0.5 mm/m) in standard position.

Tech. Code	GR64 Euro	Length mm	N° vials
F9047040	29,50	400	2
F9047060	33,70	600	2

F

Indivisible package Suggested retail package - Unit price

CLASSIC ALUMINIUM MAGNETIC SPIRIT LEVELS

STANLEY

ITEM: STHT1-43110 STHT1-43111

Painted aluminium body, milled base and shockproof vials. Levelling surface accuracy 0.5 mm/m.

Tech. Code	GR60 Euro	Length mm	N° vials
F905040	42,51	400	2
F905060	52,83	600	2

MAGNETIC LEVELS TORPEDO

STANLEY

NEW

ITEM: 0-43-609

Magnetic levels with die-cast aluminum structure, grooved base suitable for positioning on pipes, one horizontal spirit level, one vertical spirit level and one adjustable one for determining variable inclinations. Accuracy of work surfaces 0.5 mm/m.

Tech. Code	GR60 Euro	Length mm	N° Vials	
F904925	45,80	250	3	6

MAGNETIC TORPEDO LEVELS WITH 360° ADJUSTABLE VIAL

ITEM: 4932459096

Magnetic torpedo level with 360° adjustable vial for measuring variable inclinations.
Locking mechanism for easier repetitive measurements.
Milled levelling surface ensures maximum accuracy in all working positions.
SHARPSITE technology with solid and shockproof vial housing.
Die cast aluminium body designed to withstand worksite conditions.
Accurate to 0.029° (0.0005"/in, 0.5mm/m) in standard position.

Tech. Code	GR64 Euro	Length mm	N° vials
F905125	85,90	250	3

MAGNETIC TORPEDO LEVELS - CONTRACTOR

STANLEY

ITEM: 0-42-465

Grooved aluminium alloy body with opening for upper reading. Levelling surface accuracy 1 mm/m.

Tech. Code	GR60 Euro	Length mm	N° vials	
F905223	41,27	230	3	6

MAGNETIC TORPEDO LEVELS

STANLEY

ITEM: 0-43-511

Grooved shock-resistant synthetic material body with opening for upper reading. Levelling surface accuracy 1 mm/m.

Tech. Code	GR60 Euro	Length mm	N° vials	
F905320	25,44	230	3	6

COMPACT MAGNETIC TORPEDO LEVELS

ITEM: 4932459097

Compact magnetic spirit level with maximised viewing area. Reinforced acrylic vial for maximum durability and ease of reading.
Weld clearance, easily level over weld joints in pipes.

Tech. Code	GR64 Euro	Length mm	N° vials
F905417	55,40	170	3

STAINLESS STEEL SEMIRIGID RULERS

ITEM: F9055

Flexible semi-rigid stainless steel matte-finish, one-sided millimetre division.

Tech. Code	GR52 Euro	Section mm	Length mm
F9055300	2,23	30 x 1	300
F9055500	4,23	30 x 1	500
F90551000	14,03	30 x 1	1000
F90551500	32,16	30 x 1	1500
F90552000	48,42	30 x 1	2000

ITEM: F9057

Matt-finish stainless steel flexible millimetre scale, double-sided millimetre division mm/mm - mm/1/2 mm.

Tech. Code	GR52 Euro	Section mm	Length mm
F9057150	2,34	13 x 0.5	150
F9057200	2,56	13 x 0.5	200
F9057250	3,00	13 x 0.5	250
F9057300	3,34	13 x 0.5	300

Indivisible package Suggested retail package - Unit price

STAINLESS STEEL RULERS WITH MILLIMETER GRADUATION WITHOUT BEVEL

ITEM: F9070

DIN 866/A standard compliant tolerance, one-side mm graduation.

Tech. Code	GR45 Euro	Section mm	Length mm
F9070500	85,00	43 x 5	500
F9070750	104,00	43 x 5	750
F90701000	137,00	43 x 5	1000
F90701500	243,00	43 x 5	1500
F90702000	331,00	43 x 5	2000

ITEM: F9071

DIN 866/A standard compliant tolerance, one-side mm graduation.

Tech. Code	GR45 Euro	Section mm	Length mm
F9071500	125,00	43 x 5	500
F9071750	180,00	43 x 5	750
F90711000	190,00	43 x 5	1000
F90711500	355,30	43 x 5	1500
F90712000	451,00	43 x 5	2000

BRIGHT STEEL STRAIGHT EDGES

ITEM: F9072

DIN 874/I standard compliant.

Tech. Code	GR45 Euro	Section mm	Length mm
F9072500	65,00	50 x 10	500
F9072750	85,00	50 x 10	750
F90721000	120,00	60 x 12	1.000
F90721500	350,00	60 x 12	1.500

CIRCUMFERENCE TAPES

ITEM: F9075

Graduated flexible ruler for circumferences and diameters, made from stainless steel, engraved and blackened graduation, vernier reading 0,1 mm section 15x0.5 mm.

Tech. Code	GR45 Euro	Diameter mm	Circumference mm
F9075300	105,00	20 ÷ 300	60 ÷ 950
F9075700	145,85	300 ÷ 700	940 ÷ 2200
F90751100	218,40	700 ÷ 1100	2190 ÷ 3460
F90751500	244,65	1100 ÷ 1500	3450 ÷ 4720
F90751900	280,35	1500 ÷ 1900	4710 ÷ 5980
F90752300	306,60	1900 ÷ 2300	5960 ÷ 7230

METRIC TAPE MEASURES

ITEM: F9100

ABS housing with handle, fibreglass tape with high visibility numbering, accuracy class III.

Tech. Code	GR52 Euro	Tape length m	Tape width mm
F910050	21,73	50	15

ITEM: F9105

ABS case, fibreglass tape with high visibility numbering, accuracy class III.

Tech. Code	GR52 Euro	Tape length m	Tape width mm
F910520	16,01	20	15

METRIC TAPE MEASURES

ITEM: F9116

ABS case, steel tape with high-visibility numbering, accuracy class II.

Tech. Code	GR52 Euro	Tape length m	Tape width mm
F911620	45,02	20	13

METRIC TAPE MEASURES WITH STEEL TAPE

STANLEY

ITEM: 0-34-102 0-34-105

ABS case, painted steel tape with high visibility numbering, two-rivet hook. Accuracy class II.

Tech. Code	GR60 Euro	Tape length m	Tape width mm	
F911910	33,45	10	9.5	6
F911920	45,81	20	9.5	6

WOODEN FOLDING RULERS

ITEM: F9120

In precious, high-quality beechwood.

Tech. Code	GR52 Euro	Stem length m	Stem width mm	
F912002	7,20	2	17	10

POCKET TAPE MEASURES

WODEX

ITEM: WX6100

Pocket tape measure **TOP-LINE with ergonomic non-slip case** in two-component ABS-TPR resistant to falls from 3 metres and extra-thick steel tape with wear-resistant coating up to 100 hours in salt spray, clip for belt attachment.

Tech. Code	GR51 Euro	Tape length m	Tape width mm	Dimensions mm	
F912305	12,61	5	19	73 x 71 x 43	12

EC compliant Class II accuracy

POCKET TAPE MEASURES

WRK

ITEM: F9133

Pocket tape measures **DUAL STOP** with compact impact resistant ABS case and non-slip rubber coating.
- Superior tape with wear resistant nylon coating
- Standard stop button
- Temporary stop or controlled rewind button
- Blade rigidity up to 1.9 metres (Model F913305)
- Hook clip and strap

Tech. Code	GR52 Euro	Tape length m	Tape width mm	Dimension mm	
F913303	7,02	3	16	66 x 69 x 29	12
F913305	8,63	5	19	74 x 75 x 32	12

EC compliant Class II accuracy

POCKET TAPE MEASURES RUBBERFLEX

WRK

ITEM: F9140

RUBBERFLEX Pocket tape with bi-component casing. Steel blade.

Tech. Code	GR52 Euro	Tape length m	Tape width mm	Dimension mm	
F914008	13,89	8	25	87 x 80 x 40	10
F914010	17,96	10	25	87 x 80 x 40	10

EC compliant Class II accuracy

Indivisible package Suggested retail package - Unit price

POCKET TAPE MEASURES FATMAX

STANLEY

ITEM: 33-681 33-684

Pocket tape measures **FatMax**® with ergonomically case in non-slip bi-component material and extra thick steel tape Mylar® coating, belt clip.

Tech. Code	GR60 Euro	Tape length m	Tape width mm	Dimension mm	
F91423	25,17	3	16	64 x 60 x 29	24
F91425	42,10	5	19	74 x 68 x 32	16

CE compliant Class II accuracy

ITEM: 33-238 33-191 33-195 33-198 33-442

PowerLock® Pocket tape measures with **p**lastic case and tape in Mylar® coated carbon steel, belt clip.

Tech. Code	GR60 Euro	Tape length m	Tape width mm	Dimension mm	
F91463	16,51	3	13	57 x 57 x 20	12
F9146519	28,21	5	19	66 x 69 x 30	18
F9146525	33,45	5	25	66 x 69 x 42	12
F91468	41,14	8	25	74 x 76 x 42	12
F914610	50,80	10	25	84 x 89 x 42	4

EC compliant Class II accuracy

ITEM: 33-218

PowerLock® **Classic** Pocket tape measures with metallic case, Mylar coated carbon steel blade, belt clip.

Tech. Code	GR60 Euro	Tape length m	Tape width mm	Dimension mm	
F91473	21,32	3	13	57 x 57 x 20	12

EC compliant Class II accuracy

POCKET TAPE MEASURES WIDE BLADE

ITEM: WIDE BLADE

Premium Quality pocket tape measure, ergonomically designed two-component anti-slip case with increased width blade.

- Nylon coated blade
- Millimetre scale on both sides
- Reinforced case with 5 closure points
- Controlled tape rewind
- Ape rigidity up to 4 metres
- Belt clip

Tech. Code	GR64 Euro	Tape length m	Tape Width m	Dimension mm	
F913905	(39,20)	5	33	80 x 70 x 45	6
F913908	(45,20)	8	33	85 x 45 x 45	6

EC compliant Class II accuracy

POCKET TAPE MEASURES

WRK

ITEM: F9125

ROUNDFLEX Pocket tape ABS plastic case, steel blade.

Tech. Code	GR52 Euro	Tape length m	Tape width mm	Dimension mm	
F912503	3,77	3	13	52 x 52 x 20	10

EC compliant Class II accuracy

F

POCKET TAPE MEASURES

STANLEY

ITEM: 32-189

SUNFLEX Pocket tape plastic case, polymerized-paint steel blade.

Tech. Code	GR60 Euro	Tape length m	Tape width mm	Dimension mm	
F91263	13,50	3	13	52 x 52 x19	8

EC compliant Class II accuracy

POCKET TAPE MEASURES

STANLEY

ITEM: 30-687 - 30-697 - 30-657

Pocket tape measures **TYLON™** with shockproof ABS case and non-slip rubber coating, tape with cured paint and Tylon™ synthetic film coating, hook clip.

Tech. Code	GR60 Euro	Tape length m	Tape width mm	Dimension mm	
F914103	8,28	3	13	63 x 63 x 30	12
F914105	15,94	5	19	73 x 73 x 40	12
F914108	26,33	8	25	80 x 80 x 45	1

Accuracy class II Conforms to CE directive

ITEM: 0-33-720 0-33-728 0-33-811

Measuring tapes FATMAX® 32 with ergonomic case in non-slip bi-component material, 32 mm tape width, Mylar® coating, extra-large double grip tip, reinforced spring and hooking clip. The first 10 cm of the tape is fully covered with Blade Armor ™ film.

NEW

Tech. Code	GR60 Euro	Tape length m	Tape width mm	Dimension mm	
F914905	38,60	5	32	115 x 180 x 55	4
F914908	41,50	8	32	120 x 180 x 60	4
F914910	43,60	10	32	120 x 180 x 60	4

Accuracy class II Compliant with CE directive

LASER DISTANCE METERS

STANLEY

NEW

ITEM: STHT1-77409

Llaser distance meters ,compact, lightweight and simple to use TLM50, for measurements in millimeters and inches with resolution 1 mm - 1/16". Plastic housing with TPE inserts for better grip and instrument protection, operating temperature 0 °C ~ +40°C.
The package includes 2 AAA 1.5 Volt batteries, battery life up to 3,000 measurements.

Tech. Code		F915015
GR60	Euro	96,20
Measuring range	m	0,15 - 15
Accuracy +/-	mm	± 3
Laser class		2 (IEC/EN60825-1: 2014)
Automatic shutdown	min	3
Power supply		2 x AAA
Dimension L x P x H	mm	115 x 44 x 25
Weight	g	100

Indivisible package Suggested retail package - Unit price

LASER DISTANCES DETECTOR

BOSCH

ITEM: GLM 40 PROFESSIONAL

Measures lengths, detection of surfaces, calculation of volumes. All designed for intuitive use. The memory function allows easy access to the latest 10 measurements. Thanks to the ISO certification, the results of the measurements are reliable in all circumstances. Lit three-line display for better readability. Robust casing, shock resistant with IP54 (protection against dust and splashing water).
Diode laser 635 nm, < 1 mW. Unit of measurement: m/cm, ft/inch

Tech. Code		F915440
GR25	Euro	179,00
MODEL		GLM 40
Measuring range	m	0,15 ÷ 40
Precision +/-	mm	1,5
Laser class		2
Automatic shutdown		5 minutes
Protection class		IP54
Power supply		2 x AAA 1,5 V
Weight	g	90

Supplied with:
2 batteries of 1,5 V LR03 (AAA)
Certificate of manufacturer
Protective casing

DISTANCE METER DETECTOR LASER

BOSCH

ITEM: GLM 50-27 C PROFESSIONAL

The professional laser distance meter GLM 50-27 C offers a durable construction, designed for harsh conditions, allows quick documentation and is easy to use. Ideal for construction sites, it offers an IP65-rated construction with impact-resistant coating and withstands drops from 1.5 meters, even onto concrete. With data transfer via Bluetooth® connectivity or Bosch MeasureOn app.
Ideal for documentation and for calculating required materials, room volumes and wall surfaces as well as for positioning and installing elements. The meter offers increased battery life, acoustic and vibration feedback, to confirm the success of the measurements.

Tech. Code		F915650
GR25	Euro	289,00
Measuring range	m	0,05 - 50
Measuring range inclination		0-360° (4x90°)
Precision +/-	mm	1,5
Laser class		2
Automatic shutdown	min.	5
Protection class		IP65
Power supply		2 x 1,5-V-LR6 (AA)
Weight	g	200

Supplied with:
Protective case
Shoulder bag
2 batteries 1,5V LR6 (AA)

LIQUID PAINT MARKERS

MARKAL

ITEM: SL.100

Liquid paint marker, for every surface, also the hardest, durable mark resistant to atmospheric agents (up to 100°C), strong and resistant tip.

Tech. Code	GR60 Euro	Colour	
F9210BIANCO	5,43	White	12
F9210BLU	5,43	Blue	12
F9210GIALLO	5,43	Yellow	12
F9210NERO	5,43	Black	12
F9210ROSSO	5,43	Rosso	12
F9210VERDE	5,43	Green	12

BALL POINT MARKERS

MARKAL

ITEM: STYLMARK® 3

Metal ballpoint tube markers ideal for rough, vertical, greasy or wet surfaces. Can be used for writing on metal, concrete, stone, plastic, rubber and textiles.
Features:Ball point tip, marking size 3 mm

Tech. Code	GR60 Euro	Colour	
F9211BIANCO	5,77	White	10
F9211BLU	5,77	Blue	10
F9211GIALLO	5,77	Yellow	10
F9211NERO	5,77	Black	10
F9211ROSSO	5,77	Rosso	10
F9211VERDE	5,77	Green	10

SOLID PAINT STICKS

MARKAL

ITEM: QUIK STIK

Solid paint stick in twist-up holder with ball point, for all types of surfaces: wet, smooth, rough and hot, clear and durable marks up to 200°C, it dries in just 5 minutes.

Tech. Code	GR60 Euro	Colour	
F9220BIANCO	12,21	White	12
F9220GIALLO	12,21	Yellow	12
F9220ROSSO	12,21	Rosso	12

PERMANENT INK MARKERS

ITEM: DURA-INK 5

Tip micro-extended for clear marks reaching the most difficult areas, permanent ink marker. Micro-tip in metal. Scratches, water and breaks resistant.

Tech. Code	GR60 Euro	Colour	
F9230NERO	4,79	Black	12
F9230ROSSO	4,79	Rosso	12

ITEM: DURA-INK 15

Permanent ink marker scratches and water resistant, spherical tip ultra-hard for difficult works, perfect for industrial conditions, fast-drying quality and wear resistant.

Tech. Code	GR60 Euro	Colour	
F9235NERO	1,56	Black	12
F9235ROSSO	1,56	Rosso	12

PERMANENT INK MARKERS

ITEM: DURA-INK® 60

Quick-drying markers with highly resistant tips for writing on metals, cardboard, plastic glass, wood, fabrics.
Features:
Medium round tip, marking size 3 mm

Tech. Code	GR60 Euro	Colour	
F9240BLU	2,39	Blue	12
F9240NERO	2,39	Black	12
F9240ROSSO	2,39	Rosso	12

STEATITE CHALKS

ITEM: FM.400

Steatite chalks for marking during welding and metalworking operations. Suitable for marking steel, stainless steel and aluminum.

Tech. Code	GR60 Euro	Dimension mm	Pieces per pack
F925510	(28,35)	10 x 10 x 100	50

The displayed price refers to a pack of 50 pieces.

AUTOMATIC CENTRE PUNCHES, MICRO SERIES

ITEM: F9315

Deep, fast stroke marking for characters, numbers, symbols and custom logo on metal, alloy, plastic and light cardboard materials. Automatic centre punches, Micro series stand as the smallest stroke marking system in the world, adjustable force up to 50 kg.
Spring system activated by hand pressure. Standard version supplied with tips for punch marking
Characters and numbers for MICRO serie centre punches. Font size 25/10

Tech. Code	GR60 Euro	Max. impact force N	Tip Ø mm	Length mm
F9315140	48,60	500	6	140
F9315PS	18,00	Spare tip	6	58

BENCH TYPE IMPACT MANUAL MACHINES

ITEM: MB15 - 500

Perfect for quick and deep stroke marking of a logo, texts and numbers.
Manually activated lever-action mechanism, strip-pressing system to avoid work piece deformation. Uniform stroke even on pieces of various thickness. Suitable also for calking, riveting and blanking operations.

Main features:
- Net weight: 10Kg - 33 Kg
- T-shaped groove: 6 mm - 10 mm
- Taper diameter: 8 x 32 mm - 10 x 38 mm

Tech. Code	GR60 Euro	Dimension mm	Adjustable force kg / kN	Height max mm
F9330MB15	702,00	132 x 450 x 210	500 / 5	260

TAPERS FOR CHARACTER HOLDERS

ITEM: F9331

Coupling tapers/shanks to join character holders and numerators or other stroke marking tools.
D8 version for MB15 machines.
Manually operated version to be used with hammer.

Tech. Code	GR60 Euro	Coupling shank/taper Ø	Adapter	Thread
F933108	19,80	8	MB15	M12
F9331MANO	21,60	-	MANUAL	M12

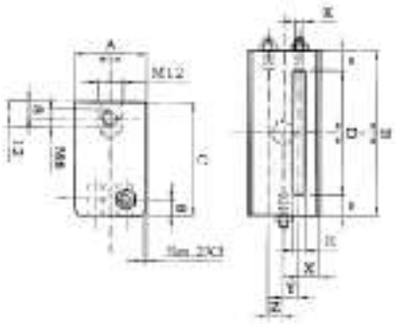
Indivisible package Suggested retail package - Unit price

LINEAR CHARACTER HOLDERS

ITEM: PC

Linear type holders are suitable for flat surface marking with stroke marking machines or presses both on round shapes marking with rolling machines.
All models are equipped with an M12 threaded hole to insert the coupling shank to be selected according to the stroke marking tool used.

Upon request character holders can be provided so to multiple number alignment.



Tech. Code	GR60 Euro	Rows n°	A mm	B mm	C mm	D mm	E mm	Types per row
F9335PC13/6	117,00	1	20	55	40	40	6	3 x 13
F9335PC3/4	117,00	1	20	50	40	30	4	2 x 15

ASSORTMENT OF 100 CHARACTERS IN CASING

ITEM: F9340

Assortment of 100 characters and 20 spacers in casing.
Characters available in different sizes.

Tech. Code	GR60 Euro	Type size mm	Execution
F934020/10	342,00	2 - 20/10	Standard for use with Automator type holders
F934030/10	342,00	3 - 30/10	Standard for use with Automator type holders

ASSORTMENT OF 100 CHARACTERS IN CASING AND CHARACTER HOLDER

ITEM: F9341

Assortment of 100 characters and 20 spacers in casing, one type holder with manual shank, one plier and one key for perfect type fastening , types available in different sizes.

Tech. Code	GR60 Euro	Type size mm	Type holder model	N° casing for character holder
F934115/10	423,00	1,5	PC2/4S	9
F934120/10	423,00	2	PC2/4S	7
F934125/10	423,00	2,5	PC13/6	16
F934130/10	423,00	3	PC13/6	13

ALFANUMERIC CHARACTERS

NEW

ITEM: F9360

Hand punches with continuous thread engraving, resistance of the engraving line 58/60 HRC.

Set of 10 numbers from 0 to 9 for normal writing (right).

Tech. Code	GR60 Euro	Writing height mm	Stem section mm	Length mm
F9360020	37,00	2	6,3 x 6,3	68,5
F9360030	37,00	3	6,3 x 6,3	68,5
F9360040	38,00	4	7,9 x 7,9	76
F9360050	40,00	5	7,9 x 7,9	76
F9360060	51,00	6	10 x 10	76
F9360080	95,00	8	12,9 x 12,9	94
F9360100	(121,00)	10	14,9 x 14,9	94

On request sets of numbers for mirrow writing are available (left)

ITEM: F9370

Set of 26 characters A to Z for normal writing (right)

NEW

Tech. Code	GR60 Euro	Writing height mm	Stem section mm	Length mm
F9370020	98,00	2	6,3 x 6,3	68,5
F9370030	98,00	3	6,3 x 6,3	68,5
F9370040	100,00	4	7,9 x 7,9	76
F9370050	109,00	5	7,9 x 7,9	76
F9370060	140,00	6	10 x 10	76
F9370080	240,00	8	12,9 x 12,9	94
F9370100	(338,00)	10	14,9 x 14,9	94

A set of letters for mirror writing are available on request (left)

THROTTLE BODY ROUND BRUSHES

ITEM: F9400

Blond Chinese bristle, painted opaque wooden handle with nickel ferrule.

Tech. Code	GR60 Euro	N°	die ø mm	Bristle length mm	
F9400T4	2,23	4	10	40	12
F9400T6	2,58	6	12	40	12
F9400T8	3,32	8	16	42	12
F9400T10	3,81	10	20	44	12
F9400T12	4,18	12	23	45	12
F9400T14	4,92	14	26	52	12
F9400T16	6,26	16	29	58	12
F9400T18	8,60	18	32	65	12
F9400T20	10,30	20	36	66	12

ITEM: F9405

Blond Chinese bristle, opaque painted wooden handle with nickel-plated ferrule.

Tech. Code	GR60 Euro	N°	Die ø mm	Die thickness mm	
F940502	2,72	2	18 x 13	43	12
F940504	3,19	4	22 x 16	43	12
F940506	3,81	6	27 x 20	45	12
F940508	4,67	8	34 x 23	53	12
F940510	5,29	10	39 x 28	53	12
F940512	6,92	12	45 x 32	61	12
F940514	11,73	14	50 x 37	68	12

ITEM: F9409

Blond Chinese bristle, opaque painted wooden handle with nickel-plated ferrule.

Tech. Code	GR60 Euro	Ring width mm	Die thickness mm	
F9409P20	2,45	20 x 15	47	12
F9409P30	2,84	30 x 15	47	12
F9409P40	3,56	40 x 15	53	12
F9409P50	4,06	50 x 15	53	12
F9409P60	5,36	60 x 15	60	12
F9409P70	7,22	70 x 15	66	12

ITEM: F9410

Blond Chinese bristle, plastic handle with nickel ferrule.

Tech. Code	GR60 Euro	Die width mm	Bristle length mm	
F9410P20	1,96	20 x 15	40	12
F9410P30	2,08	30 x 15	40	12
F9410P40	2,45	40 x 15	40	12
F9410P50	3,45	50 x 15	47	12
F9410P60	3,93	60 x 15	47	12
F9410P70	6,50	70 x 15	53	12
F9410P80	6,38	80 x 15	53	12

ITEM: F9420

Bristle radiator brushes that can be used with all paints, wooden nickel ferrule handle.

Tech. Code	GR60 Euro	Die width mm	Bristle length mm	
F9420R20	3,19	20 x 9	40	12
F9420R30	3,19	30 x 9	47	12
F9420R40	3,68	40 x 9	47	12
F9420R50	4,67	50 x 9	53	12
F9420R60	6,38	60 x 9	60	12

WIRE HAND BRUSHES

ITEM: SPID STEEL

Practical and durable universal hand brushes. The narrow surface, the special curvature and the ergonomic handle give it a unique manoeuvrability.

Tech. Code	GR60 Euro	Steel wire	Handle colour	Dimension mm	
F9500ACC	3,91	Brass-plated steel ø 0,3	Red	15 x 245	24

ITEM: SPID INOX

Tech. Code	GR60 Euro	Steel wire	Handle colour	Dimension mm	
F9501INOX	6,99	Inox Ø 0,3	Green	15 x 245	24

ITEM: SPID BRASS

Tech. Code	GR60 Euro	Steel wire	Handle colour	Dimension mm	
F9502OTT	7,79	Brass Ø 0,30	Yellow	15 x 245	24

Indivisible package Suggested retail package - Unit price

WIRE HAND BRUSHES

ITEM: SPID NYLON

Tech. Code	GR60 Euro	Wire	Handle colour	Dimension mm	
F9503NYLON	8,56	Ridig Nylon	Blue	15 x 245	24

ITEM: F9505

Universal manual brushes with brass wires and wooden handle.

Tech. Code	GR60 Euro	Steel wire	Rows	Dimension mm	
F95053	2,24	Brass 0,15	3	15 x 150	24
F95054	3,70	Brass 0,15	4	25 x 150	24
F95054/L	5,50	Brass 0,15	4	35 x 170	24

ITEM: F9506

Universal manual brushes with brass wires and wooden handle.

Tech. Code	GR60 Euro	Wire	Rows	Dimension mm	
F95063	3,15	Steel 0,15	3	25 x 150	12

ITEM: F9515

Universal manual brushes with brass wires and wooden handle.

Tech. Code	GR60 Euro	Steel wire	Rows	Dimension mm	
F95155	3,58	Steel ø 0,35	5	37 x 290	12

ITEM: F9520

Hand brushes of limited size for better hand brushing of smaller surfaces and with little cracks where traditional hand brushes cannot be used.

Tech. Code	GR60 Euro	Wire	Rows	Dimension mm	
F9520ACC	5,30	Steel	1	6 x 220	12
F9520OTT	7,79	Brass	1	6 x 220	12

SPATULAS

ITEM: F9610

Special hardened steel blade, painted wooden handle.

Tech. Code	GR52 Euro	Width mm	
F961030	3,58	30	12
F961040	3,69	40	12
F961050	3,75	50	12
F961060	4,09	60	12
F961080	4,71	80	12
F9610100	5,33	100	12

ITEM: F9612

Stainless steel blade with precision rolling to ensure perfect taper and adequate flexibility. Ergonomic two-component handle made of polypropylene and non-slip thermoplastic rubber.

Tech. Code	GR52 Euro	Width mm	
F9612040	6,29	40	12
F9612060	7,04	60	12
F9612080	7,83	80	12
F9612100	9,36	100	12
F9612120	10,39	120	12

PRESSURE OILERS

WODEX

ITEM: WX7000

Pressure oilers with top quality polyethylene can compliant with European accident prevention and safety regulations.

Version with spout and polyethylene cap.

Tech. Code	GR51 Euro	Capacity ml	Tank mm	Total height mm
F9750050	0,99	50	54 x 26	110

ITEM: WX7001

Version with spout and polyethylene cap.

Tech. Code	GR51 Euro	Capacity ml	Tank mm	Total height mm
F9751080	1,04	80	47 x 26	130

ITEM: WX7003

Version with spout and polyethylene cap.

Tech. Code	GR51 Euro	Capacity mm	Can Ø mm	Total height mm
F9753060	1,05	60	42	115

ITEM: WX7004

Version with spout and polyethylene cap.
Suitable for contact with food and compliant with EC 1935/2004 - EU 10/2011 standards

Tech. Code	GR51 Euro	Capacity ml	Can Ø mm	Total height mm
F97540250	2,08	250	60	220
F97540500	2,49	500	75	250

ITEM: WX7006

Version with fixed brass spout and polyethylene cap.

Tech. Code	GR51 Euro	Capacity ml	Can Ø mm	Total height mm
F97560125	2,44	125	50	220
F97560250	2,76	250	60	250
F97560500	3,33	500	75	280

Indivisible package Suggested retail package - Unit price

PUMP OILERS

ITEM: WX7010

Oilers **Premium Quality** suitable for continuous use in industrial and mechanical workshops. Can, cap and handle are made of painted sheet metal, the brass pump can be used with all types of oil.
Version with rigid metal spout.

Tech. Code	GR51 Euro	Capacity ml
F9760200	10,71	200
F9760300	11,45	300
F9760500	12,19	500
F9760750	14,73	750

Replacement spout F9764R - WX7014-R

ITEM: WX7011

Version with flexible metal spout.

Tech. Code	GR51 Euro	Capacity ml
F9761200	11,80	200
F9761300	12,80	300
F9761500	13,50	500
F9761750	14,88	750

Replacement spout F9764F - WX7014-F

ITEM: WX7012

Light and easy to handle **Premium Quality** oilers, semi-transparent high density polyethylene graduated can. Handle, cap and pump are made of shock and low temperature resistant propylene copolymer.
Version with rigid metal spout.

Tech. Code	GR51 Euro	Capacity ml
F9762200	8,03	200
F9762300	8,45	300
F9762500	8,80	500

Replacement spout F9764R - WX7014-R

ITEM: WX7013

Version with flexible metal spout.

Tech. Code	GR51 Euro	Capacity ml
F9763200	8,03	200
F9763300	8,45	300
F9763500	8,56	500

Replacement spout F9764F - WX7014-F

LABORATORY PRESSURE SPRAYERS

ITEM: WX7015

Pressure sprayers with high-grade polyethylene bottle compliant with European accident prevention and safety regulations.

Version with flexible spout and polyethylene anti-drip nozzle.
Suitable for contact with food and compliant with EC 1935/2004 - EU 10/2011 standards

Tech. Code	GR51 Euro	Capacity ml	Can Ø mm	Total height mm
F97650250	2,71	250	60	180
F97650500	3,16	500	75	210
F97651000	4,36	1000	95	250

SPRAYERS WITH VAPORIZER

ITEM: WX7020

Sprayers **Profi-Line** , with adjustable spray pump, suitable for use with moderately aggressive acid products. Polyethylene bottle, brass ring and Viton gasket.

Tech. Code	GR51 Euro	Capacity ml	Can Ø mm	Total height mm
F97701000	9,19	1000	100	305

ITEM: WX7020/SP

Spray pumps, complete, spare parts for sprayers with vaporizers WX7020

Tech. Code	GR51 Euro	Ring nut	Gaskets
F977100	5,77	Brass	Viton

SPRAYERS WITH VAPORIZER

ITEM: F9740

High density polyethylene.

Tech. Code	GR60 Euro	Capacity ml
F97401000	6,50	1000

PRESSURE SPRAYERS

ITEM: F9747

Pressure sprayers with big capacity mist spraying pump, with viton ring, for light oils, diesel fuel, detergent (not acid). Spout with adjustable nozzle and brass jet. Sturdy, polyethylene tank, with scaling.

Tech. Code	GR52 Euro	Capacity ml	Can
F97471250	25,11	1250	Yellow
F97472200	30,21	2200	Rosso

JUGS

ITEM: F9800

Measuring jugs made of high-density polypropylene.

Tech. Code	GR60 Euro	Capacity ml	Ø mm	Height mm
F98001000	3,02	1000	120	135
F98002000	7,06	2000	145	170
F98003000	8,40	3000	165	185
F98005000	12,86	5000	190	235

ITEM: F9813

Measuring jugs for oil made of high-density polypropylene.

Tech. Code	GR60 Euro	Capacity ml	Ø mm	Height mm
F98131000	22,28	1000	95	250
F98132000	27,42	2000	110	320
F98135000	42,02	5000	150	380

Indivisible package Suggested retail package - Unit price

HEAVY DUTY BUCKET FOR POURING

ITEM: F9820

Measuring buket in polyethylene with pouring spout.

Tech. Code	GR60 Euro	Capacity L	upper ø mm	lower ø mm	Height mm
F982017	21,01	17	335	245	310

WIDE MOUTH DRUMS

ITEM: F9830

High density polyethylene drums, connection for ¾" tap.

Tech. Code	GR60 Euro	Capacity L	Ø mm	Height mm	Mouth width mm
F983030	85,46	30	380	440	250
F9830RUB	6,18	¾ " drum spout	-	-	-

FUNNELS

ITEM: F9850

High-density polyethylene funnels complete with filter.

Tech. Code	GR60 Euro	Ø mm
F9850200	14,00	200
F9850250	16,20	250
F9850300	21,50	300

ITEM: F9870

Metal funnels complete with filter and removable flexible extension Ø 38 x 320 mm.

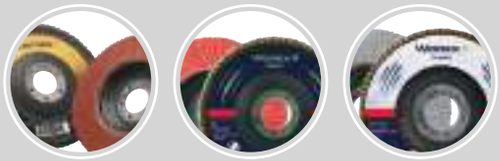
Tech. Code	GR60 Euro	Ø mm
F9870FLES	37,00	200

WODEX

" HANDsome "

WODEX
PFERD
NORTON
3M

G0
2 - 4
Cut-off & grinding wheels

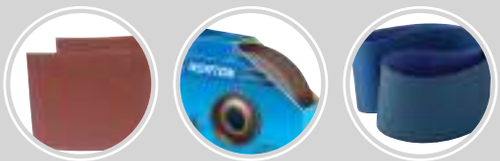


WODEX
WRK
TYROLIT
3M

G1
5 - 11
Flap discs, non-woven fabric

STARCKE
3M
PFERD
VSM

G2
12 - 17
Fibrediscs, quick change discs



STARCKE
3M
NORTON
WRK

G3
18 - 23
Abrasive rolls, sheets and belts

3M
FLEX-HONE
PFERD
WRK

G4
24 - 32
Flap wheels and brushes

PFERD
WRK

G5
33 - 38
Mounted points and felt polishing products

WODEX
PFERD

G6
39 - 48
Tungsten carbide burrs

NORTON
TYROLIT
WRK

G7
49 - 59
Bonded abrasive, diamond grinding wheel

WODEX
PFERD

G8
60 - 67
Engineering and needle files

NAKANISHI
FARO

G9
68 - 73
Polishing machines, mini-grinders

CUTTING-OFF AND GRINDING DISC - INSTRUCTIONS FOR USE

Grinding and cutting discs consist of abrasive grains,binding materials and additives, perfectly adapting to the electric and pneumatic angle grinders, fit for cutting and grinding on a wide range of materials.

All items herewith listed are free from additives that may contain iron, sulphur and chlorine.
All items should be used together with all the personal protective equipment (PPE) as stated by law and provided by employer..

P	M	K	N	S	H
●○	●○	●○	●○	●○	●○

● Recommended fot this material ○ Suitable for this material

CUTTING SPEED TABLE

Ø disc mm	115	125	180	230
Max speed (rpm)	13.200	12.200	8.500	6.600

FLAT CUTTING DISCS

WODEX

ART. SPACE CUT

Latest generation flat cutting discs, TOP QUALITY.
Excellent cutting performance and long service life.
Suitable for steel and stainless steel. To be used on angle grinders.

Tech. Code		G020711510	G020711516	G020712510	G020712516	G020723019
GR61	Euro	2,96	2,96	3,14	3,14	5,10
Ø	mm	115 x 1.0 x 22.2	115 x 1.6 x 22.2	125 x 1.0 x 22.2	125 x 1.6 x 22.2	230 x 1.9 x 22.2
		25	25	25	25	25

P	M	K	N	S	H
●	●	○	○		

FLAT CUTTING DISCS

NORTON SAINT-GOBAIN

ART. SUPER BLEUE 5

High performance. Suitable for steel and stainless steel. To be used on angle grinders.

Tech. Code		G021511510	G021511516	G021512510	G021512516	G021523019
GR69	Euro	4,04	4,04	4,16	4,16	7,00
Ø	mm	115 x 1.0 x 22.2	115 x 1.6 x 22.2	125 x 1.0 x 22.2	125 x 1.6 x 22.2	230 x 1.9 x 22.2
		25	25	25	25	25

P	M	K	N	S	H
●	●	○	○		

FLAT CUTTING DISCS CUBITRON II

3M

ART. CUBITRON II

Cubitron II ceramic type cutting disc. Optimised for maximum cutting high-density performance. High cutting rates and long service life.
Suitable for cutting very hard metals, steel and stainless steel.

Tech. Code		G022011510	G022011516	G022012510	G022012516	G022023025
GR69	Euro	4,31	4,71	4,72	5,52	19,44
Ø	mm	115 x 1.0 x 22.2	115 x 1.6 x 22.2	125 x 1.0 x 22.2	125 x 1.6 x 22.2	230 x 2.5 x 22.2
		25	25	25	25	25

P	M	K	N	S	H
●	●	○	○		

Indivisible package Suggested retail package - Unit price

FLAT CUTTING DISCS

ART. SG STEELOX

Cutting discs of the latest generation with very high performance. Universal use on steel and stainless steel. High cutting performance and exceptional durability. Ideal for cutting sheet metal, profiles and solid material.

Tech. Code		G022311510	G022311516	G022312510	G022312516	G022323019
GR69	Euro	3,30	3,39	3,82	3,86	6,88
Ø	mm	115 x 1,0 x 22,23	115 x 1,6 x 22,23	125 x 1,0 x 22,23	125 x 1,6 x 22,23	230 x 1.9 x 22.23
		25	25	25	25	25

P	M	K	N	S	H
●	●	○	○		

DEPRESSED CENTRE CUTTING DISCS

ART. SUPER BLEUE 5

High performance. Suitable for steel and stainless steel. To be used on angle grinders.

Tech. Code		G031211525	G031211532	G031212532	G031218032	G031223032
GR69	Euro	3,64	3,64	4,02	5,70	7,76
Ø	mm	115 x 2.5 x 22.2	115 x 3.2 x 22.2	125 x 3.2 x 22.2	180 x 3.2 x 22.2	230 x 3.2 x 22.2
		25	25	25	25	25

P	M	K	N	S	H
●	●	○	○		

FLAT CUTTING DISCS

ART. MULTICUT

Universal flat cutting discs. Suitable for cutting medium-small sections. To be used on angle grinders.

Tech. Code		G035011510	G035011516	G035012510	G035012516
GR68	Euro	1,74	1,84	1,96	2,01
Ø	mm	115 x 1,0 x 22,2	115 x 1,6 x 22,2	125 x 1,0 x 22,2	125 x 1,6 x 22,2
		25	25	25	25

P	M	K	N	S	H
●	●	○	○		

FLAT CUTTING DISCS FOR NON-FERROUS MATERIALS

ART. G0314

Flat aluminum oxide cutting discs, ideal for processing Aluminum, Bronze, Copper, Brass and non-ferrous metals in general. This innovative disc structure avoids the clogging typical of these materials and guarantees fast and precise cuts.

Tech. Code		G031411510	G031411516	G031412510	G031412516
GR69	Euro	3,26	3,26	3,67	3,53
Ø	mm	115 x 1,0 x 22,23	115 x 1,6 x 22,23	125 x 1,0 x 22,23	125 x 1,6 x 22,23
Specification		A60N-BFP	A46N-BFP	A60N-BFP	A46N-BFP
		25	25	25	25

P	M	K	N	S	H
			●	●	

NON-REINFORCED CUTTING DISCS

ART. G0405

Organic aluminum oxide binder. Treated and hardened steel. Dry operation on stationary machines.

Tech. Code		G04051251016	G04051501016	G04051501020	G04051501616
GR69	Euro	7,17	9,57	9,57	11,94
ø	mm	125 x 1.0 x 16	150 x 1.0 x 16	150 x 1,0 x 20	150 x 1.6 x 16
Specification		23A80-PB25	23A80-PB25	23A80-PB25	23A60-NB25
		25	25	25	25

Tech. Code		G04051501620	G04051502016	G04051502020
GR69	Euro	11,94	11,94	11,94
ø	mm	150 x 1,6 x 20	150 x 2.0 x 16	150 x 2,0 x 20
Specification		23A60-NB25	23A60-NB25	23A60-NB25
		25	25	25

P	M	K	N	S	H
●	●	○	○		

Indivisible package Suggested retail package - Unit price

DEPRESSED CENTRE GRINDING DISCS

ART. SPACE GRIND

Last generation depressed centre discs, TOP QUALITY.
High performance grinding and exceptional removal with long service life.
Suitable for steel and stainless steel. To be used on angle grinders.

Tech. Code		G031711570	G031712570	G031723070
GR61	Euro	3,96	4,47	9,02
Ø	mm	115 x 7.0 x 22.2	125 x 7.0 x 22.2	230 x 7.0 x 22.2
		10	10	10

P	M	K	N	S	H
●	●	○	○		

DEPRESSED CENTRE GRINDING DISCS

ART. SUPER BLEUE 5

High performance. Suitable for steel and stainless steel. To be used on angle grinders.

Tech. Code		G032511570	G032512570	G032518070	G032523070
GR69	Euro	4,82	5,51	8,38	11,73
Ø	mm	115 x 7.0 x 22.2	125 x 7.0 x 22.2	180 x 7.0 x 22.2	230 x 7.0 x 22.2
		10	10	25	25

P	M	K	N	S	H
●	●	○	○		

DEPRESSED CENTRE GRINDING WHEELS, CUBITRON II

ART. CUBITRON II

Depressed center deburring wheel Cubitron II. Wheel for heavy weld removal and other heavy-duty grinding applications. Optmised for steel and stainless steel applications

Tech. Code		G033011570	G033012570	G033023070
GR69	Euro	9,55	10,59	23,42
Ø	mm	115 x 7.0 x 22.2	125 x 7.0 x 22.2	230 x 7.0 x 22.2
		10	10	10

P	M	K	N	S	H
●	●	○	○		

HYBRID CUTTING AND GRINDING DISCS

ART. CUT & GRINDING CUBITRON II

Hybrid disc in Cubitron II for cutting and deburring steel and stainless steel plates and bars. High-precision and high cutting rates Precise and fast cutting. Good service life. Its extremely versatile performance ensures significant savings in time. Use with medium to high power angle grinders.

Tech. Code		G033511542	G033512542	G033523042
GR69	Euro	9,85	11,29	26,59
Ø	mm	115 x 4.2 x 22.2	125 x 4.2 x 22.2	230 x 4.2 x 22.2
		10	10	10

P	M	K	N	S	H
●	●	○	○		

Indivisible package Suggested retail package - Unit price

FLAP GRINDING DISCS - INFORMATION FOR USE

Flap discs are typically used for grinding, chamfering or removal works in general.
They consist of abrasive flaps, slightly over lapped then glued by means of specific resins to plastic or fibreglass supports.
Their main feature is a consistent and even cutting thanks to the gradual consumption of the cloth and to its subsequent continuous renewal.
Used for angled grinding machines with adequate power to maximise performance.
They should be used together with all the personal protective equipment (PPE) as stated by law and provided by employer.

Abrasives didn't deemed to be harmful elements, but any way particular attention must be given to machining waste.

P	M	K	N	S	H
●○	●○	●○	●○	●○	●○

● - RECOMMENDED FOR THIS MATERIAL
○ - SUITABLE FOR THIS MATERIAL

LEGEND OF ICONS MATERIAL

- A — Oxide of Aluminum
- A+ — Aluminum oxide Additivated
- Z — Zirconium
- Z+ — Additivated Zirconium
- SiC — Silicon carbide
- Ceramic
- C+ — Additivated Ceramic
- Z A — Zirconium Aluminum oxide
- Z A+ — Zirconium Aluminum oxide Additivated
- Z C — Zirconium Ceramic

FLAP DISCS ZIRCONIUM

WRK

Z

ART. FALCON FIBER BACKING

Flap grinding discs with fiberglass backing and zirconium oxide cloth. Monolamellar-type execution with conic shaped backing pads. Cost-effective, high-performance product. The fiberglass support allows full consumption of the disc. For general use on steel, cast iron, aluminum and light alloys.

P	M	K	N	S	H
●	●	○	○		

Tech. Code		G1214115040	G1214115060	G1214115080
GR68	Euro	2,11	2,11	2,11
Ø	mm	115 x 22.2	115 x 22.2	115 x 22.2
Grit		40	60	80
		20	20	20

Tech. Code		G1214125040	G1214125060	G1214125080
GR68	Euro	2,90	2,90	2,90
Ø	mm	125 x 22.2	125 x 22.2	125 x 22.2
Grit		40	60	80
		20	20	20

Z

ART. FALCON PLASTIC

Flap grinding discs with nylon backing and zirconium abrasive cloth. Monolamellar execution with flat shaped backing pads. High performance economical. Suitable for use on all stainless steel materials and also cast iron, aluminum and light alloys.

P	M	K	N	S	H
●	●	○	○		

Tech. Code		G1218115040	G1218115060	G1218115080
GR68	Euro	2,11	2,11	2,11
Ø	mm	115 x 22,2	115 x 22,2	115 x 22,2
Grit		40	60	80
		20	20	20

Tech. Code		G1218125040	G1218125060	G1218125080
GR68	Euro	2,90	2,90	2,90
Ø	mm	125 x 22,2	125 x 22,2	125 x 22,2
Grit		40	60	80
		20	20	20

Indivisible package Suggested retail package - Unit price

FLAP GRINDING DISCS

WRK

Z

ART. PYTHON FIBER

Flap grinding discs in fiberglass and zirconium abrazive cloth. Bilamellar execution with conic shaped pads. Exploiting the abrasive cloth. The most wide spread in the world which guarantees an absolute balance between performance and profitability. Its fiberglass backing with conical geometry allows a uniform consumption of the cloth. Suitable for all types of stainless steel also cast Iron, alumium and light alloys.

P	M	K	N	S	H
●	●	○	○		

Tech. Code		G1219115040	G1219115060	G1219115080	G1219115120
GR68	Euro	2,62	2,62	2,62	2,62
Ø	mm	115 x 22.2	115 x 22.2	115 x 22.2	115 x 22.2
Grit		40	60	80	120
		20	20	20	20

Tech. Code		G1219125040	G1219125060	G1219180040	G1219180060
GR68	Euro	3,64	3,64	6,48	6,48
Ø	mm	125 x 22.2	125 x 22.2	180 x 22.2	180 x 22.2
Grit		40	60	40	60
		20	20	20	20

Z

ART. PYTHON PLASTIC

Flap grinding discs with plastic backing and zirconium oxide cloth. double-sided excution with flat shaped back pad. Its abrasive cloth ensures long-lasting, quality performance. Ideal for stainless steel, as well as cast-iron, aluminum, light alloys.

P	M	K	N	S	H
●	●	○	○		

Tech. Code		G1215115040	G1215115060	G1215115080	G1215115120
GR68	Euro	2,62	2,62	2,62	2,62
Ø	mm	115 x 22.2	115 x 22.2	115 x 22.2	115 x 22.2
Grit		40	60	80	120
		20	20	20	20

Tech. Code		G1215125040	G1215125060	G1215180040	G1215180060
GR68	Euro	3,64	3,64	6,48	6,48
Ø	mm	125 x 22.2	125 x 22.2	180 x 22.2	180 x 22.2
Grit		40	60	40	60
		20	20	20	20

Z+

ART. REVEN EVO PLASTIC

Flap grinding discs in nylon strengthed flat pad for diffilcult applications. Bilamellar execution with zirconium cooling admixture. It garantees self lubricated cold machining. The pair of grinding discs are of superior width than normal which offers an increase of the abrasive surface and an increase of the life of the discs. For correct use it is adviced to use suitable power sanders, suited for steel, high alloy steel, stainless steel also cast iron, aluminum and light alloys

P	M	K	N	S	H
●	●	○	○		

Tech. Code		G1224115040	G1224115060	G1224125040	G1224125060
GR68	Euro	3,87	3,87	4,27	4,27
Ø	mm	115 x 22.2	115 x 22.2	125 x 22.2	125 x 22.2
Grit		40	60	40	60
		15	15	15	15

FLAP DISCS ALUMINIUM OXIDE

WRK

A

ART. BULLDOG PLASTIC

Flap grinding discs with plastic backing and corundum abrasive cloth.
Mono lamellar feature with flat pad. Cost-effective, high-performance. Ideal on iron, plastic, polish, lacquer as well as on non-ferrous materials.

P	M	K	N	S	H
●	○	○	●	●	

Tech. Code		G1230115040	G1230115060	G1230115080	G1230125040	G1230125060	G1230125080
GR68	Euro	2,11	2,11	2,11	2,90	2,90	2,90
Ø	mm	115 x 22,2	115 x 22,2	115 x 22,2	125 x 22,2	125 x 22,2	125 x 22,2
Grit		40	60	80	40	60	80
		20	20	20	20	20	20

Indivisible package Suggested retail package - Unit price

HIGH PERFORMANCE FLAP DISCS

WRK

Z A+

ART. RED DRAGON PLASTIC

Flap discs with reinforced plastic backing and thread M14 with ventilation holes. Zirconium and corundum abrasive cloth admixture Bi-Lamellar with flat shaped back pads. Thanks to the wider flaps in superimposed pairs there is a guaranteed increasment of the abrasive surface while the union of zirconium and corundum increases the versatility. It does not overheat the material being used. The threads of the M14 pad allows direct mounting on the most common angle grinders of medium and high power without the use of a classical fixing nut. Ideal on stainless steel, high alloy steels and for cast Iron, alluminium and light alloys.

Tech. Code		G1205115040	G1205115060	G1205125040	G1205125060
GR68	Euro	4,44	4,44	4,85	4,85
Ø	mm	115 x 22.2	115 x 22.2	125 x 22,2	125 x 22,2
Grit		40	60	40	60
		15	15	15	15

P	M	K	N	S	H
●	○	○	●		

Z C

ART. BARRACUDA PLASTIC

Flap grinding discs with reinforced,thick plastic backing zirconium abrasive cloth and ceramic abrasive. Bi-lamellar feature with flat back pad.Thanks to its superimposed wide flaps in pairs, it provides a larger abrasive surface as well as an increased service life of disc itself. Faster grinding at reduced pressure on extremely hard materials. Ideal for professional use, performances increased by at least 20% compared to standard discs.
A fairly high power grinder is recommended so to ensure effective performance.
Ideal on stainless steel, high-alloy steel, and also suitable for cast iron and titanium use.

Tech. Code		G1240115040	G1240115060
GR68	Euro	5,00	5,00
Ø	mm	115 x 22,2	115 x 22,2
Grit		40	60
		15	15

P	M	K	N	S	H
●	●	○	○		

FLAP DISCS CARBIDE SILICON

WRK

SiC

ART. LION PLASTIC

Flap grinding discs with plastic backing and silicon carbide abrasive cloth. Bi-lamellar feature with flat back pad. Ideal on aluminum, copper, bronze, titanium, stone and high-alloy steels as well as for fibre reinforced synthetic materials.

Tech. Code		G1235115040	G1235115080	G1235115120	G1235115220
GR68	Euro	2,84	2,84	2,84	2,84
Ø	mm	115 x 22,2	115 x 22,2	115 x 22,2	115 x 22,2
Grit		40	80	120	220
		20	20	20	20

Tech. Code		G1235180040	G1235180080	G1235180120	G1235180220
GR68	Euro	6,60	6,60	6,60	6,60
Ø	mm	180 x 22,2	180 x 22,2	180 x 22,2	180 x 22,2
Grit		40	80	120	220
		20	20	20	20

P	M	K	N	S	H
○	○	●	●	○	●

G

CERAMIC FLAP DISCS

C+

ART. RAPTOR PIANO

Flap discs with fibreglass backing and polycotton abrasive cloth with the latest generation self-lubricating ceramic abrasive grit. Monolamellar feature with flat backing pad. Outstanding ceramic abrasive removal capacity with cooling additives to ensure a cool cut. For heavy duty use, especially on high alloy and stainless steels.

Tech. Code		G1250115040	G1250115060	G1250125040	G1250125060
GR61	Euro	3,79	3,79	5,30	5,30
Ø	mm	115 x 22.2	115 x 22.2	125 x 22.2	125 x 22.2
Grain size		40	60	40	60
		15	15	15	15

P	M	K	N	S	H
●	●	○	●		

C+

ART. RAPTOR CONICO

Flap discs with fibreglass backing and polycotton abrasive cloth with the latest generation self-lubricating ceramic abrasive grit. Monolamellar feature with conical backing pad. Outstanding ceramic abrasive removal capacity with cooling additives to ensure a cool cut. For heavy duty use, especially on high alloy and stainless steels.

Tech. Code		G1251115040	G1251115060	G1251125040	G1251125060
GR61	Euro	3,79	3,79	5,30	5,30
Ø	mm	115 x 22.2	115 x 22.2	125 x 22.2	125 x 22.2
Grain size		40	60	40	60
		15	15	15	15

P	M	K	N	S	H
●	●	○	●		

FLAP DISCS ZIRCONIUM STEARATE

Z+

ART. HUSKY

Flap discs with fibre backing and zirconium stearate cloth. The stearate allows cold working and lower disc clogging. Ideal for low pressure machining of aluminium cast iron, brass, copper and all clogging materials.

Tech. Code		G1255115040	G1255115060
GR61	Euro	2,79	2,79
Ø	mm	115	115
Grain size		40	60
		20	20

P	M	K	N	S	H
○	●	●	●		

FLAT FLAP DISCS CUBITRON II

C+

ART. 967/A CUBITRON II VERSIONE PIANA

Ceramic type flap discs Cubitron II. Fiber flat shaped. Precise cutting and quick grinding and weld removal, low heat development. Ideal for welding and deburring removal on steel, stainless steel, aluminum and non-ferrous metals.

Tech. Code		G1300115040	G1300115060	G1300115080
GR69	Euro	7,97	7,42	7,42
Ø	mm	115 x 22.2	115 x 22.2	115 x 22.2
Grit		40	60	80
		10	10	10

Tech. Code		G1300125040	G1300125060	G1300125080
GR69	Euro	7,68	7,35	7,35
Ø	mm	125 x 22,2	125 x 22,2	125 x 22,2
Grit		40	60	80
		10	10	10

P	M	K	N	S	H
●	●	○	●		

FLAP DISCS CONICA CUBITRON II

C+

ART. 967/A CUBITRON II CONICA VERSION

Ceramic flap disc Cubitron II. Fiber pad. Conical shape. Precise cutting and quick grinding and weld removal with a low heat development. Ideal for welding and deburring removal on steel, stainless steel, aluminum and non-ferrous metals.

Tech. Code		G1310115040	G1310115060	G1310115080
GR69	Euro	7,77	7,24	7,24
Ø	mm	115 x 22,2	115 x 22,2	115 x 22,2
Grit		40	60	80
		10	10	10

Tech. Code		G1310125040	G1310125060	G1310125080
GR69	Euro	7,83	7,50	7,50
Ø	mm	125 x 22,2	125 x 22,2	125 x 22,2
Grit		40	60	80
		10	10	10

P	M	K	N	S	H
●	●	○	●		

Indivisible package Suggested retail package - Unit price

SOFT FLAP GRINDING DISCS

WRK

Z

ART. FOX

Zirconium flap grinding discs with glass fiberglass backing.
The flaps arranged in an angular way are characterized by a great flexibility comparable to that of a fiber disc but with a longer duration of life.
Particularly suitable for working angles, shaped edges, corrugated surfaces, thin sheets or where it is necessary to exert low pressures.
Cold cut.
Useful on all materials with medium power grinders.
Operating speed 10,400 rpm (63 m/s)

Tech. Code		G1410115040	G1410115060	G1410115080
GR68	Euro	5,30	5,30	5,30
Ø	mm	115 x 22,2	115 x 22,2	115 x 22,2
Grit		40	60	80
		20	20	20

P	M	K	N	S	H
●	●	●	●		

Z

ART. MINI FOX

Shares the same Fox discs features, 50 mm diameter, Mini Fox guarantees full performance in restricted spaces. Pad in special Nylon with Roloc quick coupling.
Cutting speed 24000 rev. (63 m/s)

Tech. Code		G1415050040	G1415050060	G1415050080	G1415050120
GR68	Euro	4,22	4,22	4,22	4,22
Ø	mm	50	50	50	50
Grit		40	60	80	120
		25	25	25	25

P	M	K	N	S	H
●	●	●	●		

QUICK COUPLING ARBORS

3M

ART. 9884

Quick coupling Roloc arbor to be used with Mini Fox flap discs 6-mm guide.

Tech. Code		G1416025
GR69	Euro	11,86
ø	mm	25

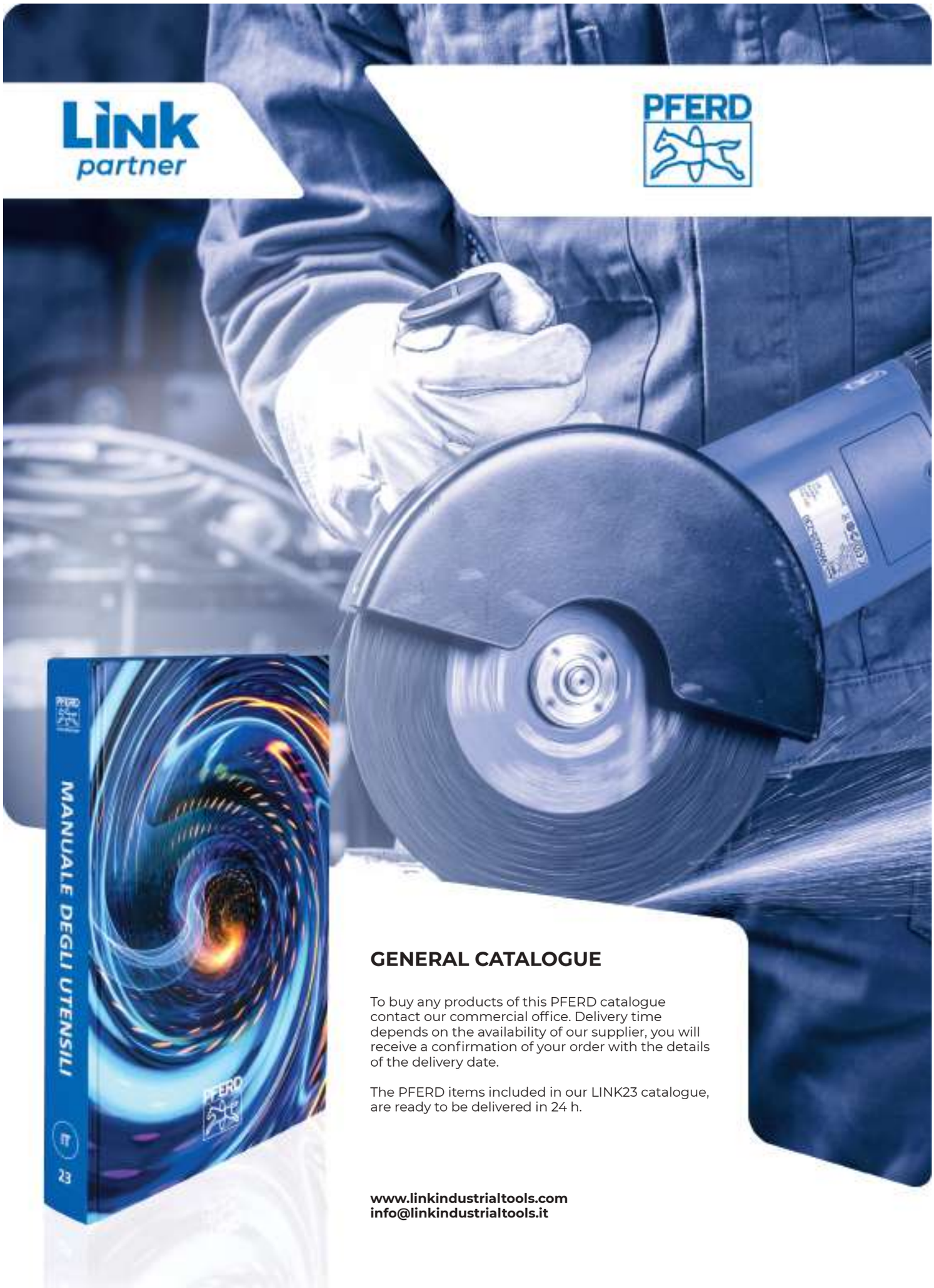
Related products

CORDLESS ANGLE GRINDER BATTERY OPERATED 18V

Tech. Code	Battery tension V	Cutting depth max. mm	No-load speed/min Rpm
N406818	18	33	9000

The products are available in chapter N

Indivisible package Suggested retail package - Unit price



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The PFERD items included in our LINK23 catalogue, are ready to be delivered in 24 h.

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SURFACE TREATMENT DISCS

ART. POLISH TNT

Non-woven disc impregnated with abrasive grit on a fibreglass backing plate.
Close mesh allows minor imperfections left by flap discs to be removed for a perfect mirror finish.
Low noise, highly recommended for machining stainless steel and suitable for all other ferrous surfaces, as well as plastic, wood, marble and glass or on all surfaces where a superior finishing is required.
Use on angle grinders at a speed of 8300 rpm (50 m/s).

Tech. Code		G1421115
GR61	Euro	14,03
Ø	mm	115 x 22.2
Grain size		Soft
		10

P	M	K	N	S	H
○	●	○	○	○	

ART. SURFACE TNT

Non-woven flap discs with fibreglass backing plate.
Special Nylon thread flaps impregnated with abrasive grit ensure consistent finishing throughout the entire process. Low noise. Allows a high degree of finish to be obtained on iron, stainless steel, aluminium, titanium, fibreglass, non-ferrous materials, plastics, paints and lacquers. The level of finish depends on the type of disc chosen.
Use on angle grinders at 10,400 rpm (63 m/s)

Tech. Code		G1426115C	G1426115M	G1426115VF
GR61	Euro	10,61	10,61	10,61
Ø	mm	115 x 22.2	115 x 22.2	115 x 22.2
Grain size		Coarse	Medium	Very fine
		10	10	10

P	M	K	N	S	H
●	●	●	●	●	

ART. CLEAN TNT

Non-woven disc impregnated with abrasive silicon carbide granules on a fibreglass backing plate.
Open mesh for improved removal of material without clogging.
May be cleaned using compressed air. Low noise. No contaminants released.
Can be used on all materials.
Use on angle grinders at 8,300 rpm (50 m/s).

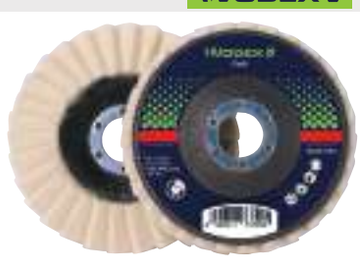
Tech. Code		G1431115
GR61	Euro	6,92
Ø	mm	115 x 22.2
Grain size		Coarse
		10

P	M	K	N	S	H
●	●	●	●	●	●

FELT FLAP DISCS

ART. FELT

Felt flap discs with fibreglass backing plate.
Specifically designed for use with abrasive paste in surface mirror polishing.
Use on angle grinders at 2500 rpm (16 m/s).



Tech. Code		G1441115
GR61	Euro	10,24
Ø	mm	115 x 22.2
Grain size		Coarse
		10

To be used in combination with abrasive past G7984.

P	M	K	N	S	H
●	●		●		

UNITIZED DISCS

ART. G1445

Untized discs, obtained from pressed layers of non-woven fabric, guarantee an excellent surface finish,cold grinding, reduced clogging and long life. The 3SF version in Silicon Carbide is more flexible and suitable for small burrs, cleaning of welding traces and polishing. The more rigid and agrresive 6AM version in Aluminum Oxide is suitable for burrs and bevels even on edges. 22.23 mm hole for use on angle grinders. Max speed 10,000 RPM - Recommended 5,000RPM

Tech. Code		G144512763SF	G144512766AM
GR69	Euro	19,26	22,62
Ø x L	mm	127 x 6	127 x 6
Grit		3SF	6AM

P	M	K	N	S	H
●	●	●	●	●	

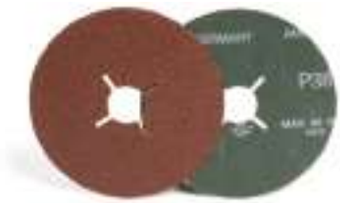
ALUMINUM OXIDE ABRASIVE FIBER DISCS

A

ART. KF708

Used for general machining from roughing to finishing of all metals, in particular non-ferrous materials.

Tech. Code		G2000115036	G2000115060	G2000125036	G2000125060	G2000180036	G2000180060
GR69	Euro	0,85	0,67	0,95	0,77	1,58	1,30
Ø	mm	115 x 22.2	115 x 22.2	125 x 22.2	125 x 22.2	180 x 22.2	180 x 22.2
Grit		36	60	36	60	36	60
		25	25	25	25	25	25



P	M	K	N	S	H
●	○	○	●	●	

ZIRCONIA ABRASIVE FIBER DISCS

Z

ART. ZF713

Thanks to the high removal capacity of the zirconium they are indicated for heavy work.
They are recommended for use on high-power grinders.

Tech. Code		G2100115036	G2100115060	G2100125036	G2100125060	G2100180036	G2100180060
GR69	Euro	1,22	0,82	1,35	0,91	2,42	1,60
Ø	mm	115 x 22.2	115 x 22.2	125 x 22.2	125 x 22.2	180 x 22.2	180 x 22.2
Grit		36	60	36	60	36	60
		25	25	25	25	25	25

P	M	K	N	S	H
●	●	○	○	○	

ADDITIVE COATED CERAMIC FIBER DISCS

C+

ART. XF885

Ceramic abrasive specific features allow for larger material removal rates and consistency in performance.
Lubricant and coolant additives ensure a proper cold cutting. Specifically recommended for alloy and stainless steel as well as for titanium and aluminum alloys. Use of high-power grinders is recommended.

Tech. Code		G2120115036	G2120115040	G2120115060	G2120115080	G2120115120
GR69	Euro	2,44	2,07	1,62	1,49	1,49
Ø	mm	115 x 22,2	115 x 22,2	115 x 22,2	115 x 22,2	115 x 22,2
Grit		36	40	60	80	120
		50	50	50	50	50

Tech. Code		G2120125036	G2120125040	G2120125060	G2120125080	G2120125120
GR69	Euro	2,71	2,30	1,81	1,64	1,64
Ø	mm	125 x 22,2	125 x 22,2	125 x 22,2	125 x 22,2	125 x 22,2
Grit		36	40	60	80	120
		50	50	50	50	50

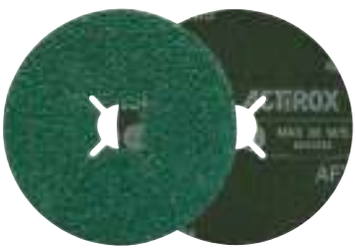
P	M	K	N	S	H
●	●	○	○		

ACTIROX FIBERED DISCS

ART. AF799

Fiber disc with new generation ceramic abrasive.characterized by an innovative grain shape. Extraordinary performances in terms of duration and removal. Suitable for all steel and tough materials. Available only in 36 grit to maximize yield we recommend use with the G2127 pad.

Tech. Code		G212611536	G212611560	G212612536	G212612560	G212618036	G212618060
GR69	Euro	2,71	2,23	2,89	2,48	5,67	4,95
Ø	mm	115	115	125	125	180	180
Grit		36	60	36	60	36	60
		50	50	50	50	50	50



P	M	K	N	S	H
●	○	○	○		

FIBER DISCS ACTIROX ADDITIVE

C+

ART. AF890

Fiber discs with latest generation ceramic abrasive with additives, characterized by an innovative grain shape. It offers extraordinary removal performance and long life. Suitable for all materials and in particular for working stainless steel. Only available in 36 grit, to maximize yield we recommend using it with the G2127 backing pad.

Tech. Code		G212511536	G212511560	G212512536	G212512560	G212518036	G212518060
GR69	Euro	3,05	2,48	3,26	2,76	6,51	5,50
Ø	mm	115	115	125	125	180	180
Grain		36	60	36	60	36	60
		50	50	50	50	50	50

P	M	K	N	S	H
○	●	●	●		

Indivisible package Suggested retail package - Unit price

FIBER DISCS STEARATE CERAMIC

ART. XF733

Ceramic fiber discs with stearate. Ideal for processing aluminum and its alloys. Thanks to the lubricating property of zinc stearate is solves many of the problems associated with the processing of material with low melting points. In addition, the ceramic abrasive offers a high removal capacity. Ideal for removing calamine.

Tech. Code		G2123115036	G2123115060	G2123125036	G2123125060
GR69	Euro	2,32	1,54	2,56	1,71
Ø	mm	115	115	125	125
Grit		36	60	36	60
		50	50	50	50

P	M	K	N	S	H
○	●	●	●		

AGGLOMERATED FIBER DISC

A

ART. KF736

The agglomerated fiber disc thanks to the particular shape of the abrasive granules offers an extraordinary performance in terms of durability and constant finish. Exceptional in finishing operations on stainless steel where it eliminates many steps.

Tech. Code		G2130115120	G2130115180	G2130125120	G2130125180	G2130180120	G2130180180
GR69	Euro	1,56	1,56	1,75	1,75	3,09	3,09
Ø	mm	115	115	125	125	180	180
Grit		120	180	120	180	120	180
		50	50	50	50	50	50

P	M	K	N	S	H
●	●				

FIBER DISCS CERABOND X

C+

ART. CERABOND X

Ceramic fiber discs for steel and stainless steel processing. The new grain structure allows for extremely fast stock removal- The coolant layer makes the disc long-lasting and performing. Great working uniformity for the entire duration of the disc. The convenient bucket box version guarantees the shape of the disc over time.

Tech. Code		G212811536	G212811560	G212812536	G212812560
GR69	Euro	2,24	2,13	2,19	2,19
Ø	mm	115	115	125	125
Grain		36	60	36	60
Box		Box	Box	Box	Box
		25	25	25	25

Tech. Code		G212811536BOX	G212811560BOX	G212812536BOX	G212812560BOX
GR69	Euro	2,13	2,13	2,19	2,19
Ø	mm	115	115	125	125
Grain		36	60	36	60
Box		Bucket	Bucket	Bucket	Bucket
		50	50	50	50

P	M	K	N	S	H
●	●	○	○		

ABRASIVE DISCS CUBITRON II

ART. 982 C

Fibre disc with new-generation Cubitron II®, ceramic abrasive.
Featuring evenly shaped grains positioned in the same direction.
Extremely tough, keeps its cutting performance unaltered throughout its service life, regardless its wear and tear.
Superior results in major removals, featuring great machining durability and speed for greatly improved performances. Mainly used on carbon steel.

Tech. Code		G2180115036	G2180115060	G2180125036	G2180125060	G2180180036	G2180180060
GR69	Euro	3,56	3,10	3,58	3,45	6,98	6,34
Ø	mm	115 x 22.2	115 x 22.2	125 x 22.2	125 x 22.2	180 x 22.2	180 x 22,2
Grit		36	60	36	60	36	60
		100	100	100	100	100	100

P	M	K	N	S	H
●	○	○	○		

ABRASIVE DISCS CUBITRON II CX PRO

ART. 982CX PRO

Featuring redesigned 3M™ Precision Shaped Grain Technology, these fiber discs deliver superior cutting speed and durability of 3M™ Cubitron™ II abrasives. Available in 36+ grit for medium and high pressure applications such as weld grinding, chamgering and heavy deburring.

Tech. Code		G2181115036	G2181125036	G2181180036
GR69	Euro	3,44	3,78	7,05
Ø	mm	115 x 22,23	125 x 22,23	180 x 22,23
Grit		36	36	36
		25	25	25

P	M	K	N	S	H
●	○	○	○		

ABRASIVE DISCS

C+

ART. 987 C

Fibre disc with new-generation Cubitron II®, ceramic abrasive, treated with coolant additive.
Featuring evenly shaped grains positioned in the same direction.
Extremely tough, keeps its cutting performance unaltered throughout its service life, despite the wear and use.
Superior results in major removals, featuring great machining durability and speed for greatly improved performances.
Suitable for stainless steel, nickel alloy and other heat sensitive materials.

P	M	K	N	S	H
○	●	●	●		

Tech. Code		G2185115036	G2185115060	G2185115080	G2185125036	G2185125060
GR69	Euro	3,79	3,23	3,05	3,96	3,47
Ø	mm	115 x 22,2	115 x 22,2	115 x 22,2	125 x 22,2	125 x 22,2
Grit		36	60	80	36	60
		100	100	100	100	100

Tech. Code		G2185125080	G2185180036	G2185180060	G2185180080
GR69	Euro	3,20	7,74	6,96	6,79
Ø	mm	125 x 22,2	180 x 22,2	180 x 22,2	180 x 22,2
Grit		80	36	60	80
		100	100	100	100

BACK-UP PADS MEDIUM/HARD FOR FIBER DISCS

ART. G2149

Back-up pads medium/hard for fiber discs. Ideal for working with processes of medium pressure and fine grits.

Tech. Code		G2149115	G2149125	G2149180
GR69	Euro	9,57	11,12	19,16
Ø	mm	115	125	180
Coupling		M14	M14	M14

BACK-UP PADS FOR FIBER DISCS

ART. G2150

Back-up pads hard for discs in fiber. Ideal for severe removal. With holes to reduce the temperature of the processing.

Tech. Code		G2150115	G2150125	G2150180
GR69	Euro	10,59	12,39	21,05
Ø	mm	115	125	180
Coupling		M14	M14	M14

BACK UP PADS HARD FOR FIBER DISCS ACTIROX

ART. TURBO PAD 3

Back up pads hard suitable for processing with ACTIROX fiber discs. It improves performance and durability significantly.

Tech. Code		G2127115	G2127125	G2127180
GR68	Euro	(20,67)	(24,10)	(41,35)
Ø	mm	115	125	180
Coupling		M14	M14	M14

BACK-UP PADS FOR CUBITRON II FIBER DISCS

ART. 64860 - 64861 - 64862

Specific rigid backing pads for Cubitron II® 982 C and 987 C fibre discs

Tech. Code		G2190115	G2190125	G2190180
GR69	Euro	32,00	35,15	47,70
Ø	mm	115	125	180

Indivisible package Suggested retail package - Unit price

VELCRO COATED CORUNDUM ABRASIVE DISCS

STARCKE

A

ART. 732EK

Aluminum oxide. Paper support. Mainly used for sanding flat surfaces of metal, particularly stainless steel, and raw wood. Semi-open anti-clogging coating.
Disc without holes.

Tech. Code		G2250150040	G2250150060	G2250150080	G2250150100	G2250150120
GR69	Euro	0,91	0,81	0,76	0,71	0,71
Ø	mm	150	150	150	150	150
Grit		40	60	80	100	120
		50	50	50	50	50

P	M	K	N	S	H
●	○	○	●	●	

VELCRO COATED ABRASIVE DISCS HOLED CORUNDUM

STARCKE

A

ART. 732EK

Aluminum oxide. Paper support. Mainly used for sanding flat surfaces of metal, especially stainless steel, and raw wood.
Semi-open anti-clogging coating. The disc has 6+1 holes.

Tech. Code		G2300150040	G2300150060	G2300150080	G2300150100	G2300150120
GR69	Euro	0,93	0,83	0,78	0,74	0,74
Ø	mm	150	150	150	150	150
Grit		40	60	80	100	120
		50	50	50	50	50

P	M	K	N	S	H
●	○	○	●	●	

ZIRCONIUM VELCRO COATED ABRASIVE DISCS

STARCKE

NEW

Z

ART. 341XK

Zirconium coated abrasive discs with sturdy canvas backing. Suitable for heavy use. High stock removal. It is recommended to use it with grinders of adequate power.

Tech. Code		G2310115040	G2310115060	G2310115080	G2310115120
GR69	Euro	1,03	1,01	0,92	0,85
Ø	mm	115	115	115	115
Grain		40	60	80	120
		50	50	50	50

P	M	K	N	S	H
●	●	○			

Tech. Code		G2310125040	G2310125060	G2310125080	G2310125120
GR69	Euro	1,25	1,07	1,03	0,92
Ø	mm	125	125	125	125
Grain		40	60	80	120
		50	50	50	50

Tech. Code		G2310150040	G2310150060	G2310150080	G2310150120
GR69	Euro	1,62	1,38	1,28	1,22
Ø	mm	150	150	150	150
Grain		40	60	80	120
		50	50	50	50

CERAMIC VELCRO COATED DISCS

VSM

NEW

C+

ART. XK870K

Discs with ceramic grain and sturdy polyester cloth. Exceptional stock removal capacity. Additives with coolants to allow a cold cut. Very efficient in the processing of hard and stainless steel.

Tech. Code		G2315115060	G2315115080	G2315115120	G2315125060	G2315125080
GR69	Euro	1,41	1,28	1,23	1,64	1,48
Ø	mm	115	115	115	125	125
Grain		60	80	120	60	80
		50	50	50	50	50

P	M	K	N	S	H
○	●	●	●		●

Tech. Code		G2315125120	G2315150060	G2315150080	G2315150120
GR69	Euro	1,42	2,33	2,08	1,96
Ø	mm	125	150	150	150
Grain		120	60	80	120
		50	50	50	50

AGGLOMERATED VELCRO DISC

A

ART. KK772K

The agglomerated velcro disc thanks to the particular shape of the abrasive granules offers an extraordinary performance in terms of durability and constand finish. Exceptional in finishing operations on stainless steel where it eliminates many steps. Indispensable to prepare the piece for the mirror finish.

P	M	K	N	S	H
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Tech. Code		G23201150120	G23201150240	G23201150320	G23201150600	G23201151200
GR69	Euro	1,28	1,28	1,28	1,28	1,28
Ø	mm	115	115	115	115	115
Grit		120	240	320	600	1200
		50	50	50	50	50

Tech. Code		G23201500120	G23201500240	G23201500320	G23201500600	G23201501200
GR69	Euro	2,05	2,05	2,05	2,05	2,05
Ø	mm	150	150	150	150	150
Grit		120	240	320	600	1200
		50	50	50	50	50

VELCRO DISCS FOR SUPERFINISHING

ART. TR-K

NEW

Velcro discs with pyramid-shaped abrasive. Homogeneous finish. Reinforced stand ensures long life. Exceptional in the preparation of mirror polishing on stainless steel.
On request also available in diameter 125 and 150

P	M	K	N	S	H
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Tech. Code		G2335115065	G2335115045	G2335115030	G2335115016	G2335115006
GR69	Euro	(2,60)	(2,60)	(2,60)	(2,60)	(2,60)
Ø	mm	115	115	115	115	115
Grit		A65	A45	A30	A16	A6
		25	25	25	25	25

WAFFLE BACKING FOR VELCRO DISCS

ART. G2350

Back cover for velcro-coated discs with spongy inter-layer.

Tech. Code		G2350115M14	G2350150M14	G2350150M87F
GR69	Euro	42,79	47,34	38,73
Ø	mm	115	150	150 - 6+1 fori
Coupling		M14	M14	M8 (5/16")

ALUMINUM OXIDE QUICK CHANGE DISCS

A

ART. KK711X

Quick change discs with R type male thread aluminum oxide cloth. Suitable for general use in roughing small surfaces on all types of metals and particulary on ferrous metals. The quick change allows a fast tool replacement by optimizing work processes and reducing costs.

P	M	K	N	S	H
●	○	○	●	●	

Tech. Code		G241050R036	G241050R060	G241050R080	G241050R120
GR69	Euro	0,93	0,84	0,82	0,81
Ø	mm	50	50	50	50
Coupling		Male thread type R	Male thread type R	Male thread type R	Male thread type R
Grit		36	60	80	120
		50	50	50	50

Tech. Code		G241075R036	G241075R060	G241075R080	G241075R120
GR69	Euro	1,12	1,04	1,02	1,01
Ø	mm	75	75	75	75
Coupling		Male thread type R	Male thread type R	Male thread type R	Male thread type R
Grit		36	60	80	120
		50	50	50	50

Indivisible package Suggested retail package - Unit price

CERAMIC QUICK CHANGE DISCS

C+

ART. XK880Y

Quick change discs with male thread type R. Latest generation ceramic cloth with cooling additive. Polyester support. Suitable for roughing small surfaces mainly of alloy steel and stainless steel. The quick change allows a quick replacement of the tool optimizing the work processes and reducing costs.

P	M	K	N	S	H
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Tech. Code		G242050R036	G242050R060	G242050R080	G242050R120
GR69	Euro	1,32	1,19	1,17	1,12
Ø	mm	50	50	50	50
Coupling		Male thread type R	Male thread type R	Male thread type R	Male thread type R
Grit		36	60	80	120
📦		50	50	50	50

Tech. Code		G242075R036	G242075R060	G242075R080	G242075R120
GR69	Euro	1,95	1,68	1,64	1,54
Ø	mm	75	75	75	75
Coupling		Male thread type R	Male thread type R	Male thread type R	Male thread type R
Grit		36	60	80	120
📦		50	50	50	50

CLOTH QUICK CHANGE DISCS

ART. SCM - KV707X

Quick change discs type R in cloth. Suitable for satin finishing and cleaning operations of metal surfaces. Very low material removal. The quick change allows a quick replacement of the tool by optimizing work processes and reducing costs.

P	M	K	N	S	H
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Tech. Code		G2430R50M	G2430R50VF	G2430R75M	G2430R75VF
GR69	Euro	1,82	1,82	2,74	2,74
Ø	mm	50	50	75	75
Coupling		Male thread type R	Male thread type R	Male thread type R	Male thread type R
Grit		Medium	Very fine	Medium	Very fine
📦		25	25	25	25

BACKING PADS FOR QUICK CHANGE DISCS TYPE R

ART. G2440

Backing pads for discs quick change with male thread R type.

Tech. Code		G2440R25	G2440R50	G2440R75
GR69	Euro	(9,39)	11,26	12,45
Ø	mm	25	50	75
Coupling type		R	R	R
Shank	mm	6	6	6
📦		1	1	1

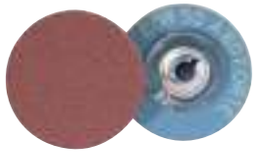
ALUMINUM OXIDE COMBI-DISCS

PFERD

A

ART. CD FORTE

Corundum abrasive a vlies support, high removal.Suitable for general use on all metals.For use on SBH pads.



P	M	K	N	S	H
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Tech. Code		G245025060	G245025120	G245038060	G245038120	G245050060	G245050120
GR69	Euro	1,02	1,02	1,29	1,29	1,77	1,77
Ø	mm	25	25	38	38	50	50
Grit		60	120	60	120	60	120
📦		100	100	100	100	100	100

COMBI-DISC BACKING PADS

PFERD

ART. SBH

Semi-rigid, blue, suitable for CD grinding discs.

Tech. Code		G246025	G246038	G246050
GR69	Euro	24,71	27,95	31,37
Ø	mm	25	38	50
Shank	mm	6 x 40	6 x 40	6 x 40

ALUMINUM OXIDE CLOTH SHEETS

STARCKE

A

ART. 641PF

Light flexible and cotton support, resin binder and corundum abrasive. Versatile long-lasting product.
Mainly used for grinding metals by hand, profile finishing and blanking burs, mechanical part finishing, cylinders and goose necks.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3250040	2,14	230 x 280	40	50
G3250050	1,96	230 x 280	50	50
G3250060	1,77	230 x 280	60	50
G3250080	1,63	230 x 280	80	50
G3250100	1,52	230 x 280	100	50
G3250120	1,52	230 x 280	120	50
G3250150	1,52	230 x 280	150	50
G3250180	1,52	230 x 280	180	50

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3250220	1,52	230 x 280	220	50
G3250240	1,52	230 x 280	240	50
G3250280	1,52	230 x 280	280	50
G3250320	1,52	230 x 280	320	50
G3250400	1,52	230 x 280	400	50
G3250500	1,52	230 x 280	500	50
G3250600	1,52	230 x 280	600	50

P	M	K	N	S	H
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ALUMINUM OXIDE CLOTH SHEETS

NORTON SAINT-GOBAIN

A

ART. R222

Light and flexible cotton support, resin binder and corundum abrasive.
Suitable for roughing, finishing and deoxidizing metals. Excellent also for wood machining.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3205040	3,59	230 x 280	40	50
G3205050	3,37	230 x 280	50	50
G3205060	3,18	230 x 280	60	50
G3205080	2,61	230 x 280	80	50
G3205100	2,51	230 x 280	100	50
G3205120	2,51	230 x 280	120	50
G3205150	2,51	230 x 280	150	50

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3205180	2,51	230 x 280	180	50
G3205220	2,51	230 x 280	220	50
G3205240	2,51	230 x 280	240	50
G3205280	2,51	230 x 280	280	50
G3205320	2,51	230 x 280	320	50
G3205400	2,51	230 x 280	400	50
G3205600	2,51	230 x 280	600	50

P	M	K	N	S	H
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WATERPROOF SILICON CARBIDE SHEETS

STARCKE

SiC

ART. 991A

For hand work, in particular on glass and paint, and for wet-sanding repair work on automobiles.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3380080	1,34	230 x 280	80	50
G3380100	1,19	230 x 280	100	50
G3380120	1,05	230 x 280	120	50
G3380150	0,96	230 x 280	150	50
G3380220	0,87	230 x 280	220	50
G3380320	0,87	230 x 280	320	50
G3380400	0,87	230 x 280	400	50
G3380600	0,87	230 x 280	600	50

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3380800	0,87	230 x 280	800	50
G33801000	0,87	230 x 280	1000	50
G33801200	0,87	230 x 280	1200	50
G33801500	1,14	230 x 280	1500	50
G33802000	1,14	230 x 280	2000	50
G33802500	1,14	230 x 280	2500	50
G33803000	1,38	230 x 280	3000	50
G33805000	1,81	230 x 280	5000	50

P	M	K	N	S	H
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WATERPROOF SILICON CARBIDE SHEETS

3M

SiC

ART. WT734

Silicon carbide. Suitable for wet-machining stucco, priming and paint.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3405080	1,26	230 x 280	80	50
G3405100	1,15	230 x 280	100	50
G3405120	1,11	230 x 280	120	50
G3405150	1,09	230 x 280	150	50
G3405180	1,04	230 x 280	180	50
G3405220	1,05	230 x 280	220	50
G3405280	1,01	230 x 280	280	50
G3405320	1,01	230 x 280	320	50

Tech. Code	GR69 Euro	Dimension mm	Grit	
G3405360	1,01	230 x 280	360	50
G3405400	1,01	230 x 280	400	50
G3405500	1,01	230 x 280	500	50
G3405600	1,01	230 x 280	600	50
G3405800	1,01	230 x 280	800	50
G34051000	1,01	230 x 280	1000	50
G34051200	1,01	230 x 280	1200	50

P	M	K	N	S	H
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ABRASIVE CLEAN & FINISH PADS IN NON-WOVEN SCOTCH-BRITE

3M

SiC A

ART. CF-SH

Scotch-Brite abrasive material pads for cleaning and finishing.
Type A: Aluminum Oxide. Used for cleaning or re-polishing steel and aluminum.
Type S: Silicon Carbide. Used on the wood to prepare the surfaces before applying adhesives and to eliminate the raised fibers before and after applying the primer.

Tech. Code		G3720AVFN	G3720SUFN
GR69	Euro	2,64	2,71
Dimension	mm	120 x 280	120 x 280
Grit		A/VFN	S/UFN
		60	60

P	M	K	N	S	H
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Indivisible package Suggested retail package - Unit price

ABRASIVE SPONGES ON 4 SIDES

A

ART. G3415

Abrasive sponges on 4 sides. Suitable for working on mutiple materials. Being made of sponge allows it to distribute the loads to work at its best even on irregular surfaces. Thesponges are washable and reusable ensuring a long life at the same time.

Tech. Code		G3415060	G3415100	G3415180
GR69	Euro	1,30	1,30	1,30
Dimension	mm	100 x 66 x 26	100 x 66 x 26	100 x 66 x 26
Grit		60	100	180
		60	60	60

P	M	K	N	S	H
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ALUMINUM OXIDE FLEX ABRASIVE CLOTH ROLLS

A

ART. G3300

Norton 222 aluminum oxide. Super-flexible cotton cloth, weight. Ideal for roughing, finishing and deoxidizing of metals. Excellent also for wood machining. 25-meter dispenser.

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G330025040	43,64	25	40	25
G330025050	39,67	25	50	25
G330025060	38,34	25	60	25
G330025080	33,93	25	80	25
G330025100	33,00	25	100	25
G330025120	33,00	25	120	25
G330025150	33,00	25	150	25

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G330025180	33,00	25	180	25
G330025220	33,00	25	220	25
G330025240	33,00	25	240	25
G330025320	33,00	25	320	25
G330025400	33,00	25	400	25
G330025600	33,00	25	600	25

P	M	K	N	S	H
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A

ART. G3302

Norton R222 Aluminum oxide. Super-flexible cotton cloth. Ideal for roughing, finishing and deoxidizing of metals. Excellent also for wood machining. 25-meter dispenser.

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G330238040	62,69	38	40	25
G330238050	58,67	38	50	25
G330238060	54,77	38	60	25
G330238080	50,72	38	80	25
G330238100	48,11	38	100	25
G330238120	48,11	38	120	25
G330238150	48,11	38	150	25

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G330238180	48,11	38	180	25
G330238220	48,11	38	220	25
G330238240	48,11	38	240	25
G330238280	48,11	38	280	25
G330238320	48,11	38	320	25
G330238400	48,11	38	400	25
G330238600	48,11	38	600	25

P	M	K	N	S	H
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A

ART. G3305

Norton 222 Aluminum oxide. Super-flexible cotton cloth, suitable for roughing, finishing and deoxidizing metals.
Excellent also for wood machining. 25-meter dispenser.

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G330550040	78,03	50	40	25
G330550050	73,22	50	50	25
G330550060	68,58	50	60	25
G330550080	63,24	50	80	25
G330550100	59,72	50	100	25
G330550120	59,72	50	120	25
G330550150	59,72	50	150	25

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G330550180	59,72	50	180	25
G330550220	59,72	50	220	25
G330550240	59,72	50	240	25
G330550280	59,72	50	280	25
G330550320	59,72	50	320	25
G330550400	59,72	50	400	25
G330550600	59,72	50	600	25

P	M	K	N	S	H
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ALUMINUM OXIDE ABRASIVE CLOTH ROLLS

STARCKE

A

ART. 641PF

Resin coated corundum cloth with light and flexible cotton support. Optimal for all metal grinding by hand. Use by hand to grind hard to reach spots. Thanks to the hight flexibility ideal for grinding and finishing concave and convex details. The strength of the support and the abrasive allow its use on all types of material.

Tech. Code	GR69 Euro	H mm	Grit	Rotolo m
G335050040	67,67	50	40	50
G335050050	66,39	50	50	50
G335050060	61,23	50	60	50
G335050080	59,18	50	80	50
G335050100	55,58	50	100	50
G335050120	55,58	50	120	50
G335050150	55,58	50	150	50
G335050180	55,58	50	180	50

Tech. Code	GR69 Euro	H mm	Grit	Rotolo m
G335050220	55,58	50	220	50
G335050240	55,58	50	240	50
G335050280	55,58	50	280	50
G335050320	55,58	50	320	50
G335050400	55,58	50	400	50
G335050500	55,58	50	500	50
G335050600	55,58	50	600	50

P	M	K	N	S	H
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A

ART. 641PF

Corundum grained, resin-coated cloth with a light and flexible cotton backing. Optimised for hand grinding of all kinds of metal. Ideal for sanding hard-to-reach areas. Highly flexible cloth, ideal for finishing operations of cancave and convex detailed workpieces. The combination of a tough cloth back with the abrasive grit firmly anchored make it ideal on all material surfaces.

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G3355115060	117,31	115	60	50
G3355115080	111,67	115	80	50
G3355115100	104,21	115	100	50
G3355115120	104,21	115	120	50

Tech. Code	GR69 Euro	H mm	Grit	Dispenser m
G3355115150	104,21	115	150	50
G3355115180	104,21	115	180	50
G3355115220	104,21	115	220	50
G3355115240	104,21	115	240	50

P	M	K	N	S	H
●	●	●	●	●	

A

ART. 531JFF

Corindone cloths with cotton support, extra flexible version.
Ideal for mould makers.

Tech. Code	GR69 Euro	H mm	Grit	Roll m
G335150060	76,51	50	60	50
G335150080	74,53	50	80	50
G335150100	69,63	50	100	50
G335150120	69,63	50	120	50
G335150150	69,63	50	150	50
G335150180	69,63	50	180	50

Tech. Code	GR69 Euro	H mm	Grit	Roll m
G335150220	69,63	50	220	50
G335150240	69,63	50	240	50
G335150320	69,63	50	320	50
G335150400	69,63	50	400	50
G335150600	69,63	50	600	50
G335150800	69,63	50	800	50

P	M	K	N	S	H
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ABRASIVE CLEAN & FINISH ROLLS

WRK

A

ART. G3630

Used for removing oxidation and for cleaning all kinds of metal, plastic, glass fiber, filler and paint by hand.
Excellent resistance to clogging. For dry or wet use. Can be cut to size to fit the shape of any workpiece.
Type A: Aluminum Oxide.

Tech. Code	GR68 Euro	Dimension mm	Grit
G3630AC	77,21	120 x 10,000	A/COARSE
G3630AM	65,00	120 x 10,000	A/MEDIUM

Tech. Code	GR68 Euro	Dimension mm	Grit
G3630AF	54,61	120 x 10,000	A/FINE
G3630AV	53,92	120 x 10,000	A/VFINE

P	M	K	N	S	H
●	●	●	●	●	○

G

ALUMINUM OXIDE ABRASIVE CLOTH BELTS

WRK

A

ART. G3480

Aluminum oxide. Suitable for roughing and finishing ferrous and non-ferrous metals, wood and other materials.

Tech. Code	GR68 Euro	Dimension mm	Grit	
G34800401000	5,26	100 x 1000	40	10
G34800401500	8,46	120 x 1500	40	10
G34800601000	4,81	100 x 1000	60	10
G34800601500	7,65	120 x 1500	60	10
G34800801000	4,68	100 x 1000	80	10

Tech. Code	GR68 Euro	Dimension mm	Grit	
G34800801500	7,41	120 x 1500	80	10
G34801001000	4,40	100 x 1000	100	10
G34801001500	6,91	120 x 1500	100	10
G34801201000	4,40	100 x 1000	120	10
G34801201500	6,91	120 x 1500	120	10

P	M	K	N	S	H
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ALUMINUM OXIDE ABRASIVE CLOTH BELTS

NORTON SAINT-GOBAIN

A

ART. G3505

Aluminum oxide R230. Suitable for roughing and finishing ferrous and non-ferrous materials, wood and other materials.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G35050401000	9,22	100 x 1000	40	10
G35050401500	15,12	120 x 1500	40	10
G35050601000	8,38	100 x 1000	60	10
G35050601500	13,50	120 x 1500	60	10
G35050801000	7,87	100 x 1000	80	10

Tech. Code	GR69 Euro	Dimension mm	Grit	
G35050801500	12,62	120 x 1500	80	10
G35051001000	7,55	100 x 1000	100	10
G35051001500	12,05	120 x 1500	100	10
G35051201000	7,55	100 x 1000	120	10
G35051201500	12,05	120 x 1500	120	10

P	M	K	N	S	H
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ZIRCONIA ABRASIVE CLOTH BELTS

WRK

Z

ART. G3490

Zirconium oxide for superior performance. Suitable for roughing and finishing stainless steel, ferrous and non-ferrous metals, wood and other materials.

Tech. Code	GR68 Euro	Dimension mm	Grit	
G34900401000	7,34	100 x 1000	40	10
G34900401500	12,19	120 x 1500	40	10
G34900601000	6,18	100 x 1000	60	10
G34900601500	10,12	120 x 1500	60	10
G34900801000	5,85	100 x 1000	80	10

Tech. Code	GR68 Euro	Dimension mm	Grit	
G34900801500	9,52	120 x 1500	80	10
G34901001000	5,42	100 x 1000	100	10
G34901001500	8,74	120 x 1500	100	10
G34901201000	5,42	100 x 1000	120	10
G34901201500	8,74	120 x 1500	120	10

P	M	K	N	S	H
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ZIRCONIA ABRASIVE CLOTH BELTS

NORTON SAINT-GOBAIN

Z

ART. G3525

Zirconium oxide NORTON R822 for superior performance. Suitable for roughing and finishing stainless steel, ferrous and non-ferrous materials, wood and other materials.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G35250401000	11,08	100 x 1000	40	10
G35250401500	18,34	120 x 1500	40	10
G35250601000	9,92	100 x 1000	60	10
G35250601500	16,28	120 x 1500	60	10
G35250801000	9,30	100 x 1000	80	10

Tech. Code	GR69 Euro	Dimension mm	Grit	
G35250801500	15,23	120 x 1500	80	10
G35251001000	8,96	100 x 1000	100	10
G35251001500	14,47	120 x 1500	100	10
G35251201000	8,96	100 x 1000	120	10
G35251201500	14,47	120 x 1500	120	10

P	M	K	N	S	H
●	●	○	○	○	

CUBITRON II ABRASIVE CLOTH BELTS

3M

C+

ART. 947/A CUBITRON II

Cubitron II ceramic abrasive belt with coolant additive. Representing the "next generation" of abrasive technology. Its unsurpassed abrasive features ensure roughing and finishing operations on nearly all materials. First choice on hard alloys.

Tech. Code		G35350401000	G35350601000	G35350801000	G35351201000
GR69	Euro	(21,20)	(21,51)	(20,28)	(18,18)
Dimension	mm	100 x 1000	100 x 1000	100 x 1000	100 x 1000
Grit		40	60	80	120
		10	10	10	10

Tech. Code		G35350401500	G35350601500	G35350801500	G35351201500
GR69	Euro	(24,08)	(30,77)	(25,91)	(23,39)
Dimension	mm	120 x 1500	120 x 1500	120 x 1500	120 x 1500
Grit		40	60	80	120
		10	10	10	10

P	M	K	N	S	H
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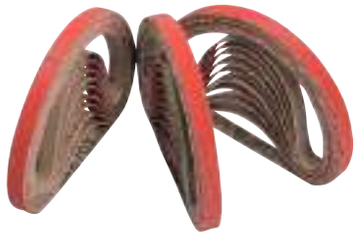
Indivisible package Suggested retail package - Unit price

ABRASIVE BELTS FOR PORTABLE MACHINES

C+

ART. XK850X

Ceramic abrasive belts with cooling additive and polyester support. Ideal for processing steel, stainless steel, aluminum, titanium, bronze. Can be used with portable electric or pneumatic grinders.



Tech. Code		G3555040	G3555060	G3555080	G3555120
GR69	Euro	1,44	1,41	1,30	1,27
Dimension	mm	10 x 330	10 x 330	10 x 330	10 x 330
Grit		40	60	80	120
		10	10	10	10

Tech. Code		G3555040A	G3555060A	G3555080A	G3555120A
GR68	Euro	1,55	1,41	1,35	1,35
Dimension	mm	13 x 305	13 x 305	13 x 305	13 x 305
Grit		40	60	80	120
		10	10	10	10

P	M	K	N	S	H
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ABRASIVE STICKS

ART. G3620

Sturdy polypropylene support. Equipped with spring tensioner to facilitate the replacement of the belt or the rotation of the same. Ideal for smoothing and finishing areas that are difficult to access. When mounted an A 180-grade aluminum oxide belt.

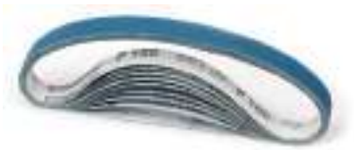
Tech. Code		G36201506	G362025018
GR69	Euro	6,24	14,45
Dimension	mm	150 x 6	250 x 18
Belt	mm	320 x 18	520 x 18

BELTS FOR FILES

A

ART. 541JF

Aluminum oxide belts with semi-flexible support, suitable for use with belt files from the G3620 range.



Tech. Code		G3625A120	G3625A180	G3625A320
GR69	Euro	1,01	1,01	1,01
Grit		120	180	320
Dimension	mm	320 x 6	320 x 6	320 x 6
		10	10	10

P	M	K	N	S	H
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Tech. Code		G3625C120	G3625C180	G3625C320
GR69	Euro	1,25	1,25	1,25
Grit		120	180	320
Dimension	mm	520 x 18	520 x 18	520 x 18
		10	10	10

Related products

WRK GLOVES IN POLYESTER COATED IN POLYURETHANE

Tech. Code	Taglia	EU size
K23107	M	7
K23108	L	8
K23109	XL	9

The products are available in chapter K

CUTTING SPEED CHART - FLAP WHEELS WITH SHANK

Ø ring mm	10	15	20-25	30	40	50	60	80
Velocità consigliata (RPM)	38.000	25.000	18.000	13.000	10.000	7.500	6.500	4.500
Max speed (rpm)	70.000	50.000	30.000	25.000	20.000	15.000	13.000	9.000

FLAP WHEELS WITH SHANK

WRK

A

ART. G4105

Aluminium oxide flap wheels, semi-flexible support. For grinding and finishing work on small or shaped workpieces made of carbon steel, stainless steel, non-ferrous metals, fiberglass, stone and marble.

Tech. Code	GR68 Euro	D x H mm	Shank mm	Grit	
G41051010060	4,07	10 x 10	3 x 40	60	25
G41051010080	4,07	10 x 10	3 x 40	80	25
G41051010120	4,07	10 x 10	3 x 40	120	25
G41051515060	4,07	15 x 15	3 x 40	60	25
G41051515080	4,07	15 x 15	3 x 40	80	25
G41051515120	3,00	15 x 15	3 x 40	120	25
G41052010040	2,60	20 x 10	6 x 40	40	10
G41052010060	2,57	20 x 10	6 x 40	60	10
G41052010080	2,57	20 x 10	6 x 40	80	10
G41052010120	2,57	20 x 10	6 x 40	120	10
G41052515040	2,30	25 x 15	6 x 40	40	10
G41052515060	2,30	25 x 15	6 x 40	60	10
G41052515080	2,30	25 x 15	6 x 40	80	10
G41052515120	2,30	25 x 15	6 x 40	120	10
G41052525040	2,55	25 x 25	6 x 40	40	10
G41052525060	2,55	25 x 25	6 x 40	60	10
G41052525080	2,61	25 x 25	6 x 40	80	10
G41052525120	2,61	25 x 25	6 x 40	120	10
G41053010040	2,15	30 x 10	6 x 40	40	10
G41053010060	2,15	30 x 10	6 x 40	60	10
G41053010080	2,21	30 x 10	6 x 40	80	10
G41053010120	2,25	30 x 10	6 x 40	120	10
G41053015040	2,18	30 x 15	6 x 40	40	10
G41053015060	2,18	30 x 15	6 x 40	60	10
G41053015080	2,25	30 x 15	6 x 40	80	10
G41053015120	2,27	30 x 15	6 x 40	120	10
G41053020040	2,34	30 x 20	6 x 40	40	10
G41053020060	2,34	30 x 20	6 x 40	60	10
G41053020080	2,38	30 x 20	6 x 40	80	10
G41053020120	2,42	30 x 20	6 x 40	120	10
G41054010040	2,27	40 x 10	6 x 40	40	10
G41054010060	2,27	40 x 10	6 x 40	60	10
G41054010080	2,33	40 x 10	6 x 40	80	10

Tech. Code	GR68 Euro	D x H mm	Shank mm	Grit	
G41054010120	2,35	40 x 10	6 x 40	120	10
G41054015040	2,32	40 x 15	6 x 40	40	10
G41054015060	2,32	40 x 15	6 x 40	60	10
G41054015080	2,36	40 x 15	6 x 40	80	10
G41054015120	2,38	40 x 15	6 x 40	120	10
G41054020040	2,45	40 x 20	6 x 40	40	10
G41054020060	2,45	40 x 20	6 x 40	60	10
G41054020080	2,51	40 x 20	6 x 40	80	10
G41054020120	2,54	40 x 20	6 x 40	120	10
G41055010040	2,55	50 x 10	6 x 40	40	10
G41055010060	2,55	50 x 10	6 x 40	60	10
G41055010080	2,58	50 x 10	6 x 40	80	10
G41055010120	2,61	50 x 10	6 x 40	120	10
G41055015040	2,65	50 x 15	6 x 40	40	10
G41055015060	2,65	50 x 15	6 x 40	60	10
G41055015080	2,70	50 x 15	6 x 40	80	10
G41055015120	2,72	50 x 15	6 x 40	120	10
G41055020040	2,81	50 x 20	6 x 40	40	10
G41055020060	2,81	50 x 20	6 x 40	60	10
G41055020080	2,89	50 x 20	6 x 40	80	10
G41055020120	2,91	50 x 20	6 x 40	120	10
G41055030040	3,15	50 x 30	6 x 40	40	10
G41055030060	3,15	50 x 30	6 x 40	60	10
G41055030080	3,33	50 x 30	6 x 40	80	10
G41055030120	3,47	50 x 30	6 x 40	120	10
G41056030040	3,91	60 x 30	6 x 40	40	10
G41056030060	3,91	60 x 30	6 x 40	60	10
G41056030080	4,04	60 x 30	6 x 40	80	10
G41056030120	4,10	60 x 30	6 x 40	120	10
G41058040040	6,17	80 x 40	6 x 40	40	10
G41058040060	6,17	80 x 40	6 x 40	60	10
G41058040080	6,39	80 x 40	6 x 40	80	10
G41058040120	6,92	80 x 40	6 x 40	120	10

P	M	K	N	S	H
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FLAP WHEELS IN NON-WOVEN FABRIC WITH SHANK

WRK

A

ART. G4310

Abrasive flap wheels with 6 mm shank made with non-woven fabric. Aluminum Oxide in various grains. Ideal for satin finishing of metals in general, plastic and wood.

Tech. Code	GR68 Euro	D x H mm	Grit	Max RPM	
G43103020AC	4,85	30x20	Coarse	20000	10
G43103020AF	4,85	30x20	Fine	20000	10
G43103020AM	4,85	30x20	Medium	20000	10
G43103020CPM	7,51	30x20	CP Med	15000	10
G43103030AC	4,94	30x30	Coarse	20000	10
G43103030AF	4,94	30x30	Fine	20000	10
G43103030AM	4,94	30x30	Medium	20000	10
G43103030CPM	7,51	30x30	CP Med	15000	10
G43104020AC	5,18	40x20	Coarse	16000	10
G43104020AF	5,18	40x20	Fine	16000	10
G43104020AM	5,18	40x20	Medium	16000	10
G43104020CPM	8,34	40x20	CP Med	13000	10

Tech. Code	GR68 Euro	D x H mm	Grit	Max RPM	
G43104030AC	5,10	40x30	Coarse	16000	10
G43104030AF	5,10	40x30	Fine	16000	10
G43104030AM	5,10	40x30	Medium	16000	10
G43104030CPM	8,34	40x30	CP Med	13000	10
G43105030AC	5,32	50x30	Coarse	12500	10
G43105030AF	5,32	50x30	Fine	12500	10
G43105030AM	5,32	50x30	Medium	12500	10
G43105030CPM	9,30	50x30	CP Med.	10500	10
G43106040AC	6,08	60x40	Coarse	10000	10
G43106040AF	6,08	60x40	Fine	10000	10
G43106040AM	6,08	60x40	Medium	10000	10
G43106040CPM	11,31	60x40	CP Med	8500	10

P	M	K	N	S	H
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CP MED version (Cut and Polish) is particulary dense which combines a great duration with an aggressive satin and a fine uniform finish.

Indivisible package Suggested retail package - Unit price

CUTTING SPEED CHART FOR ABRASIVE SPIRAL BANDS

Ø ring mm	10 - 13	15	22 - 25	30	45	60
Velocità consigliata (RPM)	35.000	25.000	17.000	13.000	8.500	6.500
Max speed (rpm)	45.000	40.000	25.000	18.000	12.500	9.000

ABRASIVE SPIRAL BANDS - ALUMINIUM OXIDE

WRK

A

ART. G4400

Abrasive spiral bands with aluminium oxide grain are universally suitable for many materials such as non-ferrous metals and plastic. Internally reinforced with cotton cloth.

P	M	K	N	S	H
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Tech. Code	GR68 Euro	D x H mm	Grit	
G44001020040	0,24	10 x 20	40	100
G44001020060	0,24	10 x 20	60	100
G44001020080	0,22	10 x 20	80	100
G44001325040	0,35	13 x 25	40	100
G44001325060	0,29	13 x 25	60	100
G44001325080	0,29	13 x 25	80	100
G44001530040	0,37	15 x 30	40	100
G44001530060	0,36	15 x 30	60	100
G44001530080	0,35	15 x 30	80	100
G44001925040	0,39	19 x 25	40	100
G44001925060	0,37	19 x 25	60	100
G44001925080	0,37	19 x 25	80	100
G44002220040	0,35	22 x 20	40	100
G44002220060	0,29	22 x 20	60	100
G44002220080	0,29	22 x 20	80	100

Tech. Code	GR68 Euro	D x H mm	Grit	
G44002525040	0,44	25 x 25	40	100
G44002525060	0,41	25 x 25	60	100
G44002525080	0,41	25 x 25	80	100
G44003020040	0,39	30 x 20	40	100
G44003020060	0,38	30 x 20	60	100
G44003020080	0,37	30 x 20	80	100
G44003030040	0,48	30 x 30	40	100
G44003030060	0,46	30 x 30	60	100
G44003030080	0,46	30 x 30	80	100
G44004530040	0,63	45 x 30	40	100
G44004530060	0,57	45 x 30	60	100
G44004530080	0,57	45 x 30	80	100
G44006030040	0,71	60 x 30	40	100
G44006030060	0,66	60 x 30	60	100
G44006030080	0,64	60 x 30	80	100

ABRASIVE SPIRAL BANDS - ZIRCONIA

WRK

Z

ART. G4402

Zirconium abrasive spiral bands internally reinforced with cotton cloth to strengthen the structure.
Zirconium ensures a very aggressive material removal. Specifically recommended on steel and stainless steel.

P	M	K	N	S	H
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Tech. Code	GR68 Euro	D x H mm	Grit	
G44021020040	0,37	10 x 20	40	100
G44021020060	0,37	10 x 20	60	100
G44021020080	0,36	10 x 20	80	100
G44021325040	0,44	13 x 25	40	100
G44021325060	0,43	13 x 25	60	100
G44021325080	0,43	13 x 25	80	100
G44021530040	0,49	15 x 30	40	100
G44021530060	0,46	15 x 30	60	100
G44021530080	0,44	15 x 30	80	100
G44022220040	0,44	22 x 20	40	100
G44022220060	0,43	22 x 20	60	100
G44022220080	0,43	22 x 20	80	100

Tech. Code	GR68 Euro	D x H mm	Grit	
G44023020040	0,56	30 x 20	40	100
G44023020060	0,49	30 x 20	60	100
G44023020080	0,47	30 x 20	80	100
G44023030040	0,68	30 x 30	40	100
G44023030060	0,66	30 x 30	60	100
G44023030080	0,64	30 x 30	80	100
G44024530040	0,91	45 x 30	40	100
G44024530060	0,84	45 x 30	60	100
G44024530080	0,82	45 x 30	80	100
G44026030040	1,04	60 x 30	40	100
G44026030060	0,97	60 x 30	60	100
G44026030080	0,95	60 x 30	80	100

Indivisible package Suggested retail package - Unit price

ABRASIVE SPIRAL BANDS - CERAMIC

WRK

C+

ART. G4407

Ceramic abrasive spiral bands, excellent removal capacity and cold cutting. Their structure is internally reinforced with cotton cloth. Specifically recommended for alloy steel, stainless steel, titanium and aluminum alloys.

Tech. Code	GR68 Euro	D x H mm	Grit	
G44071020060	0,57	10 x 20	60	100
G44071020080	0,54	10 x 20	80	100
G44071325060	0,71	13 x 25	60	100
G44071325080	0,66	13 x 25	80	100
G44071530060	0,75	15 x 30	60	100

Tech. Code	GR68 Euro	D x H mm	Grit	
G44071530080	0,71	15 x 30	80	100
G44073030060	1,02	30 x 30	60	100
G44073030080	1,02	30 x 30	80	100
G44074530060	1,26	45 x 30	60	100
G44074530080	1,24	45 x 30	80	100

P	M	K	N	S	H
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BAND HOLDERS FOR SPIRAL BANDS

WRK

ART. G4409

Band holders in expandable laminated rubber suitable for all abrasive spiral bands.

Tech. Code	GR68 Euro	D x H mm	Shank mm
G44091020	8,72	10 x 20	6 x 40
G44091325	8,90	13 x 25	6 x 40
G44091530	8,04	15 x 30	6 x 40
G44091925	9,50	19 x 25	6 x 40
G44092220	8,28	22 x 20	6 x 40

Tech. Code	GR68 Euro	D x H mm	Shank mm
G44092525	11,21	25 x 25	6 x 40
G44093020	11,21	30 x 20	6 x 40
G44093030	11,50	30 x 30	6 x 40
G44094530	13,78	45 x 30	6 x 40
G44096030	18,35	60 x 30	6 x 40

CARTRIDGE ROLLS

A

ART. G4430

Cartridge rolls in rolled-up aluminum oxide cloth. Ideal for grinding in difficult to acess areas. The canvas allows it to lengthen the life of the tool compared to traditional sleeves and rings. Available in cyclindrical shape and conical for restricted points.

Tech. Code		G4430A1238060	G4430A1238080	G4430A1238120
GR69	Euro	1,13	1,13	1,13
D x H x F	mm	12 x 38 x 3	12 x 38 x 3	12 x 38 x 3
Shape		Cylindrical	Cylindrical	Cylindrical
Grit		60	80	120
		50	50	50

Tech. Code		G4430B1238060	G4430B1238080	G4430B1238120
GR69	Euro	1,26	1,68	1,26
D x H x F	mm	12 x 38 x 3	12 x 38 x 3	12 x 38 x 3
Shape		Conica	Conica	Conica
Grit		60	80	120
		50	50	50

P	M	K	N	S	H
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PIN FOR ABRASIVE WRAPPED ROLLS

ART. G4431

Pin with tang D.6 for rolls with 3 mm holes.

Tech. Code		G4431P38
GR69	Euro	7,36
Ø Pin	mm	3
Ø Shank	mm	6

ABRASIVE FLAP WHEELS FOR SATINEX MACHINES

WRK

A

ART. G4520

19-mm hole abrasive rolls and driving key seat. Made in abrasive clothed corindone flaps, various types of grit. Fit for satinex machines tools for metal grinding. Also used to remove polish, protective wax coating and oxidised parts on all surfaces. Coarse grain grinders are also used on marble and stone. Recommended speed 3.500/4.000 rpm.

Tech. Code		G452010010040	G452010010060	G452010010080	G4520100100120
GR68	Euro	30,19	30,19	30,19	30,19
D x H	mm	100 x 100	100 x 100	100 x 100	100 x 100
Grit		40	60	80	120
Hole	mm	19	19	19	19
Speed	RPM	Max. 5.700	Max. 5.700	Max. 5.700	Max. 5.700

P	M	K	N	S	H
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Indivisible package Suggested retail package - Unit price

NON-WOVEN MIXED FLAP WHEELS FOR HAND-HELD GLAZING MACHINES

WRK

SiC A

ART. G4540

Combination flap wheels with 19mm keyhole. These wheels alternate corundum-type flaps with non-woven fabric. For grade 40 and 60 (coarse), corundum type cloth wheel is used, while silicon carbide type is suitable for grade 80 and 120 (medium) Its structure combines non-woven fabric removal features with cloth finishing performance Recommended speed 2.500/3.000 rpm

Tech. Code		G4540110AM40	G4540110AM60	G4540110SM80	G4540110SM120
GR68	Euro	25,95	25,95	25,95	25,95
D x H	mm	100 x 100	100 x 100	100 x 100	100 x 100
Grit		40	60	80	120
Hole	mm	19	19	19	19
Speed	RPM	Max. 5.000	Max. 5.000	Max. 5.000	Max. 5.000

P	M	K	N	S	H
●	●		●	○	

NON-WOVEN WHEELS FOR SATINEX MACHINES

WRK

A

ART. G4605

19-mm hole abrasive wheels, with driving key seat, made in non-woven fabric Aluminum oxide, various types of grit. Ideal for metal glazing. Removing scales oxide e rust. Produces homogeneus surfaces without defects. The Cuts and Polish version combines great cutting performance with smooth, consistent finishing. Recommended speed 3.000/3.500 rpm.

Tech. Code		G4605110100C	G4605110100F	G4605110100M	G4605110100VF	G4605110100CPM
GR68	Euro	20,36	20,36	20,36	20,36	(61,94)
D x H	mm	100 x 100	100 x 100	100 x 100	100 x 100	100 x 100
Hole	mm	19	19	19	19	19
Grit		Coarse	Fine	Medium	Very fine	CPM
Speed	RPM	Max. 5.000	Max. 5.000	Max. 5.000	Max. 5.000	Max. 5.000

P	M	K	N	S	H
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ABRASIVE FLAP WHEELS WITH HOLE

WRK

A

ART. G4705

Abrasive flap wheels with hole, are also used for fixed and portable machines' grinding and finishing.
Made in corundom with standard cotton support, can fit nearly all applications.
Max speed expressed in RPM: D.165 - 5.300 , D.200 - 4.400 , D.250 - 3.600

Tech. Code	GR68 Euro	D x H mm	Hole mm	Grit
G470516530060	(25,71)	165 x 30	54	60
G470516530080	(26,93)	165 x 30	54	80
G470516530120	(29,27)	165 x 30	54	120
G470516530180	(32,89)	165 x 30	54	180
G470516550060	(30,54)	165 x 50	54	60
G470516550080	(32,35)	165 x 50	54	80
G470516550120	(35,71)	165 x 50	54	120
G470516550180	(41,12)	165 x 50	54	180

Tech. Code	GR68 Euro	D x H mm	Hole mm	Grit
G470520050060	(39,18)	200 x 50	54	60
G470520050080	(41,65)	200 x 50	54	80
G470520050120	(46,23)	200 x 50	54	120
G470520050180	(53,73)	200 x 50	54	180
G470525050060	(65,76)	250 x 50	100	60
G470525050080	(70,36)	250 x 50	100	80
G470525050120	(77,41)	250 x 50	100	120
G470525050180	(86,54)	250 x 50	100	180

P	M	K	N	S	H
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NON-WOVEN FABRIC CLOTH FLAP WHEELS WITH HOLE

WRK

A

ART. G4805

Abrasive flap wheels with hole for stationary machines, made in non-woven fabric.
Aluminum oxide, various types of grit Ideal for metal glazing.

Tech. Code		G480520050C8	G480520050F8	G480520050M8	G480520050VF8
GR68	Euro	45,96	45,96	45,96	45,96
D x H	mm	200 x 50	200 x 50	200 x 50	200 x 50
Hole	mm	76	76	76	76
Grit		Coarse	Fine	Medium	Very fine
Speed	RPM	Max. 2.500	Max. 2.500	Max. 2.500	Max. 2.500

P	M	K	N	S	H
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FLAP WHEELS REDUCER FLANGES

ART. G4850

Manufactured in aluminum, supplied in pairs.

Tech. Code		G485054X25	G485076X25	G4850100X25
GR69	Euro	(21,66)	(55,39)	(55,34)
Ø	mm	54	76	100
Hole	mm	25	25	25

G

BRISTLE BRUSH ON SHAFT BB-ZS

3M

ART. G4890

Brushes made from Aluminum Oxide and Cubitron. Ideal for removing microfilaments on flat profile surface. Its pattern makes it ideal for unevenly shaped profiles. Clogging free features allow for perfect paint and glue residues removal. Superior performance on finishing operations No clogging.

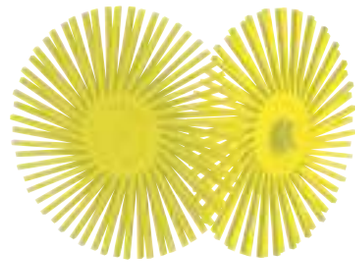
Tech. Code		G489075080	G489075120	G489075220
GR69	Euro	34,77	34,77	34,77
Ø	mm	75	75	75
Grit		80	120	220
Pivot	mm	6	6	6
Colour		Yellow	White	Rosso
📦		6	6	6

ABRASIVE DISCS BRUSHES SUNBURST

Dedeco

ART. G4892

Abrasive brushes with aluminum oxide with thermoplastic binder. Disc shape with type R quick coupling. Ideal for deburring, finishing and polishing of various types of materials, including metals, plastics, ceramics and wood. The uniform distribution of the abrasive in the thermoplastic material guarantees a long tool life and a uniform result throughout the life of the tool. The flexibility of the bristles allows a perfect adaptation of the brush on both flat and shaped surfaces. Low heat emission during processing.



Tech. Code		G489275036	G489275050	G489275080	G489275120
GR69	Euro	(14,87)	(14,87)	(14,87)	(14,87)
Ø	mm	75	75	75	75
Grit		36	50	80	120
Colour		Brown	Green	Giallo	White
📦		10	10	10	10

ABRASIVE CUP BRUSHES SUNBURST

Dedeco

ART. G4894

Aluminum oxide abrasive brushes with theroplastic binder. Cup shape with type R quick coupling. Ideal for deburring, finishing and polishing of various types of materials, including metals, plastics, ceramics and wood. The uniform distribution of the abrasive in the thermoplastic material guarantees a long life and a uniform resulit throughout the life of the tool. The flexibility of the bristles allows a perfect adaptation of the brush on both flat and shaped surfaces. Low heat emission during processing.

Tech. Code		G489425036	G489425050	G489425080	G489425120	G489450036	G489450050
GR69	Euro	(7,96)	(7,96)	(7,96)	(7,96)	(9,86)	(9,86)
Ø	mm	25	25	25	25	50	50
Grit		36	50	80	120	36	50
Colour		Brown	Green	Giallo	White	Brown	Green
📦		10	10	10	10	10	10

Tech. Code		G489450080	G489450120	G489475036	G489475050	G489475080	G489475120
GR69	Euro	(9,86)	(9,86)	(15,18)	(15,18)	(15,18)	(15,18)
Ø	mm	50	50	75	75	75	75
Grit		80	120	36	50	80	120
Colour		Giallo	White	Brown	Green	Giallo	White
📦		10	10	10	10	10	10

SUNBURST RADIAL ABRASIVE BRUSHES

Dedeco

ART. G4895

Aluminum oxide abrasive brushes with thermoplastic binder. Radial in shape, they are supplied complete in the 8-layer version. The bore of the brush includes reduction bushings to adapt it to multiple diameters. Ideal for deburring, finishing and polishing of many materials including metals and plastics. Low heat emission.

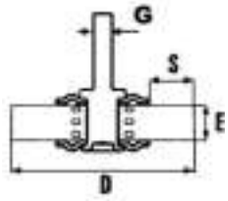
Tech. Code		G48951500808	G48951501208	G48951502208
GR69	Euro	101,67	101,67	101,67
Ø	mm	150	150	150
Grit		80	120	220
Colour		Giallo	White	Marrone

📦 Indivisible package 📦 Suggested retail package - Unit price

WHEEL BRUSHES WITH SHANK

ART. G4901

High resistant crimped wire. Long service life and excellent industrial processing performances.

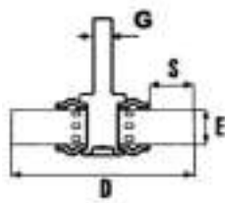


Tech. Code	GR69 Euro	D mm	E mm	S mm	G mm	Filo	Max speed RPM	
G490140X9	7,70	40	9	8	6 x 25	Steel Ø 0,3	18.000	1
G490140X12	10,10	40	12	8	6 x 25	Steel Ø 0,3	18.000	1
G490150X9	7,70	50	9	13	6 x 25	Steel Ø 0,3	15.000	1
G490150X12	10,10	50	12	13	6 x 25	Steel Ø 0,3	15.000	1
G490160X9	7,70	60	9	15	6 x 25	Steel Ø 0,3	15.000	1
G490160X12	10,10	60	12	15	6 x 25	Steel Ø 0,3	15.000	1
G490170X9	8,15	70	9	20	6 x 25	Steel Ø 0,3	15.000	1
G490170X15	12,65	70	15	20	6 x 25	Steel Ø 0,3	15.000	1
G490180X12	10,65	80	12	20	6 x 25	Steel Ø 0,3	12.000	1
G490180X15	12,65	80	15	20	6 x 25	Steel Ø 0,3	12.000	1
G490140INOX	15,45	40	12	8	6 x 25	Stainless Steel Ø 0,3	18.000	1
G490150INOX	15,45	50	12	13	6 x 25	Stainless Steel Ø 0,3	15.000	1
G490160INOX	15,45	60	12	15	6 x 25	Stainless Steel Ø 0,3	15.000	1
G4901750INOX	16,45	70	12	20	6 x 25	Stainless Steel Ø 0,3	15.000	1

WHEEL BRUSHES WITH SHANK

ART. G4902

Crimped wire brushes. Universal use in cleaning steps. Ideal for removing rust, polishing, light deburring removing corrosion and varnish.

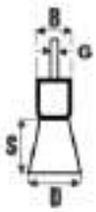


Tech. Code	GR69 Euro	D mm	E mm	S mm	G mm	Filo	Max speed RPM	
G490202004	(7,30)	20	4	3	6 x 30	Steel Ø 0,20	20.000	10
G490203006	(5,11)	30	6	7	6 x 30	Steel Ø 0,20	20.000	10
G490204009	(4,86)	40	9	9	6 x 30	Steel Ø 0,20	18.000	10
G490205015	(7,04)	50	15	13	6 x 30	Steel Ø 0,20	15.000	10
G490206015	(7,85)	60	15	15	6 x 30	Steel Ø 0,20	15.000	10
G490207010	(5,75)	70	10	19	6 x 30	Steel Ø 0,30	15.000	10
G490207015	(7,22)	70	15	19	6 x 30	Steel Ø 0,30	15.000	10
G490208015	(8,44)	80	15	19	6 x 30	Steel Ø 0,30	12.000	10
G490210010	(9,09)	100	10	20	6 x 30	Steel Ø 0,30	12.000	10
G490202004IN	(9,26)	20	4	3	6 x 30	Stainless steel ø 0,20	20.000	10
G490203006IN	(6,31)	30	6	7	6 x 30	Stainless steel ø 0,20	20.000	10
G490204009IN	(7,94)	40	9	9	6 x 30	Stainless steel ø 0,20	18.000	10
G490205015IN	(11,97)	50	15	13	6 x 30	Stainless steel ø 0,20	15.000	10
G490206015IN	(12,75)	60	15	15	6 x 30	Stainless steel ø 0,20	15.000	10
G490207004IN	(16,52)	70	4	9	6 x 30	Stainless steel ø 0,20	15.000	10
G490207015IN	(12,78)	70	15	19	6 x 30	Stainless steel ø 0,30	15.000	10
G490208015IN	(13,73)	80	15	19	6 x 30	Stainless steel ø 0,30	12.000	10
G490210010IN	(14,84)	100	10	20	6 x 30	Stainless steel ø 0,30	12.000	10

END BRUSHES WITH SHANK

ART. G4903

High resistant crimped wire. Designed for front operations with electrical or air tools.

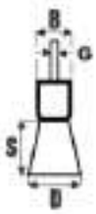


Tech. Code	GR69 Euro	D mm	S mm	B mm	G mm	Filo	Max speed RPM	
G490318	4,20	18	24	15	6 x 21	Steel ø 0.3	18.000	12
G490322	5,25	22	27	20	6 x 21	Steel ø 0.3	18.000	12
G490325	6,45	25	27	25	6 x 21	Steel ø 0.3	18.000	12
G490335	7,60	35	30	30	6 x 21	Steel ø 0.3	15.000	12

END BRUSHES WITH SHANK

ART. G4904

End brushes with crimped wire. Ideal for lightbrushing and deburring or removing rust. During the rotation filament spread out permits to access even hard-to-reach locations into holes and cavities.



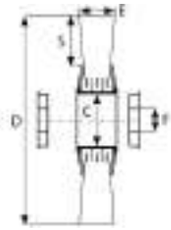
Tech. Code	GR69 Euro	D mm	S mm	B mm	G mm	Filo	Max speed RPM	
G490410	4,21	10	20	10	6 x 21	Steel Ø 0.20	20.000	10
G490410IN	5,33	10	20	10	6 x 21	Stainless steel Ø 0.20	20.000	10
G490415	4,19	15	22	16	6 x 21	Steel Ø 0.20	18.000	10
G490415IN	5,92	15	22	16	6 x 21	Stainless steel Ø 0.20	18.000	10
G490420	5,12	20	25	22	6 x 21	Steel Ø 0.20	18.000	10
G490420IN	8,28	20	25	22	6 x 21	Stainless steel Ø 0.20	18.000	10
G490430	7,30	30	25	29	6 x 21	Steel Ø 0.20	15.000	10
G490430IN	12,24	30	25	29	6 x 21	Stainless steel Ø 0.20	15.000	10

Indivisible package Suggested retail package - Unit price

WHEEL BRUSHES

ART. G4905

High resistant crimped wire. For deburring, etching and polishing.
K = multihole reduction kit 25-20-16



Tech. Code	GR69 Euro	D mm	E mm	S mm	C mm	F mm	Filo
G4905100	25,35	100	20	19	28	16	Steel Ø 0.35
G4905150	26,45	150	27	36	38	K	Steel Ø 0.35
G4905150/1	19,40	150	20	32	38	K	Steel Ø 0.35
G4905200	31,70	200	29	44	38	K	Steel Ø 0,35
G4905200/0	24,10	200	23	44	38	K	Steel Ø 0,35
G4905250	61,90	250	30	65	58	38+K	Steel Ø 0,35
G4905150/2	29,70	150	27	32	38	K	Steel Ø 0.50
G4905200/1	35,70	200	29	47	38	K	Steel Ø 0.50
G4905100/0	32,00	100	12	25	-	12	Brass-plated steel Ø 0.30
G4905150INOX	49,55	150	27	36	38	K	Stainless steel Ø 0.30
G4905200INOX	64,20	200	29	44	38	K	Stainless steel Ø 0.30

WHEEL BRUSHES TWIST KNOTTED WIRE

ART. G4908

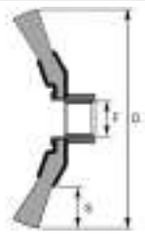
Aggressive brush, suitable for removing burning and rust. Cleaning of fillet weld and elimination of adhesive residues.

Tech. Code	GR69 Euro	D mm	E mm	S mm	F mm	Filo	Max speed RPM
G4908115	(14,88)	115	12	22	22,2	Steel Ø 0.50	12.500
G4908115IN	(33,47)	115	12	22	22,2	Stainless steel Ø 0.35	12.500
G4908125	(16,97)	125	12	28	22,2	Steel 0,50	11.000
G4908125IN	(34,57)	125	12	28	22,2	Stainless steel Ø 0.35	11.000

BEVEL BRUSHES

ART. G4911

Cone-shaped brushes suitable for uneven surfaces and surfaces with sharp edges. Suitable for removing scale, rust and residues from various materials. The crimped steel wires are extremely high strength and provide a long service life.

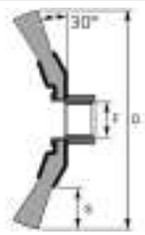


Tech. Code	GR69 Euro	D mm	S mm	F	Wire	Max speed RPM
G4911090	11,25	90	20	M14	Steel Ø 0.35	14,000
G4911090IN	16,70	90	20	M14	Stainless steel Ø 0.30	14,000
G4911120	19,20	120	22	M14	Steel Ø 0.35	12,500
G4911120IN	24,85	120	22	M14	Stainless steel Ø 0.30	12,500

THREADED BEVEL TWIST KNOTTED BRUSHES

ART. G4912

Aggressive brush. Excellent for heavy duty brushing, deburring e rust removal. The conical shape facilitates reaching difficult areas such as inner corners, grooves and gorges.

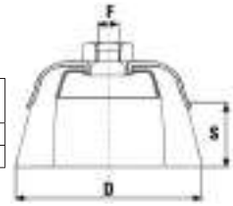


Tech. Code	GR69 Euro	D mm	S mm	F	Filo	Max speed RPM
G4912115	18,35	115	26	M14 x 2	Steel Ø 0.50	15.000
G4912115IN	28,20	115	26	M14 x 2	Stainless steel Ø 0.35	15.000

CUP BRUSHES

ART. G4910

Crimped, high-resistance wire. Used for angle grinders or fixed machines.
Ideal to prepare metal surfaces for the painting process.



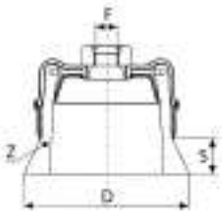
Tech. Code	GR69 Euro	D mm	S mm	F	Wire	Max speed RPM
G491080	9,85	75	25	M14	Steel Ø 0.35	14.000
G4910100	20,15	100	25	M14	Steel Ø 0.35	8.500

Indivisible package Suggested retail package - Unit price

TWISTED KNOT CYLINDRICAL CUP BRUSHES

ART. G4915

Heavy-duty, tough performances high-standard safe operations. They can be fitted on fixed machineries, designed for removing fillet weld scale, rust, old paint and tough corrosion.

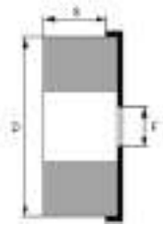


Tech. Code	GR69 Euro	D mm	S mm	F	Z = number of knots	Wire	Max speed RPM
G491570	16,30	70	17	M14	18	Steel Ø 0.35	14.000
G491570INOX	29,40	70	17	M14	18	Stainless steel Ø 0.50	14.000

FLAT BRUSHES FOR USE ON STATIONARY MACHINES

ART. DBUR

Ideal for deburring on machining centres. They have a resin body with drive holes. Nylon thread coated with Silicon Carbide. To be used with the specific support shaft. Particularly suitable for removing burrs after milling operations with interrupted cuts.



Tech. Code	GR69 Euro	D mm	S mm	F mm	Grain	Ø Wire mm	Max speed RPM
G4918075080	(103,07)	75	38	22,2	SIC 80	1,1	4.500
G4918075120	(103,07)	75	38	22,2	SIC 120	1,1	4.500
G4918100080	(105,08)	100	38	22.2	SIC 80	1.1	3.500
G4918100120	(105,08)	100	38	22.2	SIC 120	1.1	3.500
G4918150080	(170,79)	150	38	22,2	SIC 80	1,1	2.500
G4918150120	(170,79)	150	38	22,2	SIC 120	1,1	2.500

ARBORS FOR FLAT BRUSHES

ART. BO 12/22

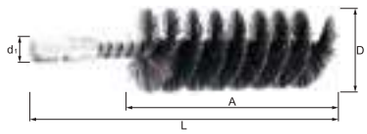
For use with brushes for stationary G4918 range.

Tech. Code	GR69 Euro	For brushes Ø mm	Shank Ø mm
G4919100	(204,20)	75 - 100	12
G4919150	(217,00)	125 -150	12

CLEANING RODS FOR TUBING

ART. G4920

Essential when cleaning and finishing in the inner of the tubes and metal holes.



Tech. Code	GR69 Euro	D mm	A mm	L mm	d1	
G492008	12,60	8	80	115	M6	10
G492012	12,60	12	80	115	M6	10
G492016	12,60	16	80	115	M6	10
G492020	12,60	20	80	115	M6	10

Related products

BOSCH ELECTRIC ANGLE GRINDERS

Tech. Code	Power W	No-load speed Rpm	Ø Grinding wheels mm
N4215125/2	1300	11500	125

The products are available in chapter N

Indivisible package Suggested retail package - Unit price

FLEXIBLE SMOOTHING POLISHERS

SiC

ART. G4930

Usable on CNC machines and drill presses
Speed and uniformity for a better finished surface
used in varius sectors:
- general precision mechanical engineering
- automotive industry
- aviation industry
- ship building industry.

P	M	K	N	S	H
●	●	●			

Tech. Code	GR69 Euro	Model	Ø hole mm	Grit	Utile mm	D mm	l mm	L mm
G4930050SC120	(48,58)	BC5MM	5	120	4.75 - 5.00	5.5	38	203
G4930050SC180	(48,58)	BC5MM	5	180	4.75 - 5.00	5.5	38	203
G4930100SC120	(38,27)	BC10MM	10	120	9.50 - 10.0	11	57	203
G4930100SC180	(38,27)	BC10MM	10	180	9.50 - 10.0	11	57	203
G4930100SC240	(40,47)	BC10MM	10	240	9.50 - 10.0	11	57	203
G4930100SC320	(57,33)	BC10MM	10	320	9.50 - 10.0	11	57	203
G4930120SC120	(39,90)	BC12MM	12	120	11.0 - 12.0	13	57	203
G4930120SC180	(39,90)	BC12MM	12	180	11.0 - 12.0	13	57	203
G4930120SC240	(42,38)	BC12MM	12	240	11.0 - 12.0	13	57	203
G4930120SC320	(59,81)	BC12MM	12	320	11.0 - 12.0	13	57	203
G4930127SC120	(40,66)	BC1/2"	12.7	120	12.0 - 12.7	14.5	64	203
G4930127SC180	(40,66)	BC1/2"	12.7	180	12.0 - 12.7	14.5	64	203
G4930127SC240	(43,03)	BC1/2"	12.7	240	12.0 - 12.7	14.5	64	203
G4930127SC320	(60,84)	BC1/2"	12.7	320	12.0 - 12.7	14.5	64	203
G4930140SC120	(40,83)	BC14MM	14	120	12.7 - 14.0	15.5	64	203
G4930140SC180	(40,83)	BC14MM	14	180	12.7 - 14.0	15.5	64	203
G4930140SC240	(43,27)	BC14MM	14	240	12.7 - 14.0	15.5	64	203
G4930140SC320	(61,30)	BC14MM	14	320	12.7 - 14.0	15.5	64	203
G4930160SC120	(43,18)	BC5/8"	16	120	14,0 - 16,0	18	64	203
G4930160SC180	(43,18)	BC5/8"	16	180	14.0 - 16.0	18	64	203
G4930160SC320	(64,67)	BC5/8"	16	320	14.0 - 16.0	18	64	203
G4930180SC120	(44,34)	BC18MM	18	120	16.0 - 18.0	20	64	203
G4930180SC180	(44,34)	BC18MM	18	180	16.0 - 18.0	20	64	203
G4930180SC240	(46,91)	BC18MM	18	240	16.0 - 18.0	20	64	203
G4930180SC320	(66,39)	BC18MM	18	320	16.0 - 18.0	20	64	203
G4930190SC120	(45,41)	BC3/4"	19	120	18.0 - 19.0	21	64	203
G4930190SC180	(45,41)	BC3/4"	19	180	18.0 - 19.0	21	64	203
G4930190SC320	(68,94)	BC3/4"	19	320	18.0 - 19.0	21	64	203
G4930200SC120	(45,65)	BC20MM	20	120	19,0 - 20,0	22	64	203
G4930200SC180	(45,65)	BC20MM	20	180	19.0 - 20.0	22	64	203
G4930200SC320	(68,45)	BC20MM	20	320	19.0 - 20.0	22	64	203
G4930220SC120	(45,89)	BC7/8"	22	120	20,0 - 22,0	25	76	203
G4930220SC180	(45,89)	BC7/8"	22	180	20.0 - 22.0	25	76	203
G4930220SC320	(68,83)	BC7/8"	22	320	20.0 - 22.0	25	76	203
G4930254SC120	(49,01)	BC1"	25,4	120	23,8 - 25,4	28	76	203
G4930254SC180	(49,01)	BC1"	25.4	180	23.8 - 25.4	28	76	203
G4930254SC320	(73,45)	BC1"	25.4	320	23.8 - 25.4	28	76	203
G4930290SC120	(51,53)	BC1"-1/8	29	120	25.4 - 29.0	32	76	203
G4930290SC180	(51,53)	BC1"-1/8	29	180	25.4 - 29.0	32	76	203
G4930290SC320	(77,37)	BC1"-1/8	29	320	25.4 - 29.0	32	76	203
G4930318SC120	(55,56)	BC1"-1/4	31,8	120	29,0 - 31,8	35	76	203
G4930318SC180	(55,56)	BC1"-1/4	31.8	180	29.0 - 31.8	35	76	203
G4930318SC320	(83,40)	BC1"-1/4	31.8	320	29.0 - 31.8	35	76	203
G4930350SC120	(57,05)	BC1"-3/8	35	120	31,8 - 35,0	38,5	76	203
G4930350SC180	(57,05)	BC1"-3/8	35	180	31.8 - 35.0	38.5	76	203
G4930350SC320	(85,69)	BC1"-3/8	35	320	31.8 - 35.0	38.5	76	203
G4930380SC120	(61,30)	BC1"-1/2	38	120	35.0 - 38.0	41.5	76	203
G4930380SC180	(61,30)	BC1"-1/2	38	180	35.0 - 38.0	41.5	76	203
G4930380SC320	(91,81)	BC1"-1/2	38	320	35.0 - 38.0	41.5	76	203
G4930410SC120	(61,35)	BC1"-5/8	41	120	38,0 - 41,0	44,5	76	203
G4930410SC180	(61,35)	BC1"-5/8	41	180	38.0 - 41.0	44.5	76	203
G4930410SC320	(91,96)	BC1"-5/8	41	320	38.0 - 41.0	44.5	76	203
G4930510SC120	(66,35)	BC2"	51	120	47,6 - 51,0	54	76	203
G4930510SC180	(66,35)	BC2"	51	180	47.6 - 51.0	54	76	203
G4930510SC320	(99,67)	BC2"	51	320	47.6 - 51.0	54	76	203
G4930570SC120	(71,91)	BC2"-1/4	57	120	54.0 - 57.0	60.5	76	203
G4930570SC180	(71,91)	BC2"-1/4	57	180	54.0 - 57.0	60.5	76	203
G4930570SC320	(107,85)	BC2"-1/4	57	320	54.0 - 57.0	60.5	76	203

Indivisible package Suggested retail package - Unit price

MOUNTED POINTS WITH PINK ALUMINUM OXIDE

ART. ZY

Cylinder-shaped, pink corundum, high-stability edges and shape, low-wear and long-lasting grinding wheels.
Suitable for mechanical workpiece grinding, bur removal, chamfers for welding preparation.

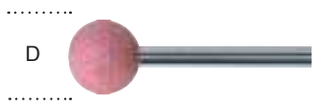
Tech. Code		G540502053	G540503063	G540504083	G540505103	G540506133
GR69	Euro	2,51	2,20	2,20	2,20	2,32
D x T	mm	2 x 5	3 x 6	4 x 8	5 x 10	6 x 13
Shank	mm	3	3	3	3	3
Specification		AR 100 O 5 V	AR 100 O 5 V	AR 100 O 5 V	AR 100 O 5 V	AR 100 O 5 V
		10	10	10	10	10

Tech. Code		G540508103	G540510133	G540506136	G540508106	G540510136
GR69	Euro	2,20	2,25	2,32	2,20	2,25
D x T	mm	8 x 10	10 x 13	6 x 13	8 x 10	10 x 13
Shank	mm	3	3	6	6	6
Specification		AR 80 O 5 V	AR 46 O 5 V	AR 100 O 5 V	AR 80 O 5 V	AR 46 O 5 V
		10	10	10	10	10

Tech. Code		G540513136	G540516206	G540520206	G540525256	G540532326
GR69	Euro	2,31	2,73	2,92	3,53	4,21
D x T	mm	13 x 13	16 x 20	20 x 20	25 x 25	32 x 32
Shank	mm	6	6	6	6	6
Specification		AR 46 O 5 V	AR 30 O 5 V	AR 30 O 5 V	AR 30 O 5 V	AR 24 O 5 V
		10	10	10	10	10

ART. KU

Sphere-shaped, pink corundum, high-stability edges and shape, low-wear and long-lasting grinding wheels.
Suitable for mechanical workpiece grinding, bur removal, chamfers for welding preparation.



Tech. Code		G5410053	G5410083	G5410103
GR69	Euro	2,51	2,71	2,72
D	mm	5	8	10
Shank	mm	3	3	3
Specification		AR 100 O 5 V	AR 80 O 5 V	AR 46 O 5 V
		10	10	10

Tech. Code		G5410106	G5410136	G5410166	G5410206
GR69	Euro	2,72	2,89	3,41	3,87
D	mm	10	13	16	20
Shank	mm	6	6	6	6
Specification		AR 46 O 5 V	AR 46 O 5 V	AR 30 O 5 V	AR 30 O 5 V
		10	10	10	10

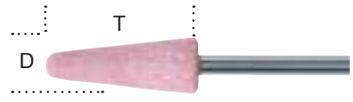
ART. SP

Ogive-shaped, pink corundum, high-stability edges and shape, low-wear and long-lasting grinding wheels.
Suitable for mechanical workpiece grinding, bur removal, chamfers for welding preparation.

Tech. Code		G541508166	G541513206	G541520326
GR69	Euro	2,72	3,27	4,50
D x T	mm	8 x 16	13 x 20	20 x 32
Shank	mm	6	6	6
Specification		AR 80 O 5 V	AR 46 O 5 V	AR 30 O 5 V
		10	10	10

ART. KE

Radial cone-shaped, pink corundum, high-stability edges and shape, low-wear and long-lasting grinding wheels.
Suitable for mechanical workpiece grinding, bur removal, chamfers for welding preparation.



Tech. Code		G542010256	G542016456	G542020326
GR69	Euro	3,41	5,17	4,10
D x T	mm	10 x 25	16 x 45	20 x 32
Shank	mm	6	6	6
Specification		AR 46 O 5 V	AR 46 O 5 V	AR 30 O 5 V
		10	10	10

MOUNTED POINTS WITH PINK ALUMINUM OXIDE

WRK

ART. ZY

Made with pink aluminum oxide and vitrified bond. For universal use on all kind of steel and cast iron. Made in Italy with high quality raw material in order to give a consistent cut rate and a good surface finish.
Specification of the mixture: AR - Abrasive (Pink corundum), P - Hardness (High), 5 - Structure (Close), V - Bond (Vitrified ceramic).

Cylindrical shape

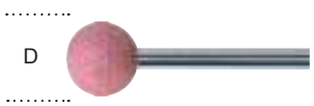
Tech. Code		G540630206100	G540630306080	G540630408080	G540630510080	G540630612080	G540630812080
GR68	Euro	1,82	1,67	1,67	1,67	1,67	1,82
D x T	mm	2 x 6	3 x 6	4 x 8	5 x 10	6 x 12	8 x 12
Shank	mm	3 x 38	3 x 38	3 x 38	3 x 38	3 x 38	3 x 38
Specification		AR 100 P5V	AR 80 P5V	AR 80 P5V	AR 80 P5V	AR 80 P5V	AR 80 P5V
		10	10	10	10	10	10

Tech. Code		G540631012060	G540660610060	G540660612100	G540660810080	G540661015060
GR68	Euro	2,17	2,06	2,06	2,34	2,49
D x T	mm	10 x 12	6 x 10	6 x 12	8 x 10	10 x 15
Shank	mm	3 x 38	6 x 40	6 x 40	6 x 40	6 x 40
Specification		AR 80 P5V	AR 60 P5V	AR 100 P5V	AR 80 P5V	AR 60 P5V
		10	10	10	10	10

Tech. Code		G540661215060	G540661520046	G540662020046	G540662525046	G540663232036
GR68	Euro	2,53	2,82	2,92	3,27	4,53
D x T	mm	12 x 15	15 x 20	20 x 20	25 x 25	32 x 32
Shank	mm	6 x 40	6 x 40	6 x 40	6 x 40	6 x 40
Specification		AR 60 P5V	AR 46 P5V	AR 46 P5V	AR 46 P5V	AR 36 P5V
		10	10	10	10	10

ART. KU

Spherical shape



Tech. Code		G5411306080	G5411308080	G5411310060
GR68	Euro	2,49	2,49	2,53
D	mm	6	8	10
Shank	mm	3 x 38	3 x 38	3 x 38
Specification		AR 80 P5V	AR 80 P5V	AR 60 P5V
		10	10	10

Tech. Code		G5411610060	G5411612060	G5411615046	G5411620046
GR68	Euro	3,31	3,31	2,88	3,56
D	mm	10	12	15	20
Shank	mm	6 x 40	6 x 40	6 x 40	6 x 40
Specification		AR 60 P5V	AR 60 P5V	AR 46 P5V	AR 46 P5V
		10	10	10	10

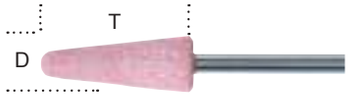
ART. SP

Ogival shape

Tech. Code		G541661220060	G541662032046
GR68	Euro	3,69	5,83
D x T	mm	12 x 20	20 x 32
Shank	mm	6 x 40	6 x 40
Specification		AR 60 P5V	AR 46 P5V
		10	10

ART. KE

Conical shape

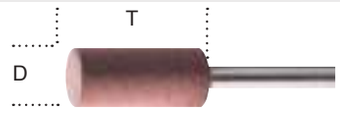


Tech. Code		G542161025060	G542162032046
GR68	Euro	3,12	3,95
D x T	mm	10 x 25	20 x 32
Shank	mm	6 x 40	6 x 40
Specification		AR 60 P5V	AR 46 P5V
		10	10

Indivisible package Suggested retail package - Unit price

POLIFLEX SHANK-MOUNTED ABRASIVE GRINDERS

ART. ZY



Cylinder-shaped, pink corundum and GR rubber bond. GR bond, soft and elastic, allows delicate grinding.
Suitable for finishing steel, stainless steel and non-ferrous materials resulting in fine and shiny surfaces.
Recommended for injection and pressure mold finishing.

Tech. Code		G551004083	G551006103	G551008123	G551010153
GR69	Euro	4,85	4,85	5,05	5,05
D x T	mm	4 x 8	6 x 10	8 x 12	10 x 15
Shank	mm	3	3	3	3
Specification		AR 120 GR	AR 120 GR	AR 120 GR	AR 120 GR
		10	10	10	10

Tech. Code		G551010156	G551015156	G551020206	G551025256
GR69	Euro	5,05	5,05	5,83	6,10
D x T	mm	10 x 15	15 x 15	20 x 20	25 x 25
Shank	mm	6	6	6	6
Specification		AR 120 GR	AR 120 GR	AR 120 GR	AR 120 GR
		10	10	10	10

ART. ZY

Cylinder-shaped with corundum and LR leather bond. LR hard bond provides good removal, long tool life and fine surface quality. Suitable for finishing steel, stainless steel and titanium material.
Recommended for mold manufacturing and tool finishing.

Tech. Code		G552004083	G552006103	G552008123	G552010153
GR69	Euro	4,85	4,85	5,05	5,05
D x T	mm	4 x 8	6 x 10	8 x 12	10 x 15
Shank	mm	3	3	3	3
Specification		AW 120 LR	AW 120 LR	AW 120 LR	AW 120 LR
		10	10	10	10

Tech. Code		G552010156	G552015156	G552020206	G552025256
GR69	Euro	5,05	5,05	5,84	6,10
D x T	mm	10 x 15	15 x 15	20 x 20	25 x 25
Shank	mm	6	6	6	6
Specification		AW 120 LR	AW 120 LR	AW 120 LR	AW 120 LR
		10	10	10	10

GESSWEIN ABRASIVE GRINDERS - FOR HARD MATERIALS

These superior-quality grinders are made of aluminum oxide and cobalt alloyed by ceramic powder which provides the high resistance and rigidity required for removal and roughing.
The ceramic binder releases the abrasive grains gradually so that when the abrasive starts to lose its cutting edge it is replaced by a new grain with sharp cutters.
The blue grinders keep their shape in a perfect way and are suitable for use on hard tempered materials.
They cut well and leave the surface smooth. Operating speed max 30 m/sec.

Use glasses or a visor during grinding operations.

Tech. Code		G5650B44	G5652B52	G5654B53	G5656B55	G5658B96	G5660B97	G5680W176	G5682W215
GR69	Euro	4,60	5,00	5,00	4,00	4,00	4,60	3,80	4,80
Dimension	mm	5.5 x 9.5	9.4 x 18.8	6.3 x 15.7	3.1 x 6.3	3.1 x 6.3	2.4 x 9.3	9.4 x 12.5	25.4 x 3.1
Gambo Ø	mm	3	3	3	3	3	3	3	3
Grit		120	120	120	120	120	120	120	120
		12	12	12	12	12	12	12	12

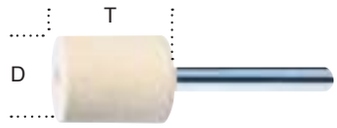
Tech. Code		G5662B105	G5664B123	G5668B125	G5670W142	G5672W144	G5674W145	G5676W153	G5678W163
GR69	Euro	4,00	4,00	4,80	3,60	3,40	3,80	3,80	3,80
Dimension	mm	6.3 x 6.3	4.7	6.3	2.4 x 6.3	3.1 x 6.3	3.1 x 9.4	4.7 x 9.4	6.3 x 12.5
Gambo Ø	mm	3	3	3	3	3	3	3	3
Grit		120	120	120	120	120	120	120	120
		12	12	12	12	12	12	12	12

Indivisible package Suggested retail package - Unit price

SHANK-MOUNTED FELT BOBS

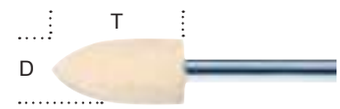
ART. FK ZYA

Cylinder-shaped. Suitable for pre-polishing and polishing mechanical forms in general.
To be used with diamond paste and polishing paste.



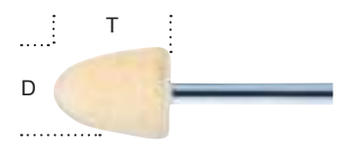
Tech. Code		G570506103	G570508103	G570510143	G570510146	G570515206	G570520256	G570525306
GR69	Euro	2,13	2,13	2,33	2,33	3,55	4,34	5,39
D x T	mm	6 x 10	8 x 10	10 x 15	10 x 15	15 x 20	20 x 25	25 x 30
Shank	mm	3	3	3	6	6	6	6
Shape		Cilindrica	Cilindrica	Cilindrica	Cilindrica	Cilindrica	Cilindrica	Cilindrica
		10	10	10	10	10	10	10

ART. FK SPK



Tech. Code		G571508123	G571510183	G571515206	G571520256
GR69	Euro	2,16	2,41	2,41	2,95
D x T	mm	8 x 12	10 x 18	15 x 20	20 x 25
Shank	mm	3	3	6	6
Shape		Pointed Conical	Pointed Conical	Pointed Conical	Pointed Conical
		10	10	10	10

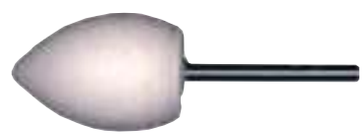
ART. FK KEL



Tech. Code		G573015206	G573020256
GR69	Euro	2,38	4,44
D x T	mm	15 x 20	20 x 25
Shank	mm	6	6
Shape		Conical radius	Conical radius
		10	10

SHANK MOUNTED FELT BOBS

The felt rotary tools are produced with 100% best-quality Australian wool. Suitable for use with diamond paste to produce a mirror finish on moulds for plastics, dies etc.
Shank Ø 3x30 mm. Recommended speed 5-10m/sec. Length tolerance ±5%.



Tech. Code		G58559X153MO	G585013X203MO	G584510X303MO	G584020X303MO
GR69	Euro	1,65	2,40	2,25	4,80
Dimensions	mm	9 x 15	12 x 20	10 x 30	20 x 30
Shank Ø	mm	3	3	3	3
Material		Soft white felt	Soft white felt	Soft white felt	Soft white felt
		10	10	10	10

Tech. Code		G58254X83MO	G58206X153MO	G581510X203MO	G581015X253MO	G580520X303MO
GR69	Euro	1,62	1,50	1,68	2,85	4,05
Dimensions	mm	4 x 8	6 x 15	10 x 20	15 x 25	20 x 30
Shank Ø	mm	3	3	3	3	3
Material		Soft white felt	Soft white felt	Soft white felt	Soft white felt	Soft white felt
		10	10	10	10	10

Tech. Code		G58206X153RE	G581510X203RE	G581015X253RE	G580520X303RE
GR69	Euro	1,80	1,98	3,30	4,80
Dimensions	mm	6 x 15	10 x 20	15 x 25	20 x 30
Shank Ø	mm	3	3	3	3
Material		Hard resin-treated felt	Hard resin-treated felt	Hard resin-treated felt	Hard resin-treated felt
		10	10	10	10

Tech. Code		G5835D103MO	G5830D153MO
GR69	Euro	1,80	1,95
Dimensions	mm	10	15
Shank Ø	mm	3	3
Material		Soft white felt	Soft white felt
		10	10

Indivisible package Suggested retail package - Unit price

SHANK MOUNTED SOFT FELT WHEELS

ART. G5875

Shank mounted soft felt wheels.

Tech. Code		G5875D212,35	G5875D252,35
GR69	Euro	1,50	2,16
Dimensions Ø	mm	21	25
Shank Ø	mm	2.35	2.35
Material		Soft felt	Soft felt
		10	10

ROTARY FELT LAPPING TOOLS WITH SYNTHETIC SUPPORT

ART. G5880

Flexible body, steel shank.

Tech. Code		G5880D123	G5880D203	G5880D332	G5880D486
GR69	Euro	3,60	4,20	5,10	9,00
Description		Felt pad	Felt pad	Felt pad	Felt pad
Dimensions Ø	mm	12	20	32	48
Shank Ø	mm	3	3	3	6
		10	10	10	10

SELF-ADHESIVE FELT DISCS

ART. G5885

Replacement for rotary supports.

Tech. Code		G588512X3	G588520X3	G588532X3	G588548X3
GR69	Euro	1,10	1,32	1,76	2,42
Description		Felt pad	Felt pad	Felt pad	Felt pad
Dimensions Ø	mm	12	20	32	48
		10	10	10	10

SHANK MOUNTED SOFT COTTON STRING BUFFS

ART. G5935

Cotton wheel buffs of various sizes 21 mm, 30 mm and 40 mm, all with Ø 2.35 mm shank.

Tech. Code		G5935D21G2,35M	G5935D21G2,35D	G5935D30G2,35D	G5935D40G2,35D
GR69	Euro	(3,90)	(3,00)	(3,30)	(3,45)
Dimension	mm	21	21	30	40
Shank Ø	mm	2.35	2.35	2.35	2.35
Material		Soft cotton	Double twisted cotton	Double twisted cotton	Double twisted cotton
		10	10	10	10

POLISHING ABRASIVE PASTES

ART. PP

Polishing abrasive pastes are indicated by different colours, according to their specific use.
Usually applied on G1440 felt discs. Indicative weight - 1.000 + 1.150 gr.

Tech. Code		G7984100	G7984300	G7984400
GR69	Euro	16,70	11,69	13,32
Application		Steel + Stainless Steel	Non ferrous metals	All metals
Colour		Green	Brown	Pink
Esecuzione		Pre- polishing	Pre- polishing	Mirror polishing

INFORMATION FOR USE

Metal cleaning and polishing is becoming increasingly important in order to meet the needs of today's customers. Below we offer a standard selection of products that can be used for most operations that are carried out with cleaning machines.
Fabric wheels should always be used with abrasive pastes and normally work at a speed of about 40 m/sec.
Various types of fabrics are available on request in all sizes to meet any requirement.

STITCHED SISAL MOPS FOR CLEANING METALS

ART. SISAL

Specific for roughing and pre-polishing. High density, usually used with the coarsest abrasive pastes. The Sisal fabric guarantees a good abrasive capacity and good absorbency. Suitable for all types of steel and metals in general. The 20 mm hole can be used with shanks of up to 25 mm.

Tech. Code		G595215020	G595220020	G595225020	G595230020
GR69	Euro	8,42	10,35	15,26	26,46
Diameter	mm	150	200	250	300
Width *	mm	20	20	20	20
Hole	mm	20	20	20	20
		2	2	2	2

* Given the nature of the product, the width has a tolerance of approximately +/- 10%

COTTON POLISHING DISCS

ART. COTTON 20/20

Medium/high density hard-wearing disc, excellent cleaning performance. Good hydroscopic absorbency. Specific for ferrous and non-ferrous metals. Used for the most varied types of polishing operations. Also used for finishing gold and silver. The 20 mm hole can be used with shanks of up to 25 mm.

Tech. Code		G595515010	G595520020	G595525020	G595530020
GR69	Euro	14,57	19,20	25,61	39,13
Diameter	mm	150	200	250	300
Width *	mm	20	20	20	20
Hole	mm	10	20	20	20
		2	2	2	2

* Given the nature of the product, the width has a tolerance of approximately +/- 10%

VENTILATED COTTON POLISHING DISCS

ART. COTTON 20/20 VENTILATED

Medium density hard-wearing disc, excellent cleaning performance. Good hydroscopic absorbency. Specific for ferrous and non-ferrous metals. The ventilation allows to the tool to be kept cooler, especially on automatic machines with very intense work cycles. The slightly crossed cut allows an improved and more uniform finish.

Tech. Code		G596015020G	G596020020G	G596025025C	G596030025C
GR69	Euro	6,77	7,12	23,11	30,23
Diameter	mm	150	200	250	300
Width *	mm	20	20	20	20
Hole	mm	20 with clip	20 with clip	25 with carton	25 with carton
		2	2	2	2

* Given the nature of the product, the width has a tolerance of approximately +/- 10%

SHANK MOUNTED VENTILATED COTTON DISCS

ART. COTTON 20/20 VENTILATED

Ventilated cotton disc mounted on a D.6 shank and can therefore be used on straight grinders.

Tech. Code		G5961D6	G5961100
GR69	Euro	5,63	8,89
Diameter		Shank	Disc
Width *	mm	6	100
Hole	mm	-	Conical
Hole	mm	-	Conico
		1	2

* Given the nature of the product, the width has a tolerance of approximately +/- 10%

Indivisible package Suggested retail package - Unit price

TECHNICAL INFORMATION
CARBIDE ROTARY BURRS

		TAGLIO 1	TAGLIO 3	TAGLIO 4	TAGLIO 6
P	< 500 N/mm²		400 - 500	350 - 600	300 - 500
	< 850 N/mm²		300 - 450	250 - 450	
	< 1200 N/mm²		250 - 400	200 - 350	
M	< 600 N/mm²			350 - 500	300 - 500
	< 850 N/mm²			250 - 350	200 - 450
	DUPLEX			200 - 300	200 - 350
K	< 240 HB			200 - 350	300 - 450
	< 300 HB		200 - 450	200 - 350	300 - 450
N	< 10% Si	800 - 1.000			
	> 10% Si	600 - 800			
	Ottone Rame		600 - 800		500 - 800
S	Bronzo >700 N/mm²			600 - 800	600 - 800
	Ti6Al4V			250 - 350	300 - 400
H	HTA			350 - 450	250 - 350
	< 45 HRC			250 - 400	150 - 300
	< 60 HRC			250 - 350	150 - 250

EXAMPLES OF PROCESSING AND RECOMMENDED FORMS

ZYAS type

KUD type

WRC type

RBF type

SPG type

SKM type

KEL type

TREE type

CARBIDE ROTARY BURRS - ZYAS TYPE

ART. WX7450

Cylinder-shaped with cutting on the perimeter and at the head. Suitable for machining all materials of various strengths.
Ideal for deburring work.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G60101,5833	13,52	1.5 x 8	3	40	3
G601021033	12,93	2 x 10	3	40	3
G601021034	15,57	2 x 10	3	40	4
G60102,51233	12,48	2.5 x 12	3	40	3
G601031333	10,88	3 x 13	3	40	3
G601031334	12,93	3 x 13	3	40	4
G601041033	17,39	4 x 10	3	45	3
G601041034	20,79	4 x 10	3	45	4
G601041036	19,17	4 x 10	3	45	6
G601041361	24,56	4 x 13	6	50	1
G601041363	22,33	4 x 13	6	50	3
G601041364	28,74	4 x 13	6	50	4
G601041366	24,56	4 x 13	6	50	6
G601051233	18,49	5 x 12	3	47	3
G601051234	22,26	5 x 12	3	47	4
G601051236	20,27	5 x 12	3	47	6
G601061333	19,67	6 x 13	3	48	3
G601061334	23,70	6 x 13	3	48	4
G601061336	21,64	6 x 13	3	48	6
G601061661	24,56	6 x 16	6	50	1
G601061663	22,33	6 x 16	6	50	3

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G601061664	28,74	6 x 16	6	50	4
G601061666	24,56	6 x 16	6	50	6
G601082061	31,30	8 x 20	6	65	1
G601082063	28,48	8 x 20	6	65	3
G601082064	34,14	8 x 20	6	65	4
G601082066	31,30	8 x 20	6	65	6
G6010102061	35,52	10 x 20	6	65	1
G6010102063	32,18	10 x 20	6	65	3
G6010102064	38,57	10 x 20	6	65	4
G6010102066	35,52	10 x 20	6	65	6
G6010122561	45,86	12 x 25	6	70	1
G6010122563	41,66	12 x 25	6	70	3
G6010122564	50,04	12 x 25	6	70	4
G6010122566	45,86	12 x 25	6	70	6
G6010162561	64,48	16 x 25	6	70	1
G6010162563	58,65	16 x 25	6	70	3
G6010162564	70,32	16 x 25	6	70	4
G6010162566	64,48	16 x 25	6	70	6
G6010202563	91,09	20 x 25	6	70	3
G6010202564	110,25	20 x 25	6	70	4
G6010202566	100,22	20 x 25	6	70	6

CARBIDE ROTARY BURRS WITH EXTENDED SHANK - ZYAS TYPE

ART. WX7450L

Cylinder-shaped with cutting on the perimeter and at the head. Suitable for machining all materials of various strengths.
Ideal for deburring work.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G616061863	30,30	6 x 18	6	150	3
G616061864	37,98	6 x 18	6	150	4
G616061866	32,97	6 x 18	6	150	6
G616081863	37,67	8 x 20	6	150	3
G616081864	44,46	8 x 20	6	150	4
G616081866	41,06	8 x 20	6	150	6

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G6160102063	43,10	10 x 20	6	150	3
G6160102064	50,80	10 x 20	6	150	4
G6160102066	47,13	10 x 20	6	150	6
G6160122563	55,98	12 x 25	6	150	3
G6160122564	66,06	12 x 25	6	150	4
G6160122566	61,04	12 x 25	6	150	6

CARBIDE ROTARY BURRS - KUD TYPE

ART. WX7453

Sphere-shaped. Suitable for machining all materials of various strengths. Ideal for machining profiles, deburring the inside of holes and pre-milling for build-up welds.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G60301,5133	14,99	1.5 x 1.35	3	40	3
G60301,5134	17,98	1.5 x 1.35	3	40	4
G60301,5136	16,44	1.5 x 1.35	3	40	6
G603021,533	14,31	2 x 1.8	3	40	3
G603021,534	17,18	2 x 1.8	3	40	4
G603021,536	15,84	2 x 1.8	3	40	6
G60302,5233	13,77	2.5 x 2.2	3	40	3
G60302,5234	16,44	2.5 x 2.2	3	40	4
G60302,5236	15,15	2.5 x 2.2	3	40	6
G603032,533	12,07	3 x 2.7	3	40	3
G603032,534	14,31	3 x 2.7	3	40	4
G603032,536	13,17	3 x 2.7	3	40	6
G603043,533	14,83	4 x 3.6	3	38.5	3
G603043,534	17,64	4 x 3.6	3	38.5	4
G603043,536	16,25	4 x 3.6	3	38.5	6
G603043,561	25,84	4 x 3.6	6	50	1
G603043,563	23,44	4 x 3.6	6	50	3
G603043,564	28,24	4 x 3.6	6	50	4
G603043,566	25,84	4 x 3.6	6	50	6
G60305433	15,23	5 x 4.5	3	39.5	3
G60305434	18,31	5 x 4.5	3	39.5	4

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G60305436	16,86	5 x 4.5	3	39.5	6
G60306533	16,25	6 x 5.4	3	40	3
G60306534	19,49	6 x 5.4	3	40	4
G60306536	17,90	6 x 5.4	3	40	6
G60306561	25,84	6 x 5.4	6	50	1
G60306563	23,44	6 x 5.4	6	50	3
G60306564	28,24	6 x 5.4	6	50	4
G60306566	25,84	6 x 5.4	6	50	6
G60308763	22,16	8 x 7.2	6	52	3
G60308764	26,45	8 x 7.2	6	52	4
G60308766	24,39	8 x 7.2	6	52	6
G603010963	26,09	10 x 9	6	54	3
G603010964	31,30	10 x 9	6	54	4
G603010966	28,58	10 x 9	6	54	6
G6030121163	31,41	12 x 10.8	6	56	3
G6030121164	37,72	12 x 10.8	6	56	4
G6030121166	34,58	12 x 10.8	6	56	6
G6030161563	44,65	16 x 14.4	6	60	3
G6030161564	53,54	16 x 14.4	6	60	4
G6030161566	49,11	16 x 14.4	6	60	6

Indivisible package Suggested retail package - Unit price

CARBIDE ROTARY BURRS - WRC TYPE

ART. WX7456

Cylindrical shape with spherical head. Suitable for machining all materials of various strengths.
Ideal for machining surfaces, profiles and the pre-milling of build-up welds.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G60501,5833	15,42	1.5 x 8	3	40	3
G60501,5834	18,49	1.5 x 8	3	40	4
G60501,5836	16,95	1.5 x 8	3	40	6
G605021033	14,89	2 x 10	3	40	3
G605021034	17,90	2 x 10	3	40	4
G605021036	16,34	2 x 10	3	40	6
G60502,51233	14,19	2.5 x 12	3	40	3
G60502,51234	17,02	2.5 x 12	3	40	4
G60502,51236	15,65	2.5 x 12	3	40	6
G605031433	12,42	3 x 14	3	40	3
G605031434	14,89	3 x 14	3	40	4
G605031436	13,69	3 x 14	3	40	6
G605041033	17,39	4 x 10	3	45	3
G605041034	20,79	4 x 10	3	45	4
G605041036	19,17	4 x 10	3	45	6
G605041461	24,98	4 x 13	6	50	1
G605041463	22,74	4 x 13	6	50	3
G605041464	27,25	4 x 13	6	50	4
G605041466	24,98	4 x 13	6	50	6
G605051233	18,13	5 x 12	3	47	3
G605051234	21,64	5 x 12	3	47	4
G605051236	19,84	5 x 12	3	47	6

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G605061433	20,10	6 x 13	3	48	3
G605061436	22,16	6 x 13	3	48	6
G605061861	24,98	6 x 16	6	50	1
G605061863	22,74	6 x 16	6	50	3
G605061864	27,25	6 x 16	6	50	4
G605061866	24,98	6 x 16	6	50	6
G605082061	32,18	8 x 20	6	65	1
G605082063	29,17	8 x 20	6	65	3
G605082064	34,99	8 x 20	6	65	4
G605082066	32,18	8 x 20	6	65	6
G6050102061	37,04	10 x 20	6	65	1
G6050102063	33,62	10 x 20	6	65	3
G6050102064	40,38	10 x 20	6	65	4
G6050102066	37,04	10 x 20	6	65	6
G6050122561	50,12	12 x 25	6	70	1
G6050122563	45,60	12 x 25	6	70	3
G6050122564	54,65	12 x 25	6	70	4
G6050122566	50,12	12 x 25	6	70	6
G6050162561	66,80	16 x 25	6	70	1
G6050162563	60,73	16 x 25	6	70	3
G6050162564	72,86	16 x 25	6	70	4
G6050162566	66,80	16 x 25	6	70	6

CARBIDE ROTARY BURRS WITH EXTENDED SHANK - WRC TYPE

ART. WX7456L

Cylindrical shape with spherical head. Suitable for machining all materials of various strengths.
Ideal for machining surfaces, profiles and the pre-milling of build-up welds.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G616161863	30,82	6 x 18	6	150	3
G616161864	36,19	6 x 18	6	150	4
G616161866	33,49	6 x 18	6	150	6
G616181863	33,93	8 x 20	6	150	3
G616181864	40,12	8 x 20	6	150	4
G616181866	42,12	8 x 20	6	150	6

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G6161102063	44,84	10 x 20	6	150	3
G6161102064	52,92	10 x 20	6	150	4
G6161102066	48,96	10 x 20	6	150	6
G6161122563	53,54	12 x 25	6	150	3
G6161122564	63,13	12 x 25	6	150	4
G6161122566	66,16	12 x 25	6	150	6

CARBIDE ROTARY BURRS - RBF TYPE

ART. WX7459

Tree-shaped. Suitable for machining all materials of various strengths.
Ideal for machining narrow profiles.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G607031433	12,07	3 x 13	3	40	3
G607031434	14,31	3 x 13	3	40	4
G607031436	13,17	3 x 13	3	40	6
G607041033	16,86	4 x 10	3	45	3
G607041034	20,10	4 x 10	3	45	4
G607041036	18,49	4 x 10	3	45	6
G607041461	29,26	4 x 14	6	50	1
G607041463	26,45	4 x 14	6	50	3
G607041464	31,65	4 x 14	6	50	4
G607041466	29,26	4 x 14	6	50	6
G607051233	18,39	5 x 12	3	47	3
G607051234	22,00	5 x 12	3	47	4
G607051236	20,19	5 x 12	3	47	6
G607061433	19,17	6 x 13	3	48	3
G607061434	22,93	6 x 13	3	48	4
G607061436	21,14	6 x 13	3	48	6
G607061861	29,26	6 x 18	6	50	1
G607061863	26,45	6 x 18	6	50	3

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G607061864	31,65	6 x 18	6	50	4
G607061866	29,26	6 x 18	6	50	6
G607081661	31,22	8 x 20	6	65	1
G607081663	28,40	8 x 20	6	65	3
G607081664	34,04	8 x 20	6	65	4
G607081666	31,22	8 x 20	6	65	6
G6070102061	36,09	10 x 20	6	65	1
G6070102063	32,85	10 x 20	6	65	3
G6070102064	39,36	10 x 20	6	65	4
G6070102066	36,09	10 x 20	6	65	6
G6070122561	43,62	12 x 25	6	70	1
G6070122563	39,69	12 x 25	6	70	3
G6070122564	47,64	12 x 25	6	70	4
G6070122566	43,62	12 x 25	6	70	6
G6070162861	62,36	16 x 30	6	75	1
G6070162863	56,70	16 x 30	6	75	3
G6070162864	67,99	16 x 30	6	75	4
G6070162866	62,36	16 x 30	6	75	6

CARBIDE ROTARY BURRS - SPG TYPE

ART. WX7462

Ogive-shaped. Suitable for machining all materials of various strengths.
Ideal for machining narrow profiles and acute angles.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G609031433	11,66	3 x 13	3	40	3
G609031434	13,88	3 x 13	3	40	4
G609031436	12,77	3 x 13	3	40	6
G609041033	14,54	4 x 10	3	45	3
G609041034	17,39	4 x 10	3	45	4
G609041036	16,03	4 x 10	3	45	6
G609041461	28,06	4 x 14	6	50	1
G609041463	25,57	4 x 14	6	50	3
G609041464	30,63	4 x 14	6	50	4
G609041466	28,06	4 x 14	6	50	6
G609051233	16,77	5 x 12	3	47	3
G609051236	18,39	5 x 12	3	47	6
G609061433	17,39	6 x 13	3	48	3
G609061434	20,79	6 x 13	3	48	4
G609061436	19,17	6 x 13	3	48	6
G609061861	28,06	6 x 18	6	50	1
G609061863	25,57	6 x 18	6	50	3
G609061864	30,63	6 x 18	6	50	4

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G609061866	28,06	6 x 18	6	50	6
G609081661	28,58	8 x 20	6	65	1
G609081663	25,92	8 x 20	6	65	3
G609081664	31,13	8 x 20	6	65	4
G609081666	28,58	8 x 20	6	65	6
G6090102061	35,52	10 x 20	6	65	1
G6090102063	32,25	10 x 20	6	65	3
G6090102064	38,75	10 x 20	6	65	4
G6090102066	35,52	10 x 20	6	65	6
G6090122561	41,94	12 x 25	6	70	1
G6090122563	38,10	12 x 25	6	70	3
G6090122564	45,65	12 x 25	6	70	4
G6090122566	41,94	12 x 25	6	70	6
G6090162861	61,07	16 x 30	6	75	1
G6090162863	55,59	16 x 30	6	75	3
G6090162864	66,65	16 x 30	6	75	4
G6090162866	61,07	16 x 30	6	75	6

CARBIDE ROTARY BURRS - SKM TYPE

ART. WX7465

Pointed cone shape. Suitable for machining all materials of various strengths.
Ideal for machining narrow profiles, acute angles and surfaces.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut	α°
G611031433	12,07	3 x 11	3	40	3	12
G611031434	14,31	3 x 11	3	40	4	12
G611031436	13,17	3 x 11	3	40	6	12
G611041033	14,54	4 x 10	3	45	3	19
G611041034	17,39	4 x 10	3	45	4	19
G611041036	15,90	4 x 10	3	45	6	19
G611041261	23,44	4 x 14	6	50	1	13
G611041263	21,32	4 x 14	6	50	3	13
G611041264	25,57	4 x 14	6	50	4	13
G611041266	23,44	4 x 14	6	50	6	13
G611051233	15,72	5 x 12	3	47	3	20
G611051234	18,91	5 x 12	3	47	4	20
G611051236	17,29	5 x 12	3	47	6	20
G611061433	16,86	6 x 13	3	48	3	23
G611061434	20,19	6 x 13	3	48	4	23
G611061436	18,49	6 x 13	3	48	6	23
G611061861	23,44	6 x 18	6	50	1	16
G611061863	21,32	6 x 18	6	50	3	16

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut	α°
G611061864	25,57	6 x 18	6	50	4	16
G611061866	23,44	6 x 18	6	50	6	16
G611081561	22,16	8 x 15	6	60	1	20
G611081563	20,10	8 x 15	6	60	3	20
G611081564	24,02	8 x 15	6	60	4	20
G611081566	22,16	8 x 15	6	60	6	20
G6110101861	26,36	10 x 20	6	65	1	25
G6110101863	24,02	10 x 20	6	65	3	25
G6110101864	28,84	10 x 20	6	65	4	25
G6110101866	26,36	10 x 20	6	65	6	25
G6110122061	36,02	12 x 25	6	70	1	25
G6110122063	32,76	12 x 25	6	70	3	25
G6110122064	39,26	12 x 25	6	70	4	25
G6110122066	36,02	12 x 25	6	70	6	25
G6110162261	51,49	16 x 25	6	70	1	32
G6110162263	46,77	16 x 25	6	70	3	32
G6110162264	56,03	16 x 25	6	70	4	32
G6110162266	51,49	16 x 25	6	70	6	32

CARBIDE ROTARY BURRS - KEL TYPE

ART. WX7468

Cone-shaped with rounded point. Suitable for machining all materials of various strengths.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut	α°
G613031434	14,31	3 x 14	3	40	4	6
G613031436	13,17	3 x 14	3	40	6	6
G613041433	16,51	4 x 14	3	49	3	10
G613041434	19,84	4 x 14	3	49	4	10
G613041436	18,21	4 x 14	3	49	6	10
G613041461	24,98	4 x 14	6	50	1	10
G613041463	22,74	4 x 14	6	50	3	10
G613041464	29,95	4 x 14	6	50	4	10
G613041466	24,98	4 x 14	6	50	6	10
G613051633	18,49	5 x 16	3	51	3	10
G613051634	22,26	5 x 16	3	51	4	10
G613051636	20,37	5 x 16	3	51	6	10
G613062033	20,64	6 x 20	3	55	3	10
G613062034	24,81	6 x 20	3	55	4	10
G613062036	22,74	6 x 20	3	55	6	10
G613062061	24,98	6 x 20	6	50	1	10
G613062063	22,74	6 x 20	6	50	3	10
G613062064	29,95	6 x 20	6	50	4	10

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut	α°
G613062066	24,98	6 x 20	6	50	6	10
G613082461	35,52	8 x 20	6	65	1	14
G613082463	32,25	8 x 20	6	65	3	14
G613082464	38,99	8 x 20	6	65	4	14
G613082466	35,52	8 x 20	6	65	6	14
G6130102861	43,97	10 x 20	6	65	1	18
G6130102863	40,05	10 x 20	6	65	3	18
G6130102864	48,00	10 x 20	6	65	4	18
G6130102866	43,97	10 x 20	6	65	6	18
G6130123061	52,51	12 x 30	6	75	1	18
G6130123063	47,81	12 x 30	6	75	3	18
G6130123064	57,39	12 x 30	6	75	4	18
G6130123066	52,51	12 x 30	6	75	6	18
G6130163861	79,43	16 x 30	6	75	1	25
G6130163863	72,17	16 x 30	6	75	3	25
G6130163864	86,56	16 x 30	6	75	4	25
G6130163866	79,43	16 x 30	6	75	6	25

Indivisible package Suggested retail package - Unit price

CARBIDE ROTARY BURRS - TREE TYPE

ART. WX7471

Drop-shaped, suitable for machining all materials of various strengths.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G61503533	12,07	3 x 7	3	40	3
G61503534	14,31	3 x 7	3	40	4
G61503536	13,17	3 x 7	3	40	6
G61504633	14,89	4 x 7	3	42	3
G61504634	17,90	4 x 7	3	42	4
G61504636	16,34	4 x 7	3	42	6
G61504661	26,60	4 x 7	6	50	1
G61504663	24,21	4 x 7	6	50	3
G61504664	29,01	4 x 7	6	50	4
G61504666	26,60	4 x 7	6	50	6
G61505833	16,51	5 x 8	3	43	3
G61505834	19,84	5 x 8	3	43	4
G61505836	18,21	5 x 8	3	43	6
G61506933	17,90	6 x 10	3	45	3
G61506934	21,32	6 x 10	3	45	4
G61506936	19,49	6 x 10	3	45	6
G61506961	26,60	6 x 10	6	50	1
G61506963	24,21	6 x 10	6	50	3

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G61506964	29,01	6 x 10	6	50	4
G61506966	26,60	6 x 10	6	50	6
G615081461	29,61	8 x 13	6	59	1
G615081463	26,95	8 x 13	6	59	3
G615081464	32,25	8 x 13	6	59	4
G615081466	29,61	8 x 13	6	59	6
G6150101661	33,85	10 x 16	6	61	1
G6150101663	30,79	10 x 16	6	61	3
G6150101664	36,95	10 x 16	6	61	4
G6150101666	33,85	10 x 16	6	61	6
G6150122161	42,42	12 x 20	6	66	1
G6150122163	38,56	12 x 20	6	66	3
G6150122164	46,26	12 x 20	6	66	4
G6150122166	42,42	12 x 20	6	66	6
G6150162561	61,58	16 x 25	6	70	1
G6150162563	56,03	16 x 25	6	70	3
G6150162564	67,21	16 x 25	6	70	4
G6150162566	61,58	16 x 25	6	70	6

CARBIDE ROTARY BURRS FOR DIES

ART. WX7480

Cylinder-shaped with cutting on the perimeter and at the head.
Suitable for machining dies and moulds.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G617016506	20,84	1 x 6	3	50	6
G61701,58506	18,77	1.5 x 8	3	50	6

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G6170210506	12,51	2 x 10	3	50	6
G6170210656	14,60	2 x 10	3	65	6

CARBIDE ROTARY BURRS FOR DIES

ART. WX7480

Cylinder-shaped with cutting on the perimeter and at the head.
Suitable for machining dies and moulds.

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G61752,512506	12,10	2.5 x 12	3	50	6
G61752,512656	13,76	2.5 x 12	3	65	6

Tech. Code	GR61 Euro	d1 x l2 mm	d2 mm	l1 mm	Cut
G6175314506	11,69	3 x 14	3	50	6
G6175314656	13,35	3 x 14	3	65	6

Related products

PROTECTIVE EYEWEAR

Tech. Code	Filter	Gradation	Optical class
K4120100	2C - UV plus FIlter	1.2 – Clear lens	Class 1

The products are available in chapter K

CARBIDE ROTARY BURRS - ZYAS TYPE - IN KIT

ART. WX7450/S5

Selection of 5 rotary burrs, including G6010, 6mm shank cut 6. Cylinder-shaped with cutting on the perimeter and at the head.
Suitable for machining all materials of various strengths, ideal for deburring operations.

Tech. Code		G6015BOX1
GR61	Euro	139,04
Description		Assortment D 4 - 6 - 8 - 10 - 12
Pcs		5

CARBIDE ROTARY BURRS - WRC TYPE - IN KIT

ART. WX7456/S5

Selection of 5 rotary burrs, including G6050, 6mm shank cut 6.
Cylindrical shape with spherical head. Suitable for machining all materials of various strengths, ideal for machining surfaces, profiles and for the pre-milling of build-up welds.

Tech. Code		G6055BOX1
GR61	Euro	144,45
Description		Assortment D 4 - 6 - 8 - 10 - 12
Pcs		5

CARBIDE ROTARY BURRS - RBF TYPE - IN KIT

ART. WX7459/S5

Selection of 5 rotary burrs, including G6070, 6mm shank cut 6. Suitable for machining all materials of various strengths. Ideal for machining narrow profiles.

Tech. Code		G6075BOX1
GR61	Euro	160,00
Description		Assortment D 4 - 6 - 8 - 10 - 12
Pcs		5

Related products

PNEUMATIC DIE GRINDERS

Tech. Code	Collet Ø mm	Power Kw	Max speed Rpm
L130106	6	0.3	25,000

The products are available in CAP L

Indivisible package Suggested retail package - Unit price

CARBIDE ROTARY BURRS
PFERD – TECHNICAL NOTES

Cut		Steel and steel casting	Stainless steel	Non ferrous materials	Cast iron	Plastic and others
Alu		-	-	N	-	H
3		-	-	N	K	-
3 PLUS		P	-	-	K	-
4		-	M	N	-	-
5		P	M	N	-	-

	Materials groups	Machining type	Cutting	Cutting speed
P	Carbon and construction steel. Steel used for tools, non-alloy steel, casehardened steel. Steel casting.	Coarse milling= high material removal	3 / 3 PLUS	450 - 600 m/min
P	Carbon and construction steel. Steel used for tools, non-alloy steel, casehardened steel. Steel casting.	Fine milling for ex. deburring	3	500 - 600 m/min
P	Tool steel, hardened and tempered steel, alloy steel with >35HRC mechanical resistance	Coarse milling= high material removal	3 / 3 PLUS	250 - 350 m/min
P	Tool steel, hardened and tempered steel, alloy steel with >35HRC mechanical resistance	Coarse milling= high material removal	4	250 - 350 m/min
P	Tool steel, hardened and tempered steel, alloy steel with >35HRC mechanical resistance	Fine milling for ex. deburring	5	300 - 400 m/min
M	Austenitic and ferritic stainless steel.	Coarse milling= high material removal	3 PLUS	250 - 350 m/min
M	Austenitic and ferritic stainless steel.	Coarse milling= high material removal	4	250 - 350 m/min
M	Austenitic and ferritic stainless steel.	Fine milling for ex. deburring	5	350 - 450 m/min
N	Aluminum, Brass, Copper, Zinc alloys.	Coarse milling= high material removal	Alu	600 - 900 m/min
N	Aluminum, Brass, Copper, Zinc alloys.	Fine milling for ex. deburring	Alu	800 - 900 m/min
N	Bronze, Titanium and related alloys. Extremely hard aluminum alloys (Yes>12%).	Coarse milling= high material removal	4	250 - 350 m/min
N	Bronze, Titanium and related alloys. Extremely hard aluminum alloys (Yes>12%).	Fine milling for ex. deburring	3	350 - 450 m/min
N	Nickel-based alloys. Cobalt-based alloys Exotic material alloys in general.	Coarse milling= high material removal	3 PLUS / 4	300 - 450 m/min
N	Nickel-based alloys. Cobalt-based alloys Exotic material alloys in general.	Fine milling for ex. deburring	5	350 - 500 m/min
K	Gray cast iron. Spheroidal cast iron.	Coarse milling= high material removal	3 / 3 PLUS	450 - 600 m/min
K	Gray cast iron. Spheroidal cast iron.	Fine milling for ex. deburring	3	500 - 600 m/min
H	Fibre reinforced synthetic materials Thermoplastic materials.	Coarse milling= high material removal	Alu	500 - 900 m/min
H	Fibre reinforced synthetic materials Thermoplastic materials.	Fine milling for ex. deburring	Alu	500 - 900 m/min

CARBIDE ROTARY BURRS

ART. ZYAS

Cylinder-shaped with cutting on the perimeter and in the head. Suitable for working all materials with different strengths. Ideal for deburring work.

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6210021035	24,22	2 x 10	3	40	5
G6210031333P	19,96	3 x 13	3	43	3P
G6210031335	20,15	3 x 13	3	43	5
G6210061333P	35,41	6 x 13	3	43	3P
G6210061663P	40,12	6 x 16	6	55	3P
G6210061664	42,25	6 x 16	6	55	4
G6210082063	52,04	8 x 20	6	60	3
G6210082063P	46,18	8 x 20	6	60	3P
G6210082064	50,27	8 x 20	6	60	4

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6210102063	55,46	10 x 20	6	60	3
G6210102063P	55,46	10 x 20	6	60	3P
G6210102064	59,58	10 x 20	6	60	4
G621012256ALU	78,21	12 x 25	6	65	ALU
G6210122563	78,37	12 x 25	6	65	3
G6210122563P	78,37	12 x 25	6	65	3P
G6210122564	82,85	12 x 25	6	65	4
G6210162563P	87,82	16 x 25	6	65	3P
G6210162564	96,37	16 x 25	6	65	4

Indivisible package Suggested retail package - Unit price

ART. KUD

Sphere-shaped. Suitable for working all materials with different strengths. Ideal for machining profiles, deburring internal holes and in pre-processing millworking on fillet weld.

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6230030233P	21,51	3 x 2	3	33	3P
G6230030234	25,66	3 x 2	3	33	4
G6230030235	20,30	3 x 2	3	33	5
G6230040333P	33,88	4 x 3	3	34	3P
G6230040334	32,56	4 x 3	3	34	4
G6230040335	32,77	4 x 3	3	34	5
G6230060533P	28,63	6 x 5	3	35	3P
G6230080763	34,69	8 x 7	6	47	3

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6230080763P	31,45	8 x 7	6	47	3P
G6230080764	32,91	8 x 7	6	47	4
G6230100964	39,72	10 x 9	6	49	4
G6230121063P	45,58	12 x 10.8	6	50	3P
G6230121064	48,73	12 x 10.8	6	50	4
G6230161463P	64,64	16 x 14.3	6	54	3P
G6230161464	69,50	16 x 14.3	6	54	4

ART. WRC

Cylinder-shaped with spherical head. Suitable for working all materials with different strengths. Ideal for machining surfaces, profiles, and in pre-processing millworking on fillet weld.

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6240031333P	22,54	3 x 13	3	43	3P
G6240031334	26,95	3 x 13	3	43	4
G6240031335	20,15	3 x 13	3	43	5
G6240061335	51,96	6 x 13	3	43	5
G6240061663P	38,79	6 x 16	6	55	3P
G6240082063	55,24	8 x 20	6	60	3
G6240082063P	43,66	8 x 20	6	60	3P

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6240082064	48,21	8 x 20	6	60	4
G6240102063P	54,09	10 x 20	6	60	3P
G6240102064	64,97	10 x 20	6	60	4
G624012256ALU	81,60	12 x 25	6	65	ALU
G6240122563	69,98	12 x 25	6	65	3
G62401225363P	69,98	12 x 25	6	65	3P
G6240162563P	99,23	16 x 25	6	65	3P

ART. RBF

TREE shape. Suitable for working all materials with different strengths.
Ideal for working with narrow profiles.

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6250030735	24,22	3 x 7	3	37	5
G6250061333P	43,19	6 x 13	3	43	3P
G6250061335	41,84	6 x 13	3	43	5
G6250061863	44,92	6 x 18	6	55	3
G6250061863P	38,40	6 x 18	6	55	3P

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6250082063P	53,85	8 x 20	6	60	3P
G6250102063	61,74	10 x 20	6	60	3
G6250102063P	61,74	10 x 20	6	60	3P
G6250122563	67,70	12 x 25	6	65	3
G6250122563P	67,70	12 x 25	6	65	3P

ART. SPG

Ogive-shaped. Suitable for working all materials with different strengths.
Ideal for working with narrow profiles and acute angles.

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6260031335	24,70	3 x 13	3	43	5
G6260061334	29,70	6 x 13	3	43	4
G6260061863P	37,09	6 x 18	6	55	3P
G6260061864	38,79	6 x 18	6	55	4
G6260102063	53,19	10 x 20	6	60	3

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6260102064	56,14	10 x 20	6	60	4
G6260122563	66,19	12 x 25	6	65	3
G6260122563P	66,19	12 x 25	6	65	3P
G6260122564	69,88	12 x 25	6	65	4
G6260163063P	94,67	16 x 30	6	70	3P

ART. SKM

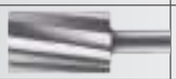
Pointed cone shape. Suitable for working all materials with different strengths.
Ideal for working with narrow profiles, acute angles and surfaces.

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6270031134	26,95	3 x 11	3	41	4
G6270031135	27,54	3 x 11	3	41	5
G6270061333P	39,22	6 x 13	3	43	3P
G6270061335	37,70	6 x 13	3	43	5

Tech. Code	GR69 Euro	d1 x l2 mm	d2 mm	l1 mm	Taglio
G6270061863P	43,52	6 x 18	6	55	3P
G6270102063P	68,15	10 x 20	6	60	3P
G6270122563P	90,29	12 x 25	6	60	3P
G6270122564	95,59	12 x 25	6	60	4

Indivisible package Suggested retail package - Unit price

HSS ROTARY BURRS
PFERD - TECHNICAL NOTES

Cut		Steel and steel casting	Stainless Steel	Non ferrous materials	Cast iron	Plastic materials and others
Alu		-	-	N	-	H
3		P	-	-	K	-

	Materials groups	Machining types	Cutting	Cutting speed
P	Structural steels, carbon steels, tool steels, not alloy steels, casehardened steels, steel castings	Coarse milling = high material removal	3	60 - 80 m/min
P	Structural steels, carbon steels, tool steels, not alloy steels, casehardened steels, steel castings	Fine milling for ex. deburring	3	80 - 100 m/min
M	Austenitic and ferritic stainless steel	Coarse milling = high material removal	1	60 - 80 m/min
M	Austenitic and ferritic stainless steel	Fine milling for ex. deburring	2	60 - 80 m/min
N	Aluminum, Copper, Brass, Zinc alloys	Coarse milling = high material removal	Alu	200 - 300 m/min
K	Grey cast iron. Spheroidal cast iron	Fine milling for ex. deburring	3	200 - 250 m/min
K	Grey cast iron. Spheroidal cast iron	Coarse milling = high material removal	3	60 - 80 m/min
H	Thermoplastics and duroplastics fibre-reinforced, rubber, wood synthetic materials	Fine milling for ex. deburring	2	80 - 100 m/min
H	Thermoplastics and duroplastics fibre-reinforced, rubber, wood synthetic materials	Coarse milling = high material removal	Alu	200 - 300 m/min

HSS ROTARY BURRS

PFERD

ART. A-ST

Cylinder-shaped with cutting on the perimeter and in the head. Suitable for machining materials with low mechanical strength. Ideal for deburring work.

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6310061663	16,39	6 x 16	6	60	3	5
G6310082063	19,16	8 x 20	6	60	3	5
G6310102063	30,66	10 x 20	6	60	3	5

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6310122563	35,28	12 x 25	6	65	3	5
G6310162563	45,27	16 x 25	6	65	3	5

ART. C

Cylinder-shaped with spherical head. Suitable for machining materials with low mechanical strength. Ideal for machining surfaces, profiles, and in pre-processing millworking on fillet weld.

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6320061663	16,39	6 x 16	6	60	3	5
G6320082063	19,16	8 x 20	6	60	3	5

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6320102063	30,78	10 x 20	6	60	3	5
G6320122563	35,28	12 x 25	6	65	3	5

ART. F

Sphere-shaped. Suitable for machining materials with low mechanical strength. Ideal for machining profiles, deburring internal holes and in pre-processing millworking on fillet weld.

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6330060563	16,39	6 x 5	6	55	3	5
G6330080763	27,25	8 x 7	6	55	3	5
G6330100963	31,76	10 x 9	6	49	3	5

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6330121063	38,05	12 x 10	6	51	3	5
G6330161463	45,27	16 x 14	6	54	3	5

Indivisible package Suggested retail package - Unit price

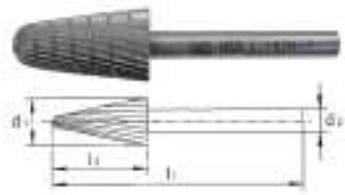
HSS ROTARY BURRS

ART. L

Rounded cone shape. Suitable for machining materials with low mechanical strength. Ideal for working with narrow profiles.

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6340102063	29,96	10 x 20	6	60	3	5
G6340122563	33,47	12 x 25	6	65	3	5

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6340163063	45,27	16 x 30	6	70	3	5



ART. G

Pointed cone shape. Suitable for machining materials with low mechanical strength. Ideal for working with narrow profiles, acute angles and surfaces.

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6350061863	16,39	6 x 18	6	60	3	5
G6350102063	27,25	10 x 20	6	60	3	5

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6350122563	35,28	12 x 25	6	65	3	5

ART. K

Ogive-shaped. Suitable for machining materials with low mechanical strength. Ideal for working with narrow profiles and acute angles.

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6360061863	16,39	6 x 18	6	60	3	5
G6360102063	31,76	10 x 20	6	60	3	5

Tech. Code	GR69 Euro	Dim d1 x l2 mm	Gambo d2 mm	Dim l1 mm	Taglio Z	
G6360122563	33,79	12 x 25	6	65	3	5
G6360163063	45,27	16 x 30	6	70	3	5

Related products

WRK GLOVES IN POLYESTER COATED IN POLYURETHANE

Tech. Code	Taglia	EU size
K23107	M	7
K23108	L	8
K23109	XL	9

The products are available in chapter K

Indivisible package Suggested retail package - Unit price

GRINDING WHEELS

WRK

A

ART. G7200

Grinding wheels in grey aluminium oxide. Suitable machining steels, ferrous material in general.

Tech. Code		G720015036	G720015060	G720020036	G720020060
GR68	Euro	34,59	34,59	55,47	55,47
D x T x H	mm	150 x 20 x 32/20	150 x 20 x 32/20	200 x 25 x 32/20	200 x 25 x 32/20
Specification		1A36-P5V	1A60-P5V	1A36-P5V	1A60-P5V

P	M	K	N	S	H
●		○			

A

ART. G7208

Grinding wheels in white Aluminium oxide. Suitable for machining steels and HSS steels, ferrous material in general and hard bronze.

Tech. Code		G7208150202046	G7208150202060	G7208150252046	G7208150252060
GR68	Euro	37,88	37,88	43,77	43,77
D x T x H	mm	150 x 20 x 32/20	150 x 20 x 32/20	150 x 25 x 32/20	150 x 25 x 32/20
Specification		8A46-M5V	8A60-M5V	8A46-M5V	8A60-M5V

Tech. Code		G7208200202046	G7208200202060	G7208200252046	G7208200252060
GR68	Euro	50,09	50,09	57,15	57,15
D x T x H	mm	200 x 20 x 32/20	200 x 20 x 32/20	200 x 25 x 32/20	200 x 25 x 32/20
Specification		8A46-M5V	8A60-M5V	8A46-M5V	8A60-M5V

P	M	K	N	S	H
●	●	○		○	

SiC

ART. G7204

Grinding wheels in green Silicon carbide. Harder and sharper than aluminium oxide. Suitable for machining metal carbides, brass and soft bronze, copper, aluminium and its alloys and non-metal materials.

Tech. Code		G7204150202080	G7204150252080	G7204200202080	G7204200252080
GR68	Euro	37,09	42,27	54,27	78,96
D x T x H	mm	150 x 20 x 32/20	150 x 25 x 32/20	200 x 20 x 32/20	200 x 25 x 32/20
Specification		2C80-K5V	2C80-K5V	2C80-K5V	2C80-K5V

P	M	K	N	S	H
●		○	●	●	●

GRINDING WHEELS

NORTON SAINT-GOBAIN

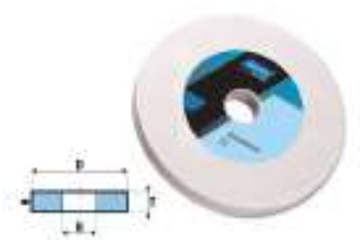
A

ART. G7210

Aluminium oxide. Suitable for machining steels and HSS steels, ferrous material in general and hard bronze. Friable. Cold cutting. Abrasive 38A, white colour.

Tech. Code		G72101502020B	G72101502032	G72101502520	G72102002032
GR69	Euro	41,27	41,27	41,42	48,36
D x T x H	mm	150 x 20 x 32	150 x 20 x 32	150 x 25 x 20	200 x 20 x 32
Specification		38A46-MVS	38A60-NVS	38A60-MVS	38A60-NVS

Tech. Code		G72102002532	G72102002520	G72102502532B	G72102503232
GR69	Euro	61,91	62,50	80,84	107,01
D x T x H	mm	200 x 25 x 32	200 x 25 x 20	250 x 25 x 32	250 x 32 x 32
Specification		38A46-NVS	38A60-MVS	38A60-LVS	38A60-NVS



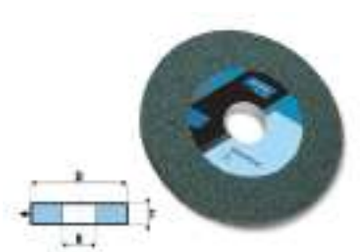
P	M	K	N	S	H
●	●	○		○	

SiC

ART. G7205

Silicon carbide. Harder and sharped than aluminium oxide. Suitable for machining metal carbides, brass and soft bronze, copper, aluminium and its alloys and non-metal materials.
Abrasive 39C, green colour.

Tech. Code		G72051502020	G72051502520	G72052002020	G72052002520	G72052503232
GR69	Euro	41,55	47,11	63,00	73,39	110,81
D x T x H	mm	150 x 20 x 20	150 x 25 x 20	200 x 20 x 20	200 x 25 x 20	250 x 32 x 32
Specification		39C80-KVS	39C80-KVS	39C80-KVS	39C80-KVS	39C80-KVS



P	M	K	N	S	H
●		○	●	●	●

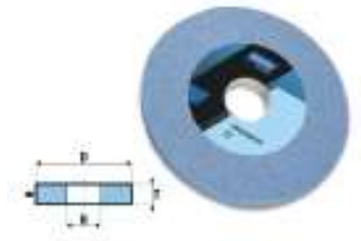
G

GRINDING WHEELS

ART. G7220

High concentration SG Norton ceramic aluminum oxide. Self-restoring microcrystalline structure.
Outstanding cutting performances and long service life. Suitable for very hard steels.
Abrasive 35G, light blue colour.

Tech. Code		G72201501032	G72201501632
GR69	Euro	55,33	60,43
D x T x H	mm	150 x 10 x 32	150 x 16 x 32
Specifications		3SG60-LVX	3SG60-LVX
		2	2

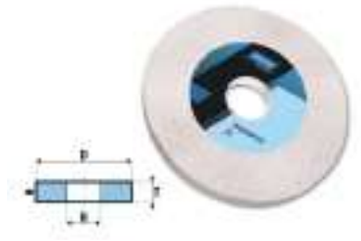


P	M	K	N	S	H
●	●	○	●	○	

ART. G7230

Next generation Quanton Norton + Vitrium ceramic abrasive.
Minimum clogging and significantly reduced heat development.
Unmatched removal performances and long life service up to 35%.
Highly versatile product. First choice for roughing and finishing operations on HSS steels.
Abrasive 2NQ + VITRIUM 3, ivory colour.

Tech. Code		G72301801332	G72302002032
GR69	Euro	65,16	70,33
D x T x H	mm	180 x 13 x 32	200 x 20 x 32
Specifications		2NQ46IVS3	2NQ60IVS3
		2	2



P	M	K	N	S	H
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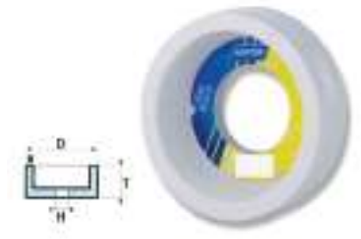
CUP GRINDING WHEELS

A

ART. G7305

Aluminum oxide. Suitable for machining steels and hardened steels. Machine use for surface grinding.
Abrasive 38A, white colour.

Tech. Code		G7305180AA	G7305200AA	G7305200BB
GR69	Euro	105,68	143,55	143,55
D x T x H	mm	180 x 76 x 78	200 x 82 x 78	200 x 82 x 78
Specification		38A36-JVS	38A36-HVS3	38A46-HVS3
		2	2	2



P	M	K	N	S	H
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A

ART. G7310

Aluminum oxide. Suitable for machining SR steel. Use on universal sharpeners.
Abrasive 38A, white colour.

Tech. Code		G7310100A60	G7310100A80
GR69	Euro	51,45	51,45
D x T x H	mm	100 x 50 x 20	100 x 50 x 20
Specification		38A60-MVS	38A80-LVS
		2	2

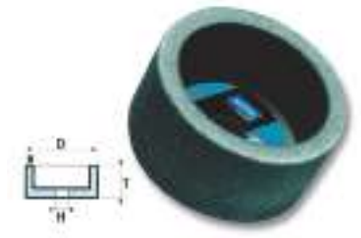
P	M	K	N	S	H
●	●				

SiC

ART. G7315

Silicon carbide. Suitable for machining metal carbides. Use on universal sharpeners.
Abrasive 39C, green colour.

Tech. Code		G7315100CBO
GR69	Euro	56,60
D x T x H	mm	100 x 50 x 20
Specification		39C80-JVS
		2



P	M	K	N	S	H
●					

Indivisible package Suggested retail package - Unit price

GRINDING SEGMENTS

A

ART. G7405

Aluminum oxide. SE shape. Suitable for working hardened steels.
Abrasive 38A, white colour.

Tech. Code		G7405A46VS3
GR69	Euro	9,61
a x c x b	mm	50 x 45 x 16
Length	mm	90
Specification		38A46HVS3
◈		4

P	M	K	N	S	H
●	●				

ART. G7410

High-performance ceramic oxide. SE shape. Suitable for machining steel and hardened steel . Machine use for surface grinding.
Abrasive 2NQ, ivory colour.

Tech. Code		G7410NQ46VS3
GR69	Euro	13,45
a x c x b	mm	50 x 45 x 16
Length	mm	90
Specification		2NQ46GVS3
◈		4

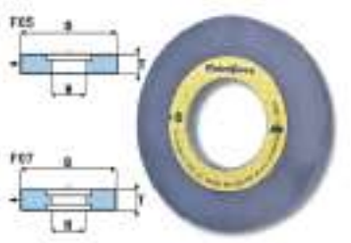
P	M	K	N	S	H
●	●		●		

GRINDING WHEELS FOR FLAT SURFACE RECTIFYING PROCESSING

ART. GLOBAL FORCE

G7440P205 - Open, porous structure. For hard steel, superior finishing
G7440P255 - Open, porous structure. Universal use for steel up to 50-55 Rockwell
G7440P305 - Medium structure, non-porous grinding wheel.
Suitable for medium-mild steel and in the event of interrupted cutting
G7440P357 - Open, porous structure. Universal use for steel up to 50-55 Rockwell

Tech. Code		G7440P205	G7440P255	G7440P305	G7440P357
GR69	Euro	419,96	552,89	552,89	817,95
D x T x H	mm	355 x 50 x 127	406 x 50 x 127	406 x 50 x 127	406 x 76 x 127
Specification		GF54E12VXPM	GF46F12VXPC	GF46IVX	GF46F12VXPC
Shape		05	05	05	07



P	M	K	N	S	H
●	●	●	○	○	

GRINDING WHEELS FOR EXTERNAL ROUND SURFACE RECTIFYING PROCESSING

ART. GLOBAL FORCE

G7450TE2020 - For mild steel
G7450TE2520 - For medium and hard steel up to 50-55 Rockwell
G7450P3020 - Universal version, fit for a wide range of materials
G7450P3540 - For medium and hard steel up to 50-55 Rockwell

Tech. Code		G7450TE2020	G7450TE2520	G7450P3020	G7450P3540
GR69	Euro	(240,63)	(321,71)	(432,79)	(552,89)
D x T x H	mm	300 x 40 x 127	355 x 40 x 127	406 x 40 x 127	406 x 50 x 127
Specification		GF60-MVX	GF60-LVX	GF60-KVX	GF60-LVX
Shape		20	20	20	20

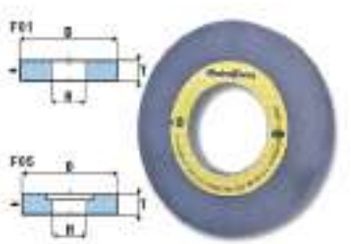
P	M	K	N	S	H
●	●	●	○	○	

SPECIFIC GRINDING WHEELS FOR RECT. PROCESSING " JONES AND SHIPMAN"

ART. GLOBAL FORCE

G7460JS2005 - Fit for mild steel, medium structure, superior finishing
G7460JS2501 - High-porosity fine grain grinding wheel, high removal capacity and good surface finishing

Tech. Code		G7460JS2005	G7460JS2501
GR69	Euro	93,37	113,02
D x T x H	mm	180 x 20 x 31,75	200 x 20 x 31,75
Specification		3SG60JVS	3SG60GVSPF
Shape		05	01
◈		2	2



P	M	K	N	S	H
●	●	●	○	○	

◈ Indivisible package ◈ Suggested retail package - Unit price

GRINDING WHEEL DRESSERS

ART. G7710

For dressing and sharpening. With a sturdy wooden handle. Stainless steel rolls.

Tech. Code		G771036	G771055	G7711R36	G7711R55
GR69	Euro	73,80	96,29	30,68	50,82
Wheel ø	mm	36	55	36	55
Length	mm	285	435	-	-
Rotelle dentate	n°	3	4	3	4
Spare part		-	-	Wheel Ø36	Wheel Ø55

SILICON CARBIDE DRESSER STICKS

NORTON SAINT-GOBAIN

ART. 37C

For conventional grinding wheels. Round section.
Dark grey colour.

Tech. Code		G761020200C30	G761025200C30
GR69	Euro	19,29	20,47
Shape		●	●
D x L	mm	20 x 200	25 x 200
Specification		37C30-TV	37C30-TV
📦		10	10

ALUMINUM OXIDE ABRASIVE STONES

NORTON SAINT-GOBAIN

ART. 38A

White corundum abrasive stones ideal for cleaning diamond and CBN wheels. Placed with a slight pressure on the wheels, they allow cleaning of the same while keeping the cut constant and uniform. The 320 grit stone is suitable for very fine grit wheels, up to a maximum of 76 grit. For coarser grits it is advisable to use the 220 grit stone.

Tech. Code		G76150220	G76150320
GR69	Euro	11,56	11,56
Shape		▬	▬
Dimension	mm	13 x 25 x 150	13 x 25 x 150
Specification		38A220	38A320
📦		10	10

DIAMOND DRESSERS

NORTON SAINT-GOBAIN

ART. G7620

Single diamond. Suitable for all types of conventional abrasives.

Tech. Code		G76200508	G762003310	G762010010	G762005012
GR69	Euro	153,40	133,54	166,16	153,40
Kt		0.50	0.33	1.00	0.50
Shank	mm	8	10	10	12

DIAMOND MULTI-TIPPED DRESSER

NORTON SAINT-GOBAIN

ART. G7630

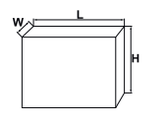
Multi-tipped diamond dresser.
Dark grey colour.

Tech. Code		G7630258
GR69	Euro	236,06
Specification		Multi tipred diamond, 8 x 11 conic shank MK1

MANUAL DIAMOND DRESSERS

ART. G7640

Manual diamond dressing tool suitable for most bench wheels. The agglomerated diamond granules inside the plate ensure constant wear.



Tech. Code		G76402015A
GR69	Euro	(102,53)
L x H x W	mm	20 x 15 x 4,5
Carat	Kr	4

📦 Indivisible package 📦 Suggested retail package - Unit price

A

ART. G7505

Impregnation procedure with special oils. Homogeneous agglomeration, uniform hardness, dimensional accuracy.
Suitable for sharpening and touch-up deburring works. Square section.

Tech. Code		G750513FF46	G750516MF56	G750519FF66	G750519MF66
GR69	Euro	11,67	12,27	13,26	13,26
Shape		■	■	■	■
D x H x L	mm	13 x 13 x 150	16 x 16 x 150	19 x 19 x 150	19 x 19 x 150
Specification		FF-46	MF-56	FF-66	MF-66
📦		5	5	5	5

P	M	K	N	S	H
○	○	○	○		

FF = Brick color fine grain
MF = Brown medium grain

A

ART. G7510

Impregnation procedure with special oils. Homogeneous agglomeration, uniform hardness, dimensional accuracy.
Suitable for sharpening and touch-up deburring works. Triangular section.

Tech. Code		G751010FF136	G751010MF136	G751013FF146	G751013MF146	G751016FF156	G751016MF156
GR69	Euro	11,47	11,47	12,01	12,01	12,62	12,62
Shape		▲	▲	▲	▲	▲	▲
D x H x L	mm	10 x 10 x 150	10 x 10 x 150	13 x 13 x 150	13 x 13 x 150	16 x 16 x 150	16 x 16 x 150
Specification		FF-136	MF-136	FF-146	MF-146	FF-156	MF-156
📦		5	5	5	5	5	5

P	M	K	N	S	H
○	○	○	○		

FF = Brick color fine grain
MF = Brown medium grain

A

ART. G7515

Impregnation procedure with special oils. Homogeneous agglomeration, uniform hardness, dimensional accuracy.
Suitable for sharpening and touch-up deburring works: Rectangular section.

Tech. Code		G75150625FB14	G75150625MB14	G75151325FB24	G75151325MB24
GR69	Euro	10,99	10,99	11,59	11,59
Shape		▬	▬	▬	▬
D x H x L	mm	6 x 25 x 100	6 x 25 x 100	13 x 25 x 100	13 x 25 x 100
Specification		FB-14	MB-14	FB-24	MB-24
📦		5	5	5	5

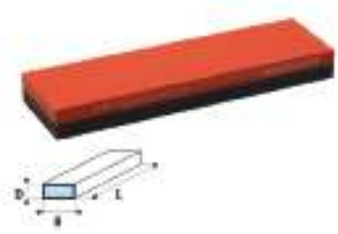
Tech. Code		G75151338MB26	G75151650MB36	G75152550FB8	G75152550MB8
GR69	Euro	17,11	18,17	29,29	28,26
Shape		▬	▬	▬	▬
D x H x L	mm	13 x 38 x 150	16 x 50 x 150	25 x 50 x 200	25 x 50 x 200
Specification		MB-26	MB-36	FB-8	MB-8
📦		5	5	5	5

P	M	K	N	S	H
○	○	○	○		

A

ART. G7520

Impregnation procedure with special oils. Homogeneous agglomeration, uniform hardness, dimensional accuracy. Suitable for sharpening and touch-up deburring works: Rectangular section.
Combined grain.



Tech. Code		G75202550IB6
GR69	Euro	25,76
Shape		▬
D x H x L	mm	25 x 50 x 150
Specification		38A320-SV / 57A100-OV
📦		5

P	M	K	N	S	H
○	○	○	○		

Combined grain

SYNTHERIZED BORON CARBIDE HAND LAPPING, GRIT-BIT

ART. GRIT-BIT

Grit-Bit represents a long-service life, high-performance, cost-effective tool A 2X magnifier built in the handle allows for an accurate check of the tool's cutting edge.

Main features:
It helps prevent chipping of hard metal inserts, burr and roughness that may develop on the cutting edge subsequent to the sharpening process is completely avoided.

Tech. Code		G8710240	G8710320	G8710400	G8710600
GR69	Euro	(71,00)	(75,00)	(75,00)	(97,00)
Shape		Flat	Flat	Flat	Flat
Model		GB-240	GB-320	GB-400	GB-400
Application		Degreasing	Sanding	Lapping	Ultra-fine
Grit		240	320	400	600

GESSWEIN ABRASIVE STONES - DIE MAKER (DF)

A

ART. G7800

Medium-hard stones made of aluminum oxide.
They combine fast cutting and moderate friability. Ideal for general use on hard and soft steel such as 2344, 2311, 2083 and to pre-finish aluminum.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G78006X3400	9,80	6 x 3 x 150	400	12
G78006X3600	11,00	6 x 3 x 150	600	12
G78006X3900	11,40	6 x 3 x 150	900	12
G780513X6150	12,00	13 x 6 x 150	150	12
G780513X6220	12,00	13 x 6 x 150	220	12
G780513X6320	13,80	13 x 6 x 150	320	12
G780513X6400	13,80	13 x 6 x 150	400	12

GESSWEIN ABRASIVE STONES - EDM

A

ART. G7810 - G7815

They remove the tough and tenacious deposits produced during electro-erosion processes much faster than any other stone. They contain very sharp Premium aluminum oxide for fast cutting action. A special clay-based binder allows EDM stones to keep their shape well during the machining of small details and live angles.
They crumble slowly, cut fast and do not paste up.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G78106X3120	9,20	6 x 3 x 150	120	12
G78106X3180	9,20	6 x 3 x 150	180	12
G78106X3220	9,20	6 x 3 x 150	220	12
G78106X3320	9,80	6 x 3 x 150	320	12
G78106X3400	9,80	6 x 3 x 150	400	12
G78106X3600	11,20	6 x 3 x 150	600	12
G781513X6120	12,60	13 x 6 x 150	120	12
G781513X6180	12,60	13 x 6 x 150	180	12
G781513X6220	12,60	13 x 6 x 150	220	12
G781513X6320	13,80	13 x 6 x 150	320	12
G781513X6400	13,80	13 x 6 x 150	400	12

GESSWEIN ABRASIVE STONES - OIL TREATED (OT)

A

ART. G7820

Medium hard stones with White Aluminum Oxide impregnated with oil; can be used without lubrication.
Excellent for machined surfaces, fine cutting.
They maintain their form well to polish the details of the moulds, moderate crushing.

Tech. Code	GR69 Euro	Dimension mm	Grit	
G78206X3120	9,80	6 x 3 x 150	120	12
G78206X3220	9,80	6 x 3 x 150	220	12
G78206X3320	10,20	6 x 3 x 150	320	12
G78206X3400	10,20	6 x 3 x 150	400	12
G78206X3600	11,80	6 x 3 x 150	600	12
G78206X31200	13,60	6 x 3 x 150	1200	12
G782513X6120	13,60	13 x 6 x 150	120	12
G782513X6220	13,60	13 x 6 x 150	220	12
G782513X6320	15,80	13 x 6 x 150	320	12
G782513X6400	15,80	13 x 6 x 150	400	12

Indivisible package Suggested retail package - Unit price

CERAMIC FIBRE STONES

ART. G7850

The long ceramic fibres and a special hardening resin make these stones flexible and heat-resistant, ideal for finishing in tight spaces.
Primarily intended for use with ultrasound equipment but will also provide good performance with manual filing machines or by hand.

Tech. Code	GR69 Euro	Colour	Dimension mm	Grain size	
G78501X4120	14,60	Green	1 x 4 x 100	120	1
G78501X4180	14,60	Gold	1 x 4 x 100	180	1
G78501X4300	14,60	Brown	1 x 4 x 100	300	1
G78501X4400	14,60	Orange	1 x 4 x 100	400	1
G78501X4600	14,60	Grey	1 x 4 x 100	600	1
G78501X4800	13,00	Blue	1 x 4 x 100	800	1
G78501X41000	13,00	White	1 x 4 x 100	1000	1
G78501X41200	13,00	Red	1 x 4 x 100	1200	1
G78551X6120	22,20	Green	1 x 6 x 100	120	1
G78551X6180	22,20	Gold	1 x 6 x 100	180	1
G78551X6300	22,20	Brown	1 x 6 x 100	300	1
G78551X6400	22,20	Orange	1 x 6 x 100	400	1
G78551X6600	22,20	Grey	1 x 6 x 100	600	1
G78551X6800	20,00	Blue	1 x 6 x 100	800	1
G78551X61000	20,00	White	1 x 6 x 100	1000	1
G78551X61200	20,00	Red	1 x 6 x 100	1200	1
G78651X10120	29,00	Green	1 x 10 x 100	120	1
G78651X10180	29,00	Gold	1 x 10 x 100	180	1
G78651X10300	29,00	Brown	1 x 10 x 100	300	1
G78651X10400	29,00	Orange	1 x 10 x 100	400	1
G78651X10600	29,00	Grey	1 x 10 x 100	600	1
G78651X101000	26,20	White	1 x 10 x 100	1000	1
G78651X101200	26,20	Red	1 x 10 x 100	1200	1

CERAMIC FIBRE STONES

ART. G7875

The long ceramic fibres and a special hardening resin make these stones flexible and heat-resistant, ideal for finishing in tight spaces.
Primarily intended for use with ultrasound equipment but will also provide good performance with the DIPROFIL filing machine or by hand.

Tech. Code	GR69 Euro	Colour	Dimension mm	Grain size	
G7875D3120	15,20	Green	Ø 3 X 50	120	1
G7875D3180	15,20	Gold	Ø 3 X 50	180	1
G7875D3300	15,20	Brown	Ø 3 X 50	300	1
G7875D3400	15,20	Orange	Ø 3 X 50	400	1
G7875D3600	15,20	Grey	Ø 3 X 50	600	1
G7875D3800	13,60	Blue	Ø 3 X 50	800	1
G7875D31000	13,60	White	Ø 3 X 50	1000	1
G7875D31200	13,60	Red	Ø 3 X 50	1200	1
G7880D3120	29,80	Green	Ø 3 x 100	120	1
G7880D3180	29,80	Gold	Ø 3 x 100	180	1
G7880D3300	29,80	Brown	Ø 3 x 100	300	1
G7880D3400	29,80	Orange	Ø 3 x 100	400	1
G7880D3600	29,80	Grey	Ø 3 x 100	600	1
G7880D3800	26,80	Blue	Ø 3 x 100	800	1
G7880D31000	26,80	White	Ø 3 x 100	1000	1
G7880D31200	26,80	Red	Ø 3 x 100	1200	1

WOOD BARS FOR LAPPING AND POLISHING

ART. G7950

The wooden bars are ideal for use with diamond paste. They are made of laminated strips of wood bonded with a resin binder.

Tech. Code	GR69 Euro	Dimension mm	Material	Shape	
G79503X3D	2,00	3 x 3 x 150	Hardwood = Resin-treated beechwood	■	10
G79504,5X4,5D	2,40	4.5 x 4.5 x 150	Hardwood = Resin-treated beechwood	■	10
G79506,5X6,5D	3,40	6.5 x 6.5 x 150	Hardwood = Resin-treated beechwood	■	10
G79553X7D	2,40	3 x 7 x 150	Hardwood = Resin-treated beechwood	▬	10
G79558X12,5D	5,00	8 x 12.5 x 150	Hardwood = Resin-treated beechwood	▬	10
G7960D3D	2,20	Ø 3 x 150	Hardwood = Resin-treated beechwood	●	10
G7960D4,5D	3,20	Ø 4.5 x 150	Hardwood = Resin-treated beechwood	●	10
G7960D6,5D	4,40	Ø 6.5 x 150	Hardwood = Resin-treated beechwood	●	10

SUPPORTS FOR ABRASIVE STONES

ART. G8010

Support for abrasive stones. Supports round stones Ø 6 mm and rectangular stones having a thickness of 3 mm and a width of 6 mm.

Tech. Code		G801066
GR69	Euro	(35,60)
Dim. supported	mm	Ø 6.0 - 3 x 6 - 6x6

ART. G8011

Support for round abrasive stones Ø 3 mm.

Tech. Code		G801130
GR69	Euro	14,20
Dim. supported	mm	Ø 3.0

ART. G8012

Support for rectangular abrasive stones.

Tech. Code		G801241	G801261	G8012101
GR69	Euro	8,60	8,60	8,60
Dim. supported	mm	4 x 1	6 x 1	10 x 1

ART. G8013

Support for rectangular abrasive stones with clamping screw. Suitable for 13x6 mm stones.

Tech. Code		G8013136
GR69	Euro	53,80
Dim. supported	mm	13 x 6

SUPPORT FOR ABRASIVE STONES

ART. G9341

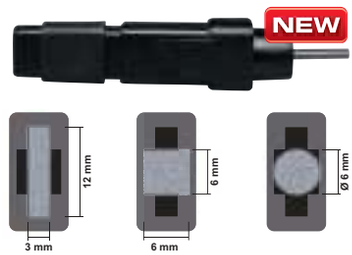
NEW

Support for rectangular abrasive stones usable with pneumatic filers. In burnished steel.

Tech. Code		G9341100
GR69	Euro	12,40
Round stem Ø	mm	4
Maximum opening	mm	6 x 13
Weight	gr	41

ART. G9343

Support for abrasive stones in various shapes that can be used pneumatic filing machines.
In shockproof plastic.



Tech. Code		G9343100
GR69	Euro	22,00
Round stem Ø	mm	3
Maximum opening	mm	3x12 6x6 Ø6
Weight	gr	17

Indivisible package Suggested retail package - Unit price

LUBRICATING FLUID FOR DIAMOND PASTES AND FLUIDS

ART. G7985

Liquid Lubricant Type OS, soluble in oil. Oil based low viscosity fluid. Suitable for use with type KD pastes. Recommended for cleaning tools and polishing moulds.

Tech. Code		G7985OS0,45	G7985OS5
GR69	Euro	34,80	117,20
Type		OS	OS
Package		Bottle with sprayer	Drum
Quantity	l	0.45	5

DIAMOND PASTES - TYPE KD

ART. G7979

A series of diamond pastes for specific applications that complement the range of polishing products.
All pastes are made according to ISO 9001. The KD pastes are soluble in both oil and water.
Packaged in 5 g. "Applikator" type syringes.

Tech. Code		G79791KDC25	G79793KDC45	G79796KDC35	G79798KDC45
GR69	Euro	39,40	74,20	77,80	117,80
Use		Mirror finishing of steel, metallographic polishing of tungsten carbide.	Mirror finishing of tungsten carbide, sapphire, ruby.	Excellent rapid polishing of steel, sapphire, ruby. Improved polishing for general use.	Elimination of scratches and preliminary polishing of steel. Medium polishing of tungsten carbide, sapphire, ruby. Lapping of steel, tungsten carbide.
Microns		1	3	6	8
Colour		Sky blue	Green	Yellow	Red

Tech. Code		G797914KDC35	G797925KDC35	G797945KDC35	G797960KDC25
GR69	Euro	117,80	117,80	117,80	146,20
Use		Rapid removal of steel, preliminary polishing of tungsten carbide.	Rapid material removal with good finish on steel. Good material removal from tungsten carbide.	Ultra rapid removal of steel, especially deep roughness, undulating surfaces and craters (notches). Rapid removal of material from tungsten carbide.	Roughing of hard materials.
Microns		14	25	45	60
Colour		Brown	Mahogany	Crimson	Orange

DIAMOND PASTES FOR LAPPING

ART. G7970

Synthetic diamond powder, perfectly selected by size, is mixed in a paste.
When used, it should be diluted in water or alcohol; excellent for manual lapping operations of a wide range of parts.
To give a super-finish to electronic components, semiconductors, magnetic heads, hard drives and optical glass.
Traditional finishing operations, preparatory lapping, high material removal and roughing.

Tech. Code		G7970AVORIO5	G7970GIALLO5	G7970ARANCIO5	G7970VERDE5	G7970AZZURRO5
GR69	Euro	39,18	44,13	53,23	52,96	58,84
Micron		1	3	6	9	12
Colour		Ivory	Yellow	Orange	Green	Sky Blue
Content	g	5	5	5	5	5

Tech. Code		G7970BLU5	G7970MARRONE5	G7970ROSSO5	G7970NOCCIOLA5
GR69	Euro	58,84	71,42	71,42	71,42
Micron		15	20	30	45
Colour		Blue	Marrone	Rosso	Hazel
Content	g	5	5	5	5

USAGE INFORMATION FOR DIAMOND GRINDING WHEELS

The extreme hardness of the diamond makes it valid in the processing of hard metal, glass, graphite, precious metals and all synthetic materials reinforced with fibers. Being the same carbon compound it is not suitable for machining steel. Cubic boron nitride (CBN), on the other hand, is particularly suitable for the machining of hardened steel above 50 Rockwell and superrapid steel (HSS).

DIAMOND WHEELS FORM 1A1R

ART. G7731

High efficiency cutting-off wheels for hard metal. Can be used with manual stationary or automatic parting systems, generally wet. Recommended working speed 50 m/s.

Tech. Code		G77311251126
GR69	Euro	307,23
D	mm	125
T	mm	1
H	mm	20
X	mm	5
Specification		D126 C100 B

DIAMOND WHEELS FORM 1A1

ART. G7736

Resin bonded diamond grinding wheels for hard metal working. For grounded, rounded and centerless grinding. Allows you to work with a high degree of precision. The high removal efficiency combined with reduced wear allows a considerable economic advantage over conventional silicon carbide wheels. Recommended lubrication. Max working speed 63 m/s

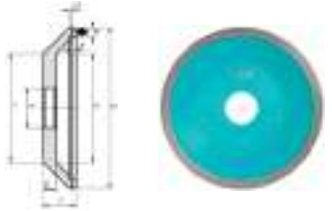
Tech. Code		G773610010126
GR69	Euro	276,05
D	mm	100
T	mm	10
H	mm	20
X	mm	3
Specification		11 D126 C75 B52 AL

DIAMOND WHEELS FORM 12A2D

ART. G7746

Resin bonded grinding wheels for sharpening and grinding, typically dry, to carbide cutting tools. Compared to traditional silicon carbide wheels, they offer greater durability and greater dimensional accuracy.

Tech. Code		G77461002564	G774610025126
GR69	Euro	206,74	206,74
D	mm	100	100
T	mm	25	25
H	mm	20	20
W - X	mm	6 x 2	6 x 2
Specification		11 D64 C50 B52 AL	11 D126 C75 B52 AL

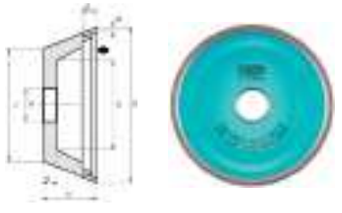


DIAMOND WHEELS FORM 11V9

ART. G7751

Resin bonded grinding wheels for sharpening and grinding, typically dry, to carbide cutting tools. Compared to traditional silicon carbide wheels, they offer greater durability and greater dimensional accuracy.

Tech. Code		G77511003564	G775110035126
GR69	Euro	191,74	(191,74)
D	mm	100	100
T	mm	35	35
H	mm	20	20
W - X	mm	3 x 10	3 x 10
Specification		11 D64 C50 B DIAGO	11 D126 C75 B DIAGO



Indivisible package Suggested retail package - Unit price

WHEELS OF CBN FORM 1A1

ART. G7760

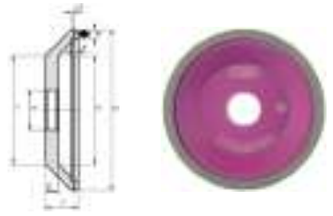
Resin bonded CBN grinding wheels for machinining high-alloy and super-rapid steel. For grounded, rounded and centerless grinding. Allows you to work a high degree of precision. The high removal efficiency combined with reduced wear allows a considerable economic advantage over conventional silicon carbide wheels. Recommended lubrication. Max working speed 63 m/s.

Tech. Code		G776010010126
GR69	Euro	473,55
D	mm	100
T	mm	10
H	mm	20
X	mm	6
Specification		51 B126 C50 B54 BA

WHEELS OF CBN FORM 12A2D

ART. G7770

CBN resin bonded grinding wheels for sharpening and grinding, typically dry, of cutting tools in non-alloy steels and super-rapid steels. Compared to traditional silicon carbide wheels, they offer greater durability and greater dimensional accuracy.

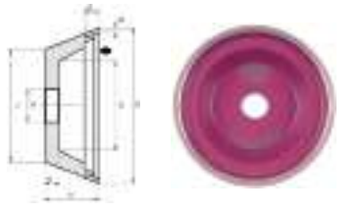


Tech. Code		G777010025126
GR69	Euro	239,08
D	mm	100
T	mm	25
H	mm	20
W - X	mm	6 x 2
Specification		51 B126 C50 B54 AL

WHEELS OF CBN FORM 11V9

ART. G7780

CBN resin bonded grinding wheels for sharpening and grinding, typically dry, of cutting tools in unalloyed and low alloy steel, highly alloyed steel and super-rapid steel. Compared to traditional silicon carbide wheels, they offer greater durability and greater dimensional accuracy.



Tech. Code		G778010035126
GR69	Euro	207,91
D	mm	100
T	mm	35
H	mm	20
W - X	mm	3 x 10
Specification		51 B126 C75 B

SHANK-MOUNTED DIAMOND GRINDERS

ART. G5610

EC-electroplated diamond for internal grinding. High speed removal, consistent profiling.

Tech. Code	GR69 Euro	D x T mm	Shank mm	Specification	
G5610010040	17,70	1 x 4	3 x 40	D 107	5
G5610015040	16,45	1.5 x 4	3 x 40	D 107	5
G5610020050	16,45	2 x 5	3 x 40	D 107	5
G5610025060	16,45	2.5 x 6	3 x 40	D 107	5
G5610030060	17,36	3 x 6	3 x 40	D 107	5
G5610040060	18,76	4 x 6	3 x 40	D 107	5

Tech. Code	GR69 Euro	D x T mm	Shank mm	Specification	
G5610050060	20,10	5 x 6	3 x 40	D 107	5
G5610060070	22,12	6 x 7	6 x 70	D 107	5
G5610080090	28,86	8 x 9	6 x 70	D 107	5
G5610100100	33,65	10 x 10	6 x 70	D 107	5
G5610120100	38,89	12 x 10	6 x 70	D 107	5

ART. G5613

Spherical head electroplated diamond for internal grinding. High speed removal, consistent profiling.

Tech. Code	GR69 Euro	D mm	Shank mm	Specification	
G56130203	8,89	2	3 x 46	D126	10
G56130303	8,89	3	3 x 46	D126	10
G56130403	11,12	4	3 x 46	D126	10
G56130503	13,16	5	3 x 46	D126	10

Tech. Code	GR69 Euro	D mm	Shank mm	Specification	
G56130603	13,16	6	3 x 46	D126	10
G56130803	16,40	8	3 x 46	D126	10
G56131003	18,45	10	3 x 46	D126	10

Indivisible package Suggested retail package - Unit price

APPLICATION AREAS OF FILES

The number of cuts in the files identifies the type of the same and refers to a number of teeth present in one centimeter of the file measured perpendicular to the axis of the same as in the table below. the greater number refers to a greater number of teeth per cm , therefore, as the number increases, the file will become more and more sweet. in mechanical files we define with cut 1 the bastard file, with cut 2 the medium soft and with cut 3 the SOFT.

Teeth per cm (tolerance according to ISO 234)		8	12	14	16	20	25	31	38	46
Files for mechanics	mm 100-125				1	2	3			
Files for mechanics	mm 150-200		1		2	3				
Files for mechanics	mm 250-350	1	2		3					
Raspe	mm 250-300	1		2						
Needle files						00	0	1	2	3

ENGINEER'S FILES - FLAT

WODEX

ART. WX7600

DIN 7261 shape A FLAT. High carbon steel.
Excellent dimensional accuracy, uniform tooth distribution and depth.

Tech. Code		G8306100T1	G8306100T2	G8306100T3	G8306150T1	G8306150T2
GR61	Euro	7,02	7,59	7,87	7,76	8,11
Shape		▬	▬	▬	▬	▬
L	mm	100	100	100	150	150
Section	mm	12 x 2.5	12 x 2.5	12 x 2.5	16 x 4	16 x 4
Cut		1-B	2-MD	3-D	1-B	2-MD
📦		12	12	12	12	12

Tech. Code		G8306150T3	G8306200T1	G8306200T2	G8306200T3	G8306250T1
GR61	Euro	8,83	9,27	9,89	10,36	12,25
Shape		▬	▬	▬	▬	▬
L	mm	150	200	200	200	250
Section	mm	16 x 4	20 x 5	20 x 5	20 x 5	25 x 6
Cut		3-D	1-B	2-MD	3-D	1-B
📦		12	12	12	12	12

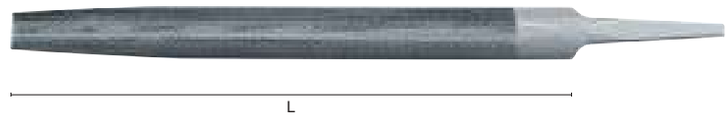
Tech. Code		G8306250T2	G8306250T3	G8306300T1	G8306300T2	G8306300T3
GR61	Euro	13,48	14,66	16,55	17,85	19,57
Shape		▬	▬	▬	▬	▬
L	mm	250	250	300	300	300
Section	mm	25 x 6	25 x 6	30 x 6.5	30 x 6.5	30 x 6.5
Cut		2-MD	3-D	1-B	2-MD	3-D
📦		12	12	6	6	6

Indivisible package Suggested retail package - Unit price

ENGINEER'S FILES - HALF-ROUND

ART. WX7602

DIN 7261 shape E - HALF-ROUND. High carbon steel.
Excellent dimensional accuracy, uniform tooth distribution and depth.



Tech. Code		G8308100T1	G8308100T2	G8308100T3	G8308150T1	G8308150T2
GR61	Euro	9,67	10,38	11,30	11,39	11,43
Shape		◓	◓	◓	◓	◓
L	mm	100	100	100	150	150
Section	mm	11 x 3	11 x 3	11 x 3	16 x 4.5	16 x 4.5
Cut		1-B	2-MD	3-D	1-B	2-MD
👁		12	12	12	12	12

Tech. Code		G8308150T3	G8308200T1	G8308200T2	G8308200T3	G8308250T1
GR61	Euro	12,07	13,60	14,30	15,33	17,02
Shape		◓	◓	◓	◓	◓
L	mm	150	200	200	200	250
Section	mm	16 x 4.5	20 x 6	20 x 6	20 x 6	25 x7
Cut		3-D	1-B	2-MD	3-D	1-B
👁		12	12	12	12	12

Tech. Code		G8308250T2	G8308250T3	G8308300T1	G8308300T2	G8308300T3
GR61	Euro	18,14	19,57	22,49	23,69	26,45
Shape		◓	◓	◓	◓	◓
L	mm	250	250	300	300	300
Section	mm	25 x 7	25 x 7	30 x 8.5	30 x 8.5	30 x 8.5
Cut		2-MD	3-D	1-B	2-MD	3-D
👁		12	12	6	6	6

ENGINEER'S FILES - ROUND

ART. WX7604

DIN 7261 shape F ROUND. High carbon steel.
Excellent dimensional accuracy, uniform tooth distribution and depth.

Tech. Code		G8310100T1	G8310100T2	G8310100T3	G8310150T1	G8310150T2
GR61	Euro	7,02	7,99	9,21	7,59	8,70
Shape		●	●	●	●	●
L	mm	100	100	100	150	150
Section	mm	Ø 4	Ø 4	Ø 4	Ø 6	Ø 6
Cut		1-B	2-MD	3-D	1-B	2-MD
👁		12	12	12	12	12

Tech. Code		G8310150T3	G8310200T1	G8310200T2	G8310200T3	G8310250T1
GR61	Euro	9,67	8,70	9,53	10,59	10,83
Shape		●	●	●	●	●
L	mm	150	200	200	200	250
Section	mm	Ø 6	Ø 8	Ø 8	Ø 8	Ø 10
Cut		3-D	1-B	2-MD	3-D	1-B
👁		12	12	12	12	12

Tech. Code		G8310250T2	G8310250T3	G8310300T1	G8310300T2	G8310300T3
GR61	Euro	12,17	13,37	14,30	15,49	17,85
Shape		●	●	●	●	●
L	mm	250	250	300	300	300
Section	mm	Ø 10	Ø 10	Ø 12	Ø 12	Ø 12
Cut		2-MD	3-D	1-B	2-MD	3-D
👁		12	12	6	6	6

ENGINEER'S FILES - SQUARE

ART. WX7606

DIN 7261 shape D SQUARE. High carbon steel.
Excellent dimensional accuracy, uniform tooth distribution and depth.

Tech. Code		G8312100T1	G8312100T2	G8312100T3	G8312150T1	G8312150T2
GR61	Euro	7,59	8,70	9,91	8,22	9,27
Shape		■	■	■	■	■
L	mm	100	100	100	150	150
Section	mm	4 x 4	4 x 4	4 x 4	6 x 6	6 x 6
Cut		1-B	2-MD	3-D	1-B	2-MD
📦		12	12	12	12	12

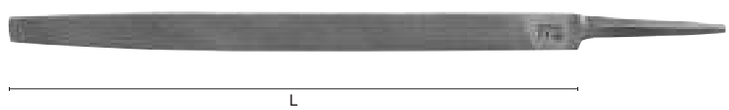
Tech. Code		G8312150T3	G8312200T1	G8312200T2	G8312200T3	G8312250T1
GR61	Euro	10,59	9,27	10,38	11,30	13,11
Shape		■	■	■	■	■
L	mm	150	200	200	200	250
Section	mm	6 x 6	8 x 8	8 x 8	8 x 8	10 x 10
Cut		3-D	1-B	2-MD	3-D	1-B
📦		12	12	12	12	12

Tech. Code		G8312250T2	G8312250T3	G8312300T1	G8312300T2	G8312300T3
GR61	Euro	13,13	14,42	15,33	16,79	19,18
Shape		■	■	■	■	■
L	mm	250	250	300	300	300
Section	mm	10 x 10	10 x 10	12 x 12	12 x 12	12 x 12
Cut		2-MD	3-D	1-B	2-MD	3-D
📦		12	12	6	6	6

ENGINEER'S FILES - TRIANGULAR

ART. WX7608

DIN 7261 shape C TRIANGULAR. High carbon steel.
Excellent dimensional accuracy, uniform tooth distribution and depth.



Tech. Code		G8314100T1	G8314100T2	G8314100T3	G8314150T1	G8314150T2
GR61	Euro	8,70	9,53	10,38	9,53	10,38
Shape		▲	▲	▲	▲	▲
L	mm	100	100	100	150	150
Section	mm	8	8	8	11	11
Cut		1-B	2-MD	3-D	1-B	2-MD
📦		12	12	12	12	12

Tech. Code		G8314150T3	G8314200T1	G8314200T2	G8314200T3	G8314250T1
GR61	Euro	11,43	11,62	12,51	13,81	15,33
Shape		▲	▲	▲	▲	▲
L	mm	150	200	200	200	250
Section	mm	11	15	15	15	17.5
Cut		3-D	1-B	2-MD	3-D	1-B
📦		12	12	12	12	12

Tech. Code		G8314250T2	G8314250T3	G8314300T1	G8314300T2	G8314300T3
GR61	Euro	16,67	18,14	20,16	21,44	23,08
Shape		▲	▲	▲	▲	▲
L	mm	250	250	300	300	300
Section	mm	17.5	17.5	20	20	20
Cut		2-MD	3-D	1-B	2-MD	3-D
📦		12	12	6	6	6

ENGINEER'S FILES - IN SET

ART. WX7617/S5

Set of 5 engineer's files with thermoplastic resin handle in roll-up fabric bag.

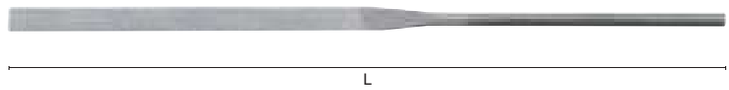
Tech. Code		G832605
GR61	Euro	77,00
mm		200
Cut		2-MD

📦 Indivisible package 📦 Suggested retail package - Unit price

FLAT NEEDLE FILES

ART. WX7750

Flat, parallel shape in high-carbon steel. Excellent dimensional accuracy, uniform tooth distribution and depth.



Tech. Code		G8552160T0	G8552160T1	G8552160T2	G8552180T0	G8552180T1
GR61	Euro	8,84	8,84	8,84	10,41	10,41
Shape		▬	▬	▬	▬	▬
L	mm	160	160	160	180	180
Section	mm	5.5 x 1.4	5.5 x 1.4	5.5 x 1.4	6 x 1.5	6 x 1.5
Cut	Ø	3,25	3,25	3,25	3,5	3,5
Size		0	1	2	0	1
👁		12	12	12	12	12

Tech. Code		G8552180T2	G8552200T0	G8552200T1	G8552200T2
GR61	Euro	10,41	11,67	11,67	11,67
Shape		▬	▬	▬	▬
L	mm	180	200	200	200
Section	mm	6 x 1.5	6.4 x 1.6	6.4 x 1.6	6.4 x 1.6
Cut	Ø	3,5	3,75	3,75	3,75
Size		2	0	1	2
👁		12	12	12	12

SEMI-ROUND NEEDLE FILES

ART. WX7752

Semi-round shape in high-carbon steel. Excellent dimensional accuracy, uniform tooth distribution and depth.

Tech. Code		G8554160T0	G8554160T1	G8554160T2	G8554180T0	G8554180T1
GR61	Euro	12,22	12,22	12,22	13,91	13,91
Shape		◓	◓	◓	◓	◓
L	mm	160	160	160	180	180
Section	mm	5.6 x 1.8	5.6 x 1.8	5.6 x 1.8	6 x 2	6 x 2
Shank	Ø	3,25	3.25	3.25	3.5	3.5
Cut		0	1	2	0	1
👁		12	12	12	12	12

Tech. Code		G8554180T2	G8554200T0	G8554200T1	G8554200T2
GR61	Euro	13,91	15,44	15,44	15,44
Shape		◓	◓	◓	◓
L	mm	180	200	200	200
Section	mm	6 x 2	6.5 x 2	6.5 x 2	6.5 x 2
Shank	Ø	3.5	3.75	3.75	3.75
Cut		2	0	1	2
👁		12	12	12	12

ROUND NEEDLE FILES

ART. WX7754

Round shape in high-carbon steel. Excellent dimensional accuracy, uniform tooth distribution and depth.

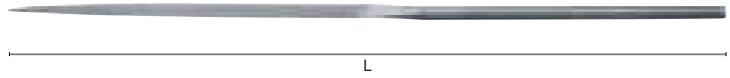
Tech. Code		G8556160T0	G8556160T1	G8556160T2	G8556180T0	G8556180T1
GR61	Euro	8,84	8,84	8,84	10,41	10,41
Shape		●	●	●	●	●
L	mm	160	160	160	180	180
Section	mm	Ø 3.25	Ø 3.25	Ø 3.25	Ø 3.5	Ø 3.5
Shank	Ø	3,25	3,25	3,25	3,5	3,5
Cut		0	1	2	0	1
		12	12	12	12	12

Tech. Code		G8556180T2	G8556200T0	G8556200T1	G8556200T2
GR61	Euro	10,41	11,67	11,67	11,67
Shape		●	●	●	●
L	mm	180	200	200	200
Section	mm	Ø 3.5	Ø 3.75	Ø 3.75	Ø 3.75
Shank	Ø	3,5	3,75	3,75	3,75
Cut		2	0	1	2
		12	12	12	12

TRIANGULAR NEEDLE FILES

ART. WX7758

Triangular shape in high carbon steel. Excellent dimensional accuracy, uniform tooth distribution and depth.



Tech. Code		G8562160T0	G8562160T1	G8562160T2	G8562180T0	G8562180T1
GR61	Euro	10,39	10,39	10,39	11,76	11,76
Shape		▲	▲	▲	▲	▲
L	mm	160	160	160	180	180
Section	mm	3.7	3.7	3.7	4.1	4.1
Tang	Ø	3,25	3,25	3,25	3,5	3,5
Cut		0	1	2	0	1
		12	12	12	12	12

Tech. Code		G8562180T2	G8562200T0	G8562200T1	G8562200T2
GR61	Euro	11,76	13,16	13,16	13,16
Shape		▲	▲	▲	▲
L	mm	180	200	200	200
Section	mm	4.1	4.4	4.4	4.4
Tang	Ø	3,5	3,75	3,75	3,75
Cut		2	0	1	2
		12	12	12	12

SQUARE NEEDLE FILES

ART. WX7756

Square shape in high-carbon steel. Excellent dimensional accuracy, uniform tooth distribution and depth.

Tech. Code		G8558160T0	G8558160T1	G8558160T2	G8558180T0	G8558180T1
GR61	Euro	10,39	10,39	10,39	11,76	11,76
Shape		■	■	■	■	■
L	mm	160	160	160	180	180
Section	mm	2.5	2.5	2.5	2.7	2.7
Tang	Ø	3,25	3,25	3,25	3,5	3,5
Cut		0	1	2	0	1
		12	12	12	12	12

Tech. Code		G8558180T2	G8558200T0	G8558200T1	G8558200T2
GR61	Euro	11,76	13,16	13,16	13,16
Shape		■	■	■	■
L	mm	180	200	200	200
Section	mm	2.7	3	3	3
Tang	Ø	3,5	3,75	3,75	3,75
Cut		2	0	1	2
		12	12	12	12

Indivisible package Suggested retail package - Unit price

NEEDLE FILES IN SET

ART. WX7768/S6

Set of 6 needle files in plastic pouch. High carbon steel. Excellent dimensional accuracy, uniform tooth distribution and depth.
Contents: 1 flat parallel file, 1 half round, 1 triangular, 1 square, 1 round, 1 flat-head shaped file.

Tech. Code		G8568160T0	G8568160T1	G8568160T2
GR61	Euro	67,28	67,28	67,28
Length	mm	160	160	160
Cut		0	1	2

FILES FOR MECHANICS IN FOAM

2/3 WMS

ART. WX7620/SE5

Set of 5 files complete with Eva Tray module for Wodex trolleys - module size 400x223.5 mm - Horizontal position.

Composition:

WX7600 Flat file 8" - 200 mm T2 cut 2
WX7602 Half round file 8" - 200 mm T2 cut 2
WX7604 Round file 8" - 200 mm T2 cut 2
WX7606 Square file 8" - 200 mm T2 cut 2
WX7608 Triangular file 8" - 200 mm T2 cut 2
WX7742 Wooden handles - 2 x 120 mm - 3 x 130 mm

Tech. Code	GR61 Euro	Pieces
G832805	76,32	10

FILES FOR PNEUMATIC FILERS

ART. G8740

NEW

Small size files for working with pneumatic filers. Single cut suitable for multiple processes, from the deburring of light alloys and cast iron castings to the processing of plastic materials. Developed with a special technology that prevents kneading.

Tech. Code		G8740A1	G8740A2	G8740B1	G8740B2	G8740C1
GR69	Euro	9,50	10,70	9,50	11,50	9,50
Form		▬	▬	◓	◓	●
Section	mm	6,5 x 2	10 x 3	6,5 x 2,5	10 x 3	4
Length	mm	90	90	90	90	90
Stem Ø	mm	4	4	4	4	4
👁		12	12	12	12	12

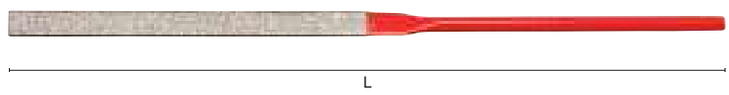
WODEX mro

Perfect ergonomics

FLAT DIAMOND NEEDLE FILES

ART. WX7770

Flat needle files with electroplated diamond on 4 sides. Suitable for metal carbides, hardened and nitrided steel, stellite, ferrite, silicon, glass, ceramics, hard stone and carbon.



Tech. Code		G8715140126	G8715160126	G8715215151
GR61	Euro	22,82	26,70	114,34
Shape		▬	▬	▬
Section	mm	5.5 x 1.5	6 x 1.5	10 x 3
L (useful)	mm	140 (70)	160 (80)	215 (110)
Specification		D126	D126	D151

SEMI-ROUND DIAMOND NEEDLE FILES

ART. WX7772

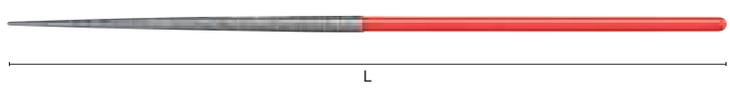
Semi-round needle files with electroplated diamond. Suitable for metal carbides, hardened and nitrided steel, stellite, ferrite, silicon, glass, ceramics, hard stone and carbon.

Tech. Code		G8716140126	G8716160126	G8716215151
GR61	Euro	23,96	27,85	110,39
Shape		◗	◗	◗
Section	mm	5 x 2	6 x 2	13 x 4
L (useful)	mm	140 (70)	160 (80)	215 (110)
Specification		D126	D126	D151

ROUND DIAMOND NEEDLE FILES

ART. WX7774

Round diamond needle files with electroplated diamond. Suitable for metal carbides, hardened and nitrided steel, stellite, ferrite, silicon, glass, ceramics, hard stone and carbon.

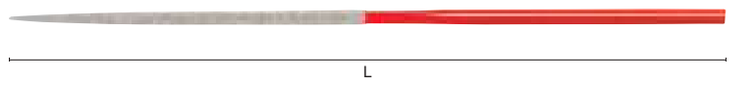


Tech. Code		G8717140126	G8717160126	G8717215151
GR61	Euro	23,96	27,85	114,34
Shape		●	●	●
Section	mm	3	3.5	5
L (useful)	mm	140 (70)	160 (80)	215 (110)
Specification		D126	D126	D151

SQUARE DIAMOND NEEDLE FILES

ART. WX7776

Square diamond needle files with electroplated diamond. Suitable for metal carbides, hardened and nitrided steel, stellite, ferrite, silicon, glass, ceramics, hard stone and carbon.

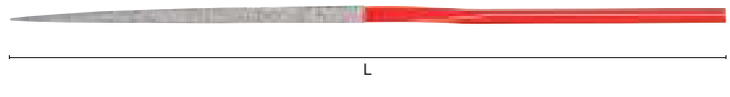


Tech. Code		G8718140126	G8718160126	G8718215151
GR61	Euro	23,96	27,85	114,34
Shape		■	■	■
Section	mm	3 x 3	3.5 x 3.5	6 x 6
L (useful)	mm	140 (70)	160 (80)	215 (110)
Specification		D126	D126	D215

TRIANGULAR DIAMOND NEEDLE FILES

ART. WX7778

Triangular diamond needle files with electroplated diamond. Suitable for metal carbides, hardened and nitrided steel, stellite, ferrite, silicon, glass, ceramics, hard stone and carbon.



Tech. Code		G8719140126	G8719160126	G8719215151
GR61	Euro	23,96	27,85	114,34
Shape		▲	▲	▲
Section	mm	4 x 4	4.5 x 4.5	10 x 10
L (useful)	mm	140 (70)	160 (80)	215 (110)
Specification		D126	D126	D215

SET OF DIAMOND NEEDLE FILES

ART. WX7780

Electroplated diamond.
Suitable for metal carbides, hardened steel, ferrite, silicon, glass, ceramic oxide and similar materials.
Contents: 5 needle files of G8716 range kit, 1 flat, 1 half-round, 1 round, 1 squared, 1 triangular.

Tech. Code		G87075L140	G87075L160
GR61	Euro	113,53	130,61
Length	mm	140	160

Indivisible package Suggested retail package - Unit price

RESIN HANDLES FOR MECHANIC'S FILES

ART. WX7740

Ergonomic thermoplastic resin handles for files.

Tech. Code		G840001	G840002	G840003
GR61	Euro	3,31	4,01	4,77
L	mm	90	110	125
For files		4" - 6"	8"	10" - 12"

WOODEN HANDLES FOR MECHANICS FILES IN FOAM

ART. WX7742

Wooden handles with metal ring for files.

Tech. Code		G8405080	G8405090	G8405100	G8405110
GR61	Euro	1,47	1,52	1,69	1,82
Size	N.	0	1	2	3
L	mm	80	90	100	110
For files		4"	6"	6"	8"

Tech. Code		G8405120	G8405130	G8405140
GR61	Euro	1,96	2,25	2,40
Size	N.	4	5	6
L	mm	120	130	140
For files		8"	10"	12"

WOODEN HANDLES WITH BRASS CHUCK FOR NEEDLE FILES

ART. WX7795

Beechwood handles with brass chuck and setting nut for needle files.

Tech. Code		G859003
GR61	Euro	6,74
L	mm	93
Description		For needle files length 140,160 and 180 mm

QUICK-SNAP PLASTIC HANDLES FOR NEEDLE FILES

ART. 210-1

Quick-clamping plastic handles for needle files.

Tech. Code		G8825001
GR69	Euro	4,55
Description		For models 140 - 160 - 180 - 200 mm
		10

DUAL-COMPONENT PLASTIC HANDLES FOR FILES

ART. FH

DUAL-COMPONENT PLASTIC HANDLES FOR FILES

Tech. Code		G88350406A	G88350810PH	G88350810TQR	G88351214PH	G88351214TQR
GR69	Euro	2,26	2,91	2,91	3,37	3,37
Model		3-10	4/1-10	4-10	5/1-10	5-10
Limes		4"-6"	8"-10"	8"-10"	12"-14"	12"-14"
Shape		All	flat - half-round	3 sp - square - round	flat - half-round	3 sp - square - round
		10	10	10	10	10

PNEUMATIC FILERS

ART. G9310

NEW

Pneumatic filers with low vibration level and reduced tool kickback. Extremely light and easy to handle for precision and finishing work. The round shank tool collet makes it ideal for working with needle files. Use with clean filtered air and a minimum of lubrication greatly increases the life of the machine.

Tech. Code		G9310060
GR69	Euro	852,00
Pliers for shank Ø	mm	da 3 a 4
Fixed stroke	mm	4
Power	HP/Watt	0,04 / 30
Operating pressure	Bar	6 - 6,5
Noise level	dB	71
Dimension max	Ø x L	30 x 200
Weight	kg	0,3

ART. G9330

NEW

Pneumatic filers with low vibration level and reduced tool kickback. Equipped with adequate power for heavy removal work on surfaces and removal of welds. Pliers for tools with round shank. Sturdy and reliable, it works very well even with large files. Use with clean filtered air and a minimum of lubrication greatly increases the life of the machine.

Tech. Code		G9330110
GR69	Euro	955,00
Collect for Ø	mm	From 4 to 6
Fixed stroke	mm	8
Power	HP/Watt	0,1 / 75
Operating pressure	Bar	6 - 6,5
Noise level	dB	77
Dimension max	Ø x L	34 x 200
Weight	kg	1,05

MINI-LUSTER FILERS FOR EMAX EVOLUTION

NAKANISHI

ART. ML-8

NEW

Filers handpiece to be used in combination with the standard ENK-410S motor of the Emax Evolution system. Compact, light and with very low vibrations. Ideal tool for polishing inside grooves and tight spaces. Supplied with support for diamond files and abrasive stones with max size 1x6

Tech. Code		G9435000
GR69	Euro	(918,00)
Collect for max Ø	mm	3,2
Fixed stroke	mm	0,8
Operating pressure	n°/min	0 ~ 6.380
Weight	g	130

DIAMOND FILES FOR PNEUMATIC FILING MACHINES

ART. G8750

NEW

Small diamond files for working with pneumatic filing machines. The flat files are diamond-coated on 4 sides. D151 grain for universal use. Suitable for machining multiple materials including hard metals, hardened steels, ceramics, glass, precious stones and carbon fibers.

Tech. Code		G8750P431	G8750P452	G8750R2	G8750R4
GR69	Euro	19,00	19,00	13,65	13,65
Shape		▬	▬	●	●
Section	mm	3 x 1	5 x 2	2	4
L tot / useful	mm	50 / 15	50 / 15	50 /15	50 / 15
Shank Ø	mm	3	3	3	3

HANDPIECES PNEUMATIC IMPULSE

NAKANISHI

ART. NSP601

NEW

Ideal for high precision machining, absence of vibrations even at very high speed.
Extremely light and silent. Maintains constant engine speed even under varying loads.
Body in stainless steel and aluminum. It can mount optional calipers from 0.8 to 3.175 mm.
Connection joint to the articulated tube to avoid twisting.
The use of a dedicated filtration and lubrication system is recommended.

Tech. Code		G9400NSP601
GR69	Euro	770,00
Standard collet Ø	mm	3
Speed	Rpm	60.000
Length	mm	168
Weight	Kg	0,165

Indivisible package Suggested retail package - Unit price

SUSPENDED 230/240V MOTORS COMPLETE WITH CONTRONIC RHEOSTAT

ART. G9500

The FARO laboratory motor offers the absolute security of double insulation, the durability of a motor sized for work far in excess of your work load, the quality of a product made with cutting-edge technologies.

Technical Data:
- Motor with double insulation
- High torque also at low rotation speed
- Electronic rheostat to ensure good progression of the motor rotation speed
- Rheostat speed from 8000 to 22000 rev/min - "Contronics" version from 3000 to 20000 rev/min

The arm for suspension, the flexible shaft and the handpiece are not included.

Tech. Code		G9500MOTORE
GR69	Euro	(860,00)
Power	W	300
Speed	rev/min.	22.000

REINFORCED FLEXIBLE SHAFTS

ART. G9510

The flexible shaft is particularly robust and easy to handle, thanks to the universal joint (patented) that is also useful to insulate the hose from the motor; the rotation is vibration-free.

Ready for use with SLIP-coupling handpieces.

Tech. Code		G9510ALB5X950
GR69	Euro	(280,00)
Ø Coupling	mm	5
Length	mm	950

SUSPENSION ARMS FOR MOTORS

ART. G9520

Complete with screw for fastening to workbench.
Painted grey with chrome extension.

Tech. Code		G9520BRACCIO
GR69	Euro	(239,00)
Clamping capacity	mm	0 - 60
Extension min/max	mm	610/930

STRAIGHT SLIP-COUPLING HANDPIECES

ART. G9530

The Faro laboratory handpiece rotates on auto-adjusting ball bearings; particularly suitable for use with mini-cutters, cotton discs, felt and woods with shank for polishing.
Ruggedly built, lightweight and simple to use.

Technical Data:
- Speed up to 22000 rev/min.
- SLIP-type coupling (to flexible shaft)
- Collet Ø 2.35mm - Ø 3,00mm

Tech. Code		G9530MAN2,35	G9530MAN3,00
GR69	Euro	(190,00)	190,00
Collet for shank	Ø mm	2,35	3,00

MICRO GRINDER EMAX EVOLUTION

ART. EV410-230

Suitable for deburring polishing and engraving. The ideal tool for mould makers. Equipped with a large digital display. Memory speed function. Two micromotors can be mounted and managed independently and simultaneously. The standard micro motor can be adjusted from 1,000 to 40,000 rpm and can be used with many types of attachments according to the needs of the user.
It is brushless, extremely lightweight, vibration-free and equipped with a button for switching it on and off directly on the workstation. Foot controller available on request.

Composition:
- Controller NE249 230
- Power supply cord
- Motor ENK-410S
- Attachment IR-310
- Collet 2.35 mm
- Collet 3.00 mm
- Handpiece stand
- Maintenance tools

Tech. Code		G9430100
GR69	Euro	2392,00
Power supply	V / Hz	230 / 50-60
Dimensions	mm	130 x 524 x 97
Weight	kg	2,3

STANDARD MOTOR FOR EMAX EVOLUTION

ART. ENK-410S

Standard lightweight, compact and a small diameter motor. High rotation speed and high torque. Brushless, On/Off switch, perfect for high precision work. Can be used with many types of hand pieces.

Technical data:
- Speed adjustable from 1,000 - 40,000 rpm
- Cable length 1.5 m
- Weight without cable 90 g

Tech. Code		G9432100
GR69	Euro	(1134,00)
Max power	W	73
Max torque	Ncm	4,3

ATTACHMENTS FOR EMAX EVOLUTION

ART. IR-310 - HG-200 - IC-300 - KC-300

The modular Nakanishi system features various easily interchangeable attachments to modify the machine for a variety of operations.

Tech. Code	GR69 Euro	Item Supplier	Type	Max speed Rpm	
G9434100	(551,00)	IR-310	Straight standard	40.000	
G9434200	(530,00)	HG-200	Straight for attachment of 6 mm	30.000	
G9434300	(686,00)	IC-300	Angled head of 90°	30.000	
G9434400	(686,00)	KC-300	Angled head of 50°	30.000	

Indivisible package Suggested retail package - Unit price

MICRO GRINDER ESPERT 500

NAKANISHI

ART. ES50T-HR

Suitable for all situations where high torque is required at a high RPM. Equipped with a large digital display. Memory speed function. Two micromotors can be mounted and managed independently and simultaneously. The high torque motor can be adjusted from 1,000 to 50,000 rpm and can be used with many types of attachment according to the needs of the user. Brushless, extremely silent and vibration-free for extremely precise work. Foot controller available on request.

Composition
- Controller NE249
- Power supply cord
- Motor ENK-50T-HR
- Attachment EHR-500
- Collet 2.35 mm
- Collet 3.00 mm
- Handpiece stand
- Maintenance tools

Tech. Code		G9450100
GR69	Euro	(3349,00)
Power supply	V / Hz	230 / 50-60
Dimensions	mm	172 x 230 x 94
Weight	Kg	2,6

STANDARD MOTOR FOR ESPERT 500

NAKANISHI

ART. ENK-500T

High power high torque brushless motor. Equipped with On/Off switch. Can be used with many types of hand pieces. High precision and sturdiness.

Technical data:
- Speed adjustable from 1,000 - 50,000 rpm
- Cable length 1.5 m
- Weight without cable 160 g

Tech. Code		G9452100
GR69	Euro	(1279,00)
Max power	W	200
Max torque	Ncm	8,7

ATTACHMENTS FOR ESPERT 500

NAKANISHI

ART. EHR-500 - EHG-400 - EIC-300 - EKC-300

The modular Nakanishi system features various easily interchangeable attachments to modify the machine for a variety of operations.

Tech. Code	GR69 Euro	Item Supplier	Type	Max speed Rpm	
G9454100	(749,00)	EHR-500	Straight standard	50.000	
G9454200	(655,00)	EHG-400	Straight for attachment of 6 mm	40.000	
G9454300	(721,00)	EIC-300	Angled head of 90°	30.000	
G9454400	(721,00)	EKC-300	Angled head of 50°	30.000	

ABRASIVE GRADE COMPARISON CHART

FEPA (P) coated abrasives	FEPA (F) bonded abrasives	FEPA (D) Diamond / CBN (µ)	Non - Woven abrasives (indicative parameters)		SC Surface Conditioning (indicative parameters)	Trizact (µ)	JIS (mesh) Japanese Industrial Standard	ANSI (grit) American National Standards Institute
P12	F12							12
	F14							
P16	F16							16
P20	F20							20
	F22							
P24	F24							24
P30	F30							
P36	F36							30
P40	F40	D357						40
	F46							
P50	F54					A300		50
P60	F60	D252				A400	J60	60
	F70							
P80		D181	A/O COARSE		A/O COARSE	A300	J80	80
	F80							
P100	F90	D151			A/O MEDIUM	A200		
P120	F100	D126	A/O MEDIUM			A160	J100	100
P150	F120	D107		S/C MEDIUM	A/O FINE	A120	J120	120
		D91				A110		
P180	F150				A/O VERY FINE	A100	J150	150
P220	F180	D76	A/O FINE	S/C FINE		A60	J180	180
	F220	D54				A65	J220	220
P240						A50	J240	
P280	F230				S/C ULTRA FINE	A75	J280	240
		D54				A60	J320	
P320	F240		A/O VERY FINE	S/C VERY FINE			J380	
								200
P360		D46					J400	220
P400	F280					A45	J500	
P500	F320	D40		S/C SUPER FINE		A35	J600	300
P600						A30		
		D30					J780	400
P800	F360	D15		S/C ULTRA FINE		A25		
P1000							J880	500
						A20		
	F400						J1000	600
P1200						A16		
P1500	F500	D7				A10	J1200	
								800
P2000	F600	D3					J1500	
							J1800	1000
P2500	F800					A6	J2000	
							J2500	1200
P3000	F1000					A5	J3000	
								1400
P4000	F1200					A3	J4000	
	F1500						J6000	1800
P5000	F2000						J7500	
							J8000	2000

EDGE
GET THE LOOK
LISTA

L-TEC
" think clean "
METALWORKING LUBRICANTS

METALWORKING LUBRICANTS

LTEC

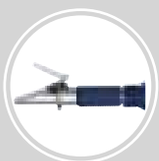
H0
2 - 6
Metalworking fluids

LTEC
WRK

H1
7 - 12
Cutting oils
and accessories

Landoil
LTEC

H2
13 - 26
Lubrificants



LTEC

H3
26 - 33
Cooling fluid
accessories
and additives

Landoil
LTEC

H4
34 - 38
Skimmers
and tramp
oil separators

LTEC

H5
39 - 41
Oil mist collectors

ICON AND FORMATS LEGEND

≤15°f H2O — Water soft≤15 ° f

≤30°f H2O — Water medium 15-30°f

~50°f H2O — Water hard 30-50°

Small chip

≤30 BAR — Low pressure ≤30 bar

≤50 BAR — High pressure≤50 bar

≤80 BAR — High pressure ≤80 bar

Large chip

Can

Drum

IBC

H

SELECTION OF LUBRICANT-COOLING OILS

	Large chip				Small chip		
	UNITEC 2K	UNITEC 2K STRONG	UNITEC SL 550 EP	UNITEC 2K CF AEROSPACE	UNITEC GREEN 725 H	UNITEC HF 535 E	UNITEC 520
	H0010	H0011	H0030	H0015	H0212	H0045	H0125
Page. H	3	3	4	4	3	5	5
GRINDING	○	○	○	○	●●	●●●	●●
MILLING	●●●	●●●	●●●	●●●	●●●	●●●	●●
TURNING	●●●	●●●	●●●	●●●	●●●	●●	●
FORATURA	●●	●●●	●●	●●	●●●	●●	●
WATERS	<25°f	<50°f	<50°f	<25°f	<50°f	<50°f	<25°f
DETERGENCY	●	●●	●●	●	●●●	●●●	●●●
CAST IRON (K)	○	●●	●	○	○	●●●	●●●
STAINLESS STEEL (M)	●●●	●●●	●●	●●	●●	●●	●
ALLOYED STEEL (p<1200 n/mm²)	●●●	●●●	●●●	●●	●●●	●●	●
CARBON STEEL (P <850 n/mm²)	●●●	●●●	●●●	●●●	●●●	●●●	●
ALUMINUM (al) ERGAL - AVIONAL	●●	●●	●●●	●●●	●●	●●●	●
MAGNESIUM (mg)	○	○	○	○	●	○	○
COPPER ALLOY (Cu)	●●	●	●●	●●	●●	●●	●
TITANIUM (ti)	●●	●●	●●	●●	●●●	●	○
PRESSURE (Bar)	<40	<50	<50	<40	<50	<70	<40
Refractometric factor	1	1,1	1,1	1	1,9	1,4	1,9

○ = not suited ● suited ●● recommended ●●● excellent

BORON-CHLORINE AND FORMALDHEYDE RELEASER-FREE SEMI-SYNTHETIC FLUIDS

LTEC

~50°f H_2O | ≤30 BAR | PDF | PDF

ITEM: UNITEC GREEN 725H

UNITEC GREEN 725H is an innovative emulsifiable coolant based on esters derived from renewable raw materials. It is a universal product for machining steels, stainless steels, titanium and aluminum alloys, even those particularly sensitive to staining. It can also work with yellow alloys and cast iron. The special additives, free of chlorine, boron and formaldehyde donor bactericides, make it an absolutely avant-garde product from an eco / toxicological point of view.Moreover, thanks to the new generation components with which it is formulated, UNITEC GREEN 725H has a high tolerance of hardness water and excellent resistance to foam even at high pressure.

ADVANTAGES:
- Excellent compatibility with water hardnesses from 5 to 50 ° f
- No occupational exposure limits since it is free from mineral oil
- No risk of skin irritation as it is free from isothiazolinone bactericides
- Very low chemical risk: in addition to being free from formaldehyde donors (therefore it does not contain any component considered carcinogenic) and from boron and on compounds, it does not contain SVHC substances, secondary amines (therefore there is no risk of formation of nitrosamines) or dangerous substances for the environment (no H 412 labeling).

Tech. Code	GR70 Euro	Quantity L	Appearance concentrated	Appearance emulsion	Refractometric factor	Density DIN 52757 kg/L	pH (5%) DIN 51369	Storage temperature °C
H0212020	224,00	20	Amber	Traslucent	1,9	0,990	9,3	from 5 to 40
H0212200	1980,00	200	Amber	Traslucent	1,9	0,990	9,3	from 5 to 40

BORON AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS

LTEC Unitec

~50°f H_2O | ≤80 BAR | PDF | PDF

ITEM: UNITEC 2K STRONG

UNITEC 2K STRONG is a multi-material emulsifiable cooling lubricant with a high mineral oil content. Free from SVHC, boron and formaldehyde releasing biocides. UNITEC 2K STRONG is an emulsifiable oil created for the needs of industry where water hardness is high and there is a need for extensive lubrication. The UNITEC 2K STRONG emulsifiable oil has an excellent lubricating and cleaning capacity and an excellent resistance to microorganisms.

ADVANTAGES:
- Excellent compatibility with water hardness from 5 to 10 °f
- Excellent cleaning power of the machine tool and workpieces
- Excellent lubrication even in the most demanding situations
- Excellent anti-corrosive action
- Excellent cleaning of work areas
- Long emulsion life and excellent resistance to bacterial proliferation
- Excellent resistance to foam

Tech. Code	GR70 Euro	Quantity L	Appearance concentrated	Appearance emulsion	Refractometric factor	Density DIN 52757 kg/L	pH (5%) DIN 51369	Storage temperature °C
H001120	209,00	20	Amber	Milky	1.1	0.975	9.35	from 5 to 40
H0011200	1920,00	200	Amber	Milky	1.1	0.975	9.35	from 5 to 40

BORON AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS

LTEC Unitec

≤15°f H_2O | ≤30 BAR | PDF | PDF

ITEM: UNITEC 2K

UNITEC 2K is an emulsifiable cooling lubricant with a high content of mineral oils and EP additives; it does not contain SVHC, boron or formaldehyde releasing biocides. Formulated for processing ferrous and non-ferrous alloys.
The UNITEC 2K emulsifiable oil has been formulated to give maximum performance with medium-soft water and its EP additives give it an excellent lubricating capacity.

ADVANTAGES:
- Excellent compatibility with water hardness from 0 to 30°f
- Excellent cleaning power of the machine tool and of workpieces
- Excellent health and safety properties and operator acceptability
- Excellent lubrication even in the most demanding situations
- Formidable antioxidant and bio-dynamic action
- Excellent cleaning of work areas
- Long emulsion life
- Low foaming in the recommended water hardness range

Tech. Code	GR70 Euro	Quantity L	Appearance concentrated	Appearance emulsion	Refractometric factor	Density DIN 52757 kg/L	pH (5%) DIN 51369	Storage temperature °C
H00105	59,00	5	Emerald green	Milky	1.0	0.960	9.25	from 5 to 40
H001020	211,00	20	Emerald green	Milky	1.0	0.960	9.25	from 5 to 40
H0010200	1790,00	200	Emerald green	Milky	1.0	0.960	9.25	from 5 to 40

H

BORON AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS

≤15°f H2O | ≤30 BAR | PDF | PDF

ITEM: UNITEC 2K CF AEROSPACE

UNITEC 2K CF AEROSPACE is an emulsifiable cooling lubricant with a high mineral oil content. Free from chlorine, SVHC, boron and formaldehyde releasing biocides, suitable for machining ferrous, non-ferrous and titanium alloys.
UNITEC 2K CF AEROSPACE is an emulsifiable oil created for the needs of the aerospace industry and therefore does not contain chlorinated paraffins or halides.
The UNITEC 2K CF AEROSPACE emulsifiable oil has been formulated to provide maximum performance with medium-soft water and the EP additives give it an excellent lubricating capacity.

ADVANTAGES:
- Excellent compatibility with water hardness from 0 to 30°f
- Chlorinated paraffin free
- Excellent cleaning power of the machine tool and of workpieces
- Excellent health and safety properties and operator acceptability
- Excellent lubrication even in the most demanding situations
- Formidable antioxidant and bio-dynamic action
- Excellent cleaning of work areas
- Long emulsion life
- Low foaming in the recommended water hardness range

Tech. Code	GR70 Euro	Quantity L	Appearance concentrated	Appearance emulsion	Refractometric factor	Density DIN 52757 Kg/L	pH (5%) DIN 51369	Storage temperature °C
H001520	215,00	20	Brown	Milky	1.0	0.960	9.25	from 5 to 40
H0015200	(1800,00)	200	Brown	Milky	1.0	0.960	9.25	from 5 to 40

BORON AND FORMALDEHYDE RELEASER FREE MINERAL FLUIDS

~50°f H2O | ≤50 BAR | PDF | PDF

ITEM: UNITEC SL 550 EP

UNITEC SL 550 EP is an emulsifiable lubricating-coolant fluid with a high mineral oil content, with special synthetic-based additives which ensure good lubricity even for heavy-duty machining. It is a universal product for all machining, even heavy-duty, with chip removal of steel, stainless steel, titanium, light alloys and cast iron.
It can also be used in grinding due to good foam control. The product is free from chlorine and bactericides.

ADVANTAGES:
- Excellent compatibility with water hardnesses from 5 to 50 °f
- Very high lubricating and greasing power
- Long duration of the emulsions
- Excellent anti-foaming capacity even at high pressures
- High protective action on machine and pieces
- Excellent safety profile and very high operator compatibility

Tech. Code	GR70 Euro	Quantity L	Concentrated appearance	Emulsion appearance	Refractometric factor	Density DIN 52757 kg/L	pH (5%) DIN 51369	Storage temperrature °C
H003020	220,00	20	amber	Milky	1,1	0,963	9,3	from 5 to 40
H0030200	1800,00	200	amber	Milky	1,1	0,963	9,3	from 5 to 40

Indivisible package Suggested retail package - Unit price

BORON-CHLORINE AND FORMALDHEYDE RELEASER-FREE SEMI-SYNTHETIC FLUIDS

ITEM: UNITEC HF 535 E

UNITEC HF 535E is a semi-synthetic lubricating-coolant fluid with a medium content of mineral oil, with special synthetic-based additives that ensure good lubricity in medium-heavy machining, in particular those where high feed (High Feed) of the tool is required. It is free from bactericides. UNITEC HF 535E is a universal product for chip removal of steels, stainless steels, titanium, light alloys and cast iron; it can also be used in grinding thanks to its excellent detergency and good foam control. Thanks to the new generation components with which it is formulated, UNITEC HF 535E has high tolerance of water hardness and excellent resistance to foam even at high pressures.

ADVANTAGES:
- Excellent compatibility with water hardnesses from 5 to 50 ° f
- Excellent lubricating and greasing power
- Very high detergency
- Long emulsion life
- Excellent anti-foaming capacity even at high pressures
- High protective action on machine and parts
- Excellent safety profile and very high compatibility with operators

Tech. Code	GR70 Euro	Quantity L	Appearance concentrated	Appearance emulsion	Refractometric factor	Density DIN 52757 kg/L	pH (5%) DIN 51369	Storage temperature °C
H0045020	188,00	20	Amber	Traslucent	1,4	0,989	9,4	from 5 to 40
H0045200	1489,00	200	Amber	Traslucent	1,4	0,989	9,4	from 5 to 40

BORON-CHLORINE AND FORMALDEHYDE RELEASER-FREE SEMI-SYNTHETIC FLUIDS

ITEM: UNITEC 520

UNITEC 520 is a semi-synthetic emulsifiable cooling lubricant with a low mineral oil content. It does not contain SVHC, boron or formaldehyde releasers. Has a formidable anti-oxidant action and a very high resistance to microorganisms.
The product has been designed to give maximum performance on cast iron but can also be used to machine materials such as steel, aluminium, magnesium or copper alloys.
UNITEC 520 is an emulsifiable oil free from chlorinated paraffins and halides.
The UNITEC 520 emulsifiable oil has been formulated for all processes that require an excellent cooling capacity without losing any of its capacity for lubricating and cleaning the workpiece.

ADVANTAGES:
- Compatible with water hardness from 0 a 30°f
- Excellent health and safety properties and operator acceptability
- Excellent grinding wheel cleaning
- Excellent cleaning of work areas
- Long emulsion life
- Low foaming in the recommended water hardness range

Tech. Code	GR70 Euro	Quantity L	Appearance concentrated	Appearance emulsion	Refractometric factor	Density DIN 52757 kg/L	pH (5%) DIN 51369	Storage temperature °C
H01255	55,00	5	Amber	Translucent	1.9	1.010	9.80	from 10 to 40
H012520	167,00	20	Amber	Translucent	1.9	1.010	9.80	from 10 to 40
H0125200	1390,00	200	Amber	Translucent	1.9	1.010	9.80	from 5 to 40

H

FLUID MANAGEMENT

COST OPTIMIZATION

The LTEC Technical Assistance program allows you to get the most out of any lubricant or cooling lubricant. Regular inspection of the fluids allows you to optimize performance, minimize consumption and avoid problems.

CUSTOM PLANNING

We schedule inspection of the emulsions at the customer's facilities according to individual requirements.

ON-SITE INSPECTIONS

Our staff assesses the condition of the oils in the machine tools using advanced diagnostic tools.

CUSTOMER REPORTS

At the end of each on-site analysis or technical intervention, an easy to understand technical report is prepared indicating the condition of the fluids and any action that should be taken to maintain maximum efficiency.

SELECTION OF LUBRICANT-COOLING OILS

	ECOSYNTH 1-6	ECOSYNTH 2-10	ECOSYNTH 3-22	ECOSYNTH 4-42	ECOSYNTH 6-12 DD
	H1160	H1162	H1164	H1166	H1170
Page. H	7	7	8	8	8
GRINDING	●●●	●●	●	○	●●●
MILLING	●●	●●	●●●	●●●	●●
TURNING	●	●●	●●●	●●●	●●
FORATURA	○	●●●	●●●	●●●	●●●
STAINLESS STEEL (M)	●●	●	●●●	●●●	●●●
ALLOYED STEEL (p<1200 n/mm²)	●●●	●●●	●●●	●●	●●
CARBON STEEL (P <850 n/mm²)	●●●	●●●	●●●	●●●	●●
ALUMINUM (al) ERGAL - AVIONAL	●●	●●●	●●●	●●●	●●●
MAGNESIUM (mg)	●	●●●	●●●	●●●	●●●
COPPER ALLOY (Cu)	●●	●●●	●●●	●●●	●●●
TITANIUM (ti)	●●●	●	●●	●●●	●●
HSS	●●●	○	○	○	○
MDI	●●●	○	○	○	○

○ = not suited ● suited ●● recommended ●●● excellent

RENEWABLE PLANT BASED NEAT CUTTING OILS

LTEC EcoSynth

≤80 BAR | PDF

ITEM: ECOSYNTH 1-6

ECOSYNTH 1-6 is a latest generation neat machining oil formulated using renewable plant sources, suitable for grinding and lapping steel, hardened steel, HSS and solid carbide.
ECOSYNTH 1-6 is a neat machining oil that has been developed for heavy duty grinding and lapping. It is plant based, which means that it has excellent biocompatibility.
ECOSYNTH 1-6 has been formulated for customers who require a neat machining oil with high performance lubrication and cleaning properties that also takes health and safety properties into account.

ADVANTAGES:
- Excellent cleaning action on diamond wheels
- Easy micro-scrap removal
- Recommended for high speed machining
- Excellent when machining produces high temperatures
- Formulated for heavy duty of grinding of hard metals
- First choice for lapping

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C
H116020	190,00	20	Straw yellow	6	0.890	>170°	from 10 to 40
H1160200	(1750,00)	200	Straw yellow	6	0.890	>170°	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

RENEWABLE PLANT BASED NEAT CUTTING OILS

LTEC EcoSynth

≤80 BAR | PDF

ITEM: ECOSYNTH 2-10

ECOSYNTH 2-10 is a latest generation neat machining oil formulated using renewable plant sources, suitable for turning, milling, drilling, boring and tapping metals. Designed to give excellent performance when used for grinding and lapping HSS and solid carbide.
The neat machining oil ECOSYNTH 2-10 is a multi-purpose oil suitable for machining all types of metal. It has an excellent ability to eliminate micro-scrap and an outstanding cleaning capacity. It provides maximum performance on sliding head lathes and grinding machines.
ECOSYNTH 2-10 has been formulated for customers who require a neat machining oil with high performance lubrication and cleaning properties that also takes health and safety properties into account.

ADVANTAGES:
- Excellent cleaning action on diamond wheels
- Specific for manufacturing and sharpening MDI and HSS tools
- Easy removal of micro scrap
- Formulation suitable for machining metal alloys on sliding head lathes

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C
H116220	190,00	20	Straw yellow	10	0.880	>190	from 10 to 40
H1162200	(1750,00)	200	Straw yellow	10	0.880	>190	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

RENEWABLE PLANT BASED NEAT CUTTING OILS

LTEC EcoSynth

ITEM: ECOSYNTH 3-22

ECOSYNTH 3-22 is a latest generation neat machining oil formulated using renewable plant sources; it contains EP additives to increase its performance. Suitable for turning, milling, drilling, boring and threading metals and designed to give excellent performance when used for turning and milling.
The neat machining oil ECOSYNTH 3-22 is a multi-purpose oil suitable for any type of metal machining. It has excellent lubricity and high anti-weld properties even in heavy duty machining processes such as moulding or gear cutting.
ECOSYNTH 3-22 has been formulated for customers who require a neat machining oil with high performance lubrication and cleaning properties that also takes health and safety properties into account.

ADVANTAGES:
- Excellent lubrication
- First choice when machining using sliding head lathes
- High anti-welding power
- Designed to be suitable for any type of machining
- Can be used with any type of metal
- Outstanding when used for grinding gear teeth

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C
H116420	170,00	20	Amber	22	0.895	>220	from 10 to 40
H1164200	(1494,00)	200	Amber	22	0.895	>220	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

RENEWABLE PLANT BASED NEAT CUTTING OILS

LTEC EcoSynth

ITEM: ECOSYNTH 4-42

ECOSYNTH 4-42 is a latest generation neat machining oil formulated using renewable plant sources; it contains EP additives to increase its performance. Suitable for turning, milling, drilling, boring and tapping of metals. Formulated to provide excellent performance when used for heavy duty machining processes.
The multi-purpose neat machining oil EOSYNTH 4-42 is suitable for any type of metal machining. It has excellent lubricity and performance in heavy duty machining processes such as moulding or gear cutting.
ECOSYNTH 4-42 has been formulated for customers who require a neat machining oil with high performance lubrication and cleaning properties that also takes health and safety properties into account.

ADVANTAGES:
- Recommended for heavy duty machining
- Extraordinary lubrication
- High EP power at high and low temperatures
- Formulated to be able to work in harsh conditions

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C
H116620	150,00	20	Amber	42	0.930	>220	from 10 to 40
H1166200	1290,00	200	Amber	42	0.930	>220	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

RENEWABLE PLANT BASED NEAT CUTTING OILS

LTEC EcoSynth

ITEM: ECOSYNTH 6-12 DD

ECOSYNTH 6-12 DD is a latest generation neat machining oil formulated using renewable plant sources; it contains EP additives to increase its deep drilling performance.
The neat machining oil ECOSYNTH 6-12 DD has been formulated to give maximum performance when used for deep drilling applications, while maintaining its performance when used for turning, milling, drilling, boring, threading, broaching, blanking or moulding.
This oil is also suitable for use on multi-spindle and sliding head lathes.
ECOSYNTH 6-12 DD has been formulated for customers who require a neat machining oil with high performance lubrication and cleaning properties that also takes health and safety properties into account.

ADVANTAGES:
- Formulated for deep drilling
- High EP power at high temperatures
- Excellent for boring and threading steel
- Suitable for sliding head and multi-spindle lathes

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 Kg/L	Flash point ASTM D92 °C	Storage temperature °C
H117020	197,00	20	Golden yellow	14	0.900	>200	from 10 to 40
H1170200	(1690,00)	200	Golden yellow	14	0.900	>200	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

Indivisible package Suggested retail package - Unit price

READY TO USE OIL FOR BAND SAWS

GUABO

ITEM: ALL IN ONE GREEN SAW

ALL IN ONE GREEN SAW is an innovative coolant based on esters derived from renewable raw materials. It is ready for use : a universal product for steel machining, stainless steel, titanium and aluminum alloys, even those particularly sensitive to staining. It can also work yellow alloys and cast iron.

PROPERTIES

The special additive, free from chlorine, boron and formaldehyde donor vactercides, makes it an absolutely avant-garde product from an eco/toxicological point of view. Furthermore, thanks to the new generation components with which it is formulated. ALL IN ONE GREEN SAW has excellent resistance to foam even at high pressures.

The advantage of having emulsion already prepared with water of controlled hardness allows for several advantages:
- No need for measuring jugs or mixing systems ;
- No risk of calculation errors in finding the correct proportion ;
- ZERO risk of INCOMPATIBILITY of water hardness
- ZERO waste of staff time

APPLICATION

The product is suitable for blanking operations with saws of steel, stainless steel, titanium and aluminum alloys, even those particularly sensitive to staining. It can also work yellow alloys and cast iron.

STORAGE AND HANDLING

Store indoors if possible. The drums must be kept tilted or horizontal with the caps below the level of the contents. Avoid contamination with foreign substances during decanting or withdrawing. Tightly close the caps of the containers after opening them.

Tech. Code	GR70 Euro	Quantity L	Specific weight a 20°C kg/L	Appearance	pH	Concentration %
H005020	72,00	20	1,0	Translucent	9,4	10

TAPPING PASTE

LTEC

ITEM: HI-THREAD

HI-THREAD paste is specifically designed for use in tapping, threading and drilling any type of material. Its high adherence properties protect the tool.
The high adherence of the HI-THREAD paste allows perfect lubrication of the tool in any entry position.
The product, which includes powerful EP additives, ensures maximum lubrication even under high stress and difficult-to-machine materials.

ADVANTAGES:
- Does not drip
- Superior adhesion to all ferrous and non-ferrous metal alloys
- High viscosity lubricant film, excellent for extremely heavy duty machining
- Recommended for machining titanium and titanium alloys
- Reduces tool friction
- The high viscosity allows excellent product handling
- Odourless
- Excellent adhesion to tools

Tech. Code	GR70 Euro	Weight g	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 kg/L	VOC g/l	Storage temperature °C
H13260500	20,00	500	White	2950	1.010	0	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

H

HIGH PERFORMANCE NEAT CUTTING OILS

LTEC Tap

ITEM: TAP MITIC

TAP MITIC is a cutting oil produced from renewable materials, it is suitable for tapping, broaching, slotting and drilling any type of difficult to machine material.
The TAP MITIC cutting oil has been developed and formulated for maximum ease of use and the highest safety features, while at the same time maximizing product performance.
Its exceptional EP properties mean that TAP MITIC can adhere to the surface of the tool and maximize cutting capacity even under high stress.

ADVANTAGES:
- High lubricity
- Extraordinary ability to adhere to tools
- Excellent adhesion to the workpiece
- Exceptional EP properties
- Protects the cutting edge from corrosion
- Prevents built up edge formation

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C	
H13200,5	25,00	0.5	Dark amber	>250	1.22	>150	from 10 to 40	6
H13205	144,00	5	Dark amber	>250	1.22	>150	from 10 to 40	1

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

CUTTING FLUIDS

WRK

ITEM: TOP TOOL III

TOP TOOL III is a universal cutting fluid for all tapping and threading operations of all materials, including aluminum, stainless steels, alloys composites and polymers. Formulated with raw materials of natural origin, entirely biodegradable, TOP TOOL III possesses an exceptional lubricating capacity able to reduce the friction between the tool and the worked piece, at the same time allowing rapid chip decanting.
TOP TOOL can be applied directly on the tool with a brush, an oil can and can also be dispensed with a minimal lubrication unit.

ADVANTAGES
- Maximize lubrication
- Multimetal compatibility
- Excellent on aluminum and stainless steel
- Suitable for special alloys
- Specific for threading

Tech. Code	GR70 Euro	Quantity L	Appearance	Density DIN 52757 kg/L	Viscosity at 40°C ASTM D445 cSt	Flash point ASTM D92°C	
H13310,4	16,40	0,4	Amber	0,911	39	-	12
H13315	90,00	5	Amber	0,911	39	182	1
H133120	253,00	20	Amber	0,911	39	182	1

CUTTING FLUIDS

LTEC Alu

ITEM: ALU FLUID

ALU FLUID is a lubricating oil for tapping and threading, designed and formulated for maximum performance with aluminium alloys.
The unique characteristics of the ALU FLUID cutting and tapping oil, and the highly refined petroleum compounds it contains, optimizes tool lubrication and chip discharge.
ALU FLUID cutting oil reduces the friction coefficient, preventing tool wear by cooling them and reducing the working temperature.

ADVANTAGES:
- High cooling and lubricating capacity
- Suitable for aluminium alloys
- Does not stain yellow metal alloys
- Chlorine-free
- Prevents built up edge formation

Tech. Code	GR70 Euro	Quantity L	Appearance	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C	
H13400,4	7,70	0.4	Ochre	0.870	>62	from 10 to 40	12
H13401	21,80	1	Ochre	0.870	>62	from 10 to 40	4

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

H

Indivisible package Suggested retail package - Unit price

CUTTING FLUIDS

LTEC Tap

ITEM: TAP FLUID

TAP FLUID is a lubricating oil for tapping and threading. It has been designed and formulated for maximum performance on steel alloys and stainless steel.
The innovative formulation of this cutting and tapping oil allows optimal tool lubrication by creating an extremely thin film that guarantees maximum lubrication during use.
Its exceptional mechanical coupling between the cutting edge and the metal make TAP FLUID tapping oil an excellent multi-purpose oil. This means it is also suitable for chip removal with bench-mounted tools.

ADVANTAGES:
- High cooling and lubricating capacity
- High anti-seize capacity
- Suitable for lubricating mechanical couplings
- Suitable for cutting operations

Tech. Code	GR70 Euro	Quantity L	Appearance	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C	
H13500,4	7,70	0.4	Ochre	0.880	>62	from 10 to 40	12
H13501	21,80	1	Ochre	0.880	>62	from 10 to 40	4
H13505	75,00	5	Ochre	0.880	>62	from 10 to 40	1

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

SYNTHETIC CUTTING FLUIDS

LTEC Steel

ITEM: FLUBE MINIMALCUT STEEL 46

FLUBE MINIMALCUT STEEL 46 is composed of synthetic esters designed for minimal MQL lubrication.
The FLUBE MINIMALCUT STEEL 46 neat cutting oil has been developed and formulated to maintain maximum lubrication with minimum smoke when machining any type of metal or non-metal.
Its characteristics and EP additives means that the FLUBE MINIMALCUT STEEL 46 neat cutting oil can provide optimal lubrication for any type of chip removal machining. It also has exceptional lubricity when used with cutting discs or band saws.

ADVANTAGES:
- Suitable for machining of steels and non-ferrous alloys
- Suitable for plastic cutting and deformation processes
- Suitable for minimal lubrication

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Storage temperature °C
H142005	65,00	5	Golden yellow	36	0.925	>250	from 10 to 40
H1420020	220,00	20	Golden yellow	36	0.925	>250	from 10 to 40
H1420200	1940,00	200	Golden yellow	36	0.925	>250	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

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Indivisible package Suggested retail package - Unit price

MINIMAL LUBRICATING CONTROL UNIT FOR SAWING MACHINES

LTEC Micro

ITEM: MICRO DROP

LTEC minimal lubricating systems have been designed to replace traditional lubrication with oil emulsion or neat oil in machining with chip removal, molding and cold deformation. Uses lubricants from renewable bases that replace conventional fluids, eliminating registration requirement and disposal of exhausted liquid.
The micro-pneumatic pumps dose the minimum amount of lubricant that is transported by a flow of compressed air towards the tool/workpiece contact point without creating mist or pollution. The lubricant is consumed only during the processing phase.
It is possible to obtain an immediate increase in productivity because machine, working area and piece cleaning times are eliminated.
A further advantage in cost reduction is derived from the increase in tool life, which kept at room temperature significantly increases its life; and also eliminates any possible health problems deriving from contact with traditional fluids.

MODEL FOR BAND SAWS

The ECU consists of a 1.2-liter tank with electric level control, frequency generator, needle valve to regulate the flow of compressed air coming out of the nozzel, micro-pump single-acting pneumatic pump, solenoid valve to start and the stop of the control unit, nozzel for band sawing machine complete with 5 meters of coaxial pipe.

Tech. Code	GR71 Euro	Tension Voltage	For band saw blades mm
H145034	550,00	24 V-CC	≤ 34

WARNING: Available on request reel with different voltage in CC or AC.

MINIMAL LUBRICATING CONTROL UNIT FOR MACHINES

LTEC Micro

ITEM: MICRO DROP

LTEC'S minimal lubricating systems have been designed to replace the traditional lubrication with oil emulsion or neat oil in machining with chip removal, molding and cold deformation. These units have been designed to use fluids from renewable bases which replace conventional fluids eliminating the obligation of registration and disposal of used liquids.
The micro pneumatic pumps dose the minimum amount of lubricant transported by a flow of compressed air flow to the contact point tool/ workpiece without creating fog or pollution. The lubricant is consumed only during the processing phase.
It is possible to obtain an instant increase in productivity as it helps eliminate cleaning times usually required by the machine as well as it surrounding working area.
A further advantage in cost reduction is derived from the increase in tool life, which, kept at a room temperature, significantly increases its life, it also eliminates the health problems derived from contact with traditional fluids.

MODEL FOR MACHINE TOOLS

The ECU consists of a 1.2-liter tank with electric level control, frequency generator, needle valve to regulate the flow of compressed air coming out of the nozzel, micro-pump single-acting pneumatic pump, solenoid valve to start and stopping the control unit, articulated nozzel (s) with 5 meters of coaxial pipe.

Tech. Code	GR71 Euro	Nozzles n°	Tension Voltage
H14521	610,00	1	24 V-CC
H14522	725,00	2	24 V-CC

WARNING: Available on request reel with different voltage in CC or AC.

Indivisible package Suggested retail package - Unit price

ITEM: HYDROPRO

HYDROPRO is a neat oil made from refined oils and specific additives that give the product the ability to meet multiple needs. Its unique formulation makes HYDROPRO hydraulic oil suitable for a variety of uses from hydraulic controls to bar feeders for machine tools.
The HYDROPRO series hydraulic oils comply with DIN 51524 Part II DENISON HF-0 specifications and pass the IP 281 tests on a VICKERS FZG 12° STAGE VICKERS CETOP RP67H pump.
Classification: ISO-L-HM

ADVANTAGES AND USES:
- Large number of applications
- Used in machine tool hydraulic controls
- Used in bar feeders for lathes and hydraulic presses
- Can be in forklift trucks and rolling mills
- Used in earthmoving machines and hydraulic servo controls

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Viscosity index	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Pour point °C	Storage temperature °C
H202032B1	(159,00)	20	Yellow	32	100	0.867	>220	-30	from 10 to 40
H202032F	1490,00	200	Yellow	32	100	0.867	>220	-30	from 10 to 40
H202046B1	45,00	5	Yellow	46	101	0.867	>220	-30	from 10 to 40
H202046B3	(164,00)	20	Yellow	46	101	0.867	>220	-30	from 10 to 40
H202046F	1500,00	200	Yellow	46	101	0.867	>220	-30	from 10 to 40
H202068B1	(185,00)	20	Yellow	68	99	0.870	>230	-30	from 10 to 40
H202068F	1620,00	200	Yellow	68	99	0.870	>230	-30	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

ITEM: NEBULIS

NEBULIS is a hydraulic mineral lubricant with a high natural viscosity index and contains additives to enhance its antioxidant and anti-corrosive properties.
Its formulation makes NEBULIS hydraulic oil suitable for use in compressor turbines and hydraulic systems.
Its characteristics mean that NEBULIS passes the AFNOR NFE 48603 and HL DIN 51524 Part 1 HL tests. It is a high quality hydraulic oil and is excellent for use in industrial air filters and bearings.

ADVANTAGES AND USES:
- Outstanding protective properties
- Incorporated additives that prevent rust and corrosion in the presence of water
- Can be used in turbines and compressors
- Can be used in vacuum pumps and hydraulic systems
- Excellent for industrial air filters and machine tools
- Can be used for plain bearings and in machines with low loads

Tech. Code	GR70 Euro	Quantity L	Viscosity at 40°C ASTM D445 cSt	Viscosity index	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Pour point °C	Storage temperature °C
H2010B	12,00	1	32	100	0.875	220	-15	from 10 to 40
H2010T1	51,00	5	32	100	0.875	220	-15	from 10 to 40
H2010T3	(178,00)	20	32	100	0.875	220	-15	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

SLIDEWAY OILS

LTEC Waylube

ITEM: WAYLUBE EP

WAYLUBE EP slideway oil is made from selected oils and special zinc-free additives that give a high adhesion capacity and size to the lubricating film that increases the performance of the product.
The excellent adhesion capacity of the WAYLUBE EP slideway oil can efficiently lubricate both horizontal and vertical slideways.
The EP additives ensures that WAYLUBE slideway oil provides lubrication even under high loads and in oil-loss and oil circulation lubrication systems.
WAYLUBE passes the CINCINNATI MILACRON P47, P50 and P53 tests.
Classification: ISO-L-HG

ADVANTAGES AND USES:
- High adhesion lubricating film
- Hydrodynamic friction coefficient
- Suitable for lubricating machine tool slideways
- Adheres both in horizontal and vertical applications
- Suitable for oil-loss and oil circulation lubrication
- Withstands high loads
- Excellent for slow and heavily loaded rolling bearings

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Viscosity index	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Pour point °C	Storage temperature °C
H201532B1	(170,00)	20	Yellow	32	100	0.870	>220	-20	from 10 to 40
H201568T	48,00	5	Giallo	68	101	0,880	>220	-21	from 10 to 40
H201568B1	(168,00)	20	Yellow	68	101	0.880	>220	-21	from 10 to 40
H201568F	1390,00	200	Yellow	68	101	0.880	>220	-21	from 10 to 40
H2015220B1	(179,00)	20	Yellow	220	101	0.895	>230	-10	from 10 to 40
H2015220F	1550,00	200	Yellow	220	101	0.895	>230	-10	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

MULTI-PURPOSE HYDRAULIC OILS

LTEC Oleol

ITEM: OLEOL HM

The OLEOL HM series multi-purpose oils are hydraulic circuit lubricants formulated with paraffinic mineral bases and contain anti-wear additives.
Their excellent viscosity index makes the multi-purpose OLEOL HM oils suitable for various applications, from fast machine tool heads to refrigerator compressors.
The innovative formulation of the multi-purpose OLEOL HM oils means that they are classified as L-HM in the ISO classification. They pass the DIN 51524 PART II, DENSION HF-0, HF-1, HF-2 and AFNOR E48-603 tests. They pass the VICKERS CETOP RP67H, VICKERS I-286 S and M2950 S, 12TH STAGE OF THE FZG TEST, CINCINNATI MACHINE USS-127, USS-136.

ADVANTAGES AND USES:
- Anti-wear additives
- Anti-corrosion additives
- Excellent viscosity index
- Mainly used on high speed machines
- Excellent in heat exchangers and refrigerators
- Ideal for hydraulic power units

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Viscosity index	Density DIN 52757 kg/L	Flash point ASTM D92 °C	Pour point °C	Storage temperature °C
H20451020	(164,54)	20	Yellow	10	100	0.825	>165	-32	from 10 to 40
H20451520	(151,00)	20	Yellow	15	101	0.850	>180	-30	from 10 to 40
H20452220	(154,00)	20	Yellow	22	101	0.865	>180	-30	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

Indivisible package Suggested retail package - Unit price

GEAR OILS

Landoil

NEW

ITEM: GEAR POWER

GEAR POWER constitute a line of oils for gears operating in extreme pressure conditions (EP) characterized by high resistance to loads, high resistance to high operating temperatures (up to 120°C).
They provide excellent wear protection even in heavily loaded gear systems and exhibit high water separation capabilities under all operating conditions.

BENEFITS AND USES:
- Excellent thermal and oxidation resistance
- For any type of gear
- Can also be used for chain drives and bearings
- Contains lead-free high pressure additives
- Added with EP additives in higher quantities than normal gear oils

Tech. Code	GR70 Euro	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Index of viscosity	Density DIN52757 kg/L	Point of flammability ASTM D92 °C	Point of scroll °C	Storage temperatue °C
H203168020	(169,00)	20	Amber	68	101	0,885	>230	-20	From 10 to 40
H2031150020	(182,00)	20	Amber	150	99	0,890	>235	-15	From 10 to 40
H2031150200	(1567,50)	200	Amber	150	99	0,890	>235	-15	From 10 to 40
H2031220020	(184,25)	20	Amber	220	100	0,900	>235	-10	From 10 to 40
H2031320020	(186,75)	20	Amber	320	101	0,900	>240	-5	From 10 to 40
H2031320200	(1617,50)	200	Amber	320	101	0,900	>240	-5	From 10 to 40

CONCENTRATED ANTIFREEZE

Landoil

NEW

ITEM: ANTIFROST ECO

New concept antifreeze for heat exchangers, formulated without amines and nitrites.
ANTIFROST ECO is a product based on propylene glycol, less toxic than traditional products.
Due to its formulation, it can be used in the food, health and solar panel industries.

BENEFITS AND USES:
- Maximum system protection from corrosion
- Maximum antifoam capacity
- Formulated to have maximum stability during use and storage
- No problem when diluted in hard water

Tech. Code	GR70 Euro	Quantity L	Specific weight kg/L	pH solution at 50% v/v	Alkaline reserve ml HCE0,1N	Point of boiling °C	Point of flammability °C	ANTIFREEZE PRO % - T	H2O %	Point of freezing °C
H2054005	54,00	5	1.054	9.7	17	160	110	25% Vol. / -10°C 33% Vol. / -15°C 50% Vol. / -33°C 60% Vol. / -48°C	75% Vol. 67% Vol. 50% Vol. 40% Vol.	-10 -15 -32 -47
H2054020	(202,00)	20	1.054	9.7	17	160	110	25% Vol. / -10°C 33% Vol. / -15°C 50% Vol. / -33°C 60% Vol. / -48°C	75% Vol. 67% Vol. 50% Vol. 40% Vol.	-10 -15 -32 -47

ANTI-OXIDANT PROTECTIVES

Landoil

NEW

ITEM: PROTEX A

PROTEX A is a protective formulated starting from highly refined petroleum bases and top quality additives to guarantee a product with very high quality standards.
Thanks to the use of particular antioxidant components, the protective PROTEX A ensures an effective protective effect on iron and ferrous alloys, yellow alloys including marine brass and on most plastics.
Thanks to a careful formulation and an excellent balance of detergents and solvents, PROTEX A has excellent degreasing properties and a "dewatering" effect.
PROTEX A can be used as a corrosion protection, both on ferrous metals and on yellow alloys, also by sea thanks to the passing of the ASTM B117 (test for the determination of the resistance to saline fog) with the excellent result of 90 hours of resistance.
PROTEX A maintains its protection capacity for 15 months in case of storage indoors while outdoors, by allocating the material indoors, it manages to maintain its protective capacities for 9 months.

Tech. Code	GR70 Euro	Packaging	Quantity L	Appearance	ASTM viscosity D445 at 40°C cSt	Point of COC flammability C	Point of scroll C	Specific weight at 15°C kg/L	Protection
H2111020	(199,25)	Can	20	Amber	1,8	64	-24	0,820	15 months (Internal) 9 months (external)

H

ANTI-OXIDANT PROTECTIVES

Landoil

ITEM: PROTEX DW EXTRA

NEW

PROTEX DW EXTRA is a product for the protection of metals against atmospheric humidity or oxidizing agents present in the mechanical workshops. PROTEX DW EXTRA protective is ideal for defending the surfaces of measuring instruments, gauge blocks, tools and firearms.This product thanks to the presence of highly refined and high quality components, is able to prevent corrosion also caused by digital finerprints.

Tech. Code	GR70 Euro	Packaging	Quantity L
H2103400	(11,24)	Spray can	0,400
H2103020	(198,75)	Can	20

MOULD PROTECTIVES

OKS

PDF

ITEM: 2301

The mould protector 2301 is designed to protect metal surfaces from corrosion caused by atmospheric agents.
2301 creates a non-sticky water repellent film against corrosion that is visible to the naked eye.
2301 has a characteristic green colour so that is can be quickly checked during application.
The film created by 2301 has a thickness of 10 microns per single application.
The product can easily be removed using cleaner 2611. Code (J3510500).

Tech. Code	GR74 Euro	Package	Quantity mL	
H2120400	26,20	Spray can	400	12

PROTECTIVES FOR METALS

OKS

PDF

ITEM: 2101

2101 is an NSF H2 certified metal protective. It creates an easily removable corrosion-resistant protective wax film that lasts for up to two years.
2101 is suitable for protecting any type of bare metal surface that is to be stored for a long time and that is exposed to atmospheric agents.
The product can be used in the metalworking, shipbuilding and transport industries.
Its innovative formulation makes 2101 highly effective and its good film-forming properties mean that it provides exceptional protection against corrosion and oxidation.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2122400	24,00	Spray can	400	12

VCI PACKAGING

LTEC

ITEM: SACCHI VCI LTEC

The LTEC VCI (Volatile Corrosion Inhibitor) bags have been designed to maximize the protection of machined components against rust or the formation of metal oxides during storage or transport.
They are made of low density polyethylene with the addition of volatile corrosion inhibitors and designed to effectively protect ferrous metals and alloys from oxidation. For the protection to be effective, the pieces to be protected should be dry and clean before they are inserted in the VCI bags and the package sealed. The volatile corrosion inhibitors become attached to the metal surface, preventing or blocking oxidation.
The LTEC VCI bags are compatible with the most common types of commercially available corrosion inhibitor oils and waxes.

Advantages:
- easy and inexpensive to use
- compatible with most corrosion inhibitors
- very long protection.

Tech. Code	GR73 Euro	Pieces per pack pc.	Dimension mm	Thickness microns	Protection period months
H217010020X30	220,00	1600	200 x 300	100	36 indoor 24 outdoor
H217010033X22	211,00	320	330 x 220 h 550	100	36 indoor 24 outdoor
H217010044X33	205,00	150	440 x 330 h 820	100	36 indoor 24 outdoor

Contact our technical department to assess the compatibility of the VCI LTEC bags with the corrosion inhibitors used.

While stocks last

Indivisible package Suggested retail package - Unit price

LTEC Rust Off

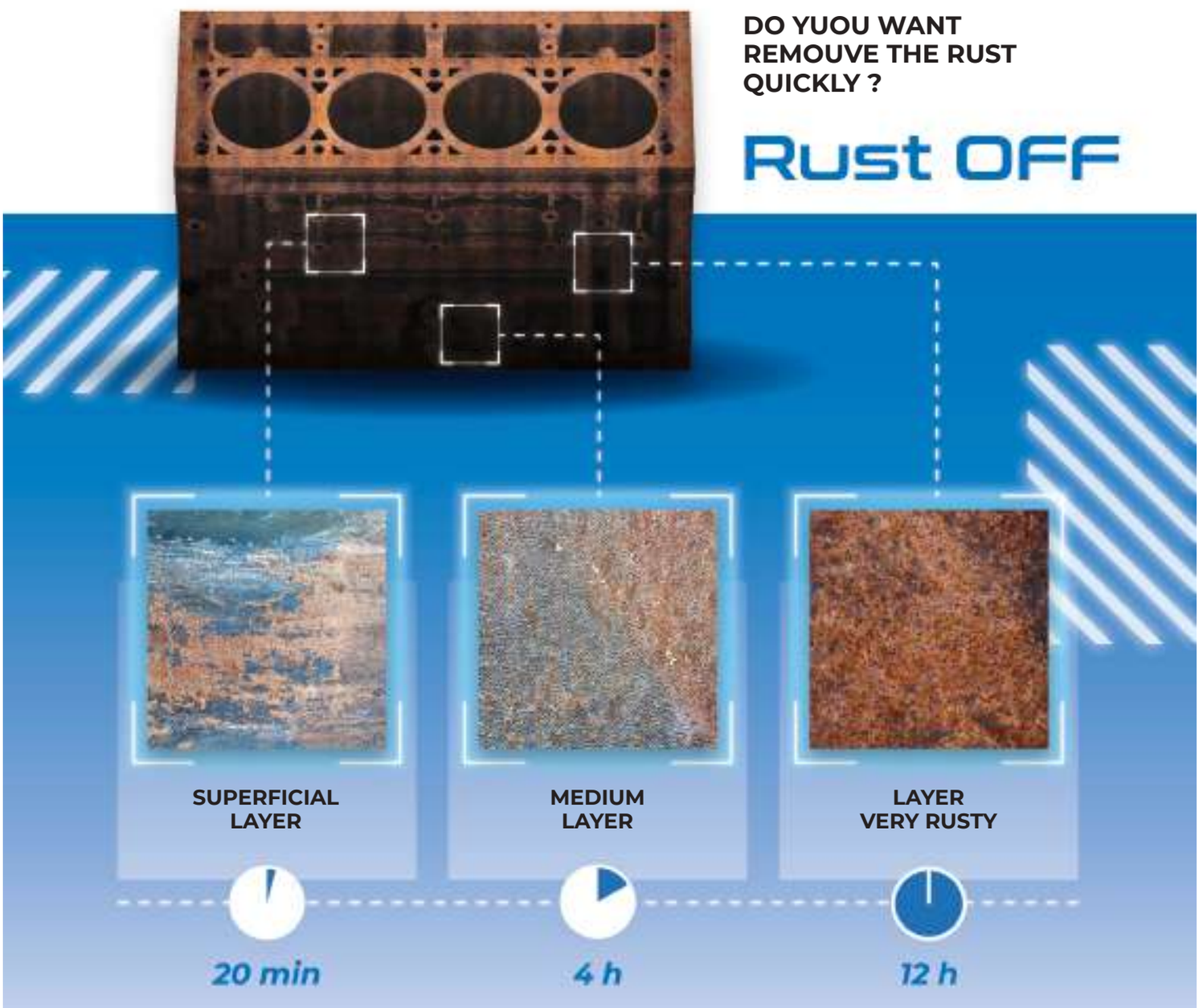
ITEM: RUST-OFF

RUST-OFF is a water-based solution for removing surface rust. This product allows you to restore the shine to oxidized metals. RUST-OFF is biodegradable and safe to use. It is non-toxic, non-corrosive, non-flammable and does not contain volatile organic compounds.
RUST-OFF does not harm copper, brass, aluminium, plastic, rubber, wood or vinyl. It does not remove paint or chrome plating unless it is oxide based.

For best results, rusty parts should be completely immersed in RUST-OFF and removed once the layer of rust has completely disappeared. A thin layer of surface rust will take 20 to 30 minutes, an average layer may take up to 4 hours and very rusty parts may require soaking overnight.

Tech. Code	GR73 Euro	Quantity L	Appearance concentrated	Density DIN 52757 kg/L	pH (5%) DIN 51369	Flash point ASTM D92 °C	Solubility	Storage temperature °C
H219020	248,00	20	Yellow	1.042	6.0 - 7.0	n. a.	Soluble in water	from 10 to 40

Warning: EVAPO-RUST has been shown to be incompatible with magnesium and magnesium alloys (e.g. Zamak) and cadmium (cadmium coated screws and period paints).
Always contact our technicians to check compatibility, methods, times and precautions to take when carrying out tests using EVAPO-RUST.



SELECTION TABLE FOR GREASE

	Multipurpose	High Performances	PTFE	Silicones	Pastes
Industry	**Normal Drain** H2201 MULTIGREASE MP H2202 GLOBALGREASE H2203 SKF LGMT 2 H2204 OKS 402 H2211 HYDROGREASE AL H2220 DROPLESS	**Hi Temp** H2300 OKS 424 H2330 OKS 420	H2410 OKS 571 H2412 SYSTEM TT163 H2420 DRYLUBE P.T.F.E.	H2505 SILICONE SPRAY H2510 OKS 1110 H2525 HISIL H2530 OKS 1361 H2535 DETACH	H2600 OKS 265 H2630 OKS 240 H2631 OKS 241 H2635 CUPROLUBE H2636 CUPRO GREASE
		Hi EP Load H2340 OKS 400 H2345 MOLYLUBE			
	Long Drain H2230 OKS 451 H2235 CHAIN OIL H2240 OKS 422	**Low Temp** -			
Food Industry	**Normal Drain** H2260 OKS 470 H2261 OKS 471 H2270 OKS 476 H2275 WHITE GREASE FU	**Hi Temp** H2360 OKS 4220	H2460 OKS 3751 H2370 OKS 475	-	H2660 OKS 250
		Hi EP Load H2380 OKS 480			
	Long Drain H2295 OKS 371	**Low Temp** H2370 OKS 475			

Normal Drain Normal drain greases

Long Drain Long drain greases

Hi Temp High temperatures greases

Hi EP Load Heavy loads greases

Low Temp Low temperatures greases

UNIVERSAL GREASE

Landoil

NEW

ITEM: MULTIGREASE MP

MULTIGREASE MP are excellent quality, multipurpose greases based on lithium hydroxysterate with EP characteristics. These greases can be used for the lubrication of flat or rolling bearings, industrial, construction, road machinery and, in general, when operating conditions with high speeds, high temperatures and the presence of water occur at the same time. They have excellent resistance to oxidation and exceptional mechanical stability; they do not soften or harden even if exposed to heavy exercise loads for a long time.
The product is designed to be used with J4165 air pumps, available on page J.29 up to NLGI 2 viscosity grade.

Tech. Code	GR70 Euro	NLGI consistency	Packaging	Weight kg
H2201MP0018	(272,50)	00	Can	18
H2201MP018	(255,60)	0	Can	18
H2201MP118	(285,00)	1	Can	18
H2201MP218	(285,00)	2	Can	18
H2201MP318	(295,00)	3	Can	18

MULTIPURPOSE GREASES

ITEM: GLOBALGREASE

Multi-purpose, drop point >180°C. NGLI class 2, light colour, for use with lever type grease guns J4120 and J4122.

Tech. Code	GR74 Euro	For grease guns Volume	Ø mm	Weight g	📦
H2202600	9,90	1000	56	600	12
H2202400	(8,50)	500	52	400	12

BEARING GREASES

SKF

ITEM: LGMT 2

Suitable for bearings and mechanical parts in general.
Operating temperature -30°C +120°C. NLGI Class 2.
Light colour.

Can be used with grease drum pump J4160, available on page J.29

Tech. Code	GR74 Euro	Package	Weight kg	📦
H2203B	27,00	Jar	1	1
H2203S	117,00	Bucket	5	1
H2203F	(295,00)	Drum	18	1

📦 Indivisible package 📦 Suggested retail package - Unit price

BEARINGS GREASE

ITEM: 402

Bearing grease 402 is a high performance product for the lubrication of rolling bearing. Bearing grease 402 is a suitable and recommended product fpr bearomgs lubrication under normal working load conditions.
The product is recommended for the lubricatin of friction, rotation and oscillating bearings, splined shafts, direct expulsion spindles and sliding surfaces of any type.
The 402 product prevents bearing corrosion and is resistant to aging due to normal product oxidation.

DIN 51502: K2K-30. -30 ° C / + 120 ° C. NLGI 2.

Tech. Code	GR74 Euro	Package	Weight kg	
H2204B	39,40	Jar	1	10

UNIVERSAL GREASE

ITEM: HYDROGREASE AL

HYDROGREASE AL is a lubricating grease based on highly refined mineral oils and aluminum complexes.
The product is indicated for greasing parts that operate in unfavorable environmental conditions due to the presence of water or humidity.
HYDROGREASE AL is a mud-resistant lubricating grease and is recommended for chassis, parts of cars and industrial vehicles subjected to the washing away action of water or atmospheric agents of any kind.

Tech. Code	GR70 Euro	NLGI consistency	Packaging	Weight kg	
H2211AL25	82,50	2	Can	4,5	1
H2211AL218	(238,00)	2	Can	18	1

MULTI-PURPOSE HIGH TEMPERATURE GREASES

ITEM: DROPLESS

DROPLESS is an infusible multi-purpose lubricating grease spray that offers a high protection against oxidation.
Its formulation and additives give DROPLESS the capacity to lubricate surfaces that are subject to high loads and to maintain its characteristics both at high and low loads and at high and low speeds.
DROPLESS is infusible.
The multi-purpose DROPLESS lubricating grease is an excellent lubricant for ball bearings, rollers, pins, cylinders and parts subject to considerable stress and friction in general.
DROPLESS can effectively work at temperatures of between -10°C and +200°C.

Tech. Code	GR70 Euro	Package	Quantity mL	
H2220400	9,72	Spray can	400	12

CHAIN LUBRICANTS

ITEM: 451

The 451 chain lubricant is transparent adhesive lubricant for chains and other high-speed machine elements that are subject to high pressure and corrosion.
The high adhesion capacity of 451 allows it to remain unaltered even under the stress of inertial forces.
451 has excellent anti-wear properties and its carefully selected additives mean that it can resist seawater. It also has the ability to reduce noise.

Resistant to seawater and road salt.
Operating temperature -30°C to +200°C.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2230400	29,70	Spray can	400	12

CHAIN LUBRICANTS

ITEM: CHAIN OIL

CHAIN OIL is a lubricant suitable for any type of chain and mechanical parts. It has high adhesion properties and is a mixture made from high viscosity agents and specific lubricants. Its high adhesion capacity and the centripetal effect ensures that the lubricating power remains constant over a wide range of temperatures and rotational speeds. It is solvent-free and can be used on any type of chain, on bearings and on any parts that are difficult to lubricate due to standard lubricants being eliminated by high centrifugal speeds.
Operating temperature up to 150°C.

Tech. Code	GR73 Euro	Package	Quantity mL	
H2235400	10,43	Spray can	400	12

LUBRICANTS FOR CHAINS

Landoil NEW

ITEM: CHAIN OIL PRO

CHAIN OIL PRO is an adhesive lubricant for catenaries and transfer systems that work even in harsh conditions. The high viscosity, the excellent adhesive and stringy power maintain a high lubricating power even in applications with complex geometries of the components in contact. It can be used on any type of chain, on bearings and on any part where lubrication is made difficult by operating conditions. Operating temperature up to 160°C.

Tech. Code	GR70 Euro	Packaging	Quantity L	Appearance	Viscosity at 40°C ASTM D445 cSt	Flash point °C	Point of scroll °C	Specific weight at 15°C kg/L	
H2236600	(8,99)	Container	0,600	Amber	180	245	-13	0,888	15

LONG-LASTING UNIVERSAL GREASE

OKS

ITEM: 422

422 is a high performance synthetic grease for long-term lubrication of machine parts subjected to high temperatures, high speeds and high loads.
422 is suitable for the lubrication of rollers and plain bearings as well as threaded mandrels, gear wheels and spindle bearings in machine tools.
422 has a high corrosion resistance and resists cold, vapour and hot water.

Operating temperature -40 ° C to + 180 ° C.
NLGI Class 2.

Tech. Code	GR74 Euro	Package	Weight kg	
H2240B	175,10	Jar	1	5

BEARING GREASES FOR THE FOOD INDUSTRY

OKS

ITEM: 470

The white high performance 470 multi-purpose grease is recommended for lubricating bearings. The product is NSF H2 certified.
The 470 grease ensures excellent, clean lubrication and its solid lubricants guarantee greater safety. The product is suitable for the food, textile, paper and precision mechanics sectors.

Operating temperature -30°C/+120°C.
Type of grease NLGI 2.
LGA Nuremberg approval. DIN 51502:KF2K-30.

Tech. Code	GR74 Euro	Package	Weight kg	
H2260B	51,30	Jar	1	10

MULTIPURPOSE GREASES FOR THE FOOD INDUSTRY

OKS

ITEM: 471

471 is a NSF H2 certified multi-purpose grease suitable for use in the food industry.
Its NSF H2 certification makes 471 grease suitable for use in the food textile, paper and fine mechanics sectors.
The product is suitable lubricating normally loaded friction bearings, roller bearings, rod end bearings, spindles and guides for machines with moving parts, precision mechanical devices and household appliances.

Operating temperature -30°C to +120°C
NLGI Class 2.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2261400	25,70	Spray can	400	12

MULTIPURPOSE GREASES FOR THE FOOD INDUSTRY

OKS

ITEM: 476

476 is a NSF H1 certified multi-purpose lubricating grease for the food industry.
Its excellent formulation makes 476 grease resistant to detergents and disinfectants and is suitable for lubricating bearings, open gears, racks, worm screws, ball joints, splined shafts, slideways, springs and lever mechanisms.
476 is suitable for lubricating fittings, gaskets, moulded parts and flexible rubber elements for hot water and cold water applications.

Operating temperature -30°C to +110°C
NLGI Class 2.
NSF H1N.REG.137619

Tech. Code	GR74 Euro	Package	Weight kg	
H2270B	69,50	Jar	1	10

H

Indivisible package Suggested retail package - Unit price

VASELINE GREASES FOR THE FOOD INDUSTRY

ITEM: WHITE GREASE FU

WHITE GREASE FU is used as a lubricant that is resistant to water, steam and fumes. WHITE GREASE FU is a mixture of high purity lubricating substances according to Official Pharmacology standards.
The absence of toxic substances and the high quality of the formulation means that it is widely used in the following applications:
• food industry plant, where there may be accidental contact with foodstuffs
• pharmaceutical and textile industry plant, where clean and effective lubrication is required
• in musical instruments, for lubricating moving parts

Tech. Code	GR73 Euro	Package	Quantity mL	
H2275400	9,06	Spray can	400	12

LUBRICANTS FOR THE FOOD INDUSTRY

ITEM: 371

371 is a multi-purpose oil for high efficiency food technology and precision mechanics. 371 is tasteless and odourless with excellent lubricity and water repellent.
Its formulation allows 371 to dissolve dirt and rust. The product can be washed from fabrics and can also be used in the textile and packaging industries.
LGA Nuremberg approval. Complies with DAB11 (German Pharmacopoeia).

Operating temperature -10°C to 180°C.
Viscosity ISO VG 15
DIN 51502: C, CL.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2295400	28,10	Spray can	400	12

HIGH PERFORMANCE GREASES

ITEM: 424

424 is a synthetic lubricating grease used to lubricate items subjected to extremely high temperatures and corrosive atmospheric agents.
424 is suitable for lubricating rolling and friction bearings that are subject to high temperatures, corrosion or harsh environments.
The product is suitable for lubricating furnaces, cooling and conveying systems, hot air motors and fans subjected to thermal stress. It is also suitable for lubricating exhaust gas fans.
424 has the advantage of reducing wear and friction and protecting against corrosion. It has an excellent resistance to temperature; when the operating temperature is exceeded, it forms only minimal residues. It has a good compatibility with plastic and elastomers and a good resistance to water and aggressive environments.

Operating temperature -30°C to +220°C
NLGI Class 1-2.

Tech. Code	GR74 Euro	Package	Weight kg	
H2300B	135,50	Jar	1	5

MULTI-PURPOSE HIGH TEMPERATURE GREASES

ITEM: 420

420 is a high temperature lubricating grease suitable for lubricating support points that need to be highly lubricated.
The multi-purpose 420 grease is suitable for lubricating support points that are subject to high loads, high temperature bearings and areas subject to steam and water in corrosive environments.
The MOX-ACTIVE additive contained in 420, coats metal surfaces instantaneously, greatly reducing friction and wear. This makes 420 grease suitable for lubricating and soundproofing bearings, closed gears, racks, worm screws, ball joints, slideways and linear guide systems.

Operating temperature -10°C +160°C.
NLGI Class 1-2.

Tech. Code	GR74 Euro	Package	Weight kg	
H2330B	90,90	Jar	1	10

MOLYBDENUM DISULPHIDE GREASES

ITEM: 400

400 is a molybdenum disulphide lubricating grease that ensures a high capacity to withstand loads.
400 grease has a low friction coefficient and offers high wear protection. Suitable for lubricating bearings, open gears, racks, worm screws, spherical plain bearings, splined and cam shafts, slideways and lever mechanisms.

Operating temperature -10°C +160°C
NLGI Class 2.

Tech. Code	GR74 Euro	Package	Weight kg	
H2340B	40,80	Jar	1	10

MOLYBDENUM BISULPHIDE GREASE

ITEM: MOLYLUBE

MOLYLUBE is a compound made of lubricating agents and specific anti-adhesive admixed with bisulphide molybdenum suitable for preventing seizure between surfaces in contact subject to conditions of elevated temperature and pressure. MOLYLUBE is a valid alternative to graphite and is silicone-free.
MOLYLUBE can be used in mechanical and engineering industries whenever a product is required that must comply with performance specifications of extreme lubrication and non-adhesiveness.

Tech. Code	GR73 Euro	Package	Quantity mL	
H2345400	13,20	Spray can	400	12

HIGH TEMPERATURE GREASES FOR THE FOOD INDUSTRY

ITEM: 4220

4220 is a lubricating grease for extreme temperatures based on perfluoropolyether (PFPE) oils. Its NSF H1 certification means that it can be used in food and related industries.
4220 is recommended for rolling bearings operating at high temperatures, tunnel kiln machinery, cooking ovens, burners and dryers, hot gas units, reaction vessels, boiler plants, rollers and conveyors used in continuous ovens.
Its characteristics make 4220 grease suitable for use in the metalworking, chemical, food and packaging industries.
4220 is resistant to water and steam; it has an exceptional resistance to chemical agents (solvents, benzene, benzol, acetone, trichloroethane and inorganic acids such as sulphuric acid, hydrochloric acid and nitric acid as well as stearic acids, alcohols and halogens). Lastly, it is highly compatible with plastic and elastomers.
The special 4220 grease is suitable for long-term lubrication, even for high temperatures up to 300°C.

Operating temperature - 30°C +280°C.
NLGI 2. Class 2.

Tech. Code	GR74 Euro	Package	Weight kg	
H2360500	721,50	Jar	0.500	1

HIGH PERFORMANCE GREASES FOR THE FOOD INDUSTRY

ITEM: 475

The high-performance 475 lubricating grease is a fully synthetic product with added PTFE to maximize its lubricating capacity even during use at low temperatures and at high speeds.
Its NSF H2 certification makes 475 grease suitable for use in the food industry.
475 grease is suitable for lubricating flat bearings, low clearance roller bearings and low-friction bearings, high speed roller bearings, ground parts such as conical caps, metering pistons and valves.

Operating temperature -60°C to + 120°C
NLGI Class 2.

Tech. Code	GR74 Euro	Package	Weight kg	
H2370B	114,70	Jar	1	5

HIGH PERFORMANCE GREASES FOR THE FOOD INDUSTRY

ITEM: 480

The special 480 grease is a fully synthetic calcium sulphonate complex, for high loads and pressures.
The 480 grease has been designed and formulated to meet the safety requirements of the food industry and is NSF H1 certified.

This product is suitable for lubricating rolling and anti-friction bearings, even at high temperatures. It is also suitable for lubricating bearings in contact with detergents or disinfectants.
The OKS 480 has a wide range of application: food and beverage industry, pharmaceutical industry, animal feed industry, packaging industry and metalworking industry.
In addition to its NSF H1 certification, 480 has a high cutting stability (which prevents thinning of the grease in case of extreme mechanical loads such as during vibration), provides excellent wear protection and has excellent high pressure properties.
The calcium sulphonate complex soap means that 480 ensures excellent water resistance and excellent corrosion protection.

Operating temperature -30°C to +160°C
NLGI Class 2.
Certification NSF H1.

Tech. Code	GR74 Euro	Package	Weight kg	
H2380B	104,10	Jar	1	10

Indivisible package Suggested retail package - Unit price

PTFE LUBRICANTS

ITEM: 571

571 guarantees a dry coating with P.T.F.E., colourless, clean, with anti-adhesion properties at high pressure and slow speed. Suitable for use when lubrication with oil or grease is not desired or possible. It can be used on all types of metal, plastic, ceramic and wood. 571 can also be used as a separating film in resin casting plants. The contact surfaces must be clean and grease-free. Applied in the same way as paint. Optimum coating thickness: approx. 10 microns. Dries in 5 to 8 minutes at +20°C.
Operating temperature: - 180°C / +260°C.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2410400	25,70	Spray can	400	12

PTFE LUBRICANTS

ITEM: SYSTEM TT163

Aluminium based mineral grease with the addition of P.T.F.E., excellent water repellency, high lubricity, low friction coefficient, excellent load and corrosion resistance.
Operating temperature -40°C + 170°C, light yellow.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2412400	24,80	Spray can	400	12

PTFE LUBRICANTS

ITEM: DRYLUBE P.T.F.E.

DRYLUBE P.T.F.E. is a compound based on polytetrafluoroethylene, an inert and odourless substance, whose friction coefficient is among the lowest known. DRYLUBE P.T.F.E. is the ideal solution for long-lasting lubrication that is resistant to abrasion, dust and the action of fluids, such as oil and water.
DRYLUBE P.T.F.E. maintains its lubrication characteristics from -70°C up to +300°C. Does not retrain dust and dirt. DRYLUBE P.T.F.E. does not contain silicone or oil.
DRYLUBE P.T.F.E. is suitable for lubricating dry moulds, precision equipment, sliding parts, hinges, drawers, locks and woodworking machine components, reducing work time and increasing the lubrication period of treated parts. It makes anti-adhesive surfaces smooth and sliding without trapping dust and dirt.
Particularly suitable as an inert release agent in the technical moulding of plastics. Recommended for the textile and printing industries, in carpentry and all applications where a clean, dry, odourless, stain-free and long-lasting lubrication is required.

Tech. Code	GR73 Euro	Package	Quantity mL	
H2420400	10,00	Spray can	400	12

PTFE LUBRICANTS

ITEM: 3751

3751 is a high performance fully synthetic lubricating oil with added PTFE to increase its adhesion and lubricating capacity.
3751 is suitable for lubricating highly loaded machine parts (even when exposed to water) and for lubricating chains, joints, guides, rolling and sliding bearings, gearboxes, accessories, hinges and locks.
3751 is NSF H1 certified and therefore suitable for use in the food industry. 3751 is resistant to hot and cold water, steam and acid and alkaline disinfectants and detergents.

Operating temperature -35°C +135°C.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2460400	33,50	Spray can	400	12

SILICONE LUBRICANTS

ITEM: SILICONE SPRAY

The formulation of SILICONE SPRAY means that it has multiple uses: as a solid lubricant due to its lubricating capacity, as a parting agent for plastic, a polishing agent for wood and plastic, a protective for rubber and as an antistatic.
SILICONE SPRAY has excellent water-repellent properties to maximize the protection of the surface on which it is used. Its innovative formula means that it does not contain solvents.

Tech. Code	GR73 Euro	Package	Quantity mL	
H2505400	5,90	Spray can	500	12

H

Indivisible package Suggested retail package - Unit price

SILICONE GREASE

ITEM: 1110

The 1110 silicone grease is a multipurpose, physiologically safe product. It is a silicone lubricant and sealant for valves. It can be used to lubricate shut-off valves and pressure control; facets, pressure swithces, thermostats. It is a sealant for vacuum and pressure systems, does not dry out, does not solidify and does not drip in a wide thermal range.
It can also be used to seal open air equipment, ships, parts subject to washing or exposed to aggressive environments, such as meters and electrical connectors; has excellent adhesive properties on all materials and can be used as a coating against aggressive chemicals and lubricants for gaskets, seals and O-rs in rubber and plastic.
Excellent resistance to most chemicals with a broad operating temperature range, reduced vapor pressure, low volatility, water resistance, chemical resistance to acetone, ethanol, ethylene, glycerol and methanol.
Meets the following standards:
DIN 51502: MSI3S-40. NLGI 3. -40°C/+200°C.
LGA Nuernberg Authorization.
DIN DVGW N Authorization NG-516BL0482.
KTW approval, recommended for D2-type seals.

Tech. Code	GR74 Euro	Package	Weight g	
H2510080	36,50	Tube	80	10
H2510500	192,40	Jar	500	1

SILICONE LUBRICANTS

ITEM: HISIL

HISIL is a multi-purpose polysiloxane based release lubricant designed and formulated to make surfaces on which it is sprayed smooth and shiny, eliminating the adhesiveness of glue, inks and varnish residues. It is ideal for graphics, textile and footwear equipment.

The multi-purpose polysiloxane based release lubricant HISIL is recommended for lubricating plastic parts and sliding frames and tools.

HISIL has a very high silicone content.

Tech. Code	GR73 Euro	Package	Quantity mL	
H2525400	8,49	Spray can	400	12

SILICONE RELEASE AGENTS

ITEM: 1361

1631 is an effective parting agent and lubricant with anti-static properties. It is chemically neutral and solvent-free release agent used in plastic injection moulding or elastomer extrusion processes. 1361 creates a sliding film for joining materials such as plastic/plastic and plastic/metal, for example to make it easier to insert rubber profiles. It can be used as a mould release agent and for temperatures of up to +200°C. It provides excellent lubrication for threads on closures for pressurized steel oxygen cylinders at temperatures up to a maximum of 60°C and pressures of up to 15 bar.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2530400	12,50	Spray can	400	12

SILICONE RELEASE AGENTS

ITEM: DETACH

The DETACH silicone polishing release agent is designed to protect and preserve mechanical parts.
Its high concentration of highly refined silicones makes DETACH an ideal product for releasing moulds from plastic matrices and elastomers.
The DETACH polishing release agent has been formulated with a high silicon content to maximize product performance.
DETACH effectively detaches rubber surfaces from metal matrices without affecting the surfaces of either material.

Tech. Code	GR73 Euro	Package	Quantity mL	
H2535400	9,85	Spray can	400	12

Indivisible package Suggested retail package - Unit price

ANTI-SEIZE PASTES

ITEM: 265

265 is a fully synthetic paste for spindles, for lubricating friction and sliding points under high loads and shock loads.
265 is suitable for contact with lubricants, coolants and to lubricate control and drive mechanisms. It can be used in liquid filling machines.
265 is suitable for the mechanical engineering and metalworking industries, tool manufacturing and maintenance.
265 is resistant to water, steam and aqueous cooling lubricants and effectively prevents fretting corrosion. The optimum combination of solid lubricants contained in 265 makes it highly effective.

Operating temperature -45°C to 110°C

Tech. Code	GR74 Euro	Package	Quantity mL/ kg	
H2600400	38,60	Cartridge	400	10
H2600B	83,80	Jar	1000	10

ANTI-SEIZE PASTES

ITEM: 240

240 is a classic anti-seize paste that offers broad protection over the entire temperature range.
240 is suitable for installing threaded connections that are subject to high temperatures and corrosive agents.
Its newly developed additives mean that 240 prevents oxidation and corrosion.
240 is recommended for connecting combustion chambers and fixing screws for gas and oil burners. 240 is recommended for the assembly of threaded connections that are subject to high temperatures and corrosive agents and for connecting screws, fittings and flanges in steam lines or hot or overheated sections.

The product complies with US MIL-A-907E military specifications. Active up to 1,100° C.
Operating temperature -30°C to 200°C

Tech. Code	GR74 Euro	Package	Weight kg	
H26301	153,00	Jar	1	10

ANTI-SEIZE PASTES

ITEM: 241

241 is a classic anti-seize paste spray that offers broad protection over the entire temperature range.
241 is suitable for installing threaded connections that are subject to high temperatures and corrosive agents. Its packaging makes it easy to use.
Its newly developed additives mean that 241 prevents oxidation and corrosion. The optimal ratio between screw tightening torque and pre-tensioning makes 241 suitable as an anti-seize agent for threads.
The 241 paste is recommended for the assembly of threaded connections that are subject to high temperatures and corrosive agents and for connecting screws, fittings and flanges in steam lines or hot or overheated sections.

The product complies with US MIL-A-907E military specifications. Active up to 1100°C.
Operating temperature -30°C +200°C.

Tech. Code	GR74 Euro	Package	Quantity mL	
H2631400	48,80	Spray can	400	12

ANTI-SEIZE PASTES

ITEM: CUPROLUBE

CUPROLUBE is an anti-seize lubricating grease has a combustion temperature of about 1200°C and can be used in high temperature applications.
CUPROLUBE is formulated to withstand extreme operating pressures and is resistant to both fresh and salt water.
CUPROLUBE demonstrates its excellent lubricating capacity when applied to guide pins, moulds, bushes, extrusion heads, threads, studs, valves, pins, cables, tie-rods, expansion joints, shafts, pulleys, keys, flange bolts, press fit joints and guides exposed to high temperatures.

Tech. Code	GR73 Euro	Package	Quantity mL	
H2635400	13,03	Spray can	400	12

ANTI-SEIZE PASTES

ITEM: CUPRO GREASE

CUPRO GREASE is an anti-seize and protective paste with ultrafine lamellar copper particles and special corrosion inhibitors. It is an extremely versatile compound that allows it to guarantee exceptional anti-adhesive and anti-rust performance in the most varied operating conditions: the product can in fact be used in an extremely extended temperature range. It can be used as an anti-seize agent for inserts, screws, nuts, pins, bolts and threaded metal fittings in general, subject to extreme conditions: from mechanical machining done with insert tools to catenaries for ovens.

Operating temperature: -30° C +1100° C
Grade NLGI: 2

Tech. Code	GR74 Euro	Package	Quantity g	
H2636125	7,80	Tube	125	1

H

ANTI-SEIZE PASTES FOR THE FOOD INDUSTRY

ITEM: 250

250 is a white ceramic based paste for high temperature applications for lubricating surfaces subject to high loads.
250 is NSF H2 certified and therefore suitable for use in the food industry.
250 is suitable for lubricating surfaces subject to high loads, especially at low slip speeds or with oscillating movements.
The product has the ability to separate the surfaces of threaded connections that are subjected to thermal stresses.
The 250 paste is also suitable for protecting screws, pins, bolts, flanges, spindles and stainless steel products against corrosion. To maximize lubrication performance, 250 contains molybdenum additives.

Operating temperature -40°C +200°C.

Tech. Code	GR74 Euro	Package	Weight kg	
H2660B	128,60	Jar	1	5

AEROSOL SPRAY GUNS

ITEM: H2950

Plastic spray gun for aerosol cans. Allows the product to be dispensed with extreme ease. Specifically for LTEC products, fits most commercially available cans.

Tech. Code	GR73 Euro	Package
H2950GUN	3,00	1 pc.

STOPPERS WITH TAP FOR JERRYCANS

ITEM: H2013

Stopper with dispensing cap suitable for use with plastic jerrycans. For jerrycans from 5 to 30 L.

Tech. Code	GR70 Euro	Package
H2013CAP	5,70	1 pc.

ANTI-OXIDANT PROTECTIVES

ITEM: PROTEX NS 80H

PROTEX NS 80H is a protective agent for metal components which are stored in conditions of high humidity and high salinity. Thanks to a careful formulation and an excellent balance of detergents and solvents, PROTEX NS 80H has excellent degreasing properties and a "dewatering" effect. The product passes the ASTM B117 test (test for the determination of resistance to saline fog) with 90 hours of resistance. PROTEX NS 80H maintains its protection capacity for 15 months in case of detachment indoors while outdoors, by allocating the material indoors, it manages to maintain its protective capacities for 9 months.

Tech. Code	GR70 Euro	Packaging	Quantiy L
H2116020	(203,90)	Can	20

BIOCIDAL ADDITIVE FORMALDEHYDE FREE

ITEM: ACTICIDE SPX

ACTICIDE SPX is a broad spectrum bactericidal product that can be used on any type of emulsion.
The ACTICIDE SPX bactericide is a specific formulation to counteract the degradation phenomena caused by bacterial proliferation that cause bad odors in systems such as emulsions and washing waters.

- Broad spectrum of action
- High efficacy
- Easy to use
- Eliminates bacteria and bad smells

Recommended concentrations: 100 mL every 100 litres

Tech. Code	GR70 Euro	Quantity kg	Appearance Concentrated	Density kg/L	pH (5%) DIN 51369	Solubility	Storage temperature °C
H35145	(148,00)	5	Straw	1,060	6,4	complete in water	10 - 40

Indivisible package Suggested retail package - Unit price

ADDITIVE FOR THE MAINTENANCE OF EMULSIFIABLE FLUIDS

LTEC Double

ITEM: DOUBLE ACTION

DOUBLE ACTION is an emulsion stabilizer designed to restore the balance of the water oil system after the prolonged use of a cooling lubricant.
Is innovative formulation means that DOUBLE ACTION is able to protect machine surfaces from oxidation.
Its components mean that DOUBLE ACTION can clean sludge and extraneous oils.

ADVANTAGES:
- Protects non-ferrous alloys from staining
- Improves emulsion stability
- Solubilises sludge
- Cleansing action

Notes: Pour the product into the sump before preparing the emulsion or during processing.
Recommended concentration:
- Before preparing the emulsion 0.1 - 0.3%
- When the emulsion is in use 0.1 - 0.2%

Tech. Code	GR70 Euro	Quantity kg	Appearance concentrated	Density DIN 52757 kg/L	pH (5%) DIN 51369	Flash point ASTM D92 °C	Solubility	Storage temperature °C
H356010	105,00	5	Amber	1.195	8.3	>100	Soluble in water	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

BIOCIDE ADDITIVE FORMALDEHYDE FREE

Landoil

NEW

ITEM: ACTICIDE IPS 20

ACTICIDE IPS 20 is a broad spectrum fungicidal product, usable on all emulsions.
It is a specific product to counteract the degradation phenomena of the emulsions and, in particular, the gummy films typical of fungal colonies
- Broad spectrum of action
- Ease of use
- Eliminates fungi, algae and yeasts

Recommended concentrations: 100 - 300 mL for every 100 litres

Tech. Code	GR70 Euro	Quantity L	Concentrated appearnace	Density DIN 52757 kg/L	pH (5%) DIN 51369	Point of flammability ASTM D92 °C	Solubility	Storage temperature °C
H35175	(232,00)	5	Clear	1,13	6,5	>148	Soluble in water	From 10 to 40

SILICONE ANTIFOAM

LTEC Zero

ITEM: ZERO FOAM

ZERO FOAM is a silicone anti-foaming product specific for emulsions and alkaline systems.
The innovative structure of the ZERO FOAM antifoam for emulsions means that it can break down the froth of the cooling lubricant in both the long and short term.
ZERO FOAM antifoam is suitable for both the mechanical engineering and electronic industries.

ADVANTAGES:
- Specific for the mechanical and electrical engineering Industries
- Can be sprayed onto foam to be broken down
- Can be added to the sump without damaging the emulsion
- Useful for preventing the formation of foam

Recommended concentration: 0.1% - 0.2%

Tech. Code	GR70 Euro	Quantity kg	Appearance concentrated	Density DIN 52757 kg/L	pH (5%) DIN 51369	Solubility	Storage temperature °C
H35405	132,00	5	White	1.000	5 - 7	Soluble in water Partially soluble in oil	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

H

SILICONE FREE ANTIFOAM

ITEM: ANTI FOAM

ANTI FOAM is a **NON-SILICONE** anti-foaming product, which is used in the metalworking industry.
ANTI FOAM is a highly effective antifoam formulated specifically for systems with a stable foam that is persistent difficult to break down.
ANTI FOAM is a product free of ions and its formulation means that it is stable even in the long term.
Its innovative formulation means that ANTI FOAM does not interfere with the water system to which it is added and its silicone additives mean that it does not clog filters.
ANTI FOAM is able to act on foams produced by surfactants, vinyl finishing resins, acrylic resins, mixed resins, waxes, protein derivatives and foaming products in any amounts.

ADVANTAGES:
- Non-silicone anti-foam
- Does not clog filters
- Specific for the mechanical engineering Industry
- Can be sprayed onto foam to be broken down
- Can be added to the sump without damaging the emulsion
- Instant foam reduction

Recommended concentration: 0.5% - 2.0%

Tech. Code	GR70 Euro	Quantity kg	Appearance concentrated	Density DIN 52757 kg/L	pH (5%) DIN 51369	Solubility	Storage temperature °C
H35455	182,00	5	Amber	0.912	-	Soluble in water Partially soluble in oil	from 10 to 40

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

MACHINE TOOL CLEANING FLUIDS

ITEM: CLEAN SUMP

CLEAN SUMP is a detergent for cleaning and sanitizing machine tools before the cooling lubricant it replaced.
Its powerful additives give it an excellent capacity to solubilise sludge and degrease surfaces.
CLEAN SUMP tank detergent allows you to continue working even after it has been added, without affecting the stability of the cooling lubricant.

ADVANTAGES AND USES:
- Excellent tank cleaning capacity
- Excellent sludge solubilisation capacity
- Excellent capacity to sanitize machine tools
- Reduces the amount of spent emulsions to be disposed of
- Used in the emulsion prior to disposal

Tech. Code	GR70 Euro	Quantity L	Appearance concentrated	Density DIN 52757 kg/L	pH (5%) DIN 51369	Flash point ASTM D92 °C	Solubility	Storage temperature °C
H351010	61,20	10	Straw coloured	1.065	12.5	>100	Soluble in water Partially soluble in acetone	from 10 to 40
H351020	113,50	20	Straw coloured	1.065	12.5	>100	Soluble in water Partially soluble in acetone	from 10 to 40

Notes: add 2% for normally polluted emulsions and 4% for highly polluted emulsions. Pour the required amount of Clean Sump directly into the polluted emulsion before emptying the sump. Leave it to act in circulation for 48 hours in the machine tool in order to clean the pumps, filters and moving parts. When finished, empty the sump.

The characteristics chemical and physical listed in the chart are not under any circumstances for the manufacturer or producer.

PH-CONTROL PAPERS

ITEM: H3609

The emulsion pH-control papers are used to verify that the value lies between 8.5 and 9.5. A too low pH value can generate oxidation processes, be a symptom of the formation of bacterial colonies and/or of the presence of extraneous elements, while a too high pH value is among the main causes of operator skin irritation; daily use is recommended.

Tech. Code	GR70 Euro	pH	Package	Pieces
H36096510	(30,50)	6,5 - 10	Box	100

Indivisible package Suggested retail package - Unit price

WATER HARDNESS CONTROL PAPERS

ITEM: H3615

Papers for controlling the emulsion water hardness are used to verify this value. If the value is higher than 50° French, the emulsion may separate; it is advisable to top up with emulsion prepared with demineralised water. The emulsion hardness tends to increase during use due to the evaporation of water and the high concentration of minerals dissolved in it; so we recommend a weekly control of this parameter.

Tech. Code	GR70 Euro	Package	Pieces
H3615100	64,00	Jar	100

HAND HELD REFRACTOMETERS

ITEM: H3631

The refractometer is an optical instrument that measures the refractive index of a fluid in order to determine the concentration percentage of cooling lubricant emulsions. Its daily use allows verification of the correct concentration of the emulsion in the tank in order to avoid waste, protect the machine tools and reduce the total production costs.

CAUTION: Do not immerse in any liquid or emulsion.

Tech. Code	GR70 Euro	Model	Divisions %
H3631018	93,50	0 - 18%	0.1
H3631032	104,00	0 - 32%	0.2
H3631R1	7,40	Spare plate	-

EMULSION OXYGENATORS

ITEM: OXI COOLER

OXI COOLER is a combined oxygenation and cooling system featuring a DELTA 40 cooling unit, which can also be mounted onto a TOS 2.0 tramp oil separator so to accelerate separation of lubricant oil from emulsion itself.

The neodymium magnet is designed to provide a safe and tight fastening of the OXI COOLER onto a steel wall, simply by inserting its bubbler tube in the bottom of the tank and coupling it to the compressed air unit.

The flux valve is designed to optmise cooling air flux in relation to tank emulsion levels.

ADVANTAGES:
- Longer emulsion life without chemical supplement
- Enhanced tool performance
- Preventing unpleasant odours due to microbial metabolism
- Emulsion provide from oxygenation kept at optimum PH levels.
- Gradually ihibits bacterial growth
- Protecting ferrous alloys against oxidation
- Cooled down emulsion ensures reduced fume and fog
- Significantly reduced cost of disposal

Tech. Code	GR71 Euro	Pressure Bar	Outlet. Temp °C	Air NL/min.	Weight kg
H3266OXI	289,00	1,5 3 4 5	- 8,0 -18,5 -21,5 -23,0	46 80 100 125	1,2
H3266OXM	(789,00)	5 6 7	- 16 -17 -19	633 783 900	1,9

RASEN BELT SEPARATOR N

Landoil

NEW

ITEM: H4042

The belt oil separators of the RASEN N series are designed for the removal of extraneous oil present in machine tools, parts washers, compressor condensates and in general where it is necessary to separate the surface oil from the underlying fluid.
They are easily applicable even in confined spaces, and allow an effective mechanical removal of polluting oils from the surface of the lubricating coolant emulsions.
Characteristics:
• Structure in stainless steel and light alloy
• PVC/Polyurethane strap
• Low voltage planetary gearmotor, in accordance with ISO standards, protected against dust and accidental impacts
• 7 speeds adjustable by potentiometer
• Air connection included for emulsion oxygenation
• Equipped with a level switch
• Reliable in operation

ADVANTAGES OF USE
• Avoids microbiological degradation of the operating fluid
• Improve production standards
• Reduces soiling of the machine tool
• Eliminates machine stops due to manual deoiling interventions

Tech. Code	GR71 Euro	Draft mm	Belt dimension mm	Power supply V
H4042N30X2,5	(498,00)	300	25	230
H4042N30X5	(746,00)	300	50	230

VENTURI MIXER

LTEC

ITEM: H3619

The Venturi mixer allows machine tool tanks to be filled and topped up quickly.
We recommend that you periodically check the concentration at the outlet of the mixer.

Concentration range from 1 to 10 %

ADVANTAGES
- Easy to use
- Reduced costs
- Rapid top-up

Tech. Code	GR71 Euro	Concentration	Flow L/h	Water pressure Bar
H3619V	415,00	1 - 10%	1000	min. 2

VOLUMETRIC MIXER

LTEC

ITEM: H3618

A volumetric mixer is an instrument driven only by water pressure that guarantees stable emulsions at the required concentration.
Using a volumetric mixer can reduce filling and topping up times for machine tool tanks, saving time and reducing costs. The volumetric mixer can also be used for topping up, specifying the concentration with ease and precision.
The LTEC volumetric mixer is made in Italy and all units are tested individually before being sold to the end user. The H361812 mixer is complete with a filter, pressure reducer, suction tube, stainless steel housing to prevent the product from accidental impact and 2 valves so that it is ready for use.

Concentration range from 1 to 10 %

ADVANTAGES
- Easy to use
- Reduced costs
- Product tested before sale
- Rapid topping up
- Top-up precision

Tech. Code	GR71 Euro	Concentration	Flow L/h	Water pressure Bar	Model
H361810	1195,00	1 - 10%	1600	from 0.7 to 8	Base
H361812	1570,00	1 - 10%	1600	from 0.7 to 8	Complete

Indivisible package Suggested retail package - Unit price

I.TEC Air Blade

AIRBLADE

Air Blade is a machinery through which the air blows out with a continuous and linear flux, without any turbulence from 1 m to 1,5 m, depending on the compressed air supply.

- Chips and/or lubricants workpieces cleaning
- Machine-tool indoor glass cleaning
- Concentrating chips inside the tank
- Chips containment barrier
- Painted drying
- Printed cooling

- ***IT AVOIDS WASTE OF EMULSION***
- ***NO FLUIDS IN THE WORKSHOP***
- ***TIME SAVING***
- ***QUALITY PRODUCTION***
- ***NO NOISE***

HOW IT WORKS

01 Air gets inside the front hole.

02 Air - reacting like a fluid - is in turbulence (molecules bounce in the first entrance room)

03 Air "bangs" towards the convex blade and molecules become ordered.

04 Air flux, starting from turbulence, follows the blade surface and it overflows orderly from both the blade sides, much more powerfully than in entrance.

H

ITEM: AIR BLADE MINI

Tech. Code	GR71 Euro	Pressione Bar	Air consumption NL/min	Thrust force* g
H3635100	346,94	1	765	42
		2	978	238
		3	1360	595
		4	1573	722
		5	1955	1105
		6	2380	1490
		7	2663	1900

*** Thrust force (grammes) measured at the distance of 150/200 mm.**

ITEM: AIR BLADE MINI

Tech. Code	GR71 Euro	Pressure Bar	Air consumption NL/min	Thrust force* g
H3645100	(163,00)	1	300	100
		2	384	203
		3	533	303
		4	616	417
		5	767	550
		6	933	652
		7	1067	782

*** Thrust force (grams) measured at a distance of 200 mm.**

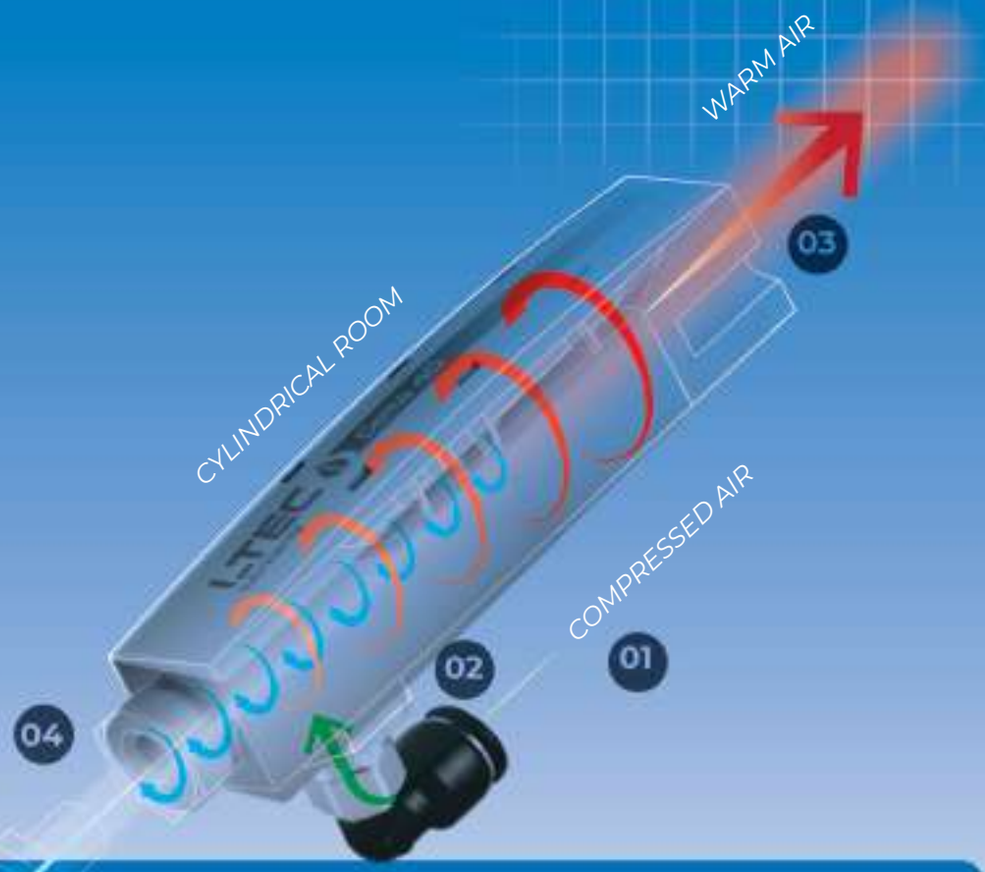
LTEC DELTA 40

AIR COOLERS

During dry processing
Parting/Cutting/CNC

- Cools the piece
- Cools the tool
- Evacuates the chip
- Avoids material bonding
- Increases the degree of the finishing

- ***Improve tool life***
- ***Reduce tool wear***
- ***Improve machining efficency***
- ***Reduce costs***



HOW IT WORKS

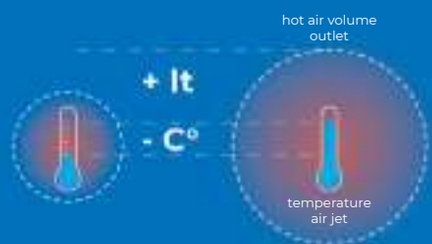
01 The compressed air is introduced into the device through a vortex generator that imparts a tornado or vortex-shaped rotary motion to the air.

02 The vortex directs the hot air towards the exit, rotating at a very high speed, touching the inner walls of the pipe.

03 The valve positioned at the end of the cooler allows the output flow to be adjusted.

04 The part of the hot air that is not expelled comes back, positioning itself in axis with the tube, this creating a low-pressure vortex which, by giving off heat to the first, cools down.

FLOW ADJUSTMENT



AIR COOLERS

LTEC Delta 40

ITEM: DELTA 40

DELTA 40 is a patented compressed air cooling device that converts the air into two flows: one of hot air and one of very cold air. The jets and the hot or cold air temperatures are adjustable by means of a valve that allows control. It is light, compact and economical and operates easily. It is made of corrosion resistant materials. The support is made of plastic material (nylon 6.6) which allows it to be installed using a dedicated, adaptable bracket. It does not use electricity or chemicals, it does not generate sparks or interference. Reduces pollution and increases tool processing speed by extending its service life.

Equipment: DELTA 40 is provided with a 160mm - 1/4" articulated tube.

Tech. Code	GR71 Euro	Pressure Bar	Outlet temperature* °C	Air NL/min	Weight g
H362210	191,00	1,5 3 4 5	- 8,0 -18,5 -21,5 -23,0	46 80 100 125	150

***Temperature detected on exit nozzle with an inlet air temperature of 20°C.**

ITEM: DELTA 40 4-KOMPACT

DELTA 40 TRIPLO offers, in addition to the traditional refrigeration of the air, a flow three times higher.
This allows, in addition to the cooling of the pieces, shaving and tools also the blowing of the chips away from the work area.
Furthermore, developing a triple voloume of cold air can be used on larger tools.

Tech. Code	GR71 Euro	Pressure Bar	Outlet temperature* °C	Air consumption NL/min	Cooling capacity W - Kcal/h - BTU/h	Weight g
H36244K	(359,00)	4 5 6	-18 -21 -23	376 460 540	875 972 1080	346

***Temperature detected on exit nozzle with an inlet air temperature of 20°C.**

ITEM: DELTA 40 TURBO KOMPACT

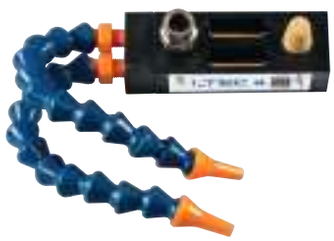
DELTA 40 TURBO is a patented compressed air cooling device. DELTA 40 TURBO divides the air into two flows: one of hot air and one of very cold air.
The jets and the hot and cold air temperatures can be adjusted and controlled by means of valve. It is lightweight, compact, economical and easy to operate. It is made of corrosion resistant material. The support is made of aluminium and the DELTA 40 TURBO can be installed using two magnets.
It does not use electricity or chemicals and it does not generate sparks or interference.
Reduces pollution and increases the speed of the machining tool, increasing its service life.

Tech. Code	GR71 Euro	Pressure Bar	Input temperature °C	Outlet temperature* °C	Air consumption NL/min	Cooling capacity W - Kcal/h - BTU/h	Weight g
H3629TURBOK	(329,00)	4 5 6	20	-18 -21 -23	94 115 135	730 630 2500	225

*** Outlet temperature partly of cold air regulated about 50%.**

AIR COOLER - BAND SAW KIT

LTEC Delta 40



ITEM: DELTA 40 SAW KOMPACT

DELTA 40 SAW KOMPACT is a specific air cooling device for band saw machines. It is applied on saws to cool the blade and allow dry cutting on both metals and various types of plastic.
This cooler also finds a valid application on vertical band sawing machines for metals, wood, plastic, on disc sawing machines for cutting the sprue of aluminum molded parts and in all material cutting applications where it is not recommended or impossible to use coolants.

*Temperature detected on exit nozzle with an inlet air temperature of 20°C.

Tech. Code	GR71 Euro	Pressure Bar	Outlet temperature* °C	Air consumption NL/min.	Cooling capacity W - Kcal/h - BTU/h	Weight g
H36232K	(279,00)	4 5 6	-18 -21 -23	196 230 270	583 648 720	238

H

I_TEC TOS

DISOLEATRICE

The TOS 2.0 is a coalescing tramp oil separator that separates foreign oils, sludge and foam from emulsions in the tank. The self-levelling suction inlet, which automatically adjusts to the level of the emulsion, can also be used in tanks with limited space. Does not require operator supervision except during emptying. The TOS 2.0 effectively de-oils pH neutral or weakly alkaline aqueous fluids at temperatures of up to 60°C.

- ***Reduces lost production due to machine downtime***
- ***Increases the life of the emulsion and reduces chemical and biological risks***
- ***Reduces bad odours, improving the working environment***
- ***Inhibits the reproduction of mould and bacteria while protecting the health of the operators***
- ***Reduces fumes generated by extraneous oils***

H

EASY TO INSTALL QUICKLY IN LARGE TANKS

Tech. Code	GR71 Euro	Tank capacity L	Flow L/h	Power kW	Voltage V	Dimensions mm	Empty weight kg	Operating temp.	Mod.
H4000TOS2.0	4074,00	105	250	0.29	230 - 50 Hz	570 x 550 x 980h	80	< 60°C	STD

TRAMP OIL SEPARATORS TOS 2.0 - SPARE PARTS

ITEM: H4002

Replacement suction inlet for tramp oil separator TOS 2.0.

Tech. Code	GR71 Euro	Description
H4002P070	375,90	Dynamic suction inlet with magnet. h=70 mm
H4002P250	400,10	Dynamic float with magnet. h=250/500 mm
H4002R070	(45,50)	Replacement float Ø 75 mm
H4002R125	(50,00)	Replacement float Ø 250 mm

ITEM: H4004

Replacement bag filter parts and connectors TOS 2.0.

Tech. Code	GR71 Euro	Description
H4004F300	(62,50)	Replacement filter 300µm
H4004ORING	(16,00)	bag filter o-ring

ITEM: H4006

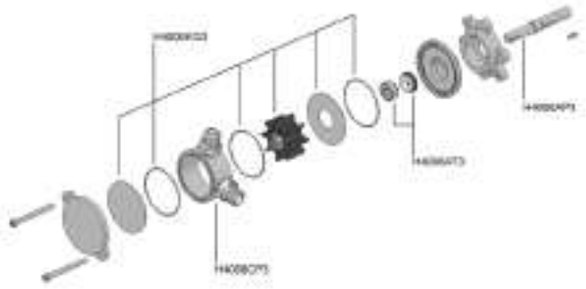
Replacement fittings and connectors for TOS 2.0.

Tech. Code	GR71 Euro	Description
H4006RF20	(30,80)	Quick release female Ø20 mm
H4006RM20	(14,80)	Quick release male Ø20 mm
H4006SC40	(43,20)	Drain hose w/elbow Ø40 mm

ITEM: H4008

Motor spare parts for TOS 2.0

Tech. Code	GR71 Euro	Description
H4008AP3	(49,00)	Replacement pump shaft
H4008AT3	(36,40)	Sealing ring
H4008CP3	(222,00)	Pump body with fittings
H4008KG3	(94,30)	Pump impeller kit NBR



H

ABSORBENTS FOR OILS AND LIQUIDS

ITEM: H4150

Aluminium oxide-based product for oil, emulsion, grease, tar, solvent, paint and hydrocarbon in general; rapidly absorbs all liquid substances from surfaces without leaving a trace. Remains stable up to temperatures of 1500°, offers excellent adhesion to the floor, it remains dry to the touch, non-slippery and non-toxic even when it is completely soaked. Absorption ratio from 1:1 to 1:1.5

Tech. Code	GR70 Euro	Package	Weight kg
H415010	65,00	Bucket	10

UNIVERSAL ABSORBENTS

ITEM: DRY GRAIN

DRY GRAIN is a granular environmentally friendly product based on natural components for the absorption of oils, greases, hydrocarbons and chemical products in the workplace. It is unalterable in contact with moisture and water, does not create slippery and dangerous mixtures. It is non-flammable and does not release the absorbed substances over time.
If stored in a dry place, DRY GRAIN has no expiry date. It can be disposed of as municipal waste as long as disposal is carried out in accordance with the regulations governing the disposal of the absorbed substance. DRY GRAIN is supplied in two grain sizes. The fine grained type is ideal for polluting films and is usually widely used in industry. The coarse grained type is more suitable if there is a large quantity of pollutants where the fine grained type is not effective. Absorbs approximately 130% of its own weight.
Complies with standard EU CEN TS 15366: 2010
Complies with standard Fr NF P 98-190

Tech. Code	GR70 Euro	Package	Grain size mm	Weight kg
H415112F	31,00	Sack 17 L	0,8 - 2,0	12,0
H415108G	40,00	Sack 17 L	2,0 - 4,8	8,0

ABSORBENTS FOR OILS AND LIQUIDS

ITEM: H4155

Professional high-purity Sepiolite-based absorbent. The Sepiolite has internal channels called "zeolitic channels" that cross the entire structure of the material up to the outer surface forming pores of various sizes. The result is a highly porous mineral with low specific weight, ideal for absorbing all types of liquids (oil, petrol, water, etc.). It is an essential product for factories, workshops, roadbeds and work areas where spilled liquids can cause accidents, fermentation, danger and unwanted odours. It is very safe because it is a flame-retardant material. It also acts as a anti-slip agent in road maintenance in case of slippery bottoms due to the presence of spilled liquids.

Tech. Code	GR70 Euro	Grain	Package	Weight kg
H415515/30	36,00	Medium 15/30	Bag	20
H415530/60	35,00	Fine 30/60	Bag	20

BATTERY ACID NEUTRALIZERS

ITEM: SAFETY SAND

SAFETY SAND is a mixture of natural sand specific for acidic liquids, especially sulphuric acid. The product is environmentally friendly and does not contain irritants, toxic, corrosive or hazardous substances. **Does not require special storage containers.** The product has an expiry date of 7 years. When the product expires, it should be disposed of as non-hazardous special waste.

Absorbance ratio: 0.54 kg per 1 L of sulphuric acid
Neutralization ratio: 0.54 kg per 1 L of sulphuric acid

Test reports available upon request, in compliance with Ministry of Environment decree n. 20.

How to use
Pour the product gradually onto the spill. After a few minutes, the effervescent reaction finishes and an easily removable mortar-like material is formed. Collect and dispose of as non-hazardous special waste.

Tech. Code	GR70 Euro	Package	Weight kg
H421010	(42,00)	Bucket	10

Indivisible package Suggested retail package - Unit price

ABSORBENTS FOR OILS AND HYDROCARBONS

ITEM: WHITE DRY

WHITE DRY is a floating and water repellent absorbent, effective for use with spilled pollutants both on the ground and on water as in the case of rain. It is suitable for use with all types of hydrocarbons and derivatives such as oils, solvents, petrol etc.
WHITE DRY is a hydrophobic absorbent that doesn't absorb water. It becomes rapidly impregnated and absorbs up to 20 times its own weight. The sheets are ideal for machinery leaks and the sleeves are excellent for absorbing and retaining spills.

Tech. Code	GR70 Euro	Description	Dimensions cm	Absorption L
H41315040F	141,00	Sheets per pack 200 pcs	50 x 40	145
H41318120	153,00	Sleeves per pack 24 pcs	8 x 120	168
H41318240	153,00	Sleeves per pack 12 pcs	8 x 240	168

EMERGENCY KIT ANTI-OIL SPILL

ITEM: WHITE DRY KIT

Emergency Kit consisting of:
- 30 pads 50 x 40 cm
- 6 sleeves Ø 8 x 120 cm
- 6 sleeves Ø 8 x 60 cm
- 1 pair of gloves
- 1 mask
- 3 disposal bags

Supplied in a plastic trunk

Tech. Code	GR70 Euro	Package	Dimensions cm	Absorption L
H4132KIT75	227,00	Plastic trunk	60 x 40 x 32 h	75

UNIVERSAL ABSORBENT PADS

ITEM: GRAY DRY

GRAY DRY is a Universal product ideal for absorbing industrial liquids, oils, refrigerants, solvents etc. Absorbs instantly by capillary method up to 19 times its weight. Also suitable for water.

Tech. Code	GR70 Euro	Description	Dimensions cm	Absorption L
H41335040F	148,00	Sheets package 100 pcs	50 x 40	105
H41338120	153,00	Manicotti conf. 24 pz.	8 x 120	144
H41338240	153,00	Tubes package 12 pcs	8 x 240	144

UNIVERSAL EMERGENCY KIT ANTI-SPILL

ITEM: GRAY DRY KIT

Emergency Kit consisting of:
- 30 pads 50 x 40 cm
- 3 sleeves Ø 8 x 120 cm
- 3 sleeves Ø 8 x 60 cm
- 1 bag of fine absorbent granules 10l
- 1 pair of gloves
- 1 mask
- 3 disposal bags

Supplied in a plastic trunk

Tech. Code	GR70 Euro	Package	Dimensions cm	Absorption L
H4134KIT65	227,00	Plastic trunk	60 x 40 x 32 h	65

COVER DRAIN PROTECTIVE MAT

ITEM: COVER DRAIN

COVER DRAIN is a Protective that prevents the infiltration of pollutants in the drains and in the water supply.

Tech. Code	GR70 Euro	Description	Dimensions cm
H413760	166,00	Carpet	60 x 60

H

NON-WOVEN MATERIAL FOR FILTER MATS

ITEM: H4110

Viscose BTZ offers higher filtration quality because porosity is uniform over the whole surface; it is more suitable for filtering emulsions.

The polypropylene BTK is more economical, but offers lower pore uniformity; it is also suitable for filtering neat oils.

The polyester is based of polyethylene which has the features to offer a perfect filtration for neat cutting oils on mineral based and synthetic fluids.

The weight per square meter is directly proportional to the filtration quality; a higher weight retains the finer dust, while a lighter weight allows the micro-scrap to pass through.

Tech. Code	GR70 Euro	Material	Length m	Height mm	Weight mm	Weight g/m²
H4110Z25500	34,03	Viscose	100	500	155	25
H4110Z30500	37,63	Viscose	100	500	165	30
H4110Z35500	43,46	Viscose	100	500	170	35
H4110Z50500	59,89	Viscose	100	500	195	50
H4110Z25700	42,29	Viscose	100	700	155	25
H4110Z30700	50,03	Viscose	100	700	165	30
H4110Z35700	57,45	Viscose	100	700	170	35
H4110Z50700	79,82	Viscose	100	700	195	50
H4110Z251000	59,89	Viscose	100	1000	155	25
H4110Z301000	66,89	Viscose	100	1000	165	30
H4110Z351000	83,32	Viscose	100	1000	170	35
H4110Z501000	120,84	Viscose	100	1000	195	50

Tech. Code	GR70 Euro	Material	Length m	Height mm	Weight mm	Weight g/m²
H4110K2500	22,26	Polypropylene	100	500	160	20
H4110K3500	30,10	Polypropylene	100	500	180	30
H4110K2700	30,53	Polypropylene	100	700	160	20
H4110K3700	38,69	Polypropylene	100	700	180	30
H4110K5700	48,55	Polypropylene	100	700	215	50
H4110K7700	86,50	Polypropylene	100	700	230	70
H4110K21000	38,69	Polypropylene	100	1000	160	20
H4110K31000	46,96	Polypropylene	100	1000	180	30
H4110K51000	58,41	Polypropylene	100	1000	215	50
H4110K71000	110,24	Polypropylene	100	1000	230	70

Tech. Code	GR70 Euro	Material	Length m	Height mm	Weight mm	Weight g/m²
H4110P30700	42,82	Polyester	100	700	155	30
H4110P45700	65,93	Polyester	100	700	175	45
H4110P70700	97,10	Polyester	100	700	215	70
H4110P301000	62,43	Polyester	100	1000	155	30
H4110P451000	94,76	Polyester	100	1000	175	45
H4110P701000	117,66	Polyester	100	1000	215	70

Indivisible package Suggested retail package - Unit price

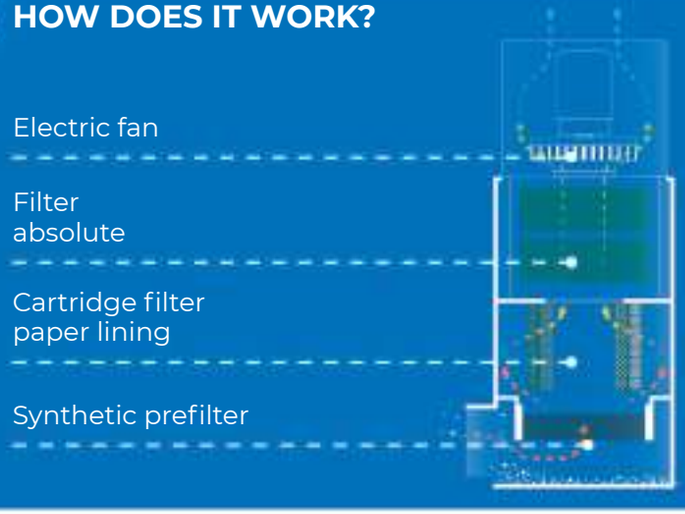
WODEX

I-TEC AFM

OIL MIST COLLECTORS FOR EMULSIONS

New superior quality solution to eliminate oil mists, fumes and vapours generated by mechanical processing using emulsions.
It has an innovative integrated centrifugal "SELF-CLEANING" system for effective removal of pollutants directly at the source, which significantly increases the service life of the subsequent filters.
The post-filters with a high filtering surface can eliminate micro-mists and harmful fumes and guarantee a reduction in emissions by up to 99.98% (according to EN 779 - EN1822 HEPA standards).
Their versatility is able to solve all customer needs.
The innovative collection systems halve maintenance costs and create a healthier and cleaner working environment in compliance with current industrial health and safety regulations (Italian Legislative Decree 25/02 - Legislative 81/2008). Supply voltage 400 V / 50 Hz three-phase.
Complete with Filter Clogging Detection Device.
Standard equipment: Clogging column light detector.

HOW DOES IT WORK?



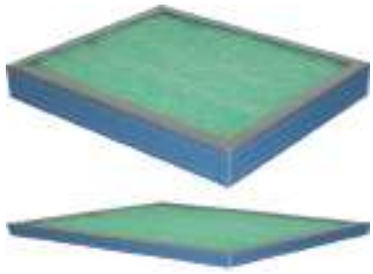
Tech. Code	GR71 Euro	Model	Filtration type	Suction air flow m³/h	Power kW	Inlet Ø mm	Noise level dBA	Static pressure Pa	Filtering surface m²
H54250500	(3352,00)	AFM MIST PLUS - 500	Inertial + Mechanical	700	0.55	125	62	820	5.7
H54251000	(3850,00)	AFM MIST PLUS - 1000	Inertial + Mechanical	1200	1.1	150	64	1100	8.4
H54252000	(4535,00)	AFM MIST PLUS - 2000	Inertial + Mechanical	2100	1.5	200	68	1400	11.9
H54253000	(4990,00)	AFM MIST PLUS - 3000	Inertial + Mechanical	3100	2.2	250	72	2000	14

TO ORDER SPARE PARTS OF BLAST CHILLER ACCESSORIES IT IS NECESSARY TO ALWAYS SUPPLY THE NUMBER AND SERIES OF THE MACHINE

SYNTHETIC PRE-FILTER CELLS FOR MIST COLLECTORS

LTEC AFM

ITEM: H5422



This replacement part consists of a pair of synthetic filters mounted on a metal frame, except for the 500 and 1000 models that have only one filter. The replacement part lasts more than 3000 hours when used correctly.
The Clogged Filter Detection Device installed on the electric panel of the mist collector flashes to warn the user that the filter is only 15% efficient, allowing plenty of time to order a replacement.
Replace this part by opening the Pre-Filter access door and removing the filters from the rails.
The replacement is installed by following the procedure in the reverse order.

Tech. Code	GR71 Euro	Recommended replacement every	Compatible with Model
H5422RIC1	(31,00)	1500 h	AFM 500
H5422RIC2	(53,00)	1500 h	AFM 1000
H5422RIC3	(88,00)	1500 h	AFM 2000
H5422RIC4	(115,00)	1500 h	AFM 3000

SYNTHETIC FILTER KIT FOR INTERNAL CARTRIDGE OF LTEC MIST COLLECTORS

LTEC AFM

ITEM: H5415

The replacement part consists of a pair of tubular filters mounted on the coalescing filter cartridge.
The replacement part lasts more than 3000 hours when used correctly.
The Clogged Filter Detection Device installed on the electric panel of the mist collector flashes to warn the user that the filter is only 15% efficient, allowing plenty of time to order a replacement.
Replace this part by opening the Post-Filter access door and removing the filters from the rails, access the base body cover, unscrew the screws that secure the cover and remove the metal cartridge together with the tubular synthetic filters. Lastly, pull out both tubular filters from metal cartridge. Install the new cartridge and tubular filters, by following the procedure in reverse.

Tech. Code	GR71 Euro	Recommended replacement every	Compatible with Model
H5415500	(215,00)	2000 h	AFM 500
H54151000	(233,00)	2000 h	AFM 1000
H54152000	(370,00)	2000 h	AFM 2000
H54153000	(420,00)	2000 h	AFM 3000

FINAL FILTER CARTRIDGE

LTEC AFM

ITEM: H5418

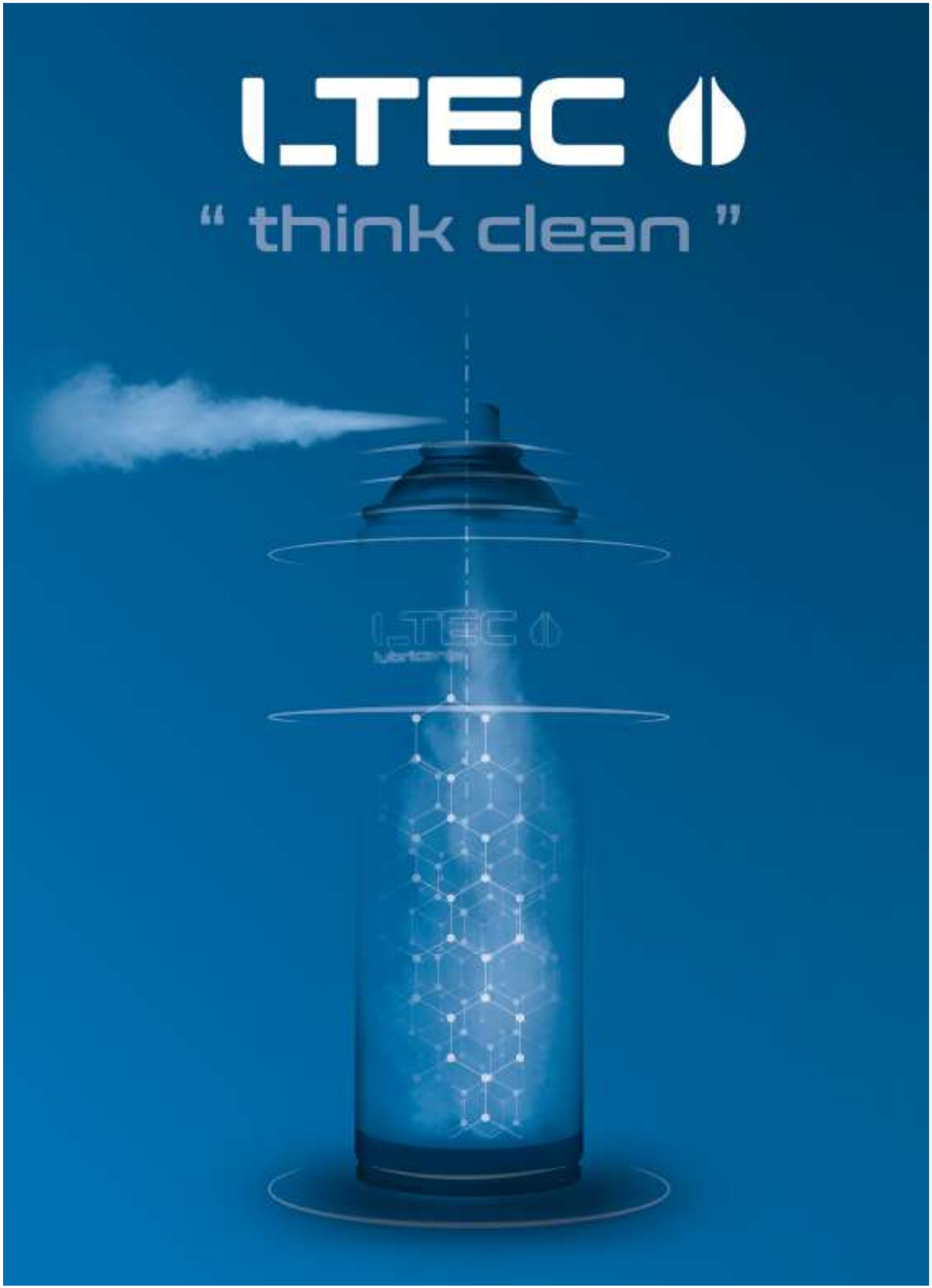
The replacement part consists of a superior quality, class H10 filter element.
The clogged Filter Detection Device, installed on the oil mist collector, flashes to warn the user that the filter is only 15% efficient, allowing plenty of time to order a replacement.
Replace this part by opening the Post-Filter access door and removing the used filter from the rails.
The replacement is installed by following the procedure in the reverse order.

Tech. Code	GR71 Euro	Recommended replacement every	Compatible with Model
H5418500	(239,00)	2000 h	AFM-PX 500
H54181000	(280,00)	2000 h	AFM-PX 1000
H54182000	(321,00)	2000 h	AFM-PX 2000
H54183000	(468,00)	2000 h	AFM-PX 3000

TO ORDER SPARE PARTS OF BLAST CHILLER ACCESSORIES IT IS NECESSARY TO ALWAYS SUPPLY THE NUMBER AND SERIES OF THE MACHINE

WODEX mro

Perfect ergonomics


LTEC
" think clean "

ADHESIVES, CHEMICAL PRODUCTS AND WELDING

J

LTEC adhesives
LOCTITE

J0
2 - 18
Adhesives, hybrid, cyanoacrylate, anaerobic

LTEC
NPT
LOCTITE

J1
19 - 26
Adhesives acrylic, epoxy. Sealants, silane, silicone

LTEC
WD-40

J2
27 - 28
Lubricants and greases

LTEC
OKS

J3
29 - 33
Lubrificants

WRK
LOC-LINE

J4
34 - 41
Protectives, detergents and accessories for greases

LTEC
LOCTITE

J5
42 - 45
Hygiene products, cleaning cloths, rags

SAF-FRO
LINCOLN ELECTRIC

J6
46 - 47
Welding inverters, consumables

LINCOLN ELECTRIC
SAF-FRO
SACIT

J7
48 - 55
Antispatter products, welding accessories, welding protection

LTEC
LINCOLN ELECTRIC
SAF-FRO
Weller

J8
56 - 65
Pressure reducers, safety device for welding

J

HYBRID ADHESIVES

They enclose the best characteristics of both instant and structural adhesives. They guarantee rapid polymerization even in the presence of gaps. They are suitable for gluing multiple substrates and guarantee excellent structural durability and atmospheric agents. They are safe to use.

HYBRID ADHESIVES

LOCTITE

PDF

ITEM: HY 4070

Hybrid adhesive Bi-component with extremely fast fixing time. It has ability to fill any gaps. Suitable for metal, plastic, rubber, wood, paper and leather. Formulation in gel does not drip. Good resistance to humidity, heat, UV rays and chemicals. Suitable for all maintenance and repair operations.

- Ready-to-use package with syringe, plunger and 4 mixing needles
- Fixing time: 1 minute
- Operating temperature: up to +120 °C
- Gel
- Light yellow
- Game filling: up to 5 mm

Tech. Code		J000511
GR72	Euro	26,90
Package		Double cartridge
Quantity	g	11
		12

PDF

ITEM: HY 4090

Hybrid adhesives Bi-component in gel. Suitable for most substrates, it guarantees high adhesive strength. Excellent resistance to humidity, chemicals and temperature. Resistant to shock and vibration. Very limited halo effect. Perfect for all design requirements.

- Fixing time: 4 - 6 minutes
- Operating temperature: up to +150 °C
- Gel
- Light yellow
- Little halo

Tech. Code		J000750	J000750S
GR72	Euro	62,75	30,93
Package		Double cartridge with 5 nozzle mixer	Double cartridge without nozzle
Quantity	g	50	50

MIXING NOZZLES FOR HYBRID ADHESIVES

ITEM: J0009

Mixing nozzles for cyanoacrylate adhesives, to be used with the specified products.

Tech. Code		J0009A	J0009B
GR72	Euro	15,60	15,50
Mixing ratio		10:1	1:1
Package		Bag	Bag
Quantity	n°	10	10
Suitable for products		3090 - 4070 (10 ml)	4080 - 4090 (50 ml)

Indivisible package Suggested retail package - Unit price

INSTANT ADHESIVES - PRODUCT INFO

Instant or cyanoacrylate adhesives dry very rapidly when applied in-between surfaces.
Surface humidity of materials activates polymerization which develops from the materials surface towards the adhesive centre.
Cyanoacrylates are ideally suited for quick bonding application of small sized parts
This certain kind of adhesive does not feature excellent gap filling abilities therefore requiring nearly matching up surfaces.
Excellent adhesive results for most materials Superior after-gluing shear resistance and breaking resistance
Not suitable for glazed pottery, may be used on plastic and fibreglass.

To select the right instant adhesive the following aspects should be taken into account:
· **Instant adhesives for porous or acid surfaces bonding**
Such preparations are specifically formulated to obtain quick bonding and cure (polymerisation) on porous or acid substrates, as in the case of paper or galvanised metals.
· **Shock resistant instant adhesives**
Elastomer fed instant adhesive gives the product high shock resistance along with an increased high temperature resistance when bonding metals in moist environments.
· **High temperature instant adhesives**
Maintain their bond strength in operating temperatures as high as 120 °C, and up to 140 °C for short periods of time.
· **Flexible instant adhesives**
When bond components are faced with bending loads,flexible instant adhesives are formulated to reduce stress focus or favour a more homogeneous deformation.
· **Reduced halo and odor instant adhesive**
Instant adhesive with only minor halo are specifically developed for those applications where appearance as well as smell are considered important.
· **Bicomponent instant adhesives**
An innovative bicomponent technology ensure a a quick polymerisation regardless the gap. These products are specifically suitable for those assembly works that cannot perfectly match up or when an extra amount of adhesive is required
· **UV instant adhesives**
UV polymerized preparations are recommended when bonding transparent substrates with specific aesthetic requirements or to polymerizeany excess in products.

CYANOACRYLATE INSTANT ADHESIVES

LOCTITE

ITEM: 401

Instant low viscosity adhesive, suitable on most substrates, including acidic surfaces.
High adhesive power on close contact parts.

- Fixing time: 3 - 10 sec
- Operating temperature: -40 / +120 °C
- Low viscosity
- Transparent
- **Universal**
- **NSF-P1 Certificate**

Tech. Code		J0010005	J0010020	J0010050	J0010500
GR72	Euro	6,65	21,40	47,10	277,90
Package		Blister	Bottle	Bottle	Bottle
Quantity	g	5	20	50	500
		12	12	12	1

INSTANT CYANOACRYLIC ADHESIVES

LTEC adhesives

NEW

ITEM: CU1

Universal instant adhesives that work very well on most materials, including acid surfaces such as wood, leather, cardboard, paper, etc. is suitable for general use. Great speed of polymerziation and high adhesive power.
- Fixing time 1 - 3 sec
- Operating temperature from -55 to +95°c
- Colour: transparent
- **Certifications: NSF**

Tech. Code		J0013050
GR73	Euro	19,20
Package		Bottle
Quantity	g	50
		10

Indivisible package Suggested retail package - Unit price

INSTANT CYANOACRYLIC ADHESIVES

LTEC adhesives

NEW

ITEM: CU6

High performance instant adhesives for rubbers (in particular EPDM) and plastics. Excellent resitance to ageing. The low viscosity of the product allows to obtain a very thin adhesive film. For anti-adhesive plastics it must be used in combination with a primer.
- Fixing time: 1 - 3 sec
- Operating temperature: from -55 to +95 °C
- Colour: transparent
- Certifications: NSF

Tech. Code		J0018050
GR73	Euro	20,10
Packaging		Bottle
Quantity	g	50
		10

CYANOACRYLATE INSTANT ADHESIVES

LOCTITE

ITEM: 460

Instant adhesive for porous materials such as paper, wood, leather, cork and fabric.Practically odourless. Suitable for all those applications where the halo effect must be avoided.

- Fixing time: 3 - 20 sec.
- Operating temperature: -40 / +80 °C
- Low viscosity
- Colorless
- Little halo and little smell

Tech. Code		J0015020	J0015500
GR72	Euro	26,40	320,20
Package		Bottle	Bottle
Quantity	g	20	500
		12	1

ITEM: 406

Instant adhesive for rapid bonding of plastics and rubbers including elastomers and EPDM. For difficult bonding, e.g. with polyolefin plastics, use SF770 primer.

- Fixing time: 2 - 10 sec.
- Operating temperature: -40 / +120 °C
- Low viscosity
- Colorless
- For "difficult" rubbers and plastics

Tech. Code		J0020020	J0020050	J0020500
GR72	Euro	25,25	55,35	(291,95)
Package		Bottle	Bottle	Flacone
Quantity	g	20	50	500
		12	12	1

ITEM: 424

Instant adhesive for rapid bonding of plastics and rubbers including elastomers and EPDM. More viscous than 406. For difficult bonding, e.g. with polyolefin plastics use SF770 primer.

- Fixing time: 2 - 10 sec
- Operating temperature: -40 / +80 °C
- Low - Medium viscosity
- Colorless
- For "difficult" rubbers and plastics

Tech. Code		J0025020	J0025500
GR72	Euro	27,75	300,75
Package		Bottle	Bottle
Quantity	g	20	500
		12	1

J

Indivisible package Suggested retail package - Unit price

VISCOUS CYANOACRYLATE INSTANT ADHESIVES

ITEM: 480

Universal adhesive for bonding metals with metals or with rubber or magnets. Withstands humid environments well. Ideal for all applications where impact resistance is required or where shock loads or peeling are present.

- Fixing time: 20 - 50 sec.
- Operating temperature: -40 / +100 °C
- Low - Medium viscosity
- Black
- **Impact resistant**

Tech. Code		J0050020	J0050500
GR72	Euro	32,55	351,35
Package		Bottle	Bottle
Quantity	g	20	500
		12	1

ITEM: 495

Instant ethyl-based adhesive. For general use. Good performance on many substrates.

- Fixing time: 5 - 20 sec
- Operating temperature: -40 / +120 °C
- Low viscosity
- Colorless
- **General use**

Tech. Code		J0070020	J0070050	J0070500
GR72	Euro	26,00	53,15	300,80
Package		Bottle	Bottle	Bottle
Quantity	g	20	50	500
		12	12	1

METHYLIC CYANOACRYLATE INSTANT ADHESIVES

ITEM: 415

Rapid Methyl based adhesive suitable for metal to metal bonding. Excellent mechanical resistance.

- Fixing time: 20 - 40 sec.
- Operating temperature: -40 / +80 °C
- Colorless
- **High viscosity**

Tech. Code		J0030020	J0030050	J0030500
GR72	Euro	25,15	52,65	297,30
Package		Bottle	Bottle	Bottle
Quantity	g	20	50	500
		12	12	1

ITEM: 496

Rapid Methyl based adhesive suitable for metal to metal bonding. Excellent mechanical resistance.

- Fixing time: 10 - 30 sec
- Operating temperature: -40 / +80 °C
- Colorless
- **Low viscosity**

Tech. Code		J0060020	J0060050	J0060500
GR72	Euro	24,15	50,70	(286,55)
Package		Bottle	Bottle	Bottle
Quantity	g	20	50	500
		12	12	1

UNIVERSAL CYANOACRYLATE INSTANT GEL ADHESIVES

ITEM: 454

Gel adhesive suitable for acidic surfaces such as chrome or galvanic and porous materials such as wood, paper, leather, cork, foams and metals. The gel formulation makes it suitable for vertical and drip-free applications.

- Fixing time: 5 - 10 sec
- Operating temperature: -40 / +120 °C
- Gel
- Colorless
- **Vertical gluing**
- **NSF-P1 Certificate**

Tech. Code		J0040020
GR72	Euro	27,35
Package		Tube
Quantity	g	20
		10

BI-COMPONENT INSTANT CYANOACRYLATE ADHESIVES

ITEM: 3090

Instant, two-component, gel adhesive. Suitable for most surfaces. Suitable for filling up to 5 mm clearance. Without halos. Designed for general maintenance.

- Fixing time: 120 sec
- Operating temperature: -40 / +80 °C
- Gel
- Colorless
- **Filling games**

Tech. Code		J0118010
GR72	Euro	26,10
Package		Double cartridge
Quantity	g	11
		12

ADHESIVE PRIMERS FOR NON-ADHESIVE PLASTIC

ITEM: SF 770

Specific for pre-treating difficult to bond plastic surfaces such as PP and PE polyolefins.

Tech. Code		J0091010
GR72	Euro	33,65
Packaging		Bottle
Quantity	g	10
		10

POST-ACTIVATOR FOR CYANOACRYLATE ADHESIVES

ITEM: SF 7113

Accelerates the polymerization process. It is used as a post-activator to harden excess adhesive.

Tech. Code		J0092150
GR72	Euro	36,25
Package		Spray can
Quantity	ml	150
		12

Indivisible package Suggested retail package - Unit price

THREADLOCKERS - PRODUCT INFO

Designed to prevent loosening of any threaded fastener from shock and vibration high fluidity liquid, extremely effective when filling gaps of threaded couplings is required.
Also featuring anti-corrosion and good rub resistance properties becoming one with the threads

To select the right threadlocker the following aspects should be taken into account:
• **Low-Strength Threadlockers:**
May be removed using standard hand tools, ideal for adjustment screws, calibration screws, meters, gauges, used on thread size uptoM80.
• **Medium-Strength Threadlockers:**
May be removed using standard hand tools,disassembling can be somewhat difficult, ideal for machine tools, presses,pumps and compressors, mounting bolts, gear boxes, used on thread size up to M80.
Threadlockers versions may vary according to viscosity and strength properties, employed for a wide range of applications .
• **High-Strength Threadlockers:**
Extremely hard to disassemble with standard handtools, removal may require a spot heating procedure. Ideal for permanent coupling of heavy duty equipment, stud bolts, motor and pump mounts, used onthread size up to M80.
• **Penetrating Grade Threadlockers:**
To secure preassembled fasteners already in place,such as mechanical devices or carburetor adjustment screws. Extremely hard to disassemble with standard hand tools, removal may require a spot heating procedure.
• **Stick Threadlockers (semi-solid):**
May be used with thread size up to M50. Ideal for vertical or upsidedown applications.

THREADLOCKERS WITH LOW MECHANICAL RESISTANCE

LOCTITE

ITEM: 222

Low resistance threadlocker. Recommended for devices made of light alloys or non-ferrous materials such as aluminium and brass.

- Resistance: Low
- Operating temperature: -55 / +150 °C
- Medium viscosity
- Max thread size: M36
- Colour: Violet
- NSF-P1 Certificate

Tech. Code		J0121250
GR72	Euro	165,70
Package		Bottle
Quantity	ml	250
		1

THREADLOCKERS WITH MEDIUM MECHANICAL RESISTANCE

LOCTITE

ITEM: 243

Medium strength threadlocker. Excellent on any metal including passive materials such as stainless steel, aluminium and galvanized surfaces. Tolerates contamination from industrial oils. Ideal in the presence of parts subject to vibration. Allows disassembly with the help of hand tools.

- Resistance: Medium
- Operating temperature: -55 / +180 °C
- Medium viscosity
- Max thread size: M36
- Color: Blue
- NSF-P1 Certificate

Tech. Code		J0122010	J0122050	J0122250
GR72	Euro	13,10	49,85	175,60
Package		Bottle	Bottle	Bottle
Quantity	ml	10	50	250
		12	12	1

Indivisible package Suggested retail package - Unit price

THREADLOCKERS WITH MEDIUM MECHANICAL RESISTANCE

L.TEC adhesives

NEW

ITEM: FFM4

Threadlockers medium resistance, medium viscosity, thixotropic for braking and sealing threaded fasteners to be disassemble with standarad hand tools. Suitable for all metals.
- Max thread Ø M20
- Operating temperature: from -50 to + 150° C
- Blue colour
- **Certification: NS**

Tech. Code		J0120050	J0120250
GR73	Euro	18,40	62,50
Package		Bottle	Bottle
Quantity	g	50	250
		10	5

THREADLOCKERS WITH MEDIUM MECHANICAL RESISTANCE

LOCTITE

ITEM: 248

Threadlocker in stick, suitable for vertical applications and on difficult to access components. Suitable on all metal couplings subject to disassembly.

- **Resistance: Medium**
- Operating temperature: -55 / +150 °C
- Semi solid
- Max thread size: M50
- Color: Red

Tech. Code		J0123019
GR72	Euro	33,15
Package		Stick
Quantity	g	19
		2

ITEM: 2400

Medium strength threadlocker without risk and safety symbols or warnings. Excellent chemical resistance. To be used where periodic disassembly with hand tools is required. Approved for drinking water.

- **Resistance: Medium**
- Operating temperature: -55 / +150 °C
- Low viscosity
- Max thread size: M36
- Color: Blue
- **Approval: WRAS**

Tech. Code		J0124050	J0124250
GR72	Euro	47,75	166,50
Package		Bottle	Bottle
Quantity	ml	50	250
		12	1

SAFETY DATA SHEET WITHOUT RISK PHRASES

THREADLOCKERS WITH HIGH MECHANICAL RESISTANCE

LOCTITE

ITEM: 270

High strength threadlocker, suitable for all metal couplings including stainless steel, aluminium, galvanised surfaces and chrome-free coatings. Tolerates contamination from industrial oils. For use on parts that do not require frequent disassembly.

- **Resistance: High**
- Operating temperature: -55 / +180 °C
- Low viscosity
- Max thread size: M20
- Color: Green
- **NSF-P1 Certificate**

Tech. Code		J0125010	J0125050	J0125250
GR72	Euro	14,35	49,35	167,25
Package		Bottle	Bottle	Bottle
Quantity	ml	10	50	250
		12	12	1

J

Indivisible package Suggested retail package - Unit price

THREADLOCKERS WITH HIGH MECHANICAL RESISTANCE

LTEC adhesives

NEW

ITEM: FFF7

Threadlokcers with high mechanical resistance, medium viscosity for permanent braking and sealing of threaded fasteners.
Suitable for all metals.
- Max thread Ø M20
- Operating temperature: from -50 to +150° C
- Colour Green
- **Certifications: NSF**

Tech. Code		J0170050	J0170250
GR73	Euro	18,40	62,50
Package		Bottle	Bottle
Quantity	g	50	250
		10	5

THREADLOCKERS WITH HIGH MECHANICAL RESISTANCE

LOCTITE

ITEM: 268

Threadlocker in stick, suitable for vertical applications and on difficult to access components. Suitable on all metal couplings not subject to frequent disassembly.

- **Resistance: High**
- Operating temperature: -55 / +150 °C
- Semi solid
- Max thread size: M50
- Color: Blue

Tech. Code		J0126019
GR72	Euro	33,15
Package		Stick
Quantity	g	19
		2

ITEM: 2700

High strength threadlocker without risk and safety symbols or warnings. Excellent chemical resistance. To be used where frequent disassembly is not required. Approved for drinking water.

- **Resistance: High**
- Operating temperature: -55 / +150 °C
- Low viscosity
- Max thread size: M20
- Color: Green
- **Approval: WRAS**

Tech. Code		J0127050	J0127250
GR72	Euro	49,80	(164,90)
Package		Bottle	Bottle
Quantity	ml	50	250
		12	1

SAFETY DATA SHEET WITHOUT RISK PHRASES

ITEM: 2701

High strength threadlocker specifically for passivated, chrome-plated and galvanized surfaces. To be used where frequent disassembly is not required.

- **Resistance: High**
- Operating temperature: -55 / +150 °C
- Low viscosity
- Max thread size: M20
- Color: Green

Tech. Code		J0128250
GR72	Euro	179,55
Package		Bottle
Quantity	ml	250
		1

J

PENETRATING THREADLOCKERS WITH MEDIUM/HIGH MECHANICAL RESISTANCE

LOCTITE

PDF

ITEM: 290

Threadlocker with medium/high resistance and very low viscosity, penetrating, for already tightened screws.

- Resistance: Medium/High
- Operating temperature: -55 / +150 °C
- Very low viscosity, penetrating
- Max thread size: M6
- Color: Green

Tech. Code		J0129050
GR72	Euro	48,50
Package		Bottle
Quantity	ml	50
		12

THREAD SEALANTS - PRODUCT INFO

Thread sealants are used to prevent gas and liquid leakage by filling the gap between threaded parts therefore providing immediate sealing Designed to be used both with high and low pressure
Ensuring much great seal properties when compared to traditional solvent based thread sealants, elastomer tape or hemp with sealing paste.

To select the right thread sealant the following aspects should be taken into account:
The type of materials requiring sealing are key in order to select the right thread sealant. According to whether it is a plastic thread application, or a metal one or again a combination of the two, choosing the right thread sealant is paramount.
• **Anaerobic Thread Sealant:**
Polymerizing under the absence of air and when theycome into contact with metals, as in pipe thread sealing applications.
Applications:
Any type of metal coupling.
• **Silicone Thread Sealants:**
Polymerizing at ambient temperature and reacting with environmental moist.
Applications:
Ideal for applications on threaded plastic or on a combination of materials such as plastic and metal.
• **Thread Sealing Yarn:**
A non-hardening coated multifilament yarn. For water,heating, oxygen pipes as well as for most industrial oils (Approved for drinking water (KTW), gas (DVGW) and oxygen (BAM).
Applications:
Recommended for cone plastic or metal threads. Allowsfor repositioning and pipe alignment .

THREADED FITTING SEALANTS

LOCTITE

PDF WRAS DVGW

ITEM: 542

Ideal for fine threads as used in the hydraulic and pneumatic industry. Approved for gas and drinking water.

- **Resistance: Medium**
- Operating temperature: -55 / +150 °C
- Low viscosity
- Max thread size: M26 - R3/4"
- Color: Brown
- **Approval: DVGW, WRAS**

Tech. Code		J0131050	J0131250
GR72	Euro	39,75	153,20
Package		Bottle	Bottle
Quantity	ml	50	250
		12	1

Indivisible package Suggested retail package - Unit price

THREADED FITTING SEALANTS PRECISE

LTEC adhesives

NEW

ITEM: SRP2

Anaerobic sealant adhesive for threaded fittings; medium strength, medium/low viscosity. Suitable for relatively precise hydraulic and pneumatic fittings.
- Maximum diameter: MA20
- Operating temperature: from -50 to +150° C
- Brown colour

Tech. Code		J0177050
GR73	Euro	15,90
Package		Bottle
Quantity	g	50
		10

THREADED FITTING SEALANTS

LOCTITE

ITEM: 572

Suitable for very precise threaded fittings where slow polymerization is needed. High viscosity.

- **Resistance: Medium**
- Operating temperature: -55 / +150 °C
- High viscosity
- Max thread size: M80 - R3".
- Color: Ivory white

Tech. Code		J0132050	J0132250
GR72	Euro	27,20	107,90
Package		Tube	Tube
Quantity	ml	50	250
		12	1

ITEM: 577

Multi-purpose sealant for all coarse metal threads. Suitable for low temperatures and maintenance of outdoor installations. Approved for food and drinking water environment.

- **Resistance: Medium**
- Operating temperature: -55 / +150 °C
- High viscosity
- Max thread size: M80 - R3"
- Color: Yellow
- **Approval: DVGW, NSF, WRAS**

Tech. Code		J0133050	J0133250
GR72	Euro	26,30	111,65
Package		Tube	Tube
Quantity	ml	50	250
		12	1

COARSE THREADED FITTING SEALANTS

LTEC adhesives

NEW

ITEM: SRG7

Anaerobic sealant adhesive for threaded fitting with medium strength and high viscosity. It can be taken apart. Specific for inaccurate threads typical of gas, water and steam fittings. The viscosity of the product contributes to the sealing of the gaps.
- Maximum diameter: 2"
- Operating temperature: from -50 to + 150°C
- **Certification: NSF - DVGW**

Tech. Code		J0175050
GR73	Euro	13,40
Packaging		Tube
Quantity	g	50
		10

J

Indivisible package Suggested retail package - Unit price

THREADED FITTING SEALANTS

LOCTITE

ITEM: 511

Low resistance product suitable for precise metal threaded fittings. Approved for use on gas fittings.

- **Resistance: Low**
- Operating temperature: -55 / +150 °C
- High viscosity
- Max thread size: M80 - R3"
- Color: Ivory white
- **Approval: DVGW**

Tech. Code		J0134050
GR72	Euro	28,55
Package		Tube
Quantity	ml	50
		12

THREADED FITTINGS SEALING CORD

LOCTITE

ITEM: 55

Nylon multi-fibre sealing wire for metal and plastic fittings and threaded pipes. Does not harden. Immediate high pressure sealing. Approved for use with gas, drinking water and food environment.

- **Resistance: Low**
- Operating temperature: -55 / +130 °C
- Semi solid
- Max thread size: R4"
- Color: White
- **Approval: DVGW, KTW, NSF**

Tech. Code		J0135160
GR72	Euro	18,90
Packaging		Roll
Quantity	m	160
		6

Indivisible package Suggested retail package - Unit price

RETAINING COMPOUND-CYLINDRICAL BONDING - PRODUCT INFO

Designed for bonding roller bearings, sockets and cylindrical fitting parts on casing and shafts. Allows max transmission of load and uniformly distribution vibrations, preventing fretting corrosion.
Liquid is applied, filling gaps and allowing a complete contact between metal surface.
Some highly important aspects should be taken into account when choosing the product:

· **Parts clearance**
Traditionally, low-viscosity bonding or locking products (from 125 up to 2.000 mPa·s) are used for a clearance up to 0,15 mm. For a clearance greater than 0,15 mm higher-viscosity bonding products should be selected instead (>2.000 mPa·s).

• **Temperature resistance**
Most locking products feature a temperature resistance up to150 °C. For applications requiring higher temperature resistance, specific products have been formulated, with a temperature resistance up to 230 °C.

• **Bonding resistance**
For those applications requiring permanent bond, we recommend a high-resistance locking product. Should maintenance and disassembly of parts be required, a medium-strength product should be preferred, featuring a lowering shear resistance.

• **Polymerization speed**
Many applications require a quick-polymerization product so to maximize production time . On the other hand, some applications requirea slower polymerization so to permit readjustment of parts after assembly.

RETAINERS FOR CYLINDRICAL COUPLINGS

LOCTITE

ITEM: 603

Suitable for locking tight cylindrical couplings where a penetrating action is required. Low viscosity. High tensile strength. Oil impregnated applications.

- Resistance: High
- Operating temperature: -55 / +150 °C
- Low viscosity
- Color: Green
- **Max. diametrical clearance: 0.1 mm**
- **NSF-P1 Certificate**

Tech. Code		J0136050	J0136250
GR72	Euro	49,10	179,10
Package		Bottle	Bottle
Quantity	ml	50	250
		12	1

ITEM: 638

High thermal resistance product suitable on all metals including corrosion resistant metals such as aluminium, steel and galvanized surfaces. Suitable for drive shafts, gears, pulleys and other cylindrical parts. Approved for gas, drinking water and food environment.

- Resistance: High
- Operating temperature: -55 / +180 °C
- Medium viscosity
- Color: Green
- **Max. diametrical clearance: 0.25 mm**
- **Approval: DVGW, WRAS, NSF**

Tech. Code		J0137050	J0137250
GR72	Euro	50,25	186,50
Package		Bottle	Bottle
Quantity	ml	50	250
		12	1

J

Indivisible package Suggested retail package - Unit price

RETAINERS FOR CYLINDER COUPLINGS

LTEC adhesives

NEW

ITEM: BC8

High strength anaerobic blocker, medium viscosity, resistant to high temperatures. Suitable for fixing bearings, gears, rotors and coaxial couplings in general.
- Gap filling: 0.05 to 0.15 mm
- Operating time: -50 to +180°C
- Colour: green

Tech. Code		J0180050
GR73	Euro	18,40
Package		Bottle
Quantity	g	50
		10

RETAINERS FOR CYLINDER COUPLINGS

LOCTITE

ITEM: 641

Ideal for medium strength fixing of bearings, bushings, keys and grooved couplings in general. To be used for components requiring subsequent disassembly.

- Resistance: Medium
- Operating temperature: -55 / +150 °C
- Low viscosity
- Color: Yellow
- **Max. diametrical clearance: 0.1 mm**

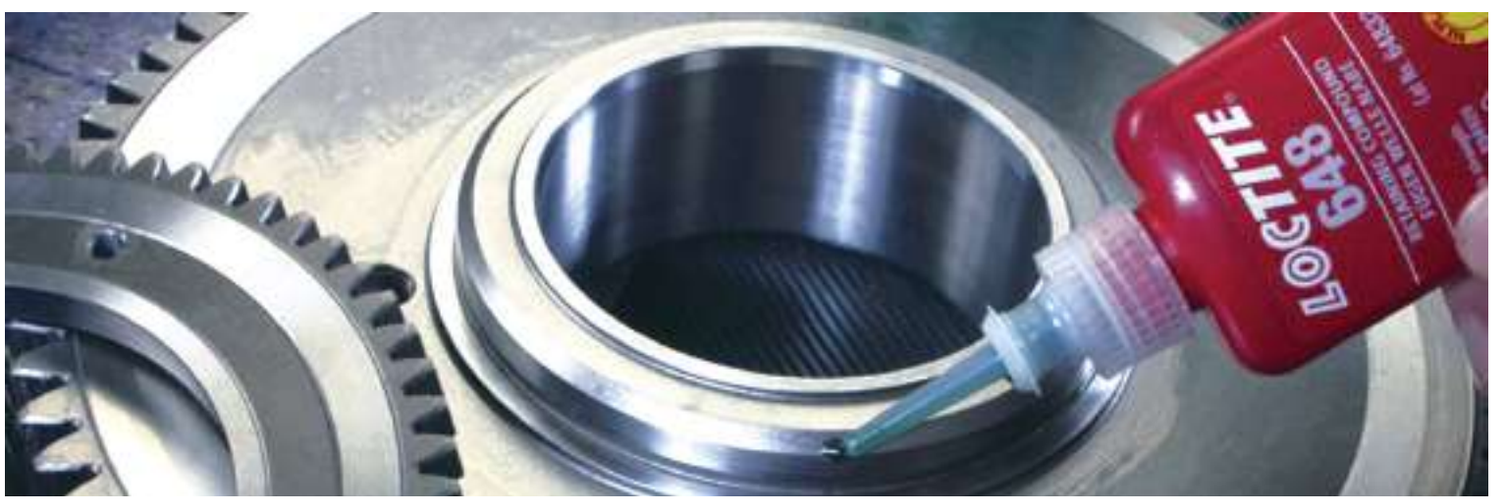
Tech. Code		J0138050
GR72	Euro	50,20
Package		Bottle
Quantity	ml	50
		12

ITEM: 648

Product with high thermal resistance. It also glues in the presence of contaminants such as industrial oils. Excellent on all metals including corrosion resistant metals such as stainless steel and aluminium. Ideal for blocking parts with or without interference.
Approved for gas, drinking water and food environment.

- Resistance: High
- Operating temperature: -55 / +180 °C
- Low viscosity
- Color: Green
- **Diametric play max: 0.15 mm**
- **Approval: DVGW, WRAS, NSF**

Tech. Code		J0139050	J0139250
GR72	Euro	52,30	186,00
Package		Bottle	Bottle
Quantity	ml	50	250
		12	1



Indivisible package Suggested retail package - Unit price

FLANGE SEALANT - PRODUCT INFO

Flange sealants are employed to prevent leakage of fluids or gases. It's a liquid gasket designed to ensure perfect sealing of the components, for best adhesion between contact surfaces avoiding flange corrosion. An instant low-pressure sealing while polymerization takes up to 24 hour to complete

When choosing the right flange sealant we define what follows:
• Rigid Flange Sealant:
Remain liquid when exposed to air, yet polymerize to a tough solid when filling the space between the flange surfaces. Anaerobic sealants are ideal for rigid metal-metal joints with a very small to no clearance
• Silicone-based products for flexible flanges:
Silicone-based sealants comprise products with specific properties, such as, a superior fluid or high operating temperature resistance. Ideal for large-clearance applications and for joints where flange movement is required
• Liquid Gaskets:
May be used for any type of flange. Must be applied liquid on a flange surface before proceeding to parts coupling. Then the sealant agent distributes andpolymerizes in between flanges, filling gaps, scratches and uneven surfaces fora long-lasting sealing result.

FLANGE SEALANTS FOR HIGH TEMPERATURES

LOCTITE

ITEM: 510

Anaerobic paste adhesive for use on rigid flanges. High thermal and chemical resistance. Ideal for application on vertical surfaces. Approved for use in the food industry.

- Resistance: Medium
- Operating temperature: -55 / +200 °C
- Max clearance: 0.25 mm
- Color: Pink
- **Fixing time (steel): 25 min**
- **Fixing time (aluminium): 45 min**
- **NSF-P1 Certificate**

Tech. Code		J0141050	J0141250
GR72	Euro	33,55	116,95
Package		Tube	Tube
Quantity	ml	50	250
		12	1

FLANGE SEALANT WITH LOW MECHANICAL STRENGTH

LOCTITE

ITEM: 573

Anaerobic paste adhesive for use on rigid and machined flanges. Low resistance, specific where slow polymerization is required.

- Resistance: Low
- Operating temperature: -55 / +150 °C
- Max clearance: 0.1 mm
- Color: Green
- **Fixing time (steel): 9 hours**
- **Fixing time (aluminium): 12 hours**

Tech. Code		J0142050	J0142250
GR72	Euro	30,25	(112,80)
Package		Tube	Tube
Quantity	ml	50	250
		12	1

J

FLANGE SEALANT WITH MEDIUM MECHANICAL STRENGTH

LOCTITE

ITEM: 518

Anaerobic gel adhesive for sealing rigid cast iron and aluminium flanges. Thixotropic, semi-flexible. Approved for use in contact with food.

- Strength: Medium
- Service temperature range: -55 / +150 °C
- Max clearance: 0.3 mm
- Colour: Red
- **Fixing time (steel): 25 min**
- **Fixing time (aluminium): 20 min**
- **NSF-P1 Certificate**

Tech. Code		J0144050	J0144300
GR72	Euro	33,20	(146,55)
Package		Syringe	Cartridge
Quantity	ml	50	300
		10	2

MULTIPURPOSE FLANGE SEALANTS

LOCTITE

ITEM: 574

Anaerobic paste adhesive, ideal for use on rigid metal parts such as iron moulds and pump housings.

- Resistance: Medium
- Operating temperature: -55 / +150 °C
- Max clearance: 0.25 mm
- Color: Orange
- **Fixing time (steel): 15 min**
- **Fixing time (aluminium): 45 min**

Tech. Code		J0143050
GR72	Euro	32,05
Package		Bottle
Quantity	ml	50
		12

ANAEROBIC ADHESIVE ACTIVATOR

LOCTITE

ITEM: SF 7649

Acetone-based activator specific for all anaerobic adhesives.
Increases the polymerization speed, particularly at temperatures lower than 15°C.
Very useful in case of large bond gaps.

Tech. Code		J0145500
GR72	Euro	67,25
Package		Canister
Quantity	ml	500
		1

J

Indivisible package Suggested retail package - Unit price

MULTIFUNCTION 4 IN 1 FOR MAINTENANCE

LTEC adhesives

NEW

ITEM: MRO41

Medium/high strength, high viscosity, thixotropic multifunction anaerobic adhesive. MR041 features a pump dispenser for precise dosing. This product is suitable for sealing flanges and fittings, braking screws and nuts, as well as locking cylindrical couplings. Product specifically designed for industrial maintenance.
- Amplitude of play: from 0.1 to 0.2 mm
- Operating time: -50 to + 150° C
- Colour Green
- **Certifications: NSF - DVGW**

Tech. Code		J0190050
GR73	Euro	13,40
Packaging		Spray can
Quantity	g	35
		10

J

Indivisible package Suggested retail package - Unit price

PERISTALTIC HAND PUMPS

ITEM: 98414 - 97001

Manual dispensers. They are easily screwed onto all bottles of Loctite anaerobic, threadlocker, thread sealer and blockers of 50 and 250 ml. Designed to dose drops from 0.01 to 0.04 ml of product from every angle without loss or waste. Suitable for low and medium viscosity products.

Tech. Code		J0146001	J0146002
GR72	Euro	(210,00)	(184,10)
For bottles		50 ml	250 ml
		1	1

MAUAL DISPENSER PRO PUMP

ITEM: PRO PUMP

Manual dispenser for 50 and 250ml bottles of thread locker. Adjustable nozzel in 3 positions. Guarantees precision and cleanliness of the application. Speeds up adhesive positioning operations and reduces product waste.

Tech. Code		J0149001
GR72	Euro	(75,60)
For bottles	ml	50 - 250
		1

DOSING NEEDLES

ITEM: J0147

Loctite dosing needles for correct and precise despensing of the product.
PPF - Flexible dosing Tips in polypropylene
PPC - Conical dosing Tips in polypropylene
SSS - Stainless Steel Tips

Tech. Code	GR72 Euro	Tip type	Ø Nozzel mm	Colour
J0147025F	142,10	PPF	0,25	Rosso
J0147061F	142,10	PPF	0,61	Rosa
J0147084F	142,10	PPF	0,84	Verde
J0147137F	142,10	PPF	1,37	Amber
J0147041P	76,90	PPC	0,41	Blue
J0147061P	76,90	PPC	0,61	Rosa
J0147084P	76,90	PPC	0,84	Verde
J0147119P	76,90	PPC	1,19	Grigio
J0147025S	67,60	SSS	0,25	Rosso
J0147061S	67,60	SSS	0,61	Rosa
J0147084S	67,60	SSS	0,84	Verde
J0147137S	67,60	SSS	1,37	Amber

Package consisiting of 50 pieces

DOSING NEEDLES KIT

ITEM: J0148

Dosing needles kit . Contains 2 needles of each type of the J0147 range.

Tech. Code		J0148KIT
GR72	Euro	58,20
Packaging		Bag
		1

Indivisible package Suggested retail package - Unit price

STRUCTURAL ADHESIVES - PRODUCT INFO

A structural bond joins strongly and permanently two similar or dissimilar materials by means of an adhesive and acts as a bridge between surfaces.

When designing bonded joints the following factors should be considered:
· surfaces to be joined should have the greater extent possible so to transfer sufficient forces.
· Stresses should be uniformly distributed.

Type of joints fit for structural bond: wherever parts are subject to shear stress, traction and compression.
Type of joints which are not fit for structural bond: end to end connectors, breaking and peel loads.

Rigid bonding (curing)
Hard rigid curing adhesives are commonly employed to transmit high loads therefore replacing commonly used mechanical fastening systems Two parts which bond by such kind of adhesives may be defined as structurally bond. It's mechanical properties such as high resistance and modulus jointly with superior adhesive performance have proved to be effective in highly demanding sectors such as aerospace and automotive industry.

Hard, rigid bonding offers users considerable benefits:
· An easier building process, better rigidity and higher resistance, an improved transmission of forces.
· It prevents stress failures while ensuring uniformly distributed tension stresses, preserving structural integrity.
(no weakening of the material due to the heat of welding or to drilling)
· Reduced production costs as no traditional fasteningmethods are used (screws, rivets or welding).
· Reduces costs of materials and related weight, allows to use thinner materials and does affect the product performance.
· It allows also to join a combination of materials such as metal and plastic, metal and glass, metal and wood, etc..

Among differing technologies we herewith define:
· Epoxy products
· Acrylics
· Polyurethanes
· Silicones
· Silane Modified Polymers

MULTIBOND ACRYLATE ADHESIVES

LOCTITE

PDF NSF

ITEM: AA 330

Structural adhesive suitable for most materials (except rubber), to be used with activator SF 7388. Excellent impact resistance, rapid polymerization.

- Working temperature: up to 100 °C
- Fixing time: 3 min
- Color: Light Yellow
- **For all materials (except rubber)**
- **NSF-P1 Certificate**

Tech. Code		J1001315
GR72	Euro	68,10
Package		Tube
Quantity	ml	315
◈		2

LIQUID ACTIVATORS FOR MULTIBOND ADHESIVES

LOCTITE

PDF

ITEM: SF 7386 / SF 7388

Heptane based activator for acrylic adhesives. Fixing time and polymerization speed depend on the adhesive, glued material and surface cleaning.

Tech. Code		J1003150	J1003500
GR72	Euro	56,60	110,60
Package		Canister	Bottle
Quantity	ml	150	500
◈		12	1

◈ Indivisible package ◈ Suggested retail package - Unit price

MULTIBOND ADHESIVE + ACTIVATOR KIT

ITEM: AA 330 / SF 7388

Kit composed of multiband acrylate adhesive AA 330 + activator SF 7388.

Tech. Code		J10045040
GR72	Euro	57,95
Package		Tube + Spray
Quantity	ml	50 + 40
		1

BI-COMPONENT TOUGH EPOXY ADHESIVES WITH HIGH VISCOSITY

ITEM: EA 3425

Two-component structural epoxy adhesive with slow polymerization. Excellent for bonding metals and large surfaces. Thixotropic.

- Working temperature: -55 / +120 °C.
- Fixing time: 240 min
- Peel resistance: 1.5 - 2.5 N/mm
- Colour: Yellow/White
- **For metals and large surfaces**

Tech. Code		J1010050
GR72	Euro	28,05
Package		Double cartridge
Quantity	ml	50
		10

BI-COMPONENT EPOXY QUICK ADHESIVES

ITEM: EA 3430

Fast structural two-component epoxy adhesive. Impact and water resistant. Suitable for applications requiring a transparent joining line. Ideal for glass, decorative panels and general DIY applications.

- Working temperature: -55 / +100 °C.
- Fixing time: 15 min
- Peel resistance: 3 N/mm
- Colour: Ultra transparent
- **For glass**

Tech. Code		J1011024
GR72	Euro	18,95
Package		Double syringe
Quantity	ml	24
		12

BI-COMPONENT EPOXY QUICK ADHESIVES CHARGED WITH STEEL

ITEM: EA 3450

Two-component structural epoxy adhesive with rapid polymerization. The play filling capacity makes it ideal for repairing damaged metal parts.

- Operating temperature: -55 / +100 °C
- Fixing time: 15 min
- Peeling resistance: -
- Colour: Grey
- **Repairs of metal parts**

Tech. Code		J1012025
GR72	Euro	18,00
Package		Double syringe
Quantity	ml	25
		6

APPLICATOR GUNS DUAL CARTRIDGE

ITEM: 96001

For the continuous and automatic mixing of two-component structural adhesives. Suitable for epoxies, polyurethanes, acrylics, cyanoacrylates and modified silane polymers.

Tech. Code		J1013050
GR72	Euro	86,20
Cartridge size	ml	50
Mixing ratio		1:1 , 2:1
		1

Indivisible package Suggested retail package - Unit price

QUICK EPOXY COMPOUNDS

ITEM: EA 3463 METAL MAGIC STEEL

Two-component epoxy in kneadable stick format loaded with steel. Adheres on wet surfaces and polyerizes in water. Resistant to chemicals. Can be drilled, sanded and painted.

- Operating temperature: -30 / +120 °C.
- Fixing time: 10 min
- **For leaks in pipes and tanks. Repairing small cracks**

Tech. Code		J1014114
GR72	Euro	23,35
Package		Stick
Quantity	g	114
		6

NON-METALLIC THIXOTROPIC ANAEROBIC PASTES

ITEM: QUICK METAL 660

Ideal for repairing worn coaxial couplings. Allows you to restore bearing seats or keyways. Suitable for filling clearances up to 0.5 mm using the activator SF7649. Approved for use in a food processing environment.

- Resistance: High
- Operating temperature: -55 / +150 °C
- High viscosity
- Colour: Silver
- Max. diametrical clearance: 0.5 mm
- **To repair very worn coaxial couplings**
- **NSF-P1 Certificate**

Tech. Code		J1015050
GR72	Euro	53,55
Package		Bottle
Quantity	ml	50
		2

J

Indivisible package Suggested retail package - Unit price

SILANE MODIFIED POLYMER SEALANTS

TEROSON

PDF

ITEM: MS 930 BIANCO

Mono-component modified silane adhesive, specific for flexible structural bonding. With medium modulus, pasty consistency, thixotropic, shock absorbent. White. MPA fire resistance certified.

Tech. Code		J1107300
GR72	Euro	15,45
Package		Cartridge
Quantity	ml	310
		12

SILANE MODIFIED POLYMER SEALANTS

NPT

PDF

ITEM: SIMP SEAL 25HM

High performance sealing adhesive. **Medium/low modulus**. Ideal for bonding and sealing various materials. Permanently elastic, excellent resistance to UV and atmospheric agents. Can be over-painted even when wet. Does not swell or shrink. Solvent and isocyanate free. Suitable for bonding metals, galvanized and stainless steels, aluminium, painted surfaces, plastics and fibreglass. Multi-purpose for the building sector. Door and window frames, horizontal and vertical joints, cladding, sheet metal and light metalwork in general. **EC1 Plus certified due to very low VOC (volatile organic compound) emissions**

Tech. Code		J111125B
GR74	Euro	7,50
Colour		White
Package		Cartridge
Quantity	ml	290
		12

PDF

ITEM: SIMP SEAL 55

High performance sealing adhesive. **Medium/high modulus**. Ideal for the elastic bonding and sealing of various materials. Excellent resistance to UV and atmospheric agents. Can be over-painted even when wet. Does not swell or shrink. Solvent and isocyanate free. Suitable for bonding metals, galvanized and stainless steels, aluminium, painted surfaces, plastics and fibreglass, used in the furniture manufacturing, nautical and transport sectors. Rapid bonding. **ISEGA Certification for food contact materials. IMO certification for marine use. EC1 Plus certified due to very low VOC (volatile organic compound) emissions**

Tech. Code		J111455B	J111455N
GR74	Euro	8,20	8,20
Colour		White	Black
Package		Cartridge	Cartridge
Quantity	ml	290	290
		12	12

PDF

ITEM: SIMP CLEAR

High performance sealing adhesive for elastic bonding where high transparency is required. **Medium/high modulus**. Ideal for bonding various materials. Can be over-painted even when wet. Does not swell or shrink. Solvent and isocyanate free. Suitable for gluing glass, metals, aluminium, plastics, fibreglass and general assembly work. Rapid curing. Low resistance to UV light. **ISEGA Certification for food contact materials.**

Tech. Code		J111755T
GR74	Euro	(10,30)
Colour		Transparent
Package		Cartridge
Quantity	ml	290
		12

POLYURETHANE SEALANTS

NPT

PDF

ITEM: U SEAL 500

High-performance sealing adhesive. Suitable for bonding various materials such as steel, sheets, painted surfaces and plastics. Good UV resistance, does not swell or shrink. Sandable and paintable after the film has formed.

Tech. Code		J1123500B	J1123500N
GR74	Euro	7,10	7,10
Colour		White	Black
Package		Cartridge	Cartridge
Quantity	ml	310	310
		12	12

J

Indivisible package Suggested retail package - Unit price

ACETIC SILICONE SEALANTS

ITEM: SILICON 5

High mould resistance, ideal for sealing non-porous materials (glass, ceramic), sanitary ware, sinks.

Tech. Code		J1222280T	J1222280B
GR72	Euro	5,95	6,36
Colour		Transparent	White
Package		Cartridge	Cartridge
Quantity	ml	280	280
		25	25

ITEM: SL 500

High mould resistance, ideal for sealing non-porous materials (aluminum, metal), metal seals for windows and door frames, gutters and so forth.

Tech. Code		J1223300G	J1223300N
GR72	Euro	6,87	6,87
Colour		Grey	Black
Package		Cartridge	Cartridge
Quantity	ml	300	300
		12	12

ITEM: SL 501

High resistance to mold and chemicals, ideal in bathrooms and wet environments.

Tech. Code		J1224300T
GR72	Euro	7,34
Colour		Transparent
Package		Cartridge
Quantity	ml	300
		25

ITEM: SL 503

Ideal for thermal insulation of windows and door frames, sealing glass to wood or pre-painted metal.

Tech. Code		J1225300T
GR72	Euro	7,79
Colour		Transparent
Package		Cartridge
Quantity	ml	300
		25

NEUTRAL SILICONE SEALANTS

ITEM: SL 618

Does not stain and is resistant to vibration and deformation, ideal for bonding mirrors and polycarbonate plates and for sealing plastic materials (except PE, PP, PTFE)

Tech. Code		J1231300T
GR72	Euro	9,66
Colour		Transparent
Package		Cartridge
Quantity	ml	300
		25

NEUTRAL SILICONE SEALANTS

ITEM: SL 620 FUSION

High resistance to mould, weathering, acids and UV rays, ideal for sealing in buildings (windows and door frames, plumbing, air conditioning and ventilation).
New formula fusion without oximes.

Tech. Code		J1232300T	J1232300B	J1232300G	J1232300N
GR72	Euro	8,17	8,47	8,58	8,58
Colour		Transparent	White	Grey	Black
Package		Cartridge	Cartridge	Cartridge	Cartridge
Quantity	ml	300	300	300	300
		25	25	12	12

Indivisible package Suggested retail package - Unit price

ACETIC SILICONE SEALANTS HEAT RESISTANT

PDF

ITEM: SL 509

Ideal for sealing metal parts exposed to high temperatures (250° in continuous), replacement seals for pumps, motors and tool machines and paste crystal furnace profiles.

Tech. Code		J1237300R
GR72	Euro	11,95
Colour		Red
Package		Cartridge
Quantity	ml	300
		12

POLYURETHANE FOAM

PDF

ITEM: PF 100

Pattex PF 100 is a polyurethane mono-component full-range foam, for manual applications. Conforms to class B3 Specifically formulated for doors and windows mounting operations. Fills perfectly secondary frames' gaps or gaps between frames and walls. After hardening, the foam may be cut, filled-plastered, perforated and painted. Mould, bacterial growth and chemical agents resistant.

It ensures good adhesion on construction materials wood, metal and plastic materials (PE,PP, PTFE excepted)

Tech. Code		J12430750
GR72	Euro	9,37
Application		Manual
Quantity	ml	750
		12

SILICONE CARTRIDGE GUN

ITEM: KPM 2

Model with rotating shell, suitable for standard silicone cartridges. Suitable for standard silicone cartridges.

Tech. Code		J1310001
GR74	Euro	50,20
Type		Professional

SILICONE CARTRIDGE GUNS

ITEM: J1312

Suitable for standard silicone cartridges.

Tech. Code		J1312001
GR74	Euro	8,70
Type		Economic

SILICONE CARTRIDGE PNEUMATIC GUNS

ITEM: J1314

Aluminum body, anodized tube, quick exhaust valve to allow instantaneous interruption of product delivery.

Tech. Code		J1314001
GR74	Euro	70,00
Coupling		Milled nut 1/4"

Indivisible package Suggested retail package - Unit price

HOT GLUE GUNS

BOSCH

ITEM: PKP18E

Suitable for hot glue sticks max. length mm 200, mechanical dosage feed, extrusion capacity 20 g/min.

INCLUDED:
1 hot glue stick - 1 extra-long nozzle

Tech. Code		J1316060
GR25	Euro	93,00
Absorbed power	W	200

ITEM: GKP200CE

Suitable for hot glue sticks max. length mm 200, mechanical dosage feed, with electronically controlled temperature, extrusion capacity 30 g/min, removable cable, supplied with plastic carrying case.
INCLUDED:
1 universal nozzle, 1 extra-long nozzle,
1 wide-slot nozzle, 8 hot glue sticks.

Tech. Code		J1318500
GR25	Euro	175,00
Absorbed power	W	500

TRANSPARENT HOT MELT GLUE STICKS

PDF

ITEM: J1320

Tech. Code		J132001	J132005
GR74	Euro	19,00	61,00
Stick		12 x 200	12 x 200
Package		1 Kg bag	5 Kg box
Pieces		50	250

MULTI-PURPOSE SPRAY ADHESIVE

LTEC

PDF

ITEM: SPRAYGLUE

Spray glue is a non-reusable multi-purpose spray adhesive.
Ideal for many types of gluing, It can withstand up to 200°C
Suitable for bonding paper, cardboard, wood, fabrics, leather, plastic, glass, fibers, rock wool and absorbent materials.

Tech. Code		J1330400
GR73	Euro	5,62
Package		Bomboletta spray
Quantity	ml	400
		12

GASKET MASTICS

PDF

ITEM: 0019

Suitable for positioning and fixing all types of traditional gaskets, resistant to coolant, oil, petrol and pressure.

Tech. Code		J1340200
GR74	Euro	19,75
Package		Jar
Quantity	ml	200
		6

J

Indivisible package Suggested retail package - Unit price

LIQUID GASKET

PDF

ITEM: 0012

Suitable for making gaskets for mechanical couplings, resistant to water, mineral oils, fuel, diluted acids and fats.

Tech. Code		J1345065
GR74	Euro	11,98
Package		Tube
Quantity	ml	65
		6

RED SILICONE AUTO-LEVELING GASKETING

PDF

ITEM: 596

Suitable for flexible assembly and sealing with clearance up to 8 mm, resistant to high temperatures (-55°C +250°C).

Tech. Code		J1347080
GR72	Euro	12,30
Package		Tube
Quantity	ml	80
		6

RED SILICONE AUTO-LEVELING GASKETING

PDF

ITEM: 0096

Suitable for making gaskets for mechanical couplings that operate in difficult conditions, resistant to high temperatures (-70°C +250°C) with peaks of up to 300°C. Vulcanizing at enviroment temperture, excellent resistance to water, mmoisture and oil.

Tech. Code		J1350060
GR74	Euro	19,15
Package		Tube
Quantity	g	60
		6

PDF

ITEM: RS01

Suitable for making gaskets for mechanical couplings that operate in difficult conditions, resistaant to high temperatures (-70°C + 250°C) with peaks of up to 300°C. Vulcanizing at enviroment temperture, excellent resistance to water,moisture and oil.

Tech. Code		J1351300R
GR74	Euro	69,00
Package		Cartridge
Quantity	ml	310
		12

BLACK SILICONE GASKETING

PDF

ITEM: 0094

Suitable for all motoring works and anywhere you need a resistant gasket. Fast acetic polymerization. Resistant to high temperatures from -70°C to 250°C, with peaks of up to 300°C.

Tech. Code		J1353060
GR74	Euro	19,61
Package		Tube
Quantity	g	60
		6

Indivisible package Suggested retail package - Unit price

QUICK PENETRATING RELEASE AGENT WITH LUBRICATING ACTION

ITEM: BOLT SBLOC

BOLT SBLOC is a multi-purpose lubricating, releasing and cleaning product with high capacity of action; it contains highly refined solvents with high capacity action that guarantee high product performance.
The BOLT SBLOC releasing lubricant, thanks to its formulation, has the ability to release and at the same time lubricate the oxidized corroded mechanical parts: this thanks to its high penetrating power.
Thanks to its new spray dispenser the BOLT SBLOC has a triple possibility of use for direct, short and long range vaporization.
The BOLT SBLOC product, thanks to its new packaging also works upside down.
The innovative formulation of the product has made it possible to eliminate chlorinated solvents from the formulation, maintaining the lubrication performances at a very high level intact.
The BOLT SBLOC release product is entirely produced, checked and packaged in Italy according to the highest standards.
The product is recommended for lubrication, cleaning and protection of mechanical parts of machines.
Thanks to its formulation, the product has a high water repellent and protective capacity against atmospheric agents.
It unlocks, lubricates, cleans, removes moisture and prevents corrosion.

Tech. Code		J2120400
GR73	Euro	7,70
Package		Spray can
Quantity	ml	400
		12

MULTI-PURPOSE LUBRICANTS

ITEM: SVITOL

New double-action spray nozzle for targeted or wide-range vaporization. Suitable for releasing hard oxidized pieces, protects and prevents rust formation.

Tech. Code		J2140200	J2140400
GR74	Euro	7,34	10,56
Package		Spray can	Spray can
Quantity	ml	200	400
		24	24

MULTI-PURPOSE LUBRICANTS

ITEM: LB 8201

Multi-purpose lubricants Five-way mineral-based release agent. unlocks, lubricates, cleans, removes moisture and prevents corrosion. Ideal for lubricating metal. Resistant up to 120°C.

Tech. Code		J2150400
GR72	Euro	8,40
Package		Spray can
Quantity	ml	400
		12

MULTI-PURPOSE LUBRICANTS

ITEM: WD 40

In spray format, new double-action nozzle for targeted or wide-range vaporization. Suitable for releasing, clean, lubricating and protecting parts subject to oxidation. It is waterproof, anti-corrosion, usable on painted surfaces.

Tech. Code		J2160500	J21605000	J216025000
GR74	Euro	10,25	72,00	240,00
Package		Spray can	Can	Can
Quantity	L	0.5	5	25
		6	1	1

COLD ZINC PROTECTOR

PDF

ITEM: ZINC SHIELD

ZINC SHIELD cold zinc anticorrosive is a product designed to protect all ferrous surfaces from corrosion.
ZINC SHIELD can be used to restore galvanization affected by atmospheric agents.
Contains micronized zinc with a 99% purity.

Tech. Code		J2455400
GR73	Euro	9,11
Package		Spray can
Quantity	ml	400
		12

PROTECTOR WITH HIGH ZINC CONTENT

PDF

ITEM: ULTRA ZINC II

The ULTRA ZINC II high zinc protective product is a product designed and formulated to cover all ferrous surfaces and has the task of improving the protection of surfaces. Contains 99% purity zinc with the task of maximizing surface protection. The surface of the product after the application of ULTRA ZINCE II takes on the apperance of a bright zinc coating.

Tech. Code		J2450400
GR73	Euro	7,10
Package		Spray can
Quantity	ml	400
		12

STAINLESS STEEL COATING

PDF

ITEM: INOX SHIELD

INOX SHIELD is a coating based on stainless steel in a can suitable for the coating of ferrous metals in general.

The SHIELD INOX coating has the ability to restore the stainless patina affected by welding operations.

Thanks to its innovative formula, INOX SHIELD withstands high temperatures up to 600 ° C.

Tech. Code		J2460400
GR73	Euro	12,65
Package		Spray can
Quantity	ml	400
		12

POLISH FOR STAINLESS STEEL

PDF

ITEM: LUCIDANTE SHINOX

LUCIDANTE SHINOX is a polishing product for parts and surfaces in steel and is also effective on chrome-plating. Thanks to its innovative formulation, the SHINOX polish is effective as a polishing and brightening product on all stainless steel and chrome surfaces, guaranteeing exceptional cleanliness and shine.

Tech. Code		J2465400
GR73	Euro	10,35
Package		Spray can
Quantity	ml	400
		12

J

Indivisible package Suggested retail package - Unit price

CONCENTRATED SAFETY CLEANER

ITEM: DEGREASE

DEGREASE concentrated detergent is a high efficiency product formulated to remove stubborn dirt from surfaces.
DEGREASE quickly and efficiently removes grease, oils and greases from metal and plastic.
The product is specific for manual washing of mechanical parts.
Average concentration of use: 5%.

Tech. Code		J3530T1	J3530T3
GR73	Euro	34,01	105,07
Package		Can	Can
Quantity	kg	5	20
		1	1

CLEANER - DEGREASER

ITEM: SF 7840

Multipurpose biodegradable cleaner. Suitable for removing grease, oil and dirt in general. Must be diluted in water. Solvent-free. Non-flammable.

Tech. Code		J3515FL	J3515T
GR72	Euro	12,40	52,70
Package		Bottle with sprayer	Can
Quantity	L	0.75	5
		12	4

ITEM: SF 7063

Multipurpose cleaner. Suitable for preparing components for the application of an adhesive or a sealant, can be used with metal, glass, rubber. Leaves no residue.

Tech. Code		J3680400	J3680010
GR72	Euro	27,75	240,55
Package		Spray can	Can
Quantity	L	0.4	10
		12	1

CLEANER - DEGREASER

ITEM: FULCRON

Cleaner suitable for removing any type of dirt, non-abrasive, non-toxic, free from ammonia, phosphates and dyes, it can be used pure or diluted in relation to the dirt, it is not flammable.

Tech. Code		J3520FL	J3520T	J3520F
GR74	Euro	7,30	39,00	198,00
Package		Bottle with sprayer	Can	Drum
Quantity	L	0.5	5	30
		24	4	1

Indivisible package Suggested retail package - Unit price

UNIVERSAL CLEANER - DEGREASER

PDF

ITEM: 2611

2611 is a universal cleaner with high cleaning power.
Thanks to its formulation it evaporates quickly without leaving residues and has the ability to protect the material from accidental contact with corrosive agents thanks to the VCI additives contained inside.
2611 has the ability to degrease all surfaces even those with high friction value such as brakes and clutches, surfaces where paint and adhesives are to be applied. The product has the ability to remove oil and grease residues, silicon brake fluids, bonding and sealing materials.
The product has no rapid cooling, so no condensation on the surface is also free of chlorinated hydrocarbons and is free of petrol vapours.

Tech. Code		J3510500
GR74	Euro	21,90
Package		Spray can
Quantity	ml	500
		12

GLASS CLEANING

PDF

ITEM: VETRI PLUS

VETRI PLUS is an innovative product that thanks to its innovative formulation allows an excellent cleaning of glass thanks to a formulation that contains biodegradable surfactants that safeguards the environment.
The new formulation VETRI PLUS guarnatees an excellent anti-static action to eliminate and avoid the accumulation of dust on the surface.
VETRI PLUS glass cleaner cleans surfaces without leaving upleasant smears. Ideal for cleaning glass, mirrors, lacquered surfaces, steel surfaces of machine or measuring instruments, chrome surfaces and tiles. Use the product by spraying it directly on the surface to be cleaned and wipe the product with a clean cloth.
The product does not need to be rinsed.

Tech. Code		J35251
GR73	Euro	4,26
Package		Bottle with sprayer
Quantity	L	1
		12

CLEANERS FOR ELECTRIC AND ELECTRONIC DEVICES

PDF

ITEM: ELECLEAN

ELECLEAN is a cleaner for eletrical panels formulated to dissolve the deposits of grease and oil from electrical and electronic equipment specific for delicate surfaces.
ELECLEAN has a very high penetration capacity so as to dissolve dirt even in the most difficult to reach positions. The ELECLEAN cleaner thanks to its innovative formulation has a very high drying speed. ELECLEAN cleaner is also ideal for degreasing precision mechanical parts. The product is recommended for cleaning electrial contacts, printed circuits, mechanical and electrical parts of printers and photocopiers.

Tech. Code		J3620400
GR73	Euro	8,85
Package		Spray can
Quantity	ml	400
		12

ANTISTATIC CLEANER

PDF

ITEM: PULISCREEN

PULISCREEN is a product for cleaning and maintenance of monitors, keyboards and office equipment in general.
Cleans and polishes without marks, leaving behind an invisible protective film on the surfaces.
Removes and prevents the accumulation of static electricity. It is suitable for all types of surfaces, PVC, rubber-plastic, wood, steel, glass, ceramic.
Application areas: LCD and plasma screens, computers, crystals, mirrors, glass, wood and metal furniture, motorcycles, cars, boats.

Tech. Code		J3640400
GR73	Euro	7,72
Package		Spray can
Quantity	ml	400
		12

J

Indivisible package Suggested retail package - Unit price

COMPRESSED AIR SPRAY

ITEM: AIR JET

AIR JET is a CFC-free air blower suitable for daily maintenance of optical and electronic equipment. It is ideal for cleaning electronic boards and integrated circuits.

Tech. Code		J3650400
GR73	Euro	5,46
Package		Spray can
Quantity	ml	400
		12

GAS LEAK DETECTORS

ITEM: LEAK VIEWER

Specific to quickly detect gas, nitrogen, oxygen, carbon dioxide, compressed air leakage.

Tech. Code		J3670400
GR73	Euro	10,15
Package		Spray can
Quantity	ml	400
		12

NEUTRAL DETERGENT

ITEM: FULNET

FULNET is a liquid detergent of acquamarine colour with neutral pH, usable both diluted and pure. FULNET is a low-foaming product that requires low rinsing operations. Thanks to it neutral pH, FULNET is also
indicated for the removal of neat and emulsifiable oils from surface. After applying the FULNET detergent, wait a few seconds for the product to fully express its disintegrating action on the dirt.
APPLICATIONS
Hard surfaces in general, plastics and varnishes, synthetic surfaces. Machine tools, textiles and printing machines. Car interiors and industrial vehicles. Porcelain, Marble, Aluminum, Vinyl,
Linoleum and industrial flooring in general.

Tech. Code		J35181
GR73	Euro	6,57
Package		Bottle with sprayer
Quantity	L	1
		12

UNIVERSAL DETERGENT

ITEM: BLU WASHER

BLU WASHER detergent is a product composed of a balanced mixture of alkalis, wetting agents and detergents. BLUE WASHER is formulated to be a fast acting detergent safeguarding the material from surface corrosion of both natural and synthetic matrices.Thanks to the balancedformulation BLUE WASHER cleans and provides a slight anti- rust protection on the degreased metal surfaces.

The product should be used diluted in water at 4% - 8%.

Tech. Code		J3545T2
GR73	Euro	249,69
Package		Can
Weight	kg	20

DETERGENT FOR HOT CLEANING SYSTEM

PDF

ITEM: MC CLEAN

MC CLEAN is a hot detergent for washing machines specially formulated to cleanse all metals and yellow alloys by spraying, flotation, immersion and ultrasound, obviating the drawbacks of strongly alkaline formulations. It can be used in the mechanical industry, engineering, for the degreasing of mechanical parts, small parts, engine parts, to easily revove neat oils and emulsions, sludge, scraps. The product has an effective detergent and antioxidant action; the concentration of use can vary between 1% and 3 % for steel parts, with an operating temperature between 40°C and 60°C. Contact times are based on the dirt toughness. The maximum detergent power is obtained starting from 2%.

Tech. Code		J3552T2
GR73	Euro	157,20
Package		Can
Quantity	kg	20

DETERGENTS FOR HYDRO CLEANERS

PDF

ITEM: MRN BLU

MRN BLU is a universal degreaser for use in high-pressure washers.
Effectively removes oils, greases, mineral or synthetic oils residues from surfaces, the low alkaline also makes it suitable for washing the bodywork of operating machines. The standard dilution of the product ranges from 2 to 4%

Tech. Code		J3560T
GR73	Euro	104,00
Package		Can
Weight	kg	25

CONCENTRATED DETERGENT FOR FLOOR CLEANING MACHINES

PDF

ITEM: FAST CLEAN

FAST CLEAN is a liquid detergent for washing floors with washer-dryer machines, It is not foaming. Suitable for cleaning floors in cement, clinker, natural and artifical stones. (not wood). FAST CLEAN is suitable for cleaning very dirty rooms, workshops, warehouses, industrial floors and sports facilities. It has a strong degreasing power and eliminates any kind of dirt, Dilute to 2.5 - 4 % with water, depending of the degree of dirt on the surface to be treated. Pour the product directly into the machine tank. Warnings: before applying it, check the colour of the floor.

Tech. Code		J3565T
GR73	Euro	113,40
Package		Can
Weight	kg	25

UNIVERSAL SAFETY SOLVENT

PDF

ITEM: UNISOLV

The UNISOLV Low-volatility odourless solvent is a product formulated to maximize the cleaning and solubilization of dirt.
UNISOLV is a solvent suitable for removing greases and oils and protective for mechanical parts and ideal for preparing surfaces to be painted and glued.
The product has been studied and formulated to replace the most dangerous solvents in mechanical workshops, maintaining a very high detergent power.

Tech. Code		J3540T1	J3540T2
GR73	Euro	45,51	162,28
Package		Can	Can
Quantity	L	5	20

J

Indivisible package Suggested retail package - Unit price

DE-MINERALIZED WATER

ITEM: AQUAPUR

For industrial use.
Produced with reverse osmosis technology.
Electrical conductivity: max 17 µs.

Tech. Code		J36850005	J36850020	J36851000
GR73	Euro	5,50	(21,00)	(684,00)
Package		Can	Can	IBC
Quantity	L	5	20	1000

ACRYLIC ENAMEL SPRAYS

ITEM: J3810

Fast-drying, high-grip power on all surfaces, even on difficult material such as plastic and standing finishes. It does not yellow and remains unchanged over time, re-paintable, with self-cleaning valve.

Tech. Code	GR74 Euro	Package	Quantity ml	Colour	RAL	
J38101021	6,77	Spray can	400	Polished cadmium yellow	1021	6
J38102004	6,77	Spray can	400	Polished pure orange	2004	6
J38103020	6,77	Spray can	400	Polished traffic red	3020	6
J38105012	6,77	Spray can	400	Light blue	5012	6
J38105015	6,77	Spray can	400	Polished sky blue	5015	6
J38106011	6,77	Spray can	400	Polished reseda green	6011	6
J38107001	4,75	Spray can	400	Polished silver grey	7001	6
J38107035	6,77	Spray can	400	Polished light grey	7035	6
J38109005	6,77	Spray can	400	Polished black	9005	6
J38109010	6,77	Spray can	400	Polished white	9010	6
J3810NEOP	6,77	Spray can	400	Opaque black	-	6
J3810TRLU	6,77	Spray can	400	Polished transparent	-	6

Related products

3M HALF-MASKS FOR GAS AND VAPOURS

Tech. Code	Description
K5380100	Complete respirator
K5380R100	Pre-filter for painting protection (pack of 10)

The products are available in chapter K

Related products

ONE PIECE DISPOSABLE OVERALLS WITH HOOD

Tech. Code	Size
K3204L	L
K3204M	M
K3204XL	XL
K3204XXL	XXL

The products are available in chapter K

GREASE GUNS

ITEM: J4110

Black painted steel body, "Zerk" tip type for lubricators with convex head.

Tech. Code		J4110C
GR74	Euro	13,50
Capacity	g	200
ø body	mm	45
Length	mm	320

ITEM: J4111

Black painted steel body, "Lub" tip type for lubricators with concave head.

Tech. Code		J4111P
GR74	Euro	13,50
Capacity	g	200
ø body	mm	45
Length	mm	320

GREASE LEVER COMPRESSORS

ITEM: J4120

Black galvanized steel body suitable also for bulk grease charging.

Tech. Code		J4120250	J4120500	J41201000
GR74	Euro	24,00	30,40	35,40
For cartridges	g	-	400	600
For cartridges ø	mm	Unpackaged grease only	52	56
Capacity	g	300	500	1000

PROFESSIONAL HAND OPERATED GREASE PUMPS

ITEM: J4122

Professional greasing kit in box including a professional hand operated grease pump, complete with 300 mm rubber hose and 4-chuck jaw grease coupler Suitable for general-purpose standard cartridges or bulk grease.

Tech. Code		J41220500
GR74	Euro	55,50
For cartridges	g	400
For cartridges ø	mm	52
Capacity	g	500

PROFESSIONAL LEVER AND GUN COMPRESSORS

ITEM: J4124

Professional manual compressor that can be lever operated or even pistol operated with one hand. Aluminum head and black anti-slip knob, with vent valve for air bubbles. It can also be used with bulk grease. The kit includes a 400mm flexible hose, a rigid pipe straw and a 4-jaw head.

Tech. Code		J4124500
GR74	Euro	108,10
For cartridges	g	400
For cartridges ø	mm	52
Capacity	g	500

FLEXIBLE NYLON HOSE FOR GREASE COMPRESSORS

ITEM: J4125

Nylon tubing feature a working pressure of 200 Bar and are tested to max pressure of 800 Bar.
Rubber hoses feature a working pressure of 400 Bar and are tested to a max pressure of 1000 Bar.

Tech. Code	GR74 Euro	L mm	Hose ø mm	Type	Threaded coupling
J4125300	5,10	300	4 x 8,4	Nylon	M 10 x 1
J4125400	5,10	400	4 x 8,4	Nylon	M 10 x 1
J4125500	6,70	500	4 x 8,4	Nylon	M 10 x 1
J4125300G	5,10	300	4 x 11	Rubber	M 10 x 1
J4125400G	6,10	400	4 x 11	Rubber	M 10 x 1
J4125500G	6,70	500	4 x 11	Rubber	M 10 x 1

Indivisible package Suggested retail package - Unit price

LUBRICATOR HEADS

ITEM: J4130

Three-jaw model.
Suitable for lubricators with "Hydraulic" spherical head type.

Tech. Code		J41301
GR74	Euro	3,40
Threaded coupling		M 10 x 1

ITEM: J4131

EXCELLENT Swiss four-jawed model. High quality.
Suitable for lubricators with "Hydraulic" spherical head type.

Tech. Code		J41312
GR74	Euro	18,60
Threaded coupling		M 10 x 1

ITEM: J4132

Suitable for lubricators with 15 mm hexagonal head.

Tech. Code		J41323
GR74	Euro	5,10
Threaded coupling		M 10 x 1

GREASE NIPPLE COVERS

WRK

ITEM: J4137

PVC red coloured covers for hydraulic grease nipples.

Price refers to 10 pcs blister packaging. Retail minimum order packaging.

Tech. Code		J4137R10
GR74	Euro	1,70
Description		Grease nipple cover

HYDRAULIC GREASE NIPPLES-STRAIGHT

WRK

ITEM: J4134

UNI 7663-A Standard compliant hydraulic straight nipples-1:16 conical threading
AVP steel, white zinc plated as standard supply.

Price refers to 10 pcs blister packaging. Retail packaging.

Tech. Code	GR74 Euro	Thread mm	A mm	B mm	C mm
J41340761Z	2,40	M 6 x 1	13,5	5	7
J41340981Z	3,30	M 8 x 1	17	6	9
J4134098125Z	3,30	M 8 x 1,25	17	6	9
J41341161Z	5,20	M 6 x 1	17	5,2	11
J41341181Z	5,20	M 8 x 1	17,5	5,7	11
J4134118125Z	5,20	M 8 x 1,25	17,5	5,7	11
J4134111101Z	4,20	M 10 x 1	17,5	7,2	11
J4134111015Z	4,20	M 10 x 1,50	17,5	7,2	11
J4134111/8Z	4,20	R 1/8	17,5	7,2	11
J4134141/4Z	7,50	R 1/4	18,5	6,8	14

Stainless steel, DIN standard compliant version also available upon request.

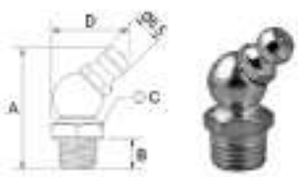
HYDRAULIC GREASE NIPPLES - 45 DEGREES

WRK

ITEM: J4135

UNI 7663-B Standard compliant hydraulic 45°- nipples-1:16 conical threading
AVP steel, white zinc plated as standard supply.

Price refers to 10 pcs blister packaging. Retail packaging.



Tech. Code	GR74 Euro	Thread mm	A mm	B mm	C mm	D mm
J41351161Z	7,60	M 6 x 1	25,5	5,5	11	16,2
J41351181Z	7,60	M 8 x 1	25,5	6,7	11	16,2
J4135118125Z	7,60	M 8 x 1,25	25,5	6,7	11	16,2
J4135111101Z	7,60	M 10 x 1	25,5	6,7	11	16,2
J4135111015Z	7,60	M 10 x 1,50	25,5	6,7	11	16,2
J4135111/8Z	7,60	R 1/8	25,5	6,7	11	16,2
J4135141/4Z	11,10	R 1/4	25,5	6,7	14	17,5

Stainless steel, DIN standard compliant version also available upon request.

HYDRAULIC GREASE NIPPLES - 90 DEGREES

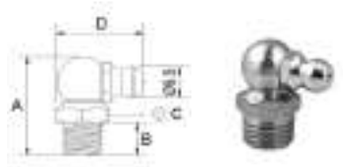
ITEM: J4136

UNI 7663-C Standard compliant hydraulic 90°- nipples-1:16 conical threading
AVP steel, white znc plated as standard supply.

Price refers to 10 pcs blister packaging. Retail minimum order packaging.

Tech. Code	GR74 Euro	Thread mm	A mm	B mm	C mm	D mm
J41361161Z	7,60	M 6 x 1	20,3	5,5	11	18
J41361181Z	7,60	M 8 x 1	20,3	6,7	11	18
J4136111101Z	7,60	M 10 x 1	20,3	6,7	11	18
J4136111015Z	7,60	M 10 x 1,50	20,3	6,7	11	18
J4136111/8Z	7,60	R 1/8	20,3	6,7	11	18
J4136141/4Z	11,10	R 1/4	20,3	6,7	14	19,5

Stainless steel, DIN standard compliant version also available upon request.



BUTTON-HEAD HEX TAT HEAD GREASE NIPPLES

ITEM: J4138

UNI 7662-A Standard compliant button-head hex tat head grease nipples featuring cylindrical threading.
AVP steel, white zinc plated as standard supply.

Price refers to 10 pcs blister packaging. Retail minimum order packaging.

Tech. Code	GR74 Euro	Thread mm
J4138151/4Z	7,00	G 1/4
J4138151/8Z	7,00	G 1/8
J4138151015Z	7,00	M 10 x 1,5
J413815101Z	7,00	M 10 x 1
J41381561Z	8,00	M 6 x 1
J4138158125Z	8,00	M 8 x 1,25
J41381581Z	8,00	M 8 x 1

Stainless steel, DIN standard compliant version also available upon request.

BUTTON-HEAD DOUBLE HEX TAT HEAD GREASE NIPPLES

ITEM: J4139

UNI 7662-A Standard compliant button-head double hex tat head grease nipples featuring cylindrical threading. AVP steel, white zinc plated as standard supply.

Price refers to 10 pcs blister packaging. Retail minimum order packaging.

Tech. Code	GR74 Euro	Thread mm
J4139151/4Z	7,40	G 1/4
J4139151/8Z	7,40	G 1/8
J4139151015Z	7,40	M 10 x 1,5
J413915101Z	7,40	M 10 x 1
J41391561Z	8,40	M 6 x 1
J4139158125Z	8,40	M 8 x 1,25
J41391581Z	8,40	M 8 x 1

Stainless steel, DIN standard compliant version also available upon request.

Indivisible package Suggested retail package - Unit price

MANUAL LEVER GREASERS

ITEM: J4152

Portable hand operated grease pump. 13 kg high pressure tank. Equipped with follower membrane that protects the lubricant and preserves its characteristics over time.

Tech. Code		J415213
GR74	Euro	228,90
Tank	kg	13
Grease pressure	bar	350/400
Tube		2,5 m - 1/4"
Weight	kg	10,4

WHEELED PEDAL GREASERS

ITEM: J4153

Wheeled pedal manual grease pump. Allows hands-free use. 13 kg high pressure tank. Equipped with follower membrance that protects the lubricant and preserves its characteristics over time.

Tech. Code		J415313
GR74	Euro	(346,70)
Tank	kg	13
Grease pressure	bar	300/350
Tube		2,5 m - 1/4"
Weight	kg	14

GREASE AIR PULSOMETERS FOR 20-30 KG DRUMS

ITEM: J4165

Grease distribution kit. Available with or without trolley. Complete with drum cover and follower membrane.
Compression ratio 50:1 - Flow rate 1500 rpm - Suitable for drums from ø 260 mm to ø 300 mm and for grease types 0, 1, and 2

Tech. Code		J4165030	J4165030CR
GR74	Euro	(322,00)	579,00
Description		Pump only	Pump and trolley
For drums		12 - 30 kg	12 - 30 kg
Tube		M/F 1/4" - 4 m - 400 bar	M/F 1/4" - 4 m - 400 bar

GREASE AIR PULSOMETERS FOR 180-200 KG DRUMS

ITEM: J4167

Grease distribution kit. Available with or without trolley. Complete with drum cover and follower plate. Compression ration 50:1 - Flow rate 1500 g/min - Suitable for grease types 0, 1 e 2

Tech. Code		J4167200	J4167200CR
GR74	Euro	(375,90)	880,80
Description		Pump only	Pump and trolley
For drums		180 - 200 kg	180 - 200 kg
Tube		M/F 1/4" - 4 m - 400 bar	M/F 1/4" - 4 m - 400 bar

LEVER ACTION BARREL PUMPS

ITEM: J4170

Aluminum body, suitable for petrols and lubricants with low and medium viscosity, do not use with corrosive liquids and solvents.

Tech. Code		J417025	J417060
GR74	Euro	97,90	111,20
Capacity	L/min	25	60
Suction tube	cm	75	80

LEVER ACTION BARREE PUMPS

ITEM: J4180

Steel body, suitable for petrols and lubricants with low and medium viscosity, do not use with corrosive liquids and solvents.

Tech. Code		J418075
GR74	Euro	111,20
Capacity	L/min	75
Suction tube	cm	110

OIL BRASS SYRINGES

ITEM: J4140

Brass body, rigid tube.

Tech. Code		J4140500	J41401000
GR74	Euro	(52,20)	69,10
Capacity	g	500	1000
Ø body	mm	50	50
Length	mm	290	490

SAFETY CONTAINERS WITH PLUNGER AND PLATE IMPREGNATED

ITEM: J4145

Safety containers in painted powder steel to moisten cloths and sponges. The residual liquid flows back in to the container.

Tech. Code		J41451L
GR74	Euro	107,00
Capacity	L	1
Dimension	mm	180 x 200h

SAFETY CONTAINERS WITH SPRAYER

ITEM: J4146

Safety containers in powder coated steel with sprayer extension.

Tech. Code		J41461L
GR74	Euro	(91,00)
Capacity	L	1
Dimension	mm	165 x 300h

Indivisible package Suggested retail package - Unit price

MODULAR FLEXO HOSE 1/4”

LOC-LINE

ITEM: J4410

Tech. Code	GR70 Euro	Supplier code	Description
J441001	19,19	40413	Standard pack of 20 modular segments 3 nozzles Ø 1.6 - 3.17 - 6.35 2 connections 1/4" and 1/8" NPT Total length. 330 mm
J441002	0,72	41401/1	1/4" segment
J441003	2,50	41402/1	Nozzle ø 1.6
J441004	2,50	41403/1	Nozzle ø 3.17
J441005	2,50	41404/1	Nozzle ø 6.35
J441006	7,28	41407/1	Flat nozzle 24 x 0.8
J441007	7,28	41489/1	Flat direct flow nozzle 25 x 1.3
J441008	10,68	41481/1	16-hole flat nozzle ø 1
J441009	21,40	41482/1	16-hole flat nozzle ø 1.5
J441010	3,75	41483/1	Flat nozzle 11 x 1
J441011	3,76	41484/1	Flat nozzle 11 x 1.5
J441012	3,75	41485/1	5-hole flat nozzle ø 1.5
J441013	3,75	41486/1	7-hole flat nozzle ø 1
J441014	2,50	41405/1	Connection 1/8" NPT
J441015	2,50	41406/1	Connection 1/4" NPT
J441016	7,28	41408/1	6 mm Y-coupling
J441017	2,95	41470/1	90° nozzle ø 1.6
J441018	37,43	41479	15 assembled radial nozzles and 1 cap package
J441019	21,40	21191/1	1/4" valve
J441020	10,68	21192/1	Flow regulator 1/4" NPT male
J441021	10,68	21193/1	Flow regulator 1/4" NPT female
J441022	10,68	21194/1	Intermediate flow regulator for 6 mm hose
J441023	101,17	40400	Magnetic base with 4 1/4" outputs
J441024	26,05	78001	Pliers 1/4"
J441219	45,88	78003	2 pliers 1/4" and 1/2" package

MODULAR FLEXO HOSE 1/2”

LOC-LINE

ITEM: J4412

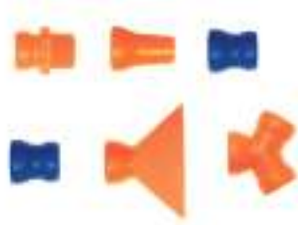
Tech. Code	GR70 Euro	Supplier code	Description
J441201	22,06	50813	Standard pack of 12 modular segments 3 nozzles Ø 6.35 - 9.3 - 12.7 2 connections 1/2" and 3/8" NPT Total length. 330 mm
J441202	1,48	51801/1	1/2" segment
J441203	2,84	51806/1	Nozzle ø 6.35
J441204	2,84	51802/1	Nozzle ø 9.3
J441205	2,84	51803/1	Nozzle ø 12.7
J441206	7,74	51807/1	Flat nozzle 32 x 4.5
J441207	8,29	51809/1	Flat nozzle 60 x 3
J441208	2,84	51804/1	Connection 3/8" NPT
J441209	2,84	51805/1	Connection 1/2" NPT
J441210	7,73	51808/1	12 mm Y-coupling
J441211	7,73	51822/1	Y-Reducer from 1/2" to 1/4"
J441212	15,52	51821/1	Reducer from 1/2" to 1/4"
J441214	12,72	32091/1	1/2" valve
J441215	12,72	32092/1	Flow regulator 1/2" NPT male
J441216	12,72	32093/1	Flow regulator 1/2" NPT female
J441217	12,70	32094/1	Intermediate flow regulator for 1/2" hose
J441218	26,05	78002	Pliers 1/2"
J441219	45,88	78003	2 pliers 1/4" and 1/2" package

MODULAR FLEXO HOSE 3/4”

LOC-LINE

ITEM: J4414

Tech. Code	GR70 Euro	Supplier code	Description
J441401	27,65	60513	Standard pack of 12 modular segments 2 nozzles Ø 16 - 20 1 connection 3/4" NPT Total length. 350 mm
J441402	1,71	61501/1	3/4" segment
J441403	9,43	61507/1	Flat nozzle 75 x 5
J441404	9,41	61511/1	20 mm Y-coupling



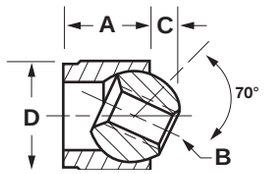
NOZZLE FOR SB LATHES – 10 BARS

ITEM: J4500

Nozzles to be pressed, just drill and ream with H9 tolerance.
Nozzles with threaded hole for use with SBT-ST ET nozzles and pipe.

Acetal resin body - Stainless steel sphere - Max. operating temperature 70°

Tech. Code	GR70 Euro	Supplier code	Thread B	D mm	A mm	C mm
J450010	24,88	SB 9510	M4 x 0.7	10	7	2
J450012	25,88	SB 9520	M5 x 0.8	12	8	2.5
J450014	28,93	SB 9530	M6 x 1	14	10	3
J450015	28,93	SB 9540	M6 x 1	15	6	3



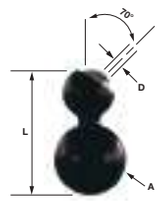
NOZZLE FOR CNC LATHES – 10 BARS

ITEM: J4510

Nozzles for CNC lathes, ideal for employment when it is not possible to use standard nozzles with spheres.

Acetal resin body - Stainless steel sphere - Max. operating temperature 70°

Tech. Code	GR70 Euro	Supplier code	Diameter A mm	D mm	L mm
J451012	34,01	BU 2310	12	4	28
J451014	34,01	BU 2320	14	4	30.5
J451015	34,01	BU 2330	15	4	31



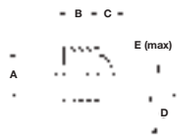
NOZZLE FOR JJ LATHES – 10 BARS

ITEM: J4520

These nozzles are particularly suited for special applications on equipment and tool machines.
Just drill a passage for the liquid, ream the hole with a tolerance of 0 + 0.05 and then press the nozzle in the seat obtained.

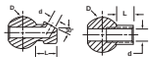
Acetal resin body - Stainless steel sphere - Max. operating temperature 70°

Tech. Code	GR70 Euro	Supplier code	Diameter A mm	D mm	B mm	C mm	E Degrees
J452008	23,00	JJ 0119	8	3.2	6.35	1.5	35°
J452010	23,62	JJ 0113	10	4	8	2	35°



Indivisible package Suggested retail package - Unit price

NOZZLE FOR LATHES – 33 BARS



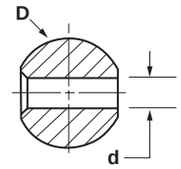
ITEM: J4530

Nozzles with brass sphere and smooth threaded hole, ideal for CNC lathes.

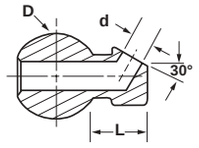
Brass sphere – Max operating temperature 150°

Tech. Code	GR70 Euro	Supplier code g	Diameter D mm	d mm	L mm	Hole
J4530A10	(16,07)	BB 1007	10	4	-	Plain straight hole
J4530A12	(22,21)	BB 1024	12	4	-	Plain straight hole
J4530A14	(22,36)	BB 1037	14	4	-	Plain straight hole
J4530A15	(23,48)	BB 1049	15	4	-	Plain straight hole
J4530B12	(30,17)	BB 1021	12	4	9.15	Plain angled hole
J4530B14	(32,15)	BB 1034	14	4	9.15	Plain angled hole
J4530B15	(32,84)	BB 1046	15	4	9.15	Plain angled hole
J4530C10	(18,63)	BB 1001	10	M6 x 1	0	Straight threaded hole
J4530C12	(24,03)	BB 1018	12	M5 x 0.8	6	Straight threaded hole
J4530C14	(26,37)	BB 1031	14	M6 x 1	7.9	Straight threaded hole
J4530C15	(27,05)	BB 1043	15	M6 x 1	7.9	Straight threaded hole
J4530C22	(31,35)	BB 1065	22	M6 x 1	7.9	Straight threaded hole

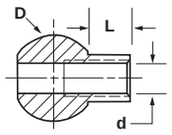
Plain straight hole



Plain angled hole



Straight threaded hole



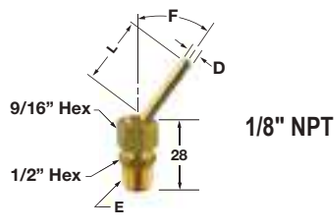
NOZZLE FOR LATHES – 100 BARS

ITEM: J4540

Nozzles for high-pressure CNC machines.

Brass body – Stainless steel sphere and extension - Max. operating temperature 150°

Tech. Code	GR70 Euro	Supplier code	Thread E	D mm	L mm	F Degrees
J45403	(53,50)	LJ 18130	1/8" NPT	2.2	6.35	33°
J45404	(60,00)	LJ 18140	1/8" NPT	2.2	31.7	28°
J45405	(55,34)	LJ 18150	1/8" NPT	3.0	12.7	33°
J45406	(60,00)	LJ 18160	1/8" NPT	3.0	31.7	28°
J45407	(63,00)	LJ 18165	1/8" NPT	3.0	15.2	28°
J45408	(55,34)	LJ 18170	1/8" NPT	4.0	12.7	28°
J45409	(60,00)	LJ 18180	1/8" NPT	4.0	31.7	28°



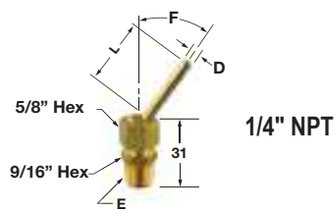
1/8" NPT

ITEM: J4550

Nozzles for high-pressure CNC machines.

Brass body – Stainless steel sphere and extension - Max. operating temperature 150°

Tech. Code	GR70 Euro	Supplier code	Thread E	D mm	L mm	F Degrees
J455008	(61,25)	LJ 18260	1/4" NPT	3.0	12.7	33°
J455009	(65,96)	LJ 18265	1/4" NPT	4.0	31.7	33°
J455010	(61,25)	LJ 18270	1/4" NPT	5.6	12.7	27°
J455011	(65,96)	LJ 18275	1/4" NPT	M6 x 1	31.7	27°



1/4" NPT

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DETGREEN HYGIENE

The LTEC DETGREEN line offers a complete series of products for hygiene in industrial environments.

All products are formulated to respect the environment.
Like most detergents, they are most effective when used dry with subsequent rinsing.

HAND-WASH LIQUID

PDF

ITEM: DETGREEN HANDYSOAP

DETGREEN HANDYSOAP is a pH neutral liquid detergent, whose mild and effective formulation allows frequent use without altering the hydrolipidic balance of the skin. Formulated using vegetable surfactants from renewable sources. Suitable for hands and body, ideal for office use and light soiling.

Tech. Code		J5415500	J541510
GR73	Euro	4,70	32,30
Package		Small container with dispenser	Refill
Quantity	L	0,5	10
		12	1

HAND-WASH GEL

PDF

ITEM: DETGREEN HANDYGEL ORANGE

DETGREEN HANDYGEL ORANGE is a solvent-free handwash gel, with a softer mineral abrasive (calcium carbonate), with aloe and vegetable surfactants. Very effective for removing industrial dirt without harming the skin.

Tech. Code		J52213	J5221B3
GR73	Euro	25,30	19,20
Package		Small container with dispenser	Refill sachet for Handygel Orange dispenser
Quantity	L	3	3
		1	6

HAND-WASH CREAM

PDF

ITEM: DETGREEN HANDYCREAM WHITE

DETGREEN HANDYCREAM WHITE is a creamy solvent-free detergent. It contains a mineral abrasive (calcium carbonate) and vegetable surfactants. Creamy, mild and pH neutral. Suitable for frequent washing.

Tech. Code		J52263	J52265	J5226B3
GR73	Euro	24,60	32,60	18,60
Package		Small container with dispenser	Small container with dispenser	Refill sachet for HANDYCREAM WHITE dispenser
Quantity	L	3	5	3
		1	1	6

Indivisible package Suggested retail package - Unit price

WALL DISPENSER

ITEM: DETGREEN

3 L dispenser. Use Handygel and Handycream refill bags.

Tech. Code		J52293
GR73	Euro	34,30
Description		Hand-washing product dispenser
Dimensions		340h x 200l x 100p
		1

WALL HOLDER FOR DRUMS WITH DISPENSER

ITEM: DETGREEN

Chromed metal for 3 L and 5 L drums. Supplied with dowels and screws for perfect mounting.

Tech. Code		J52313	J52315
GR73	Euro	(22,60)	(25,80)
Package		Holder for 3 L drum	Holder for 5 L drum
Weight	g	400	510

HAND-WASH PASTE

PDF

ITEM: DETGREEN PASTE

DETGREEN PASTE is a sand-free ecological handwash paste that contains natural surfactants and soaps. A natural wood flour based abrasive produced from renewable sources. Ideal for removing stubborn and ingrained dirt.

Tech. Code		J52401	J52405
GR73	Euro	3,30	7,90
Package		Tub	Bucket
Quantity	L	1	5
		12	4

DERMA-PROTECTIVE CREAM FOR HANDS

PDF

ITEM: HANDYSAVE SPRAY

Derma-protective fluid, it creates an invisible barrier against dirt and irritating substances. Makes hand cleaning easy.

Tech. Code		J5310400
GR73	Euro	8,81
Package		Spray can
Quantity	ml	400
		4

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DISINFECTANT - DEODORANT SPRAY

LOCTITE

PDF

ITEM: SF 7080 HYGIEN SPRAY PROFESSIONAL

Non-toxic multi-purpose disinfectant. Eliminates bacterial, molds and fungi froms surfaces, contaminated objects and air conditioning systems. Medical Surgery Presidium. It neutralizes any unpleasant odor caused by microrganisms, acting specifically on the responsible subtrates and leaving a pleasant fragrance of eucalyptus and menthol.

Tech. Code		J5110150
GR72	Euro	12,80
Package		Spray can
Quantity	ml	150
		4

HAND-WASHING CREAM

LOCTITE

PDF

ITEM: SF 7850

Natural citrus fruit extracts, suitable for removing deep-seated dirt while protecting the skin. Biodegradable.

Tech. Code		J52103
GR72	Euro	40,50
Package		Can with dispenser
Quantity	L	3
		4

PAPER ROLL BOBIN

ITEM: J5420

Havana: 80% cellulose fiber + 20% recycled - 3 layers - weight-3.2 kg
Strong: 100% cellulose - 3 layers - weight 3.2kg

Tech. Code		J5420HAVANA	J5420STRONG
GR74	Euro	13,50	16,60
Description		Havana embossed	Strong embossed white
Tear off	n°	568	510
Dim. tear off	cm	26 x 28	26 x 28
Coil height	m	216	194
		2	2

FLOOR ROLL HOLDER

ITEM: J5421

Painted tubular steel structure.

Tech. Code		J5421A2
GR74	Euro	47,00
Description		Without wheel

WALL ROLL HOLDER

ITEM: J5422

Painted tubular steel structure.

Tech. Code		J5422A1
GR74	Euro	34,00
Description		White structure

Indivisible package Suggested retail package - Unit price

CLEANING CLOTH FORM NON-WOVEN MATERIAL

ITEM: J5425

Anti-silicone single-ply cloth of non-woven material. 100% fiber without chemical binders. Absorbs up to 35 times its own weight in a few seconds. High mechanical strength and solvent resistance.
It does not flake nor leave lint.
Suitable for all cleaning operations in industrial, body shop and graphic arts environments.
Light blue. The roll weighs 1.6 kg.

Tech. Code		J5425005	J5425010
GR74	Euro	52,00	35,00
Tear off	cm	25 x 38	25 x 38
Wipe off	n°	236	236
Package		Box	Roll
📦		1	2

WHITE INDUSTRIAL CLEANING RAGS

Sanitized, mixed -fabric seconds white rags. Supplied in a 10kg convenience packaging.

Tech. Code		J543010	J543510	J544010	J544510	J545010	J545020
GR74	Euro	37,80	21,00	61,60	29,40	33,60	(37,80)
Color		White	Colorful	White	Colorful	Colorful	White
Material		Mixed textiles	Mixed textiles	Bed linen	T-Shirt	Sponge	Sponge
Dimensions	cm	40 x 40 x 20	40 x 40 x 20	40 x 40 x 20	40 x 40 x 20	40 x 40 x 20	40 x 40 x 20

ITEM: SAXO 3.2

Power supply 230 V 1HP-50/60 Hz, suitable for use with rutile-coated, basic and non-oxidising electrodes.
Arc Force, Hot Start and Anti-Bonding functions, compatible with motor generators and, if properly equipped, it can be used for TIG welding with scratch-striking. For use with all domestic electrical networks.
Supplied in a plastic case with all its accessories.

Tech. Code		J611132
GR75	Euro	515,00
Primary voltage	V	230 Single-phase
Vacuum tension	V	69
Power reg.	Kw	4,8
Rep. intermittence	A	10 - 150
Max. electrodes	A	150 (10%) - 70 (60%) - 55 (100%)
Connector size	mm	9
Electrode diameter	mm	1.6 ÷ 3.2
Dimension	mm	220 x 120 x 320
Weight	kg	3,8

ITEM: PRESTO 160

Power supply 230 V 1HP - 50/60 Hz, inverter for welding with coated electrodes, particularly easy to use thanks to functions such as Hot Start, Arc Force and Anti Bonding. Welds rutile, basic, non-oxidising and special electrodes up to Ø 3.25 mm. TIG welding with scratch-striking.

Tech. Code		J6114160
GR75	Euro	582,00
Primary voltage	V	230 single-phase
Vacuum tension	V	85
Power reg.	Kw	4,6
Rep. intermittence	A	5 - 150
Max. electrodes	A	150 (35%) - 120 (60%) - 100 (100%)
Connector size	mm	9
Electrode diameter	mm	1,6 ÷ 4,0
Dimension	mm	145 x 230 x 365
Weight	kg	7

ITEM: PRESTO 165 FORCE

Power supply 230 V 1HP - 50/60 Hz, suitable for use with all types of coated electrodes except for cellulose.
The PFC device reduces interferences in the power network, increases compatibility with the motor generator and reduces energy consumption. The generator can also weld in TIG Lift, the control through micro-controller guarantees exceptional performance. Automatic functions: Arc Force, Hot Start and Anti Bonding.

Tech. Code		J6116165F
GR75	Euro	771,00
Primary voltage	V	230 single-phase
Vacuum tension	V	48.4
Power reg.	Kw	4,8
Rep. intermittence	A	10 - 160
Max. electrodes	A	160 (30 %) - 140 (60%) - 120 (100 %)
Connector size	mm	9
Electrode diameter	mm	1.6 ÷ 4.0
Dimension	mm	320 x 170 x 395
Weight	kg	6,6

ITEM: PRESTO 185 FORCE

Power supply 230 V 1Ph - 50/60 Hz, suitable for the use of all types of coated electrodes except cellulosic. The generator can also weld in TIG LIFT, the control by means of a microcontroller guarantees exceptional performance. PFC device that reduces the disturbances introduced into the power supply network, increases compatibility with the motor generator and reduces energy consumption. Arc Force and Hot Start functions that facilitate arc ignition and maintenance and automatic anti-gluing. VRD device for no-load voltage reduction that improves the safety of welding in a wet environment. IP 23 / H protection / insulation class.

Tech. Code		J6118185F
GR75	Euro	839,00
Primary voltage	V	230 single-phase
Vacuum tension	V	48,4
Max absorbed power	Kw	5,6
Power setting	A	10 - 180
Intermittence ratio	A	180 (20%) - 140 (60%) - 120 (100%)
Connector size	mm	9
Electrode diameter	mm	1,6 ÷ 4,0
Dimension	mm	320 x 170 x 395
Weight	kg	6,6

MULTIFUNCTION WELDERS

LINCOLN ELECTRIC

ITEM: BESTER 190C MULTI

Monophase multifunction welding machine with Inverter technology. It carries out MIG, MMA and TIG LIFT welding processes. Portable, light and robust. Equipped with a large display for consulting the parameters. It is compatible with motor generator. Arc Force and Hot Start function that facilitate the start and help keep the arc lit. Anti Sticking Function. Polarity change. Includes MIG torch with 3m cable and 3m work cable

Tech. Code		J6125190
GR75	Euro	(861,00)
Power supply voltage	V	230 single-phase
Power setting MIG	A	30 - 180
Rapp. di intermittenza MIG	A	180 (20%) - 115 (60%) - 90 (100%)
Power setting MMA	A	15 - 180
Rapp. di intermittenza MMA	A	180 (15%) - 95 (60%) - 75 (100%)
Power setting TIG	A	15 - 180
Rapp. di intermittenza TIG	A	180 (25%) - 120 (60%) - 90 (100%)
Max reel size	kg	5
Cable diameter	mm	0,6 ÷ 1,0
Connector size	mm	13

PLASMA CUTTING

SAF-FRO

ITEM: PRESTOJET 25I

Ready to use portable plasma generator. It is supplied with a 2 m power cable with 16A plug, 3m torch and pre-assembled ground cable, air connection kit and cutting torch consumable kit. Robust integrated compressor and external air connection. Suitable for steel, stainless steel, aluminum and all conductive metals

Tech. Code		J613025
GR75	Euro	(2870,00)
Power supply voltage	V	230 single-phase
Power setting	A	10 - 25
Required Air pressure	Bar	6,0
Service Factor		25A/90V (35%) - 20A/88V (60%) - 15A/86V (100%)
Max absorbed power	Kw	3,0
Cutting capacity	mm	10
Dimension	mm	385 x 215 x 480
Weight	kg	18,5

WELDING TORCH TIG

ITEM: WTT2

Torch TIG simple and reliable air-cooled, suitable for most common applications. Equipped with a tap for regulating the gas, it can be used on inverter machines with the TIG LIFT process. High temperature silicone rubber handle. Super flexible high performance cable to facilitate the operator's work.

Tech. Code		J7050110V	J7050135V	J7050135V13
GR75	Euro	(95,80)	(109,70)	(135,00)
Model		WTT2-9	WTT2-17	WTT2-17
Working cycle 40°C		80 A (60%)	100 A (60%)	100 A (60%)
Ø Nozzle	mm	10	10	10
Ø Electrode	mm	1,6	2,0	2,0
Cable	m	4	4	4
Connection		V (conn. 9mm)	V (conn. 9mm)	V (conn. 13mm)

SPARE PARTS FOR TIG TORCHES

ITEM: J7053

Tech. Code	GR75 Euro	Mod. Torch	Image	Description	Type	
J705309A100	2,30	WTT2-9	A	Rear tap	Lungo	2
J705309B16	1,90	WTT2-9	B	Electrode holder	Ø 1,6	3
J705309C16	4,70	WTT2-9	C	Plier holder	Ø 1,6	2
J705309D96	2,20	WTT2-9	D	Nozzle	Ø 9,6	10
J705317A100	2,00	WTT2-17	A	Rear tap	Lungo	2
J705317B20	6,60	WTT2-17	B	Electrode holder	Ø 2,0	3
J705317C20	5,30	WTT2-17	C	Plier holder	Ø 2,0	2
J705317D96	3,10	WTT2-17	D	Nozzel	Ø 9,6	10

SUPPORT FOR TIG TORCHES .

ITEM: J7060

Support with magnetic base for TIG torches. Parking the torch on the support increases the safety of the workstation and facilitates the operator's task

Tech. Code		J7060BASE
GR75	Euro	(20,40)
Description		Support with magnetic base for TIG torches

Indivisible package Suggested retail package - Unit price

TORCHES FOR MIG-MAG WIRE WELDING

ITEM: LGS2-ARIA

Semi-automatic, air-cooled wire welding torches. Cable length 4 m. Rotating handle and extra flexible cable.
Parts subject to wear in compliance with the major European standards.

Tech. Code		J72271504	J72272504	J72273604
GR75	Euro	103,10	136,50	196,90
Model		LGS2-150G	LGS2-250G	LGS2-360G
Work cycle (co_2)		180 A to 60%	230 A to 60%	330 A to 60%
APPLICATION		Thin thickness	Thin thickness - light carpentry	Construction sites - Media carpenterial
Ø Max wire	mm	1,0	1,0	1,2
Contact tip	mm	0,8	1,0	1,2
Conical nozzle	mm	12	15	16

ITEM: LGS2-ACQUA

Semi-automatic water-cooled wire welding torches. Cable length 4 m. Rotating handle and extra flexible cable.
Parts subject to wear conform to the major European standards.

Tech. Code		J72285004
GR75	Euro	266,70
Model		LGS2-505W
Work cycle (CO_2)		500 A al 100%
APPLICATION		Heavy industry - High productivity
Ø Max wire	mm	2,4
Contact tip	mm	1,2
Conical nozzle	mm	16

SPARE PARTS FOR MIG-MAG WIRE TORCH

ITEM: J7230

Tech. Code	GR75 Euro	Mod. Torch	Image	Description	Type	
J7230150A08	9,00	150	A	Contact tip (10pcs)	M6x25 Ø0,8	1
J7230150A10	9,50	150	A	Contact tip (10pcs)	M6x25 Ø1,0	1
J7230150B12	3,10	150	B	Conical nozzle	Ø12,5	5
J7230250A08	8,70	250	A	Contact tip (10pcs)	M6x25 Ø0,8	1
J7230250A10	9,50	250	A	Contact tip (10pcs)	M6x25 Ø1,0	1
J7230250B15	5,50	250	B	Conical nozzel	Ø15	5
J7230360A10	14,40	360/505	A	Contact tip (10pcs)	M8x30 Ø1,0	1
J7230360A12	12,50	360/505	A	Contact tip (10pcs)	M8x30 Ø1,2	1
J7230360B16	6,90	360	B	Conical nozzel	Ø16	5
J7230360CST	8,50	360	C	GAS diffuser (10pcs)	Standard	1
J7230505B16	5,70	505	B	Conical nozzel	Ø16	5
J7230505CST	10,00	505	C	GAS diffuser (10pz)	Standard	1

SUPPORT FOR MIG TORCHES

ITEM: J7240

Support with magnetic base for MIG torches. Parking the torch on the support increases the safety of the workstation and facilitates the operator's task.

Tech. Code		J7240BASE
GR75	Euro	(20,40)
Description		Support with magnetic base for MIG torches

Indivisible package Suggested retail package - Unit price

ELECTRODE WELDING KIT

ITEM: J7020

The kit is supplied in a box and complete with all accessories for electrode welding (MMA). The kit includes: Electrode holder with cable, ground clamp with cable, hammer brush and protective screen in compressed fiber complete with glass

Tech. Code		J702016	J702025
GR75	Euro	(79,00)	(108,60)
Ø Cable	mm²	16	25
Electrode holder cable	m	3	4
Earth cable	m	2	3
Ø Connectors	mm	9	9
Dim. glass	mm	75 x 98	75 x 98

ELECTRODE HOLDER PLIERS

SAF-FRO

ITEM: CAIMAN

Straight-type with electrode-holder jaws, body and lever in cast brass, insulating coating with thermosetting material. The electrodes can be locked in any direction.

Tech. Code		J7215200425	J7215300550
GR75	Euro	17,40	20,40
Amparage	35%	200 A	400 A
Max. electrodes	mm	3,2	5
Cable	Ø mm²	25	50

ITEM: SEGURA

Straight-type with electrode-holder hole, body and lever in cast brass, insulating coating with thermosetting material.

Tech. Code		J7220300425	J7220300550	J7220400670
GR75	Euro	21,20	27,20	29,90
Amparage	35%	300 A	400 A	600 A
Max. electrodes	mm	4	5	6,3
Cable	Ø mm²	35	50	70

GROUND CLAMPS

SACIT

ITEM: J7310

Treated sheet steel body, brass clamp, braided copper shunt between contacts.

Tech. Code		J7310250	J7310300	J7310500
GR75	Euro	10,20	13,50	25,20
Intermitt. ratio	35%	250 A	400 A	500 A
Intermitt. ratio	60%	200 A	300 A	400 A
Cable	Ø mm	25 - 35	50 - 70	70 - 95
Weight	g	215	320	560

GROUND CLAMPS SCREW TYPE

SACIT

ITEM: J7315

Brass body, tilting contact, suitable for fixed positioning.

Tech. Code		J7315400	J7315600
GR75	Euro	22,40	40,20
Intermitt. ratio	35%	400	600
Intermitt. ratio	60%	300	500
Cable	Ø mm²	35 - 50	70 - 95
Weight	g	360	700

SLAG-STRIKING HAMMERS

SACIT

ITEM: J7320

Steel head, iron handle and plastic-coated handle.

Tech. Code		J73201
GR75	Euro	6,30
Length	mm	315
Weight	g	250

ITEM: F9515

Universal manual brushes with brass wires and wooden handle.

Tech. Code		F95155
GR60	Euro	3,58
Steel wire		Steel ø 0,35
Rows		5
Dimension	mm	37 x 290
📦		12

📦 Indivisible package 📦 Suggested retail package - Unit price

CABLE TERMINAL FOR WELDING CABLES

ITEM: J7420

Cable terminal for welding cables nickel-plated brass with 2 hexagonal head screws.

Tech. Code		J742016	J742025	J742035	J742050	J742070
GR75	Euro	2,30	2,60	3,20	3,90	5,60
Cable	Ø mm²	16	25	35	50	70
Capacity	mm	10	10	14	14	16
Tightening screws	n°	2	2	2	2	4

MALE CONNECTORS FOR WELDING CABLES

ITEM: J7430

Male connectors, welding cable junction plug. Insulating coating.

Tech. Code		J7430200	J7430250	J7430300	J7430400
GR75	Euro	4,60	6,50	7,50	9,50
Rep. int. 60%	A	200 A	250 A	315 A	400 A
Cable	Ø mm²	10 - 25	35	50	70
Pin	Ø mm	9	13	13	13

FEMALE CONNECTORS FOR WELDING CABLES

ITEM: J7435

Brass body covered with highly insulating material.

Tech. Code		J7435200	J7435250	J7435300	J7435400
GR75	Euro	6,00	6,80	7,50	8,90
Rep. int. 60%	A	200 A	250 A	315 A	400 A
Cable	Ø mm²	10 - 25	35	50	70
Pin	Ø mm	9	13	13	13

MULTIPURPOSE PLIERS FOR WELDING

ITEM: J7450

Multipurpose pliers specifically designed to facilitate the welder's work. Allows easy installation and removal of MIG torch tips, nozzles and diffusers. Suitable for stripping cables and cutting sheaths. Suitable for the removal of welding spatter.

Tech. Code		J7450000
GR75	Euro	(28,70)
Length	mm	210

MAGNETIC POSITIONERS

ITEM: J7460

Magnetic positioners to hold the pieces to be welded in position. They allow positioning angles of 45 °, 90 ° and 135 ° - Simple to use, available in multiple sizes, they facilitate the positioning and maintenance of the pieces to be welded in the correct position.

Tech. Code		J7460200	J7460300	J7460500
GR75	Euro	(4,80)	(14,40)	(25,20)
Article		PS-2	PS-3	PS-5
A	mm	93	157	200
B	mm	62	93	125
C	mm	62	102	125

SPRING GAS LIGHTERS

ITEM: J7465

Suitable for igniting oxy-gas torches.

Tech. Code		J746501
GR75	Euro	13,24
Equipment		5 flints

HANDLES FOR MODULAR SYSTEM

ITEM: FROVER

Frover handles in one-piece molded brass. Modular system on which various types of lance can be applied. Suitable for supporting welding and brazing from 0.3 to 20 mm, for high-power heating and for cutting up to 200 mm. Taps with stainless steel pin. Removable hose connectors.

Tech. Code		J7620000
GR75	Euro	(186,08)
Hose pipe connectors Ø	mm	6,3 - 8
Hose pipe nut		G3/8"

TAP CUTTING LANCES

ITEM: FROVER H1F

Brass cutting lance compliant with the international standard ISO 5172 which guarantees the greatest resistance to backfire. Mounted on the Frover handle it guarantees power, safety and reliability

Tech. Code		J762390AC	J762390PM
GR75	Euro	215,48	(215,48)
Typology		Acetylene 90 °	Propane-Methane

CUTTING BITS - ACETYLENE

ITEM: H1F AC

Cutting bits model H1F, consisting of an internal part in brass and an external part in copper, make cleaning the tip practical, effective and quick. The exit of the heating flame very close to the central hole of the cut guarantees a more concentrated and effective heating.

Tech. Code		J7625025	J7625050	J7625075	J7625100
GR75	Euro	(33,56)	(33,56)	(33,56)	(33,56)
Cutting thickness	mm	25	50	75	100

CUTTING BITS -PROPANE-METHANE

ITEM: H1F PM

Cutting bits model H1F, consisting of an internal part in brass and external part in copper, make cleaning the bit practical, effective and fast. The exit of the heating flame very close to the central hole of the cut guarantees a more concentrated and effective heating.

Tech. Code		J7627025	J7627050	J7627075	J7627100
GR75	Euro	(35,21)	(35,21)	(35,21)	35,21
Cutting thickness	mm	25	50	75	100

Related products

WORKS SAFETY SHOES

Tech. Code	EU size	US size
K164243	43	10
K164244	44	10,5
K164245	45	11
K164246	46	11,5

Product available in CAP K

Indivisible package Suggested retail package - Unit price

OXYGEN PRESSURE REDUCERS

SAF-FRO

ITEM: EUROFRO

EN ISO 2503. Full-protection covered gauges, ABS shockproof, detachable hose connection for Ø 8 mm pipe with G 3/8 DX nut.

Tech. Code		J77110
GR75	Euro	165,74
Entry scale	bar	200
Exit scale	bar	10
Max. press.	m³/h	35

ACETYLENE PRESSURE REDUCERS

SAF-FRO

ITEM: EUROFRO

EN ISO 2503. Full-protection covered gauges, ABS shockproof, detachable hose connection for Ø 8 mm pipe with G 3/8 SX nut.

Tech. Code		J771401
GR75	Euro	185,98
Entry scale	bar	25
Exit scale	bar	1,5
Max. press.	m³/h	10

PROPANE PRESSURE REDUCERS

SAF-FRO

ITEM: EUROFRO

EN ISO 2503. Full-protection covered gauges, ABS shockproof, detachable hose connection for Ø 8 mm pipe with G 3/8 SX nut.

Tech. Code		J771501
GR75	Euro	164,27
max. output	bar	4
Max. press.	m³/h	10

ARGON PRESSURE REDUCERS WITH FLOW METER

SAF-FRO

ITEM: EUROFRO

EN 13918, double regulation for greater flow stability, with the option of closing the gas without changing the settings. Protection cover, rubber gauge, detachable hose connection for Ø 6 mm pipe with G 1/4 SX nut.

Tech. Code		J771901
GR75	Euro	197,27
max. input	bar	200
Flowmeter scale	L/min	0 - 20

PRESSURE REDUCERS WITH HANDFLOW METER FOR ARGON/CO2

SAF-FRO

NEW

ITEM: EUROFRO

Standard EN ISO 2503. Shockproof ABS protection cap, removable hose connector for Ø6 mm tube with G 1/4 SX nut.

Tech. Code		J772301
GR75	Euro	134,58
Max inlet pressure	bar	200
Flow	l/min	0 - 25

J

SAFETY DEVICE FOR TORCHES

SAF-FRO

ITEM: SECURTOP 662 TF

ISO 5175 Class 1 - EN 730-1. Pressed brass, stops flashbacks and gas.

Tech. Code		J7730OSS	J7730GAS
GR75	Euro	43,03	43,04
Use for		Oxygen	*comb. gas
Threaded coupling		G 3/8 DX	G 3/8 SX
Hose connection ø	mm	8 - 6.3	8 - 6.3

* acetylene, propane, methane

SAFETY DEVICE FOR HOSES

SAF-FRO

ITEM: SECURTOP 662 TT

ISO 5175 Class 1 - EN 730-1. Pressed brass, stops flashbacks and gas.

Tech. Code		J7735OSS	J7735GAS
GR75	Euro	36,67	36,67
Use for		Oxygen	*comb. gas
Hose connection ø	mm	8 - 6.3	8 - 6.3

* acetylene, propane, methane

SAFETY DEVICE FOR REDUCERS

SAF-FRO

ITEM: SECURTOP 665

EN 730-1. Pressed brass, stops flashbacks and gas, sintered stainless device to stop gas flames, high-sensitivity backstop device.

Tech. Code		J7740OSS	J7740GAS
GR75	Euro	55,01	55,01
Use for		Oxygen	*comb. gas
Threaded coupling		G 3/8 DX	G 3/8 SX

* acetylene, propane, methane

RUBBER HOSE FOR ACETYLENE

ITEM: J7810

ISO 3821 - Maximum operating pressure 20 bars. Red colour.

Tech. Code		J7810815A	J7810815B	J7810815C	J7810815D
GR75	Euro	26,00	64,90	129,80	167,20
Dimension	mm	8 x 15	8 x 15	8 x 15	8 x 15
Length	m	10	25	50	100

RUBBER HOSE FOR OXYGEN

ITEM: J7812

ISO 3821 - Maximum operating pressure 20 bars. Light blue colour.

Tech. Code		J7812815A	J7812815B	J7812815C	J7812815D
GR75	Euro	26,00	64,90	129,80	167,20
Dimension	mm	8 x 15	8 x 15	8 x 15	8 x 15
Length	m	10	25	50	100

DOUBLE RUBBER HOSE FOR OXY/ACETYLENE

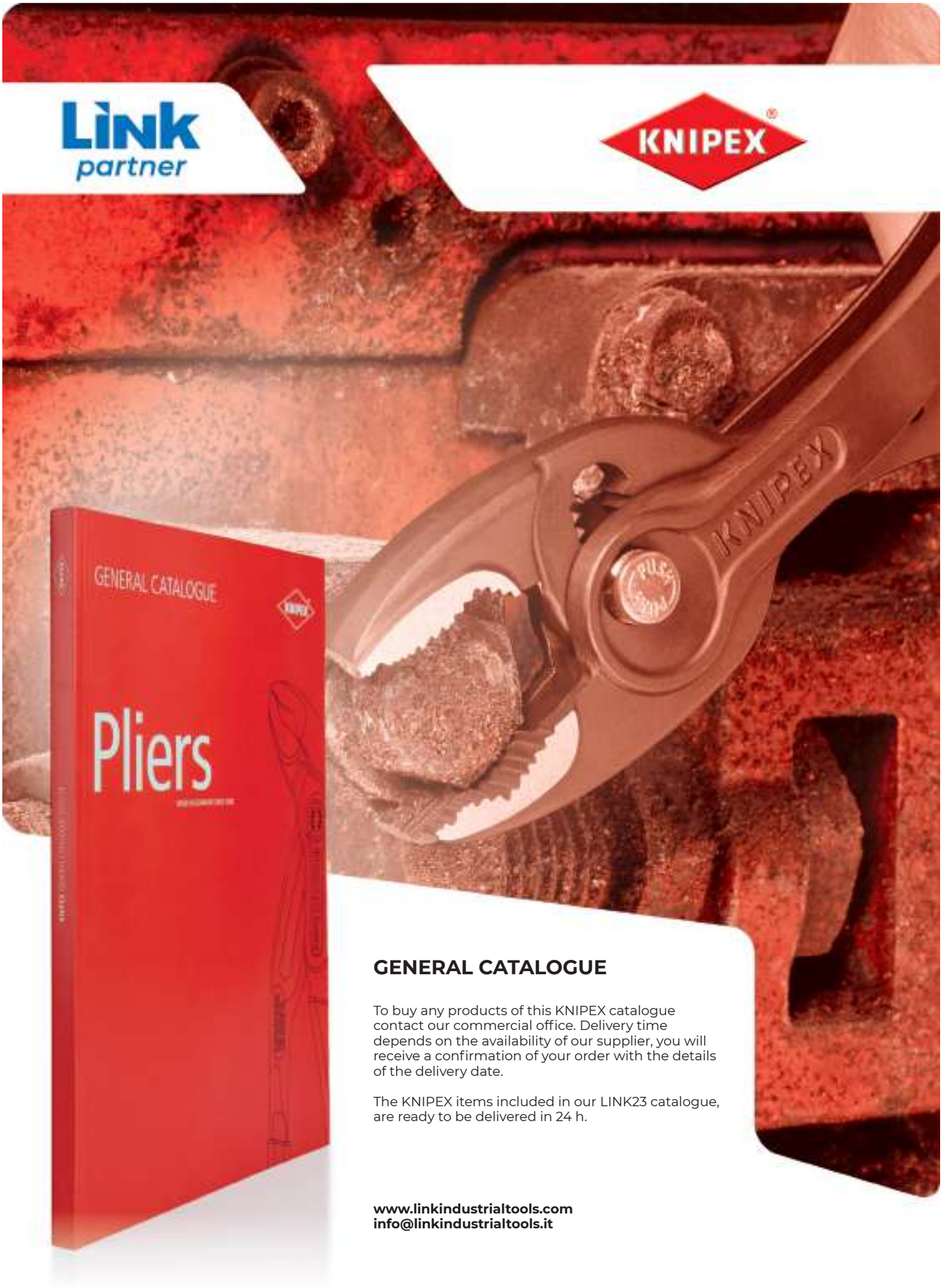
ITEM: J7814

ISO 3821 - Maximum operating pressure 20 bars. Light blue/red colour.

Tech. Code		J7814815A	J7814815B	J7814815C	J7814815D
GR75	Euro	40,90	102,30	204,60	310,20
Dimension	mm	8 x 15	8 x 15	8 x 15	8 x 15
Length	m	10	25	50	100

J

Indivisible package Suggested retail package - Unit price



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RUTILE ELECTRODES FOR CARBON STEEL

SAF-FRO

PDF

ITEM: BLUCORD

Good ignition, fine finish. Suitable for light carpentry work and tank manufacturing.

Tech. Code		J8010020	J8010025	J8010032
GR75	Euro	42,50	61,30	85,10
Ø	mm	2	2.5	3.2
Length	mm	300	300	450
Package	pcs	161	215	130

PDF

ITEM: FRO GREEN

Excellent welding capacity and aesthetics, easily removable slag, low smoke production, suitable for light carpentry.

Tech. Code		J8015020	J8015025
GR75	Euro	114,88	86,11
Ø	mm	2	2.5
Length	mm	300	300
Package	pcs	340	210

BASIC ELECTRODES FOR CARBON STEEL

SAF-FRO

PDF

ITEM: BASICORD A

Universal application, good ignition, suitable for boiler making and shipbuilding. Vacuum packed.

Tech. Code		J8020025	J8020032
GR75	Euro	43,31	47,93
Ø	mm	2.5	3.2
Length	mm	300	400
Package	pcs	90	55

ELECTRODES FOR STAINLESS STEEL

SAF-FRO

PDF

ITEM: SAFINOX R308L

Sliding with low carbon content, suitable for welding austenitic stainless steel to 18Cr-8Ni (AISI 304-304L).

Tech. Code		J8025020	J8025025	J8025032
GR75	Euro	177,00	153,00	167,00
Ø	mm	2	2,5	3,2
Length	mm	300	300	350
Package	pcs	310	190	120

PDF

ITEM: SAFINOX R316L

Sliding with low carbon content, suitable for welding austenitic stainless steel to 18Cr-8Ni-3Mo (AISI 316-304).

Tech. Code		J8030020	J8030025
GR75	Euro	229,00	203,00
Ø	mm	2	2,5
Length	mm	300	300
Package	pcs	310	190

PURE TUNGSTEN ELECTRODES

SAF-FRO

ITEM: WP

Green tip Pure tungsten no oxides added. Excellent arc stability on alternating current (AC) welding. Suitable for welding aluminum, light alloys and magnesium.

Tech. Code		J811316	J811320	J811324	J811332
GR75	Euro	36,12	47,46	76,44	126,56
Ø	mm	1.6	2.0	2,4	3.2
Length	mm	175	150	175	175
Package	Pcs	10	10	10	10

J

Indivisible package Suggested retail package - Unit price

TUNGSTEN ELECTRODES IN LANTHANUM

SAF-FRO

ITEM: WL 20

Blue end, Lanthanum 2%. For use with both DC, for stainless steel, and AC current, for light alloys. Suitable for welding steel and light alloys, good ignition, durability and heat resistance. Effectively replace Thoriated tungsten electrodes contain thorium, a radioactive material.

Tech. Code		J811516	J811520	J811524	J811532
GR75	Euro	40,18	66,64	90,02	149,66
Ø	mm	1.6	2,0	2.4	3.2
Length	mm	175	175	175	175
Package	pcs	10	10	10	10

SOLID WIRE FOR CARBON STEELS

SAF-FRO

ITEM: FILCORD C S/S

Precision layer wound reel ensures continuous unwinding without interruptions caused by wire overlap, suitable for boilermaking, metal furniture manufacturing, railway rolling stock and general metalworking.
Metal basket 300 mm with 180 mm hole.

Tech. Code		J815008	J815010	J815012
GR75	Euro	(115,84)	101,12	94,72
Wire Ø	mm	0.8	1.0	1.2
Weight	kg	16	16	16

SOLID WIRE FOR CARBON STEELS

LINCOLN ELECTRIC

ITEM: ULTRAMAG AWS: ER70S-6

Wire with excellent flow, outstanding welding performance and high productivity. Excellent weldability, stable arc and low spatter.
Typical Application: Automotive, construction, shipbuilding, general manufacturing .
Welding Positions: All except vertical down.
Metal basket 300 mm with 52 mm hole.
Classification: AWS A5.18/A5.18M - ER70S-6 - EN ISO 14341-A - G 46 4 M 3Si1 / G 42 3 C 3Si1.

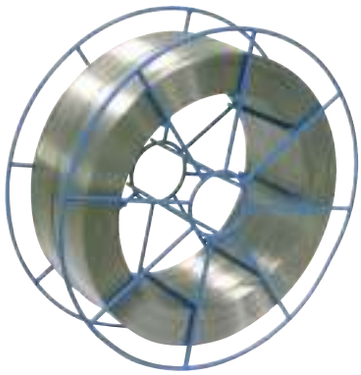
Tech. Code		J815508	J815510	J815512
GR75	Euro	111,36	97,60	88,96
Wire Ø	mm	0.8	1	1.2
Weight	kg	16	16	16

SOLID WIRE FOR STAINLESS STEELS

SAF-FRO

ITEM: FILINOX 308 L SI

Low carbon content, suitable for welding austenitic stainless steels AISI 304-308 and similar.
Metal basket 300 mm with 52 mm hole.



Tech. Code		J816008	J816010
GR75	Euro	(331,36)	310,78
Wire Ø	mm	0.8	1.0
Weight	kg	15	15

J

SOLDERING GUNS 100 W

ITEM: 8100

Expert Soldering Gun with built-in illumination of the solder-.joint and copper soldering tip. All purpose gun, that tackles soldering, cutting, sealing and pyrograph with instant heat through interchangeable tips, this gun is activated with the fingertips and is ready for welding in 7 seconds. Standard equipment: 1 soldering tip.

Complies with the European Safety standards.

Tech. Code		J8200100	J8200PS	J8200PT
GR75	Euro	52,50	4,60	9,30
Power		100 W	Welding tips (2 pieces)	Welding tips (1 piece)
Voltage		230	-	-

While stocks last

80 WATT STYLUS WELDERS

ITEM: 8023C

High quality versatile welder, equipped with 360-degree LED to illuminate the work area in a focused manner. Ergonomic handle and integrated safety rest. Quick replacement of the tips.

Tech. Code		J8208000	J8208S10
GR75	Euro	82,00	36,40
Description		Welder	Screwdriver tip from 10 mm (3pz)
Power	W	80	-
Tension	V	230	-

SOLDERING IRON 120 W

ITEM: SI120

Soldering irons for demanding jobs ideal for professional use, with bent tip,12, 5 mm
Complies with the European Safety standards.

Tech. Code		J821200	J8212PS
GR75	Euro	80,00	19,60
Power		120 W	Welding tips mm 12,5
Voltage		230	-

SOLDERING STATIONS

ITEM: 3023C

Weller precision soldering station with variable power from 5 to 30 Watts. Ergonomic handle, tip cleaner, tip holder and integrated safety holder. 360 degree illumination provides focused and intense light. Easy replacement of the tips.

Tech. Code		J8213000	J8213S4	J8213C08
GR75	Euro	134,00	21,40	21,40
Description		Soldering station	Screwdriver tip from 4 mm (3 PZ)	Conical tip 0,8 mm (3 PZ)
Power	W	5 - 30	-	-
Tension	V	230	-	-

12V BATTERY WELDERS

ITEM: M12 SI-201C

M12 SI-201C battery-powered soldering iron with extremely fast heating time, ready for use in 20 to 30 seconds. 3 head locking positions to work confortably in multiple positions (0°, 45°, 90°). Replaceable tips without tools. The two-colour LED lights up differently: blinking green when the tool is heating up, fixed green when the tool is ready for use and fixed red when the tool is off but the tip is still hot **(do not touch until red LED has gone out)**. Works with all Milwaukee® M12™ batteries.

Supplied with:
- 1 battery 12V da 2,0 Ah + 1 battery charger + carrying case

Tech. Code		J824012
GR64	Euro	(263,00)
Battery capacity	Ah	2
Weight with battery	kg	1,2
Heating power	W	90
Temperature range	°C	400
Battery charging time	min	40
Battery type		Li-ion
Voltage	V	12

Indivisible package Suggested retail package - Unit price

DISSOLDERING PIPES

ITEM: J8250

Tech. Code		J825000
GR75	Euro	26,00
Total length	mm	215

TIN ALLOY AT 50% IN WIRE COILS

ITEM: J8255

Tech. Code		J825510	J825515
GR75	Euro	34,00	34,00
Wire ø	mm	1	1,5
Reel	g	500	500

TIN ALLOY AT 50% IN RODS

ITEM: J8258

The tin is sold in 400 mm rods for a total weight of approximately 1 kg

Tech. Code		J8258400
GR75	Euro	41,20
Rods	mm	400
Weight	kg	approx. 1

CARTRIDGE GAS WELDER

PDF

ITEM: J8260

Piezoelectric ignition, gas preheating to weld even upside down. Supplied without cartridge.

Tech. Code		J826001	J8260R1
GR75	Euro	79,00	14,60
Description		Welder	Cartridge
		-	Propane/butane

J

QUALITY CONTROL OF WELDED JOINTS

SAF-FRO

PDF

ITEM: 1 - FLUXO S190 SOLVENTE

Cleaner for removing oil, dirt, paint, rust, moisture, and miscellaneous residues.
An optimal preventive cleaning in order to allow the penetrating agent to seep in without obstacles, even in the most microscopic crack, is essential for detecting defects.

Tech. Code		J8411400
GR75	Euro	24,46
Package		Spray can
Quantity	ml	500
		12

PDF

ITEM: 2 - FLUXO P125 PENETRANTE

Penetrating product for application on surfaces to be inspected. Applied on wet surfaces, it seeps into gaps by capillary action.

Tech. Code		J8412400
GR75	Euro	24,46
Package		Spray can
Quantity	ml	500
		12

PDF

ITEM: 3 - FLUXO R175 RIVELANTE

The developer absorbs and draws the penetrating agent left over in the gap to the surface, allowing the red colorations to be seen in contrast with the white background.

Tech. Code		J8414400
GR75	Euro	24,35
Package		Spray can
Quantity	ml	500
		12

MOLYBDENUM BISULPHIDE MULTIPURPOSE ANTI-SPATTER

I.TEC

PDF

ITEM: CLEAN WELD

The antispatter CLEAN WELD is a product designed to avoid the seizure between surfaces in contact in the presesence of high temperatures.
CLEAN WELD antispatter is ideal for preventing the adhesion of metal particles to the torch of the wire welders and the surfaces adjacent ot the weld.
CLEAN WELD thanks to its latest generation additives is a valid alternative to graphite and being free from silicones is an excellent product for the lubrication of catenaries for furnaces up to 800 ° C.

Tech. Code		J8435400
GR73	Euro	9,01
Package		Spray can
Quantity	ml	400
		12

Indivisible package Suggested retail package - Unit price

MULTIPURPOSE ANTI-SPATTER

LTEC

PDF

ITEM: SLICK SPRAY

Multi-purpose antispattern SLICK SPRAY is a product that is used in all continuous wire welding and metal working processes in which there are incandescent waste emissions.
SLICK SPRAY guarantees superior safety thanks to the particular totally synthetic base and the absence of solvents. Silicon Free.
The innovative formulation of SLIK SPRAY allows its use even in conditions of high metal slag formation by processing.
The slag at high temperature when it comes into contact with the product does not develop harmful and polluting gases, thus safeguarding the health of the operator.

Tech. Code		J8440400
GR73	Euro	5,12
Package		Spray can
Quantity	ml	400
		12

PDF

ITEM: ANTISPATTER SLICK RTU

Fluid ready to use, economical and ecological. SLICK RTU is a completely synthetic, transparent and solvent-free soldering agent. The product is Silicon free. Applied to areas adjacent to the areas to be welded, it prevents slag and fusion sprays from adhering, facilitating subsequent cleaning steps. SLICK RTU is used in all continuous wire welding, laser cutting and metalworking processes where there are incandescent waste emissions. The particular totally synthetic base and the absence of solvents, allows the use of SLICK RTU even in cases where there is a high formation of slag, in contact with which SLICK RTU does not develop harmful and polluting gases, safeguarding health operator and environment.
METHOD OF USE
SLICK RTU is used as it is using normal sprays.
SLICK RTU is sprayed in the welding torch and on the surfaces involved in laser cutting.

Tech. Code		J844520
GR73	Euro	79,68
Package		Can
Quantity	L	20

PROTECTIVE CERAMIC FOR WELDING

LOCTITE

PDF

ITEM: SF 7900

Ceramic protector without silicon, long-lasting (up to 8 hours before re-application), dry to the touch in seconds. Prevents adhesion of molten metal splashes on threaded guides, torch nozzles and parts to be welded. Very effective on laser and plasma nozzles, eliminates cleaning downtime in automated welding systems with considerable time-savings.

Tech. Code		J8420400
GR72	Euro	43,45
Package		Spray can
Quantity	ml	400
		12

ANTI-ADHESIVE PROTECTIVE FOR WELDING

SAF-FRO

PDF

ITEM: SPRAYMIG H20

Protects torches and welding pieces, prevents adhesion to metallic parts at high temperatures. Ecological silicone-free and dichloromethane, non-flammable.

Tech. Code		J8425400
GR75	Euro	6,54
Package		Spray can
Quantity	ml	400
		12

J

Indivisible package Suggested retail package - Unit price

FACE SHIELDS, SHIELDS AND FILTERS FOR WELDING STANDARD TABLE

EN 166	Specification for construction and performance of eye-protectors
EN 169	Filters for welding and related techniques
EN 170	Ultraviolet filters
EN 171	Infrared filters
EN 172	Solar filters for industrial use
EN 175	Protective Equipment for eyes and face protection during welding and related processes
EN 379	Automatic welding filters
EN 1731	Eyes and face protectors with net

FACE SHIELDS FOR WELDING

ITEM: J8610

Cellulose fiber material with anti-reflective treatment, internal reinforcement, black.
EU standard reference - EN 175.

Tech. Code		J861010
GR75	Euro	14,80
Glass dimensions	mm	75 x 98
Weight	g	320

ITEM: J8612

Thermosetting material, non-flammable fiberglass, black.
EU standard reference - EN 175.

Tech. Code		J861210
GR75	Euro	27,00
Glass dimensions	mm	75 x 98
Weight	g	520

HELMET MASKS FOR WELDING

ITEM: J8616

Helmet mask for welding in polypropylene, colour red.
Supplied without glass.
EU standard reference - EN 175.

Tech. Code		J861610
GR75	Euro	17,20
Glass dimensions	mm	75 x 98
Weight	g	317

HELMET MASKS FOR WELDING WITH LIFTING GLASS-HOLDER

ITEM: J8618

Helmet mask for welding in polypropylene with lifting glass-holder colour red.
Supplied without glass.
EU standard reference - EN 175.

Tech. Code		J861810
GR75	Euro	32,00
Glass dimension	mm	75 x 98
Weight	g	397

Indivisible package Suggested retail package - Unit price

HEADGEAR MASKS

ITEM: J8620

Headgear in thermoplastic material with replaceable sponge sweatband. Special rack and pin system for adjusting the circumference.

Tech. Code		J862011
GR75	Euro	14,20
Description		Replacement headgear for masks - for J8616 / J8618

ELECTRONIC WELDING MASKS

ITEM: EUROONE

Latest generation electronic auto-darkening welding mask. Suitable for a range of welding processes, MMA - MIG - MAG, and grinding.
Solar powered. No batteries required. Adjustable headgear with sweatband.
Included: 2 external protective lenses, 2 internal protective lenses and 1 sweatband.
Compliance: EN379 EN175 EN166

Variable shade: DIN 3.5/9-13
Light to dark switching time 0.06 ms
Arc sensors: 2
Cartridge size: 110 x 90 mm
Viewing area: 4,312 mm²

Tech. Code		J864010
GR75	Euro	146,99
Power supply		Solar powered
Weight	g	490

SPARE PARTS FOR EUROONE MASKS

ITEM: J8641

Tech. Code		J8641A	J8641B	J8641C
GR75	Euro	2,11	(64,30)	(109,38)
Description		Front lenses	Helmet	Auto darkening filter

False

Tech. Code		J8641D	J8641E	J86411
GR75	Euro	1,96	(30,45)	14,10
Description		Internal lenses	Headgear	Sweet band

ELECTRONIC WELDING MASKS

ITEM: TIGER TOP

Electronic masks for high performance welding, suitable for all welding processes. Equipped with a True Colour system that guarantees a true colour vision.
Adjustment of the DIN 5 9/9 13 filter
External control regulation and filter sensitivity
4 dimming sensor, weight 510 g
Dimming time 0.08 ms
EU reference standards EN175 EN379

Tech. Code		J865010	J865012	J865014	J865016
GR75	Euro	258,20	5,80	20,20	31,50
Power supply		Solar cells	-	-	-
SPARE PARTS		-	Glass Int.protection (5pcs)	Glass ext. protection (10pcs)	Cruise for masks

COLOURLESS MINERAL-GLASS FLAT PLATE

ITEM: J8670

Suitable for protecting adiactinic glass in welding masks.
EU standard reference - EN 166 - Colorless, thickness 2 mm

Tech. Code		J86701
GR75	Euro	0,70
Dimension	mm	75 x 98
		10

ADIACTINIC MIRROR GLASS

ITEM: J8672

Chromed surface, suitable for welding masks used.
EU standard reference - EN 169 - Thickness 3 mm

Tech. Code		J867210	J867211	J867212
GR75	Euro	4,70	4,70	4,70
Degree		DIN 10 Light green	DIN 11 Medium green	DIN 12 Dark green
Dimension	mm	75 x 98	75 x 98	75 x 98
		10	10	10

ADIACTINIC GLASS

ITEM: J8675

Suitable for welding masks.
EU standard reference - EN 169 - Thickness 3 mm

Tech. Code		J867509	J867510	J867511	J867512
GR75	Euro	2,50	3,00	3,00	3,10
Degree		DIN 9	DIN 10	DIN 11	DIN 12
Dimension	mm	75 x 98	75 x 98	75 x 98	75 x 98
		10	10	10	10

Indivisible package Suggested retail package - Unit price

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WRK
" smart "
SAFETY GLOVES
CUT C
PROTECTION

WODEX

K0
2 - 7
Clothing wear

WORKS
DIKE

K1
8 - 14
Safety shoes

WRK
Ansell

K2
15 - 25
Safety gloves

K3
26 - 29
Safety overalls and aprons

3M

K4
29 - 38
Safety glasses,
helmets and headphones

3M

K5
39 - 41
Safety masks

Tractel

K6
42 - 44
Safety harnesses

K7
45 - 47
First aid kits

CLOTHING REGULATORY LEGEND STANDARD

EN ISO 13688 - EN 340 - PROTECTIVE CLOTHING - GENERAL REQUIREMENTS

Specifies the general requirements for ergonomics, harmless, size designations, ageing, compatibility and marking of protective clothing and the information to be provided by the manufacturer.

EN ISO 20471 - EN 471 - HIGH VISIBILITY CLOTHING

High visibility clothing able to visually signal the presence of the user in daylight and the light made by vehicles in the dark.

x	Garment class (from 1 to 3)

Minimal sufaces of materials visible	1st CLASS	2nd CLASS	3rd CLASS
Background material	0,14	0,5	0,5
Retroflective material	0,10	0,13	0,13
Combined performance material	0,2	-	-

EN ISO 11612 - PROTECTION AGAINST HEAT AND FLAMES

CAT.	Description
a	Spread of flames (y=Flame spread test method used)
b	Convective heat (from 1 to 3)
c	Radient heat (from 1 to 4)
d	Splashes of molten aluminum (from 1 to 3)
e	Splashes of molten iron (from 1 to 3)
f	Contact heat (from 1 to 3)

EN ISO 11611 - PROTECTIVE CLOTHING FOR WELDING AND RELATED PROCEDURES

x	Protection class
	1- Protection against the least dangerous welding techniques and situations, which produce the lowest levels of splashes and radiant heat
	2 - Protection against the most dangerous welding techniques and situations, which produce the highest levels of splashes and radiant heat
AY	Test method for limited spread of flames
	A1 - Procedure A (Ignition of the surfaces)
	A2 - Procedure B (Ignition of bottom edge)
	A1+A2 - Both precedures

EN 1149 ELECTROSTATIC PROPERTIES

The standard specifies the electrostatic requirements for protective clothing which dissopates electostatic charges, to avoid discharges which can ingnite fires.

IEC / EN 61482-1-2 - PROTECTIVE CLOTHING AGAINST THERMAL EFFECTS OF THE ELECTRIC ARC

1 Class - Effective protection against a 4 Ka for 0.5 seconds
2 Class - Effective protection against a 7 Ka for 0.5 seconds

PROTECTION AGAINST CHEMICAL RISKS

Class	4	5	6
Residence time (min)	>120	>240	>480

Permeation is the process by which a chemical substance passes through the material that makes up a garment at a molecular level.

TIPO 1 - Gas-tightness
TIPO 2 - Non-gas-tightness
TIPO 3 - Sealing of liquids
TIPO 4 - Spraying
TIPO 5 - Dust-tightness
TIPO 6 - Limited liquid splashes

T-SHIRTS

ITEM: WX8000

T-shirt with Wodex logo RAL6018 in 100% cotton 135g/m². Navy blue colour.

Tech. Code	GR67 Euro	Size	EU size
K0670M	7,00	M	48/50
K0670L	7,00	L	52

Tech. Code	GR67 Euro	Size	EU size
K0670XL	7,00	XL	54/56
K0670XXL	7,00	XXL	58/60

Indivisible package Suggested retail package - Unit price

SHORT SLEEVE POLO

ITEM: WX8020

Short sleeve polo shirt made of 100% combed cotton, transparent white buttons.
Weight: Gr. 180 /m²- **Navy blue colour**

Tech. Code	GR67 Euro	Size	EU size
K0671M	20,80	M	48/50
K0671L	20,80	L	52

Tech. Code	GR67 Euro	Size	EU size
K0671XL	20,80	XL	54/56
K0671XXL	20,80	XXL	58/60

CREW NECK SWEATSHIRT

ITEM: WX8040

Crew neck sweatshirt made of 80% cotton - 20% polyester, crossed stitching under the collar with cuffs and knitted bottom in elasticated rib. Weight: Gr. 280 m². **Navy blue colour**

Tech. Code	GR67 Euro	Size	EU Size
K0672M	29,10	M	48/50
K0672L	29,10	L	52

Tech. Code	GR67 Euro	Size	EU Size
K0672XL	29,10	XL	54/56
K0672XXL	29,10	XXL	58/60

SOFTSHELL JACKET

ITEM: WX8060

Softshell jacket in 100% polyester fabric, waterproof and breathable. Anti-pilling fleece interior (reduces the formation of lint) internal mesh lining at the front. Detachable hood with zip, taped zips, a chest pocket with zip and printed pocket shape, two external pockets with zip, one internal wallet pocket with zip, adjustable elastic cuffs with Velcro and polyurethane closure, drawstring at the bottom.
Weight: Gr. 525 /m². **Navy blue colour**

Tech. Code	GR67 Euro	Size	EU size
K0673M	88,40	M	48/50
K0673L	88,40	L	52

Tech. Code	GR67 Euro	Size	EU size
K0673XL	88,40	XL	54/56
K0673XXL	88,40	XXL	58/60

WORK TROUSERS

ITEM: WX8080

Work trousers 100% non-shrink cotton, flap closure with zip and uncovered button, 2 internal front pockets, 1 back patch pocket on the right closed with button, 1 ruler holder, 1 pen holder and 1 side pocket on the left closed with flap and Velcro, elastic in the back waist.
Weight: Gr. 280 m². **Navy blue colour**

Tech. Code	GR67 Euro	Size	EU size
K0674M	35,40	M	48/50
K0674L	35,40	L	52

Tech. Code	GR67 Euro	Size	EU size
K0674XL	35,40	XL	54/56
K0674XXL	35,40	XXL	58/60

WORK OVERALLS

ITEM: WX8100

Work overalls, 100% Sanforized Cotton fabric, including elastic waistband, on the back, two pockets on the sides and two on the chest, both closed with flap and Velcro.
Weight: Gr. 260 m². **Navy blue colour**

Tech. Code	GR67 Euro	Size
K067548	36,40	48
K067550	36,40	50
K067552	36,40	52
K067554	36,40	54

Tech. Code	GR67 Euro	Size
K067556	36,40	56
K067558	36,40	58
K067560	36,40	60
K067562	36,40	62

HIGH VISIBILITY ORANGE VEST - 100% POLYESTER

EN ISO 20471

ITEM: K0595

100% Polyester high-visibility vest Adjustable front opening, velcro closure, 2 EN 471-compliant waist level horizontal reflective stripes extending entirely around the back. One size fits all-Orange colour.

Tech. Code	GR67 Euro	Size
K0595AR	4,95	One size fits all

HIGH VISIBILITY JACKET

ITEM: K0596

High visibility padded polyester jacket with retro-reflective inserts on the chest, sleeves and shoulders. Front zip closure covered by flap with press studs and removable hood. Ergonomically shaped sleeves, adjustable cuffs with velcro with internal knitted cuffs.

Tech. Code	GR67 Euro	Size	EU Size
K0596M	(138,24)	M	48/50
K0596L	(138,24)	L	52

Tech. Code	GR67 Euro	Size	EU Size
K0596XL	(138,24)	XL	54/56
K0596XXL	(138,24)	XXL	58/60

WORKWEAR MULTI-USE SECURITY CATEGORY III

A1 B1 C1 E1 | CLASS 1 A1 | TYPE 6 | CLASS 1

ITEM: K0601

Coveralls with collar, sleeves with elastic cuffs, central opening with zipper covered by list with covered press button studs, two chest pockets and two flap covered pockets on the front with velcro and leg pocket. Fabric:280 g/m² twill (cotton 98% antistatic fiber 2%).

Tech. Code	GR67 Euro	Size
K060148	(76,60)	48
K060150	(76,60)	50
K060152	(76,60)	52
K060154	(76,60)	54
K060156	(76,60)	56

Tech. Code	GR67 Euro	Size
K060158	(76,60)	58
K060160	(76,60)	60
K060162	(76,60)	62
K060164	(76,60)	64

WORKWEAR DUNGAREES - 100% SANFORIZED COTTON

ITEM: K0610

100% Sanforized cotton working dungarees. 100% sanforized cotton dungarees. Weight 270 g/m², shrinkage percentage +/- 2%, suspenders with front adjustment and closing with metal buckles, 1 patch-pocket on bib with zipper closing, 2 patch pockets on the waist, 1 back patch pocket on the right side, 1 rule pocket on right leg side, adjustable elastic waist band, side opening with button closing, front opening with button flap, blue colour.

Tech. Code	GR67 Euro	Size
K061046	25,50	46
K061048	25,50	48
K061050	25,50	50
K061052	25,50	52
K061054	25,50	54

Tech. Code	GR67 Euro	Size
K061056	25,50	56
K061058	25,50	58
K061060	(25,50)	60
K061062	(25,50)	62
K061064	(25,50)	64

WORKWEAR TROUSERS - 100% SANFORIZED MASSAUA COTTON

ITEM: K0615

100% massaua cotton multi-pockets trousers, weight 250 g/m², sanforized, reagent color, flap closing with buttons, two front pockets, a rear stitched pocket, tools pocket on the right leg, elastic on the waist, blue colour.

Tech. Code	GR67 Euro	Size
K061546	21,90	46
K061548	21,90	48
K061550	21,90	50
K061552	21,90	52
K061554	21,90	54

Tech. Code	GR67 Euro	Size
K061556	21,90	56
K061558	21,90	58
K061560	21,90	60
K061562	21,90	62
K061564	21,90	64

WORKWEAR JACKETS - 100% SANFORIZED MASSAUA COTTON

ITEM: K0618

100% massaua cotton jacket, 250 g/m², sanforized, reagent color, middle closing with covered buttons, opened collar, 2 stitched pockets and 1 stitched breast pocket, elastic on the wrists, blue colour.

Tech. Code	GR67 Euro	Size
K061846	23,90	46
K061848	23,90	48
K061850	23,90	50
K061852	23,90	52
K061854	23,90	54

Tech. Code	GR67 Euro	Size
K061856	23,90	56
K061858	23,90	58
K061860	23,90	60
K061862	23,90	62
K061864	23,90	64

WORKWEAR OVERALL COAT - 100% SANFORIZED COTTON

ITEM: K0620

100% sanforized cotton working long coat Weight 270 g/m², shrinkage percentage +/- 2%, 1 small pocket on the chest, 2 patch pockets on the waist, coat collar in double fabric, fastener with buttons and button flap, radial arm construction sleeve, blue colour.

Tech. Code	GR67 Euro	Size
K062046	26,10	46
K062048	26,10	48
K062050	26,10	50
K062052	26,10	52
K062054	26,10	54

Tech. Code	GR67 Euro	Size
K062056	26,10	56
K062058	26,10	58
K062060	26,10	60
K062062	26,10	62
K062064	26,10	64

POLYESTER AND COTTON OVERALL COATS BLUE - WHITE - BLACK

ITEM: K0621

Polyester/cotton coats, 145 g/m², middle closing with covered buttons, opened collar, two stitched pockets and a stitched breast pocket, elastic on the wrists, blue, white, black colour.

Tech. Code	GR67 Euro	Colour	Size
K062146BLU	(33,50)	Blue	46
K062148BLU	(33,50)	Blue	48
K062150BLU	(33,50)	Blue	50
K062152BLU	(33,50)	Blue	52
K062154BLU	(33,50)	Blue	54

Tech. Code	GR67 Euro	Colour	Size
K062156BLU	(33,50)	Blue	56
K062158BLU	(33,50)	Blue	58
K062160BLU	(33,50)	Blue	60
K062162BLU	(33,50)	Blue	62

Tech. Code	GR67 Euro	Colour	Size
K062146BI	(33,50)	White	46
K062148BI	(33,50)	White	48
K062150BI	(33,50)	White	50
K062152BI	(33,50)	White	52
K062154BI	(33,50)	White	54

Tech. Code	GR67 Euro	Colour	Size
K062156BI	(33,50)	White	56
K062158BI	(33,50)	Bianchi	58
K062160BI	(33,50)	Bianchi	60
K062162BI	(33,50)	Bianchi	62

Tech. Code	GR67 Euro	Colour	Size
K062146N	(33,50)	Black	46
K062148N	(33,50)	Black	48
K062150N	(33,50)	Black	50
K062152N	(33,50)	Black	52
K062154N	(33,50)	Black	54

Tech. Code	GR67 Euro	Colour	Size
K062156N	(33,50)	Black	56
K062158N	(33,50)	Neri	58
K062160N	(33,50)	Neri	60
K062162N	(33,50)	Neri	62

FIREPROOF TROUSERS II CAT.

NEW

ITEM: K0701

Fireproof trousers 100% cotton trousers with flap closure with covered buttons and two front welt pockets, one back patch pocket with Velcro flap.
Internal crotch reinforcement and double stitching at the points of greatest effort.
Fabric weight: 295 g/m²
Certifications: UNI EN ISO 13688:2013 - UNI EN ISO 11611:2015 Class 1 A1 - UNI EN ISO 11612:2015 A1B1C1E2F2

Tech. Code	GR67 Euro	Size	Eu size	Colour
K070146	(50,00)	S	46	GREEN
K070148	(50,00)	M	48	GREEN
K070150	(50,00)	M	50	GREEN
K070152	(50,00)	L	52	GREEN
K070154	(50,00)	L	54	GREEN

Tech. Code	GR67 Euro	Size	Eu size	Colour
K070156	(50,00)	XL	56	GREEN
K070158	(50,00)	XL	58	GREEN
K070160	(50,00)	XXL	60	GREEN
K070162	(50,00)	XXL	62	GREEN
K070164	(50,00)	XXXL	64	GREEN

FIREPROOF JACKET II CAT.

NEW

ITEM: K0702

100% fireproof cotton jacket characterized by shirt collar, front closure with covered automatic buttons and elastic cuffs.
It also boasts two chest pockets with hook-and-loop flaps, shoulder reinforcements and double stitching at the points of greatest effort.
Fabric weight: 295 g/m²
Certifications: UNI EN ISO 13688:2013 - UNI EN ISO 11611:2015 Class 1 A1 - UNI EN ISO 11612:2015 A1B1C1E2F2

Tech. Code	GR67 Euro	Size	Eu size	Colour
K070246	(40,00)	S	46	GREEN
K070248	(40,00)	M	48	GREEN
K070250	(40,00)	M	50	GREEN
K070252	(40,00)	L	52	GREEN
K070254	(40,00)	L	54	GREEN

Tech. Code	GR67 Euro	Size	Eu size	Colour
K070256	(40,00)	XL	56	GREEN
K070258	(40,00)	XL	58	GREEN
K070260	(40,00)	XXL	60	GREEN
K070262	(40,00)	XXL	62	GREEN
K070264	(40,00)	XXXL	64	GREEN

Indivisible package Suggested retail package - Unit price

FIREPROOF OVERALLS II CAT.

NEW

ITEM: K0703

100% fire retardant cotton overalls characterized by closed shirt collar, front closure with covered zip, elastic cuffs, rear elastic waist, two chest pockets with Velcro flap. two patch pockets with velcro flap closure.
It also boasts a back pocket with a hook-and-loop flap and internal reinforcement at the crotch and shoulders.
Fabric weight: 295 g/m²
Certifications: UNI EN ISO 13688:2013 - UNI EN ISO 11611:2015 Class 1 A1 - UNI EN ISO 11612:2015 A1B1C1E2F2

Tech. Code	GR67 Euro	Size	Eu size	Colour
K070346	(80,00)	S	46	GREEN
K070348	(80,00)	M	48	GREEN
K070350	(80,00)	M	50	GREEN
K070352	(80,00)	L	52	GREEN
K070354	(80,00)	L	54	GREEN

Tech. Code	GR67 Euro	Size	Eu size	Colour
K070356	(80,00)	XL	56	GREEN
K070358	(80,00)	XL	58	GREEN
K070360	(80,00)	XXL	60	GREEN
K070362	(80,00)	XXL	62	GREEN

FIREPROOF TROUSERS III CAT.

NEW

ITEM: K0704

Trousers in 78% fire retardant cotton, 20% polyester and 2% dissipative carbon fibre. Flap closure with covered buttons, two front welt pockets and elastic waistband.
Double side pocket, one back patch pocket with Velcro flap and internal crotch reinforcement.
Double stitching at stress points.
Fabric weight: 250 g/m²
PPE THIRD Category.

Tech. Code	GR67 Euro	Size	Measurement waste	Colour
K0704S	(55,00)	S	42	BLUE
K0704M	(55,00)	M	46	BLUE
K0704L	(55,00)	L	50	BLUE

Tech. Code	GR67 Euro	Size	Measurement waste	Colour
K0704XL	(55,00)	XL	54	BLUE
K0704XXL	(55,00)	XXL	58	BLUE
K0704XXXL	(55,00)	XXXL	62	BLUE

FIREPROOF JACKET III CAT.

NEW

ITEM: K0705

Jacket in 78% fire retardant cotton, 20% polyester and 2% dissipative carbon fibre.
Composed of shirt collar, front closure with covered snap buttons and elastic cuffs.
Two chest pockets with velcro flap, badge holder, shoulder reinforcement.
Double stitching on stress points.
Fabric weight: 250 g/m²
PPE THIRD Category

Tech. Code	GR67 Euro	Size	Chest measurement	Colour
K0705S	(65,00)	S	51.5	BLUE
K0705M	(65,00)	M	55.5	BLUE
K0705L	(65,00)	L	59.5	BLUE

Tech. Code	GR67 Euro	Size	Chest measurement	Colour
K0705XL	(65,00)	XL	63.5	BLUE
K0705XXL	(65,00)	XXL	65.5	BLUE
K0705XXXL	(65,00)	XXXL	69.5	BLUE

STANDARDS FOR SAFETY FOOTWEAR

EN ISO 20344* **EN 344**	Footwear testing
EN ISO 20345:2022	Safety shoes with toe cap impact resistance up to 200 J and compression resistance 15 kN (CATEGORY S)
EN ISO 20347* **EN 347**	Heavy duty footwear, without protective toe cap (CATEGORY 0)
EN ISO 17249	Cut-resistant chainsaw safety shoes
EN ISO 13287	Slip-resistance testing methods

*** DPI certified starting from 2006**

		CLASSIFICATION						
PERFORMANCE REQUIREMENTS		TYPE I o TYPE II	TYPE I Leather and other materials				TYPE II All-rubber or all-polymeric	
CATEGORIES	**Safety shoes**	**SB**	**S1P**	**S1**	**S2**	**S3**	**S4**	**S5**
	Work shoes	**OB**	**01P**	**01**	**02**	**03**	**04**	**05**
Basic requirements		X	X	X	X	X	X	X
Slip resistance **SR A/B/C***		X	X	X	X	X	X	X
Antistatic quality **A**		0	X	X	X	X	X	X
Heel energy absorption **E**		0	X	X	X	X	X	X
pper: water penetration and water absorption **WRU** (applicable only for type I shoes)		0	0	0	X	X	-	-
Perforation resistance **P**		0	X	0	0	X	0	X
Conductive protection **C**		0	0	0	0	0	0	0
Heat insulation **HI**		0	0	0	0	0	0	0
Cold insulation **CI**		0	0	0	0	0	0	0
Contact heat resistance **HRO**		0	0	0	0	0	0	0
Water resistant **WR** (applicable only for type I shoes)		0	0	0	0	0	-	-
Ankle protection **AN**		0	0	0	0	0	0	0
Cut resistance **CR**		0	0	0	0	0	0	0
Metatarsal protection **M** (applicable only for safety shoes)		0	0	0	0	0	0	0
Chemical resistance **FO** (optional for all work shoes category and for SB category, standard for all other safety shoes categories)		0	X	X	X	X	X	X

*** DPI certified starting from 2006** **X: mandatory requirement** **0: optional requirement**

DEFINITION OF FOOTWEAR REQUIREMENTS

Standard requirements (SB) comprise amongst others:
tear-off, abrasion resistance, water vapour permeability, upper surface and sole resistance to detachment.

Standard requirements (OB) comprise amongst others:
tear-off, abrasion resistance, water vapour permeability, upper surface and sole resistance to detachment.

Slip resistance
the degree of slip resistance is determined by the coefficient of friction on different types of slippery surfaces, tested on both heel and sole.

OPTIONAL REQUIREMENTS

The following requirements are not mandatory for the purpose of footwear certification, yet these are additional necessary requirements for some special footwear applications defined by the manufacturer.

Antistatic property
Capable of dissipating electrostatic charge in a controlled manner therefore reducing the hazard of fire or explosion in workplaces with inflammable and explosive substances. Should some work environments pose the risk of electric shock, additional requirements are paramount. Electric shock resistance properties in footwear may be significantly modified, by flexion, contamination or moisture. While wearing antistatic footwear, soil resistance must be suited to avoid any shoe protection failure and no other insulating element should be added between insole and foot. Should a footbed be added between insole and foot itself, the combination of footwear/footbed and their electric properties must be further tested.

Heel energy absorption
It absorbs impact energy applied to the heel so to reduce risk of long-term negative effects.

Upper shoe: water penetration and absorption
Used in the event of long or repeated contact with water, mud or when exposed to weather conditions. Should contact with water be prolonged and continuous a type II footwear is recommended instead.

Perforation resistance
An anti-perforation insole is added within the sole itself, its size being such as to ensure full protection to the foot.

Conductivity
Used when electric charge needs to be significantly reduced and dissipated as quickly as possible. Shall not be used in the event of electric shock hazard While wearing conductive footwear, soil resistance must be suited to avoid any shoe protection failure and no other insulating element should be added between insole and foot.

Heat insulation
Designed to offer foot protection and insulation against external heat. They must guarantee that the foot remains at a maximum temperature of 22°C for at least 30 minutes when the shoe is in contact with hot ground up to 150°C.

Cold insulation
Indicated when working outdoor and for workers who are exposed to extreme weather conditions, along roadways or in the woods.

Contact heat resistance
They can manage hot surface contact being provided with a specific waffle-pattern outsole for effective protection and insulation results. Nevertheless, tested contact heat resistance is limited to 300°C for 1 minute.

Ankle protection
Designed to protect the worker's ankle against shocks and trauma.

Cut resistance
The bottom of the shoes from sole to a height of 3 cm offer protection against cutting. Their protection level may be compared to that of level 2 cut resistant gloves.

Metatarsal protection
Providing an additional protection to the metatarsal region.

Symbol	Test conditions	Methods	Standard requirements
SRA	Surface: ceramic Lubricant: detergent solution	Heel Flat	0,28 0,32
SRB	Surface: steel Lubricant: glycerin	Heel Flat	0,13 0,18
SRC	SRA + SRB	-	-
SR	Non-slip resistant Floor made of rubber + glycerine	-	-

FOOTWEAR ICONS LEGEND

- 200 joule toe cap
- Oil resistant sole
- Heat resistance by contact
- Safety requirements S1P
- Safety requirements S3L
- Non-slip tread
- Antistatic footwear
- Waterproof upper
- Breathable leather upper
- Safety requirements S1PL
- Safety requirements S5
- Non-slip tread for ceramic+glycerine
- Energy absorbing heel
- Waterproof upper
- Steel midsol
- Safety requirements S3
- Electrostatic discharge protection

SAFETY SHOES

WORKS

S3 SRC

ITEM: RACE 200 MID L59833 OXH

Asphalt colour - Green Acacia. Water-proof Action Nubuck leather uppers, breathable mesh fabric lining, metal-free toe cap with 200 Joule impact protection, anti-perforation fabric anti-perforation insole, absorbent, abrasion resistant, polyurethane sole, non-slip SRC tread, confortable midsole.

Tech. Code	GR67 Euro	EU size	US size
K120138	87,00	38	5.5
K120139	87,00	39	6
K120140	87,00	40	7
K120141	87,00	41	8.5
K120142	86,00	42	9
K120143	87,00	43	10
K120144	87,00	44	10.5
K120145	87,00	45	11
K120146	87,00	46	11.5
K120147	87,00	47	12

S3 SRC

ITEM: RACE 200 L5983 OXH

Asphalt colour - Green Acacia. Water-proof Action Nubuck leather uppers, breathable mesh fabric lining, metal-free toe cap with 200 Joule impact protection, anti-perforation fabric anti-perforation insole, absorbent, abrasion resistant, polyurethane sole, non-slip SRC tread, confortable midsole.

Tech. Code	GR67 Euro	EU size	US size
K120036	80,00	36	4.5
K120037	80,00	37	5
K120038	80,00	38	5.5
K120039	80,00	39	6
K120040	80,00	40	7
K120041	80,00	41	8.5
K120042	80,00	42	9
K120043	80,00	43	10
K120044	80,00	44	10.5
K120045	80,00	45	11
K120046	80,00	46	11.5
K120047	80,00	47	12

SAFETY SHOES

WORKS

S1P SRC

ITEM: RACE 401 L59837 2BL

Asphalt colour. Grey Glace. In anti-scratch and breathable Suede leather uppers, breathable mesh fabric lining, metal free toe cap with 200 Joule impact protection, anti-perforation anti-perforation fabric insole, absorbent, abrasion resistant, polyurethane sole, non-slip SRC tread, midsole comfortable.

Tech. Code	GR67 Euro	EU size	US size
K120336	73,00	36	4.5
K120337	73,00	37	5
K120338	73,00	38	5.5
K120339	73,00	39	6
K120340	73,00	40	7
K120341	73,00	41	8.5
K120342	73,00	42	9
K120343	73,00	43	10
K120344	73,00	44	10.5
K120345	73,00	45	11
K120346	73,00	46	11.5
K120347	73,00	47	12

S1P SRC

ITEM: RACE 250 L59834 OXH

Colour Asphalt - Green Acacia. In anti-scratch breathable Suede leather uppers, breathable mesh fabric lining, metal free toe cap with 200 Joule impact protection, anti-puncture insole anti.perforation fabric, absorbent, abrasion resistant, polyurethane sole, non-slip SRC tread, comfortable midsole.

Tech. Code	GR67 Euro	EU size	US size
K120236	73,00	36	4.5
K120237	73,00	37	5
K120238	73,00	38	5.5
K120239	73,00	39	6
K120240	73,00	40	7
K120241	73,00	41	8.5
K120242	73,00	42	9
K120243	73,00	43	10
K120244	73,00	44	10.5
K120245	73,00	45	11
K120246	73,00	46	11.5
K120247	73,00	47	12

Indivisible package Suggested retail package - Unit price

SAFETY SHOES

WORKS

S1P SRC

ITEM: HIT 400 ESD 211779 5AI

Acacia Green colour. Leather uppers in Ripstop fabric, toe in technical microfiber with high resistance to scrathces and tears with breathable mesh fabric lining. Aluminum toecap and insole in anti-perforation, absorbent, abrasion-resistant fabric, anti-static polyurethane sole, anti-slip tread and comfortable and anti-shock midsole.

Tech. Code	GR67 Euro	EU size	US size
K120836	97,00	36	4.5
K120837	97,00	37	5
K120838	97,00	38	5.5
K120839	97,00	39	6
K120840	97,00	40	7
K120841	97,00	41	8.5
K120842	97,00	42	9
K120843	97,00	43	10
K120844	97,00	44	10.5
K120845	97,00	45	11
K120846	97,00	46	11.5
K120847	97,00	47	12

S3 SRC

ITEM: RACE 900 S3 L59839 2AZ

Colour Black - Asphalt, in water-proof pigmented leather uppers, lining in breathable mesh fabric, metal-free toe cap with 200 joule impact protection, anti-intrusion insole in anti-perforation fabric, absorbent, abrasion resistant, polyurethane sole, non-slip SRC tread, comfortable midsole.

Tech. Code	GR67 Euro	EU size	US size
K120436	67,00	36	4.5
K120437	67,00	37	5
K120438	67,00	38	5.5
K120439	67,00	39	6
K120440	67,00	40	7
K120441	67,00	41	8.5
K120442	67,00	42	9
K120443	67,00	43	10
K120444	67,00	44	10.5
K120445	67,00	45	11
K120446	67,00	46	11.5
K120447	67,00	47	12

S1P SRC

ITEM: RING 400 S1P 213038 5AH

Cool Gray 9C colour. In anti-scratch split leather uppers and breathable fabric, lining in breathable mesh fabric, steel toe cap with 200 Joule impact protection and 1500Kg compression protection, anti-intrusion insole in anti-perforation, absorbent, abrasion-resistant and flaking fabric. Antistatic polyurethane sole, non-slip SRC tread and resistant to abrasion and hydrocarbons. Comfortable and anti-shock midsole.

Tech. Code	GR67 Euro	EU size	US size
K121136	63,00	36	4.5
K121137	63,00	37	5
K121138	63,00	38	5.5
K121139	63,00	39	6
K121140	63,00	40	7
K121141	63,00	41	8.5
K121142	63,00	42	9
K121143	63,00	43	10
K121144	63,00	44	10.5
K121145	63,00	45	11
K121146	63,00	46	11.5
K121147	63,00	47	12

SAFETY SHOES

WORKS

S3 SRC ESD

ITEM: HIT 200 ESD 211871 5AK

Asphalt colour. in water-proof and tear resistant Nubuk leather uppers, tip in high-tech microfibre with high resistance to scratches and laceration with breathable mesh fabric lining. Aluminium tip with ample internal space for better toe comfort, impact protection and compression. Anti-perforation fabric insole, absorbent, abrasion-resistant, dual-density anti-static polyurethane sole with electrostatic dissipation capacity, anti-slip SRC tread, comfortable midsole and anti-shock.

Tech. Code	GR67 Euro	EU size	US size
K120636	107,00	36	4.5
K120637	107,00	37	5
K120638	107,00	38	5.5
K120639	107,00	39	6
K120640	107,00	40	7
K120641	107,00	41	8.5
K120642	107,00	42	9
K120643	107,00	43	10
K120644	107,00	44	10.5
K120645	107,00	45	11
K120646	107,00	46	11.5
K120647	107,00	47	12

S3 SRC

ITEM: RACE 900 S3 MID L59840 2AZ

Colour Black - Asphalt. In water-proof pigmented leather uppers, lining in breathable mesh fabric, metal-free toe cap with 200 Joule impact protection, anti-intrusion insole in anti-perforation fabric, absorbent, abrasion resistant, polyurethane sole, non-slip SRC tread, comfortable midsole.

Tech. Code	GR67 Euro	EU size	US size
K120538	73,00	38	5.5
K120539	73,00	39	6
K120540	73,00	40	7
K120541	72,00	41	8.5
K120542	73,00	42	9
K120543	73,00	43	10
K120544	73,00	44	10.5
K120545	73,00	45	11
K120546	73,00	46	11.5
K120547	73,00	47	12

S3 SRC

ITEM: RING 200 S3 213037 5AH

Colour Cool Grey 9C. Water proof and tear resistant Nubuck leather uppers and collar in abrasion resistant fabric, lining in breathable mesh fabric, steel toe cap with 200 Joule impact protection and 1500 kg compression protection. Anti-intrusion insole in anti-perforation, absorbent, resistant to abrasion and flaking. Antistatic polyurethane sole, non-slip SRC tread and resistant to abrasion and hydrocarbons. Comfortable and anti-shock midsole.

Tech. Code	GR67 Euro	EU Size	US size
K121036	67,00	36	4.5
K121037	67,00	37	5
K121038	67,00	38	5.5
K121039	67,00	39	6
K121040	67,00	40	7
K121041	67,00	41	8.5
K121042	67,00	42	9
K121043	67,00	43	10
K121044	67,00	44	10.5
K121045	67,00	45	11
K121046	67,00	46	11.5
K121047	67,00	47	12

SAFETY SHOES

WORKS

S1PL SR

ITEM: JUMP 500 II S1PL

Footwear with external TPU toe cap for maximum comfort and abrasion resistance. New insole in anatomical polyethylene + EVA, extra comfort on the heel and forefoot.
Upper color blue, in oiled nubuk leather of the highest quality. Bi-density polyurethane sole with deep lugs for excellent grip on hard and soft ground, resistant to hydrocarbons. Lining. Air Mesh with microfiber anti-slip, ALcap (aluminium) toe cap that resists up to 200 joules of compression.

Tech. Code	GR67 Euro	EU size	US size
K162039	107,00	39	6
K162040	107,00	40	7
K162041	107,00	41	8.5
K162042	107,00	42	9
K162043	107,00	43	10
K162044	107,00	44	10.5
K162045	107,00	45	11
K162046	107,00	46	11.5
K162047	107,00	47	12

SAFETY SHOES

WORKS

NEW

S1PL SR

ITEM: JUMP 550 II S1PL

Footwear with external TPU toe cap for maximum comfort and abrasion resistance. New insole in anatomical polyethylene + EVA, extra comfort on the heel and forefoot.
Upper color black, in oiled nubuk leather of the highest quality. Bi-density polyurethane sole with deep lugs for excellent grip on hard and soft ground, resistant to hydrocarbons. Lining. Air Mesh with microfiber anti-slip, ALcap (aluminium) toe cap that resists up to 200 joules of compression.

Tech. Code	GR67 Euro	EU size	US size
K162138	113,00	38	5.5
K162139	113,00	39	6
K162140	113,00	40	7
K162141	113,00	41	8.5
K162142	113,00	42	9
K162143	113,00	43	10
K162144	113,00	44	10.5
K162145	113,00	45	11
K162146	113,00	46	11.5
K162147	113,00	47	12

S1P SRC

ITEM: HIT 425 S1P 215058 7BV

Colour Snorkel Blue - Silver. Upper in highly breathable 3D Mesh fabric, toe in technical microfiber with high resistance to scratches and tears. Breathable mesh fabric lining, Aluminum toe cap with 200 Joule impact protection, anti-intrusion insole in anti-perforation absorbent abrasion-resistant fabric, polyurethane sole, non-slip SRC tread, comforable midsole.

Tech. Code	GR67 Euro	EU size	US size
K164238	97,00	38	5.5
K164239	97,00	39	6
K164240	97,00	40	7
K164241	97,00	41	8.5
K164242	97,00	42	9
K164243	97,00	43	10
K164244	97,00	44	10.5
K164245	97,00	45	11
K164246	97,00	46	11.5
K164247	97,00	47	12

S3 SRC

NEW

ITEM: HIT 250 S3 WR CI SRC HDRY

Certified footwear W, breathable thanks to the special HDRY membrane. It also offers total insulation from the cold (CI). Nubuck leather synonymous with quality and wear resistance.
Aluminum toe cap, 200 J protection. Toe reinforcement in technical microfibre with high abrasion resistance. Multi Protection Flexible anti-puncture insole. Tread: high density, SRC anti-slip, resistant to abrasion and hydrocarbons.

Tech. Code	GR67 Euro	Eu size	US size
K162238	126,00	38	5.5
K162239	126,00	39	6
K162240	126,00	40	7
K162241	126,00	41	8.5
K162242	126,00	42	9
K162243	126,00	43	10
K162244	126,00	44	10.5
K162245	126,00	45	11
K162246	126,00	46	11.5
K162247	126,00	47	12

S1P SRC

ITEM: STREET

Grey/yellow colour. Leather uppers in suede and synthetic material, highly breathable fabric combined with anti-slip micro fabric lining. Insole in PU expanded + EVA. Rubber/EVA sole and high-flexibility zero perforation midsole. Composite FLYcap toe.

Tech. Code	GR67 Euro	EU size	US size
K164038	88,00	38	5.5
K164039	88,00	39	6
K164040	88,00	40	7
K164041	88,00	41	8.5
K164042	88,00	42	9
K164043	88,00	43	10
K164044	88,00	44	10.5
K164045	88,00	45	11
K164046	88,00	46	11.5
K164047	88,00	47	12

S3L SR

NEW

ITEM: JUMP 350 II S3L

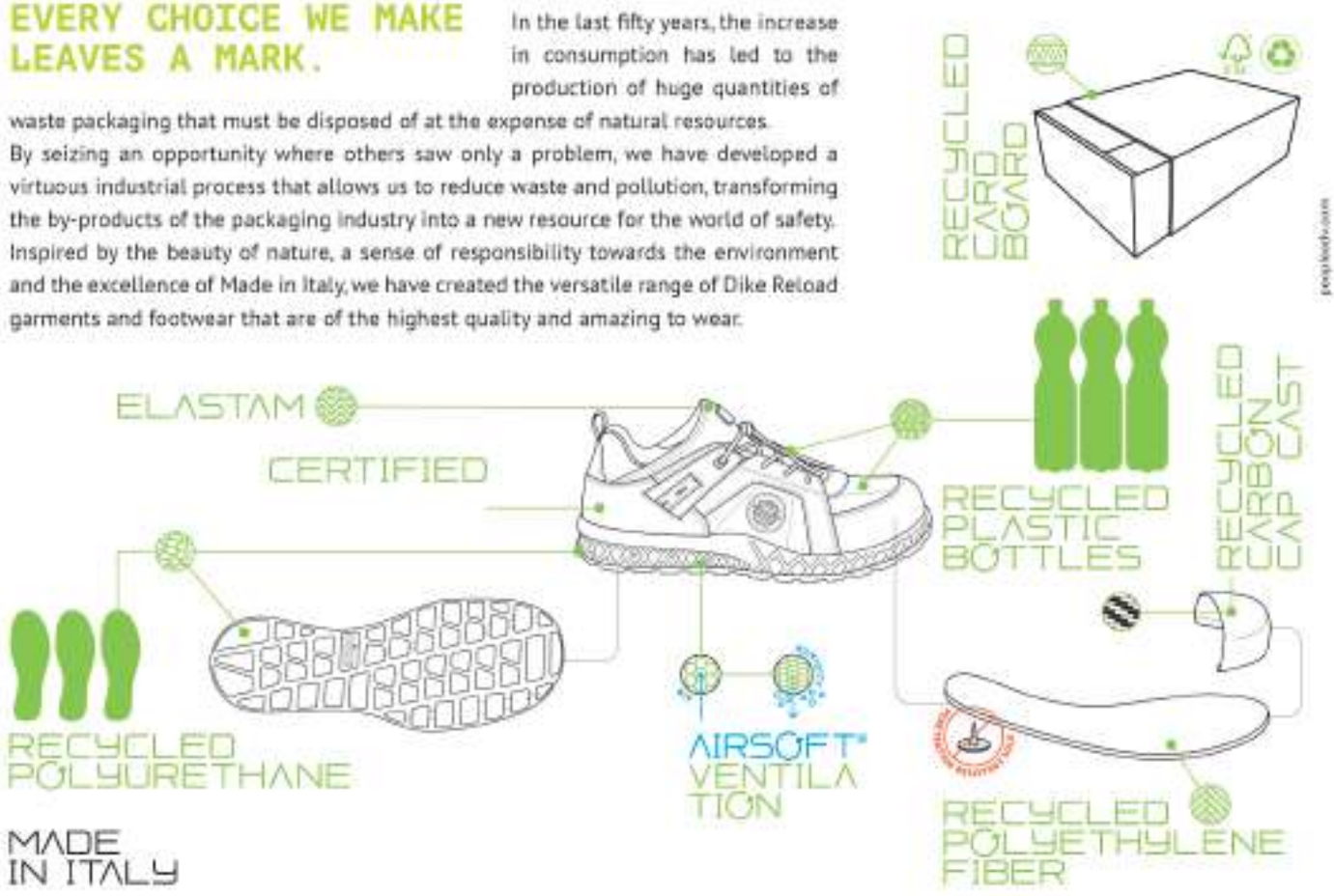
Footwear with external TPU toe cap for maximum comfort and abrasion resistance. New insole in anatomical polyethylene + EVA, extra comfort on the heel and forefoot.
Upper colour major brown, in oiled nubuk leather of the highest quality. Bi-density polyurethane sole with deep lugs for excellent grip on hard and soft ground, resistant to hydrocarbons. Lining. Air Mesh with microfiber anti-slip, ALcap (aluminium) toe cap that resists up to 200 joules of compression.

Tech. Code	GR67 Euro	Eu size	US size
K162338	120,00	38	5.5
K162339	120,00	39	6
K162340	120,00	40	7
K162341	120,00	41	8.5
K162342	120,00	42	9
K162343	120,00	43	10
K162344	120,00	44	10.5
K162345	120,00	45	11
K162346	120,00	46	11.5
K162347	120,00	47	12

K

EVERY CHOICE WE MAKE LEAVES A MARK.

In the last fifty years, the increase in consumption has led to the production of huge quantities of waste packaging that must be disposed of at the expense of natural resources.
By seizing an opportunity where others saw only a problem, we have developed a virtuous industrial process that allows us to reduce waste and pollution, transforming the by-products of the packaging industry into a new resource for the world of safety.
Inspired by the beauty of nature, a sense of responsibility towards the environment and the excellence of Made in Italy, we have created the versatile range of Dike Reload garments and footwear that are of the highest quality and amazing to wear.



SAFETY SHOES

DIKE

NEW

S3 SRC

ITEM: GLIDER

Tumbled Nubuck uppers, Solidbreath® High performance lining, made with a special "open-pore" fabric that eliminates "stale" air and humidity while walkig. The very high grip sole, made in PU-PU, Aluforce® toe cap in cast aluminium, ultra light and highly resistant. Highsafe-Tex® special high density anti-perforation insole. Made with an innovative material and stitched to the upper, it guarnatees the highest standard of protection.

Tech. Code	GR67 Euro	Eu size	US size
K170938	120,00	38	5
K170939	120,00	39	6
K170940	120,00	40	7
K170941	120,00	41	8
K170942	120,00	42	8.5
K170943	120,00	43	9
K170944	120,00	44	10
K170945	120,00	45	11
K170946	120,00	46	11.5
K170947	120,00	47	12

SAFETY SHOES

DIKE

S1P SRC

ITEM: CYCLON CROSS

Suede calfskin leather uppers, sole characterized by extreme lightness, flexibility and thrust capacity. Toe cap in cast aluminum, ultra light and highly resistant. Highsafe-Tex® anti-puncture insole with high density, resistant and flexible. Solid breath lining that eliminates "stale" air and humidity while walking. Energy absorption in the heel area.

Made in Italy

Tech. Code	GR67 Euro	EU size	US size
K170238	98,00	38	5
K170239	98,00	39	6
K170240	98,00	40	7
K170241	98,00	41	8
K170242	98,00	42	8.5
K170243	98,00	43	9
K170244	98,00	44	10
K170245	98,00	45	11
K170246	98,00	46	11.5
K170247	98,00	47	12

S3 SRC

ITEM: AGILITY ADVANCE

Nubuck leather uppers, high performance lining (Solidbreath®). Extremely light and resistant PU-PU sole, expanded PU midsole, ultra-light toe cap in cast aluminum (Aluforce®), resistant and flexible high-density anti-puncture insole (Highsafe-tex®), removable anatomic EVA insole.

Made in Italy

Tech. Code	GR67 Euro	EU size	US size
K168138	106,00	38	5
K168139	106,00	39	6
K168140	106,00	40	7
K168141	106,00	41	8
K168142	106,00	42	8.5
K168143	106,00	43	9
K168144	106,00	44	10
K168145	106,00	45	11
K168146	106,00	46	11.5
K168147	106,00	47	12

S3 SRC

NEW

ITEM: SUMMIT SUPERB

Full grain nappa leather uppers buffed wax oiled natural pull up Solidbreath® High performance lining, made with a special "open-pore" fabric that eliminates "stale" air and humidity while walking. The tread is designed to accompany you safely on any type of terrain, the Dirty Stop® blocks designed to quickly evacuate liquids and mud. Aluforce toe cap in cast aluminium, ultra light and highly resistant. Highsafe-Tex® special high density antio-perforation insole.

Tech. Code	GR67 Euro	Eu size	US size
K171138	113,00	38	5
K171139	113,00	39	6
K171140	113,00	40	7
K171141	113,00	41	8
K171142	113,00	42	8.5
K171143	113,00	43	9
K171144	113,00	44	10
K171145	113,00	45	11
K171146	113,00	46	11.5
K171147	113,00	47	12

S3 SRC

NEW

ITEM: SUMMIT SUPERB H

Upper in full grain vintage tumbled greased pull-up nappa leather, Solidbreath® High performance lining, made with a special "open-pore" fabric that eliminates "stale" air and humidity while walking. The tread is designed to accompany you safely on any type of terrain, the Dirty Stop® blocks designed to quickly evacuate liquids and mud. Aluforce® toe cap in cast aluminium, ultra light and highly resistant. Highsafe-Tex® special high density anti-perforation insole.

Tech. Code	GR67 Euro	EU size	US size
K171238	120,00	38	5
K171239	120,00	39	6
K171240	120,00	40	7
K171241	120,00	41	8
K171242	120,00	42	8.5
K171243	120,00	43	9
K171244	120,00	44	10
K171245	120,00	45	11
K171246	120,00	46	11.5
K171247	(120,00)	47	12

S3 SRC ESD

ITEM: RELOAD S3

Upper in recycled/recyclable Pet fabric calfskin with natural suede inserts, Solidbreath® lining and compact PU sole with green recycled inserts. The midsole is in expanded PU with Aluforce® toe cap and anti-perforation insole in breathable agglomerated felt in PET recycled polyethylene fiber. Anatomic removable GRS foam footbed entirely recycled.

Made in Italy

Tech. Code	GR67 Euro	EU size	US size
K170838	102,00	38	5
K170839	102,00	39	6
K170840	102,00	40	7
K170841	102,00	41	8
K170842	102,00	42	8.5
K170843	102,00	43	9
K170844	102,00	44	10
K170845	102,00	45	11
K170846	102,00	46	11.5
K170847	102,00	47	12

K

Indivisible package Suggested retail package - Unit price

SAFETY SHOES

S1P SRC ESD

ITEM: RELOAD

Upper leathers in recycled/recyclable PET fabric calfskin with natural suede inserts, Solidbreath® lining and compact PU sole with green recyled inserts, The midsole is in expanded PU with Aluforce® toe cap and anti-puncture insole in breathable agglomerated felt in PET recycled polyethylene fiber. Anatomic removable GRS foam insole entirely recycled.

Made in Italy

Tech. Code	GR67 Euro	EU size	US size
K170738	105,00	38	5
K170739	105,00	39	6
K170740	105,00	40	7
K170741	105,00	41	8
K170742	105,00	42	8.5
K170743	105,00	43	9
K170744	105,00	44	10
K170745	105,00	45	11
K170746	105,00	46	11.5
K170747	105,00	47	12

PROTECTIVE PVC BOOTS

S5 SRC

ITEM: K1740

PVC boots with steel toe cap and midsole, black sole, non-slip and resistant to hydrocarbons.

Tech. Code	GR67 Euro	EU size	US size
K174041	32,00	41	8
K174042	32,00	42	8.5
K174043	32,00	43	9
K174044	32,00	44	10
K174045	32,00	45	11
K174046	32,00	46	11.5

S1P SRC ESD

ITEM: RAVING 26016/804

Drummed suede calf leather uppers, high-performance lining (Solidbreath®), made in open-pore fabric to vent stuffy air and humidity while walking for dry, healthier feet. Compact PU sole, midsole in expanded PU, ultralight cast aluminum toe cap (Aluforce®), anti-perforation highly resistant and flexible (Highsafe-tex®), high-density insole, EVA anatomically shaped, removable footbed.

Made in Italy

Tech. Code	GR67 Euro	EU size	US size
K171538	94,00	38	5
K171539	94,00	39	6
K171540	94,00	40	7
K171541	94,00	41	8
K171542	94,00	42	8.5
K171543	94,00	43	9
K171544	94,00	44	10
K171545	94,00	45	11
K171546	94,00	46	11.5
K171547	94,00	47	12

S3 SRC

ITEM: K1730

High shoes for welders in waterproof leather uppers with flap in Alfaliscio, transpiration lining, composite toe cap, foil fabric midsole kevlar. Removable antistatic insole, PU/PU polyurethane sole antistatic dual density SRC, slipping resistant, oils and hydrocarbons resistant, with energy absorption in heel area.

Tech. Code	GR67 Euro	EU size	US size
K173041	79,00	41	8
K173042	79,00	42	8,5
K173043	79,00	43	9
K173044	79,00	44	10
K173045	79,00	45	11
K173046	79,00	46	11,5

S1P SRC ESD

NEW

ITEM: RANKING RELOAD

In GRS fabric upper and recyclable suede calfskin with PU film inserts, Solidbreath® lining and compact PU sole with green recycled inserts. The midsole is in PU foam with 100% recyclable aluminum toe cap and Highsafe-tex® anti-puncture insole. Removable anatomical recycled EVA footbed.

Tech. Code	GR67 Euro	EU size	US size
K171638	113,00	38	5
K171639	113,00	39	6
K171640	113,00	40	7
K171641	113,00	41	8
K171642	113,00	42	8.5
K171643	113,00	43	9
K171644	113,00	44	10
K171645	113,00	45	11
K171646	113,00	46	11.5
K171647	113,00	47	12

OVERSHOE WITH INTERGRATED SAFETY TIP

ITEM: K1645

Overshoe with Intergrated safety in PVC/rubber.Tip in steel, adjustable rear strap. Packaging in pairs in a practical bag.
Measurement S: from 34 to 38 with green tip.
Measurement M: from 39 to 43 with yellow tip.
Measurement L: from 44 to 50 with red tip..

Tech. Code	GR67 Euro	EU size	US size
K1645S	71,00	34 - 38	2,5 - 5
K1645M	71,00	39 - 43	6 - 9
K1645L	71,00	44 - 50	10 - 15

Indivisible package Suggested retail package - Unit price

GLOVES
STANDARD LEGEND

abcdef

EN 407 - THERMAL RISKS

Protective gloves against one or more of the following: fire, contact heat, convective heat, radiant heat, small splashes or large projections of molten metal.

a	Fire behaviour (level 0 to 4)
b	Contact heat (level 0 to 4)
c	Convective heat (level 0 to 4)
d	Radiant heat (level 0 to 4)
e	Small splashes of molten metal (level 0 to 4)
f	Large projections of molten metal (level 0 to 4)
0	The gloves did not pass the specific test
X	The gloves have not been tested

Performance	Contact temperature
1	100°C
2	250°C
3	350°C
4	500°C

EN 1082-1 - GLOVES AND SLEEVES AGAINST CUTS CAUSED BY HAND KNIVES

Particularly suitable for use with hand knives in the meat processing industry, large-scale catering and manual boning of meat. Suitable for people working with hand knives in industry.

EN 374 - PROTECTIVE GLOVES AGAINST MICRO-ORGANISMS

Protective gloves against chemicals and/or micro-organisms.

EN 374-1	Terminology and performance requirements
EN 374-2	Penetration resistance
EN 374-3	Permeation resistance
EN 374-4	Resistance to degradation

WATER-RESISTANT, LOW CHEMICAL PROTECTION GLOVES

The EN ISO version of the standard introduces the notion of three types of chemical protective gloves:

EN/ISO 374-1:2016/Type A

Type **A** gloves have achieved level 2 or higher against **six** of the chemicals listed in EN ISO 374-1 (see table on TESTING CHEMICALS). As a minimum, the six tested chemicals must be identified by their code letters under the pictogram.

EN/ISO 374-1:2016/Type B

Type **B** gloves have achieved level 2 or higher against at least **three** of the chemicals listed in EN ISO 374-1. Tested chemicals must be identified by their code letter in the pictogram.

EN/ISO 374-1:2016/Type C

Type **C** gloves shall have achieved at least level 1 against **one** of that chemical listed in EN ISO 374-1. For each of the three categories, reference shall be made to EN 374-1 and the type of glove shall be listed. If chemicals not listed in EN ISO 374-1 have also been tested, these may be detailed in the instructions for use.

Gloves tested for penetration resistance only, for use with non-hazardous chemicals.

PROTECTIVE GLOVES AGAINST CHEMICAL AGENTS

The time between the initial application of a test chemical to the outer surface of the glove material and its subsequent appearance on the other side is the breakthrough time.

Permeation index	Passage time (min)
1	>10
2	>30
3	>60
4	>120
5	>240
6	>480

abcdef

EN 388 : 2016 - MECHANICAL RISKS

Protective gloves against mechanical risks, abrasion, cutting by blade, laceration and perforation.

With the new standard, new tests have been introduced that improve the effectiveness of the standard, one of which is the shear strength test.
The test consists of a continuous change of blade which allows the real cutting assessment to be made compared to previous tests.
The real cut rating therefore changes from a definition in 5 levels expressed in numbers to a rating in Newtons expressed in 6 letters (from A to F).

Performance	1	2	3	4	5
a - Abrasion (cycles)	100	500	2000	8000	-
b - Blade cutting	1.2	2.5	5	10	20
c - Tear (N)	10	25	50	75	-
d - Perforation (N)	20	60	100	150	-
e - EN ISO cutting (level A to F)					
f - Impact					

The new EN 13594:2015 test allows the declaration of impact protection at the joints and fingers. If the glove passes the test, the letter P is added after the five letters of the pictogram.

Shear strength test	Applied force (N)
Liv. A	2
Liv. B	5
Liv. C	10
Liv. D	15
Liv. E	22
Liv. F	30

Where X is indicated it means that the test is not relevant for that type of resistance.

PROTECTIVE GLOVES AGAINST MICRO-ORGANISMS

Gloves that resist penetration, when tested according to EN 374-3, provide an effective barrier against fungi and bacteria, not viruses.

TESTING CHEMICALS

	Product	Class
A	Methanol	Primary alcohol
B	Acetone	Ketone
C	Acetonitrile	Nitrile compound
D	Dichloromethane	Chlorinated paraffin
E	Carbon disulphide	Sulphur containing organic compound
F	Toluene	Aromatic hydrocarbon
G	Diethylamine	Amina
H	Tetrahydrofuran	Compound of electrocyclic and ether
I	Ethyl acetate	External
J	n-heptane	Saturated hydrocarbon
K	Sodium hydroxide 40%	Inorganic base
L	Sulphuric acid 96%	Inorganic mineral acid
M	Nitric Acid 65%	Mineral Acid
N	Acetic acid 99%	Organic Acid
O	Ammonia 25%	Organic Base
P	Hydrogen peroxide 30%	Peroxide
S	Hydrofluoric acid 40%	Inorganic mineral acid
T	Formaldehyde 37%	Aldehyde

VIRUS

EN ISO 374-5 VIRUS

An additional viral penetration test must be carried out for protection against viruses. If the gloves pass this additional test, the word 'Virus' is added under the pictogram.

SELECTION AND LEGEND OF GLOVES

			Legislation standard				APPLICATION SELECTION							
		PAG K.	EN 407	EN 388	EN 374	EN 374-5 VIRUS								
K2100		17		●					●			●	●	●
K2110		17		●					●			●	●	
K2180	NEW	17		●					●			●		
K2125		17		●					●	●		●		
K2130		17		●					●	●		●		
K2140		18	●	●					●	●		●		
K2113		17	●	●					●	●		●		
K2114	NEW	18	●	●					●	●				
K2120		18		●					●	●		●		
K2150		18	●	●					●	●		●		
K2181	NEW	18	●	●					●	●				
K2217	NEW	18		●					●			●	●	●
K2215		19		●					●			●	●	●
K2213		19		●							●	●		●
K2214		19		●							●	●		●
K2228		19		●					●			●		●
K2230		19		●					●			●		●
K2304	NEW	21		●				●	●			●		●
K2303	NEW	19		●					●		●	●	●	●
K2313		20		●							●	●		
K2316		20		●							●	●		
K2317		20		●							●	●		
K2319		22		●							●	●		
K2321		20		●							●	●		
K2225		21		●							●	●		●
K2310		20		●							●	●		
K2311		20		●							●	●		
K2324		21		●							●	●	●	●
K2327		21		●					●		●	●	●	●
K2328		22		●					●		●	●	●	●
K2331		22		●							●	●		
K2335		22		●							●	●		
K2325		22		●							●	●	●	●
K2320		22		●							●	●		
K2330		23		●							●	●		
K2346		23		●							●	●		
K2347	NEW	23		●					●		●	●		
K2400		23		●	●	●	●	●						●
K2401	NEW	23		●	●		●	●	●				●	
K2421	NEW	23		●	●	●	●	●	●				●	●
K2420		24	●	●	●	●	●	●						●
K2402		24		●	●		●	●						
K2423		21		●							●	●	●	
K2404		24		●				●					●	●
K2280		24		●	●	●	●	●				●		●
K2610		25										●		
K2501		25			●	●		●	●		●			
K2502		25			●	●		●	●		●			
K2513		24		●	●	●	●	●	●		●		●	●
K2512		25			●	●		●	●		●		●	●
K2516		24			●		●	●	●				●	●
K2520	NEW	25			●			●	●					
K2517	NEW	25		●	●	●	●	●	●					●

● RECOMMENDED FOR... ○ USABLE FOR...

Recommended for chemical processing

Recommended for building maintenance

Recommended for general processing

Recommended for welding operations

Recommended for processing in the food environment

Recommended for working with oils and greases

Recommended for machining with precision assembli

Recommended for working with water

COWHIDE GRAIN LEATHER GLOVES

WRK

2143X

ITEM: K2100

Hemmed, inner elastic wrist wrap.
White colour.

Tech. Code	GR67 Euro	Size	EU size	
K21007	4,80	M	7	12
K21008	4,80	L	8	12
K21009	4,80	XL	9	12
K210010	4,80	XXL	10	12
K210011	4,80	XXXL	11	12

COWHIDE GRAIN SPLIT LEATHER GLOVES

3142X

ITEM: K2110

Palm in flower cowhide grain leather and crust leather back, inner elastic wrist wrap.
White colour.

Tech. Code	GR67 Euro	EU size	
K21107	4,29	7	12
K21108	4,29	8	12
K21109	4,29	9	12
K211010	4,29	10	12
K211011	4,29	11	12

COWHIDE GRAIN LEATHER/COTTON GLOVES

NEW

2121X

ITEM: K2180

Leather gloves with cowhide grain palm and back in stretch cotton knit, elastic tightened wrist with adjustable strap closure with velcro. Each size differs in the colour of the elasticated back. They offer high sensitivity to the wearer, the gloves are also very breathable and the cuffs with velcro allow the gloves to stay perfectly tight on the wrist.

Tech. Code	GR67 Euro	Size	EU Size	
K218009	6,00	XL	9	12
K218010	6,00	XXL	10	12

RUMP SPLIT GLOVES

3144X

ITEM: K2130

Hand-breadth and thumb reinforced, split cuff.
Grey colour.

Tech. Code	GR67 Euro	Size	EU size	Arm guard cm	
K21301014	6,90	XXL	10	14	12

RUMP SPLIT GLOVES

3144X

ITEM: K2125

Hand-breadth and thumb reinforced, rump split cuff. Arm guard length 7cm.
Grey color.

Tech. Code	GR67 Euro	Size	EU size	Arm guard cm	
K212510	6,40	XXL	10	7	12

ARAMID FIBER THERMAL PROTECTION GLOVES

2443X 43XX4X

ITEM: K2113

Aramid fiber glove TNT fire resistant internal lining. Ensures an excellent protection against (for a limited period of time) flames ignition, minor molten steel splashes and heat by contact (max 350°C). Extremely resistant to cuts and tear-offs

Tech. Code	GR67 Euro	Size	EU size	Length cm	
K211310	55,00	XXL	10	17	10

HEAT RESISTANT GLOVES IN SPLIT FLEECE WITH KEVLAR SEAMS

NEW

4244B 423X4X

ITEM: K2114

Top quality heat resistant split leather gloves, internally lined in 100% cotton, reinforced stitching in Kevlar thread. It is recommended for welding activities, especially when handling hot objects is required.
Black colour.
Safety category: II

Tech. Code	GR67 Euro	Size	Eu size	Length	
K211410	12,00	XXL	10	35	12

WORK GLOVES HEAT RESISTANT CRUSADER FLEX®

Ansell

2241B X2XXXX

ITEM: 42-445 42-474

Gloves designed for the intermittent handling of hot objects up to 180°C, they provide excellent grip when handling dry or oily surfaces and have an absorbent non-woven felt liner.
Grey colour.

Tech. Code	GR67 Euro	Size	EU size	Length cm	
K21501024	31,00	XL	10	24	12
K21501033	31,50	XL	10	33	12

RUMP SPLIT GLOVES

4142X

ITEM: K2120

Simple cowhide rump split gloves, elastic wrist wrap and hemmed wrist.
Grey colour.

Tech. Code	GR67 Euro	Size	EU size	
K212009	5,00	XL	9	12
K212010	5,00	XXL	10	12

WELDING GLOVES IN SHEEP SKIN/COWHIDE LEATHER

NEW

2122X 412X3X

ITEM: K2181

Gloves for welding TIG in sheepskin with cowhide cuffs. They protects the hands from abrasions, blade cuts, tears and perforations from nails, splinters, thorns. Resistance to contact heat (up to 100°C), excellent fire proof behavior, with contact times with fire up to a maximum of 15 seconds. Resistant to convective heat and small splashes of molten metal.
White colour

Tech. Code	GR67 Euro	EU size	
K218110	13,50	10	60
K218111	13,50	11	60

RUMP GLOVES FOR WELDERS

3143X 423X4X

ITEM: K2140

Suitable for welders. Totally lined, internal support in fireproof fabric, protection-sewing fillets, cuff 14 cm.
Red colour.
Complies with STANDARD EN 12447-Type A

Tech. Code	GR67 Euro	Size	EU size	
K214010	12,00	XXL	10	12

GLOVES COATED IN NBR ACTIVARMR® HYCRON®

Ansell

NEW

4121B

ITEM: 27-805

Coated gloves with cotton jersey lining completely coated in NBR. Superior resistance to sharp and abrasive materials. Antistatic and silicone free.
Wrist: safety cuff.
Colour Blue
It also offers an excellent barrier to grease and oil; it doesn't degrade like leather or cotton.

Tech. Code	GR67 Euro	Size	EU size	
K221709	6,60	XL	9	12
K221710	6,60	XXL	10	12

Indivisible package Suggested retail package - Unit price

GLOVES COATED IN NBR

4121X

ITEM: K2215

Gloves coated in NBR, entirely covered with cuffs, resistant to abrasion. Colour Blue.

Tech. Code	GR67 Euro	Size	EU size	
K22159	6,50	L	9	12
K221510	6,50	XL	10	12

NITRILE COATED COTTON GLOVES - NITROTOUGH™ Ansell

4111A

ITEM: N230Y

Interlock 100% cotton liner gloves, elastic knitwrist. Nitrile coated palm and light back. Suitable for assembly and finishing, light metal fabrication and handling.

Tech. Code	GR67 Euro	EU size	
K223007	5,00	7	12
K223008	5,00	8	12
K223009	5,00	9	12
K223010	5,00	10	12

CONTINUOUS WIRE GLOVES TOTAL GRIP NBR

4122X

ITEM: K2213

13 gauge continuous filament gloves completely covered in nitrile with non-slip coating and superior grip even in the presence of oils or greases. Excellent abrasion resistance with eleaticated wrist. Colour Black/yellow

Tech. Code	GR67 Euro	Size	EU size	
K221308	4,80	M	8	12
K221309	4,80	L	9	12
K221310	4,80	XL	10	12

WORK GLOVES IN FABRIC IMPREGNATED WITH YELLOW NBR

4111X

ITEM: K2228

NBR coated cotton gloves, ventilated back with cuff.
Colour yellow.

Tech. Code	GR67 Euro	EU size	
K222807	2,10	7	12
K222808	2,10	8	12
K222809	2,10	9	12
K222810	2,10	10	12

GLOVES DOUBLE COATED IN NBR

4121X

ITEM: K2214

Gloves in double coated NBR wtih covered palm, fingers and knuckles, safety cuffs in cotton cloth. Excellent resistance to abrasion, hydrocarbons and derivatives, oils and grease. Colour Blue.

Tech. Code	GR67 Euro	EU Size	
K221409	3,50	9	12
K221410	3,50	10	12

GLOVES NITRILE COATED POLYESTER

NEW

4122X

ITEM: K2303

Palm covered in nitrile for a valid protection in the presence of liquids, oils and/or fats, it also boasts excellent resistance to abrasion.
Ergonomic shape, absence of seams, excellent wearing comfort, elasticity and flexibility.
Ventilated back, non-slip palm.
Colour: grey, white

Tech. Code	GR67 Euro	Eu size	
K230307	2,20	7	12
K230308	2,20	8	12
K230309	2,20	9	12
K230310	2,20	10	12

Indivisible package Suggested retail package - Unit price

GLOVES IN CONTINUOUS NYLON WIRE COATED IN POLYURETHANE

ITEM: K2313

Polyurethane coated palm, stretch knit wrist, ventilated back, recommended for precision tasks where high sensitivity is required. Black color.

Tech. Code	GR67 Euro	Size	EU size	
K231306	3,00	S	6	12
K231307	3,00	M	7	12
K231308	3,00	L	8	12
K231309	3,00	XL	9	12
K231310	3,00	XXL	10	12

NYLON GLOVES LIGHT WEIGHT COATED IN POLYURETHANE

2131X

ITEM: K2321

Lycra gloves with thin layer of polyurethane coating. Extreme elasticity and finesse combined with excellent durability. Suitable for small parts, eyewear, fine mechanics, electronics, maintenance and storage.
Black-blue colour.

Tech. Code	GR67 Euro	Size	EU size	
K232106	3,70	S	6	12
K232107	3,70	M	7	12
K232108	3,70	L	8	12
K232109	3,70	XL	9	12
K232110	3,70	XXL	10	12

WORK GLOVES IN NYLON COATED WITH POLYURETHANE

3131X

ITEM: K2316

High performance polyurethane-coated nylon gloves, ventilated back, stretch knit wrist. Excellent mechanical resistance to abrasion and tearing. Recommended for precision work where high sensitivity is required.
Colour white

Tech. Code	GR67 Euro	EU size	
K231606	3,70	6	12
K231607	3,70	7	12
K231608	3,70	8	12
K231609	3,70	9	12
K231610	3,70	10	12

GLOVES IN POLYESTER COATED IN POLYURETHANE WRK

2121X

ITEM: K2310

Polyurethane coated polyester gloves, ventilated back, elasticated wrist. Recommended in precision operations where high sensitivity is required.
Black colour.

Tech. Code	GR67 Euro	Size	EU size	
K23106	1,65	S	6	12
K23107	1,65	M	7	12
K23108	1,65	L	8	12
K23109	1,65	XL	9	12
K231010	1,65	XXL	10	12

WORK GLOVES IN NYLON COATED IN POLYURETHANE

3121X

ITEM: K2317

Palm coated with a special polyurethane compound. Stretch knit wrist, super light, super stretch, super sensitive. Ideal for work that requires the utmost precision.
Colour blue/black

Tech. Code	GR67 Euro	EU size	
K23178	6,10	8	12
K23179	6,10	9	12
K231710	6,10	10	12

POLYESTER GLOVES POLYURETHANE COATED WRK

2121X

ITEM: K2311

Polyurethane coated polyester gloves, ventilated back, elasticated wrist. Recommended in precision operations where high sensitivity is required. White colour.

Tech. Code	GR67 Euro	Size	EU size	
K23116	1,65	S	6	12
K23117	1,65	M	7	12
K23118	1,65	L	8	12
K23119	1,65	XL	9	12

Indivisible package Suggested retail package - Unit price

GLOVES IN NYLON SPANDEX COATED IN MICROPOROUS NITRILE

4121X

ITEM: K2302

Nylon spandex gloves with microporous nitrile coating, high breathability and abrasion resistance. Very elastic and flexible gloves designed to facilitate movement and its durability. Recommended in precision operations where high sensitivity is required.
Ideal glove for assembly lines.

Tech. Code	GR67 Euro	Size	EU Size	
K230208	5,80	L	8	12
K230209	5,80	XL	9	12
K230210	5,80	XXL	10	12

GLOVES IN NYLON/SPANDEX WITH 2/4 COATED IN NITRIL FOAM SANITIZED

4121X

ITEM: K2324

Gloves high quality nylon, coating on palm and fingers with nitril, rough finish that increases exponentially of the area in contact for consolidating the grip even in the presence of oil and water. Transpiring elastic material.
Colour black-red.

Tech. Code	GR67 Euro	Size	EU size	
K232406	5,10	S	6	12
K232407	5,10	M	7	12
K232408	5,10	L	8	12
K232409	5,10	XL	9	12
K232410	5,10	XXL	10	12

NYLON GLOVES COATED WITH SANITIZED NITRILE FOAM

NEW

4121X

ITEM: K2304

Gloves in water-repellent nylon with nitrile foam coating, ventilated back that guarantees high breathability. Very elastic and flexible gloves designed to facilitate movement and its duration. Recommended in precision operations where high sensitivity is required.
Ideal gloves for assembly lines.

Tech. Code	GR67 Euro	Size	Eu size	
K230408	5,50	M	8	12
K230409	5,50	L	9	12
K230410	5,50	XL	10	12
K230411	5,50	XXL	11	12

GLOVES IN NYLON/SPANDEX 3/4 COATED IN NITRIL FOAM SANITIZED

4121X

ITEM: K2327

High quality nylon, coating on palm and fingers with nitril, rough finish that increases exponentially of the area in contact for consolidating the grip even in the presence of oil and water.Transpiring elastic material.
Colour black-red.

Tech. Code	GR67 Euro	Size	EU size	
K232706	6,10	S	6	12
K232707	6,10	M	7	12
K232708	6,10	L	8	12
K232709	6,10	XL	9	12
K232710	6,10	XXL	10	12

WORK GLOVES IN NYLON COATED IN MICROPOROUS NITRILE

4132X

ITEM: K2225

Nylon gloves fully coated with nitrile, additional micro-porous nitrile coated palm. Excellent abrasion resistance, superior grip in the event of oil and grease.
Colour blue/black

Tech. Code	GR67 Euro	EU size	
K222508	6,50	8	12
K222509	6,50	9	12
K222510	6,50	10	12

POLYESTER GLOVES COATED IN NITRILE EDGE®

Ansell

4121A

ITEM: 48-128

Very light and comfortable nitrile coated polyester gloves. High levels of dexterity and flexibility and excellent resistance to abrasion and oil.

Tech. Code	GR67 Euro	Size	EU Size	
K242308	2,08	M	8	12
K242309	2,08	L	9	12
K242310	2,08	XL	10	12

K

Indivisible package Suggested retail package - Unit price

WORK GLOVES IN CONTINUOUS NYLON THREAD COATED IN NITRIL FOAM

Ansell

3111A

ITEM: 11-800

Nylon gloves coated with nitrile foam that makes the glove soft and breathable, stretch knit wrist.
Colour grey

Tech. Code	GR67 Euro	EU size	
K232507	6,90	7	12
K23258	6,90	8	12
K23259	6,90	9	12
K232510	6,90	10	12
K232511	6,90	11	12

CUT-RESISTANT GLOVES IN FIBER WITH DOUBLE COATING 3/4 IN NITRILE

4443C

ITEM: K2319

Cut-resistant gloves CATEGORY 5 - Size C with double coating 3/4 in microporus nitrile with elastic finish. Use of the gloves: protection from liquids, oils and solvents.processing of metal sheets, any processing involving the risk of cutting and contact with oils and wet parts.

Tech. Code	GR67 Euro	Size	EU Size	
K231907	16,30	S	7	12
K231908	16,30	M	8	12
K231909	16,30	L	9	12
K231910	16,30	XL	10	12
K231911	16,30	XXL	11	12

GLOVES IN NYLON/SPANDEX WITH 4/4 COATED IN NITRIL FOAM SANITIZED COATING

4121X

ITEM: K2328

Gloves in high quality nylon, entirely coated in nitril (back and front) rough finish that increases exponentially of the area in contact for consolidating the grip even in the presence of oil and water. Transpiring elastic material.
Colour black-red.

Tech. Code	GR67 Euro	Size	EU size	
K232806	6,90	S	6	12
K232807	6,90	M	7	12
K232808	6,90	L	8	12
K232809	6,90	XL	9	12
K232810	6,90	XXL	10	12

CUT-RESISTANT GLOVES IN CONTINOUS WIRE COATED IN POLYETHYLENE FIBER

4442C

ITEM: K2331

Cut-resistant gloves in continous wire gauge 13 in polyethylene fiber with micro-porous nitrile coated palm. Supported by cut-resistant fiber (CATEGORY 4) with an ultra-thin thickness and excellent dexterity.

Tech. Code	GR67 Euro	Size	EU Size	
K233107	11,00	S	7	12
K233108	11,00	M	8	12
K233109	11,00	L	9	12
K233110	11,00	XL	10	12

WORK GLOVES IN CONTINUOUS NYLON THREAD COATED IN TEXTURED NITRILE

4121X

ITEM: K2335

Gloves in continuous nylon thread coated with nitrile foam that makes the glove soft and breathable, stretch knit wrist, textured palm.
Ideal glove for assembly lines.
Colour grey.

Tech. Code	GR67 Euro	EU size	
K23358	8,80	8	12
K23359	8,80	9	12
K233510	8,80	10	12

GLOVES IN CONTINUOUS DYNEEMA® WIRE COATED IN POLYURETHANE

4342B

ITEM: K2320

Polyurethane-coated palm, stretch knitwrist, maximum comfort and protection against cutting in manufacturing operations where precision is required. Highly breathable, provide greater sensitivity to the hand reducing fatigue.

Tech. Code	GR67 Euro	Size	EU size	
K23207	17,00	S	7	12
K23208	17,00	M	8	12
K232010	17,00	XL	10	12
K232011	17,00	XXL	11	12

Indivisible package Suggested retail package - Unit price

CUT RESISTANCE GLOVES COATED IN POLYURETHAN SIZE B

4242B

ITEM: K2330

Gloves in anti-cut resistant fiber with palm covered in grey polyurethane complying with the EN388 standard with blade cut resitance GATEGORY 3.
Colour grey.

Tech. Code	GR67 Euro	EU size	
K233007	6,30	7	12
K233008	6,30	8	12
K233009	6,30	9	12
K233010	6,30	10	12

WORK GLOVES IN SPECIAL BLEND NITRILE SANITIZED

Ansell

4101X VIRUS JK LOPT

ITEM: 37-675

Sandblasted palm and fingers, good mechanical and chemical resistance. SANITIZED for use in the food industry. Colour green.

Tech. Code	GR67 Euro	Size	EU size	Length cm	
K240006	3,30	XS	6	33	12
K240007	3,30	S	7	33	12
K24008	3,30	M	8	33	12
K24009	3,30	L	9	33	12
K240010	3,30	XL	10	33	12
K240011	3,30	XXL	11	33	12

CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT

WRK

4442C

ITEM: K2346

Cut resistance fiber gloves with palm covered in grey polyurethane compliant with EN388 standard with blade cut resistance. CATEGORY 5.
Colour grey.

Tech. Code	GR67 Euro	Size	EU size	
K234607	6,20	7	S	12
K234608	6,20	8	M	12
K234609	6,20	9	L	12
K234610	6,20	10	XL	12

SOLVEX® NITRILE GLOVES WITH SANDBLASTED FINISH

NEW

4102X AGJKLPT

ITEM: 37-185

Very comfortable gloves in nitrile compound high performance, offering a great combination of chemical resistance and robustness, for optimal results in both work environments dry and wet. Covers up to above the elbow. The sandblasted finish gives the gloves a smooth surface, which allows to reduce costs indirect, thanks to the lower number of fragile waste items. Excellent combination of resistance abrasion and chemical agents. SANTIZED treatment for use in the food sector. Colour Green.

Tech. Code	GR67 Euro	Size	EU Size	Length cm	
K240107	11,50	S	7	45	12
K240108	11,50	M	8	45	12
K240109	11,50	L	9	45	12
K240110	11,50	XL	10	45	12

CUT RESISTANT GLOVES COATED IN POLYURETHANE D CUT

NEW

4443D

ITEM: K2347

Gloves in high quality anti-cut fiber with palm covered in grey polyurethane and with nitrile reinforcement at the crotch of the thumb to make it extremely resistant at the point of greatest wear. Compliant with EN388 standard. Safety category: II
Colour: Grey.

Tech. Code	GR67 Euro	Size	
K234708	9,30	8	12
K234707	9,30	7	12
K234709	9,30	9	12
K234710	9,30	10	12

ANSELL ALPHATEC GLOVES® WITH COTTON LINING IN ROUGH NITRILE

Ansell

NEW

4111 X1XXXX

ITEM: 39-122

The gloves offer both chemical and mechanical performance protection being extremely robust they also offer maximum comfort for prolonged use. The superior qualities of dexterity and the high levels of grip both on dry and wet objects, contribute to guarantee the safety of the user and consequently, the productivity. It is the ideal solution when you need rough gloves with chemical resistance. Antistatic, silicone-free and latex-free gloves. Colour Green.

Tech. Code	GR67 Euro	Size	EU Size	Length cm	
K242107	12,00	S	7	31	12
K242108	12,00	M	8	31	12
K242109	12,00	L	9	31	12
K242110	12,00	XL	10	31	12

Indivisible package Suggested retail package - Unit price

ALPHATEC NITRILE GLOVES® 58-535W

Ansell

3132A X1XXXX AJKLOPT JKL

ITEM: 58-535W

Gloves with nitrile coating, antistatic according to EN1149. The Alphatec gloves allows you to handle wet or oiled objects with greater control, a unique combination of impermeability to chemicals and grip. Green and anthracite colour.

Tech. Code	GR67 Euro	Length cm	Size	EU Size	
K242009	16,30	35	L	9	12
K242010	16,30	35	XL	10	12

CRINKLED LATEX GLOVES

2121X

ITEM: K2404

Latex gloves 100%. Good abrasion resistance and excellent grip. Crinkle finish on palm and back for superior grip, smooth inside rolled cuff for easy use. Length 60 cm.

Tech. Code	GR67 Euro	Size	EU size	
K240409	25,00	L	9	1
K240410	25,00	XL	10	1

SPECIALLY SANITIZED GLOVES COATED IN PVC

4121X VIRUS AKLMPST

ITEM: K2280

Internal cotton, SANITIZED antibacterial treatment, excellent resistance to abrasion and tearing.
Effective protection from chemicals. Red colour.

Tech. Code	GR67 Euro	Size	EU size	Length cm	
K2280927	6,50	L/XL	9.5	27	12
K2280935	6,00	L/XL	9.5	35	12

DISPOSABLE NITRILE GLOVES

WRK

EN 374-1

ITEM: K2516

Elastic Lightweighted ambidextrous. Intended use with operating temperatures not exceeding 40° C. AQL 1,5. Thickness 0,12 mm. Weight 4,9 g. Blue colour. Box of 100 pcs.

Tech. Code	GR67 Euro	Size	EU Size	
K251607	9,50	S	7	1
K251608	9,50	M	8	1
K251609	9,50	L	9	1
K251610	9,50	XL	10	1

WORK GLOVES IN NEOPRENE

2121X ALMNST

ITEM: K2402

Neoprene gloves. Cotton flock lined. **Anti-slip outer knurling**, silicone treated external surface.
Thickness: 0.75 mm.
Long version, approx. 30 cm.
Colour black.

Tech. Code	GR67 Euro	Size	EU size	
K240207	8,10	S	7 - 7.5	10
K240208	8,10	M	8 - 8.5	10
K240209	8,10	L	9 - 9.5	10
K240210	9,00	XL	10 - 10.5	10

DISPOSABLE GLOVES IN EMBOSSED NITRILE

JKPT VIRUS

ITEM: K2513

Ambidextrous powder-free nitrile disposable gloves, 0.15mm thickness. Long version, appox. 24 cm.
Color Orange. Box of 50 pcs.

Prices and availability subject to change due to Covid-19.

Tech. Code	GR67 Euro	Size	EU size	
K25138	22,70	M	8	1
K25139	22,70	L	9	1
K251310	22,70	XL	10	1

Indivisible package Suggested retail package - Unit price

DISPOSABLE LATEX GLOVES WITH POWDER COATING

GKL VIRUS

ITEM: K2501

Disposable latex gloves with powder coating, ambidextrous and with excellent sensitivity and comfort. Thickness 0.08 mm. White colour. Box of 100 pcs.

Tech. Code	GR67 Euro	Size	EU Size	
K25017	12,00	S	7	1
K25018	12,00	M	8	1
K25019	12,00	L	9	1
K250110	12,00	XL	10	1

DISPOSABLE POWDER-FREE NITRILE GLOVES POWDER FREE

ITEM: K2512

Ambidextrous use, powder free nitrile disposable gloves, 0.12mm thickness, Long version, approx 30 cm. Purple. Box of 50 pcs availability suject to change due to Covid-19.

Tech. Code	GR67 Euro	Size	EU size	
K251208	23,00	M	8	1
K251209	23,00	L	9	1
K251210	23,00	XL	10	1

LATEX DISPOSABLE GLOVES POWDER FREE COATING

KLP VIRUS

ITEM: K2502

Disposable latex gloves powder free coating, Ambidextrous use, high strength, dexterity and flexibility.
Enhanced thickness 0.28 mm. Long version, approx 30 cm. Blue colour. Box of 50 pcs.

Tech. Code	GR67 Euro	Size	EU size	
K250206	25,00	S	6,5	1
K250207	25,00	M	7	1
K250208	25,00	L	8	1
K250209	25,00	XL	8,5	1

CONTINUOUS COTTON WIRE GLOVES

ITEM: K2610

Continuous wire (3 wires). Stretch knitwist. Raw colour.

Tech. Code	GR67 Euro	Size	EU size	
K26107	0,80	S	7	12
K26109	0,80	L	9	12

DISPOSABLE GLOVES IN VINYL

NEW

GKL

ITEM: K2520

Ambidextrous, treated with powder.
Intended for use at operating temperatures not exceeding 40°C.
Transparent colour. Box 100 pcs.

Tech. Code	GR67 Euro	Size	EU size
K25207	8,90	S	7
K25208	8,90	M	8
K25209	8,90	L	9
K252010	8,90	XL	10

DISPOSABLE GLOVES EMBOSSED IN NITRILE

NEW

JKPT VIRUS

ITEM: K2517

Disposable ambidextrous nitrile gloves without powder, completely latex-free. Non sterile and with a thickness of 0.15 mm. Fish scale finish on palm and back for excellent grip. Anti-swating technology, suitable for food contact.
Colour Black. Box of 50 pcs.

Tech. Code	GR67 Euro	Size	Eu Size	
K251708	18,00	M	8	10
K251709	18,00	L	9	10
K251710	18,00	XL	10	10

Indivisible package Suggested retail package - Unit price

APRONS AND TRACKSUITS STANDARD LEGEND

CLASS

EN ISO 11611
PROTECTIVE CLOTHING FOR USE IN WELDING AND ALLIED PROCESSES
Specifies the minimum safety key requirements for protective clothing including hoods, aprons, sleeves and gaiters, which are designed to protect the body, the head and feet of the user and which are intended to be worn during welding and procedures that have comparable risks. Clothing protectors certified to this standard are therefore designed to protect the wearer against small splashes of molten metal, short-term contact with the flame and radiant heat.

CLASS X AY
Class Protector (x)
Garments are classified according to the results obtained during tests in 2 classes:
Class 1 - Protection against welding techniques and environmental conditions less dangerous (causing lower levels of spatter and radiant heat)
Class 2 - protection against welding techniques and the most dangerous environmental conditions (causing higher levels of spatter and radiant heat)
Limited flame spread (Y)
The test of the measurement of the properties of limited flame spread on the head can be carried out with two different procedures:
Procedure A - Ignition surface (in marking A1)
Procedure B - Ignition from the bottom edge (in marking A2)
The two procedures can also be applied together (in marking A1 + A2).

CLASS

EN 1073-2
PROTECTIVE CLOTHING FOR USE AGAINST RADIOACTIVE CONTAMINATION
Requirements and test methods for non-ventilated protective clothing against radioactive contamination in form of particles. The garment must be designed so as to be easy to wear and take off, and to minimize the risk of contamination. Can be constituted by one or more parts to wear together and can incorporate permanently fixed accessories (eg.: hood, gloves, galoshes, respiratory protection)

TYPE...

EN 1149-1
PROTECTIVE CLOTHING FOR USE AGAINST THE RISK OF ELECTROSTATIC DISCHARGES
Standard EN 1149-1:1997 specifies electrostatic requirements and test methods for protective clothing dissipating electrostatic charges, to prevent discharges that can ignite fires.
Standard EN 1149-2:1997 defines test methods for measuring the electrical resistance through a material (vertical resistance).
Standard EN 1149-3:2005 defines test methods for measurement of charge attenuation.

TYPE...

EN ISO 13982-1
PROTECTIVE CLOTHING FOR USE AGAINST SPECIAL SOLID

TYPE...

EN 14126
PROTECTIVE CLOTHING FOR USE AGAINST THE BIOHAZARD

TYPE...

EN 13034
LIMITED PROTECTION AGAINST SMALL QUANTITIES AND SPLASHES OF LIQUID CHEMICALS

ONE PIECE DISPOSABLE OVERALLS WITH HOOD

TYPE 5 TYPE 6

ITEM: K3204

Disposable overalls with white hood in highly breathable microporous fabric, good protection against the penetration of mists of particles and aerosols, elasticated ankles, waist, wrist and hood for a better fit and quilted seams to prevent the penetration of particles. keep sleeves in place and zip covered with adhesive flap for added protection. Weight 65 g. 3-piece stretch hood and elasticated waist. Recommended environments: spray painting, chemical industry, asbestos removal, clean room, pharmaceutical industries, agriculture. CAT. 3

Tech. Code	GR67 Euro	Size	
K3204M	9,84	M	5
K3204L	9,84	L	5
K3204XL	9,84	XL	5
K3204XXL	9,84	XXL	5

Indivisible package Suggested retail package - Unit price

ONE PIECE DISPOSABLE OVERALLS WITH HOOD

ITEM: K3201

Overalls in non-woven polypropylene fabric, elastic wrist /ankle straps, product compling with CE regulations. CAT. 1

Tech. Code	GR67 Euro	Size	
K3201M	3,70	M	5
K3201L	3,70	L	5
K3201XL	3,70	XL	5
K3201XXL	3,70	XXL	5

TYPE 5 TYPE 6 Class 2

ITEM: K3205

TYVEK XPERT 500 DUPONT COLOUR WHITE
Sewn with zipper closure, elastic wrist/ankle/waist squeezers, product complying with EC type 4-5-6.

Tech. Code	GR67 Euro	Size	
K3205L	13,50	L	5
K3205XL	13,50	XL	5
K3205XXL	13,50	XXL	5

SPLIT APRONS FOR WELDING APPLICATIONS

Class 2 A1 + A2

ITEM: K3100

Suitable for welding operations, effective against small splashes of molten metal and incidental flame contact.
Grey colour.

Tech. Code	GR67 Euro	Dimension cm
K31006090	17,00	60 x 90

SPLIT APRONS

ITEM: K3102

Split aprons with neck and waist regulation laces.

Tech. Code	GR67 Euro	Dimension cm
K31026090	17,70	60 x 90

REINFORCED SPLIT APRONS

ITEM: K3103

Reinforced Aprons with neck and waist regulation laces.

Tech. Code	GR67 Euro	Dimension cm
K31036090	19,60	60 x 90

SPLIT GAITERS

A1 + A2 CLASS 2

ITEM: K3107

Split leather gaiters with Kevlar stitching and internal velcro closure. Length 30 cm.

Tech. Code	GR67 Euro	Size	
K310700	15,00	One size	5

ELASTIC SPLIT SLEEVE

A1 + A2 CLASS 2

ITEM: K3108

Split leather sleeve with elastic wrist, adjustable strap closure. Length 60 cm.

Tech. Code	GR67 Euro	Size	
K310800	18,00	One size	5

PVC APRONS

ITEM: K3110

Suitable for protection against acids, solvents, oils and derivatives.
Green colour.

Tech. Code	GR67 Euro	Dimension cm	Thickness mm	
K311075110	5,50	75 x 110	0.35	20
K311090120	5,00	90 x 120	0.35	20

Indivisible package Suggested retail package - Unit price

KNEE PAD IN POLYURETHANE

ITEM: K3207

Polyurethane shaped knee pads with adjustable elastic.

Tech. Code	GR67 Euro	Packaging
K320700	23,50	Supplied in pairs

EYE PROTECTION STANDARD LEGEND

EN 166 Construction and performance specifications of the eye protectors
EN 169 Filters for welding and related techniques
EN 170 Ultraviolet filters
EN 171 Infrared filters
EN 172 Solar filters for industrial use
EN 175 Eye and face protection equipment during welding and related processes

EN 379 Automatic welding filters
EN 1731 Mesh eye and face protectors

PROTECTIVE EYEWEAR

CE

EN 166, EN 170

ITEM: K4006

Utmost care given to details and excellent ergonomic design, great comfort, trendy eyewear. Featuring anallergic, non-slip nose pad. Its wraparound lens design provides extra side coverage, the exclusive painted frame confers elegance and style. Shiny red frame, clear lens. Shock-proof, UV protection.

Tech. Code		K400610
GR67	Euro	15,88
Lens		2C - UV plus filter
Grade		1.2 – Clear lens
Optical Class		Class 1
Protection VS Impact		F(T) - Low impact energy and high temperature exposure
Optional req.		N - Anti-fog K - Scratch resistant
		10

PROTECTIVE EYEWEAR

CE

EN 166

ITEM: K4102

Semi-rigid black plastic frame, clear glass lenses. Two-lens eyewear complete with tilted vented side shields. Interchangeable lenses also available. Scratch resistance and chemical agent protection.

Tech. Code		K410201	K410201R
GR67	Euro	12,70	7,04
Type		Complete pair	Lens replacement
Filter		-	-
Grade		-	-
Optical Class		Class 1	Class 1
Protection VS Impact		S - Enhanced resilience	S - Enhanced resilience
Optional req.		-	-
		10	20

PROTECTIVE POLYCARBONATE EYEWEAR

EN 166, EN 170

ITEM: K4103

Semi-rigid black frame, polycarbonate clear glass lenses. Two-lens eyewear complete with tilted vented side shields. Interchangeable lenses also available.

Tech. Code		K410301	K410301R
GR67	Euro	8,24	2,91
Type		Complete pair	Lens replacement
Filter		2C - UV plus filter	2C - UV plus filter
Grade		1.2 -Clear lens	1.2 -Clear lens
Optical Class		Class 1	Class 1
Protection VS Impact		F - Low impact energy	F - Low impact energy
Optional req.		-	-
		10	20

EN166

ITEM: K4126

Transparent protective eyewear, standard CE DIN EN166:2002-04 class 1. Lenses and frame polycarbonate. Minimum purchase 12 pcs.

Tech. Code		K4126100
GR67	Euro	7,30
Filter		-
Grade		1.2 - Clear lens
Optical Class		Class 1
Protection VS impact		F - Low impact energy
Optional req.		-
		10

EN 166, EN 170

ITEM: K4120

Blue polycarbonate frame with adjustable temples, clear anti-mist single lens.

Tech. Code		K4120100
GR67	Euro	4,62
Filter		2C - UV plus FIlter
Gradation		1.2 – Clear lens
Optical class		Class 1
Protection VS Impact		F - Low impact energy
Optional req.		-
		10

EN 166, EN 169, EN 175

ITEM: K4105

Semi-rigid black plastic frame, side shields, convex lenses.

Tech. Code		K410505	K4109R05
GR67	Euro	17,55	10,46
Type		Complete pair	Lens replacement
Filter		5 – For welding	5 – For welding
Grade		Dark green	Dark green
Optical Class		Class 1	Class 1
Protection VS Impact		S - Enhanced resilience	S - Enhanced resilience
Optional req.		-	-
		20	25

PROTECTIVE EYEWEAR

EN 166, EN 170

ITEM: K4121

Polycarbonate clear frame eyewear. scratch resistant, side shields Comfortable, ultralight weight, extremely flexible, heavy duty wrap around frame. Neck strap included in the packaging

Tech. Code		K4121100
GR67	Euro	7,64
Filter		2C - UV plus FIlter
Grade		1.2 - Clear lens
Optical Class		Class 1
Protection VS Impact		F(T) - Low impact energy and high tempt exposure
Optional req.		-
		10

Indivisible package Suggested retail package - Unit price

PROTECTIVE EYEWEAR

EN 166, EN 170

ITEM: K4122

Black and green polycarbonate frame. Frame designed to cushion the contact points on the face with adjustable temples, transparent lens with anti-scratch treatment.

Tech. Code		K4122100
GR67	Euro	12,30
Filter		2C - UV plus FIlter
Grade		1.2 - Clear lens
Optical Class		Class 1
Protection VS Impact		F(T) - Low impact energy and high tempt exposure
Optional req.		K - Scratch resistant
		10

PROTECTIVE EYEWEAR WITH ELASTIC HEAD BAND

EN 166, EN 170

ITEM: K4123

Polycarbonate frame with green and white rods. Frame designed to cushion the contact points on the face. Colourless lenses with certified anti-scratch and anti-mist treatment.

Rods adjustable in inclination, gasket mounted in soft rubber for a soft support on the face and nose; panoramic and enveloping lens for better lateral protection. Supplied with adjustable elastic band, it makes it more comfortable and guarantees greater impact protection.

Tech. Code		K4123100
GR67	Euro	18,60
Filter		2C - UV filter plus
Grade		1.2 - Clear Lens
Optical Class		Class 1
Protection VS Impact		F (T) - Low energy impact and at extreme temperatures
Optional req.		K - Abrasion resistance and N - Resistance to fogging of the eyepieces
		10

PROTECTIVE GOGGLES

EN 166, EN 170

ITEM: K4108

Polycarbonate clear goggles, scratch resistant, anti-mist, indirect ventilation. Side shielding. Chemical protection against liquid droplets or splashes, resisting medium energy impact. Guarantees protection against molten metals or hot solids. Fits over prescription glasses. DPI 3

Tech. Code		K4108100		
GR67	Euro	15,28		
Filter		2C - UV plus Filter		
Grade		1.2 - Clear lens		
Optical Class		Class 1		
Protection VS Impact		B – Medium energy impact		
Optional req.		N - Anti-fog K - Scratch resistant		
Use	3 – Liquid splashes protection	4 – Coarse powder protection	9 – Molten metals and hot solids protection	
		5		

PROTECTIVE GOGGLES

EN 166

ITEM: K4130

Soft plastic frame with adjustable elastic fabric headband, flat clear anti-mist single lens.

Tech. Code		K4130100
GR67	Euro	6,05
Filter		-
Grade		-
Optical Class		1
Protection VS Impact		B - Medium energy impact
		10

SEALED SAFETY GOGGLES

EN 166, EN 170

ITEM: K4107

Grey polycarbonate frame. mono lens, clear anti-mist, scratch resistant lens

Tech. Code		K4107100
GR67	Euro	29,45
Filter		2C - UV plus filter
Grade		1.2 - Clear Lens
Optical Class		Class 1
Protection VS Impact		F(T) - Impatto Bassa Energia ed a temperature estreme
Optional req.		N - Anti-fog K - Anti-scratch
Use		3 - 4
		5

WELDING GLASSES

EN166 EN175 EN 169

ITEM: K41111

Protective glasses in soft and heat-resistant material, lens colour Green IR 5 Glass. Protects from impacts, UV rays, infrared rays (IR) and glare generated by welding processes EN166, EN169, EN175

Tech. Code		K4111100
GR67	Euro	7,44
Filter		For welding
Optical class		Class 1
VS impact protection		F (S) Low energy impact and increased robustness
Optional Requirements		T - Impact resistance at extreme temperatures -5 ° / + 55 ° C (T)
		10

GLASSES FOR ANTI-NOISE HEADPHONES

EN166 EN170

ITEM: K4124

Glasses entirely in polycarbonate, anti-scratch and anti-fog. Enveloping design that gurarantees excellent lateral protection and very flexible and resistant rods with a reduced section. Temples with technology designed for perfect interaction with ear muffs.

Tech. Code		K4124100
GR67	Euro	6,83
Filter		2C - UV Plus Filter
Gradation		1.2 - Clear Lens
Optical class		Class 1
VS impact protection		F (T) - Low energy and extreme temperature impact
Optional Requirements		K-Abrasion Resistance
		10

ANTI-MIST POLYCARBONATE PROTECTIVE GOGGLES

ITEM: K4129

Goggles with excellent lateral and upper protection, temples adjustable in three positions, very light. Internal foam for a perfect fit to the face that maximizes comfort and reduces possible shocks. Optical class I -F marking, anti-scratch, anti-mist.

Tech. Code		K4129100
GR67	Euro	14,40
Filter		2C- UV plus Filter
Gradation		1.2 clear lens
Optical class		1 Class
VS Impact protection		F- Low energy impact
Optimal requirements		-
		1

Indivisible package Suggested retail package - Unit price

PROTECTIVE GOGGLES

CE

EN 166

ITEM: K4132

Soft plastic frame with adjustable elastic headband, siphon ventilation. Flat transparent anti-mist replaceable single lens.

Tech. Code		K4132100
GR67	Euro	18,00
Filter		-
Grade		-
Optical Class		1
Protection VS Impact		B - Medium energy impact
Optional req.		N - Anti-fog
		10

REPLACEMENT LENS FOR PROTECTIVE GOGGLES

ITEM: K4139

Replacement lens for protective masks K4132100.

Tech. Code		K4139A100
GR67	Euro	7,98
Filter		- Anti-fogging, colour free
		5

SAFETY FACE SHIELDS

EN 166, EN 170

ITEM: K4155

Crown complete with face shield and chin rest, anti-sweat interchangeable head band.
1mm, 90° flip-up polycarbonate face shield
Can be worn over protection eyewear and respirators.
Replaceable polycarbonate chin rest

Tech. Code		K4155100	K4155R100
GR67	Euro	16,38	8,24
Filter		2C -UV plus filter	-
Grade		1.2 - Clear lens	-
Optical Class		Class 1	-
Protection VS Impact		B - Medium energy impact	-
Optional req.		-	-
Applications		3 - Liquid splashes protection	-
Spare part		-	Visor

EN 166

ITEM: K4160

Visor with support cap to protect the forehead, head, eyes, chin guard and part of the neck. Impact and heat resistant polycarbonat optical part.

Tech. Code		K4160100	K4160R100
GR67	Euro	39,25	22,16
Filter		2C - UV plus filter	-
Grade		1.2 - Clear lens	-
Optical Class		Class 1	-
Protection VS Impact		B (T) - Medium energy impact and high tempt exposure	-
Optional req.		-	-
Use		3 - Liquid splashes protection	-
Spare part		-	Visor

REPLACEMENT FACE SHIELD BRACKETS

ITEM: K4157

Universal brackets for crowns, to be paired with K4156-model safety face shields
Guarantees protection against liquid droplets or splashes, resisting high-speed particles and high temperature exposure.

Tech. Code		K4157100
GR67	Euro	8,74
Filter		-
Grade		-
Optical Class		-
Protection VS Impact		A (T) - High energy impact and high tempt exposure
Optional req.		-
Applications		3 - Liquid splashes protection

PROTECTION FACE VISOR

EN 166

ITEM: K4156

Transparent polycarbonate visor.
Protection against medium-speed particles.

Tech. Code		K4156100
GR67	Euro	6,53
Filter		-
Grade		-
Optical Class		Class 1
Protection VS Impact		B - Medium energy impact
Optional req.		-

Indivisible package Suggested retail package - Unit price

HELMETS STANDARD LEGEND

EN 397 Protective helmets for industry
Elements of marking

a	Name or identifying mark of the manufacturer
b	Type of helmet (name of manufacturer)
c	Year and trimester of manufacture
d	Size or range of sizes (in centimeters)
e	Number of the reference standard (EN 397)
f	Abbreviation of the material of the cap (ABS, PC, ...)
g	CE Marking
h	Optional Requirements

EN 50365 Electrically insulating helmets for use on low voltage installations

SAFETY HELMETS

CE
EN 397

ITEM: K4200

Polythene material, adjustable straps with six anchor points, electrical insulation up to 440 volts.

Tech. Code		K4200G	K4200B	K4200A1
GR67	Euro	6,42	6,42	3,85
Colour		Yellow	White	-
Weight	g	380	380	-
Spare part		-	-	Chin strap

CE
EN 397

ITEM: K4206

ABS safety helment, harness with quick adjustment in nylon, sweatband with adjustable padded chin strap and quick release fasterner.

Tech. Code		K4206G	K4206A1
GR67	Euro	15,00	3,00
Colour		Giallo	-
Weight	g	333	-
Spare part		-	Chin strap

WODEX mro

Perfect ergonomics

EAR PROTECTION STANDARD LEGEND

EN 352-1 Earmuffs
EN 352-2 Earplug inserts
EN 352-3 Earmuffs mounted on a protective helmet for the industry
EN 352-4 Earmuffs with response as a function of the sound level
EN 352-5 Earmuffs with active control of noise reduction
EN 352-6 Earmuffs with audio communication
EN 352-7 Earplug inserts with attenuation in function of the sound level

NOISE REDUCTION: the difference between the reduction in operator's perceived noise and the noise intensity level actually transmitted to the ear.
It can be measured scientifically in two ways:
HML: frequency based attenuation (H-high, M-medium, L- low)
SNR: signal to noise ratio

EARMUFFS

3M

EN 352-1

ITEM: OPTIME I

Wide comfortable padded pads with a combination of liquid and foam for an optimal seal and a reduced and well distributed pressure. Headband with two attachment points in harmonic steel for better pressure distribution over time.Suitable for moderate noise environments.

Tech. Code		K4300100
GR67	Euro	27,50
Frequency	Hz	H - M - L - SNR
Attenuation	dB	30 - 24 - 15 - 27

EN 352-1

ITEM: OPTIME II

Wide and comfortable padded pads with a combination of liquid and foam for an optimal seal and a reduced and well distributed pressure. Headband with two attachment points in harmonic steel for better pressure distribution over time. Suitable for very noisy environments.

Tech. Code		K4305100
GR67	Euro	35,00
Frequency	Hz	H - M - L - SNR
Attenuation	dB	34 - 29 - 20 - 31

EARMUFFS

EN 352-1

ITEM: K4301

Earmuffs with ABS head that can be rotated in three positions (above, behind the head and under the chin). Adjustment of the snap height which can be combined with helmets, visors and masks.
Weight 189g, colour silver.

Tech. Code		K4301100
GR67	Euro	18,00
Frequency	Hz	H-M-L-SNR
Attenuation	dB	29-23-17-26

HEADPHONES BLUETOOTH

3M

EN 352

ITEM: PELTOR™ WS™ ALERT™ X

Headphones 3M™ PELTOR™ WS™ ALERT™ X with Bluetooth® technology and noise canceling microphone connect to your mobile phone for hands-free calling and streaming in noisy environments. The headphones feature a controlled attenuation function for ambient listening and sync with a mobile app, so they can be set up and adjusted by users with ease. Automatic shutdown after 4 hours of non-use, 70h battery life.

Tech. Code		K4302100
GR67	Euro	(470,00)
Freequency	Hz	H - M - L - SNR
Attenuation	dB	35 - 27 - 18 - 30

Indivisible package Suggested retail package - Unit price

EARMUFFS

CE

EN 352-1

ITEM: K4306

Earmuffs with soft padded headband for better comfort. Quick and stable height adjustment, folding ABS cups with soft padded pads. They can be easily combined with visors and masks.
Weight 268g Colour black/metallic.

Tech. Code		K4306100
GR67	Euro	24,00
Frequency	Hz	H-M-L-SNR
Attenuation	dB	33-30-23-32

HEADPHONES ANTI-NOISE

3M

CE

EN 352-2

ITEM: OPTIME III

Easy-to-replace sound-absorbing pads and inserts to guarantee greater cleanliness and hygine. Large internal space of the cuffs which reduces the formation of internal humidity and temperature. Suitable for particularly noisy envionments characterized by low frequencies.

Tech. Code		K4308100
GR67	Euro	41,00
Frequency	Hz	H - M - L - SNR
Attenuation	dB	40 - 32 - 23 - 35

DISPOSABLE EARPLUGS

3M

CE

EN 352-2

ITEM: 1100

Soft and hypoallergenic polyurethane foam. Packaged in pairs.

Tech. Code		K4320200
GR67	Euro	0,27
Frequency	Hz	H - M - L - SNR
Attenuation	dB	37 - 34 - 31 - 37
		200

DISPOSABLE EARPLUGS

CE

EN 352-2

ITEM: PP-01-002

PVC slow expansion. Packaged in pairs.

Tech. Code		K4325250
GR67	Euro	0,35
Frequency	Hz	H - M - L - SNR
Attenuation	dB	30 - 24 - 22 - 28
		250

DISPOSABLE EARPLUGS WITH STRING

3M

CE

EN 352-2

ITEM: 1110

Soft and hypoallergenic polyurethane foam.

Tech. Code		K4330100
GR67	Euro	0,62
Frequency	Hz	H - M - L - SNR
Attenuation	dB	37 - 34 - 31 - 37
		100

FLEXIBLE EARPHONE INSERTS

3M

CE

EN 352-2

ITEM: 328-1000

Earplugs made entirely of washable foam. Double certification, unique in the world, as depending on how it is inserted it has a reduction of 30 or 35 dB.

Tech. Code		K4333100
GR67	Euro	1,20
Frequency	Hz	H - M - L - SNR
Attenuation	dB	36 - 32 - 29 - 35
		400

HEADBAND EARPLUGS

3M

CE

EN 352-2

ITEM: 1310

ABS headband, soft and hypoallergenic polyurethane foam buffers.

Tech. Code		K4340100	K4340R100
GR67	Euro	9,25	3,20
Frequency	Hz	H - M - L - SNR	H - M - L - SNR
Attenuation	dB	30 - 22 - 19 - 26	30 - 22 - 19 - 26
Description		Complete headband	Pair of ear tips
		1	20

HEADBAND EARPLUGS

E·A·R

CE

EN 352-2

ITEM: EC-01-000

ABS headband, soft and hypoallergenic polyurethane foam buffers.

Tech. Code		K4345100	K4345R100
GR67	Euro	6,90	3,66
Frequency	Hz	H - M - L - SNR	H - M - L - SNR
Attenuation	dB	27 - 19 - 17 - 23	27 - 19 - 17 - 23
Description		Complete headband	Pair of ear tips
		1	10

HEADBAND EARPLUGS

CE

EN 352-2

ITEM: K4346

Foam earplugs with practical headband for intermittent noise exposures, which can be positioned on the neck or under the chin.

Tech. Code		K434610	K434610R
GR67	Euro	3,70	13,10
Frequency	Hz	SNR	SNR
Attenuation	dB	20	20
Description		Complete headband	10 Changeable ear tips

Indivisible package Suggested retail package - Unit price

RESPIRATORY SYSTEM PROTECTION STANDARD LEGEND

EN 149+A1 Respiratory protective devices and filtering half masks against particles

EN 140 Half masks and quarter masks intended for use as part of respiratory protection, with the exception of devices intednded for leakages or underwater useage (Subacqua)

EN 136 Specification of minimum requirements for full face masks for respiratory protection equipment. They are rusable devices consisting of a structure which covers the entire face with a visor in transparent material, they are equipped with a exhalation valve that guarantee a greater seal of the half masks

EN 405 Specification of minimum requirements, test methods and marking requirements for filter facepieces with valves incorporating gas filters or combination filters, used as respiratory protective equipment, with the exception of devices for leakages. It does not apply to gas or combination facepieces that do not have valves or that are exclusively equipped with exhalation valves. It does not apply to devices designed for use in situations where there is or may be insufficient oxygen (oxygen less that 17% by volume)

EN 143 Refers to dust filters to be used as components of unassisted respiratory tract devices, with the exception of devices for leakages and filter facepieces

EN 14387 Combined gas filters (suitable for portection from gases and vapors) and combined filters for use as components in non-assisted respiratory protection devices

The chart along with all reference info concerning the use of related equipment have a merely indicative value. Use of respirators implies the user's knowledge of the reference regulations implemented in each Country. Such equipment should be selected by knowledgeable and trained personnel and may vary according to environmental and work conditions.

NR Non reusable. Respiratory protection masks are intended for single shift use only (8 hrs)

R Reusable. Reuse restrictions may vary according to exposure factors, though typically these should never exceed 5 shifts (40hrs)

TLV The term for airborne concentration of a substance below which all workers are believed to be protected.

D This marking indicates that the anti-dust filter has passed the test with Dolomite dust

FFP1 Specifies 80% standard filtering of solid and liquid particles. Featuring a protection level usually equal to 4 TLV. Typically used in construction works and light carpentry machining.

FFP2 Specifies 94% standard filtering of solid and liquid particles. Featuring a protection level usually ranging between 10 and 12 TLV. Mainly used in wood, steel and plaster works For varnishing, welding fumes, and in case of mould and bacteria.

FFP3 Specifies 99% standard filtering of solid and liquid particles. Featuring a protection level that may get as high as 50 TLV. Mainly recommended for stainless steel, nickel, lead, hardwood, especially beech wood, chestnut and oak wood works. Fibre processing.

		RESPIRATORS DESIGNED TO PROTECT FROM DUST, FUME AND FOG												
Class		FFP1				FFP2						FFP3		
Tech. Code		K520020	K521020	K520520	K530010	K521520	K532010	K534010	K534310	K531010	K522020	K533620	K534410	K535010
Art.		8710	9913	9310	9312	8810	8822	9925	9152E	9322	9320	K5336	9163E	9332
Valve		NO	NO	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES	YES
NR/R		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
TLV Limit		4	4	4	4	12	12	10	12	12	12	50	50	50
Cleaning, Brush varnishing, Odour emissions			•											
Grinding Cutting	Rust, Iron	•		•	•									
	Stone, Concrete	•		•	•									
	Concrete, Plaster					•	•					•		
	Paint, Varnishing					•	•				•	•		
	Steel, Stainless Steel, Nickel, Lead										•	•	•	•
Nebulized spray lubricant		•				•	•					•	•	
Welding	Steel, Stainless Steel, Zinc							•						
Primer sanding-cutting	Softwood					•	•		•	•	•			
	Hardwood								•	•		•		•
Maintenance	Oils, Grease					•	•			•	•			
Glass or mineral fibres												•		
Contact	Mould, Spores, Bacteria					•	•			•	•			

FILTERING RESPIRATORS FFP1

EN 149 FFP1 NR D

ITEM: 8710

Double elastic and nose clip for better fit disposable. Main applications: machining of marble, plaster, cement, and light carpentry.

Tech. Code	GR67 Euro	Type	Valve	
K520020	1,43	FFP1	No	20

FILTERING RESPIRATORS WITH VALVE FFP2

EN 149 FFP2 NR D

ITEM: 9322

3M patent valve for excellent breathing comfort, double elastic and nose clip for better fit. Diposable. Structure divided into three parts for maximum fit and communication comfort. Individually packaged for total hygiene guarantee. Main applications: sanding, wood dust, paint, fiberglass and oil sprays.

Tech. Code	GR67 Euro	Type	Valve	
K531010	4,12	FFP2	Si	10

FILTERING RESPIRATORS FFP1

EN 149 FFP1 NR D

ITEM: 9310

Double elastic and nose clip for better fit disposable. Foldable, ideal for use with eyeglasses. Individually packaged for total hygiene guarantee. Main applications: machining of marble, plaster, cement, and light carpentry.

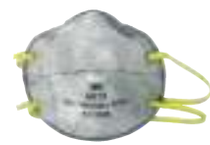
Tech. Code	GR67 Euro	Type	Valve	
K520520	2,33	FFP1	No	20

FILTERING RESPIRATORS FFP1

EN 149 FFP1 NR D

ITEM: 9913

Activated carbon layer, provides relief from nuisance levels of organic vapours and against low level of fine dust and odors. Double elastic and nose clip for better fit disposable. Main applications: paint brush, galvanic baths, pest control, industrial cleaning.



Tech. Code	GR67 Euro	Type	Valve	
K521020	6,86	FFP1	No	20

FILTERING RESPIRATORS FFP2

EN 149 FFP2 NR D

ITEM: 9320

Double elastic and nose clip for better fit, structure divided into three parts for maximum fit and communication comfort disposable. Individually packaged for total hygiene guarantee.
Main applications: sanding, wood dust, paint, fiberglass and oil sprays.

Tech. Code	GR67 Euro	Type	Valve	
K522020	3,09	FFP2	No	20

FILTERING RESPIRATORS FFP2

EN 149 FFP2 NR D

ITEM: 8810

Double elastic and nose clip for better fit disposable. Main applications: sanding, wood dust, paint, fiberglass and oil sprays.

Tech. Code	GR67 Euro	Type	Valve	
K521520	2,51	FFP2	No	20

FILTERING RESPIRATORS WITH VALVE FFP1

EN 149 FFP1 NR D

ITEM: 9312

Double elastic and nose clip for better wearability. Disposable. Patented valve for excellent breathing comfort. Foldable, ideal for use with glasses. Individually wrapped for a total guarantee of hygiene. Main applications: working in marble, plaster, cement and in light carpentry.

Tech. Code	GR67 Euro	Type	Valve	
K530010	2,05	FFP1	Si	10

FILTERING RESPIRATORS WITH VALVE FFP2

EN 149 FFP2 NR D

ITEM: 8822

Cool-Flow patent valve for excellent breathing comfort, double elastic and nose clip for better fit disposable. Main applications: sanding, wood dust, paint, fiberglass and oil sprays.

Tech. Code	GR67 Euro	Type	Valve	
K532010	3,25	FFP2	Si	10

Indivisible package Suggested retail package - Unit price

FILTERING RESPIRATORS WITH VALVE FFP2

EN 149 FFP2 NR D

ITEM: 9925

The Cool-Flow patent exhalation valve reduces heat build-up. Layer of active carbon, adjustable double elastic, anti-sweat edge. Structure designed for maximum fit and communication comfort. Main applications: welding, disposable shipbuilding, heavy industry.

Tech. Code	GR67 Euro	Type	Valve	
K534010	12,78	FFP2	Si	10

HALF-MASKS FOR GAS AND VAPOURS

FFA1 P2 R D

ITEM: 4251+ / 400

Exhalation valve to reduce heat build-up, parabolic exhalation valve to reduce overheating. Comfortable hypoallergenic edge. Maintenance free. Offers protection from dangerous gases, vapours and dust. Main applications: spray painting, galvanic baths and working with solvents and resins.
The protective pre-filter extends the life of the main filters.

Tech. Code	GR67 Euro	Description
K5380100	38,00	Complete respirator
K5380R100	19,50	Pre-filter for painting protection (pack of 10)

FILTERING RESPIRATAORS FFP2

EN 149 FFP2 NR D

ITEM: 9152E

The 9152E Disposable Dust filerting respirators provides affordable FFP2 protection by featuring a V-fold design and filtering material that makes breathing easier.
It is equipped with an adjustable metal nose clip for a personalized fit and side tabs for easy positioning on the face.

Tech. Code	GR67 Euro	Type	Valve	
K534310	0,81	FFP2	No	25

SEMI-MASK WITH TWO FILTERS FOR GAS AND VAPOR

EN 140

ITEM: 6100 - 6200 - 6300

Half-mask for protective filters for bayonet fixing system, the mask is supplied without filters. Avilable in 3 sizes.
Supplied without filters.

Tech. Code	GR67 Euro	Size	Item:
K5400100	32,00	S	6100
K5400200	32,00	M	6200
K5400300	32,00	L	6300

FILTERING RESPIRATORS WITH FFP3 VALVE

EN 149 FFP3 NR D

ITEM: 9163E

The 9163E Disposable Dust filtering masks provides economical FFP3 protection by featuring a V-fold design, filtering material and valve for easy breathing.
It is equipped with an adjustable metal nose clip for a personalized fit and side tabs for easy positioning on the face.

Tech. Code	GR67 Euro	Type	Valve	
K534410	3,17	FFP3	SI	15

FULL FACE MASK

NEW

ITEM: 6800

Full face masks 3M™ Reusable 6800 series with Bayonet Filter Attachment, dual filter design reduces breathing resistance for maximum comfort and balance. The large polycarbonate lens offers good visibility and is impact resistant to EN166.b. Gas, vapor and particulate protection. The mask is supplied without filters.

Tech. Code	GR67 Euro	Size	Item:	
K5500100	213,00	M	6800	4

FILTERING RESPIRATORS WITH VALVE FFP3

EN 149 FFP3 NR D

ITEM: 9332

Soft foam sealing edge absorbs - moisture. Disposable. 3M patent exhalation valve to reduce internal heat, double elastics and nose clip for a better fit. Main applications: processing of stainless steel, heavy metals, chromium, nickel, lead, asbestos fibres.

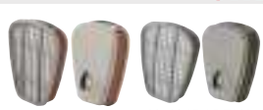
Tech. Code	GR67 Euro	Type	Valve	
K535010	8,24	FFP3	Si	10

GAS AND VAPOR FILTERS FOR SEMI-MASKS

EN 140

ITEM: 6051 - 6059 - 5935

Filters with bayonet fixing system for half mask.



K5401RA1 K5401RABEK1

K5401RP3 K5402G01

Tech. Code	GR67 Euro	Class	
K5401RA1	23,00	A1	1
K5401RABEK1	29,00	ABEK1	1
K5401RP3	16,00	P3	40

Tech. Code	GR67 Euro	Description	
K5402G01	4,20	Filter holder	20

Indivisible package Suggested retail package - Unit price

HARNESSES

ITEM: HT45

Harnesses with leg loops.
Back attachment (forged De') EN 361

Five adjustment points.

Tech. Code		K6130M	K6130XL
GR67	Euro	108,00	113,00
Size		M	XL

ITEM: HT22

Back attachment (forged De').
Equipped with positioning belt with two lateral hitch D rings. EN 361

Six adjustment points..

Tech. Code		K61350S/L	K61350XL
GR67	Euro	120,00	120,00
Size		S / L	XL

SAFETY ROPES

ITEM: 78362

Polyamide rope. Length 2 m with a reducer + 2M10 (EN 358/2000) Ø 12 mm.

Tech. Code		K613601
GR67	Euro	68,00
Ø	mm	11

ENERGY ABSORBING SYSTEM

ITEM: 75142

Double polyester straps 27 mm, Length 2 m (connector M10 e 2M53). EN 355

Tech. Code		K61370
GR67	Euro	153,00
Length	m	2
Width	mm	30
Intervention distance	m	1,6

Indivisible package Suggested retail package - Unit price

PROTECTIVE HELMETS

ITEM: 443240

Protective helmets particularly suitable for working at altitudes, polyamide fastening strap with a four hole fastening position. Internal structure with six fastening positions, anti-sweat strap, shell of helmet with air ventilation in ABS injection molded, with high impact and compression resistance. Back cover colour orange that gives greater visibility in low light conditions and protects the upper part of the neck .
Protection against electrical current of 1000 V AC, 1500 V DC (EN 50365).

Tech. Code		K613801
GR67	Euro	43,00
Size	cm	min. 51 - max. 63
Weight	g	375

FALLS FROM HEIGHT PROTECTION STANDARD LEGEND

EN 341 Descent devices
EN 353-1 Guided type fall arresters on a rigid anchorage line
EN 353-2 Guided type fall arresters on a flexible anchorage line
EN 354 Lanyards
EN 355 Energy absorbers
EN 360 Retractable type fall arresters
EN 361 Full body harnesses
EN 362 Connectors
EN 363 Fall arrest systems
EN 364 Test Method
EN 365 General requirements for instructions for use and for marking
EN 795 Anchor devices - Requirements and testing

FALL ARRESTING DEVICES

CE
EN 360

ITEM: BLOCFOR 6 SM47-10

Auto-retracting textile tape with energy absorber.
Plastic protective casing and automatic swivel carabiner.
Vertical use.

Tech. Code		K62006
GR67	Euro	330,00
Tape width	mm	17
Tape length	m.	6
Min. use distance	m	0.6
Capacity	kg	150 max

CE
EN 360

ITEM: BLOCFOR 10 M46-10

Auto-retracting metal cable with energy absorber.
ABS casing and automatic swivel carabiner with fall indicator.
Vertical use.

Tech. Code		K621010
GR67	Euro	638,00
Ø cable	mm	4.7
Cable length	m	10
Min. use distance	m	0.7
Capacity	kg	150 max

BASIC HARNESS SCAFFOLDING KIT

ITEM: K6112

Basic fall arrest harness kit for scaffolding.

Content:
1 harness art. BASIC 3
1 2 anchoring ropes with energy absorber, art. SAFE BI-1, complete with connections
1 bag included

Tech. Code		K6112100
GR67	Euro	162,53
Pieces	n°	7

BASIC HARNESS SCAFFOLDING KIT

ITEM: K6116

Basic anti-fall kit for scaffolding.

Content:
1 fall arrest harness with a dorsal and sternal attachment point
1 guided fall arrester on flexible anchor rope
1 "Kernmantel" polyamide safety rope Ø 12 mm (length 15 m)
2 self-closing galvanized steel connectors with breaking load: F ≥ 25 kN
1 anchoring strap in sewn textile strap. Dimensions: Length 80 cm, Width 2 cm
1 bag included

Tech. Code		K6116100
GR67	Euro	225,02
Pieces	n°	7

PLASTIC SIGN CHAINS

ITEM: K6000

Red/white plastic chains, Injection made, seamless, lightweight, washable, floating, resistant to bad weather.

Tech. Code		K6000D6
GR67	Euro	46,12
Ø	mm	6
Length	m	25

HOOKS FOR JOINING PLASTIC CHAINS

ITEM: K6010

Plastic "S" shaped hook junctions.

Tech. Code		K60100
GR67	Euro	7,70
Ø	mm	8
Package	pcs	30

PLASTIC CHAIN STANCHIONS FOR DELIMITATIONS

ITEM: K6100

Complete with a concrete base, coated in black plastic, shock-proof. Highly efficient signal effect.
Colour: red/white.

Tech. Code		K61002
GR67	Euro	15,38
Height	mm	900

POLYETHYLENE SIGNAGE TAPE

ITEM: K7200

Warning signal tape for the identification of posts, scaffolding, poles, protruding parts etc.
Colour: red/white and black/yellow.

Tech. Code	GR67 Euro	Colour	Height mm	Length m
K7200BR	5,60	Red/white	70	200
K7200NG	6,50	Black/yellow	70	200

Indivisible package Suggested retail package - Unit price

STANDARD FIRST AID

Classification of companies:
Companies or production units are classified, taking into account the type of activity carried out, the number of workers employed and the risk factors, into three groups:

- Companies Group A: are all those companies or production units with industrial type activities, thermoelectric plants, nuclear plants and processors, mining companines or related activities, companies that produce explosives or warfare, companines with 5 workers belonging to or attributable to groups INAIL tariffs with an accident rate of permanent disability of more than four, companies belonging to the agricultural sector with over five permanent workers.
- Companies Group B: all those companies or production units with workers equal to or greater than three that do not fall within group A
- Companies Group C: all those companies or production units with fewer than three workers that do not fall within group A

Type of activity	Workers	Group	Presidium content
Companies or business units with certified industrial major accident hazard, thermal power plants, nuclear installations and laboratories, mining companies and other mining operations, underground works, explosive manufacturing sector, gunpower and ammunition.	More than 5	A	A
Companies or business units in agriculture sector.	More than 5	A	A
Companies or business units with different activities	3 or more	B	B
Companies or business units with different activities	Less than 3	C	C
Companies that have employees carrying out their activities in isolated places, different from the corporate headquarters or business units.	Any	-	Medication package (Annex 2)

FIRST AID KIT IN CASE

ITEM: MED P3

ABS case for first aid, with wall bracket for easy extraction.

Annex 2 up-rated in compliance with the Ministerial Decree of 388 15/07/03
Decree Law 81/08

Tech. Code	GR67 Euro	Colour	Dimension mm	Weight full - empty Kg
K7000PS2	37,00	Orange	310 x 210 x 120	2,4 - 1,1

Only for the Italian market.

FIRST AID KIT IN CASE

ITEM: MED P4

First aid case in extractable ABS and with wall bracket.
Annex.1 in compliance with the Ministerial Decree of. 388 of 15/07/03
Legislative Decree 81/08.

Tech. Code	GR67 Euro	Colour	Dimension mm	Peso pieno-vuoto Kg
K7002PS1	85,00	Orange	410 x 310 x 100	7,4 - 2,6

FIRST AID KIT IN CABINET

ITEM: MED F1

Polypropylene wall cabinet for first aid.
Door, snap closure and an internal shelf.

Annex 2 basic in compliance with the Ministerial Decree of 388 15/07/03
Decree Law 81/08

Tech. Code	GR67 Euro	Colour	Dimension mm	Weight full - empty Kg
K7005PS2	40,00	White	380 x 230 x 120	2.15 - 0.7

Only for the Italian market.

ITEM: MED F2

Polypropylene wall cabinet for first aid.
Two doors, snap closure and two internal shelves.

Annex 1 basic in compliance with the Ministerial Decree of 388 15/07/03
Decree Law 81/08

Tech. Code	GR67 Euro	Colour	Dimension mm	Weight full - empty Kg
K7006PS1	125,77	White	450 x 370 x 130	6.9 - 2.7

Only for the Italian market.

EYE WASH KIT

ITEM: K7007

Eye wash kit consisting of 2 bottles of sterile disposable use 500 ml saline solution with eyepiece cap fitted for quick use. Thermoformed support with transparent front with dustproof closure, equipped with mirror and supplied with screws and plugs for wall mounting.

Tech. Code	GR67 Euro	Colour	Dimension mm	Weight kg
K700701	(35,00)	Green	320 x 410 x 80	1,05

BURNS FIRS AID KIT FOR WELDERS

ITEM: K7008

Case made of shockproof polypropylene, with wall support attachment, carrying handle, closure with 2 rotating clips. Burns First aid kit for all companies and on transport vehicles where there is a risk of burns. Contains all you need for a first emergency medication.

Tech. Code	GR67 Euro	Colour	Dimension mm	Weight kg
K700801	(68,00)	White	260 x 205 x 90	1,2

Indivisible package Suggested retail package - Unit price

FIRST AID KIT - STANDARD

ITEM: K7003

First aid kit compliant with **ANNEX 2** of Italian Ministerial decree 388 of 15.07.2003. Medical devices included in the first aid kit comply with European directives 93/42 EC, Legislative Decree 24.2.97 and directive 2007/47/EEC. For companies with less than 3 employees

Tech. Code	GR67 Euro	Colour	Dimension mm	Weight Kg
K7003PS1	14,90	White	240 x 95 x 210	1.05

FIRST AID KIT

ITEM: K7004

Standard first aid kit WITHOUT SPHYGMOMANOMETER compliant with **ANNEX 1** of Italian Ministerial decree 388. Medical devices included in the first aid kit comply with European directives 93/42 EC, Legislative Decree 24.2.97 and directive 2007/47/EEC. For GROUP A (more than 5 employees) and B (3-5 employees) companies

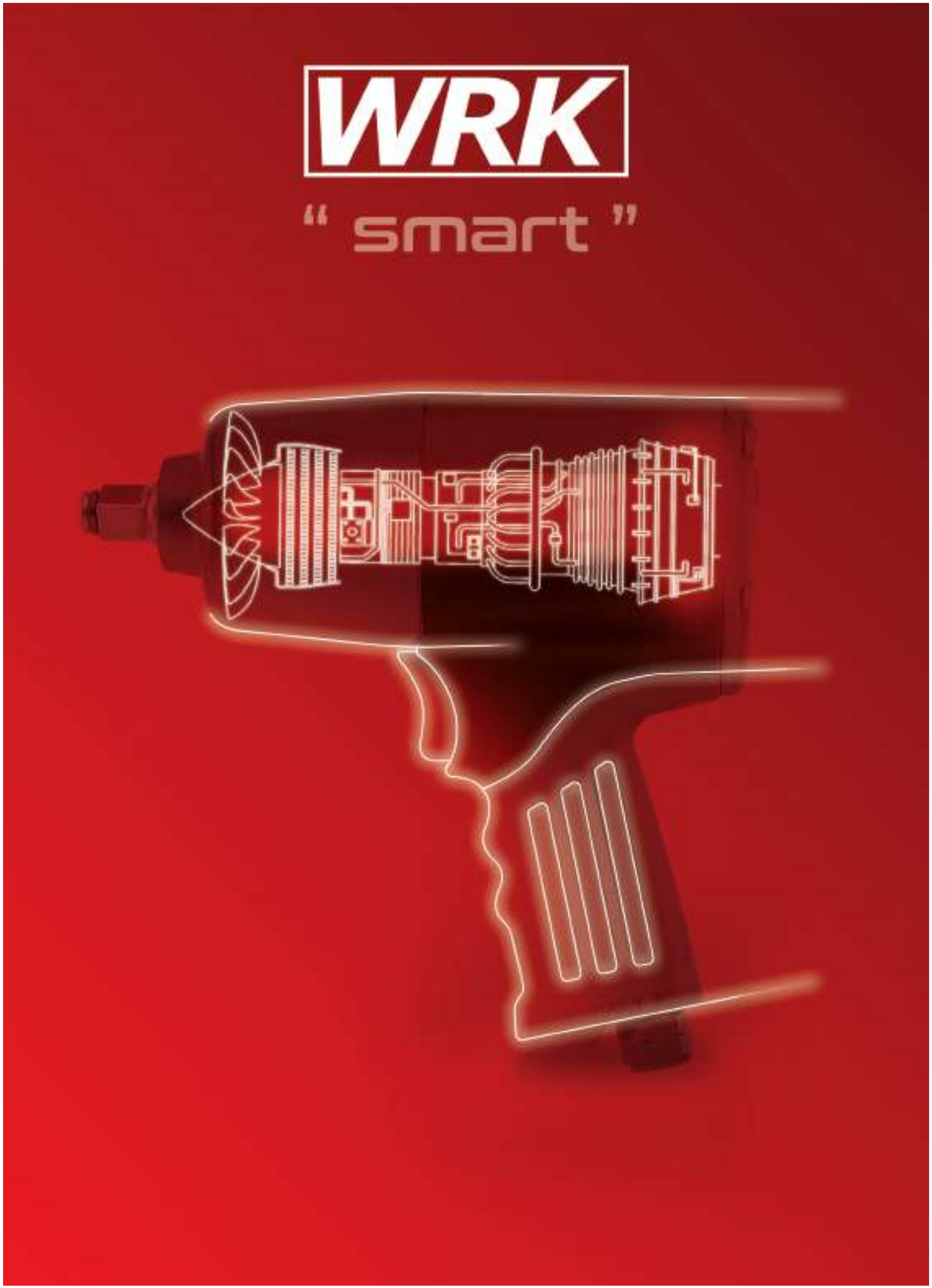
Tech. Code	GR67 Euro	Colour	Dimension mm	Weight Kg
K7004PS1	49,00	White	340 x 244 x 110	3.9

EYE AND FACE WASH UNIT IN ABS

ITEM: K7500

Closed bowl type ABS eye and face wash unit, designed according to ANSI standards, wall mounted for indoor use but can be placed outdoors where possible. The integral lid is connected to the water valve and automatically activates the unit when the lid is lowered. The lid ensures that the bowl remains clean and free from contamination.
The flow regulating valve ensures optimal water flow.
The high flow rate aerated diffusers provide an improved washing action with the 12 litres per minute recommended by ANSI.

Tech. Code	GR67 Euro	Dimension mm	Working pressure BAR	BSP Fitting inch	Finish
K75001	(630,00)	362 x 320 x 227	2/6	1/2 M	ABS


WRK
“ smart ”

IR
WRK
Fiam

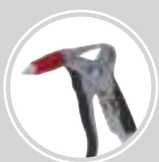
L0
2 - 11
Air impactools, air ratches

IR
WRK
NITTO
MANNESMANN DEMAG
Fiam

L1
11 - 27
Air drills, engraving pens, die grinders, sanders, hammers

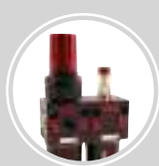
TECNA

L2
27 - 30
Spring balancers



ANI
CEMN

L3
31 - 35
Blow and inflating guns, paint spray guns



AIGNEP

L4
36 - 39
Pressure regulators, filters, groups, manometers

ANI
CEMN
AIGNEP
ZECA

L5
40 - 59
Hoses, couplers, fittings, connections, valve, teflon rolls

ABAC

L6
60 - 61
Air compressors

GENERAL CATALOGUE

To purchase any product from the INGERSOLL RAND catalogue, contact our sales office. The delivery time depends on the availability of our supplier; you will receive an order confirmation for your order with details of the delivery date.

The INGERSOLL RAND items included in our LINK23 catalogue are ready to be delivered in 24 h.

www.linkindustrialtools.com
info@linkindustrialtools.it

ITEM: LA158-EU

Air impact wrenches with 3/8” square coupling. The small size of these tools allows you access even the tightest spaces. The wide range of power settings allows you to adjust the power level to suit the needs of the application.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L004938
GR63	Euro	245,00
Square coupling	■	3/8"
Torque range	Nm	100
Max torque	Nm	136
Idle speed	Rpm	1000
Blows per minute	Nr	1400
Air inlet connector	NPT	1/4"
Air consumption	L/min	450
Air Inlet Ø int.	mm	10
Noise level	dBA	88.4
Vibration*	m/s²/K	3.3 / 1.1
Length	mm	137
Weight	Kg	1.25

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: 2115QTIMAX

The 2100MAX series tools stand out for their compactness and excellent quality. Designed for the most demanding applications. The new design ensures great comfort. The Ingersoll Rand Twin Hammer impulse mechanism is the strongest, most durable and reliable mechanism in the industry. Ultra-sensitive button control, very wide range of forward power settings and full power in reverse. Titanium hammer case and composite housing that guarantees operator comfort and protection from cold air. The patented Quiet Tool system reduces the noise produced by the air.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005038
GR63	Euro	(536,00)
Square coupling	■	3/8"
Torque range	Nm	312
Max torque	Nm	407
No-load speed	Rpm	15,000
Blows per minute	Nr	1500
Air inlet connector	NPT	1/4"
Air consumption	L/min	480
Air Inlet hose Ø int	mm	10
Noise level	dBA	93,2
Vibration*	m/s²/K	7,5 / 1,8
Dimension L x P x H	mm	152 x 52 x 171
Weight	Kg	1,12

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: 36QMAX

The Impact wrenches series Ultra-compact Impactools™ stand out for their compactness and excellent quality. Designed for the most demanding applications. The design ensures great comfort, the Ingersoll Rand Twin Hammer impulse mechanism is the strongest, most durable and reliable mechanism in the industry. Ultra-sensitive button control, 3 forward power levels and full power in reverse.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L004812
GR63	Euro	222,00
Square coupling	■	1/2"
Torque range	Nm	520
Max torque	Nm	870
Idle speed	Rpm	8000
Blows per minute	Nr	1300
Air inlet connector	NPT	1/4"
Air consumption	L/min	538
Air Inlet hose Ø int.	mm	10
Noise level	dBA	91.3
Vibration*	m/s²/K	8.1 / 1.2
Dimension L x P x H	mm	117 x 60 x 181
Weight	kg	1,2

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

AIR IMPACT WRENCHES

WRK

ITEM: L0010

Twin Hammer mechanism model with composite/steel housing, rear exhaust and NBR coated handle.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L001012
GR63	Euro	120,00
Square coupling	■	1/2"
Torque range	Nm	440
Max torque	Nm	690
Idle speed	Rpm	8500
Blows per minute	Nr	1150
Air inlet connector	NPT	1/4"
Air consumption	L/min	135
Air Inlet Ø int.	mm	10
Noise level	dBA	97.5
Vibration	m/s²	6.22
Dimension L x H	mm	175 x 190
Weight	Kg	2

While stocks last

AIR IMPACT WRENCHES

Ingersoll Rand

ITEM: 231GXP

The most popular product for maintenance workers as it offers greater durability and features such as quiet operation and a rubber coated handle for increased comfort. The 231GXP is a MUST for all professional maintenance personnel. Maximum reverse torque of 610 Nm, the air exhaust handle keeps air away from the operator and the work area, variable power control.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005112
GR63	Euro	207,00
Square coupling	■	1/2"
Torque range	Nm	407
Max torque	Nm	610
Idle speed	Rpm	8.000
Blows per minute	Nr	1200
Air inlet connector	NPT	1/4"
Air consumption	L/min	618
Air Inlet hose Ø int.	mm	10
Noise level	dB(A)	91,5
Vibration*	m/s²/K	6,3 / 2,1
Dimension L x P x H	mm	185 x 67 x 195
Weight	Kg	2,7

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: 2135QXPA

The Ingersoll Rand 2135QXPA series was built on the 2135QTiMAX series. The result is a light, quiet and powerful impact wrench that provides incredible performance and power at a low cost. The precision-made 2135QXPA is the impact wrench you need to tackle the toughest jobs. The maximum torque of 1490 Nm and a reverse torque 1057 Nm are produced by the Twin Hammer impulse mechanism. Ingersoll Rand's silent technology reduces the noise of the wrench without losing any power.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005212
GR63	Euro	(326,00)
Square coupling	■	1/2"
Torque range	Nm	949
Max torque	Nm	1490
Idle speed	Rpm	9.800
Blows per minute	Nr	1250
Air inlet connector	NPT	1/4"
Air consumption	L/min	648
Air Inlet Ø int.	mm	10
Noise level	dBA	90.7
Vibration*	m/s²/K	13.3 / 4.6
Dimension L x P x H	mm	190 x 70 x 183
Weight	Kg	1.8

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

Indivisible package Suggested retail package - Unit price

ITEM: 2235QTIMAX

The 2200MAX series tools stand out for their excellent quality and are intended for the most demanding applications. They are designed with special functions that ensure unmatched power, control and reliability. The new design ensures great comfort. The Ingersoll Rand Twin Hammer impulse mechanism is the strongest, most durable and reliable mechanism in the industry. Maximum power, reverse power of 1,220 Nm and maximum torque of 1,760 Nm. Maximum reliability and durability with a titanium hammer case and composite housing.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005312
GR63	Euro	524,00
Square coupling	■	1/2"
Torque range	Nm	1180
Max torque	Nm	1760
Idle speed	Rpm	8,500
Blows per minute	Nr	1220
Air inlet connector	NPT	1/4"
Air consumption	L/min	678
Air Inlet hose Ø int.	mm	10
Noise level	dBA	91.9
Vibration*	m/s²/K	9.0 / 2.8
Dimension L x P x H	mm	193 x 74 x 183
Weight	Kg	2.1

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: 2906P1

The 2900 Series is designed to last a long time, the vanes, hammer heads and shafts are designed for intensive use of the screwdriver in maintenance and industrial production. The 5-position power regulator helps to match the power to the application. Ingersoll Rand Twin Hammer Impulse Mechanism, Pressure Fed Mechanism Lubrication, Integrated Silencer Reduces Operator Fatigue.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005412
GR63	Euro	(828,00)
Square coupling	■	1/2"
Torque range	Nm	475
Max torque	Nm	678
No-load speed	Rpm	5,000
Blows per minute	Nr	1200
Air inlet connector	NPT	1/4"
Air consumption	L/min	648
Air Inlet hose Ø int.	mm	10
Noise level	dBA	83.7
Vibration*	m/s²/K	7.2 / 0.8
Length	mm	175
Weight	kg	2.72

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: 261

The series 260 tools are ideal for heavy vehicle and machinery repair work, they feature a Jumbo series hammer mechanism that ensures reliability and durability.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005634
GR63	Euro	(1017,00)
Square coupling	■	3/4"
Torque range	Nm	813
Max torque	Nm	1491
Idle speed	Rpm	5500
Blows per minute	Nr	1000
Air inlet connector	NPT	3/8"
Air comsumption	L/min	1076
Air Inlet hose Ø int.	mm	12
Noise level	dBA	98,1
Vibration*	m/s²/K	10,4 / 1,3
Dimension L x P xH	mm	224 x 120 x 262
Weight	kg	5,62

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: 2145QIMAX

The 2100MAX series tools stand out for their excellent quality and are intended for the most demanding applications. They are designed with special functions that ensure unmatched power, control and reliability. The new design includes enhanced controls ensure even greater ease and comfort. The Ingersoll Rand Twin Hammer impulse mechanism is the strongest, most durable and reliable mechanism in the industry. Ultra-sensitive button control, very wide range of forward power settings and full power in reverse.The lightweight composite housing guarantees operator comfort and protection from cold air. The patented Quiet Tool system reduces the noise produced by the air.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005534
GR63	Euro	812,00
Square coupling	■	3/4"
Torque range	Nm	1220
Max torque	Nm	1830
Rpm	max.	6,300
Blows per minute	Nr	1150
Air inlet connector - consumption	NPT	3/8"
Air inlet hose	L/min	906
Noise level	mm	12
Noise level	dBA	96.3
Vibrationes*	m/s²/K	8.7 - 2.7
Length	mm	217
Weight	Kg	3.35

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

While stocks last

ITEM: 2146Q1MAX

The tools of 2146QMax series are the most powerful pneumatic impact wrenches in its class, these tools have an innovative builit-in pressure gauge that ensures optimized airflow and pressure, the Twin Hammer impact mass and cold forged motor offer more torque, durability and efficiency, while the innovative pressure gauge improves productivity and prolongs tool life, the silenced technology reduces noise while preserving the operator's hearing. Prominent torque 2700 Nm and max torque 1970 Nm in torque 1970 Nm in just 3.5 Kg of the total weight of the machine.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L005734
GR63	Euro	888,00
Square Drive	■	3/4"
Torque range	Nm	1970
Max torque	Nm	2700
Idle speed	Rpm	5500
Blows per min	Nr	1075
Air entry coupling	NPT	3/8" F
Air consumption	L/min	1019
Air Inlet tube Ø int.	mm	12
Noise level	dBA	94,3
Vibrationi*	m/s²/K	8,4 - 3
Dimension L x P x H	mm	216 x 89 x 210
Weight	Kg	3,5

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty

ITEM: 2175MAX

The 2100MAX series tools stand out for their excellent quality and are intended for the most demanding applications. They are designed with special functions that ensure unmatched power, control and reliability. The Ingersoll Rand Twin Hammer impulse mechanism is the strongest, most durable and reliable mechanism in the industry. Ultra-sensitive button control, very wide range of forward power settings and full power in reverse. The lightweight composite housing guarantees maximum operator comfort and protection from cold air. The patented Quiet Tool system reduces the noise produced by the compressed air.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L006010
GR63	Euro	(959,00)
Square coupling	■	1"
Torque range	Nm	2580
Max torque	Nm	2715
Idle speed	Rpm	4500
Blows per minute	Nr	740
Air inlet coupling	NPT	1/2"
Air Consumption	L/min	1606
Air Inlet Ø int.	mm	12
Noise level	dBA	101,5
Vibrationi*	m/s²/K	11,8 / 3,6
Length	mm	254
Weight	Kg	8,2

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: 107XPA

Air ratchet wrenches with a 3/8" coupling and proven reliability. This is one of the world's best-selling wrenches. The 1077XPA with an advanced head design offers a longer service life. Maximum torque of 73 Nm and a 360° adjustable exhaust directs air away from the operator, speed regulator lever.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L007038
GR63	Euro	207,00
Square coupling	■	3/8"
Torque range	Nm	14 - 61
Max torque	Nm	73
Speed A/R	Rpm	160
Air inlet connector	NPT	1/4" F
Air consumption	L/min	530
Air Inlet Ø int.	mm	10
Noise level	dBA	94,4
Vibration*	m/s²/K	2,4 / 0,7
Length	mm	279
Weight	kg	1,25

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

NEW

ITEM: 1211MAX-D3

The high-speed ratchet wrenches series 1211MAX offer a free speed of 625 rpm and an innovative impact mechanism with no torque reaction, 108 Nm of peak torque and speed regulator for increased productivity.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L007138
GR63	Euro	(345,00)
Square Drive	■	3/8"
Torque range	Nm	14 - 81
Max torque	Nm	89
No-load speed	Rpm	625
Air Inlet hose	NPT	1/4" F
Air consumption	L/min	388
Air Inlet Ø int.	mm	10
Noise Level	dBA	90,6
Vibration*	m/s²/K	12,7 / 2,6
Length	mm	302
Weight	Kg	1,38

* ISO28927 - 3-axis measurement: Vibration level/uncertainty of measurement.

ITEM: 1077XPA

Air ratchet wrenches with 1/2" coupling and proven reliability, the 107XPA with an advanced head design is one of the world's best selling wrenches. Maximum torque of 73 Nm and a 360°, adjustable exhaust directs air away from the operator, speed regulator lever.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L007212
GR63	Euro	207,00
Square coupling	■	1/2"
Torque range	Nm	14 - 61
Max torque	Nm	73
Idle speed	Rpm	160
Air inlet hose	NPT	1/4" F
Air consumption	L/min	530
Air Inlet Ø int.	mm	10
Noise level	dBA	94,4
Vibration*	m/s²/K	2,4 / 0,7
Length	mm	279
Weight	Kg	1,25

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

AIR RATCHET WRENCHES REVERSIBLE

Ingersoll Rand

NEW

ITEM: 1211MAX-D4

The high-speed ratchet wrenches 1211MAX series offer a free speed of 625 rpm and an innovative impact mechanism with no torque reaction,108 Nm of peak torque and speed regulator for increased productivity.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L007312
GR63	Euro	(345,00)
Square Drive	■	1/2"
Torque range	Nm	14 - 81
Torque max	Nm	89
NO-load speed	Rpm	625
Air entry coupling	NPT	1/4" F
Air Consumption	L/min	388
Air inlet Ø int.	mm	10
Noise Level	dBA	90,3
Vibration*	m/s²/K	12,7 / 2,6
Length	mm	302
Weight	kg	1,38

* ISO28927 - 3-axis measurement: Vibration level/uncertainty of measurement.

PNEUMATIC ANGLE IMPACT WRENCHES

Ingersoll Rand

ITEM: 2025MAX

The MAX series pneumatic angle impact wrenches guarantee top-level performance, power and control are equipped with an Ingersoll Rand Jumbo hammer impact mechanism. Ideal for professional assembly and maintenance technicians when working in areas that are difficult to access.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L007512
GR63	Euro	(662,00)
Coupling	■	1/2"
Torque range	Nm	217
Max torque	Nm	244
No-load speed	Rpm	7100
Blows per minute	Nr	2100
Air inlet connector	NPT	1/4" F
Air consumption	L/min	538
Air Inlet hose Ø int.	mm	10
Noise level	dBA	96,6
Vibration	m/s²/K	17,4 / 3
Dimension L x P x H	mm	332 x 56 x 79
Weight	Kg	1,54

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

AIR IMPACT WRENCHES

Ingersoll Rand

ITEM: LA413-EU

Reversible straight Impact wrenches with adjustable clutch, the right compromise for different types of assembly.
One-hand forward/reverse operation.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L008014
GR63	Euro	396,00
Hex coupling	⬢	1/4"
Max torque	Nm	13
No-load speed	Rpm	1800
Power	Kw	0,25
Air inlet connector	NPT	1/4" F
Air consumption	L/min	84
Air inlet hose	mm	10
Noise level	dBA	85,5
Vibration	m/s²	< 2,5
Length	mm	260
Weight	Kg	1,5

AIR IMPACT WRENCHES

ITEM: LA439-EU

Reversible pistol grip air impact wrenches with adjustable clutch, the right compromise for different types of assembly.
Fitted with one-hand operation screw/unscrew switch.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L008514
GR63	Euro	396,00
Hex coupling	⬢	1/4"
Max torque	Nm	13
Speed A/R	Rpm	1800
Power	Kw	0,25
Air inlet connector	NPT	1/4" F
Air consumption	L/min	84
Air inlet hose Ø int.	mm	10
Noise level	dBA	86,9
Vibration	m/s²	< 2,5
Length	mm	216
Weight	Kg	1,1

PNEUMATIC IMPACT WRENCHES

ITEM: 15C

Reversible pneumatic impact wrenches with torque control and automatic air shut-off, indispensable where very high torque repeatability is required both in the presence of rigid and elastic joints. The tightening torque is adjusted by varying the compression of the main clutch spring, by screwing or unscrewing the threaded adjustment ring with a screwdriver (supplied).
The machines do not have a torque reading scale, any verification of the preset torque must be performed with a dynamometric instrument (not supplied).
The standard equipment includes a complementary spring for the clutch.

Features:
Straight handle with push start

Supply: Non-lubricated and lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L00872000	L00871400	L00870950
GR63	Euro	(1457,00)	(1457,00)	(1457,00)
Hex coupling	⬢	1/4" F	1/4" F	1/4" F
Torque range	Nm	0,4 - 2,0	0,4 - 3,5	0,4 - 4,5
No-load speed	Rpm	2000	1400	950
Power	Kw	0,15	0,15	0,15
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F
Air consumption	L/min	240	330	330
Air Inlet hose Ø int.	mm	5	5	5
Sound pressure ISO 3744-15744	dBA	73	73	73
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5
Dimension Ø x L	mm	38 x 230	38 x 230	38 x 230
Weight	Kg	0,58	0,59	0,59

Tech. Code		L00870650	L00870250	L00870150
GR63	Euro	(1457,00)	(1748,00)	(1822,00)
Hex coupling	⬢	1/4" F	1/4" F	1/4" F
Torque range	Nm	0,4 - 5,0	0,4 - 5,0	0,4 - 5,0
No-load speed	Rpm	650	250	150
Power	Kw	0,15	0,15	0,15
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F
Air consumption	L/min	330	330	330
Air Inlet hose Ø int.	mm	5	5	5
Sound pressure ISO 3744-15744	dBA	73	73	73
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5
Dimension Ø x L	mm	38 x 230	38 x 240	38 x 240
Weight	Kg	0,59	0,65	0,65

For other models consult the manufacturer's general catalogue.

NEW

ITEM: 15C.AL

Reversible pneumatic impact wrenches with torque control and automatic air shut-off, indispensable where very high torque repeatability is required both in the presence of rigid and elastic joints. The tightening torque is adjusted by varying the compression of the main spring of the clutch, by screwing or unscrewing the threaded adjustment ring nut by inserting the supplied screwdriver in the special niche obtained on the ring nut itself, the adjustment ring nut can be reached through a slot on the tool body.
The standard equipment includes a complementary spring for the clutch.

Features:
Straight handle with lever start complying with EN 792 standard

Supply: Non-lubricated and lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L00892000	L00891400	L00890950	L00890650
GR63	Euro	(1512,00)	(1512,00)	(1512,00)	(1512,00)
Hex coupling	⬢	1/4" F	1/4" F	1/4" F	1/4" F
Torque range	Nm	0,4 - 2,0	0,4 - 3,5	0,4 - 4,5	0.4 - 5,0
Speed A/R	Rpm	2000	1400	950	650
Power	Kw	0,15	0,15	0,15	0,15
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F	1/4" F
Air consumption	L/min	240	330	330	330
Air Inlet hose Ø int.	mm	5	5	5	5
Sound pressure ISO 3744-15744	dBA	73	73	73	73
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5	< 2,5
Dimension Ø x L	mm	38 x 228	38 x 228	38 x 228	38 x 228
Weight	kg	0,59	0,60	0,60	0,60

For other models consult the manufacturer's general catalogue

NEW

ITEM: 15C.APA-R

Features:
Pistol grip with push button start and reverse

Supply: Non-lubricated and lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L00912200	L00911400	L00910950	L00910650
GR63	Euro	(1681,00)	(1681,00)	(1681,00)	(1681,00)
Hex coupling	⬢	1/4" F	1/4" F	1/4" F	1/4" F
Torque range	Nm	0,6 - 2,2	0,4 - 3,5	0,4 - 4,5	0,4 - 5,0
Speed A/R	Rpm	2200	1400	950	650
Power	Kw	0,15	0,15	0,15	0,15
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F	1/4" F
Air consumption	L/min	360	360	360	360
Air Inlet hose Ø int	mm	5	5	5	5
Sound pressure ISO 3744-15744	dBA	71	71	71	71
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5	< 2,5
Dimension Ø x L x H	mm	37 x 186 x 155	37 x 186 x 155	37 x 186 x 155	37 x 186 x 155
Weight	Kg	0,75	0,77	0,77	0,77

For other models consult the manufacturer's general catalogue.

PNEUMATIC IMPACT WRENCHES

NEW

ITEM: 15C.APA-3I

Features:
Pistol grip with push button start and reverse.
3-point power supply for use in different work layouts.

Supply: Non-lubricated and lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L00930150	L00930250	L00930650
GR63	Euro	(2316,00)	(2223,00)	(1854,00)
Hex coupling	⬢	1/4" F	1/4" F	1/4" F
Torque range	Nm	0,4 - 5,0	0,4 - 5,0	0,4 - 5,0
Speed A/R	Rpm	150	250	650
Power	Kw	0,15	0,15	0,15
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F
Air consumption	L/min	360	360	360
Air Inlet hose Ø int.	mm	5	5	5
Sound pressure ISO 3744-15744	dBA	71	71	71
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5
Dimension Ø x L x H	mm	37 x 121 x155	37 x 121 x155	37 x 109 x 155
Weight	Kg	0,78	0,78	0,78

Tech. Code		L00930950	L00931400	L00932200
GR63	Euro	(1854,00)	(1854,00)	(1854,00)
Hex coupling	⬢	1/4" F	1/4" F	1/4" F
Torque range	Nm	0,4 - 4,5	0,4 - 3,5	0,6 - 2,2
Speed A/R	Rpm	950	1400	2200
Power	Kw	0,15	0,15	0,15
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F
Air consumption	L/min	360	360	360
Air Inlet hose Ø int.	mm	5	5	5
Sound pressure ISO 3744-15744	dBA	71	71	71
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5
Dimension Ø x L x H	mm	37 x 109 x 155	37 x 109 x 155	37 x 109 x 155
Weight	Kg	0,78	0,78	0,76

For other models consult the manufacturer's general catalogue

PNEUMATIC DRILLS

NEW

ITEM: FY8A - FY10A

Fiam pneumatic drills are equipped with advanced ergonomic solutions that allow different gripping positions to satisfy every situation of use, particularly recommended for their weight/power ratio, handling and effectiveness in every production sector. The wide range of machines with different speeds allows you to select the most suitable one according to the material to be drilled and the diameter of the drill bit.
The standard equipment includes a keyless steel chuck with Ø 1-10 mm capacity
Features:
400 Watt motor right rotation, lever start, straight handle recommended for vertical drilling operations.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L100026	L100018
GR63	Euro	(884,00)	(895,00)
Torque range	mm	1 - 4	2 - 7
Idle speed	Rpm	2600	1800
Power	Kw	0,40	0,40
Air Inlet connection	BSP	1/4" F	1/4" F
Air consumption	L/min	660	660
Air Inlet hose Ø int.	mm	8	8
Sound pressure ISO 3744-15744	dBA	77	77
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5
Dimension Ø x L	mm	46 x 270	46 x 270
Weight	Kg	1,33	1,33

PNEUMATIC DRILLS

ITEM: FS17A - FS10A - FS5A

Features:
Motor 260 Watt right rotation, lever start, straight handle recommended for vertical drilling operations

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L100217	L100210	L100205
GR63	Euro	(931,00)	(957,00)	(957,00)
Steel drilling capacity	mm	2 - 7	3 - 8	4 - 10
Speed A/R	Rpm	1700	1000	500
Power	Kw	0,26	0,26	0,26
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F
Air consumption	L/min	540	540	540
Air Inlet hose Ø int.	mm	8	8	8
Sound pressure ISO 3744-1574	dBA	76	76	76
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5
Dimension Ø x	mm	40 x 255	40 x 255	40 x 255
Weight	Kg	1,09	1,09	1,09

REVERSIBLE AIR DRILLS

ITEM: L1006

Reversible drills for forward or reverse operation.
Composite material/steel grip and keyless chuck.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L100606
GR63	Euro	80,00
Steel drilling capacity	mm	6
Chuck fitting	UNF	3/8"
Power	Kw	0,23
Speed A/R	Rpm	2600
Noise level	dBA	84
Vibration level	m/s²	0,4
Air inlet connector	NPT	1/4" F
Air consumption	L/min	690
Length	mm	148
Weight	Kg	0,6

While stocks last

ITEM: L1010

Reversible drill for RH/LH use.
Composite material/steel grip and keyless chuck.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L101010
GR63	Euro	95,00
Chuck capacity	mm	10
Chuck fitting	UNF	3/8"
Power	Kw	0,68
Speed A/R	max.	1800
Noise level	dBA	83
Vibration level	m/s²	0,5
Air inlet connector	NPT	1/4" F
Air consumption	L/min	720
Length	mm	202
Weight	Kg	1,1

While stocks last

REVERSIBLE AIR DRILLS

ITEM: 7802RAKC

Reversible air drills with 10 mm keyless chuck. Excellent quality compact, powerful and lightweight product. Incredibly handy with innovative features, produced by INGERSOLL RAND a global leader in the industry.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L102010
GR63	Euro	215,00
Steel drilling capacity	mm	10
Speed A/R	Rpm	2000
Power	Kw	0,38
Air Inlet connection	NPT	1/4" F
Air consumption	L/min	736
Air inlet hose Ø int.	mm	10
Noise level	dBA	82
Vibration	m/s²	2,8
Length	mm	188
Weight	Kg	1,2

ITEM: 7803RA

Reversible pneumatic drills with 13 mm keyed chuck. Excellent compact, powerful and lightweight (1.6 Kg) product. Incredibly handy with innovative features, produced by INGERSOLL RAND a global leader in the industry.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L102213
GR63	Euro	281,00
Steel drilling capacity	mm	13
Speed A/R	Rpm	500
Power	Kw	0,38
Air Inlet connection	NPT	1/4" F
Air consumption	L/min	765
Air Inlet hose Ø int.	mm	10
Noise level	dBA	83
Vibration	m/s²	< 2,5
Length	mm	221
Weight	Kg	1,5

PNEUMATIC DRILLS

NEW

ITEM: FY6PA - FY8PA - FY10PA

Fiam pneumatic drills are equipped with advanced ergonomic solutions that allow different gripping positions to satisfy every situation of use, particularly recommended for their weight/power ratio, handling and effectiveness in every production sector.
The wide range of machines with different speeds allows you to select the most suitable one according to the material to be drilled and the diameter of the drill bit.
The standard equipment includes a keyless steel chuck with Ø 1-10 mm capacity

Features:
400 Watt motor right rotation, push button start, pistol grip recommended for horizontal drilling operations.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L102532	L102526	L102518
GR63	Euro	(947,00)	(920,00)	(947,00)
Steel drilling capacity	mm	1 - 3	1 - 4	2 - 7
Speed A/R	Rpm	3200	2600	1800
Power	Kw	0,40	0,40	0,40
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F
Air consumption	L/min	660	660	660
Air Inlet hose Ø int.	mm	8	8	8
Sound pressure ISO 3744-1574	dBA	77	76	76
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5
Dimension Ø x L x H	mm	46 x 222 x 170	46 x 222 x 170	46 x 222 x 170
Weight	Kg	1,54	1,54	1,54

PNEUMATIC DRILLS

ITEM: FDE.PA - FSE.PA

Characteristics of the drills from 6000 to 2600 Rpm:
Motor 350 Watt right rotation, push button start, pistol grip recommended for horizontal drilling operations.

Characteristics of drills from 1700 to 500 Rpm:
Motor 260 Watt right rotation, push button start, pistol grip recommended for horizontal drilling operations.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L102760	L102749	L102733	L102726
GR63	Euro	(926,00)	(926,00)	(926,00)	(926,00)
Steel drilling capacity	mm	1 - 2	1 - 3	1 - 4	1 - 4
Speed A/R	Rpm	6000	4900	3300	2600
Power	Kw	0,35	0,35	0,35	0,35
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F	1/4" F
Air consumption	L/min	600	600	600	600
Air Inlet hose Ø int.	mm	8	8	8	8
Sound pressure ISO 3744-1574	dBA	77	77	77	77
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5	< 2,5
Dimension Ø x L x H	mm	38 x 233 x 155	38 x 233 x 155	38 x 233 x 155	38 x 233 x 155
Weight	Kg	1,08	1,08	1,08	1,08

Tech. Code		L102717	L102710	L102705
GR63	Euro	(952,00)	(990,00)	(990,00)
Steel drilling capacity	mm	2 - 7	3 - 8	4 - 10
Speed A/R	Rpm	1700	1000	500
Power	Kw	0,26	0,26	0,26
Air Inlet connection	BSP	1/4" F	1/4" F	1/4" F
Air consumption	L/min	540	540	540
Air Inlet hose Ø int.	mm	8	8	8
Sound pressure ISO 3744-1574	dBA	77	77	77
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5	< 2,5
Dimension Ø x L x H	mm	38 x 233 x 155	38 x 233 x 155	38 x 233 x 155
Weight	Kg	1,18	1,18	1,18

PNEUMATIC TAPPERS

ITEM: MAS6 - MAS8

Pneumatic tapping machines are the best solution for quick hand tapping operations with machine taps, even when high quality standards are required. Thanks to the excellent weight/power ratio, their great maneuverability and versatility of use, Fiam tapping machines guarantee optimal responses in every work situation and can also be used for the application of threaded inserts and studs. For all models, the direction of rotation of the tap can be reversed simply by pulling the tool.
The standard equipment includes a quick release chuck for tap holders code L1158xxx, on request it is possible to have the same machines with a precision chuck for bushes with built-in clutch.

Features:
260 Watt motor, lever + push start, straight handle recommended for vertical tapping.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L115006	L115008
GR63	Euro	(1353,00)	(1353,00)
Max.tapping	M	6	8
Power	Kw	0,26	0,26
Speed A/R	Rpm	1000 - 1700	500 - 800
Air Inlet Ø int.	BSP	1/4" F	1/4" F
Air consumption	L/min	540	540
Air Inlet hose Ø	mm	8	8
Sound pressure ISO 3744-1574	dBA	74	74
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5
Dimension Ø x L	mm	40 x 240	40 x 240
Weight	Kg	0,98	0,98

NEW

ITEM: MAY10 - MAY12

Features:
400 Watt motor, lever + push start, straight handle recommended for vertical tapping

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L115210	L115212
GR63	Euro	(1766,00)	(1766,00)
Max tapping	M	10	12
Power	Kw	0,40	0,40
Speed A/R	Rpm	450 - 930	220 - 470
Air Inlet connection	BSP	1/4" F	1/4" F
Air consumption	L/min	660	660
Air Inlet hose Ø int.	mm	8	8
Sound pressure ISO 3744-1574	dBA	78	78
Vibrations ISO 3744-1574	m/s²	< 2,5	< 2,5
Dimension Ø x L	mm	46 x 335	46 x 335
Weight	kg	1,82	1,82

NEW

ITEM: MA6P - MA8P

Features:
260 Watt motor, push-button start, pistol grip recommended for horizontal tapping

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L115406	L115408
GR63	Euro	(1425,00)	(1425,00)
Max.tapping	M	6	8
Power	Kw	0,26	0,26
Speed A/R	Rpm	1000 - 1700	500 - 800
Air Inlet connection	BSP	8	8
Air consumption	L/min	540	540
Air Inlet hose Ø int.	mm	8	8
Sound pressure ISO 3744-1574	dBA	78	78
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5
Dimension Ø x L x H	mm	38 x 230 x 155	38 x 230 x 155
Weight	Kg	1	1

NEW

ITEM: MAY10P - MAY12P

Features:
400 Watt motor, push button + push start, pistol grip recommended for horizontal tapping

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L115610	L115612
GR63	Euro	(1760,00)	(1779,00)
Max.tapping	M	10	12
Power	Kw	0,40	0,40
Speed A/R	Rpm	450 - 930	220 - 470
Air Inlet connection	BSP	1/4" F	1/4" F
Air consumption	L/min	660	660
Air Inlet hose Ø int.	mm	8	8
Sound pressure ISO 3744-1574	dBA	78	78
Vibration ISO 28927-1	m/s²	< 2,5	< 2,5
Dimension Ø x L x H	mm	46 x 289 x 147	46 x 289 x 147
Weight	kg	2,08	2,08

TAP HOLDER BUSHINGS FOR TAPPING MACHINES

NEW

ITEM: L1158

Tap holder bushings for Fiam pneumatic tapping machines equipped with standard quick change chuck.

Tech. Code		L1158028	L1158030	L1158035	L1158040
GR62	Euro	(40,00)	(26,00)	(26,00)	(26,00)
For taps shank Ø	mm	2,8	3,0	3,5	4,0
For tap ■	mm	2,1	2,4	2,7	3,0

Tech. Code		L1158045	L1158050	L1158060	L1158063
GR62	Euro	(26,00)	(26,00)	(26,00)	(26,00)
For taps shank Ø	mm	4,5	5,0	6,0	6,3
For tap ■	mm	3,4	3,8	4,9	5,0

Tech. Code		L1158065	L1158070	L1158073	L1158080
GR62	Euro	(24,00)	(26,00)	(26,00)	(26,00)
For taps shank Ø	mm	6,5	7,0	7,3	8,0
For tap ■	mm	4,9	5,5	5,5	6,2

Tech. Code		L1158085	L1158090	L1158094	L1158100
GR62	Euro	(30,00)	(43,00)	(30,00)	(30,00)
For taps shank Ø	mm	8,5	9,0	9,4	10,0
For tap ■	mm	7,0	7,0	7,0	8,0

PNEUMATIC ENGRAVING PENS

CE

ITEM: L1202

Vibrating pneumatic pens for marking the most varied materials such as metal, glass, etc.
The equipment includes a fine carbide tip.

Tech. Code		L1202150
GR63	Euro	280,00
Stokes per minute	BPM	30000
Noise level	dBA	65
Vibration (ISO 8662-4)	m/s²	< 2,5
Air inlet tube Ø int.	mm	4
Air inlet connection	BSP	1/4"
Air consumption	L/min	15
Dimension Ø x L	mm	17 x 150
Weight	kg	0,15

Thin spare tip code L1204RIC - Medium spare tip code L1203RIC

PNEUMATIC ENGRAVING PENS

NEW

CE

ITEM: 140EP

The Ingersoll Rand 140EP pen is a precision tool for engraving on any surface, from alloys to brittle ceramics, the soft rubber grip and slim body design make it ideal for extended use.

Tech. Code		L1206140
GR63	Euro	189,00
Strokes per minute	BPM	11400
Air Inlet connection	NPT	1/4" F
Air consumption	L/min	30
Air inlet tube Ø int.	mm	4
Noise level	dBA	77,5
Vibration*	m/s²/K	3,9 / 0,88
Length	mm	140
Weight	Kg	0,20

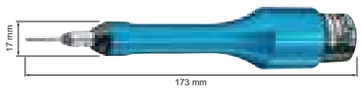
* ISO28927 - 3-axis measurement: Vibration level/uncertainty of measurement.

L

Indivisible package Suggested retail package - Unit price

PNEUMATIC GRINDERS WITH HIGH SPEED TURBINE

MANNESMANN DEMAG



ITEM: GT652D - 65000

High quality manageable and reliable turbine grinders with a long and tapered handle, suitable for light-micro-deburring and finishing with solid carbide and ceramic tools.Thanks to the engine mounted on rolling supports, the vibratins are almost absent. The high number of revolutions of these machines requires checking the technical specifications of the tool to check their compatibility.

Features:
- Rear air discharge with integrated silencer
- Operation via a rotary valve located on the handle

Standard equipment:
- Model Pliers ZG5 Ø 3 mm cod. 1226192
- Supply hose 1.5 m and exhaust 1 m with silencer cod. 1226289
- 2 Service keys cod. 1226765

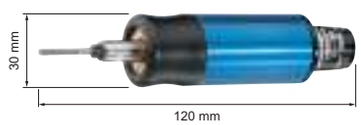
Power supply: Compressed air Non-lubricated - Recommended pressure 6.3 Bar

Tech. Code		L121003
GR63	Euro	(850,00)
Collect Ø	mm	3
Power	Watt	70
Max speed	Rpm	65000
Air consumption	L/min	210
Quick air coupling	Tap	European DN 7.8
Noise level	dB(A)	66
Vibration	m/s²	< 2,5
Dimension Ø x L	mm	17 x 173
Weight without tube	kg	0,27

Pliers model ZG5 with different diameters are available on request.

PNEUMATIC GRINDERS WITH HIGH SPEED TURBINE

MANNESMANN DEMAG



ITEM: GTV1000 - 100000

Compact and extremely easy to handle high quality industrial turbine grinders, suitable for micro-deburring and finishing with solid carbide and ceramic tools. Thanks to the engine mounted on rolling supports, the vibrations are almost absent. The high number of revolutions of these machines requires checking the technical specifications of the tool to check their compatibility.

Features:
- Front air discharge
- Operation via a rotary valve located on the handle

Standard equipment:
- Model collect ZG5 Ø 3 mm cod. 1226192
- Supply hose 1,5 , COD. 1226240
- 2 Service keys cod. 1226765

Power supply: Compressed air Non-lubricated - Recommended pressure 6.3 Bar

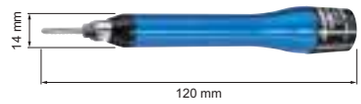
Tech. Code		L121403
GR63	Euro	(835,00)
Collect Ø	mm	3
Power	Watt	100
Max speed	Rpm	100000
Air consumption	L/min	318
Quick air coupling	Tap	European DN 7.8
Noise level	dB(A)	70
Vibration	m/s²	< 2,5
Dimension Ø x L	mm	30 x 120
Weight without tube	kg	0,21

Pliers model ZG5 with different diameters are available on request

HIGH SPEED PNEUMATIC GRINDERS

MANNESMANN DEMAG

ITEM: G551D - 55000



High quality industrial grinders, simple, manageable and reliable, suitable for milling, deburring, finishing and engraving with solid carbide, ceramic and abrasive tools. The high number of revolutions of these machines requires checking the technical specifications of the tool to check their compatibility.
Features:
- Rear air discharge with integrated silencer
- Operation via a rotary valve located on the handle
Standard equipment:
- Model collect ZG5 Ø 3 mm cod. 1226292
- Supply hose 1.5 m and exhaust 1 m with silencer cod. 1226275
- 2 Service keys cod. 1226765

Power supply: Lubricated compressed air - Recommended pressure 6,3 Bar

Tech. Code		L122003
GR63	Euro	(715,00)
Collect Ø	mm	3
Power	kW	100
Max speed	Rpm	55000
Air consumption	L/min	120
Quick air coupling	Tap	European DN 7.8
Noise level	dB(A)	74
Vibration	m/s²	< 2,5
Dimension Ø x L	mm	14 x 120
Weight without tube	kg	0,15

Pliers model ZG5 with different diameters are available on request

PNEUMATIC GRINDERS

IR ingersoll Rand

NEW

ITEM: 320PG

Mini grinders reliable and easy to handle thanks to their extremely small dimensions, ideal for light deburring and finishing operations with abrasive wheels, solid carbide and ceramic tools.
Features:
- Rear air discharge
- Activation by rotary valve located on the handle
Standard equipment:
- Collet Ø 3 mm
- Inlet hose and exhaust hose
- 2 service keys

Tech. Code		L128003
GR63	Euro	199,00
Collect Ø	mm	3
Power	Watt	70
Max speed	Rpm	60000
Air Inlet	NPT	1/8" F
Air consumption	L/min	220
Air inlet tube Ø int.	mm	6
Noise level	dBA	83
Vibration*	m/s²	2,4 / 0,73
Length	mm	140
Weight	Kg	0,23

ISO28927 - 3-axis measurement: Vibration level/uncertainty of measurement.

PNUEMATIC GRINDERS

Fiam PEOPLE AND SOLUTIONS

NEW

ITEM: SMZ15D

Pnuematic grinders compact and easy to handle, suitable for deburring, smoothing and polishing of moulds, usable with stem grinders, rotary files, brushes and flap rollers, with a maximum diameter of 15 mm.
Features:
Operation by lever with safety device in accordance with EN 792 and rear air outlet.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L129003
GR63	Euro	(846,00)
Collect Ø	mm	3
Power	Kw	0,13
Max.speed	Rpm	22000
Air Inlet connection	BSP	1/8" F
Air consumption	L/min	360
Air Inlet Ø int.	mm	5
Sound pressure ISO 3744-1574	dBA	74
Vibration ISO 28927-1	m/s²	< 3,5
Dimension Ø x L	mm	32 x 155
Weight	kg	0,37

Indivisible package Suggested retail package - Unit price

ITEM: 307B

Versatile and economic Smart Line pneumatic die grinders, suitable for deburring welds, grinding and polishing. Front air discharge, safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L129506
GR63	Euro	92,00
Collet Ø	mm	6
Power	Kw	0,19
Max speed	max.	28000
Air inlet connector - consumption	NPT	1/4" F
Air inlet hose	L/min	680
Noise level	mm	10
Vibration*	dBA	90
Weight	m/s²/K	4,5 / 1,1
Length	mm	132
Weight	Kg	0,33

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.
Spare collet Ø 6 mm code 1194977

ITEM: 5108MAX-M

Pneumatic grinders MAX series are economical, durable, compact, lightweight and easy to handle. Fitted with ball bearings for greater reliability. Designed to function without lubricants so as not to contaminate the work area. Improved handle design with a low profile control lever for prolonged operation without fatigue.

Power supply: Not lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L130106
GR63	Euro	187,00
Collet Ø	mm	6
Power	Kw	0.3
Max speed	Rpm	25,000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	708
air inlet tube Ø int.	mm	10
Noise level	dBA	83,3
Vibration*	m/s²/K	1,8 / 0,8
Length	mm	167
Weight	Kg	0,46

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.
Spare collet Ø 6 mm code 1194977

ITEM: 325SC4A

Straight die grinders, ideal for carrying out maintenance, powerful 0.4 cv (0.3 kW) motor. The torque and power provided are suitable for a wide range of applications, from the automotive industry to assembly. With a weight of less than 0.45 kg, the Revolution series straight die grinders only require minimal effort from the operator and offer maximum comfort.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L130206
GR63	Euro	469,00
Collet Ø	mm	6
Power	Kw	0,3
Max. speed	Rpm	25.000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	906
Air inlet hose Ø int.	mm	10
Noise level	dBA	78,6
Vibration*	m/s²/K	2,6 / 1,1
Length	mm	166
Weight	Kg	0,4

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.
Spare collet Ø 6 mm code 1327708

NEW

ITEM: SMS30DC

Compact and handy pneumatic grinders, suitable for deburring, smoothing and polishing of moulds, usable with stem grinders, rotary files, metal brushes and flap rollers, with a maximum diameter of 30 mm.
Characteristics:
Operation by lever with safety device in accordance with EN 792 and front air exhaust

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L131606
GR63	Euro	(729,00)
Collect Ø	mm	6
Power	Kw	0,30
Max speed	Rpm	24000
Air inlet connection	BSP	1/4" F
Air consumption	L/min	540
Air inlet hose Ø int.	mm	10
Sound pressure ISO 3744-1574	dBA	83
Vibration ISO 28927-1	m/s²	4
Dimension Ø x L	mm	40 x 190
Weight	kg	0,62

NEW

ITEM: SMS30DCZ

Features:
Operation by lever with safety device in accordance with EN 792 and rear air outlet

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L131806
GR63	Euro	(719,00)
Collect Ø	mm	6
Power	Kw	0,30
Max speed	Rpm	22000
Air Inlet connection	BSP	1/4" F
Air comsumption	L/min	540
Air Inlet hose Ø int.	mm	10
Sound pressure ISO 3744-15744	dBA	80
Vibration ISO 28927-1	m/s²	3
Dimension Ø x L	mm	40 x 190
Weight	kg	0,62

NEW

ITEM: SMY50DC2

High-performance pneumatic grinders, suitable for deburring, smoothing and polishing of moulds, usable with stem grinders, rotary files, metal brushes and flap rollers, with a maximum diameter of 50 mm
Features:
Operation by lever with safety device in accordance with EN 792 and rear air outlet

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L132006
GR63	Euro	(892,00)
Collect Ø	mm	6
Power	Kw	0,40
Max.speed	Rpm	15000
Air Inlet connection	BSP	1/4" F
Air consumption	L/min	600
Air Inlet hose Ø int.	mm	10
Sound pressure ISO 3744-15744	dBA	83
Vibration ISO 28927-1	m/s²	< 3
Dimension Ø x L	mm	48 x 235
Weight	kg	1,06

EXTENDED PNEUMATIC GRINDERS

ITEM: 325XC4A

Extended straight die grinders, ideal for carrying out maintenance, powerful 0.4 CV (0.3 kW) motor. The torque and power provided are suitable for a wide range of applications, from the automotive industry to assembly. With a weight of less than 0.65 kg, the Revolution series straight die grinders only require minimal effort from the operator and offer maximum comfort.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L130506
GR63	Euro	611,00
Collet Ø	mm	6
Power	Kw	0.3
Max speed	Rpm	25,000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	936
Air inlet tube Ø int.	mm	10
Noise level	dBA	78,6
Vibration	m/s²	< 2,5
Length	mm	244
Weight	Kg	0,62

Spare collet Ø 6 mm code 1327708

PNEUMATIC GRINDERS

NEW

ITEM: SMS30DZ

Extended pneumatic grinders, suitable for deburring, smoothing and polishing of moulds, usable with stem grinders, rotary files, metal brushes and flap rollers, with a maximum diameter of 30 mm.
Features:
Operation by lever with safety device in accordance with EN 792 and rear air outlet.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L132206
GR63	Euro	(857,00)
Collect Ø	mm	6
Power	Kw	0,30
Max speed	Rpm	22000
Air Inlet connection	BSP	1/4" F
Air consumption	L/min	540
Air inlet hose Ø int.	mm	10
Sound pressure ISO 3744-15744	dBA	80
Vibration ISO 28927-1	m/s²	< 2,5
Dimension Ø x L	mm	40 x 245
Weight	kg	0,83

PNEUMATIC DIE GRINDERS

ITEM: 301B

Versatile and economic Smart Line pneumatic angle grinders, suitable for deburring welds, grinding and polishing. Safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L134006
GR63	Euro	113,00
Collet Ø	mm	6
Power	Kw	0,19
Max. speed	Rpm	21000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	680
Air inlet hose Ø int	mm	10
Noise level	dBA	91,8
Vibration*	m/s²/K	5,9 / 1
Length	mm	134
Weight	Kg	0,46

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.
Spare collet Ø 6 mm code 1194977

PNEUMATIC DIE GRINDERS

ITEM: 302B

The compact and easy to handle Series 300 pneumatic angle grinders are suitable for deburring, grinding and polishing moulds. Safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L134206
GR63	Euro	(191,00)
Collet Ø	mm	6
Power	Kw	0,25
Max. speed	Rpm	20000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	651
Air inlet hose Ø int.	mm	10
Noise level	dBA	90
Vibration*	m/s²/K	5,5 / 1,5
Length	mm	176
Weight	Kg	0,58

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.
Spare collet Ø 6 mm code 1327718

NEW

ITEM: 5102MAX-M

Pnuematic die grinders MAX series are economical and durable, compact and light, easy to handle equipped with ball bearings to ensure greater reliability. Designed to work without lubricant, they avoid contaminating the working enviorment. Improved handle design with low profile joustick, for prolonged fatigue-free operation.

Power supply: Compressed air Not lubricated - Recommended pressure 6.3 Bar

Tech. Code		L134406
GR63	Euro	250,00
Collect Ø	mm	6
Power	Kw	0,3
Speed	Rpm	20.000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	708
Air Inlet hose Ø int.	mm	10
Noise level	dBA	84,1
Vibrationi*	m/s²/K	3,3 / 1,1
Length	mm	178
Weight	Kg	0,64

* ISO28927 - 3 axis measurement: vibration level / measurement uncertainty.
Spare pliers Ø 6 mm code 1194977

PNEUMATIC GRINDERS

NEW

ITEM: SMLES135

Pneumatic angle grinders compact and easy to handle, suitable for deburring, smoothing and polishing of moulds, usable with stem grinding wheels, rotary files, metal brushes and flap rollers, with a maximum diameter of 30 mm.
Features:
Operation by lever with safety device compliant with standard EN 792.

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L135006
GR63	Euro	(949,00)
Collect Ø	mm	6
Power	Kw	0,3
Max.speed	Rpm	13500
Air Inlet connection	BSP	1/4" F
Air consumption	L/min	540
Air Inlet Ø int.	mm	10
Sound pressure ISO 3744-15744	dBA	81
Vibration ISO 28927-1	m/s²	0,3
Dimension Ø x L x H	mm	40 x 185 x 71
Weight	kg	0,86

Indivisible package Suggested retail package - Unit price

PNEUMATIC ANGLE GRINDERS

ITEM: SMS100A

Pneumatic angle grinders fast and light suitable for deburring, smoothing and cutting off operations, usable with depressed center gringing wheels, flap discs and cutting discs with a maximum diamerter of 100 mm. The standard equipment includes a disc protection casing, a locking nut and a key for closing the nut.

Tech. Code		L1400100
GR63	Euro	(1073,00)
Disc Ø x H max	mm	100 x 5
Connection pin Ø	mm	16
Power	Kw	0,30
Max speed	Rpm	13500
Air Inlet connection	BSP	1/4" F
Air consumption	L/min	540
Air Inlet hose Ø int.	mm	10
Sound pressure ISO 3744-15744	dBA	83
Vibration ISO 28927-1	m/s²	1,1
Dimension Ø x L x H	mm	40 x 190 x 77
Weight	kg	1,00

ITEM: SMY115A

Pneumatic angle grinders fast and light suitable for deburring, smoothing and cutting operations, usable with wire brushes, depressed center grinding wheels, flap and cutting discs with a maximum diameter of 115 mm. The standard equipment includes a lateral auxiliary handle, a disc protection guard, a locking ring and a key for closing the ring.
Features:
Operation by lever with safety device compliant with standard EN 792

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L1405115
GR63	Euro	(1126,00)
Disc Ø max	mm	115
Connection pin Ø	mm	22 (M14)
Power	Kw	0,40
Max.speed	Rpm	9000
Air Inlet connection	BSP	1/4" F
Air consumption	L/min	600
Air Inlet hose Ø int.	mm	10
Sound pressure ISO 3744-15744	dBA	82
Vibration ISO 28927-1	m/s²	3,9
Dimension Ø x L x H	mm	47 x 225 x 80
Weight	Kg	1,65

PNEUMATIC ANGLE GRINDERS

ITEM: 345MAX-M

The 345MAX-M angle grinders are the ideal choice for effective material removal. This 125mm pneumatic angle grinder combines a unique internal regulator (which prevents an excessive increase in speed) with a powerful 0.66 kW motor to provide the best power-to-weight ratio in its category and high-performance material removal. Safety lever actuated, compliant with EN 792.

Power supply: Not lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L1410125
GR63	Euro	598,00
Disc Ø	mm	125
Thread Ø	mm	22 (M14)
Power	Kw	0,66
Max. speed	Rpm	12.000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	1161
Air inlet hose Ø int.	mm	10
Noise level	dBA	79,6
Vibration	m/s²	7,9
Length	mm	245
Weight	Kg	1,6

PNEUMATIC ANGLE GRINDERS

ITEM: 100SM125A

Pneumatic angle grinders powerful and sturdy suitable for deburring, smoothing and cutting off operations, usable with wire brushes, depressed center grinding wheels, flap and cutting discs with a maximum diameter of 125 mm. The standard equipment includes a lateral auxiliary handle, a disc protection guard, a locking ring and a key for closing the ring.
Features:
Operation by lever with safety device compliant with standard EN 792

Power supply: lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L1414125
GR63	Euro	(1943,00)
Disc Ø max	mm	125
Connection pin Ø	mm	22 (M14)
Power	Kw	1,00
Max.speed	Rpm	12200
Air Inlet connection	BSP	3/8" F
Air consumption	L/min	1200
Air Inlet hose Ø int.	mm	10
Sound pressure ISO 3744-15744	dBA	84,5
Vibration ISO 28927-1	m/s²	< 2,4
Dimension L x H	mm	254 X 106
Weight	Kg	2,3

AIR BELT SANDERS

ITEM: G1A200PS812

Small 0.4 HP (0.3 kW) belt sander, ideal for the removal of light material, cleaning rough castings, deburring components, cleaning weld seams and other finishing operations. The G1 series offers a low noise level, reduced vibration and direct access to the motor for maintenance. Safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L1502305
GR63	Euro	1596,00
Belt dimension	mm	13 x 305
Power	Kw	0,3
No load speed	Rpm	20.000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	708
Air Inlet tube Ø int.	mm	8
Noise level	dBA	83,6
Vibration*	m/s²/K	2,6 / 0,7
Length	mm	273
Weight	kg	0,54

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

ITEM: L1504

Belt sanders without bevel gear, with speed variator and digital display. 360° rotating head.
Safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L1504330
GR63	Euro	448,00
Belt dimension	mm	10 x 330
Power	kW	0,25
No load speed	Rpm	18.000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	690
Air inlet tube Ø int.	mm	8
Noise level	dBA	84
Vibration level	m/s²	< 2,5
Dimension L x P	mm	340 x 80
Weight	kg	1

ROTO-ORBITAL PNEUMATIC SANDERS

ITEM: 4151-HL

Reduced vibration model designed for extracting dust via suction, produces a very high quality finish and connects to central or portable vacuum systems. The 4151-HL sander removes dust and particles through and around the pad, keeping it away from the motor and work area. Can be used with 6-hole Velcro discs.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L1551150
GR63	Euro	274,00
Pad Ø	mm	150
Orbit Ø	mm	5
Power	kW	0,15
Max speed	Rpm	12.000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	450
Air inlet hose Ø int.	mm	8
Noise level	dBA	81,6
Vibration*	m/s²/K	7,5/1,6
Length	mm	190
Weight	kg	0,87

* ISO28927 - 3-axis measurement: Vibration level/uncertainty of measurement.

ITEM: 5151-6-HL

Orbital Optimal Heavy Duty Sanders 5100 Series Ingersoll Rand®offer the efficiency you need for high-level productivity. They can be used with 6-hole velcro abrasive discs on multiple surfaces, such as wood, composie materials, fiberglass and sheet steel.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L1553150
GR63	Euro	356,00
Pad Ø	mm	150
Orbit Ø	mm	5
Power	Kw	0,22
Max speed	Rpm	12000
Air inlet connection	NPT	1/4" F
Air consumption	L/min	496
Air Inlet tube Ø int.	mm	8
Noise level	dBA	77,6
Vibration*	m/s²/K	6 / 2
Length	mm	166
Weight	Kg	0,82

*ISO28927 - 3- axis measurement: vibration level/measurement uncertainty.

HAND-HELD DISC SANDERS

ITEM: L1550

Small angle sander. Without bevel gear. Available for Ø 50 and 75 mm discs. Its light weight and ergonomics means that it can be used with the palm of the hand and in a wide variety of processes. Mounts type R quick coupling discs of the G2410 - G2420 - G2430 ranges.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L155050	L155075
GR63	Euro	354,00	360,00
Pad Ø	mm	50	75
Power	kW	0,25	0,25
Max speed	Rpm	20.000	20.000
Air inlet connector	NPT	1/4" F	1/4" F
Air consumption	L/min	540	560
Noise level	dBA	79	79
Vibration	m/s²	< 2,5	< 2,5
Dimension L x P x H	mm	103 x 50 x 90	103 x 75 x 90
Weight	kg	0,48	0,55

PNEUMATIC JIGSAWS

ITEM: 4429

Pneumatic jigsaws ergonomic compact designed to cut plastic, fibreglass, aluminium, composite materials and sheet steel. The small size of these tools makes it easier to access even tight spaces. Safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L158010
GR63	Euro	362,00
Strokes per minute	Nr	5000
Stroke length	mm	10
Air inlet connector	NPT	1/4" F
Air comsumption	L/min	255
Air inlet hose Ø int.	mm	10
Noise level	dBA	66,2
Vibration*	m/s²/K	9,5 / 2,4
Length	mm	356
Weight	kg	0,74

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.

BLADES FOR AIR RECIPROCATING SAWS

ITEM: P4EV-6 / P4CS-6 / P4FS-6

Bi-metal blades for use with all standard pneumatic saws with 1/2" shank.

Tech. Code	GR76 Euro	Total length mm	Teeth TPI	Package content pc.
N519814	(40,60)	100	14/18	6
N519824	(40,60)	100	24	6
N519832	(40,60)	100	32	6

The price shown refers to a pack

PNEUMATIC PERCUSSION HAMMERS

ITEM: LA427-EU

Pneumatic percussion hammers suitable for chipping, cutting and stripping of materials. The machining takes place through the repeated action of linear impulses by the tool applied to the pneumatic hammer.
Set in case including 6 assorted chisels with hexagonal shank.

Power supply: Lubricated compressed air - Recommended pressure 6.3 Bar

Tech. Code		L159007
GR63	Euro	186,00
Coupling	⬢	10,2
Blows per minute	Nr.	3500
Air inlet connector	NPT	1/4" F
Air consumption	L/min	425
Air inlet hose Ø int.	mm	10
Noise level	dBA	101,4
Vibration*	m/s²/K	14,8 / 2,2
Length	mm	198
Weight	kg	1,54

* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.
Spares:
Set of 5 assorted chisels with hexagonal shank.
Spring retainer for chisels - Code L1590FM

PNEUMATIC SHAPERS

ITEM: SH-100A

The pneumatic shapers Nitto SH-100A is ultra-small, ultra-lightweight air tool, therefore incredibly user-friendly.
Its double-acting piston system ensures low-vibration levels, yet a high-performance, powerful tool.

Standard accessories files Kit diameter 5mm length 105mm:
- 1 round file Ø 2.5mm
- 1 triangular file 2.5mm
- 1 half rounded file 3mm
- 1 rectangular file 7x3mm

Tech. Code		L160009
GR63	Euro	(688,30)
Run	mm	9
Blade stroke/min	Nr.	3700
File coupling Ø max	mm	6,3
Air entry coupling	NPT	1/8"
Air consumption	L/min	240
Noise level	dBA	82
Length	mm	177
Weight	kg	1,1

Indivisible package Suggested retail package - Unit price

PNEUMATIC LAPPING TOOLS

ITEM: L1700

Pneumatic lapping tools suitable for small operations and maintenance which is necessary for tools with alternative movement.
Standard equipment:
Pliers Ø 3 mm with provision for the use of flat tools 1 mm thick.

Tech. Code		L170010
GR63	Euro	345,00
Length run	mm	0,5
Runs per minute	Nr.	45000
Maximum pressure	Bar	6
Noise level (ISO 15744)	dBA	80
Dimension Ø x L	mm	23 x 185
Weight	kg	220

* Stones available on chapter G.7 of this catalogue

SPRING BALANCERS FLEX LIGHT SERIES

ITEM: FLEX TYPE B

Sheet steel housing. Spring with adjustable load. Adjustable cable run. Safety device against spring break. Suitable for the balanced suspension of tools and frames.

Tech. Code		L2100005015	L2100010020	L2100020035
GR63	Euro	57,30	57,30	57,30
Load capacity	kg	0.5-1.5	1-2	2-3.5
Cable length	m	2.30	2.30	2.30
Cable		Braided nylon	Braided nylon	Braided nylon
Weight	kg	0.60	0.65	0.65

Tech. Code		L2100030060	L2100050085	L2100080110
GR63	Euro	99,50	99,50	99,50
Load capacity	kg	3-6	5-8.5	8-11
Cable length	m	2.30	2.30	2.30
Cable		Coated steel	Coated steel	Coated steel
Weight	kg	1.65	1.70	1.75

SPRING BALANCERS MATIC WITH COMPRESSED AIR HOSE

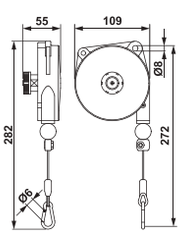
ITEM: MATIC

Composite material housing. Spring with adjustable load. Adjustable hose run. Specifically designed for pneumatic tools, the feeding hose is also the tool supporting cable.

Tech. Code		L2105005015	L2105015030	L2105030050
GR63	Euro	161,70	(161,70)	(161,70)
Load capacity	kg	0,5-1,5	1.5-3	3-5
Pipe length	m	1,60	1,60	1,60
Fitting		¼" M	¼" M	¼" M
Weight	kg	1,6	1.7	1.8

SPRING BALANCERS - LIGHT SERIE RUN 1600

TECNA



ITEM: 9311 - 9312 - 9313

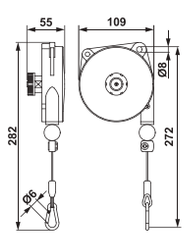
Structural characteristics:
- Suitable for the assembly lines
- Indicated for the use of electrical and pneumatic tools

Advantages:
- Reduces the operator's labour
- Reduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		L2200002005	L2200004010	L2200010020	L2200020030
GR63	Euro	(37,90)	39,10	41,90	45,20
Load capacity	Kg	0,2 ÷ 0,5	0.4 ÷ 1	1 ÷ 2	2 ÷ 3
Weight	Kg	0,55	0.6	0.6	0.7
Run	mm	1600	1600	1600	1600
Cable		Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum

SPRING BALANCERS - SERIE NYLON RUN 1600

TECNA



ITEM: 9300NY - 9301NY - 9302NY - 9303NY

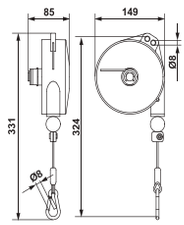
Features:
- Cover in nylon and rope in polyrpopylene
- Suitable for assembly lines
- Suitable for the use of small electric and pneumatic tools

Advantages:
- Cancels the operators fatigue
- Reduces processing time
- Improve the quality of work
- Limits wear and damage to tools and people

Tech. Code		L2202002005	L2202004010	L2202010020	L2202020030
GR63	Euro	(44,20)	47,60	48,70	54,30
Load capacity	Kg	0,2 ÷ 0,5	0,4 ÷ 1	1 ÷ 2	2 ÷ 3
Weight	Kg	0,5	0,5	0,6	0,7
Excursion	mm	1600	1600	1600	1600
Fune		Polipropilene	Polipropilene	Polipropilene	Polipropilene
Cap		Nylon	Nylon	Nylon	Nylon

SPRING BALANCERS - LIGHT SERIE RUN 2000

TECNA



ITEM: 9320 - 9321 - 9322 - 9323

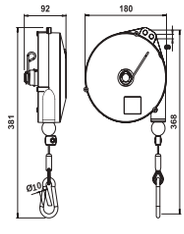
Structural characteristics:
- Suitable for the assembly lines
- Indicated for the use of electrical and pneumatic tools

Advantages:
- Reduces the operator's labour
- Reduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		L2210010025	L2210020040	L2210040060	L2210060080
GR63	Euro	89,10	98,60	116,00	130,10
Load capacity	Kg	1 ÷ 2.5	2 ÷ 4	4 ÷ 6	6 ÷ 8
Weight	Kg	2	2	2.3	2.5
Run	mm	2000	2000	2000	2000
Cable		Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum

SPRING BALANCERS - LIGHT SERIE RUN 2500

TECNA



ITEM: 9336 - 9337 - 9338 - 9339 - 9340

Structural characteristics:
- Suitable for the assembly lines
- Indicated for the use of electrical and pneumatic tools and handling of medium loads

Advantages:
- Reduces the operator's labour
- Reduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		L2220020040	L2220040060	L2220060080	L2220080100	L2220100140
GR63	Euro	(124,60)	(132,30)	(136,40)	(155,20)	173,70
Load capacity	Kg	2 ÷ 4	4 ÷ 6	6 ÷ 8	8 ÷ 10	10 ÷ 14
Weight	Kg	2.9	3.2	3.5	3.7	4
Run	mm	2500	2500	2500	2500	2500
Cable		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum

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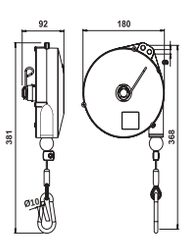
Indivisible package Suggested retail package - Unit price

SPRING BALANCERS - SERIE WITH SAFETY BLOCK RUN LOCK 2500

TECNA



ITEM: 9346 - 9347 - 9348 - 9349 - 9350

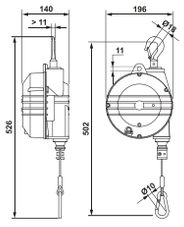
Features:
- Equipped with a device that allows you to stop the run
- Suitable for assembly lines
- Suitable for the use of electric or pneumatic tools and for handling medium loads

Advantages
- Cancels the operators fatigue
- Reduces processing time
- Improve the quality of work
- Limits wear and damage to tools and people

Tech. Code		L2225020040	L2225040060	L2225060080	L2225080100	L2225100140
GR63	Euro	(150,60)	(170,10)	(176,60)	(194,00)	(215,00)
Load capacity	Kg	2 ÷ 4	4 ÷ 6	6 ÷ 8	8 ÷ 10	10 ÷ 14
Weight	Kg	3	3,3	3,6	3,8	4
Excursion	mm	2500	2500	2500	2500	2500
Fune		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum

SPRING BALANCERS - MEDIUM SERIE RUN 2000

TECNA



ITEM: 9356 - 9357 - 9358 - 9359

Structural characteristics:
- Suitable for the assembly lines
- Indicated for the use of electrical and pneumatic tools and handling of medium loads, portable welders and multiple screw drivers

Advantages:
- Reduces the operator's labour
- Reduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		L2230100140	L2230140180	L2230180220	L2230220250
GR63	Euro	317,90	317,90	338,30	(338,30)
Load capacity	Kg	10 ÷ 14	14 ÷ 18	18 ÷ 22	22 ÷ 25
Weight	Kg	5.5	6.5	6	6.6
Run	mm	2000	2000	2000	2000
Cable		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum

SPRING BALANCERS - HEAVY SERIE RUN 2700

TECNA

ITEM: 9520 - 9521 - 9522 - 9523 - 9524 - 9525

Features:
- Suitable for assembly lines
- Suitable for handling heavy parts, portable welding machines and industrial screwdrivers

Advantages:
- Adjustable capacity by endless screw
- Auxiliary safety sospension
- Safety device against load drop due to spring breakage (> 3 Kg)
- Upper sospension with revolving safety hook
- Divice to lock the load at any height
- Adjustable stroke limiter

Tech. Code		L2245120200	L2245200300	L2245300400	L2245400500	L2245500600	L2245600700
GR63	Euro	(750,20)	(770,60)	(809,10)	(830,60)	(846,50)	(861,20)
Load capacity	Kg	12 ÷ 20	20 ÷ 30	30 ÷ 40	40 ÷ 50	50 ÷ 60	60 ÷ 70
Weight	Kg	12,8	12,6	15,8	15,4	16,6	15,7
Excursion	mm	2700	2700	2700	2700	2700	2700
Fune		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum

SPRING BALANCERS - ATEX SERIE RUN 1600

TECNA

ITEM: 9311AX - 9312AX - 9313AX

Balancers suitable for use in environments with a potentially exlposive atmosphere composed of flammable gases or combustible dusts.

Features:
- Suitable for assembly lines
- Suitable for handling small electric or pneumatic tools

Advantages:
- Adjustable capacity
- Auxiliay safety suspension
- Adjustable stroke limiter

Certification ATEX II 2G c T6

Tech. Code		L2250010020	L2250020030	L2250004010
GR63	Euro	(110,20)	(120,90)	(110,20)
Load capacity	Kg	0,4 ÷ 1	1 ÷ 2	2 ÷ 3
Weight	Kg	0,6	0,6	0,8
Excursion	mm	1600	1600	1600
Fune		Stainless Steel	Stainless Steel	Stainless Steel
Cap		Aluminum	Aluminum	Aluminum

SPRING BALANCERS - ATEX SERIE RUN 2000

TECNA

ITEM: 9320AX - 9321AX - 9322AX - 9323AX

Balancers suitable for use in enviornments with a potentially explosive atmosphere composed of flammable gases or combustible dusts.

Features:
-Suitable for assembly lines
-Suitable for handling electric tools or medium size pneumatic.

Advantages:
- Adjustable capacity
- Auxililary safety supension
- Safety device against load drop due to spring breakage (> 3 kg)
- Adjustable stroke limiter

Certification ATEX II 2G c T6

Tech. Code		L2252010025	L2252020040	L2252040060	L2252060080
GR63	Euro	(139,40)	(145,10)	(146,20)	(164,20)
Load capacity	Kg	1 ÷ 2,5	2 ÷ 4	4 ÷ 6	6 ÷ 8
Weight	Kg	1,7	1,9	2	2,3
Excursion	mm	2000	2000	2000	2000
Fune		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum

Related products

WORKS SAFETY SHOES

Tech. Code	EU Size	US size
K121044	44	10,5
K121045	45	11
K121046	46	11,5

The products are available in chapter K

Indivisible package Suggested retail package - Unit price

BLOW GUNS

ITEM: 25/B1

Professional blow guns with progressive air valve. Aluminum body and nickel- plated steel lever.

Tech. Code		L3100100	L310014
GR62	Euro	10,85	9,66
Fitting		1/4" milled nut	BSP 1/4" F
📦		1	1

ITEM: 25/B1-RB

Professional blow guns with rubber protection and progressive air valve. Aluminum body and nickel-plated lever.

Tech. Code		L3101101	L310114
GR62	Euro	12,41	11,02
Fitting		1/4" milled nut	BSP 1/4" F
📦		1	1

BLOW GUNS IN NYLON PA6

ITEM: AP/1

Professional blow guns in nylon PA6 with progressive air valve, ergonomic design,brass plated nozzel. Body,lever and valve in nylon PA6. Threaded 1/4"F.

Tech. Code		L3105101
GR62	Euro	9,63
Fitting		BSP 1/4" F
📦		1

BLOW GUNS WITH SILENT NOZZEL

ITEM: 25/AR

Professional blow guns with progressive air valve and silent nozzel in brass. Noise level max 78 dBA. Aluminum body and nickel-plated lever. Threaded 1/4"F + fitting with milled nut.

Tech. Code		L3110100	L311014
GR62	Euro	15,17	13,92
Fitting		Milled nut 1/4"	BSP 1/4"F
📦		1	1

SAFETY BLOW GUNS

ITEM: 25/AN

Professional blow guns with progressive air valve and antinfortunistic nozzel in brass. Aluminum body and nickel-plated lever.

Tech. Code		L3115100	L311514
GR62	Euro	12,47	11,17
Fitting		1/4" milled nut	BSP 1/4" F
📦		1	1

BLOW GUNS AJUSTABLE MULTIFLOW

ITEM: 11-210-0450

The mutiflow blow gun CEJN effectively cleans surfaces by air or fluid with a strong blowing inequality jet force. It is possible to obtain a defined flow thanks to the position of the settings. The nozzle can be regolated from a thin jet stream to a wide ranging stream. Multiflow complies with all safety standards OSHA in cases of obstructive tips.

Tech. Code		L3120100
GR62	Euro	64,80
Air flow		Ajustable 200 l/min - 1200 l/min
Coupling		BSP 1/4" F
Noise level	dB	79 - 101
Weight	g	205

BLOW GUNS - EXTENDEND REACH SPOUT

ITEM: 25/B2

Professional blow guns with progressive air valve, with extended reach spout. Spout in aluminum, length 180 mm. Aliminum body and nickel-plated lever.

Tech. Code		L3150100	L315014
GR62	Euro	12,27	11,08
Fitting		1/4" milled nut	BSP 1/4" F
Spout	mm	180	180
		1	1

ITEM: 25/B2-RB

Professional blow guns with extended spout and non-slip rubber handle, progressive air valve. Aluminum body and nickel-plated lever.

Tech. Code		L3151100	L315114
GR62	Euro	13,86	12,67
Fitting		1/4" milled nut	BSP 1/4" F
Spout	mm	180	180
		1	1

BLOW GUNS EXTENDED REACH

ITEM: 25/B2-RB-500

Professional blow guns with extra long lance and non-slip rubber grip, progressive air valve. Aluminium body and nickel-plated steel lever.

Tech. Code		L315314
GR62	Euro	14,36
Coupling		BSP 1/4" F
Nozzle	mm	500
		1

BLOW GUNS EXTENDED REACH

ITEM: AP/2-500

Professional blow guns made of Nylon PA6 with extra long lance and progressive air valve. Nylon PA6 body, lever and valve, nickel-plated steel nozzle.

Tech. Code		L315414
GR62	Euro	45,20
Coupling		BSP 1/4" F
Nozzle	mm	500
		5

BLOW GUNS - IN NYLON PA6 WITH BENT SPOUT

ITEM: AP/3

Professional blow guns in nylon PA6 with progressive air valve, ergonomic design, brass plated nozzel, bent nozzel spout L=100 MM. Body, lever and valve in nylon PA6 - Threaded 1/4"F.

Tech. Code		L3155101	L3155102
GR62	Euro	13,17	11,14
Fitting		1/4" milled nut	BSP 1/4" F
		1	1

ACCESSORIES FOR BLOW GUNS - BENT SPOUT

ITEM: S - G - AR

Accessories for professional blow guns in nylon PA6 bent spout:

- Anti-splinter shield
- Anti-scratch
- Nozzel silencer

Tech. Code		L3156S	L3156G	L3156R
GR62	Euro	4,41	3,65	6,82
Accessory		Anti-splinter shield	Anti-scratch nozzle	Nozzle silencer
		1	1	1

BLOW GUNS WITH RUBBER SPOUT

ITEM: L3160

Blow guns with flexible rubber body, stainless steel pin, fitting and valve in brass. Max. working pressure 10 bar.

Tech. Code		L3160100
GR62	Euro	8,44
Fitting		1/4" milled nut
		1

Indivisible package Suggested retail package - Unit price

BLOW GUNS IN PLASTIC - EXTENDEND REACH BENT SPOUT

ITEM: L3152

Blow guns in plastic with bent spout L = 100 mm. Threaded 1/4"F

Tech. Code		L3152100
GR62	Euro	12,90
Fitting		BSP 1/4" F
◈		1

BLOW GUNS IN ACETALIC RESIN - BENT SPOUT

ITEM: L3162

Professional blow guns with progressive air valve and spring in stainless steel. Rotating attachment with thread 1/4"M removable. Body in hostform C and spout in chromed steel L=110 mm.

Tech. Code		L3162100
GR62	Euro	27,50
Fitting		1/4" M swivel
◈		1

SILENCED BLOW GUNS STAR-TIP

ITEM: 11-208-3200

The CEJN blow guns are wear-resistant and easy to use for all cleaning applications.
The plastic body ensures flexibility of use for both right-handed and left-handed users and insulates from the cold; it also reduces the risk of scratching the work surface.
The blow gun provides excellent progressive delivery, which guarantees simple airflow adjustment.

Tech. Code		L3165208
GR62	Euro	22,10
Weight	g	96
Noise level	dB	79
Capacity	l / min	190
Pressure	bar	16 max
Tube		Removable L = 90 mm
Coupling		BSP 1/4" F
◈		1

RUBBER TIP SET FOR STAR-TIP BLOW GUNS

ITEM: 11-208-9960

Fits directly onto the tube.
For use on delicate surfaces. Suitable for pressurizing, such as in leakage or cylinder testing.
The kit contains three sizes of nozzles.

Tech. Code		L3166KIT
GR62	Euro	32,00
Ø	mm	14 - 25 - 35

CHIP SHIELD FOR STAR-TIP BLOW GUNS

ITEM: 11-208-9955

Fits directly onto the tube.
Protects operators from flying chip debris. Can be placed anywhere on the tube.
Nitrile bushing for easy mounting, transparent shield.

Tech. Code		L316710
GR62	Euro	8,00
Ø	mm	100

SILENCER NOZZLE FOR STAR-TIP BLOW GUNS

ITEM: 11-208-9965

Fits directly onto the thread of the blowgun body.
Used where noise reduction is required.

Tech. Code		L316810
GR62	Euro	3,10
Ø	mm	18
L	mm	25

EXTENSION TUBE FOR STAR-TIP BLOW GUNS

ITEM: 11-208-3219

Fits directly onto the thread of the blowgun body.
Offers increased access in hard-to-reach areas.

Tech. Code		L3169300
GR62	Euro	29,60
Length	mm	300

TYRE INFLATORS

ITEM: 25/D

Tyre inflators with manometer 60 mm diameter precision class 1.6. Aluminium plated body, rubber hose 6,5 x 12 L=400 mm.
Inflating head 25/W for tyres with schrader valve 8 mm diameter.

Tech. Code		L3200100
GR62	Euro	26,54
Fitting	Bar	0 - 12
Coupling		Milled nut 1/4"
		1

ITEM: L3205

Tyre inflators with rear manometer 60 mm diameter, precision class 2,5. Aluminium plated body, rubber hose 6,5 x 12L=400 mm.
Inflating head 25/W with schrader valve 8 mm diameter.

Tech. Code		L3205100
GR62	Euro	46,40
Fitting	Bar	0 - 12
Coupling		Milled nut 1/4"
		1

TYRE INFLATORS PROFESSIONAL

ITEM: 25/FLEX-80

Professional tyre inflators with cushioned shockproof pressure gauge, two levers for inflating/deflating and a 360° rotating rubber hose.
Ø 80 mm rear pressure gauge, accuracy class 2.5. Glass fibre reinforced engineering plastic body with rubber-coated grip.
PVC hose Ø6.5x12 x length 400 mm and series 25/W air chuck for tyres with Ø 8 mm Schrader valve.

Tech. Code		L3207100
GR62	Euro	73,81
Scale	bar	0 - 12
Coupling		Milled nut 1/4"
		1

COMPRESSOR GUN IN KIT

ITEM: F1/E

Compressor gun in kit, pack contents:

- 1 Air brush F1/E Ø 1,5 mm
- 1 Oil pistol 26/E
- 1 Inflatable gun 25/DE
- 1 Blowing gun 25/B1-E
- 1 Spiral tube NYLON 8 x 6 - 4 m
- 4 Fittings 1/A

Tech. Code		L3210100
GR62	Euro	108,92
Pieces		9
		1

JET GUNS FOR LIQUID DISTRIBUTION

ITEM: 26/CR-G

Jet guns for the distribution of non aggressive liquids with jet regulating valve. Regulating nozzel 2,5 mm diameter.

Tech. Code		L3220100
GR62	Euro	24,59
Fitting		3/8" F BSP
		1

PARAFFIN SPRAY GUNS

ITEM: L3230

Paraffin spray guns. Aluminum bayonet tank, internal and external distributing tube in metal.

Tech. Code		L3230100
GR62	Euro	40,72
Tank	L	1
Fitting		1/4" milled nut
		1

ITEM: 26/B-TN

Paraffin spray guns, screw-on steel tank, metal delivery tube internally coated with nylon.

Tech. Code		L3232100
GR62	Euro	38,05
Tank	L	1
Coupling		Milled nut 1/4"
		1

Indivisible package Suggested retail package - Unit price

PAINT SPRAY GUNS GRAVITY FEED

ITEM: F1/N- SUPER/S

Paint spray guns with 500 ml gravity feed cup suitable for use with any type of paint and with insulating primers.
Features:
- CNC machined hot-pressed nickel-plated brass nozzle cap
- Brass nozzle CNC machined from bar stock
- Stainless steel AISI 303 needle ø 3 mm
- Pressure and airflow regulator
- Jet regulator from round to fan spray pattern
- Paint quantity regulator
- Stainless steel springs and PTFE washers
- Nylon cup with drip-catching device

Operating pressure: 2 ÷ 6 Bar

Tech. Code		L325012	L325015	L325018	L325020	L325025
GR62	Euro	(123,05)	109,94	109,94	(109,94)	(109,94)
Nozzle Ø	mm	1.2	1.5	1.8	2.0	2.5
Coupling		BSP 1/4" M	BSP 1/4" M	BSP 1/4" M	BSP 1/4" M	BSP 1/4" M
		1	1	1	1	1

Supplied with spanner for carrying out maintenance
Spare nozzle kit supplied on request - Code L3250...R

PAINT SPRAY GUNS SUCTION FEED

ITEM: F1/N- SUPER/I

Paint spray guns with 1000 ml suction feed tank suitable for use with any type of paint and with insulating primers.

Features:
- CNC machined hot-pressed and nickel-plated brass nozzle cap
- Brass nozzle CNC machined from bar stock
- Stainless steel AISI 303 needle ø 3 mm
- Pressure and airflow regulator
- Jet regulator from round to fan spray pattern
- Paint quantity regulator
- Stainless steel springs and PTFE washers
- Nylon cup with drip-catching device

Operating pressure: 2 ÷ 6 Bar

Tech. Code		L325212	L325215	L325218	L325220	L325225
GR62	Euro	(92,80)	123,05	123,05	(92,80)	(123,05)
Nozzle Ø	mm	1.2	1.5	1.8	2.0	2.5
Coupling		BSP 1/4" M	BSP 1/4" M	BSP 1/4" M	BSP 1/4" M	BSP 1/4" M
		1	1	1	1	1

Supplied with spanner for carrying out maintenance
Spare nozzle kit supplied on request - Code L3252...R

PAINT SPRAY GUNS GRAVITY FEED PROFESSIONAL USE

ITEM: F160/S

Paint spray guns designed for highly professional use. Lightweight and ergonomic, making them ideal for prolonged use, reducing operator fatigue. The high performance combined with the ease of use are aimed at simplifying all painting operations.

Features:
- Stainless steel AISI 303 nozzle (needle ø 3 mm)
- High atomization nozzle cap in nickel-plated brass
- High atomization system
- **HPS** technology
- Pressure and airflow regulator
- Jet regulator from round to fan spray pattern
- Paint quantity regulator
- Stainless steel springs and PTFE washers
- Nylon cup 600ml with drip-catching device and filter

Operating pressure: 2 ÷ 6 Bar

Tech. Code		L325415	L325417	L325419
GR62	Euro	(324,80)	(324,80)	(290,00)
Nozzle Ø	mm	1.5	1.7	1.9
Coupling		BSP 1/4" M	BSP 1/4" M	BSP 1/4" M
		1	1	1

Supplied with pipe cleaners and spanner for carrying out maintenance.
Spare nozzle kit supplied on request - Code L3254...R

PRESSURE REGULATORS MINI SERIES

ITEM: T020-MINI

MINI series pressure regulators made of engineering plastic with brass threaded parts and NBR seals.
GAS/BSP 1/8" pressure gauge coupling

Tech. Code		L413018	L413014
GR62	Euro	21,24	21,26
Coupling	G/BSP	1/8"	1/4"
Adjustment	Bar	0 - 8	0 - 8
Capacity	Nl/min	600	600

FILTER REGULATORS MINI SERIES

ITEM: T030-MINI

MINI series filter regulators made of engineering plastic with brass threaded parts and NBR seals.
GAS/BSP 1/8" pressure gauge coupling

Tech. Code		L414018	L414014
GR62	Euro	35,83	35,83
Coupling	G/BSP	1/8"	1/4"
Adjustment	Bar	0 - 8	0 - 8
Capacity	Nl/min	600	600
Filtration	µm	20	20

AIR PREPARATION UNITS FR+L MINI SERIES

ITEM: T100-MINI

The FRL MINI air preparation units (Filter-Regulator+ Lubricator) are essential elements in any pneumatic system for "treating" compressed air.
The Aignep FRL units are made of engineering plastic with brass threaded parts and can be used for all industrial applications.
Recommended oils: ISO VG 22A CLASS - ISO 3448 NORMA
GAS/BSP 1/8" pressure gauge coupling

Tech. Code		L415018	L415014
GR62	Euro	65,23	65,23
Coupling	G/BSP	1/8"	1/4"
Adjustment	Bar	0 - 8	0 - 8
Capacity	Nl/min	260	260
Filtration	µm	20	20

PRESSURE REGULATORS STANDARD

ITEM: T020

Pressure regulators made of engineering plastic with brass threaded parts and NBR seals.
GAS/BSP 1/8” pressure gauge coupling.

Tech. Code		L416038	L416012
GR62	Euro	(36,68)	(50,47)
Coupling	G/BSP	3/8"	1/2"
Adjustment	Bar	0 - 8	0 - 8
Capacity	Nl/min	2050	3200

FILTER REGULATORS STANDARD

ITEM: T030

Filter regulators made of engineering plastic with brass threaded parts and NBR seals.
GAS/BSP 1/8” pressure gauge coupling

Tech. Code		L417038	L417012
GR62	Euro	(53,80)	(77,07)
Coupling	G/BSP	3/8"	1/2"
Adjustment	Bar	0 - 8	0 - 8
Capacity	Nl/min	1650	3000
Filtration	µm	20	20

AIR PREPARATION UNITS FR+L STANDARD SERIES

ITEM: T100

The FRL air preparation units (Filter-Regulator+ Lubricator) are essential elements in any pneumatic system for “treating” compressed air.
The Aignep FRL units are made of engineering plastic with brass threaded parts and can be used for all industrial applications.
Recommended oils: ISO VG 22A CLASS - ISO 3448 NORMA
GAS/BSP 1/8” pressure gauge coupling

Tech. Code		L418038	L418012
GR62	Euro	(87,12)	(126,31)
Coupling	G/BSP	3/8"	1/2"
Adjustment	Bar	0 - 8	0 - 8
Capacity	Nl/min	1100	2500
Filtration	µm	20	20

PRESSURE REGULATORS

ITEM: L4200

High-performance model with high stability and low pressure drop. Rolling membrane. Rapid discharge of overpressure. Knob with an adjustment locking device. Can be fixed to the wall using holes or brackets. G 1/8" pressure manometer coupling.

Tech. Code		L420014	L420038	L420012
GR62	Euro	22,70	34,70	45,60
Fitting		G 1/4"	G 3/8"	G 1/2"
Pressure	Bar	0 - 8	0 - 8	0 - 8
Inlet press.	Bar	16.0 max	12.5 max	12.5 max

COMBINATION UNITS FILTER / REGULATOR

ITEM: L4205

High-performance model with high stability and low pressure drop. Rolling membrane. Device for manual and semi-automatic condensation drainage. Polyamide bowl with external protection (Mod. 3/8"and 1/2" cup quick-coupling with anti-release safety mechanism). Can be fixed to the wall using holes or brackets (not included). Collected quantity of condensate (1/4" and 3/8" 42cc-1/2" 100 cc). G 1/8" pressure manometer coupling.

Tech. Code		L420514	L420538	L420512
GR62	Euro	35,80	49,80	65,10
Fitting		G 1/4"	G 3/8"	G 1/2"
Pressure	Bar	0 - 8	0 - 8	0 - 8
Inlet press.	Bar	16.0 max	12.5 max	12.5 max

FR+L GROUPS

ITEM: L4210

Technical characteristics, filter regulator and lubricator group with a drainage device. Cups in polyamide.

Tech. Code		L421014	L421038	L421012
GR62	Euro	63,60	85,70	111,30
Fitting		G 1/4"	G 3/8"	G 1/2"
Pressure	Bar	0 - 8	0 - 8	0 - 8
Inlet press.	Bar	16.0 max	12.5 max	12.5 max

Oil for tools NEBULIS H2010 is available on page H.13

MANOMETERS

ITEM: L4250

Tech. Code		L4250040	L4250050
GR62	Euro	9,80	9,80
Fitting		G 1/4"	G 1/4"
Unit of meas.	Bar	0 - 12	0 - 12
Unit of meas.	PSI	0 - 175	0 - 175
Ø	mm	40	50

DRY PRESSURE MANOMETERS - BOTTOM CONNECTION - ABS CASE

ITEM: L4251

Dry pressure guages with ABS case,brass interiors.

Standard reference:
EN 837-1 - precision class 2,5%

Tech. Code		L4251040002,5	L4251040004	L4251040006	L4251040010	L4251040012
GR62	Euro	9,60	9,60	9,60	9,60	9,60
Ø	mm	40	40	40	40	40
Thread		1/8" BSPT	1/8" BSPT	1/8" BSPT	1/8" BSPT	1/8" BSPT
Pressure	Bar	0 - 2,5	0 - 4	0 - 6	0 - 10	0 - 12

Tech. Code		L4251063002,5	L4251063004	L4251063006	L4251063025
GR62	Euro	10,40	11,40	11,40	11,40
Ø	mm	63	63	63	63
Thread		1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT
Pressure	Bar	0 - 2.5	0 - 4	0 - 6	0 - 25

DRY PRESSURE MANOMETERS - REAR CONNECTION - ABS CASE

ITEM: L4253

Dry pressure guages with ABS case, brass interiors

Standard reference:
EN 837-1-class precision 2.5%

Tech. Code		L4253040001	L4253040002,5	L4253040004	L4253040006	L4253040010	L4253040012
GR62	Euro	10,60	9,60	9,60	9,60	9,60	9,60
Ø	mm	40	40	40	40	40	40
Thread		1/8" BSPT	1/8" BSPT	1/8" BSPT	1/8" BSPT	1/8" BSPT	1/8" BSPT
Pressure	Bar	0 - 1	0 - 2.5	0 - 4	0 - 6	0 - 10	0 - 12

Tech. Code		L4253050004	L4253050006	L4253050010	L4253050012	L4253063004	L4253063012
GR62	Euro	10,20	10,20	10,20	10,20	11,40	11,40
Ø	mm	50	50	50	50	63	63
Thread		1/8" BSPT	1/8" BSPT	1/8" BSPT	1/8" BSPT	1/4" BSPT	1/4" BSPT
Pressure	Bar	0 - 4	0 - 6	0 - 10	0 - 12	0 - 4	0 - 12

PRESSURE MANOMETERS - BOTTOM CONNECTION - STEEL CASE WITH GLYCERINE

ITEM: L4255

Bourdon spring guages with glycerine , stainless steel case AISI 304, Interior brass attack OT 58.

Standard reference:
EN 837-1 - class precision 1.6%
Protection grade IP67

Tech. Code		L4255063-1/0	L4255063001	L4255063006	L4255063010
GR62	Euro	36,60	29,50	29,50	29,50
Ø	mm	63	63	63	63
Thread		1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT
Pressure	Bar	-1 + 0	0 - 1	0 - 6	0 - 10

Tech. Code		L4255063025	L4255063040	L4255063060	L4255063100
GR62	Euro	29,50	29,50	29,50	29,50
Ø	mm	63	63	63	63
Thread		1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT
Pressure	Bar	0 - 25	0 - 40	0 - 60	0 - 100

Tech. Code		L4255063160	L4255063250	L4255063300	L4255063400	L4255063600
GR62	Euro	29,50	29,50	29,50	29,50	37,80
Ø	mm	63	63	63	63	63
Thread		1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT
Pressure	Bar	0 - 160	0 - 250	0 - 300	0 - 400	0 - 600

PRESSURE MANOMETERS - REAR CONNECTION - STEEL CASE WITH GLYCERINE

ITEM: L4258

Bourdon spring guages with glycerine, stailess steel case AISI 304, interior brass attack OT 58.

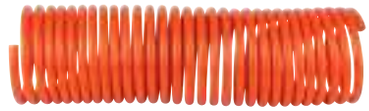
Standard reference:
EN 837-1 - class precision 1.6%
protection grade IP67

Tech. Code		L4258063010	L4258063025	L4258063040	L4258063060	L4258063100	L4258063250
GR62	Euro	34,00	34,00	34,00	34,00	34,00	34,00
Ø	mm	63	63	63	63	63	63
Thread		1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT	1/4" BSPT
Pressure	Bar	0 - 10	0 - 25	0 - 40	0 - 60	0 - 100	0 - 250

SPIRAL HOSES IN POLYAMIDE PA6

ITEM: L5080

Spiral hoses in polyamide PA6 orange colour RAL 2004



Features:
- Good pressure resistance
- Good chemical resistance

Tech. Code		L50800607	L50800615	L50800815	L50801030
GR62	Euro	7,05	13,43	17,53	40,63
Hose ø	mm	6 x 8	6 x 8	8 x 10	10 x 12
Total length	m	7,5	15	15	30
Spiral ø int.	mm	80	80	90	120
Useful length	m	4,5	9	9	17

SPIRAL HOSES IN POLYAMIDE PA12 WITH TONGS

ITEM: L5090

Polyamide hoses PA12 with tongs orange colour RAL 2004

Features:
- High flexibility
- Good resistance to chemical agents
- High resistance to abrasion
- Operating temperature from -40 ° C + 125 ° C

Tech. Code		L50900630	L50900830
GR62	Euro	50,83	68,03
Hose ø	mm	6 x 8	8 x 10
Total length	m	30	30
Spiral ø int.	mm	80	90
Useful length	m	17	17

ITEM: L5091

Spiral hoses in Polyamide PA12 colore blu RAL 5010

Features:
- High flexibilty
- Good resistance to chemical agents
- High resistance to abrasion
- Operating temperature from -40°C +125°C

Tech. Code		L50910630	L50910830
GR62	Euro	50,83	68,03
Hose ø	mm	6 x 8	8 x 10
Total length	m	30	30
Spiral ø int.	mm	80	90
Useful length	m	17	17

SPIRAL HOSES IN POLYAMIDE PA12 CON CODOLI

ITEM: L5095

Spiral hoses in polyamide PA12 orange colour RAL 2004

Features:
- High flexibilty
- Good resistance to chemical agents
- High resistance to abrasion
- Operating temperature from -40°C +125°C

Supplied with 2 straight end shanks

Tech. Code		L50950607	L50950615
GR62	Euro	17,56	32,41
Hose ø	mm	6 x 8	6 x 8
Total length	m	7,5	15
Spiral ø int.	mm	80	80
Useful length	m	4,5	9

ITEM: L5096

Spiral hoses in polyamide PA12 colour blue RAL 5010

Features:
- High flexibilty
- Good resistance to chemical agents
- High resistance to abrasion
- Operating temperature from -40°C +125°C

Supplied with 2 straight end shanks

Tech. Code		L50960607	L50960615
GR62	Euro	17,56	32,41
Hose ø	mm	6 x 8	6 x 8
Total length	m	7,5	15
Spiral ø int.	mm	80	80
Useful length	m	4,5	9

SPIRAL HOSES IN POLYURETHANE PU 98A PU 98A

ITEM: L5108

Spiral hoses in extra flexible polyurethane based on Polyester 98 shore A, light blue colour RAL 5015

Features:
- Excellent resistance to pressure
- High flexibility and elastic memory
- Resistant to abrasion, tearing, bending, cutting and perforation
- Resistant to oils and grease

Supplied pre-assembled with 2 swivel male connections 1/4" - 3/8" BSP.

Tech. Code		L51080506	L51080509	L51080512	L51080706	L51080709	L51080712
GR62	Euro	30,33	38,50	40,05	35,88	44,33	54,66
Hose ø	mm	5 x 8	5 x 8	5 x 8	7 x 10	7 x 10	7 x 10
Fittings	BSP	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Total length	m	6	9	12	6	9	12
Spiral ø int.	mm	40	40	40	50	50	50
Useful length	m	4	6	8	4	6	8

Tech. Code		L51080806	L51080809	L51080812
GR62	Euro	46,37	62,12	76,47
Hose ø	mm	8 x 12	8 x 12	8 x 12
Fittings	BSP	3/8"	3/8"	3/8"
Total length	m	6	9	12
Spiral ø int.	mm	60	60	60
Useful length	m	4	6	8

POLYURETHANE HOSES 98 SHORE A

ITEM: L5103

Polyurethane hoses 98 Shore A for industrial applications.

Features:
- Excellent flexibility and resistance to bending
- High resistance to abrasion
- High resistance to tearing and cutting
- Good resistance to oils and fats

Tech. Code		L51030402AZ	L51030604AZ	L51030806AZ	L51031008AZ
GR62	Euro	13,59	17,56	23,46	31,07
Dimension	mm	4 x 2	6 x 4	8 x 6	10 x 8
Colour		Azzurro	Azzurro	Azzurro	Azzurro
Operating press	Bar	22	13	10	7
Roll	m	25	25	25	25

For other colours and dimension requested minimum order of 4 packs of 25 m

POLYAMIDE HOSES 98 SHORE A

ITEM: L5104

Polyamide hoses in polyester based 98 Shore A for industrial applications.

Features:
- Excellent flexibilty and resistance to bending
- High resistance to abrasion
- High resistance to tearing and cutting
- Good resistance to oils and grease

Other sizes and colours available on request

Tech. Code		L51040402NT	L510404025NT	L51040806NT	L51041008NT	L51041209NT
GR62	Euro	(37,48)	30,85	90,69	126,33	(216,85)
Dimension	mm	4 x 2	4 x 2,5	8 x 6	10 x 8	12 x 9
Colour		Neutro	Neutro	Neutro	Neutro	Neutro
Operating press	Bar	22	15	10	7	10
Roll	m	100	100	100	100	100

Tech. Code		L51040402AZ	L510404025AZ	L51040604AZ	L51040806AZ	L51041008AZ	L51041209AZ
GR62	Euro	41,09	(36,08)	53,96	78,32	107,98	185,34
Dimension	mm	4 x 2	4 x 2,5	6 x 4	8 x 6	10 x 8	12 x 9
Colour		Azzurro	Azzurro	Azzurro	Azzurro	Azzurro	Azzurro
Operating press	Bar	22	15	13	10	7	10
Roll	m	100	100	100	100	100	100

Tech. Code		L51040402NR	L510404025NR	L51040604NR	L51040806NR	L51041008NR	L51041209NR
GR62	Euro	(43,86)	(36,08)	(53,96)	77,53	107,98	216,85
Dimension	mm	4 x 2	4 x 2,5	6 x 4	8 x 6	10 x 8	12 x 9
Colour		Black	Black	Black	Black	Black	Black
Operating press	Bar	22	15	13	10	7	10
Roll	m	100	100	100	100	100	100

Tech. Code		L51040402RO	L510404025RO	L51040604RO	L51040806RO	L51041008RO	L51041209RO
GR62	Euro	(37,48)	36,08	53,96	90,69	126,33	216,85
Dimension	mm	4 x 2	4 x 2,5	6 x 4	8 x 6	10 x 8	12 x 9
Colour		Rosso	Rosso	Rosso	Rosso	Rosso	Rosso
Operating press	Bar	22	15	13	10	7	10
Roll	m	100	100	100	100	100	100

Indivisible package Suggested retail package - Unit price

POLYAMIDE HOSES PA12 C

ITEM: L5114

DIN 73378 - DIN 74324
Polyamide PA12 HIPHL hoses for industrial and automotive applications.

Features:
- Excellent dimensional stability
- Resistance to pressure
- Resistance to chemical agents
- Operating temperature -40 ° C + 125 ° C

Tech. Code		L51140402NT	L51140604NT	L51140806NT	L51141008NT	L51141210NT
GR62	Euro	18,59	24,20	35,40	43,33	51,24
Dimension	mm	4 x 2	6 x 4	8 x 6	10 x 8	12 x 10
Colour	BAR	Neutral	Neutral	Neutral	Neutral	Neutral
Roll	Bar	49	29	21	16	13
Roll	m	25	25	25	25	25

For the colours and dimension requested minimum order of 4 packs of 25 m

POLYAMIDE HOSES PA12

ITEM: L5116

DIN 73378 - DIN 74324
Polyamide PA12 HIPHL hoses for industrial and automotive applications.

Features:
- Excellent dimensional stability
- Resistance to pressure
- Resistance to chemical agents
- Operating temperature -40 ° C + 125 ° C

Other colours and dimension are available on request.

Tech. Code		L51160402NT	L51160604NT	L51160806NT	L51161008NT	L51161210NT
GR62	Euro	53,17	89,55	120,44	157,81	189,42
Dimension	mm	4 x 2	6 x 4	8 x 6	10 x 8	12 x 10
Colour		Neutral	Neutral	Neutral	Neutral	Neutral
Operating press	Bar	49	29	21	16	13
Roll	m	100	100	100	100	100

Tech. Code		L51160402AZ	L51160604AZ	L51160806AZ	L51161008AZ
GR62	Euro	(63,91)	(98,51)	137,85	172,44
Dimension	mm	4 x 2	6 x 4	8 x 6	10 x 8
Colour		Light blue	Light blue	Light blue	Light blue
Operating press	Bar	49	29	21	16
Roll	m	100	100	100	100

Tech. Code		L51160402GI	L51160604GI	L51160806GI	L51161008GI
GR62	Euro	(63,91)	(98,51)	(137,85)	(180,65)
Dimension	mm	6 x 4	6 x 4	8 x 6	10 x 8
Colour		Giallo	Giallo	Giallo	Giallo
Operating press	Bar	49	29	21	16
Roll	m	100	100	100	100

Tech. Code		L51160402NR	L51160604NR	L51160806NR	L51161008NR
GR62	Euro	(63,91)	98,51	(137,85)	(180,65)
Dimension	mm	6 x 4	6 x 4	8 x 6	10 x 8
Colour		Black	Black	Black	Black
Operating press	Bar	49	29	21	16
Roll	m	100	100	100	100

Tech. Code		L51160402RO	L51160604RO	L51160806RO	L51161008RO
GR62	Euro	(63,91)	(98,51)	(131,57)	(189,68)
Dimension	mm	6 x 4	6 x 4	8 x 6	10 x 8
Colour		Rosso	Rosso	Rosso	Rosso
Operating press	Bar	49	29	21	16
Roll	m	100	100	100	100

PIPE CUTTERS FOR PLASTIC PIPES

ITEM: F3570

PVC - Nylon - PE cutting, nickel plated body, hardened ground steel knife.

Tech. Code		F357012-25	F35703-15	F3570R6	F3570R7
GR60	Euro	29,25	19,57	6,08	9,58
Pipe ø	mm	12-25	3 - 15	Spare blade for 3 -15 mm ø tubes	Spare blade for 12 - 25 mm ø tubes
Length	mm	185	130	-	-

Indivisible package Suggested retail package - Unit price

AIR RUBBER HOSES

ITEM: L5301

Max. working pressure 20 bar. Colour black.

Tech. Code		L5301614A	L5301614B	L5301614C	L5301614D
GR62	Euro	28,40	70,90	141,80	212,00
Dimension	mm	6 x 14	6 x 14	6 x 14	6 x 14
Length	mt	10	25	50	100

Tech. Code		L5301817A	L5301817B	L5301817C	L5301817D
GR62	Euro	31,20	77,90	155,80	280,00
Dimension	mm	8 x 17	8 x 17	8 x 17	8 x 17
Length	mt	10	25	50	100

STRAIGHT HOSES POLYURETHENE WOVEN EXTRA FLEXIBLE

ITEM: 10-958-1

CEJN Straight braided hoses are an excellent choice for applications that require a pressure of (232 PSI) maximun competance of use up to 16 bar. They offer a vast range of different temperatures that can be used. The hoses are easily rewinded to their original state and has a remarkable resistance to abrasion.

Tech. Code		L51180625	L51180650	L51180825	L51180850	L51181125	L51181150
GR62	Euro	(106,80)	(213,80)	(144,70)	(289,40)	(289,40)	(578,80)
Tube	Ø	6.5 x 10	6.5 x 10	8 x 12	8 x 12	11 x 16	11 x 16
With spool		YES	NO	YES	NO	YES	NO
Length	m	25	50	25	50	25	50

PRE-ASSEMBLED LINEAR HOSE KIT SERIES 320 DN7.6

ITEM: 19-958-9

Polyurethane straight braided hoses extremely flexible pre-assembled with quick connection at an high working pressure 320 DN7.6 complete with security valve that prevents the whip effect.

Tech. Code		L51210610MT	L51210810MT
GR62	Euro	(79,90)	(95,90)
Tube	Ø	6.5 x 10	8 x 12
Length	m	10	10
Connection		Rapid and Safe 320 Male\Female	Rapid and Safe 320 Male\Female
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Max pressure		16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

LINEAR SAFETY HOSES HI-VISIBILITY WITH FAST CONNECTIONS SERIES 320 DN7.6

ITEM: 19-958-924

Suitable for crowded work areas, where safety is essential. Thanks to the highly visible "neon" colour, the tube can be used safely on roads and corridors.

Tech. Code		L512210MT	L512215MT
GR62	Euro	(102,00)	(132,30)
Tube	Ø	8 x 12	8 x 12
Length	m	10	15
Fittings		Quick and safe 320 Male/Female	Quick and safe 320 Male/Female
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Max pressure		16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

AIR-WATER HOSE REEL SAFETY SPEED CONTROL

ITEM: 92848.102/C2 - 92848.105/C2

Hose reel with automatic device for controlled rewinding of the **SAFETY SPEED CONTROL** hose stop system at the desired length. The Raasm winders are suitable for use with air, water and non-corrosive detergents, at a maximum pressure of 20 Bar and fluid temperature up to 40 ° C.
Made of shockproof plastic material with adjustable steel bracket for wall mounting and polyurethane pipe.

Standard equipment:
Inlet hose 1,5 m
Viton seals
Swivel fittings with protective spring

Tech. Code		L51310814	L51311009
GR63	Euro	228,00	(226,00)
Pipe dimesion	mm	8 x 12	10 x 14,5
Pipe length	m	14	9
Inlet connection	BSP	1/4" M	3/8" M
Outlet connection	BSP	3/8" M	3/8" M
Dimension	mm	387 x 331 x 178	387 x 331 x 178
Weight	Kg	9,3	9,4

HOSE REELS FOR COMPRESSED AIR

ITEM: 19-911

The CEJN hose reels guarantee maximum productivity of the tools and maximum safety in the working environment thanks to their casing, the slow rewinding and a soft stop ball. The hose reels are easy to use that offer a freedon of movement of 180 degrees and a position of non-use. They are easy to Install both on the wall and on the ceiling and if necessary they can be disconnected from the wall bracket. The patented hose reels are study and produced in Sweden.

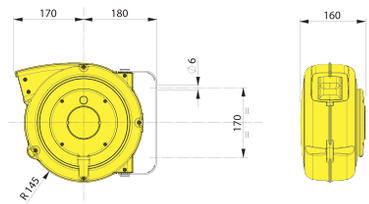
Tech. Code		L51320810	L51320817	L51320914
GR62	Euro	(347,30)	(409,30)	(434,10)
Tube	Ø	8 x 12	8 x 12	9,5 x 13,5
Connection		Male 1/4" BSPT	Male 1/4" BSPT	Male 1/4" BSPT
Length	m	10 + 1,5	17 + 1,5	14 + 1,5
Ø	mm	313	409	409
Weight	kg	4,9	6,0	6,0

COMPRESSED AIR HOSE REELS

CE

ITEM: N7120

EN 12100-1 EN 12100-2 Standards, complies with 626 Standard. Also suitable for cold water, maximum pressure 15 bars, impact-resistant plastic body, automatic hose-stopping device at the desired length, easily removable if constant traction is needed, adjustable sheet steel fixing brackets, polyurethane hose.



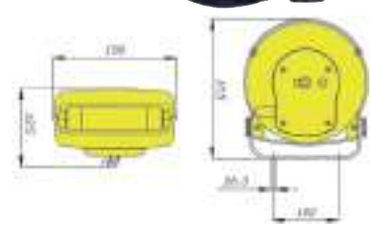
Tech. Code		L513401	L513402
GR76	Euro	248,00	248,00
Internal hose ø	mm	8	10
Hose	m	9 + 1	7 + 1
Inlet hose	m	1.5	1,5
Outlet connection		1/4" M	3/8" M
Inlet connection		NO	NO

COMPRESSED AIR HOSE REELS "MINI"

CE

ITEM: N7123

EN 12100-1 EN 12100-2 Standards, complies with 81/08 Standard. Also suitable for cold water, maximum pressure 12 bars, impact-resistant plastic body, automatic hose-stopping device at the desired length, easily removable if constant traction is needed, adjustable sheet steel fixing bracket, polyurethane hose.



Tech. Code	GR76 Euro	Int. hose ø mm	Hose m	Inlet hose m	Outlet connection	Inlet connection
L51355,5	151,00	5.5	5.5 + 1	NO	1/4" M	for tube 8 x 6 ø

Indivisible package Suggested retail package - Unit price

PRE-ASSEMBLED 1/4" SPIRAL HOSE KIT

ITEM: 19-958-946

Polyurethane spiral hoses extremely flexible, Pre-assembled with thread connections 1/4".

Tech. Code		L51110602	L51110604	L51110606	L51110608
GR62	Euro	21,80	30,60	39,70	51,00
Tube	Ø	6.5 x 10	6.5 x 10	6.5 x 10	6.5 x 10
Fitting		1/4" BSP	1/4" BSP	1/4" BSP	1/4" BSP
Length	m	2	4	6	8

Tech. Code		L51110802	L51110804	L51110806	L51110808
GR62	Euro	33,60	45,80	58,70	72,00
Tube	Ø	8 x 12	8 x 12	8 x 12	8 x 12
Fitting		1/4" BSP	1/4" BSP	1/4" BSP	1/4" BSP
Length	m	2	4	6	8

PRE-ASSEMBLED SPIRAL HOSE KIT SERIES 320 DN7.6

ITEM: 19-958-976

Polyurethane spiral hoses extremely flexible pre-assembled with quick connection an high working pressure 320 DN7.6 complete with security valve that prevents the whip effect.

Tech. Code		L51170804MT	L51170604MT
GR62	Euro	67,00	64,80
Tube	Ø	8 x 12	6.5 x 10
Length	m	4	4
Connection		Rapid eSafe 320 Male\Female	Rapid eSafe 320 Male\Female
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Max pressure		16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

SPIRAL HOSE SET WITH 1/4" BSP BLOW GUNS SERIES 320 DN7.6

ITEM: 19-958-9328

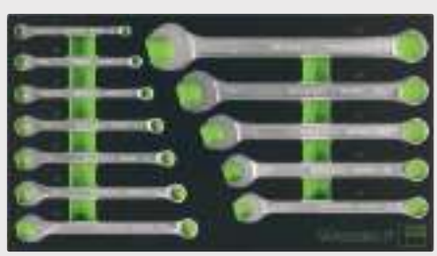
Kit of 4 m spiral hose 6,5x10 kit with 1/4" STAR-TIP gun included.
CEJN blow guns feature wear resistance properties, user friendly, suit all cleaning applications.
Its plastic body ensures great flexibility for both right-hand and left-hand users while its insulation against cold reduces the risk of surface scratches.
This blow gun ensures outstanding progressive flow rate performance along with a simple air stream adjustment.

Tech. Code		L5124KIT
GR62	Euro	84,10
Gun		208 Star-Tip with rapid male coupler on the gun - Removable hose
Tube	Ø	6.5 x 10
Length	m	4
Connection		Rapid and safe 320 Male\Female
Air flow		2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

Related products

WODEX COMBINATION WRENCHES IN FOAM

Tech. Code	Pieces	Module size mm
E000712	12	400 x 223.5 - 1/3 Horizontal position
E000716	16	400 x 447- 2/3 Vertical position



The product is available in Chap. E

BAYONET COUPLINGS WITH SPRING

ITEM: 60/MF - 60/MG

Bayonet couplings with spring for spiral tubes.
Nickel-plated brass body, nickel-plated steel spring.

Tech. Code		L52150608	L52150608G	L52150810	L52150810G
GR62	Euro	2,64	3,86	2,96	3,83
For tubes ø	mm	6 x 8	6 x 8	8 x 10	8 x 10
Specification		Fixed	Swivel	Fixed	Swivel
📦		10	10	10	10

MALE THREADED FITTINGS WITH MILLED NUT

ITEM: 11/A - 11/B

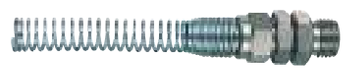
Fittings with milled nut male threaded ISO 228.
Brass/zinc alloy nickel-plated and milled nut in zama.

Tech. Code		L544514	L544538
GR62	Euro	2,15	2,96
Thread		1/4"	3/8"
📦		10	10

COUPLING FITTINGS MALE THREADED WITH SPRING

ITEM: 61/MF - 61/MG

Male Threaded fittings cylindrical ISO228 with spring for spiral tubes.
Nickel-plated brass body, nickel-plated steel spring.



Tech. Code		L52250608	L52250608G	L52250810	L52250810G
GR62	Euro	2,64	3,68	2,96	3,71
For tubes ø	mm	6 x 8	6 x 8	8 x 10	8 x 10
Thread		Fixed	Swivel	Fixed	Swivel
📦		10	10	10	10

QUICK COUPLINGS MALE THREADED

ITEM: 15/A-M

Quick couplings with male threaded cylindrical ISO 228.
Galvanized carbonitrided steel body.

Tech. Code		L541114	L541138
GR62	Euro	1,13	1,28
Thread		1/4"	3/8"
📦		10	10

QUICK COUPLINGS FEMALE THREADED

ITEM: 15/A-F

Quick couplings female threaded cylindrical ISO 228.
Galvanized carbonitrided steel body.

Tech. Code		L541514	L541538
GR62	Euro	1,22	1,80
Thread		1/4"	3/8"
📦		10	10

QUICK COUPLINGS MALE THREADED WITH SPRING

ITEM: 63/MF

Quick coulings with spring for spiral tubes.
Nickel-plated brass body, nickel-plated steel spring.

Tech. Code		L52080608	L52080810
GR62	Euro	2,90	3,31
For tubes ø	mm	6 x 8	8 x 10
📦		10	10

QUICK COUPLINGS MALE THREADED WITH CONNECTING SLEEVE

ITEM: 14/A - 14/B

Quick couplings with hose end connector sleeve.
Nicke-plated brass.

Tech. Code		L54200614	L54200817
GR62	Euro	3,83	4,12
For tubes ø	mm	6 x 14	8 x 17
📦		10	10

BAYONET PLUGS WITH HOSE CONNECTION SLEEVE

ITEM: 10/A - 10/B

Bayonet plugs with hose end connector sleeve.
Nickel-plated brass body.

Tech. Code		L54250614	L54250817
GR62	Euro	3,63	4,00
For tubes ø	mm	6 x 14	8 x 17
📦		10	10

📦 Indivisible package 📦 Suggested retail package - Unit price

QUICK COUPLINGS FEMALE THREADED WITH SPRING

ITEM: 64/MF

Quick couplings sphere with spring for spiral tubes.
Nickel-plated brass body, nickel-plated steel spring. Nylon release shockproof ring.

Tech. Code		L52500608	L52500810
GR62	Euro	8,06	8,35
For tubes ø	mm	6 x 8	8 x 10
		10	10

QUICK COUPLINGS FEMALE THREADED WITH CONNECTING SLEEVE

ITEM: 16/A - 16/B

Quick couplings sphere with hose end connector sleeve.
Nickel-plated brass body, nickel plated steel spring. Nylon release shockproof ring.

Tech. Code		L54300614	L54300817
GR62	Euro	8,90	9,31
For tubes ø	mm	6 x 14	8 x 17
		20	20

QUICK COUPLINGS MALE THREADED

ITEM: 17/A - 17/B

Quick couplings sphere male threaded ISO 228.
Nickel-plated brass body,nickel.plated steel spring. Nylon release shockproof ring.

Tech. Code		L543514	L543538	L543512
GR62	Euro	6,26	6,29	6,47
Thread		1/4"	3/8"	1/2"
		20	20	20

QUICK COUPLINGS FEMALE THREADED

ITEM: 17/C - 17/D

Quick couplings sphere female threaded ISO 228.
Nickel-plated brass body. Nylon release shockproof ring.

Tech. Code		L544014	L544038
GR62	Euro	6,38	7,19
Thread		1/4"	3/8"
		20	20

QUICK COUPLINGS FEMALE WITH MALE THREAD - MULTI PROFILE

ITEM: 191

Multisockets can be used with 4 different types of profiles, ensuring a perfect seal for all.
Operating pressure 0-16 BAR.
Version with male thread Gas cylindrical
Complies with ISO 228 Class A.
Compatibility with:
- Swiss profile DN 5.5 mm
- European profile DN 7.5 - 7.8 mm
- Italian profile DN 5 mm
- UNI ISO 6150-B profile 12 DN 5.5 mm

Tech. Code		L545114	L545138	L545112
GR62	Euro	7,13	7,13	7,66
Thread	BSP	1/4"	3/8"	1/2"
		10	10	10

QUICK COUPLING FEMALE WITH FEMALE THREAD - MULTI PROFILE

ITEM: 192

Multisocket can be used with 4 different types of profiles, ensuring a perfect seal for all.
Operating pressure 0-16 BAR.
Female thread version Gas Cylindrical compliant with ISO 228 Class A.
Compatibility:
- Swiss profile DN 5.5 mm
- European profile DN 7.5 - 7.8 mm
- Italian profile DN 5 mm
- UNI ISO 6150-B profile 12 DN 5.5 mm

Tech. Code		L545214	L545238	L545212
GR62	Euro	7,60	7,60	8,15
Thread	BSP	1/4"	3/8"	1/2"
		10	10	10

QUICK COUPLINGS FEMALE WITH SPRING- MULTI PROFILE

AIGNEP

ITEM: 193

Multisockets can be used with 4 different types of profiles, ensuring a perfect seal for all.
Operating pressure 0-16 BAR.
Version with spring for polyurethane and polyamide tubes.
Compatibility:
- Swiss profile DN 5.5 mm
- European profile DN 7.5 - 7.8 mm
- Italian profile DN 5 mm
- UNI ISO 6150-B profile 12 DN 5.5 mm

Tech. Code		L54540608	L54540810	L54541012
GR62	Euro	8,98	8,98	9,28
For tubes	mm	6 x 8	8 x 10	10 x 12
		10	10	10

QUICK COUPLINGS FEMALE WITH HOSE CONNECTOR - MULTI PROFILE

AIGNEP

ITEM: 196

Multi-socket couplings that can be used with 4 different types of profile, ensuring a perfect seal for all.
Operating pressure 0-16 BAR
Version with coupling for rubber hoses
Compatibility:
- Swiss profile DN 5.5 mm
- European profile DN 7.5 - 7.8 mm
- Italian profile DN 5 mm
- UNI ISO 6150-B 12 DN 5.5 mm profile

Tech. Code		L54560614	L54560817	L54561019
GR62	Euro	11,76	11,90	13,07
For tubes	mm	6 x 14	8 x 17	10 x 19
		10	10	10

QUICK COUPLINGS MALE THREADED - PROFILE EU-DN7.5

AIGNEP

ITEM: 261

Quick couplings in nickel-plated brass with European profile DN7.5 mm.
Operating pressure 0-16 BAR.
Version with male thread Gas cylindrical compliant with ISO 228 Class A.

Tech. Code		L545814	L545838	L545812
GR62	Euro	1,58	1,80	2,59
Thread	BSP	1/4"	3/8"	1/2"
		10	10	10

QUICK COUPLING FEMALE THREADED - PROFILE EU-DN7.5

AIGNEP

ITEM: 262

Quick couplings in nickel-plated brass with European profile DN7.5 mm.
Operating pressure 0-16 BAR.
Gas cylindrical female thread version compliant with ISO 228 Class A.

Tech. Code		L546014	L546038	L546012
GR62	Euro	1,60	1,80	2,86
Thread	BSP	1/4"	3/8"	1/2"
		10	10	10

QUICK COUPLINGS WITH SPRING - PROFILE EU-DN7.5

AIGNEP

ITEM: 263

Quick couplings in nickel-plated brass with European profile DN7.5 mm.
Operating pressure 0-16 BAR.
Version with spring for polyurethane and polyamide tubes.

Tech. Code		L54620608	L54620810	L54621012
GR62	Euro	2,58	2,94	3,42
For tubes	mm	6 x 8	8 x 10	10 x 12
		10	10	10

QUICK COUPLINGS MALE WITH HOSE - PROFILE EU-DN7.5

AIGNEP

ITEM: 266

Quick couplings in nickel-plated brass with European profile DN7.5 mm.
Operating pressure 0-16 BAR.
Version with rubber hose connection.

Tech. Code		L54640614	L54640817	L54641019
GR62	Euro	3,34	3,77	4,24
For tubes	mm	6 x 14	8 x 17	10 x 19
		10	10	10

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Indivisible package Suggested retail package - Unit price

SAFETY COUPLINGS & NIPPLES - SERIES 320 ESAFE, DN 7.6

ITEM: 10-320-200

ESafe Series 320 coupling is an easy-to-handle high performing coupling with a long service life. eSafe is a one hand operated safety coupling that drains out air before disconnection eliminating the risk of hose whip. Male threads on the couplings and nipples feature pre-applied thread sealant. The couplings have a smaller outside dimension than comparable designs. Full automatic operation ensures easy handling. eSafe complies with ISO Standard 4414 and EN 983. Interchangeable with: Parker Rectus 25/26, Parker Tema 1600/1625, Prevost ESC07/ERC07/ESI07/ISC08, Oetiker SC C, Hansen Auto-Flo 24.

Coupling - hose connection.

Tech. Code		L515006	L515008	L515010
GR62	Euro	24,30	23,60	23,60
For tubes	Ø	6.3 mm - 1/4"	8 mm - 5/16"	10 mm - 3/8"
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

SAFETY COUPLINGS & NIPPLES - SERIES 320 ESAFE, DN 7.6

ITEM: 10-320-215

Coupling - Male thread.

Tech. Code		L515214	L515238	L515212
GR62	Euro	24,30	24,30	24,30
Male thread		1/4" BSPT	3/8" BSPT	1/2" BSPT
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN series 320 DN7 6 -Eurostandard 7.4 mm	Original CEJN series 320 DN7 6 -Eurostandard 7.4 mm	Original CEJN series 320 DN7 6 -Eurostandard 7.4 mm

ITEM: 10-320-220

Coupling - Female thread.

Tech. Code		L515414	L515438	L515412
GR62	Euro	24,30	24,30	24,30
Female thread		1/4" BSP	3/8" BSP	1/2" BSP
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

ITEM: 10-320-206

Coupling - Stream Line hose connection.

Tech. Code		L515606	L515608	L515611
GR62	Euro	27,60	27,60	30,30
For tubes	Ø	6.5 x 10	8 x 12	11 x 16
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

ITEM: 10-320-500

Hardened steel nipples - Hose connection.

Tech. Code		L515806	L515808	L515810
GR62	Euro	4,10	4,10	4,10
For tubes	Ø	6.3 mm - 1/4"	8 mm - 5/16"	10 mm - 3/8"
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

SAFETY COUPLINGS & NIPPLES - SERIES 320 ESAFE, DN 7.6

ITEM: 10-320-515

Nipples - Male thread.

Tech. Code		L516014	L516038	L516012
GR62	Euro	4,10	4,40	7,50
Male thread		1/4" BSPT	3/8" BSPT	1/2" BSPT
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

QUICK RELEASE SAFETY COUPLINGS SERIES 320 DN7.6

ITEM: 10-320-545

Quick release safety coupling in hardened steel with conical male thread NPT ASME B 1.20.1.

Tech. Code		L516114	L516138	L516112
GR62	Euro	4,30	6,30	11,90
Male thread		1/4" NPT	3/8" NPT	1/2" NPT
Air flow		2250 l/min (79,4 CFM)	2250 l/min (79,4 CFM)	2250 l/min (79,4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN 7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN 7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN 7.6 - Eurostandard 7.4 mm

ITEM: 10-320-520

Nipples - Female thread.

Tech. Code		L516214	L516238	L516212
GR62	Euro	4,40	5,30	9,50
Female thread		1/4" BSP	3/8" BSP	1/2" BSP
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

ITEM: 10-320-506

Nipples - Stream Line hose connection.

Tech. Code		L516406	L516408	L516411
GR62	Euro	9,50	11,00	16,30
For tubes	Ø	6.5 x 10	8 x 12	11 x 16
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

COMPACT MULTIPLE VENTED SAFETY OUTLETS - SERIES 320 ESAFE MULTI-LINK

ITEM: 10-902-920

With multiple outlets Series 320 eSafe Multi-Link offers both flexibility and high performance. eSafe complies with ISO Standard 4414 and EN 983 and it offers standard features; one-hand operated, high flow and long service life.

Tech. Code		L517002	L517003
GR62	Euro	115,20	143,30
Connection		2	3
Female thread		1/2" BSP	1/2" BSP
Air flow		2250 l/min (79.4 CFM)	2250 l/min (79.4 CFM)
Maximum pressure		16 bar (232 PSI)	16 bar (232 PSI)
Standard		Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm	Original CEJN Series 320 DN7.6 - Eurostandard 7.4 mm

QUICK COUPLINGS FEMALE WITH MALE THREAD - MIGNON DN5

ITEM: 111

Mignon DN Series 5 mm sockets with a nickel-plated brass body and NBR seals.
Operating pressure 0-12 BAR.
Version with cylindrical male Gas thread compliant with ISO 228 Class A.
Compatible with:
- RECTUS/PARKER 21/90 profile
- CAMOZZI 5050 - 5150 profile
- CEJN 200 profile

Tech. Code		L548018	L548014
GR62	Euro	4,99	4,99
Thread	BSP	1/8"	1/4"
📦		10	10

QUICK COUPLINGS FEMALE WITH FEMALE THREAD - MIGNON DN5

ITEM: 112

Mignon DN Series 5 mm sockets with a nickel-plated brass body and NBR seals.
Operating pressure 0-12 BAR.
Version with cylindrical female Gas thread compliant with ISO 228 Class A.
Compatible with:
- RECTUS/PARKER 21/90 profile
- CAMOZZI 5050 - 5150 profile
- CEJN 200 profile

Tech. Code		L548218	L548214
GR62	Euro	5,43	5,43
Thread	BSP	1/8"	1/4"
📦		10	10

📦 Indivisible package 📦 Suggested retail package - Unit price

QUICK COUPLINGS FEMALE WITH SPRING - MIGNON DN5

AIGNEP

ITEM: 113

Mignon DN Series 5 mm sockets with a nickel-plated brass body and NBR seals.
Operating pressure 0-12 BAR.
Version with spring guard for polyurethane and polyamide hoses.
Compatible with:
- RECTUS/PARKER 21/90 profile
- CAMOZZI 5050 - 5150 profile
- CEJN 200 profile

Tech. Code		L54840406	L54840608
GR62	Euro	6,61	6,61
For tubes	mm	4 x 6	6 x 8
		10	10

QUICK COUPLINGS MALE THREADED - MIGNON DN5

AIGNEP

ITEM: 211

Quick release couplings in nickel-plated brass with Mignon DN 5 mm series profile.
Operating pressure 0-12 BAR.
Version with cylindrical male Gas thread compliant with ISO 228 Class A.

Tech. Code		L548618	L548614
GR62	Euro	0,94	1,09
Thread	BSP	1/8"	1/4"
		10	10

QUICK COUPLINGS FEMALE THREADED - MIGNON DN5

AIGNEP

ITEM: 212

Quick release couplings in nickel-plated brass with Mignon DN 5 mm series profile.
Operating pressure 0-12 BAR.
Version with cylindrical female Gas thread compliant with ISO 228 Class A.

Tech. Code		L548818	L548814
GR62	Euro	0,94	1,13
Thread	BSP	1/8"	1/4"
		10	10

QUICK COUPLINGS WITH SPRING - MIGNON DN5

AIGNEP

ITEM: 213

Quick release couplings in nickel-plated brass with Mignon DN 5 mm series profile.
Operating pressure 0-12 BAR.
Version with spring guard for polyurethane and polyamide hoses.

Tech. Code		L54900406	L54900608
GR62	Euro	2,29	2,41
For tubes	mm	4 x 6	6 x 8
		10	10

QUICK COUPLINGS FEMALE WITH MALE THREAD - UNI-ISO 6150 A-6 PROFILE

AIGNEP

ITEM: 101

NEW

Sockets with UNI ISO 61500 A-6 DN 2.5 mm profile with nickel-plated brass body and NBR gaskets.
Operating pressure 0-10 BAR.
Version with cylindrical gas male thread conforming to ISO 228 Class A.
Compatibility with:
- Profile Festo KD2 - KS2

Tech. Code		L549518
GR62	Euro	4,70
Thread	BSP	1/8"
		10

QUICK COUPLINGS WITH MALE THREAD - UNI-ISO 6150 A-6 PROFILE

AIGNEP

ITEM: 201

NEW

nn Quick coupling in nickel-plated brass with UNI ISO 6150 A-6 DN 2.5 mm profile.
Operating pressure 8-10 BAR.
Version with cylindrical gas male thread conforming to IAO 228 A Class.

Tech. Code		L549718
GR62	Euro	0,88
Thread	BSP	1/8"
		10

TAPER THREADED NIPPLES

AIGNEP

ITEM: 2000

Nipples with conical thread in brass OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code		L510018	L510014	L510038	L510012	L510034
GR62	Euro	0,56	0,79	1,10	1,84	3,26
A		1/8"	1/4"	3/8"	1/2"	3/4"
B	mm	7.5	11	11.5	14	16.5
L	mm	19.5	27	28	33.5	40
CH	mm	12	14	17	22	27
		10	10	10	10	10

Indivisible package Suggested retail package - Unit price

TAPER THREADED REDUCTION NIPPLES

AIGNEP

ITEM: 2020

Reducing nipples with tapered brass thread OT UNI EN 12164/5 CW 614 / 7N with nickel-plating treatment.

Tech. Code		L51051814	L51051838	L51051812	L51051438
GR62	Euro	0,79	0,99	1,88	1,04
A - A1		1/8" - 1/4"	1/8" - 3/8"	1/8" - 1/2"	1/4" - 3/8"
B	mm	7.5	7.5	7,5	11
C	mm	11	11,5	14	11.5
L	mm	23.5	24	27	27.5
CH	mm	14	17	22	17
📦		10	10	10	10

Tech. Code		L51051412	L51053812	L51051234	L51053410
GR62	Euro	1,69	1,75	3,08	6,80
A - A1		1/4" - 1/2"	3/8" - 1/2"	1/2" - 3/4"	3/4" - 1"
B	mm	11	11.5	14	16,5
C	mm	14	14	16.5	19
L	mm	30.5	31	37.5	44
CH	mm	22	22	27	34
📦		10	10	10	10

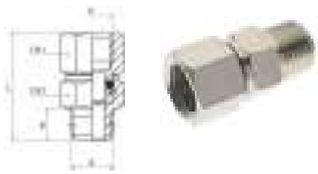
REDUCTION NIPPLES WITH TAPERED HEAD

AIGNEP

NEW

ITEM: 2110

Reduction nipples with tapered head in brass OT UNI EN 12164/5 CW 614/7N with nickel-plating treatment.



Tech. Code		L510618	L510614	L510638
GR62	Euro	1,83	2,20	2,83
A		1/8"	1/4"	3/8"
B	mm	7,5	11	11,5
CH1	mm	13	16	20
CH2	mm	13	15	17
L	mm	25	33	35,5
📦		10	10	10

REDUCTION NIPPLES WITH CYLINDRICAL HEAD

AIGNEP

NEW

ITEM: 2115

Reduction nipples with cylindrical head in OT UNI EN 12645/5 CW 614/7N with nickel-plating treatment.

Tech. Code		L510718	L510714	L510738
GR62	Euro	2,00	2,44	3,15
A	mm	1/8"	1/4"	3/8"
B	mm	6	8	9
CH1	mm	13	16	20
CH2	mm	13	16	18
L	mm	24,5	31	34,5
📦		10	10	10

TAPER THREADED REDUCTIONS

AIGNEP

ITEM: 2040

Male-female reductions with brass conical thread OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code		L51101818	L51101814	L51101838	L51101414	L51101438
GR62	Euro	0,67	0,87	1,61	0,98	1,54
A A1		1/8" - 1/8"	1/8" - 1/4"	1/8" - 3/8"	1/4" - 1/4"	1/4" - 3/8"
B	mm	7.5	7.5	7.5	11	11
L	mm	20	22	23	26	27
CH	mm	14	17	22	17	22
📦		10	10	10	10	10

Tech. Code		L51101412	L51103838	L51103812	L51101212	L51101234
GR62	Euro	2,40	1,70	2,44	2,72	4,14
A A1		1/4" - 1/2"	3/8" - 3/8"	3/8" - 1/2"	1/2" - 1/2"	1/2" - 3/4"
B	mm	11	11.5	11.5	14	14
L	mm	30	27.5	30.5	33	35
CH	mm	26	22	26	26	32
📦		10	10	10	10	10

📦 Indivisible package 📦 Suggested retail package - Unit price

TAPER THREADED REDUCTIONS

AIGNEP

ITEM: 2080

Short male-female reductions with brass conical thread OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code		L51151418	L51153818	L51153814	L51151218	L51151214	L51151238
GR62	Euro	0,63	0,86	0,80	1,54	1,40	1,21
A A1		1/4" - 1/8"	3/8" - 1/8"	3/8" - 1/4"	1/2" - 1/8"	1/2" - 1/4"	1/2" - 3/8"
B	mm	11	11.5	11.5	14	14	14
L	mm	16	16.5	16.5	19,5	19.5	19.5
CH	mm	14	17	17	22	22	22
◈		10	10	10	10	10	10

Tech. Code		L51153438	L51153412	L51151012	L51151034
GR62	Euro	2,87	2,19	5,04	4,85
A A1		3/4" - 3/8"	3/4" - 1/2"	1" - 1/2"	1" - 3/4"
B	mm	16,5	16.5	19	19
L	mm	23,5	23.5	27,5	27,5
CH	mm	27	27	34	34
◈		10	10	10	10

TAPER THREADED SLEEVES

AIGNEP

ITEM: 3000

Sleeves with brass female thread OT UNI EN 12164/5 CW 614 7N with nickel-plated treatment.

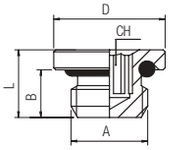
Tech. Code		L512018	L512014	L512038	L512012	L512034
GR62	Euro	0,75	0,99	1,54	2,53	4,50
A		1/8"	1/4"	3/8"	1/2"	3/4"
L	mm	15	22	24	30	32
CH	mm	14	17	22	26	32
◈		10	10	10	10	10

PLUGS WITH CYLINDRICAL MALE THREAD AND NBR O-RING

AIGNEP

ITEM: 3015

Plugs with hexagonal socket head, cylindrical male thread and NBR O-ring.
OT UNI EN 12164/5 CW 614/7N brass with nickel plating treatment.



Tech. Code		L5123M5	L512318	L512314	L512338	L512312
GR62	Euro	0,62	0,57	0,68	0,97	1,62
A		M5	1/8"	1/4"	3/8"	1/2"
B	mm	4	6	8	9	10
L	mm	6	8,5	11	12,5	13,5
D	mm	8	14	17	20	25
CH	mm	2	5	6	8	10
◈		10	10	10	10	10

CYLINDRICAL MALE THREADED PLUGS

AIGNEP

ITEM: 3020

Plugs with hexagonal head and cylindrical male thread in brass OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code		L512518	L512514	L512538	L512512
GR62	Euro	0,52	0,71	0,94	1,58
A		1/8"	1/4"	3/8"	1/2"
B	mm	6.5	9	9.5	10
L	mm	10	13	13.5	14.5
CH	mm	14	17	19	24
◈		10	10	10	10

TAPER MALE THREADED PLUGS

AIGNEP

ITEM: 3025

Plugs with hexagon socket and tapered male thread in brass OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code		L513018	L513014	L513038	L513012
GR62	Euro	0,46	0,57	0,71	1,11
A		1/8"	1/4"	3/8"	1/2"
B	mm	7.5	10	11	13
H	mm	5	7	7	8
CH	mm	5	6	8	10
◈		10	10	10	10

TEFLON TAPES

WRK

ITEM: L5501

Tech. Code		L550112
GR62	Euro	1,10
Width		1/2"
Length	m	12

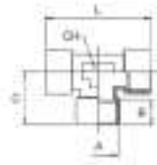
◈ Indivisible package ◈ Suggested retail package - Unit price

CYLINDRICAL FEMALE THREADED T - FITTINGS

ITEM: 4000

Female-female-female T-connectors with brass cylindrical thread OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code		L520018	L520014	L520038	L520012	L520034
GR62	Euro	1,64	2,33	3,72	6,03	8,25
A		1/8"	1/4"	3/8"	1/2"	3/4"
B	mm	8.5	11	12	15	16.5
C	mm	19.5	24.5	27	32	36.5
L	mm	39	49	54	64	73
CH	mm	12	13	16	20	27
		10	10	10	10	10

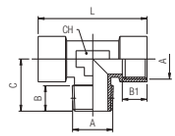


CENTRAL FEMALE-FEMALE-MALE T-FITTINGS

ITEM: 4040

Central female-female-male T-fittings with conical thread in OT UNI EN 12164/5 CW 614/7N brass with nickel plating treatment.

Tech. Code		L520218	L520214	L520238	L520212	L520234
GR62	Euro	1,70	2,33	3,72	6,03	8,25
A	BSP - BSPT	1/8"	1/4"	3/8"	1/2"	3/4"
B	mm	8	11	11,5	14	14,5
B1	mm	8,5	11	12	15	16,5
C	mm	17,5	23	25,5	29,5	32
L	mm	39	49	54	64	73
CH	mm	12	13	16	20	27
		10	10	10	10	10

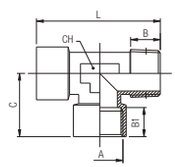


LATERAL FEMALE-FEMALE-MALE T-FITTINGS

ITEM: 4050

Lateral female-female-male T-fittings with conical thread in OT UNI EN 12164/5 CW 614/7N brass with nickel plating treatment.

Tech. Code		L520418	L520414	L520438	L520412	L520434
GR62	Euro	1,70	2,33	3,72	6,03	8,25
A	BSP - BSPT	1/8"	1/4"	3/8"	1/2"	3/4"
B	mm	8	11	11,5	14	14,5
B1	mm	8,5	11	12	15	16,5
C	mm	19,5	24,5	27	32	36,5
L	mm	37	47,5	52,5	61,5	68,5
CH	mm	12	13	16	20	27
		10	10	10	10	10

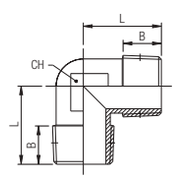


MALE-MALE L-FITTINGS WITH CONICAL THREAD

ITEM: 5000

Male-male L-fittings with conical thread in OT UNI EN 12164/5 CW 614/7N brass with nickel plating treatment.

Tech. Code		L520518	L520514	L520538	L520512	L520534
GR62	Euro	1,37	1,84	2,73	4,33	6,16
A	BSPT	1/8"	1/4"	3/8"	1/2"	3/4"
B	mm	7,5	11	12	14	14,5
L	mm	18	24	27	29,5	32
CH	mm	11	13	17	20	27
		10	10	10	10	10



CYLINDRICAL FEMALE THREADED L - FITTINGS

ITEM: 5010

Female-female L fittings with cylindrical thread in brass OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

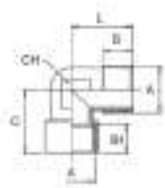
Tech. Code		L521018	L521014	L521038	L521012	L521034
GR62	Euro	1,42	1,96	2,73	4,33	6,16
A		1/8"	1/4"	3/8"	1/2"	3/4"
B	mm	8.5	11	11.5	15	16.5
L	mm	21	25.5	28	32	36.5
CH	mm	11	13	17	20	27
		10	10	10	10	10

CYLINDRICAL MALE/FEMALE THREADED L - FITTINGS

ITEM: 5020

Male-female L fittings with brass cylindrical thread OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code		L522018	L522014	L522038	L522012	L522034
GR62	Euro	1,36	1,84	2,73	4,33	6,16
A		1/8"	1/4"	3/8"	1/2"	3/4"
B	mm	7.5	11	11.5	14	14.5
B1	mm	8.5	11	12	15	16.5
C	mm	21	25.5	28	32	36.5
L	mm	18.5	24	27	29.5	32
CH	mm	11	13	17	20	27
		10	10	10	10	10



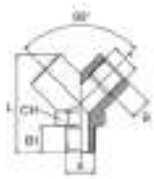
Indivisible package Suggested retail package - Unit price

90° MALE Y-FITTINGS WITH CYLINDRICAL THREAD

AIGNEP

ITEM: 6000

90 ° Y fittings with male-female-female thread in brass OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.



Tech. Code		L523018	L523014	L523038	L523012
GR62	Euro	2,13	2,53	4,46	6,87
A		1/8"	1/4"	3/8"	1/2"
B	mm	8	11	11.5	14
B1	mm	9	11	12.5	16.5
L	mm	33	37	46	58
CH	mm	14	17	22	26
◈		10	10	10	10

MALE HOSE CONNECTIONS WITH TAPERED THREAD

AIGNEP

ITEM: 3040

Male hose connections with tapered thread OT UNI EN 12164/5 CW 614 / 7N with nickel-plated treatment.

Tech. Code	GR62 Euro	A1	A mm	B mm	C mm	◈
L52601806	0,79	1/8"	6	19.5	7.5	10
L52601808	0,83	1/8"	8	19.5	7.5	10
L52601809	0,83	1/8"	9	19,5	7,5	10
L52601406	0,88	1/4"	6	19,5	11	10
L52601407	0,87	1/4"	7	19.5	11	10
L52601408	0,94	1/4"	8	19.5	11	10
L52601409	0,94	1/4"	9	19,5	11	10
L52601410	0,94	1/4"	10	19.5	11	10
L52601412	0,97	1/4"	12	19.5	11	10
L52603810	1,36	3/8"	10	19.5	11.5	10
L52603812	1,36	3/8"	12	19.5	11.5	10

Tech. Code	GR62 Euro	A1	A mm	B mm	C mm	◈
L52603814	1,42	3/8"	14	19,5	11,5	10
L52601210	1,88	1/2"	10	19.5	14	10
L52601212	1,99	1/2"	12	19.5	14	10
L52601214	2,00	1/2"	14	19,5	14	10
L52601218	2,11	1/2"	18	19,5	14	10
L52601220	3,02	1/2"	20	30	14	10
L52603418	3,35	3/4"	18	19,5	16,5	10
L52603420	4,33	3/4"	20	30	13,5	10
L52603425	4,57	3/4"	25	30	14,5	10
L52601025	7,05	1"	25	30	16	10

MALE HOSE CONNECTIONS WITH CYLINDRICAL HEAD

AIGNEP

NEW

ITEM: 3045

Male hose connections with cylindrical head in OT UNI EN 1216/5 cw 614/7N and nickel-plated treatment.

Tech. Code	GR62 Euro	A1	A mm	B mm	C mm	◈
L5262M503	1,06	M5	3	7,5	4	10
L52621806	0,88	1/8"	6	20	6	10
L52621408	1,15	1/4"	8	20	8	10

Tech. Code	GR62 Euro	A1	A mm	B mm	C mm	◈
L52621412	1,20	1/4"	12	20	8	10
L52621217	2,59	1/2"	17	24	10	10
L52623421	6,51	3/4"	21	24	12	10

FEMALE HOSE CONNECTIONS WITH THREADED HEAD

AIGNEP

NEW

ITEM: 3050

Female hose connections with threaded head in OT UNI EN 12164/5 CW 614/7N with nickel-plated treatment.

Tech. Code		L52641806	L52641406	L52641407	L52641408
GR62	Euro	1,12	1,22	1,17	1,30
A1		1/8"	1/4"	1/4"	1/4"
A	mm	6	6	7	8
B	mm	19,5	19,5	19,5	19,5
C	mm	8,5	11	11	11
L	mm	30	32,5	32,5	32,5
CH	mm	14	17	17	17
◈		10	10	10	10

FEMALE-FEMALE CYLINDRICAL THREAD BALL VALVES

AIGNEP

NEW

ITEM: 6300

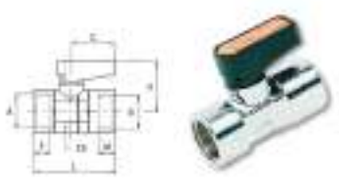
Ball vlaves with female - female cylindrical threads Gas RP ISO 7.1 - BS 21 - DIN 2999 in chrome plated brass, selas in NBR and PA66 glass-reinforced handle.

Tech. Code		L529018	L529014	L529038	L529012	L529034
GR62	Euro	5,78	5,82	6,31	(9,10)	(12,84)
A B	ISO 7.1	1/8"	1/4"	3/8"	1/2"	3/4"
ES	mm	14-15	14-15	18-19	22-23	28-30
F	mm	7,4	11	11,4	15	16,3
M	mm	7,4	11	11,4	15	16,3
L	mm	36	43	47	59	67
G	mm	19	19	19	26	50
H	mm	21	21	22	30,5	33
◈		10	10	5	10	5

FEMALE CYLINDRICAL THREAD BALL VALVES

ITEM: 6400

Ball valves with female-female thread G ISO 228 in chrome-plated brass, seals in NBR and PA66 glass-reinforced handle.

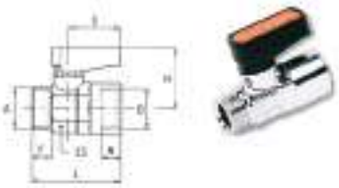


Tech. Code		L530018	L530014	L530038	L530012	L530034
GR62	Euro	5,59	5,75	6,02	8,64	12,17
A B		1/8"	1/4"	3/8"	1/2"	3/4"
ES	mm	14-15	14-15	18-19	22-23	28-30
F	mm	7	8	9	10	12
M	mm	7	8	9	10	12
L	mm	35	37	42	49	58
G	mm	19	19	19	26	26
H	mm	21	21	22	30.5	33
◈		10	10	10	10	5

MALE/ FEMALE CYLINDRICAL THREAD BALL VALVES

ITEM: 6410

Ball valves with female-female thread G ISO 228 in chrome-plated brass, seals in NBR and PA66 glass-reinforced handle.



Tech. Code		L531018	L531014	L531038	L531012	L531034
GR62	Euro	5,59	5,75	5,94	8,64	11,98
A B		1/8"	1/4"	3/8"	1/2"	3/4"
ES	mm	14-15	14-15	18-19	22-23	28-30
F	mm	7	8	9	10	12
M	mm	7	8	9	10	12
L	mm	34	35	39	45	52
G	mm	19	19	19	26	26
H	mm	21	21	22	30.5	33
◈		10	10	10	10	5

SILENCERS

ITEM: 7000

Bronze silencers for pneumatic tools.

Tech. Code		L540018	L540014	L540038	L540012	L540034
GR62	Euro	1,79	2,22	4,34	5,87	10,95
A		1/8"	1/4"	3/8"	1/2"	3/4"
F	mm	6	6	8	10	13
B	mm	12	15	19	23	30
H	mm	21	25	36	43	53
Δ	dB	42.6	44	27.3	19	16
◈		10	10	10	10	10

SILENCERS

ITEM: 7010

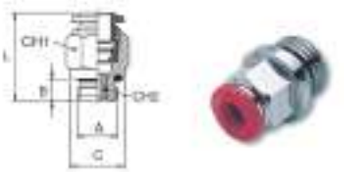
Brass silencers for pneumatic tools.

Tech. Code		L541018	L541014	L541038	L541012
GR62	Euro	1,32	1,81	3,17	4,51
A		1/8"	1/4"	3/8"	1/2"
F	mm	6	8	9	11
H	mm	13	16	18	20
CH	mm	13	16	19	24
Δ	dB	30.6	33	35	23
◈		10	10	10	10

MALE STRAIGHT FITTINGS WITH CYLINDRICAL THREAD

ITEM: 50020

Nickel-plated brass body. Pipe release pusher in acetalic resin. Clamping washer pliers in AISI 301. NBR seals. Working pressure -0.99 Bar min/20 Bar max.



Tech. Code	GR62 Euro	Pipe mm	A	B mm	C mm	◈
L550004M5	1,46	4	M5	4	8	10
L55000414	1,60	4	1/4"	8	16	10
L55000418	1,41	4	1/8"	6	13	10
L55000518	1,50	5	1/8"	6	13	10
L55000618	1,44	6	1/8"	6	13	10
L55000614	1,52	6	1/4"	8	16	10
L55000818	1,56	8	1/8"	6	13	10

Tech. Code	GR62 Euro	Pipe mm	A	B mm	C mm	◈
L55000814	1,65	8	1/4"	8	16	10
L55001014	2,09	10	1/4"	8	16	10
L55000838	2,04	8	3/8"	9	20	10
L55001038	2,19	10	3/8"	9	20	10
L55001214	2,65	12	1/4"	8	16	10
L55001238	2,57	12	3/8"	9	20	10
L55001212	2,80	12	1/2"	10	25	10

◈ Indivisible package ◈ Suggested retail package - Unit price

MALE STRAIGHT FITTINGS WITH CYLINDRICAL THREAD

ITEM: 50020N

In technopolymer and Nickel-plated brass body with cylindrical male thread. Technopolymer body with nickle plated brass threaded parts. Pipe release pusher in acetalic resin. Clamping washer pliers in AISI 301. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code	GR62 Euro	Pipe mm	A	B mm	C mm	
L560004M5	1,46	4	M5	4	8	10
L56000418	1,41	4	1/8"	6	13	10
L56000618	1,44	6	1/8"	6	13	10
L56000614	1,52	6	1/4"	8	16	10
L56000818	1,56	8	1/8"	6	13	10

Tech. Code	GR62 Euro	Pipe mm	A	B mm	C mm	
L56000814	1,65	8	1/4"	8	16	10
L56001014	2,09	10	1/4"	8	16	10
L56001038	2,19	10	3/8"	9	20	10
L56001238	2,57	12	3/8"	9	20	10
L56001212	2,80	12	1/2"	10	25	10

STRAIGHT CONNECTORS

ITEM: 50040

Nickel-plated brass body. Pipe release pusher in acetalic resin. Clamping washer in AISI 304. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code		L550504	L550505	L550506	L550508	L550510	L550512
GR62	Euro	2,31	2,24	2,32	2,59	3,27	3,82
Pipe	mm	4	5	6	8	10	12
L	mm	30.5	33	34	36	42	47
B	mm	10.5	11,5	12.5	14.5	17.5	20.5
		10	10	10	10	10	10

STRAIGHT CONNECTORS

ITEM: 55040

Technopolymer body. Pipe release pusher in acetalic resin ISOFORM. Nickel-plated brass capsule. Clamping washer in AISI 301. NBR seals.
Working pressure -0.99 Bar min/20 Bar max.

Tech. Code		L560504	L560506	L560508	L560510	L560512
GR62	Euro	2,05	2,09	2,32	2,66	3,39
Pipe	mm	4	6	8	10	12
L	mm	31	35	37	45	49
B	mm	10	12.5	14	17	20
		10	10	10	10	10

ADJUSTABLE MALE PUSH-TO-CONNECT L-FITTINGS WITH CYLINDRICAL THREAD

ITEM: 50116

Nickel-plated brass body. Pipe release pusher in acetalic resin. Clamping washer in AISI 301. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L551004M5	2,47	4	M5	3.6	18	10
L55100418	2,50	4	1/8"	5.4	18	10
L55100618	2,58	6	1/8"	5.4	21	10
L55100614	2,77	6	1/4"	7.1	21	10
L55100818	2,93	8	1/8"	5.4	22.5	10
L55100814	3,07	8	1/4"	7.1	22.5	10

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L55101014	3,87	10	1/4"	7.1	26.5	10
L55101038	4,28	10	3/8"	8.1	26.5	10
L55101214	4,73	12	1/4"	8	31,5	10
L55101238	4,91	12	3/8"	8.1	31.3	10
L55101212	5,60	12	1/2"	9.6	31.3	10

ADJUSTABLE MALE PUSH-TO-CONNECT L-FITTINGS WITH CYLINDRICAL THREAD

ITEM: 55116

Technopolymer body. Pipe release pusher in acetalic resin ISOFORM. Nickel-plated brass capsule. Clamping washer in AISI 304. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L561004M5	2,15	4	M5	3.6	16.5	10
L56100418	2,15	4	1/8"	5.4	16.5	10
L56100618	2,15	6	1/8"	5.4	20.5	10
L56100614	2,34	6	1/4"	7.1	20.5	10
L56100818	2,47	8	1/8"	5.4	22	10

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L56100814	2,59	8	1/4"	7.1	22	10
L56101014	3,42	10	1/4"	7.1	26.5	10
L56101038	3,80	10	3/8"	8.1	26.5	10
L56101238	4,26	12	3/8"	8.1	30	10
L56101212	4,80	12	1/2"	9.6	30	10

INTERMEDIATE PUSH-TO-CONNECT L-FITTINGS

ITEM: 50130

Nickel-plated brass body. Pipe release pusher in acetalic resin. Clamping washer in AISI 304. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code		L551504	L551506	L551508	L551510	L551512
GR62	Euro	2,54	2,57	3,02	3,73	4,89
Pipe	mm	4	6	8	10	12
L	mm	17	21	22.5	26.5	30.5
CH	mm	9	11	13	16	19
D	mm	10	12.5	14	17	21.5
		10	10	10	10	10

Indivisible package Suggested retail package - Unit price

INTERMEDIATE PUSH-TO-CONNECT L-FITTINGS

AIGNEP

ITEM: 55130

Technopolymer body. Pipe release pusher in acetalic resin ISOFORM. Nickel-plated brass capsule. Clamping washer in AISI 304. NBR seals.
Working pressure -0.99 Bar min/20 Bar max.

Tech. Code	GR62 Euro	Pipe mm	L mm	CH mm	D mm	
L561504	2,07	4	16.5	9	10	10
L561506	2,20	6	20.5	11	12	10
L561508	2,56	8	22	13	14	10

Tech. Code	GR62 Euro	Pipe mm	L mm	CH mm	D mm	
L561510	3,34	10	26.5	16	17	10
L561512	4,35	12	30	19	20	10

MALE ADJUSTABLE PUSH-TO-CONNECT T-FITTINGS WITH CYLINDRICAL THREAD

AIGNEP

ITEM: 50216

Nickel-plated brass body. Pipe release pusher in acetalic resin. Clamping washer in AISI 304. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L552004M5	4,03	4	M5	3.6	34	10
L55200418	3,55	4	1/8"	5.4	34	10
L55200618	3,56	6	1/8"	5.4	42	10
L55200614	3,80	6	1/4"	7.1	42	10
L55200818	4,34	8	1/8"	5.4	45	10

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L55200814	4,46	8	1/4"	7.1	45	10
L55201014	5,73	10	1/4"	7.1	53	10
L55201038	5,99	10	3/8"	8.1	53	10
L55201238	6,64	12	3/8"	8.1	62.6	10
L55201212	7,44	12	1/2"	9.6	62.6	10

MALE ADJUSTABLE PUSH-TO-CONNECT T-FITTINGS WITH CYLINDRICAL THREAD

AIGNEP

ITEM: 55216

Technopolymer body. Pipe release pusher in acetalic resin ISOFORM. Nickel-plated brass capsule. Clamping washer in AISI 304. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L562004M5	3,23	4	M5	3.6	33	10
L56200418	3,00	4	1/8"	5.4	33	10
L56200618	3,03	6	1/8"	5.4	41	10
L56200614	3,21	6	1/4"	7.1	41	10

Tech. Code	GR62 Euro	Pipe mm	A	B mm	L1 mm	
L56200818	3,68	8	1/8"	5.4	44	10
L56200814	3,71	8	1/4"	7.1	44	10
L56201014	5,14	10	1/4"	7.1	53	10
L56201038	5,30	10	3/8"	8.1	53	10

INTERMEDIATE PUSH-TO-CONNECT-FITTINGS

AIGNEP

ITEM: 50230

Nickel-plated brass body. Pipe release pusher in acetalic resin. Clamping washer in AISI 304. NBR seals.
Working pressure -0.99 Bar min/20 Bar max.

Tech. Code		L552504	L552506	L552508	L552510	L552512
GR62	Euro	3,49	3,72	4,28	5,60	6,90
Pipe	mm	4	6	8	10	12
L1	mm	34	42	45	53	61
L2	mm	17	21	22.5	26.5	30.5
CH	mm	9	11	13	16	19
D	mm	10	12.5	14	17	21.5
		10	10	10	10	10

INTERMEDIATE PUSH-TO-CONNECT-FITTINGS

AIGNEP

ITEM: 55230

Technopolymer body. Pipe release pusher in acetalic resin ISOFORM. Nickel-plated brass capsule.
Clamping washer in AISI 304. NBR seals. Working pressure -0.99 Bar min/20 Bar max.

Tech. Code		L562504	L562506	L562508	L562510	L562512
GR62	Euro	2,86	3,09	3,46	5,00	6,16
Pipe	mm	4	6	8	10	12
L1	mm	33	41	44	53	61.5
L2	mm	16.5	20.5	22	26.5	30
CH	mm	9	11	13	16	19
D	mm	10	12	14	17	20
		10	10	10	10	10

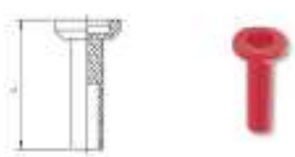
POLYAMIDE PLUGS

AIGNEP

ITEM: 8610

Polyamide plugs for tubes ideal for all types of use.

Tech. Code		L557004	L557006	L557008	L557010	L557012
GR62	Euro	0,33	0,33	0,35	0,41	0,45
Pipe	mm	4	6	8	10	12
L	mm	23.5	24.5	26	28.5	28.5
		10	10	10	10	10



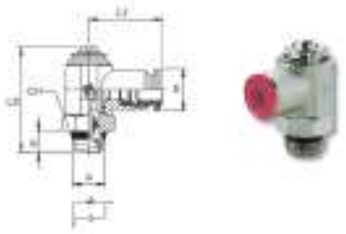
Indivisible package Suggested retail package - Unit price

ORIENTING FLOW REGULATORS FOR CYLINDERS WITH TAPER THREAD - SHORT

AIGNEP

ITEM: 50901

Screwdriver adjustment. Nickel-plated brass body. Pipe release pusher in acetalic resin.
Clamping washer in AISI 304. NBR seals. Working pressure 1 Bar min/20 Bar max.
Adjustment with screwdriver.



Tech. Code		L55300418	L553004M5	L55300614	L55300618	L55300814	L55300818
GR62	Euro	10,81	13,51	11,71	10,81	11,71	10,81
Pipe	mm	4	4	6	6	8	8
A		1/8"	M5	1/4"	1/8"	1/4"	1/8"
B	mm	5.5	4	7	5.5	7	5,5
L1	mm	21	19	25	22.5	26	24
L2	mm	31	29.5	36.5	31	36.5	31
CH	mm	14	8	17	14	17	14
D	mm	10	10	12.5	12.5	14	14
📦		10	10	10	10	10	10

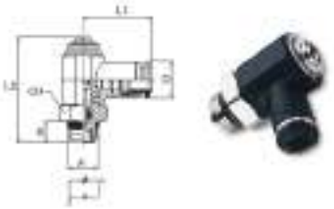
Please note: Short tapered thread allows coupling with different standard threads both cylindrical and conical, as BSP ISO 228 - ISO 7 BSPP/BSPT

ORIENTING FLOW REGULATORS FOR CYLINDERS WITH TAPER THREAD - SHORT

AIGNEP

ITEM: 55900

Screwdriver adjustment. Technopolymer and nickel-plated brass body. Pipe release pusher in acetalic resin ISOFORM. Nickel-plated brass capsule. Clamping washer in AISI 301. NBR seals.
Working pressure 1 Bar min/20 Bar max.
Adjustment with screwdriver.



Tech. Code		L56300618	L56300614	L56300814	L56301038
GR62	Euro	10,19	11,04	11,04	16,76
Pipe	mm	6	6	8	10
A		1/8"	1/4"	1/4"	3/8"
B	mm	5.5	7	7	8.5
L1	mm	23	25.5	26	30.5
L2	mm	31	36.5	36.5	42.5
CH	mm	14	17	17	20
📦		10	10	10	10

Please note: Short tapered thread allows coupling with different standard threads both cylindrical and conical, as BSP ISO 228 - ISO 7 BSPP/BSPT

QUICK REDUCTIONS PUSH-TO-CONNECT-FITTINGS

AIGNEP

ITEM: 50700

Nickel-plated brass body. Pipe release pusher in acetalic resin. Clamping washer in AISI 304. NBR seals.
Working pressure - 0.99 Bar min/20 Bar max.

Tech. Code		L553506	L553508	L553510	L553512
GR62	Euro	1,41	1,53	1,63	1,75
Pipe A	mm	6	8	10	12
Pipe B	mm	4	6	8	8
L	mm	30	34.5	38	39
D	mm	10.5	12.5	14.5	14.5
📦		10	10	10	10

ITEM: 50700N

Nickel-plated brass body. Pipe release pusher in acetalic resin ISOFORM. Nickel-plated brass capsule.
Clamping washer in AISI 301. NBR seals. Working pressure - 0.99 Bar min/20 Bar max.

Tech. Code		L563504	L563506	L563508	L563510	L563512
GR62	Euro	2,80	1,41	1,53	1,63	1,75
Pipe A	mm	4	6	8	10	12
Pipe B	mm	3	4	6	8	8
L	mm	27	30	34	38	39
D	mm	10	12.5	14	17	21.5
📦		10	10	10	10	10

Note: COMPATIBLE WITH THE TECHNOPOLYMER FITTINGS

ONE-WAY FLOW CONTROLLERS

AIGNEP

ITEM: 8850

Anodized aluminum body. Brass adjustment group. NBR O-Ring.
Working pressure 1 Bar min/10 Bar max.

Tech. Code		L571018	L571014	L571038	L571012
GR62	Euro	9,12	12,14	24,59	26,92
A		1/8"	1/4"	3/8"	1/2"
B	mm	35	46	50	60
C	mm	22	30	30	40
H	mm	18	20	25	25
D	mm	24.7	35	35	44
F	mm	4.5	6.5	6.5	6.5
L	mm	27-34	27-34	32-43	32-43
📦		10	10	10	10

AIR COMPRESSORS CO-AXIAL SINGLE-STAGE LUBRICATED

ITEM: SILVERSTONE L25P

The pumping unit mounted directly on the rotating shaft of the electric motor makes these compressors lightweight and exceptionally compact. The lubrication system for the moving parts prevents overheating and increases service life.

Tech. Code		L629010
GR63	Euro	418,00
Tank	L	10
Power	Hp/kW	2.5/1.9
Rpm	max	2850
Inlet flow rate	l/min	270
Power supply	V/Hz	230/50
Max. pressure	Bar	10
Dimensions	mm	420 x 330 x 635
Weight	Kg	24

ITEM: POLE POSITION L20

Compact and lightweight, thanks to the pumping unit mounted directly on the rotating shaft of the electric motor, the lubrication system of the moving mechanical parts prevents overheating and increases durability.

Tech. Code		L630024
GR63	Euro	210,00
Tank	L	24
Power	HP/Kw	2 - 1.5
Rpm	max	2850
Air inlet	l/min	220
Power	Voltage	230
Max pressure	Bar	8
Dimension	mm	570 x 255 x 590
Weight	kg	25

ITEM: MONTECARLO L20

Compact and lightweight, thanks to the pumping unit mounted directly on the rotating shaft of the electric motor, the lubrication system of the moving mechanical parts prevents overheating and increases durability.

Tech. Code		L630550
GR63	Euro	290,00
Tank	L	50
Power	HP/Kw	2 - 1.5
Rpm	max	2850
Air inlet	l/min	220
Power	Voltage	230
Max pressure	Bar	8
Dimension	mm	770 x 310 x 645
Weight	kg	33

AIR COMPRESSORS WITH BELT DRIVE - SINGLE-STAGE

ITEM: A29/50 CM2

Sturdy and reliable, the electric motor with belts transmits motion to the flywheel of the pump unit, ensuring quiet operation and performance. The high-quality mechanical components and the adequate lubrication make them suitable for small industrial activities and for ambitious hobbyists.

Tech. Code		L633050
GR63	Euro	742,00
Tank	L	50
Power	HP/Kw	2 - 1.5
Rpm	max	1075
Air inlet	l/min	255
Power	Voltage	230
Max pressure	Bar	10
Dimension	mm	870 x 370 x 780
Weight	kg	49

ITEM: A29/100 CM2

Sturdy and reliable, the electric motor with belts transmits motion to the flywheel of the pump unit, ensuring quiet operation and performance. The high-quality mechanical components and the adequate lubrication make them suitable for small industrial activities and for ambitious hobbyists.

Tech. Code		L6335100
GR63	Euro	775,00
Tank	L	100
Power	HP-KW	2 - 1.5
Rpm	max	1075
Air inlet	l/min	255
Power	Voltage	230
Max pressure	Bar	10
Dimension	mm	1010 x 415 x 900
Weight	kg	56

Indivisible package Suggested retail package - Unit price

GENERAL CATALOGUE

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B·HANDLING 3

" HANDsome "

LIFTING AND HANDLING SYSTEMS

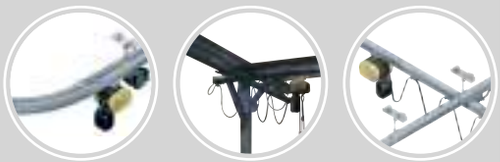
GIS

Ingersoll Rand

M0
1 - 10
Electric chain hoists

B·HANDLING

M1
1,11 - 25
Jib cranes



GIS

M2
1,26 - 27
Modular system for monorails and bridge cranes

B·HANDLING

M3
1,28 - 31
Vacuum lifters

TECNA

M4
1,32 - 33
Pneumatic chain hoists and balancers

B·HANDLING

M5
1,34
Manipulators

Tractel

M6
1,35
Manual chain hoists

B·HANDLING

TECNARD

KERN

M7
1,36 - 55
Lifting equipment

B·HANDLING

M8
1,56 - 68
Lifting magnets and lifting sling bars

PRAMAC GROUP

B·HANDLING

M9
1,69 - 93
Pallet trucks and hydraulic lifters

ITEM: M0005

High performance electric chain hoist with an high quality chain thanks to the high FEM class.

Features:
- Electromechancal drive
- Chain with safety factor "8"
- Die cast aluminum structure and tempered steel wheel
- Polygonal motor shaft coupling with Trefoil
- Low voltage commands (42V)
- The brake does not require adjustment, emergency overload device included
- Three-phase feed 380V 50Hz

Advantages:
- Suitable for an high number of operations
- Indicated for external enviorments IP65 protection
- Usuable between -15° and + 50°

Supplied with:
- Chain bucket
- Instruction manual of use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	CLASS FEM (ISO)	SPEED m/min	NR. CHAIN FALLS N°	EXCURSION m	ADDITIONAL HOOK RUN € / m	ADDITIONAL PUSH-BUTTON CABLE € / m	POWER kW	INTENSITY A	Weight kg
M0005801NF	(2250,00)	80	GPM250/1SF	3m (M6)	16/4	1	3	30	7,5	0,37 / 0,1	2,0 / 1,2	17
M00051251NF	(2100,00)	125	GPM250/1NF	3m (M6)	8/2	1	3	30	7,5	0,37 / 0,1	2,0 / 1,2	17
M00051251NF2	(2150,00)	125	GP250/1NF	4m (M7)	8/2	1	3	30	7,5	0,72 / 0,18	2,8 / 1,7	24
M00051251SF2	(2165,00)	125	GP250/1SF	2m (M5)	16/4	1	3	30	7,5	0,72 / 0,18	2,8 / 1,7	24
M00052001NF2	(2150,00)	200	GP250/1NF	3m (M6)	8/2	1	3	30	7,5	0,72 / 0,18	2,8 / 1,7	24
M00052002NF	(2250,00)	200	GP250/2NF	4m (M7)	4/1	2	3	60	7,5	0,72 / 0,18	2,8 / 1,7	25
M00052001NF3	(2400,00)	200	GP500/1NF	4m (M7)	8/2	1	3	40	7,5	0,72 / 0,18	2,8 / 1,7	26
M00052001SF	(2450,00)	200	GP500/1SF	3m (M6)	16/4	1	3	40	7,5	0,72 / 0,18	2,8 / 1,7	26
M00052501NF2	(2150,00)	250	GP250/1NF	2m (M5)	8/2	1	3	30	7,5	0,72 / 0,18	2,8 / 1,7	24
M00052501NF3	(2400,00)	250	GP500/1NF	4m (M7)	8/2	1	3	40	7,5	0,72 / 0,18	2,8 / 1,7	26
M00052502NF	(2250,00)	250	GP250/2NF	4m (M7)	4/1	2	3	60	7,5	0,72 / 0,18	2,8 / 1,7	25
M00052501SF	(2450,00)	250	GP500/1SF	2m (M5)	16/4	1	3	40	7,5	0,72 / 0,18	2,8 / 1,7	26
M00055002NF	(2250,00)	500	GP250/2NF	2m (M5)	4/1	2	3	60	7,5	0,72 / 0,18	2,8 / 1,7	25
M00055001NF	(2400,00)	500	GP500/1NF	2m (M5)	8/2	1	3	40	7,5	0,72 / 0,18	2,8 / 1,7	26
M00055001SF	(3380,00)	500	GP1000/1SF	2m (M5)	16/4	1	3	100	7,5	2,3 / 0,68	5,7 / 4,1	62
M00055002NF2	(2525,00)	500	GP500/2NF	4m (M7)	4/1	2	3	80	7,5	0,72 / 0,18	2,8 / 1,7	28
M00055001NF2	(3330,00)	500	GP1000/1NF	4m (M7)	8/2	1	3	100	7,5	2,3 / 0,68	5,7 / 4,1	62
M000510002NF	(2525,00)	1000	GP500/2NF	2m (M5)	4/1	2	3	80	7,5	0,72 / 0,18	2,8 / 1,7	28
M000510002NF2	(3600,00)	1000	GP1000/2NF	4m (M7)	4/1	2	3	40	7,5	2,3 / 0,68	5,7 / 4,1	66
M000510001NF	(3330,00)	1000	GP1000/1NF	2m (M5)	8/2	1	3	100	7,5	2,3 / 0,68	5,7 / 4,1	62
M000510001SF	(5000,00)	1000	GP1600/1SF	1Am (M4)	16/4	1	3	135	7,5	3,7 / 0,93	9,5 / 5,5	93
M000516001NF	(3330,00)	1600	GP1000/1NF	1Bm (M3)	8/2	1	3	100	7,5	2,3 / 0,68	5,7 / 4,1	62
M000516002NF	(3600,00)	1600	GP1000/2NF	3m (M6)	4/1	2	3	200	7,5	2,3 / 0,68	5,7 / 4,1	66
M000516001NF2	(4950,00)	1600	GP1600/1NF	2m (M5)	8/2	1	3	135	7,5	3,7 / 0,93	9,5 / 5,5	93
M000520002NF	(3600,00)	2000	GP1000/2NF	2m (M5)	4/1	2	3	200	7,5	2,3 / 0,68	5,7 / 4,1	66
M000520001NF	(4950,00)	2000	GP1600/1NF	1Am (M4)	8/2	1	3	135	7,5	3,7 / 0,93	9,5 / 5,5	93
M000520002NF2	(5450,00)	2000	GP2500/1NF	3m (M6)	8/2	1	3	195	7,5	3,7 / 0,93	9,5 / 5,5	100
M000525002NF	(3600,00)	2500	GP1000/2NF	1Am (M4)	4/1	2	3	200	7,5	2,3 / 0,68	5,7 / 4,1	66
M000525001NF	(4950,00)	2500	GP1600/1NF	1Bm (M3)	8/2	1	3	135	7,5	3,7 / 0,93	9,5 / 5,5	93
M000525002NF2	(5450,00)	2500	GP2500/1NF	2m (M5)	8/2	1	3	195	7,5	3,7 / 0,93	9,5 / 5,5	100
M000532001NF	(5550,00)	3200	GP1600/2NF	2m (M5)	4/1	2	3	270	7,5	3,7 / 0,93	9,5 / 5,5	102
M000532002NF	(5490,00)	3200	GP2500/1BF	1Am (M4)	6,4/1,6	1	3	195	7,5	3,7 / 0,93	9,5 / 5,5	100
M000540002NF	(5550,00)	4000	GP1600/2NF	1Am (M4)	4/1	2	3	270	7,5	3,7 / 0,93	9,5 / 5,5	102
M000540002NF2	(6200,00)	4000	GP2500/2NF	3m (M6)	4/1	2	3	390	7,5	3,7 / 0,93	9,5 / 5,5	117
M000550002NF	(6200,00)	5000	GP2500/2NF	2m (M5)	4/1	2	3	390	7,5	3,7 / 0,93	9,5 / 5,5	117
M000563002NF	(6400,00)	6300	GP2500/2BF	1Am (M4)	3,8/0,8	2	3	390	7,5	3,7 / 0,93	9,5 / 5,5	117
M000575003NF	(16850,00)	7500	GP1600/3BF	1Bm (M3)	2,1/0,53	3	3	405	7,5	3,7/0,93	9,5/5,5	125
M0005100003NF	(21320,00)	10000	GP2500/3BF	1Bm (M3)	2,1/0,53	3	3	585	7,5	3,7/0,93	9,5/5,5	150

Indivisible package Suggested retail package - Unit price

ELECTRIC CHAIN HOISTS - HANDY

ITEM: M0012

High performance electric chain hoist thanks to the high FEM class.
Equipped with an ergonomic command on the loading hook.

Features:
- Electromechanical drive
- Chain with safety factor "8"
- Die cast aluminum structure and tempered steel wheel
- Polygonal motor shaft coupling with trefoil
- Low voltage commands (42V)
- The brake does not require adjustment, emergency overload included
- Three-phase feed 380V 50 Hz

Advantages:
- Suitable for an high number of operations
- Indicated for external enviorments IP65 protection
- Usable between 15° and + 50°

Supplied with:
- Chain bucket
- Instruction manual of use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	CLASS FEM (ISO)	SPEED m/min	NR. CHAIN FALLS	EXCURSION m	POWER kW	INTENSITY A	Weight kg
M00120801	(3194,00)	80	GPMH250/1SF	3m (M6)	16/4	1	3	0,37 / 0,10	2,0 / 1,2	19
M00121251	(3033,00)	125	GPMH250/1NF	3m (M6)	8/2	1	3	0,37 / 0,10	2,0 / 1,2	19
M00121252	(3389,00)	125	GPH500/1SF	4m (M7)	16/4	1	4	0,72 / 0,18	2,8 / 1,7	25
M00122001	(3033,00)	200	GPMH250/1NF	3m (M6)	8/2	1	3	0,37 / 0,10	2,0 / 1,2	19
M00122002	(3389,00)	200	GPH500/1SF	3m (M6)	16/4	1	4	0,72 / 0,18	2,8 / 1,7	25
M00122501	(3340,00)	250	GPH500/1NF	4m (M7)	8/2	1	4	0,72 / 0,18	2,8 / 1,7	25
M00122502	(3389,00)	250	GPH500/1SF	2m (M5)	16/4	1	4	0,72 / 0,18	2,8 / 1,7	25
M00125001	(3340,00)	500	GPH500/1NF	2m (M5)	8/2	1	4	0,72 / 0,18	2,8 / 1,7	25

SPECIAL ELECTRIC CHAIN HOISTS

GPR INOX
hoist for the food market

GPK hoist for low headroom installations

GPHT hoist with telescopic stand
and control panel on the hook

GPFU hoist
with frequency inverter

GPS hoist for
synchronous lift

ELECTRIC CHAIN HOISTS ATEX - ZONA 22

ITEM: M0013

High quality electric chain hoist, thanks to the high FEM class. Suitable for use in hazardous environments classified Atex Zone 22 dust. ATEX coding II 3D Ex tc IIIA T130 ° C Db

Features:
- Electromechanical drive
- Chain with safety factor "8"
- Die-cast aluminum structure and tempered steel wheel
- Polygonal motor shaft coupling with trefoil
- Low voltage commands (42V)
- Adjustment-free brake and emergency overload included
- Three-phase feed 380V 50 Hz

Advantages:
- Suitable for a large number of operations
- Suitable for outdoor use, IP65 protection
- Usable between -15 ° and +50 ° C

Supplied with:
- Chain bucket
- Instruction manual of use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	CLASS FEM (ISO)	SPEED m/min	NR. CHAIN FALLS N°	HOOK RUN m	ADDITIONAL HOOK RUN €/m	ADDITIONAL PUSH-BUTTON CABLE €/m	POWER kW	INTENSITY A	Weight kg
M00131251NF	(4216,00)	125	GPD250/1NF	4m (M7)	8/2	1	3	30	7,5	0,72/0,18	2,8/1,7	24
M00132001NF	(4216,00)	200	GPD250/1NF	3m (M6)	8/2	1	3	30	7,5	0,72/0,18	2,8/1,7	24
M00132501NF	(4216,00)	250	GPD250/1NF	2m (M5)	8/2	1	3	30	7,5	0,72/0,18	2,8/1,7	24
M00132502NF	(4408,00)	250	GPD250/2NF	4m (M7)	4/1	2	3	60	7,5	0,72/0,18	2,8/1,7	25
M00132501NF2	(4431,00)	250	GPD500/1NF	4m (M7)	8/2	1	3	40	7,5	0,72/0,18	2,8/1,7	26
M00135002NF	(4408,00)	500	GPD250/2NF	2m (M5)	4/1	2	3	60	7,5	0,72/0,18	2,8/1,7	25
M00135001NF	(4431,00)	500	GPD500/1NF	2m (M5)	8/2	1	3	40	7,5	0,72/0,18	2,8/1,7	26
M00135002NF2	(4675,00)	500	GPD500/2NF	4m (M7)	4/1	2	3	80	7,5	0,72/0,18	2,8/1,7	28
M001310002NF	(4675,00)	1000	GPD500/2NF	2m (M5)	4/1	2	3	80	7,5	0,72/0,18	2,8/1,7	28
M001310001NF	(5271,00)	1000	GPD1000/1NF	2m (M5)	8/2	1	3	100	7,5	2,3/0,68	5,7/4,1	62
M001316002NF	(5659,00)	1600	GPD1000/2NF	3m (M6)	4/1	2	3	200	7,5	2,3/0,68	5,7/4,1	66
M001316001NF	(7057,00)	1600	GPD1600/1NF	2m (M5)	8/2	1	3	135	7,5	3,7/0,93	9,5/5,5	93
M001320002NF	(5659,00)	2000	GPD1000/2NF	2m (M5)	4/1	2	3	200	7,5	2,3/0,68	5,7/4,1	66
M001320001NF	(7532,00)	2000	GPD2500/1NF	3m (M6)	8/2	1	3	195	7,5	3,7/0,93	9,5/5,5	100
M001325002NF	(5659,00)	2500	GPD1000/2NF	1Am (M4)	4/1	2	3	200	7,5	2,3/0,68	5,7/4,1	66
M001325001NF	(7057,00)	2500	GPD1600/1NF	1Bm (M3)	8/2	1	3	135	7,5	3,7/0,93	9,7/5,5	93
M001325001NF2	(7532,00)	2500	GPD2500/1NF	2m (M5)	8/2	1	3	195	7,5	3,7/0,93	9,7/5,5	100
M001332002NF	(7637,00)	3200	GPD1600/2NF	2m (M5)	4/1	2	3	270	7,5	3,7/0,93	9,7/5,5	100
M001332001BF	(7592,00)	3200	GPD2500/1BF	1Am (M4)	6,4/1,6	1	3	195	7,5	3,7/0,93	9,7/5,5	102
M001340002NF	(7637,00)	4000	GPD1600/2NF	1Am (M4)	4/1	2	3	270	7,5	3,7/0,93	9,7/5,5	102
M001340002NF2	(8318,00)	4000	GPD2500/2NF	3m (M6)	4/1	2	3	390	7,5	3,7/0,93	9,7/5,5	117
M001350002NF	(8318,00)	5000	GPD2500/2NF	2m (M5)	4/1	2	3	390	7,5	3,7/0,93	9,7/5,5	117
M001363002BF	(8378,00)	6300	GPD2500/2BF	1Am (M4)	3,8/0,8	2	3	390	7,5	3,7/0,93	9,7/5,5	117

Indivisible package Suggested retail package - Unit price

ELECTRIC CHAIN HOISTS ATEX - ZONA 2

ITEM: M0014

High quality electric chain hoist, thanks to the high FEM class.
Suitable for the use in hazardous envioronments classified Atex Zone 2 gas.
ATEX coding II 3G Ex pz IIA T3 Gb

Features:

- Electromechanical drive
- Chain with safety factor "8"
- Die-cast aluminum structure and tempered steel wheel
- Polygonal motor shaft coupling with trefoil
- Low voltage commands (42V)
- Adjustment-free brake and emergency overload included
- Three-phase feed 380V 50 Hz

Advantages:
- Suitable for a large number of operations
- Suitable for outdoor use, IP65 protection
- Usable between -15 ° and +50 ° C

Supplied with:
- Chain bucket
- Use and maintenance manual

Tech. Code	GR66 Euro	LOAD CAPACITY Kg	MODEL	CLASS FEM (ISO)	SPEED m/min	HOOK RUN N°	HOOK RUN m	ADDITIONAL HOOK RUN €/m	ADDITIONAL PUSH-BUTTON CABLE €/m	POWER kW	INTENSITY A	Weight kg
M001401251NF	(4965,00)	125	GPG250/1NF	4m (M7)	8/2	1	3	30	7,5	0,72/0,18	2,8/1,7	24
M001402001NF	(4965,00)	200	GPG250/1NF	3m (M6)	8/2	1	3	30	7,5	0,72/0,18	2,8/1,7	24
M001402501NF	(4965,00)	250	GPG250/1NF	2m (M5)	8/2	1	3	30	7,5	0,72/0,18	2,8/1,7	24
M001402502NF	(5157,00)	250	GPG250/2NF	4m (M7)	4/1	2	3	60	7,5	0,72/0,18	2,8/1,7	25
M001402501NF2	(5178,00)	250	GPG500/1NF	4m (M7)	8/2	1	3	40	7,5	0,72/0,18	2,8/1,7	26
M001405002NF	(5157,00)	500	GPG250/2NF	2m (M5)	4/1	2	3	60	7,5	0,72/0,18	2,8/1,7	25
M001405001NF	(5178,00)	500	GPG500/1NF	2m (M5)	8/2	1	3	40	7,5	0,72/0,18	2,8/1,7	26
M001405002NF2	(5401,00)	500	GPG500/2NF	4m (M7)	4/1	2	3	80	7,5	0,72/0,18	2,8/1,7	28
M001410002NF	(5401,00)	1000	GPG500/2NF	2m (M5)	4/1	2	3	80	7,5	0,72/0,18	2,8/1,7	28
M001410001NF	(6133,00)	1000	GPG1000/1NF	2m (M5)	8/2	1	3	100	7,5	2,3/0,68	5,7/4,1	62
M001416002NF	(6500,00)	1600	GPG1000/2NF	3m (M7)	4/1	2	3	200	7,5	2,3/0,68	5,7/4,1	66
M001416001NF	(7989,00)	1600	GPG1600/1NF	2m (M5)	8/2	1	3	135	7,5	3,7/0,93	9,5/5,5	93
M001420002NF	(6500,00)	2000	GPG1000/2NF	2m (M5)	4/1	2	3	200	7,5	2,3/0,68	5,7/4,1	66
M001420001NF	(8462,00)	2000	GPG2500/1NF	3m (M6)	8/2	1	3	195	7,5	3,7/0,93	9,5/5,5	100
M001425002NF	(6500,00)	2500	GPG1000/2NF	1Am (M4)	4/1	2	3	200	7,5	2,3/0,68	5,7/4,1	66
M001425001NF	(7989,00)	2500	GPG1600/1NF	1Bm (M3)	8/2	1	3	270	7,5	3,7/0,93	9,5/5,5	93
M001425001NF2	(8462,00)	2500	GPG2500/1NF	2m (M5)	8/2	1	3	195	7,5	3,7/0,93	9,5/5,5	100
M001432002NF	(8569,00)	3200	GPG1600/2NF	2m (M5)	4/1	2	3	270	7,5	3,7/0,93	9,5/5,5	100
M001432001BF	(8523,00)	3200	GPG2500/1BF	1Am (M4)	6,4/1,6	1	3	195	7,5	3,7/0,93	9,5/5,5	102
M001440002NF	(8569,00)	4000	GPG1600/2NF	1Am (M4)	4/1	2	3	270	7,5	3,7/0,93	9,5/5,5	102
M001440002NF2	(9248,00)	4000	GPG2500/2NF	3m (M6)	4/1	2	3	390	7,5	3,7/0,93	9,5/5,5	117
M001450002NF	(9248,00)	5000	GPG2500/2NF	2m (M5)	4/1	2	3	390	7,5	3,7/0,93	9,5/5,5	117
M001463002BF	(9310,00)	6300	GPG2500/2BF	1Am (M4)	3,8/0,8	2	3	390	7,5	3,7/0,93	9,5/5,5	117

PUSH BUTTON PANEL FOR HOISTS IN ATEX ENVIRONMENTS

ITEM: M0970

Two-speed pushbutton panel for ATEX classified hazardous environments.
ATEX coding: Ex d e IIC T6 Gb - Ex tb IIIC T85 ° C Db

- Emergency stop button
- IP65 protection
- Tear-saving ring

Tech. Code	GR65 Euro	Model	Push buttons	Suitable for hoist
M09704/1	(2119,00)	XAVP06	4 + 1	GP - GMF

HOIST PUSH-BUTTON SWITCHES

ITEM: M0910

Two speed push button control unit for electric hoists

- Emergency stop button
- Protection IP65
- Cable anti-tearing protection

Tech. Code	GR66 Euro	Model	Number of buttons	Suitable for hoist
M09102/1	(112,00)	GHP03	2 + 1	GP

ITEM: M0920

Two speed push button control unit for electric hoists.

- Emergency stop button
- Protection IP65
- Cable anti-tearing protection

Tech. Code	GR66 Euro	Model	Number of buttons	Suitable for hoist
M09202/1	(122,00)	510/FE	2 + 1	GP

ITEM: M0930

Two speed bush button control unit for electric hoists.

- Emergency stop button
- Protection IP65
- Cable anti-tearing protection

Tech. Code	GR66 Euro	Model	Number of buttons	Suitable for hoist
M09302/1	(143,00)	BXP03	2 + 1	GP

ITEM: M0950

Two speed push button control unit for electric hoists.

- Emergency stop button
- Protection IP65
- Cable anti-tearing protection

Tech. Code	GR66 Euro	Model	Number of buttons	Suitable for hoist
M09504/1	(400,00)	515/FE	4 + 1	GP - GMF

ITEM: M0955

Two speed push-button control unit for electric hoists.

- Emergency stop button
- IP65 protection
- Cable anti-pull ring

Tech. Code	GR66 Euro	Model	Number of buttons n°	Suitable for hoist
M09556/2	(315,00)	G6	6 + 2	GP - GMF

ITEM: M0960

Two speed radio push button control unit for electric hoists.

- Emergency stop button
- Protection IP65
- Receiving device

Tech. Code	GR66 Euro	Model	Number of buttons	Suitable for hoist
M0960RADIO	(1100,00)	RADIO	8 + 1	GP - GMF

MANUAL TROLLEYS FOR BEAMS

ITEM: M0155

Manual trolley for beams.

Features:
- For GP hoists with ring suspension
- Four steel ball bearing mounted wheels
- Cast iron casing
- Equipped with anti-impact and anti-derailment safety system

Advantages:
- Suitable for a high number of operations due to high FEM class
- Can be used between -15° and +50°

Supplied with:
- Pin for coupling to hoist
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	Model	Width Z mm	Suitable for hoist	Weight kg
M01550500/1	(174,00)	up to 500	GHF500K	50 - 99	GPM250	2,5
M01550500/2	(187,00)	up to 500	GHF500K	100 - 149	GPM250	2,5
M01551250/1	(289,00)	up to 1250	GHF1250	70 - 240	GP250 - GP500	11
M01552500/1	(402,00)	up to 2500	GHF2500	88 - 300	GP1000	20
M01555000/1	(839,00)	up to 5000	GHF5000	91 - 300	GP1600	32
M01556300/1	(1046,00)	up to 6300	GHF6300	91 - 300	GP2500	47

QUICK CONNECTOR FOR HOIST PUSH-BUTTON CONTROLS OR POWER SUPPLIES

ITEM: M0980

Quick connect kit for hoist push-button controls or power supplies.
- IP67 protection
- Voltage up to 600V

Tech. Code	GR65 Euro	Terminals	Suitable for hoist
M0980AR1	(83,00)	5	GCH - GP
M0980AR2	(95,00)	10	GCH - GP - GMF

CYCLE COUNTERS FOR HOISTS

ITEM: M0990

Device for counting the work cycles of the GP hoist.
Can be used with USB connector for connecting to a PC or connected directly to the LCD unit.
- Voltage 42V
- Board inserted inside the hoist

Tech. Code	GR66 Euro	Description	Suitable for hoists
M0990DT	(121,00)	Board	GCH - GP
M0990CXDT	(408,00)	USB connector for PC	GCH - GP
M0990VXDT	(1223,00)	LCD unit	GCH - GP

LOAD CELL FOR GIS HOISTS

ITEM: M0985

Kit for the implementation of the load cell between trolley and GIS hoist. Eye bolts are included.

Tech. Code	GR66 Euro	Capacity kg	Suitable for GIS hoists
M09852000	(1290,00)	Up to 2000	GP250 - GP500
M09855000	(1400,00)	Up to 5000	GP1000 - GP1600 - GP2500

TIMING DEVICE FOR GIS HOISTS

ITEM: M0995

Kit for timing the speed of the GIS hoist.

Tech. Code	GR66 Euro	Suitable for starters
M0995TEMP	(950,00)	GP250 - GP500 - GP1000 - GP1600 - GP2500

ELECTRIC TROLLEY FOR BEAMS

ITEM: M0165

Electric trolley for beams.

Features:
- For GP hoists with ring suspension
- Four steel ball bearing mounted wheels, two motorized and two idler
- Cast iron casing
- Equipped with anti-impact and anti-derailment safety system

Advantages:
- Suitable for a high number of operations due to high FEM class
- Can be used between -15° and +50°

Supplied with:
- Pin for coupling to hoist
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	Model	Speed m/min	Power kW	Intensity A	Width Z mm	Suitable for hoist	Weight kg
M01651250/1	(2050,00)	up to 1250	GMF1250	12/4	0.15 / 0.45	1.0 / 1.2	70 - 119	GP250/GP500	30
M01651250/2	(2050,00)	up to 1250	GMF1250	12/4	0.15 / 0.45	1.0 / 1.2	120 - 240	GP250/GP500	30
M01652500/1	(2280,00)	up to 2500	GMF2500	12/4	0.15 / 0.45	1.0 / 1.2	88 - 300	GP1000	38
M01654000/1	(2699,00)	fino a 4000	GMF4000	12/4	0,15 / 0,045	0,65 / 0,75	91 - 300	GP1600 / GP2500	55
M01655000/1	(3050,00)	up to 5000	GMF5000	12/4	0.15 / 0.45	1.0 / 1.2	91 - 300	GP1600 / GP2500	63
M01656300/1	(3368,00)	up to 6300	GMF6300	12/4	0.15 / 0.45	1.0 / 1.2	91 - 300	GP1600 / GP2500	78

ELECTRIC TROLLEY FOR BEAMS - ATEX

ITEM: M0175

Electric trolley for beams suitable for use in hazardous areas classified ATEX.
Zone 22 dust code: II 3D Ex Tc IIIA T 130 ° C Db
Zone 2 gas coding: II 3G Ex Pz IIA T3 Db

Features:
- For GIS GP pranchi with suspension and ring
- Four steel wheels mounted on ball bearings, two motorized and two idle
- Cast iron shells
- Equipped with shockproof and anti-fall protection for derailment

Advantages:
- Suitable for a large number of operations, thanks to the high FEM class
- Usable between -15 ° and + 50 ° C

Supplied with:
- Pin for coupling with the hoist
- Use and maintenance manual

Tech. Code	GR66 Euro	Load capacity kg	Model	Zona	Speed m/min	Power kW	Intensity A	Ala Z mm	Suitable for hoists	Weight kg
M01751250/1P	(3868,00)	fino a 1250	GMFD1250	22	12/4	0.15 / 0,045	0,65 / 0,75	70 - 119	GP250 - GP500	30
M01751250/2P	(3842,00)	fino a 1250	GMFD1250	22	12/4	0.15 / 0,045	0,65 / 0,75	120 - 240	GP250 - GP500	30
M01752500/1P	(3973,00)	fino a 2500	GMFD2500	22	12/4	0.15 / 0,045	0,65 / 0,75	88 - 300	GP1000	38
M01754000/1P	(4277,00)	fino a 4000	GMFD4000	22	12/4	0.15 / 0,045	0,65 / 0,75	91 - 300	GP1600 - GP2500	55
M01755000/1P	(5463,00)	fino a 5000	GMFD5000	22	12/4	0.15 / 0,045	0,65 / 0,75	91 - 300	GP1600 - GP2500	63
M01756300/1P	(5566,00)	fino a 6300	GMFD6300	22	12/4	0.15 / 0,045	0,65 / 0,75	91 - 300	GP1600 - GP2500	78
M01751250/1G	(4732,00)	fino a 1250	GMFG1250	2	12/4	0.15 / 0,045	0,65 / 0,75	70 -119	GP250 - GP500	30
M01751250/2G	(4713,00)	fino a 1250	GMFG1250	2	12/4	0.15 / 0,045	0,65 / 0,75	120 - 240	GP250 - GP500	30
M01752500/1G	(4844,00)	fino a 2500	GMFG2500	2	12/4	0.15 / 0,045	0,65 / 0,75	88 - 300	GP1000	38
M01754000/1G	(5149,00)	fino a 4000	GMFG4000	2	12/4	0.15 / 0,045	0,65 / 0,75	91 - 300	GP1600 - GP2500	55
M01755000/1G	(6670,00)	fino a 5000	GMFG5000	2	12/4	0.15 / 0,045	0,65 / 0,75	91 - 300	GP1600 - GP2500	63
M01756300/1G	(6774,00)	fino a 6300	GMFG6300	2	12/4	0.15 / 0,045	0,65 / 0,75	91 - 300	GP1600 - GP2500	78

PNEUMATIC CHAIN HOISTS - ATEX

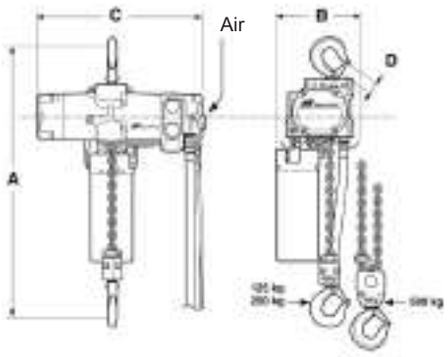
ITEM: M4070

High quality performance pneumatic chain hoist, certification class ATEX 3GD cll B 135° CX.

Features:
- 2 Push button (lift and descent) control levers
- Control hose 2m
- Die casting aluminum structure
- Overloading protection device

Advantages:
- Ideal for lifting operations within hazardous environments where sparkles, high temperatures fumes and vapours may cause serious risks to the working environment
- Reduced air consumption
- Low noise level

Supplied with:
- Suspension hook
- Chain bucket
- Instruction manual of use and maintenance



Tech. Code	GR66 Euro	Model	Max capacity kg	Chain lifting speed at full load m/min	Sections chain n°	Hook run m	Noise level dB(A)	Air consumption l/s	A mm	B mm	C mm	D mm	Weight kg
M4070125	(2888,00)	CL125K	125	13,1	1	3	75	15	292	160	325	20	15,4
M4070250	(2964,00)	CL250K	250	9,8	1	3	75	15	292	160	325	20	15,4
M4070500	(3351,00)	CL500K	500	4,6	2	3	75	15	324	160	325	20	17,2
M40701000	(6730,00)	ML1000K	1000	9	2	3	89	35	457	248	343	28	28

HAND OPERATED TROLLEYS - ATEX

ITEM: M4080

Manual hoist trolley for beams, certification class ATEX 3GD cll B 135° CX.

Features:
- For CLK and MLK hoists with hook suspension
- 4 steel wheels mounted on ball bearings
- Cast Iron case
- Shockproof anti-derailment and anti-tilt device

Advantages:
- Ideal for lifting operations within hazardous enviroments where sparkes, high temperatures, fumes and vapours may cause serious risk to the working environment
- Low noise level

Supplied with:
- Instruction manual of use and maintenance

Tech. Code	GR66 Euro	Max capacity kg	Beam width mm	Bending folding radius	A mm	B mm	Weight kg
M4080500M	(158,00)	500	67 - 203	0,92	254	53	8,9
M40801000M	(226,00)	1000	76 - 203	0,92	330	70	13,9
M40802000	(391,00)	2000	90 - 203	1,22	380	108	27,4

HANDLING SERVICE

SPECIALIZED INSTALLATION PERSONNEL

AFTER SALES ASSISTANCE

MULTI-BRAND REPAIRS

STATUTORY MAINTENANCE

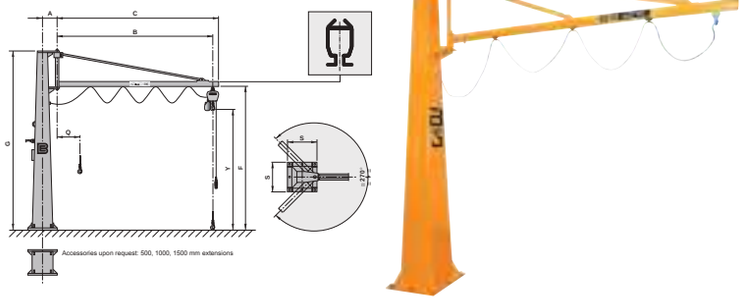
EMERGENCY MAINTENANCE WITH AUTHORIZED LOCAL SERVICE CENTRES

TWENTY-YEAR CRANE INSPECTIONS WITH REMAINING SERVICE LIFE ASSESSMENT

COLUMN-MOUNTED JIB CRANES WITH GIS SYSTEM KB PROFILE ARM

ITEM: M1010

Column mounted jib cranes SC model
with GIS KB system profile arm.



Features:
- Profile cold-rolled not bent without welds
- Brakes operated by cap springs, wear resistant
- Tronco-pyramidal column, our patent
- Finishing coat with anti-rust, two coats of water-soluble paint, not suitable for external or particular humid environments

Advantages:
- Maximum smoothness guaranteed by the quality of the profile
- Maximum rigidity garanteed by the geometry of the column
- Arm rotation up to 270°

Supplied with:
- Hoist trolley
- Power supply system with flat cable and cable trolleys
- Three pole circuit breaker switch
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGHT C mm	EXTERNAL HOOK POSITION B mm	A mm	F mm	G* mm	Q mm	S mm	MAX HOOK HEIGHT FROM GROUND Y mm	FOUNDATION TYPE**	EXTENSION TYPE	PRESSURE BETWEEN COLUMN BASE AND FOUNDATION kg/cm²	ANCHORING TIE ROD TRACTION kg	Weight kg
M1010802000	(1222,00)	80	SC 80/2000	2020	1855	200	2530	3020	405	400	2045	1	1	3	530	180
M1010803000	(1560,00)	80	SC 80/3000	3020	2855	200	2530	3020	405	400	2045	2	1	4	800	190
M1010804000	(1857,00)	80	SC 80/4000	4020	3855	200	2530	3020	415	400	2045	3	1	5	1070	200
M1010805000	(1985,00)	80	SC 80/5000	5020	4855	200	2530	3020	425	400	2045	4	1	6	1300	210
M10101252000	(1470,00)	125	SC 125/2000	2020	1855	200	2530	3020	405	400	1975	3	1	4	850	180
M10101253000	(1608,00)	125	SC 125/3000	3020	2855	200	2530	3020	405	400	1975	4	1	6	1210	190
M10101254000B	(1808,00)	125	SC 125/4000 Bis	4030	3865	260	2430	3025	570	560	1875	5	1A	3	720	220
M10101254000	(2160,00)	125	SC 125/4000	4030	3865	305	3430	4025	570	560	2875	5	1A	3	720	280
M10101255000	(2331,00)	125	SC 125/5000	5030	4865	305	3430	4025	655	560	2875	6	1A	4	890	300
M10101256000	(2557,00)	125	SC 125/6000	6030	5850	305	3425	4025	680	560	2865	7	1A	5	1060	320
M10101257000	(3707,00)	125	SC 125/7000	7035	6855	320	3495	4320	765	620	2935	10	2	4	700	330
M10101258000	(3878,00)	125	SC 125/8000	8035	7855	320	3495	4320	850	620	2935	10	2	5	800	340
M10102003000	(1959,00)	200	SC 200/3000	3030	2865	305	3430	4025	485	560	2875	6	1A	4	840	275
M10102004000	(2245,00)	200	SC 200/4000	4030	3865	305	3430	4025	570	560	2875	7	1A	5	1100	285
M10102005000	(2458,00)	200	SC 200/5000	5030	4850	305	3425	4025	670	560	2865	8	1A	6	1360	320
M10102006000	(2820,00)	200	SC 200/6000	6030	5850	305	3425	4025	680	560	2865	8	1A	7	1620	330
M10102007000	(4153,00)	200	SC 200/7000	7035	6830	320	3460	4320	805	620	2880	11	2	7	1120	415
M10102008000	(4643,00)	200	SC 200/8000	8035	7830	320	3460	4320	890	620	2880	11	2	8	1280	450
M10102503000B	(1982,00)	250	SC 250/3000 Bis	3030	2865	305	3430	4025	485	560	2875	7	1A	3	1060	250
M10102504000B	(2287,00)	250	SC 250/4000 Bis	4030	3865	305	3430	4025	570	560	2875	8	1A	3	1400	280
M10102505000	(3596,00)	250	SC 250/5000	5035	4855	320	3495	4320	685	620	2935	10	2	6	1000	340
M10102506000	(3642,00)	250	SC 250/6000	6035	5855	320	3495	4320	685	620	2935	11	2	7	1200	370
M10102507000	(4250,00)	250	SC 250/7000	7035	6830	320	3460	4320	805	620	2880	12	2	9	1400	415
M10102508000	(4687,00)	250	SC 250/8000	8035	7830	320	3460	4320	890	620	2880	12	2	10	1570	450
M10105003000	(3763,00)	500	SC 500/3000	3035	2735	320	3495	4320	670	620	2910	10	2	7	1170	330
M10105004000	(4200,00)	500	SC 500/4000	4035	3855	320	3495	4320	600	620	2910	12	2	10	1550	380
M10105005000	(4998,00)	500	SC 500/5000	5045	4840	320	3445	4320	730	620	2845	13	2	12	1910	530
M10105006000	(5203,00)	500	SC 500/6000	6045	5840	320	3445	4320	730	620	2845	14	2	14	2290	550
M10105007000	(5129,00)	500	SC 500/7000	7045	6840	320	3445	4320	815	620	2845	15	2	16	2660	585
M10105008000	(6849,00)	500	SC 500/8000	8045	7840	320	3445	4320	880	620	2845	17	2	19	3050	640
M101010003000	(4406,00)	1000	SC1000/3000	3045	2720	320	3445	4320	680	620	2845	16	2	15	2360	460
M101010004000	(6133,00)	1000	SC1000/4000	4045	3720	320	3445	4320	765	620	2845	17	2	19	3100	500
M101010005000	(6290,00)	1000	SC1000/5000	5045	4720	320	3445	4320	850	620	2845	18	2	24	3850	630
M101010006000	(6628,00)	1000	SC1000/6000	6045	5720	320	3445	4320	950	620	2845	19	2	28	4600	680

NOTE: Upon request versions featuring different load capacity may be supplied.

* Cranes may be supplied featuring lower height from the standard. From the model SC 125/4000 onwards the ceiling must be 150 mm taller than the G quote.

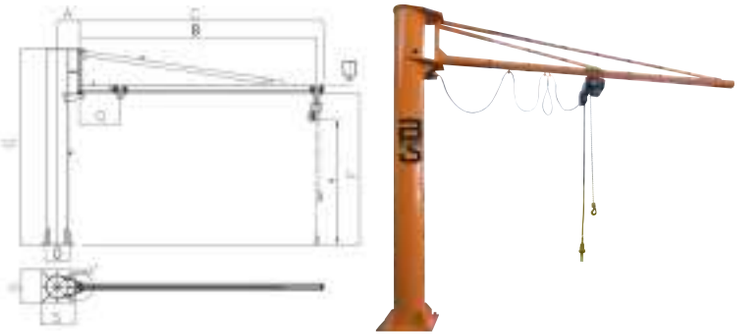
Pag. M.19 - For foundation and relative cages dimensions

ROUND COLUMN MOUNTED JIB CRANE WITH GIS SYSTEM KB PROFILE ARM

B·HANDLING 3

ITEM: M1250

Column mounted jib crane, model TER, with GIS system KB profile arm.



Features:
- Cold rolled profile, not bent, seamless
- Wear resistant cap spring brakes
- Finish: one coat of anti-rust paint and two coats of water-soluble varnish not suitable for outdoors or particularly damp environments

Advantages:
- Maximum smoothness guaranteed by the quality of the profile
- Maximum rigidity guaranteed by the geometry of the column
- Arm rotation up to 270°

Supplied with:
- Hoist trolley
- Power supply system with festoon flat cable system and cable trolleys
- Radius adjustable slew limiter
- Use and maintenance manual

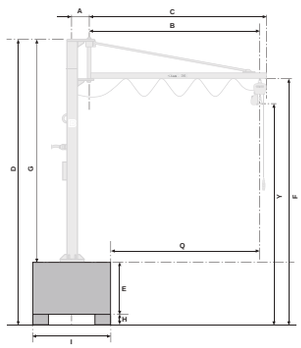
Tech. Code	GR66 Euro	CAPACITY kg	MODEL	ARM LENGTH C mm	OUTERMOST POSITION OF HOOK B mm	A mm	F mm	G mm	Q mm	S mm	D mm	HOOK HEIGHT FROM GROUND Y mm	FOUNDATION TYPE**	EXTENSION TYPE	ANCHORING TIE ROD TRACTION kg	Weight kg
M125002003000	(2290,00)	200	SC200/3000 TER	3000	2855	300	3385	4000	560	560	330	2900	6	1A	1440	310
M125002004000	(2510,00)	200	SC200/4000 TER	4000	3855	300	3382	4000	560	560	330	2900	7	1A	1920	330
M125002005000	(2554,00)	200	SC200/5000 TER	5000	4855	300	3385	4000	560	560	330	2900	8	1A	2400	345
M125002503000	(2489,00)	250	SC250/3000 TER	3000	2855	300	3385	4000	560	560	330	2900	7	1A	1440	310
M125002504000	(2572,00)	250	SC250/4000 TER	4000	3855	200	3382	4000	560	560	330	2900	8	1A	1920	330
M125002505000	(2716,00)	250	SC250/5000 TER	5000	4855	300	3385	4000	560	560	330	2900	8	1A	2400	345
M125005004000	(3674,00)	500	SC500/4000 TER	4000	3720	350	3140	4000	740	620	400	2650	12	2	2130	465
M125005005000	(3803,00)	500	SC500/5000 TER	5000	4720	350	3140	4000	740	620	400	2650	13	2	2660	490
M125010004000	(4531,00)	1000	SC1000/4000 TER	4000	3720	350	3140	4000	740	620	400	2650	17	2	3960	580
M125010005000	(4788,00)	1000	SC1000/5000 TER	5000	4720	350	3140	4000	740	620	400	2650	18	2	4950	610

Pag. M.19 - For foundation and relative cages dimensions

Indivisible package Suggested retail package - Unit price

ITEM: M1015

Movable jib cranes with palletized base, model SCP
with GIS KB System profile arm.



Features:
- Profile cold-rolled not bent without welds
- Brakes operated by cap springs, wear resistant
- Finishing coat with anti-rust, two coats of water-soluble paint, not suitable for external or particular humid environments
- The palletized base is an iron structure which has to be filled with cement by the user

Advantages:
- Maximum smoothness guaranteed by the quality of the profile
- Maximum rigidity garanteed by the geometry of the column
- Thanks to the palletized base the crane can be easily moved
- Rotation of the arm up to 270°

Supplied with:
- Hoist trolley
- Power supply system with flat cable and cable box trolley
- Three pole circuit breaker switch
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGHT C mm	A mm	B mm	D mm	E mm	F mm	G mm	H mm	I mm	Q mm	MAX HOOK HEIGHT FROM GROUND Y mm	Weight kg
M10151253000	(2945,00)	125	SCP125/3000	3000	200	2855	3820	700	3330	3020	100	1000	2555	2775	2000
M10151254000	(3772,00)	125	SCP125/4000	4000	260	3865	3925	800	3330	3025	100	1100	3620	2775	2750
M10151255000	(5146,00)	125	SCP125/5000	5000	305	4865	4075	950	3480	3025	100	1100	4620	2925	3300
M10152003000	(4061,00)	200	SCP200/3000	3000	305	2865	3925	800	3330	3025	100	1100	2620	2775	2750
M10152004000	(5059,00)	200	SCP200/4000	4000	305	3865	4075	950	3480	3025	100	1100	3620	2925	3300
M10152005000	(5032,00)	200	SCP200/5000	5000	305	4850	4125	1000	3525	3025	100	1200	4555	2965	4000

- Hoist excluded

KERN HFC

Compact crane scale for use in harsh environmental conditions or where space is limited, with convenient hand-held terminal

KERN HFD

Robust, high-resolution crane scale up to 12 t

KERN

Do you already know the advantages of active partnership with KERN?

- Warranty up to 3 years
- Fast delivery service for products in stock – ordered today – shipped today
- DAkkS calibration according to DIN EN ISO/IEC 17025
- QM system certified according to DIN EN ISO 9001:2015
- First calibration 2014/31/EU
- Purchasing from one source: at KERN you will find all types of scales from pocket scales to crane scales up to up to 12 t
- Hotline with product specialists daily from 8.00 a.m. to 5.00 p.m.
- Experts in weighing technology for more than 175 years

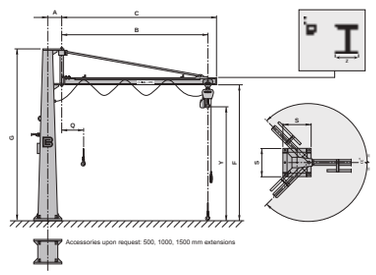
ITEM: M1020

Colum mounted jib cranes, TC model, with a beam arm.

Features:
- Tronco-pyramidal column, our patent
- Brakes operated by cap springs, wear resistant
- Finishing coat with anti-rust, two coats of water-soluble paint, not suitable for external or particularly humid enviroments

Advantages:
- Maximum rigidity guaranteed by the geometry of the column
- Arm rotation up to 270°

Supplied with:
- Power supply system with flat cable and cable trolleys
- Three pole circuit breaker switch
- Instruction manual for assembly, use and maintenance



Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGHT C mm	EXTERNAL HOOK POSITION B mm	A mm	F mm	G* mm	Q mm	S mm	MAX HOOK HEIGHT FROM GROUND Y mm	Z mm	α°	FOUNDATION TYPE**	EXTENSION TYPE	PRESSURE BETWEEN COLUMN BASE AND FOUNDATION Kg/cm²	ANCHORING TIE ROD TRACTION kg	Weight kg
M10202503000	**(3110,00)**	250	TC 250/3000	3040	2800	320	3451	4320	477	620	2885	120	265	9	2	4	610	360
M10202504000	**(3358,00)**	250	TC 250/4000	4040	3800	320	3451	4320	477	620	2885	120	265	10	2	5	800	405
M10202505000	**(3476,00)**	250	TC 250/5000	5040	4800	320	3451	4320	477	620	2885	120	265	10	2	6	1000	425
M10202506000	**(3593,00)**	250	TC 250/6000	6040	5800	320	3451	4320	477	620	2885	120	265	11	2	7	1200	445
M10202507000	**(3895,00)**	250	TC 250/7000	7040	6800	320	3451	4320	477	620	2885	120	265	12	2	9	1400	465
M10202508000	**(4065,00)**	250	TC 250/8000	8040	7800	320	3451	4320	477	620	2885	120	265	12	2	10	1570	485
M10205003000	**(3116,00)**	500	TC 500/3000	3040	2800	320	3451	4320	480	620	2860	120	265	10	2	7	1170	385
M10205004000	**(3351,00)**	500	TC 500/4000	4040	3800	320	3451	4320	480	620	2860	120	265	12	2	10	1550	405
M10205005000	**(3953,00)**	500	TC 500/5000	5051	4810	320	3491	4320	491	620	2900	120	265	13	2	12	1910	595
M10205006000	**(4080,00)**	500	TC 500/6000	6051	5810	320	3491	4320	491	620	2900	120	265	14	2	14	2290	615
M10205007000	**(4129,00)**	500	TC 500/7000	7051	6810	320	3472	4320	491	620	2900	140	260	15	2	16	2660	670
M10205008000	**(5923,00)**	500	TC 500/8000	8051	7810	320	3453	4320	491	620	2860	160	255	17	2	19	3050	740
M102010003000	**(3643,00)**	1000	TC 1000/3000	3051	2810	320	3491	4320	558	620	2900	120	265	16	2	15	2360	515
M102010004000	**(5536,00)**	1000	TC 1000/4000	4051	3810	320	3491	4320	558	620	2900	120	265	17	2	19	3100	680
M102010005000	**(5389,00)**	1000	TC 1000/5000	5051	4810	320	3491	4320	558	620	2900	120	265	18	2	24	3850	700
M102010006000	**(5572,00)**	1000	TC 1000/6000	6051	5810	320	3472	4320	558	620	2880	140	260	19	2	28	4600	750
M102015004000	**(4872,00)**	1500	TC 1500/4000	4051	3820	320	3472	4320	558	620	2800	140	260	19	2	26	4250	700
M102015004500	**(5187,00)**	1500	TC 1500/4500	4451	4210	320	3472	4320	558	620	2800	140	260	19	2	33	5350	710

* Cranes may be supplied featuring lower height from the standard.
The ceiling must be 150 mm taller than the G quote.
On request we supply the cranes with the lower features.

Pag. M.19- For foundation and relative cages dimensions

COLUMN MOUNTED JIB CRANES WITH OVERHEAD BEAM ARM

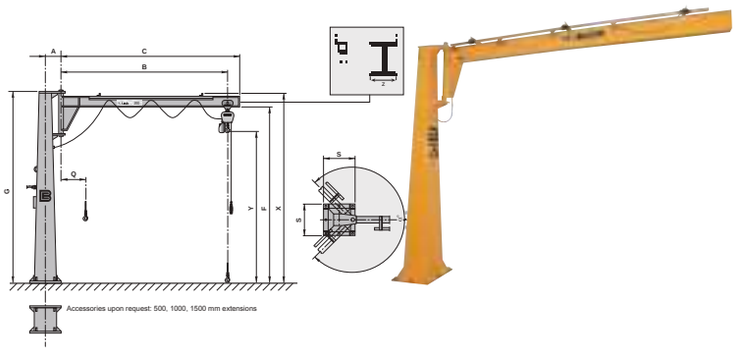
ITEM: M1030

Column mounted jib cranes, RC model, with overhead beam.

Features:
- Tronco-pyramidal column, our patent
- Brakes operated by cap springs, wear resistant
- Finishing coat with anti-rust, two coats of water-soluble paint, not suitable for external or particularly humid enviroments humid

Advantages:
- The overhead beam are allows you to recover height space increasing the hook run
- Maximum rigidity guaranteed by the geometry of the column
- Arm rotation up to 270°

Supplied with:
- Power supply system with flat cable and cable trolleys
- Three pole circuit breaker switch
- Instruction manual for assembly, use and maintenance



Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGHT C mm	EXTERNAL HOOK POSITION B mm	A mm	F mm	G* mm	Q mm	S mm	X*** mm	MAX HOOK HEIGHT FROM GROUND Y mm	Z mm	α°	FOUNDATION TYPE**	EXTENSION TYPE	PRESSURE BETWEEN COLUMN BASE AND FOUNDATION kg/cm²	ANCHORING TIE ROD TRACTION kg	Weight kg
M10302503000	(3129,00)	250	RC 250/3000	3000	2840	320	4070	4320	587	620	4280	3510	90	270	9	2	4	610	350
M10302504000	(3307,00)	250	RC 250/4000	4000	3840	320	4050	4320	587	620	4280	3485	100	270	10	2	5	800	380
M10302505000	(3280,00)	250	RC 250/5000	5000	4840	320	4030	4320	587	620	4280	3465	110	270	10	2	6	1000	420
M10302506000	(3891,00)	250	RC 250/6000	6000	5840	320	4098	4320	587	620	4280	3530	160	270	11	2	7	1200	480
M10302507000	(4017,00)	250	RC 250/7000	7000	6840	320	4079	4320	587	620	4280	3510	180	265	12	2	9	1400	540
M10302508000	(4931,00)	250	RC 250/8000	8000	7840	320	4060	4320	587	620	4280	3495	200	260	12	2	10	1570	640
M10305003000	(3006,00)	500	RC 500/3000	3000	2840	320	4050	4320	590	620	4280	3460	100	270	10	2	7	1170	360
M10305004000	(3634,00)	500	RC 500/4000	4000	3840	320	4030	4320	590	620	4280	3440	110	270	12	2	10	1550	400
M10305005000	(4232,00)	500	RC 500/5000	5000	4840	320	4079	4320	590	620	4280	3490	180	265	13	2	12	1910	610
M10305006000	(4585,00)	500	RC 500/6000	6000	5840	320	4079	4320	590	620	4280	3490	180	265	14	2	14	2290	645
M10305007000	(4687,00)	500	RC 500/7000	7000	6840	320	4060	4320	590	620	4280	3470	200	240	15	2	16	2660	730
M10305008000	(6256,00)	500	RC 500/8000	8000	7840	320	4040	4320	590	620	4280	3450	220	250	17	2	19	3050	840
M103010003000	(3537,00)	1000	RC 1000/3000	3000	2830	320	4098	4320	657	620	4280	3505	160	270	16	2	15	2360	520
M103010004000	(5055,00)	1000	RC 1000/4000	4000	3830	320	4079	4320	657	620	4280	3485	180	265	17	2	19	3100	680
M103010005000	(5731,00)	1000	RC 1000/5000	5000	4830	320	4060	4320	657	620	4280	3465	200	260	18	2	24	3850	750
M103010006000	(6167,00)	1000	RC 1000/6000	6000	5830	320	4040	4320	657	620	4280	3445	220	250	19	2	28	4600	845
M103015004000	(5075,00)	1500	RC 1500/4000	4000	3830	320	4040	4320	657	620	4280	3365	220	250	19	2	26	4250	740
M103015004500	(5386,00)	1500	RC 1500/4500	4400	4230	320	4040	4320	657	620	4280	3365	240	245	20	2	33	5350	845

* Cranes may be supplied featuring lower height from the standard.The ceiling must be 150 mm taller than the G quote.
*** Measured with applied load.
On request we supply the cranes with the lower features.

Pag. M.19 - For foundation and relative cages dimensions

Related products

WRK CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT

Tech. Code	Size	EU size
K234607	7	S
K234608	8	M
K234609	9	L
K234610	10	XL

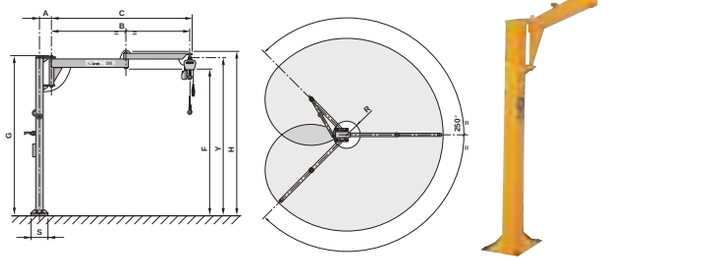
Product available in CAP K

COLUMN MOUNTED JIB CRANES WITH ARTICULATED ARM

B·HANDLING 3

ITEM: M1040

Column mounted jib cranes ACP - ACH model with articulated arm and eyebolt attack, suitable for any type of hoist with suspension.



Features:
- Brake operated by cap springs, wear resistant
- Arm joint rotating on high quality ball bearings
- Finishing coat with anti-rust, two coats of water-soluble paint, not suitable for external or particularly humid environments

Advantages:
- Maximum rigidity guaranteed by the geometry of the colum
- Maximum coverage of the area ajacent to the columns
- Ability to overcome obstacles thanks to the arm articulation

Supplied with:
- External power supply system with flat cable
- Three pole circuit breaker switch
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGHT C mm	EXTERNAL HOOK POSITION B mm	A mm	F mm	G* mm	H mm	R mm	S mm	EYEBOLT HEIGHT Y mm	FOUNDATION TYPE**	EXTENSION TYPE	PRESSURE BETWEEN PILLAR BASE AND FOUNDATION kg/cm²	ANCHORING TIE ROD TRACTION kg	Weight kg
M1040P802600	(2923,00)	80	ACP 80/2600	2650	2600	305	2630	3025	3180	230	560	3055	5	1A	2	370	205
M1040P804000	(3136,00)	80	ACP 80/4000	4050	4000	305	2630	3025	3180	350	560	3055	5	1A	2	490	238
M1040P1252600	(2980,00)	125	ACP 125/2600	2650	2600	305	2630	3025	3180	230	560	3055	5	1A	3	560	205
M1040P1254000	(3435,00)	125	ACP 125/4000	4050	4000	305	3735	4025	4230	350	560	4080	5	1A	3	720	297
M1040P2002600	(3451,00)	200	ACP 200/2600	2650	2600	305	3735	4025	4230	230	560	4080	5	1A	4	840	292
M1040P2004000	(4209,00)	200	ACP 200/4000	4050	4000	305	3735	4025	4230	350	560	4080	5	1A	3	1100	319

NOTE: Upon request different version sizes may also be supplied.

Pag. M.19 - For foundation and relative cages dimensions

EXTENSIONS FOR COLUMN MOUNTED CRANES

B·HANDLING 3

ITEM: M1210

Extensions needed to increase the height of the crane column.

Features:
- Designed to match the crane column models SC, SC TER, TC, RC, ACP, e ACH

Advantages:
- Maximum rigidity guaranteed by the pressure of reinforcements on every corner
  Suppled with : column coupling bolts

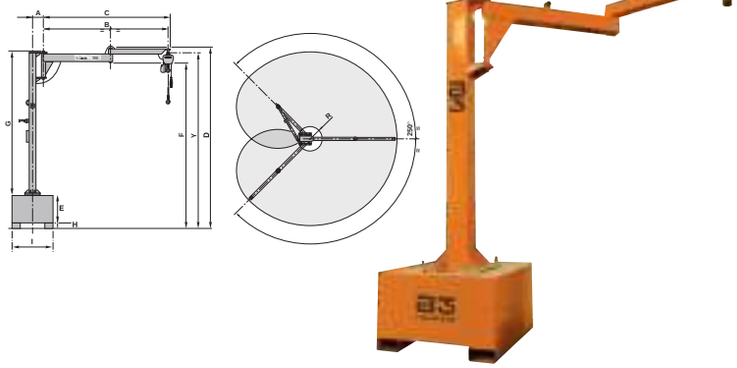
Tech. Code	GR66 Euro	Model	Height m	Weight kg
M121011	(647,00)	Type 1	0.5	52
M121012	(770,00)	Type 1	1.0	88
M121013	(870,00)	Type 1	1,5	147
M121021	(1030,00)	Type 1a	0.5	72
M121022	(1363,00)	Type 1a	1.0	124
M121023	(1496,00)	Type 1a	1,5	216
M121031	(1518,00)	Type 2	0.5	90
M121032	(1743,00)	Type 2	1.0	161
M121033	(1803,00)	Type 2	1.5	285

Indivisible package Suggested retail package - Unit price

MOVABLE JIB CRANES WITH ARTICULATED ARM

ITEM: M1045

Column mounted jib cranes with palletized base, ACPP model, with articulated arm and Eyebolt attachment, suitable for any type of hoist with suspension.



Features:
- Brake operated by cap springs, wear resistant
- Arm joint rotating on high quality ball bearings
- Finishing coat with anti-rust, two coats of water-soluble paint, not suitable for external or particularly humid environments
- The palletized base is an Iron structure which has to be filled with cement by the user

Advantages:
- Maximum rigidity guaranteed by the geometry of the colum
- Maximum coverage of the area ajacent to the column
- Ability to overcome obstacles thanks to the arm articulation
- Thanks to the palletized base, the crane can be easily moved

Supplied with:
- Internal power supply system
- Three pole circuit breaker switch
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGHT C mm	EXTERNAL HOOK POSITION B mm	A mm	D mm	E mm	F mm	G mm	H mm	I mm	R mm	Y mm	Weight kg
M1045P1252600	(4737,00)	125	ACPP125/2600	2650	2600	260	4080	800	3530	3025	100	1100	230	3955	2750
M1045P1254000	(5435,00)	125	ACPP125/4000	4050	4000	260	4130	800	3635	3025	100	1100	350	3980	2750
M1045P2002600	(5450,00)	200	ACPP200/2600	2650	2600	305	4130	800	3635	3025	100	1100	230	3980	2750
M1045P2004000	(6250,00)	200	ACPP200/4000	4050	4000	305	4280	950	3785	3025	100	1100	350	4130	3300

Related products

WORKS SAFETY SHOES

Tech. Code	EU size	US size
K164243	43	10
K164244	44	10,5
K164245	45	11
K164246	46	11,5

Product available in CAP K

ANCHORING ACCORDING TO THE THICKNESS OF THE INDUSTRIAL REINFORCED CONCRETE FLOORING

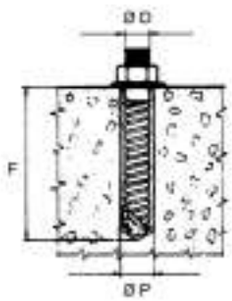
MODEL	< 120 mm	120 mm	150 mm	200 mm	240 mm	> 240 mm
80/2000 - SC	TYPE 1 CAGE - M1220A380	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
80/2600 - ACP, ACH	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
80/3000 - SC	TYPE 1 CAGE - M1220A380	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
80/4000 - SC	TYPE 1 CAGE - M1220A380	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
80/4000 - ACP, ACH	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
80/5000 - SC	TYPE 1 CAGE - M1220A380	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
125/2000 - SC	TYPE 1 CAGE - M1220A380	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
125/2600 - ACP, ACH	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
125/3000 - SC	TYPE 1 CAGE - M1220A380	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
125/4000 - SC, SC-BIS, ACP, ACH	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
125/5000 - SC	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
125/6000 - SC	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
125/7000 - SC	TYPE 4 CAGE - M1220B880	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2
125/8000 - SC	TYPE 4 CAGE - M1220B880	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2
200/2600 - ACP,ACH	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
200/3000 - SC, SC-TER	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
200/4000 - SC, SC-TER, ACP,ACH	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
200/5000 - SC, SC-TER	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
200/6000 - SC	TYPE 2 CAGE - M1220A580	TYPE 1 PLATE - M124002006BIS	TYPE 1 PLATE - M124002006BIS	CHEMICALS M20 KIT3 - M1230KIT3	CHEMICALS M20 KIT3 - M1230KIT3	CHEMICALS M20 KIT3 - M1230KIT3
200/7000 - SC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
200/8000 - SC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
250/3000 - SC-BIS, SC-TER	TYPE 4 CAGE - M1220B880	TYPE 2 CAGE - M1220A580	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
250/3000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2
250/4000 - SC-BIS, SC-TER	TYPE 2 CAGE - M1220A580	TYPE 2 CAGE - M1220A580	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1	CHEMICALS M16 KIT1 - M1230KIT1
250/4000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2	CHEMICALS M16 KIT2 - M1230KIT2
250/5000 - SC-TER	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT3 - M1230KIT3	CHEMICALS M20 KIT3 - M1230KIT3	CHEMICALS M20 KIT3 - M1230KIT3
250/5000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
250/6000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
250/7000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
250/8000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
500/3000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
500/4000 - SC, SC-TER, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 2 PLATE - M124005004BIS	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4	CHEMICALS M20 KIT4 - M1230KIT4
500/5000 - SC, SC-TER, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 3 PLATE - M124005006BIS	TYPE 3 PLATE - M124005006BIS	CHEMICALS M24 KIT5 - M1230KIT5	CHEMICALS M24 KIT5 - M1230KIT5
500/6000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 3 PLATE - M124005006BIS	TYPE 3 PLATE - M124005006BIS	CHEMICALS M24 KIT5 - M1230KIT5	CHEMICALS M24 KIT5 - M1230KIT5
500/7000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS
500/8000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS
1000/3000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS
1000/4000 - SC, SC-TER, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS	TYPE 4 PLATE - M124010004BIS
1000/5000 - SC, SC-TER, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS
1000/6000 - SC, TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS
1500/4000 - TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS
1500/4500 - TC, RC	TYPE 4 CAGE - M1220B880	TYPE 4 CAGE - M1220A880	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS	TYPE 5 PLATE - M124015005BIS

SCREWS AND CHEMICAL FIXING FOR COLUMN MOUNTED JIB CRANES

B·HANDLING 3

ITEM: M1230

Kit consisting of screws and chemical fixing for mounting column cranes to the reinforced concrete industrial pavment
(minimum resistance 250 daN cm³).
The verfication of eligibiliy is on the user.



Tech. Code	GR66 Euro	Mod. Crane	D screw Ø	F Hole depth	P Hole ø mm	Depth mm	P mm
M1230KIT1	(79,00)	KIT 1	M16	4	130	150	18
M1230KIT2	(142,00)	KIT 2	M16	8	130	150	18
M1230KIT3	(97,00)	KIT 3	M20	4	170	200	22
M1230KIT4	(187,00)	KIT 4	M20	8	170	200	22
M1230KIT5	(312,00)	KIT 5	M24	8	210	240	26

FOUNDATION PLINTHS AND CAGES FOR COLUMN CRANES

B·HANDLING

ITEM: M1220

Cages for column cranes anchorage.

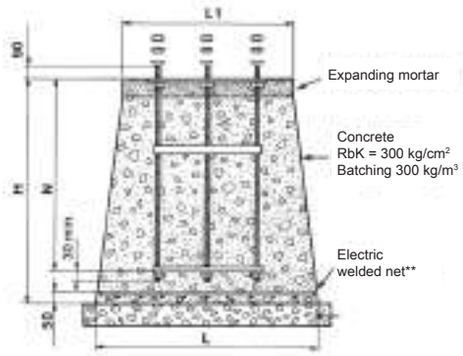
Features:
- Supplied fully assembled and welded

Advantages:
- Ready to be sunk in the plinth

Supplied with:
- The necessary nuts and lock nuts matching the column

The foundation plinths are calculated for an average ground pressure of 1.1kg/cm². In the presence of ground with an average allowable pressure below these values, the dimension of the plinth will have to be recalculated properly.
Our technical department is available for this service.

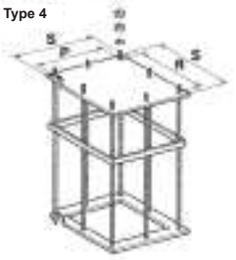
PLINTH IN FOUNDATION DRAFT



** In foundation with H=1200 and in all cases where L/H = 1,5 reinforce the foundation plinth with an electric welde net 200 x 200 Ø 5 mm.

Type 1 - 2

Type 4



Tech. Code	GR66 Euro	FOUNDATION TYPE	CAGE TYPE	N mm	S mm	*P mm	*R mm	H mm	L mm	L1 mm	TIE RODS	Weight kg
M1220A380	(272,00)	1 ÷ 4	A	380	400	330	240	500	700 ÷ 1000	560 ÷ 800	M24	25
M1220A580	(298,00)	5 ÷ 8	A	580	560	480	480	700	1000 ÷ 1300	800 ÷ 1040	M27	45
M1220B880	(360,00)	9 ÷ 20	B	880	620	540	540	1200	1200 ÷ 2200	960 ÷ 1760	M27	75

* Cranes featuring 1-2-3-4 foundation type have a double-hole base plate, thus allowing to choose column positioning.

Foundation type:

1 - L mm 700 - L1 mm 560
2 - L mm 800 - L1 mm 640
3 - L mm 900 - L1 mm 720
4 - L mm 1000 - L1 mm 800
5 - L mm 1000 - L1 mm 800
6 - L mm 1100 - L1 mm 880
7 - L mm 1200 - L1 mm 960
8 - L mm 1300 - L1 mm 1040
9 - L mm 1200 - L1 mm 960
10 - L mm 1300 - L1 mm 1040
11 - L mm 1400 - L1 mm 1120
12 - L mm 1500 - L1 mm 1200
13 - L mm 1600 - L1 mm 1280
14 - L mm 1700 - L1 mm 1360
15 - L mm 1800 - L1 mm 1440
16 - L mm 1600 - L1 mm 1280
17 - L mm 1800 - L1 mm 1440
18 - L mm 1900 - L1 mm 1520
19 - L mm 2000 - L1 mm 1600
20 - L mm 2200 - L1 mm 1760

FOUNDATION COUNTERPLATES FOR COLUMN MOUNTED JIB CRANES

B·HANDLING

ITEM: M1240

FOUNDATION COUNTERPLATES for fixing the column mounted jib cranes to a reinforced concrete industrial floor (minimum strength 250 daN cm³).
Supplied with the necessary screws and nuts for coupling to the column mounted jib crane. It is the responsibility of the user to assess the suitability of the floor.

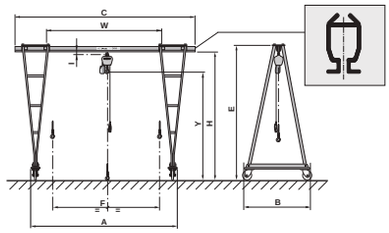
Tech. Code	GR66 Euro	Counterplates	D screw Ø	Screws N°	Hole depth mm	Floor depth min. mm	Hole Ø mm	Weight kg
M124002006BIS	(1027,00)	Type 1	M12	12	100	120	14	115
M124005004BIS	(1214,00)	Type 2	M16	12	130	150	18	150
M124005006BIS	(1601,00)	Type 3	M16	12	130	150	18	190
M124010004BIS	(2201,00)	Type 4	M16	16	130	150	18	240
M124015005BIS	(2668,00)	Type 5	M16	20	130	150	18	350

PORTAL CRANES WITH GIS SYSTEM PROFILE

B·HANDLING 3

ITEM: M1610

Portal cranes, GP model, with GIS KB system profile.



Features:
- Profile cold rolled not bent without welds
- Finishing a coat of anti-rust, two coats of water-soluble paint, not suitable for external or particularly humid enviroments

Advantages:
- Maximum smoothness guaranteed by the quality of the profile
- Thanks to the 4 wide diameters wheels coated in neoprene, the crane can be easily moved

Supplied with:
- Hoist trolley
- Power supply system with flat cable and cable trolleys
- Three pole circuit breaker switch
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	A mm	B mm	C mm	E mm	F mm	H mm	I mm	W mm	Y mm
M16101253000	(4434,00)	125	GP 125/3000	3780	1560	4280	3200	2700	3090	81	3000	2534
M16101254000	(4558,00)	125	GP 125/4000	4780	1560	5280	3300	3700	3076	83	4000	2518
M16101254500	(4609,00)	125	GP 125/4500	5280	1560	5780	3300	4200	3076	83	4500	2518
M16102503000	(4678,00)	250	GP 250/3000	3780	1560	4280	3350	2700	3076	83	3000	2518
M16102504000	(4565,00)	250	GP 250/4000	4780	1560	5280	3350	3700	3076	83	4000	2518
M16102504500	(4615,00)	250	GP 250/4500	5280	1560	5780	3350	4200	3036	102	4500	2459
M16105003000	(4473,00)	500	GP 500/3000	3780	1560	4280	3350	2700	3036	102	3000	2437
M16105004000	(4585,00)	500	GP 500/4000	4780	1560	5280	3350	3700	3036	102	4000	2437
M16105004500	(4933,00)	500	GP 500/4500	5280	1560	5780	3350	4200	3036	102	4500	2437
M16107503000	(4509,00)	750	GP 750/3000	3780	1560	4280	3350	2700	3036	102	3000	2437
M16107504000	(4708,00)	750	GP 750/4000	4780	1560	5280	3350	3700	3036	102	4000	2437
M161010003000	(5116,00)	1000	GP 1000/3000	3780	1560	4280	3350	2700	3036	102	3000	2437

NOTE: Upon request versions featuring different load capacity may be supplied.

Related products

PROTECTIVE EYEWEAR

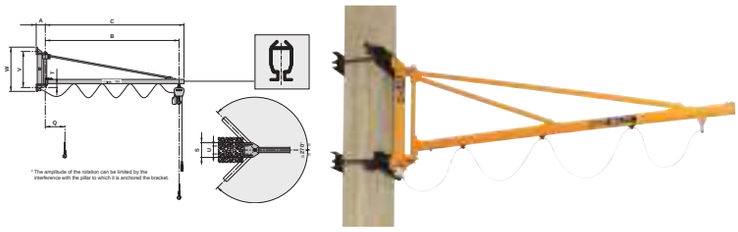
Tech. Code	Filter	Gradation	Optical class
K4120100	2C - UV plus FIlter	1.2 – Clear lens	Class 1

The products are available in chapter K

Indivisible package Suggested retail package - Unit price

ITEM: M1310

Wall mounted jib crane, SM model with GIS KB system profile arm.



Features:
- Profile cold-rolled not bent without welds
- Brakes operated by cap springs, wear resistant
- Finishing a coat of anti-rust, two coats of water-soluble paint, not suitable for external or particular humid enviroments

Advantages:
- Maximum smoothness guaranteed by the quality of the profile
- Arm rotation up to 270°

Supplied with:
- Hoist trolley
- Power supply system with flat cable and cable trolleys
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGTH C mm	EXTERNAL HOOK POSITION B mm	A mm	Q mm	S mm	T mm	U mm	V mm	W mm	ANCHORING SYSTEM**	PRESSURE BETWEEN COLUMN BASE AND FOUNDATION kg/cm²	ANCHORING TIE ROD TRACTION kg	PILLAR BENDING MOMENT kgm	Weight kg
M13100802000	(811,00)	80	SM 80/2000	2020	1855	135	405	180	77	80	620	750	1	2	180	247	70
M13100803000	(876,00)	80	SM 80/3000	3020	2855	135	405	180	77	80	620	750	1	3	270	370	80
M13100804000	(1004,00)	80	SM 80/4000	4020	3855	135	415	180	77	80	620	750	1	3	360	494	90
M13100805000	(1258,00)	80	SM 80/5000	5020	4855	135	425	180	77	80	620	750	1	4	450	617	100
M13101252000	(978,00)	125	SM 125/2000	2020	1855	135	405	180	77	80	620	750	1	3	270	370	70
M13101253000	(1121,00)	125	SM 125/3000	3020	2855	135	405	180	77	80	620	750	1	4	400	548	80
M13101254000	(1271,00)	125	SM 125/4000	4030	3865	185	570	240	93	150	760	880	2	3	450	738	85
M13101255000	(1421,00)	125	SM 125/5000	5030	4865	185	655	240	93	150	760	880	2	4	550	902	100
M13101256000	(1572,00)	125	SM 125/6000	6030	5850	185	680	240	86	150	760	880	2	5	660	1083	130
M13101257000	(1843,00)	125	SM 125/7000	7035	6855	185	805	240	124	150	1010	1130	2	5	550	1177	140
M13101258000	(2235,00)	125	SM 125/8000	8035	7855	185	890	240	124	150	1010	1130	2	6	620	1327	150
M13102003000	(1182,00)	200	SM 200/3000	3030	2865	185	485	240	93	150	760	880	2	4	510	837	80
M13102004000	(1392,00)	200	SM 200/4000	4030	3865	185	570	240	93	150	760	880	2	5	680	1115	90
M13102005000	(1572,00)	200	SM 200/5000	5030	4850	185	670	240	86	150	760	880	2	6	840	1378	125
M13102006000	(1869,00)	200	SM 200/6000	6030	5850	185	680	240	86	150	760	880	2	7	1000	1640	130
M13102007000	(2649,00)	200	SM 200/7000	7035	6830	185	805	240	86	150	1010	1130	2	6	880	1883	200
M13102008000	(2771,00)	200	SM 200/8000	8035	7830	185	890	240	86	150	1010	1130	2	7	1000	2140	240
M13102503000B	(1182,00)	250	SM 250/3000 Bis	3030	2865	185	485	240	93	150	760	880	2	4	610	1006	90
M13102504000B	(1392,00)	250	SM 250/4000 Bis	4030	3865	185	570	240	93	150	760	880	2	5	820	1348	120
M13102505000	(1800,00)	250	SM 250/5000	5035	4855	185	685	240	124	150	1010	1130	2	5	780	1670	130
M13102506000	(1940,00)	250	SM 250/6000	6035	5855	185	685	240	124	150	1010	1130	2	6	930	1990	160
M13102507000	(2737,00)	250	SM 250/7000	7035	6830	185	805	240	86	150	1010	1130	2	7	1100	2354	210
M13102508000	(2827,00)	250	SM 250/8000	8035	7830	185	890	240	86	150	1010	1130	2	8	1250	2675	250
M13105003000	(1749,00)	500	SM 500/3000	3035	2735	185	670	240	124	150	1010	1130	2	6	900	1926	130
M13105004000	(1898,00)	500	SM 500/4000	4035	3855	185	600	240	124	150	1010	1130	2	8	1200	2568	180
M13105005000	(2491,00)	500	SM 500/5000	5045	4840	185	730	240	88	150	1012	1132	3	10	1500	3210	235
M13105006000	(2694,00)	500	SM 500/6000	6045	5840	185	730	240	88	150	1012	1132	3	12	1800	3852	255
M13105007000	(3025,00)	500	SM 500/7000	7045	6840	185	815	240	88	150	1012	1132	3	14	2100	4494	275
M13105008000	(3479,00)	500	SM 500/8000	8045	7840	185	880	240	88	150	1012	1132	3	16	2400	5136	330
M131010003000	(2376,00)	1000	SM1000/3000	3045	2720	185	680	240	88	150	1012	1132	3	12	1810	3874	150
M131010004000	(2532,00)	1000	SM1000/4000	4045	3720	185	765	240	88	150	1012	1132	3	16	2410	5158	190
M131010005000	(2860,00)	1000	SM1000/5000	5045	4720	185	850	240	88	150	1012	1132	3	20	3000	6420	230
M131010006000	(3169,00)	1000	SM1000/6000	6045	5720	185	850	240	88	150	1012	1132	3	23	3600	7704	280

NOTE: Upon request cranes with different load capacities may be supplied.

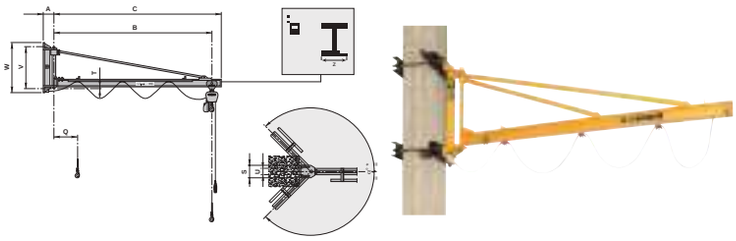
Pag. M.25 - For bracket and tie rod assembly dimensions

WALL MOUNTED JIB CRANES WITH BEAM ARM

B·HANDLING 3

ITEM: M1320

Wall mounted jib, TM model, with beam arm.



Features:
- Brakes operated by cap springs, wear resistant
- Finishing a coat of anti-rust, two coats of water-soluble paint, not suitable for external or particular humid enviroments

Advantages:
- Arm rotation up to 270°

Supplied with:
- Power supply system on a steel profile with cable trolleys
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	ARM LENGHT C mm	EXTERNAL HOOK POSITION B mm	A mm	Q mm	S mm	T mm	U mm	V mm	W mm	BEAM WIDTH Z mm	α°	ANCHORAGE TYPE**	PRESSURE BETWEN COLUMN BASE AND FOUNDATION kg/cm²	ANCHORAGE THE ROD TRANCTION kg	PILAR BENDING MOMENT kgm
M13202503000	(1477,00)	250	TM 250/3000	3040	2800	185	477	240	86	150	1010	1130	120	255	2	3	470	1006
M13202504000	(1622,00)	250	TM 250/4000	4040	3800	185	477	240	86	150	1010	1130	120	255	2	4	630	1348
M13202505000	(1755,00)	250	TM 250/5000	5040	4800	185	477	240	86	150	1010	1130	120	255	2	5	780	1670
M13202506000	(1911,00)	250	TM 250/6000	6040	5800	185	477	240	86	150	1010	1130	120	255	2	6	930	1990
M13202507000	(2115,00)	250	TM 250/7000	7040	6800	185	477	240	86	150	1010	1130	120	255	2	7	1100	2354
M13202508000	(2427,00)	250	TM 250/8000	8040	7800	185	477	240	86	150	1010	1130	120	255	2	8	1250	2675
M13205003000	(1477,00)	500	TM 500/3000	3040	2800	185	480	240	86	150	1010	1130	120	255	2	6	900	1926
M13205004000	(1643,00)	500	TM 500/4000	4040	3800	185	480	240	86	150	1010	1130	120	255	2	8	1200	2568
M13205005000	(1915,00)	500	TM 500/5000	5051	4810	185	491	240	126	150	1012	1132	120	255	3	10	1500	3210
M13205006000	(2121,00)	500	TM 500/6000	6051	5810	185	491	240	126	150	1012	1132	120	255	3	12	1800	3852
M13205007000	(2291,00)	500	TM 500/7000	7051	6810	185	491	240	107	150	1012	1132	140	250	3	14	2100	4494
M13205008000	(2479,00)	500	TM 500/8000	8051	7810	185	491	240	88	150	1012	1132	160	245	3	16	2400	5136
M132010003000	(1498,00)	1000	TM 1000/3000	3051	2810	185	558	240	126	150	1012	1132	160	255	3	12	1810	3874
M132010004000	(1837,00)	1000	TM 1000/4000	4051	3810	185	558	240	126	150	1012	1132	160	255	3	16	2410	5158
M132010005000	(2026,00)	1000	TM 1000/5000	5051	4810	185	558	240	126	150	1012	1132	160	255	3	20	3000	6420
M132010006000	(2193,00)	1000	TM 1000/6000	6051	5810	185	558	240	107	150	1012	1132	140	250	3	23	3600	7704
M132015004000	(1910,00)	1500	TM 1500/4000	4051	3810	185	568	240	107	150	1012	1132	140	250	3	21	3300	7062
M132015004500	(1980,00)	1500	TM 1500/4500	4451	4210	185	568	240	107	150	1012	1132	140	250	3	27	4200	8988

NOTE: Upon request cranes with different load capacities may be supplied.

Pag. M.25 - For brackets and staybolts unit dimensions

SLEW LIMITERS FOR WALL MOUNTED JIB CRANES

B·HANDLING 3

ITEM: M1440

Slew limiter kit for wall mounted jib cranes.

Features:
- Custom designed to limit the rotation of the jib for wall mounted cranes mod. SM, TM, RM, AMP and AMH

Advantages:
- Suitable for all brackets

Supplied with:
- The fastenings and bolts necessary for attaching wall mounted jib crane

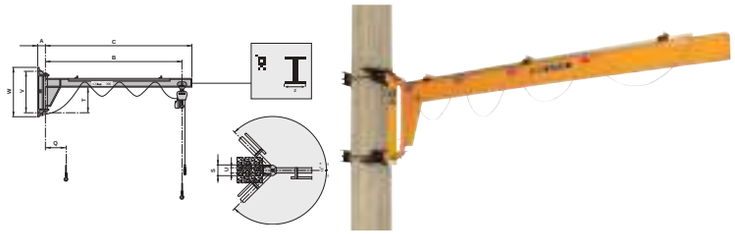
Tech. Code	GR65 Euro	Suitable for	Weight kg
M1440MENS	(225,00)	SM - TM - RM - AMP - AMH	3

Indivisible package Suggested retail package - Unit price

WALL MOUNTED OVERHEAD BEAM JIB CRANES

ITEM: M1330

Wall mounted jib, RC model, with overhead beam arm.



Features:
- Brakes operated by cap springs, wear resistant
- Finishing a coat of anti-rust, two coats of water-soluble paint, not suitable for external or particular humid enviroments

Advantages:
- The raised beam allows you to save height, increasing the hook run
- Arm rotation up to 270°

Supplied with:
- External power supply system on a steel profile with cable trolleys
- Instruction manual of assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	STRADDLE C mm	EXTERNAL HOOK POSITION B mm	A mm	Q mm	S mm	T*** mm	U mm	V mm	W mm	Trench Z mm	α°	ANCHORING SYSTEM**	PRESSURE BETWEEN PILLAR BASE AND FOUNDATION kg/cm²	ANCHORING TIE ROD TRACTION kg	PILLAR BENDING PHASE kgm
M13302503000	(1260,00)	250	RM 250/3000	3000	2840	185	587	240	705	150	1010	1130	90	265	2	3	470	1006
M13302504000	(1588,00)	250	RM 250/4000	4000	3840	185	587	240	685	150	1010	1130	100	260	2	4	630	1348
M13302505000	(1602,00)	250	RM 250/5000	5000	4840	185	587	240	665	150	1010	1130	110	260	2	5	780	1670
M13302506000	(1896,00)	250	RM 250/6000	6000	5840	185	587	240	733	150	1010	1130	160	245	2	6	930	1990
M13302507000	(2227,00)	250	RM 250/7000	7000	6840	185	587	240	714	150	1010	1130	180	240	2	7	1100	2354
M13302508000	(2730,00)	250	RM 250/8000	8000	7840	185	587	240	695	150	1010	1130	200	235	2	8	1250	2675
M13305003000	(1374,00)	500	RM 500/3000	3000	2840	185	590	240	685	150	1010	1130	100	260	2	6	900	1926
M13305004000	(1655,00)	500	RM 500/4000	4000	3840	185	590	240	665	150	1010	1130	110	260	2	8	1200	2568
M13305005000	(2091,00)	500	RM 500/5000	5000	4840	185	590	240	714	150	1012	1132	180	240	3	10	1500	3210
M13305006000	(2134,00)	500	RM 500/6000	6000	5840	185	590	240	714	150	1012	1132	180	240	3	12	1800	3852
M13305007000	(2499,00)	500	RM 500/7000	7000	6840	185	590	240	695	150	1012	1132	200	235	3	14	2100	4494
M13305008000	(3022,00)	500	RM 500/8000	8000	7840	185	590	240	675	150	1012	1132	220	225	3	16	2400	5136
M133010003000	(1697,00)	1000	RM 1000/3000	3000	2830	185	657	240	733	150	1012	1132	160	245	3	12	1810	3874
M133010004000	(2142,00)	1000	RM 1000/4000	4000	3830	185	657	240	714	150	1012	1132	180	240	3	16	2410	5158
M133010005000	(2487,00)	1000	RM 1000/5000	5000	4830	185	657	240	695	150	1012	1132	200	235	3	20	3000	6420
M133010006000	(2736,00)	1000	RM 1000/6000	6000	5830	185	657	240	675	150	1012	1132	220	225	3	23	3600	7704
M133015004000	(2377,00)	1500	RM 1500/4000	4000	3830	185	657	240	675	150	1012	1132	220	225	3	21	3300	7062
M133015005000	(2639,00)	1500	RM 1500/5000	4800	4630	185	657	240	675	150	1012	1132	240	220	3	21	4200	8988

* The rotation radius can be limited by the pillar itself to which is anchored the bracket. Height assessed when loaded. Upon request cranes with different load capacities may be supplied.
*** Height measured with applied load.
Different load capacities may be supplied upon request.

Pag. M.25 - For brackets and staybolts unit dimensions

Related products

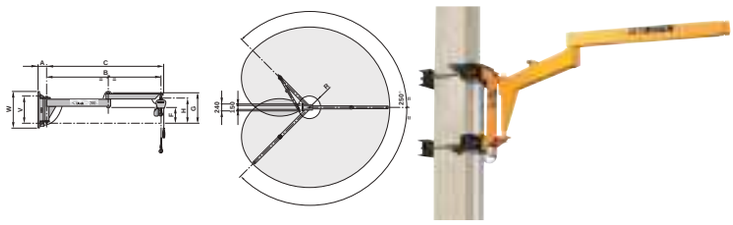
DIKE SAFETY SHOES

Tech. Code	EU size	US size
K168143	43	9
K168144	44	10
K168145	45	11
K168146	46	11,5

Product available in index K

ITEM: M1340

Wall mounted crane, AMP model with articulated arm and eyebolt connection, suitable for any type of hoist with suspension.



Features:
- Brake operated by cap springs, wear resistant
- Arm joint rotating on high quality ball bearings
- Finishing coat with anti-rust, two coats of water-soluble paint,not suitable for external or particularly humid environments

Avantages:
- Maximum coverage of the area adjacent to the column
- Ability to overcome obstacles thanks to the arm articulation

Supplied with:
- Internal power supply system,
- Instruction manual for assembly, use and maintenance

Tech. Code	GR66 Euro	LOAD CAPACITY kg	MODEL	STRADDLE C	ESTREME POSITIONING LOAD AXLE B mm	A mm	F mm	G mm	H mm	R mm	V mm	W mm	ANCHORING SYSTEM**	PRESSURE BETWEEN PILLAR BASE AND FOUNDATION kg/cm²	ANCHORING TIE ROD TRACTION kg	PILLAR BENDING PHASE kg/m	Weight kg
M1340P802600	(2133,00)	80	AMP 80/2600	2650	2600	185	460	840	735	230	760	880	2	2	210	336	118
M1340P804000	(2311,00)	80	AMP 80/4000	4050	4000	185	460	840	735	350	760	880	2	3	300	480	141
M1340P1252600	(2244,00)	125	AMP 125/2600	2650	2600	185	460	840	735	230	760	880	2	4	340	540	118
M1340P1254000	(2674,00)	125	AMP 125/4000	4050	4000	185	410	890	785	350	760	880	2	3	450	738	142
M1340P2002600	(2520,00)	200	AMP 200/2600	2650	2600	185	410	890	785	230	760	880	2	4	510	837	137
M1340P2004000	(3331,00)	200	AMP 200/4000	4050	4000	185	410	890	785	350	760	880	2	5	680	1115	164

Pag. M.25 - For brackets and staybolts unit dimensions

ANCHORING BRACKET SYSTEM KIT FOR WALL-MOUNTED CRANES

B·HANDLING

ITEM: M1410

Anchoring brackets system kit, complete with bolts for wall mounting.

Features:
- Designed to anchor cranes models SM, TM, RM, AMP, AMH

Advantages:
- Ensures a stable secure fixing system over time

Supplied with:
- The necessary couplings and bolts for the crane mounting

Tech. Code	GR66 Euro	ANCHORING SYSTEM	Pillard (A) mm	Weight kg
M1410250KIT1	(576,00)	1	from 250 up to 450	54
M1410250KIT2	(618,00)	2	from 250 up to 450	62
M1410250KIT3	(770,00)	3	from 250 up to 450	73
M1410450KIT1	(601,00)	1	from 451 up to 650	64
M1410450KIT2	(649,00)	2	from 451 up to 650	76

Tech. Code	GR66 Euro	ANCHORING SYSTEM	Pillard (A) mm	Weight kg
M1410450KIT3	(898,00)	3	from 451 up to 650	88
M1410650KIT1	(626,00)	1	from 651 up to 850	74
M1410650KIT2	(704,00)	2	from 651 up to 850	87
M1410650KIT3	(982,00)	3	from 651 up to 850	105

ANCHORING BRACKET SYSTEM KIT FOR FRONTAL ANCHORING OF JIB CRANES

B·HANDLING

ITEM: M1415

Anchoring bracket system kit for frontal anchoring of jib cranes

Features:
- Custom designed to anchor the SM, TM, RM, AMP and AMH cantilever cranes from the fron

Advantages:
- They ensure a secure and stable fixing over time

Supplied with:
- Equipped with the nuts and bolts and chemical anchors necessary for coupling with the cantilever crane and fixing on the reinforced concrete column.

Tech. Code	GR65 Euro	ANCHORING SYSTEM	Pillard A mm	Weight kg
M1415250KIT1	(-)	1	da 250 a 450	15
M1415250KIT2	(-)	2	da 250 a 450	25
M1415250KIT3	(-)	3	da 250 a 450	35
M1415450KIT1	(-)	1	da 451 a 650	18
M1415450KIT2	(-)	2	da 451 a 650	28

Tech. Code	GR65 Euro	ANCHORING SYSTEM	Pillard A mm	Weight kg
M1415450KIT3	(-)	3	da 451 a 650	38
M1415650KIT1	(-)	1	da 651 a 850	20
M1415650KIT2	(-)	2	da 651 a 850	30
M1415650KIT3	(-)	3	da 651 a 850	40

SLEW LIMITERS FOR COLUMN MOUNTED JIB CRANES

B·HANDLING

ITEM: M1420

Slew limiter kit for column mounted jib cranes.

Features:
- Custom designed to limit the rotation of the jib for column-mounted cranes. SC, TC, RC, ACP, ACH.

Advantages:
- Suitable for all columns

Supplied with:
- The fastenings and bolts necessary for coupling the crane to the column

Tech. Code	GR65 Euro	Suitable for	Weight kg
M1420CRAV	(310,00)	SC - TC - RC - ACP - ACH	8

ITEM: M1430

Slew limiter kit for column mounted jib cranes.

Features:
- Custom designed to limit the rotation of the jib for column-mounted cranes. SC, ACP, ACH

Advantages:
- Suitable for all columns

Supplied with:
- The fastenings and bolts necessary for coupling the crane to the column

Tech. Code	GR65 Euro	Suitable for	Weight kg
M1430RAGG	(320,00)	SC up to 250 kg - ACP - ACH	5

MODULAR SYSTEM FOR KB PROFILE SYSTEM MONORAILS AND TRAVELLING CRANES

ITEM: M1600

Modular system fo KB profile system monorails and travelling cranes for the safe and reliable handling of suspended loads.

Features:
- Profile cold rolled not bent without welds
- Finishing coat with anti-rust, two coats of water soluble paint, not suitable for external or particular humid environments

Supplied with:
- Hoist trolley
- Power supply system with flat cable and cable trolleys
- Instruction manual for assembly, use and maintenance

Advantages:
- Maximum smoothness guaranteed by the quality of the profile
- The outstanding profile weight/capacity ratio light and rigid at the same time and very easy to handle
- Easy to mount thanks to the modularity of the system
- Minimum noise level guaranteed by a reflon coating on the trolleys wheels

KB I

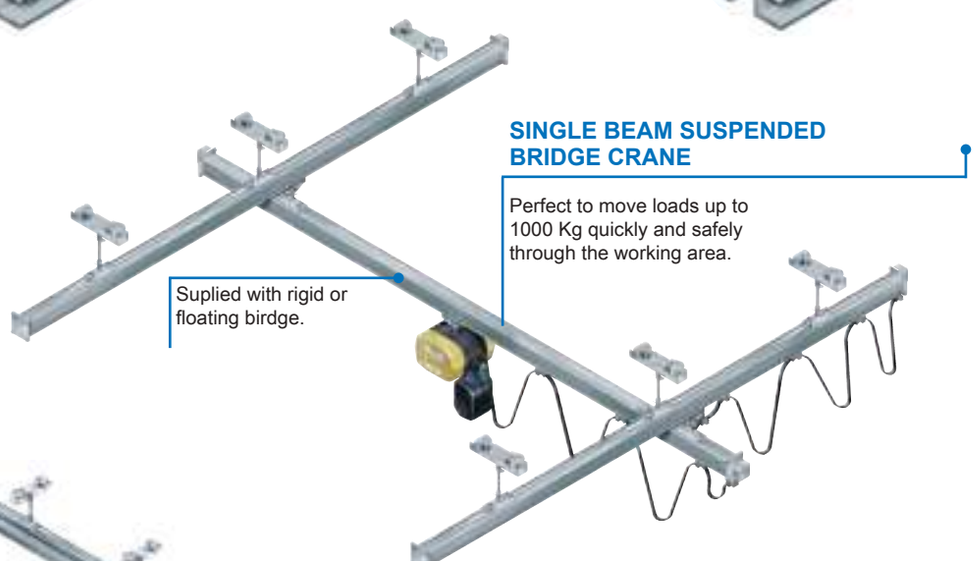
Load capacity up to 500 kg

KB II

Load capacity up to 1500 kg

- **MAXIMUM SMOOTHNESS**
- **MAXIMUM SAFETY**
- **EASY TO ASSEMBLE**
- **MINIMUM NOISE**

HIGHER CAPACITIES PROFILE AVALAIBLE ON REQUEST



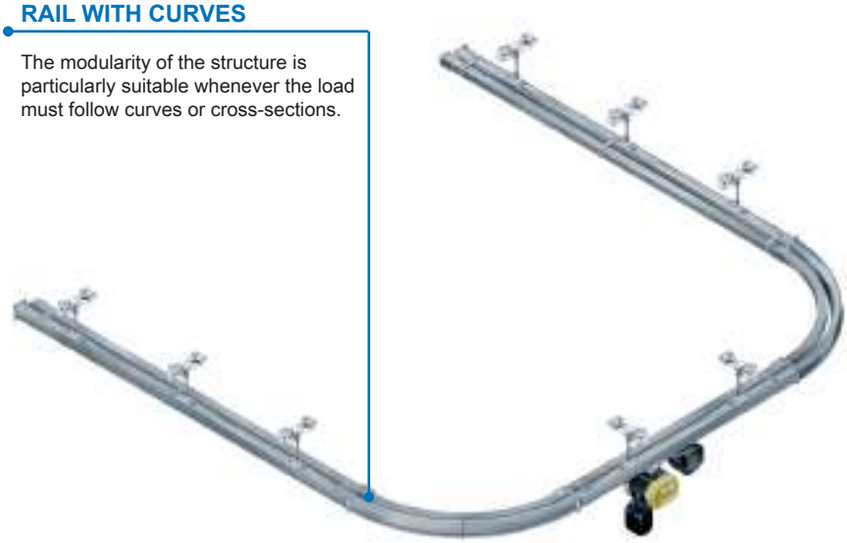
SINGLE BEAM SUSPENDED BRIDGE CRANE

Perfect to move loads up to 1000 Kg quickly and safely through the working area.

Suplied with rigid or floating birdge.

RAIL WITH CURVES

The modularity of the structure is particularly suitable whenever the load must follow curves or cross-sections.



ALUMINUM PROFILE VERSIONS ALSO AVAILABLE ON REQUEST

For more information please contact our technical office
info@linkindustrialtools.it

KB TRAVELLING CRANES

ITEM: M2000

Modular crane system with supporting structure, made with modular elements and high quality steel profiles, cold rolled allowing an outstanding smooth running. Rigid and stable construction to minimize the efforts related to both bridge and of hoist trolley movements. Available load capacities: 200 and 500 Kg.

Runways:
- 2 Bars length 6000 mm
- Gauge 4000 mm
- GIS system KB I profile
- Power supply cable ,profile built-in trolleys , front connection box units positioned along the runways
- Finishing with 1 coat of anti-rust and 2 coats of water soluble paint which is not suitable for external or particulary humid environments

Suspensions:
- 6 direct suspensions for beams with a flange from 65 mm up to 200 mm
- Maxximum interaxis 3000 mm

Bridge:
- Single beam
- Maximum width 4500 mm
- GIS system KB I profile
- Reinforcement IPE 120
- Height from ground 3300 mm
- Power supply cable and profile built-in trolleys positioned along the bridge
- Manual translation of the bridge along the runways
- Manual hoist movement along the bridge
- Finishing with 1 coat of anti-rust and 2 coats of water soluble paint which is not suitable for external or particulary humid environments

Structure:
- Solid steel structure built with commercial profiles
- Perforated base plates for ground anchoring by chemical vials and tie rods
- Maximum height 4100 mm
- Maximum width 5900 mm
- Maximum length 6000 mm
- Finishing with 1 coat of anti-rust and 2 coats of water soluble paint which is not suitable for external or particulary humid environments

Electric chain hoist GIS GP250:
- Sturdy construction with cast aluminium housing and covers
- New braking system for an immediate and precise stop of the load
- Adjustable up and down electric limit switch- Hook run 2700 mm
- Control panel low voltage 42 V
- Supply 380 V, 3 Ph, 50 Hz

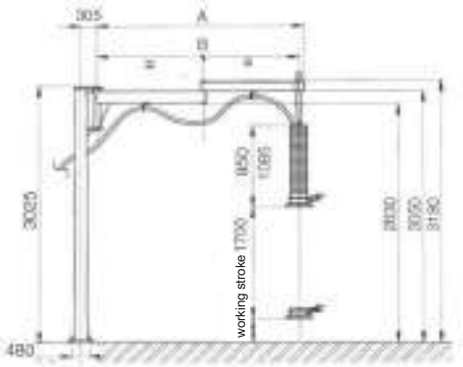
Tech. Code	GR66 Euro	Load capacity Kg	Operation area mm	Hoist	Speed m/s	Weight kg
M20002006X4	(18900,00)	200	6000 x 4000	GP250 1NF	8/2	1900
M20005006X4	(22400,00)	500	6000 x 4000	GP250 2NF	4/1	1950

CE

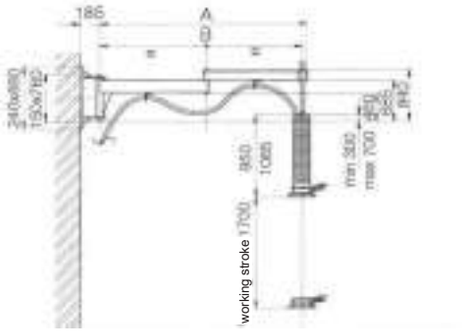
ITEM: M3010

Vacuum lifters guided by an electric vacuum pump for lifting various types of material.

M301030PSF	-Model with single pad flexible
M301030PS	-Model with single pad rectangular
M301030PD	-Model with double rectangular pad on 500 mm bar
M301030PO	-Model with oval pad
M301035PTI	-Model with round plate support in aluminum and gasket in silicone, control handles in stainless steel AISI 304
M301060PD	-Model with double rectangular pad on 500 mm bar
M301060PO	-Model with oval pad
M3010100PQ	-Model with quadruple rectangular pad. The distance between the individual suction cups are adjustable on 2 bars of 600 mm mounted on a bar of 1800 mm.



Jib crane with articled arm model ACH (column mounted)



Features:
- 3 Phase pump 380V 50HZ
- Bellows air lift
- Filter protection for the pump
- 13m vacuum tube
- Lifting speed with continuous regulation from 0 to 30/min
- Usefull vertical run 1700mm
- 360 ° Roating suspension head 360° incontinuous

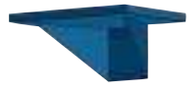
Advantages:
- Loads fast and accurate moving
- Vacume level regulation through a comfortable handle positioned on the control unit
- The system holds the load even in case of a power cut, slowly taking it down to the ground in an easy controlled manner

Supplied with:
- Instruction manual of use and maintenance

Tech. Code	GR66 Euro	Load capacity kg	Weight kg	Suitable for	Pad mm	Description	Pad
M301030PSF	(13268,00)	30	18	Box	∅ 120	Flexible single plate	
M301030PS	(9450,00)	30	20	Box	85 x 200	Single rectangular plate	
M301030PD	(9988,00)	30	25	Box	120 x 315	Double rectangular plate	
M301030PO	(9828,00)	30	25	Bags in paper or pvc	180 x 370	Oval plate	
M301050PV	(14320,00)	50	28	Bags	146 x 19,9 x 318	Vertical gripper	
M301035PTI	(14175,00)	35	20	Food products	∅ 250	Circular plate	
M301060PD	(10900,00)	60	26	Box	120 x 320	Double rectangular plate	
M301060PO	(10206,00)	60	26	Bags in paper or pvc	180 x 370	Oval plate	
M3010100PQ	(14616,00)	100	30	Panels	120 x 320	Quadruple rectangular plate	

ACCESSORIES FOR VACU-B HANDLING

ITEM: M3012

Tech. Code	GR66 Euro	Suitable for	Dimension mm	Weight kg	
M3012CASE	(1460,00)	Soundproof case to reduce pump noise	600 x 480	10	
M3012MENS	(1040,00)	Pump holder shelf	600 x 480	25	

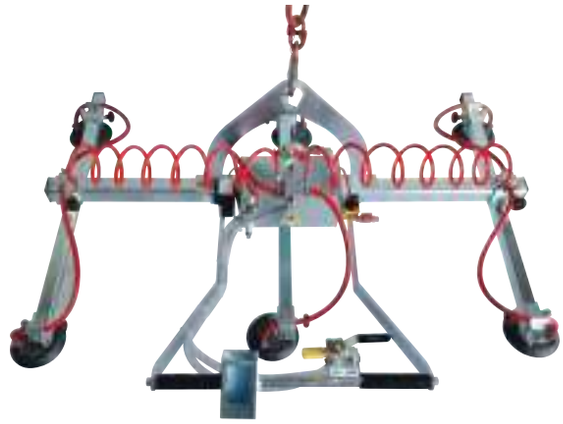
INFO APPLICATIONS VACU-B

Some examples of applications of vacuum lifters.

Indivisible package Suggested retail package - Unit price

ITEM: VACUJET SDPM

Model SDPM vacuum lifters with extremely high suction capacity and continuous vacuum generation.



Features:
- Suction plates suitable for constant loads and for use with non-porous surfaces such as metal, glass, Plexiglas and marble
- Compressed air operated
- Custom beams designed to allow the position of the suction points to be changed

Advantages:
- Precise and safe load handling
- Possibility of handling variously shaped parts with a wide size range
- The system holds the raised load even in the event of a power failure thanks to the vacuum tank

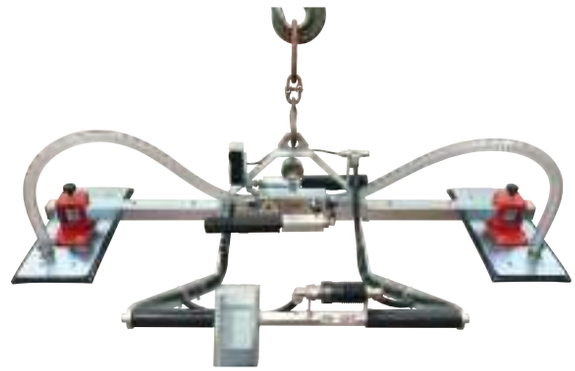
Supplied with:
- Sound and light warning system if the vacuum plates are incorrectly positioned on the piece to be lifted
- Shut-off valves at every suction point
- Use and maintenance manual

Tech. Code		M3050SDPM0125	M3050SDPM0250	M3050SDPM0500	M3050SDPM1000	M3050SDPM1500
GR66	Euro	(3190,00)	(3461,00)	(3785,00)	(4596,00)	(5353,00)
Max. capacity	kg	125	250	500	1000	1500
N° vacuum plates		2	4	4	6	8
Vacuum plate Ø	mm	250	250	300	300	300
Height	mm	550	620	620	650	680
Weight	kg	45	45	50	65	95

NOTE: Pneumatic tilting versions available on request.

ITEM: VACUJET SDPL

Model SDPL vacuum lifters with extremely high suction capacity and continuous vacuum generation.



Features:
- Suction plates suitable for constant loads and for use with porous surfaces such as wood, MDF and chipboard
- Compressed air operated
- Custom beams designed to allow the position of the suction points to be changed

Advantages:
- Precise and safe load handling
- Possibility of handling variously shaped parts with a wide size range
- The system holds the raised load even in the event of a power failure thanks to the vacuum tank

Supplied with:
- Sound and light warning system if the vacuum plates are incorrectly positioned on the piece to be lifted
- Shut-off valves at every suction point
- Use and maintenance manual

Tech. Code		M3055SDPL0125	M3055SDPL0200
GR66	Euro	(2109,00)	(3623,00)
Max. capacity	kg	125	200
N° vacuum plates		1	2
Vacuum plate size	mm	600 x 200	500 x 200
Height	mm	400	450
Weight	kg	25	40

NOTE: Pneumatic tilting versions available on request.

ELECTRIC VACUJET VACUUM LIFTERS

B·HANDLING 3

ITEM: VACUJET SDE

Model SDE vacuum lifters with extremely high suction capacity and continuous vacuum generation.

Features:
- Suction plates suitable for constant loads and for use with non-porous surfaces such as metal, glass, Plexiglas and marble
- Electric 3 phase 380V 50 Hz pump operated
- Custom beams designed to allow the position of the suction points to be changed

Advantages:
- Precise and safe load handling
- Possibility of handling variously shaped parts with a wide size range
- The system holds the raised load even in the event of a power failure thanks to the vacuum tank

Supplied with:
- Sound and light warning system if the vacuum plates are incorrectly positioned on the piece to be lifted
- Shut-off valves at every suction point
- Use and maintenance manual

Tech. Code		M3060SDE0125	M3060SDE0250	M3060SDE0500	M3060SDE1000	M3060SDE1500
GR66	Euro	(3785,00)	(3947,00)	(4272,00)	(5137,00)	(5894,00)
Max. capacity	kg	125	250	500	1000	1500
N° vacuum plates		2	4	4	6	8
Vacuum plate Ø	mm	250	250	300	300	300
Height	mm	550	620	620	650	680
Weight	kg	50	50	55	70	100

NOTE: Electric tilting versions available on request.

VACUJET VACUUM LIFTERS WITHOUT POWER SUPPLY

ITEM: VACUJET SDSA

Model SDSA vacuum lifters with extremely high suction capacity that do not require an external power supply.

Features:
- Suction plates suitable for constant loads and for use with non-porous surfaces such as metal, glass, Plexiglas and marble
- Piston operated without the need for an external supply
- Custom beams designed to allow the position of the suction points to be changed

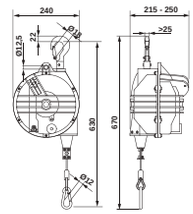
Advantages:
- Precise and safe load handling
- Possibility of handling variously shaped parts with a wide size range
- Flexibility of use as no power supply is required

Supplied with:
- Safety system that prevents the load from falling if the vacuum pads are incorrectly positioned on the item to be lifted
- Shut-off valves at every suction point
- Use and maintenance manual

Tech. Code		M3030SDSA0100	M3030SDSA0250	M3030SDSA0500	M3030SDSA1000
GR66	Euro	(4000,00)	(5500,00)	(5800,00)	(9200,00)
Max. capacity	kg	100	250	500	1000
N° vacuum plates		1	4	4	6
Vacuum plate Ø	mm	230	280	340	410
Weight	kg	10	100	115	220

SPRING BALANCERS - HEAVY SERIE RUN 2000

TECNA



ITEM: 9361-9362-9363-9364-9365-9366-9367-9368-9369-9370-9371

Structural characteristics:
- Suitable for the assembly lines
- Indicated for the handling of heavy pieces, portable welders and mutiple screwdrivers

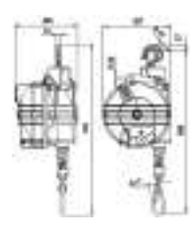
Advantages:
- Reduces the operator's labour
- Reduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		M4010010015	M4010015020	M4010020025	M4010025030	M4010030035	M4010035045
GR63	Euro	(412,00)	(431,00)	(559,00)	(573,00)	(615,00)	(651,00)
Load capacity	kg	10 ÷ 15	15 ÷ 20	20 ÷ 25	25 ÷ 30	30 ÷ 35	35 ÷ 45
Weight	mm	2000	2000	11.2	11.5	11.8	12.4
Run		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cable		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Cap	kg	9,2	9,5	Aluminum	Aluminum	Aluminum	Aluminum

Tech. Code		M4010045055	M4010055065	M4010065075	M4010075090	M4010090105
GR63	Euro	(671,00)	(688,00)	(713,00)	(765,00)	(807,00)
Load capacity	kg	45 ÷ 55	55 ÷ 65	65 ÷ 75	75 ÷ 90	90 ÷ 105
Weight	mm	2000	2000	2000	2000	2000
Run		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cable		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Cap	kg	11,3	12,3	13,2	16,1	17,2

SPRING BALANCERS - HEAVY SERIE RUN 3000

TECNA



ITEM: 9434-9435-9436-9441-9442-9443-9444

Features:
- Suitable for assembly lines
- Suitable for handling heavy pieces, portable welders and multiple screwdrivers

Advantages:
- Cancel operator's labour
- Reduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		M4020035045	M4020040050	M4020050060	M4020060070
GR63	Euro	(1189,00)	(1219,00)	(1293,00)	(1337,00)
Load capacity	kg	35 ÷ 45	40 ÷ 50	50 ÷ 60	60 ÷ 70
Excursion	mm	3000	3000	3000	3000
Cable		Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum
Weight	kg	24,46	23,64	24,69	25,56

Tech. Code		M4020070080	M4020080090	M4020080100
GR63	Euro	(1406,00)	(1506,00)	(1600,00)
Load capacity	kg	70 ÷ 80	80 ÷ 90	80 ÷ 100
Excursion	mm	3000	3000	3000
Cable		Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum
Weight	kg	26,75	27,90	28,46

Indivisible package Suggested retail package - Unit price

SPRING BALANCERS - HEAVY SERIE RUN 3000

TECNA

ITEM: 9451-9452-9453-9454-9455-9456

Features:
- Suitable for the assembly lines
- Indicated for the handling of heavy pieces, portable welders and mutiple scredrivers

Advantages:
- Reduces the operator's labour
- Riduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		M4030100115	M4030115130	M4030130140
GR63	Euro	(1935,00)	(1983,00)	(2020,00)
Load capacity	kg	100 ÷ 115	115 ÷ 130	130 ÷ 140
Excursion	mm	3000	3000	3000
Cable		Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum
Weight	kg	36,61	36,77	38,51

Tech. Code		M4030140150	M4030150160	M4030160180
GR63	Euro	(2121,00)	(2221,00)	(2313,00)
Load capacity	kg	140 ÷ 150	150 ÷ 160	160 ÷ 180
Excursion	mm	3000	3000	3000
Cable		Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum
Weight	kg	38,83	40,90	43,20

SPRING BALANCERS ATEX SERIE RUN 2100

TECNA

ITEM: 9502-9503-9504-9505-9506-9507-9508-9509

Features:
- Suitable for use in hazardous areas classified ATEX
- Atex coding: II 2D c T 85 ° C - II 2G c T6
- Suitable for handling heavy pieces, portable welders and multiple screwdrivers

Advantages:
- Reduces the operator's labour
- Reduces the working time
- Improves the quality of work
- Limits the damage to tools and risks to people

Tech. Code		M4040020030	M4040030040	M4040040050	M4040050060
GR63	Euro	(744,00)	(793,00)	(799,00)	(807,00)
Load capacity	kg	20 ÷ 30	30 ÷ 40	40 ÷ 50	50 ÷ 60
Excursion	mm	2100	2100	2100	2100
Cable		Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum
Weight	kg	12,6	15,2	15,5	16,7

Tech. Code		M4040060070	M4040070080	M4040080090	M4040090100
GR63	Euro	(829,00)	(844,00)	(863,00)	(889,00)
Load capacity	kg	60 ÷ 70	70 ÷ 80	80 ÷ 90	90 ÷ 100
Excursion	mm	2100	2100	2100	2100
Cable		Stainless steel	Stainless steel	Stainless steel	Stainless steel
Cap		Aluminum	Aluminum	Aluminum	Aluminum
Weight	kg	15,5	17,7	16,2	16,8

PNEUMATIC MANIPULATORS WITH DOUBLE CABLE

B·HANDLING 3

CE

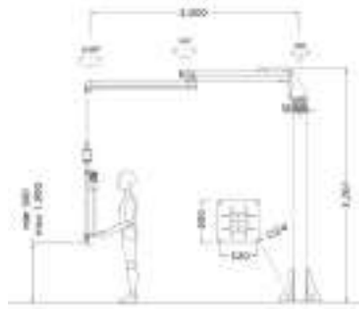
ITEM: M5010

Double cable pneumatic manipulators with zero gravity balancing system.

Features:
- Sensitive grip
- Brakes on all rotation axes
- Continuous rotation on the column axis
- Applied load regulation system

Advantages:
- Automatic pneumatic balancing, no adjustment required
- Precise effortless positioning
- Safe to use due to the double cable
- Clean operation, non-lubricated

Composition:
- Support column
- Load hook
- Use and maintenance manual



Tech. Code	GR66 Euro	Model	Capacity kg	Arm extension mm	Range mm	Total height mm	Arm height mm	Column base mm	Column diam. mm	Weight kg
M50100553000	(19250,00)	MP 55/3000	55	3000	100 - 1700	2700	2400	600 x 600	200 x 200	130
M50100803000	(20900,00)	MP 80/3000	80	3000	100 - 1700	2700	2400	600 x 600	200 x 200	145
M50101303000	(23100,00)	MP 130/3000	130	3000	100 - 1700	2700	2400	600 x 600	200 x 200	170

PNEUMATIC MANIPULATORS WITH RIGID ARMS

B·HANDLING 3

CE

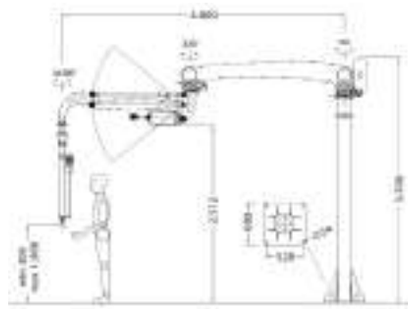
ITEM: M5020

Pneumatic manipulators with rigid arms and zero gravity balancing system.

Features:
- Ergonomic control panel
- Brakes on all rotation axes
- Continuous rotation on the column axis
- Applied load regulation system

Advantages:
- Automatic pneumatic balancing, no adjustment required
- Precise effortless positioning
- Pneumatic arms that follow the operator's movements
- Clean operation, non-lubricated

Composition:
- Support column
- Load hook
- Use and maintenance manual



Tech. Code	GR66 Euro	Model	Capacity kg	Arm extension mm	Range mm	Total height mm	Arm height mm	Column base mm	Column diam. mm	Weight kg
M50200803000	(23760,00)	MP 80/3000	80	3000	200 - 1800	3500	2500	600 x 600	200 x 200	230
M50200804000	(25250,00)	MP 80/4000	80	4000	200 - 1800	3500	2500	600 x 600	200 x 200	280
M50201603000	(24420,00)	MP 160/3000	160	3000	200 - 1800	3500	2500	600 x 600	200 x 200	250
M50201604000	(25950,00)	MP 160/4000	160	4000	200 - 1800	3500	2500	600 x 600	200 x 200	295
M50202403000	(26180,00)	MP 240/3000	240	3000	200 - 1800	3500	2500	600 x 600	200 x 200	290
M50202404000	(27690,00)	MP 240/4000	240	4000	200 - 1800	3500	2500	600 x 600	200 x 200	330

Indivisible package Suggested retail package - Unit price

MANUAL CHAIN HOISTS

ITEM: M6010

Manual chain hoists.

Features:
- Strong, sturdy device
- Swivel hook with safety block catch
- Automatic brake with double ratchet

Advantages:
- Extra light

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M6010250	M6010500	M60101000	M60101500	M60102000
GR66	Euro	187,00	253,00	308,00	462,00	572,00
Load capacity	kg	250	500	1.000	1.500	2.000
Hook run	m	3	3	3	3	3
Load chain falls		1	1	1	1	2
Control chain lenght	m	3	3	3	3	3
H	mm	230	340	390	470	530
A	mm	100	132	156	196	156
B	mm	100	112	134	150	134
C	mm	18	23	27	31	35
Weight	kg	3.5	9.0	12.0	19.0	18.0

BUCKETS FOR MANUAL CHAIN HOISTS

ITEM: M6015

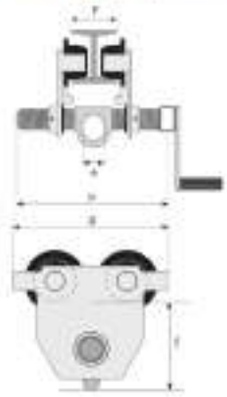
Chain hoist boxes in cloth

Tech. Code		M6015A1
GR66	Euro	118,00
Referred to hoist	kg	500 - 1000
Chain capacity	m	from 3 up to 10

TROLLEYS FOR MANUAL CHAIN HOISTS

ITEM: M6020

Manual hoist trolleys for beams



Features:
- For manual hoists with hook suspension
- Steel ball bearing wheels
- Shock-proof anti- derailment and anti-tilt device

Advantages:
- Minimum height loss
- Easily adaptable to different beams

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M6020250	M6020500	M60201000	M60202000
GR66	Euro	174,00	238,00	297,00	490,00
Load capacity	kg	250	500	1.000	1.500 - 2.000
F	mm	45 - 145	50 - 220	58 - 220	66 - 220
Bending radius	mm	700	900	1000	1200
a	mm	175	225	252	300
b	mm	220	324	334	342
e	mm	22	25	30	40
f	mm	78	88	103	127
Weight	kg	3.5	8.5	10.5	18

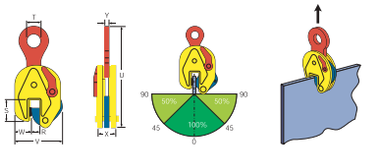
ITEM: M7010

Lifting clamps for handling sheet metal.

Features:
- Body and components made of high quality steel
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Minimum lifting weight > 10% of the maximum capacity
- Suitable for vertical lifting and transport of sheet metal and steel structures

Advantages:
- The security mechanism ensures that it never releases the load when lifting or during transportation

Supplied with:
- Instruction manual for use and maintenance



Tech. Code		M7010750	M70101000	M70102000	M70104500
GR65	Euro	299,00	367,00	412,00	564,00
Model		0.75 TS	1 TSE	2 TSE	4.5 TSE
Load capacity	kg	750	1,000	2,000	4,500
R opening	mm	0 - 13	0 - 25	0 - 35	0 - 45
S	mm	47	56	78	85
T	mm	30	45	64	70
U	mm	202	263	336	425
V	mm	100	141	183	228
W	mm	37	37	56	60
X	mm	37	47	56	78
Y	mm	10	15	16	20
Weight	kg	1.5	3.6	6.5	15.9

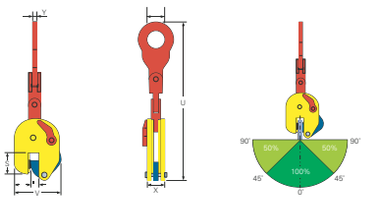
ITEM: M7015

Lifting clamps for handling metal sheets.

Features:
- Body and components made of high quality steel
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Minimum lifting weight > 10% of the maximum capacity
- Suitable for vertical lifting and transport of sheet metal and steel structures in three different ways of handling/lifting

Advantages:
- The security mechanism ensures that it never releases the load when lifting or during transportation

Supplied with:
- Instruction manual for use and maintenance



Tech. Code		M7015750	M70151000	M70152000
GR65	Euro	380,00	466,00	(523,00)
Model		0.75 TSMP	1 TSEMP	2 TSEMP
Load capacity	kg	750	1,000	2,000
R opening	mm	0 - 13	0 - 25	0 - 35
S	mm	47	56	78
T	mm	30	45	64
U	mm	307	403	516
V	mm	100	141	183
W	mm	37	37	56
X	mm	37	47	56
Y	mm	10	15	16
Weight	kg	2	4.5	7.7

Indivisible package Suggested retail package - Unit price

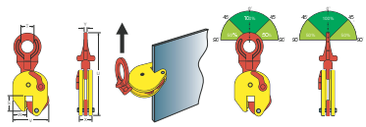
ITEM: M7020

Lifting clamps for handling sheet metal.

Features:
- Joint lifting arm with articulation
- Body and components made of high quality steel
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Minimum lifting weight > 10% of the maximum capacity
- Suitable for vertical ifting and transport of sheet metal and steel structures in all horizontal, vertical and lateral postitions

Advantages:
- The security mechanism ensures that it never releases the load when lifting or during transportation

Supplied with:
- Instruction manual for use and maintenance



Tech. Code		M7020750	M70201000	M70202000	M70203000
GR65	Euro	378,00	502,00	587,00	637,00
Model		0.75 TSU	1 TSEU	2 TSEU	3 TSEU
Load capacity	kg	750	1.000	2,000	3,000
Opening	mm	0 - 13	0 - 25	0 - 35	0 - 35
S	mm	47	56	78	78
T	mm	30	50	70	70
U	mm	203	292	372	372
V	mm	100	141	183	183
W	mm	37	37	56	56
X	mm	37	47	56	56
Y	mm	10	15	16	16
Weight	kg	1.7	3,8	7.3	7.5

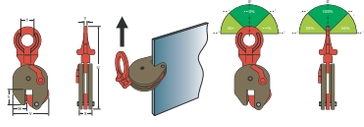
ITEM: M7022

Lifting clamps in stainless steel for handling metal sheets

Features
- Joint lifting arm with articulation
- Components made of stainless steel
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Minimum lifting weight > 10% of the maximum capacitiy
- Suitable for vertical lifting and transport of sheet metal and steel structures in corrosive environments

Advantages:
- The security mechanism ensures that it never releases the load when lifting or during transportation

Supplied with:
- Instruction manual for use and maintenance



Tech. Code		M70220750	M70221000	M70222000	M70223000	M70224500
GR65	Euro	(475,00)	(642,00)	(846,00)	(881,00)	(1294,00)
Model		0.75 TSU-R	1 TSEU-R	2 TSEU-R	3 TSEU-R	4.5 TSEU-R
Load capacity	kg	750	1.000	2.000	3.000	4.500
Opening	mm	0 - 13	0 - 25	0 - 35	0 - 35	0 - 45
S	mm	47	56	78	78	85
T	mm	30	50	70	70	70
U	mm	203	292	372	372	431
V	mm	100	141	183	183	228
W	mm	37	37	56	56	60
X	mm	37	47	56	56	78
Y	mm	10	15	16	16	20
Weight	kg	1,8	3,8	8	8	16,5

HORIZONTAL LIFTING CLAMPS SETS OF PAIRS

ITEM: M7045

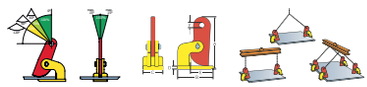
Lifting clamps in pairs for the handling of flat surfaces.

Features:
- Body and components made of high quality steel
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Suitable for horizontal lifting and transport of sheet metal

Advantages:
- The clamp is blocked in close and open positions
- More pairs of clamps can be used

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M7045100035	M7045200060	M70452000100	M70453000100
GR65	Euro	353,00	438,00	547,00	647,00
Model		1 FH-X	2 FH-X	2 FHS-X	3 FHS-X
Pair capacity	kg	2 x 500	2 x 1.000	2 x 1.000	2 x 1.500
Opening	mm	0 - 35	0 - 60	0 - 100	0 - 100
A	mm	188	287	383	387
B	mm	140	180	180	180
C	mm	65	90	90	90
D	mm	10	15	15	20
E	mm	99	118	120	120
F	mm	25	30.5	30.5	30.5
Weight	kg/pcs	2.6	7	9,2	10



ITEM: M7047

Lifting clamps in pairs for the handling of steel pipes.

Features:
- Body and components made of high quality steel
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Suitable for horizontal and transport of steel pipes

Advantages:
- The clamp is blocked in close and open positions
- More pairs of clamps can be used

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M70471500	M70473000	M70474000
GR65	Euro	322,00	365,00	(462,00)
Model		1.5 TPH	3 TPH	4 TPH
Pair capacity	kg	2 x 750	2 x 1.500	2 x 2.000
Opening R	mm	40	40	50
A	mm	120	120	140
B	mm	70	70	70
C	mm	50	50	58
D	mm	185	185	204
E	mm	16	16	26
F	mm	41	41	41
G	mm	25	25	25
Weight	kg/pcs	2	2	3

Indivisible package Suggested retail package - Unit price

LIFTING CLAMPS WITH ANTI-DAMAGING PADS

ITEM: M7025

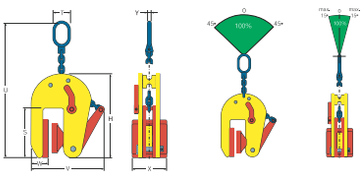
Lifting clamps for vertical handling of sheet metal with damageable surfaces.

Features:
- Pads in plastic material to secure the integrity of the gripped surfaces
- Body and components made of high quality steel
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Suitable for vertical lifting and transport of all those types of materials at risk of damage: steel, aluminium, plastic, wood and marble

Advantages:
- The security mechanism ensures that it never releases the load when lifting or during transportation

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M7025500	M70251000
GR65	Euro	751,00	(935,00)
Model		0.5 TNMK	1 TNMK
Load capacity	kg	500	1,000
Opening	mm	0 - 20	0 - 30
H	mm	205	232
T	mm	40	40
S	mm	102	105
U	mm	462	470
V	mm	224	282
W	mm	48	46
X	mm	80	80
Y	mm	14	14
Weight	kg	6	6,5



ITEM: M7028

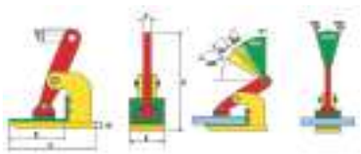
Lifting clamps with protective pads for the horizontal handling of sheet metals with delicate surfaces.

Features:
- Plastic gripping pads to protect the surfaces
- Body and components made of high quality steel
- Lifting thickness and capacity marked on the body
- Suitable for horizontal lifting and handling all materials with delicate surfaces such as stainless steel, aluminium, plastic, wood and marble

Advantages:
- Safety mechanism that prevents the load from being released during lifting and handling

Supplied with:
- Use and maintenance manual

Tech. Code		M70281000	M70282000
GR65	Euro	789,00	1049,00
Model		1 TNMH	2 TNMH
Pair capacity	kg	2 x 500	2 x 1,000
Opening	mm	0 - 25	0 - 45
H	mm	10	15
T	mm	20	30.5
S	mm	94	151
U	mm	155	267
V	mm	140	225
W	mm	15	23
X	mm	65	90
Y	mm	15	15
Weight	kg/pcs	2.4	7.5



ITEM: M7040

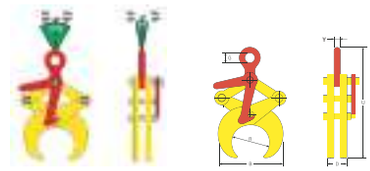
Lifting clamps for handling of pipes, tubes and solid round materials.

Features:
- Body and components made of high quality steel
- Closing lever with an automatic opening when the load is deposited
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Suitable for horizontal lifting and transport of individual pipes, in bundles and round structures

Advantages:
- The security mechanism ensures that it never releases the load when lifting or during transportation

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M7040500	M70401000	M70402000
GR65	Euro	411,00	565,00	1119,00
Model		0.5 TTL	1 TTL	2 TTL
Load capacity	kg	500	1,000	2,000
R opening	mm	48.3 - 114.3	114.3 - 219.1	219.1 - 368
B max	mm	207	345	610
U max	mm	400	615	955
Y	mm	15	15	16
D	mm	47	47	56
G	mm	45	45	64
Weight	kg	4,5	9	31



ITEM: M7042

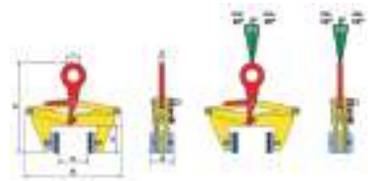
Lifting clamps for handling parts with parallel surfaces.

Features:
- Body and components made of high quality steel
- Closing lever with an automatic opening when the load is deposited
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Suitable for horizontal lifting and transport of square tubes and structures with parallel surfaces
- Plastic grip pads to protect the integrity of the gripped surface

Advantages:
- The security mechanism ensures that it never releases the load when lifting or during transportation

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M70422000	M70423000
GR65	Euro	1444,00	1500,00
Model		2 TBLC	3 TBLC
Load capacity	kg	2.000	3.000
R opening	mm	220 - 360	350 - 500
B max	mm	675	835
U max	mm	735	900
Y	mm	15	16
D	mm	80	100
G	mm	45	64
Weight	kg	18	33



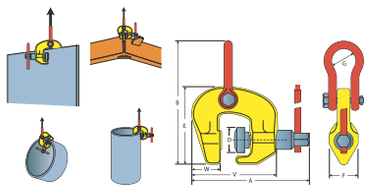
Indivisible package Suggested retail package - Unit price

ITEM: M7030

Lifting clamps for handling sheet metal profiles of various sizes.

Features:
- Body and components made of high quality steel
- Threaded pin with oscillating terminal
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Minimum lifting weight > 10% of the maximum flow rate
- Suitable for vertical lifting and transport of sheet metal and steel structures

Supplied with:
- Instruction manual for use and maintenance



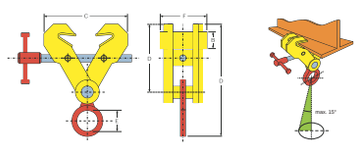
Tech. Code		M7030500	M70301500	M70303000
GR65	Euro	347,00	564,00	818,00
Model		0.5 TSCC	1.5 TSCC	3 TSCC
Load capacity	kg	500	1.500	3.000
Opening	mm	0 - 35	0 - 40	0 - 60
A	mm	158	220	280
B	mm	211	232	278
W	mm	26	40	46
V	mm	108	150	190
D	mm	27.5	42	50
E	mm	82	140	184
F	mm	0.8	46	60
G	mm	25	46	50
Weight	kg	1	3.5	7.8

ITEM: M7035

Lifting clamps for handling profiled bars.

Features:
- Body and components made of high quality steel
- Symmetrical jaws concentric closure
- The extent and thickness of the lifting capacity and jaw openings engraved on the body
- Minimum lifting weight > 10% of the maximum capacity
- Suitable for vertical lifting and transport of profiled bars, IPE, INP, HEA and metal structures

Supplied with:
- Instruction manual for use and maintenance



Tech. Code		M70351000	M70353000
GR65	Euro	309,00	457,00
Model		1 FSV	3 FSV
Load capacity	kg	1.000	3.000
Opening	mm	75 - 190	75 - 190
B	mm	30	30
C-max	mm	357	357
D-max	mm	345	345
E	mm	73.5	73.5
F	mm	120	120
Weight	Kg	5	5

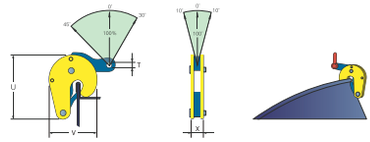
ITEM: M7050

Drum lifting clamps for transportation of the drums.

Features:
- Body and components made of high quality steel
- The extent, thickness of the lifting capacity and the jaw opening is engraved on the body
- Minimum lifting weight > 10% of the maximum capacity
- Suitable for vertical lifting and transport in complete safety of even full drums

Advantages:
- Automatic clamping mechanism

Supplied with:
- Instruction manual for use and maintenance



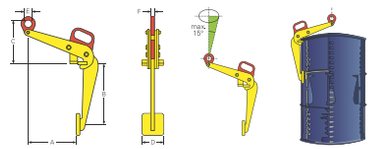
Tech. Code		M7050500
GR65	Euro	209,00
Model		TVK
Load capacity	kg	500
Opening	mm	0-17
U	mm	121
V	mm	96
X	mm	28
T	mm	12
Weight	kg	1,3

ITEM: M7055

Drum lifting clamps for transportation of the drums.

Features:
- Body and components made of high quality steel
- The extent, thickness of the lifting capacity and the jaw opening is engraved on the body
- Minimum lifting weight > 10% of the maximum capacity
- Suitable for vertical lifting and transport in complete safety of even full drums

Supplied with:
- Instruction manual for use and maintenance



Tech. Code		M7055600
GR65	Euro	296,00
Model		TVKH
Load capacity	kg	600
Opening	mm	0 - 25
A	mm	305
B	mm	434
C-max	mm	331
D	mm	100
E	mm	50
F	mm	10
Weight	kg	7

Indivisible package Suggested retail package - Unit price

LIFTING CLAMPS INTERNAL GRIP

B·HANDLING

ITEM: M7070

Manual lifting clamps for handling reels through their internal hole.

Characteristics:
- Built in high-strength carbon steel, it allows safe and very reliable reel handling,
- Manual hooking and unhooking by screwing or unscrewing the handwheel,
- 3 clamping spokes, equipped with a safety hook which automatically positions itself under the reel when tightened.

Benefits:
- The gripping claws are covered in high adherence interchangeable rubber to avoid damage to the lifted product,
- Adaptable to the different dimensions of the material to be lifted.

Supplied with:
- Use and maintenance manual

Tech. Code		M7070500
GR66	Euro	(7990,00)
Model		PI 500
Capacity	kg	500
Max external Ø	mm	900
Max internal Ø	mm	600
Max height	mm	650
Weight	kg	80

LIFTING CLAMPS WITH EXTERNAL GRIP

B·HANDLING

ITEM: M7075

Manual lifting clamps grippers with jaws for handling reels by means of an external grip.

Characteristics:
- Built in high-strength carbon steel, it allows safe and very reliable handling of the reel
- Hooking and unhooking takes place automatically without the operator having to be near the reel
- 3 clamping spokes, equipped with a safety hook which automatically positions itself under the reel when tightened

Benefits:
- The gripping claws are covered in high adherence interchangeable rubber to avoid damage to the lifted product
- Adaptable to the different dimensions of the material to be lifted

Supplied with:
- Use and maintenance manual

Tech. Code		M7075500
GR66	Euro	(8610,00)
Model		PE 500
Capacity	kg	500
Max external Ø	mm	600
Max height	mm	400
Weight	kg	65

ELECTRONIC DYNAMOMETERS

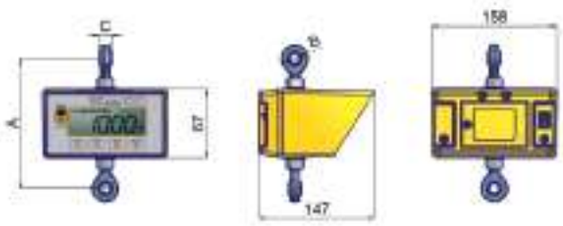
ITEM: M7210

Digital electronic dynamometers, designed for weighing overhead loads - light series.

Features:
- Stainless steel load cells with ABS electronic casing
- 5 number digital weight display
- Infrared on/reset remote control
- Maximum Safety load: 200% of its nominal capacity
- Safety braking: >5
- Protection: IP65
- Operating temperature: -5°C +55°C
- Measuring accuracy: ± 0,1% referred to nominal capacity

Advantages:
- Tare reset and weight calibration from keyboard
- Selectable digital filters for weight stabilization
- Automatic shut-off from keyboard
- Peak storing and weight monitorization functions
- Measurement units selectable from keyboard (Kg - N - kN - lb)
- Power supply: three batteries 1,5 V

Supplied complete with:
- Instruction manual for use and maintenance
- Uniball suspension
- Plastic casing



Tech. Code	GR66 Euro	Load capacity kg	Resolution step kg	A mm	B mm	C mm	Weight kg
M72100050	(805,00)	50	0,02	158	12	16	1,30
M72100100	(805,00)	100	0,05	158	12	16	1,30
M72100300	(805,00)	300	0,1	158	12	16	1,30
M72100600	(855,00)	600	0,2	170	16	21	2,30
M72101000	(890,00)	1000	0.50	170	16	21	2,30

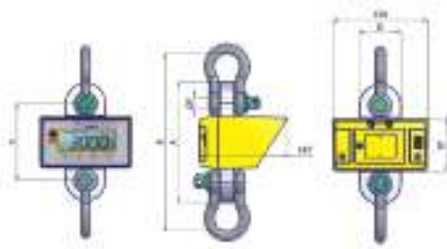
ITEM: M7220

Digital electronic dynamometers designed for weighing overhead loads - heavy series

Features:
- Stainless steel load cells with ABS electronic casing
- 5 number digital weight display
- Infrared on/reset remote control
- Maximum Safety load: 200% of its nominal capacity
- Safety braking: >5
- Protection: IP65
- Operating temperature: -5°C +55°C
- Measuring accuracy: ± 0,1% referred to nominal capacity

Advantages:
- Tare reset and weight calibration from keyboard
- Selectable digital filters for weight stabilization
- Automatic shut-off from key board
- Peak storing and weight monitorization functions
- Measurement units selectable from keyboard (Kg - N - kN - lb)
- Power supply: three batteries 1,5 V

Supplied complete with:
- Instruction manual for use and maintenance
- Shackles suspension
- Plastic casing



Tech. Code	GR66 Euro	Load capacity kg	Resolution step kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Weight kg
M72203200	(1005,00)	3200	1	199	69	130	25	269	20	188	182	86	4.2
M72206300	(1104,00)	6300	2	213	69	144	39	348	26	188	182	86	6.5
M722010000	(1610,00)	10000	5	265	100	181	50	455	36	188	182	86	9.6

* For 1000 Kg capacity suspension shackles (not included)

IMPORTANT NOTE
Dynamometers with lower capacity listed at page D.86

Indivisible package Suggested retail package - Unit price

ELECTRONIC DYNAMOMETERS

KERN

NEW

ITEM: HFD

Extremely solid crane scales intended for heavy industrial use thanks to the very sturdy structure.
Compact and resistant structure, equipped with a special protection against dust and splashes of water according to the IP67 standard.
Easy to read display even in unfavorable lighting conditions.
Thanks to the Hold function it is possible to "freeze" the weight detected until the HOLD key is pressed.
Automatic passage to the upper weighing/division range.
Rechargeable battery pack internal, operating time approx. 70h without backlight.
Equipment:
Remote controller
12V Type 23 battery

Tech. Code	GR50 Euro	Capacity kg	Divisioin g	Weight kg
M72301500	(590,00)	300 | 600 | 1500	100 | 200 | 500	9
M72303000	(740,00)	600 | 1500 | 3000	200 | 500 | 1000	10
M72306000	(920,00)	1500 | 3000 | 6000	500 | 1000 | 2000	15

REMOTE READING DYNAMOMETERS FOR CRANES

KERN

ITEM: HFC

Compact crane scale for use in harsh environments or where space is limited, with a convenient hand-held terminal.

With the TÜV certification mark, the scale meets the requirements of the standard EN 13155 (Non-fixed load lifting attachments/Breakage resistance) and EN 61010-1 (Electrical safety).
With its high-quality finish, low weight and compact dimensions, this crane scale (tensile force gauge) is an essential device for industrial use, on building sites, in freight centres, ports etc.
Its compact design also makes ideally suited for installation in systems where space is limited etc. Peak load display (peak hold).
Hold function: when the weight has stabilized, the weight indicated on the display is automatically "frozen" until the HOLD key is pressed
Tare: Resets the display to zero when there is a load on the scale. Loads that are removed or added are then displayed directly. Display device with integrated radio module, with convenient hand strap, which the user can take with him. This allows the user to read off the weighing data, even when he/she is a long way from the load detector (force gauge) or in poor lighting conditions. Included. Range up to 100 m. All functions can be selected. LCD display, digit height 23 mm, standard internal rechargeable battery pack. Operating time up to 80 h without backlight, charging time approx. 12 h.

Housing dimensions (display device) W×D×H 88×64×256 mm.

Material and design of housing/load support, models with [Max] ≤ 3 t: aluminium/stainless steel bearing [Max] > 3 t: steel/steel

Tech. Code	GR50 Euro	Capacity kg	Division g	Weight kg
M722501000	(1298,00)	1000	500	1.8
M722503000	(1386,00)	3000	1000	2.2
M722505000	(1485,00)	5000	2000	4
M722510000	(2046,00)	10000	5000	6

ROUND LIFTING SLINGS

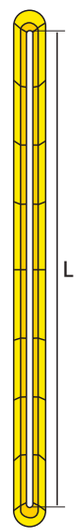
CE

ITEM: M7310

Round polyester lifting slings.

Features:
- High tenacity endless hank polyester in protective polyester sheath
- Maximum stretch 7%, returns to original length when relaxed
- Colour as per the chart according to current standards

Advantages:
- Excellent elasticity
- Unaltered by heat and UVA rays



SAFETY FACTOR 7:1	LOAD CAPACITY kg				

Tech. Code	GR65 Euro	Colour	L m	DIRECT PULL	LOOP TYPE	PARALLEL BASKET	DOUBLE ß ≤ 45°	DOUBLE ß ≤ 60°	SINGLE ß ≤ 45°	SINGLE ß ≤ 60°
M73101000X1	9,00	PURPLE	1.0	1000	800	2000	1400	1000	700	500
M73101000X1,5	13,00		1.5	1000	800	2000	1400	1000	700	500
M73101000X2	16,00		2.0	1000	800	2000	1400	1000	700	500
M73101000X2,5	20,00		2.5	1000	800	2000	1400	1000	700	500
M73101000X3	24,00		3.0	1000	800	2000	1400	1000	700	500
M73101000X4	31,00		4.0	1000	800	2000	1400	1000	700	500
M73101000X5	38,00		5.0	1000	800	2000	1400	1000	700	500
M73102000X1	14,00	GREEN	1.0	2000	1600	4000	2800	2000	1400	1000
M73102000X1,5	20,00		1.5	2000	1600	4000	2800	2000	1400	1000
M73102000X2	26,00		2.0	2000	1600	4000	2800	2000	1400	1000
M73102000X2,5	32,00		2.5	2000	1600	4000	2800	2000	1400	1000
M73102000X3	38,00		3.0	2000	1600	4000	2800	2000	1400	1000
M73102000X4	45,00		4.0	2000	1600	4000	2800	2000	1400	1000
M73102000X5	59,00		5.0	2000	1600	4000	2800	2000	1400	1000
M73103000X1	18,00	YELLOW	1.0	3000	2400	6000	4200	3000	2100	1500
M73103000X1,5	26,00		1.5	3000	2400	6000	4200	3000	2100	1500
M73103000X2	33,00		2.0	3000	2400	6000	4200	3000	2100	1500
M73103000X2,5	42,00		2.5	3000	2400	6000	4200	3000	2100	1500
M73103000X3	65,00		3.0	3000	2400	6000	4200	3000	2100	1500
M73103000X4	70,00		4.0	3000	2400	6000	4200	3000	2100	1500
M73103000X5	78,00		5.0	3000	2400	6000	4200	3000	2100	1500
M73103000X6	91,00		6.0	3000	2400	6000	4200	3000	2100	1500
M73104000X1	22,00	GREY	1.0	4000	3200	8000	5600	4000	2800	2000
M73104000X1,5	32,00		1.5	4000	3200	8000	5600	4000	2800	2000
M73104000X2	41,00		2.0	4000	3200	8000	5600	4000	2800	2000
M73104000X3	61,00		3.0	4000	3200	8000	5600	4000	2800	2000
M73104000X4	81,00		4.0	4000	3200	8000	5600	4000	2800	2000
M73104000X6	120,00		6.0	4000	3200	8000	5600	4000	2800	2000
M73105000X1	(26,00)	RED	1,0	5000	4000	10,000	7000	5000	3500	2500
M73105000X1,5	(39,00)		1.5	5000	4000	10,000	7000	5000	3500	2500
M73105000X2	(51,00)		2,0	5000	4000	10,000	7000	5000	3500	2500
M73105000X2,5	(63,00)		2.5	5000	4000	10,000	7000	5000	3500	2500
M73105000X3	(75,00)		3,0	5000	4000	10,000	7000	5000	3500	2500
M73105000X4	(108,00)		4,0	5000	4000	10,000	7000	5000	3500	2500
M73105000X5	(134,00)		5,0	5000	4000	10,000	7000	5000	3500	2500
M73105000X6	(166,00)		6,0	5000	4000	10,000	7000	5000	3500	2500
M73106000X1	(56,00)	BROWN	1,0	6000	4600	12,000	8400	6000	4200	3000
M73106000X2	(95,00)		2,0	6000	4600	12,000	8400	6000	4200	3000
M73106000X4	(164,00)		4,0	6000	4600	12,000	8400	6000	4200	3000
M73106000X5	(231,00)		5,0	6000	4600	12,000	8400	6000	4200	3000
M73106000X6	(282,00)		6,0	6000	4600	12,000	8400	6000	4200	3000
M73108000X1	(70,00)	BLUE	1,0	8000	6400	16,000	11,200	8000	4900	4000
M73108000X4	(179,00)		4,0	8000	6400	16,000	11,200	8000	4900	4000
M73108000X5	(238,00)		5,0	8000	6400	16,000	11,200	8000	4900	4000
M73108000X6	(307,00)		6,0	8000	6400	16,000	11,200	8000	4900	4000
M731010000X1	(131,00)	ORANGE	1,0	10,000	8000	20,000	14,000	10,000	5600	5000
M731010000X2	(145,00)		2,0	10,000	8000	20,000	14,000	10,000	5600	5000
M731010000X3	(166,00)		3,0	10,000	8000	20,000	14,000	10,000	5600	5000
M731010000X4	(228,00)		4,0	10,000	8000	20,000	14,000	10,000	5600	5000
M731010000X5	(262,00)		5,0	10,000	8000	20,000	14,000	10,000	5600	5000
M731010000X6	(344,00)		6,0	10,000	8000	20,000	14,000	10,000	5600	5000

The direct pull lifting capacity can be easily identified: 1000 kg per black longitudinal line

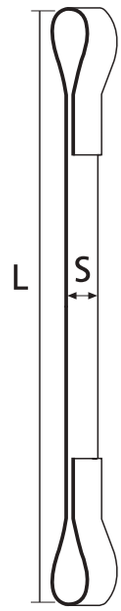
WEB LIFTING SLINGS

ITEM: M7320

Polyester web lifting slings.

Features:
- High tenacity endless hank polyester with soft eyelets and protective fabric sleeve
- Maximum stretch 7%, returns to original length when idle
- Colour as per the chart according to current standards

Advantages:
- Excellent elasticity
- Unaltered by heat and UVA rays



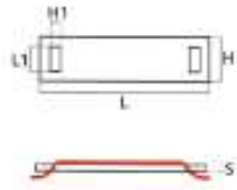
SAFETY FACTOR 7:1					LOAD CAPACITY kg				
Tech. Code	**GR65 Euro**	Colour	S mm	L m	DIRECT PULL	LOOP TYPE	PARALLEL BASKET	BASKET ß ≤ 45°	BASKET ß ≤ 60°
M73201000X1	**9,00**	PURPLE	50	1.0	1000	800	2000	1400	1000
M73201000X1,5	**12,00**		50	1.5	1000	800	2000	1400	1000
M73201000X2	**13,00**		50	2.0	1000	800	2000	1400	1000
M73201000X2,5	**15,00**		50	2.5	1000	800	2000	1400	1000
M73201000X3	**17,00**		50	3.0	1000	800	2000	1400	1000
M73201000X4	**21,00**		50	4.0	1000	800	2000	1400	1000
M73201000X5	**21,00**		50	5.0	1000	800	2000	1400	1000
M73201000X6	**28,00**		50	6.0	1000	800	2000	1400	1000
M73202000X1	**13,00**	GREEN	60	1.0	2000	1600	4000	2800	2000
M73202000X1,5	**18,00**		60	1.5	2000	1600	4000	2800	2000
M73202000X2	**21,00**		60	2.0	2000	1600	4000	2800	2000
M73202000X2,5	**24,00**		60	2.5	2000	1600	4000	2800	2000
M73202000X3	**28,00**		60	3.0	2000	1600	4000	2800	2000
M73202000X4	**35,00**		60	4.0	2000	1600	4000	2800	2000
M73202000X5	**42,00**		60	5.0	2000	1600	4000	2800	2000
M73202000X6	**50,00**		60	6.0	2000	1600	4000	2800	2000
M73203000X1	**20,00**	YELLOW	90	1.0	3000	2400	6000	4200	3000
M73203000X1,5	**27,00**		90	1.5	3000	2400	6000	4200	3000
M73203000X2	**31,00**		90	2.0	3000	2400	6000	4200	3000
M73203000X2,5	**37,00**		90	2.5	3000	2400	6000	4200	3000
M73203000X3	**42,00**		90	3.0	3000	2400	6000	4200	3000
M73203000X4	**53,00**		90	4.0	3000	2400	6000	4200	3000
M73203000X5	**64,00**		90	5.0	3000	2400	6000	4200	3000
M73203000X6	**75,00**		90	6.0	3000	2400	6000	4200	3000
M73203000X8	**96,00**		90	8.0	3000	2400	6000	4200	3000
M73204000X2	**42,00**	GREY	120	2.0	4000	3200	8000	5600	4000
M73204000X5	**88,00**		120	5.0	4000	3200	8000	5600	4000
M73204000X6	**(104,00)**		120	6.0	4000	3200	8000	5600	4000
M73204000X8	**172,00**		120	8.0	4000	3200	8000	5600	4000
M73205000X2	**59,00**	RED	150	2.0	5000	4000	10000	7000	5000
M73205000X3	**(81,00)**		150	3.0	5000	4000	10000	7000	5000
M73205000X4	**103,00**		150	4.0	5000	4000	10000	7000	5000
M73205000X6	**148,00**		150	6.0	5000	4000	10000	7000	5000
M73205000X8	**(192,00)**		150	8.0	5000	4000	10000	7000	5000
M73206000X2	**74,00**	BROWN	180	2.0	6000	4800	12000	8400	6000
M73206000X3	**(105,00)**		180	3.0	6000	4800	12000	8400	6000
M73206000X4	**132,00**		180	4.0	6000	4800	12000	8400	6000
M73206000X5	**160,00**		180	5.0	6000	4800	12000	8400	6000
M73206000X6	**(188,00)**		180	6.0	6000	4800	12000	8400	6000
M73206000X8	**(248,00)**		180	8.0	6000	4800	12000	8400	6000
M73208000X4	**147,00**	BLUE	240	4.0	8000	6400	16000	11200	8000
M73208000X5	**177,00**		240	5.0	8000	6400	16000	11200	8000
M73208000X6	**208,00**		240	6.0	8000	6400	16000	11200	8000
M73208000X8	**(273,00)**		240	8.0	8000	6400	16000	11200	8000
M732010000X4	**(201,00)**	ORANGE	300	4.0	10000	8000	20000	14000	10000
M732010000X5	**(242,00)**		300	5.0	10000	8000	20000	14000	10000
M732010000X6	**(284,00)**		300	6.0	10000	8000	20000	14000	10000
M732010000X8	**(368,00)**		300	8.0	10000	8000	20000	14000	10000

The direct pull lifting capacity can be easily identified. 1000 kg per 30 mm of belt width or each longitudinal black line.

PROTECTIVE SLEEVING FOR LIFTING SLINGS

ITEM: M7325

Protective sleeving in polyurethane for lifing slings.
Suitable to protect only one side of the strap from sharp edges, corners and several types of roughness.



Tech. Code	GR65 Euro	Tape capacity kg	L mm	H mm	L1 mm	H1 mm	S mm
M73252000	68,00	2000	450	100	60	30	4

LADDER LOCK CLOSURE STRAPS

ITEM: M7330

Straps in polyester with locking buckle.
Suitable for holding tightly together in a practical and safe way various objects and structures.
To be used only for anchoring needs.
Safety factor 2:1

Tech. Code	GR65 Euro	Tape width mm	Tape length m	Anchoring capacity daN
M73303	14,60	25	2,5	250

ITEM: M7335

Straps in polyester with locking buckle.
Suitable for holding tightly together in a practicl and safe way various objects and structures.
To be used only for anchoring needs
Safety factor 2:1

Tech. Code	GR65 Euro	Tape width mm	Tape length m	Anchoring capacity daN
M73354	25,70	35	4	200

Sales packaging minimum 2 pieces.

LADDER LOCK CLOSURE, HOOK-ENDED STRAPS

ITEM: M7340

Polyester straps ladder lock closure, hook ended.
Suitable for holding tightly together in a practical and safe way various objects and structures.
To be used only for anchoring needs.
Safety factor 2:1

Tech. Code	GR65 Euro	Tape width mm	Tape length m	Anchoring capacity daN
M73404	31,90	35	4	250

RATCHET TENSIONER STRAPS

ITEM: M7350

Polyester straps with ratchet tensioner.
Suitable for holding tightly together in a practical and safe way various objects and structures.
To be used only for anchoring needs.
Safety factor 2:1

Tech. Code	GR65 Euro	Tape width mm	Tape length m	Anchoring capacity daN
M73505	18,40	25	5	800

ITEM: M7355

Polyester straps with ratchet tensioner.
Suitable for holding tightly together in a practical and safe way various objects and structures.
To be used only for anchoring needs.
Safety factor 2:1

Tech. Code	GR65 Euro	Tape width mm	Tape length m	Anchoring capacity daN
M73558,5	48,20	50	8.0	4000

Indivisible package Suggested retail package - Unit price

RATCHET TENSIONER, HOOK-ENDED STRAPS

ITEM: M7360

Polyester straps with ratchet tensioner, hook ended.
Suitable for holding tightly together in a practical and safe way various objects and structures.
To be used only for anchoring needs.
Safety factor 2:1

Tech. Code	GR65 Euro	Tape width mm	Length before and after ratchet m	Anchoring capacity daN
M73604,5	19,40	25	4,5 + 0,5	1000

ITEM: M7365

Polyester straps with ratchet tensioner, hook ended.
Suitable for holding tightly together in a practical and safe way various objects and structures.
To be used only for anchoring needs.
Safety factor 2:1

Tech. Code	GR65 Euro	Tape width mm	Length before and after ratchet m	Anchoring capacity daN
M73658	34,20	50	8,5 + 0,5	4000

SELF ROLL-UP ANCHORING SYSTEMS

ITEM: M7370

SELF ROLL-UP anchoring featuring a brake interlock system, allows for a constant monitoring of both roll-up and extension process.
Extremely easy to use.
When not in use, the tape is safely kept in its casing so to avoid any cluttered and potentially dangerous dangling.
More to that, the tape/belt is kept clean, grease and dust free.

GUIDELINES

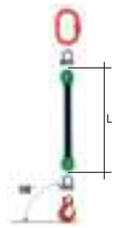
1. **LOAD ANCHORING SYSTEM**
   Position lever in release position, simply use S-shaped hook to pull the tape. Fix hood to the load anchoring point
2. **TENSIONING PROCEDURE**
   Push red button and lever together, the latter to be positioned
   Push the red button again, push lever downward o manually activate it
   Do not overload
3. **LOCKING PROCEDURE**
   In order to safely anchor load, make sure the lever is in its lock position
4. **WINDING AND RELEASE**
   Push red button and lever together, the latter to be positioned from lock to release position
   remove hook from anchoring point and proceed to gradual tape winding by pushing the red button

Tech. Code	GR65 Euro	Dimension mm	Set content pcs
M737050X3	93,00	50 x 3 m	2

LIFTING FIBER SLINGS

ITEM: M7410

Single lifting sling



Features:
- Polyester coiled, high density fibre, sleeved in a polyester protective braiding
- Excellent elasticity-Maximum stretching 7% fully resumed at rest
- Rope safety factor 7:1
- Metal components safety factor 4:1

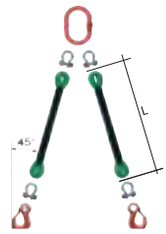
Advantages:
- Excellent elasticity
- Unaltered by heat and UVA rays

Supplied with:
Ring, Hook and eye

Tech. Code	GR65 Euro	Colour	L m	Load capacity kg
M74101000X0,5	(41,50)	VIOLA	0.5	1.000
M74101000X1	(45,50)	VIOLA	1.0	1.000
M74102000X1	(66,20)	VERDE	1.0	2.000
M74102000X1,5	(73,80)	VERDE	1.5	2.000
M74102000X2	(81,90)	VERDE	2.0	2.000
M74103000X1	(107,10)	YELLOW	1.0	3.000
M74103000X1,5	(108,20)	YELLOW	1.5	3.000

ITEM: M7415

Double lifting slings



Features:
- Polyester coiled, high density fibre, sleeved in a polyester protective braiding
- Excellent elasticity-Maximum stretching 7% fully resumed at rest
- Rope safety factor 7:1
- Metal components safety factor 4:1

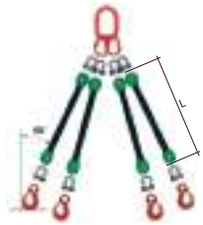
Advantages:
- Excellent elasticity
- Unaltered by heat and UVA rays

Supplied with:
Ring, Hook and eye

Tech. Code	GR65 Euro	Colour	L m	Load capacity Kg
M74151400X0,5	71,40	VIOLA	0.5	1.400
M74151400X1	78,80	VIOLA	1.0	1.400
M74152800X0,5	112,40	VERDE	0.5	2.800
M74152800X1	122,90	VERDE	1.0	2.800
M74152800X2	152,30	VERDE	2.0	2.800
M74154200X0,5	(201,60)	YELLOW	0.5	3.800
M74154200X1	(203,70)	YELLOW	1.0	3.800
M74154200X1,5	204,80	YELLOW	1.5	3.800
M74154200X2	(222,60)	YELLOW	2.0	3.800

ITEM: M7420

Quadruple lifting slings



Features:
- Polyester coiled, high density fibre, sleeved in a polyester protective braiding
- Excellent elasticity-Maximum stretching 7% fully resumed at rest
- Rope safety factor 7:1
- Metal components safety factor 4:1

Advantages:
- Excellent elasticity
- Unaltered by heat and UVA rays

Supplied with:
Ring, Hook and eye

Tech. Code	GR65 Euro	Colour	L m	Load capacity Kg
M74202100X1	(156,50)	VIOLA	1.0	2.100
M74204200X1	(249,90)	VERDE	1.0	4.200
M74204200X1,5	(278,30)	VERDE	1.5	4.200
M74206300X1	(407,40)	YELLOW	1.0	6.300
M74206300X1,5	(411,60)	YELLOW	1.5	6.300
M74206300X2	(447,30)	YELLOW	2.0	6.300

Indivisible package Suggested retail package - Unit price

LIFTING CHAIN SLINGS

ITEM: M7440

Single lifting chain sling.

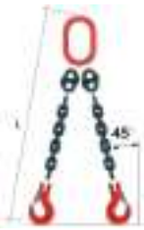
Features:
- Chain, master link, hammerlock and hook in grade 80 alloy steel
- Safety factor 4:1

Supplied with:
- Complete with master link, shackles and load hook

Tech. Code	GR65 Euro	Chain Ø mm	L m	Capacity kg
M74401120X0,5	34,70	6	0.5	1,000
M74401120X1	34,70	6	1.0	1,000
M74402000X0,5	54,60	8	0.5	2,000
M74402000X1	54,60	8	1.0	2,000
M74403150X1	(79,80)	10	1.0	3,100

Also available in grade 60 stainless steel.

ITEM: M7445



Lifting chain slings with two arms.

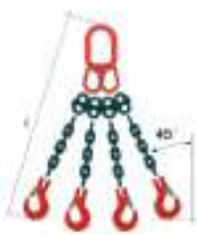
Features:
- Chain, master link, hammerlock and hook in grade 80 alloy steel
- Safety factor 4:1

Supplied with:
- Complete with master link, shackles and load hooks

Tech. Code	GR65 Euro	Chain Ø mm	L m	Capacity kg
M74451600X0,5	59,90	6	0.5	1,400
M74451600X1	59,90	6	1.0	1,400
M74451600X1,5	72,50	6	1.5	1,400
M74452800X0,5	105,00	8	0.5	2,800
M74452800X1	105,00	8	1.0	2,800
M74452800X1,5	126,00	8	1.5	2,800
M74452800X2	147,00	8	2.0	2,800
M74454250X1	154,40	10	1.0	4,300
M74454250X1,5	186,90	10	1.5	4,300
M74454250X2	219,50	10	2.0	4,300
M74457500X1	257,30	13	1.0	7,000
M74457500X2	(362,30)	13	2.0	7,000

Also available in grade 60 stainless steel.

ITEM: M7450



Lifting chain slings with four arms.

Features:
- Chain, master link, hammerlock and hook in grade 80 alloy steel
- Safety factor 4:1

Supplied with:
- Complete with master link, shackles and load hooks

Tech. Code	GR65 Euro	Chain Ø mm	L m	Capacity kg
M74502360X1	128,10	6	1.0	2,100
M74502360X1,5	153,30	6	1.5	2,100
M74504250X1	218,40	8	1.0	4,200
M74504250X1,5	260,40	8	1.5	4,200
M745011200X1	547,10	13	1.0	11,000
M745011200X2	757,10	13	2.0	11,000

Also available in grade 60 stainless steel.

HAMMERLOCKS FOR LIFTING CHAIN SLINGS

ITEM: M7460

Grade 80 alloy steel hammerlocks for lifting chain slings.
Safety factor 4:1.

Tech. Code	GR65 Euro	Capacity kg	A mm	B mm	C mm	D mm	E mm
M74601000	8,40	1000	6.8	43	18	16	16
M74602000	14,70	2000	9	70	26	25	22.7
M74603000	15,80	3000	11	77	32	27	25
M74605000	26,30	5000	15.5	85	35	32	30

Also available in grade 60 stainless steel.

LIFTING CHAIN SLINGS WITH SHORTENING GRAB HOOKS

ITEM: M7452

Lifting chain slings with shortening grab hooks.

Features:
- Chain, master link, hammerlock, hook and shortening hooks in grade 80 alloy steel
- Safety factor 4:1

Supplied with:
- Complete with master link, shackles and load hook

Tech. Code	GR65 Euro	Chain Ø mm	L m	Capacity kg
M74521120X1	70,40	6	1.0	1,000

Also available in grade 60 stainless steel.

ITEM: M7455

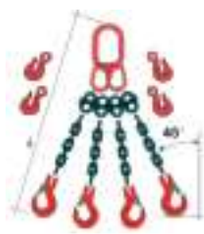
Lifting chain slings with two arms and shortening grab hooks.

Features:
- Chain, master link, hammerlock, hook and shortening hooks in grade 80 alloy steel
- Safety factor 4:1

Supplied with:
- Complete with master link, shackles and load hooks

Tech. Code	GR65 Euro	Chain Ø mm	L m	Capacity kg
M74551600X0,5	94,50	6	0.5	1,400
M74551600X1	100,80	6	1.0	1,400
M74551600X1,5	113,40	6	1.5	1,400
M74552800X1	(146,00)	8	1.0	2,800
M74552800X1,5	167,00	8	1.5	2,800
M74552800X2	188,00	8	2.0	2,800
M74554250X2	283,50	10	2.0	4,300
M74557500X2	422,10	13	2.0	7,000

Also available in grade 60 stainless steel.



ITEM: M7458

Lifting chain sling with four arms and shortening grab hooks.

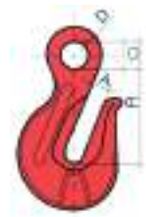
Features:
- Chain, master link, hammerlock, hook and shortening hooks in grade 80 alloy steel
- Safety factor 4:1

Supplied with:
- Complete with master link, shackles and load hooks

Tech. Code	GR65 Euro	Chain Ø mm	L m	Capacity kg
M74582360X1	151,20	6	1.0	2,100
M74582360X1,5	201,60	6	1.5	2,100
M74584250X1,5	340,00	8	1.5	4,200

Also available in grade 60 stainless steel.

SHORTENING GRAB HOOKS FOR LIFTING CHAIN SLINGS



ITEM: M7470

Shortening grab hooks in Grade 80 alloy steel for lifting chain slings.
Suitable for regulating the length of the chain.
Safety factor 4:1

Tech. Code	GR65 Euro	Chain Ø mm
M74706	6,30	6
M74708	6,30	7/8
M747010	(16,80)	10
M747013	30,50	13

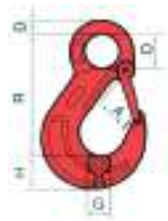
Also available in grade 60 stainless steel.

Indivisible package Suggested retail package - Unit price

HOOKS WITH SAFETY LATCH FOR LIFTING LIFTING CHAIN SLINGS

ITEM: M7475

Hooks with safety latch in grade 80 alloy steel for lifting chain slings.
Safety factor 4:1.



Tech. Code	GR65 Euro	Capacity kg	A mm	D mm	G mm	H mm	O mm	R mm
M74751000	7,40	1000	25	8.5	14.5	20	20.5	80.5
M74752000	12,60	2000	25.5	11	19	27	25	95.5
M74753000	15,80	3000	30.5	14	23.5	33	34	120.5
M74755000	32,60	5,000	41	17.5	29	40	42.5	150

Suitable for use with lifting chain slings. Also available in grade 60 stainless steel.

ITEM: M7480

Hooks with safety latch in grade 80 alloy steel for lifting chain slings.
Safety factor 4:1.

Tech. Code	GR65 Euro	Capacity kg	A mm	B mm	C mm	G mm	H mm	P mm	R mm
M74801000	7,40	1000	24.5	6.7	8.5	14.5	20	7	73
M74802000	12,60	2000	25.5	8.7	9.8	19	27	9	86.3
M74803000	21,00	3000	30.5	12.2	13.5	23.5	33	13	105
M74805000	42,00	5000	41	15.3	17	28.5	40	16	128.5

Suitable for use with lifting chain slings. Also available in grade 60 stainless steel.

LIFTING HOOKS WITH SAFETY LATCH FOR LIFTING CHAINS

ITEM: M7485

Hooks with safety latch in carbon steel for lifting chains.
Safety factor 4:1.

Tech. Code	GR65 Euro	Capacity kg	A mm	B mm	D mm	E mm	G mm	H mm	I mm	L mm
M74851000	12,60	1000	23	12	32	82	23	93	17.5	125
M74852000	25,20	2000	30	16	38	105	24	117	22	165
M74853000	43,10	3000	38	19	46	125	26.5	145	28.5	204

Also available in grade 60 stainless steel.

SWIVEL HOOKS WITH SAFETY LATCH

ITEM: M7490

Swivel hooks with safety latch in carbon steel for lifting chains.
Safety factor 4:1.

Tech. Code	GR65 Euro	Capacity kg	d ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	L1 mm
M74901000	27,30	1000	M16	38	13	34	82	34	81	27	16	86	170	135.5
M74901600	35,70	1600	M18	46	16	42	99	38	92	29	19	94	197.5	156
M74902000	42,00	2000	M20	50	18	47	110	48	104	32	21.5	106	219.5	173
M74903000	70,40	3000	M16	48	19	43	117	39	123	34	33	141	222	185
M74905000	(194,30)	5000	M27	68	26	59	146	60	166	48	35	167	315	243

Also available in grade 60 stainless steel.

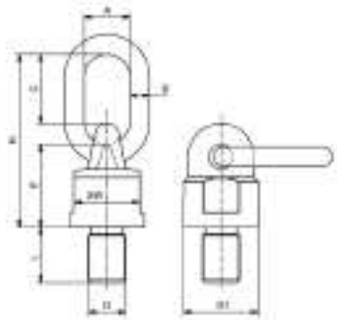
SWIVEL EYE BOLTS WITH RING

CARCANO | CARTEC

CE

ITEM: M7510

Swivel eye bolts in grade 80 steel with ring adjustable under load. Suitable for lifting and tilting loads fitted with a threaded hole. Safety factor 4 in all load directions. Rotates through 360° with ring that pivots 180°, self-aligning. Tested for 20,000 stress cycles.



Tech. Code	GR65 Euro	Size	Capacity kg	A mm	B mm	C mm	E mm	H mm	SW mm	D1 mm	Weight kg
M7510M0816	69,00	M8 x 16	300	30	13	46	50	105	30	38	0.48
M7510M1018	71,00	M10 x 18	300	30	13	46	50	105	30	38	0.48
M7510M1218	77,00	M12 x 18	500	30	13	46	50	105	30	38	0.50
M7510M1620	81,00	M16 x 20	1125	30	13	46	50	105	30	38	0.53
M7510M2030	94,00	M20 x 30	2000	34	16	57	61	131	40	50	1.05
M7510M2430	127,00	M24 x 30	3150	40	18	70	68	153	48	58	1.63
M7510M3035	163,00	M30 x 35	5300	45	22	65	80	165	65	75	2.23

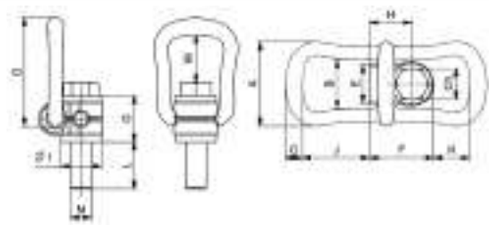
BOLT-ON SWIVEL EYE BOLTS

CARCANO | CARTEC

CE

ITEM: M7515

Bolt-on swivel eye bolts for 90° load, in grade 80 steel, takes up minimal space. Anchor point for lifting loads fitted with a threaded hole. Safety factor 4 in all load directions. Can rotate through 360° when not loaded. Suitable for anchor points up to 90°. Tested for 20,000 stress cycles.



Tech. Code	GR65 Euro	Size	Capacity kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	W mm	J mm	K mm	CH mm	Weight kg
M7515M08	(81,00)	M8	300	57	34	10	78	24	41	30	26.5	25	15	43	51	35	13	0.275
M7515M10	(82,00)	M10	630	57	34	10	78	24	41	30	26.5	25	15	42	51	35	17	0.29
M7515M12	(82,00)	M12	1000	66	38	13.5	85	30	50	36	33	32	23	40	52	28	19	0.50
M7515M16	(88,00)	M16	1500	66	38	13.5	85	30	50	36	33	32	24	38	52	28	24	0.51
M7515M20	(98,00)	M20	2500	87	55	16	111	48	68	44	42.5	45	31	54	71	36	30	1.25
M7515M24	(98,00)	M24	4000	87	55	16	111	48	68	44	42.5	45	37	51	71	36	36	1.30
M7515M27	(182,00)	M27	4000	109	66	22.5	145	54	91	63	58.5	60	37	64	86	47	41	3.15
M7515M30	(201,00)	M30	5000	109	66	22.5	145	54	91	63	58.5	60	45	62	86	47	46	3.25

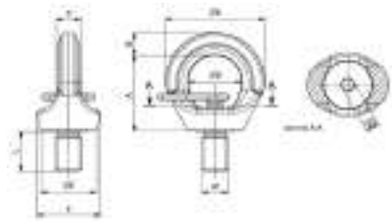
SWIVEL EYE BOLTS

CARCANO | CARTEC

CE

ITEM: M7520

Swivel eye bolts in grade 80 steel. Anchor point for lifting loads fitted with a threaded hole. Safety factor 4 in all load directions. Can rotate through 360° when not loaded. Suitable for anchor points up to 90°. Tested for 20,000 stress cycles.



Tech. Code	GR65 Euro	Size	Capacity kg	A mm	B mm	C mm	D mm	E mm	F mm	K mm	L mm	CH mm	Weight kg
M7520M08	44,00	M8	300	33.7	10	9.8	25	25.5	30	46	12	6	0.12
M7520M10	44,00	M10	400	33.7	10	9.8	25	25.5	30	46	15	6	0.12
M7520M12	51,00	M12	750	41.5	12.5	11.5	30	30.6	36.5	55.5	18	8	0.20
M7520M16	61,00	M16	1500	49.5	14.5	15.7	35	36.5	42	64.5	24	10	0.35
M7520M20	83,00	M20	2300	58	16	18	40	42	52.5	74.5	30	12	0.60
M7520M24	119,00	M24	3200	69	20.5	22	49	50	61	90	36	12	1
M7520M27	150,00	M27	3200	69	20.5	22	49	50	61	90	36	12	1
M7520M30	162,00	M30	4500	86	25.5	28	60	66	75	111	45	17	2

Also available in grade 60 stainless steel.

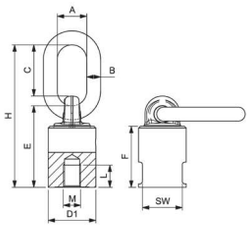
Indivisible package Suggested retail package - Unit price

SWIVEL EYE NUTS FEMALE WITH RING

CARCANO | CARTEC

ITEM: M7525

Female swivel eye nut in grade 80 steel with ring adjustable under load. Suitable for lifting loads fitted with a threaded shaft. Safety factor 4 in all load directions. Rotates through 360° with ring that pivots 180°, self-aligning. Tested for 20,000 stress cycles.



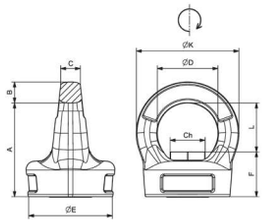
Tech. Code	GR65 Euro	Size	Capacity kg	A mm	B mm	C mm	E mm	F mm	H mm	SW mm	D1 mm	Weight kg
M7525M1215	170,00	M12 x 15	500	30	13	47	69	50	124	34	36.5	0.61
M7525M1620	172,00	M16 x 20	1000	30	13	47	76	57	131	34	38	0.68
M7525M2025	191,00	M20 x 25	1700	34	16	57	93	70	164	46	55	1.65
M7525M2430	268,00	M24 x 30	2100	42	18	72	107	81	193	50	58	2.17
M7525M3040	303,00	M30 x 40	3200	45	22	65	126	94	211	65	75	4.29

SWIVEL EYE NUTS FEMALE

CARCANO | CARTEC

ITEM: M7530

Swivel eye nuts female in grade 80 steel. Anchor point intended for lifting loads fitted with a threaded shaft. Safety factor 4 in all load directions. Can rotate through 360° when not loaded. Tested for 20,000 stress cycles.



Tech. Code	GR65 Euro	Size	Capacity kg	A mm	B mm	C mm	D mm	E mm	F mm	K mm	L mm	CH mm	Weight kg
M7530M08	58,00	M8	300	44.5	8	10	29	32	21.5	45	23	13	0.17
M7530M10	68,00	M10	400	44.5	8	10	29	32	21.5	45	23	14	0.20
M7530M12	73,00	M12	750	53.5	11	11	34	44	26.5	56	27	16	0.39
M7530M16	93,00	M16	1500	59.5	13	14.5	39	56	30.5	65	29	21	0.69
M7530M20	107,00	M20	2300	67	14	17	42	58	33	70	34	26	0.71
M7530M24	134,00	M24	3200	80	18	19	52	73	40	88	40	30	1.70
M7530M30	185,00	M30	4500	101	22	27	62	80	51	106	50	36	2.44

B·HANDLING 3

LIFTING MAGNETS - NEO

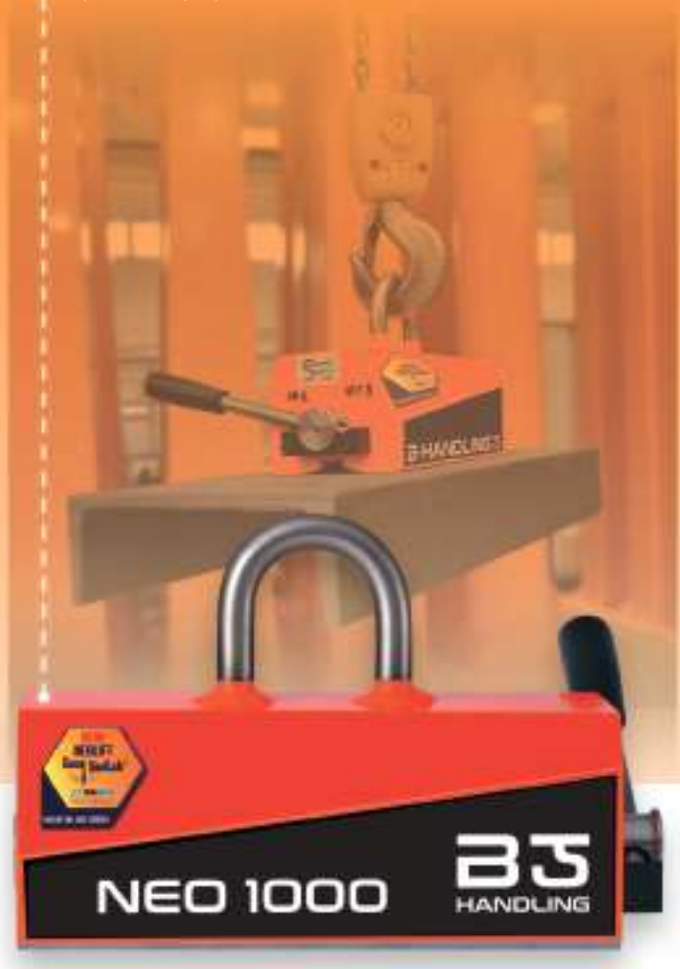
They use neodymium a material three times better than ferromagnete

- The V-Shaped plate make them fit to handle both flat (also narrow profile plates and bars) and round shape items (tubes and rods)

- Stop block treated with manganese phosphate coating

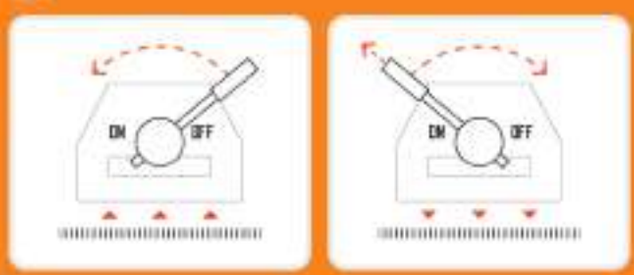
- Tested capacity of lifting 3 times more than nominal

- Actuation lever of the magnetic field with safety device to prevent improper or accidental disconnections



- ***Very light, compact and easy to use***
- ***The magnetic power remains absolutely unchanged overtime***
- ***Elimination of the risk of damaging the load with other chains or slings***
- ***Often a single operator is sufficient to lift and move heavy or bulky loads***
- ***Lower lifting and handling times thanks to the immediate seizure of the cargo by the magnet***

HOW DOES IT WORK



Tech. Code	GR66 Euro	Model	Lifting pow. plate surf. kg	Lifting pow. round surf. kg	Ø min sollevabile mm	Ø max sollevabile mm	Eyebolt height mm	Length x width mm	Weight kg
M8020125	515,00	NEO 125	125	40	50	100	110	93 x 60	3
M8020250	733,00	NEO 250	250	125	60	200	164	152 x 100	10
M8020500	1094,00	NEO 500	500	250	65	270	164	246 x 120	20
M80201000	1928,00	NEO 1000	1000	500	100	300	216	305 x 140	40
M80202000	(3670,00)	NEO 2000	2000	1000	150	350	251	480 x 165	90

Hot versions available on request, to handle very hot surfaces, up to 180° C.

MAX LOAD CAPACITY ACCORDING TO TYPE OF SURFACE AND SINGLE PIECE DIMENSIONS

B·HANDLING 3

M8020125

Nominal workload:
- for plates (kg) **125**
- for round (kg) **40**
Ø min/max (mm) 50/100
Testload (kg)* 400
Weight (kg) **3**
Length (mm) 93
Width (mm) 60
Crown height (mm) 110

*Tested with a mild steel plate, rectified, 50mm

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥25	-	125	-	75	-	60
15	1900 x 500	115	1100 x 500	70	900 x 500	55
10	2300 x 500	110	1500 x 500	65	1200 x 500	50
4	2500 x 500	45	2300 x 500	40	1700 x 500	30
2	1500 x 500	15	1300 x 500	13	1200 x 500	12
Tubi Ø (mm) 50-100	2500	40	1700	28	1500	24

NB: Plates L and W must be at least 200 x 200 mm

M8020250

Nominal workload:
- for plates (kg) **250**
- for round (kg) **125**
Ø min/max (mm) 60/200
Testload (kg)* 800
Weight (kg) **10**
Length (mm) 152
Width (mm) 100
Crown height (mm) 164

*Tested with a mild steel plate, rectified, 50mm

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥30	-	250	-	170	-	105
15	1750 x 1000	205	1250 x 1000	150	1000 x 800	90
10	2200 x 1000	170	1650 x1000	130	1100 x 1000	85
6	2100 x 1000	100	1650 x 1000	80	1300 x 1000	60
4	1600 x 1000	50	1400 x 1000	45	1150 x 1000	36
Tubes Ø (mm) 60-200	3500	125	3000	100	2500	70

NB: Plates L and W must be at least 300 x 300 mm

M8020500

Nominal workload:
- for plates (kg) **500**
- for round (kg) **250**
Ø min/max (mm) 65/270
Testload (kg)* 1600
Weight (kg) **20**
Length (mm) 246
Width (mm) 120
Crown height (mm) 164

*Tested with a mild steel plate, rectified, 50mm

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥40	-	500	-	380	-	225
20	1800 x 1500	425	1650 x 1250	320	1400 x 1000	220
15	2250 x 1500	400	2050 x 1250	300	1750 x 1000	205
10	2500 x 1500	270	2350 x 1250	200	2150 x 1000	165
8	2300 x 1500	195	2250 x 1250	160	2150 x 1000	125
6	2000 x 1500	125	2000 x 1250	100	2000 x 1000	80
Tubes Ø (mm) 65-270	4000	250	3500	200	3000	150

NB: Plates L and W must be at least 400 x 400 mm

M80201000

Nominal workload:
- for plates (kg) **1000**
- for round (kg) **500**
Ø min/max (mm) 100/300
Testload (kg)* 3200
Weight (kg) **40**
Length (mm) 305
Width (mm) 140
Crown height (mm) 216

*Tested with a mild steel plate, rectified, 50mm

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥60	-	1000	-	845	-	650
50	2450 x 1500	860	2000 x 1500	730	1900 x 1250	565
30	2850 x 1500	830	2400 x 1500	705	2250 x 1250	550
20	3200 x 1500	745	2750 x 1500	640	2600 x 1250	510
15	3300 x 1500	500	2900 x 1500	445	2800 x 1250	380
10	2750 x 1500	265	2550 x 1500	240	2650 x 1250	200
Tubes Ø (mm) 100-300	4500	500	4000	400	3500	300

NB: Plates L and W must be at least 500 x 500 mm

M80202000

Nominal workload:
- for plates (kg) **2000**
- for round (kg) **1000**
Ø min/max (mm) 150/350
Testload (kg)* 6000
Weight (kg) **90**
Length (mm) 480
Width (mm) 165
Crown height (mm) 251

*Tested with a mild steel plate, rectified, 50mm

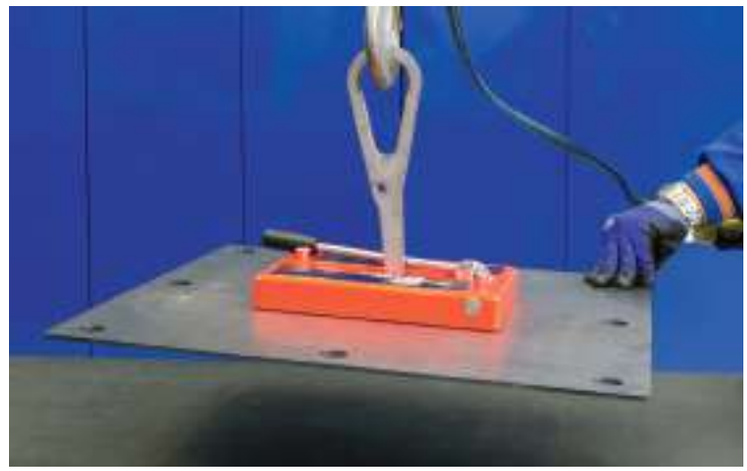
Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥80	-	2000	-	1650	-	1300
50	3250 x 1500	1950	2500 x 1500	1600	2000 x 1500	1250
30	3500 x 1500	1350	3000 x 1500	1150	2000 x 1500	1000
20	3500 x 2000	1100	3000 x 2000	1000	2000 x 2000	900
15	3000 x 1500	650	3000 x 1500	600	2000 x 1500	550
Tubes Ø (mm) 150-350	5000	1000	4500	900	4000	800

NB: Plates L and W must be at least 800 x 800 mm

ITEM: M8030

Permanent lifting magnets model FLAT 250 for handling sheet metal and steel plates in horizontal and vertical position.

Features:
- Lifting minimum thickness 3 mm
- High level safety factor 1: 4
- lifting eye hook lockable to allow turning from horizontal to vertical position
- Release lever for operator safety



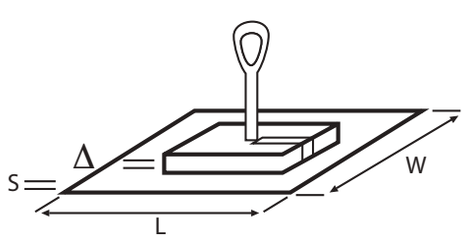
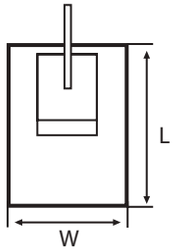
Advantages:
- Very light, compact and easy to use
- From 4 mm thick, only 1 sheet is lifted from the stack
- The magnetic power remains absolutely unchanged overtime
- Elimination of the risk of damaging the load with other chains or slings
- Often a single operator is sufficient to lift and move heavy or bulky loads
- Lower lifting and handling times thanks to the immediate seizure of the cargo from the magnet

Included:
- Instruction manual
- Test certificate

Tech. Code	GR66 Euro	Length x width x height mm	Overall length mm	Overall height mm	Tested lifting force* daN	Workload limit horizontal kg	Workload limit vertical kg	Weight kg
M8030250	(990,00)	288 x 200 x 40	440	315	1100	250	80	9,75

*Tested on St37 steel, ground surface, 25 mm thick

WORK LOAD LIMIT FOR PLATES (for S 235 JR [ST 37])

Horizontal		Δ = < 0,1 mm		Δ = < 0,1 - 0,3 mm		Δ = 0,5 mm	
	s (mm)	L max. x W max. (mm)	M max. (kg)	L max. x W max. (mm)	M max. (kg)	L max. x W max. (mm)	M max. (kg)
	> 20	1600 x 1000	250	1000 x 700	115	500 x 500	45
	12	2000 x 1000	195	1500 x 800	110	1000 x 500	45
	10	1700 x 1000	140	1200 x 800	75	1200 x 500	45
	8	1100 x 1000	95	1200 x 800	60	1200 x 500	38
	5	1500 x 1000	60	1000 x 800	33	1200 x 500	23
	3	1700 x 1000	40	1300 x 800	25	1500 x 500	19
Vertical		Δ = < 0,1 mm		Δ = < 0,1 - 0,3 mm		Δ = 0,5 mm	
	s (mm)	L max. x W max. (mm)	M max. (kg)	L max. x W max. (mm)	M max. (kg)	L max. x W max. (mm)	M max. (kg)
	> 20	1000 x 500	80	500 x 400	30	400 x 300	12
	12	1200 x 500	60	600 x 500	28	400 x 300	11
	10	1200 x 500	46	500 x 500	20	400 x 300	10
	8	1000 x 500	30	500 x 500	15	400 x 300	8
	5	1000 x 500	18	500 x 500	8	500 x 300	6
	3	1000 x 500	13	500 x 500	6	500 x 300	5

L = Lenght (mm), W = Width (mm)

ITEM: M8040

NEO HV device that allows metal sheets to be rotated by 90°.

Features:
- Tested lifting capacity three times the nominal capacity
- Suitable for use with NEO series lifting magnets

Advantages:
- Lightweight and compact design
- Can pick up a horizontal load and place it vertically and vice versa
- Magnetic power remains unchanged over time
- Eliminates the risk of damaging the load with chains or slings
- One operator is often sufficient to lift and handle bulky and heavy loads
- Lower lifting and handling times due to the load being gripped immediately by the magnet

Included:
- Use and maintenance manual
- Test certificate

Tech. Code	GR66 Euro	Model	Total width mm	Total length mm	Total height mm	Capacity kg	Test load kg	Piece dimensions min/max mm	Weight kg
M80400250	(1309,00)	HV250	210	958	244	250	750	300 - 800	27
M80400500	(1595,00)	HV500	210	1158	244	500	1,500	300 - 1,000	38
M80401000	(1808,00)	HV1000	210	1211	257	1,000	3,000	300 - 1,000	59

NOTE: Lifting magnet not included.

M80400250

Nominal workload:
- flat surfaces (kg) **250**
min/max dimension of component (mm) 300 - 800
Workload of the test (kg)* 750
Weight (kg) **27**
Length (mm) 958
Width (mm) 210
Height of eyelet (mm) 244

*Tested with a plate of mild steel, rectified, thickness 50mm

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥30	-	250	-	170	-	105
15	1750 x 800	205	1250 x 800	150	1000 x 800	90
10	2200 x 800	170	1650 x 800	130	1100 x 800	85
6	2100 x 800	100	1650 x 800	80	1300 x 800	60
4	1600 x 800	50	1400 x 800	45	1150 x 800	36

NOTE: L and W of the plate to be lifted have to be at least the same as the surface of the magnet

M80400500

Nominal workload:
- flat surfaces (kg) **500**
min/max dimension of component (mm) 300 - 1000
Workload of the test (kg)* 1500
Weight (kg) **38**
Length (mm) 1158
Width (mm) 210
Height of eyelet (mm) 244

*Tested with a plate of mild steel, rectified, thickness 50mm

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥40	-	500	-	380	-	225
20	1800 x 1000	425	1650 x 1000	320	1400 x 1000	220
15	2250 x 1000	400	2050 x 1000	300	1750 x 1000	205
10	2500 x 1000	270	2350 x 1000	200	2150 x 1000	165
8	2300 x 1000	195	2250 x 1000	160	2150 x 1000	125
6	2000 x 1000	125	2000 x 1000	100	2000 x 1000	80

NOTE: L and W of the plate to be lifted have to be at least the same as the surface of the magnet

M80401000

Nominal workload:
- flat surfaces (kg) **1000**
min/max dimension of component (mm) 300 - 1000
Workload of the test (kg)* 3000
Weight (kg) **59**
Length (mm) 1211
Width (mm) 210
Height of eyelet (mm) 297

*Tested with a plate of mild steel, rectified, thickness 50mm

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥60	-	1000	-	845	-	650
50	2450 x 1500	860	2000 x 1500	730	1900 x 1250	565
30	2850 x 1500	830	2400 x 1500	705	2250 x 1250	550
20	3200 x 2000	745	2750 x 2000	640	2600 x 1250	510
15	3300 x 1500	500	2900 x 1500	445	2800 x 1250	380
10	2750 x 1500	265	2550 x 1500	240	2650 x 1250	200

NOTE: L and W of the plate to be lifted have to be at least the same as the surface of the magnet

ELECTRICALLY POWERED LIFTING MAGNETS

ITEM: M8050

Electrically operated lifting magnetic, NEO EP series.

Features:
- They use neodymium, a material with a power of three times superior to the ferromagnet
- Sturdy construction designed for continuous activations
- Push button activation system
- Lifting capacity three times higher than the nominal one
- The permanent magnetic field supports the piece even in case of interruption of current
- 380V - 50 Hz three-phase power supply

Advantages:
- Very light, easy to use compact design
- The magnetic power remains absolutely unchanged over time
- Elimination of the risk of damaging the load with chains or other slings
- One operator is often sufficient to lift and handle bulky and heavy loads
- Lower lifting and handling times, thanks to the immediate "grip" of the load by the magnet
- The electric activation allows taking the load without any effort from the operator

Supplied with:
- Use and maintenance manual
- Test certificate

Tech. Code	GR66 Euro	Model	Load capacity kg	Length mm	Width mm	Total height mm	Magnetic surface mm	Weight kg
M80500300	(4153,00)	NEO EP 300	300	164	164	420	166 x 166	23
M80500600	(4377,00)	NEO EP 600	600	420	95	450	372 x 52	44
M80501000	(4888,00)	NEO EP 1000	1.000	228	228	295	172 x 172	77

M80500300

Plate Thickness (S) (mm)	L x W max (mm)	Max workload (kg)
≥15	2000 x 1500	300
10	2000 x 1500	280
8	2000 x 1500	200
6	2000 x 1500	140
4	1800 x 1500	70

M80500600

Plate Thickness (S) (mm)	L x W max (mm)	Max workload (kg)
≥15	4000 x 1000	600
10	3000 x 1000	350
8	2500 x 1000	300
6	2500 x 1000	200
4	2000 x 1000	100

M80501000

Plate Thickness (S) (mm)	L x W max (mm)	Max workload (kg)
≥25	2000 x 1500	1000
15	2000 x 1500	600
10	2000 x 1500	300
8	2000 x 1500	200

BATTERY LIFTING MAGNETS BM

ITEM: M8060

BM series battery lifting magnets.

Features:
- Sturdy construction for heavy and large loads
- Suitable for lifting pieces with flat surfaces
- Lifting capacity three times higher than the nominal one

Advantages:
- Compact design and easy to use
- The magnetic power remains absolutely unchanged over time
- Elimination of the risk of damaging the load with chains or other slings
- One operator is often sufficient to lift and handle loads that are also very bulky and heavy
- Lower lifting and handling times, thanks to the immediate "grip" of the load by the magnet

Supplied with:
- Use and maintenance manual -Test certificate - Battery charger - Remote control

Tech. Code	GR66 Euro	Model	Load capacity flat surface kg	Tested capacity kg	Internal battery V/Ah	Eyelet height mm	Magnetic surface dimensions mm	Weight kg
M80601350	(5229,00)	BM 1350	1.350	2.700	12/35	460	272 x 242	60
M80602500	(6086,00)	BM 2500	2.500	5.000	12/75	460	400 x 242	72
M80603600	(6955,00)	BM 3600	3.600	7.200	12/75	460	1050 x 240	180
M80605000	(7926,00)	BM 5000	5.000	10.000	12/75	460	1200 x 300	203

M80601350

MAXIMUM CAPACITY OF THE SURFACE REGARDING THE DIMENSION OF THE COMPONENT TO BE LIFTED

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥38	2130 x 2130	1350	1900 x 1900	1160	1700 x 1700	900
25		950	1830 x 1830	890	1830 x 1520	770
19		660		580		500
13		370		340	1520 x 1520	290
10	1830 x 1520	180	1520 x 1520	160		150
6	1220 x 1220	90	1220 x 1220	86	1220 x 1220	80

M80602500

MAXIMUM CAPACITY OF THE SURFACE REGARDING THE DIMENSION OF THE COMPONENT TO BE LIFTED

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥50	2400 x 2400	2500	2400 x 2100	2100	2100 x 2100	1750
38		1850		1620		1350
25		1200		1130		950
19	2400 x 2100	800	2100 x 2100	700	2100 x 1800	610
13	1800 x 1800	370	1800 x 1800	360	1800 x 1800	330
10	1800 x 1500	250	1800 x 1500	200	1800 x 1500	180
6	1500 x 1200	110	1500 x 1200	100	1500 x 1200	90

M80603600

MAXIMUM CAPACITY OF THE SURFACE REGARDING THE DIMENSION OF THE COMPONENT TO BE LIFTED

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥25	6000 x 3000	3600	6000 x 2700	3270	4500 x 3000	2730
19	6600 x 2400	2430	6000 x 2400	2230	4500 x 2400	1960
13	5100 x 2400	1250	4800 x 2400	1180		1090
10	3900 x 2400	720	3600 x 2400	660	3300 x 2400	610
6	3600 x 1800	340	1800 x 3300	300	3300 x 1500	270
3	2400 x 1800	110	1800 x 2100	100	1800 x 1800	90

M80605000

MAXIMUM CAPACITY OF THE SURFACE REGARDING THE DIMENSION OF THE COMPONENT TO BE LIFTED

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
≥50	3600 x 3300	5000	3300 x 3000	4200	3000 x 2700	3500
38	3300 x 3300	3700		3240		2700
25		2400		2260		1900
19	3000 x 2700	1600	3000 x 2700	1400	2700 x 2700	1200
13	2700 x 2400	740	2700 x 2400	720	2700 x 2400	660
10	2100 x 2100	500	2100 x 2100	400	2100 x 2100	360
6	1800 x 1800	220	1800 x 1800	200	1800 x 1800	280

BATTERY LIFTING MAGNETS BMP

ITEM: M8065

Battery powered magnets BMP series.

Features:
- Sturdy construction for heavy and bulky loads
- The V-shaped magnetic plate makes them suitable for handling both flat parts (sheets and bars) and rounded shapes (tubes and round bars)
- Lifting capacity three times higher than the nominal

Advantages:
- Compact design and easy to use
- The magnetic power remains absolutely unchanged over time
- Elimination of the risk of damaging the load with chains or other slings
- One operator is often sufficient to lift and handle bulky and heavy loads
- Lower lifting and handling times, thanks to the immediate "grip" of the load by the magnet

Supplied with:
- Use and maintenance manual - Test certificate - Battery charger
- Remote controller

Tech. Code	GR66 Euro	Model	Load capacity. flat surf. kg	Load capacity. round surf. kg	Tested capacity kg	Total height mm	Magnetic surface dimensions mm	Batteria interna V/Ah
M80651800	(6405,00)	BMP 1800	1.800	1.100	3.600	610	470 x 242	12/75
M80653600	(7722,00)	BMP 3600	3.600	2.200	7.200	610	760 x 262	12/75

M80651800

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
50	2000 x 2000	1800	1700 x 1500	1030	1500 x 1500	930
38	1900 x 1900	1130	1800 x 1500	930	1800 x 1500	850
25	2100 x 2100	1020	2100 x 1800	840	2100 x 1800	760
19	2400 x 2100	800		660		590
13		570	2100 x 2100	470		420
10	2100 x 2100	390	2100 x 1800	310	2100 x 1500	270
6	2000 x 2000	250	2000 x 1500	200	1800 x 1500	150

M80653600

Plate Thickness (S) (mm)	Clean and Smooth plane surface Δ < 0,1 mm		Rusty and hot rolled surface Δ = 0,1÷0,3 mm		Irregular and rough surface Δ = 0,3÷0,5 mm	
	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)	L x W max (mm)	Workload max (kg)
70	-	3600	-	3400	-	3200
40	2700 x 2700	2270	2400 x 2400	2440	2400 x 2100	2320
30	3000 x 3000	1730	2700 x 2700	1570	2700 x 2400	1420
20		1250		1140		1050
15		920		840		780
10	2700 x 2700	610	2700 x 2400	580	2400 x 2400	520
6	3000 x 2700	370	2700 x 2400	350	2700 x 2400	320

M80651800 - M80653600

Load type	Web thickness diameter (mm)	Workload max (kg)		Max. leght (mm)
		M80651800	M80653600	
I-beams lift by web	25	840	1500	6000
	20	680	1250	
	10	310	600	
	6	200	370	
solid bar	Ø 25 - 150 Ø 150 - 300	- 1130	- 1800	6000 -
tubes / pipes	Ø 25 - 300	1130	1800	6000

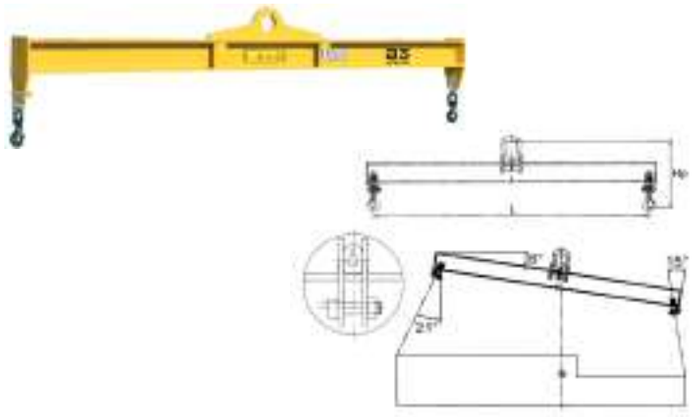
Indivisible package Suggested retail package - Unit price

ITEM: M8110

Lifting bars with fixed hooks without welds

Features:
Central ring suspension and load hooks fixed on the edges

Supplied with:
Instruction manual for use and maintenance



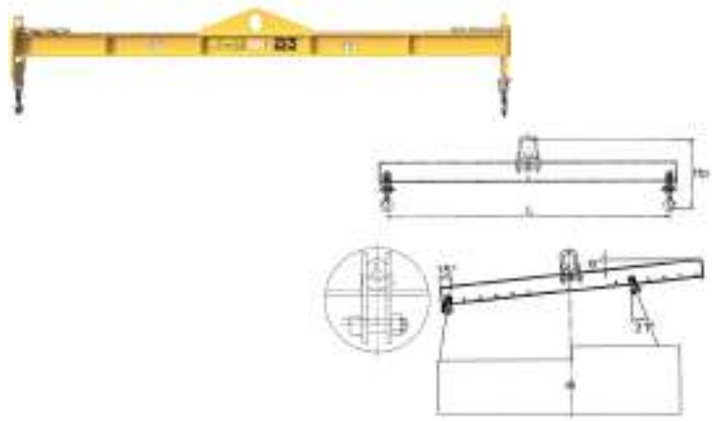
Tech. Code	GR66 Euro	Model	Max work load kg	Total length mm	Hook spacing inferior mm	Encumbrance vertical mm	Weight kg
M81101000A	(1000,00)	PBFA1-A	1.000	1050	1.000	440	20
M81101000D	(1145,00)	PBFA1-D	1.000	2050	2.000	440	36
M81101000G	(1455,00)	PBFA1-G	1.000	3050	3.000	440	90
M81101000J	(1915,00)	PBFA1-J	1.000	4050	4.000	495	145
M81102000A	(1025,00)	PBFB2-A	2.000	1050	1.000	460	25
M81102000D	(1280,00)	PBFB2-D	2.000	2050	2.000	460	65
M81102000G	(1655,00)	PBFB2-G	2.000	3050	3.000	485	115
M81102000J	(2225,00)	PBFB2-J	2.000	4050	4.000	500	184
M81103000A	(1030,00)	PBFC3-A	3.000	1050	1.000	485	30
M81103000D	(1420,00)	PBFC3-D	3.000	2050	2.000	485	85
M81103000G	(1865,00)	PBFC3-G	3.000	3050	3.000	505	145
M81103000J	(2518,00)	PBFC3-J	3.000	4050	4.000	525	225
M81104000A	(1192,00)	PBFD4-A	4.000	1050	1.000	510	45
M81104000D	(1655,00)	PBFD4-D	4.000	2050	2.000	510	110
M81104000G	(1958,00)	PBFD4-G	4.000	3050	3.000	530	150
M81104000J	(2610,00)	PBFD4-J	4.000	4050	4.000	550	230
M81105000A	(1265,00)	PBFE5-A	5.000	1050	1.000	620	55
M81105000D	(1760,00)	PBFE5-D	5.000	2050	2.000	620	125
M81105000G	(2505,00)	PBFE5-G	5.000	3050	3.000	650	215

ADJUSTABLE LIFTING MONOBEAMS

B·HANDLING 3

ITEM: M8120

Adjustable lifting beam without welds



Features:
- Central ring suspension and load hooks adjustable every 100 mm along the beam.

Supplied with:
- Instruction manual for operating use and maintenance.

Tech. Code	GR66 Euro	Model	Max work load kg	Total length mm	Useful length L mm	Height mm	Weight kg
M81201000A	(1175,00)	PBMA1-A	1,000	1.050	600 - 1.000	440	26
M81201000D	(1318,00)	PBMA1-D	1,000	2.050	1.000 - 2.000	440	48
M81201000G	(1660,00)	PBMA1-G	1,000	3.050	2.000 - 3.000	440	96
M81201000J	(2138,00)	PBMA1-J	1.000	4.050	3.000 - 4.000	495	152
M81202000A	(1205,00)	PBMB2-A	2.000	1.050	600 - 1.000	460	32
M81202000D	(1490,00)	PBMB2-D	2,000	2.050	1.000 - 2.000	460	72
M81202000G	(1865,00)	PBMB2-G	2,000	3.050	2.000 - 3.000	485	122
M81202000J	(2410,00)	PBMB3-J	2.000	4.050	3.000 - 4.000	500	190
M81203000A	(1235,00)	PBMC3-A	3.000	1.050	600 - 1.000	485	36
M81203000D	(1625,00)	PBMC3-D	3,000	2.050	1.000 - 2.000	485	91
M81203000G	(2075,00)	PBMC3-G	3.000	3.050	2.000 - 3.000	505	152
M81203000J	(2710,00)	PBMC3-J	3.000	4.050	3.000 - 4.000	525	232
M81204000A	(1410,00)	PBMD4-A	4.000	1.050	600 - 1.000	510	53
M81204000D	(1872,00)	PBMD4-D	4.000	2.050	1.000 - 2.000	510	118
M81204000G	(2175,00)	PBMD4-G	4,000	3.050	2.000 - 3.000	530	158
M81204000J	(2820,00)	PBMD4-J	4.000	4.050	3.000 - 4.000	550	240
M81205000A	(1460,00)	PBME5-A	5.000	1.050	600 - 1.000	620	60
M81205000D	(1965,00)	PBME5-D	5.000	2.050	1.000 - 2.000	620	131
M81205000G	(2700,00)	PBME5-G	5,000	3.050	2.000 - 3.000	650	223

Hooks can be positioned every 100 mm.

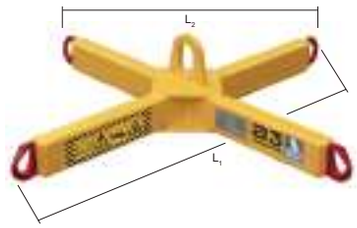
Indivisible package Suggested retail package - Unit price

LIFTING CROSS MONOBEAMS FOR BIG BAGS

ITEM: M8130
Cross type lifting monobeams

Features:
- Central ring sospension, load hooks welded on the edges

Supplied with:
- Instruction manual for use and maintenance



Tech. Code	GR66 Euro	Model	Load capacity kg	Hook Interaxis L1 mm	Hook Interaxis L2 mm	Weight kg
M81301000A	(955,00)	BCA1-A	1.000	1.000	707	55
M81301000C	(1045,00)	BCA1-C	1.000	1.500	1.060	65
M81302000A	(1025,00)	BCA2-A	2.000	1.000	707	70
M81302000C	(1160,00)	BCA2-C	2.000	1.500	1.060	90
M81303000A	(1025,00)	BCA3-A	3.000	1.000	707	95
M81303000C	(1160,00)	BCA3-C	3.000	1.500	1.060	115
M81304000A	(1080,00)	BCA4-A	4.000	1.000	707	110
M81304000C	(1240,00)	BCA4-C	4.000	1.500	1.060	140

BIG BAG

ITEM: P7014

Big Bag standard UN 13H3Y approved with four lifting straps. In polypropylene.

Tech. Code		P7014U2	P701401	P701402
GR80	Euro	14,00	12,00	15,00
Dimension	cm	90 x 90 x 120	90 x 90 x 120	90 x 90 x 120
Volume	m³	0,97	0,97	0,97
Load capacity	kg	1000	1000	1500
Form		Cloded bottom	Closed bottom	With drain valve
Type approved		13H3Y	-	-

Indivisible package Suggested retail package - Unit price

MANUAL BALANCING TELESCOPIC FORKS

B·HANDLING

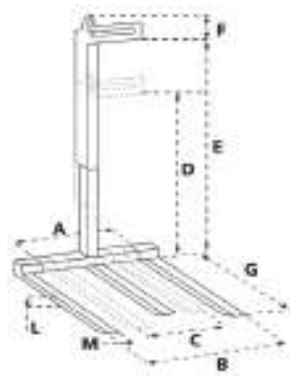
ITEM: M8140

Height adjustable goods handling telescopic forks with manual balancing.

Features:
- Low height steel structure

Advantages:
- Manual height adjustment via the telescopic stem, width adjustment by moving the forks

- Included:
- Use and maintenance manual



Tech. Code	GR66 Euro	Model	Weight kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	L mm	M mm	Weight kg
M81401000	(1335,00)	FTM1000	1000	1000	1000	300	1000	1450	450	1000	25	90	110
M81401500	(1465,00)	FTM1500	1500	1000	1000	300	1000	1600	450	1000	30	90	140
M81402000	(1775,00)	FTM2000	2000	1000	1000	300	1200	1800	450	1000	35	100	160
M81402500	(2215,00)	FTM2500	2500	1000	1000	300	1200	1800	450	1000	35	120	215
M81403000	(2395,00)	FTM3000	3000	1000	1000	300	1200	1800	450	1000	35	120	225

SELF-BALANCING TELESCOPIC FORKS

B·HANDLING

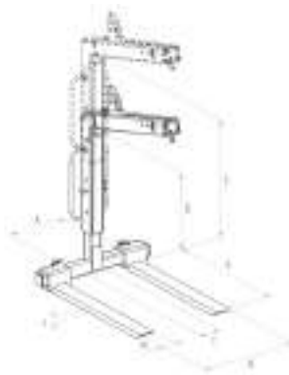
ITEM: M8150

Height adjustable goods handling telescopic forks with self-balancing feature.

Features:
- Low height steel structure

Advantages:
- Manual height adjustment via the telescopic stem, width adjustment by moving the forks

Included:
- Use and maintenance manual



Tech. Code	GR66 Euro	Model	Capacity kg	A mm	B mm	C mm	D mm	E mm	G mm	L mm	M mm	Weight kg
M81501500	(2270,00)	FTA1500	1500	950	1000	400	1100	1640	1000	30	90	140
M81502000	(2515,00)	FTA2000	2000	950	1000	400	1100	1640	1000	35	100	170
M81502500	(2700,00)	FTA2500	2500	950	1000	400	1100	1640	1000	35	120	220
M81503000	(2755,00)	FTA3000	3000	950	1000	400	1100	1640	1000	35	120	240

Indivisible package Suggested retail package - Unit price

FORK MOUNTED HOOKS

ITEM: M8160

Hook attachment, single fork, can be placed anywhere on the fork.

Features:
- Body and components made of high quality steel
- Suitable for lifting and transporting parts using the swivel hook

Advantages:
- Safety mechanism that prevents the load from being released during lifting and handling
- Can be positioned anywhere on the fork

Supplied with:
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	Weight kg	Internal fork dimensions mm
M81602000	(520,00)	2000	11	160 x 60

FORK MOUNTED HOOKS

ITEM: M8170

Forklift hook attachment, two forks.

Features:
- Body and components made of high quality steel
- Suitable for lifting and transporting parts using the swivel hook

Advantages:
- Safety mechanism that prevents the load from being released during lifting and handling

Supplied with:
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	Weight kg
M81702000	(1135,00)	2000	27
M81705000	(1300,00)	5000	30

FORK MOUNTED HOOKS

ITEM: M8180

Forklift hook attachment, two forks.

Features:
- Body and components made of high quality steel
- Suitable for lifting and transporting parts using the swivel hook

Advantages:
- Safety mechanism that prevents the load from being released during lifting and handling
- Fixed position for continuous use

Supplied with:
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	Weight kg
M81802000	(795,00)	2000	30
M81805000	(1090,00)	5000	35

MANUAL CLAMPS FOR 200 LITERS

B·HANDLINGS NEW

ITEM: M7060

Characteristics:
- Applicable to forklift forks
- Works automatically both in the gripping and in the releasing phase
- Safety chain to secure the equipment to the forklift

Tech. Code	GR66 Euro	Model	Capacity kg	Length mm	Width mm	Height mm	Fork dimensions max mm	Weight kg
M7060300	(1.585,00)	PF200	300	1220	670	200	135 x 45	50

MANUAL CLAMP FOR 200 LITERS DRUM TILT

B·HANDLINGS NEW

CE

ITEM: M7065

Characteristics:
- Applicable to forklift forks
- Allows you to flip the trunks from vertical to horizontal and vice versa
- The transport of the drums takes place in a horizontal position
- All operations are carried out with the operator on board the forklift

Tech. Code	GR66 Euro	Model	Capacity kg	Length mm	Width mm	Height mm	Fork dimensions max. mm	Weight kg
M7065300	(5.850,00)	PRF200	300	2110	612	470	145 x 45	140

CRANES FORKABLE WITH FORKLIFT

B·HANDLINGS NEW

CE

ITEM: M8210

Cranes forkable with forklift.

Characteristics:
- High quality steel body and components
- Suitable for lifting and transporting parts using a hook

Benefits:
- Fixed positioning for continuous use
- Locking bracket for fast and safe application on the forks
- 360° rotatable hook

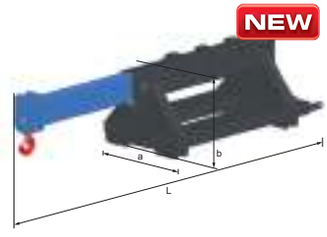
Equipment:
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	L mm	A mm	B mm	Section max mm	Weight kg
M82100500	(3710,00)	500	2180	540	460	100 x 45	153
M82101000	(4065,00)	1000	2180	550	500	125 x 45	160
M82101500	(5295,00)	1500	2200	570	550	150 x 60	213

CE

ITEM: M8220

NEW



Telescopic forkable cranes with forklift.

Characteristics:
- High quality steel body and components
- Suitable for lifting and transporting parts using a hook

Benefits:
- Fixed positioning for continuous use
- Locking bracket for fast and safe application on the forks
- 360° rotatable hook

Equipment:
- Use and maintenance manual

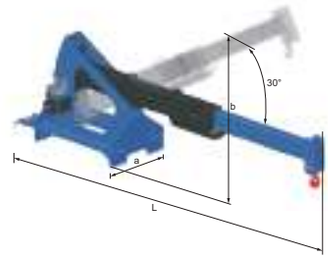
Tech. Code	GR66 Euro	Capacity kg	Length mm	Width mm	Height mm	Section max mm	Weight kg
M82200500	(4818,00)	500	2180	540	460	100 x 45	160
M82201000	(5255,00)	1000	2180	550	500	125 x 45	205
M82201500	(6390,00)	1500	2200	570	550	150 x 60	215

TELESCOPIC TILTING CRANES WITH FORKLIFT

B·HANDLINGS NEW

CE

ITEM: M8230



Telescopic tilting cranes, which can be forklifted with forklifts.

Characteristics:
- High quality steel body and components
- Suitable for lifting and transporting parts using a hook

Benefits:
- Fixed positioning for continuous use
- Locking bracket for fast and safe application on the forks
- 360° rotatable hook

Equipment:
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	Length mm	Width mm	Height mm	Section max mm	Weight kg
M82300500	(6695,00)	500	2680	540	460	100 x 45	265
M82301000	(7395,00)	1000	2680	540	500	125 x 45	310
M82301500	(8055,00)	1500	2700	550	550	150 x 60	350

Indivisible package Suggested retail package - Unit price

Tractel®

Fall arrest products and solutions for PROFESSIONALS

CE

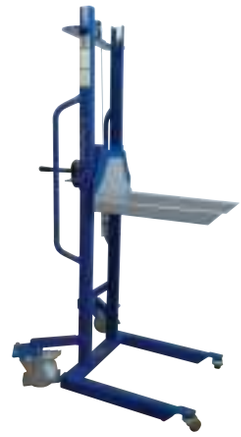
ITEM: M9003

Manual lifter model MEM.

Features:
- The forks are lifted and lowered via a winch
- 4 swivel wheels with brake
- Conformable side handles integrated in the reduced size structure

Advantages:
- Its small size allows it to be used in tight spaces that are difficult to reach
- Lightweight yet sturdy lifter, with exceptional manoeuvrability and flexibility of use

Supplied with:
- Specific platform for the work to be carried out
- Use and maintenance manual



Tech. Code	GR66 Euro	Capacity kg	Weight kg	Suitable for	Range mm	Description	Tool
M9003100FS	(2292,00)	100	76	General use	1500	Standard forks	
M9003100SP	(2348,00)	100	74	Reels	1500	Spindle	
M9003100SR	(2565,00)	100	79	Reels	1500	Spur with rollers	
M9003100CF	(2730,00)	100	92	Round items	1500	Front cradle	
M9003100CP	(3064,00)	50	86	Round items	1500	Pivoting cradle	
M9003100PV	(3111,00)	50	76	Glass	1500	Glass holder	
M9003100BG	(2534,00)	100	80	General use	1500	Arm with hook	
M9003100PN	(2451,00)	100	80	General use	1500	Platform 500x600 mm	
M9003100PR	(3069,00)	70	102	General use	1500	Roller platform 500x600 mm	

Available in stainless steel on request

BATTERY POWERED MINI LIFTERS

CE

ITEM: M9004

Battery powered lifter model MEB.

Features:
- The forks are lifted and lowered electrically by means of an electric worm screw actuator
- 2 swivel wheels with brake and front rollers
- Conformable side handles integrated in the reduced size structure
- Powered by 2 maintenance-free AGM 12V 40Ah batteries

Advantages:
- Its small size allows it to be used in tight spaces that are difficult to reach
- Lightweight yet sturdy lifter, with exceptional manoeuvrability and flexibility of use

Supplied with:
- Specific platform for the work to be carried out
- Use and maintenance manual

Tech. Code	GR66 Euro	Capacity kg	Weight kg	Suitable for	Range mm	Description	Tool
M9004100FS	(4285,00)	100	106	General use	1500	Standard forks	
M9004200FS	(5284,00)	200	112	General use	2000	Standard forks	
M9004100SP	(4326,00)	100	104	Reels	1500	Spindle	
M9004200SP	(5330,00)	200	110	Reels	2000	Spindle	
M9004100SR	(4491,00)	100	109	Reels	1500	Spur with rollers	
M9004200SR	(5490,00)	200	115	Reels	2000	Spur with rollers	
M9004100CF	(4717,00)	100	122	Round items	1500	Front cradle	
M9004200CF	(5717,00)	200	128	Round items	2000	Front cradle	
M9004100CP	(5037,00)	100	116	Round items	1500	Pivoting cradle	
M9004200CP	(6046,00)	200	122	Round items	2000	Pivoting Cradle	
M9004100PV	(5099,00)	100	106	Glass	1500	Glass holder	
M9004200PV	(6077,00)	200	112	Glass	2000	Glass holder	
M9004100BG	(4737,00)	100	110	General use	1500	Arm with hook	
M9004200BG	(5731,00)	200	116	General use	2000	Arm with hook	
M9004100PN	(4419,00)	100	110	General use	1500	Platform 500x600 mm	
M9004200PN	(5418,00)	200	116	General use	2000	Platform 500x600 mm	
M9004100PR	(5068,00)	100	132	General use	1500	Roller platform 500x600 mm	
M9004200PR	(6077,00)	200	138	General use	2000	Roller platform 500x600 mm	
M9004100PS	(6901,00)	100	149	General use	1500	Ball platform 500x600 mm	
M9004200PS	(7905,00)	200	155	General use	2000	Ball platform 500x600 mm	

Available in stainless steel on request

MANUAL LIFTERS

ITEM: M9002

Manual lifters CM model.

Features:
- The lifting of the forks is done by a manual foot pump and the descent is regulated by a special lever
- 2 pivoting wheels, parking brake and front rollers
- Comfortable side handles integrated in the reduced size of the structure and central handle
- Removable platform above the forks to ease picking operations

Advantages:
- The reduced overall dimensions allow it to be used in tight spaces that are difficult to reach
- Lightweight yet sturdy lift, with exceptional maneuverability and flexibility of use

Supplied with:
- Use and maintenance manual

Tech. Code		M90021200	M90021500
GR66	Euro	(1090,00)	(1226,00)
Model		CM 1200	CM 1500
Load capacity	kg	400	400
min/max leverage	mm	85 - 1200	85 - 1500
Overall dimension	mm	1035 x 600 x 1425	1035 x 600 x 1625
Dimension single fork	mm	650 x 110 x 50	650 x 110 x 50
Distance between forks	mm	320	320
Platform	mm	650 x 550	650 x 550
Weight	kg	81	90

BATTERY POWERED LIFTER

ITEM: M9006

Battery powered lifter model CB

Features:
- The forks are lifted and lowered via a handy puch button control unit located near the push handle
- The lifting speed with full load is 80 mm/sec
- 2 swivel wheels brake and front rollers
- Conformable side handles integrated in the reduced size structure and central handle
- Removable platform above the forks to make picking easier.

Advantages:
- Its small size allows it to be used in tight spaces that are difficult to reach
- Lightweight yet sturdy lifter, with exceptional manoeuvrability and flexibility of use

Supplied with:
- Use and maintenance manual

Tech. Code		M9006400
GR66	Euro	(3543,00)
Model		CB 400
Capacity	kg	400
Lift height min/max	mm	85 - 1200
Overall dimensions	mm	1100 x 600 x 1425
Single fork dimensions	mm	650 x 110 x 50
Distance between forks	mm	320
Platform	mm	650 x 550
Weight	kg	125

MANUAL LIFTERS WITH FIXED FORKS

B·HANDLING

ITEM: M9007

Manual lifters with fixed forks EM model

Features:
- The lifting of the forks is done by a manual pump, while the descent is regulated by the lever on the rudder
- Reinforced frame to ensure maximum safety even when used at full load
- 2 pivoting wheels, parking brake and polyurethane front rollers

Advantages:
- Great ease of maneuvering and positioning of the trolley thanks to the comfortable side handles
- Light yet sturdy, with exceptional maneuverability and flexibility of use

Supplied with:
- Use and maintenance manual

Tech. Code		M900705001600	M900710001600	M900710003000
GR66	Euro	(1703,00)	(1841,00)	(3025,00)
Model		EM 500/1600	EM 1000/1600	EM 1000/3000
Load capacity	kg	500	1000	1000
min/max leverage	mm	90 - 1600	90 - 1600	85 - 3000
Overall dimension	mm	1560 x 700 x 2000	1560 x 700 x 2000	1668 x 740 x 2060
Dimension single fork	mm	1050 x 150 x 50	1140 x 160 x 55	1140 x 160 x 55
Distance between forks	mm	350	350	350
Weight	kg	145	230	310

BATTERY-POWERED LIFTERS WITH FIXED FORKS

B·HANDLING

ITEM: M9009

Battery powered lifters EB model

Features:
- Lifting takes place via the up and down commands located on the dashboard, where there is also the emergency button
- Reinforced frame to ensure maximum safety even when used at full load
- 2 pivoting wheels, parking brake and polyurethane front rollers

Advantages:
- Great ease of maneuvering and positioning of the trolley thanks to the ergonomic rudder and the comfortable side handles
- Light and at the same time robust, with exceptional maneuverability and flexibility of use

Supplied with:
- Use and maintenance manual

Tech. Code		M900910001600	M900910003000
GR66	Euro	(5886,00)	(6367,00)
Model		EB 1000/1600	EB 1000/3000
Load capacity	kg	1000	1000
min/max leverage	mm	85 - 1600	85 - 3000
Overall dimension	mm	1750 x 800 x 2020	1750 x 800 x 2080
Dimension single fork	mm	1140 x 180 x 55	1140 x 180 x 55
Distance between forks	mm	350	350
Weight	kg	300	466

BALLASTED REVOLVING CRANES 360 ° WITH MANUAL EXTENSION

B·HANDLING 3

ITEM: M9410

Features:
- Lifting with double delivery manual pump that allows fast lifting
- High-capacity pivoting wheels with high smoothness with bumper supports and parking brakes
- 360 ° rotatable
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

Advantages:
- Suitable for front loading directly into the mouth of work center load
- Reduces operator effort thanks to the hydraulic cylinder of the larger pump
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

Tech. Code		M9410200	M9410500	M9431PRL
GR66	Euro	(4437,00)	(4619,00)	(434,00)
Load capacity	kg	200 - 170 - 150 - 130	500 - 420 - 370 - 320	Extension
Cantilever	mm	365 - 500 - 635 - 770	365 - 500 - 635 - 770	-
A max	mm	2500	2500	-
Capacity with extension	mm	92 - 85 - 78 - 71	220 - 200 - 180 - 160	-
Cantilever with extension	mm	865 - 1000 - 1135 - 1270	865 - 1000 - 1135 - 1270	-
A max with extension	mm	2850	2850	-
Weight	kg	400	600	-

BALLASTED REVOLVING CRANES 360° WITH MANUAL EXTENSION

B·HANDLING 3

ITEM: M9415

Features:
- Electric lifting by means of a push-button panel that maneuvers the up and down of the arm
- High-capacity pivoting wheels with high smoothness with bumper supports and parking brakes
- 360 ° rotatable
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

Advantages:
- Suitable for front loading directly into the mouth of work center load
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

Tech. Code		M9415200	M9415500	M9430BAT	M9431PRL
GR66	Euro	(6321,00)	(6504,00)	(297,00)	(434,00)
Load capacity	kg	200 - 170 - 150 - 130	500 - 420 - 370 - 320	Battery	Extension
Cantilever	mm	365 - 500 - 635 - 770	365 - 500 - 635 - 770	-	-
A max	mm	2500	2500	-	-
Capacity with extension	kg	92 - 85 - 78 - 71	220 - 200 - 180 - 160	-	-
Cantilever with extension	mm	865 - 1000 - 1135 - 1270	865 - 1000 - 1135 - 1270	-	-
A max with extension	mm	2850	2850	-	-
Weight	kg	440	640	-	-

M9415200 Equipment not subject to periodic visits by certification bodies for certification of use and maintenance status.

BALLASTED REVOLVING CRANES WITH PROGRESSIVE LIFTING AND MANUAL EXTENSION

ITEM: M9420

Features:
- Electric lifting by proportional joystick that maneuvers the lifting and lowering of the arm
- High-capacity pivoting wheels with high smoothness with bumper supports and parking brakes
- 360 ° rotatable
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

Advantages:
- Suitable for front loading directly into the mouth of work center load
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

Tech. Code		M9420200	M9420500	M9430BAT	M9431PRL
GR66	Euro	(7598,00)	(7779,00)	(297,00)	(434,00)
Load capacity	kg	200 - 170 - 150 - 130	500 - 420 - 370 - 320	Battery	Extension
Cantilever	mm	365 - 500 - 635 - 770	365 - 500 - 635 - 770	-	-
A max	mm	2500	2500	-	-
Capacity with extension	kg	92 - 85 - 78 - 71	220 - 200 - 180 - 160	-	-
Cantilever with extension	mm	865 - 1000 - 1135 - 1270	865 - 1000 - 1135 - 1270	-	-
A max with extension	mm	2850	2850	-	-
Weight	kg	440	640	-	-

M9420200 Equipment not subject to periodic visits by certification bodies for certification of use and maintenance status.

BALLASTED REVOLVING CRANES WITH ELECTRIC LIFTING AND EXTENSION

ITEM: M9425

Features:
- Lifting and electric extension through a comfortable joystick that maneuvers the ascent, the descent and extension of the boom
- High-capacity pivoting wheels with high smoothness with bumper supports and parking brakes
- 360° rotatable
- Continuously extendable lifting arm over the entire length
- Descent of the load regulated by handwheel incorporated in the pump

Advantages:
- Suitable for frontal loading directly into the loading mouth of the machining centre
- Extremely versatile thanks to its small size which allows it to reach even narrow spaces

Tech. Code		M9425200	M9425500	M9430BAT	M9431PRL
GR66	Euro	(8994,00)	(9178,00)	(297,00)	(434,00)
Load capacity	kg	200 - 80	500 - 200	Battery	Extension
Cantilever	mm	410 - 1410	410 - 1410	-	-
A max	mm	2258	2258	-	-
Capacity with extension	kg	40	100	-	-
Cantilever with extension	mm	1930	1930	-	-
A max with extension	mm	2600	2600	-	-
Weight	kg	480	680	-	-

M9425200 Equipment not subject to periodic visits by certification bodies for certification of use and maintenance status.

BALLASTED CANTILEVERED CRANES WITH MANUAL EXTENSION

B·HANDLING 3

ITEM: M9435

Features:
- Lifting with double delivery manual pump that allows fast lifting
- Equipped with two fixed wheels and two fully loaded steering wheels connected to the guide rudder, to allow extreme maneuverability even when fully loaded
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

Advantages:
- Suitable for front loading directly into the mouth of work center load
- Reduces operator effort thanks to the hydraulic cylinder of the larger pump
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

Tech. Code		M94351000	M9455PRL
GR66	Euro	(6077,00)	(558,00)
Load capacity	kg	1000 - 835 - 670 - 500	Extension
Cantilever	mm	650 - 850 - 1050 - 1250	-
A max	mm	2640	-
Capacity with extension	mm	450 - 390 - 325 - 275	-
Cantilever with extension	mm	1400 - 1600 - 1800 - 2000	-
A max with extension	mm	3030	-
Weight	kg	1150	-

ELECTRIC BALLASTED OVERHANGING CRANES WITH MANUAL EXTENSION

B·HANDLING 3

ITEM: M9440

Features:
- Electric lifting by means of a push-button panel that maneuvers the up and down of the arm
- Equipped with two fixed wheels and two fully loaded steering wheels connected to the steering drawbar, to allow extreme maneuverability even when fully loaded
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

Advantages:
- Suitable for front loading directly into the mouth of work center load
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

Tech. Code		M94401000	M9430BAT	M9455PRL
GR66	Euro	(8630,00)	(297,00)	(558,00)
Load capacity	kg	1000 - 835 - 670 - 500	Battery	Extension
Cantilever	mm	650 - 850 - 1050 - 1250	-	-
A max	mm	2640	-	-
Capacity with extension	kg	450 - 390 - 325 - 275	-	-
Cantilever with extension	mm	1400 - 1600 - 1800 - 2000	-	-
A max with extension	mm	3030	-	-
Weight	kg	1190	-	-

Indivisible package Suggested retail package - Unit price

ELECTRIC BALLASTED CANTILEVER CRANES WITH PROGRESSIVE LIFTING AND MANUAL EXTENSION

B·HANDLING

ITEM: M9445

Features:
- Electric lifting by means of a proportional joystick that maneuvers the lifting and lowering of the arm
- Equipped with two fixed wheels and two fully loaded steering wheels connected to the guide rudder, to allow extreme maneuverability even when fully loaded
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

Advantages:
- Suitable for front loading directly into the mouth of work center load
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

Tech. Code		M94451000	M9430BAT	M9455PRL
GR66	Euro	(9846,00)	(297,00)	(558,00)
Load capacity	kg	1000 - 835 - 670 - 500	Battery	Extension
Cantilever	mm	650 - 850 - 1050 - 1250	-	-
A max	mm	2640	-	-
Capacity with extension	kg	450 - 390 - 325 - 275	-	-
Cantilever with extension	mm	1400 - 1600 - 1800 - 2000	-	-
A max with extension	mm	3030	-	-
Weight	kg	1190	-	-

CANTILEVER CRANE WITH LIFTING AND ELECTRIC EXTENSION

B·HANDLING

ITEM: M9450

Features:
- Electric lifting and extension through joystick control that maneuvers the ascent, the descent and extension of the arm
- Equipped with two fixed wheels and two fully loaded steering wheels connected to the guide rudder to allow extreme maneuverability even when fully loaded
- Continuously extendable lifting arm over the entire length
- Load descent adjusted by means of a handwheel incorporated in the pump

Advantages:
- Suitable for front loading directly into the mouth of work center load
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

Tech. Code		M94501000	M9430BAT	M9455PRL
GR66	Euro	(11183,00)	(297,00)	(558,00)
Load capacity	kg	1000 - 500	Battery	Extension
Cantilever	mm	650 - 1250	-	-
A max	mm	2670	-	-
Capacity with extension	mm	200	-	-
Cantilever with extension	mm	1400 - 2000	-	-
A max with extension	mm	3120	-	-
Weight	kg	1195	-	-

REVOLVING BALLASTED MOTORIZED CRANES 270° WITH ELECTRIC LIFTING AND EXTENSION

B·HANDLING 3

NEW

ITEM: M9456

Fully electric crane equipped with motorized traction, usable in all industrial sectors.

Features:
- Electric lifting controlled by proportional levers
- Manual rotation at 270°
- Electric extension with 1430 mm overhang, extendable up to 1930 mm
- Motorized traction driven by an ergonomic rudder equipped with horn and anti-crushing buttons
- Hare/Turtle button which allows 2-speed driving

Advantages:
- Suitable for front loading
- System for limiting the maximum permitted load
- Allow handling with the suspended load
- Crane with the smallest dimensions in its category
- Exceptional steering angle that allows it to move or rotate in limited spaces
- Transportable by forklift

Tech. Code		M9456500	M9457BAT	M9457PRL
GR66	Euro	18500,00	(450,00)	(520,00)
Capacity	kg	500 - 200	Battery	Extension
Cantilever	mm	430 - 1430	-	-
A max	mm	2261	-	-
Capacity with extension	kg	100	-	-
Cantilever with extension	mm	1930	-	-
A max with extension	mm	2725	-	-
Speed	km/h	1,5/3	-	-
Weight with ballast	kg	910	-	-

BALLASTED CANTILEVER MOTORIZED CRANES WITH ELECTRIC LIFTING AND EXTRACTION

B·HANDLING 3

NEW

ITEM: M9458

Fully electric crane equipped with motorized traction, usable in all industrial sectors.

Features:
- Electric lifting controlled by proportional levers
- Electric extension with overhang of 1653 mm, extendable up to 2155 mm
- Motorized traction driven by an ergonomic rudder equipped with horn and anti-crushing buttons
- Hare/Turtle button which allows 2-speed driving

Advantages:
- Suitable for front loading
- System for limiting the maximum permitted load
- Allow handling with the suspended load
- Crane with the smallest dimensions in its category
- Exceptional steering angle that allows it to move or rotate in limited spaces
- Transportable by forklift

Tech. Code		M94581000	M9459BAT	M9459PRL
GR66	Euro	20300,00	(500,00)	(567,00)
Capacity	kg	1000 - 500	Battery	Extension
Cantilever	mm	635 - 1653	-	-
A max	mm	2911	-	-
Capacity with extension	kg	200	-	-
Cantilever with extension	mm	2155	-	-
A max with extension	mm	3349	-	-
Speed	km/h	1,5/3	-	-
Weight with ballast	kg	1600	-	-

Indivisible package Suggested retail package - Unit price

MOTORIZED CRANES ROTATING AT 210 ° BALLASTED

B·HANDLING

ITEM: M9460

Fully electric crane equipped with motorized traction, usable in all industrial sectors.
- Electric lifting controlled by proportional levers
- Electric rotation at 210 °
- Electric extension with overhang up to 2 meters
- Motorized traction driven by ergonomic tiller equipped with horn and anti-crushing buttons
- Hare / Turtle button that allows driving at 2 speeds

Advantages:
- Suitable for front loading
- Maximum permissible load limitation system
- Allow handling with suspended load
- Crane with the smallest dimensions in its category
- Exceptional steering angle that a
- Transportable by forklift

Tech. Code		M9460200	M9480BAT
GR66	Euro	(27000,00)	(477,00)
Load capacity	Kg	200 - 80	Battery
Cantilever	mm	583 - 2050	-
A max	mm	3700	-
Speed	Km/h	1,5/3	-
Weight	kg	800	-

MOTORIZED CRANES ROTATING AT 210° BALLASTED

B·HANDLING

ITEM: M9465

Fully electric crane equipped with motorized traction, usable in all industrial sectors.
Features:
- Electric lifting controlled by proportional levers
- Electric rotation at 210 °
- Electric extension with overhang up to 2 meters
- Motorized traction driven by ergonomic tiller equipped with horn and anti- crushing buttons
- Hare / Turtle button that allows driving at 2 speeds

Advantages:
- Suitable for front loading
- Maximum permissible load limitation system
- Allow handling with suspended load
- Crane with the smallest dimensions in its category
- Exceptional steering angle that allows it to move or to rotate in confined spaces
- Transportable by forklift

Tech. Code		M9465500	M9480BAT
GR66	Euro	(30000,00)	(477,00)
Load capacity	kg	500 - 200	Battery
Cantilever	mm	487 - 1963	-
A max	mm	3700	-
Speed	km/h	1,5/3	-
Weight	kg	1100	-

ITEM: M9470

Fully electric crane equipped with motorized traction, usable in all industrial sectors.

Features:
- Electric lifting controlled by proportional levers
- Electric extension with overhang up to 3 meters
- Motorized traction driven by ergonomic tiller equipped with horn and anti-crushing buttons
- Hare / Turtle button that allows driving at 2 speeds

Advantages:
- Suitable for front loading
- Maximum permissible load limitation system
- Allow handling with suspended load
- Crane with the smallest dimensions in its category
- Exceptional steering angle that allows it to move or to rotate in confined spaces
- Transportable by forklift

Tech. Code		M947010002	M947010003	M9485BAT
GR66	Euro	(29000,00)	(33500,00)	(596,00)
Load capacity	kg	1000 - 370	1000 - 250	Battery
Cantilever	mm	466 - 2216	466 - 3096	-
A max	mm	4500	4500	-
Speed	km/h	1,5/3	1,5/3	-
Weight	kg	1600	1600	-

ITEM: M9475

Fully electric crane equipped with motorized traction, usable in all industrial sectors.
Features:
- Electric lifting controlled by proportional levers or by proportional radio control
- Electric extension with overhang up to 3 meters
- Motorized traction driven by ergonomic tiller equipped with horn and anti-crushing buttons
- Hare / Turtle button that allows driving at 2 speeds

Advantages:
- Suitable for front loading
- Maximum permissible load limitation system
- Allow handling with suspended load
- Crane with the smallest dimensions in its category
- Exceptional steering angle that allows it to move or to rotate in confined spaces
- Transportable by forklift

Tech. Code		M94752000	M94752000R*	M9490BAT
GR66	Euro	(50000,00)	(52000,00)	(953,00)
Load capacity	kg	2000 - 500	2000 - 500	Battery
Cantilever	mm	0 - 3000	0 - 3000	-
A max	mm	5500	5500	-
Speed	km/h	1,5/3	1,5/3	-
Radio control		-	YES	-
Weight	kg	1900	1900	-

* version with proportional radio control that manages the lifting and advancing of the arm

MOBILE ELEVATING PLATFORMS

B·HANDLING

ITEM: M9210

Features:
- Solid steel painted structure
- Foot pump with pump cylinder and piston rod of hard chrome
- 2 fixed wheels - 2 swivel wheels with brake
- Manual lowering lever control

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M9210500	M9210500L	M92101000	M92101000L
GR66	Euro	(824,00)	(1298,00)	(1381,00)	(2625,00)
Load capacity	Kg	500	500	1000	1000
Platform	mm	815 x 500	1600 x 810	1.016 x 510	2035 x 750
Min- Max height	mm	290 - 870	286 - 915	380 - 990	350 - 1360
Weight	Kg	84	154	122	198

MOBILE ELEVATING PLATFORMS

B·HANDLING

ITEM: M9220

Features:
- Solid steel painted structure
- Foot pump with pump and cylinder and piston rod of hard chrome
- 2 fixed wheels - 2 swivel wheels with brake
- Manual lowering lever control

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M9220350	M9225700
GR66	Euro	(914,00)	(1771,00)
Load capacity	Kg	350	700
Platform	mm	905 x 512	1220 x 610
Min-Max height	mm	370 - 1300	445 - 1500
Weight	Kg	113	195

MOBILE ELEVATING PLATFORMS WITH ROLLERS

B·HANDLING

ITEM: M9250

Features:
- Solid steel painted structure
- Foot pump with pump cylinder and piston rod of hard chrome
- 2 fixed wheels - 2 swivel wheels with brake
- Manual lowering lever control
- Roller with mechanical stops on both ends to move loads easily along the table

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M92500500	M92500750
GR66	Euro	(1336,00)	(1908,00)
Load capacity	kg	500	750
Platform	mm	815 x 500	1100 x 510
Min- Max height	mm	350 - 930	480 - 1050
Weight	kg	100	139

Versions with rollers available on request.

MOBILE ELEVATING PLATFORMS WITH ROLLERS

B·HANDLING 3

ITEM: M9255

Features:
- Solid steel painted structure
- Foot pump with pump cylinder and piston rod of hard chrome
- 2 fixed wheels - 2 swivel wheels with brake
- Manual lowering lever control
- Roller with mechanical stops on both ends to move loads easily along the table

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M9255350	M9255700
GR66	Euro	(1424,00)	(2573,00)
Capacity	kg	350	700
Platform	mm	905 x 512	1220 x 610
Min-max height	mm	420 - 1350	495 - 1550
Weight	kg	127	205

Versions with rollers available on request.

ELECTRIC ELEVATING PLATFORMS

B·HANDLING 3

ITEM: M9230

Features:
- Solid steel painted structure
- Operations of up and down are activated through the relevant buttons
- An excess flow valve controls the speed of descent of different loads

Supplied with:
- Instruction manual of use and maintenance
- Perimeter protection placed under the lifting platform, if during descent there are impediments the table is stopped

Tech. Code		M92300500	M92301000	M92302000	M92303000
GR66	Euro	(2916,00)	(3297,00)	(3747,00)	(4360,00)
Load capacity	kg	500	1000	2000	3000
Lifting time	sec.	15	25	40	26
Load upward speed	mm/s	55	40	22	30
Load downward speed	mm/s	40	35	33	40
Electric motor	kW	0,75 three - phase	0,75 three - phase	0,75 three - phase	0,75 three - phase
Dimension	mm	800 x 1.300	800 x 1.300	800 x 1.300	800 x 1.300
Min- Max height	mm	190 - 1010	190 - 1010	190 - 1010	220 - 1020
Weight	Kg	160	220	280	320

Versions with rollers available on request.

ITEM: M9235

Features:
- Solid steel painted structure
- Operations of up and down are activated through the relevant buttons
- An excess flow valve controls the speed of descent of different loads

Supplied with:
- Instruction manual of use and maintenance
- Perimeter protection placed under the lifting platform, if during descent there are impediments the table is stopped

Tech. Code		M92351000
GR66	Euro	(4261,00)
Load capacity	kg	1000
Lifting time	sec.	18
Load upward speed	mm/s	42
Load downward speed	mm/s	48
Electric motor	kW	0,75
Dimension	mm	1140 x 1450
Min- Max height	mm	80 - 760
Weight	Kg	235

Versions with rollers available on request.

MOBILE ELECTRIC ELEVATING PLATFORMS

B·HANDLING

ITEM: M9260

Features:
- Solid steel painted structure
- Operations of up and dow are activated through the relevant buttons
- An excess flow valve controls the speed of descent of different loads

Supplied with:
- Instruction manual of use and maintenance
- Perimeter protection placed under the lifting platform; if there are any obstacles during the descent, the table locks automatically

Tech. Code		M92601000
GR66	Euro	(4153,00)
Load capacity	Kg	1000
Lifting time	sec.	18
Load. upward speed	mm/s	42
Load. downward speed	mm/s	48
Electric motor	kW	0,75 Trifase
Dimension	mm	1140 x 1450
Min- Max height	mm	82 - 760
Weight	kg	245

Versions with rollers available on request.

MOBILE ELECTRIC ELEVATING PLATFORMS

B·HANDLING

ITEM: M9240

Features:
- Solid steel painted structure
- Operations of up and down are activated through the relevant buttons
- An excess flow valve controls the speed of descent of different loads

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M92400500
GR66	Euro	(3611,00)
Load capacity	kg	500
Lifting time	mm	1010 x 520
Min - Max height	mm	440 - 1025
Weight	kg	157

Versions with rollers available on request.

MOBILE ELECTRIC ELEVATING PLATFORMS

B·HANDLING

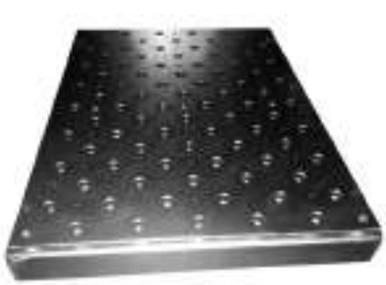
ITEM: M9245

Features:
- Solid steel painted structure
- Operations of up and down are activated through the relevant buttons
- An excess flow valve controls the speed of descent of different loads

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M92450350
GR66	Euro	(3679,00)
Load capacity	kg	350
Lifting time	mm	910 x 500
Min - Max height	mm	370 - 1300
Weight	kg	142

Versions with rollers available on request.



ELECTRIC ELEVATING PLATFORMS

B·HANDLING 3

NEW

ITEM: M9270

Features:
- Solid painted steel structure
- Up and down operation activated through the relative buttons
- A flow limiting valve controls the descent speed at differentiated load

Supplied with:
- Use and maintenance manual
- Perimeter protection placed under the lifting platform; if during the descent there are impediments, the table locks automatically

Tech. Code		M927010001610	M927010001785	M927010001710	M927010002085	M927010002010
GR66	Euro	3800,00	4085,00	4275,00	4560,00	4845,00
Capacity	kg	1000	1000	1000	1000	1000
Platform	mm	1600 x 1000	1700 x 850	1700 x 1000	2000 x 850	2000 x 1000
Base	mm	1240 x 640	1580 x 640	1580 x 640	1600 x 785	1580 x 640
Height min-max	mm	205-1000	240-1300	240-1300	250-1300	240-1300
Ascent with/without weight	sec.	20/25	30/35	30/35	30/35	30/35
Motor	kW	1,1	1,1	1,1	1,1	1,1
Weight	kg	186	200	210	212	223

Tech. Code		M927020001610	M927020001785	M927020001710	M927020002085	M927020002010
GR66	Euro	4370,00	4655,00	5035,00	5225,00	5510,00
Capacity	kg	2000	2000	2000	2000	2000
Platform	mm	1600 x 1000	1700 x 850	1700 x 1000	2000 x 850	2000 x 1000
Base	mm	1220 x 785	1600 x 785	1600 x 785	1600 x 785	1600 x 785
Height min-max	mm	230-1050	250-1300	250-1300	250-1300	250-1300
Ascent with/without weight	sec.	20/25	25/35	25/35	25/35	25/35
Motor	kW	2,2	2,2	2,2	2,2	2,2
Weight	kg	268	289	300	300	315

Tech. Code		M927040001712	M927040002010	M927040002012	M927040002013	M927040002210	M927040002212
GR66	Euro	5700,00	6080,00	6460,00	6650,00	6840,00	7220,00
Capacity	kg	4000	4000	4000	4000	4000	4000
Platform	mm	1700 x 1200	2000 x 1000	2000 x 1200	2000 x 1300	2200 x 1000	2200 x 1200
Base	mm	1600 x 900	2000 x 900	1600 x 900	2000 x 900	2000 x 900	2000 x 900
Height min-max	mm	240-1100	300-1400	240-1100	300-1400	300-1400	300-1400
Ascent with/without weight	sec.	30/40	45/50	30/40	45/50	45/50	45/50
Motor	kW	2,2	2,2	2,2	2,2	2,2	2,2
Weight	kg	375	405	470	490	480	505

DOUBLE SCISSORS ELECTRIC ELEVATING PLATFORMS

B·HANDLING 3

NEW

ITEM: M9275

Features:
- Solid painted steel structure
- Up and down operation activated through the relative buttons
- A flow limiting valve controls the descent speed at differentiated load

Supplied with:
- Use and maintenance manual
- Perimeter protection placed under the lifting platform; if there are any impediments during the descent, the board will automatically lock.

Tech. Code		M92751000	M92752000	M92754000
GR66	Euro	5320,00	5890,00	7600,00
Capacity	kg	1000	2000	4000
Platform	mm	1300 x 820	1300 x 850	1700 x 1200
Base	mm	1240 x 640	1220 x 785	1600 x 900
Height min-max	mm	305-1780	360-1780	400-2050
Ascent with/without weight	sec.	35/45	35/45	55/65
Motor	kW	2,2	2,2	2,2
Weight	kg	210	295	520

Indivisible package Suggested retail package - Unit price

ELECTRIC TILTING PLATFORMS

B·HANDLING

ITEM: M9265

Features:
- Solid steel painted structure
- Up and down operations activated through the relevant buttons
- Electrically tiltable to any position
- An excess flow valve controls the speed of descent of different loads

Equipment:
- Use and maintenance manual
- Perimeter protection placed under the lifting platform; if there are any obstacles during the descent, the table locks automatically

Tech. Code		M92650750
GR66	Euro	(6359,00)
Load capacity	kg	750
Lifting time	sec.	8
Max inclination	Degrees	48
Electric motor	kW	1,1 Trifase
Dimension	mm	800 x 1300
Min- Max height	mm	235 - 1055
Weight	kg	285

Version with rollers available on request.

HAND PALLET TRUCKS

B·HANDLING

ITEM: M9008

Features:
- Sturdy painted steel structure
- Switch lever featuring good ergonomic grip for easy operation. 3-position control: down - neutral - up.
- Cast iron wheels, thermoplastic polymer coating.

Supplied with:
- Instruction manual of use and maintenance
- Handlebar is delivered as not assembled.

Tech. Code		M9008250080	M90082000200
GR66	Euro	(750,00)	(1100,00)
Load capacity	kg	2500	2000
Fork Dimension	mm	800 x 520	2000 x 540
Total length	mm	1200	2400
Lift H	mm	85 - 200	85 - 200
Steering angle		220°	220°
Total height	mm	1230	1230
Rolls dimensions	mm	82 x 99 single	82 x 99 single
Weight	kg	62	120

ITEM: M9010

Features:
- Sturdy painted steel structure
- Switch lever featuring good ergonomic grip for easy operation. 3-position control: down - neutral - up.
- Cast iron wheels, thermoplastic polymer coating.

Supplied with:
- Instruction manual of use and maintenance
- Handlebar is delivered as not assembled.

Tech. Code		M90102500
GR66	Euro	490,00
Load capacity	Kg	2500
Forks	mm	1.150 x 520
Total length	mm	1550
Lift H	mm	85 - 200
Steering angle		220°
Total height	mm	1230
Rolls dimensions	mm	82 x 70 double
Weight	kg	72

SCALE PALLET TRUCKS

B·HANDLING 3

ITEM: M9114

Features:
- Stainless steel, oven-fire painted structure
- Switch level featuring good ergnomic grip for easy operation, 3 position control: down - neutral - up
- steering wheels and double loading polyurethane rollers.
- 4 shear-beam aluminum-based load cells
- 25 mm, backlit LCD display, 6 high-contrast digits which are clearly visible even in poor lighting conditions
- Waterproof membrane keyboard with 5 functional, easy to use and intuitive keys
- Configuration, calibration and diagnostics from keyboard
- Power supply through 4 AA-type battery set, also rechargeable
- Operating time is of 40 hours of continuous use
- Programmable auto switch-off function, battery level indication
- High resolution weighing x 10
- Function of zeroing, tare, net/gross, lb/kg conversion, accumulation, formulation +/- checkweighing, counting.

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M91142000
GR66	Euro	(1700,00)
Capacity	kg	2000
Precision	kg	+/- 0,2
Fork Dimension	mm	1150 x 550
Lift H	mm	83 - 200
Rolls dimensions	mm	74 x 70 double
Weight	kg	127

SCALE PALLET TRUCKS WITH PRINTER

B·HANDLING 3

ITEM: M9115

Features:
- Solid structure in steel and oven-fire painted structure
- Switch lever feauturing good ergnomic grip, for easy operation, 3 position control down - neutral - up
- Steering wheels and double loading polyurethane rollers.
- 4 shear-beam, IP67-protection load cells
- Weight indicator in IP65 stainless steel water proof case, resistant to harsh and corrosive environments.
- 25 mm, backlit LCD display, clearly visible even in poor lighting conditions.
- Waterproof membrane keyboard with 17 functional, easy to use and intuitive keys
- Configuration, calibration and diagnostics from keyboard
- Power supply through extractable rechargeable battery
- Operating time is of about 80 hours of continuous use or one month with the typical non continuous use thanks to its programmable auto switch-off function
- Function of zeroing, tare, net/gross, lb/kg conversion, accumulation, percentage weighing, counting
- Max resolution of 1.500.000 divisions

Supplied with:
- Instruction manual of use and maintenance
- Equipped with 230Vac 50Hz battery charger (recharging time is about 8 hours).
- Configurable RS23332/C port for connection to a printer. PC, modem radio or portable terminal.
- Fitted with thermal printer with IR input for remote control management
- On request CE-M approval for weighing for leagal use

Tech. Code		M91152000
GR66	Euro	(2500,00)
Capacity	kg	2000
Precision	Kg	+/- 2
Fork Dimension	mm	1150 x 550
Lift H	mm	85 - 200
Rolls dimensions	mm	74 x 70 double
Weight	kg	127

AGILE PLUS SEMI-ELECTRIC PALLET TRUCKS

ITEM: AGILE PLUS

Innovative motorized pallet trucks that combines electric and manual funcions for a comfortable usability.

Features:
- Compact and light, simple and easy to use
- Two large diameter wheels (200 mm)
- Long life 36V battery
- With switch to activate manual movements in case of low battery

Advantages:
- Ideal solution for effortless handling of any pallets
- Great stability and excellent for all applications
- The fastest in its class

Supplied with :
- Use and maintenance manual

Tech. Code		M91201250
GR66	Euro	(2520,00)
Capacity	kg	1200
Model		AGILE PLUS
Fork length	mm	1150
Fork width	mm	525
Weight	kg	88

ELECTRIC PALLET TRUCKS EX15L

NEW

ITEM: EX 15L

Pallet trucks with electric traction and lifting, the ideal solution for light logistics operations.

- Easy to use, compact dimensions and low weight
- Powerful removable lithium battery
- Emergency button and electric brake as standard
- Easy and fast handling of pallets
- Fast recharging thanks to the removable and replaceable lithium battery

Tech. Code		M91221500
GR66	Euro	(3.000,00)
Model		EX15L
Capacity	kg	1500
Fork size	mm	1150-560
Lift height	mm	115
Translation speed	km/h	4,5
Weight	kg	120

STACKER RX 10/16 EVO GEL 1000KG

NEW

ITEM: RX 10/16 EVO GEL

Complete and compact single mast stacker.

- Compact dimensions, ergonomic
- Powerful maintenance-free gel battery
- Ergonomic tiller with: accelerator, proportional control for forks, safety button, calcson, turtle button, display with hourmeter and battery indicator
- Safe and fast handling and lifting of pallets
- Convenient height-adjustable worktop
- Excellent for handling in confined spaces, because it can also be used with the rudder in a vertical position while operating in turtle mode

Tech. Code		M901110001600
GR66	Euro	(6.990,00)
Model		RX10/16 EVO GEL
Capacity	kg	1000
Fork dimension	mm	1050-560
Lift height	mm	1510
Post height	mm	1970
Weight	kg	371

STACKER GX12/29 EVO GEL

NEW

ITEM: GX 12/29 EVO GEL

Compact stacker

- Compact dimensions (800 mm wide), lateral drawbar, wide mast
- Powerful maintenance-free gel battery
- Ergonomic tiller with: accelerator, proportional control for forks, safety button, calcson, turtle button, display with hour meter and mast battery indicator with height indicator
- Safe and fast handling and lifting of pallets, excellent visibility
- Convenient height-adjustable worktop
- Excellent for handling in confined spaces, because it can also be used with the rudder in a vertical position while operating in turtle mode

Tech. Code		M901212002900
GR66	Euro	(9.025,00)
Model		GX 12/29 EVO GEL
Capacity	kg	1200
Fork dimension	mm	1150-560
Lift height	mm	2810
Closed mast height	mm	1987
Extended mast height	mm	3392
Weight	kg	585

MANUAL LIFT PALLET TRUCKS

B·HANDLING 3

ITEM: M9125

Features:
- Solid steel painted structure
- Switch lever 3 position control up- neutral - down for easy operations
- Equipped with a 2 speed pump, fast mode 20 cycles lifts 800 mm, slow mode in 55 cycles lifts 800 mm
- Designed to increase the productivity thanks to the possibility of moving the weight up to a height of 400 mm
- Suitable for upload presses, cutters, conveyor assembly lines etc.

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M91251000
GR66	Euro	(1226,00)
Capacity	kg	1000
Fork Dimension	mm	1140 x 520
Lift H	mm	800
Min clearance from ground	mm	80 - 400*
Total length	mm	1540
Rolls dimensions	mm	78 x 60
Weight	kg	127

*Above 400mm the transpallet translation is automatically blocked.

ELECTRIC LIFT PALLET TRUCKS

B·HANDLING 3

ITEM: M9135

Features:
- Solid steel painted structure
- Switch lever 3 position control up- neutral - down for easy operations
- Designed to increase the productivity thanks to the possibility of moving the weight up to a height of 250 mm
- Suitable for upload presses, cutters, conveyor assembly lines etc.

Supplied with:
- Instruction manual of use and maintenance
- 12 V battery and standard battery charger

Tech. Code		M91351000
GR66	Euro	(3576,00)
Capacity	kg	1000
Fork Dimension	mm	1170 x 570
Lift H	mm	800
Min clearance from ground	mm	85 - 400*
Total length	mm	1570
Motor		0,58KW - 12V
Battery		12V - 52Ah
Rolls dimensions	mm	78 x 60
Weight	kg	127

*Above 400 mm the translation of the pallet truck is automatically blocked

PANTOGRAPH PALLET TRUCK HX10E + AUTOLEVEL

ITEM: HX 10E

Pallet truck with pantograph function and self-leveling system.

Featurese:
- Easy and light lifting up to 800 mm
- The handle offers an erogomic tiller and an electric switch for lifing and lowering
- Long life 12V battery
- Autolevel system with sensor

Advantages:
- Pallet truck that becomes a comfortable work platform
- Great for manufacturing, assembly lines and logistics
- Autolevel system that adjust the height of the forks while maintaining the desired working height constant

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M91411000
GR66	Euro	(3930,00)
Capacity	kg	1000
Model		HX10E
Fork length	mm	1150
Fork width	mm	540
Weight	kg	139

HYDRAULIC CRANES-LIGHT SERIES

ITEM: M9352

Features:
- Two speed hydraulic pump
- Lateral tie rods
- Overload valve
- Extentable arm in 4 working positions
- Fixed front wheels, pivoting rear wheels

Supplied with:
- Instruction manual for use and maintenance

Tech. Code		M9352500	M93521000	M93521500	M93522000
GR66	Euro	(1006,00)	(1492,00)	(2349,00)	(2608,00)
Max capacity	kg	500	1000	1500	2000
Variable capacity	Kg	500 - 400 / 350 - 250	1000 - 800 / 600 - 300	1500 - 1200 / 800 - 500	2000 - 1500 / 1200 - 700
A	mm	1040 - 1350	1210 - 1510	1370 - 1820	1470 - 1920
B	mm	2160 - 2360	2100 - 2250	2750 - 3100	2800 - 3145
C	mm	885	1060	1050	1200
D	mm	665	750	1000	1150
E	mm	1260	1520	1800	2000
Weight	kg	77	95	171	211

FOLDABLE HYDRAULIC CRANES

ITEM: M9362

Features:
- Steel frame-Fold-away elements
- Two speed hydraulic pump
- Overload valve
- Extenable arm in 4 working positons
- four wheels-two fixed, two pivoting rear wheels

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M9362500	M93621000
GR66	Euro	(1077,00)	(1492,00)
Max capacity	kg	500	1000
Variable capacity	kg	500 - 400 - 300 -250	1000 - 800 - 600 - 300
A	mm	1010 - 1320	1000 - 1300
B	mm	2040 - 2190	2240 - 2420
C	mm	860	1000
Weight	kg	83	99

FOLDABLE HYDRAULIC CRANES WITH LOW PROFILE LEGS

B·HANDLING 3

ITEM: M9363

Features:
- Steel frame-Fold-away elements
- Two speed hydraulic pump
- Lateral tie rods
- Overload valve
- Extendable arm with 4 working positions
- Fur wheels-two fixed, two pivoting rear wheels

Supplied with:
- Instruction manual of use and maintenance

Tech. Code		M9363500
GR66	Euro	(1272,00)
Max capacity	kg	500
Variable capacity	kg	500 - 400 - 350 - 250
Lowered model	mm	80
A	mm	1010 - 1320
B	mm	1990 - 2140
C	mm	860
Weight	kg	87

APPROVED TRESTLES

B·HANDLING 3

ITEM: M8100

To further comply with the strict and specific workplace safety rules, we introduce our trestle equipment range in steel designed for static suspended product handling.
A safe and highly reliable tool for the industry production sectors.

Supplied with:
- Related approval and loading capacity certification.

Tech. Code		M8100200	M8100500	M81001000	M81002000
GR66	Euro	(363,00)	(410,00)	(534,00)	(674,00)
Load capacity	kg	200	500	1000	2000
Length A	mm	1100	1200	1500	1500
Width C	mm	600	600	600	600
Height B	mm	830	850	900	900
Weight	kg	21,5	28	59	65

STOPBAR DEVICE FOR TRESTLES

B·HANDLING 3

ITEM: M8104

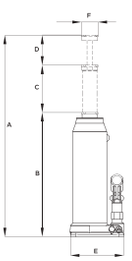
Stopbar device for round pieces, for trestles.

Tech. Code		M81041000	M81042000
GR66	Euro	(73,00)	(73,00)
For trestles with capacities of kg		1000	2000

Individually sold.

HYDRAULIC BOTTLE JACKS

ITEM: M9365



Features:
- Steel structure - strong resistance
- High stability support base
- Overload protection valve

Supplied with:
Instruction manual for use and maintenance

Tech. Code		M93653	M93655	M936510	M936520
GR66	Euro	93,00	108,00	143,00	264,00
Load capacity	kg	3000	5000	10000	20000
A	mm	325	485	515	575
B	mm	200	220	240	285
C	mm	125	140	150	165
D	mm	-	125	125	125
E	mm	120 x 120	120 x 120	140 x 140	170 x 170
F	mm	40	40	50	60
Weight	kg	4,8	5,5	8,0	18

Indivisible package Suggested retail package - Unit price

MECHANICAL RACK AND PINION JACK FOR INDUSTRIAL HANDLING

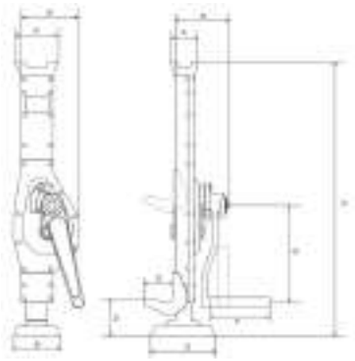
ITEM: M9375

Mechanical rack and pinion jack

Features:
- Casing made of sheet steel, pinions and forged and molded gears
- The toothing of the rack is milled

Advantages:
- The crank, with friction locking device and double spring catcher, allows to hold the load at any distance from the ground

Supplied with:
- Use and maintenance manual



Tech. Code		M93751	M93753	M93755	M937510	M937516	M937520
GR66	Euro	(258,00)	(411,00)	(510,00)	(984,00)	(1410,00)	(1884,00)
Head flow rate	T	1,5	3	5	10	16	20
Foot flow rate	T	1,5	3	5	10	11,2	14
Max.force	daN	30	35	40	58	73	80
Min height	mm	70	70	80	100	160	150
Raised positon	mm	300	355	345	390	320	300
A	mm	81	83	108	124	135	135
B	mm	100	130	140	140	200	240
C min	mm	600	735	735	800	900	960
D min	mm	70	70	80	100	160	150
E	mm	55	60	71	86	75	80
F	mm	46	45	68	76	85	85
G	mm	110	138	170	170	230	270
H	mm	225	249	249	300	400	400
K	mm	147	168	190	250	270	300
R	mm	119	129	146	168	220	240
T	mm	113	130	130	239	280	280
Weight	kg	18	20	28	46	65	90

HYDRAULIC JACK FOR INDUSTRIAL HANDLING

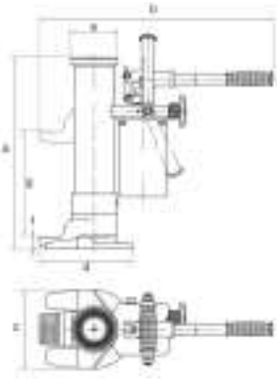
ITEM: M9376

Hydraulic Jack

Features:
- Sheet steel casing
- Extendable handle to facilitate transport

Advantages:
- Load evenly distributed both on the head and on the foot
- Possibility to rotate 360° on the axis

Supplied with:
- Use and maintenance manual



Tech. Code		M93765	M937610	M937625
GR66	Euro	(948,00)	(1176,00)	(4548,00)
Load capacity	T	5	10	25
Max.force	daN	38	40	40
Min height	mm	20	28	58
Raised positon	mm	205	230	215
a	mm	368	420	505
b	mm	740	745	1305
c x d	mm	140 x 213	170 x 205	210 x 420
e	mm	93 x 93	103 x 103	155 x 155
f	mm	25	30	58
g	mm	205	230	215
Weight	kg	20	28	109

SKATES AND TROLLEY SKATES WITH POLYURETHANE WHEELS

ITEM: M9377

Skates and trolley skates with polyurethane wheels.

Features:
- Designed to handle heavy and rigid loads manual
- Steering guide with swivel plate on ball bearings

Advantages:
- Increased resistance to impact and micro-roughness of the ground
- Modular elements based on needs

Supplied with:
Use and maintenance manual

Tech. Code	GR66 Euro	Model	Load capacity T	Height mm	External dimension mm	Support dimension mm	Weight kg
M9377G4	(348,00)	4-wheel steering guide	4	110	230 x 297	145 x 180	14
M9377G8	(1200,00)	8-wheel steering guide	8	110	530 x 640	400 x 220	50
M9377P2	(188,00)	2-wheel skates	2	110	106 x 308	270 x 106	5
M9377P4	(390,00)	4-wheel skates	4	110	232 x 308	270 x 232	11
M9377P6	(552,00)	6- wheel skates	6	110	348 x 308	270 x 348	25

SKATES AND TROLLEY WITH NYLON WHEELS

ITEM: M9378

Skates and trolley with nylon wheels

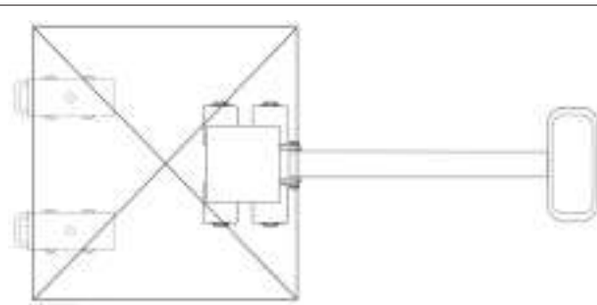
Features:
- Designed to handle heavy and rigid loads manually- Steering guide with swivel plate on ball bearings

Advantages:
- Greater smoothness, suitable for smooth and clean floors
- Modular elements based on needs

Supplied with:
- Use and maintenance manual

Tech. Code	GR66 Euro	Model	Load capacity T	Height mm	External dimension mm	Support dimension mm	Weight kg
M9378G4	(366,00)	4-wheel steering guide	4	110	230 x 297	145 x 180	14
M9378G8	(1044,00)	8-wheel steering guide	6	110	530 x 640	400 x 220	50
M9378P2	(163,00)	2-wheel skates	2	110	106 x 308	270 x 106	5
M9378P4	(348,00)	4-wheel skates	4	110	232 x 308	270 x 232	11
M9378P6	(450,00)	6- wheel skates	6	110	348 x 308	270 x 348	25

COMBINATION EXAMPLES

Load capacity T	Steering guide T	Roller wheels n° x T	
8	4	2 x 2	
12	4	2 x 4	
14	6	2 x 4	
18	6	2 x 6	
20	8	2 x 6	

Indivisible package Suggested retail package - Unit price

swiss lifting solutions

GIS AG -
THE SPECIALIST FOR CRANE SYSTEMS

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- With own subsidiaries in Germany, England and the United States
- Development and production of electric chain hoists in Switzerland for over 60 years
- Swiss manufacturer of complete crane systems inc. hoisting equipment and vacuum lifters
- Certified to ISO 9001 since 1994
- International sales network with over 75 qualified partners worldwide

ELECTRIC CHAIN HOIST GP

3 YEAR WARRANTY

- Load capacity up to 6.3 t
- IP65 as standard
- No sensitive electrics

LIGHT CRANE SYSTEM GISKB

- Load capacity up to 2 t
- Regular or optimised construction height
- Manual or electrical travel

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WORKSHOP EQUIPMENT

N

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1 - 10
Drilling machines

ECOGA

N1
10 - 13
Lathes safety shields,
anti vibration mounts

SNIP
BIANCO

N2
14 - 17
Band saw machines
circular mitre saw

GRIND

N3
18 - 21
Mitre saw bench grinders
polishing machines
belt sanders

BOSCH
IR

N4
22 - 54
Power tools

LTEC
WRK
RÖHM
BOSCH

N5
55 - 72
Drill accessories,
vacuum cleaners

LTEC

N6
73 - 83
Fumes aspirators,
industrial aspirators

WODEX
B·HANDLING
WRK
RIMSA

N7
83 - 91
Hydraulic presses,
vices, torches, lamps, cable reels,
air hoses

tellure Rôta
fischer
WRK
DESTACO
VORPA

N8
91 - 121
Anti vibration mounts, magnets,
quickclamps,
spring plungers, brushes,
thread inserts

WRK

N9
121 - 131
Packaging equipment

DRILLING MACHINES 18CO

ITEM: 18CO

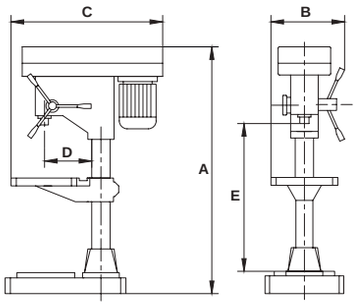
Precise, silent and reliable drilling machines, compliant with safety standards.

Features:
- Steel column
- Cast iron base
- Ground swivel table and vice
- Manual downfeed with depth stop
- Three phase motor 400 Volt
- Safety guard

Variants:
- 2 speed motor
  (10 speed spindle via step pulley drive)
- Motor with electronic Speedtronic
  speed variator and digital display

VARIANTS

Electronic variator speedtronic with digital reading of RPM of the spindle



Tech. Code	GR78 Euro	Drilling mm	Coupling	Range mm	Table mm	Column Ø mm	Distance spindle to table mm	Kw HP	A mm	B mm	C mm	D mm	E mm	Weight kg	Variants
N038018	(3802,00)	1 - 18/20	CM2	90	240 x 240	80	50 - 630	0.56 0.75	1625	490	660	200	1160	140	2-speed motor
N038018VE	(5408,00)	1 - 18/20	CM2	90	240 x 240	80	50 - 630	0.56 0.75	1625	490	660	200	1160	140	Electronic speed variator

DRILLING MACHINES 25TM

ITEM: 25TM

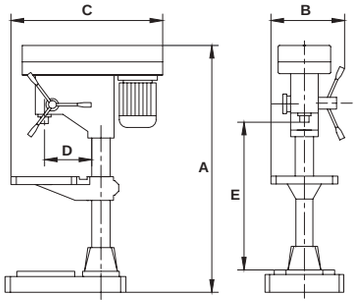
Precise, silent and reliable drilling machines, compliant with safety standards.

Features:
- Steel column
- Cast iron base
- Ground swivel table and vice
- Manual downfeed with depth stop
- Three phase motor 400 Volt
- Safety guard

Variants:
- 2 speed motor
  (10 speed spindle via step pulley drive)
- Motor with electronic Speedtronic
  speed variator and digital display

VARIANTS

Electronic variator speedtronic with digital reading of RPM of the spindle



Tech. Code	GR78 Euro	Drilling mm	Coupling	Range mm	Table mm	Column Ø mm	Distance spindle to table mm	Kw HP	A mm	B mm	C mm	D mm	E mm	Weight kg	Variants
N043825	(4520,00)	1 - 25/28	CM3	110	300 x 300	100	50 - 620	0.75 1	1710	580	830	250	1185	230	2-speed motor
N043825VE	(6307,00)	1 - 25/28	CM3	110	300 x 300	100	50 - 620	0.75 1	1710	580	830	250	1185	230	Electronic speed variator

DRILLING MACHINES 30LE

ITEM: 30LE

Precise, silent and reliable drilling machines, compliant with safety standards.

Features:
- Steel column
- Cast iron base
- Ground swivel table and vice
- Manual downfeed with depth stop
- Three phase motor 400 Volt
- Safety guard

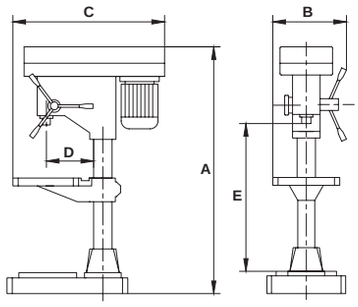
Variants:
- 2 speed motor (14 speed spindle via step pulley drive)
- Motor with electronic Speedtronic speed variator and digital display
- Tapping system and cooling system

VARIANTS

Electronic variator speedtronic with digital reading of RPM of the spindle

Tapping system with teleinversion

Cooling system of tools



Tech. Code	GR78 Euro	Drilling mm	Coupling	Range mm	Table mm	Column Ø mm	Distance spindle to table mm	Kw HP	A mm	B mm	C mm	D mm	E mm	Weight kg	Variants
N044230	(5840,00)	1 - 30/32	CM3	110	350 x 350	110	50 - 630	1.1 1.5	1800	580	880	280	1210	290	2-speed motor
N044230VE	(7629,00)	1 - 30/32	CM3	110	350 x 350	110	50 - 630	1.1 1.5	1800	580	880	280	1210	290	Electronic speed variator
N044230MR	(7480,00)	1 - 30/32	CM3	110	350 x 350	110	50 - 630	1.1 1.5	1800	580	880	280	1210	290	Tapping system cooling

DRILLING MACHINE WITH 6 SPEEDS

ITEM: N0360

Sensitive drilling machine with the highest accuracy, mounted on high-speed ball bearings of the best brands. The ground steel bush pulley holder and spindle shaft holder as also the mechanic cast iron column are highly resistant. These features ensure long machine life. 6-speed drill (2000 - 3000 - 4000 - 6000 - 8500 - 11500). B10 spindle coupling, three-phase 2-pole motor - 2800 rpm, 0.25 HP. It is supplied with reflector, rack chuck, hole depth micrometer measuring.

Tech. Code	GR78 Euro	Drilling capacity (force) mm	Distance chuck/table mm	Excursion mm	Ø column mm	Distance col. /chuck centre mm
N0360-B10	(2360,00)	6 max.	200 max.	45 - 50	60	115

N

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www.linkindustrialtools.com
info@linkindustrialtools.it

DRILLING MACHINES WITH MAGNETIC BASE

NEW

ITEM: KBE 32

The compact single-speed core drill KBE 32 is the most powerful in its class with performance of the highest precision and quality, thanks to the high magnetic holding force. Resistant for hole diameters up to 32 mm. Quick change system of the core bit without service keys. Internal engine wiring and cooling system. Advance knob mountable on both sides and safety differential switch. Excellent accessibility in confined spaces.

Tech. Code		N432032
GR82	Euro	(673,00)
Rated power consumption	W	1200
Rendered power	W	770
Speed under load	Rpm	450
No-load speed	Rpm	700
Crown tip Ø max	mm	32
HSS crown cutter Ø max	mm	32
Depth of drilling max with crown	mm	50
Hole cutters coupling		3/4" Weldon
Execursion	mm	90
Magnetic holding force	N	10.000
Dimension of magnet base	mm	175 x 80
Weight	Kg	11

Supplied with:
Hand pump
Protection grid
Fixing strap
100 mm centering pin
Bottle holder
1 Allen key 5mm
1 Case

ITEM: KBU 35 Q

KBU 35 Q universal drill with crown tip and 1-speed magnetic base, with reduced dimensions and a very wide stroke, with left and right rotation and maximum functionality to work flexibly on site. High load capacity thanks to the solid structure of the machine with the sheathing of the swiveling motor. Quick change of the crown tip without service keys. Electronic regulation of the number of revolutins. High magnetic holding force. Feeding knob mountable on both sides. Anti-tipping sensor.

Tech. Code		N05301100
GR82	Euro	(1276,00)
Rated power consumption	W	1100
Rendered power	W	550
Speed under load	Rpm	130 - 520
Tapping		M14
Countersink Ø max.	mm	31
Boring Ø max.	mm	16
Crown tip Ø max.	mm	35
HSS crown cutter Ø max.	mm	35
Hole cutters coupling		QUICK IN
Excursion	mm	135
Overall excursion	mm	260
Magnetic holding force	N	10000
Dimension of magnetic base	mm	175 x 80
Weight	kg	10,6

Supplied with :
Case
Tank of cooling lubricant
Fixing strap
Chip hook
Centering pin
Protection grid
Extraction wedge

ITEM: KBM 50 U

KBM 50 U universal drill with 2 -speed gearbox and maximum functionality for flexible work in the workshop and on site. Compact with high functionality for universal use on site and in the workshop. Ideal for using large drilling tools thanks to the dual motor drive. Right / left rotation. Electronic speed regulation. FEIN high-performance motor with stable speed. High magnetic holding force. Integrated refrigerant tank.

Tech. Code		N05201200
GR82	Euro	(2325,00)
Rated power consumption	W	1200
Rendered power	W	610
Speed under load 1st gear	Rpm	130 - 260
Speed under load 2nd gear	Rpm	260 - 520
Tapping		M16
Countersink Ø max.	mm	50
Boring Ø max.	mm	23
Crown tip Ø max.	mm	50
Propeller tip Ø max.	mm	23
Depth of drilling max. with crown	mm	50
HSS crown cutter Ø max.	mm	40
Hole cutters coupling		QUICK IN
Excursion	mm	145
Overall excursion	mm	315
Magnetic holding force	N	12500
Dimension of magnetic base	mm	195 x 90
Weight	kg	13,9

Supplied with:
Case
Tank of cooling lubricant
Fixing strap
Chip hook
Centering pin
Protection grid
Extraction wedge

CORDLESS MAGNETIC BASE DRILLS WITH 18 V BATTERY

ITEM: M18 FMDP-502C M18 FUEL

Two-speed M18 FMDP-502C drill with magnetic base for use with end mills or drill bits. The brushless POWERSTATE™ motor provides corded drilling performance with a strong magnet holding force on ¼" steel and can make 40 x 18 mm holes per battery charge. The intelligent REDLINK PLUS™ system provides advanced digital overload protection for the tool and battery. The REDLITHIUM-ION™battery, by monitoring the individual battery cells, optimises the durability and performance of the battery pack to deliver more tool run time. The AUTOSTOP™ sensor detects misalignment of the magnetic base compared to its original position and automatically stops the drill. Fast release 19 mm Weldon adapter (keyless). On board lubrication tank with magnet, easy to fix to the material, especially when drilling in vertical positions. Handle can be positioned for right or left hand usage.

Tech. Code		N05018
GR64	Euro	(3502,00)
Battery capacity	Ah	5
Magnetic holding force	N	8890
Blade stroke length	mm	146
Max. solid drilling bit hole	mm	13
Max drilling capacity	mm	38
Max drilling depth	mm	50
Battery charge time	min	59
Battery type		Lithium
No-load speed	Rpm	400/690
Weight with battery	kg	13

Included:
2 batteries 5 Ah
Battery charger
Lubrication tank
Chuck 13 mm
Ejector pin
Safety strap
Case

ELECTRIC TAPPING MACHINES WITH ARTICULATED ARM SNIPER

ITEM: SNIPER 400

Compact and easy to handle Made in Italy electric tapper with 400 Watt Brushless motor, articulated aluminum supporting structure and control unit integrated inside the arm. The Sniper 400 is a machine with a wide range of tapping on multiple materials and can be set up with a fixed head for exclusively vertical machining, or with an adjustable head for vertical and inclined machining +/- 180°

Features:
- Articulated arm system with adjustable balance
- High performance IP65 motor, minimum noise and low consumption
- Wide regulation of the tapping speed
- Maximum anti-clockwise speed for rapid extraction of the tool
- Possibility of threading blind and through holes thanks to the adjustable clutches

Optional accessories:
- GR1 quick-change bushings for tap holders and die holders
- GR1 quick change chucks for bit holders and countersinks
- Depth sensor with automatic reverse
- Tapping trolley or bench

Tech. Code		N060016SM	N060016M
GR78	Euro	(3297,00)	(3684,00)
Tapping on steel		M2 - M14 (*)	M2 - M14 (*)
Adjustable head		No	Yes
Speed	RPM	40 - 450	40 - 450
Torque max	Nm	39	39
Chuck coupling		GR1	GR1
Operation area	mm	1102	1102
Power supply	V - Hz	230 - 50/60	230 - 50/60
Weight	kg	15	15

(*) M16 on aluminum
The machine with swivel head is equipped with a quick-change bushing with magnetic base for fast and precise alignment to the workpiece

DEVICE FOR AUTOMATIC LUBRICATION OF THE TOOL

ITEM: LST01

The automatic lubrication system is activated autonomously at each tapping cycle, lubricating the tool in the desired quantity.
The device can be installed (by the manufacturer) on all Joytap tapping machines.

Tech. Code		N061800
GR78	Euro	(650,00)
MODEL		LST01

N

Indivisible package Suggested retail package - Unit price

ELECTRIC TAPPING MACHINES WITH ARTICULATED ARM JOYTAP

ITEM: JOYTAP JT2

Made in Italy electric machines with Brushless motor and balanced articulated arm system entirely in aluminum that guarantees fast and precise alignment on the holes. All JOYTAP machines can be equipped with the **VASTC or VASCT Industry 4.0 WI-FI** Touch Screen Control (Optional) for semi-automatic tapping operations, controlled screwing, installation of self-tapping bushes and inserted threads, drilling and countersinking operations.

Features:
- Articulated arm system with adjustable balance
- IP65 high performance motor, minimum noise and low consumption
- Wide adjustment of the tapping speed
- Double counter-clockwise extraction speed that can be set at 100% or 50% of the maximum speed
- Joystick with control buttons that facilitates tool alignment and speeds up the execution of machining
- Balance and fluidity in movements guaranteed by adjustable gas springs and joints mounted on ball bearings
- Possibility to thread blind and through holes thanks to the adjustable clutches

Optional accessories:
- Volumec Assisted Screwing Tapping Control **"VASTC"**
- Depth sensor with automatic inversion
- Device for automatic tool lubrication
- GR2 - GR3 - GR4 quick change bushes for taps
- GR2 - GR3 quick change die holders
- GR2 quick change chucks for drills and countersinks
- Quick change chucks GR2 insert holder with 1/4 "E connection
- GR2 quick change adapters for 1/4 "- 3/8" - 1/2 "sockets
- GR2 quick change installers for self-tapping bushes
- Reduction sleeves GR4> GR3 - GR3> GR2 - GR2> GR1
- Trolleys, benches or tapping columns

Version:
- JT2 series with double articulated arm and swiveling head for machining vertically ofr inclined +/- 180°

Tech. Code		N060512M	N060516M	N060524M
GR78	Euro	(3980,00)	(3980,00)	(4450,00)
Tapping on steel		M3 - M12	M3 - M16	M5 - M24
Adjustable head		Yes	Yes	Yes
Speed	RPM	100 - 1000	50 - 500	20 - 200
Torque max	Nm	28	70	180
Chuck coupling		GR2	GR2	GR2
Operation area	mm	1300	1300	1300
Power supply	V - Hz	230 - 50/60	230 - 50/60	230 - 50/60
Weight	kg	15	15	15

The machines with swiveling head are equipped with a quick-change compass with magnetic base for fast and accurate alignment to the workpiece.

ITEM: JOYTAP JT3

Version:
- JT3 series with triple articulated arm with fixed head for vertical machining
- JT3 series with triple articulated arm and swiveling head for machinging vertically and inclined +/- 180°

Tech. Code		N061012M	N061016M	N061024M	N061036M	N061036SM	N061048SM
GR78	Euro	(4480,00)	(4480,00)	(4950,00)	(6800,00)	(6200,00)	(11850,00)
Steel tapping		M3 - M12	M3 - M16 (*)	M5 - M24 (**)	M8 - M36	M8 - M36	M18 - M48
Adjustable head		Yes	Yes	Yes	Yes	No	No
Speed	RPM	100 - 1000	50 - 500	20 - 200	10 - 150	10 - 150	10 - 90
Torque max	Nm	28	70	180	250	250	450
Chuck coupling		GR2	GR2	GR2	GR3	GR3	GR4
Operation area	mm	1900	1900	1900	1900	1900	1500
Power supply		230V - 50/60Hz	230V - 50/60Hz	230V - 50/60Hz	230V - 50/60Hz	230V - 50/60Hz	230V - 50/60Hz
Weight	kg	19	19	20	25	25	50

(*) M20 on aluminum (**) M27 on aluminum.
The machines with swiveling head are equipped with a quick-change compass with magnetic base for fast and accurate alignment to the workpiece.

ASSISTED CHECK FOR SCREWING AND TAPPING

ITEM: VASTC - VASTC-4.0 WI-FI

All JOYTAP machines can be equipped with Touch Screen Control
VASTC or VASTC Industry 4.0 WI-FI for semi-automated tapping operations, controlled screwing, installation of self-tapping bushes and inserted threads.

TAPPING:
- Semi-automatic tapping (pitch setting - depth - speed - torque Nm).
- Manual tapping (speed setting - torque Nm).
- Constant speed and torque during tapping thanks to the control encoder.
- Simplified programming using the integrated interface.
- Counting of the threads made.
- Data archive for later reuse.

SCREWING:
- Screwing with Automatic Stop (when the preset torque is reached).
- Luminous signal at the end of the tightening.
- Centering system before screwing.
- Simplified programming using the integrated interface.
- Constant speed and torque during screwing thanks to the control encoder.
- Counting of the tightenings performed.
- Data archive for later reuse.

Version:
- Standard VASCT control installed on the machine
- VASTC-4.0 WI-FI control installed on the machine

Tech. Code	GR78 Euro	MODEL
N061200	(1250,00)	Standard
N061240	(2350,00)	Industry 4.0 WI-FI

The VASTC-4.0 Industry 4.0 version is equipped with a WI-FI connection for remote contro

ITEM: VASTC-1 - VASTC-4.0-1 WI-FI

Version:
- Standard VASCT-1 control fixed to the motor
- VASTC-4.0-1 WI-FI control fixed to the motor

Tech. Code	GR78 Euro	MODEL
N061400	(1750,00)	Standard
N061440	(2850,00)	Industry 4.0 WI-FI

The VASTC-4.0-1 Industry 4.0 version is equipped with a WI-FI connection for remote control

ELECTRONIC DEPTH SENSOR

ITEM: EDS01

Electronic sensor with automatic tool return after reaching the predetermined working depth. The electronic depth sensor can be installed (by the manufacturer) on all Sniper and Joytap tappers.

Tech. Code	GR78 Euro	MODEL
N061600	(435,00)	EDS01

TROLLEY FOR TAPPING MACHINES

ITEM: MCA001

Trolley for Sniper and Joytap tapping machines complete with shelf for sockets.

Tech. Code	GR78 Euro	Dimension mm	Weight kg
N062000	(750,00)	850 x 750 x 870 h	65

TROLLEY FOR TAPPING MACHINES

ITEM: CPA001

Joytap tapping machine trolley with structural aluminum top and slots for fixing accessories to block pieces.

Tech. Code	GR78 Euro	Dimension mm	Weight kg
N062200	(815,00)	800 x 640 x 870 h	55

WORK BENCH WITH T-SLOTS FOR TAPPING MACHINES

ITEM: BML001 - BML001-R

Sniper and Joytap tapping machine bench with 30 mm thick steel worktop and T-slots for fixing piece-locking accessories.

Tech. Code	GR78 Euro	MODEL	Dimension mm	Weight kg
N062400	(1715,00)	Stationary	800 x 600 x 870 h	150
N062400R	(2055,00)	With wheels	800 x 600 x 870 h	150

BUSHES FOR TAPPING WITH ADJUSTABLE CLUTCH

ITEM: BFGR1

Size 1 bushes with adjustable clutch for DIN371 M2 to M10 and DIN376 M12 to M16 taps.

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063002	(58,00)	M2	2,8	2,1
N063003	(58,00)	M3	3,5	2,7
N063004	(58,00)	M4	4,5	3,4
N063005	(58,00)	M5	6	4,9
N063006	(58,00)	M6	6	4,9

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063008	(58,00)	M8	8	6,2
N063010	(58,00)	M10	10	8
N063012	(58,00)	M12	9	7
N063014	(74,00)	M14	11	9
N063016	(74,00)	M16	12	9

ITEM: BFGR2

Size 2 bushes with clutch for DIN371 taps from M3 to M10 and DIN376 from M12 to M30.

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063203	(74,00)	M3	3,5	2,7
N063204	(74,00)	M4	4,5	3,4
N063205	(74,00)	M5	6	4,9
N063206	(74,00)	M6	6	4,9
N063208	(74,00)	M8	8	6,2
N063210	(74,00)	M10	10	8
N063212	(74,00)	M12	9	7
N063214	(74,00)	M14	11	9

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063216	(74,00)	M16	12	9
N063218	(74,00)	M18	14	11
N063220	(74,00)	M20	16	12
N063222	(74,00)	M22	18	14,5
N063224	(74,00)	M24	18	14,5
N063227	(98,00)	M27	20	16
N063230	(98,00)	M30	22	18

ITEM: BFGR3

Size 3 bushes with clutch for DIN376 M20 to M36 taps.

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063420	(185,00)	M20	16	12
N063422	(185,00)	M22	18	14,5
N063424	(185,00)	M24	18	14,5
N063427	(185,00)	M27	20	16

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063430	(185,00)	M30	22	18
N063433	(185,00)	M33	25	20
N063436	(300,00)	M36	28	22

ITEM: BFGR4

Size 4 bushes with clutch for DIN376 M18 to M48 taps.

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063618	(330,00)	M18	14	11
N063620	(330,00)	M20	16	12
N063622	(330,00)	M22	18	14,5
N063624	(330,00)	M24	18	14,5
N063627	(330,00)	M27	20	16
N063630	(330,00)	M30	22	18

Tech. Code	GR78 Euro	For taps	Shank Ø mm	■ mm
N063633	(330,00)	M33	25	20
N063636	(330,00)	M36	28	22
N063639	(330,00)	M39	32	24
N063642	(330,00)	M42	32	24
N063645	(330,00)	M45	36	29
N063648	(330,00)	M48	36	29

REDUCING BUSHES FOR TAPPING MACHINES

ITEM: BRGR

Reduction sleeves for Joytap tapping machines

Tech. Code	GR78 Euro	GR
N063821	(80,00)	GR2 - GR1
N063832	(205,00)	GR3 - GR2
N063843	(275,00)	GR4 - GR3

BUSHES WITH DRILL CHUCK

ITEM: MPS10GR1 - MPS13GR1

Size 1 bushes with drill chuck and countersinks

Tech. Code	GR78 Euro	Opening mm
N064610	(161,00)	0.5 - 10
N064613	(182,00)	1 - 13

ITEM: MPS10GR2 - MPS13GR2

Size 2 bushes with drill chuck and countersinks

Tech. Code	GR78 Euro	Opening mm
N064810	(161,00)	0,5 - 10
N064813	(182,00)	1 - 13

BUSHES WITH BIT HOLDER 1/4 "HEXAGONAL ATTACHMENT

ITEM: MPAE1/4

Bushes Size 2 with bit holder for 1/4 "hexagonal shank bits to DIN ISO 1173-C 6.3

Tech. Code	GR78 Euro	◉	Max strength Nm
N065014	(147,00)	1/4"	15

SAFETY SHIELDS FOR DRILLS

ITEM: N1040

Impact-proof transparent plastic shield. Chrome-plated attachment.

Tech. Code	GR76 Euro	Ø mm	Band mm	Type
N1040200	140,00	200	130	-
N1040200M	221,00	200	130	With micro-switch
N1040300	172,00	300	130	-
N1040300M	272,00	300	130	With micro-switch

ATTACHMENTS FOR SAFETY SHIELDS

ITEM: N1010

Chrome-plated side attachment with lamp holder hole.

Tech. Code	GR76 Euro	For shields Ø mm
N1010200500	38,00	200-500
N10105501000	85,00	550-1000

ITEM: N1015

With micro-switch. Chrome-plated universal attachment.

Tech. Code	GR76 Euro	For shields Ø mm
N1015200500	196,00	200-500
N10155501000	223,00	550-1000

Indivisible package Suggested retail package - Unit price

SAFETY SHIELDS FOR LATHES

ITEM: N1020

Impact-proof transparent plastic.

Tech. Code	GR76 Euro	Ø mm	Band mm
N1020300	44,00	300	150
N1020350	49,00	350	150
N1020400	54,00	400	180
N1020450	60,00	450	190

Tech. Code	GR76 Euro	Ø mm	Band mm
N1020500	67,00	500	200
N1020550	156,00	550	240
N1020650	234,00	650	265
N1020800	302,00	800	300

ITEM: N1025

Polycarbonate shield, steel structure with 30 mm Ø hole for attachment to the lathe.

Tech. Code	GR76 Euro	Ø mm	Band mm
N1025300	220,00	300	240
N1025400	226,00	400	240

SAFETY SHIELDS FOR GRINDING WHEELS

ITEM: N1035

Slotted bracket for quick mounting on any grinding wheel, friction joint for perfect positioning. Shield with the optical area made of replaceable impact-proof plastic and of glass.

Tech. Code	GR76 Euro	Shield mm
N1035115110	112,00	115 x 110

WODEX mro

Perfect ergonomics

PARALLEL LATHE ECOCA

ECOCA INDUSTRIAL CO. LTD.

ITEM: SJ 460

Tech. Code		N14901500
GR78	Euro	(-)
MODEL		SJ 460 x 1500 Tips clearance 1500 mm

TECHNICAL CHARACTERISTICS

- Height of centres: 230 mm
- Swing over bed: 460 mm
- Swing over cross slide: 258 mm
- Swing over gap: 670 mm
- Width of bed: 300 mm
- Spindle bore: 58 mm
- Cam-Lock 6"
- Taper of spindle bore: MT6
- N° of speed 12, range of single speed 20-2000 rpm
- Cross slide travel 247 mm
- Upper slide travel 132 m
- Longitudinal feed range 0,05-0,82 mm
- Cross feed range 0,02-0,4 mm
- Inch threads 4-56 TPI
- Metric threads P.0,5-P.7
- Main motor power 7,5 HP
- Cooling system motor power 0,125 HP
- Quill travel 127 mm
- Quill taper CM4
- Overall dimension cm (LxWxH): L2700 x W810 x H1230
- Weight 2000 Kg

ACCESSORIES (included)

- Simple guide self-centering chuck ø 230mm (3+3 jaws for internal/external
- Plateau 4 indipendent jaws (diam. 320 mm)
- Drive plate diam 400
- Fix rest and removable rest
- Cooling system
- Alogen Lamp
- Lathe carriage safety guard
- Tools box. Positioning stands.
- ALGRA tool post (B)
- Instruction manual and CE certification

Tech. Code		N1491VISU
GR78	Euro	(-)
MODEL		3-axis display complete with assembly

DIGITAL READOUT

- Layout 1/2 - 3 axis (n.2 display)
- Green Numeric and Alphanumeric display height 14 mm
- Resolution: 0,01 - 0,005 - 0,002 - 0,001 - 0,0005 selectable from keyboard
- Beam/diameter conversion
- Bidirectional counting
- Dimensions setting through keyboard
- Separate axis reset
- Automatic research index pulse
- Standby ignition test
- N.200 Abs absolute reading
- Protected warehouse 200 tools
- Incremental reading
- Data end work automatic rescue
- Data automatic rescue during power failure
- Algebraic sum between axis (only 3-axis)
- Mm/inch conversion
- Linear error compensation - Calculation taper
- Power supply: 230V - 50/60 Hz

Hydro pro

ART. H202032B1

Recommended for

LATHES

Oilgear

ART. H2030220B1

Recommended for

GEAR GROUPS

Waylube

ART. H201568B1

Recommended for

MACHINE TOOL GUIDE

N

Indivisible package Suggested retail package - Unit price

ANTI-VIBRATION STANDS

ITEM: N1300

Zinc plated steel base, anti-vibration sole in anti-oil and anti-slip rubber compound, removable threaded shank complete with two hexagonal nuts and two galvanised steel washers, preserves machine tools from wear that can be accumulated over time and significantly increases noise damping, suitable for simple, fast and accurate positioning and levelling of machine tools.

Tech. Code	GR76 Euro	D mm	d mm	H mm	h mm	Dynamic load kg max	Static load kg max
N130080	36,45	80	M12	80	27	max. 320	max. 900
N1300110	42,11	110	M14	125	32	max. 550	max. 1500
N1300140	45,97	140	M16	130	39	max. 750	max. 2000
N1300200	(96,93)	200	M20	175	62	max. 1450	max. 3600

ANTI-VIBRATION STANDS

ITEM: N1310

Zinc-plated steel base, anti-vibration sole in anti-oil and anti-slip rubber compound, with two stages of different density separated by a metal reinforcement.

Tech. Code	GR76 Euro	D mm	d mm	H mm	h mm	Dynamic load kg max	Static load kg max
N131080R	50,27	80	M12	80	27	400	1200
N1310110R	58,73	110	M14	125	32	650	1900
N1310140R	71,20	140	M16	130	39	900	2850

ANTI-VIBRATION STANDS

ITEM: N1315

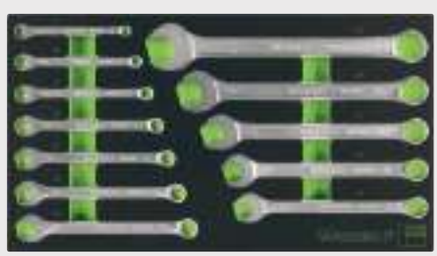
Self levelling and adjustable for height vibration-control mounts for machine tools and machineries. Zinc plated steel structure with lower surface in NBR 80 Shore, fine threaded square headed bolt, 1 nut and 1 washer. Base and spindle not assembled.

Tech. Code	GR76 Euro	D mm	H mm	M/MF mm	Shaft mm	Stat. load kg max
N1315080	50,72	80	45	12 x 1,25	100	700
N1315120	65,10	120	45	16 x 1,5	120	1000
N1315160	81,59	160	45	20 x 1,5	150	1500
N1315200	(171,99)	200	55	20 x 2,5	160	4000

Related products

WODEX COMBINATION WRENCHES IN FOAM

Tech. Code	Pieces	Module size mm
E000712	12	400 x 223.5 - 1/3 Horizontal position
E000716	16	400 x 447- 2/3 Vertical position



The product is available in Chap. E

BAND SAWS PORTABLE INVERTER - SNIP 105MI

SNIP 105 MI

ITEM: SNIP 105MI

Powerful 1800 watt motor. Cutting angle adjustable from 0° to 45° right. Automatic belt tensioning. Electronic speed variator with torque control. Oversized steel clamping vice and sliding blade guide.
The use of coolant is not recommeded.

Tech. Code	GR78 Euro	Tension V	Blades length mm	Cutting capacity	Round Ø mm	Rectectangle mm	Square mm	Weight kg
N22911140	(745,00)	230	1140 x 13 x 0,65	0° 45°	100 55	100 x 105 55 x 60	90 x 90 45 x 45	19

ITEM: A7012

Blade width 13 x 0.65 mm

Length mm	GR12 Euro	Tooth pitch 6/10	Tooth pitch 8/12	Tooth pitch 10/14	
1140	14,36	**A70121140610**	**A70121140812**	**A701211401014**	10

BAND SAWS INVERTER - SNIP 125MI

SNIP 125 MI

ITEM: SNIP 125MI

Powerful 1800 watt motor. Cutting angle adjustable from 0° to 60° right. Automatic belt tensioning. Electronic speed variator. Gear reducer with long life grease. Metal clamping vice and sliding blade guide.
Arch locking system.

Tech. Code	GR78 Euro	Tension V	Blades length mm	Cutting capacity	Round Ø mm	Rectectangle mm	Square mm	Weight kg
N22931440	(950,00)	230	1440 x 13 x 0,65	0° 45° 60°	125 102 60	130 x 115 90 x 110 60 x 90	115 x 115 90 x 90 60 x 60	19

ITEM: A7012

Blade width 13 x 0.65 mm

Length mm	GR12 Euro	Tooth pitch 6/10	Tooth pitch 8/12	Tooth pitch 10/14	
1440	16,96	**A70121440610**	**A70121440812**	**A701214401014**	10

BAND SAWS INVERTER- SNIP 176MI

SNIP 176 MI

ITEM: SNIP 176MI

Powerful 1800 watt motor. Cutting angle adjustable from 0° to 45° right. Automatic belt tensioning. Electronic speed variator. Gear reducer with long life grease. Metal clamping vice and sliding blade guide. Arch locking system. Base in die-cast aluminum. Cutting angle adjustment. Self-lubricating bushings. The use of coolant is not recommended.

Tech. Code	GR78 Euro	Tension V	Blades length mm	Cutting capacity	Round Ø mm	Rectectangle mm	Square mm	Weight kg
N22961440	(1320,00)	230	1440 x 13 x 0,65	0° 45°	150 75	150 x 125 70 x 50	125 x 125 50 x 50	35

ITEM: A7012

Blade width 13 x 0.65 mm

Length mm	GR12 Euro	Tooth pitch 6/10	Tooth pitch 8/12	Tooth pitch 10/14	
1440	16,96	**A70121440610**	**A70121440812**	**A701214401014**	10

Indivisible package Suggested retail package - Unit price

STAND FOR INVERTER BAND SAW MACHINES SNIP 105MI - 125MI - 176MI

ITEM: N2299

Foldable moving stand for portable band saw machines, can be positioned in three different heights. Can be used as a trolley, thanks to the two rubber wheels. A safety locking system fix the stand to prevent injuries to the operator. Wheels are equipped with brake, for maximum stability.

Tech. Code	GR78 Euro	Load capacity kg	Weight kg
N229900	(160,00)	50	10

CUT-OFF BENCH SAWS FOR PUNCHES

ITEM: ABZ DIAMOND

Particularly suitable for cutting pins, punches, columns and guide bushings, cobalt steel bars, special profiles in stainless steel, aluminium, brass, copper, nylon, etc... It does not leave burrs and does not alter the hardening treatment, 1HP motor /0.75kW, 400V three-phase power supply, on request also 230V single-phase power supply. High-speed abrasive disc Ø 150 x 1-1.6 mm with 20 mm hole, rotation speed around 6000 rpm, graduated rotating vice for cuts up to 45°. Starter control in the handle by means of a low voltage microswitch, enveloping casing for total protection of the abrasive disc.

Tech. Code	GR78 Euro	Power supply	Electric motor	Ø Disc mm	Rotating speed rpm
N2310150	1248,00	400V three-phase	1HP/0.75kW	150 x 1-1,6 x 20	6000

Related products

GUABO READY TO USE OIL FOR BAND SAWS

Tech. Code	Quantity L	Specific weight a 20°C kg/L	Appearance
H005020	20	1,0	Translucent

The products are available in chapter H

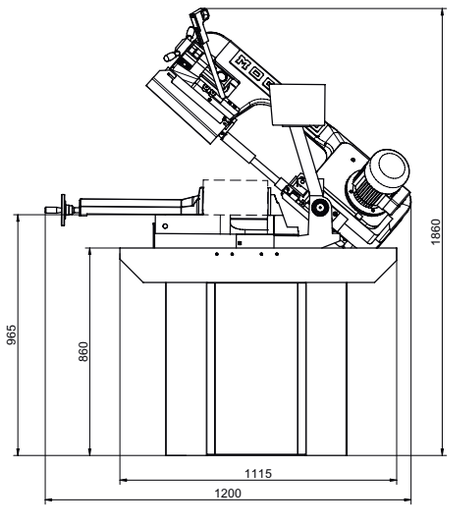
MANUAL BAND SAW MACHINES

ITEM: 280 M

Small and robust band saw.
- Particularly suitable for use in carpentry and workshops which need to cut in small series
- Vice support group, adapted to the cutting capacities, studied to contain the costs of the machine while maintaining its reliability
- Low voltage electrical system according to CE regulations
- Available only with high control panel
- Worm screw reducer
- Possibility of cutting up to 60° right
- Two-speed three-phase motor
- Worktop height 965 mm
- Hardened and ground gears

Product Made in Italy

STANDARD ACCESSORIES
- Millimetre scale 0-500 mm with stop block
- Infeed roller
- Workpiece discharge chute



Standard colours: Red upper part RAL 3002 - Black lower part RAL 7022.
BLUE RAL 5015 on request at an additional cost.

Tech. Code		N2327280M
GR78	Euro	(-)
Band dimension	mm	2450 x 27 x 0,9
Tension	V	400
Power	Kw	0,5 - 0,7
Cutting speed	m/min	35 - 70
Weight	kg	240

		Cutting capacity mm
○	0° / 45° / 60°	220 / 160 / 95
□	0° / 45° / 60°	220 / 155 / 95
▭	0° / 45° / 60°	260 x 140 / 160 x 140 / 95 x 95

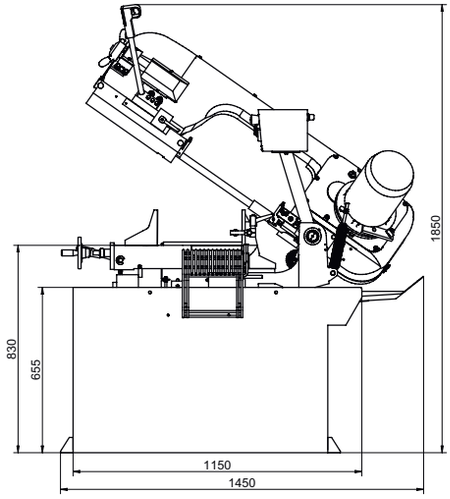
MANUAL GRAVITY FEED BANDSAW MACHINES

ITEM: 330 M + SA

Manual gravity feed band saws.
- Cutting capacity up to 60° right
- Suitable for cutting round, flat and medium size profiles
- High cutting precision and absolute reliability
- Hardened die-cast aluminium blade unit for flexibility and strength
- Low voltage electrical system compliant with all EC standards
- Can only be supplied with a top control panel
- Controlled down feed device included (art.SA)

Product Made in Italy

STANDARD ACCESSORIES
- Millimetre scale 0-500 mm with stop block
- Infeed roller
- Workpiece unloading chute
- Blade cleaning brush



Standard colours: Red upper part RAL 3002 - Black lower part RAL 7022.
BLUE RAL 5015 on request at an additional cost.

Tech. Code		N2326330
GR78	Euro	(-)
Band dimension	mm	3010 x 27 x 0.9
Tension	V	400
Power	Kw	0.9-1.5
Cutting speed	m/min	35-70
Weight	kg	345

		Cutting capacity mm
○	0° / 45° / 60°	260 / 200 / 120
□	0° / 45° / 60°	240 / 190 / 115
▭	0° / 45° / 60°	330 x 120 / 200 x 130 / 120 x 100

Indivisible package Suggested retail package - Unit price

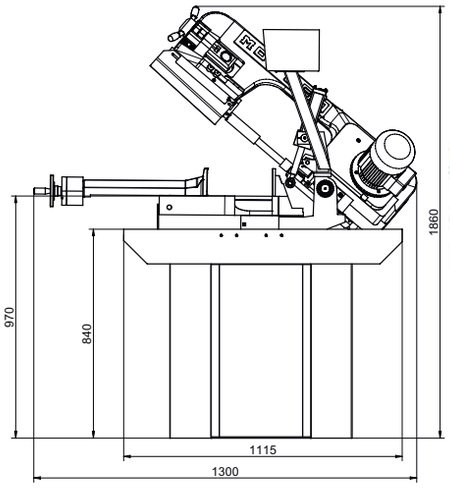
CE

ITEM: 280 SA E

Semi-automatic band saw machine.
- Cutting capacity up to 60° right
- Blade unit and hydraulic vice
- Touch probe-controlled rapid up / down movement and infinitely adjustable cutting feed
- Rear blade unit lifting cylinder
- Fitted with double cycle start safety button and low voltage electrical system compliant with EC standards
- Can only be supplied with a top control panel
- Two speed three-phase motor

Product Made in Italy

STANDARD ACCESSORIES
- Millimetre scale 0-500 mm with stop block
- Workpiece unloading chute



Tech. Code		N2328280SEM
GR78	Euro	(-)
Band dimension	mm	2450 x 27 x 0.9
Tension	V	400
Power	Kw	0.5 - 0.7
Cutting speed	m/min	35 - 70
Weight	kg	290

		Cutting capacity mm
○	0° / 45° / 60°	220 / 160 / 90
□	0° / 45° / 60°	200 / 140 / 90
▭	0° / 45° / 60°	250 x 150 / 140 x 140 / 90 x 90

Standard colours: Red upper part RAL 3002 - Black lower part RAL 7022.
BLUE RAL 5015 on request at an additional cost.

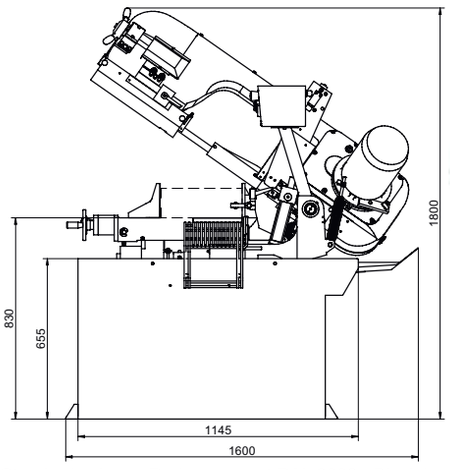
CE

ITEM: 330 SA E

Semi-automatic band saw machine.
- Cutting capacity of up to 60° right
- Hydraulic blade unit and vice
- Touch probe-controlled rapid up / down movement and infinitely adjustable cutting feed
- Rear blade unit lifting cylinder
- Double cycle start safety button and low voltage electrical system compliant with EC standards
- Can be supplied with a top or bottom control panel (to be specified when placing the order)
- Two speed three-phase motor

Product made in Italy

STANDARD ACCESSORIES
- Millimetre scale 0-500 mm with stop block
- Workpiece unloading chute
- Blade cleaning brush



Tech. Code		N2329330SEM
GR78	Euro	(-)
Band dimension	mm	3010 x 27 x 0.9
Tension	V	400
Power	Kw	0.9 - 1.5
Cutting speed	m/min	35 - 70
Weight	kg	394

		Cutting capacity mm
○	0° / 45° / 60°	260 / 200 / 120
□	0° / 45° / 60°	240 / 190 / 115
▭	0° / 45° / 60°	330 x 120 / 200 x 130 / 120 x 100

Standard colours: Red upper part RAL 3002 - Black lower part RAL 7022.
BLUE RAL 5015 on request at an additional cost.

BENCH GRINDERS 230V

ITEM: N3102

Industrial bench grinder Made in Italy, induction motor with thermal bimetallic protection that protects against overloads ensuring a virtually unlimited life of the grinder.

Grinding wheels included.

Tech. Code	GR78 Euro	Grinding wheels mm	Electric motor	RPM	HP	W	Weight kg	Model column
N3102150	191,00	150 x 20 x 20	Single-phase 230V	2800	0,5	375	8	-
N3102200	277,00	200 x 25 x 16/20	Single-phase 230V	2800	0,9	675	16	A1

BENCH GRINDERS 400V

ITEM: N3104

Industrial bench grinder Made in Italy, induction motor with thermal bimetallic protection that protects against overloads ensuring a virtually unlimited life of the grinder.

Grinding wheel to be ordered separately.

Tech. Code	GR78 Euro	Grinding wheels mm	Electric motor	RPM	HP	W	Weight kg	Model column
N3104150	316,00	150 x 20 x 16	Three-phase 400 V	2800	0,5	375	11	A1
N3104200	412,00	200 x 25 x 20	Three-phase 400 V	2800	1	750	17	A2

COMBINED BENCH GRINDERS 230V

ITEM: N3106

Industrial combined bench grinder (GRINDING WHEEL/BRUSH) Made in Italy, induction motor with thermal bimetallic protection that protects against overloads ensuring a virtually unlimited life of the grinder.

Grinding wheel and brushes to be ordered separately.

Tech. Code	GR78 Euro	Grinding wheels Brushes mm	Electric motor	RPM	HP	W	Weight kg	Model column
N3106150	249,00	150 x 20 x 20 100 x 12 x 12	Single-phase 230 V	2800	0,5	375	7,5	-

COMBINED BENCH GRINDERS 400V

ITEM: N3108

Industrial combined bench grinder (GRINDING WHEEL/BRUSH) Made in Italy, induction motor with thermal bimetallic protection that protects against overloads ensuring a virtually unlimited life of the grinder.

Grinding wheel and brushes to be ordered separately.

Tech. Code	GR78 Euro	Grinding wheels Brushes mm	Electric motor	RPM	HP	W	Weight kg	Model column
N3108150	382,00	150 x 20 x 16	Three-phase 400 V	2800	0,5	375	12,1	A1
N3108200	510,00	200 x 25 x 20	Three-phase 400 V	2800	1	750	18,8	A2

BENCH GRINDERS IN CAST IRON 400V

ITEM: N3103

Bench grinders made in Italy cast iron for intense and continuous industrial use. Motors made with low loss magnetic laminations for very high efficiency in any situation. Flanges turned on both sides to ensure maximum parallelism when coupling the abrasive wheel.
The single-phase version for the d.200 is available on request.

Grinding wheels not included.

Tech. Code	GR78 Euro	Grinding wheels mm	Motor	RPM	HP	W	Weight Kg
N3103200	(837,00)	200x25x20	Three-phrase 400V	2800	1	750	25
N3103300	(1760,00)	300x35x30	Three-phrase 400V	1400	2,5	1800	65

POLISHING MACHINES

ITEM: N3109

Industrial polishing machines Made in Italy, induction motor with thermal bimetallic protection that protects against overloads ensuring a virtually unlimited life of the grinder.

Brushes to be ordered separately.

Tech. Code	GR78 Euro	Brushes mm	Electric motor	RPM	HP	W	Weight kg	Model column
N3109150	(416,00)	150 x 20 x 16	Single phase 230 V	2800	0,9	675	15,5	A1
N3109200	(612,00)	200 x 25 x 20	Three-phase 400 V	2800	1	750	20	A2

Indivisible package Suggested retail package - Unit price

ECOLOGICAL BENCH GRINDERS IN ALUMINUM 400 VOLT

ITEM: N3116

Industrial bench grinders Made in Italy designed with a view to fully comply with workplace health and safety regulations, complete with column and integrated vacuum system.

Grinding wheels to be ordered separately.

Tech. Code	GR78 Euro	Grinding wheels mm	Electric motor	RPM	HP	W	Weight kg
N3116200	1289,00	200 x 25 x 20	Three-phase 400 V	2800	1	750	57

COMBINED ECOLOGICAL BENCH GRINDERS IN ALUMINUM 400 VOLT

ITEM: N3118

Industrial combined bench grinder (grinding wheel + brush) Made in Italy designed with a view to fully comply with workplace health and safety regulations, complete with column and integrated vacuum system.

Grinding wheel and brushes to be ordered separately.

Tech. Code	GR78 Euro	Grinding wheels Brushes mm	Electric motor	RPM	HP	W	Weight kg
N3118200	1385,00	200 x 25 x 20	Three-phase 400 V	2800	1	750	59,2

ECOLOGICAL GRINDERS IN CAST IRON 400V

NEW

ITEM: N3105

Cast Iron grinders made in Italy for intense and continuous industrial use, complete with base and suction system. Motors made with low loss magnetic laminations for very high efficiency in any situation. Flanges turned on both sides to ensure maximum parallelism when coupling the abrasive wheel.
The single-phase version for the d.200 is available on request.

Grinding wheels not included

Tech. Code	GR78 Euro	Grinding wheels mm	Motor	RPM	HP	W	Weight Kg
N3105200	(2102,00)	200X25X20	Three-phrase 400V	2800	1	750	64
N3105300	(3220,00)	300x35x30	Three-phase 400V	1400	2,5	1800	124

ECOLOGICAL POLISHING MACHINES

ITEM: N3120

Industrial polishing machines Made in Italy, designed with a view to fully comply with workplace health and safety regulations, complete with column and integrated vacuum system.

Brushes to be ordered separately.

Tech. Code	GR78 Euro	Brushes mm	Electric motor	RPM	HP	W	Weight kg
N3120200	1473,00	200 x 25 x 20	Three-Phase 400 V	2800	1	750	60,2

On request we can supply machines with engines up to 6 kw for brush units up to 300 mm diameter and control units with low voltage controls. 24 Volts.

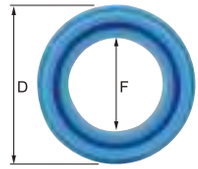
BUSH FOR GRINDING WHEELS

ITEM: N3121

Plastic bush for grinding wheel bore.

Tech. Code	GR76 Euro	D x F mm
N31212012	0,50	20 x 12
N31212013	0,50	20 x 13
N31212016	0,50	20 x 16

Tech. Code	GR76 Euro	D x F mm
N31212520	0,50	25 x 20
N31213220	0,50	32 x 20
N31213225	0,50	32 x 25



COLUMN FOR BENCH GRINDERS

ITEM: N3110

Sturdy column in pressed steel fitter with removable water reservoir for tool cooling.

Tech. Code	GR78 Euro	MODEL	Dimension mm	Hole interaxis mm	Weight kg
N3110A1	189,00	A1	370 x 360 x 790h	145 x 120	26
N3110A2	234,00	A2	400 x 370 x 760h	180 x 130	33
N3110VR	13,00	Cooling tray	-	-	-

BENCH BELT SANDERS

ITEM: N3200

Industrial bench belt sanders. Made in Italy. Engine induction with thermal protection bimetallica which protects from any overloading ensuring an almost unlimited process of the sander. Quick substitution of the abrasive belt.

Belts to be ordered separately.

Tech. Code	GR78 Euro	Belt mm	Electric motor	HP	Kw	RPM	m/s	Weight kg
N320003	1130,00	100 x 1000	Three-Phase 400 V	1,5	1,1	2800	19	38

Indivisible package Suggested retail package - Unit price

TILTING BELT SANDERS

ITEM: N3205

Industrial belt sanders. Made in Italy, double speed engine induction (N320503BT), arm orientated 0° a 360°, pulley drive loader, complete with a low voltage control unit of 24 volts (N320503BT) Emergency stop button. Quick substitution of the abrasive belt.

Belts to be ordered seperately

Tech. Code	GR78 Euro	Belt mm	Motor	HP	Kw	RPM	m/s	Weight kg
N320503	1837,00	120 x 1500	Three-Phase 400 V	1,1	0,8	2800	14	87
N320503BT	2217,00	120 x 1500	Three-Phase 400 V	0,8 - 1,1	0,6 - 0,8	1400 - 2800	14 - 28	88

INDUSTRIAL BELT SANDERS

ITEM: N3210

Industrial belt sanders. Made in Italy. Designed in the total respect of Health and Safety regulations of the working envioronment. Intergrated with a complete vacume cleaner. Adjustable double speed drive 0° a 360°, pulley wheel, full control of commands with a low voltage control unit of 24 volts. Emergency stop button. Quick substitution of the abrasive belt.

Belts to be ordered seperately.

Tech. Code	GR78 Euro	Belt mm	Electric motor	HP	Kw	RPM	m/s	Weight kg
N321003BT	3235,00	120 x 1500	Three-Phase 400 V	0,8 - 1,1	0,6 - 0,8	1400 - 2800	14 - 28	38

ICONS LEGEND
BOSCH

- 2 Speed
- Anti-rotation protection cap
- Soft grip
- Cable length 4 meters
- Brushless motor
- Speed selection
- Quick change direct / rotorbital mode
- Precision control
- Reduced vibration (EN60745)
- Electronic cell protection
- Easy-Fit
- Antistatic function
- Ergonomic
- Charging level Indicator
- Auto-Lock
- Fluctuation blade
- Restart protection
- Suction system
- Constant speed
- Belt clip/hook
- Reversibile
- Heavy Duty
- Tool coupling SDS plus
- Velcro strap
- Metal gear
- Quick clamping chuck 1 - 13 mm
- Orbital fluctuation Ø 1,6 mm
- Overload protection
- Spindle lock
- Variable speed
- LED light
- Kickback control
- Li-Ion technology
- Rotation control clutch
- Soft start
- Quick clamping chuck 13 mm
- Electronic motor protection
- Direct cooling
- Flexiclick system
- Reduced vibration (EN60745)
- Microfilter
- X-Lock system

CORDLESS SCREWDRIVER DRILLS BATTERY OPERATED 12V

BOSCH

ITEM: GSR 12V-15 PROFESSIONAL

At just 169 mm, they are the most compact design in their class.
The 2-speed gearbox ensures a powerful 30 Nm when drilling (up to 19 mm) and screwdriving (up to 7 mm). The Bosch Premium lithium-ion technology provides a 400% longer battery life. The Bosch Electronic Cell Protection (ECP) protects the battery against overload, overheating and total discharge. Bosch Hyper Charge: due to the rapid charging process, the batteries are charged to 75% after just half the charge time. No memory effect: the battery can be charged at any time regardless of the charging state, without damaging the cells. Motor brake for precise work when driving rows of screws.

Tech. Code		N402012V
GR25	Euro	209,00
Battery voltage	V	12
No-load speed (speed 1/speed 2)	Rpm	0-350/1,300
Chuck clamping range min./max.	mm	1/10
Max. screw Ø	mm	7
Max. drilling Ø - Steel	mm	10
Max. drilling Ø - Wood	mm	19
Max. hard/soft tightening torque	Nm	30/15
Tightening torque settings		20 + 1
Weight (with battery)	kg	0.95

Included:
2 lithium batteries 2 Ah
Charger GAL 12V-20
L-BOXX inlay

ITEM: GSR 12V-35 PROFESSIONAL

The GSR 12V-35 PROFESSIONAL screwdriver drills is the most compact and offers the best performance in the 12V category. Its extremely compact design and excellent performance-size ratio provides optimum handling, especially when working over head or in tight places. The brushless motor along with the Electronic Motor Protection system prevents overload and ensures a longer tool lifetime. 2 speed, auto-lock, belt clip/hook, bit holder, charging status display, Electronic Cell Protection, LED light, right/left-handed rotation. Compatible with all Bosch Professional 12 Volt batteries and chargers (Professional 12V System line).

Tech. Code		N401212
GR25	Euro	315,00
Battery tension	V	12
Battery capacity	Ah	3
Battery type		Lithium
No-load speed (1°/2° gear)	Rpm	0/460 - 0/1750
Ø max screws	mm	8
Ø Max. drilling - Wood	mm	32
Max. drilling Ø - Steel	mm	10
Tightening torque for hard/elas. coupling max	Nm	20/35
Weight (with battery)	kg	0.95
Tightening torque settings		20 + 1

Included:
2 batteries GBA 12V 3 Ah
Quick charger GAL 12V-40
Carrying case Lboxx

CORDLESS SCREWDRIVER DRILLS 12V

ITEM: M12BDD-202C

Screwdriver drills M12 BDD-202C compact measures (187 mm in length), making it ideal for working within confined spaces. The REDLINK™ electronics protect the tool and the battery pack from overload by monitoring the individual cells. The REDLITHIUM™ battery provides superior quality battery pack construction ensuring greater efficiency in terms of autonomy and duration. 10 mm metal keyless chuck with quick change..
Ergonomic handle for better control and improved grip.
Flexible 12V battery system works with all Milwaukee M12 batteries.

Tech. Code		N402312
GR64	Euro	248,00
Battery tension	V	12
Battery capacity	Ah	2
Battery type		Li-ion
Battery charging time	min	40
Ø Max. drilling - Wood	mm	22
Ø Max. drilling - Steel	mm	10
Max torque	Nm	30
Quick clamping chuck	mm	10
Speed settings		2
Speed 1	Rpm	0 - 400
Speed 2	Rpm	0 - 1500
Weight (with battery)	kg	1,2

Included:
2 batteries 12V 2 Ah
Battery charger
Carrying case

N

CORDLESS SCREWDRIVER DRILLS BATTERY OPERATED 12V

ITEM: M12 BD-202C

M12 BD-202C screwdriver drills: compact with 175 mm in length it is ideal for working in confined spaces.
REDLINK™ electronics protect the tool and battery against overcharging by monitoring individual cells. The REDLITHIUM™ battery offers a superior quality battery pack construction ensuring greater efficiency in terms of autonomy and duration. 1/4" hex connection. Ergonomic handle to ensure greater control and a secure grip.
12V platform works with all Milwaukee M12 batteries.

Tech. Code		N402518
GR64	Euro	248,00
Battery tension	V	12
Battery capacity	Ah	2
Battery type		Li-Ion
Ø Max. drilling - Wood	mm	22
Ø Max. drilling - Metal	mm	10
Torque max	Nm	30
Coupling		¼" Hex
Speed settings		2
Speed 1	Rpm	0-400
Speed 2	Rpm	0-1500
Weight (with battery)	kg	1

Included:
2 batteries 12V da 2 Ah
Battery charger
Case

ITEM: M12 FDD-202X

Screwdriver drills M12 FDD-202X with POWERSTATE™ bushless motor, designed and built by Milwaukee®, capable of delivering more power while remaining intrepidly compact. The intelligent REDLINK PLUS™ system provides advanced digital overload protection for tools and batteries and improves the performance of the tools under load. The REDLITHIUM™battery offers superior battery pack construction, electronics and consistent performance to provide more autonomy and more work during battery life. Metal spindle 13 mm. Battery charge indicator.Works with all Milwaukee® M12™batteries.

Tech. Code		N402612
GR64	Euro	364,00
Battery tension	V	12
Battery capacity	Ah	2
Battery type		Li-ion
Battery charging time	min	40
Ø Max. drilling - Wood	mm	35
Ø Max. drilling - Steel	mm	13
Torque max.	Nm	37
Quick clamping chuck	mm	13
Speed settings		2
Speed 1	Rpm	0 - 450
Speed 2	Rpm	0 - 1700
Weight (with battery)	kg	1,2

Included:
2 Batteries 12V da 2 Ah
Battery charger
Heavy Duty carrying case

ITEM: M12 FDD2-202X

Cordless screwdriver drills M12 FDD2-202X, FUEL™ technology, equipped with a new generation POWERSTATE™ Brushless motor, REDLINK PLUS™ electronics and REDLITHIUM™ battery, which offer advanced protection against overload, exponentially increasing the power tool's performance. Extremely compact design (151 mm) for accessing confined spaces, with an excellent torque/size ratio (45 Nm torque). Heavy Duty 13mm metal chuck. Mechanical clutch with 13 settings.
Compatible with all M12™ platform batteries.

NEW

Tech. Code		N402912
GR64	Euro	419,00
Battery tension	V	12
Battery capacity	Ah	2
Battery type		Li-ion
Max drilling Ø - Wood	mm	35
Max drilling Ø - Steel	mm	13
Torque max	Nm	37
Quick clamping chuck	mm	13
Speed settings		2
Speed 1	Rpm	0-450
Speed 2	Rpm	0-1550
Weight	Kg	1,1

Included:
2 12V 2Ah batteries
Battery charger
Heavy Duty Case

CORDLESS SCREWDRIVER DRILLS BATTERY OPERATED 12V

NEW

ITEM: M12 FDD2-202X

Screwdriver drills M12 FUEL™ with interchangeable chucks, for maximum versatility. REDLINK™ electronics protect the tool and battery against overcharging by monitoring individual cells. The REDLITHIUM™ battery offers a superior quality battery pack construction ensuring greater efficiency in terms of autonomy and duration. 4 interchangeable chucks for multiple applications: self-locking metal 10 mm, ¼″ hex 6 mm, with angle drive ¼″ hex attachment, off-centre attachment ¼″ hex. Compact (130 mm length) and ergonomic. The POWERSTATE™ brushless motor delivers up to 34Nm of torque. Magnetic holder for bits. Works with all M12™ batteries.

Tech. Code		N403112
GR64	Euro	512,00
Battery tension	V	12
Battery capacity	Ah	2
Battery type		Li-ion
Max drilling Ø - Wood	mm	28
Max drilling Ø - Steel	mm	10
Torque max	Nm	34
Speed settings		2
Speed 1	Rpm	0-400
Speed 2	Rpm	0-1600
Weight	Kg	0,9

Supplied with:
2 12V 2Ah batteries
Battery charger
Heavy Duty Case

MITER SAWS BATTERY OPERATED 12V

ITEM: M12 FCOT-422X

Multi-material mini-miter saws guarantee precise cuts up to 20.000 rpm. Compact and optimized for one handed use. Versatile for cutting steel, stainless steel, non ferrous materials, plasterboard, fiber cement, plastic and ceramic. The REDLINK PLUS™ intelligent system provides advanced digital overload protection for tools and batteries, and dramatically improves tool performance under load. The REDLITHIUM™ battery offers superior quality battery pack construction, electronics, and consistent performance to deliver more range. Works with all Milwaukee M12™ batteries.

Tech. Code		N407718
GR64	Euro	(528,00)
Battery tension	V	12
Battery capacity	Ah	4 Ah/2 Ah
Battery type		Li-ion
Bore	mm	10
Disc diameter	mm	76
Cutting depth max	mm	16,3
No-load speed	Rpm	20.000
Weight (with battery)	kg	1,1

Included:
1 battery 12V 4 Ah + 1 battery 12V 2 Ah
Battery charger
Heavy Duty case

CORDLESS SCREWDRIVER DRILLS WITH BATTERY PERCUSSION 12V

BOSCH

ITEM: GSB 12V-15 PROFESSIONAL

Screwdriver drills GSB 12V-15 robust, with its only 189 mm, has the most compact shape in its class, for optimal handling especially in drilling and screwing work over head and in tight places. Newly developed 2-speed planetary gears for powerful screwing and drilling applications in wood and metal and for drilling with a hammer in to the wall. Sturdy 10 mm keyless chuck. The practical LED indicationg the battery charge level which indicates at any time the available charge status. Electronic Cell Protection (ECP) Bosch protects the battery against overload, overheating and complete discharge.
Intergrated.LED for illuminating the work area, even in poorly lit areas.

Tech. Code		N402112V
GR25	Euro	225,00
Battery tension	V	12
Battery capacity	Ah	2
Battery type		Lithium
No-load speed (1°/2° gear)	Rpm	0-380/1300
Ø max screws	mm	7
Ø Max. drilling - Wood	mm	19
Ø Max. drilling - Steel	mm	10
Ø Max. drilling - Masonry	mm	10
Tightening torque for hard/elas. coupling max	Nm	30/15
Weight (with battery)	kg	1

Included:
2 batteries GBA 12V 2 Ah
Rapid battery charger GAL 12V-20

N

CORDLESS IMPACT WRENCHES 12V

ITEM: M12 FIWF12-422X

Impact wrenches powerful and compact (124.5 mm long) M12 FIWF12-422X. 1/2" drive with friction ring for quick and easy socket changes. The brushless POWERSTATE™ motor delivers more power in a more compact size. The intelligent REDLINK PLUS™ system provides advanced digital overload protection for the tool and battery, vastly improving tool performance under load. The REDLITHIUM™ battery, by monitoring the individual battery cells, optimises the durability and performance of the battery pack to deliver more tool run time. The DRIVE CONTROL™ system allows you to choose between 4 different speed and torque settings, including auto-shut off mode. Works with all Milwaukee M12 batteries.

Tech. Code		N402712
GR64	Euro	559,00
Voltage	V	12
Battery capacity	Ah	1x2Ah - 1x4Ah
Battery type		Li-ion
Battery charging time	min	80
Max. tightening torque	Nm	339
Max. bolt Ø		M16
Impact rate	Bpm	1100/3200
No-load speed	Rpm	1200/2700
Weight	kg	1.1

Included:
Battery 12V 2 Ah
Battery 12V 4 Ah
Battery charger
Heavy Duty carrying case

BATTERY RATCHETS 12V

ITEM: M12 IR-201B 3/8

Powerful and fast M12 IR-201B ratchet with a torque of 47 Nm and 250 Rpm. Compact head, ideal for working in confined spaces. Variable speed switch for better control in different types of applications.
REDLINK™ electronics protect the tool and battery against overload.
The REDLITHIUM™ battery offers a superior quality battery pack construction ensuring greater efficiency in terms of autonomy and duration.
Works with all Milwaukee M12 batteries.

Tech. Code		N407318
GR64	Euro	419,00
Battery tension	V	12
Battery capacity	Ah	2
Battery type		Li-Ion
Coupling		3/8 square
Handle circumference	mm	45
Torque max	Nm	47
Length	mm	274
Head profile	mm	20
No-load speed	Rpm	0-250
Weight (with battery)	kg	0,9

Included:
1 battery 12V of 2 Amp
Battery charger
Bag

CORDLESS SCREWDRIVER DRILLS 18V

ITEM: M18 CBLDD-202C

Screwdriver drills compact brushless M18 CBLDD-202C,165 mm long for easy access in tight spaces. Heavy-duty 13 mm metal chuck for quick bit changes and superior bit retention. The REDLINK™ electronics protect the tool and the battery pack from overload by monitoring the individual cells. The REDLITHIUM™ battery provides superior pack construction to deliver more run time and longer battery life. Works with all Milwaukee M18 batteries.

Tech. Code		N405818
GR64	Euro	450,00
Voltage	V	18
Battery capacity	Ah	2
Battery type		Li-ion
Battery charging time	min	40
Ø Max. drilling - Wood	mm	52
Max. drilling Ø - Metal	mm	13
Max torque	Nm	60
Quick clamping chuck	mm	13
Speed settings		2
Speed 1	Rpm	0-500
Speed 2	Rpm	0-1800
Weight	kg	1.5

Included:
2 batteries 2 Ah
Battery charger
Carrying case

CORDLESS SCREWDRIVER DRILLS BATTERY OPERATED 18V

BOSCH

ITEM: GSR 18V-28 PROFESSIONAL

Screwdriver drills GSR 18V-28 powerful, robust and durable due to Electronic Motor Protection technology that protects the motor from overload and overheating.
The Bosch Electronic Cell Protection system protects the battery against overload, overheating and discharge.
Ergonomic design, comfortable to grip and handle, all metal 13 mm chuck.
20 +1 clutch settings.

Tech. Code		N405418
GR25	Euro	395,00
Battery voltage	V	18
Battery capacity	Ah	4
Battery type		Lithium
No-load speed (speed 1/speed 2)	Rpm	0-500/1900
Max. screw Ø	mm	8
Max. drilling Ø - Wood	mm	38
Max. drilling Ø - Steel	mm	13
Max. hard/soft tightening torque	Nm	63/28
Weight (with battery)	kg	1.49

Included:
2 batteries 18 V 4 Ah
Battery charger GAL 1860 CV
Carrying case L-BOXX

CORDLESS SCREWDRIVERS DRILLS BATTERY OPERATED 18V

BOSCH NEW

ITEM: GSR 18V-90 C

Powerful cordless drill driver with brushless motor and high performance. Ideal handling thanks to the compactness of the head (only 163 mm). Robust 13 mm metal chuck for efficient torque transfer suitable for any application. Switchable KickBack Control function, to reduce the risk of kickback in the event of a jam. Compatible with all Bosch Professional 18V batteries and chargers (Professional 18V System).

Tech. Code		N415218
GR25	Euro	(485,00)
Battery tension	V	18
Battery capacity	Ah	4
Battery type		Lithium
No-load speed (speed 1/2)	Rpm	0-630 / 0-2.100
max Screw Ø	mm	12
Max drilling Ø - Wood	mm	68
Max drilling Ø - Steel	mm	13
Tightening torque (soft/hard/max.)	Nm	36/64
Weight	kg	1,1

Supplied with:
2 Procore 18V 4Ah batteries
Bluetooth module
L-Box case

CORDLESS SCREWDRIVER DRILLS WITH PERCUSSION BATTERY OPERATED 18V

BOSCH

ITEM: GSB 18V-55 PROFESSIONAL

The GSB 18V-55 Professional cordless screwdriver drills are reliable and long lasting due to the integral metal gears and the innovative "Electronic Cell Protection" system that protects the battery against overload, overheating and total discharge. 13 mm keyless chuck.

Tech. Code		N405618
GR25	Euro	405,00
Battery tension	V	18
Battery capacity	Ah	4
Battery type		Lithium
No-load speed (speed 1/speed 2)	Rpm	0-460 / 0-1800
Max hard/soft tightening torque	Nm	55/28
Max. screw Ø	mm	10
Ø Max. drilling - Wood	mm	35
Ø Max. drilling - Steel	mm	13
Ø Max. drilling - Masonry	mm	13
Weight with battery	kg	1,6

Included:
2 batteries GBA 18V 4 Ah
Battery charger GAL 18V-40
Carrying case L-BOXX

CORDLESS SCREWDRIVER DRILLS WITH PERCUSSION 18 V

ITEM: M18 CBLPD-402C

Cordless screwdriver drills with percussion M18 CBLPD-402C with 165 mm length for easy access even in tight spaces. 13 mm Heavy Duty metal spindle for quick changeover and better bit retention. The REDLINK™ electronics offers superior battery pack construction, electronics and consistent performance to provide more battery life and work during battery life. 60 Nm of torque - maximum performance, maximum compactness. Works with all Milwaukee® M18™ batteries.

Tech. Code		N405718
GR64	Euro	559,00
Battery tension	V	18
Battery capacity	Ah	4
Battery type		Li-ion
Battery charging time	min	80
Ø Max. drilling - Wood	mm	52
Ø Max. drilling - Steel	mm	13
Ø Max. drilling - Masonry	mm	16
Torque max.	Nm	60
Quick clamping chuck	mm	13
Speed settings		2
Speed 1	Rpm	0 - 500
Speed 2	Rpm	0 - 1800
Weight with battery	kg	1,8

Included:
2 Batteries 18V 4 Ah
Battery charger
Case

ITEM: M18 FPD2-502X

Cordless drill screwdriver with M18 FPD2-502X percussion even more effective under stress - unmatched maximum torque of 135 Nm. Extremely compact: 175 mm in length for working in tight spaces. New Heavy Duty spindle ensures greater retention of the inserts.The POWERSTATE™ brushless motor, designed and built by Milwaukee® , for heavyduty applications. The intelligent REDLINK PLUS™ system provides advanced digital overload protection for tools and batteries, and improves the performance of the tool under load. Works with all Milwaukee® M18™ batteries.

Tech. Code		N405918
GR64	Euro	777,00
Battery tension	V	18
Battery capacity	Ah	5
Battery type		Li-ion
Battery charging time	min	59
Ø Max. drilling - Wood	mm	89
Ø Max. drilling - Steel	mm	16
Ø Max. drilling - Masonry	mm	16
Torque max.	Nm	135
Quick clamping chuck	mm	13
Speed settings		2
Speed 1	Rpm	0 - 550
Speed 2	Rpm	0 - 2000
Weight (with battery)	kg	2,2

Included:
2 Batteries 18V 5 Ah
Battery charger
Heavy Duty carrying case

While stocks last

IMPACT WRENCHES BATTERY OPERATED 18V

ITEM: M18 FID2-502X

Impact wrenches M18 FID2-502X even more effective under unequaled maximum torque force of 226 Nm. 1/4 " hexagonal connection for quick and easy insertion changes. The highest screwdring speed - up to 3600 rpm and 4300 strokes per minute. Extremely compact: only 117 mm in length for easy access even in rough spaces. The intelligent REDLINK PLUS ™ system provides advanced digital overload protection for tools and batteries and dramatically improves tool performance under load The REDLITHIUM™ battery offers superior quality battery pack construction, electronics and consistent performance for offering more autonomy and more work during the life of the battery. Works with all Milwaukee® M18 ™ batteries.

Tech. Code		N406318
GR64	Euro	(824,00)
Battery tension	V	18
Battery capacity	Ah	5
Battery type		Li-ion
Battery charging time	min	59
Tightening torque coupling max.	Nm	226
Ø max. bolt		M16
Impact rate	Bpm	0 - 4300
No-load speed	Rpm	0 - 3600
Weight (with battery)	kg	1,7

Included:
2 Batteries 18V to 5 Ah
Battery charger
Heavy Duty carrying case

CORDLESS IMPACT WRENCHES 18V

ITEM: M18 FIW2F12-502X

High performance impact wrenches thanks to the MILWAUKEE® DRIVE CONTROL electronics with 1/2" attachment that allows you to select 4 different speeds and torque settings to ensure maximum versatility in every application, specifically:
- Speed 1: precision work
- Speed 2: allows to prevent and avoid damage to the material
- Speed 3: heavy work
- Speed 4: the tool automatically locks one second after the impact, avoiding excessive tightening and therefore damage to the material.

The POWERSTATE™ brushless motor ensures longer life, efficiency and power.
The intelligent REDLINK PLUS™ system provides advanced digital protection against tool and battery overload, improving tool performance under load.
The REDLITHIUM™ battery offers a superior quality battery pack construction ensuring greater efficiency in terms of autonomy and duration.
Works with all Milwaukee M18 batteries.

Tech. Code		N407118
GR64	Euro	886,00
Battery tension	V	18
Battery capacity	Ah	5
Battery type		Li-ion
Tightening torque coupling max.	Nm	339
Impact rate	Bpm	1000/2400/3500
No-load speed	Rpm	900/1650/2400/1200
Weight (with battery)	kg	1,8

Included:
2 batteries 18V of 5 Amp
Battery charger
Heavy Duty Case

ITEM: M18FID3-502X

NEW

High performance impact wrench with 226Nm of torque. FUEL technology with POWERSTATE brushless motor, REDLINK™ electronics that protect the tool and the battery against overload by monitoring the individual cells and REDLITHIUM™ battery that guarantees greater efficiency in terms of autonomy and duration. With only 113 mm it is the most compact in its category. 3 speeds. 1/4" hex drive.

Tech. Code		N408318
GR64	Euro	(839,00)
Battery tension	V	18
Battery capacity	Ah	5
Battery type		Li-Ion
Tightening torque max	Nm	226
Ø max. bolt	mm	M16
Impact rate	Bpm	0-4400
No-load speed	Rpm	0-3900
Weight	Kg	1

Supplied with:
2 18V 5Ah batteries
Battery charger
Heavy Duty Case

ITEM: M18 FHIWF12-502X

The M18 FHIWF12-502X FUEL impact wrenches combines a 1356 Nm of tightening torque in a compact size of 213 mm, giving greater access in tight spaces. The DRIVE CONTROL system allows you to choose between four different speed and torque settings for maximum flexibility in various applications. 1/2" drive with friction ring. The brushless POWERSTATE™ motor offers increased power efficiency and durability. The intelligent REDLINK PLUS™ system provides advanced digital overload protection for the tool and battery, improving tool performance under load. The REDLITHIUM™ battery provides superior pack construction to deliver more run time and longer battery life.
Works with all Milwaukee M18 batteries.

Tech. Code		N406118
GR64	Euro	1026,00
Voltage	V	18
Battery capacity	Ah	5
Battery type		Li-ion
Battery charging time	min	59
Max. tightening torque	Nm	130/1356
Impact rate	Bpm	0-950/ 0-2100
No-load speed	Rpm	0-550/ 0-1750
Weight (with battery)	kg	3.3

Included:
2 batteries 18V 5 Ah
Battery charger
Heavy Duty carrying case

CORDLESS IMPACT WRENCHES 18V

ITEM: M18 ONE FHIWF34-502X

Compact size high torque impact wrenches. DRIVE CONTROL system allows you to select 4 different speed and torque setting modes. Possibility of repeating applications with extreme torque accuracy. ¾" square drive with friction ring. The KEY™ technology allows you to customize the tool according to the application to be carried out, increasing its productivity and also guarantees remote, monitoring of all tools in the inventory, preventing tampering. The REDLINK PLUS™ intelligent system provides protection advanced digital overload protection for tools and batteries, and dramatically improves tool performance under load. The REDLITHIUM™ battery offers superior quality battery pack construction, electronics and consistent performance to deliver longer range. Works with all Milwaukee® M18™ batteries.

Tech. Code		N407618
GR64	Euro	(1166,00)
Battery tension	V	18
Battery capacity	Ah	5
Battery type		Li-ion
Max. tightening torque	Nm	702/1138/1627/1627
Ø max. bolt		M33
Impact rate	Bpm	0-850/0-1850/0-2400
No-load speed	Rpm	0-800/0-1300/0-1800/0-1800
Max torque in reverse	Nm	2034
Weight (with battery)	kg	3,5

Included:
2 batteries 18V 5 Ah
Battery charger
Heavy Duty Case

IMPACT WRENCHES HIGH TORQUE 18 V

ITEM: M18 ONE FHIWF1-802X

M18 ONE FHIWF1-802X is the first M18 FUEL™ ONE KEY™ high torque impact wrenches with 1" connection capable of replacing corded and pneumatic tools.
DRIVE CONTROL system that allows you to choose between four different speed and torque settings, for maximum flexibility in different applications. Ensures repeatability of applications with extreme torque accuracy.
The ONE-KEY™ technology allows you to customize the tool according to the application to be performed, increasing its productivity and also guarantees remote monitoring of all the tools entered in the inventory, preventing tampering.
The REDLINK PLUS™ intelligent system provides advanced digital overload protection for tools and batteries, and dramatically improves tool performance under load. The REDLITHIUM™ battery offers superior battery pack construction, electronics, and consistent performance to deliver more runtime.
Works with all Milwaukee® M18™ batteries.

Tech. Code		N407018
GR64	Euro	(1493,00)
Battery tension	V	18
Battery capacity	Ah	8
Battery type		Li-ion
Max. tightening torque	Nm	530/1020/1800/2033
Ø max. bolt		M42
Impact rate	Bpm	1350-2500
No-load speed	Rpm	0-1670
Max torque in reverse	Nm	2400
Weight (with battery)	kg	5,9

Included:
2 batteries 18V of 8 Amp
Battery charger
Heavy Duty Case

CORDLESS REVERSIBLE SCREWDRIVERS BATTERY OPERATED 20V

ITEM: W5153

Drill screwdrivers 1/2" Impact wrench with a maximum torque of 500 Nm and a torque of 750 Nm.
The IQV series power control system includes 4 modes:
Maximum power, Medium power, Key lock and Manual tightening.
IQV technology with brushless motor and lighting without shadows.

Tech. Code		N409620
GR25	Euro	(916,00)
Battery tension	V	20
Battery capacity	Ah	2,5 / 5,0
Battery type		Lithium
Torque max	Nm	500
No-load speed/min.	Rpm	2100
Square drive	Inch	1/2
Strokes/min.	Bpm	3300
Length	mm	183
Noise level	Db(A)	90
Vibration (with battery BL 2012)	m/s²/K	12,6/1,7
Vibration (with battery BL 2022)	m/s²/K	16,1/2,6
Weight (with battery BL 2012)	kg	2,1
Weight (with battery BL 2022)	kg	2,4

Included:
Battery charger of 12/20 V
Lithium-ion batteries
BL2012 (2,5 Ah)
BL2022 (5 Ah)
Case

CORDLESS REVERSIBLE SCREWDRIVERS BATTERY OPERATED 20V

ITEM: W7152EU-K22

Drill screwdrivers 1/2" Impact wrench with a maximum torque of 1.360 Nm and a torque of 2033 Nm.
The IQV series power control system includes 4 modes: Maximum power, Medium power, Key lock and Manual tightening.
IQV technology with brushless motor and lighting without shadows.
LED light ring with 4 intensity settings.

Tech. Code		N410120
GR25	Euro	(979,00)
Battery tension	V	20
Battery capacity	Ah	5
Battery type		Lithium
Torque max	Nm	1360
No-load speed/min	Rpm	1900
Square drive	Inch	1/2
Strokes/min.	Bpm	2450
Length	mm	207
Noise level	Db(A)	95
Vibration	m/s²/K	17/3,7
Weight (with battery)	kg	3,4

Included:
Battery charger of 12/20 V
2 Lithium-ion batteries
BL2022 (5 Ah)
Case

IN LINE SCREWDRIVERS 4V

ITEM: M4 D

Compact 244 mm screwdrivers. Tool suitable for small screwdriving on metal that require little power, typically assemblies. Extremely accurate 8% clutch. Two speeds for screwing and drilling. Electronic switch with variable speed ¼" hexagonal shank.

Tech. Code		N407804V
GR64	Euro	216,00
Battery tension	V	4
Capacity	Ah	2
Battery type		Li-ion
No-load speed (1°/2°vel.)	Rpm	0-200/0-600
Tightening torque coupling max.	Nm	5
Weight (with battery)	kg	0,5

Included:
2 batteries 4V
Battery Charger

BAND SAWS COMPACT 18V

ITEM: M18 FBS85-202C

Band saws compact M18 FBS85-with cutting capacity up to 85mm. Tool-free adjustable blade protection cap to ensure maximum safety, as well as a lever-operated blade removal system to facilitate blade replacement. Variable speed switch and safety switch. Support base adjustable without tools.
POWERSTATE™ brushless motor for longer life, efficiency and power.
The intelligent REDLINK PLUS™ system provides advanced digital protection against overload of tool and battery, improving the performance of the tool under load. Battery REDLITHIUM™ offers superior quality battery pack construction ensuring greater efficiency in terms of autonomy and duration.
Works with all Milwaukee M18 batteries.

Tech. Code		N406918
GR64	Euro	(902,00)
Battery tension	V	18
Battery capacity	Ah	2
Battery type		Li-Ion
Cutting capacity of rectangular beams	mm	85
Blade length	mm	898,52
No-load speed	m/min	0-165
Weight (with battery)	kg	3,9

Included:
2 batteries 18V da 2 Ah
Batery charger
Case

ROTARY HAMMERS BATTERY OPERATED 18V

ITEM: M18 BLHX-502X

Powerful cordless rotary hammers battery operated with compact and ergonomic design. FIXTEC™ system for keyless spindle change (SDS plus coupling). 4 operating modes: rotary percussion, chisel rotation and neutral position for chisel orientation. Anti-vibration side handle. Metal gearbox for maximum strength.The REDLINK PLUS™ intelligent system provides advanced digital overload protection for tools and batteries, and dramatically improves tool performance under load, The REDLITHIUM™ battery offers superior quality battery pack construction, electronics, consistent performance to deliver more range. Works with all Milwaukee® M18™ batteries.

Tech. Code		N407918
GR64	Euro	(917,00)
Battery tension	V	18
Battery capacity	Ah	5
Stroke power	J	2,3
Percussion frequency (strokes / min)		0-5100
No-load speed	Rpm	0-1400
Capacity max wood drilling	mm	26
Capacity max metal drilling	mm	13
Capacity max concrete drilling	mm	26
Vibration drilling	m/s²	8.9
Vibration chisel	m/s²	9.5
Weight (with battery)	kg	3,5

Included:
2 batteries 18v 5 Ah
Battery charger
Heavy Duty case

CORDLESS ANGLE GRINDERS BATTERY OPERATED 18V

BOSCH

EC BRUSHLESS MOTOR | LI-ION | KICKBACK CONTROL | RESTART PROTECTION

ITEM: GWS 18V-10 PROFESSIONAL

GWS 18V-10 angle grinders with high stock removal and cutting capacity in its class. Restart Protection for protection against accidental restart, Kickback Control protect against Kickbacks. Drop Control to switch off the motor if the machine falls. New generation brushless motor.

Tech. Code		N407418
GR25	Euro	(519,00)
Battery tension	V	18
Battery capacity	Ah	4
Battery type		Lithium
No-load speed/min.	Rpm	9000
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Threaded shaft coupling		M14
Weight (with battery)	kg	2,8

Included:
2 batteries GBA 18V 4 Ah
Rapid battery charger GAL 18V-40
Carrying case L-BOXX
Protective cap
Tightening nut
Clamping flange

CORLESS ANGLE GRINDERS BATTERY OPERATED 18V

NEW

ITEM: M18 FSAGF125XB-0X

Angle grinders M18 FUEL™ equipped with new generation POWERSTATE™ Brushless motor, REDLINK PLUS™ electronics and REDLITHIUM™ battery, which offer advanced protection against overload, exponentially increasing the yield of individual cells to guarantee a result comparable to that of traditional tools. wire. Flat head design, for maximum accessibility in confined spaces with angles up to 42°. RAPIDSTOP™ system capable of braking the disc in less than 2 seconds, for greater safety. FIXTEC™ system for tool-free disc replacement. AVS anti-vibration side handle. Protection against accidental restart.
Works with all M18™ batteries.

Tech. Code		N404718
GR64	Euro	528,00
Battery tension	V	18
Battery capacity	Ah	-
Batterry type		Li-ion
No-load speed	Rpm	8500
Ø Disc	mm	125
Threaded shaft coupling		M14
Weight	kg	2,6

Included:
Heavy Duty Case
Quick release deburring cap
AVS anti-vibration side handle
Flange and counter flange
Spade wrench
Dust grilles

N

Indivisible package Suggested retail package - Unit price

CORDLESS ANGLE GRINDERS BATTERY OPERATED 18V

ITEM: M18 FSAG125XB-502X

Cordless Angle Grinders M18 FSAG125XB-502X equipped with Brushless motor POWERSTATE™ new generation electric REDLINK PLUS™ battery REDLITHIUM™ offers superior performance and durability, power equal to 1200 W. System RAPIDSTOP™ capable of braking the disc in less than 2 seconds, for added safety. Small head size and optimized battery housing: maximum handling. Ergonomic side handle and AVS anti-vibration. FIXTEC ™ system for tool-free disc replacement. Removable dust grids to protct the motor from abrasive dust and quick release cap that allows maximum cutting capacity and quick adjustment. Protection against accidental restart. Compatible with all MILWAUKEE® M18™ batteries.

Tech. Code		N404818
GR64	Euro	917,00
Battery tension	V	18
Battery capacity	Ah	5
Battery type		Li-Ion
Battery charging time	min.	59
No-load speed/min.	Rpm	8500
Ø Disc	mm	125
Cutting depth max.	mm	33
Threaded shaft coupling		M14
Accidental restart lock		Si
Weight (with battery)	kg	2,7

Included :
2 batteries M18 5 Ah
Battery charger M12-18 FC
HeavyDuty case

ITEM: M18 FHSAG125XPDB-552X

Angle Grinders HIGH OUTPUT™ delivers the power to make up to 145 cuts per charge on wireway. The POWERSTATE™ brushless motor ensures maximum performance and durability.REDLINK PLUS™ electronics offer advanced overload protection. The REDLITHIUM™ HIGH OUTPUT™ battery pack exponentially increases the yield of the individual cells to guarantee a result absolutely comparable to that of the corded tool. Paddle switch without the possibility of locking with protection against accidental restart. Anti-vibration side handle. FIXTEC™ attachment that allows you to change the disc without using any tools. Removable anti-dust grilles.

Tech. Code		N406818
GR64	Euro	(1088,00)
Battery tension	V	18
Cutting depth max.	mm	33
No-load speed/min	Rpm	9000
Ø Disc	mm	125
Threaded shaft coupling		M14
Battery type		Li-Ion
Accidental restart lock		Yes
Battery capacity	Ah	5,5
Kickback protection		Yes
Switch type		Paddle
Weight (with battery)	kg	3,4

Included:
2 batteries 18V 5,5 Ah
Battery charger
Heavy Duty Case

CORDLESS STRAIGHT GRINDERS BATTERY OPERATED 18V

NEW

ITEM: M18 FDGRB-502X

straight grinders M18 FUEL™ equipped with new generation POWERSTATE™ Brushless motor, REDLINK PLUS™ electronics and REDLITHIUM™ battery, which offer advanced protection against overload, exponentially increasing the yield of individual cells to guarantee a result comparable to that of rotary tools. wire. Attacks 6 and 8 mm compatible with the most common accessories. Compact design; length 430 mm, connection 20x27 mm. Maximum control in every application thanks to the 5 selectable speeds. Protection against accidental restart (LLO). RAPIDSTOP™ in less than 2 seconds. Compatible with all MILWAUKEE® M18™ batteries.

Tech. Code		N403218
GR64	Euro	(886,00)
Battery tension	V	18
Battery capacity	Ah	5
Battery type		Li-ion
No-load speed	Rpm	27.000
Collar dimension	mm	6/8
Max Ø accessories	mm	50
Weight	Kg	2,1

Supplied with:
2 18V 5Ah batteries
Battery charger
Heavy Duty Case
6mm collar, 8mm collar
15mm open end wrench, 17mm open end wrench
2 dust filters

LITHIUM BATTERIES

ITEM: M12 B4

Tech. Code	GR64 Euro	Battery tension V	Ah
N4080122	86,00	12	2
N4080124	132,00	12	4
N4080185	232,00	18	5

BATTERY CHARGER

ITEM: M12-18C

Tech. Code	GR64 Euro	Battery tension V	Supplier art.
N408112/18	101,00	12 - 18	M12-18 C

LITHIUM BATTERIES RESISTANT TO CHEMICAL AGENTS

NEW

ITEM: M18B5-CR

New coating composed of nylon with glass fiber (GFN) which increases the useful life of the battery and guarantees chemical resistance against oils and greases. Up to 2.5 times longer runtime, up to 20% more power and up to double the battery life compared to other lithium-ion technologies. Operation at temperatures down to -20°. Internal anti-shock separators to prevent damage due to vibrations or falls.

Tech. Code	GR64 Euro	Battery tension V	Battery capacity Ah
N408918	248,00	18	5

LITHIUM BATTERIES

ITEM: GBA

LITHIUM BATTERIES

Tech. Code	GR25 Euro	Battery tension V	Ah
N409012	68,00	12	2
N409012/3	82,00	12	3
N409018/4	135,00	18	4

PROCORE BATTERIES

BOSCH

ITEM: PROCORE

The batteries are 100% compatible with all new and existing Bosch 18V power tools and battery chargers.
87% more power compared to standard batteries due to the latest cell technology that provides superior and intelligent heat management.
135% longer life with the Coolpack 2.0 technology that prevents the battery from overheating.

Tech. Code	GR25 Euro	Battery tension V	Ah
N409118/4PRO	135,00	18	4
N409118/8PRO	229,00	18	8
N409118/12PRO	345,00	18	12

LITHIUM CELL BATTERY CHARGERS

BOSCH

ITEM: AL-1130-CV - GAL36-80-CV - GAX 18V-30

Tech. Code	GR25 Euro	Battery tension V	Supplier item
N409518	93,00	12 - 18	GAX 18V-30

BATTERIES 20V

Ingersoll Rand

ITEM: BL2022

The BL2022, 5 Ah has the same weight and the same dimensions as its 3 Ah predecessor,but guarantees a longer operating time of 68%. Ergonomics: patent-pending two-sided button designed for easier battery installation. Durability: The Intelegent management system BMS) allows the battery to communicate with the tool and the charger to provide triple battery protection, to avoid overloads and to check the charge / discharge status to ensure a longer useful life of the tool and battery.

Tech. Code	GR25 Euro	Battery tension V	Battery capacity Ah	Weight kg
N409820	(283,00)	20	5	0,72

BATTERY CHARGER 20V

Ingersoll Rand

ITEM: BC1121-EU

Versatility: A charger for all Ingersoll Rand batteries, compatible with all existing 20 V and 12 V IR batteries, can charge USB mobile devices. Durability: The composite housing is hard wearing, resistant to abrasion and falls, it can also be fixed with screws to walls or tool boxes.

Tech. Code	GR25 Euro	Battery tension V
N409920	(150,00)	12/20

GENERAL CATALOGUE

To buy any products of this MILWAUKEE catalogue contact our commercial office. Delivery time depends on the availability of our supplier, you will receive a confirmation of your order with the details of the delivery date.

The MILWAUKEE items included in our LINK23 catalogue are ready to be delivered in 24 h.

www.linkindustrialtools.com
info@linkindustrialtools.it

REVERSIBLE DRILLS

BOSCH

ITEM: GBM 10 RE PROFESSIONAL

Supply voltage 230 Volt, powerful and compact, electronic control for a precise initial drilling phase. Auto-locking metal chuck for high precision and long service life, with anti-loosening safety screw during left-hand rotation, handle with Softgrip coating for a secure and comfortable grip, practical belt clip attachment, 43 mm collar Ø for use on a column support.

Tech. Code		N4100600/1
GR25	Euro	175,00
Power	W	600
No-load speed	Rpm	0-2600
Threaded shaft coupling		3/8"
Chuck	mm	10
Ø Max. drilling - Steel	mm	10
Ø Max. drilling - Aluminium	mm	10
Ø Max. drilling - Wood	mm	25
Weight	kg	1,7

Included:
Keyless chuck
Dimension: 267x194h mm

ITEM: GBM 13-2 RE PROFESSIONAL

Supply voltage 230 Volt, powerful and accurate, fully equipped with ball and roller bearings for long service life and precise work, pre-set number of revolutions with setting wheel. Auto-locking metal chuck for high precision and long service life,with anti-loosening safety screw during left-hand rotation, 43 mm collar Ø for use on a column support.

Tech. Code		N4103750/1
GR25	Euro	389,00
Power	W	750
No-load speed	Rpm	0-1000/3200
Threaded shaft coupling		1/2 UNF
Chuck	mm	1,5-13
Ø Max. drilling - Steel	mm	13/8
Ø Max. drilling - Aluminium	mm	20/12
Ø Max. drilling - Wood	mm	32/20
Weight	kg	2,4

Included:
Auxiliary handle
Depth stop 210 mm
Keyless chuck high precision

Dimension: 332x208h mm

REVERSIBLE DRILLS

ITEM: BOP 10

Compact variable speed drills with high Rpm stability, suitable for holes in steel up to 10 mm. FEIN® high-performance motor with right and left rotation. Equipped with SUPRA SKE steel quick-release chuck and FEIN® Sensitiv handle. 5 meter cable.

Tech. Code		N410410
GR82	Euro	377,00
Power supply	V	230 - 50 Hz
Power	W	500
No-load speed	Rpm	0 - 1500
Threaded shaft coupling		1/2 20 UNF
Chuck	mm	1,5 - 13
Ø Max. drilling - Steel	mm	10
Ø Max. drilling - Aluminium	mm	15
Ø Max. drilling - Wood	mm	30
Weight	kg	1,8

Included:
Chuck
Handle

ELECTRIC REVERSIBLE ANGLED DRILLS

BOSCH

ITEM: GWB 10 RE PROFESSIONAL

Supply voltage 230 Volt, slender cylindrical body, small angular size (only 23 mm) and very low height thanks to the cashed chuck. Pre-set number of revolutions with speed setting wheel, chuck rack.

Tech. Code		N4109400ANG
GR25	Euro	498,00
Power	W	400
No-load speed	Rpm	0-1300
Chuck	mm	10
Ø Max. drilling - Steel	mm	10
Ø Max. drilling - Aluminium	mm	12
Ø Max. drilling - Wood	mm	22
Weight	kg	1,7

Included:
Rack and pinion chuck
Dimension: 298x76h mm

N

ITEM: GSB 13 RE PROFESSIONAL

Percussion drills GSB 13 RE extremely easy to handle and only 1,8 Kg heavy. Softgrip for a safer grip and more comfortable, robust, self-locking chuck with two metal bushes for a quick tool change. Preselection of the speed with adjustment wheel, clock-wise and anti-clock wise.

Tech. Code		N4111600P/1
GR25	Euro	115,00
Power	W	600
No-load speed	Rpm	0 - 2800
Impact frequency at no-load/min.		0 - 44800
Threaded shaft coupling		1/2 UNF
Chuck	mm	13
Ø Max. drilling - Concrete	mm	13
Ø Max. drilling - Masonry	mm	15
Ø Max. drilling - Steel	mm	10
Ø Max. drilling - Wood	mm	25
Weight	kg	1,8

Included:
Extra handle
Depth limiter 210 mm
Keyless chuck 13 mm
Dimension: 266x180h mm

ITEM: GSB 16 RE PROFESSIONAL

Supply voltage 230 Volt, compact and handy with sturdy metal gear housing, pre-set number of revolutions with setting wheel. Auto-locking metal chuck with Auto-Lock for quick one-handed tool changes, handle with Softgrip coating for a secure and comfortable grip, ball coupling of the cable to prevent breakage and improve operation, 43 mm collar Ø for use also on a column support.

Tech. Code		N4110750P/1
GR25	Euro	219,00
Power	W	750
No-load speed	Rpm	0-2800
Impact frequency at no-load/min.		0-47600
Threaded shaft coupling		1/2 UNF
Chuck		13
Ø Max. drilling - Concrete	mm	16
Ø Max. drilling - Masonry	mm	18
Ø Max. drilling - Steel	mm	13
Ø Max. drilling - Wood	mm	30
Weight	kg	2,2

Included:
Auxiliary handle
Depth stop 210 mm
Plastic case
Dimension: 285x214h mm

ITEM: GSB 20-2 RE

Supply voltage 230 V. The GSB 20-2 RE Professional is a versatile 2-speed impact drill with a KickBack Control function for greater user protection in more complex drilling applications. The powerful 850 Watt motor ensures a very high workflow. This impact drill is designed for drilling concrete, stone and masonry. It is fitted with a sturdy metal gear housing to ensure greater durability. Autolock, overload clutch and speed selector included.

Tech. Code		N4121850P/1
GR25	Euro	265,00
Power	W	850
No-load speed	Rpm	0-1000 / 3000
Impact rate at no-load speed/bpm		0-17000 / 51000
Threaded shaft coupling		1/2" - 20 UNF
Chuck	mm	13
Ø Max. drilling - Concrete	mm	18/13
Ø Max. drilling - Masonry	mm	20/15
Max. drilling Ø - Steel	mm	13/8
Ø Max. drilling - Wood	mm	40/25
Min/max chuck clamping range	mm	1.5 / 13
Max torque	Nm	36 / 15.5
Weight	kg	2.6

Included:
Keyless chuck 13 mm
Auxiliary handle
Depth stop 210 mm
Carrying case L-case

REVERSIBLE ROTARY HAMMERS SDS PLUS

BOSCH

ITEM: GBH 2-26 PROFESSIONAL

Supply voltage 230 Volts, compact and balanced thanks to its "L" shape, system for quick replacement of the SDS Plus coupling with auto-locking chuck. Stepless adjustment of the number of revolutions for a more sensitive drilling start, impact stop for drilling steel and wood and rotation stop for chiselling. Safety clutch against overload, Vibration Control for effective vibration reduction, handle with Softgrip coating for a secure and comfortable grip, ball coupling of the cable to prevent breakage and impediments.

Tech. Code		N4133790M/1
GR25	Euro	279,00
Power	W	830
Rated speed	Rpm	0 - 900
Max stroke power	J	2,7
Impact frequency at no-load/min.		0-4000
Chuck tool coupling		SDS plus
Ø Max. drilling - Concrete with SDS drills	mm	4 - 26
Ø Max. drilling - Steel	mm	13
Ø Max. drilling - Wood	mm	30
Hollow crowns for drilling masonry	mm	68
Weight	kg	2,9

Included:
Auto-locking chuck
Quick-change 13 mm
Auxiliary handle
Depth stop 210 mm
Plastic case
Dimension: 354 x 233 h mm

ITEM: GBH 3-28 DFR PROFESSIONAL

Supply voltage 230 Volt, compact and balanced thanks to its "L" shape, system for quick replacement of the SDS Plus coupling with auto-locking chuck. Stepless adjustment of the number of revolutions for a more sensitive drilling start, impact stop for drilling steel and wood and rotation stop for chiselling. Safety clutch against overload, Vibration Control for effective vibration reduction, handle with Softgrip coating for a secure and comfortable grip, ball coupling of the cable to prevent breakage and impediments.

Tech. Code		N4140800M/2
GR25	Euro	539,00
Power	W	800
Rated speed	Rpm	0-900
Max stroke power	J	3,1
Impact frequency at no-load/min.		0-4000
Chuck tool coupling		SDS plus
Ø Max. drilling - Concrete with SDS drills	mm	28
Ø Max. drilling - Brickwork with hollow crowns	mm	82
Ø Max. drilling - Steel	mm	13
Ø Max. drilling - Wood	mm	30
Weight	kg	3,6

Included:
Auto-locking chuck
Quick-change 13mm
Auxiliary handle
Depth stop 210 mm
Plastic case
Dimension: 354 x 233 h mm

PORTABLE TAPPING MACHINES

ITEM: GWP 10

Portable tapping machines with reverser gear that allows automatic reversal of the direction of rotation by extracting the male from the threaded hole, rapid return at 680 rpm for very fast operating cycles. FEIN® high-performance motor with stable number of revolutions even in the most demanding jobs. FEIN® metal head and Sensitiv handle.Chuck to be ordered separately.

Tech. Code		N416010
GR82	Euro	(754,00)
Power supply	V	230 - 50 Hz
Power	W	450
No-load speed left	Rpm	0 - 1000
Rpm during tapping	Rpm	0 - 450
Rpm during extraction of taps	Rpm	0 - 680
Tapping on steel		M 10
Shaft coupling		B 12
Weight	kg	1,6

Supplied with:
Handle

Machine supplied without chuck, demonstration image.

CHUCKS FOR PORTABLE TAPPING MACHINES

ITEM: 63206019009

Self-centering chucks for portable tapping machines.

Tech. Code		N416210
GR82	Euro	118,00
For taps	DIN 371 / 376	M3 - M10
Clamping range	mm	2 - 8,1
Morse taper		B 12

Supplied with:
Key

ANGLE GRINDERS

BOSCH

ITEM: GWX 9-125S X-LOCK

Angle grinders GWX 9-125S the most compact and powerful in the 900W cordless category. The innovative and patented keyless X-LOCK click system enables fast and convenient accessory changes without the aid of any tools. The preselection of the number of revolutions allows perfect results on multiple processes. The anti-rotation guard protects the user in the event of disc breakage. Equipped with a protection system against accidental restart.

Tech. Code		N42379125
GR25	Euro	179,00
Power	W	900
No-load speed	Rpm	2800 - 11,000
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Weight	kg	2.1

Included:
Auxiliary handle
Protective guard

ITEM: GWS 750 PROFESSIONAL

Supply voltage 230 Volt, lightweight and easy to handle, chuck lock for easy wheel change, safety switch to prevent accidental starting. Gear head rotatable in steps of 90°, adjustable grinding wheel guard with axial safety lock and extra handle for both right and left-hand use. Equiped with the RESTART PROTECTION, protection against the restarting in case of power interruption.

Tech. Code		N4205115
GR25	Euro	89,00
Power	W	750
No-load speed	Rpm	11000
Ø Grinding wheels	mm	115
Ø Pad	mm	115
Ø hole brushes max	mm	70
Threaded shaft coupling		M 14
Weight	kg	1,8

Included:
Mounting flange
Protection cap
Clamping nut
Dual hole wrench
Dimension: 263x104h mm

Tech. Code		N4200RIC
GR76	Euro	19,36
SPARE PARTS		Brushes (pair) 1607014145

N

Indivisible package Suggested retail package - Unit price

ANGLE GRINDERS

ITEM: WSG 7-115

Angle grinders compact and handy for simple cutting and sanding work. Lateral switch and small handle, metal head rotating in 90 °steps to work even in very tight spots. Increased security thanks to the integrated restart interlock device. Lock button of the tool holder shaft.

Tech. Code		N4203115
GR82	Euro	92,00
Power supply	V	230 - 50 Hz
Rated power consumption	W	760
No-load speed	Rpm	12500
Ø Grinding wheels	mm	115
Ø Pad	mm	115
Ø hole brushes max	mm	70
Threaded shaft coupling		M 14
Weight	kg	1,7

Included:
Protection cap
Pair of flanges
Handle
Key

ANGLE GRINDERS

BOSCH

ITEM: GWS 9-125 S PROFESSIONAL

Angle grinders GWS 9-115 / 125 S powerful and ergonomic. Long life, thanks to the motors with direct cooling, protection against overload and long life of the brushes. Suitable for processing all materials thanks to the adjustable speed. Perfect control thanks to the optimized weight, only 1.9 kg and the smallest handle in its class (187 mm).

Tech. Code		N4210125
GR25	Euro	129,00
Power	W	900
No-load speed	Rpm	2800 - 11000
Ø Grinding wheels	mm	115/125
Ø Pad	mm	115/125
Ø Hole brushes	mm	70
Threaded shaft coupling		M14
Weight	kg	1,9

Included:
Mounting flange
Protection cap
Clamping nut
Vibration Control handle
Dual hole wrench
Dimension: 284x100h mm

Tech. Code		N4200RIC5
GR76	Euro	(11,06)
SPARE PARTS		Brushes (pair) 1619P11715

ANGLE GRINDERS

ITEM: AG 800 E

Grinders with powerful 800w motor and extremely light. Compact design, slim body. Protection against accidental restart. Steel gears for maximum durability. Protected air intakes for better cooling.

Tech. Code		N4207115
GR64	Euro	107,00
Power	W	800
No-load speed	Rpm	11500
Ø Grinding wheels	mm	115
Ø Pad	mm	115
Ø hole brushes max	mm	70
Threaded shaft coupling		M14
Weight	kg	2

Included:
Side handle
Flange
Flange key
Protective cover

ITEM: AG 10-125 EK

AG 10-125 EK grinder, powerful 1000 W motor for high performance. Compact design: only 276 mm in length and 2.1 kg in weight for greater maneuverability. Protection against accidental restart (LLO). Resistant adjustable protective cover without tools, slide switch, 4 meter cable.

Tech. Code		N4208125
GR64	Euro	170,00
Power	W	1000
No-load speed	Rpm	11000
Variable speed		No
AVS (Anti-Vibration-System)		No
Accidental restart lock		Yes
Ø Disc	mm	125
Threading shaft coupling		M14
Weight	kg	2,1

Included:
Side handle
Flange
Flange wrench
Adjustable protection cover without tools

N

ANGLE GRINDERS

ITEM: CG 10-125

Angle grinders compact and handy for cutting, deburring and sanding jobs. 90° rotable head for a wide range of applications. Quick-release disc lock ring as standard allows you to change abrasives without the need for any tools. High overload capacity thanks to direct motor cooling.

Tech. Code		N4213125
GR82	Euro	(129,00)
Power supply	V	230 - 50 Hz
Rated power consumption	W	1000
No-load speed	Rpm	11.000
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Ø hole brushes max	mm	70
Threaded shaft coupling		M14
Weight	kg	2,1

Included:
Protective cap
Pair of flanges
Handle
Key

ANGLE GRINDERS

BOSCH

ITEM: GWS 11-125 PROFESSIONAL

Supply voltage 230 Volt, powerful and compact, direct cooling for overload, high resistance and long service life. Chuck lock for easy wheel change, safety switch to prevent accidental starting. Gear head rotatable in steps of 90°, anti-rotating quick positioning guard for grinding wheel. Equiped with the RESTART PROTECTION, protection against the restarting in case of power interruption.

Tech. Code		N4212125/1
GR25	Euro	199,00
Power	W	1100
No-load speed	Rpm	11500
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Ø hole brushes max	mm	75
Threaded shaft coupling		M14
Weight	kg	2,2

Included:
Mounting flange
Protection cap
Clamping nut
Handle
Dual hole wrench
Dimension: 303x103h mm

Tech. Code		N4200RIC1
GR76	Euro	27,44
SPARE PARTS		Brushes (pair)167000V53

ANGLE GRINDERS

ITEM: AGV13-125 XE

Powerful 1250 W PROTECTOR-MOTOR with epoxy resin coated windings for greater durability and maximum resistance to abrasive dust. Power supply 230V, powerful and compact. Constant power and speed under load. Accidental restart protection (LLO). Protection against overheating. Overload clutch to protect the user in case the disc jams. New integrated Milwaukee FIXTEC™ system for fast and tool-less disc changes. Durable tool-free protective cover. Anti-Vibration handle for maximum user comfort. 90° Rotatable head. 4 m cable.

Tech. Code		N421413125
GR64	Euro	248,00
Power	W	1250
No-load speed	Rpm	2800 - 11,500
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Max. cutting depth	mm	33
Threaded shaft coupling		M14
Weight	kg	2.4

Included:
Side handle AVS
Flange
Flange wrench
Protective cover - adjustable without tools

BOSCH

ITEM: GWS 1400 PROFESSIONAL

Supply voltage 230 Volt, powerful, compact, technologically advanced, starting current limiter for a smooth and safe start and Constant Electronic for constant rpm even under load. Kick-Back-Stop for power turn-off in case of wheel lock, protection against accidental restarting, direct cooling for overload, high resistance and long service life. Chuck lock for easy wheel change, safety switch to prevent accidental starting. Gear head rotatable in steps of 90°, anti-rotating quick positioning guard for grinding wheel.

Tech. Code		N4217125/1
GR25	Euro	199,00
Power	W	1400
No-load speed	Rpm	11000
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Ø hole brushes max	mm	70
Threaded shaft coupling		M14
Weight	kg	2,2

Included:
Mounting flange
Protection cap
Clamping nut
Handle
Dual hole wrench
Dimension: 297x103h mm

Tech. Code		N4200RIC3
GR76	Euro	27,44
SPARE PARTS		Brushes (pair) 1607014176

NEW

ITEM: GWS 14-125

230V voltage, powerful, compact and technologically advanced. Better dust protection than previous models thanks to the air inlets on the back of the tool. Handling improved by the very small circumference of the grip. High level of user protection thanks to the KickBack Control function, the restart protection and the Vibration Control side handle. Constant speed, soft start and overload protection. Ideal for grinding metal and weld seams, cutting metal, concrete, brick and tile

Tech. Code		N4216125
GR25	Euro	219,00
Power	Watt	1400
No-load speed	Rpm	11500
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Threaded shaft coupling		M14
Weight	kg	2,2

Supplied with:
Additional Vibration Control handle
Protective headset
Anti-cut protection cap with plastic snap clip
Two-hole key
Clamping flange
Locking nut

ITEM: GWS 17-125 PROFESSIONAL

Extremely powerful and technologically advanced 230 Volt angle grinder with starting current limiter for a smooth and safe start and Constant Electronic for constant speed, even under load. KickBack Stop to shut down the tool if the grinding wheel jams, accidental restart protection and direct cooling for high overload capability and long lifetime. Spindle lock for easy disc change, restart protection switch, gear head can be rotated in 90° steps, anti-rotation disc guard with quick and easily adjustment without the need for tools, Vibration Control handle can be used on right or left.

Tech. Code		N4218125/3
GR25	Euro	279,00
Power	W	1700
No-load speed	Rpm	11500
Grinding disc Ø	mm	125
Backing pad Ø	mm	125
Cup brushes max. Ø	mm	75
Spindle thread		M 14
Weight	kg	2.4

Included:
Backing flange
Protective guard
Locking nut
Auxiliary vibration control handle
Two-hole spanner
Dimension: 327x265X108h mm

Tech. Code		N4200RIC2
GR76	Euro	30,94
SPARE PARTS		Brushes (pair) 167000V37

ANGLE GRINDERS

BOSCH

ITEM: GWS 17-125 INOX

Supply voltage 230 Volt, the specialist for stainless steel finishing, starting limiter for a smooth and safe start, preselection of the number of revolutions on six positions. Constant Electronic for a constant number of revolutions even under load, Kick Back Stop to cut off the power supply in the event of a grinding wheel jam, protection against unintentional restart, direct cooling for high overload resistance and a long service life. Spindle lock for simple wheel replacement, safety switch against accidental starting, gear head that can be rotated in 90° steps, quick-positioning anti-rotation wheel cover, additional Vibration Control handle applicable both on the right and on the left. Plastic case.

Tech. Code		N42201700/2
GR25	Euro	350,00
Absolute power	W	1700
No-load speed	Rpm	2200-7500
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Ø Max. hole brushes	mm	75
Threaded shaft coupling		M14
Weight	kg	2,4

Included:
Mounting flange
Protection cap
Clamping nut
Vibration Control handle
Dual hole wrench
Dimension: 311x103 mm

Tech. Code		N4200RIC2
GR76	Euro	30,94
SPARE PARTS		Brushes (pair) 167000V37

ANGLE GRINDERS

ITEM: CG 15-125 BLP

NEW

Power supply voltage 230V. Compact and high-performance grinders thanks to the innovative brushless technology which increases the life of the electric tool by 30%, almost eliminating maintenance costs. Best weight/power ratio in its category. Anti-lock system and against accidental starting.

Tech. Code		N4204125
GR82	Euro	(347,00)
Rated power consumption	W	1500
Rendered power	W	1050
Disc Ø	mm	125
No-load speed	Rpm	3800-9000
Threaded shaft attachment		M14
Weight	Kg	2,4

Supplied with:
Protective headset
Pair of flanges
Key

ANGLE GRINDERS

ITEM: CG 17-125

Angle grinders compact and easy to handle for heavy cutting and roughing operations. High overload capacity thanks to direct motor cooling. Kickback sensor, device against accidental restart, anti-vibration handle. 90° rotable head for a wide range of applications. Quick-release disc lock ring allows abrasives to be change without tools.

Tech. Code		N4229125
GR82	Euro	(238,00)
Power supply	V	230 - 50 Hz
Rated power consumption	W	1700
No-load speed	Rpm	11.500
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Ø hole brushes max	mm	70
Threaded shaft coupling		M14
Weight	kg	2,4

Included:
Protection cap
Pair of flanges
Anti-vibration handle
Key

ANGLE GRINDERS

ITEM: CG 17-125 INOX

Angle grinders with variable number of revolutions and high power reserve for processing stainless steel in various applications, from satin finishing to grinding. Removes up to 30% more material than similar grinders. Particularly constant speed under load. Anti-blocking system against accidental starting.

Tech. Code		N4231125
GR82	Euro	(262,00)
Power supply	V	230 - 50 Hz
Rated power consumption	W	1700
No-load speed	Rpm	2200-7500
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Threaded shaft coupling		M14
Weight	kg	2,4

Included:
Protective cap
Pair of flanges
Anti-vibration handle
Key

ELECTRIC ANGLE GRINDERS

BOSCH

ITEM: GWS 19-125 CIE PROFESSIONAL

GWS 19-125 CIE angle grinders high performance, thanks to the powerful 1.900 engine Watts with Constant Electronic system. Long life, thanks to the engines with direct cooling, protection against the overload and long life of the brushes. Safety for the user thanks to the Kick-Back device Control, to protect against accidental reboot, to the anti-rotation protection cuff and to reduced vibrations.
Good handling thanks to the slim casing design with Soft grip lining for a secure grip. Optimized air conduction and better protection against dust. Preselection of the number of laps in 6 stages, depending on the different materials.

Tech. Code		N42241900
GR25	Euro	(329,00)
Power	W	1900
Delivered power	W	1220
No-load speed	Rpm	2800 - 11500
Ø Grinding wheels	mm	125
Ø Pad	mm	125
Ø Hole brushes	mm	75
Threaded shaft coupling		M 14
Weight	kg	2,4

Included:
Two-hole key
Protection cap
Clamping nut
Clamping flange
Vibration control handle
Anti-dust filter
Dimension: 311x103h mm

Tech. Code		N4200RIC2
GR76	Euro	30,94
SPARE PARTS		Brushes (pair) 167000V37

ITEM: GWS 22-230 J

Power supply 230V. New motor, patented by Bosch, which guarantees more efficiency in the removal of the material and less consumption of the charcoals, Vibration reduction during machining. Oversized fan with new design to reduce overheating under overload conditions. Protection against accidental restart.

Tech. Code		N42342200
GR25	Euro	(199,00)
Tension	V	230
Power	W	2200
No-load speed	Rpm	6.500
Ø Grinding wheels	mm	230
Threaded shaft coupling		M14
Weight	kg	5,4

Included:
Dual hole wrench
Protection cap
Clamping nut
Mounting flange
Vibration control handle
Dimension: 500x140h mm

Tech. Code		N4200RIC4
GR76	Euro	30,94
SPARE PARTS		Brushes (pair) 1607014171

ANGLE GRINDERS

NEW

ITEM: AG22-230 DMS

Power supply voltage 230V. Powerful 2200 watt motor with protection against abrasive dust for greater durability. Compact design (485 mm) for easier handling. Durable protective cap. Convenient access to brushes for quick maintenance

Tech. Code		N42392200
GR64	Euro	216,00
Power	W	2200
No-load speed	Rpm	6600
Ø Grinding wheels	mm	230
Ø Pad	mm	230
Cutting depth max	mm	68
Threaded shaft coupling		M14
Weight	Kg	5,2

Supplied with:
Protective cap
Additional handle
4m cable
Wrench, fixing flange and nut

N

ANGLE GRINDERS

BOSCH NEW

RESTART PROTECTION | EC BRUSHLESS MOTOR | KICKBACK CONTROL | VIBRATION CONTROL

ITEM: GWS 30-180 B

Powerful angle grinder with 2800 watt brushless motor for more effective and faster material removal. The tool offers maximum power, high overload resistance and maximum productivity. The brushless motor, with no commutator or brushes, allows for less wear and less downtime. KickBack Control, Vibration Control and brake function, which stops the disc quickly. Ideal for grinding on metal and weld seams, as well as for cutting on metal, concrete, brick and tiles

Tech. Code		N4254180
GR25	Euro	(449,00)
Power	W	2800
No-load speed	Rpm	8500
Ø Grinding wheels	mm	180
Ø Pad	mm	180
Ø cup brushes	mm	5
Threaded shaft connection		M14
Weight	Kg	5,7

Supplied with:
Mounting flange
Protective headset
Locking nut
Two-hole key
Vibration Control handle
Dimensions: 190 x 605 x 135mm

PORTABLE SATIN FINISHING MACHINES FOR STAINLESS STEEL

ITEM: WPO 14-25 E-START SET INOX

Extremely powerful portable angle grinder-polishers, even with low rpm thanks to the mechanical drive and high-performance FEIN motor. Continuously adjustable speed, ideal for sanding, satin finishing, brushing and mirror polishing of stainless steel. Maximum safety guaranteed by soft start-up and by the device against accidental starting.

Set composition:
Satin finisher WPO 14-25 E
Plastic case
2 Service keys
Adjustable support 63733006010
Protection guard 30229216005
Fixing shaft M14 Ø 19x100 63803067028
Fixing shaft M14 Ø 15x50 63803066024
Anti-vibration handle 32119124010
Disc in corrugated viles Ø 150x30 M14 63723021013
Backing pad with velcro Ø 115-M14 63806172010
10 Velcro discs in Viles Ø 115 FINE 63732003015
Eleastic Abrasive wheel WNW Ø 100x100-19 MEDIUM 63721006012
Abrasive wheel WNW Ø 100x100-19 FINE 63721006012

Tech. Code		N422600
GR82	Euro	(1003,00)
Power supply	V	230 - 50 Hz
Rated power consumption	W	1200
Rendered power	W	750
No-load speed	Rpm	900 - 2500
Ø max standard pad	mm	115
Ø max polishing pad	mm	230
Abrasive wheel Ø x L max	mm	110 x 100
Threaded shaft coupling		M14
Weight	kg	2,5

UNIVERSAL BEVELLING MACHINES FOR EDGES UP TO 15MM

ITEM: KFH 17-15 R

Universal bevelling machine equipped with booster technology which allows to increase milling performance from 30% to 80% and to drastically reduce vibrations compared to a traditional machine.
Spring damping system for ideal weld seam preparation.
Ergonomic FeinErgoGrip handle with two-hand operation for fatigue-free working.
Soft start, restart interlock, anti-seize control, electronic overload protection.
Quick cutter change to minimize machining interruptions.
High removal capacity.

Tech. Code		N422200
GR82	Euro	(2915,00)
Rated power connection	watt	1700
Rendered power	watt	1000
No-load speed	Rpm	2300-7500
Max length bevel to 45°	mm	15
Max height bevel to 45°	mm	10,6
Bevel angle		30°/37,5°/45°/60°
Radius	mm	3
Support plate	Ø	137
Cable with plug	m	4
Weight	kg	6,4
Vibration exposure limit value	m/s²	ah, 3,7

Included:
Tool without cutter head, without guide roller,without inserts
Allen key 5 mm
6 clamping screws
Torx screwdriver TX15
Copper paste
Plastic tool case

Tech. Code	GR82 Euro	Accessories
N422201	(649,00)	Milling head for bevel 45° and rounded bevels
N422202	(171,00)	Guide roller Ø 26.30 mm for 45° bevel
N422203	(171,00)	Guide roller Ø 28.55 mm for 45° bevel
N422204	(360,00)	Straight plate kx cut for bevels
N422205	(360,00)	Straight plate kx cut for bevels
N422206	(399,00)	Cutting plate kx for r3 alu and soft materials
N422207	(399,00)	Cutting plate kx for r3 universal applications
N422208	(46,20)	Clamping screws for cutting plate kx

Related products

WRK CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT

Tech. Code	Size	EU size
K234607	7	S
K234608	8	M
K234609	9	L
K234610	10	XL

Product available in CAP K

ITEM: GGS 28 C PROFESSIONAL

Supply voltage 230 Volt, compact, ergonomic and extremely easy to handle, Constant Electronic for constant rpm even under load, Kick-Back Stop device for immediate shut-down if the tool detects a block, ball bearing with double hermetic seal applied on rubber to minimise vibrations, brushes with automatic release for maximum motor protection, new direct fixing system for grinding wheels, efficient cooling, 43 mm collar ø also for stationary use.

Tech. Code		N4240600/1A
GR25	Euro	299,00
Power	W	600
No-load speed	Rpm	30000
Colet chuck	mm	8
Weight	kg	1,4

Included:
2 x 19 mm fixed wrenches
6 mm collect chuck
Dimension: 291x75 h mm

ITEM: GGS 28 LC PROFESSIONAL

Powerful 650-Watt motor with soft start for fast work progress. Long and slender sanding spindle - particularly suited for use in hard-to-reach areas. Kick-Back-Stop: immediate tool shut-down when a block of the grinding wheel is detected - for superior user protection. Constant Electronic System for constant rpm even under load. Compact and ergonomic shape for versatile sanding. Brush disengagement for high motor protection. Reduced maintenance thanks to an optimised useful life of the brushes.

Tech. Code		N4241650
GR25	Euro	415,00
Power	W	650
No-load speed	Rpm	30000
Ø sanding body max	mm	50
Ø shaft collar	mm	43
Colet chuck	mm	8
Surface clamping nut wrench	mm²	19
Surface sanding spindle wrench	mm²	13
Weight	kg	1,6

Included:
13 mm fixed wrench
19 mm fixed wrench
6 mm collect chuck
Dimension: 375x75 h mm

ITEM: GGS 8 CE PROFESSIONAL

Supply voltage 230 Volt, strong and very resistant, suitable for more challenging milling and grinding work, optimal management of the number of revolutions for every specific need and Constant Electronic for constant rpm under load. Robust gear housing, protection switch against accidental starting, optimally positioned air intakes for high resistance to overloads and long service life.

Tech. Code		N4243650
GR25	Euro	489,00
Power	W	750
No-load speed	Rpm	2500 - 8000
Ø sanding body	mm	50
Ø shaft collar	mm	43
Colet chuck	mm	8
Surface clamping nut wrench	mm²	19
Surface sanding spindle wrench	mm²	13
Weight	kg	1,7

Included:
13 mm fixed wrenches
19 mm fixed wrenches
6 mm collect chuck
Dimension: 387x77h mm

ELECTRIC ORBITAL SANDERS

BOSCH

ITEM: GSS 140-1 A

Sanders with an intelligent mounting system, robust and stable, easy to use and replace, resistant felt cloth with sheet metal for a greater duration, less vibrations and a simple replacement. Ergonomic handle to work without effort, strong leg swing support system for grinding work that lasts hours, switch protected from dust for a greater duration of the power tool, transparent container for dust with microfilter enhanced by Bosch. A vision for a better and easier cleaning.

Tech. Code		N4251180/1
GR25	Euro	162,00
Power	W	180
No-load speed	Rpm	12000
Oscillation/min		24000
Ø fluctuations	mm	1,6
Fluctuation emission value ah	m/s²	5
Uncertainty of measurement k	m/s²	1,5
Sanding plate	mm	113 x 101
Strap fit - Abrasive paper	mm	115 x 107
Bracket fit - Abrasive paper	mm	115 x 140
Weight	kg	1,2

Included:
Plate base 113x101 mm
with grinding plate
Plate punching
Dust container
Sand paper 120 K
Sheet of sand paper C470

Dimension: 250x110x143h mm

ELECTRIC ROTO-ORBITAL SANDERS

BOSCH

ITEM: GEX 150 AC PROFESSIONAL

Supply voltage 230 Volt, high removal model with revolution and oscillation adjustment and pre-setting for appropriate work in all types of applications. Constant Electronic for constant rpm even under load, pad brake to decrease wear and to avoid scratches and damage to the workpiece. Pad with Velcro abrasive disc fixing, micro-filter dust collector box for perfect suction, handle with palm position and removable front handle for wire sanding without obstacles.

Tech. Code		N4260340/1
GR25	Euro	345,00
Power	W	340
No-load speed	Rpm	4500-12000
Oscillation/min		9000-24000
Ø pad/ strap abrasive disc	mm	150
Weight	kg	2,1

Included:
80-grit sandpaper
Adapter
Dimension: 315x190 h mm

ELECTRIC BELT SANDERS

BOSCH

ITEM: GBS 75 AE PROFESSIONAL

Supply voltage 230 Volts, sturdy and extremely easy to handle with pre-selection of the number of revolutions for work suited to the material, sturdy toothed belt and related toothed metal wheels for long service life. Sanding pad with graphite coating, aluminium rollers, micro-adjustment of the guide roller for proper belt running and fast/stable tensioning lever for simple belt change. Direct suction connection to the aspirator or to the dust bag, removable front handle for wire sanding without obstacles.

Tech. Code		N4265750/1
GR25	Euro	375,00
Power	W	750
Rotating speed abrasive sheet mt/min	m/min	200-330
Abrasive tape	mm	533 x 75
Weight	kg	3,4

Included:
Abrasive belt
Dust bag
Dimension: 440x130h mm

BELT SANDERS

ITEM: BF 10-280 E

Belt sanders BF 10-280 E powerful for sanding corners and edges when machining stainless steel. FEIN high-performance motor for maximum revoval capacity and constant speed even in case of high stresses. Optimal belt speeds for the effective use of abrasive belts, felt belts and different polishing belts.Maximum ease of use - 180 ° rotatable sanding arm without service keys, assembly and adjustment of the belt without service keys. Belt widths from 3 to 20 mm. Continuously adjustable number of revolutions, optimal for protecting delicate surfaces.

Tech. Code		N4270800
GR82	Euro	(717,00)
Rated power consumption	W	800
Rendered power	W	550
No-load speed	Rpm	10000 / 28000
Belt speed	m/sec	12-32
Cable with plug	m	4
Belt dimension	mm	520 x 3 / 6 / 20
Weight	kg	2,1

JIG SAWS

BOSCH

ITEM: GST 90 BE PROFESSIONAL

Supply voltage 230 Volt, standard model with high comfort, switch with acceleration function for soft-start cutting with all materials. SDS system for tool-free blade change without any tools, four-position adjustable blade oscillation, integrated suction duct for direct connection to the aspirator, sawdust blower device that can be switched off, handle with Softgrip-coated grip points for maximum working comfort.

Tech. Code		N4305650/1
GR25	Euro	219,00
Power	W	650
Idle runs/min		500-3100
Run height	mm	26
Max cutting depth - Wood	mm	90
Max cutting depth - Aluminum	mm	20
Max cutting depth - Non-alloyed steel	mm	10
Weight	kg	2,6

Included:
Blade
Hexagonal wrench 5 mm
Dust extraction set
Splinter protection
Plastic case
Dimension: 332x212h mm

ITEM: GST 160 CE

Thanks to its double roller, the extremely precise guide prevents the blade from bending, providing excellent cutting precision. Compact and light structure, reduced handle size, for a maximised cutting control. Its blade replacement system (SDS), which does not require any tools while ensuring no gap, prevents blade vibration therefore also ensuring superior surface quality. A mass compensation system designed to attenuate vibrations, providing excellent rotational uniformity. High-performance LED ensures intense lighting of the cutting area. A powerful 800 watt motor complete with Constant Electronic system, represents a great power source for deep cutting also in case of hard materials Accuracy with a systematic approach: compatible with the new guide rail and with our “Extra Clean for Wood” blades for splinter-free cutting. Compatible with all Bosch dust aspirator for clean work operations. Sturdy magnesium crankcase and tool-free adjustment.

Tech. Code		N4307800/1
GR25	Euro	409,00
Power	W	800
Idle runs/min		800-3000
Run height	mm	26
Max cutting depth - Wood	mm	160
Max cutting depth - Aluminum	mm	20
Max cutting depth - Non-alloyed steel	mm	10
Weight	kg	2,2

Included:
T 144 DP blade
T 244 D blade
2 T 308 B blades
1/1 insert for casing
L-BOXX for tool
Suction adapter
L-BOXX 136 casing
Dimension 251x183h mm

ELECTRIC UNIVERSAL SAWS

BOSCH

ITEM: GSA 1100 E PROFESSIONAL

GSA 1100 E universal saw with a powerful 1,100 W motor for fast cutting progress, integrated LED for optimal workpiece visibility. Metal hook to hang the tool during work breaks. «SDS» system for a quick and convenient blade replacement, gear casing with rubber coating for a secure and comfortable grip.

Tech. Code		N43101100
GR25	Euro	(239,00)
Power	W	1100
Indle runs/min.		0 - 2700
Max cutting depth - wood	mm	230
Saw stroke length	mm	28
Weight	kg	3,6

Included:
Blade for wood S 2345 X
Blade for metal S 123 XF
Case
Dimension: 495x195h mm

HEAT GUNS

BOSCH

ITEM: GHG 20-60

Power supply 230V. Its linear shape gives it exceptional versatility in any working position. Two air flow speeds and panel for setting 9 temperature levels for maximum practicality. The 2000 Watt motor guarantees high power allowing you to reach a temperature of 630° quickly.

Tech. Code		N46012000/3
GR25	Euro	219,00
Power	W	2000
Operating temperature	°C	50-630
Airflow	litres/minute	150-500
Weight	kg	0.6

Dimension: 340x97h mm

N

Indivisible package Suggested retail package - Unit price

LEGEND ICONS JIG SAW BLADES FOR SAWS

- Fast cut
- Circular cut, precise
- Bar grain 30
- Particular cutting from solid
- Clean cut
- Rectified sharpened teeth
- Straight cut, accurate
- Long life service (Bimetallic / HM)
- Fine and effortless cutting
- Straight cut, rough
- With HM coating
- Powerful and rough cutting
- Circular cut, rough
- With HM insert
- Flexible blade for wire cutting
- Thin and thick materials

JIG SAW BLADES FOR WOOD

BOSCH

ITEM: T 111 C

HCS, set, milled, softwood, chipboard panels (4-50 mm), laminboard, fibre boards, for fast cut.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510111	6,10	100	3	5 blades	1

ITEM: T 144 D

HCS, set, rectified, softwood, chipboard panels (5-50 mm), laminboard, fibre boards.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510213	9,30	100	4 - 5,2	5 blades	1

ITEM: T 244 D

HCS set, rectified,softwood (5 - 50 mm), chipboard panels, laminboard, fibre boards, ideal for curved cuts.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510315	10,50	100	4 - 5,2	5 blades	10

ITEM: T 344 D

HCS, set, milled, thick wood, softwood (5 - 100 mm), chipboard panels, laminboard, fibre boards.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510417	18,50	152	4	3 blades	1

ITEM: T 101 B

HCS, straight, rectified and straight teeth, softwood, chipboard panels, laminboard, fibre boards (3 - 30 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510519	9,30	100	2,7	5 blades	1

ITEM: T 101 D

HCS, straight, rectified and straight teeth, softwood, chipboard panels, laminboard, fibre boards (10 - 45 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510621	9,70	100	4 - 5,2	5 blades	1

Indivisible package Suggested retail package - Unit price

N

JIG SAW BLADES FOR WOOD

ITEM: T 301 CD

HCS, straight, rectified and straight teeth, softwood, chipboard panels, laminboard, fibre boards (10 - 65 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510723	24,50	117	3	5 blades	1

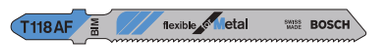
JIG SAW BLADES FOR WOOD WITH METAL

ITEM: T 345 XF

Two-metal, set, milled, wood for construction with nails (< 65 mm), wooden materials, plastic, sheet metal, pipes/profiles, including aluminum (3 - 10 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N510825	42,50	132	2,4 - 5	5 blades	1

JIG SAW BLADES FOR METAL



ITEM: T 118 AF

Two-metal, wavy corrugated, milled, thin sheet metal (1 - 3 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N512027	21,50	92	1,1 - 1,5	5 blades	1

ITEM: T 118 BF

Two-metal, wavy corrugated, milled, medium-thick sheet metal (1 - 3 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N512129	19,00	92	1,9 - 2,3	5 blades	1

ITEM: T 118 G

HSS, wavy corrugated, milled, very thin sheet metal (0.5 - 1.5 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N512231	8,70	92	0,7	5 blades	1

ITEM: T 118 A

HSS, wavy corrugated, milled, thin sheet metal (1 - 3 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N512333	8,70	92	1,1 - 1,5	5 blades	1

ITEM: T 218 A

HSS, wavy corrugated, milled, thin sheet metal (1 - 3 mm). Ideal for cutting curved

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N512435	9,70	92	1,1 - 1,5	5 blades	1

ITEM: T 318 A

HSS, wavy corrugated, milled, thin sheet metal (1 - 3 mm), pipes/profiles, including aluminium (< 65 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N512537	18,80	132	1,2	5 blades	1

Indivisible package Suggested retail package - Unit price

JIG SAW BLADES FOR METAL

ITEM: T 118 B

HSS, wavy corrugated, milled, medium-thick sheet metal (2.5 - 6 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N512639	8,70	92	1,9 - 2,3	5 blades	1

JIG SAW BLADES FOR ALUMINIUM AND NON-FERROUS METALS

ITEM: T 318 B

HSS, wavy corrugated, milled, medium-thick sheet metal (2.5 - 6 mm), pipes/profiles, including aluminium (< 65 mm). Angle and precise cuts.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N513041	18,80	132	2	5 blades	1

ITEM: T 127 D

HSS, set, milled, thin and thick sheet metal (3 - 15 mm), pipes/profiles (< 30 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N513143	10,00	100	3	5 blades	10

ITEM: T 227 D

HSS, set, milled, thin and thick sheet metal (3 - 15 mm), pipes/profiles (< 30 mm). Ideal for cutting curved.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N513245	10,30	100	3	5 blades	10

JIG SAW BLADES FOR ACRYLIC MATERIAL

ITEM: T 102 BF

HSS, straight, ground teeth, clear cuts on PMMA panels.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N515052	17,00	92	1,8	5 blades	1

JIG SAW BLADES FOR CERAMIC MATERIALS

ITEM: T 130 RIFF

HM-coated with 30 grain, soft ceramic tiles, fibreglass, cast iron (5 - 15 mm). Rough cuts.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm	Package content	
N517057	26,50	83	-	3 blades	1

BLADES FOR UNIVERSAL SAWS - BLADES FOR WOOD

ITEM: S 2345 X

HCS, set, ground, wood for construction (< 150 mm), chipboard, MDF (6 - 60 mm), plywood, plastic material (< 150 mm), wooden walls (< 150 mm). Fine cut and effortlessly.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm/TPI	Package content	
N5180A	21,50	200	2,5-4,3 - 6/10	2 blades	1

BLADES FOR UNIVERSAL SAWS - BLADES FOR WOOD WITH NAILS/METAL

ITEM: S 922 HF

Two-metal, set, milled, for repairing pallets, wood with nails/metal (< 100 mm), sheet metal, pipes, aluminium profiles (3 - 12 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm/TPI	Package content	
N5190C	33,00	150	2,5 - 10	5 blades	1

Indivisible package Suggested retail package - Unit price

N

BLADES FOR UNIVERSAL SAWS - BLADES FOR WOOD WITH NAILS/METAL

BOSCH

ITEM: S 3456 XF

Two-metal, set, milled, wood with nails/metal, chipboard panels (< 150 mm), sheet metals, aluminium profiles (3 - 18 mm), fibreglass/epoxy resin (< 150 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm/TPI	Package content	
N5191D	47,00	200	2,1-4,3 - 6-12	5 blades	5

BLADES FOR AIR RECIPROCATING SAWS

ingersoll Rand

ITEM: P4EV-6 / P4CS-6 / P4FS-6

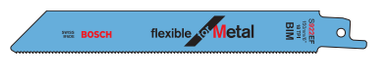
Bi-metal blades for use with all standard pneumatic saws with 1/2" shank.

Tech. Code	GR76 Euro	Total length mm	Teeth TPI	Package content pc.
N519814	(40,60)	100	14/18	6
N519824	(40,60)	100	24	6
N519832	(40,60)	100	32	6

The price shown refers to a pack

UNIVERSAL SAW BLADES FOR METAL

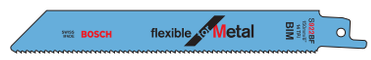
BOSCH



ITEM: S 922 EF

Two-metal, set, milled, thin sheet metal (1.5 - 4 mm), tubes/profiles (< 100 mm).

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm/TPI	Package content	
N5111G	33,00	150	1,4 - 18	5 blades	5



ITEM: S 922 BF

Two-metal, set, milled, thick plates (3 - 8 mm), massive pipes/profiles (< 100 mm). Fast cuts.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm/TPI	Package content	
N5112F	29,50	150	1,8 - 14	5 blades	1

ITEM: S 1122 EF

Two-metal, set, milled, thin sheet metal (1.5 - 4 mm), tubes/profiles (< 175 mm). Flush cutting.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm/TPI	Package content	
N5113E	35,00	225	1,4 - 18	5 blades	5

ITEM: S 1122 BF

Two-metal, set, milled, thick plates (3 - 8 mm), massive pipes/profiles (< 175 mm). Flush and fast cuts.

Tech. Code	GR76 Euro	Total length mm	Tooth pitch mm/TPI	Package content	
N5114H	35,00	225	1,8 - 14	5 blades	1

N

Indivisible package Suggested retail package - Unit price

KEYLESS DRILL CHUCKS

ITEM: SUPRA

Constant clamping force even under the most severe operating conditions. S-version recommended for portable drills.
* B18 cone shortened by 7 mm.

Tech. Code	GR76 Euro	Width	Opening mm	Coupling	External Ø mm
N520110	108,50	10S	0.5 - 10	3/8" - 24	35.8
N520111	139,60	10	0 - 10	B16	40.2
N520112	118,90	13S	1 - 13	1/2" - 20	40.2
N520113	149,50	13	1 - 13	B16	46
N520114	160,30	16	3 - 16	B16	51
N520115	160,30	16	3 - 16	B18*	51

ITEM: SUPRA SK

Safety clamping device for maximum reliability even with strong vibrations and reverse rotation, protection against dust and side drain holes with ejecting centrifuge in case of dust intrusion.

Tech. Code	GR76 Euro	Width	Opening mm	Coupling	External Ø mm
N520220	129,10	SK 13S	1 - 13	1/2" - 20	42.8

ITEM: SPIRO

Accurate execution, chamfered cap and 0.05 mm concentricity. Recommended for high-speed drills, boring machines and special drilling units.

Tech. Code	GR76 Euro	Width	Opening mm	Coupling	External Ø mm
N520313	253,10	13	1 - 13	B16	50
N520316	269,90	16	3 - 16	B16	55

ITEM: EXTRA RV

Metal cap, ergonomic shape and high concentricity, radial locking and hexagon for assembly and disassembly. Suitable for all types of drills up to 1100 Watts. Carbide jaws.

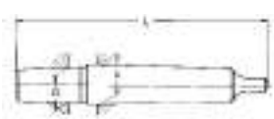
a* - without retaining ring
b* - with retaining ring

Tech. Code	GR76 Euro	Width	Opening mm	Coupling	Execution	External Ø mm
N520440	55,50	10	1 - 10	1/2" - 20	a*	42.7
N520441	55,50	10	1 - 10	3/8" - 24	a*	42.7
N520442	65,90	13	1.5 - 13	1/2" - 20	b*	42.7

TAPER COUPLINGS FOR DRILL SPINDLES

ITEM: N5210

Taper shank with tang DIN 228 B. Completely hardened and ground.



Tech. Code	GR76 Euro	CM	Coupling	L mm	C mm	G mm
N5210CM1B10	7,80	1	B10	86	12,06	10.09
N5210CM1B12	7,80	1	B12	89	12,06	12.06
N5210CM1B16	7,80	1	B16	97	12,06	15.73
N5210CM1B18	7,80	1	B18	107	12,06	17.78
N5210CM2B10	8,20	2	B10	103,5	17,78	10.09
N5210CM2B12	8,20	2	B12	106,5	17,78	12.06
N5210CM2B16	8,20	2	B16	110,5	17,78	15.73
N5210CM2B18	8,40	2	B18	117,5	17,78	17.78
N5210CM2B22	10,80	2	B22	130	17,78	21.79

Tech. Code	GR76 Euro	CM	Coupling	L mm	C mm	G mm
N5210CM3B12	10,80	3	B12	124	23,82	12.06
N5210CM3B16	10,80	3	B16	134	23,82	15.73
N5210CM3B18	10,80	3	B18	141	23,82	17.78
N5210CM3B22	10,80	3	B22	147	23,82	21.79
N5210CM4B16	23,30	4	B16	159	31,26	15.73
N5210CM4B18	27,10	4	B18	168	31,26	17.78
N5210CM4B22	24,40	4	B22	176	31,26	21.79
N5210CM5B16	51,28	5	B16	196	44,39	15.73
N5210CM5B18	51,28	5	B18	204,5	44,39	17.78

REDUCTION BUSH FOR DRILLS

ITEM: N5211

Accurate execution DIN 2185. Fully hardened and ground internally and externally.

Tech. Code	GR76 Euro	CM	Length mm
N5211CM2/1	11,60	2 / 1	92
N5211CM3/1	14,80	3 / 1	99
N5211CM3/2	14,00	3 / 2	112
N5211CM4/1	23,40	4 / 1	124

Tech. Code	GR76 Euro	CM	Length mm
N5211CM4/2	22,20	4 / 2	124
N5211CM4/3	22,20	4 / 3	140
N5211CM5/3	48,00	5 / 3	156
N5211CM5/4	48,00	5 / 4	171

EXTRACTORS/PULLERS FOR MORSE CONES

RÖHM

ITEM: N5215

Vanadium chrome steel.

Tech. Code	GR76 Euro	CM	Length mm
N521501-2	7,00	1-2	140
N521503	9,10	3	190

Tech. Code	GR76 Euro	CM	Length mm
N521504	11,70	4	225
N521505-6	29,90	5-6	265

SEMI AUTOMATIC DRILL DRIFTS

RÖHM

ITEM: N5216

Special hardened burnished steel, thermoplastic handle.

Tech. Code	GR76 Euro	CM	Length mm
N52161-3	87,80	1-3	330

METRIC THREADING SET M3-M12 - 22 PCS

ITEM: N5220

Supplied in its sturdy rigid plastic box

Set:
- 21 pcs hand taps M3-M4-M5-M6-M8-M10-M12 3 pieces each
- 1 pcs tap wrenches

Tech. Code	GR76 Euro	Pieces
N5220M3M12	162,00	22

METRIC THREADING SET M3-M12 - 16 PCS

WRK

ITEM: N5221

Provided in foam covered comfortable tray contained in rigid plastic box.

Set:
- 7 pcs taps M3-M4-M5-M6-M8-M10-M12
- 1 pcs adjustable tap wrench gr. 1, 1/2
- Dies 7 pcs d.25 mm M3-M4-M5-M6-M8-M10-M12
- 1 pcs die wrench 25 x 9mm

Tech. Code	GR76 Euro	Pieces
N5221M3M12	175,00	16

METRIC THREADING SET M3-M12 - 43 PCS

WRK

ITEM: N5223

Supplied in its sturdy rigid plastic box

Set:
- 21 pcs hand taps M3-M4-M5-M6-M8-M10-M12 3 pieces each
- Dies 7 pcs M3-M4-M5-M6-M8-M10-M12
- Drills 7 pcs DIN 338 (2,5-10,2 mm)
- Die holder 5 pcs
- Tap wrenches 2 pcs
- Screw pitch gauge caliper 1 pcs

Tech. Code	GR76 Euro	Pieces
N5223SET43	319,30	43

N

Indivisible package Suggested retail package - Unit price

CONICAL STEP DRILLS

ITEM: WX7550

Conical step drills **PREMIUM QUALITY** in HSS steel with high surface resistance, suitable for drilling ferrous materials, aluminium, copper and plastic with thicknesses of up to 5 mm. Dimensions of the drilling diameters laser engraved on the groove and cylindrical shank with driving planes.

Specifications:

N522713A - WX7550/13A Ø 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
N522722A - WX7550/22A Ø 4 - 7 - 10 - 13 - 16 - 19 - 22 mm
N522723A - WX7550/23A Ø 5 - 8 - 11 - 14 - 17 - 20 - 23 mm
N522724A - WX7550/24A Ø 6 - 9 - 12 - 15 - 18 - 21 - 24 mm
N522724B - WX7550/24B Ø 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24 mm
N522730A - WX7550/30A Ø 4 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 mm
N522732A- WX7550/32A Ø 6.5 - 9.8 - 11 - 12.5 - 14 - 15.3 - 17.2 - 18.7 - 20.5 - 22.5 - 24.7 - 26.7 - 28.5 - 30.5 - 32.5 mm
N522740A - WX7550/40A Ø 7 - 10.5 - 12.5 - 14.5 - 16.5 - 18.5 - 20.5 - 23.5 - 25.5 - 30.5 - 34 - 38.5 - 40.5 mm
N522742A - WX7550/42A Ø 6 - 10 - 14 - 18 - 22 - 26 - 30 - 34 - 38 - 42 mm
N522743A - WX7550/43A Ø 7 - 11 - 15 - 19 - 23 - 27 - 31 - 35 - 39 - 43 mm
N522744A - WX7550/44A Ø 8 - 12 - 16 - 20 - 24 - 28 - 32 - 36 - 40 - 44 mm
N522745A - WX7550/45A Ø 9 - 13 - 17 - 21 - 25 - 29 - 33 - 37 - 41 - 45 mm
N522750A - WX7550/50A Ø 9 - 13 - 17 - 21 - 25 - 29 - 33 - 37 - 41 - 45 - 50 mm
N5227PG - WX7550/PG Ø 6 - 9 - 12.5 - 15 - 18.6 - 20.5 - 22.5 - 26 - 28.5 - 30.5 - 34 - 37.5 mm

Tech. Code	GR58 Euro	Ø min/max mm	Progression mm	Shank Ø mm	L mm
N522713A	36,02	4 - 13	1	8	80
N522722A	51,44	4 - 22	3	8	64
N522723A	53,37	5 - 23	3	8	64
N522724A	57,74	6 - 24	3	8	65
N522724B	75,04	6 - 24	2	9	88
N522730A	93,13	4 - 30	2	9	100
N522742A	165,73	6 - 42	4	11	82

Tech. Code	GR58 Euro	Ø min/max mm	Progression mm	Shank Ø mm	L mm
N522743A	(177,76)	7 - 43	4	11	82
N522744A	187,06	8 - 44	4	11	84
N522745A	194,97	9 - 45	4	11	84
N522750A	198,16	9 - 50	4 - 5	11	89
N522732A	(191,50)	6.5 - 32.5	-	10	120
N522740A	225,23	7 - 40.5	-	10	115
N5227PG	156,01	6 - 37.5	PG (*)	10	100

(*) For making through holes for cable gland fittings with PG thread

ITEM: WX7555

Conical step drills **PREMIUM QUALITY** in HSS-CO steel with high surface resistance, suitable for drilling ferrous materials, aluminium, copper and plastic with thicknesses up to 5 and 10 mm. Cylindrical shank with driving surfaces.

Specifications:

Holes of up to 10 mm
N522823A - WX7555/23A Ø 5-8-11-14-17-20-23 mm
N522824A - WX7555/24A Ø 6-9-12-15-18-21-24 mm
N522825A - WX7555/25A Ø 7-10-13-16-19-22-25 mm
Holes of up to 5 mm
N522836A - WX7555/36A Ø 6-9-12-15-18-21-24-27-30-33-36 mm
N522837A - WX7555/37A Ø 7-10-13-16-19-22-25-28-31-34-37 mm
N522838A - WX7555/38A Ø 8-11-14-17-20-23-26-29-32-35-38 mm

Tech. Code	GR58 Euro	Ø min/max mm	Progression mm	Shank Ø mm	L mm
N522823A	64,42	5 - 23	3	10	110
N522824A	66,83	6 - 24	3	10	110
N522825A	70,32	7 - 25	3	10	110

Tech. Code	GR58 Euro	Ø min/max mm	Progression mm	Shank Ø mm	L mm
N522836A	108,20	6 - 36	3	11	97
N522837A	110,93	7 - 37	3	11	97
N522838A	113,00	8 - 38	3	11	97

CONICAL STEP DRILLS

WRK

ITEM: N5230

HSS steel, suitable for ferrous and non-ferrous metal and plastic.

Tech. Code	GR76 Euro	Ø min/max mm	Ø intermediate mm	Ø shank mm	Total len. mm
N52300412	(28,60)	4-12	5-6-7-8-9 10-11	6	80
N52300420	(36,20)	4-20	6-8-10-12 14-16-18	8	67
N52300630	59,90	6-30	8-10-12-14-16-18 20-22-24-26-28	10	98
N52300936	97,30	9-36	12-15-18-21-24 27-30-33	12	86
N52301220	(47,60)	12-20	13-14-15-16 17-18-19	9	76
N52302030	(82,40)	20-30	21-22-23-24-25 26-27-28-29	12	88

N

CONICAL STEP DRILL BIT SET

ITEM: N5231

Step drill bit set in rigid plastic box.

Tech. Code	GR76 Euro	Series pcs	Milling cutters
N5231SET3/1	167,20	3	Ø4-12 Ø12-20 Ø20-30

CONICAL DRILLS FOR SHEET METAL

ITEM: N5233

HSS-E steel, suitable for ferrous and non-ferrous metal and plastic.

Tech. Code	GR76 Euro	Drill bit n°	Ø mm	Shank Ø mm	Total length mm
N52333-14	(31,10)	1	3-14	6	58
N52336-20	(42,30)	2	6-20	8	71
N523316-30,5	(81,10)	3	16-30.5	9	76
N523324-40	160,00	4	24-40	10	89
N523336-50	(240,00)	5	36-50	12	97
N523340-61	(293,00)	6	40-61	13	102

CONICAL DRILL BIT SET FOR SHEET METAL

ITEM: N5234

Conical drill bit set in metal case.

Tech. Code	GR76 Euro	Pieces in set	Drill bits n°
N5234SET3/1	188,00	3	1 - 2 - 3

N

Indivisible package Suggested retail package - Unit price

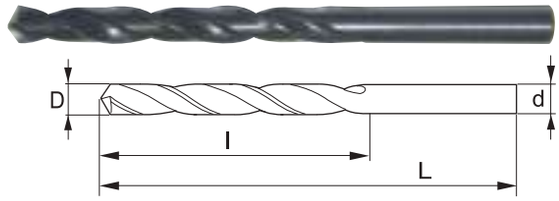
JOBBER DRILLS FOR SMALL PRODUCTION SERIES

DIN		N/R
338	118°	

ITEM: N5240

Geometry Right hand N/R type normal flute
Point angle 118°
Surface treatment Vaporized
Application General application

Roll forged execution



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○	○								○	○				

Tech. Code	GR76 Euro	D H8 mm	l mm	L mm	d mm	
N524002,5	1,13	2,5	30	57	2,5	10
N524003	1,13	3	33	61	3	10
N524003,5	1,13	3,5	39	70	3,5	10
N524004	1,13	4	43	75	4	10
N524004,25	1,48	4,25	43	75	4,25	10
N524004,5	1,13	4,5	47	80	4,5	10
N524005	1,13	5	52	86	5	10
N524005,5	1,13	5,5	57	93	5,5	10
N524006	1,13	6	57	93	6	10
N524006,5	2,28	6,5	63	101	6,5	10
N524007	2,28	7	69	109	7	10
N524007,5	2,28	7,5	69	109	7,5	10

Tech. Code	GR76 Euro	D H8 mm	l mm	L mm	d mm	
N524008	2,28	8	75	117	8	10
N524008,5	2,28	8,5	75	117	8,5	10
N524009	3,41	9	81	125	9	10
N524009,5	3,41	9,5	81	125	9,5	10
N524010	3,41	10	87	133	10	10
N524010,5	4,54	10,5	87	133	10,5	10
N524011	4,54	11	94	142	11	5
N524011,5	4,54	11,5	94	142	11,5	5
N524012	5,69	12	101	151	12	5
N524012,5	7,95	12,5	101	151	12,5	5
N524013	9,09	13	101	151	13	5

Sold as Indivisible packaged items

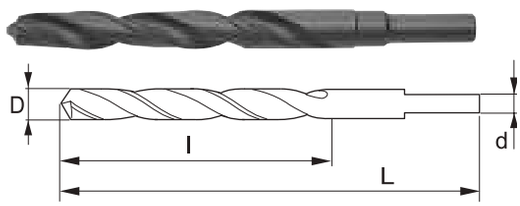
DRILLS WITH REDUCED SHANK

DIN		N/R
338	118°	

ITEM: N5241

Geometry Right hand N/R type normal flute
Point angle 118°
Surface treatment Vaporized
Application General application

Roll forged execution.



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
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Tech. Code	GR76 Euro	D mm	l mm	L mm	d mm	
N524110,5	4,54	10,5	87	133	10	1
N524111	4,54	11	94	142	10	1
N524111,5	4,54	11,5	94	142	10	1
N524112	5,69	12	101	151	10	1
N524112,5	5,69	12,5	101	151	10	1
N524113	5,69	13	101	151	10	1
N524113,5	6,82	13,5	108	160	13	1
N524114	6,82	14	108	160	13	1
N524114,5	7,95	14,5	114	169	13	1
N524115	7,95	15	114	169	13	1

Tech. Code	GR76 Euro	D mm	l mm	L mm	d mm	
N524115,5	9,09	15,5	120	178	13	1
N524116	9,09	16	120	178	13	1
N524116,5	10,23	16,5	125	184	13	1
N524117	10,23	17	125	184	13	1
N524117,5	11,36	17,5	130	191	13	1
N524118	11,36	18	130	191	13	1
N524118,5	12,49	18,5	135	198	13	1
N524119	13,64	19	135	198	13	1
N524119,5	13,64	19,5	140	205	13	1
N524120	14,77	20	140	205	13	1

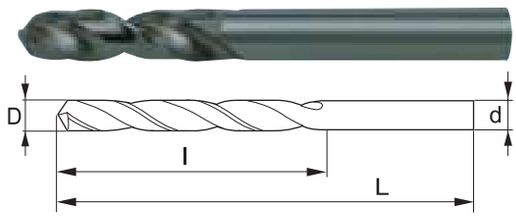
STUB DRILLS FOR SMALL PRODUCTION SERIES

DIN 1897 | 118° | N/R

ITEM: N5242

Geometry	Standard helix, right hand cutting
Point angle	118°
Surface treatment	Vaporized
Application	General use

Ground execution



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
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Tech. Code	GR76 Euro	D H8 mm	l mm	L mm	
N524203	1,13	3	14	37	10
N524203,1	1,13	3,1	14	37	10
N524203,2	1,13	3,2	14	37	10
N524203,25	1,13	3,25	16	40	10
N524203,3	1,13	3,3	16	40	10
N524203,4	1,13	3,4	16	40	10
N524203,5	1,13	3,5	16	42	10
N524203,6	1,13	3,6	16	42	10
N524203,7	1,13	3,7	16	42	10
N524203,75	1,13	3,75	16	42	10
N524203,8	1,13	3,8	16	42	10
N524204	1,13	4	16	42	10
N524204,1	1,13	4,1	18	44	10

Tech. Code	GR76 Euro	D H8 mm	l mm	L mm	
N524204,2	2,28	4,2	18	44	10
N524204,5	2,28	4,5	20	48	10
N524204,8	2,28	4,8	20	48	10
N524204,9	2,28	4,9	22	50	10
N524205	2,28	5	22	50	10
N524205,1	2,28	5,1	24	52	10
N524205,2	2,28	5,2	24	52	10
N524205,3	2,28	5,3	24	52	10
N524205,5	2,28	5,5	24	52	10
N524205,6	2,28	5,6	26	55	10
N524205,7	2,28	5,7	26	55	10
N524205,8	2,28	5,8	26	55	10
N524206	2,28	6	26	55	10

Sold as Indivisible packaged items

JOBBER DRILL SETS

DIN 338 | 118° | N/R

ITEM: N5245

Geometry	Right hand N/R type normal helix
Point angle	118°
Surface treatment	Steam tempering
Application	General application

Roll forget

Tech. Code	GR76 Euro	Description	
N5245SET19	28,69	Assorted drill set art. N5240 from 1,00 to 10,00 x 0,50	1
N5245SET25	46,33	Assorted drill set art. N5240 from 1,00 to 13,00 x 0,50	1

HAND TAP 3° FINISHING - M

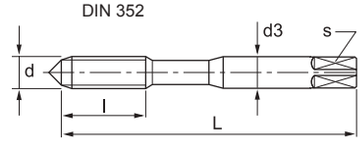
DIN 352

ITEM: N5248

ISO thread DIN 13 coarse pitch

Tolerance	ISO 6H
Surface finish	Bright
Hole type	Blind and through
Execution	C 2/3
Application	Steel and non ferrous materials with R ≤ 750/mm²

DIN 352



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○		○			○		○							

Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	S mm	Tapping hole mm
N5248M3	2,34	3 x 0,5	40	10	3,5	2,7	2,5
N5248M4	2,34	4 x 0,7	45	12	4,5	3,4	3,3
N5248M5	2,34	5 x 0,8	50	14	6	4,9	4,2
N5248M6	3,51	6 x 1	50	16	6	4,9	5
N5248M7	4,68	7 x 1	50	18	6	4,9	6
N5248M8	4,68	8 x 1,25	63	22	6	4,9	6,8
N5248M10	5,69	10 x 1,5	70	24	7	5,5	8,5

Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	S mm	Tapping hole mm
N5248M12	6,82	12 x 1,75	75	29	9	7	10,2
N5248M14	11,36	14 x 2	80	30	11	9	12
N5248M16	12,49	16 x 2	80	32	12	9	14
N5248M18	17,05	18 x 2,5	95	40	14	11	15,5
N5248M20	20,46	20 x 2,5	95	40	16	12	17,5
N5248M22	22,72	22 x 2,5	100	40	18	14,5	19,5
N5248M24	26,13	24 x 3	100	50	18	14,5	21

STRAIGHT FLUTE TAPS FOR THROUGH HOLES - M

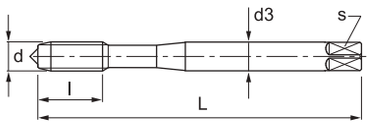
DIN 371/6 | HSSE

ITEM: N5250

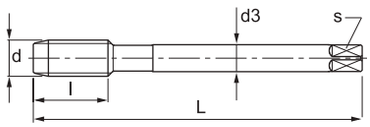
ISO coarse thread DIN 13

Tolerance 6H ISO 2
Surface finish Bright
Threaded profile < 2XD
Hole type Through
Application General use on low-alloyed steel

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○	○						●							

Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
N5250M3	9,70	3 x 0,5	56	10	3,5	2,7	2,5	371
N5250M4	9,70	4 x 0,7	63	12	4,5	3,4	3,3	371
N5250M5	9,80	5 x 0,8	70	14	6	4,9	4,2	371
N5250M6	10,20	6 x 1	80	16	6	4,9	5	371

Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
N5250M8	12,10	8 x 1,25	90	18	8	6,2	6,8	371
N5250M10	13,90	10 x 1,5	100	20	10	8	8,5	371
N5250M12	19,80	12 x 1,75	110	25	9	7	10,2	376

SPIRAL FLUTE TAPS FOR BLIND HOLES - M

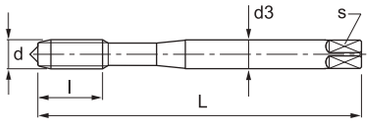
DIN 371/6 | HSSE

ITEM: N5252

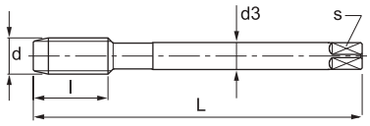
ISO Threading coarse pitch thread DIN 13

Tolerance 6H ISO 2
Surface finish Bright
Thread profile < 2,5XD
Hole type Blind
Application Generic use on low-alloyed steel

DIN 371



DIN 376



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	○	○						●							

Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
N5252M3	10,70	3 x 0,5	56	7	3,5	2,7	2,5	371
N5252M4	10,70	4 x 0,7	63	8,5	4,5	3,4	3,3	371
N5252M5	10,70	5 x 0,8	70	10	6	4,9	4,2	371
N5252M6	10,70	6 x 1	80	12	6	4,9	5	371

Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm	DIN
N5252M8	13,00	8 x 1,25	90	15	8	6,2	6,8	371
N5252M10	14,30	10 x 1,5	100	17,5	10	8	8,5	371
N5252M12	20,10	12 x 1,75	110	18	9	7	10,2	376

TAP FOR NUTS

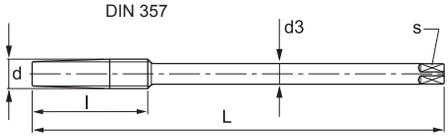
DIN 357 | HSSE

ITEM: N5253

ISO thread DIN 13 coarse pitch

Tolerance 6H ISO 2
Surface finish Bright
Thread depth ≤ 2XD
Hole type Through
Execution B 18/20
Application Nut tapping

DIN 357



< 500	< 850	< 1200	< 600	< 850	DUPLEX	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Bronze >700	Ti6Al4V	HTA	< 45	< 60
●	●														

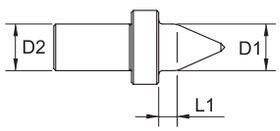
Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm
N5253M3	11,36	3 x 0,5	70	22	2,2	-	2,5
N5253M4	11,36	4 x 0,7	90	25	2,8	2,1	3,3
N5253M5	13,63	5 x 0,8	100	28	3,5	2,7	4,2
N5253M6	15,90	6 x 1	110	32	4,5	3,4	5

Tech. Code	GR76 Euro	d x p mm	L mm	l mm	d3 mm	s mm	Tapping hole mm
N5253M8	18,17	8x1,25	125	40	6	4,9	6,8
N5253M10	22,71	10 x 1,5	140	45	7	5,5	8,5
N5253M12	36,34	12 x 1,75	180	50	9	7	10,2

THERMAL FRICTION DRILLS

ITEM: N5260

The DRABUS friction drilling process creates the possibility of making holes in thin metal sheets and thin-walled tubes in just a few seconds without chips, while forming a bushing at the same time. This bushing can be used as a soldering or welding connection or as a bearing bushing. By tapping a screw-thread it can also be used as screw connection. The DRABUS friction drilling process replaces and eliminates the use of rivet or welding nuts as well as steel insert bushings. It accordingly saves time, work and material.



Tech. Code	GR76 Euro	D1 mm	Threading mm	Max thickness mm	L1 mm	D2 mm	RPM
N5260370	92,00	3,7	M4 x 0,7	<0,7	3	6	5300
N5260460	93,00	4,6	M5 x 0,8	<1,0	4,5	8	4100
N5260540	104,00	5,4	M6 x 1,0	<1,0	5	8	3500
N5260730	127,00	7,3	M8 x 1,25	<1,5	6	8	3300
N5260920	151,00	9,2	M10 x 1,5 - 1/8" Gas	<2,0	7,5	12	2750
N52601240	206,00	12,4	1/4" Gas	<2,0	6,3	12	2000

BI-METAL HOLE SAWS

ITEM: N5270

Bi-metal saw ring with HSS M42 (8% Co) cutting edge, sturdy steel body construction, medium hardness 63 HRC, suitable for steel, aluminium, copper, bronze, etc., max. cutting depth 35 mm.

Tech. Code	GR76 Euro	Ø mm
N527014	6,15	14
N527016	6,15	16
N527017	6,15	17
N527019	6,15	19
N527020	6,15	20
N527021	6,15	21
N527022	6,25	22
N527024	6,53	24
N527025	6,62	25
N527027	7,10	27
N527029	7,38	29
N527030	7,57	30
N527032	7,85	32
N527033	8,23	33
N527035	8,42	35
N527037	8,70	37
N527038	8,80	38
N527040	9,27	40

Tech. Code	GR76 Euro	Ø mm
N527041	9,36	41
N527043	9,83	43
N527044	9,83	44
N527046	10,22	46
N527048	10,40	48
N527051	10,69	51
N527052	10,78	52
N527054	10,98	54
N527057	12,11	57
N527059	12,20	59
N527060	12,59	60
N527064	12,67	64
N527065	13,06	65
N527067	13,62	67
N527068	14,00	68
N527070	13,81	70
N527073	14,48	73
N527076	14,95	76

Tech. Code	GR76 Euro	Ø mm
N527079	15,33	79
N527083	17,03	83
N527086	17,31	86
N527089	17,41	89
N527092	17,88	92
N527095	19,49	95
N527098	21,28	98
N5270102	22,61	102
N5270105	23,94	105
N5270108	24,12	108
N5270111	25,45	111
N5270114	24,12	114
N5270121	29,80	121
N5270127	31,41	127
N5270140	36,99	140
N5270152	40,68	152

While stocks last

BI-METAL HOLE SAWS - SHARK

ITEM: N5272

Cutting edge made of Bi-metal HSS 8% Cobalt (M42). Progressive variable toothing 4/6 suitable for Steel, Stainless Steel, Aluminium, Copper, Bronze, etc. Maximum cutting depth 48mm.

Tech. Code	GR76 Euro	Ø mm
N527214	7,32	14
N527216	7,77	16
N527217	7,95	17
N527219	7,95	19
N527220	8,21	20
N527221	8,75	21
N527222	8,21	22
N527224	9,55	24
N527225	9,82	25
N527227	10,63	27
N527229	11,25	29
N527230	11,52	30
N527232	12,50	32
N527233	13,30	33
N527235	13,57	35
N527237	14,28	37
N527238	14,46	38
N527240	14,55	40
N527241	14,82	41
N527243	15,27	43

Tech. Code	GR76 Euro	Ø mm
N527244	15,62	44
N527245	16,07	45
N527246	16,34	46
N527248	17,23	48
N527250	17,77	50
N527251	18,03	51
N527252	18,66	52
N527254	19,19	54
N527255	19,81	55
N527257	20,17	57
N527259	20,88	59
N527260	21,16	60
N527264	22,58	64
N527265	22,94	65
N527267	23,30	67
N527268	24,81	68
N527270	25,62	70
N527273	26,69	73
N527275	26,95	75
N527276	27,67	76

Tech. Code	GR76 Euro	Ø mm
N527279	28,48	79
N527283	30,08	83
N527286	31,15	86
N527289	31,95	89
N527292	33,02	92
N527295	34,45	95
N527298	35,52	98
N5272100	37,31	100
N5272102	37,84	102
N5272105	40,88	105
N5272108	41,95	108
N5272111	42,93	111
N5272114	45,16	114
N5272121	47,84	121
N5272127	52,12	127
N5272140	57,48	140
N5272146	59,80	146
N5272152	61,50	152

SHARK TOOTH

While stocks last

COUPLINGS FOR BI-METAL HOLE SAWS

ITEM: N5273

Complete with pilot drill bit adjustable through the screw on the side of the chuck.

Tech. Code	GR76 Euro	For saw Ø mm	Shank mm	Pilot drill bit mm
N52731	14,40	▲ 14-30	6.5	6.35
N52732	14,40	⬢ 14-30	9.50	6.35
N52733	16,90	⬢ 14-30	11.00	6.35
N52734	27,70	⬢ 32-152	11.00	6.35

While stocks last

DRILL BITS FOR BI-METAL HOLE SAWS

ITEM: N5274

DRILL BITS FOR BI-METAL HOLE SAWS

Tech. Code	GR76 Euro	Chuck drill bits	
N52746	9,10	N5273 1	2
N52747	9,10	N5273 2-3-4-5	2

While stocks last

Indivisible package Suggested retail package - Unit price

BI-METAL HOLE SAWS IN CASE

ITEM: N5276

Set of 6 bimetallic hole saws for precision drilling with cutting depth of 35 mm max. Recommended for cutting steel, cast Iron, aluminum, copper, wood and plastic.

Composition:
- 6 Hole saws Ø 22 - 29 - 35 - 44 - 51 - 64 mm
- 1 Attack 14-30 mm
- 1 Attack 32-152 mm
- 1 Reduction

Tech. Code	GR76 Euro	Pieces
N5276SET6	80,00	9

While stocks last

BI-METAL HOLE SAWS IN CASE - SHARK

ITEM: N5277

Kit 9 pcs bi-metal hole saws SHARK HIGH SPEED with progressive variable toothing 4/6, including two attachments and a reduction.

Composition:
- 9 Hole saws Ø 19 - 22 - 29 - 35 - 38 - 44 - 51 - 57 - 64 mm
- 1 Attack 14-30 mm
- 1 Attack 32-152 mm
- 1 Reduction

Tech. Code	GR76 Euro	Pieces
N5277SET9	143,90	12

While stocks last

HOLE CUTTERS FOR STEEL

ITEM: WX7495

NEW

Hole cutters **PREMIUM QUALITY** in HSS with ground sharpening for immediate chip evacuation and greater cutting performance. Complete with spindle, and bit and spring for the expulsion of waste.
Application:
Excution of through holes on steel sheets, light alloys and plastics with depths up to 5 mm. It is recommended to use cutting oils.

Tech. Code	GR58 Euro	Ø mm	d mm	D mm	h mm
N527510	16,10	10	5	7	20
N527511	16,30	11	5	7	20
N527512	17,00	12	5	7	20
N527513	18,70	13	5	7	20
N527514	19,10	14	5	8	20
N527515	20,30	15	5	8	20
N527516	20,60	16	5	8	20
N527517	21,60	17	5	8	20
N527518	21,90	18	5	8	20
N527519	23,30	19	5	8	20
N527520	24,20	20	5	8	20
N527521	25,10	21	5	8	20
N527522	26,10	22	5	8	20
N527523	27,30	23	6	9	20
N527524	28,30	24	6	9	20
N527525	29,50	25	6	9	20
N527526	30,60	26	6	9	20
N527527	31,40	27	6	9	20
N527528	32,80	28	6	9	20
N527529	33,70	29	6	9	20
N527530	34,80	30	6	9	20
N527531	35,90	31	6	9	22
N527532	37,00	32	6	9	22
N527533	38,30	33	6	9	22
N527534	39,40	34	6	9	22
N527535	40,50	35	6	9	22
N527536	41,60	36	6	9	22
N527537	42,60	37	6	9	22
N527538	43,70	38	6	9	22
N527539	45,00	39	6	9	22
N527540	45,90	40	6	9	22
N527541	49,70	41	6	10	22
N527542	50,50	42	6	10	22
N527543	51,40	43	6	10	22
N527544	52,50	44	6	10	22
N527545	53,70	45	6	10	22
N527546	54,80	46	6	10	22
N527547	56,10	47	6	10	22
N527548	56,90	48	6	10	22
N527549	58,10	49	6	10	22
N527550	59,00	50	6	10	22
N527551	(82,80)	51	6	10	24
N527552	84,20	52	6	10	24
N527553	(85,90)	53	6	10	24
N527554	87,20	54	6	10	24
N527555	89,00	55	6	10	24

Tech. Code	GR58 Euro	Ø mm	d mm	D mm	h mm
N527556	(90,40)	56	6	10	24
N527557	(92,30)	57	6	10	24
N527558	(93,60)	58	6	10	24
N527559	(94,80)	59	6	10	24
N527560	96,80	60	6	10	24
N527561	(120,00)	61	8	12	26
N527562	122,30	62	8	12	26
N527563	(124,00)	63	8	12	26
N527564	(125,70)	64	8	12	26
N527565	127,80	65	8	12	26
N527566	(129,80)	66	8	12	26
N527567	(131,80)	67	8	12	26
N527568	(133,40)	68	8	12	26
N527569	(135,90)	69	8	12	26
N527570	137,40	70	8	12	26
N527571	(139,50)	71	8	12	26
N527572	(141,30)	72	8	12	26
N527573	(143,50)	73	8	12	26
N527574	(145,10)	74	8	12	26
N527575	(146,80)	75	8	12	26
N527576	(149,00)	76	8	12	26
N527577	(150,70)	77	8	12	26
N527578	(153,10)	78	8	12	26
N527579	(154,90)	79	8	12	26
N527580	156,60	80	8	12	26
N527581	(158,50)	81	8	12	26
N527582	(160,40)	82	8	12	26
N527583	(162,40)	83	8	12	26
N527584	(164,50)	84	8	12	26
N527585	(166,20)	85	8	12	26
N527586	(168,00)	86	8	12	26
N527587	(170,20)	87	8	12	26
N527588	(172,00)	88	8	12	26
N527589	(173,80)	89	8	12	26
N527590	(175,70)	90	8	12	26
N527591	(177,90)	91	8	13	28
N527592	(179,60)	92	8	13	28
N527593	(181,60)	93	8	13	28
N527594	(183,40)	94	8	13	28
N527595	(185,20)	95	8	13	28
N527596	(187,40)	96	8	13	28
N527597	(189,30)	97	8	13	28
N527598	(191,20)	98	8	13	28
N527599	(192,90)	99	8	13	28
N5275100	(195,20)	100	8	13	28

HSSE HOLE CUTTERS FOR STEEL AND STAINLESS STEEL

ITEM: WX7500

Hole cutters **PREMIUM QUALITY** in HSSE with special ground sharpening for immediate chip evacuation and greater cutting efficiency.
Complete with spindle, bit and spring for the ejection of waste.
Application:
For making through holes in steel, stainless steel, light alloys and hard plastic with depth of up to 10 mm.
It is recommended to use cutting oil.

Tech. Code	GR58 Euro	Ø mm	d mm	D mm	h mm
N527812	22,58	12	5	7	21
N527813	28,62	13	5	7	21
N527814	29,79	14	5	8	21
N527815	30,53	15	5	8	21
N527816	31,27	16	5	8	21
N527817	31,69	17	5	8	21
N527818	32,44	18	5	8	22
N527819	34,03	19	5	8	22
N527820	35,51	20	5	8	23
N527821	37,31	21	5	8	23
N527822	39,54	22	5	8	23
N527823	40,70	23	6	9	23
N527824	42,19	24	6	9	25
N527825	43,78	25	6	9	25
N527826	45,47	26	6	9	25
N527827	47,49	27	6	9	25
N527828	49,08	28	6	9	25
N527829	50,67	29	6	9	25
N527830	52,26	30	6	9	25
N527831	53,74	31	6	9	27
N527832	55,44	32	6	9	27
N527833	57,13	33	6	9	27
N527834	58,94	34	6	9	27
N527835	60,95	35	6	9	27
N527836	62,22	36	6	10	27
N527837	64,02	37	6	10	27
N527838	66,25	38	6	10	27
N527839	70,38	39	6	10	27
N527840	71,34	40	6	10	27
N527841	72,82	41	6	10	27
N527842	74,41	42	6	10	27
N527843	76,11	43	6	10	27
N527844	77,38	44	6	10	27
N527845	79,50	45	6	10	27
N527846	80,88	46	6	10	27
N527847	82,89	47	6	10	27
N527848	84,38	48	6	10	27
N527849	85,65	49	6	10	27
N527850	87,45	50	8	12	27
N527851	122,22	51	8	12	27
N527852	130,06	52	8	12	27
N527853	126,88	53	8	12	27
N527854	129,32	54	8	12	27
N527855	137,69	55	8	12	28
N527856	134,73	56	8	12	28

Tech. Code	GR58 Euro	Ø mm	d mm	D mm	h mm
N527857	(136,95)	57	8	12	28
N527858	139,18	58	8	12	28
N527859	(141,72)	59	8	12	28
N527860	149,57	60	8	12	28
N527861	(172,46)	61	8	12	28
N527862	182,32	62	8	12	28
N527863	(177,34)	63	8	12	28
N527864	(180,73)	64	8	12	28
N527865	190,69	65	8	12	29
N527866	(187,09)	66	8	12	29
N527867	(189,21)	67	8	12	29
N527868	191,97	68	8	12	29
N527869	(193,87)	69	8	12	29
N527870	204,69	70	8	12	29
N527871	(198,43)	71	8	12	29
N527872	(201,29)	72	8	12	29
N527873	(204,05)	73	8	12	29
N527874	(206,70)	74	8	12	29
N527875	209,56	75	8	12	29
N527876	212,74	76	8	12	29
N527877	(214,97)	77	8	12	29
N527878	(217,72)	78	8	12	29
N527879	(219,63)	79	8	12	29
N527880	223,77	80	8	12	29
N527881	(225,99)	81	8	12	29
N527882	(228,85)	82	8	12	29
N527883	(231,61)	83	8	12	29
N527884	(234,37)	84	8	12	29
N527885	(237,12)	85	8	12	29
N527886	(239,88)	86	8	12	29
N527887	(242,63)	87	8	12	29
N527888	(245,50)	88	8	12	29
N527889	(255,48)	89	8	12	29
N527890	(258,45)	90	8	12	29
N527891	(261,48)	91	8	13	30
N527892	(264,00)	92	8	13	30
N527893	(266,94)	93	8	13	30
N527894	(269,99)	94	8	13	30
N527895	(272,62)	95	8	13	30
N527896	(275,35)	96	8	13	30
N527897	(278,30)	97	8	13	30
N527898	(281,04)	98	8	13	30
N527899	(283,90)	99	8	13	30
N5278100	(292,50)	100	8	13	30

DRILLS FOR HOLE CUTTERS WX7495 AND WX7500

ITEM: WX7502

NEW

Replacement tips complete with spring for HSS and HSSE hole cutters.

Tech. Code		N528205	N528206	N528208
GR58	Euro	6,30	7,20	8,00
Ø	mm	5	6	8
L	mm	50	60	65
For cutters WX7495Ø	mm	10 - 22	23 - 60	61 - 100
Per frese WX7500 Ø	mm	12 - 22	23 - 49	50 - 100
📦		2	2	2

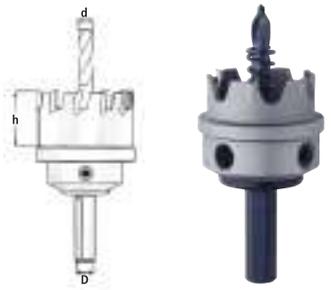
Indivisible package Suggested retail package - Unit price

HOLE CUTTERS WITH CARBIDE TIPS

WRK

ITEM: N5285

Tungsten carbide tipped hole saws, interchangeable drill bit with spring extraction, suitable for stainless steel, aluminium with a high percentage of silicon, filled plastic, PVC, fibreglass and abrasive materials in general, cutting depth 4 mm.



Tech. Code	GR76 Euro	Ø mm	d mm	D mm	h mm
N528516	46,90	16	6	10	12
N528517	46,50	17	6	10	12
N528518	46,90	18	6	10	12
N528519	46,90	19	6	10	12
N528520	51,70	20	6	10	12
N528521	53,20	21	6	10	12
N528522	51,70	22	6	10	12
N528523	51,70	23	6	10	12
N528524	51,70	24	6	10	12
N528525	53,20	25	6	10	12
N528526	60,30	26	6	10	12
N528527	62,00	27	6	10	12
N528528	60,30	28	6	10	12

Tech. Code	GR76 Euro	Ø mm	d mm	D mm	h mm
N528529	60,30	29	6	10	12
N528530	60,30	30	6	10	12
N528532	70,20	32	6	10	12
N528533	70,20	33	6	10	12
N528535	70,20	35	6	10	12
N528536	79,90	36	6	10	12
N528538	82,00	38	6	10	12
N528540	82,00	40	6	10	12
N528542	94,50	42	6	10	12
N528545	94,50	45	6	10	12
N528548	107,50	48	6	10	12
N528550	107,50	50	6	10	12
N528560	137,00	60	6	13	12

TAP EXTRACTORS FOR BROKEN TAPS

ITEM: N5293

Remove broken taps and save the threads. Walton Tap Extractors let you remove broken taps without drilling, lasers, damaged threads, scrapped parts or repair inserts.

Model with 3 beam to put into the groove of a broken taps.

Tech. Code	GR76 Euro	MA	UM
N529303	51,24	M3	#4
N529304	51,24	M4	#8
N529305	51,24	M5	#10
N529306	52,92	M6	1/4"
N529308	55,34	M8 - M7	5/16"
N529310	55,34	M10 - M9	3/8"
N529312	61,64	M12	1/2"

Available on request others dimensions.

TWIST DRILLS FOR MASONRY/CONCRETE

BOSCH

ITEM: SILVER PERCUSSION

Head with special geometry for high feed, wide HM cutting edge discharged at the bottom to avoid drill bit breakage and hard steel body with “U” spiral groove. Suitable for drilling masonry, concrete, natural and artificial stone.

Tech. Code	GR76 Euro	D mm	L1 mm	L2 mm
N53013X70	3,15	3	40	70
N53014X75	3,30	4	40	75
N53015X85	3,45	5	50	85
N53016X100	3,55	6	60	100
N53018X120	4,15	8	80	120
N53018X200	8,40	8	150	200
N53018X400	11,90	8	350	400
N530110X120	5,90	10	80	120
N530110X200	10,00	10	150	200

Tech. Code	GR76 Euro	D mm	L1 mm	L2 mm
N530110X400	15,90	10	350	400
N530112X150	8,90	12	90	150
N530112X200	12,50	12	150	200
N530112X400	15,20	12	350	400
N530114X150	11,60	14	90	150
N530114X400	18,10	14	350	400
N530116X160	14,90	16	100	160
N530116X400	21,50	16	350	400

DRILL BIT SET FOR MASONRY/CONCRETE

BOSCH

ITEM: CYL-3

Drill bit set in plastic case.
Composition: Ø x Length
N5302SET5/1 4 x 75 - 5 x 85 - 6 x 100 (2 pcs.) - 8 x 120
N5302SET7/1 4 x 75 - 5 x 85 - 6 x 100 (2 pcs.) - 7 x 100 - 8 x 120 - 10 x 120

Tech. Code	GR76 Euro	Ø for length mm	Pieces
N5302SET5/1	14,70	4x75 - 5x85 - 6x100 (2 pcs.) - 8x120	5
N5302SET7/1	22,00	4x75 - 5x85 - 6x100 (2 pcs.) - 7x100 - 8x120 - 10x120	7

N

DRILL BITS FOR CONCRETE SDS-PLUS WITH TWO CUTTERS

ITEM: N5305

Head with HM cutting edges and geometry optimized for maximum energy transmission for fast drilling. Innovative four-fold spiral flute for the rapid removal of drilling dust, vibration reduction and for greater tip stability and durability.
Suitable for drilling masonry, reinforced concrete, natural and artificial stone.
Composition: Ø x Length 5 x 110 - 6 x 110 - 6 x 160 - 8 x 160 - 10 x 160 mm

Tech. Code	GR76 Euro	D mm	L1 mm	L2 mm	Z
N53054X110	6,00	4	50	110	2
N53055X110	4,80	5	50	110	2
N53055X160	5,80	5	100	160	2
N53056X110	4,80	6	50	110	2
N53056X160	5,20	6	100	160	2
N53056X210	8,90	6	150	210	2
N53058X110	6,00	8	50	110	2
N53058X160	6,10	8	100	160	2
N53058X210	7,30	8	150	210	2
N53058X260	9,50	8	200	260	2
N53058X460	21,50	8	400	460	2
N530510X160	7,20	10	100	160	2
N530510X210	8,80	10	150	210	2
N530510X260	11,20	10	200	260	2
N530510X460	18,50	10	400	460	2
N530512X160	8,50	12	100	160	2

Tech. Code	GR76 Euro	D mm	L1 mm	L2 mm	Z
N530512X210	9,90	12	150	210	2
N530512X260	12,70	12	200	260	2
N530512X460	22,00	12	400	460	2
N530514X160	12,60	14	100	160	2
N530514X210	14,40	14	150	210	2
N530514X260	15,70	14	200	260	2
N530514X460	27,00	14	400	460	2
N530516X210	18,10	16	150	210	2
N530516X310	21,50	16	250	310	2
N530516X450	35,50	16	400	450	2
N530518X300	38,00	18	250	300	2
N530518X450	40,00	18	400	450	2
N530520X300	43,50	20	250	300	2
N530520X450	45,50	20	400	450	2
N530522X450	72,50	22	400	450	2
N530525X450	85,00	25	400	450	2

DRILL BIT SET FOR CONCRETE SDS-PLUS WITH TWO CUTTERS

ITEM: N5306

Drill bit set in plastic case.

Composition: Ø x Length 5 x 110 - 6 x 110 - 6 x 160 - 8 x 160 - 10 x 160 mm

Tech. Code	GR76 Euro	z	Pieces
N5306SET5/2	32,50	2	5

Related products

GLOVES IN NYLON/SPANDEX WITH 4/4 COATED IN NITRIL FOAM SANITIZED COATING

Tech. Code	Size	EU size
K232807	M	7
K232808	L	8
K232809	XL	9

Product available in index K

Indivisible package Suggested retail package - Unit price

KIT TOOL BOX FOR PROFESSIONALS

ITEM: N5225

Kit tool box composed of:

HAND TAPS HSS DIN 352 / M3-M12
- For cutting internal threads
- Tested industrial quality

90° COUNTERSINKS HSS DIN 335 C / TIN / Ø 6,3-20,5 mm
- 100% defined cutting geometric
- Optimized chip removal
- Tested and reliable industrial quality

TWIST DRILLS HSS-G Ø 1-10,5 mm x 0,5 mm IN PASSI
- Universal twist drill for cordless drilling machines
- Ø 1,0-10,5 mm + Ø 3,3 / 4,2 / 6,8 / 10,2 mm (size for threading)
- For the most materials

Tech. Code	GR76 Euro	Pieces n°
N5225SET3	180,00	51

While stocks last

DRILL BITS FOR CONCRETE SDS-PLUS WITH FOUR CUTTERS

ITEM: MX4

The SDS-Plus drills with 4 tungsten carbide cutters guarantee performance and durability up to 4 times higher than the same tips with 2 cutters. Suitable for drilling masonry, reinforced concrete, natural and artificial stone.

Features:
- 4-flute geometry for the maximum removal of drilling dust and debris
- Centring tip for easy spot drilling with pinpoint accuracy
- Enhanced rebar guards for improved resistance when hitting rebars
- New flute design with thin flute at the tip for maximum debris extraction, higher speed and less friction.

Tech. Code	GR76 Euro	D mm	L1 mm	L2 mm
N531005X115	(6,10)	5	50	115
N531005X165	(6,60)	5	100	165
N531006X115	(7,70)	6	50	115
N531006X165	(8,00)	6	100	165
N531006X215	(11,10)	6	150	215
N531006X265	(13,70)	6	200	265
N531007X165	(11,10)	7	100	165
N531008X115	(9,00)	8	50	115
N531008X165	(9,80)	8	100	165
N531008X215	(11,10)	8	150	215
N531008X265	(13,70)	8	200	265
N531008X315	(18,50)	8	250	315
N531010X160	(10,80)	10	100	160
N531010X215	(12,50)	10	150	215

Tech. Code	GR76 Euro	D mm	L1 mm	L2 mm
N531010X265	(14,30)	10	200	265
N531010X315	(17,80)	10	250	315
N531012X160	(12,00)	12	100	160
N531012X210	(14,90)	12	150	210
N531012X260	(16,70)	12	200	260
N531012X310	(22,70)	12	250	310
N531014X210	(22,70)	14	150	210
N531016X210	(27,40)	16	150	210
N531016X260	(31,60)	16	200	260
N531016X310	(36,80)	16	250	310
N531016X450	(38,20)	16	400	450
N531018X250	(36,10)	18	200	250
N531020X250	(43,50)	20	200	250
N531020X450	(50,10)	20	400	450

SDS - PLUS POINTED CHISELS FOR ROTARY AND DEMOLITION HAMMERS

ITEM: N5350

Coupling SDS Plus

Tech. Code	GR76 Euro	Length mm
N5350250	19,10	250

SDS - PLUS FLAT CHISELS FOR ROTARY AND DEMOLITION HAMMERS

ITEM: N5351

Coupling SDS Plus

Tech. Code	GR76 Euro	Cutting edge mm	Length mm
N5351250	19,10	20	250

SDS - MAX POINTED CHISELS FOR ROTARY AND DEMOLITION HAMMERS

ITEM: N5352

Coupling SDS Max

Tech. Code	GR76 Euro	Length mm
N5352400	29,00	400

SDS - MAX FLAT CHISELS FOR ROTARY AND DEMOLITION HAMMERS

ITEM: N5353

Coupling SDS Max

Tech. Code	GR76 Euro	Cutting edge mm	Length mm
N5353400	(29,00)	25	400

MILLING CUTTERS IN HSS WITH WELDON COUPLING 19

ITEM: HSS NOVA 25 3/4" WELDON

HSS core drills with Weldon 19 - 3/4" coupling for drilling steel and aluminium with magnetic-based drilling units. **Maximum cutting depth 25 mm**.

Tech. Code	GR82 Euro	Ø mm
N540012	(21,80)	12
N540013	(21,80)	13
N540014	(21,80)	14
N540015	(21,80)	15
N540016	(21,80)	16
N540017	(23,60)	17
N540018	(23,60)	18
N540019	(23,60)	19
N540020	(27,60)	20
N540021	(27,60)	21
N540022	(27,60)	22
N540023	(31,50)	23
N540024	(31,50)	24
N540025	(31,50)	25
N540026	(37,10)	26
N540027	(37,10)	27
N540028	(39,30)	28

Tech. Code	GR82 Euro	Ø mm
N540029	(39,30)	29
N540030	(42,10)	30
N540031	(42,10)	31
N540032	(48,80)	32
N540033	(48,80)	33
N540034	(55,40)	34
N540035	(55,40)	35
N540036	(55,40)	36
N540037	(64,50)	37
N540038	(64,50)	38
N540039	(64,50)	39
N540040	(72,50)	40
N540041	(72,50)	41
N540042	(78,80)	42
N540043	(78,80)	43
N540044	(83,10)	44
N540045	(83,10)	45

Tech. Code	GR82 Euro	Ø mm
N540046	(94,50)	46
N540047	(94,50)	47
N540048	(98,30)	48
N540049	(98,30)	49
N540050	(98,30)	50
N540051	(105,00)	51
N540052	(105,00)	52
N540053	(112,00)	53
N540054	(112,00)	54
N540055	(123,00)	55
N540056	(139,00)	56
N540057	(139,00)	57
N540058	(151,00)	58
N540059	(151,00)	59
N540060	(151,00)	60

MILLING CUTTERS IN HM WITH WELDON COUPLING 19

ITEM: HM ULTRA 35 3/4" WELDON

HM core drills with Weldon 19 - 3/4" coupling and hard metal teeth. High durability and considerable removal capacity on steel and stainless steel. Can be used with magnetic-based drilling units. **Maximum cutting depth 35 mm**.

Tech. Code	GR82 Euro	Ø mm
N541012	(52,30)	12
N541013	(52,30)	13
N541014	(52,30)	14
N541015	(52,30)	15
N541016	(52,30)	16
N541017	(52,30)	17
N541018	(52,30)	18
N541019	(52,30)	19
N541020	(52,30)	20
N541021	(52,30)	21
N541022	(52,30)	22
N541023	(52,30)	23
N541024	(52,30)	24
N541025	(52,30)	25
N541026	(52,30)	26
N541027	(52,30)	27
N541028	(52,30)	28

Tech. Code	GR82 Euro	Ø mm
N541029	(60,20)	29
N541030	(60,20)	30
N541031	(60,20)	31
N541032	(60,20)	32
N541033	(60,20)	33
N541034	(60,20)	34
N541035	(60,20)	35
N541036	(69,80)	36
N541037	(69,80)	37
N541038	(69,80)	38
N541039	(69,80)	39
N541040	(69,80)	40
N541041	(82,40)	41
N541042	(82,40)	42
N541043	(82,40)	43
N541044	(82,40)	44
N541045	(82,40)	45

Tech. Code	GR82 Euro	Ø mm
N541046	(91,80)	46
N541047	(91,80)	47
N541048	(91,80)	48
N541049	(91,80)	49
N541050	(91,80)	50
N541051	(101,00)	51
N541052	(101,00)	52
N541053	(101,00)	53
N541054	(101,00)	54
N541055	(101,00)	55
N541056	(107,00)	56
N541057	(107,00)	57
N541058	(107,00)	58
N541059	(107,00)	59
N541060	(107,00)	60

MILLING CUTTERS IN HSS WITH QUICKIN QUICK COUPLING

ITEM: HSS NOVA 25 QUICKIN

HSS core drills with **QuickIN** coupling for drilling steel and aluminum with magnetic-based drilling units. **Maximium cutting depth 25 mm**.

Tech. Code	GR82 Euro	Ø mm
N542012	(21,80)	12
N542013	(21,80)	13
N542014	(21,80)	14
N542015	(21,80)	15
N542016	(21,80)	16
N542017	(23,60)	17
N542018	(23,60)	18
N542019	(23,60)	19
N542020	(27,60)	20
N542021	(27,60)	21
N542022	(27,60)	22
N542023	(31,50)	23
N542024	(31,50)	24

Tech. Code	GR82 Euro	Ø mm
N542025	(31,50)	25
N542026	(37,10)	26
N542027	(37,10)	27
N542028	(39,30)	28
N542029	(39,30)	29
N542030	(42,10)	30
N542031	(42,10)	31
N542032	(48,80)	32
N542033	(48,80)	33
N542034	(55,40)	34
N542035	(55,40)	35
N542036	(55,40)	36
N542037	(64,50)	37

Tech. Code	GR82 Euro	Ø mm
N542038	(64,50)	38
N542039	(64,50)	39
N542040	(72,50)	40
N542041	(72,50)	41
N542042	(78,80)	42
N542043	(78,80)	43
N542044	(83,10)	44
N542045	(83,10)	45
N542046	(94,50)	46
N542047	(94,50)	47
N542048	(98,30)	48
N542049	(98,30)	49
N542050	(98,30)	50

MILLING CUTTERS IN HM WITH QUICKIN QUICK COUPLING

ITEM: HM ULTRA 35 QUICKIN

HM core drills with **QuickIN** quick coupling and teeth in hard metal. High durability and considerable removal capacity on steel and stainless steel. Can be used with magnet based drilling units. Max cutting depth 35 mm.with **QuickIN** quick coupling and teeth in hard metal. High durability and considerable removal capacity on steel and stainless steel. Can be used with magnet based drilling units. Max cutting depth 35 mm.

Tech. Code	GR82 Euro	Ø mm
N543012	(56,20)	12
N543013	(56,20)	13
N543014	(56,20)	14
N543015	(56,20)	15
N543015,5	(56,80)	15,5
N543016	(56,20)	16
N543017	(56,20)	17
N543017,5	(56,80)	17,5
N543018	(56,20)	18
N543019	(56,20)	19
N543019,5	(56,80)	19,5
N543020	(56,20)	20
N543021	(56,20)	21
N543022	(56,20)	22
N543023	(56,20)	23
N543024	(56,20)	24
N543025	(56,20)	25
N543026	(56,20)	26
N543026,5	(56,80)	26,5
N543027	(56,20)	27

Tech. Code	GR82 Euro	Ø mm
N543028	(56,20)	28
N543029	(65,30)	29
N543030	(65,30)	30
N543031	(65,30)	31
N543032	(65,30)	32
N543033	(65,30)	33
N543034	(65,30)	34
N543035	(65,30)	35
N543036	(75,80)	36
N543037	(75,80)	37
N543038	(75,80)	38
N543039	(75,80)	39
N543040	(75,80)	40
N543041	(89,40)	41
N543042	(89,40)	42
N543043	(89,40)	43
N543044	(89,40)	44
N543045	(89,40)	45
N543046	(99,80)	46
N543047	(99,80)	47

Tech. Code	GR82 Euro	Ø mm
N543048	(99,80)	48
N543049	(99,80)	49
N543050	(99,80)	50
N543051	(111,00)	51
N543052	(111,00)	52
N543053	(111,00)	53
N543054	(111,00)	54
N543055	(111,00)	55
N543056	(116,00)	56
N543057	(116,00)	57
N543058	(116,00)	58
N543059	(116,00)	59
N543060	(116,00)	60
N543061	(129,00)	61
N543062	(129,00)	62
N543063	(129,00)	63
N543064	(129,00)	64
N543065	(129,00)	65

CENTERING PINS FOR DRILLING UNITS

ITEM: 63134998300 - 63134998310

Centering pins for cutters with Weldon coupling 19 and QuickIN.

Tech. Code	GR82 Euro	Ø mm	Length mm	Depth mm
N5439082	(17,40)	6,5	82	25
N5439100	(17,40)	6,5	100	35

ADAPTORS FOR DRILLING UNITS

ITEM: N5440

Adapters for milling cutters and chucks usable with magnetic-based drilling units.

Tech. Code	GR82 Euro	Machine coupling	Tool coupling	Form
N5440QI-W19	(28,40)	QuickIN	Weldon 19	For W 19 tools
N5440QI-1/2	(28,40)	QuickIN	1/2" - 20 UNF	For chucks
N5440QI-B16	(28,40)	QuickIN	B16	For chucks
N5440W19-QI	(61,20)	Weldon 19	QuickIN	For QuickIN tools
N5440W19-1/2	(28,70)	Weldon 19	1/2" - 20 UNF	For chucks
N5440W19-B16	(28,40)	Weldon 19	B16	For chucks

MORSE TAPER ADAPTERS FOR BORING UNITS

ITEM: N5450

Morse taper adapters for burr cutters with **QuickIN** quick coupling for use with magnetic base drilling.

Tech. Code	GR82 Euro	Machine coupling	Tool coupling	Length mm	For cutters Ø mm
N5450MK250	(226,00)	MK2	QuickIN	50	12 - 35
N5450MK275	(244,00)	MK2	QuickIN	75	12 - 35
N5450MK350	(226,00)	MK3	QuickIN	50	12 - 65
N5450MK375	(243,00)	MK3	QuickIN	75	12 - 65

MORSE TAPER ADAPTERS FOR DRILLING UNITS

ITEM: N5455

Morse taper adapters for annular cutters with Weldon shank 19 usable with magnetic base drilling units.

Tech. Code	GR82 Euro	Machine coupling	Tool coupling	Length mm	For cutters Ø mm
N5455MK250	(226,00)	MK2	Weldon 19	50	12 - 35
N5455MK275	(244,00)	MK2	Weldon 19	75	12 - 35
N5455MK350	(226,00)	MK3	Weldon 19	50	12 - 65
N5455MK375	(243,00)	MK3	Weldon 19	75	12 - 65

PNEUMATIC WASHING TANKS

ITEM: 70365

Washing tanks for quick cleaning of mechanical parts and components in general. The system with low-pressure pneumatic operation, allows both the continuous flow of cleaning liquid with a brush to be washed and the immersion washing with the components immersed in the cleaning liquid inside the tank. For a correct use pour 48 - 52 liters of detergent liquid.

Standard equipment:
Knurled bristle brush N589001
Decanting grid/ filter

Tech. Code		N589000
GR78	Euro	(708,00)
Tub capacity	L	50
Tank capacity	L	65
Maximum degergent pressure	BAR	0,5
Maximum blow gun pressure	BAR	12
Dimension of the tub	mm	510 x 670
Dimension	mm	510 x 670 x 1070
Weight	kg	47

Wheels and castors made in Italy

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LIQUID VACUUM CLEANERS BREEZY 25

LTEC Breezy

ITEM: N5900

Liquid vacuum cleaners, small, reliable, practical and versatile with a twin engine 1300 Watt, barrel polpropylene filter, washable filter 2300 cm², sealed snap and cart with door accessories. Strong and practical closing hook system. Anti-shock head splash with and 4 sliding wheels Ø 50 mm. Quick coupling for tube, Ø 36 mm accessories Ø 36 mm Kit A included .

Made in Italy

Tech. Code	GR78 Euro	Can L	Electric motors N°	Tension V	Depression mm/H_2O	Air capacity m^3/h	Dimension cm	Weight kg
N590001	240,00	25	1	230	2200	180	34 x 34 x 64 h	6

LIQUID VACUUM CLEANERS BREEZY 35

LTEC Breezy

ITEM: N5910

Professional liquid vacuum cleaners for high performance,reliable, versatile,practical, ideal for all types of workplaces. Motor twin engine 1300 Watt with a steel barrel and trolley im metal, 4 sliding wheels Ø 80 mm, washable polyester filter 2300 cm² tested Anti-shock head. Quick coupling for tube accessories Ø 40 mm, accessories Ø 40 mm Kit B included.

Made in Italy

Tech. Code	GR78 Euro	Can L	Electric motors N°	Tension V	Depression mm/H_2O	Air capacity m^3/h	Dimension cm	Weight kg
N591001	308,00	35	1	230	2200	180	40 x 40 x 77 h	10

LIQUID VACUUM CLEANERS BREEZY 50

LTEC Breezy

ITEM: N5920

Professional liquid vacuum cleaners for high performance, reliable, versitile, practical, ideal for all types of workplaces. Equipped with a overhead door frame for easier emptying. Motor twin engine 1300 Watt, steel barrel and trolley in metal, 2 sliding wheels Ø 80 mm + 2 sliding wheels Ø 200 mm, washable polyester filter 6900 cm² tested Anti-shock head. Quick coupling for tube Ø 40 mm, accessories Ø 40 mm Kit B included.

Made in Italy

Tech. Code	GR78 Euro	Can L	Electric motors N°	Tension V	Depression mm/H_2O	Air capacity m^3/h	Dimension cm	Weight kg
N592001	353,00	50	1	230	2400	220	47 x 47 x 93h	20

LIQUID VACUUM CLEANERS BREEZY 70

LTEC Breezy

ITEM: N5930

Professional liquid vacuum cleaners for high performance, reliable, versitile, proctical,ideal for all types of workplaces. Equipped with overhead door frame for easier emptying Motor twin engine 1300 Watt, steel barrel and trolley in metal, 2 sliding wheels Ø 80 mm + 2 sliding wheels Ø 200 mm, washable polyester filter 6900 cm² Anti-shock tested. Quick coupling for tube accessories Ø 40 mm, accessories Ø 40 mm Kit C included.

Made in Italy

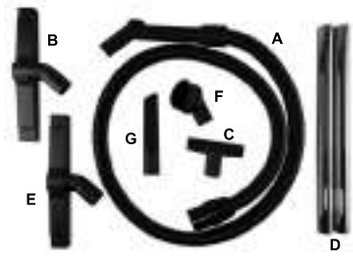
Tech. Code	GR78 Euro	Can L	Electric motors N°	Tension V	Depression mm/H_2O	Air capacity m^3/h	Dimension cm	Weight kg
N593001	667,00	70	2	230	2200	360	60 x 59 x 105 h	22

LIQUID VACUUM CLEANERS - ACCESSORIES AND SPARE PARTS Ø 36MM

ITEM: N5980

Accessories for vacuum cleaners with quick tube attachment Ø 36mm.

Tech. Code	GR78 Euro	Type	Description	Kit A Pieces
N598001	20,40	A	Hose fitting - complete with outlet - 2m	1
N598002	19,60	B	Brush for liquids 32cm	1
N598003	4,30	C	Car brushes 14cm	1
N598004	8,50	D	Chrome extension 50cm	2
N598005	8,00	E	Dust brushes 32cm	1
N598006	4,30	F	Circle brushes Ø 75mm	1
N598007	4,30	G	Flat brushes 20cm	1



LIQUID VACUUM CLEANER - ACCESSORIES AND SPARE PARTS Ø 40MM

ITEM: N5990

Accessories for vacuum cleaners with quick tube attachment Ø 40mm.

Tech. Code	GR78 Euro	Type	Description	Kit B Pieces	Kit C Pieces
N599001	34,00	A	Flexible tube - complete with outlet - 2,5m	1	1
N599002	19,60	B	Brush holder 40cm	1	-
N599003	15,30	C	Dust brush 40cm	1	-
N599004	15,30	D	Brush for liquids 40cm	1	-
N599005	34,00	E	Chrome extension 1 starboard + 1 inclined	1 + 1	1 + 1
N599006	10,20	F	Flat launches 25cm	1	1
N599007	6,80	G	PVC extension 50cm	2	1
N599008	7,70	H	Circle brushes Ø 75mm	1	1
N599009	73,10	J	PROFY brushes	-	1

VACUUM CLEANERS - ACCESSORIES AND SPARE PARTS FILTER KITS

ITEM: N5995

Polproplene filter kits for liquid vacuum cleaners.

Tech. Code	GR78 Euro	For models
N5995300	22,10	N590001
N5995330	20,40	N591001
N5995400	30,60	N592001 - N593001

VACUUM CLEANERS - ACCESSORIES AND SPARE MOTOR PARTS

ITEM: N5997

Twin motor by-pass 1300 Watt.

Tech. Code	GR78 Euro	For models
N59971300W	(129,20)	N590001 - N591001 - N592001 - N593001

INDUSTRIAL ASPIRATORS/SEPARATORS TWISTOIL

LTEC Twist Oil

ITEM: N6005

Single-phase Industrial aspirator/separator suitable for separating liquids and mixed solids. The liquidation of the liquids occurs by the inversion of the air flow generated by the turbine, eliminating any problems of possible blockage of the transfer pumps.

Features:
- Turbine with single-phase motor
- Liquid suction time L/sec 130/30
- Liquid dis-charge L/130/50
- Container made of galvanized steel
- Level probe with automatic locking system
- Suction mouth 50 mm ø
- Immediate recovery of lubricated fluids with re-immersion directly into the tank through the drainage hose with a sphere valve
- Accessories port

Standard equipment:
- 1 Nylon washable filter code N004810
- 1 Flexible tube PUR ø 50mm x 3 m code N00285003
- 1 Anti-static rubber sleeve 50mm ø code N002750
- 1 Exhaust hose 35mm x 3 m ø code N00285003
- 1 Sphere valve 1" - 1/4 code N003210
- 1 Flat nozzle L 400 mm in metal code N003350
- 1 Conical nozzle in rubber anti-oil code N003550

1	Carrying handle
3	Cover
5	Container for aspirated liquids
7	Drainage outlet
9	Accessories port
11	Drainage hose

2	Control On/Off
4	Filter housing
6	Pipe union for suction hose
8	Wheels
10	Aspiration hose
12	Electric cable

Tech. Code	GR78 Euro	Tank capacity L	Solids container L	Power supply V - Hz	Power Kw - HP	Depression max mBar	Air capacity max L/min	Sound level dB(A)	Dimension mm	Weight kg
N6005131	3796,00	130	40	230 - 50/60	2,4 - 3	230	5500	70	700 x 1180 x 1320 h	95

Conformity with the standard regulations EN 60204 - IEC 204/I - CEI 44/5 - 2006/42/CE - 2006/95/CE - 2004/108/CE

INDUSTRIAL ASPIRATOR/SEPARATORS TWISTOIL 280

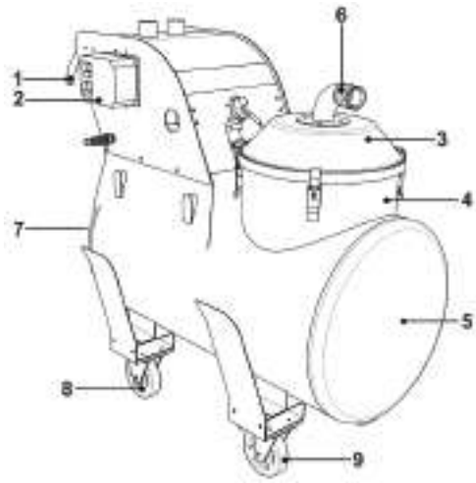
LTEC Twist Oil

ITEM: N6008

Industrial aspirator TWISTOIL 280 three-phase continuous use suitable for separating liquids and mixed solids. The liquidation of the liquids occurs by the inversion of the air flow generated by the turbine. Eliminating any problem of possible blockage of the transfer pumps.

Features:
- Turbine with three-phase motor
- Liquid suction time L/sec. 280/40
- Liquid discharge time L/sec. 280/50
- Container made of galvanized steel
- Level probe with automatic locking system
- Suction mouth 50mm ø
- Tank with capacity of 280 L which also acts as a sturdy supporting structure
- Immediate recovery of lubricated fluids with re-immersion directly into the tank through the drainage hose with a sphere valve
- Accessories port

Standard equipment:
- 1 Nylon washable filter code N004810
- 1 Flexible tube PUR ø 50mm x 3 m code N00285003
- 1 Anti-static rubber sleeve 50mm ø code N002750
- 1 Exhaust hose 50mm x 3 m ø code N00285003
- 1 Sphere valve 2" code N003220
- 1 Flat nozzle L 400 mm in metal code N003350
- 1 Conical nozzle in rubber anti-oil code N003550



1	Carrying handle
3	Cover
5	Container for aspirated liquids
7	Drainage outlet
9	Fixed wheels

2	Control on/off
4	Filter housing
6	Suction pipe connection
8	Rotating wheels

Tech. Code	GR78 Euro	Tank capacity L	Solids container L	Power supply V - Hz	Power Kw - HP	Depression max mBar	Air capacity max L/min	Sound level dB(A)	Dimension mm	Weight kg
N6008280	(5707,00)	280	40	400 - 50/60	2,5 - 3	330	5100	72	700 x 1450 x 1400 h	220

Conformity with the standard regulations EN 60204 - IEC 204/I - CEI 44/5 - 2006/42/CE - 2006/95/CE - 2004/108/CE

N

INDUSTRIAL ASPIRATORS STORM 3600

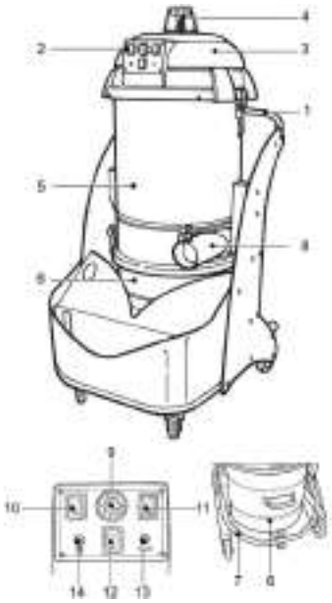
LTEC Storm

ITEM: N6015

Single phase industrial aspirator, mobile, versatile and compact. Reliable and maximum power of category.

Features:
- 3 By-pass independent motors
- Cyclone and tangential inlet of the material
- Manual mechanical filter shaker
- Voltage indicator
- Filter clogging indicator
- Vacuum gauge
- Compensation valve
- Magnetothermic switch
- Suction mouth ø 80 mm with reduction terminals for ø 50 mm hose
- Accessory compartment
- Container for quick-dislodged aspirated material

Standard equipment:
- 1 Polyester filter class M code N004520
- 1 Reduction terminal hose ø 80/50 mm code N00267050
- 1 Flexible hose PUR ø 50 x 3 m code N00285003
- 2 Antistatic rubber sleeve/nozzle ø 50mm code N002750
- 1 Conical lance anti-oil code N003550



1	Carrying handle
3	Cover
5	Filter housing
7	Release container debris lever
9	Vacuum gauge
11	2nd engine control on/off
13	Red light LED clogged filter

2	Controls
4	Cleaning filter lever
6	Container for aspirated debris
8	Suction pipe connection
10	1st engine control on/off
12	3rd engine control on/off
14	White light LED voltage presence

Tech. Code	GR78 Euro	Tank capacity L	Power supply V - Hz	Power Kw - HP	Max. depression mBar	Air capacity max L/min	Medium filter IFA/BGIA	Sound level dB(A)	Dimension mm	Weight kg
N6015100	2317,00	100	230 - 50/60	3.6 - 4.5	250	9000	M	72	820 x 650 x 1640h	71

Conformity with the standard regulations EN 60204 - IEC 204/I - CEI 44/5 - 2006/42/CE - 2006/95/CE - 2004/108/CE

INDUSTRIAL ASPIRATOR HURRICANE 55

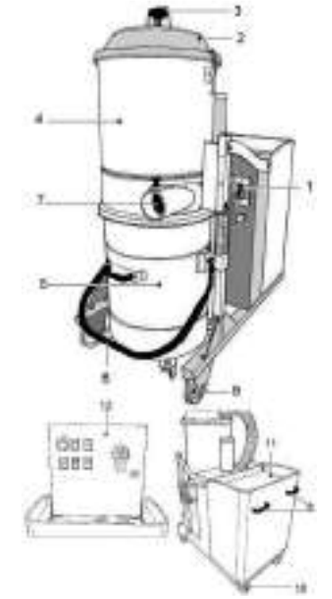
LTEC Hurricane

ITEM: N6020

Industrial mobile three-phase aspirator, reliable with a very sturdy frame, for constant and continuous use.

Features:
- 1 Turbine with three-phase motor by-pass
- Cyclone with tangential input of the material
- Manual mechanical filter shaker
- Voltage indicator
- Filter clogging indicator
- Vacuum gauge
- Compensation valve
- Suction inlet 80 mm ø with reduction terminal with quick release hose 50 mm ø
- Wheeled container for the aspirated material with quick release hook
- Accessories port

Standard equipment:
- 1 polyester filter class M code N004520
- 1 reduction terminal 80/50 mm ø code N00268050
- 1 flexible hose PUR 50 x 3 m ø code N00285003
- 2 Anti-static rubber sleeve/nozzle 50 mm ø code N002750
- 1 Conical lance anti-oil code N003550
- 1 flat lance L 400 mm in metal code. N003350



1	Control on/off
3	Filter shaker
5	Container for aspirated debris
7	Suction pipe connection
9	Fixed wheels
11	Accessories port

2	Engine cover
4	Filter housing
6	Release container debris lever
8	Carrying handle
10	Rotating wheels with brake
12	Electric panel

Tech. Code	GR78 Euro	Tank capacity L	Power supply V - Hz	Power Kw - HP	Max. depression mBar	Max. Air capacity L/min	Medium filter IFA/BGIA	Sound level dB(A)	Dimension mm	Weight kg
N6020100	(4583,00)	100	400 - 50/60	4 - 5,5	300	8666	"M" CLASS	76	1250 x 650 x 1520h	155

Conformity with standard regulations EN 60204 - IEC 204/I - CEI 44/5 - 2006/42/CE - 2006/95/CE - 2004/108/CE

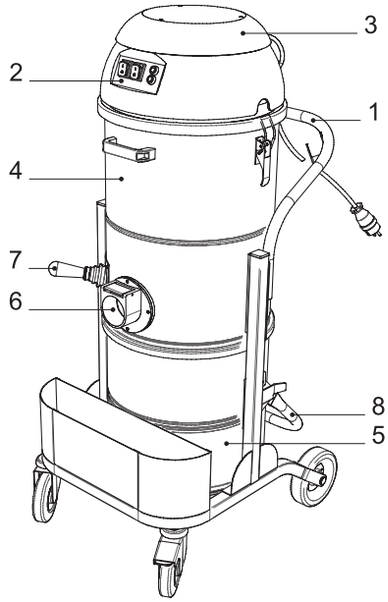
UNIVERSAL ASPIRATORS MINI STORM

ITEM: N6010

Industrial mobile single-phase extra compact aspirators.
Practical and reliable with a very sturdy frame.

Features:
-2 Independent motor By-passes
- Manual mechanical filter shaker
- Voltage indicator
- Filter clogging indicator
- Suction Inlet 70 mm ø with reduction terminal quick release hose 50 mm ø
- Accessories port
- Wheeled container for the aspirated material quick release hook

Standard equipment:
- 1 Polyester filter class M code N004510
- 1 Reduction terminal 70/50 mm ø code N00267050
- 1 Flexible tube PUR 50 x 3 m ø code N00285003
- 2 Antistatic rubber sleeve/nozzle 50 mm ø code N002750
- 1 Flat lance L 400 mm in metal code N003350



1	Carrying handle
3	Engine cover
5	Container for aspirated debris
7	Filter shaker

2	Contact on/off
4	Filter housing
6	Pipe union for suction hose
8	Container removal lever

Tech. Code	GR78 Euro	Tank capacity L	Power supply V - Hz	Power Kw - HP	Max. depression mBar	Air capacity L/min	Medium filter IFA/BGIA	Sound level dB(A)	Dimension mm	Weight kg
N601035	1937,00	45	230 - 50/60	2,4 - 3	250	6330	M - CLASS	72	510 x 640 x 1240h	45

Conformity with the standard regulations EN 60204 - IEC 204/I - CEI 44/5 - 2006/42/CE - 2006/95/CE - 2004/108/CE

ACCESSORIES FOR INDUSTRIAL ASPIRATORS

ITEM: N0051

Kit too full for automatic interrupting of the suction when the tank is full, preserving the filter.

Included:
- 1 Wet & Dry container
- 1 Floating valve

Tech. Code	GR78 Euro	For model
N005110	(499,20)	MINI STORM

ACCESSORIES FOR INDUSTRIAL ASPIRATORS

ITEM: N0052

Kit too full for interrupting the suction when the tank is full, preserving the filter.

Included:
- 1 Floating valve for liquids
- Drainage tap to be applied to the lower tank to make emptying easy (tap application 3/4" requires an hole at the bottom of the tank)

Tech. Code	GR78 Euro	For models
N005210	(240,80)	Storm 3600 - Storm 4800 - Hurricane 55

N

ITEM: N0026

Metal reduction terminal and connection between aspirator and rubber sleeve or directly to the flexible hose.

Tech. Code		N00267050	N00268050
GR78	Euro	33,40	33,40
Ø Aspirator	mm	70	80
Ø Tube/rubber sleeve	mm	50	50

ITEM: N0027

Rubber sleeve for metallic terminal connection to flexible hose pipe.

Tech. Code		N002750
GR78	Euro	29,00
Ø Terminal	mm	50
Ø Hose pipe	mm	50

ITEM: N0028

Flexible hose pipe PUR armed, resistant to mineral oil and abrasion, fire-proof. Maximum temperture usage 90°C.

Tech. Code		N00285003	N00285005	N00285010
GR78	Euro	67,90	113,20	226,30
Ø Hose pipe	mm	50	50	50
Length	m	3	5	10

ITEM: N0031

Drainage hose pipe for Twistoil aspirators.

Tech. Code		N00313503
GR78	Euro	(177,20)
Ø Hose pipe	mm	1" - 1/4
Length	m	3

ITEM: N0033

Flat nozzel in metal.

Tech. Code		N003350
GR78	Euro	31,10
Ø Attachment	mm	50
Length	mm	400

ITEM: N0035

Flat nozzel anti-oil.

Tech. Code		N003550
GR78	Euro	36,90
Ø Attachment	mm	50
Length	mm	280

ITEM: N0036

Metal tube - "S" shape with rapid coupling.

Tech. Code		N003650
GR78	Euro	76,80
Ø Joint	mm	50
Length	mm	1250

ITEM: N0038

Brushes with artificial bristles and regulating grip.

Tech. Code		N003850400	N003850500
GR78	Euro	121,40	122,70
Ø Attachment	mm	50	50
Length	mm	400	500

ACCESSORIES FOR INDUSTRIAL ASPIRATORS

ITEM: N0039

Suction cup brushes with rubber strips and grip regulator.

Tech. Code		N003950400	N003950500
GR78	Euro	110,20	112,80
Ø Attachment	mm	50	50
Length	mm	400	500

ITEM: N0042

Rubber nozzle - anti-static.

Tech. Code		N004250
GR78	Euro	58,10
Ø Attachment	mm	50
Length	mm	250

ITEM: N0043

Scraper galvanized metal.

Tech. Code		N004350
GR78	Euro	88,90
Ø Attachment	mm	50
Length	mm	1000

ITEM: N0045

Star filters IFA/BGIA class "M".

Tech. Code		N004510	N004520
GR78	Euro	138,40	182,30
For models		Ministorm	Storm 3600 - Storm 4800 - Hurricane 55

ITEM: N0046

Telflon star filters IFA/BGIA class "M".

Tech. Code		N004610	N004620
GR78	Euro	246,70	389,50
For models		Ministorm	Storm 3600 - Storm 4800 - Hurricane 55

ITEM: N0048

Filter TNT and Nylon for Twistoil aspirator & Twistoil 280.

Tech. Code		N004810	N004820
GR78	Euro	70,10	10,70
Material		Nylon (washable)	TNT

Indivisible package Suggested retail package - Unit price

CLEAN GO WELDING FUMES ASPIRATORS

ITEM: CLEANGO

The CLEANGO welding fumes aspirators are represented for their small size, easy use and operating effciency, the most economical solution to aspiration problems, filtration and deodorization of welding fumes. These welding fumes aspirators are distinguished by their high silent operation established due to pivoting wheels with brakes. The maintenance of the machine is restricted to the installation of the cellulose filter cartridge, which only requires short time and unskilled personnel.

Standard equipment:
- Self-supporting arm evolution no smoke Ø 150 mm length 3 m
- Cellulose filter of high performance IFA/BGIA M-CEL Code 1110670
- 1 Manetermic switch ON/OFF
- 1 Hour counting device

Opitonal:
- Cartridge with 2,5 kg of ative carbon Code 1161611

Tech. Code	GR78 Euro	Power supply V - Hz	Power kW	Brake capacity m³/h	Medium filter IFA/BGIA	Filter efficiency	Noise level dB(A)	Dimension mm	Weight kg
N6055ASP	2100,00	400 - 50	1,1	1400	M CEL	99%	72	* 756 x 702 x 916H	89

(*) Max dimension of the aspirator without the self supporting arm No Smoke

DF-2 CLEANING WELDING FUMES ASPIRATORS

ITEM: CLEANING DF-2

The welding fumes aspirators cleaning DF are represented for their small size, easy use and operating efficiency. The ideal solution for aspiration problems, filtration and deodorization of welding fumes. These welding fumes aspirators are distinguished by their high silent operation established due to pivoting wheels with brakes. The maintenance of the machine is restricted to the installation of 2 cellulose filter cartridges, an operation which requires a very short time thanks to an easy front access.

Standard equipment:
- 1 Purification chamber of coarse dust
- 1 Self-supporting arm evolution No smoke Ø 150 mm length 3m
- 2 Cellulose filters of high performance FA/BGIA M-CEL Code 1165233
- 1 Manetermic switch ON/OFF
- 1 Hour counting device

Optional:
- Cartride with 2,5 Kg of active carbon code 1161611
- Full expulsion with filtration DIN EN 1822 HEPAH13 filtration efficency 99.95% code Art 1165232

Tech. Code	GR78 Euro	Power supply V - Hz	Power kW	Brake capacity m³/h	Medium filter IFA/BGIA	Filter efficiency	Noise level dB(A)	Dimension mm	Weight kg
N6057ASP	(3980,00)	400 - 50	1.1	1500	M CEL	99%	77	* 750 x 960 x 1150H	154

(*) Max dimension of the aspirator without a self supporting arm No Smoke

INFRARED HEATERS

ITEM: EHT

Extremely functional and versatile infrared heaters for heating work areas. They use short wave radiation to heat objects and people, but not the surrounding air. They do not pollute or emit harmful substances. Their special reflectors make the HELIOS RADIANT TITAN very powerful heaters.
The HELIOS RADIANT TITAN heaters allow savings of over 60% compared to traditional heating systems because they only heat the required areas without heat dispersion. They can be equipped with timers, thermostats and presence detectors. They are also used in many industrial processes. IP25 protection, white colour. Several models are available on request.

Tech. Code	GR78 Euro	Model	Power W	Heated area m^2	Dimensions mm	Weight kg
N6060120	499,00	Single	2000	28	470 x 230 x 130	3.8
N6060240	(975,00)	Double	4000 (2 x 2000)	43	1040 x 230 x 130	6.9

They are ideally positioned on a wall or ceiling at a 45degree angle.

ITEM: EHT BLACK

The Black infrared heater with black safety glass differs from the standard EHT models in that it has reduced light emission. It provides a considerable heat over a large surface area. Suitable for all environments where you wish to avoid the emission of light or where the aesthetic aspect is also important. Its polyester-coated strong steel structure means it can be installed both indoors and outdoors (IP23).

Tech. Code	GR78 Euro	Model	Power W	Heated area m2	Dimension mm	Weight kg
N6062120	(473,00)	Single	2000	18	500 x 230 x 160	5

ACCESSORIES FOR INFRARED HEATERS

ITEM: N6065

- Universal telescopic support suitable for the single model
- Replacement bulb for 2000 watt EHT models

Tech. Code		N60650010	N60650015
GR78	Euro	(109,00)	(114,00)
Article		Floor support	Replacement bult 2000 watt
Height	mm	from 1070 to 2000	-
Weight	kg	9	-

Indivisible package Suggested retail package - Unit price

BENCH VICES - CAST IRON

ITEM: WX7800

Bench vices **PREMIUM QUALITY** made of high quality cast iron with replaceable induction hardened and ground jaws. Designed to provide long service even for heavy duty use. Dovetail guides mean that the movement of the upper and lower guides is play-free, the upper part can be precision-adjusted using the screw. Fixing 3-point, 2 front and one upper. Grey painted with hammered finish.

Tech. Code	GR58 Euro	Width mm	Opening mm	Weight kg
N6800100	302,74	100	130	12
N6800125	377,31	125	180	24
N6800150	624,39	150	215	41

JAWS FOR VICES WX7800

ITEM: WX7801

Pair of replacement jaws for vices WX7800.

Tech. Code	GR58 Euro	For vices mm
N6801100	(67,89)	100
N6801125	(82,36)	125
N6801150	(92,38)	150

ROTATING BASES FOR VICES WX7800

ITEM: WX7802

Rotating bases in cast iron for vices WX7800. Grey painted with hammered finish.

Tech. Code	GR58 Euro	For vices mm	Weight kg
N6802100	194,78	100	6
N6802125	190,32	125	8
N6802150	287,15	150	12

BENCH VICES - CAST IRON

ITEM: WX7810

Bench vices **PREMIUM QUALITY** made of high quality cast iron with replaceable induction hardened and ground jaws. Play-free movement of the upper and lower parts thanks to the precision dovetail guides. Fixing 3-point, 2 front and one upper. Grey painted with hammered finish.

Tech. Code	GR58 Euro	Width mm	Opening mm	Weight kg
N6810080	138,01	80	110	6
N6810100	197,00	100	140	11
N6810120	240,00	120	185	18
N6810150	355,00	150	220	25

JAWS FOR VICES WX7810 - WX7860 - WX7870

ITEM: WX7811

Pair of replacement jaws for vices WX7810 - WX7860 - WX7870.

Tech. Code	GR58 Euro	For vices mm
N6811080	28,94	80
N6811085	28,94	85
N6811100	37,84	100
N6811120	38,96	120
N6811150	58,51	150

ROTATING BASES FOR VICES WX7810

ITEM: WX7812

Rotating bases in cast iron for vices WX7810. Grey painted with hammered finish.

Tech. Code	GR58 Euro	For vices mm	Weight kg
N6812080	70,12	80	2.5
N6812100	96,83	100	4
N6812120	118,24	120	5.5
N6812150	187,73	150	8

BENCH VICES - STEEL

ITEM: WX7830

Bench vices **PREMIUM QUALITY** in high quality forged steel with front opening, non-removable upper jaws and pipe wrench jaws. Double adjustable prismatic slideways, threaded rod protected from dust and processing residues. Fixing more than 4 points. Grey painted with hammered finish.

Tech. Code	GR58 Euro	Width mm	Opening mm	For tubes Ø mm	Weight kg
N6850100	205,00	100	100	16 - 40	6
N6850120	240,41	120	120	20 - 55	11
N6850140	311,64	140	180	20 - 80	19
N6850160	452,99	160	210	25 - 100	27

ROTATING BASES FOR VICES WX7830

ITEM: WX7831

Rotating bases in steel for vices WX7830. Grey painted with hammered finish.

Tech. Code	GR58 Euro	For vices mm	Weight kg
N6851100	74,36	100	1.5
N6851120	96,83	120	2
N6851140	97,94	140	3
N6851160	122,43	160	4

BENCH VICES - STEEL

ITEM: WX7840

Bench vices **PREMIUM QUALITY** in high quality forged steel, front opening, non-removable induction hardened and ground jaws. All sliding parts are hardened and adjustable. Fixing more than 2 points. Grey painted with hammered finish.

Optional accessories:
Removable pipe wrench jaws.

Tech. Code	GR58 Euro	Width mm	Opening mm	Weight kg
N6860100	201,14	100	125	7
N6860125	220,00	125	150	11
N6860150	302,74	150	200	17
N6860175	430,00	175	220	26

PAIR OF PIPE WRENCH JAWS FOR VICES WX7840

ITEM: WX7841

Pair of hardened steel pipe wrench jaws for vices WX7840.

Tech. Code	GR58 Euro	For vices mm	For tubes Ø mm
N6861100	33,39	100	12 - 125
N6861125	37,79	125	12 - 145
N6861150	53,64	150	15 - 165
N6861175	64,61	175	15 - 190

ROTATING BASES FOR VICES WX7840

ITEM: WX7842

Rotating bases in steel for vices WX7840. Grey painted with hammered finish.

Tech. Code	GR58 Euro	For vices mm	Weight kg
N6862100	51,20	100	1.4
N6862125	61,22	125	2
N6862150	82,36	150	2.8
N6862175	114,59	175	4

BENCH VICES - STEEL

ITEM: WX7860

Bench vices **PREMIUM QUALITY** in high quality forged steel, rear opening, replaceable induction hardened and ground steel jaws. Play-free movement of the upper and lower parts thanks to the precision dovetail guides. Fixing more than 3 points. Grey painted with hammered finish.

Replacement jaws N6811 - WX7811

Tech. Code	GR58 Euro	Width mm	Opening mm	Weight kg
N6870100	375,08	100	130	11
N6870120	470,00	120	160	16
N6870150	716,77	150	175	24

Spare jaws N6811 - WX7811

BENCH VICES - STEEL

ITEM: WX7870

Bench vices **PREMIUM QUALITY** in high quality forged steel, rear opening, replaceable induction hardened and ground jaws. Play-free movement of the upper and lower parts thanks to the precision dovetail guides. Fixing 3-point, 2 front and one upper.
Grey painted with hammered finish.

Tech. Code	GR58 Euro	Width mm	Opening mm	Weight kg
N6880085	262,67	85	170	10
N6880100	272,69	100	170	10.5
N6880120	319,00	120	200	16.5
N6880150	525,34	150	210	27

Replacement jaws N6811 - WX7811

LIFTERS FOR BENCH VICES

ITEM: WX7895

Practical and sturdy devices for adjusting the height of vices. They allow the operator to maintain a correct and safe working position. The lifters can support all WODEX bench vices because when they are ordered they will be supplied with a fastening base specific for the size and model of vice.
The lifter has to be fixed on the lower part of the work bench.

Tech. Code	GR58 Euro	Adjust. range mm	Rotation	Weight kg
N690000	(350,60)	215	360°	9

Specify the model and size of the vice to be fitted.
Delivery 25/30 days from the order date.

VICES FOR COLUMN DRILLS

ITEM: WX7900

Vices for column drills **PREMIUM QUALITY** made of high quality cast iron with replaceable induction hardened and ground steel jaws. The prismatic jaws allow flat and round pieces to be clamped, while the sliding guides for the mobile jaw act as a support base for the precise closure of the pieces. Fixing more than 2 points. Grey painted with hammered finish.

Tech. Code	GR58 Euro	Width mm	Opening mm	Jaw height mm	Weight kg
N6910060	110,19	60	70	25	2.5
N6910080	131,33	80	80	25	4
N6910100	223,71	100	110	30	9
N6910120	292,72	120	150	40	16
N6910150	390,66	150	180	45	24

JAWS FOR VICES WX7900

ITEM: WX7901

Pair of replacement jaws for vices WX7900.

Tech. Code	GR58 Euro	For vices mm
N6911060	(25,60)	60
N6911080	(32,28)	80
N6911100	(46,75)	100
N6911120	(55,65)	120
N6911150	(93,86)	150

VICES FOR COLUMN DRILLS

ITEM: WX7910

High quality cast iron vices for column drills **PREMIUM QUALITY** with replaceable induction hardened and ground steel jaws. The prismatic jaws are reversible, one side has a knurled surface and the other is smooth with a prismatic profile for clamping flat and round pieces. The sliding guides of the mobile jaw serve as a support base for the precise closure of the pieces. Fixing more than 4 points.
Grey painted with hammered finish.

Tech. Code	GR58 Euro	Width mm	Opening mm	Jaw height mm	Weight kg
N6920110	361,73	110	130	32	9.5
N6920135	444,09	135	160	40	14
N6920160	656,67	160	220	50	25.5

JAWS FOR VICES WX7910

ITEM: WX7911

Pair of replacement jaws for vices WX7910.

Tech. Code	GR58 Euro	For vices mm
N6921110	117,98	110
N6921135	(151,37)	135
N6921160	192,55	160

ADJUSTABLE VICES

ITEM: WX7950

Adjustable aluminium alloy vices for mould makers and model makers, fitted with spherical joint that can be locked in any position by means of a quick clamping lever at the base. This solution means that the operator can maintain a correct and safe working position. Suitable for finishing or polishing work on delicate, small and medium-sized mechanical parts.

Fixing more than 4 points.

Tech. Code	GR58 Euro	Width mm	Opening mm	Jaws included	Weight kg
N6950050	190,32	50	75	Plastic	2.5
N6950075	394,00	75	110	Steel	3.7

ITEM: WX7955

Bottom bracket fixing with screw.

Tech. Code	GR58 Euro	Width mm	Opening mm	Jaws included	Bracket opening mm	Weight kg
N6953050	197,00	50	75	Plastic	80 max	2.6
N6953075	404,02	75	110	Steel	80 max	3.8

JAWS FOR ADJUSTABLE VICES

ITEM: WX7957 - WX7958 - WX7959

Pair of aluminium, metal or plastic jaws for vices WX7950 and WX7955.

Tech. Code	GR58 Euro	For vices mm	Material
N6955050AL	(9,75)	50	Aluminium
N6955050PL	(9,75)	50	Plastic
N6955075AC	(26,71)	75	Steel
N6955075AL	(26,71)	75	Aluminium
N6955075PL	26,71	75	Plastic

ADJUSTABLE VICES WITH GRIPS

ITEM: WX7965

Adjustable aluminium alloy vices for mould makers and model makers, fitted with spherical joint that can be locked in any position by means of a quick clamping lever at the base. This solution means that the operator can maintain a correct and safe working position. Suitable for finishing or polishing work on delicate, small and medium-sized mechanical parts. Fitted with swivel grips for clamping irregular pieces.
Bottom bracket fixing with screw.

Tech. Code	GR58 Euro	Width mm	Opening mm	Jaws Included	Bracket opening mm	Weight kg
N6960050	213,70	50	75	Aluminium	80 max	2.4

GRIPS FOR ADJUSTABLE VICES WX7965

ITEM: WX7967 - WX7968

Pair aluminium, metal or plastic grips for vices WX7965.

Tech. Code	GR58 Euro	For vices mm	Material
N6962050AL	(42,67)	50	Aluminium
N6962050PL	(42,67)	50	Plastic

BASE WITH ADJUSTABLE PIN

ITEM: WX7975

Fixing system with swivel and adjustable spherical joint. The aluminium alloy base can be fixed to a workbench, while the pin has an internal and external thread to receive special clamping devices made by the user. The ball joint can be locked into the required position using the quick clamping lever. Base with fixing of more than 4 points.
Mobile pin with external thread MF 18 x 1.5 and hole with thread M 10 x 1.5.

Tech. Code	GR58 Euro	Oscillation	Weight kg
N697000	(201,14)	90°	0.9

Indivisible package Suggested retail package - Unit price

ANGLE VICES WSM

ITEM: WSM

High quality cast iron angle vices for joining two workpieces at 90°, even pieces having different thickness. The unobstructed work area allows free access for assembly or welding to be carried out very easily.

Tech. Code	GR76 Euro	Max opening mm	Jaw length mm	Jaws height mm	Open work area mm	Weight kg
N6990090	285,10	2 x 90	110	35	60	3.8
N6990120	321,90	2 x 120	120	61	100	7.8

MAGNETIC JAWS FOR VICES

ITEM: MAGNEFIX N

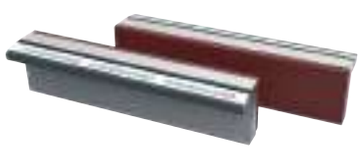
Suitable for clamping workpieces with delicate surfaces.
Made in aluminum with neutral profile.

Tech. Code	GR78 Euro	Width mm
N7045100	34,03	100
N7045120	44,17	120
N7045125	45,25	125
N7045140	49,64	140
N7045150	51,89	150
N7045160	55,06	160

Price refers to a pair

ITEM: MAGNEFIX F

Made in Fibre-coated aluminum.



Tech. Code	GR78 Euro	Width mm
N7046100	38,35	100
N7046120	47,76	120
N7046125	50,57	125
N7046140	56,48	140
N7046150	53,60	150
N7046160	57,80	160

Price refers to a pair

ITEM: MAGNEFIX P

Made in aluminum with prismatic profile.

Tech. Code	GR78 Euro	Width mm
N7047100	35,70	100
N7047120	50,67	120
N7047125	51,88	125
N7047140	54,98	140
N7047150	56,18	150
N7047160	56,70	160

Price refers to a pair

MANUAL LEVER SHEARS

ITEM: N7015

Lever shears with hardened steel blades suitable for cutting steel sheets with resistance up to 450 N/mm2, complete with operating lever with return spring and device for removable bar stop.

Tech. Code	GR58 Euro	Blades mm	Max thickness mm max	Round Iron Ø max	Weight kg
N7015120	290,49	120	70 x 5	10	8
N7015160	337,24	160	70 x 6	10	10
N7015200	549,82	200	70 x 6	13	20
N7015300	769,08	300	70 x 6	13	30

Replacement upper blade code N7015LS___
Replacement lower blade code N7015LI___

ITEM: N7017

Top Quality lever shears with hardened steel blades suitable for cutting steel sheets with resistance up to 450 N/mm², Complete with operating lever with rack feed and a removable bar stop device.

Tech. Code	GR58 Euro	Blades mm	Flat iron max. mm	Round iron Ø max	Weight kg
N7017250	982,78	250	80 x 7	16	47

Upper blade spare N7017LS___
Lower blade spare N7017LI___

JACK PIPE BENDING MACHINE

ITEM: ATLAS

The article is equipped with 5 formers for pipes of 1/4" - 3/8" - 1/2" - 3/4" - 1" and with a sturdy jack. It coldbends gas and water pipes, without welding.
UNI EN10255 (BS1387 - UNI3824).

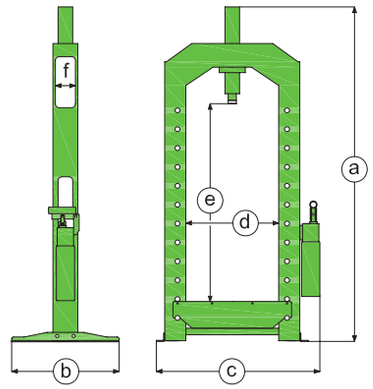
Tech. Code	GR78 Euro	For hoses Ø inches
N705000	480,00	1/4" - 3/8" - 1/2" - 3/4" - 1"

While stocks last

HYDRAULIC PRESSES

ITEM: N7010

High performance, sturdy hydraulic press Entirely cut by laser, provides high precision during execution. A twospeed pump, one for rapid approach at low pressure, one for high pressure. The cylinder includes spring return and a manometer mounted off the-rack.



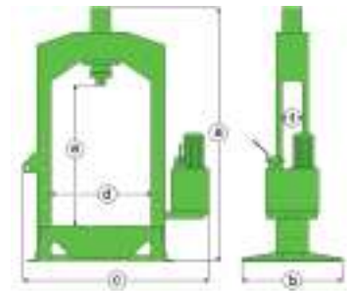
Tech. Code		N7010120	N7010200
GR78	Euro	(1939,50)	(2247,00)
a	mm	1900	1900
b	mm	530	590
c	mm	850	950
d	mm	510	510
e	mm	1050	1050
f	mm	80	80
Weight	kg	100	110
Load capacity	T	12	20
Activation		Pneumatic	Pneumatic

Tech. Code		N7010300	N7010500
GR78	Euro	(2715,10)	(3686,40)
a	mm	1970	2000
b	mm	700	800
c	mm	1250	1350
d	mm	710	805
e	mm	1120	1060
f	mm	130	160
Weight	kg	250	400
Load capacity	T	30	50
Activation		Manual	Manual

MOTORIZED HYDRAULIC PRESSES

ITEM: N7011

High performance, sturdy motorized hydraulic presses. Entirely cut by laser, provides high precision during execution. A twospeed pump, one for rapid approach at low pressure, one for high pressure. the cylinder includes spring return and a manometer mounted off the-rack.



Tech. Code		N7011120	N7011200
GR78	Euro	(4100,00)	(4397,10)
a	mm	1900	1900
b	mm	530	590
c	mm	1100	1150
d	mm	510	510
e	mm	1050	1050
f	mm	80	80
Weight	kg	170	190
Load capacity	T	12	20
Fast-forward	m/min	1,4	1,7
Working speed	m/min	0,3	0,25

Tech. Code		N7011300	N7011500
GR78	Euro	(5303,50)	(6595,10)
a	mm	1970	2000
b	mm	700	800
c	mm	1350	1350
d	mm	710	805
e	mm	1120	1060
f	mm	130	160
Weight	kg	350	500
Load capacity	T	30	50
Fast-forward	m/min	1,4	1,6
Working speed	m/min	0,3	0,3

ELECTRIC MARKING PENS

CE

ITEM: N7060

Supply voltage 220 Volt / 50Hz, painted sheet steel body, suitable for engraving all metal electricity conductors, ideal for writing on and marking machine parts.

Tech. Code	GR78 Euro	Description	Weight kg
N7060PEN	365,00	Pen	7
N7060CR	82,00	Cable with spare pen	-
N7060PR	20,90	Spare pen	-

ELECTRIC MARKING PENS

CE

ITEM: N7065

Supply voltage 220 Volt / 50Hz, impact-proof with vibration frequency controller, plastic body. Suitable for engraving all ferrous and non-ferrous materials, glass, ceramic, stone, plastic and wood. Ideal for writing on and marking parts already in place.

Tech. Code	GR78 Euro	Description	Vibrations per minute	Power Watt
N70657200	87,10	Pen	7200	12
N7065PR	15,40	Spare tip	-	-

BENCH DEMAGNETISERS

CE

ITEM: N7070

Supply voltage 220 Volt / 50Hz, painted sheet steel body, suitable for de-magnetising mechanical parts in contact with magnetic surfaces that have retained residual magnetism.

Tech. Code	GR78 Euro	Pad mm	Weight kg
N7070200	(366,10)	200 x 160 x 90 h	4.5
N7070400	(516,20)	400 x 160 x 90 h	8

LED TORCHES

SCANGRIP® INNOVATION FROM DENMARK

CE

ITEM: 03.5426 ZONE

Rechargeable Torches with COB LED technology, sturdy and light, designed for professional use.
Light intensity adjustable on 2 levels, illumination 200-400 lux/0,5 m, 120° / 60° beam angle. Li-on battery 3.7 Volt 800 mAh autonomy 4-2 hours, re-charge time 3 ore. IP30 Classe protection. Standard equipment: USB cable 1 m.

Tech. Code	GR76 Euro	Light output Lm	Beam distance m	Dimension mm	Weight g
N706601	56,50	75 - 150	50	97 x 31 x 28	66

While stocks last

Battery charger not included

LED TORCHES

WODEX

CE

ITEM: WX6610

High performance extra compact LED torches with adjustable head and magnet for positioning on metal walls, impact resistant aluminium body with pocket clip. IK07 impact resistant, IPX4 water splash protection.
Adjustable light beam as follows: High 150 Lm - Low 60 Lm - Strobe 150 Lm - SOS 150 Lm
Operating time: 60 Lm 8 hours - 150 Lm 2.5 hours

Tech. Code	GR76 Euro	Light output Lm	Beam distance m	Dimensions Ø x L mm	Weight g
N706901	27,50	60 - 150	50	17.5 x 150	50

Batteries not included (The torch requires 2 AAA 1.5 Volt batteries)

ITEM: D9925

- AAA-type 1,5V battery

Tech. Code	GR49 Euro	Model
D99251,5V	5,40	- AAA-type 1.5 battery

N

Indivisible package Suggested retail package - Unit price

LED TORCHES

1/3 H

ITEM: WX6620

High performance **PREMIUM QUALITY** modular LED torches with rechargeable battery (not included) and magnet for positioning on metal walls. Impact resistant aluminium construction with a quick-change component system and USB socket for charging even during use. ON-OFF button with ECO 30% and 100% FULL function. Operating time max 5 hours.
Set complete with Eva Tray module for Wodex tool trolleys - Module size 400x223.5 mm - Horizontal Position.
Composition:
- Handle with magnet Ø 35x140 mm
- Flexible bulb Ø 20x400 mm LED XPG 180 Lumen with Zoom function **WX6620-B**
- Fixed bulb Ø 35x50 mm LED XPG 250 Lumens with Zoom function **WX6620-A**
- Multiled adjustable bulb 20x190 mm COB LED 350 Lumens **WX6620-C**
- USB battery charger 230V
-USB cable

- Charging time 4 hours

Tech. Code	GR76 Euro	Pieces
N708001	84,00	6

Battery not included (The torch requires one 18650 3.7 Volt battery Model WX6621)

RECHARGEABLE LI-ION 18650 BATTERIES

ITEM: WX6621

Rechargeable lithium-ion batteries for LED torches.

Tech. Code		N707800
GR76	Euro	9,00
Volt		3.7
Capacity	mAh	2600
Ø	mm	18.5
L	mm	70

LED TORCHES

ITEM: WX6630

High performance LED torches suitable for lighting workstations and general inspection work. The body is covered with shock-resistant rubber (1.5 metres impact resistant) and is also resistant to splashing water (IPX-4 protection). Includes a swivel hook, an adjustable magnetic base up to 180°, a 3.7 Volt 2200 mAh Li-ion battery and a battery charger with USB socket.

Operating mode:
- Upper light - SMD LED 45 Lm - Autonomy max 13 hours
- Main light- COB LED LOW 70 Lm - Autonomy max 10 hours
- Main light - COB LED HIGH 240 Lm - Autonomy max 3 hours

- Charging time 4 hours

Tech. Code	GR76 Euro	Light output Lm	Beam distance m	Dimensions a x b x L mm	Weight g
N708101	48,50	45 - 70 - 240	10 - 20 - 24	52 x 30 x 164	197

LED TORCHES

ITEM: 03.5407 UNIFORM

Rechargeable torches with COB LED technology, extremely resistant and practical thanks to the desk top charging base with provision for wall mounting. The base of the torch can be rotated up to 180° equipped with a sturdy magnet for positioning on metal walls. Adjustable light intensity on 2 levels, lighting 475-950 - Spot 6000 lux/0,5 m, Li-on battery 3.6 V 3000 mAh, autonomy 2 - 4,5 hours, charging time 5 hours. Class protection IP65. The standard equipment includes the charging base with 1m USB cable. hours,

Tech. Code	GR76 Euro	Light output Lm	Light Spot Lm	Dimension mm	Weight g
N708301	127,40	250 - 500	175	190 x 60 x 32	263

LED FLOOD LIGHTS

ITEM: 03.5456 NOVA-R

Flood lights NOVA R recharable battery equipped with high-performance COB LED technology, easy to transport thanks to the swivel handle and have magnets for positioning on metal walls. Autonomy 2 - 20 hours, charging time 5 hours, operating temperature -10°C +40°C..Standard equipment includes a 4000 mAh 7,3 Volt Li-ion battery, a 1 m USB cable and a un cavo USB 1 m 100-240V AC, 50/60Hz battery charger.

Tech. Code	GR76 Euro	Light output Lm	Protection	Dimension mm	Weight g
N708701	148,70	200 - 2000	IP67	163 x 163 x 63	790

SWING ARM LAMPS

ITEM: N7085

Standard EN 60598-1 EN 60204-1.
Complies with Italian legislative decree 81/08, maximum fixing clamp opening 58 mm, square steel profile structure, upper part of the reflector made of fibreglass reinforced nylon and lower ø 160 mm part made of turned steel, two-layer oven cured paint, double-clutch for vertical and horizontal arm movement, spring compensated joints, 60-Watt light bulb with E27 fitting (not included).

Tech. Code	GR76 Euro	Arm length mm	Coupling	Power supply V	Power cable length m	Protection	Class	Colour
N708520	218,40	510 + 455	E27	220 - 240	1.7	IP20	I	Grey

LAMP STANDS

ITEM: N7086

Suitable for pantograph lamps

Tech. Code	GR76 Euro	Coupling
N7086FP	33,80	For fixing to wall
N7086FB	33,80	For fixing to bench

PANTOGRAPH LAMPS WITH MAGNIFYING LENS

NEW

ITEM: N7091

Standard EN 60598-1 EN 60204-1.
Compliant with law 81/08, supply voltage 230 Volt, clamp fixing, max opening 58 mm, structure in profiled steel panel, 230 mm diameter aluminum reflector with plexiglass protection screen, touch touch switch, double oven-baked painting, quick positioning and tilting with one hand, spring compensated joints, gray colour. 13.7W LED module.

Tech. Code	GR76 Euro	Lens Ø mm	Diopters	X Magnification	Arm development mm	Power cable m	Plug	Protection
N7091120	455,00	120	3	1.75	965	1.60	Type C (European 2 pole)	IP 20

LED LAMP MAGNIFIERS

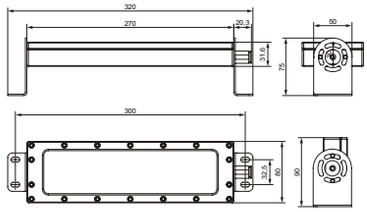
ITEM: N7092

Led lamp magnifiers with an adjustable support.

Tech. Code	GR76 Euro	Lens Ø mm	Magnification x	Max height mm	Pow. cab. m	Power supply
N709295	147,00	95	1,75	350	1,3	220 Volt

LED LAMPS FOR MACHINE TOOLS

ITEM: L18



Lamps for machine tools with high brightness LEDs, long life and low power consumption.

Features:
- Adjustable anodized aluminum frame
- Tempered glass 5 mm thick
- Gaskets in NBR
- Natural white light colour
- IP68 protection degree against dust and liquid
- Impact resistance class IK07
- Electrical isolation class III
- Low voltage operation
- Mininum distance from iluminated object 100 mm

Made in Italy

Tech. Code	GR78 Euro	Number LED's	Luminous flux Lm	Illuminance Lux	Work voltage Vdc	Power W	Operating temperature	Weight g
N709418S	(425,00)	120	3500	1100	24	25	-20°C +55°C	1200

CABLE REELS MANUAL

ITEM: 3501 - 3508 - 3510 - 3512 - 3513 -3514 - 3517 - 3520 - 3521

Cable reels manual Standard IEC 1242, tubular stand of fire-painted steel, galvanised steel flanges, plastic internal body, coil locking brake and cable reel knob, safety thermal cut-out.
(excluding art. N710023001). Supply voltage 230 Volts

Tech. Code	GR76 Euro	Cable sect.	Cable m	Watt	Socket	Plug	
N710023001	77,00	-	No cable	-	Without socket	-	
N710023008	200,00	3 x 1.5	25	1400	4-10/16A 2P + T SHUKO	16 A 2P + T	
N710023010	245,00	3 x 2,5	25	2100	4-10/16A 2P + T SHUKO	16 A 2P + T	
N710023013	204,00	3 x 1.5	25	1400	2-10/16A 2P + T SHUKO 1-CEE 16A	CEE 16 A 2P+T	
N710023014	255,00	3 x 1,5	40	1200	2-10/16A 2P + T SHUKO 1-CEE 16A	CEE 16 A 2P+T	
N710023017	112,00	-	No cable	-	2 CEE 16A	CEE 16 A 2P+T	
N710023020	255,00	3 x 2,5	25	2100	2 CEE 16A	CEE 16 A 2P+T	
N710023021	326,00	3 x 2.5	40	1800	2 CEE 16A	CEE 16 A 2P+T	

CABLE REELS MANUAL

ITEM: 3522 - 3525

Cable wheels manual standard IEC 1242, tubular stand of fire painted steel, galvanised steel flanges, Internal plastic body, coil locking brake and cable reel knob (excluding art. N 710338022). Supply voltage 380 Volts.

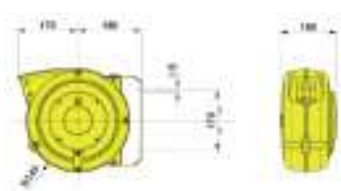
Tech. Code	GR76 Euro	Cable sect.	Cable m	Watts	Socket	Plug	
N710338022	112,00	-	No cable	-	2 CEE 16A 3P+T	CEE 16A 3P+T	
N710338025	393,00	4 x 2.5	30	2500	2 CEE 16A 3P + T	CEE 16A 3P + T	

INDUSTRIAL CABLE REELS WITH SPRING

ITEM: N7115

EN 61242 EN 60335-1, complies with 81/08 Standard. Supply voltage 230 Volt, impact-resistant plastic body, cable roll guide mouth, cable rack stopping device that can be inserted at 50-cm intervals and easily removed when constant cable traction is needed, thermal cut-out, double ground contact, high-resistance cable recoil spring, adjustable sheet steel fixing bracket, cable type H05 WW-F Ø 8.5.

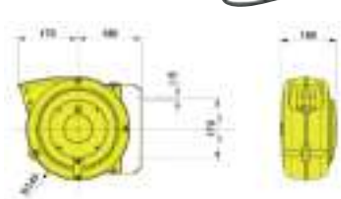
Tech. Code	GR76 Euro	Cable section	Cable m	Capacity W	Capacity W	Max. Volts	Protection rating IP
N71154M	267,00	3 x 1.5	14 + 1	1200	1800	500	42
N71155M	266,00	3 x 2.5	9 + 1	1900	2500	500	42



ITEM: 4315/GS

EN 61242 EN 60335-1, complies with 81/08 Standard. Supply voltage 230 Volt, plastic external structure, cable roll guide mouth, cable rack stopping device that can be inserted at 50-cm intervals, thermal cut-out, double ground contact, high-resistance cable recoil spring, adjustable sheet steel fixing bracket, cable type H05 WW-F Ø 8.5.

Tech. Code	GR76 Euro	Cable section	Cable m	Capacity W	Capacity W	Max. Volts	Socket and plug	Protection rating IP
N71167M	296,00	3 x 1.5	14 + 1	1200	1800	500	Schuko	42



Indivisible package Suggested retail package - Unit price

INDUSTRIAL CABLE REELS SAFETY SPEED CONTROL

ITEM: 2315F/C2 - 2325F/C2 - 4425F/C2

Cable reels with an automatic device for the controlled rewinding of the SAFETY SPEED CONTROL cable and the cable stop system to the desired length. The Raasm winders comply with the CE Standard EN 61242 - 2014/35 /EU - 2014/30 / EU 2011/65 / EU. Degree of protection of the electrical part IP44. Made of shock-resistant plastic with adjustable steel bracket for wall mounting.

Standard equipment:
Input cable 1,2 m
Thermal protector
Cable guide nozzle with rollers on all 4 side

Tech. Code	GR78 Euro	Tension V	Electric cable	Cable length m	Wounded cable usage power Kw	Unwounded cable usage power* Kw	Dimension with bracket mm	Weight kg
N711031515	170,50	230	3G x 1,5 - H05 VV-F	14 + 1	1,2	2,3	387 x 331 x 175	7,6
N711032510	(190,70)	230	3G x 2,5 - H05 VV-F	9 + 1	1,9	3,5	387 x 331 x 175	7,7
N711042509	203,10	400	4G x 2,5 - H05 VV-F	8 + 1	2	6	387 x 331 x 175	8

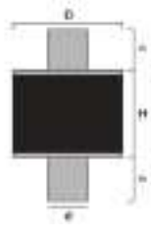
* The values refer to use with a completly unwound cable
Sockets and plugs to be ordered separately

VIBRATION-CONTROL RUBBER MOUNTS WITH 2 THREADED PINS

ITEM: N8010

Wide application for industrial use, for elastic suspensions and for absorbing the vibrations of the machines and of the various mechanical structures. Those vibration-control mounts are composed by molded rubber inside two parallel metallic plates. White Metallic Galvanized plates.

M/M version with double threaded pin

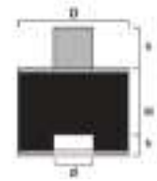


Tech. Code	GR76 Euro	D mm	H mm	d mm	h mm	Material	Hardness
N80101515M4	2,18	15	15	M4	10	SBR Rubber compound	55° shore A (±5)
N80101515M5	2,42	15	15	M5	10	SBR Rubber compound	55° shore A (±5)
N80102020M6	2,64	20	20	M6	18	SBR Rubber compound	55° shore A (±5)
N80102520M6	2,92	25	20	M6	18	SBR Rubber compound	55° shore A (±5)
N80102520M8	2,64	25	20	M8	20	SBR Rubber compound	55° shore A (±5)
N80102530M6	2,79	25	30	M6	18	SBR Rubber compound	55° shore A (±5)
N80103020M8	3,19	30	20	M8	23	SBR Rubber compound	55° shore A (±5)
N80103030M8	3,41	30	30	M8	23	SBR Rubber compound	55° shore A (±5)
N80104030M8	4,67	40	30	M8	23	SBR Rubber compound	55° shore A (±5)
N80104040M8	(5,42)	40	40	M8	23	SBR Rubber compound	55° shore A (±5)
N80105030M10	7,00	50	30	M10	28	SBR Rubber compound	55° shore A (±5)
N80105040M10	7,29	50	40	M10	28	SBR Rubber compound	55° shore A (±5)
N80106050M12	11,33	60	50	M12	37	SBR Rubber compound	55° shore A (±5)
N80107550M12	17,12	75	50	M12	37	SBR Rubber compound	55° shore A (±5)
N801010060M16	(36,12)	100	60	M16	41	SBR Rubber compound	55° shore A (±5)

VIBRATION-CONTROL RUBBER MOUNTS WITH 1 THREADED HOLE AND 1 THREADED PIN

ITEM: N8011

Wide application for industrial use, for elastic suspensions and for absorbing the vibration of the machines and of the various mechanical structures vibrations. Those vibration-control mounts are composed by molded rubber inside two parallel metallic plates. White metallic galvanized plates.



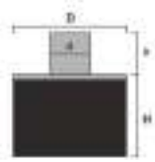
M/F version with single threaded pin and threaded blind hole

Tech. Code	GR76 Euro	D mm	H mm	d mm	h mm	Material	Hardness
N80111515M4	2,42	15	15	M4	10	SBR Rubber compound	55° shore A (±5)
N80112020M6	2,63	20	20	M6	18	SBR Rubber compound	55° shore A (±5)
N80112520M6	2,68	25	20	M6	18	SBR Rubber compound	55° shore A (±5)
N80112530M6	2,91	25	30	M6	18	SBR Rubber compound	55° shore A (±5)
N80113020M8	3,52	30	20	M8	23	SBR Rubber compound	55° shore A (±5)
N80113030M8	3,54	30	30	M8	23	SBR Rubber compound	55° shore A (±5)
N80114020M8	4,69	40	20	M8	23	SBR Rubber compound	55° shore A (±5)
N80114030M8	4,81	40	30	M8	23	SBR Rubber compound	55° shore A (±5)
N80115030M10	8,49	50	30	M10	28	SBR Rubber compound	55° shore A (±5)
N80115040M10	7,23	50	40	M10	28	SBR Rubber compound	55° shore A (±5)
N80116040M12	10,99	60	40	M12	37	SBR Rubber compound	55° shore A (±5)

VIBRATION-CONTROL RUBBER MOUNTS WITH SINGLE THREADED PIN

ITEM: N8012

Wide application for industrial use, for elastic suspensions and for absorbing the vibration of the machines and of the various mechanical structures vibrations. Those vibration-control mounts are composed by molded rubber inside two parallel metallic plates. White Metallic Galvanized plates.



P/M version with single threaded pin

Tech. Code	GR76 Euro	D mm	H mm	d mm	h mm	Material	Hardness
N80121515M4	(2,20)	15	15	M4	10	SBR Rubber compound	55° shore A (±5)
N80121610M5	(1,67)	16	20	M5	12	SBR Rubber compound	55° shore A (±5)
N8012208M6	1,10	20	8	M6	10	SBR Rubber compound	55° shore A (±5)
N80122010M6	(2,31)	20	10	M6	18	SBR Rubber compound	55° shore A (±5)
N80122015M6	(2,65)	20	15	M6	18	SBR Rubber compound	55° shore A (±5)
N80122025M6	(2,90)	20	25	M6	18	SBR Rubber compound	55° shore A (±5)
N80122515M6	(2,53)	25	15	M6	18	SBR Rubber compound	55° shore A (±5)
N80122520M6	2,88	25	20	M6	18	SBR Rubber compound	55° shore A (±5)
N80123020M8	(3,83)	30	20	M8	23	SBR Rubber compound	55° shore A (±5)
N80123030M8	4,80	30	30	M8	23	SBR Rubber compound	55° shore A (±5)
N80124030M8	5,15	40	30	M8	23	SBR Rubber compound	55° shore A (±5)
N80124030M10	(4,92)	40	30	M10	28	SBR Rubber compound	55° shore A (±5)
N80125020M10	5,47	50	20	M10	28	SBR Rubber compound	55° shore A (±5)
N80125030M10	7,17	50	30	M10	28	SBR Rubber compound	55° shore A (±5)
N80125040M10	(6,89)	50	40	M10	28	SBR Rubber compound	55° shore A (±5)
N80126050M12	10,01	60	50	M12	37	SBR Rubber compound	55° shore A (±5)
N80127540M12	15,28	75	40	M12	37	SBR Rubber compound	55° shore A (±5)
N80127550M12	(14,00)	75	50	M12	37	SBR Rubber compound	55° shore A (±5)
N801210050M16	24,00	100	50	M16	41	SBR Rubber compound	55° shore A (±5)

WHEELS
TABLE CHART

- Wheel diameter
- Hub bore diameter
- Wheel width
- Hub length
- Ball bearing seat diameter
- Ball bearing seat lenght
- Overall height
- Top-plate outer dimensions
- Hole spacing
- Hole width
- Offset
- Brake swept radius
- Threaded stem diameter
- Threaded stem lenght
- Plate diameter
- Fixed castor
- Swivel castor with front lock
- Swivel castor with top-plate
- Wheel with pin
- Wheel with pin front lock
- Capacity
- Static load
- Smoothness
- Weight
- Temperature
- Manual handling
- Asphalt floor
- Resin cement floor
- Not paved floor
- Grid floor
- Floor with chips
- Tile floor
- Hub with plain bore
- Hub with ball bearing

GREY RUBBER WHEELS - POLYAMIDE CORE

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ITEM: N8030

Grey rubber wheel ring, polyamide core with thread-guards, electrolytically galvanized supports.

Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N803050G	6,53	Rotating	50	20	0.20	67	55 x 55	40 x 40	6	24	76	35
N803060G	10,28	Rotating	60	24	0.28	83	60 x 60	45 x 45	6	21	84	50
N803050F	5,95	Fixed	50	20	0.20	67	55 x 55	40 x 40	6	24	76	35
N803060F	7,69	Fixed	60	24	0.26	83	60 x 60	45 x 45	6	21	84	50
N803050GFR	11,15	Rotating and brake	50	20	0.24	67	55 x 55	40 x 40	6	24	76	35
N803060GFR	14,90	Rotating and brake	60	24	0.40	83	60 x 60	45 x 45	6	21	84	50

GREY RUBBER WHEELS - POLYAMIDE CORE

tellureRôta

ITEM: N8032

Grey rubber wheel ring, polyamide core with thread guards, electrolytically galvanized supports.
Threaded shank in galvanized steel.

SUITABLE
For use in wet environments and with medium corrosive chemicals.

NOT RECOMMENDED
For use in environments with organic solvents, chlorinated substances, hydrocarbons and mineral oils.

Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N803250P	6,71	Rotating	50	20	0.18	66	8 M	15	35	24	76	35
N803260P	10,46	Rotating	60	24	0.29	83	12 M	25	41	21	84	50
N803250PFR	11,32	Rotating and brake	50	20	0.21	66	8 M	15	35	24	76	35
N803260PFR	15,08	Rotating and brake	60	24	0.36	83	12 M	25	41	21	84	50

N

BLACK RUBBER WHEELS – SHEET METAL DISC

ITEM: N8035

Black rubber ring, electrolytically galvanised sheet steel discs.

Dimensions expressed in mm

Tech. Code	GR77 Euro						1 daN	2 daN	daN
N803580R	2,82	80	25	0.17	12	39	260	60	65
N8035100R	3,41	100	30	0.28	12	44	300	75	80
N8035125R	4,62	125	37.5	0.51	15	44	330	85	130
N8035150R	7,00	150	40	0.73	15	44	350	100	170
N8035200R	11,82	200	50	1.75	20	58	410	140	230

POLYURETHANE WHEELS - POLYAMIDE CENTRE

ITEM: N8045

Injected polyurethane ring, polyamide 6 centre.

Dimensions expressed in mm

Tech. Code	GR77 Euro						1 daN	2 daN	daN
N804580R	3,96	80	30	0.11	12	39	220	120	120
N8045100R	4,96	100	30	0.15	12	44	300	170	170
N8045125R	8,42	125	35	0.25	15	44	350	230	230
N8045150R	12,20	150	45	0.47	20	59	500	280	350
N8045200R	23,10	200	50	0.82	20	59	700	380	450

POLYAMIDE WHEELS

ITEM: N8055

Solid polyamide 6 wheels.

Dimensions expressed in mm

Tech. Code	GR77 Euro						1 daN	2 daN	daN
N805580R	3,13	80	30	0.08	12	39	200	150	180
N8055100R	4,16	100	30	0.13	12	44	350	175	300
N8055125R	7,16	125	40	0.23	15	44	450	200	400
N8055150R	10,61	150	45	0.34	20	59	600	250	500
N8055200R	20,89	200	50	0.64	20	59	800	315	730

POLYURETHANE WHEELS - ALUMINIUM CENTRE

ITEM: N8065

TR polyurethane ring, aluminium centre.

*dimensions for pallet trucks

Dimensions expressed in mm

Tech. Code	GR77 Euro								1 daN	2 daN	daN
N806580R	17,13	80	25	0.20	12	30	28	8	280	150	220
N8065100R	25,42	100	30	0.34	12	40	32	10	350	225	250
N8065125R	27,27	125	35	0.50	12	40	32	10	500	280	400
N8065150R	36,43	150	40	0.91	20	50	47	14	850	330	600
N8065200R/A*	57,99	200	50	1.47	20	55	52	15	1000	360	850
N8065200R/B*	58,24	200	50	1.45	25	55	52	15	1000	500	850

POLYURETHANE WHEELS - CAST IRON CENTRE

ITEM: N8075

TR polyurethane ring, mechanical cast iron centre.

Dimensions expressed in mm

Tech. Code	GR77 Euro								1 daN	2 daN	daN
N8075100R	30,06	100	38	1.02	15	40	35	11	500	220	380
N8075125R	38,55	125	38	1.45	15	40	35	11	600	240	450
N8075150R	51,10	150	50	2.50	20	55	47	14	910	290	700
N8075200R	78,94	200	50	3.65	20	55	47	14	1500	380	1000

SIGMA ELASTIC RUBBER WHEELS – ALUMINIUM CENTRE

tellureRôta

ITEM: N8082

"SIGMA ELASTIC" rubber ring, aluminium centre.

*dimensions for pallet trucks

SUITABLE
For use in wet environments and with medium corrosive chemicals.
NOT RECOMMENDED
For use in environments with organic solvents, aromatic substances, chlorinated substances, hydrocarbons.

Dimensions expressed in mm

Tech. Code	GR77 Euro								1 daN	2 daN	daN
N8082200R20*	45,54	200	50	2.00	20	60	52	17.5	1000	335	500
N8082200R25*	45,77	200	50	2.00	25	60	52	17.5	1000	335	500

TR-ROLL POLYURETHANE WHEELS – CAST ALUMINIUM CENTRE

tellureRôta

ITEM: N8085

Hardness 75 Shore A.

SUITABLE
Suitable for use in industrial environments for transport of medium-heavy loads, also for mixed external-internal use.

Dimensions expressed in mm

Tech. Code	GR77 Euro								1 daN	2 daN	daN
N8085100R-NC	32,25	100	40	0.39	15	40	32	10	400	300	300
N8085160R-NC	52,80	160	50	1.00	20	60	47	14.5	800	400	550
N8085200R-NC	71,07	200	50	1.60	20	60	47	14.5	1000	500	700

POLYURETHANE PALLET TRUCK ROLLERS TR - STEEL CENTRE

tellureRôta

ITEM: N8091

Hardness 95 Shore A, excellent smoothness and elasticity, high resistance to wear and tear.

APPLICATIONS:
Excellent for use on electric pallet trucks, also in case of heavy loads and high speed handling (up to 16 km/h).
Suitable for industrial environments, even in the presence of alcohols, glycols, hydrocarbons.

NOT RECOMMENDED FOR:
Areas in which there are organic and mineral acids, base solutions and saturated vapour.

Dimensions expressed in mm

Tech. Code	GR77 Euro								1 daN	2 daN	daN
N809180X70	32,19	80	70	1.06	20	70	47	14	800	250	700
N809180X90	(35,61)	80	90	1.35	20	90	47	14	1000	335	900
N809182X70	(33,36)	82	70	1.09	20	70	47	14	800	255	700
N809185X100	(42,65)	85	100	1.52	20	100	47	14	1100	400	1000
N809185X40	(29,66)	85	40	0.72	20	40	47	14	450	150	400
N809185X70	(34,60)	85	70	1.12	20	70	47	14	800	265	700
N809185X90	(40,33)	85	90	1.39	20	90	47	14	1000	350	900

BLACK RUBBER WHEELS – SHEET METAL DISC

tellureRôta

ITEM: N8040

Black rubber ring, electrolytically galvanised sheet steel discs, electrolytically galvanised sheet steel light supports, rotating parts with double ball bearings lubricated by grease, orange polyethylene dust guard ring.

SUITABLE
For use in wet environments and with medium corrosive chemicals.
NOT RECOMMENDED
For use in environments with organic solvents, chlorinated substances, hydrocarbons and mineral oils.

Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N804080G	10,17	Rotating	80	25	0.69	107	100 x 85	80 x 60	9	39	120	65
N8040100G	10,76	Rotating	100	30	0.82	128	100 x 85	80 x 60	9	37	120	80
N8040125G	15,17	Rotating	125	37.5	1.18	156	100 x 85	80 x 60	9	39	120	130
N8040150G	17,54	Rotating	150	40	1.42	182	100 x 85	80 x 60	9	37	120	170
N8040200G	31,37	Rotating	200	50	3.25	240	140 x 110	105 x 80	11	56	156	230
N804080F	7,16	Fixed	80	25	0.49	107	100 x 85	80 x 60	9	39	120	65
N8040100F	7,75	Fixed	100	30	0.62	128	100 x 85	80 x 60	9	37	120	80
N8040125F	10,30	Fixed	125	37.5	0.92	156	100 x 85	80 x 60	9	39	120	130
N8040150F	12,68	Fixed	150	40	1.04	182	100 x 85	80 x 60	9	37	120	170
N8040200F	24,37	Fixed	200	50	2.89	240	140 x 110	105 x 80	11	56	156	230
N804080GFR	17,74	Rotating and brake	80	25	0.87	107	100 x 85	80 x 60	9	39	120	65
N8040100GFR	18,34	Rotating and brake	100	30	1.00	128	100 x 85	80 x 60	9	37	120	80
N8040125GFR	22,75	Rotating and brake	125	37.5	1.30	156	100 x 85	80 x 60	9	39	120	130
N8040150GFR	25,12	Rotating and brake	150	40	1.57	182	100 x 85	80 x 60	9	37	120	170
N8040200GFR	43,45	Rotating and brake	200	50	3.39	240	140 x 110	105 x 80	11	56	156	230

POLYURETHANE WHEELS - POLYAMIDE CENTRE

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ITEM: N8050

Injected polyurethane ring, polyamide 6 centre, electrolytically galvanised sheet steel light supports, rotating parts with double ball bearings lubricated by grease, orange polyethylene dust guard ring.

SUITABLE
For use in environments with weathering agents, alcohol and glycol, organic acids and minerals, water and saturated steam.

Note: the 60 series can be supplied with stainless steel supports, particularly recommended for medical and foodstuff environments and for particularly strong substances.

Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N805080G	11,30	Rotating	80	30	0.62	107	100 x 85	80 x 60	9	39	120	120
N8050100G	12,30	Rotating	100	30	0.74	128	100 x 85	80 x 60	9	37	120	170
N8050125G	18,95	Rotating	125	35	0.91	156	100 x 85	80 x 60	9	39	120	220
N8050150G	30,61	Rotating	150	45	1.83	194	140 x 110	105 x 80	11	56	156	300
N8050200G	42,65	Rotating	200	50	2.23	240	140 x 110	105 x 80	11	56	156	300
N805080F	8,30	Fixed	80	30	0.38	107	100 x 85	80 x 60	9	39	120	120
N8050100F	9,29	Fixed	100	30	0.43	128	100 x 85	80 x 60	9	37	120	170
N8050125F	14,11	Fixed	125	35	0.66	156	100 x 85	80 x 60	9	39	120	220
N8050150F	24,17	Fixed	150	45	1.46	194	140 x 110	105 x 80	11	56	156	300
N8050200F	35,66	Fixed	200	50	2.01	240	140 x 110	105 x 80	11	56	156	300
N805080GFR	18,89	Rotating and brake	80	30	0.81	107	100 x 85	80 x 60	9	39	120	120
N8050100GFR	19,89	Rotating and brake	100	30	0.89	128	100 x 85	80 x 60	9	37	120	170
N8050125GFR	26,53	Rotating and brake	125	35	1.05	156	100 x 85	80 x 60	9	39	120	220
N8050150GFR	42,70	Rotating and brake	150	45	2.11	194	140 x 110	105 x 80	11	56	156	300
N8050200GFR	54,75	Rotating and brake	200	50	2.49	240	140 x 110	105 x 80	11	56	156	300

Indivisible package Suggested retail package - Unit price

POLYAMIDE WHEELS

tellureRôta

ITEM: N8060

Solid polyamide 6 centre, electrolytically galvanised sheet steel light supports, rotating parts with double ball bearings lubricated by grease, orange polyethylene dust guard ring.

SUITABLE
For use in wet environments and with highly aggressive chemicals.
NOT RECOMMENDED
For use in environments with strong organic acids and mineral concentrates.

Note: the 68 series can be supplied with stainless steel supports, particularly recommended for medical and foodstuff environments and for particularly strong substances.

Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N806080G	10,47	Rotating	80	30	0.58	107	100 x 85	80 x 60	9	39	120	180
N8060100G	11,50	Rotating	100	30	0.65	128	100 x 85	80 x 60	9	37	120	200
N8060125G	17,70	Rotating	125	40	0.89	156	100 x 85	80 x 60	9	39	120	220
N8060150G	29,03	Rotating	150	45	1.77	194	140 x 110	105 x 80	11	56	156	300
N8060200G	40,44	Rotating	200	50	2.14	240	140 x 110	105 x 80	11	56	156	300
N806080F	7,46	Fixed	80	30	0.39	107	100 x 85	80 x 60	9	39	120	180
N8060100F	8,49	Fixed	100	30	0.46	128	100 x 85	80 x 60	9	37	120	200
N8060125F	12,85	Fixed	125	40	0.64	156	100 x 85	80 x 60	9	39	120	220
N8060150F	22,59	Fixed	150	45	1.45	194	140 x 110	105 x 80	11	56	156	300
N8060200F	33,45	Fixed	200	50	1.92	240	140 x 110	105 x 80	11	56	156	300
N806080GFR	18,05	Rotating and brake	80	30	0.78	107	100 x 85	80 x 60	9	39	120	180
N8060100GFR	19,08	Rotating and brake	100	30	0.85	128	100 x 85	80 x 60	9	37	120	200
N8060125GFR	25,29	Rotating and brake	125	40	1.04	156	100 x 85	80 x 60	9	39	120	220
N8060150GFR	41,11	Rotating and brake	150	45	1.99	194	140 x 110	105 x 80	11	56	156	300
N8060200GFR	52,52	Rotating and brake	200	50	2.33	240	140 x 110	105 x 80	11	56	156	300

POLYURETHANE WHEELS - ALUMINIUM CENTRE

tellureRôta

ITEM: N8070

TR polyurethane ring, aluminium centre, electrolytically galvanised sheet steel light supports, rotating parts with double ball bearings lubricated by grease, orange polyethylene dust guard ring.

SUITABLE
For use in environments with weathering agents, alcohol and glycol.
NOT RECOMMENDED
For use in environments with mineral and organic acids, base solutions and saturated steam.

Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N807080G	24,46	Rotating	80	25	0.72	107	100 x 85	80 x 60	9	39	120	200
N8070100G	32,76	Rotating	100	30	0.94	128	100 x 85	80 x 60	9	37	120	200
N8070125G	37,81	Rotating	125	35	1.14	156	100 x 85	80 x 60	9	39	120	220
N8070150G	54,83	Rotating	150	40	2.34	194	140 x 110	105 x 80	11	56	156	300
N8070200G	77,55	Rotating	200	50	3.05	240	140 x 110	105 x 80	11	56	156	300
N807080F	21,45	Fixed	80	25	0.52	107	100 x 85	80 x 60	9	39	120	200
N8070100F	29,75	Fixed	100	30	0.69	128	100 x 85	80 x 60	9	37	120	200
N8070125F	32,94	Fixed	125	35	0.89	156	100 x 85	80 x 60	9	39	120	220
N8070150F	48,39	Fixed	150	40	2.04	194	140 x 110	105 x 80	11	56	156	300
N8070200F	70,55	Fixed	200	50	2.76	240	140 x 110	105 x 80	11	56	156	300
N807080GFR	32,05	Rotating and brake	80	25	0.91	107	100 x 85	80 x 60	9	39	120	200
N8070100GFR	40,34	Rotating and brake	100	30	1.08	128	100 x 85	80 x 60	9	37	120	200
N8070125GFR	45,39	Rotating and brake	125	35	1.28	156	100 x 85	80 x 60	9	39	120	220
N8070150GFR	66,93	Rotating and brake	150	40	2.63	194	140 x 110	105 x 80	11	56	156	300
N8070200GFR	89,63	Rotating and brake	200	50	3.25	240	140 x 110	105 x 80	11	56	156	300

POLYURETHANE WHEELS - CAST IRON CENTRE

tellureRôta

ITEM: N8080

TR polyurethane ring, mechanical cast iron centre, galvanised colonial yellow sheet steel heavy supports, rotating parts with double ball bearings lubricated by grease, red polyamide 6 dust guard ring.

SUITABLE
For use in environments with weathering agents, alcohol and glycol.

NOT RECOMMENDED
For use in environments with mineral and organic acids, base solutions and saturated steam.

Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N8080100G	51,86	Rotating	100	38	1.93	138	100 x 85	80 x 60	9	46	120	350
N8080125G	61,07	Rotating	125	38	2.37	161	100 x 85	80 x 60	9	48	120	350
N8080150G	88,39	Rotating	150	50	4.81	200	140 x 110	105 x 80	11	70	126	700
N8080200G	120,88	Rotating	200	50	6.06	250	140 x 110	105 x 80	11	70	126	750
N8080100F	40,77	Fixed	100	38	1.52	138	100 x 85	80 x 60	9	46	120	350
N8080125F	49,48	Fixed	125	38	2.04	161	100 x 85	80 x 60	9	48	120	350
N8080150F	67,12	Fixed	150	50	3.55	200	140 x 110	105 x 80	11	70	126	700
N8080200F	97,50	Fixed	200	50	5.15	250	140 x 110	105 x 80	11	70	126	750
N8080100GFR	59,44	Rotating and brake	100	38	2.06	138	100 x 85	80 x 60	9	46	120	350
N8080125GFR	68,66	Rotating and brake	125	38	2.5	161	100 x 85	80 x 60	9	48	120	350
N8080150GFR	107,41	Rotating and brake	150	50	5.33	200	140 x 110	105 x 80	11	70	126	700
N8080200GFR	140,69	Rotating and brake	200	50	6.66	250	140 x 110	105 x 80	11	70	126	750

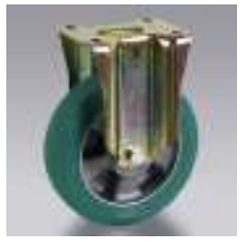
TR-POLYURETHANE ROLLERS – CAST ALUMINIUM CENTRE

tellureRôta

ITEM: N8090

Provide significant noise reduction of the trolleys and superior smoothness.

SUITABLE
For use at speeds up to 16 km/h and are, therefore, indicated for mechanical and mixed mechanical-manual handling.



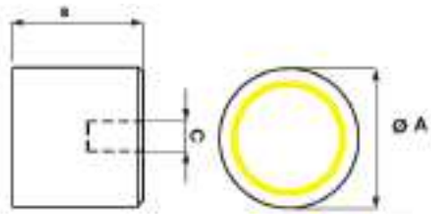
Dimensions expressed in mm

Tech. Code	GR77 Euro	Support										daN
N8090100G	60,99	Rotating	100	40	0.85	138	100 x 85	80 x 60	9	46	123	300
N8090125G	87,52	Rotating	125	40	2.33	170	140 x 110	105 x 80	11	70	126	350
N8090160G	(99,45)	Rotating	160	50	3.60	205	140 x 110	105 x 80	11	70	126	550
N8090200G	122,37	Rotating	200	50	4.31	250	140 x 110	105 x 80	11	70	126	700
N8090100F	49,90	Fixed	100	40	1.35	138	100 x 85	80 x 60	9	46	123	300
N8090125F	68,96	Fixed	125	40	1.69	170	140 x 110	105 x 80	11	70	126	350
N8090160F	78,18	Fixed	160	50	2.11	205	140 x 110	105 x 80	11	70	126	550
N8090200F	98,99	Fixed	200	50	2.85	250	140 x 110	105 x 80	11	70	126	700
N8090100GFR	68,58	Rotating and brake	100	40	1.52	138	100 x 85	80 x 60	9	46	123	300
N8090125GFR	106,53	Rotating and brake	125	40	1.86	170	140 x 110	105 x 80	11	70	126	350
N8090160GFR	(118,47)	Rotating and brake	160	50	4.17	205	140 x 110	105 x 80	11	70	126	550
N8090200GFR	141,39	Rotating and brake	200	50	4.91	250	140 x 110	105 x 80	11	70	126	700

ALNICO ALLOY PERMANENT MAGNETS

ITEM: N8101

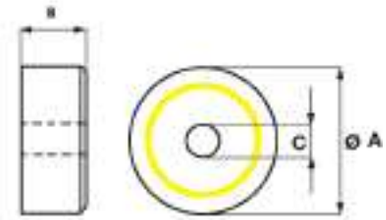
Alnico permanent magnets shielded with a brass ring, the shielding ensures increased magnetic coercivity allowing this product to maintain its shape even when inserted in ferrous components, the outer protection provides impact resistance. Heat-resistant up to 450°.



Tech. Code	GR76 Euro	A mm	B mm	C mm	Magnetic force kg
N81019,5	6,40	9.5	15	M3	1.5
N810112,7	5,90	12.7	15.8	M4	2
N810117,5	6,60	17.5	15.8	M6	4
N810120,6	7,80	20.6	19	M6	5.5
N810127	12,60	27	25.4	M6	10
N81013520	22,50	35	20	M6	12
N81013530	25,90	35	30	M6	18
N810145	39,30	45	30	M8	40
N810150	55,00	50	40	M8	50
N810155	20,00	55	14	M8	10

ITEM: N8102

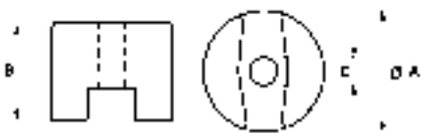
Alnico permanent magnets shielded with a brass ring, the shielding ensures increased magnetic coercivity allowing this product to maintain its shape even when inserted in ferrous components, the outer protection provides impact resistance. Heat-resistant up to 450°.



Tech. Code	GR76 Euro	A mm	B mm	C mm	Magnetic force kg
N810219	7,50	19	8	M4	2.5
N810228,6	9,20	28.6	9.5	M6	5.5
N810238	14,70	38	11.1	M6	10

ITEM: N8103

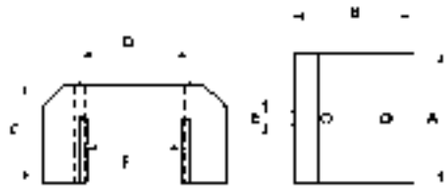
Alnico permanent magnets shielded with a brass ring, the shielding ensures increased magnetic coercivity allowing this product to maintain its shape even when inserted in ferrous components, the outer protection provides impact resistance. Heat-resistant up to 450°.



Tech. Code	GR76 Euro	A mm	B mm	C mm	Magnetic force kg
N810319	7,80	19	12.7	4.8	1.9
N810325,4	13,90	25.4	15.9	4.8	3

ITEM: N8104

Alnico permanent magnets shielded with a brass ring, the shielding ensures increased magnetic coercivity allowing this product to maintain its shape even when inserted in ferrous components, the outer protection provides impact resistance. Heat-resistant up to 450°.



Tech. Code	GR76 Euro	A mm	B mm	C mm	D mm	E mm	F mm	Magnetic force kg
N810419	15,60	19	30	20	-	4.5	14.5	5
N810425	26,80	25	40	25	-	5	19	9
N810444	82,80	44	59	35	35	7.5	29	24

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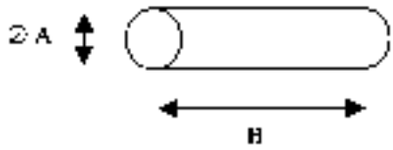
ALNICO ALLOY PERMANENT MAGNETS

ITEM: N8105

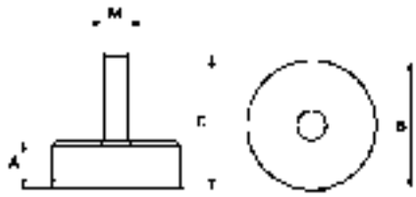


Tech. Code	GR76 Euro	A mm	B mm
N81056	2,30	6	20
N81058	3,50	8	25
N810510	5,20	10	30

NEODYMIUM PERMANENT MAGNETS

ITEM: N8110

Composed of an iron casing and a neodymium internal magnet, very strong despite the small dimensions. Widely used in positioning pieces of electric discharging machines.

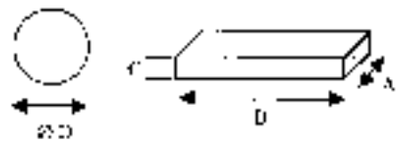


Tech. Code	GR76 Euro	A mm	B mm	C mm	M mm	Magnetic force kg
N8110A	20,40	7.5	19	-	-	6
N8110B	26,80	6	22	16	M5	5
N8110D	37,60	12	22	-	-	12

FERRITE RUBBER PERMANENT MAGNETS

ITEM: N8111

Magnetic rubber is a very malleable compound that is easily shaped, it does not feature a strong magnetic force, but if suitably applied it can solve major adhesion problems on walls and iron structures, it is easily applied.



Tech. Code	GR76 Euro	A mm	B mm	C mm	D mm
N811170X20	2,70	20	70	3	-
N8111120X30	6,40	30	120	6	-
N811120	0,62	-	-	3	20

Related products

WODEX COMBINATION RATCHET WRENCHES 72T

Tech. Code	⬢ mm	a mm	L mm
E019010	10	5.5	160
E019013	13	6.5	180
E019014	14	7.0	193
E019015	15	7.5	200

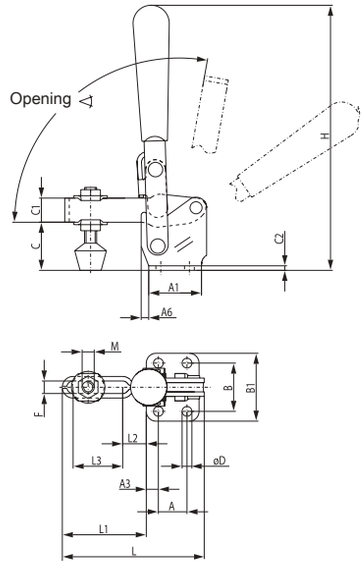
The products are available in CAP E

Indivisible package Suggested retail package - Unit price

QUICK VERTICAL CLAMPS

ITEM: N8350

Quick vertical clamps complete with pressure screw locks, ideal for drilling operations assembling and bonding. Stainless steel rivets, ergonomic grip, resistant to oils.

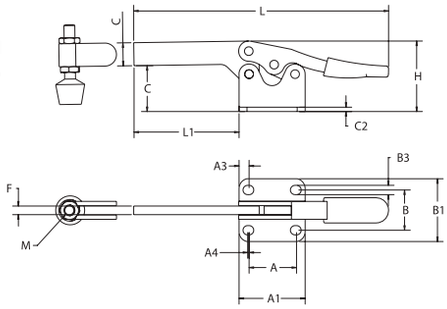


Tech. Code	GR76 Euro	MODEL	A mm	A1 mm	A3 mm	A6 mm	B mm	B1 mm	C mm	C1 mm	D mm	F mm	H mm	L mm	L1 mm	L2 mm	L3 mm	M mm
N8350201U	37,67	201-U	16	25,4	4,8	-	23,9	34	16	7,9	4,3	5,3	78,2	51,8	26,2	3,3	18,5	M5
N8350202U	41,32	202-U	12,4	25,4	6,6	2,8	26,7	39,1	23,4	9,7	5,6	6,6	110	69,6	43,9	13	24,9	M6
N8350207U	51,88	207-U	19,1	35,1	7,9	3,8	31,5	43,9	31,8	16	7,1	8,4	176	94,5	54,4	14,2	33	M8
N8350210U	73,67	210-U	31,8	48,5	7,9	10,7	45,2	64,3	42,4	20,1	8,4	10,2	207	140,7	92,2	23,9	61	M10

QUICK HORIZONTAL CLAMPS

ITEM: N8355

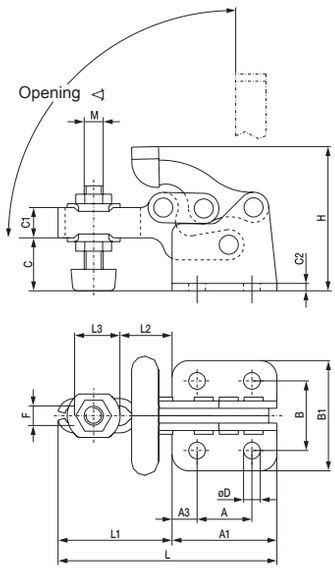
Quick horizontal clamps complete with pressure screw locks, ideal for drilling operations, assembling and bonding. Stainless steel rivets, ergonomic grip, resistant to oils.



Tech. Code	GR76 Euro	MODEL	A mm	A1 mm	A3 mm	A4 mm	B mm	B1 mm	B3 mm	C mm	C1 mm	C2 mm	H mm	L mm	L1 mm	M mm
N8355205S	33,91	205-S	13,5	23,9	6,4	2,3	15,7	24,1	4,3	9,1	3	1,5	17	71,1	22,4	M4

ITEM: N8358

Quick horizontal clamps complete with pressure screw locks, ideal for drilling operations, assembling and bonding. Stainless steel rivets, argonomic grip, resistant to oil.

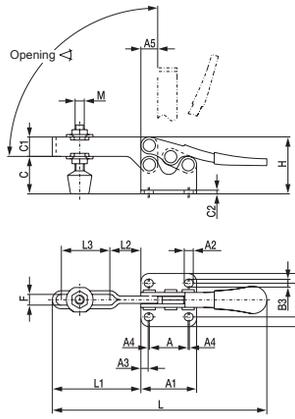


Tech. Code	GR76 Euro	MODEL	A mm	A1 mm	A3 mm	B mm	B1 mm	C mm	C1 mm	C2 mm	D mm	F mm	H mm	L mm	L1 mm	L2 mm	L3 mm	M mm
N8358305U	48,66	305-U	13,5	25,9	6,4	16	25,4	12,2	7,9	2	4,6	5,3	36,3	56,1	30,2	13	12,7	M5

QUICK HORIZONTAL CLAMPS

ITEM: N8360

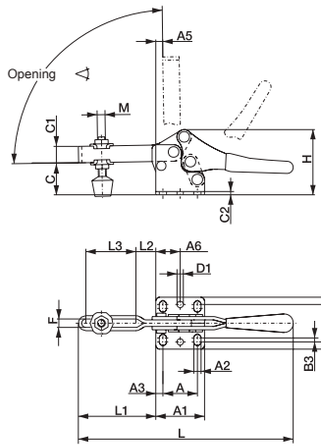
Quick horizontal clamps complete with pressure screw locks, ideal for drilling operations, assembling and bonding. Stainless steel rivets, ergonomic grip, resistant to oils.



Tech. Code	GR76 Euro	MODEL	A mm	A1 mm	A2 mm	A3 mm	A5 mm	B mm	B1 mm	C mm	C1 mm	F mm	H mm	L mm	L1 mm	L2 mm	L3 mm	M mm
N8360205U	27,10	205-U	11,4	23,9	6,6	4,1	5,8	15,7	24,1	8,1	6,4	4,6	17,8	67,3	18,8	5,6	9,4	M4
N8360215U	48,56	215-U	25,4	36,3	6,6	4,8	8,1	22,1	35,1	25,4	12,7	7,1	38,9	139,7	57,4	19,8	32	M6

ITEM: N8365

Quick horizontal clamps complete with pressure screw locks, ideal for drilling operations, assembling and bonding. Stainless steel rivets, ergonomic grip, resistant to oils.

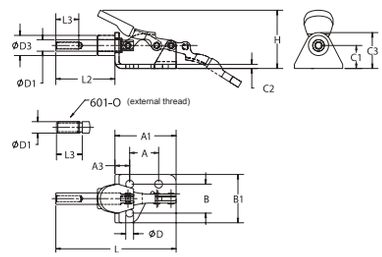


Tech. Code	GR76 Euro	MODEL	A mm	A1 mm	A2 mm	A3 mm	A5 mm	B mm	B1 mm	C mm	C1 mm	F mm	H mm	L mm	L1 mm	L2 mm	L3 mm	M mm
N8365213U	40,99	213-U	13,5	25,4	4,3	5,8	5,6	19,1	26,9	16,5	9,4	5,3	35,6	103,1	35,6	9,7	21,6	M5
N8365217U	54,80	217-U	26,2	37,1	5,6	5,3	7,6	28,4	39,4	23,4	12,4	6,4	49,5	177,8	58,7	14,2	39,1	M6
N8365227U	61,90	227-U	25,9	39,9	6,6	7,1	3,6	31,5	44,2	31,8	14,2	8,4	61	190,5	67,3	21,1	39,1	M8

QUICK PUSH ROD CLAMPS

ITEM: N8368

Quick push rod clamps threaded internally,ideal for drilling operations,assembling and bonding. Stainless steel rivets,ergononic grip,resistant to oils.



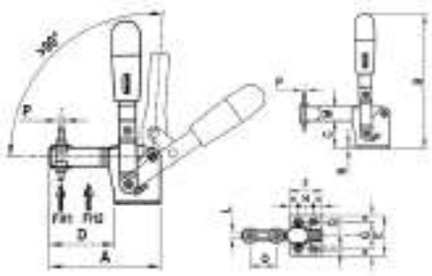
Tech. Code	GR76 Euro	MODEL	A mm	A1 mm	A3 mm	B mm	B1 mm	C1 mm	C2 mm	C3 mm	D mm	D1 mm	D3 mm	H mm	L mm	L2 mm	L3 mm
N8368601M	51,89	601-M	16	33,8	8,1	16	26,7	12,7	2,3	19,8	4,3	M4	11,2	32,3	66,3	32,5	12,7

QUICK CLAMPS

ITEM: N8400

VERTICAL SERIES

Galvanised hardened sheet steel clamping lever with plastic cover, supplied without spindle.



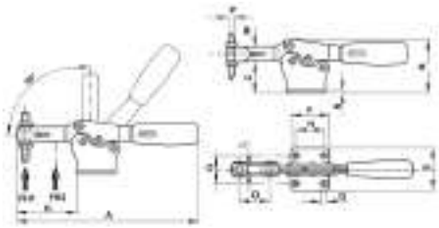
Tech. Code	GR76 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	M mm	N mm	O. mm	P mm	Q mm	FH1 DaN	FH2 DaN
N840067	20,10	66.5	98	20.5	37.5	34	29	24	15÷16	5.2	11	2	20	M5	4.5	75	160
N840085	23,80	85	142	28	50	42	35	27÷29	12.5÷19	6.2	16	2.5	28	M6	5.6	105	175
N8400110,5	27,50	110.5	168	33.5	67.5	45	43	32	19÷20	8.5	18	3	40	M8	6.7	200	320
N8400129	39,50	129	195	43	79	65	50	45÷46	29÷32	10.5	22	3.5	43	M10	8.5	240	400
N8400164	60,20	164	247	55,5	106	65	58	45	32	12,5	26	4	64	M12	8,5	280	500
N8400223	75,20	223	303	84,5	143	95	80	70	50÷51	12,5	32	7	90	M12	12,5	450	875

QUICK CLAMPS

ITEM: N8410

HORIZONTAL SERIES

Galvanised hardened sheet steel clamping lever with plastic cover, supplied without spindle.



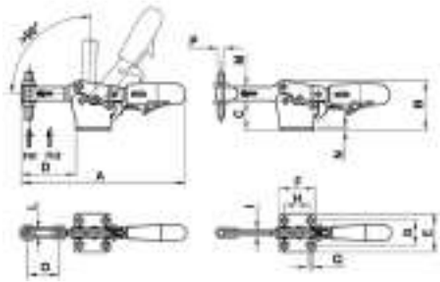
Tech. Code	GR76 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	M mm	N mm	O. mm	P mm	Q mm	FH1 daN	FH2 daN
N841068	12,40	68	23	12	19	24,5	24	16	15	4,2	7	1,2	10	M4	4,3	40	-
N8410118	19,00	118	37	20	40	26	28	17	13.5	5.5	11	2	20	M5	4.5	90	135
N8410170	20,50	170	51	29	56	40	36	26	26	6.5	14	2.5	32	M6	5.5	100	200
N8410195	24,80	195	61.5	36.5	65	42	44	28.5	26	8.5	18	3	37	M8	6.5	170	330
N8410269	36,80	269	83	50	100	56	60	41	41	10	22	3,5	58	M10	8,5	180	400
N8410308	53,20	308	98,5	60	115	65	70	41,5	41,5	12,4	26	4	65	M12	8,5	320	620

HORIZONTAL QUICK CLAMPS WITH ANTI-RELEASE LEVER

ITEM: N8412

HORIZONTAL SERIES

Some sizes of this series are also made of stainless steel and are shown in red.
The main feature of this series is the special anti-release lever with the purpose of avoiding any accidental openings caused by vibrations; these tools are designed to prevent the operator's fingers from being crushed by the levers when opening.

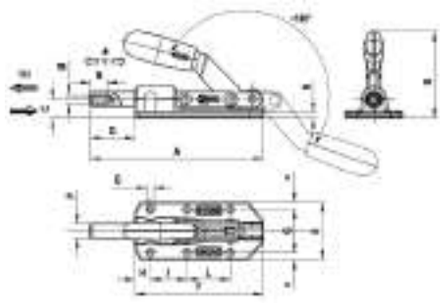


Tech. Code	GR76 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	M mm	N mm	O mm	P mm	Q mm	FH1 daN	FH2 daN
N8412118	24,70	118	37	20	39	26	28	16÷19	13,5	5,3	11	2	20	M5	4,5	90	135
N8412171	26,20	171	51	30,5	56,5	40	36	22,4÷28,4	26	6,3	16	2,5	32	M6	5,6	100	200
N8412196	30,50	196	61,5	36,5	65	44	44	26÷31,5	26	8,5	18	3	37	M8	6,6	170	330

QUICK CLAMPS

ITEM: N8420

STRAIGHT-LINE ACTION SERIES
Galvanised hardened sheet steel clamping lever with plastic cover, base body of lacquered brass, * painted forged steel body, supplied without spindle.

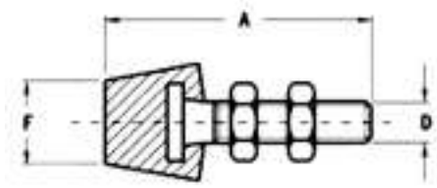


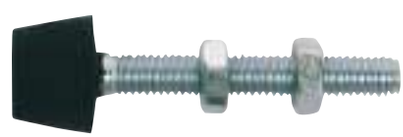
Tech. Code	GR76 Euro	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	P mm	Q mm	R mm	* mm	FH daN
N842086	35,50	86	42.5	12	22	36	64	26	13	26	-	M6	12	8.5	4.3	6	20	120
N8420116	42,40	116	56	15	31	46	85	33.5	11.5	36,5	-	M6	12	11	5.5	7	30	280
N8420122*	57,90	122	75	25	32	45.9	90	33.5	36.5	36,5	-	M8	15	12	5.5	7	32	560
N8420165	75,70	164,5	75	18	42	55	122,5	41	15	35	41	M8	16	14	7	7	42	800
N8420182	87,70	182	95	25	49	57	133	41	15	35	41	M10	18	16	8,5	8	50	1600

SPINDLE WITH NEOPRENE THRUST

ITEM: N8430

Galvanised steel screw with two nuts.





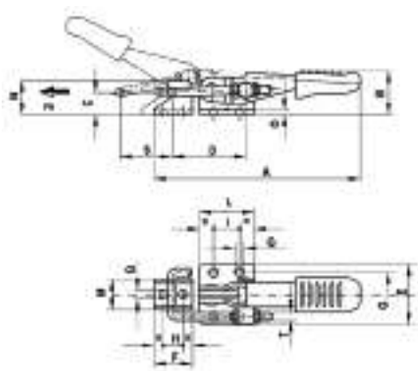
Tech. Code	GR76 Euro	A mm	D mm	F mm
N8430M5	3,00	45	M5	10
N8430M6	3,40	55	M6	13
N8430M8	4,00	68	M8	16
N8430M10	4,50	80	M10	20

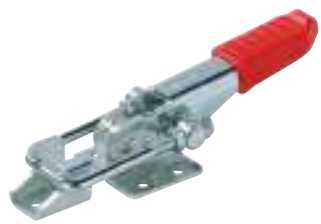
QUICK CLAMP DOUBLE SYSTEM

ITEM: N8435

The circular movement of the handle is transformed in linear action of the latch. These clamps are mostly used to fasten hinged lids and for containers. Holding capacities from 160 to 700 daN, and from 1700 to 4000 daNfor heavy series.
The hook can be set within the adjustment range (D). The main feature of different models are as follow: The bearing surface is parallel as to the line of action to the force. Clamping force Fh 320 daN. When closed, the control lever is parallel to the bearing surface.

Galvanized finish. Weight 320gr.





Tech. Code	GR76 Euro	MODEL	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	Q mm	S mm	T mm	FH daN
N843598	21,00	160/T2	98	25	12	35÷44	28	20	19	10	16	26	14	18	4,3	25	M4	160
N8435220	27,50	320/T2	152	30	16	54÷63	44	28	32	14,3	19	40	22	25	6,5	48	M6	320
N8435221	46,30	700/T2	220	42	24	70÷90	54	38	38	19	41,5	60	26	36	8,5	58	M8	750

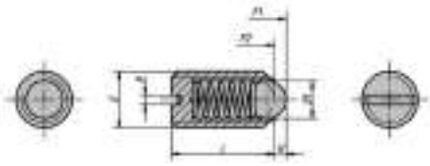
N

Indivisible package Suggested retail package - Unit price

SPRING PLUNGERS WITH SLOT AND BALL, STEEL

ITEM: N8440

Spring plungers with ball and slot for screwdrivers. Burnished steel body 5.8 resistance class, spring and steel ball.

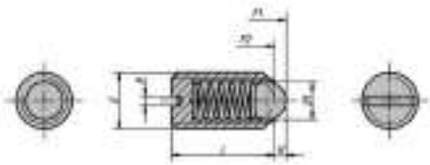


Tech. Code	GR76 Euro	D mm	D1 mm	L mm	H mm	N mm	F1 pressure N	F2 pressure N	
N844003	2,32	M3	1,5	7	0,5	0,4	1,5	3	50
N844004	1,85	M4	2,5	9	0,8	0,6	4	10	50
N844005	1,85	M5	3	12	0,9	0,8	6	11	50
N844006	1,85	M6	3,5	14	1	1	9	13	50
N844008	2,32	M8	5	16	1,5	1,2	15	30	50
N844010	2,32	M10	6	19	2	1,6	20	35	10
N844012	3,66	M12	8	22	2,5	2	30	55	10

SPRING PLUNGERS WITH SLOT AND BALL, STAINLESS STEEL

ITEM: N8441

Spring plungers with ball and slot for screwdrivers. Body in stainless steel 1.4305, spring 1.4310 and sphere 1.4034.

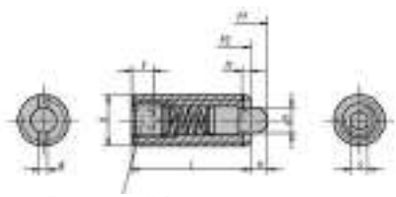


Tech. Code	GR76 Euro	D mm	D1 mm	L mm	H mm	N mm	F1 pressure N	F2 pressure N	
N844103	5,73	M3	1,5	7	0,5	0,4	1,5	3	50
N844104	4,88	M4	2,5	9	0,8	0,6	4	10	50
N844105	4,88	M5	3	12	0,9	0,8	6	11	50
N844106	4,88	M6	3,5	14	1	1	9	13	50
N844108	6,47	M8	5	16	1,5	1,2	15	30	50
N844110	7,45	M10	6	19	2	1,6	20	35	10
N844112	9,28	M12	8	22	2,5	2	30	55	10

SPRING PLUNGERS WITH HEXAGON SOCKET AND THRUST PIN, STEEL

ITEM: N8445

Spring plungers with pin and hexagon socket. Burnished steel body 5.8 class resistance, steel spring and hardened steel thrust pin.



The hexagon added is fixed with glue

Tech. Code	GR76 Euro	D mm	D1 mm	L mm	H mm	T mm	T1 mm	N mm	S mm	F1 pressure N	F2 pressure N	
N844503	5,25	M3	1	10	1,5	1,5	1	0,4	0,7	0,5	3	10
N844504	4,16	M4	1,5	15	1,5	2	0,6	0,6	1,3	5	16	10
N844505	4,03	M5	2,4	18	2,3	2	0,8	0,8	1,5	6	20	10
N844506	4,16	M6	2,7	20	2,5	2,5	1	1	2	7	20	10
N844508	4,76	M8	3,5	22	3	3	1,4	1,4	2,5	9	35	10
N844510	5,25	M10	4	22	3	3,5	1,4	1,4	3	9	35	10
N844512	6,84	M12	6	28	4	5	2	2	4	10	55	10

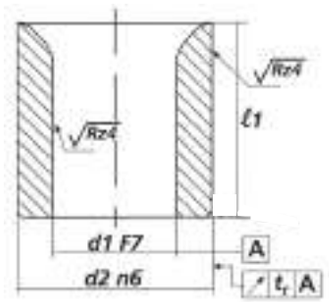
DRILL BUSHES DIN 179 – SHORT SERIES

ITEM: 179/C

Material	16 Cr Ni 4
Grinding tolerances	d1 = F7 and d2 = n6
Heat Treatment	Cementing + hardening
Hardness	60 - 62 HRc

Tech. Code	GR76 Euro	D1 hole Ø mm	l1 mm	D2 ext. Ø mm
N85002	2,00	2	6	5
N85004	2,10	4	8	8
N85005	2,10	5	8	8
N85005,5	2,21	5.5	10	10
N85006	2,21	6	10	10
N85006,1	2,42	6.1	10	12
N85006,25	2,42	6.25	10	12
N85006,5	2,42	6.5	10	12
N85008	2,42	8	10	12

Tech. Code	GR76 Euro	D1 hole Ø mm	l1 mm	D2 ext. Ø mm
N850010	2,73	10	12	15
N850010,5	3,15	10.5	12	18
N850012	3,15	12	12	18
N850014	3,47	14	16	22
N850016	4,10	16	16	26
N850017	4,10	17	16	26
N850018	4,10	18	16	26
N850020	5,46	20	20	30
N850030	7,77	30	20	42



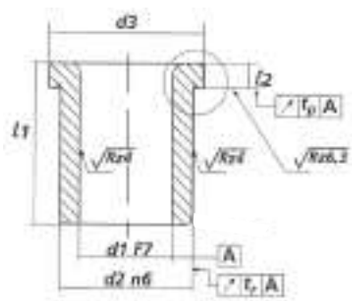
DRILL BUSHES DIN 172 – SHORT SERIES

ITEM: 172/C

Material	16 Cr Ni 4
Grinding tolerances	d1 = F7 and d2 = n6
Heat Treatment	Cementing + hardening
Hardness	60 - 62 HRc

Tech. Code	GR76 Euro	Hole Ø d1 mm	l1 mm	l2 mm	Ext. Ø d2 mm	d3 Ø mm
N85102,2	2,94	2.2	6	2	5	8
N85102,3	2,94	2.3	6	2	5	8
N85102,4	2,94	2.4	6	2	5	8
N85102,5	2,94	2.5	6	2	5	8
N85103,3	2,94	3.3	8	2.5	6	9
N85103,5	2,63	3.5	8	2.5	7	10
N85104	2,63	4	8	2.5	7	10
N85105	2,73	5	8	2.5	8	11
N85105,1	2,94	5.1	10	3	10	13
N85105,5	2,94	5.5	10	3	10	13
N85106	2,94	6	10	3	10	13
N85106,5	3,26	6.5	10	3	12	15
N85106,8	3,26	6.8	10	3	12	15
N85107	3,26	7	10	3	12	15

Tech. Code	GR76 Euro	Hole Ø d1 mm	l1 mm	l2 mm	Ext. Ø d2 mm	d3 Ø mm
N85108	3,26	8	10	3	12	15
N85109	3,68	9	12	3	15	18
N851010	3,68	10	12	3	15	18
N851010,5	4,10	10.5	12	4	18	22
N851011	4,10	11	12	4	18	22
N851012	4,10	12	12	4	18	22
N851014	4,62	14	16	4	22	26
N851015	4,62	15	16	4	22	26
N851016	5,57	16	16	4	26	30
N851020	7,14	20	20	5	30	34
N851022	7,14	22	20	5	30	34
N851025	9,14	25	20	5	35	39
N851030	9,45	30	20	5	42	46
N851040	20,79	40	25	5	55	59



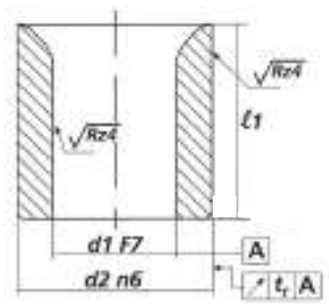
DRILL BUSHES DIN 179 – LONG SERIES

ITEM: 179/L

Material	16 Cr Ni 4
Grinding tolerances	d1 = F7 and d2 = n6
Heat Treatment	Cementing + hardening
Hardness	60 - 62 HRc

Tech. Code	GR76 Euro	D1 hole Ø mm	l1 mm	Ext. Ø D2 mm
N85202	2,10	2	9	5
N85203	2,10	3	12	6
N85203,2	2,10	3.2	12	6
N85203,5	2,10	3.5	12	7
N85204	2,10	4	12	7
N85205	2,31	5	12	8
N85206	2,63	6	16	10
N85208	2,73	8	16	12
N85209	3,15	9	20	15
N852010	3,15	10	20	15

Tech. Code	GR76 Euro	D1 hole Ø mm	l1 mm	Ext. Ø D2 mm
N852011	3,68	11	20	18
N852012	3,68	12	20	18
N852014	4,41	14	28	22
N852018	5,46	18	28	26
N852020	6,62	20	36	30
N852022	6,62	22	36	30
N852025	7,88	25	36	35
N852026	7,88	26	36	35
N852030	9,66	30	36	42



N

Indivisible package Suggested retail package - Unit price

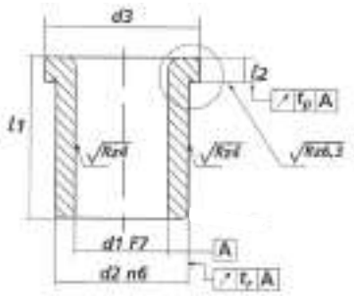
DRILL BUSHES DIN 172 – LONG SERIES

ITEM: 172/L

Material	16 Cr Ni 4
Grinding tolerances	d1 = F7 and d2 = n6
Heat Treatment	Cementing + hardening
Hardness	60 - 62 HRc

Tech. Code	GR76 Euro	Hole Ø d1 mm	l1 mm	l2 mm	Ext. Ø d2 mm	d3 Ø mm
N85303	3,15	3	12	2.5	6	9
N85304,5	3,15	4.5	12	2.5	8	11
N85305	3,15	5	12	2.5	8	11
N85306	3,26	6	16	3	10	13
N85306,5	3,68	6.5	16	3	12	15
N85307	3,68	7	16	3	12	15
N85308	3,68	8	16	3	12	15
N85308,5	4,10	8.5	20	3	15	18

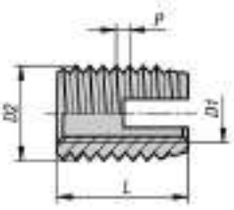
Tech. Code	GR76 Euro	Hole Ø d1 mm	l1 mm	l2 mm	Ext. Ø d2 mm	d3 Ø mm
N853010	4,10	10	20	3	15	18
N853012	4,41	12	20	4	18	22
N853013	5,99	13	28	4	22	26
N853014	5,99	14	28	4	22	26
N853016	7,14	16	28	4	26	30
N853020	9,66	20	36	5	30	34
N853025	11,45	25	36	5	35	39
N853030	11,34	30	36	5	42	46

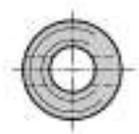


SELF-TAPPING THREAD INSERTS - GALVANIZED STEEL

ITEM: N8602

Galvanized case hardened steel self-tapping thread inserts with internal and external thread. Ideal for producing metric screw threads that are capable of supporting heavy loads. Vibration and wear resistant. Suitable for materials with low shear strength such as aluminium alloys, brass, bronze, cast iron, Duroplast and thermoplastic resins.
The thread inserts have a cutting slot and a tapered bottom, which allows them to join together. When screwed in, they cut their own threads inside the hole, ensuring that it is fastened firmly and securely.





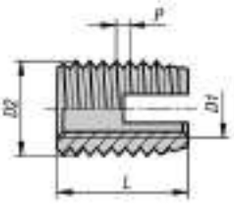
Tech. Code	GR76 Euro	D1	D2 x P	L mm	Hole diameter mm	Hole depth mm	
N86020306	0,38	M3	MF 5 x 0.5	6	4.5 - 4.8	8	100
N86020408	0,43	M4	MF 6.5 x 0.75	8	5.8 - 6.2	10	100
N86020510	0,62	M5	MF 8 x 1	10	7.1 - 7.6	13	100
N86020612	0,73	M6	MF 9 x 1	12	8.1 - 8.6	15	100
N86020614	0,73	M6	MF10 x 1.5	14	8.6 - 9.4	17	100
N86020815	0,88	M8	MF12 x 1.5	15	10.6 - 11.4	18	100
N86021018	1,28	M10	MF14 x 1.5	18	12.6 - 13.4	22	100
N86021222	2,04	M12	MF16 x 1.5	22	14.6 - 15.4	26	50
N86021424	2,87	M14	MF18 x 1.5	24	16.6 - 17.4	28	50
N86021622	3,40	M16	MF20 x 1.5	22	18.6 - 19.4	27	50

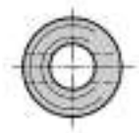
Manual installation tools code N8607__

SELF TAPPING THREAD INSERTS - STAINLESS STEEL AISI 303

ITEM: N8603

stainless steel 1.305 AISI 303 self-tapping thread inserts with internal and external thread. Ideal for producing metric screw threads that are capable of supporting heavy loads. Vibration and wear resistant. Suitable for materials with low shear strength such as aluminium alloys, brass, bronze, cast iron, Duroplast and thermoplastic resins.
The thread inserts have a cutting slot and a tapered bottom, which allows them to join together. When screwed in, they cut their own threads inside the hole, ensuring that it is fastened firmly and securely.





Tech. Code	GR76 Euro	D1	D2 x P	L mm	Hole Ø mm	Hole depth mm	
N86030306	0,73	M3	MF 5 x 0.5	6	4.5 - 4.8	8	100
N86030408	0,83	M4	MF 6.5 x 0.75	8	5.8 - 6.2	10	100
N86030510	1,09	M5	MF 8 x 1	10	7.1 - 7.6	13	100
N86030612	1,38	M6	MF 9 x 1	12	8.1 -8.6	15	100
N86030614	1,64	M6	MF10 x 1.5	14	8.6 - 9.4	17	100
N86030815	1,93	M8	MF12 x 1.5	15	10.6 - 11.4	18	100
N86031018	2,74	M10	MF14 x 1.5	18	12.6 - 13.4	22	50
N86031222	4,10	M12	MF16 x 1.5	22	14.6 - 15.4	26	50

Manual installation tools code N8607__

WIRE THREAD INSERTS STAINLESS STEEL - M

ITEM: N8611

Very high mechanical strength stainless steel wire thread inserts (approx. 145 kg/mm²).
Their typical design, in the shape of a spring, forms two perfectly concentric threads, one external and the other internal. The external one allows the wire thread insert to be inserted in a hole threaded with a specific tap, while the internal thread accommodates a screw with maximum precision.

The pull stud bolt, which is essential for inserting the thread into the hole, is easily removed after assembly using a break off tool. The external diameter of the wire thread inserts in their free state is greater than that of their receiving holes. The elastic deformation that they undergo when entering the hole generates a force that holds the thread firmly anchored to the walls of the hole, preventing them from coming out.

		1 x D		1.5 x D		2 x D		2.5 x D		3 x D	
Nominal∅		Tech. Code	GR76 Euro	Tech. Code	GR76 Euro	Tech. Code	GR76 Euro	Tech. Code	GR76 Euro	Tech. Code	GR76 Euro
M 2 x 0.4	100	N86110210	1,57	N86110215	(1,74)	N86110220	1,99	N86110225	(2,23)	N86110230	2,79
M 2.5 x 0.45	100	N861102510	(0,45)	N861102515	(0,48)	N861102520	(0,53)	N861102525	(0,59)	N861102530	(0,72)
M 3 x 0.5	100	N86110310	0,47	N86110315	0,50	N86110320	0,53	N86110325	0,63	N86110330	0,72
M 4 x 0.7	100	N86110410	0,42	N86110415	0,45	N86110420	0,48	N86110425	0,56	N86110430	0,66
M 5 x 0.8	100	N86110510	0,54	N86110515	0,55	N86110520	0,60	N86110525	0,69	N86110530	0,87
M 6 x 1	100	N86110610	0,56	N86110615	0,64	N86110620	0,71	N86110625	0,81	N86110630	0,97
M 7 x 1	100	N86110710	(0,54)	N86110715	0,71	N86110720	(0,75)	N86110725	(0,94)	N86110730	(1,12)
M 8 x 1.25	100	N86110810	0,61	N86110815	0,71	N86110820	0,82	N86110825	0,99	N86110830	1,14
M 10 x 1.5	100	N86111010	0,76	N86111015	0,86	N86111020	0,95	N86111025	(1,12)	N86111030	1,31
M 12 x 1.75	100	N86111210	1,17	N86111215	1,31	N86111220	1,45	N86111225	1,67	N86111230	1,99
M 14 x 2	50	N86111410	1,53	N86111415	1,68	N86111420	(1,80)	N86111425	(2,21)	N86111430	(2,66)
M 16 x 2	50	N86111610	2,18	N86111615	2,28	N86111620	2,76	N86111625	(2,91)	N86111630	(3,19)
M 18 x 2.5	25	N86111810	(3,90)	N86111815	(5,22)	N86111820	(6,44)	N86111825	(7,73)	N86111830	(9,28)
M 20 x 2.5	25	N86112010	(4,53)	N86112015	6,11	N86112020	7,58	N86112025	(9,20)	N86112030	(11,03)
M 22 x 2.5	10	N86112210	(4,79)	N86112215	(6,26)	N86112220	(7,79)	N86112225	(10,12)	N86112230	(12,15)
M 24 x 3	10	N86112410	(6,44)	N86112415	(7,55)	N86112420	(9,28)	N86114425	(11,44)	N86112430	(12,51)

Break off tools code N8655M_

WIRE THREAD INSERTS STAINLESS STEEL - MF

ITEM: N8612

Very high mechanical strength stainless steel wire thread inserts (approx. 145 kg/mm²).
Their typical design, in the shape of a spring, forms two perfectly concentric threads, one external and the other internal. The external one allows the wire thread insert to be inserted in a hole threaded with a specific tap, while the internal thread accommodates a screw with maximum precision.

The pull stud bolt, which is essential for inserting the thread into the hole, is easily removed after assembly using a break off tool. The external diameter of the wire thread inserts in their free state is greater than that of their receiving holes. The elastic deformation that they undergo when entering the hole generates a force that holds the thread firmly anchored to the walls of the hole, preventing them from coming out.

		1 x D		1.5 x D		2 x D		2.5 x D		3 x D	
Nominal∅		Tech. Code	GR76 Euro	Tech. Code	GR76 Euro	Tech. Code	GR76 Euro	Tech. Code	GR76 Euro	Tech. Code	GR76 Euro
MF 8 x 1	100	N86120810010	0,77	N86120810015	0,77	N86120810020	(1,01)	N86120810025	1,18	N86120810030	(1,45)
MF10 x 1	100	N86121010010	0,52	N86121010015	0,88	N86121010020	(1,07)	N86121010025	1,30	N86121010030	(1,55)
MF10 x 1.25	100	N86121012510	0,49	N86121012515	0,56	N86121012520	1,07	N86121012525	(1,30)	N86121012530	(1,55)
MF12 x 1	100	N86121210010	(1,25)	N86121210015	(1,45)	N86121210020	(1,62)	N86121210025	(1,91)	N86121210030	(2,33)
MF12 x 1.25	100	N86121212510	(1,25)	N86121212515	(1,45)	N86121212520	(1,62)	N86121212525	1,91	N86121212530	(2,33)
MF12 x 1.5	100	N86121215010	1,25	N86121215015	1,45	N86121215020	1,62	N86121215025	(1,91)	N86121215030	(2,33)
MF14 x 1.25	50	N86121412510	(1,76)	N86121412515	2,03	N86121412520	(2,12)	N86121412525	(2,55)	N86121412530	(3,10)
MF14 x 1.5	50	N86121415010	1,76	N86121415015	2,03	N86121415020	2,12	N86121415025	(2,55)	N86121415030	(3,10)
MF16 x 1.5	50	N86121615010	2,41	N86121615015	2,49	N86121615020	3,10	N86121615025	(3,39)	N86121615030	(3,68)

Break off tools code N8655M_

Indivisible package Suggested retail package - Unit price

TAPS FOR WIRE THREAD INSERTS

ITEM: N8630

Taps for hand or machine use.

Tech. Code	GR76 Euro	For threads
N8630M2X0,4	15,09	M 2 x 0,4
N8630M2,5X0,45	(15,09)	M 2,5 x 0,45
N8630M3X0,5	18,20	M 3 x 0,5
N8630M4X0,7	18,20	M4 x 0.70
N8630M5X0,8	18,50	M5 x 0.80
N8630M6X1,0	19,00	M6 x 1.00
N8630M7X1,0	(20,12)	M 7 x 1
N8630M8X1,0	32,20	MF 8 x 1
N8630M8X1,25	21,20	M8 x 1.25
N8630M10X1,0	37,20	MF 10 x 1
N8630M10X1,25	41,00	M10 x 1.25
N8630M10X1,50	24,80	M10 x 1.50
N8630M12X1,0	36,49	MF 12 x 1

Tech. Code	GR76 Euro	For threads
N8630M12X1,25	46,00	M12 x 1.25
N8630M12X1,5	27,60	MF 12 x 1,5
N8630M12X1,75	37,00	M12 x 1.75
N8630M14X1,25	61,70	M14 x 1.25
N8630M14X1,5	59,65	MF14 x 1,5
N8630M14X2,0	52,50	M14 x 2.00
N8630M16X1,5	63,16	MF 16 x 1,5
N8630M16X2,0	62,50	M16 x 2.00
N8630M18X2,5	98,80	M18 x 2.50
N8630M20X2,5	124,90	M20 x 2.50
N8630M22X2,5	(126,88)	M 22 x 2,5
N8630M24X3,0	(132,45)	M 24 x 3

MANDRELS FOR WIRE THREAD INSERTS

ITEM: N8650

Mandrels for wire thread inserts. Free rod insertion version.

Tech. Code	GR76 Euro	For threads
N8650M2X0,4	(203,28)	M2
N8650M2,5X0,45	(72,98)	M2.5
N8650M3X0,5	72,98	M3
N8650M4X0,7	59,12	M4
N8650M5X0,8	55,65	M5
N8650M6X1,0	55,65	M6
N8650M7X1,0	(58,17)	M7
N8650M8X1,0	55,65	MF8 x 1
N8650M8X1,25	55,65	M8
N8650M10X1,0	62,06	MF10 x 1
N8650M10X1,25	62,06	MF10 x 1,25
N8650M10X1,5	58,17	M10

Tech. Code	GR76 Euro	For threads
N8650M12X1,0	62,06	MF12x1
N8650M12X1,25	62,06	MF12 x 1,25
N8650M12X1,5	62,06	MF12 x 1.5
N8650M12X1,75	58,17	M12
N8650M14X1,25	109,52	MF14 x 1.25
N8650M14X2,0	108,89	M14
N8650M16X1,5	108,89	MF16 x 1.5
N8650M16X2,0	108,89	M16
N8650M18X2,5	148,16	M18
N8650M20X2,5	149,84	M20
N8650M22X2,5	(153,41)	M22
N8650M24X3,0	(153,41)	M24

THREAD INSERTS REPAIR KITS

ITEM: N8670

Thread Inserts repair kits studied to satisfy the needs of the technicians of the maintenance, practical and functional.

Compostion of kit:
- 1 cutter
- 1 installation tool
- 1 finishing tap
- 1 drill bit
- 10/15/20 threads 1,5xD

Tech. Code	GR76 Euro	For threads
N8670M03X0,5	112,77	M3
N8670M04X0,7	93,56	M4
N8670M05X0,8	93,56	M5
N8670M06X1,0	93,56	M6
N8670M08X1,0	105,32	MF8 x 1
N8670M08X1,25	94,50	M8
N8670M10X1,0	129,05	MF10 x 1

Tech. Code	GR76 Euro	For threads
N8670M10X1,25	120,65	MF10 x 1.25
N8670M10X1,5	105,95	M10
N8670M12X1,25	129,15	MF12 x 1.25
N8670M12X1,75	122,22	M12
N8670M14X2,0	210,32	M14
N8670M16X2,0	222,60	M16

BASIC THREAD INSERTS REPAIR KIT

ITEM: N8671

NEW

Basic version of the repair kit for inserted threads, essential, practical and functional to meet the needs of maintenance technicians.

Kit composition:
- 1 installation tool
- 1 finishing tap
- 1 drill bit (except for M12/M14/M16)
- 1 miter saw (except for M12/M14/M16)
- 10/15/20 1.5D threads

Tech. Code	GR76 Euro	For threads
N8671M03X0,5	(40,16)	M3
N8671M04X0,7	(40,16)	M4
N8671M05X0,8	(41,49)	M5
N8671M06X1,0	(43,63)	M6
N8671M08X1,0	(53,72)	M8 x 1
N8671M08X1,25	(53,72)	M8
N8671M10X1,0	(59,09)	M10 x 1

Tech. Code	GR76 Euro	For threads
N8671M10X1,25	(59,09)	M10 x 1,25
N8671M10X1,5	(57,76)	M10
N8671M12X1,25	(65,12)	M12 x 1,25
N8671M12X1,75	(63,80)	M12
N8671M14X2,0	(74,54)	M14
N8671M16X2,0	(87,31)	M16

THREAD INSERTS REPAIR KITS MULTIDIMENSION

ITEM: N8690

Thread Inserts repair kits multidimension studied to satisfy the needs of the technicians of the maintenance, pratical and functional.

Composition of the kit:
- 2 setting tools respectively for M6-M8 and M10-M12 threads
- 4 finishing taps for M6-M8-M10-M12 threads
- 3 thread cutters M6-M8-M10-M12
- 4 M6-M8-M10-M12 drill bits
- Threads 10/15/20 1.5D

Tech. Code	GR76 Euro	For threads
N8690KITMULTI	432,50	M6 - M8 - M10 - M12

NYLON ANCHOR SX MODEL, WITH RIM AND SCREW

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ITEM: SX-S

The 4-way expansion provides the optimum force distribution in the material, and offers high load-bearing capacities in solid and hollow building materials.
The expansion-free plug neck prevents the creation of expansion forces on the material surface whilst screwing in the screw. This helps to prevent damage to tiles and plaster.
The pronounced rim prevents the plug from slipping into the drill hole, thus allowing for a simple installation.
The greater anchorage depth of the SX means that the plug is especially suited to fixings in hollow building materials, aerated concrete and to bridge plaster

Building materials
Concrete, vertically perforated brick, hollow block made from lightweight concrete, cavity floor slabs made of brick, concrete, perforated sand-lime brick, solid sand-lime brick, natural stone with dense structure, aerated concrete, solid panel made from gypsum, solid brick made from lightweight concrete, solid brick.

The price shown refers to a pack of 100 pieces

Tech. Code	GR76 Euro	Supplier code	d_o mm	h1 mm	l mm	t fix mm	Screw = ds x l mm	
N820505	17,48	SX5x25S	5	35	25	5	4,0 x 30	100
N820506	18,66	SX6x30S	6	40	30	10	4,5 x 40	100
N820508	27,55	SX8x40S	8	50	40	10	5,0 x 50	100
N820510	66,38	SX10x50S	10	70	50	-	6,0 x 60	100

UNIVERSAL PLUG FU WITH RIM AND SCREW

fischer

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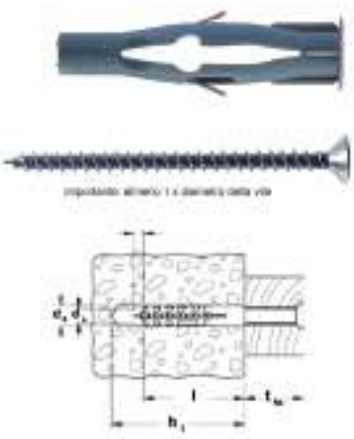
ITEM: FU

The universal fixing FU is suitable for through and non-through installations.
In solid building materials the screwing results in a complete expansion of the fastener against the hole wall, in perforated building materials the fastener body expands by undercutting into the cavity.



Building materials
Concrete, gypsum plasterboard and gypsum fibre boards, vertically perforated brick, hollow block made from lightweight concrete, cavity floor slabs made of brick, concrete, perforated sand-lime brick, solid sand-lime brick, aerated concrete.

The price shown refers to a pack of 100 pieces

Tech. Code	GR76 Euro	Supplier code	d_o mm	h1 mm	l mm	Screw = ds x l mm	t fix mm	
N82070635	31,20	FU6x35V	6	45	35	3,5 x 45	10	100
N82070645	35,70	FU6x45V	6	55	45	3,5 x 55	10	100
N820708	42,35	FU8x50V	8	60	50	4,5 x 60	10	100
N820710	70,26	FU10x60V	10	70	60	6,0 x 80	20	100

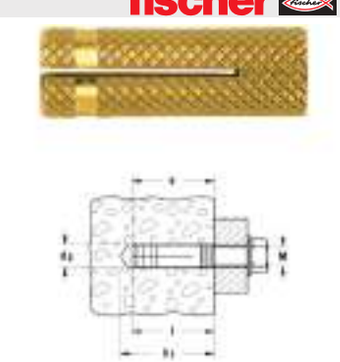
BRASS FIXING PO

fischer

PDF

ITEM: PO

Dowel with knurled body for excellent adhesion to hole walls, shallow installation depth, simple for light installations and air ducts, metric thread, threaded rods, screws and all threaded accessories can be fitted.



Building materials
Concrete and natural stone with dense structure.

Tech. Code	GR76 Euro	Supplier code	d_o mm	h1 mm	l mm	M	S mm	
N821006	0,57	PO M 6	8	30	24	M 6	24	100
N821008	0,68	PO M 8	10	40	30	M 8	30	100
N821010	1,12	PO M 10	12	45	35	M 10	35	100
N821012	2,08	PO M 12	15	50	40	M 12	40	100

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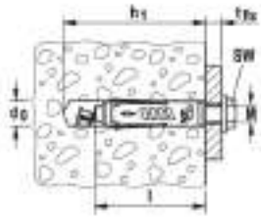
Indivisible package Suggested retail package - Unit price

HEAVY-DUTY ANCHOR TA M-S MODEL WITH TE SCREW



ITEM: TA M-S

The optimized geometry minimise setting energy and allows for use in extremely narrow spaces. This allows for user-friendly installation.
The three-part expansion sleeve creates even load distribution, thus allowing small edge and axial spacing. Thus the TA M is extremely flexible.
The metric internal thread allows to use standard screws or threaded rods for the ideal adaptation to suit the intended use. The red plastic cap protects against soiling and thus ensures free-running of the thread. Versions zinc-plated steel.

Building materials
Approved for concrete C20/25 to C50/60, noncracked, also suitable for concrete C12/15 natural stone with dense structure.

Tech. Code	GR76 Euro	Supplier code	d_0 mm	h1 mm	l mm	t fix mm	Screw = d0 x l mm	
N821506	1,66	TA M6 S	10	65	49	10	M 6 x 60	50
N821508	2,09	TA M8 S	12	70	56	10	M 8 x 65	50
N821510	3,29	TA M10 S	15	90	69	20	M 10 x 90	25
N821512	4,64	TA M12 S	18	105	86	25	M 12 x 110	20

HEAVY-DUTY ANCHOR SLM WITH SCREW TE 8.8

ITEM: SLM

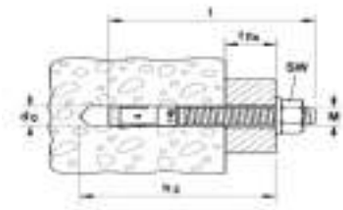
The optimized geometry minimizes setting energy and allows for use in extremely narrow spaces. This allows for user-friendly installation.
The three-part expansion sleeve creates even load distribution, thus allowing small edge and axial spacing.
Thus the SLM is extremely flexible.
The metric internal thread allows to use standard screws or threaded rods for the ideal adaptation to suit the intended use.
The red plastic cap protects against soiling and thus ensures free-running of the thread.

Zinc version with TE screw in steel 8.8.

Building materials
Approved for, concrete C20/25 to C50/60, non-cracked.
Also suitable for, concrete C12/15 natural stone with dense structure.

Tech. Code	GR76 Euro	Supplier code	d_0 mm	h1 mm	l mm	t fix mm	Screw = d0 x l mm	
N822006	1,69	SL M 6 S screw TE	12	60	45	10	M 6 x 50	50
N822008	2,11	SL M 8 S screw TE	14	65	50	10	M 8 x 60	50
N822010	3,65	SL M 10 S screw TE	16	80	60	20	M 10 x 80	25
N822012	5,41	SL M 12 S screw TE	20	95	75	20	M 12 x 90	20

BOLT ANCHOR ZINC-PLATED STEEL



ITEM: FBN II

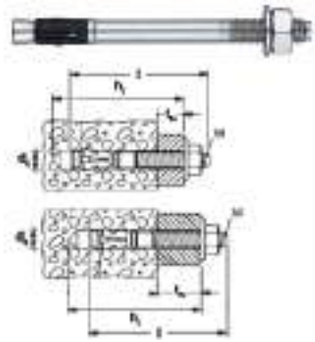
The standard anchorage depth achieves the maximum load-bearing capacities. Thus fewer fixing points and smaller anchor plates are required.
The reduced anchorage depth reduces the drill hole depth. This minimizes the amount of time needed for installation whilst increasing flexibility.
The long thread balances component tolerances and allows for stand-off installations, thus increasing flexibility.
Few hammer blows and the minimal torque slippage allow for a noticeably simpler installation. The drive-in pin protects the thread from damage, and thus ensures a faster installation and dismantling of the attachment.

Building materials
Approved for concrete C20/25 to C50/60, non cracked
Also suitable for concrete C12/15 and natural stone with dense structure

Tech. Code	GR76 Euro	Supplier code	d_0 mm	h2 mm	l mm	t fix mm	M Ø x mm	
N822508005	0,74	FBN II 8/5	8	61	66	5/15	M 8 x 34	50
N822508010	0,75	FBN II 8/10	8	66	71	10/20	M 8 x 39	50
N822508020	0,82	FBN II 8/20	8	76	81	20/30	M 8 x 49	50
N822508030	0,90	FBN II 8/30	8	86	91	30/40	M 8 x 59	50
N822508050	0,95	FBN II 8/50	8	106	111	50/60	M 8 x 79	50
N822510010	1,04	FBN II 10/10	10	78	86	10/20	M 10 x 46	50
N822510020	1,11	FBN II 10/20	10	88	96	20/30	M 10 x 56	50
N822510030	1,22	FBN II 10/30	10	98	106	30/40	M 10 x 66	50
N822510050	1,24	FBN II 10/50	10	118	126	50/60	M 10 x 86	20
N822510070	2,01	FBN II 10/70	10	138	146	70/80	M 10 x 106	20
N822510100	2,39	FBN II 10/100	10	168	176	100/110	M 10 x 136	20
N822512010	1,58	FBN II 12/10	12	95	106	10/25	M 12 x 59	20
N822512020	1,73	FBN II 12/20	12	105	116	20/35	M 12 x 69	10
N822512030	1,93	FBN II 12/30	12	115	126	30/45	M 12 x 79	20
N822512050	2,01	FBN II 12/50	12	135	146	50/65	M 12 x 99	20
N822516025	2,95	FBN II 16/25	16	129	145	25/40	M 16 x 89	10
N822516050	4,41	FBN II 16/50	16	154	170	50/65	M 16 x 105	10
N822516080	5,92	FBN II 16/80	16	184	200	80/95	M 16 x 144	10
N822516100	6,97	FBN II 16/100	16	204	220	110/115	M 16 x 164	10
N822520030	8,27	FBN II 20/30	20	165	187	30/55	M 20 x 90	10
N822520060	9,59	FBN II 20/60	20	195	217	60/85	M 20 x 90	10
N822520080	10,58	FBN II 20/80	20	215	237	80/105	M 20 x 90	10

Indivisible package Suggested retail package - Unit price

BOLT ANCHOR FAZ II MODEL



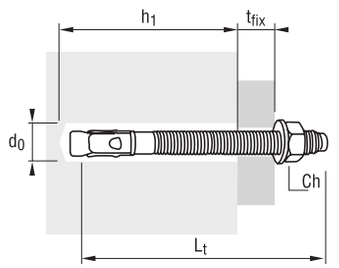
ITEM: FAZ II

The FAZ II tried and tested expansion clip enables the highest load bearing capacity. Thus fewer fixing points and smaller anchor plates are required.
The reduced anchorage depth allows for significantly reduced drill hole depths and reduces the number of reinforcement hits. This allows for a noticeably quicker installation.
Fewer hammer blows when hammering in the anchor, together with the low torque slippage, ensure a noticeably simple and comfortable setting process.
The international approvals guarantee maximum safety and the best performance. These approvals even cover use in earthquake zones (sismic).

Building materials
Approved for concrete C20/25 to C50/60, cracked. Concrete C20/25 to C50/60, non-cracked. Also suitable for concrete C12/15, natural stone with dense structure.

Tech. Code	GR76 Euro	Supplier code	d_0 mm	h2 (*) mm	l mm	t fix mm	Threading mm	
N823008010	1,23	FAZ II 8/10 (1)	8	65	75	10/-	M 8 x 38	50
N823008050	1,78	FAZ II 8/50 (1)	8	105	115	50/-	M 8 x 78	50
N823010010	1,72	FAZ II 10/10 (1)	10	85	95	10/30	M 10 x 53	50
N823010050	2,36	FAZ II 10/50 (1)	10	125	135	50/70	M 10 x 93	20
N823012010	2,35	FAZ II 12/10 (1)	12	100	110	10/30	M 12 x 61	20
N823012020	2,73	FAZ II 12/20 (1)	12	110	120	20/40	M 12 x 71	20
N823012030	2,95	FAZ II 12/30 (1)	12	120	130	30/50	M 12 x 81	20
N823012050	3,63	FAZ II 12/50 (1)	12	140	150	50/70	M 12 x 101	20
N823016025	5,45	FAZ II 16/25 (1)	16	135	148	25/45	M 16 x 84	10
N823016050	6,95	FAZ II 16/50 (1)	16	160	173	50/70	M 16 x 109	10
N823016100	8,56	FAZ II 16/100 (1)	16	210	223	100/120	M 16 x 159	10

BOLT ANCHOR ZINC-PLATED STEEL FOR NON-CRACKED CONCRETE MOD. VE.A



ITEM: VE.A

Mechanical anchors in galvanized steel with metal clamp and expansion cone. Extra-long thread ideal for all type of carpentry, plant and building applications.

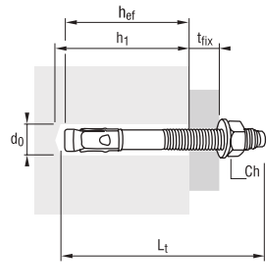
- Features:
- Thread diameter equal to drilling diameter
- Reinforced head to avoid damaging the thread during installation
- Special shape expansion bush to make the expansion soft and progressive
- It guarantees high load values and rapid installation even without moving the object to be fixed

Support materials
Recommended for non-cracked concrete with strength class C20/25

Tech. Code	GR76 Euro	Article	d_0 mm	Lt mm	t fix max mm	h_1 mm	Ch mm	
N822308075	0,60	VA.A 8/15-75	8	75	15	55	13	100
N822308090	0,70	VE.A 8/25-90	8	90	25	55	13	50
N822310080	0,87	VE.A 10/10-80	10	80	10	60	17	50
N822310100	0,94	VE.A 10/30-100	10	100	30	60	17	50
N822310120	1,03	VE.A 10/50-120	10	120	50	60	17	50
N822310140	1,32	VE.A 10/70-140	10	140	70	60	17	50
N822312090	1,22	VE.A 12/15-90	12	90	15	65	19	50
N822312110	1,32	VE.A 12/20-110	12	110	20	80	19	25
N822312145	1,58	VE.A 12/50-145	12	145	50	85	19	25
N822316145	2,75	VE.A 16/30-145	16	145	30	100	24	15
N822316175	3,67	VE.A 16/60-175	16	175	60	100	24	15
N822320170	6,63	VE.A 20/30-170	20	170	30	120	30	5

Indivisible package Suggested retail package - Unit price

BOLT ANCHOR ZINC-PLATED STEEL FOR NON-CRACKED CONCRETE MOD. VE.7CE



ITEM: VE.7CE

Mechanical anchors in galvanized steel with metal clamp and expansion cone **ETA-certified option 7** for non-cracked concrete C20 / 25 - C50 / 60. Suitable for anchoring in heavy carpentry, plant engineering, construction, laying of stairs and railings.

Features:
- European technical approvement
- Thread diameter equal to drilling diameter
- Head reinforced to avoid damaging the thread during installation
- Special shape expansion bush to make the expansion soft and progressive
- Ensures high load values and rapid installation even without moving the object to be fixed

Support materials
Approved for non-cracked concrete with strength class from C20/25 to C50/60.
Also suitable for non-cracked concrete with strength class C12/15 and compact natural stone.

Tech. Code	GR76 Euro	Article	d_o mm	Lt mm	t fix max mm	h_1 mm	Ch mm	
N822708080	0,65	VE.7CE 8/15-80	8	80	15	45	13	100
N822708095	0,73	VE.7CE 8/30-95	8	90	30	45	13	50
N822710075	0,90	VE.7CE 10/1-75	10	75	1	51	17	50
N822710090	0,94	VE.7CE 10/15-90	10	90	15	51	17	50
N822710105	1,05	VE.7CE 10/25-105	10	105	25	51	17	50
N822710120	1,12	VE.7CE 10/45-120	10	120	45	51	17	50
N822712110	1,48	VE.7CE 12/15-110	12	110	15	66	19	25
N822712120	1,62	VE.7CE 12/25-120	12	120	25	66	19	25
N822712140	1,78	VE.7CE 12/45-140	12	140	45	66	19	25
N822712200	4,53	VE.7CE 12/105-200	12	200	105	66	19	25
N822716150	3,05	VE.7CE 16/30-150	16	150	30	80	24	15
N822716175	3,96	VE.7CE 16/55-175	16	175	55	80	24	15
N822716220	4,99	VE.7CE 16/100-220	16	220	100	80	24	15

Related products

GLOVES IN NYLON/SPANDEX WITH 4/4 COATED IN NITRIL FOAM SANITIZED COATING

Tech. Code	Size	EU size
K232807	M	7
K232808	L	8
K232809	XL	9

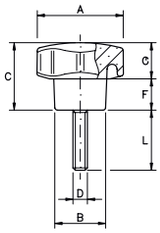
Product available in index K

N

LOBE KNOBS 6 LOBES IN DUROPLAST - MALE THREAD

ITEM: N8701

Lobe knobs in duroplast, black colour with glossy finish. Resistant to solvents, oils and greases, zinc plated steel stud.

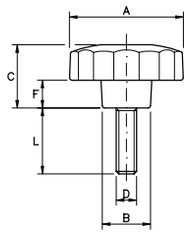


Tech. Code	GR76 Euro	A mm	D mm	L mm	B mm	C mm	F mm	G mm	Weight g	
N8701200520	1,93	20	M5	20	13	15	7	8	8	10
N8701300610	2,30	30	M6	10	17	24	11	13	16	10
N8701300615	2,30	30	M6	15	17	24	11	13	18	10
N8701300620	2,32	30	M6	20	17	24	11	13	20	10
N8701300630	2,33	30	M6	30	17	24	11	13	22	10
N8701300640	2,39	30	M6	40	17	24	11	13	24	10
N8701300815	2,43	30	M8	15	17	24	11	13	23	10
N8701300820	2,45	30	M8	20	17	24	11	13	25	10
N8701300825	2,46	30	M8	25	17	24	11	13	26	10
N8701300830	2,46	30	M8	30	17	24	11	13	27	10
N8701400815	2,88	40	M8	15	21	28	13	15	36	10
N8701400825	3,06	40	M8	25	21	28	13	15	39	10
N8701400830	3,08	40	M8	30	21	28	13	15	40	10
N8701400840	3,13	40	M8	40	21	28	13	15	44	10
N8701400850	3,16	40	M8	50	21	28	13	15	46	10
N8701401030	3,42	40	M10	30	21	28	13	15	50	10
N8701401050	3,42	40	M10	50	21	28	13	15	60	10
N8701500830	3,57	50	M8	30	25	33	15	18	56	10
N8701500840	3,57	50	M8	40	25	33	15	18	60	10
N8701501030	3,71	50	M10	30	25	33	15	18	65	10
N8701501040	3,98	50	M10	40	25	33	15	18	70	10
N8701601220	5,01	60	M12	20	28	35	15	20	101	10
N8701601230	5,09	60	M12	30	28	35	15	20	107	10

LOBE KNOBS 8 LOBES IN TECHNOPOLYMER - MALE THREAD

ITEM: N8704

Lobe knobs in technopolymer black in colour with matt finish, zinc plated steel stud.



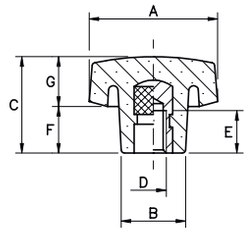
Tech. Code	GR76 Euro	A mm	D mm	L mm	B mm	C mm	F mm	G mm	Weight g	
N8704250510	1,08	25	M5	10	13	17	8	9	7	10
N8704250515	1,08	25	M5	15	13	17	8	9	8	10
N8704250615	1,13	25	M6	15	13	17	8	9	10	10
N8704250620	1,13	25	M6	20	13	17	8	9	11	10
N8704350820	1,42	35	M8	20	18	20	8	12	26	10
N8704451030	1,98	45	M10	30	22	26	12	14	51	10

Indivisible package Suggested retail package - Unit price

LOBE KNOBS 6 LOBES IN DUROPLAST - FEMALE THREAD

ITEM: N8711

Lobe knobs in duroplast black in colour with glossy finish. Resistant to solvents, oils and greases, brass bush with threaded blind hole.

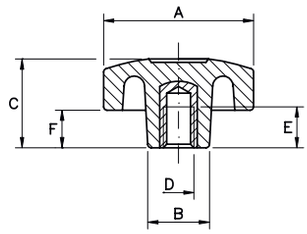


Tech. Code	GR76 Euro	A mm	D mm	B mm	C mm	E mm	F mm	G mm	Weight g	
N87113005	2,42	30	M5	17	24	9	11	13	14	10
N87113006	2,55	30	M6	17	24	9	11	13	15	10
N87114006	3,13	40	M6	21	28	13	13	15	26	10
N87114008	3,16	40	M8	21	28	15	13	15	30	10
N87115008	3,87	50	M8	25	33	15	15	18	48	10
N87115010	3,87	50	M10	25	33	16	15	18	49	10
N87116008	4,77	60	M8	28	35	16	15	20	67	10
N87116010	4,81	60	M10	28	35	16	15	20	68	10
N87116012	5,07	60	M12	28	35	18	15	20	70	10

LOBE KNOBS 8 LOBES IN TECHNOPOLYMER - FEMALE THREAD

ITEM: N8714

Lobe knobs in technopolymer black colour with matt finish, brass bush with threaded blind hole.

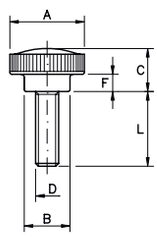


Tech. Code	GR76 Euro	A mm	D mm	B mm	C mm	E mm	F mm	G mm	Weight g	
N87142505	1,26	25	M5	13	17	9	8	9	7	10
N87143506	1,35	35	M6	18	20	13	8	12	16	10
N87143508	1,54	35	M8	18	20	13	8	12	17	10
N87144510	1,94	45	M10	22	26	13	12	14	29	10

KNURLED LOBE KNOBS IN TECHNOPOLYMER - ZINC PLATED STUD

ITEM: N8718

Lobe knobs in technopolymer colour black with matt finish, zinc plated steel stud.

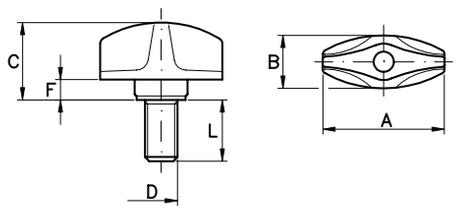


Tech. Code	GR76 Euro	A mm	D mm	L mm	B mm	C mm	F mm	Weight g	
N8718220510	0,72	22	M5	10	15	14	6	7	10

WING NUTS IN TECHNOPOLYMER - ZINC PLATED STUD

ITEM: N8719

Wing nuts in technopolymer black colour with matt finish, zinc plated steel stud.

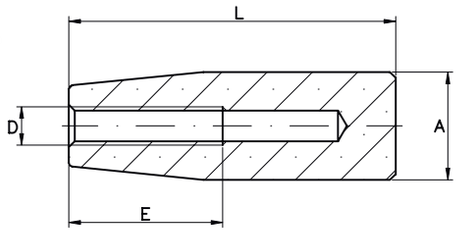


Tech. Code	GR76 Euro	A mm	D mm	L mm	B mm	C mm	F mm	Weight g	
N87190420	0,99	30	M4	20	13	19	5	5,4	10
N87190640	1,04	30	M6	40	13	19	5	12,2	10

CYLINDRICAL HANDLES FIXED IN DUROPLAST - FEMALE THREAD

ITEM: N8722

Cylindrical handles in duroplast black colour with glossy finish, resistant to solvents, oils and greases, threaded blind hole.

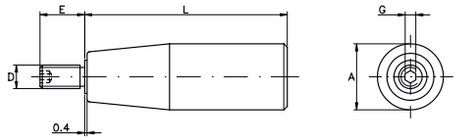


Tech. Code	GR76 Euro	A mm	L mm	D mm	E mm	Coil weight g	
N872205008	1,88	21	50	M8	25	19	10
N872206510	2,18	25	65	M10	30	35	10
N872211508	4,78	29	115	M8	40	88	10
N872211510	4,78	29	115	M10	40	87	10
N872211512	4,78	29	115	M12	40	86	10

CYLINDRICAL REVOLVING HANDLES IN DUROPLAST - MALE THREAD

ITEM: N8731

Cylindrical handles duroplast black colour with glossy finish. Resistant to oils and greases, zinc plated steel stud with hexagon socket built to facilitate the locking process.

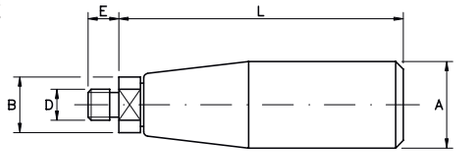


Tech. Code	GR76 Euro	A mm	L mm	D mm	E mm	G mm	Weight g	
N87314006	4,38	17	40	M6	13	3	26	10
N87316508	5,53	25	65	M8	15	4	73	10
N87318510	6,25	28	85	M10	17	5	110	10

CYLINDRICAL REVOLVING HANDLES IN DUROPLAST - MALE THREAD

ITEM: N8732

Cylindrical handles in duroplast black colour with glossy finish. Resistant to solvents, oils and greases, zinc plated steel studs with provision for locking through the use of spanners.

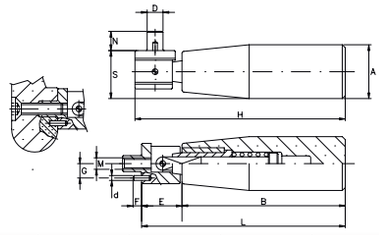


Tech. Code	GR76 Euro	A mm	L mm	D mm	E mm	B mm	Weight g	
N87324008	5,02	17	45	M8	8	12	22	5
N87325508	5,75	23	61	M8	10	16	55	5
N87326510	6,25	25	71	M10	13	18	88	5
N87328510	7,27	28	92	M10	13	20	122	5

HANDLES IN TECHNOPOLYMER REVOLVING AND FLIPPABLE

ITEM: N8734

Cylindrical handles in duroplast black colour with glossy finish. Resistant to solvents, oils and greases, zinc plated steel stud with provision for locking through the spanners.

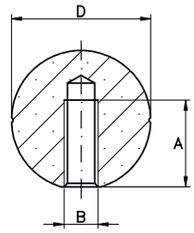


Tech. Code	GR76 Euro	A mm	B mm	S mm	D mm	N mm	M mm	d mm	G mm	F mm	E mm	H mm	L mm	Weight g	
N87346506	24,81	25	65	21	8	8	M6	2,5	7,5	4	17	86	82	85	1
N87348506	29,39	28	85	24	8	10	M6	2,5	7,5	4	20	108	105	132	1

KNOB HANDLES IN DUROPLAST - FEMALE THREAD

ITEM: N8746

Knob handles with a central groove in duroplast black colour with glossy finish. Resistant to solvents, oils and greases, threaded blind hole.

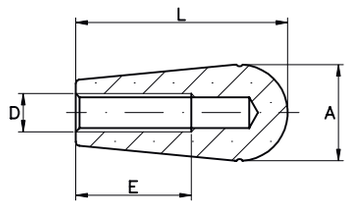


Tech. Code	GR76 Euro	D mm	B mm	A mm	Weight g	
N87462506	1,32	25	M6	17	11	10
N87463206	1,43	32	M6	20	23	10
N87463208	1,43	32	M8	20	22	10
N87464108	1,87	41	M8	20	48	10
N87464110	1,87	41	M10	20	46	10
N87464710	2,55	47	M10	23	70	10
N87464716	2,55	47	M16	23	65	10
N87466010	7,31	60	M10	25	153	10

FIXED HANDLES IN DUROPLAST - FEMALE THREAD

ITEM: N8751

Conical handles with ends rounded in duroplast black colour with glossy finish. Resistant to solvents, oils and greases, threaded blind hole.

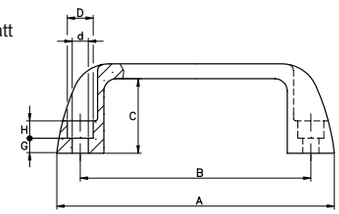


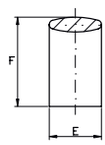
Tech. Code	GR76 Euro	A mm	L mm	D mm	E mm	Coil weight g	
N87514006	1,83	22	40	M6	25	18	10
N87514008	1,83	22	40	M8	25	17	10

HANDLES IN TECHNOPOLYMER - THROUGH HOLE

ITEM: N8756

Handles technopolymer black colour re-enforced with glass fibres, matt finish, through hole for fixing with screws TCEI UNI5931 M8.



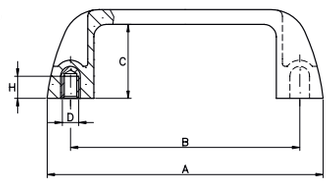


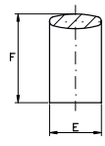
Tech. Code	GR76 Euro	B mm	A mm	E mm	F mm	C mm	G mm	H mm	D mm	d mm	Weight g	
N875611785	2,92	117	139	26	41	34	6	9	13	8,5	40	10

HANDLES IN TECHNOPOLYMER - THREADED BLIND HOLE

ITEM: N8757

Handles in technopolymeer black colour re-enforced with glass fibers, matt finish, brass bush with threaded blind hole.



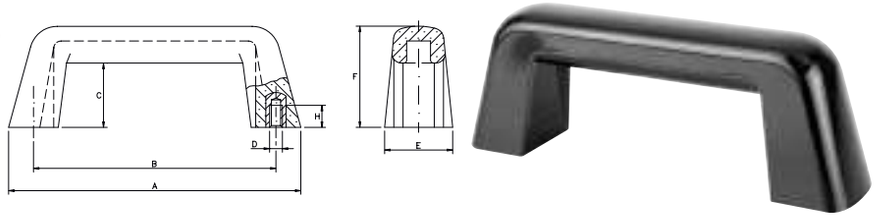


Tech. Code	GR76 Euro	B mm	A mm	E mm	F mm	C mm	H mm	D mm	Weight g	
N875709306	4,10	93,5	112	21	36	30	9	M6	33	10
N875711808	4,35	117	139	26	41	34	9	M8	49	10
N875713208	4,84	132	156	27	45	37	9	M8	64	10
N875717908	6,66	179	204	28	50	42	9	M8	82	10

HANDLES IN DUROPLAST - THREADED BLIND HOLE

ITEM: N8758

Handles in duroplast black colour with glossy finish. Resistant to solvents, oils and greases, brass bush with threaded blind hole.

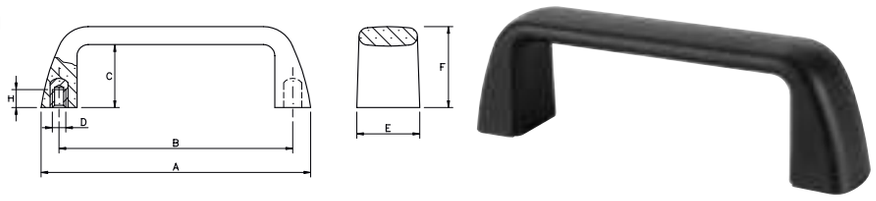


Tech. Code	GR76 Euro	B mm	A mm	C mm	E mm	F mm	H mm	D mm	Weight g	
N875811708	7,05	117	140	30	30	48	15	M8	125	10

HANDLES IN TECHNOPOLYMER - THREADED BLIND HOLE

ITEM: N8759

Handles in technopolymer black colour, brass bush with threaded blind hole.

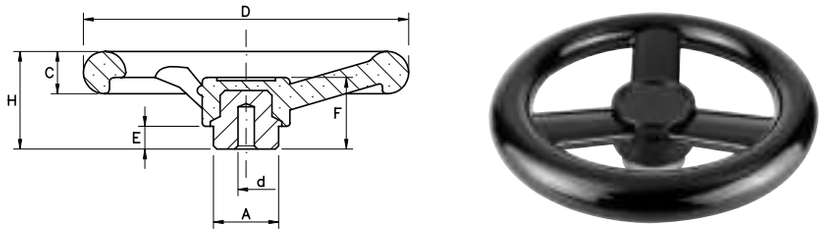


Tech. Code	GR76 Euro	B mm	A mm	E mm	F mm	C mm	H mm	D mm	Weight g	
N875911708	3,99	117	133	26	40	32	9	M8	61	10

SPOKED HANDWHEELS IN RE-ENFORCED DUROPLAST

ITEM: N8761

Black re-enforced highly resistant duroplast body with glossy finish. Resistant to solvents, oils and greases, protruding hub zinc plated with blind hole which can be expanded to the measurement required.

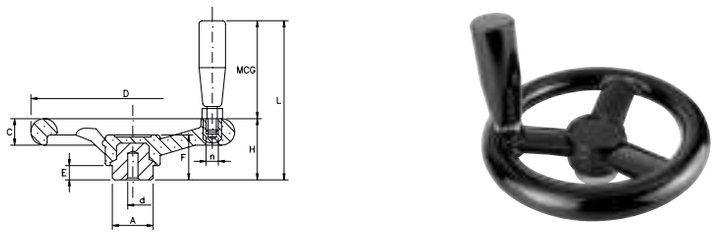


Tech. Code	GR76 Euro	D mm	H mm	A mm	d mm	F mm	E mm	C mm	Weight g	
N8761100	14,74	100	40	24	4	34	11	15	162	1
N8761125	14,88	125	46	24	6	37	13	17	260	1
N8761150	23,42	150	49	32	6	38	13	20	385	1
N8761175	31,71	175	56	40	6	42	16	22	611	1
N8761200	33,31	200	61	40	6	45	16	24	761	1
N8761250	49,64	250	72	48	8	50	17	28	1210	1
N8761300	76,82	300	78	58	8	56	18	34	2015	1

SPOKED HANDWHEELS IN RE-ENFORCED DUROPLAST WITH HANDLE

ITEM: N8771

Black re-enforced highly resistant body with glossy finish. Resistant to solvents, oils and greases, protruding hub zinc plated with blind hole which can be expanded to the measurement required. Revolving handle made of steel stud.



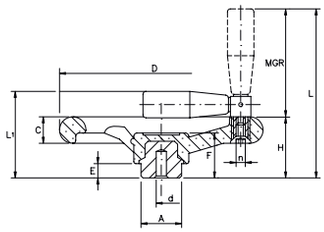
Tech. Code	GR76 Euro	D mm	H mm	L mm	C mm	A mm	d mm	E mm	F mm	n mm	Weight g	Handles spare part	
N8771100	22,45	100	40	85	15	24	4	11	34	M8	191	N87324008	1
N8771125	23,92	125	46	107	17	24	6	13	37	M8	309	N87325508	1
N8771150	31,92	150	49	120	20	32	6	13	38	M10	484	N87326510	1
N8771175	44,75	175	56	127	22	40	6	16	42	M10	694	N87326510	1
N8771200	46,22	200	61	153	24	40	6	16	45	M10	897	N87328510	1
N8771250	61,25	250	72	164	28	48	8	17	50	M10	1367	N87328510	1
N8771300	93,92	300	78	170	34	58	8	18	56	M10	2130	N87328510	1

Indivisible package Suggested retail package - Unit price

SPOKED HANDWHEELS IN RE-ENFORCED DUROPLAST WITH HANDLE

ITEM: N8772

Black re-enforced highly resistant body with glossy finish. Resistant to solvents, oils and greases, protruding hub zinc plated with blind hole which can be expanded to the measurement required. Handle rotatable and foldable for reduced dimensions and operators safety.

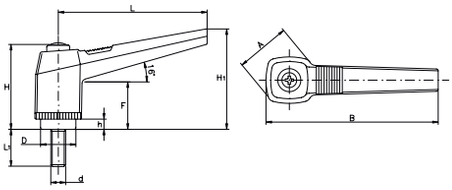


Tech. Code	GR76 Euro	D mm	H mm	L mm	L1 mm	C mm	A mm	d mm	E mm	F mm	n mm	Weight g	Handles spare part	
N8772150	66,79	150	49	131	70	20	32	6	13	38	M6	490	N87346506	1
N8772175	74,90	175	56	138	77	22	40	6	16	42	M6	700	N87346506	1
N8772200	78,38	200	61	166	85	24	40	6	16	45	M6	912	N87348506	1
N8772250	98,24	250	72	177	96	28	48	8	17	50	M6	1380	N87348506	1
N8772300	126,90	300	78	183	102	34	58	8	18	56	M6	2142	N87348506	1

CLAMP LEVERS - MALE THREAD

ITEM: N8781

Clamp levers in technopolymer in fiber glass, black colour with matt finish, male thread zinc plated.

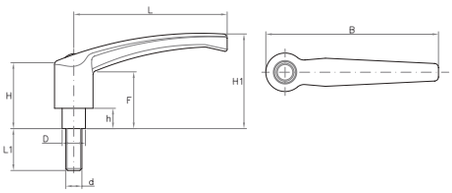


Tech. Code	GR76 Euro	L mm	d	L1 mm	H mm	A mm	B mm	H1 mm	F mm	D mm	h mm	Weight g	
N8781420520	3,29	42	M5	20	29	19	50	32	17	12	3	13	10
N8781420615	3,31	42	M6	15	29	19	50	32	17	12	3	14	10
N8781420620	3,31	42	M6	20	29	19	50	32	17	12	3	15	10
N8781420630	3,53	42	M6	30	29	19	50	32	17	12	3	16	10
N8781630620	3,87	63	M6	20	39	25	73	43	21	15	4	28	10
N8781630630	3,99	63	M6	30	39	25	73	43	21	15	4	30	10
N8781630640	4,05	63	M6	40	39	25	73	43	21	15	4	31	10
N8781630820	3,89	63	M8	20	39	25	73	43	21	15	4	33	10
N8781630825	3,93	63	M8	25	39	25	73	43	21	15	4	34	10
N8781630830	4,02	63	M8	30	39	25	73	43	21	15	4	36	10
N8781630840	4,07	63	M8	40	39	25	73	43	21	15	4	38	10
N8781630850	4,16	63	M8	50	39	25	73	43	21	15	4	39	10
N8781801030	5,12	80	M10	30	48	30	92	54	27	19	6	61	10
N8781801040	5,25	80	M10	40	48	30	92	54	27	19	6	66	10
N8781801050	5,44	80	M10	50	48	30	92	54	27	19	6	71	10
N8781801060	5,66	80	M10	60	48	30	92	54	27	19	6	78	10
N8781801250	6,27	80	M12	50	48	30	92	54	27	19	6	95	10
N87811001250	9,19	100	M12	50	58	36	115	66	30	25	8	126	10
N87811001260	9,66	100	M12	60	58	36	115	66	30	25	8	138	10

METAL CLAMP LEVERS - MALE THREAD

ITEM: N8783

Clamp levers with zinc alloy lever painted orange with toothed threaded body in burnish steel, male thread in burnish steel.

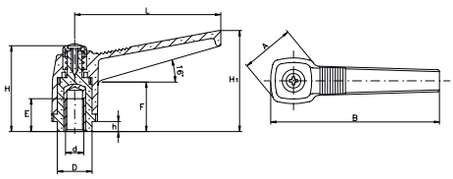


Tech. Code	GR76 Euro	L mm	d	L1 mm	D mm	H1 mm	H mm	h mm	F mm	B mm	Weight g	
N8783440530	6,58	44	M5	30	9,5	36	23	5	21	52	40	10
N8783440620	6,25	44	M6	20	9,5	36	23	5	21	52	40	10
N8783440630	6,58	44	M6	30	9,5	36	23	5	21	52	41	10
N8783650630	8,90	65	M6	30	11,5	47	33	10	28	75	80	10
N8783650830	9,10	65	M8	30	11,5	47	33	10	28	75	84	10
N8783650840	9,29	65	M8	40	11,5	47	33	10	28	75	87	10
N8783801040	14,34	80	M10	40	19	62	41	12	37	94	198	10
N8783801050	14,72	80	M10	50	19	62	41	12	37	94	204	10
N8783941250	20,92	94	M12	50	23	67	48	12	44	109	298	10

LEVER CLAMPS - FEMALE THREAD

ITEM: N8785

Lever clamp in technopolymer re-enforced with fiber glass black colour with matt finish, brass bush with threaded blind hole.

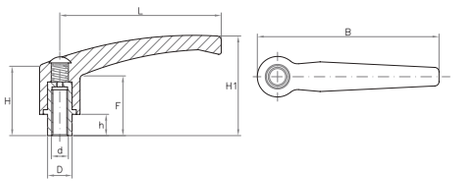


Tech. Code	GR76 Euro	L mm	d	H mm	A mm	B mm	H1 mm	F mm	D mm	h mm	E mm	Weight g	
N87854206	3,22	42	M6	29	19	50	32	17	12	3	9	11	10
N87856306	3,69	63	M6	39	25	73	43	21	15	4	13	23	10
N87856308	3,69	63	M8	39	25	73	43	21	15	4	13	24	10
N87858010	4,80	80	M10	48	30	92	54	27	19	6	16	44	10
N878510012	7,91	100	M12	58	36	115	66	30	25	8	18	83	10

METAL LEVER CLAMPS - FEMALE THREAD

ITEM: N8787

Lever clamp with zinc alloy lever painted orange, toothed threaded body in burnished steel, female thread.

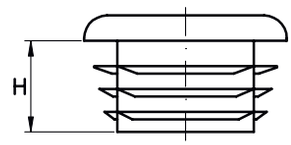


Tech. Code	GR76 Euro	L mm	d	E mm	D mm	H1 mm	H mm	h mm	F mm	B mm	Weight g	
N87874406	5,42	44	M6	8	9,5	36	23	5	21	52	34	10
N87876508	7,76	65	M8	11	11,5	47	33	10	28	75	70	10
N87878010	12,02	80	M10	18	19	62	41	12	37	94	167	10
N87878012	12,02	80	M12	18	19	62	41	12	37	94	161	10

HOLE COVER PLUGS SQUARE SHAPE IN BLACK POLYETHYLENE

ITEM: N8850

Hole cover plugs in black polyethylene with a thin layer, model for square tubes. Other dimensions supplied on request minimum package 100 pieces.



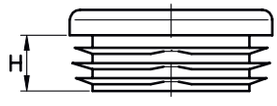
Tech. Code	GR76 Euro	External dimension of the tube mm	Thickness of the tube mm	H mm	
N88500201	14,72	20 x 20	1 - 3	11	100
N88500301	20,74	30 x 30	1 - 2,5	11,5	100
N88500401	54,75	40 x 40	1 - 3	14	100

Price for 100 pieces

HOLE COVER PLUGS - ROUND SHAPE IN BLACK POLYETHYLENE

ITEM: N8855

Hole cover plugs in black polythylene with a thin layer, model for round tubes. Other dimensions supplied on request. Minimum package of 100 pieces.



Tech. Code	GR76 Euro	External diameter of the tube mm	Thickness of the tube mm	H mm	
N88550201	15,20	20	1 - 2	11,4	100
N88550221	16,99	22	1 - 2	11,5	100
N88550231	(18,75)	23	1 - 2,5	11,5	100
N88550251	19,37	25	1 - 3	11,5	100
N88550301	27,31	30	1 - 2	11,6	100

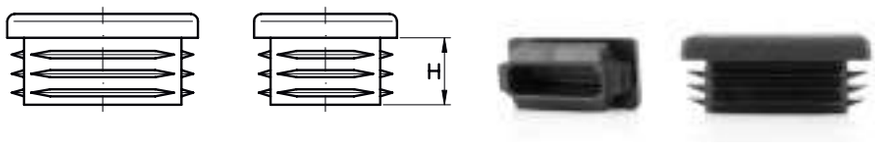
Price for 100 pieces

Indivisible package Suggested retail package - Unit price

HOLE COVER PLUGS RECTANGULAR SHAPE IN BLACK POLYETHYLENE

ITEM: N8860

Hole cover plugs in black polyethylene with a thin layer, model for rectangular tubes. Other dimensions supplied on request. Minimum package of 100 pieces.



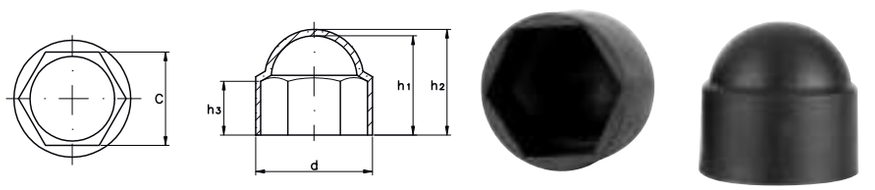
Tech. Code	GR76 Euro	External dimension of the tube mm	Thickness of the tube mm	H mm	
N88600400201	31,92	40 x 20	1 - 2	12	100
N88600400251	42,59	40 x 25	1 - 3	11,5	100
N886005002515	47,90	50 x 25	1,5 - 2,5	14,5	100

Price for 100 pieces

NUT COVERS IN BLACK POLYETHYLENE

ITEM: N8870

Nut covers with a hemispherical cap in black polyethylene. Other dimensions supplied on request. Package of 1000 pieces.



Tech. Code	GR76 Euro	Exagonal mm	For nut	C mm	d mm	h1 mm	h2 mm	h3 mm	
N887013	12,78	13	M8	12,8	16,8	14	15	9	100
N887017	16,63	17	M10	16,7	21,3	18,5	19,5	9	100

Price for 100 pieces

POLISHED IRON STRAPS

ITEM: N9100

Breaking load 70/75 Kg/mm², rounded edges, oiled surface, individually wrapped roll.

Tech. Code	GR76 Euro	Dimensions mm	Rolls in package	Package weight ab. kg
N91001332	132,70	13 x 0,5	2	32
N91001640	165,60	16 x 0,5	2	40
N91001944	187,50	19 x 0,6	2	44

HIGH-RESISTANCE BLUE IRON STRAPS

ITEM: N9115

Breaking load 80/85 Kg/mm², rounded edges, waxed surface.

Tech. Code	GR76 Euro	Dimensions mm	Roll weight ba. kg
N91151624	195,36	16 x 0,5	24
N91151927	148,80	19 x 0,6	27

METAL SECURITY SEALS

ITEM: N9131

Security seals in metal. Used with strapping tools N9200.

Tech. Code	GR76 Euro	Dimension mm	Strap mm	Box pcs
N913113	58,74	13 x 27	13	2000
N913116	59,25	16 x 27	16	2000
N913120	74,25	20 x 27	19/20	2000

SHEARS FOR METALLIC STRAPS

WODEX

ITEM: WX3960

Shears **PREMIUM QUALITY** in hot forged steel for cutting metal straps.
Comfortable and resistant PVC coated handles.

Tech. Code	GR51 Euro	L mm	Blade mm	Max. capacity mm	Weight g
N9137250	33,10	250	32	25 x 0.6	410

ITEM: WX3965

Tech. Code	GR51 Euro	L mm	Blade mm	Max. capacity mm	Weight g
N9138270	28,10	270	30	25 x 0.6	425

SHEARS FOR CUTTING METAL STRAPS

ITEM: HIT JAPAN SS-450

Heavy Duty shears specially produced in special steel, allow cutting of any type of metal strap with minimum effort. Non-slip rubber handle.

Tech. Code	GR76 Euro	Length mm	Blade mm	Max capacity mm	Weight g
N953851	239,00	450	55	51 x 1,2	1400

PLASTIC STRAPS IN POLYROPYLENE PP BLACK KNURLED

ITEM: N9142

Plastic straps in polyropylene isostatic PP. Its econimical and practical features of usage makes it an ideal packaging solution for most varied sectors of the packaging industry, 100% re-cyclable. Used with manual strapping tools. Electrical, pneumatic and battery. Closure by metal seals or thermo-welding.

- Specific weight: 0,91 g/cm3
- Resistance: 28 - 32 kg/mm²
- Elongation: 15 - 35%
- Temperature process usage: da -40° a +100°C
- Tolerance on listed data: +/- 5%

Tech. Code		N914212060	N914212080	N914215060	N914215080
GR76	Euro	121,39	134,51	135,71	128,13
Dimension	mm	12 x 0,60	12 x 0,80	15 x 0,60	15 x 0,80
Ø External	mm	560	560	560	560
Width	mm	160	160	160	160
Roll hole	mm	400	400	400	400
Breaking load	kg	151	230	218	299
Coil	m	2500	2000	2000	1500

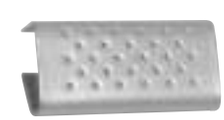
Price displayed per reel.

SEALS FOR PLASTIC STRAPS IN POLYROPYLENE

ITEM: N9159

In tooled galvanized finish.

Tech. Code	GR76 Euro	Dimension mm	Strap mm	Box pcs
N915913	33,50	13 x 26	12	2000
N915916	43,70	16 x 26	15	2000



Indivisible package Suggested retail package - Unit price

HEAT SEALABLE PLASTIC STRAPS IN POLYROYLENE PET GREEN KNURLED

ITEM: N9180

Plastic straps with an high durability of strength and a percentage of elongation, recommended as a valid alternative to steel strapping unalterable in conditions of temperature changes and insensitive to ultraviolet rays. Used for manual tensioning devices, electric, battery, pneumatic and automatic strapping systems.
100% recyclable

- Specif weight: 1,38 g/cm3
- Breaking load point: 40 - 50 Kg/mm²
- Elongation: 10 - 15%
- Temperture process usage: da -20° a +120°C
- Tolerance on listed data +/- 5%

Tech. Code	GR76 Euro	Dimension mm	Ø External mm	Width mm	Roll hole mm	Breaking load kg	Coil m
N918015060	169,80	15 x 0,60	570	160	405	310	2000
N918015070	182,54	15 x 0,70	570	160	405	330	1750
N918015080	176,10	15 x 0,80	570	160	405	430	1500
N918016088	176,81	16 x 0,88	570	160	405	520	1220
N918019100	191,86	19 x 1,00	570	160	405	800	1000

Price displayed per reel.

COMPOSITE POLYESTER STRAPS

ITEM: N9285

Polyester straps, fiber twisted threads protected by a special resin coating, high tenacity. Thanks to the compact structure it easily slips under pallets and the inside of container hooks. It has a good resistance to being cut by sharp edges and does not need the use of protected corners. It retains it shape and tension even in extreme enviorment conditions, shock absorbent during transport, resistant to chemical agents, UV light, waterproof. It does not rust or rot with humidity. The temperture of use ranges from -40 to +100°C. It can perfectly adapt to the shape of the load without damaging or scratching the surfaces.

No danger to the operator when removing or fixing, you only need a pair of scissors. The straps are made of threaded polyester with steel wire hooks. Suitable for fixing loads in containers, on trucks and vans.

Accepted by all European State railways (BN 918 090).

Tech. Code		N928516	N928519	N928525	N928532
GR76	Euro	228,00	180,00	208,00	208,00
Dimension	mm	16	19	25	32
Ø External	mm	400	400	400	400
Width	mm	190	190	190	190
Roll hole	mm	200	200	200	200
Breaking load	kg	425	625	925	1500
CRNF	kg	690	1000	1480	2400
Coil	m	850	500	450	300
📦		2	2	2	2

CRNF = Breaking load of strap + hook

Price displayed per reel.

STRAPPING TEXTILES COATED WITH HOT MELT IN POLYESTER

ITEM: N9284

Thanks to their elongation charateristics the polyester strapping has an high capacity of resistance and shock absorption, suitable for the fixing of heavy loads like (timber, glass, marble, machinery, full loads on rails, trucks etc.) The polyester threads are held together by a special hot melt adhesive that increases the resistance to the abrasion but does not compromise the flexibility of handling. In case of loads of sharp edges, the use of protective corners is recommended.

Tech. Code		N928413	N928416	N928419
GR76	Euro	58,00	111,40	98,10
Dimension	mm	13	16	19
Ø External	mm	290	290	290
Width	mm	140	140	140
Roll hole	mm	76	76	76
Breaking load	kg	400	475	570
CRNF	kg	570	650	800
Coil	m	500	850	600
📦		2	2	2

CRNF = Breaking load of strap + hook

Price displayed per reel.

HOOKS MADE OF GALVANIZED STEEL FOR HOLDING STRAPPING TEXTILES AND COMPOSITES

ITEM: N9286

Hooks made of galvanized steel. Used for hot melt strapping textiles and polyester composite straps.

Tech. Code		N928613	N928616	N928619	N928625	N928632
GR76	Euro	73,50	94,10	113,60	150,40	146,00
Dimension	mm	13 x 3,3	16 x 3,5	19 x 4	25 x 6	32 x 7
Box	pcs	1000	1000	1000	400	250

BATTERY STRAPPING TOOL

ITEM: N9288

Battery strapping tool for plastic strapping and welding vibratory.
Used for strap embossed polyester or smooth polypropylene.

Closing resistance:
80% of the load of breakages (variations depending of the type of strapping)

Standard adaption:
1 battery
1 battery charger

Tech. Code	GR78 Euro	Battery	Straps PP-PET mm	Straps PET mm	Max tension N	Tension speed m/min	Dimension mm	Weight kg
N92881216	2180,30	14.8V-2 A/h LI-PO	12-16 x 0,5-1,05	12-16 x 0,5-1,05	2200	12	290 x 140 x 165	3,6
N92881619	(3020,60)	14.8V-3 A/h LI-PO	16 x 0,5-1,05	19 x 0,5-1,05	3500	12	315 x 140 x 183	3,8

BATTERY SEALING TOOL FOR PLASTIC STRAPPING

ITEM: N9289

Battery sealing tool for plastic straps with brushless motor for smooth and embossed plastic strap welding (PP-PET). Tensioning, welding and cutting are completley automatic. With the battery fully charged up to 400 strapping cycles can be performed depending on the type of strap used and the welding time.

Supplied with standard equipment:
1 battery
1 battery charger

Tech. Code	GR78 Euro	Battery	Straps PP-PET mm	Max tension N	Welding time Sec.	Dimension mm	Weight kg
N928916	2376,83	18V / 4Ah Lion	12 - 16 x 0,65 - 1,00	2500	0,3 - 2,7	330 x 150 x 130	3,4
N928919	2567,78	18V / 4Ah Lion	16 - 19 x 0,70 - 1,27	4000	0,3 - 2,7	330 x 150 x 130	3,5

STRAP STRETCHERS FOR METALLIC STRAPS WITHOUT SEALS

ITEM: N9210

Interlocking closing system and strap cutting, easy adjustment to the desired size, the resistance of the closure without seal is higher than the one with seal and greatly reduces the execution time.

Tech. Code	GR76 Euro	Strap mm	Strap thickness mm
N921013161920	(1122,00)	13-16-19-20	max. 0.6

STRAP STRETCHERS FOR PLASTIC STRAPS WITH SEAL

ITEM: N9220

Long lever for reduced closing effort.

Tech. Code	GR76 Euro	Strap mm
N92201215	192,30	13

Indivisible package Suggested retail package - Unit price

STRAP STRETCHER FOR PLASTIC STRAPS WITH SEAL

ITEM: N9230

Long lever of pressed steel and with anatomic handles, reduced closing effort and excellent grip comfort.

Tech. Code	GR76 Euro	Strap mm
N923015	262,00	16

MANUAL POLYESTER STRAP TENSIONER

ITEM: N9295

Manualtensioners allow operators to bring polyester strap to desired tension.

Tech. Code	GR76 Euro	Strap mm
N9295T25	366,00	13 - 16 - 19 - 25

MANUAL POLYESTER STRAP TENSIONER

ITEM: N9296

Manualtensioners allow operators to bring polyester strap to desired tension.

Tech. Code	GR76 Euro	Strap mm
N9296T50	(1273,80)	19 - 25 - 32 - 35 - 40 - 50

TROLLEY STRAP HOLDERS FOR METAL STRAPS

ITEM: N9256

Steel painted profile structure with strap holder. Tray for straps and seals.

Tech. Code	GR76 Euro	Width of straps mm
N92561332	210,30	13 - 32

TROLLEY STRAP HOLDERS FOR PLASTIC STRAPS

ITEM: N9270

Steel painted profile structure with strap holder and tray for straps and seals.

Tech. Code	GR76 Euro	Ø Coil size mm
N9270F400	235,00	400/406

STRAP HOLDERS FOR PLASTIC STRAPS

ITEM: N9280

Painted steel profile structure, suitable for coils with a 62 mm hole.

Tech. Code	GR76 Euro	Coil hole mm
N9280F62	95,15	62

ITEM: N9281

Steel painted profile structure.

Tech. Code	GR76 Euro	Ø Coil size mm
N9281F060	146,20	60/62

TROLLEY STRAP HOLDERS FOR PLASTIC STRAPS

ITEM: N9290

Trolleys with very strong frames, hardwearing-extra sturdy, large diameter wheels for easy pulling also on gravvelled or icy grounds. Brake, clutch for handy-use of the rewinding coil system.

Tech. Code	GR76 Euro	Ø coil size mm
N929000	354,00	200

POLYESTER STRAP SHEARS

ITEM: N9291

Dual-blade, ergonomically designed, safety strap shears, 2 blades (smooth and serrated), ultra precise, fray free cuts. Comfortable, secure fit for your hand also with gives.
Advanced fulcrum for greater cutting force.

Tech. Code	GR76 Euro	Blades
N929100	19,00	1 smooth + 1 serrated

TRANSPARENT STRETCH FILMS

ITEM: N9300

Four-reel pack each equipped with a plastic distributor and a rubber holding handle. High elastic properties and puncture resistance, suitable for assembling profiles, panels, cornices and limited surfaces in general, non-toxic and recyclable.

Tech. Code	GR76 Euro	Thickness Microns	Reel height mm	Length m
N9300100/4	53,24	23	100	200

Indivisible package Suggested retail package - Unit price

TRANSPARENT STRETCH FILMS

ITEM: N9310

Thirty-reel pack with one plastic distributor and a rubber holding handle.

Tech. Code	GR76 Euro	Thickness Microns	Reel height mm	Length m
N9310100/30	147,00	23	100	200

ITEM: N9320

High elastic properties and puncture resistance, suitable for a broad range of packaging needs.

Tech. Code	GR76 Euro	Thickness Microns	Reel height mm	Reel hole mm	Reel weight kg	Package
N9320500/6	79,00	23	500	50	2.5	6 Reels

TRANSPARENT STRETCH FILMS

ITEM: N9370

Single reel.

Tech. Code	GR76 Euro	Thickness Microns	Reel height mm	Reel hole mm	Reel weight kg
N937023500	36,00	23	500	75	5
N937030500	36,00	30	500	75	5
N937035500	36,00	35	500	75	5

HANDLES FOR STRETCH FILMS

ITEM: N9340

For reels with a 50 mm hole.

Tech. Code	GR76 Euro	Coil hole mm
N9340MAN	11,00	50

COLOURED STRETCH FILMS

ITEM: N9350

High elastic properties and puncture resistance, suitable for a broad range of packaging needs.

Tech. Code	GR76 Euro	Colour	Thickness Microns	Reel height mm	Reel hole mm	Reel weight kg	Package
N9350BIANCO	159,00	White	30	500	75	4	4 Reels
N9350NERO	159,00	Black	30	500	75	4	4 Reels

DISTRIBUTORS FOR STRETCH FILM COILS

ITEM: N9360

Made of steel for professional use, equipped with an adjustable clutch that provides constant film tension, suitable for reels of 500 mm height and with 38 - 50 - 75 mm hole.

Tech. Code	GR76 Euro	Coil height mm	Coil hole mm
N9360DIST	102,30	500	38 - 50 - 75

BOX SEALING TAPES

ITEM: N9400

Silent polypropylene suitable for all packing and packaging needs.

Tech. Code	GR76 Euro	Colour	Height mm	Length m
N9400AV	2,33	Tobacco	50	66
N9400TRASP	2,33	Transparent	50	66
N9400BIANCO	2,33	White	50	66

Tech. Code	GR76 Euro	Colour	Height mm	Length m
N9400132AV	4,50	Tobacco	50	132
N9400132TRASP	4,50	Transparent	50	132
N9400132BIANCO	4,50	White	50	132

ADHESIVE MASKING TAPES

ITEM: N9410

Paper, suitable for covering and marking out areas for painting operations.

Tech. Code	GR76 Euro	Height mm	Length m
N941019	2,83	19	50
N941025	3,86	25	50
N941030	4,62	30	50
N941038	5,67	38	50
N941050	6,68	50	50

DOUBLE-SIDED TAPES

ITEM: 22500 UNIVERSALE

NEW

Double-sided adhesive tapes with polypropylene backing. Synthetic rubber and resin based adhesive on bisilicon paper. Very strong, for use in the industrial sector and assembly in general.

Tech. Code	GR76 Euro	Height mm	Length m	
N941519	4,53	19	25	48
N941525	5,38	25	25	36
N941550	9,97	50	25	18

INSULATING ADHESIVE TAPES

3M

ITEM: TEMFLEX 165

NEW

Vinyl insulation tape for professional indoor and outdoor use. Can be used for repairs, wiring.
Good resistance to abrasion, acid, alkali. High dielectric strength and environmental temperature resistance.

Features:
- Stretching at breaking point: 200%
- Isolation resistance: >1x10 Ω
- Dielectric rigidity: 40 KV/mm
- Operating temperature: 0 / +90°C

Tech. Code	GR76 Euro	Colour	Width mm	Thickness mm	Length m	
N942115N	2,85	Black	15	0.15	25	10
N942119N	3,75	Black	19	0.15	25	10

Certified VDE, IEC 60454-3-1-5/F-PVCP/90

INSULATING ADHESIVE TAPES

ELEMATIC

ITEM: N9422

Insulating adhesive tapes in PVC self-extinguishing with a high degree of electrical isolation (600 V) and mechanical protection for any applications in civil and industrial plants.

Features:
- Stretching at breaking point: 200%
- Electric rigidity: 40 kV/mm
- Operating temperture: -18 / +90°C

Tech. Code	GR76 Euro	Colour	Width mm	Thickness mm	Length m	
N942215N	1,04	Black	15	0,13	10	10
N942219B	2,82	White	19	0,13	25	10
N942219N	2,82	Black	19	0,13	25	10
N942219R	2,82	Rosso	19	0,13	25	10
N942225N	3,59	Black	25	0,13	25	8
N942225B	4,33	White	25	0,15	25	8

Conformity with the standard regulations CEI EN 60454-3-1 e BS 3924 VDE nr. 40039640

N

Indivisible package Suggested retail package - Unit price

ADHESIVE FABRIC-REINFORCED TAPES

ITEM: N9430

Reinforced, high adherence, waterproof, suitable for packing, repairing, joining and protecting a wide range of materials.
Color Silver.

Tech. Code	GR76 Euro	Height mm	Length m
N943050/25	4,62	50	25

TAPE STRETCHERS

ITEM: N9450

Plastic body, adjustable clutch, suitable for tapes with a height of up to 50 mm.

Tech. Code	GR76 Euro	Belt height mm
N9450S50	15,18	50

ADHESIVE FABRIC-REINFORCED TAPES

ITEM: 5080

Triple-layer highly tear resistant and waterproof up to four atmospheres, temperature resistant from -10°C to +70°C, suitable for high-sealing emergency repair. Silver.

Tech. Code	GR76 Euro	Height mm	Length m
N944050/50	23,00	50	50

PROTECTIVE TUBULAR NETS SHOCK-PROOF

ITEM: N9501

The polyethylene tubular net is specific for the protection of products in metal, wood, glass, particularly paint or rectified. It is very versatile and perfectly adaptable to any types of profile. Resistant to acids and solvents.

Tech. Code	GR76 Euro	Using range mm	Colour	Thickness	Roll m
N9501007	125,00	7 - 15	Arancio	Standard	500
N9501010	125,00	10 - 30	Purple	Standard	500
N9501020	125,00	20 - 50	Neutral	Standard	500
N9501020SM	207,00	20 - 50	Blue	Over dimension	500
N9501040	180,00	40 - 60	Giallo	Standard	300

Tech. Code	GR76 Euro	Using range mm	Colour	Thickness	Roll m
N9501050	177,00	50 - 80	Marrone	Standard	250
N9501070	206,00	70 - 100	Rosso	Standard	250
N9501090	206,00	90 - 160	Blue	Standard	250
N9501090SM	159,00	90 - 160	Arancio	Over dimension	100
N9501100	215,00	100 - 200	Green	Standard	250

POLYTHENE BUBBLE WRAP ROLLS

ITEM: N9520

Bubble wrap with a high shock absorbing quality, resistant to impacts and tearing, suitable for wrapping and protecting objects of any shape and size, odourless, chemically neutral and 100% recyclable.

Tech. Code	GR76 Euro	Roll height m	Roll length m	Weight per m² g	Roll kg
N95201000	235,00	1,0	200	115	23
N95201250	308,00	1,25	200	115	28,75
N95201500	358,00	1,5	200	115	34,5

CARDBOARD SHIPPING BOXES

ITEM: N9560

Double wave.

* compatible in size with the chipboard pallet

Tech. Code	GR76 Euro	Dimensions mm
N9560230	1,60	230 x 155 x 145
N9560280	3,00	280 x 180 x 200
N9560330	3,00	330 x 245 x 220
N9560425	3,30	425 x 230 x 185
N9560600	12,80	600 x 400 x 350*
N9560800	22,10	800 x 600 x 440*

WOODEN CHIPBOARD PALLETS

ITEM: N9575

Tech. Code	GR76 Euro	Dimensions mm
N9575600	14,00	600 x 400
N9575800	20,00	800 x 600

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WORKSTATION AND STORAGE

Fami Storage Systems
LISTA

P0
2 - 10
Workbenches

Fami Storage Systems
LISTA

P1
10 - 14
Toolholders cabinets

Fami Storage Systems
LISTA

P2
15 - 20
Drawers cabinets

Fami Storage Systems
LISTA

P3
20 - 28
Cabinets,
garment lockers and
battery charger cabinets

WODEX
Fami Storage Systems
iMilani
Jall

P4
29 - 37
Containers cabinets,
plastic cabinets,
scrap holders

WODEX
Fami Storage Systems
WRK

P5
37 - 41
Roller cabinets

WODEX
Jall
HIVE
LISTA

P6
42 - 51
Bolt and hooks shelves, pallets racks,
cantilever, tank stands
for drums

Jall
Justrite

P7
51 - 64
Shelves and ladders

Justrite

P8
64
Waste containers
and recycling

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STEEL TOP WORKBENCHES

ITEM: FBG01S1000F0004 - FBG01S1500F0004 - FBG01S2000F0004 - FBG01S1000F00PD - FBG01S1500F00PD - FBG01S2000F00PD

Sheet steel top with three raised edges, designed to accommodate drawers and cabinets, bolted structure. Blue Ral 5012, **supplied disassembled**.
Sheet metal thickness 3 mm.

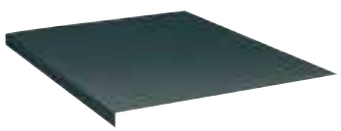
Tech. Code		P00151000	P00151500	P00152000
GR24	Euro	360,50	451,00	525,00
Dimensions	mm	1031 x 705 x 855h	1507 x 705 x 855h	2007 x 705 x 855h
Capacity	kg	1000	1000	1000
Weight	kg	40	60	110
Colour		RAL 5012	RAL 5012	RAL 5012

Tech. Code		P00151000GA	P00151500GA	P00152000GA
GR24	Euro	(371,00)	(472,00)	(552,00)
Dimensions	mm	1031 x 705 x 855h	1507 x 705 x 855h	2007 x 705 x 855h
Capacity	kg	1000	1000	1000
Weight	kg	40	60	110
Colour		RAL 7035 + RAL 7016	RAL 7035 + RAL 7016	RAL 7035 + RAL 7016

STEEL COVER COATED WITH OIL-RESISTANT RUBBER

ITEM: FBG32100007 - FBG32150007 - FBG32200007

Steel cover coated with oil-resistant rubber, suitable for workbenches with steel worktop.



Tech. Code		P0011A1000	P0011A1500	P0011A2000
GR24	Euro	134,00	185,50	237,00
For workbenches	mm	1031 x 705	1507 x 705	2007 x 705
Weight	kg	5,54	8,35	10,90

WOODEN TOP WORKBENCHES

ITEM: FBG02S1000F0004 - FBG02S1500F0004 - FBG02S2000F0004 - FBG02S1000F0008 - FBG02S1500F0008 - FBG02S2000F0008

Multiplex wood top 30mm thick. Designed to accommodate drawers and cabinets). Bolted structure. Blue Ral 5012, **supplied disassembled**.

Tech. Code		P00251000	P00251500	P00252000
GR24	Euro	360,50	451,00	525,00
Dimensions	mm	1024 x 750 x 880h	1500 x 750 x 880h	2000 x 750 x 880h
Capacity	kg	1000	1000	1000
Weight	kg	45	65	115
Colour		RAL 5012	RAL 5012	RAL 5012

Tech. Code		P00251000G	P00251500G	P00252000G
GR24	Euro	(360,50)	(451,00)	(525,00)
Dimensions	mm	1024 x 750 x 880h	1500 x 750 x 880h	2000 x 750 x 880h
Capacity	kg	1000	1000	1000
Weight	kg	45	65	115
Colour		RAL 7035	RAL 7035	RAL 7035

STEEL COVER COATED WITH OIL-RESISTANT RUBBER FOR WOODEN WORKTOPS

ITEM: FBL22300007 - FBL22600007 - FBL22900007

Steel cover coated with oil-resistant rubber, suitable for workbenches with wooden worktops.

Tech. Code		P0021A1000	P0021A1500	P0021A2000
GR24	Euro	134,00	185,50	237,00
For workbenches	mm	1024 x 750	1500 x 750	2000 x 750
Weight	kg	6,17	9,31	12,31

PAPER ROLL HOLDER KIT

NEW

ITEM: FBLIT004039

The industrial roll paper holders can hold rolls with maximum diameter of 240/300 mm.
The practical upper roll facilitates the tearing of the paper and avoids waste. It can be fixed on the wall or on perforated metal or wooden panels. Each industrial roll holder kit contains:
- 1 paper holder
- 6 dowles for perfated walls
- 4 screws for fixing on the wall or on wood.

Tech. Code		P112201
GR24	Euro	(83,00)
Dimension	mm	285 x 180 x 200 h
Load capacity	kg	5
Weight	kg	4,5

HEIGHT ADJUSTABLE WOODEN TOP WORKBENCHES

ITEM: P0027

The wooden top workbenches are designed with seat ergonomics in mind, with the option of adjusting the height from a minimum of 740 mm to a maximum of 1110 mm. Multiplex wood top 30 mm thick. **Supplied disassembled.**

Tech. Code		P002710000	P002715000	P002720000
GR24	Euro	(419,00)	(499,00)	(573,00)
Dimension	mm	1024 x 750 x 740/1100h	1500 x 750 x 740/1100h	2000 x 750 x 740/1100h
Load capacity	kg	600	600	600
Weight	kg	48	65	115
Colour		RAL 5012	RAL 5012	RAL 5012

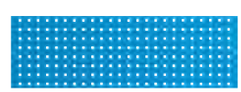
Tech. Code		P00271000GA	P00271500GA	P00272000GA
GR24	Euro	(440,00)	(509,00)	(578,00)
Dimension	mm	1024 x 750 x 740/1100h	1500 x 750 x 740/1100h	2000 x 750 x 740/1100h
Load capacity	kg	600	600	600
Weight	kg	48	65	115
Colour		RAL 7035 + RAL 7016	RAL 7035 + RAL 7016	RAL 7035 + RAL 7016

PERFORATED PANEL/SHELVES

NEW

ITEM: FBL76160004 - FBL76160008

The perforated panel can be used individually or in combination with other perforated panels to create an equipped wall that can be positioned on the workbench on a wooden panel or on the wall. The pitch between the holes are 38 mm.



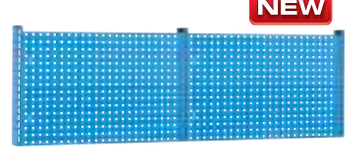
Tech. Code		P012901	P012902
GR24	Euro	(60,50)	(60,50)
Dimension	mm	953 x 31 x 304 h	953 x 31 x 304 h
Hole dimension	mm	10 x 10	10 x 10
Colour		RAL 5012	RAL 7035

SET OF PERFORATED SIDE PANELS

NEW

ITEM: WORKLOOK1001 - WORKLOOK1002 - WORKLOOK1003 - WORKLOOK1004 - WORKLOOK1501 - WORKLOOK1502 - WORKLOOK1503 - WORKLOOK1504 -WORKLOOK2001 - WORKLOOK2002

This set allows you to have everything you need to install you own equipped wall on the workbench. The two mounted ones are positioned on the sides of the counter, while the perforated panel can be used both as a support for fixing hooks and accessories and as a horizontal or inclined shelf. In the latter case, the edge must also be installed to prevent the material positioned above the shelf from falling.



Tech. Code		P0029WR01	P0029WR02	P0029WR03	P0029WR04	P0029WR05
GR24	Euro	(200,00)	(200,00)	(283,50)	(279,50)	(245,00)
Dimension	mm	1015 x 80 x 634	1015 x 80 x 634	1015 x 80 x 938	1015 x 80 x 938	1500 x 80 x 634
Colour		RAL 7035 + 7016	RAL 5012	RAL 7035 + 7016	RAL 5012	RAL 7035 + 7016
Capacity	kg	11,7	11,7	17,8	17,8	15,5

Tech. Code		P0029WR06	P0029WR07	P0029WR08	P0029WR09	P0029WR10
GR24	Euro	(245,00)	(352,00)	(348,00)	(369,00)	(369,00)
Dimension	mm	1500 X 80 X 634	1500 x 80 x 938	1500 x 80 x 938	2000 x 80 x 634	2000 x 80 x 634
Colour		RAL 5012	RAL 7035 + 7016	RAL 5012	RAL 7035 + 7016	RAL 5012
Capacity	kg	15,5	24	24	15,5	15,5

TOOL HOOKS UNIPOK

NEW

ITEM: FBLIT009007

Universal tool holder hooks that can be used both on the perforated walls and on wooden panels. The hooks for Unipok tool panels can be positioned with 4 different inclinations to create numerous combinations based on the tools, equipment and material to be organized.

Tech. Code		P112101
GR24	Euro	(22,00)
Description		13 x 26 x 30 h
Capacity	kg	5
Weight	kg	0,3

LARGE REVERSIBLE SHELVES

NEW

ITEM: FBLIT016039

The large reversible shelves allow the organization of equipment and objects of daily use. The steel shelves can be placed on perforated or wooden panels, or on concrete surfaces. Each pack contains:
- 1 steel shelf
- 6 Plugs for perforated wall
- 4 Screws for fixing to perforated wall and to wood

The supplied kit does not include material for the installation of the wall shelves.

Tech. Code		P112301
GR24	Euro	(40,50)
Dimension	mm	456 x 317 x 144 h
Capacity	kg	10
Weight	kg	2
Colour		RAL 7016

PERFORATED SIDE PANELS

ITEM: FBG15S00V0V0008 - FBG15S00V0V0004

Spedifications for P0015,P0025,P0027, P0016, P0024 and P0029 benches.
Panels to be positioned laterally in the counter 10x10 mm square hole.

Tech. Code		P0260BL01	P0260GR01
GR24	Euro	(72,50)	(72,50)
Dimension	mm	610 x 18 x 669h	610 x 18 x 669h
Colour		RAL 5012	RAL 7035

ADDITIONAL NON-SLOTTED HALF-SHELF

ITEM: FBG09S070300108 - FBG09S070300104 - FBG09S120300108 - FBG09S120300104 - FBG09S170300108 - FBG09S170300104

Specific for benches P0015, P0025, P0027, P0016, P0024 and P0029.
Non-slotted half-shelf with 100 Kg capacity.

Tech. Code		P0270BL01	P0270BL02	P0270BL03
GR24	Euro	(49,00)	(62,00)	(77,50)
Dimension	mm	760 x 300 x 35h	1260 x 300 x 35h	1760 x 300 x 35h
Colour		RAL 5012	RAL 5012	RAL 5012

Tech. Code		P0270GR01	P0270GR02	P0270GR03
GR24	Euro	(49,00)	(62,00)	(77,50)
Dimension	mm	760 x 300 x 35h	1260 x 300 x 35h	1760 x 300 x 35h
Colour		RAL 7035	RAL 7035	RAL 7035

WHEELS SET FOR BENCHES

ITEM: FKRU1252101 - FKRS1252101

Wheels set for benches P0027 e P0029 composed of 2 swivel wheels with brake and 2 fixed wheels.

Tech. Code		P0053KRS	P0053KRU
GR24	Euro	(142,00)	(89,00)
Ø	mm	125	125
Material		Elastic rubber	Synthetic non-marking rubber
Load capacity	kg	750	300

DRAWERS FOR WORKBENCHES

ITEM: FBG03S50C000104 - FBG03S50C0001PD

Specifically designed to fit workbenches P0015, P0025 and P0027.
Easy open drawers mounted on nylon bearings, key locking, complete with fittings for attaching to workbenches.
Overall width of the module: 500mm

Tech. Code		P00301C01	P00301C03
GR24	Euro	(160,00)	(167,50)
Dimension	mm	500 x 607 x 210 h	500 x 607 x 210 h
Weight	kg	8.90	8,90
Drawer capacity	kg	25	25
Colour		RAL 5012	RAL 7035 + RAL 7016

CABINETS FOR WORKBENCHES

ITEM: FBG03S50C000204 - FBG03S50C000404 - FBG03S50C000504 - FBG03S50C000304 - FBG03S50C0002PD - FBG03S50C0004PD - FBG03S50C0005PD - FBG03S50C0003PD

Specifically designed to fit workbenches P0015, P0025 and P0027.
Easy open drawers mounted on nylon bearings, key lock on each drawer and door, complete with fittings for attaching to workbenches.
Overall width of the module: 500mm

Tech. Code		P00403C01	P00403C03	P0040CP01	P0040CP03
GR24	Euro	(384,00)	(407,00)	(263,00)	(278,50)
Dimension	mm	500 x 607 x 570h	500 x 607 x 570h	500 x 607 x 570h	500 x 607 x 570h
Type		three drawers	three drawers	drawer and door	drawer and door
Weight	kg	24.30	24,30	15.20	15,20
Colour		RAL 5012	RAL 7035 + RAL 7016	RAL 5012	RAL 7035 + RAL 7016

Tech. Code		P0040P01	P0040P03	P00403C05	P00403C04
GR24	Euro	(227,00)	(232,00)	(525,50)	(556,50)
Dimension	mm	500 x 607 x 570h	500 x 607 x 570h	500 x 607 x 570h	500 x 607 x 570h
Type		door and shelf	porta e piano	Four drawers	Four drawers
Weight	kg	12.00	12,00	25,7	25,70
Colour		RAL 5012	RAL 7035 + RAL 7016	RAL 5012	RAL 7035 + RAL 7016

CABINETS FOR WORKBENCHES - 630MM

ITEM: FBG03S63C000204 - FBG03S63C000304 - FBG03S63C000404 - FBG03S63C000504 - FBG03S63C0002PD - FBG03S63C0004PD - FBG03S63C0005PD - FBG03S63C0003PD

Specifications for P0015, P0025 and P0027 benches.
Simple extraction with sliding on nylon bearings, lock with key on each single drawer and on the door, complete with fixing material to the workbenches. **Overall width of the module: 629 mm**

Tech. Code		P02403C01	P02403C03	P02403C02	P02403C04
GR24	Euro	(427,50)	(453,50)	(556,50)	(587,50)
Dimension	mm	629 x 607 x 570 h	629 x 607 x 570 h	629 x 607 x 570 h	629 x 607 x 570 h
Type		tre cassetti	tre cassetti	quattro cassetti	quattro cassetti
Weight	kg	25,10	25,10	29,40	29,40
Colour		RAL 5012	RAL 7035 + RAL 7016	RAL 5012	RAL 7035 + RAL 7016

Tech. Code		P02403P01	P02403CP03	P02403P02	P02403P04
GR24	Euro	(294,00)	(304,00)	(247,50)	(252,50)
Dimension	mm	629 x 607 x 570 h	629 x 607 x 570 h	629 x 607 x 570 h	629 x 607 x 570 h
Type		cassetto e porta	cassetto e porta	porta	porta e piano
Weight	kg	16,90	16,90	14,80	14,80
Colour		RAL 5012	RAL 7035 + RAL 7016	RAL 5012	RAL 7035 + RAL 7016

BOTTOM CLOSING FOR CABINETS

ITEM: FBG16S50V0V0008 - FBG16S50V0V0004 - FBG16S63V0V0008 - FBG16S63V0V0004

Specific for cabinets P0040CP01,P0040P01, P02403P01, P02403P02, P0040CP03, P0040P03,P02403P04 e P02403P04. To be used in cabinets with doors when the half-shelf is not present.

Tech. Code		P0250BL01	P0250BL02	P0250GR01	P0250GR02
GR24	Euro	(51,50)	(51,50)	(51,50)	(51,50)
Length	mm	500	629	500	629
Colour	mm	RAL 7035	RAL5012	RAL 7035	RAL 5012

Indivisible package Suggested retail package - Unit price

SWIVEL CHAIRS WITH LIFT ADJUSTMENT

ITEM: FQZ12100007 - FQZ12200007

Painted steel structure, beech seat and back, five star base with vibration-damping feet, chrome-plated footrest (cod. P03102).

Tech. Code	GR24 Euro	Adjustment mm	Weight kg
P03101	(214,00)	445 ÷ 625	10,00
P03102	(276,50)	510 ÷ 760	10,90

ITEM: P0320

Painted steel structure, five-star base with self-locking wheels.

Tech. Code	GR24 Euro	Adjustment mm	Finish	Weight kg
P03201	(267,00)	470 ÷ 645	Beech	11,10
P03202	(361,00)	495 ÷ 670	Polyurethane	12,40

SWIVEL CHAIR WITH SCREW ADJUSTMENT

ITEM: P0325

Chrome-plated steel structure, screw elevation with lock, beech seat and back, five-star base with vibration-damping feet, footrest.

Tech. Code	GR80 Euro	Adjustment mm
P03252	(226,00)	560 ÷ 820

SWIVEL STOOLS WITH GAS ELEVATION

ITEM: P0326

Stool with swivel seat, footrest circle, runners, gas lift. Height and depth adjustment of the backrest. Seat and back upholstered and covered in black polyurethane.

Tech. Code	GR80 Euro	Adjustment mm
P032601	(162,00)	420 ÷ 550
P032602	(204,90)	590 ÷ 850

ITEM: P0315

Painted steel structure, polyurethane seat and back, five-star base with vibration-damping feet, chrome-plated footrest.

Tech. Code	GR24 Euro	Adjustment mm	Weight kg
P03152	(425,50)	535 ÷ 785	13,00

LEGEND OF VARIABLE COLOURS

LISTA

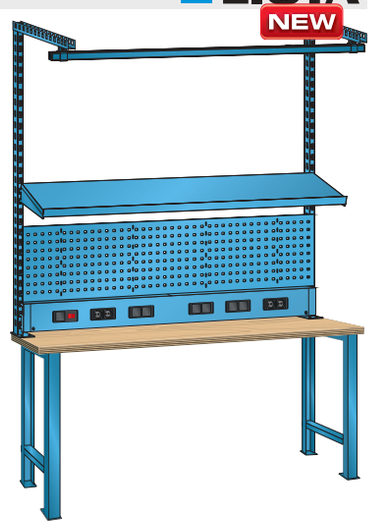
UNIVERSAL SUPERSTRUCTURE

LISTA

ITEM: 89.072

Universal superstructure designed to work ergonomically, clearly and individually. The contoured design allows for nearly invisible cable routing. Consisting of 2 uprights for surface mounting including support brackets left and right, 2 upright overhangs, 1 sliding rail with mounting kit, 1 trolley, 1 perforated rear wall, 1 smooth adjustable shelf 350mm deep, 1 rear wall for preconfigured energy and 1 switch with 5 230V sockets (including power cable).

Tech. Code		P0039A01
GR79	Euro	(1142,74)
Width	mm	1500
Length	mm	1500
Edge height	mm	1460
Sockets		DE / Schuko
Colour		RAL 5012



P.....01 | P.....02
P.....05 | P.....06

BENCHES WITH WOODEN TOP

LISTA

ITEM: 78.389 - 78.394

Benches with plywood top. Beech top thickness of 40mm very resistant to water, rounded corners, surface smoothed and treated with oil and wax thus giving resistance to any spray of water and completely unaffected by oils and fats. Including fastening material and pre-assembly.

Tech. Code		P0126A01	P0126B01
GR79	Euro	(413,10)	(454,20)
Dimension	mm	1500 x 700 x 840	2000 x 700 x 840
Colour		RAL 5012	RAL 5012
Capacity	kg	600	360

P.....01 | P.....02

Indivisible package Suggested retail package - Unit price

STATIC SUPPORTS WITH ADJUSTABLE HEIGHT FOR BENCHES

LISTA NEW

ITEM: 43.186

Adjustable supports 700mm for workbenches of 700mm depth. Height adjustment from 700 up to 1050mm.

Tech. Code		P013601
GR79	Euro	(85,65)
Dimension	mm	80 x 675
Colour		RAL 5012
Capacity	Kg	400

P.....01 P.....02 P.....05 P.....06

WORKTOPS IN MULTIPLEX

LISTA NEW

ITEM: 42.850 - 42.851

Worktops in multiplex for workbenches with beech wood veneer, impregnated with steam and very resistant to water. The surface is treated with oil and wax and has rounded edges. Universal use, water resistant, dirt resistant and is unaffected by oils and greases.
Supplied disassembled

Tech. Code		P0146M	P0146M2
GR79	Euro	(203,10)	(277,72)
Dimension	mm	1500 x 700 x 40	2000 x 700 x 40

WORKTOPS IN BEECHWOOD

LISTA NEW

ITEM: 89.684 - 89.685

Extremely solid beechwood strip worktops for workbenches. It is steam impregnated and water resistant. The surface is treated with oil and wax and has rounded corners. Water and dirt resistant.
Supplied disassembled.

Tech. Code		P0147F1	P0147F2
GR79	Euro	(273,84)	(366,70)
Dimension	mm	1500 x 700 x 40	2000 x 700 x 40

UNIVERSAL WORKTOPS

LISTA

ITEM: 39.555 - 39.556

Universal worktops for work benches with 2mm linoleum coating, resistant to shocks, scratches and at the same time moderatley shock absorbing.
Supplied disassembled

Tech. Code		P0149U1	P0149U2
GR79	Euro	(423,40)	(564,80)
Dimension	mm	1500 x 750 x 53	2000 x 750 x 53

CABINETS WITH DRAWERS FOR WORK BENCHES

LISTA NEW

ITEM: 78.469 - 14.256 - 14.258

Drawers with limit stop, single ratchet and flush drawer front. 27x27E version. Compactible with Lista workbenches. Centralized key locking. Drawer internal dimension 459x459.

Tech. Code		P0226A01	P0226B01	P0226C01
GR79	Euro	(616,01)	(900,65)	(998,32)
Dimension	mm	564 x 572 x 383	564 x 572 x 850	564 x 572 x 850
Colour		RAL 5012	RAL 5012	RAL 5012
Drawers	n°	3	5	6
Drawer dimension	mm	1 x 50 / 1 x 100 / 1 x 150	1x100 / 3x150 / 1x200	2 x 75 / 2 x 100 / 2 x 200
Draw capacity	kg	75	75	75

P.....01 P.....02 P.....05 P.....06

WORKSTATIONS ON WHEELS

LISTA

ITEM: 41.769

Stable workstation for creating workplaces in the workshops and in production. Maximum stability with cabinet body with capacity up to 1t, version with rubber wheels for moving to different workplaces. Worktop in 40mm plywood. Equipped with handle, 2 fixed wheels and 2 swivel wheels with brake (Ø 125mm). KEY Lock key closure.

Tech. Code		P0041B01
GR79	Euro	(1742,82)
Dimension	mm	1250 x 700 x 877
Colour	n°	RAL 5012
Drawers	n°	5
Shelve dimension	mm	2x75 / 1x100 / 1x150 / 1x200
Capacity	kg	400
Drawer capacity	kg	50
Compartment dimension	mm	1x600

P.....01 | P.....02 | P.....05 | P.....06

MATERIAL FOR FIXING WORKTOPS

LISTA

ITEM: 39.327 - 39.161

Material for fixing work tops for work benches.

Tech. Code		P0050W1	P0050W2
GR79	Euro	(14,10)	(12,10)
Description		Leg fixing	Drawer fixing
Pieces	n°	6 viti M10	4 viti M10

CABINETS NC HINGED DOOR

Fami Storage Systems

ITEM: PERFOMNC01 - PERFOMNC02

Cabinets with NC hinged doors for tools including frames and bushings.

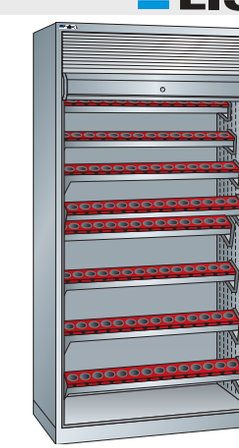
Tech. Code		P1044BL01	P1044GR01
GR24	Euro	(1553,50)	(1553,50)
Dimension	mm	1023 x 555 x 2000h	1023 x 555 x 2000h
Colour		RAL 5012	RAL 7035
Frames		4	4
Supports		84 ISO 40	84 ISO 40
Load capacity	kg	800	800

NC CABINETS WITH SHUTTERS 54 X 27 E

LISTA

ITEM: 15.635 - 15.636 - 18.395

NC cabinets with shutters equipped with eight interchangeable tool frames which are insertable into the cabinets, drawers and trolley for transportation eight pairs of frame holders. Key with central locking.



Tech. Code		P1045A01	P1045B01	P1045C01	P1045D01
GR79	Euro	(3586,60)	(3332,20)	(3522,60)	(2858,60)
Dimension	mm	1038 x 691 x 1950	1038 x 691 x 1950	1038 x 691 x 1950	1038 x 691 x 1950
Supports		112 ISO-SK 40	64 ISO-SK 50	80 HSK 63	-
Colour		RAL 5012	RAL 5012	RAL 5012	RAL 5012
Load capacity	kg	1200	1200	1200	1200

P.....01 | P.....02

Indivisible package Suggested retail package - Unit price

NC TROLLEYS FOR TRANSPORT 36 X 27 E

ITEM: 18.364 - 18.365 - 18.368 - 15.419

NC transport trolleys for safe, clean and visible storage in high-quality housings, made of break-resistant, shock-resistant and oil-resistant ABS material, which perfectly suitable for tools for removing chips. Individual and simple equipment, safe transport and maximum comfort of use and ergonomics. A shelf with side brackets, including PVC ribbed mat, a frame for housing in drawers with a frame holder, two interchangeable frames for tools with an inclined frame holder, diameter of the rubber wheels Ø 160 mm.

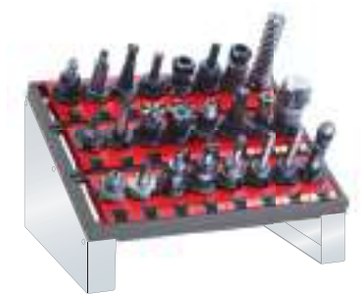
Tech. Code		P1046A01	P1046B01	P1046C01	P1046D01
GR79	Euro	(1376,80)	(1301,80)	(1365,80)	(1116,80)
Dimension	mm	1077 x 514 x 932	1077 x 514 x 932	1077 x 514 x 932	1077 x 514 x 932
Supports		40 ISO - SK 40	25 ISO - SK 50	30 HSK 63	-
Colour		RAL 5012	RAL 5012	RAL 5012	RAL 5012
Load capacity	kg	540	540	540	540

P.....01 P.....02

NC TABLE SUPPORT NC 36 X 27 E

ITEM: 15.431 - 15.432 - 18.353 - 12.959

NC table support with frame for housing in drawers for 3 tracks. Made of sheet steel.



Tech. Code		P1049A01	P1049B01	P1049C01	P1049D01
GR79	Euro	(327,50)	(282,50)	(320,90)	(171,50)
Dimension	mm	588 x 413 x 345	588 x 413 x 345	588 x 413 x 345	588 x 413 x 345
Supports		24 ISO-SK 40	15 ISO-SK 50	18 HSK 63	-
Colour		RAL 5012	RAL 5012	RAL 5012	RAL 5012

P.....01 P.....02

TOOL HOLDER IN SET 36 X 36 E

ITEM: 80.829.000 - 80.830.000 - 80.833.000

Tool holder set used in drawers. Including a housing frame, a pair of frame holder
Colour red.

Tech. Code		P105500	P105501	P105502
GR79	Euro	(316,30)	(256,30)	(307,50)
Dimension	mm	588 x 596 x 82 - 162 h	588 x 596 x 82 - 162 h	588 x 596 x 82 - 162 h
Supports		32 ISO - SK 40	20 ISO - SK 50	24 HSK 63 A+C+E/80 B+D+F

TOOL HOLDER SUPPORTS ISO-SK

ITEM: 12.880.000 - 12.062.000 - 12.877.000 - 12.875.000

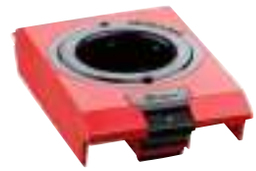
Tool holder supports ISO -SK. They are screwed or fixed by click-closure, red colour.

Tech. Code		P105000	P105001	P105002	P105003
GR79	Euro	5,80	6,50	(7,40)	7,40
Dimension	mm	65,6 x h 49 x Ø 31,8	65,6 x h 60,5 x Ø 44,5	105 x h 75 Ø57,2	105 x h 90 x Ø 69,9
Support type		ISO - SK30	ISO - SK40	ISO - SK45	ISO - SK50

TOOL HOLDER SUPPORTS HSK

ITEM: 15.314.000 - 15.318.000 - 15.319.000 - 15.320.000 - 15.330.000 - 15.336.000

Tool holder supports HSK. They are screwed or fixed by click-closure, red colour.



Tech. Code		P105100	P105101	P105102
GR79	Euro	(6,50)	(6,81)	(7,40)
Dimension	mm	58 x h 31 x Ø 24	58 x h 31 x Ø 30	65,6 x h 31 x Ø 38
Support type		HSK32	HSK40	HSK50

Tech. Code		P105103	P105104	P105105
GR79	Euro	(8,30)	(9,10)	(9,10)
Dimension	mm	87,5 x h 34 x Ø 48	105 x h 42 x Ø 60	120 x h 52 x Ø 75
Support type		HSK63	HSK80	HSK100

TOOL HOLDER SUPPORTS VDI

ITEM: 15.329.000 - 12.866.000 - 12.887.000 - 12.886.000 - 12.885.000 - 12.884.000

Tool holder supports VDI. They are screwed or fixed by click-closure, red colour.

Tech. Code		P105200	P105201	P105202
GR79	Euro	(22,40)	(23,00)	(6,50)
Dimension	mm	58 x h 20 x Ø 20,5	58 x h 20 x Ø 55,4	65,6 x h 69,5 x Ø 30,5
Support type		VDI20	VDI25	VDI30

Tech. Code		P105203	P105204	P105205
GR79	Euro	(6,81)	(9,10)	(9,80)
Dimension	mm	87,5 x h 77,5 x Ø 40,5	87,5 x h 93,5 x Ø 50	105 x h 108,5 x Ø 60,5
Support type		VDI40	VDI50	VDI60

TOOL HOLDER SUPPORTS CAPTO

ITEM: 12.650.000 - 12.651.000 - 12.652.000 - 12.653.000 - 12.654.000 - 12.655.000

Tool holder supports Capto. They are screwed or fixed by click-closure, red colour.

Tech. Code		P105300	P105301	P105302
GR79	Euro	(8,40)	(9,40)	(10,60)
Dimension	mm	58 x h 31,5 x Ø 22	58 x h 31,5 x Ø 28	65,6 x h 31,5 x Ø 35
Support type		C3	C4	C5

Tech. Code		P105303	P105304	P105305
GR79	Euro	(11,40)	(13,00)	(14,40)
Dimension	mm	87,5 x h 34 x Ø 44	105 x h 42 x Ø 55	120 x h 52 x Ø 72
Support type		C6	C8	C10

TOOL HOLDER SUPPORTS TO BE DRILLED INDEPENDENTLY

ITEM: 12.832.000 - 12.838.000

Tool holder supports to be drilled indepently for a number of tools as desired.

Tech. Code		P105400	P105401
GR79	Euro	(14,60)	(67,10)
Dimension	mm	58 x 138 x 20	535 x 138 x 20

CABINETS WITH FULL EXTENSION DRAWERS

ITEM: FDF10905404 - FDF10905408 - FDF10905604 - FDF10905608

Cabinet with full extension drawers and central locking.

P21107C... composed of:
2 drawers, height 75 mm
1 drawer, height 100 mm
3 drawers, height 150 mm
1 drawer, height 200 mm

P21109C... composed of 9 drawers, height 100 mm.

Tech. Code		P21107C01	P21107C02	P21109C01	P21109C02
GR24	Euro	(1081,50)	(1081,50)	(1257,00)	(1257,00)
Dimensions	mm	717 x 600 x 1000 h	717 x 600 x 1000 h	717 x 600 x 1000 h	717 x 600 x 1000 h
Drawers	n°	7	7	9	9
Drawer capacity	kg	70	70	70	70
Colour		RAL 5012	RAL 7035	RAL 5012	RAL 7035

CABINETS WITH FULL EXTENSION DRAWERS 54 X 27 EH

ITEM: FDL10905404 - FDL10905408 - FDL10905604 - FDL10905608

Cabinets with full extension drawers (100%), capacity 50 kg, anti-tilt opening system, central locking.

P21207C... composed of:
2 drawers, height 75 mm
1 drawer, height 100 mm
3 drawers, height 150 mm
1 drawer, height 200 mm

P21209C... composed of 9 drawers, height 100 mm.

Tech. Code		P21207C01	P21207C02	P21209C01	P21209C02
GR24	Euro	(1334,00)	(1334,00)	(1545,00)	(1545,00)
N° of drawers		7	7	9	9
Dimensions	mm	1023 x 600 x 1000h	1023 x 600 x 1000h	1023 x 600 x 1000h	1023 x 600 x 1000h
Weight	kg	105,00	105.00	105.00	105.00
Colour		RAL 5012	RAL 7035	RAL 5012	RAL 7035

OVERVIEW OF LISTA ACCESS SOLUTIONS

KEY LOCK
Proven standard locking system

KEY Lock, our standard locking system with replaceable cylinders.
- Manual opening/locking with key
- Simultaneously lockable for multiple, as well as different, products with only one key or separately lockable with several keys
- Key availability guaranteed for years

CODE LOCK
The solution with number combination

When locking with CODE Lock, the key is replaced by a number combination. A simple four to six-digit code is all that is needed to open the product.
- Manual opening/locking with number code
- Lock readout and programming with LISTA Access software (option)

RFID LOCK
Ready for the future:
the solution with RFID badge

In addition to the CODE Lock, the LISTA RFID Lock enables opening and locking via standard radio-frequency identification (RFID). It consists of a transponder in the lock and standard mobile RFID badges/cards/tags.
- **Manual opening/locking** via RFID badge or number code
- Most standard RFID badges/cards/tags can be used
- Lock readout and programming with LISTA Access software (option)

AUTO LOCK
The ultimate solution:
automatic opening and locking

The LISTA AUTO Lock features the same functionality as our RFID Lock, however opening and locking take place automatically. With LISTA Access software (option), time profiles can also be programmed in the lock or on the user for time-limited access for increased security.
- **Automatic opening/locking** via RFID badge or number code
- Most standard RFID badges/cards/tags can be used
- Locks automatically after a preset time or at the push of a button
- Lock readout and programming with LISTA Access software (option)
- Time-limited access programmable via LISTA Access software (option)

DRAWERS 27 X 27 E

ITEM: 14.252

Drawers with body that resists up to 4 t, full use of the drawers. Unique in the Lista world thanks to the total extraction of the drawers, end stop to prevent the drawers from falling, excellent protection characteristics against dirt, liquids and mechanical stress. Corrosion protection, thanks to electrophoresis painting. Including List Script labeling. Drawer internal dimension 459x459mm.

Tech. Code		P2114A01
GR79	Euro	(1175,90)
Dimension	mm	564 x 572 x 850
Drawers	n°	7
Drawers dimension	mm	2 x 75 / 3 x 100 / 2 x 150
Colour		RAL 5012
Draw capacity	kg	75

P.....01 | P.....02 | P.....05 | P.....06

CABINET DRAWERS 36 X 36 E

ITEM: 14.409 - 14.415 - 14.416 - 14.414

Drawers with total drawers extraction and with anti-tip device. Includes script list labeling system with central key lock.

Tech. Code		P2122A01	P2122B01	P2122C01	P2122D01
GR79	Euro	(1370,90)	(1330,90)	(1468,60)	(1552,10)
Dimension	mm	717 x 725 x 850h	717 x 725 x 1000h	717 x 725 x 1000h	717 x 725 x 1000h
Drawers	n°	7	6	7	8
Dim. drawers	mm	2x75 / 3x100 / 2x150	1x100 / 4x150 / 1x200	1x50 / 2x75 / 2x100 / 1x200 / 1x300	1x50 / 2x75 / 2x100 / 2x150 / 1x200
Colour		RAL 5012	RAL 5012	RAL 5012	RAL 5012
Drawers capacity	kg	75	75	75	75

P.....01 | P.....02 | P.....05 | P.....06

DRAWERS 36 X 27 E

ITEM: 78.572

Drawers with body that resists up to 4 t, full use of the drawers. Unique in the world of Lista thanks to the total extraction of the drawers, limit stop to prevent the drawers from falling, excellent protection characteristics against dirt, liquids and mechanical stress. Corrosion protection, thanks to electrophoresis painting. Including List Script labeling. Drawer internal dimension 612 x 459mm.

Tech. Code		P2124A01
GR79	Euro	(1283,07)
Dimension	mm	717 x 572 x 850
Drawers	n°	7
Drawer dim.	mm	2 x 75 / 2 x 100 / 2 x 125 / 1 x 150
Colour		RAL 5012
Drawer capacity		75

P.....01 | P.....02 | P.....05 | P.....06

CABINET DRAWERS 54 X 36 E

ITEM: 14.515 - 14.516 - 14.518

Drawers with total drawers extraction and with anti-tip device. Includes script list labeling with central key lock.

Tech. Code		P2125A01	P2125B01	P2125C01
GR79	Euro	(1972,70)	(2149,20)	(2809,50)
Dimension	mm	1023 x 725 x 1000h	1023 x 725 x 1000h	1023 x 725 x 1450h
Drawers	n°	6	7	9
Dim. drawers		1x100 / 4x150 / 1x200	1x50 / 2x75 / 2x100 / 1x200 / 1x300	3x100 / 5x150 / 1x300
Colour		RAL 5012	RAL 5012	RAL 5012
Drawers capacity	kg	200	200	200

P.....01 | P.....02 | P.....05 | P.....06

LABEL LIST - SCRIPT

ITEM: 80.325.000

Label list-script "Universal packaging". The labeling software can be downloaded from the List website at www.lista.com/script

2 sheets of handle strips, 76 labels 47 x 12 mm, 52 labels 47 x 18 mm 133 labels, 27 x 12 mm

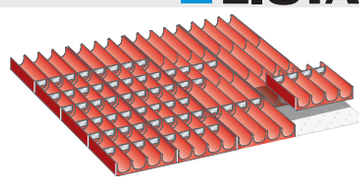
Tech. Code		P229500
GR79	Euro	6,20
Description		Label list

TROUGHS SUBDIVISION MATERIAL IN KIT 36 X 36 E

ITEM: 100.317.000

Subdivision material for drawers systematically ensure order in every sector and for any requirements.
Maximum compatibility with the entire range thanks to a unique measurement.
Useful surface of drawers L x P: 612 x 612 mm.

- 16 troughs in 4 parts, Ø 33 mm
- 70 troughs separators in 4 parts, Ø 33 mm



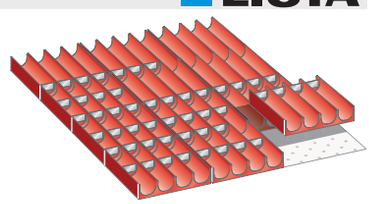
Tech. Code		P227000
GR79	Euro	94,32
Drawer height	mm	50

TROUGHS SUBDIVISION MATERIAL IN KIT 36 X 27 E

ITEM: 100.283.000

Subdivision material for drawers systematically ensure order in every sector and for any requirements.
Maximum compatibility with the entire range thanks to a unique measurement.
Useful surface of drawers L x P: 612 x 459 mm.

- 12 troughs elements in 4 parts of Ø 33 mm
- 50 separators in 4 parts of Ø 33 mm



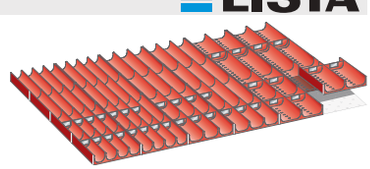
Tech. Code		P227300
GR79	Euro	75,50
Drawer height	mm	50

TROUGHS SUBDIVISION MATERIAL IN KIT 54 X 36 E

ITEM: 80.388.000

Subdivision material for drawers systematically ensure order in every sector and for any requirements.
Maximum compatibility with the entire range thanks to a unique measurement.
Useful surface of drawers L x P: 918 x 612 mm.

- 8 troughs elements: in 4 parts of Ø 33 mm
- 20 separators: in 4 parts of Ø 33 mm
- 8 troughs elements: in 3 parts of Ø 45 mm
- 10 separators: in 3 parts of Ø 45 mm
- 8 troughs elements: in 2 parts of Ø 70 mm
- 10 separators in 2 part of Ø 70 mm

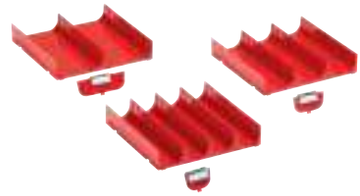


Tech. Code		P227100
GR79	Euro	115,40
Drawer height	mm	50

TROUGHS 9 E

ITEM: 100.158.000 - 100.157.000 - 100.156.000

Subdivision material in the form of troughs that can be assembled in any number by means of lateral cams.
Slotted in 14 mm increments, for splitting with separator. Red ABS plastic material.



Tech. Code		P227700	P227701	P227702
GR79	Euro	4,70	4,40	3,80
Dimension	mm	153 x Ø33 x 27h	153 x Ø45 x 27h	153 x Ø70 x 27h
Troughs	n°	4	3	2

SEPARATORS FOR TROUGHS

ITEM: 134.044.000 - 134.040.000 - 134.020.000

Separators for troughs in packs fo 10 pieces.
Colour red.

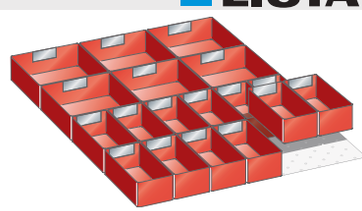
Tech. Code		P228800	P228801	P228802
GR79	Euro	5,50	5,50	5,50
Dimension	mm	Ø 33	Ø 45	Ø 70

SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 27 X 36 E

ITEM: 100.292.000

Subdivision material for drawers systematically ensure order in every sector and for any requirement. Maximum compatibility with the entire range thanks to a unique measurement. Quick and easy assembly thanks to the perimeter spacing of the drawers and to the perforated bottom of the same, for the housing and fixing of slotted walls,dividing sheets, mill holders and fixing pins. Useful surface of drawers W x D: 459 x 612 mm, 612 x 459 mm

- 12 boxes 150 x 75 mm
- 6 boxes 150 x 150 mm



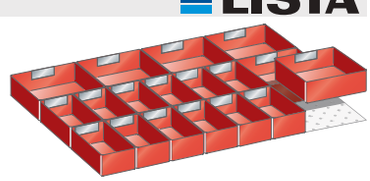
Tech. Code		P226200
GR79	Euro	45,34
Drawer height	mm	50

SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 36 X 27 E

ITEM: 100.293.000 - 100.294.000

Subdivision material for drawers, systematically ensure order in every sector for any needs. Maximum compatibility with the entire range thanks to a unique size. Useful surface of drawers W x D: 612 x 459 mm.

- 12 boxes 150 x 75 mm
- 6 boxes 150 x 150 mm



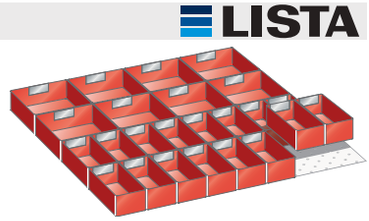
Tech. Code		P229001	P229002
GR79	Euro	57,50	90,00
Drawer height	mm	75	100 - 125

SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 36 X 36 E

ITEM: 100.389.000 - 100.390.000 - 100.391.000

Subdivision material for drawers, systematically ensure order in every sector for any needs. Maximum compatibility with the entire range thanks to a unique size. Useful surface of drawers W x D: 612 x 612 mm.

- 16 boxes 150 x 75 mm
- 8 boxes 150 x 150 mm



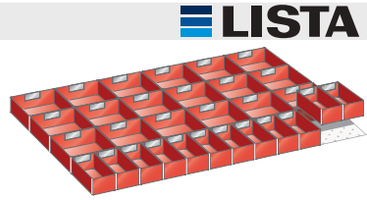
Tech. Code		P229100	P229101	P229102
GR79	Euro	59,30	76,40	118,20
Drawer height	mm	50	75	100 - 125

SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 54 X 36 E

ITEM: 80.449.000 - 80.405.000 - 80.406.000

Subdivision material for drawers, systematically ensure order in every sector for any needs. Maximum compatibility with the entire range thanks to a unique size. Useful surface of drawers W x D: 918 x 612 mm.

- 12 boxes 150 x 75 mm
- 18 boxes 150 x 150 mm

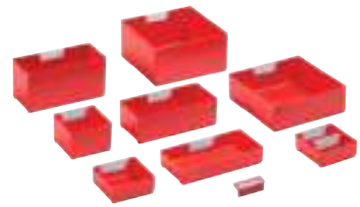


Tech. Code		P229200	P229201	P229202
GR79	Euro	87,20	105,80	152,60
Drawer height	mm	50	75	100 - 125

PLASTIC BOXES

ITEM: 100.077.000 - 100.079.000 - 100.075.000 - 100.076.000 - 100.078.000 - 100.074.000 - 100.081.000 - 100.080.000

Subdivision material in boxes. Modular insertion in drawers of any size.
Colour red.



Tech. Code		P228900	P228901	P228902	P228903
GR79	Euro	1,70	1,90	3,35	1,90
Dimension	mm	75 x 75 x 26	150 x 75 x 26	150 x 150 x 26	75 x 75 x 46

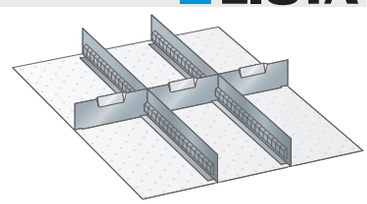
Tech. Code		P228904	P228905	P228906	P228907
GR79	Euro	2,90	4,40	5,40	5,80
Dimension	mm	150 x 75 x 46	150 x 150 x 46	150 x 75 x 71	150 x 150 x 71

SLOTTED PARTITIONS AND METAL DIVIDERS IN KIT 27 X 36 E

ITEM: 100.275.000 - 100.276.000 - 100.277.000 - 100.278.000 - 80.692.000

Subdivision material for drawers, systematically ensure order in every sector and for any need. Maximum compatibility with the entire range thanks to a unique size.
Useful surface of drawers W x D: 459 x 612 mm.

- 2 slotted partitions 36 E
- 3 metal dividers 9 E



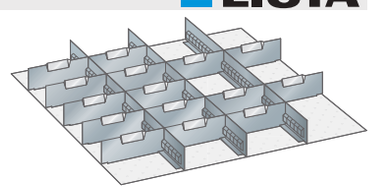
Tech. Code		P226500	P226501	P226502	P226503	P226504
GR79	Euro	18,90	24,80	29,70	34,30	41,20
Drawer height	mm	75	100 - 125	150	200	250

SLOTTED PARTITIONS AND METAL DIVICERS IN KIT 36 X 36 E

ITEM: 100.343.000 - 100.344.000 - 100.345.000 - 100.346.000

Subdivision material for drawers, systematically ensure order in every sector and for any need. Maximum compatibility with the entire range thanks to a unique size.
Useful surface of drawers W X D: 612 x 612 mm.

- 3 slotted partitions 36 E
- 15 metal dividers 9 E



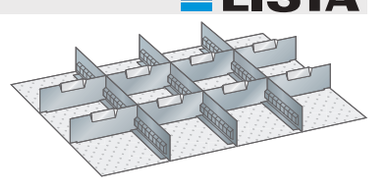
Tech. Code		P227400	P227401	P227402	P227403
GR79	Euro	45,30	57,50	66,90	79,40
Drawer height	mm	75	100 - 125	150	200

SLOTTED PARTITIONS AND METAL DIVIDERS IN KIT 36 X 27 E

ITEM: 80.649.000 - 100.314.000 - 80.651.000 - 80.652.000 – 80.653.000

Subdivision material for drawers, systematically ensure order in every sector and for any need. Maximum compatibility with the entire range thanks to a unique size.
Useful surface of drawers W x D: 612 x 459 mm.

- 3 slotted partitions 27 E
- 8 metal dividers 9 E



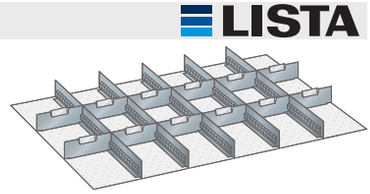
Tech. Code		P229300	P229301	P229302	P229303	P229304
GR79	Euro	28,90	32,50	42,10	49,90	63,10
Drawer height	mm	50	75	100 - 125	150	200

SLOTTED PARTITIONS AND METAL DIVIDERS IN KIT 54 X 36 E

ITEM: 80.479.000 - 80.395.000 - 80.396.000 - 80.397.000 - 80.398.000 - 80.400.000

Subdivision material for drawers, systematically ensure order in every sector and for any need. Maximum compatibility with the entire range thanks to a unique size.
Useful surface of drawers W x D: 918 x 612 mm.

- 5 slotted partitions 36 E
- 12 metal dividers 9 E



Tech. Code		P227800	P227801	P227802
GR79	Euro	48,30	53,70	70,10
Drawer height	mm	50	75	100 - 125

Tech. Code		P227803	P227804	P227805
GR79	Euro	82,30	99,60	139,80
Drawer height	mm	150	200	300

METAL DIVIDERS 6 E

ITEM: 100.840.000 - 100.851.000 - 100.862.000 - 100.870.000

Metal dividers that allow, together with the slotted partitions, an even more precise division of the drawers.The labeling part is full-length and is used to accommodate the tabs to support the bar code holders.The lower bended part allows a screwing of the dividing partition to the perforated bottom of the drawers.The dimensions are stamped on each partition. Material: aluminum.

Tech. Code		P228400	P228401	P228402	P228403
GR79	Euro	1,30	1,40	1,60	1,57
Dimension	mm	98 x 27	98 x 50	98 x 75	98 x 125
Drawer height	mm	50	75	100 - 125	150

METAL DIVIDERS 9 E

ITEM: 100.843.000 - 100.854.000 - 100.865.000 - 100.873.000 - 100.879.000 - 123.448.000 - 100884.000

Metal dividers that allow, together with the slotted partitions, an even more precise division of the drawers.The labeling part is full-length and is used to accommodate the tabs to support the bar code holders.The lower bended part allows a screwing of the dividing partition to the perforated bottom of the drawers.The dimensions are stamped on each partition. Material: aluminum.

Tech. Code		P228500	P228501	P228502	P228503
GR79	Euro	1,40	1,70	1,90	1,90
Dimension	mm	149 x 27	149 x 50	149 x 75	149 x 125
Drawer height	mm	50	75	100 - 125	150

Tech. Code		P228504	P228505	P228506
GR79	Euro	2,90	3,20	4,70
Dimension	mm	149 x 175	149 x 225	149 x 275
Drawer height	mm	200	220	300

METAL DIVIDERS 12 E

ITEM: 100.845.000 - 100.856.000 - 100.867.000 - 100.875.000 - 100.881.000 - 123.451.000 - 100.886.000

Metal dividers that allow, together with the slotted partitions, an even more precise division of the drawers.The labeling part is full-length and is used to accommodate the tabs to support the bar code holders.The lower bended part allows a screwing of the dividing partition to the perforated bottom of the drawers.The dimensions are stamped on each partition. Material: aluminum.

Tech. Code		P228600	P228601	P228602	P228603
GR79	Euro	1,70	1,90	1,78	2,52
Dimension	mm	201 x 27	201 x 50	201 x 75	201 x 125
Drawer height	mm	50	75	100 - 125	150

Tech. Code		P228604	P228605	P228606
GR79	Euro	3,80	5,50	5,90
Dimension	mm	201 x 175	201 x 225	201 x 275
Drawer height	mm	200	250	300

METAL DIVIDERS 18 E

ITEM: 100.847.000 - 100.858.000 - 100.869.000 - 100.877.000 - 100.883.000 - 123.457.000 - 100.888.000

Metal dividers that allow, together with the slotted partitions, an even more precise division of the drawers.The labeling part is full-length and is used to accommodate the tabs to support the bar code holders.The lower bended part allows a screwing of the dividing partition to the perforated bottom of the drawers.The dimensions are stamped on each partition. Material: aluminum.

Tech. Code		P228700	P228701	P228702	P228703
GR79	Euro	1,90	2,20	2,50	3,70
Dimension	mm	303 x 27	303 x 50	303 x 75	303 x 125
Drawer height	mm	50	75	100 - 125	150

Tech. Code		P228704	P228705	P228706
GR79	Euro	5,50	6,20	7,10
Dimension	mm	303 x 175	303 x 225	303 x 275
Drawer height	mm	200	250	300

SLOTTED PARTITIONS 36 E

ITEM: 80.088.000 - 80.091.000 - 80.097.000 - 80.103.000 - 80.108.000 - 80.221.000 - 80.112.000

Slotted partitions on both sides, for the longitudinal and transversal division of the drawers. Slots as for the drawer dividers in 17 mm units. The lower bend allows a screwing of the partition to the perforated bottom of the drawers. Made of sheet steel. Fixing material included.

Tech. Code		P228300	P228301	P228302	P228303
GR79	Euro	6,50	6,80	9,50	10,79
Dimension	mm	610 x 50	610 x 50	610 x 75	610 x 125
Drawer height	mm	50	75	100 - 125	150

Tech. Code		P228304	P228305	P228306
GR79	Euro	13,70	16,70	18,90
Dimension	mm	610 x 175	610 x 225	610 x 275
Drawer height	mm	200	250	300

ANTI-SLIP MATS FOR DRAWERS

ITEM: 100.396.000 - 100.394.000 - 130.745.000

Anti-slip mats for drawers for the safe storage of delicate items. To be inserted on the bottom of the drawer.
PVC / nylon mesh mats.
Anthracite color.

Tech. Code		P227900	P227901	P227902
GR79	Euro	10,50	14,00	19,40
Dim. drawer	mm	450 x 600 x 3	600 x 600 x 3	900 x 600 x 3

FOAM INSERTS

ITEM: 80.917.000 - 90.918.000 - 80.919.000

Modular inserts in expanded foam material very useful for the storage of very delicate items or of irregular shaped parts. Precision smug fit can be achieved with plunge cutters (range P2282). Material: polyethylene-plastic.

Tech. Code		P228000	P228001	P228002
GR79	Euro	31,54	46,80	57,50
Dimension	mm	447 x 600 x 22h	600 x 600 x 22h	906 x 447 x 22h
Colour		Black	Black	Black

UNDERLAY FOR FOAM INSERTS

ITEM: 80.906.000 - 80.907.000 - 80.908.000

Underlay for foam inserts in expanded material (range P2280).
The blue colour is different from the black colour of the foam inserts, gives greater visibility to the empty foam inserts.
Material: polyethylene-plastic

Tech. Code		P228100	P228101	P228102
GR79	Euro	23,20	30,00	31,54
Dimension	mm	447 x 600 x 3h	600 x 600 x 3h	906 x 447 x 3h
Colour		Blue	Blue	Blue

PLUNGE CUTTER FOR FOAM INSERTS

ITEM: 80.920.000 - 80.921.000 - 80.922.000

Plung cutter for foam inserts in expanded material (range P2280). With plunge cutters it is possible to obtain a precise fit for a perfect storage of very delicate articles or of irregular shaped parts.

Tech. Code		P228200	P228201	P228202
GR79	Euro	6,50	11,20	21,80
Dimension	mm	20 x 80	50 x 80	20 x 20 forma "U"

CABINETS FOR COMPUTERS WITH WHEELS 36 X 36 E

ITEM: 17.617

Computer cabinets with nylon wheel Ø 100 mm. Equipped with a handle to facilitate any movement.The computer cabinets offer a safe and proven solution. Computer and related hardware and software in the production field must be protected from dust, dirt and unauthorized access. The cabinets are equipped with a monitor compartment with hinged doors with a cylinder lock, a smooth moveable shelf in the monitor compartment, completely removable draws from 75 mm and stoppable in open positions, a cabinet for hardware with doors and lock included, consisting of a 4 socket power connection (230 V) with a switch with a indicator light. Integrated fan. Power cable of 5 m long. Opening in the back part with removable cover.

Tech. Code		P306601	P306602
GR79	Euro	(2199,60)	(2199,60)
Dimension	mm	717 x 725 x 1837h	717 x 725 x 1837h
Colour		RAL 5012	RAL 7035

P.....01 P.....02

CABINETS FOR COMPUTERS 36X36E

ITEM: 17.642

Computer cabinets equipped with monitor compartment and hardware cabinet, model without wheels. Monitor compartment and smooth movable shelf, also including a fully extendable 75mm keyboard drawer which can be locked in the open position. Including wardrobe with hinged door, inside the hardware wardrobe there is an electrical power supply system consisting of 4 sockets, switch with indicator light, extractable frame and lock included. Monitor compartment dimensions W x D x H = 710 x 325 x 730mm.

Tech. Code		P306701
GR79	Euro	(1734,34)
Dimension	mm	717 x 725 x 1625
Sockets		D/Schuko
Colour		RAL 5012

Indivisible package Suggested retail package - Unit price

COMPUTER CABINETS

ITEM: STANDARDCS01

Computer cabinets consisting of 1 pull-out shelf with simple extraction, 1 Schuko power strip with 4 compartments, 1 Wieland SchuKo /FR connection cable, 1 socket support, 1 230 V fan without grid with SchuKo plug, 1 nylon wheel kit Ø 100 mm and 1 tube handle.

Tech. Code		P3301PCR01
GR24	Euro	(1488,00)
Dimension	mm	717 x 635 x 1690h
Colour		RAL 7035

CABINETS WITH HINGED DOORS

ITEM: FAA1120C00104 - FAA1120C00108

Cabinets with hinged doors and 2 shelves depth 500 mm (shelf capacity 100 kg).

Tech. Code		P311050001	P311050002
GR24	Euro	(440,50)	(440,50)
Dimension	mm	512 x 555 x 1000 h	512 x 555 x 1000 h
Max. capacity	kg	250	250
Colour		RAL 5012	RAL 7035

ITEM: FAA1220C00104 - FAA1220C00108

Cabinet with hinged doors and 2 shelves depth 500 mm (shelf capacity 100 kg).

Tech. Code		P3111100001	P3111100002
GR24	Euro	(637,50)	(637,50)
Dimension	mm	1023 x 555 x 1000 h	1023 x 555 x 1000 h
Capacity	kg	600	600
Colour		RAL 5012	RAL 7035

ITEM: FAA1420C00104 - FAA1420C00108

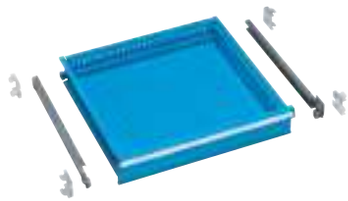
Cabinet with hinged doors, 4 shelves depth 500 mm (shelf capacity: 100 Kg).

Tech. Code		P3140100001	P3140100002
GR24	Euro	(809,00)	(809,00)
Dimension	mm	1023 x 555 x 2000 h	1023 x 555 x 2000 h
Capacity	kg	800	800
Colour		RAL 5012	RAL 7035

DRAWERS FOR CABINETS

ITEM: FAC9911180004 - FAC9911180008

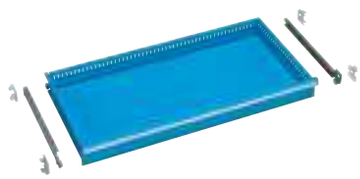
Drawer for cabinets P3110.



Tech. Code		P317250001	P317250002
GR24	Euro	(100,00)	(100,00)
Dimension	mm	396 x 447 x 85 h	396 x 447 x 85 h
Capacity	kg	50	50
Colour		RAL 5012	RAL 7035

ITEM: FAC9912180004 - FAC9912180008

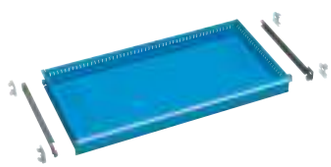
Drawers for cabinets, capacity 50 kg.
For cabinets P3111 and P3140.



Tech. Code		P3174100001	P3174100002
GR24	Euro	(118,50)	(118,50)
Dimension	mm	906 x 447 x 85 h	906 x 447 x 85 h
Colour		RAL 5012	RAL 7035

ITEM: FAC9912210008 - FAC9912210004

Drawers for cabinets, capacity 100 Kg.
For P3111 e P3140 cabinets.



Tech. Code		P3175100001	P3175100002
GR24	Euro	(181,50)	(181,50)
Dimension	mm	908 x 449 x 135h	908 x 449 x 135h
Colour		RAL 7035	RAL 5012

CABINETS WITH 2 DOORS WITH SHELVES

ITEM: P3148

Cabinets in 8/10 thick sheet metal, hinged doors with handle and 4 galvanized mobile shelves (capacity 100 kg). RAL 7038 grey coating.

Tech. Code		P31481000
GR80	Euro	(550,00)
Dimension	mm	1000 x 400 x 2000

CABINETS WITH SHEET METAL DOORS

ITEM: 60.418 - 60.419

Cabinets with two doors in sheet metal. The doors close flush with the structure of the cabinet with an opening of about 115 degrees. Maximum stability and high capacity of shelves. Extraordinary characteristics of protection against dirt, liquids and mechanical stress, thanks to the closed cabinet structure, with impact-resistant and wear-resistant surfaces. Equipped with key lock.

Tech. Code		P3053A01	P3053B01
GR79	Euro	(738,10)	(698,49)
Dimension	mm	1000 x 400 x 1950h	1000 x 500 x 1950h
Shelves		4 x 60kg	4 x 60kg
Colour		RAL 5012	RAL 5012
Load capacity	kg	500	500

P.....01 | P.....02 | P.....05 | P.....06

ADJUSTABLE SHELVES

ITEM: 58.106.000 - 58.107.000 - 60.487.000 - 60.407.000

Adjustable metal shelves with four fixing hooks. Beveled on the length of 4 x 90 degrees 30 mm thick.

Tech. Code		P3057A	P3057B	P3057C	P3057D
GR79	Euro	(29,90)	(31,40)	(37,70)	(39,10)
Dimension	mm	1000 x 400	1000 x 500	1000 x 400	1000 x 500
Load capacity	kg	60	60	100	100

Indivisible package Suggested retail package - Unit price

CABINETS WITH SLIDING DOORS

NEW

ITEM: PERFOM21004

Cabinets with sliding doors and key clyinder lock can be used in many areas thanks to the possibility of storing a wide range of materials, tools, components and documents inside. The multipurpose cabinet features four adjustable shelves and smooth sliding doors.

Composition:
- 2 sets of slotted shelves
- 1 set of 4 adjustable feet
- 1 pair of uprights

Tech. Code		P3610AN01
GR24	Euro	(1914,50)
Dimension	mm	1427 x 598 x 2000 h
Capacity	kg	1200
Weight	kg	110
Colour		RAL 7016
Shelf capacity	kg	100

CABINETS WITH SLIDING DOORS

NEW

ITEM: 58.781 - 58.762

Cabinets with two sliding doors in solid sheet metal and partition wall. Very silent sliding having ball bearings that slide on the sliding guides. Rotating/pressing cylinder with Key Lock closure, unhinging of the doors impossible. The Lista sliding doors remain in the body of the wardrobe and do not protrude into the passageway.
Supplied assembled.

Tech. Code		P3056A01	P3056B01
GR79	Euro	(1451,80)	(1036,30)
Dimension	mm	1500 x 500 x 1950	1500 x 500 x 1000
Shelves	n°	8	4
Colour		RAL 5012	RAL 5012
Shelf capacity	kg	60	60
Capacity	kg	500	500

P.....01 P.....02

PERFORATED LOCKERS

NEW

ITEM: 94.468 - 94.471 - 94.474

Lockers without substructure with two floors. Key lock closure with key. Compartment width is 300mm. Including 1 integrated solid sheet hinged door and smooth surface, 1 hat shelf, 1 coat rack with 3 sliding hooks each and 1 towel rail.

Tech. Code		P3062A01	P3062B01	P3062C01
GR79	Euro	(693,04)	(986,17)	(1231,09)
Dimension	mm	600 x 500 x 1700	900 x 500 x 1700	1200 x 500 x 1700
Compartment	n°	2 x 2	3 x 2	4 x 2
Colour		RAL 5012	RAL 5012	RAL 5012

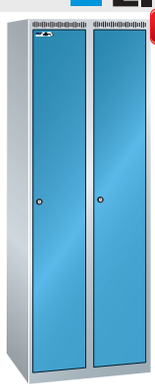
P.....01 P.....02

PERFORATED LOCKERS

NEW

ITEM: 94.531 - 94.534 - 94.537

Lockers without substructure with perforated compartments that allow greater ventilation during the course of the day. Key lock closure with key. Compartment width is 300mm. Including 1 integrated solid sheet hinged door, 1 hat shelf, 1 coat rack with 3 sliding hooks each and 1 towel rail. Very stable wardrobes thanks to the applied pins and reinforced door for greater security against break-ins.



Tech. Code		P3063A01	P3063B01	P3063C01
GR79	Euro	(435,65)	(630,37)	(791,03)
Dimension	mm	600 x 500 x 1700	900 x 500 x 1700	1200 x 500 x 1700
Compartments	n°	2	3	4
Colour		RAL 5012	RAL 5012	RAL 5012

P.....01 P.....02

CLOTHES LOCKERS DIRTY/CLEAN

ITEM: P3311

Clothes lockers dirty/clean, top shelf at h. 247 mm from the top with hanger rod equipped with towel "S" hooks in galvanized steel. Divider between shelf and bottom. Umbrella/towel holder in chromed steel rod mounted on the door. Drip tray in plastic material. Yale type cylinder lock with double key supplied. Grey colour Ral 7035. Declaration of conformity with Legislative Decree 81/2008, EN UNI ISO 9001, EN UNI ISO 14001, UNI tests on the product and finishes.

Tech. Code		P33111	P33112	P33113
GR80	Euro	195,00	325,00	410,00
Places		1	2	3
Dimension	mm	420 x 500 x 1800	810 x 500 x 1800	1200 x 500 x 1800

TRADITIONAL CLOTHES LOCKERS

ITEM: P3321

Traditional clothes lockers, upper shelf in plastic material h.247 mm from the top with hanger rod equipped with two sided hooks. Umbrella/towel holder in chromed steel rod mounted on the door. Drip tray in plastic material. Yale type cylinder lock with double keys supplied. Grey colour Ral 7035. Declaration of conformity Legislative Decree 81/2008, EN UNI ISO 9001, EN UNI ISO 14001, UNI tests on the product and on the finishes.

Tech. Code		P33211	P33212	P33213
GR80	Euro	150,00	220,00	310,00
Places		1	2	3
Dimension	mm	360 x 330 x 1800	690 x 330 x 1800	1020 x 330 x 1800

CABINETS FOR HEAVY GOODS

LISTA

ITEM: 59.541 - 59.543

Heavy goods cabinets with concealed doors, equipped with adjustable galvanized shelves, 33mm thickness, extractable shelves and drawers usually painted in gray, NCS 4502-B. Concealed doors with bevelled sides on one side, either in solid sheet or with transparent panels. Equipped with hinge bracket, 90 degree rotation angle. Opening doors protrude 85mm. Anti-tipping device thanks to the single ratchet.

Tech. Code		P3068A01	P3068B01
GR79	Euro	(2020,00)	(3033,30)
Dimension	mm	1146 x 690 x 1950	1146 x 690 x 1950
Movable shelves		4	2
Extractable shelves		-	2
Colour		RAL 5012	RAL 5012

P.....01 P.....02

Indivisible package Suggested retail package - Unit price

BATTERY CHARGER CABINETS WITH SWING DOORS

ITEM: 62.955

Battery Charger cabinet with hinged doors and galvanized adjustable shelves. Thickness 30mm, capacity 60kg. Painted drawers, anthracite gray RAL 7016, capacity 50 kg. Multi-socket strips with On/Off switch and 4.5 230 V sockets. Perfect cable management thanks to special opening for protected and orderly passage of cable, absolute safety thanks to CE conformity.

Tech. Code		P3069A01
GR79	Euro	(1736,20)
Dimension	mm	1000 x 580 x 1950
Multi-socket adaptors	N	2 x 5 - sockets (230V)
Movable shelves		4
Colour		RAL 5012
Load capacity	kg	500

P.....01 P.....02

BATTERY CHARGER CABINETS WITH COMPARTMENTS

ITEM: 98.409 - 98.416

Battery cabinets with compartments, connection to the mains to allow charging batteries while the devices are in the cabinet allowing immediate use. Aeration system for optimal air circulation thanks to the ventilation holes on the front and rear, absolute safety thanks to CE conformity. Compartment size 400x400 with modules for 230V and USB. Cabinet with cylinder lock and energy module with double socket type Schuko. Complete wiring CEE7/7.

Tech. Code		P3070A01	P3070B01
GR79	Euro	(2092,70)	(5348,70)
Dimension	mm	810 x 585 x 1789	1205 x 585 x 1789
Compartments		8	12
Module		2 x 230V	1 x 230V - 2 x USB
Colour		RAL 5012	RAL 5012

P.....01 P.....02

QUALITY STATION

ITEM: 17.802

The Quality Station is a useful workstation for reorganizing work, documents and various hardware. Also perfect for carrying out and recording test procedures in the production process. Including plastic shutter, hardware cabinet, cylinder lock, 3m power cord, laminate top, electrification with two-pole and three-pole socket.

Tech. Code		P307201
GR79	Euro	(3126,50)
Dimension	mm	1434 x 725 x 1900
Electric socket		D/Schuko
Colour		RAL 5012

P.....01 P.....02

SAFETY CABINETS FOR PAINTS AND SOLVENTS

ITEM: P3180

Safety cabinet for paints and solvents. Equipped with wide side slots and flame-break plates. Adjustable shelves. Bottom collection tank with 40 L capacity and drain cock. Earthing device. Key lock. Complete with external adhesive labels according to the applicable law. Floor or wall mounting. Yellow RAL 1004.

Tech. Code		P31801	P31803
GR80	Euro	(452,00)	(675,00)
Shelves		2	4
Dimension	mm	1000 x 500 x 1000h	1000 x 500 x 2000h
Colour		RAL 1004	RAL 1004

SAFETY CABINET PPE AND FIRE FIGHTING EQUIPMENT

ITEM: PERFOM14033

Safety cabinets PPE consisting of 1 safe crash cabinet with slotted hinged doors, 1 partition wall, 1 pipe kit Ø 22 coat hanger for perforated shelf. 1 Kit 1 shelf perforated panel, 1 kit of 3 slotted shelves.

Tech. Code		P31821
GR24	Euro	(1343,50)
Dimension	mm	1023 x 555 x 2000h
Colour		RAL 3020
Load capacity	kg	800

SAFETY CUPBOARDS FOR HAZARDOUS SUBSTANCES

ITEM: P3190

CERTIFIED FIRE RESISTANCE 90 minutes, Type 90 safety cabinets for hazardous substances are certified according to EN 14470-2.
Automatic closing system with ambient T° > 50°C.
With 3 rack stainless steel shelves and tray with grid in varnished steel.
Standard colour: Grey RAL 7035.

Tech. Code		P319001	P319002
GR80	Euro	(2637,00)	(4058,00)
External	mm	595 x 600 x 1950	1190 x 600 x 1980
Internal	mm	493 x 446 x 1625	1095 x 446 x 1625
Capacity		80/100 1 Lt bottles	160/200 1 Lt bottles
Weight	kg	210	420

FIRE RESISTANT EN SAFETY CABINETS

ITEM: P3290

Safety cabinets EN compliant safety cabinets for storing flammable products. Fire resistance for 90 minutes certified according to the EN14470-1 standard. Automatic door closing when temperature exceeds 47°, with acid resistant epoxy coating. Inside MFC panels resistant to acid and corrosive vapours.

Tech. Code		P3290G10	P3290G20
GR80	Euro	(2000,00)	(2700,00)
Dimension	mm	600 x 600 x 2070 h	1200 x 600 x 2070 h
Capacity	l	100	220
Shelves		3	3
Weight	kg	216	365

FURNITURE

INOX

These cabinets, tables and shelves are produced in stainless steel, thanks to the characteristics of the raw material used, they are particularly resistant to corrosion and easy to clean.

MAXIMUM HYGIENE

Particularly suitable for contact with food, the cabinets, table and shelves are made of stainless steel and are ideal for use in all environments where maximum hygine and lack of corrosion are indispensable, such as industries and laboratories for production and food processing, industrial kitchens, refrigeration cells, chemical-pharmaceutical laboratories, hospital departments, laundries and environments particularly exposed to bad weather.

ELEMENTS OF VALUE

Furthermore, thanks to their pleasant appearance, the cupboards, tables and shelves which are in stainless steel can be used as valuable elements in domestic and commercial furnishings.

WORKBENCHES IN AISI 304 STAINLESS STEEL WITH LOWER SHELF

ITEM: P0073

Welded box section AISI 304 stainless steel workbenches with fixed lower shelf, AISI 304 steel 40x40 mm box section legs and adjustable plastic feet. **Supplied assembled.**

Tech. Code		P00731000	P00731200	P00731400	P00731600
GR80	Euro	(500,00)	(530,00)	(570,00)	(570,00)
Dimension	mm	1000 x 600 x 850 h	1200 x 600 x 850 h	1400 x 600 x 850 h	1600 x 600 x 850 h
Capacity *	kg	325	250	250	125

* Tolerance 30% less than the actual weight

GARMENT LOCKERS DIRTY/CLEAN STAINLESS STEEL AISI 304

ITEM: P3330

One, two or three compartment garment lockers with sloping top and clean/dirty partition. Made of AISI 304 stainless steel. Available with key lock, padlockable handle or swivel knob with key, shelves for shoes, hats, clothes hanger and adjustable feet.

Tech. Code		P33301	P33302	P33303
GR80	Euro	(558,00)	(920,00)	(1268,00)
Spaces		1	2	3
Dimension	mm	500 x 400 x 2150 h	950 x 400 x 2150 h	1200 x 400 x 2150 h

BOLTED SHELF RACKS IN AISI 304 STAINLESS STEEL

ITEM: P6470

Bolted modular shelving made of AISI 304 stainless steel with 4 smooth shelves complete with bolts, plastic feet, anti-cut edges and gloss finish.

Tech. Code		P64700800	P64701000	P64701200
GR80	Euro	(350,00)	(399,00)	(550,00)
Dimension	mm	800 x 400 x 1800 h	1000 x 400 x 1800 h	1200 x 400 x 1800 h
Shelves	n°	4	4	4

TROLLEYS IN STAINLESS STEEL AISI 304

ITEM: P6570

Platform trolleys in AISI 304 stainless steel. Folding handle mounted on the short side and 4 rubber wheels Ø 125 mm, of which with brakes, non-marking grey rubber ring, rolling on bearings.

Tech. Code		P6570100
GR80	Euro	(580,00)
Dimension	mm	600 x 900 x 970 h
Platform dimension	mm	600 x 800

DOUBLE-SIDED TROLLEY WITH WOLF-MOUTH CONTAINERS

ITEM: P4113

Container trolley equipped with 2 fixed non-marking synthetic rubber wheels Ø 125 mm and 2 swivel wheels with brakes, non-marking synthetic rubber wheels Ø 125 mm, set of 5 profiles with 90 containers size 1 and set of 4 profiles with 48 containers size 2.
Maximum trolley load 300 kg.

Tech. Code		P41131
GR24	Euro	(884,00)
Dimension	mm	1067 x 668 x 1357 h
With Containers		Yes
Colour		Painted sheet metal, anthracite grey (RAL 7016)

PRACTIBOX STORAGE CABINETS

ITEM: PK2000104 - PK2001104

Practibox storage cabinets that allow you to always have the content at hand and in clear view, making it easily withdrawable.
Cabinets consisting of 15 shelves and 9 stops.

Cabinet capacity 500 kg
Shelf load capacity 50 kg

Security: for safety purposes, the cabinets must be fixed to the floor or to the wall. .

Tech. Code		P411972B	P411982B
GR09	Euro	(507,10)	(628,71)
Dimension	mm	700 x 270 x 2000	700 x 270 x 2000
Containers	n°	72	82
Type		-	con anta
Colour		RAL 5012	RAL 5012

HANGING CABINETS FOR SMALL PARTS

ITEM: P4120

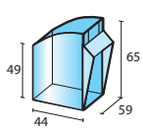
Grey RAL 7001

Tech. Code		P412024	P412030	P412075	P412095
GR80	Euro	(89,00)	(94,00)	(303,00)	(322,00)
Dimension	mm	600 x 120 x 600h	600 x 120 x 600h	600 x 120 x 1800h	600 x 120 x 1800h
Compartments		24	30	75	95
Comp. for row		4	5	5	5

PRACTIBOX STORAGE CABINETS

ITEM: PR90770001

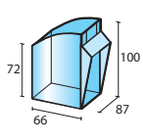
ABS structure, transparent polystyrene drawers with high mechanical resistance, convenient front opening, grey RAL 7000 structure.



Tech. Code	GR09 Euro	Drawers	Dimension mm	
P42109	15,00	9	600 x 69 x 77h	2

ITEM: PR61120001

ABS structure, transparent polystyrene drawers with high mechanical resistance, convenient front opening, grey RAL 7000 structure.



Tech. Code	GR09 Euro	Drawers	Dimension mm	
P42156	18,32	6	600 x 98 x 112h	2

Indivisible package Suggested retail package - Unit price

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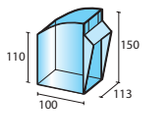
PRACTIBOX STORAGE CABINETS

ITEM: PR51640001

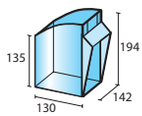
ABS structure, transparent polystyrene drawers with high mechanical resistance, convenient front opening, grey RAL 7000 structure.



Tech. Code	GR09 Euro	Drawers	Dimension mm	
P42205	29,16	5	600 x 141 x 164h	1

ITEM: PR42060001

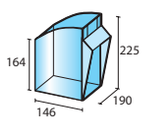
ABS structure, transparent polystyrene drawers with high mechanical resistance, convenient front opening, grey RAL 7000 structure.



Tech. Code	GR09 Euro	Drawers	Dimension mm	
P42254	38,31	4	600 x 174 x 206h	1

ITEM: PR32400001

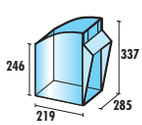
ABS structure, transparent polystyrene drawers with high mechanical resistance, convenient front opening, grey RAL 7000 structure.



Tech. Code	GR09 Euro	Drawers	Dimension mm	
P42303	42,00	3	600 x 209 x 240h	1

ITEM: PR23530001

ABS Practibox storage cabinet with convenient front opening, grey RAL 7000.



Tech. Code	GR09 Euro	Drawers	Dimension mm	
P42352	84,14	2	600 x 311 x 353h	1

TROLLEY WITH TRANSPARENT DRAWERS

NEW

ITEM: BINCART0701

The trolleys with transparent drawer units is an ideal solution for safe storage and handling of small components. The drawers on both side of the trolley are transparent for quick identification of the contents and have a tilting openeing which makes access to the material optimal.

Compostion:

- 1 FBC10070039 Disassembled trolley without wheels
- 2 FBC30070239 Pair of total supports for visual boxes
- 2 FBC25070000 Aluminum profile for picking box
- 2 FAXVBCH00300001 Visual Box unit with 3 drawers H=240 mm
- 2 FAXVBCH00400001 Visual Box unit with 4 drawers H=206 mm
- 4 FAXVBCH00500001 Visual Box unit with 5 drawers H=164 mm
- 6 FAXVBCH00600001 Visual Box unit with 6 drawers H=112 mm
- 2 FAXVBCHL0300099 Stop for Visual Box unit with 3 drawers
- 2 FAXVBCHL0400099 Stop for Visual Box unit with 4 drawers
- 4 FAXVBCHL0500099 Stop for Visual Box unit with 5 drawers
- 6 FAXVBCHL0600099 Stop for Visual Box unit with 6 drawers
- 1 FKRU1252101 Wheels set in synthetic non-marking rubber Ø 125 mm

SUPPLIED DISASSEMBLED

Tech. Code		P42410102
GR24	Euro	(1233,00)
Dimension	mm	1 x 668 x 1357 h
Capacity	kg	300
Weight	kg	48
Colour		Grey RAL 7016

MODULAR DRAWERS

ITEM: POKER 16

Stackable dovetail modular drawer with 16 drawers and 10 movable sections, handles for transport, grey casing, transparent drawers, drawers width 57mm.

Tech. Code	GR80 Euro	Dimension mm
P4330CAS16	25,17	279 x 150 x 195h

ITEM: POKER 25

Stackable dovetail modular drawer with 25 drawers and 20 repositionable sections, handle for transport, grey casing, transparent drawers, 20 drawers width 57 mm and 5 width 121 mm.

Tech. Code	GR80 Euro	Dimension mm
P4340CAS25	39,49	405 x 150 x 240h

Indivisible package Suggested retail package - Unit price

SMALL PARTS ORGANIZERS

ITEM: TERRYMIX T2

Transparent organizer with 7 fixed compartments.

Tech. Code	GR80 Euro	Dimension mm
P4350SC7	8,14	268 x 180 x 53h

ITEM: TERRYMIX T9

Transparent organizer with 9 fixed compartments.

Tech. Code	GR80 Euro	Dimension mm
P4355SC9	5,63	245 x 143 x 38h

ITEM: TERRYMIX F1

Organizer with 16 fixed compartments, blue case and transparent cover.

Tech. Code	GR80 Euro	Dimension mm
P4360SC16/1	6,89	243 x 186 x 38h

ITEM: TERRYMIX F2

Organizer with 10 fixed compartments, blue case and transparent cover.

Tech. Code	GR80 Euro	Dimension mm
P4365SC10	6,89	243 x 186 x 38h

ITEM: TERRYMIX F3

Organizer with 12 fixed compartments, blue case and transparent cover.

Tech. Code	GR80 Euro	Dimension mm
P4368SC12	13,05	345 x 252 x 55h

ITEM: PRO ORGANIZER 16

Organizer with 5 fixed compartments and 12 repositionable dividers, integrated strong and ergonomic handle, black case and transparent cover with double lock.

Tech. Code	GR80 Euro	Dimension mm
P4370SC16/2	17,64	395 x 305 x 60h

ITEM: PRO ORGANIZER 24

Organizer with 5 fixed compartments and 12 repositionable dividers, integrated strong and ergonomic handle, black case and transparent cover with double lock.

Tech. Code	GR80 Euro	Dimension mm
P4375SC24	27,59	510 x 330 x 60h

VISION STORAGE CABINETS

ITEM: P4270

Plastic structure with joints for more cabinets, transparent drawers with front label holder, dark grey casing.

Tech. Code	GR80 Euro	Type	Drawers	Dimension mm
P42701	35,11	12	16	208 x 132 x 208h
P42702	29,99	13	8	208 x 132 x 208h
P42703	25,92	14	4	208 x 132 x 208h

ITEM: P4275

Plastic structure with joints for more cabinets, transparent drawers with front label holder, dark grey casing.

Tech. Code	GR80 Euro	Type	Drawers	Dimension mm
P42751	47,74	15	8	208 x 222 x 208h
P42752	47,74	16	4	208 x 222 x 208h
P42753	44,73	17	4	208 x 222 x 208h

ITEM: P4280

Plastic structure with joints to assemble more adjacent cabinets, transparent drawer units with front label holder, dark grey/transparent.

Tech. Code	GR80 Euro	Type	Drawers	Dimension mm
P42801	76,80	19	2	249 x 366 x 250h
P42802	96,98	19/2	4	249 x 366 x 250h

ITEM: P4285

Plastic structure with joints to assemble more adjacent cabinets, transparent drawer units with front label holder, dark grey/transparent.

Tech. Code	GR80 Euro	Type	Drawers	Dimension mm
P42851	99,37	21	8	249 x 310 x 375 h

UNIONBOX PLASTIC CONTAINERS

ITEM: P4320

High mechanical resistance, superimposable and hookable together by joints on three sides, label holder frame, green.

Tech. Code	GR80 Euro	Size	Dimension mm
P4320A	2,40	A	104 x 165 x 76h
P4320B	5,94	B	147 x 234 x 129h
P4320C	7,72	C	218 x 234 x 129h
P4320D	10,96	D	210 x 341 x 167h
P4320E	20,57	E	307 x 500 x 190h
P4320F	42,94	F	388 x 610 x 250h

PLASTIC CONTAINERS

iMilani

ITEM: COC0015101 - COC0025101 - COC0035101 - COC3A25101 - COC0045101 - COC0015102 - COC0025102 - COC0035102 - COC3A25102 - COC0045102 - COC0015103 - COC0025103 - COC0035103 - COC3A25103 - COC0045103 - COC0015104 - COC0025104 - COC0035104 - COC3A25104 - COC0045104

Plastic container, high impact resistance, sturdy edge allowing stacking, label holder frame.

Tech. Code		P43101G	P43102G	P43103A2G	P43103G	P43104G
GR09	Euro	(1,14)	(2,22)	(5,30)	(6,00)	(12,23)
Size		1	2	3A2	3	4
Dimensions	mm	95 x 160 x 75 h	140 x 230 x 130 h	200 x 350 x 145 h	200 x 350 x 200 h	300 x 500 x 200 h
Colour		Grey	Grey	Grey	Grey	Grey
📦		50	54	21	15	10

Tech. Code		P43101N	P43102N	P43103A2N	P43103N	P43104N
GR09	Euro	(1,14)	(2,22)	(5,30)	(6,00)	(12,23)
Size		1	2	3A2	3	4
Dimensions	mm	95 x 160 x 75 h	140 x 230 x 130 h	200 x 350 x 145 h	200 x 350 x 200 h	300 x 500 x 200 h
Colour		Green	Green	Green	Green	Green
📦		50	54	21	15	10

Tech. Code		P43101R	P43102R	P43103A2R	P43103R	P43104R
GR09	Euro	(1,14)	(2,22)	(5,30)	(6,00)	(12,23)
Size		1	2	3A2	3	4
Dimensions	mm	95 x 160 x 75 h	140 x 230 x 130 h	200 x 350 x 145 h	200 x 350 x 200 h	300 x 500 x 200 h
Colour		Red	Red	Red	Red	Red
📦		50	54	21	15	10

Tech. Code		P43101B	P43102B	P43103A2B	P43103B	P43104B
GR09	Euro	(1,14)	(2,22)	(5,30)	(6,00)	(12,23)
Size		1	2	3A2	3	4
Dimensions	mm	95 x 160 x 75 h	140 x 230 x 130 h	200 x 350 x 145 h	200 x 350 x 200 h	300 x 500 x 200 h
Colour		Blue	Blue	Blue	Blue	Blue
📦		50	54	21	15	10

SMOOTH BOTTOM POLYPROPYLENE CONTAINERS

iMilani

ITEM: ZEZ0025101 - ZEZ0045101 - ZEZ0045102 - ZEZ0025102 - ZEZ3A25101 - ZEZ3A25102 - ZEZ4A25101 - ZEZ4A25102

The P4312 containers are handy, light and easy to clean thanks to the perfectly smooth interior, they are equipped with a sturdy edge that allows overlapping in a stable and safe way.

Tech. Code		P4312272G	P43122723A2G	P43122724A2G	P43122724G
GR09	Euro	(3,07)	(5,41)	(9,35)	(11,51)
Dimension		272-2	272-3A2	272-4A2	272-4
Dimension	mm	211 x 148 x 126h	310 x 210 x 145h	465 x 315 x 120h	465 x 315 x 200h
Colour		Grigio	Grigio	Grigio	Grigio
📦		54	21	16	10

Tech. Code		P4312272N	P43122723A2N	P43122724A2N	P43122724N
GR09	Euro	(3,07)	(5,41)	(9,35)	(11,51)
Dimension		272-2	272-3A2	272-4A2	272-4
Dimension	mm	211 x 148 x 126h	310 x 210 x 145h	465 x 315 x 120h	465 x 315 x 200h
Colour		Verde	Verde	Verde	Verde
📦		54	21	16	10

POLYPROPYLENE CONTAINERS

iMilani

ITEM: RK40125104 - RK40165104 - RK40245104 - RK50125104 - RK50165104 - RK50245104

Containers made of first choice polypropylene, the RK series containers have walls reinforced by special ribs to resist shocks.

Tech. Code		P430012400	P430016400	P430024400
GR09	Euro	(5,12)	(5,62)	(7,08)
Dimension	mm	120 x 400 x 100	160 x 400 x 100	240 x 400 x 100
Weight	g	438	644	540
📦		32	24	16

Tech. Code		P430012500	P430016500	P430024500
GR09	Euro	(5,79)	(6,01)	(7,90)
Dimension	mm	120 x 500 x 100	160 x 500 x 100	240 x 500 x 100
Weight	g	448	528	766
📦		32	24	16

TRANSVERSAL PARTITION

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ITEM: RKD1206896 - RKD1606896 - RKD2406896

Dividers made of transparent polystyrene, the dividers allow the internal subdivision of the containers into several compartments.

Tech. Code		P4302120	P4302160	P4302240
GR09	Euro	(0,76)	(0,84)	(1,34)
By width	mm	120	160	240

WALL SHELVING FOR DRAWERS

ITEM: P4316

Empty painted sheet steel wall shelf for Practibox drawer units.

Tech. Code		P431601	P431602	P431603
GR24	Euro	(60,00)	(65,50)	(59,50)
Dimension	mm	600 x 41 x 1500 h	600 x 41 x 1950 h	600 x 300 x 100 h
Colour		RAL 7000	RAL 7000	RAL 7000
Type		Shelving	Shelving	Base

TOP QUALITY POLYPROPYLENE CONTAINERS

ITEM: AT4312A5101 - AT4317A5101 - AT4322A5101 - AT4332A5101

Top quality polypropylene containers

Tech. Code		P4415120G	P4415170G	P4415220G	P4415325G
GR09	Euro	(7,82)	(9,91)	(10,74)	(15,68)
Dimension	mm	400 x 300 x 120 h	400 x 300 x 170 h	400 x 300 x 220 h	400 x 300 x 325 h
Colour		Grey	Grey	Grey	Grey
		8	6	4	2

On request custom colour and marking for MIN. 100 pieces.

COMB PARTITION - 400MM

ITEM: DI25570246801 - DI25590246801 - DI25512246801 - DI25518246801

Dividers which have slots with a pitch of 20 mm that allow a rational and varied subdivision of the internal space of the containers according to needs.

Tech. Code		P4416070	P4416090	P4416120	P4416220
GR09	Euro	(2,87)	(3,36)	(4,24)	(6,17)
Dimension	mm	255 x 70	255 x 90	255 x 120	255 x 180
Per container	mm	400 x 300 x 120	400 x 300 x 120	400 x 300 x 170	400 x 300 x 220
		10	10	10	10

HINGED LIDS IN TOP QUALITY POLYPROPYLENE

ITEM: AT43HG5101

Lid in top quality polypropylene for P4415 drawers.

Tech. Code		P44171G
GR09	Euro	(4,27)
Dimension	mm	400 x 300 h
Colour		Grey
		10

On request custom colour and marking for MIN. 100 pieces.

TOP QUALITY POLYPROPYLENE DRAWERS

ITEM: AT6412A5101 - AT6417A5101 - AT6422A5101 - AT6432A5101

Top quality polypropylene drawer

Tech. Code		P4425120G	P4425170G	P4425220G	P4425325G
GR09	Euro	(12,94)	(15,90)	(20,63)	(26,85)
Dimension	mm	600 x 400 x 120 h	600 x 400 x 170 h	600 x 400 x 220 h	600 x 400 x 325 h
Colour		Grey	Grey	Grey	Grey
		4	3	2	3

On request custom colour and marking for MIN. 100 pieces.

COMB PARTITION - 600MM

ITEM: DI35512246801 - DI35518246801 - DI35570246801 - DI35590246801

Dividers which have slots with a pitch of 20 mm that allow a rational and varied subdivision of the internal space of the containers according to needs.

Tech. Code		P4426070	P4426090	P4426120	P4426180
GR09	Euro	(1,65)	(1,95)	(2,47)	(3,28)
Dimension	mm	355 x 70	355 x 90	355 x 120	355 x 180
For container	mm	600 x 400 x 120	600 x 400 x 120	600 x 400 x 170	600 x 400 x 220
		10	10	10	10

Indivisible package Suggested retail package - Unit price

HINGED LIDS IN TOP QUALITY POLYPROPYLENE FIRST CHOICE - 600MM

iMilani

ITEM: AT64HG5101

Lid in top quality polypropylene first choice for P4425 drawers.

Tech. Code		P44271G
GR09	Euro	(8,46)
Dimension	mm	600 x 400
Colour		Grey
		10

On request custom colour and marking for MIN. 100 pieces.

POLYPROPYLENE CONTAINERS FIRST CHOICE - 800MM

iMilani

ITEM: AT8617C5101 - AT8622C5101 - AT8632C5101 - AT8643C5101

Polypropylene containers first choice.

Tech. Code		P4429170G	P4429220G	P4429320G	P4429432G
GR09	Euro	(35,79)	(37,02)	(42,01)	(48,58)
Dimension	mm	800 x 600 x 170h	800 x 600 x 220h	800 x 600 x 320h	800 x 600 x 430h
Colour		Grigio	Grigio	Grigio	Grigio
		3	2	2	1

POLYPROPYLENE LIDS FIRST CHOICE - 800MM

iMilani

ITEM: AT86SE5101

Polypropylene lids. First choice for P4429 containers.

Tech. Code		P44311G
GR09	Euro	(13,71)
Dimension	mm	800 x 600
Colour		Grigio
		5

TROLLEY IN POLYPROPYLENE

iMilani

ITEM: MO64TP5107

Trolley made of high impact polypropylene, with the possibility also to be stacked when not in use. Thanks to a simple connection system, it is possible to create rows of trolleys with a single movement. Available as standard with Ø 100mm black nylon wheels. Recommended for codes P4415 and P4425 only.

Tech. Code		P444010
GR09	Euro	(51,11)
Dimension	mm	594 x 396 x 173h
Load capacity	kg	250
Weight	kg	3,54

COLLAPSIBLE CRATES IN PP

iMilani

ITEM: KR4322B5101 - KR6422B5101 - KR6432B5101 - KR6442B5101

Collapsible crates have been specifically designed and built to significantly reduce the overall space when not in use and when transporting empty spaces. The reduction of their volume up to 75% therefore allows a high saving in storage and transport costs.

NEW

Tech. Code		P4432300220	P4432400220	P4432400320	P4432400420
GR09	Euro	(16,00)	(23,78)	(27,14)	(32,34)
Dimension	mm	400 x 300 x 220	600 x 400 x 220	600 x 400 x 320	600 x 400 x 420
Colour		Grey	Grey	Grey	Grey
Height closed	mm	80	80	80	100
		10	5	5	4

LIDS FOR COLLASPIBLE CRATES IN PP

iMilani

ITEM: KR43HG51XL - KR64HG51XL

Two-flap hinged lid.

NEW

Tech. Code		P4434300G	P4434400G
GR09	Euro	(3,73)	(5,92)
Dimension	mm	400 x 300	600 x 400
Colour		Grey	Grey
		10	10

METAL CONTAINERS

ITEM: FLS25000A01 - FLS41000A01 - FLS65000A01 - FLS89000A01

Painted metal sheet container, lifting stud, perpendicular block handle, label holder frame, grey RAL 7000.

Tech. Code		P4410140	P4410200	P4410300	P4410450
GR24	Euro	15,00	31,50	41,00	92,00
Dimension	mm	140 x 230 x 130h	200 x 350 x 200h	300 x 500 x 200h	450 x 700 x 300h
Weight	kg	1,90	2,10	3,40	9,42
		20	8	6	6

ITEM: FLA89200A01

Painted metal sheet container, double perpendicular block handle, label holder frame, grey RAL 7000, size 272-3 and size 272-4.

Tech. Code		P4420200	P4420300	P4420500
GR24	Euro	39,00	44,00	(109,00)
Dimension	mm	300 x 200 x 200 h	450 x 300 x 200 h	680 x 450 x 300 h
Weight	kg	2,3	4,05	8,1
		8	6	6

PERFORATED GALVANIZED STEEL CONTAINERS

ITEM: FLA65130099 - FLA65150099

Perforated galvanized steel drawer, size 272-4.

Tech. Code		P443007	P443010
GR24	Euro	65,50	65,50
Dimension	mm	450 x 300 x 200 h	450 x 300 x 200 h
Hole Ø	mm	7	10
		6	6

SELF-TILTING SCRAP HOLDERS

CE

ITEM: WX9900

Fork mounted structure with fork lift; simple and safe automatic emptying of the container through the tilting lever without getting off the forklift truck; watertight collection tank with sheet metal filter for the separation of liquids and solids and ball drain cock. Compliant with European standards, blue RAL 5004.
The scrap holders are supplied without a release lanyard.

Tech. Code		P4511280	P4511300	P4511500
GR58	Euro	(1300,00)	(1450,00)	(1600,00)
Model		lt - 280	lt - 300	lt - 500
Capacity	kg	600	600	1000
Weight	kg	80	102	130
A x B x C	mm	970 x 750 x 890	1350 x 820 x 650	1350 x 920 x 910
D	mm	700	490	700
E	mm	790	520	740
Inclination	°	25.1	63.5	57.6

Tech. Code		P4511750	P45111000
GR58	Euro	(1700,00)	(1900,00)
Model		lt - 750	lt - 1000
Capacity	kg	1350	1700
Weight	kg	152	181
A x B x C	mm	1350 x 1070 x 1040	1550 x 1070 x 1210
D	mm	825	970
E	mm	800	920
Inclination	°	49.6	54

Indivisible package Suggested retail package - Unit price

CONTAINERS WITH OPENABLE BOTTOM

ITEM: P4520

The best solution to facilitate the collection and unloading of waste and scrap. Simple and safe automatic emptying, Lifted by forklift truck; easy unload by the operator using a lever to empty the entire content without getting off the forklift truck. Standard unloading opening dimensions with open bottom mm 420.
Standard colours: dark blue RAL 5010 - green RAL 6011 - grey RAL 7001 - orange RAL2004 - light blue RAL 5012.

Tech. Code		P45201B	P45202B	P45203B
GR80	Euro	(947,00)	(950,00)	(1194,00)
A	mm	1000	1000	1000
B	mm	800	800	800
C	mm	650	1000	1300
D	mm	110	110	110
E	mm	110	110	110
Load capacity	kg	2000	2000	2000
Colour		RAL 5010	RAL 5010	RAL 5010

POLYETHILENE SCRAP HOLDERS

ITEM: P4515

High density polyethylene scrap holder suitable to transport particular types of waste and scrap, Watertight. Equipped with a release and tilting mechanism with ropes that ensures the unloading process without leaving the forklift truck.
Fitted with two gas-charged shock absorber and a steel "end-stop" mechanism to ensure a controlled and gradual tilting to prevent damages during the emptying phases. Sturdy construction and easy to handle, Forklift jackets and bucket support base made of sheet steel metal for high resistance, Equipped with 2 fixed & 2 swivel castors with brakes.

Tech. Code		P45151000
GR80	Euro	(3441,00)
A	mm	1650
B	mm	1190
C	mm	1075
E	mm	955
Capacity	L	1000
Load capacity	kg	1000

MINI SERIES TROLLEYS WITH 2 TRAYS

ITEM: FCR00210004 - FCR00210008

Mini series trolleys with welded tubular structure, 4 swivel wheels without brake.

Tech. Code		P51350101	P51350102
GR24	Euro	(218,50)	(218,50)
Dimension	mm	555 x 445 x 845 h	555 x 445 x 845 h
Wheel Ø	mm	100	100
Capacity	kg	150	150
Weight	kg	11	11
Colour		RAL 5012	RAL 7035

TROLLEYS WITH 3 TRAY LEVELS DISASSEMBLED DRAW TRAYS

ITEM: P5141

Disassemble trolley supplied to be assembled with practical draw, round handle. Draw with telescopic guide and automatic hooking system. Designed for the insertion of the tool holder modules.
Red colour RAL 3020.

Tech. Code		P51413020
GR80	Euro	161,00
Dimension	mm	677 x 434 x 825
Castor wheels Ø	mm	100
Uprights	mm	1,5
Tray thickness	mm	1
Tray capacity	kg	30
Drawer capacity	kg	3
Load capacity	kg	100 max

While stocks last

TROLLEYS WITH 3 TRAYS

ITEM: WX9400

Trolleys with 3 trays with ribbed mat positioned only on the trays above, the 2 central trays do not have mats. Equipped with antti-drip edges on all platforms to prevent objects from falling during transport. Capacity of each tray is approximately 100 kg. Handle with black technopolymer terminal, reinforced with glass fibers. Metallic grey aluminum tube, 2 mm thick. 2 pivoting wheels (Ø100 mm) and 2 fixed wheels (Ø100 mm), one of which with brake. Supplied diassembled. BLUE RAL 5004 epoxy.

Tech. Code		P543301
GR58	Euro	250,00
Dimension	mm	750 x 450 x 950
Capacity	kg	200
Weight	kg	21,8

RIBBED MAT

ITEM: WX9401

Ribbed mat accessory for WX9400 trolleys.
Black sheet based on styrene rubber with good mechanical properties.
Thickness 1,5mm

Tech. Code		P543401
GR58	Euro	(12,00)
Dimension	mm	744 x 444

TROLLEYS WITH 3 TRAYS

ITEM: CLEVER1005

Trolleys with three trays, completely dismountable with tubular metal handles. 2 fixed and 2 swivel rubber wheels (one with a brake) supplied assembled. Grey RAL 7035.

Tech. Code		P5315202
GR24	Euro	(367,50)
Dimension	mm	1024 x 615 x 847 h
Wheel Ø	mm	125
Tray capacity	kg	100
Weight	kg	29.32
Colour		RAL 7035

WORK TROLLEYS WITH 2 TRAYS

ITEM: P5332

Monobloc work trolleys with 2 shelves Ø 125mm wheels, 2 of which are swivel and 2 are fixed. Max capacity trolley 300 Kg.
Blue colour Ral 5015

Tech. Code		P533201
GR80	Euro	230,00
Dimension	mm	920 x 600 x 840
Tray capacity	kg	100

PLATFORM TROLLEYS

ITEM: FCEB1050304 - FCEB1050308

Platform trolley with two fixed and 2 swivel rubber wheels Ø 125mm.

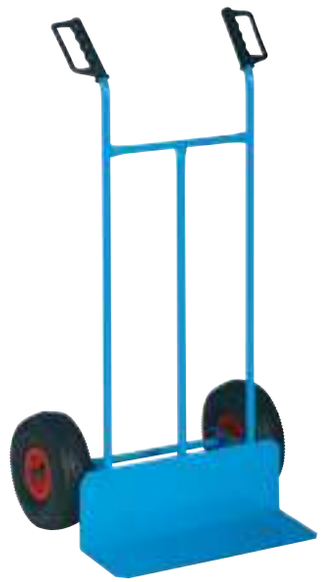
Tech. Code		P5410101	P5410102
GR24	Euro	(290,00)	(290,00)
Dimension	mm	1135 x 700 x 915 h	1135 x 700 x 915 h
Capacity	kg	250	250
Weight	kg	22.96	22.96
Colour		RAL 5012	RAL 7035

VERTICAL TRANSPORT TROLLEYS

ITEM: P5421

Multipurpose trolley ideal for handling various types of products.
Sturdy construction and absolute practicality. Plastic handle with anti-crushing protection.
Colour blue RAL 5015

Tech. Code		P542101	P542102
GR80	Euro	(100,00)	(119,80)
Dimension	mm	500 x 380 x 1100	500 x 470 x 1100
Wheels Ø	mm	200	260
Wheel type		Rubberized nylon	Pneumatic
Load capacity	kg	200	200



SMALL CYLINDER TROLLEYS

ITEM: P5431

Small cylinder trolleys, Wheels Ø 200 mm. Colour blue RAL 5015

Tech. Code		P543101
GR80	Euro	(148,00)
Dimension	mm	420 x 340 x 940
Load capacity	kg	200

CYLINDER TROLLEYS

ITEM: P5441

Cylinder trolleys, equipped with tool box. Wheels Ø 250 mm. Suitable for Ø 250 lt.40. Colour Blue RAL 5015

Tech. Code		P544101
GR80	Euro	(220,00)
Dimension	mm	500 x 450 x 1400
Load capacity	kg	200

PLATFORM TROLLEYS

ITEM: FCEP1052004

Platform trolleys equipped with 2 fixed wheels, 1 swivel wheel and 1 swivel wheel with brake Ø 200 mm in rubber. load capacity 205 kg, **supplied disassembled.**

Tech. Code		P5520101
GR24	Euro	(539,00)
Dimension	mm	1095 x 700 x 1000h
Load capacity	kg	500
Weight	kg	30
Colour		RAL 5012

LARGE TROLLEYS

ITEM: CLEVER1027 - CLEVER1028

Trolleys supplied **disassembled** consiting of: 1 wooden top, 1 perforated rear panel, 1 pair of uprights for panel fixing, 2 perforated side panels, 1 kit of non-marking synthetic rubber wheels Ø 125 mm, 1 roll holder kit with paper. Ø 240/300 mm, 2 kits 10 magnets Ø 20 mm, 1 container hooking bar with 3 containers mis 2, 1 large reversible shelf, 1 6-piece spray can holder and 2 inclined 2-piece silicone holders.

Tech. Code		P561001	P561002
GR24	Euro	(1124,00)	(1124,00)
Dimension	mm	1024 x 615 x 1540h	1024 x 615 x 1540h
Colour		RAL 7035	RAL 5012
Load capacity	kg	300	300
Weight	kg	50	50

TROLLEY IN SHEET METAL WITH NET SIDES

ITEM: P5613

NEW

Sturdy trolley that can be dissasembled closed on 3 sides by an electro-welded mesh with a 50 x 50 x 4 mesh which defines its very important protective and anti-falling function.
Wheels ø mm. 200 with bearings (2 fixed and 2 swivel).
It has 4 practical extractable shelves measuring 1096 x 647 mm, in sheet metal th. 8/10 with 2 reinforcements.
Platform dimensions: 1100 x 650 mm

Tech. Code		P5613100
GR80	Euro	(1210,00)
Dimension	mm	1320 x 670 x 1770 h
Capacity	kg	450
Colour		RAL 7038

Indivisible package Suggested retail package - Unit price

MODULAR TROLLEY WOODEN SHELF

NEW

ITEM: FCLH0560404

Complete with 2 fixed wheels, 1 swivel wheel with brake and 1 without Ø 150 mm in standard rubber.

Tech. Code		P561101
GR24	Euro	(647,00)
Dimension	mm	1135 x 625 x 1535
Capacity	kg	250
Colour		RAL5012

ADDITIONAL SHELF MODULAR TROLLEY

NEW

ITEM: FCF05800004

Additional shelf for trolley mod. FCLH0560404

Tech. Code		P561201
GR24	Euro	(117,50)
Dimension	mm	995 x 600 x 20
Capacity	kg	100
Colour		RAL 5012

Related products

WODEX COMBINATION RATCHET WRENCHES WITH SWIVEL HEAD

Tech. Code	⬣ mm	a mm	L mm
E020512	12	6.4	174
E020513	13	6.5	180
E020514	14	7.0	193
E020517	17	8.0	233

Product available in Chap. E

AUTOMATIC VERTICAL STORAGE - INTERNAL BAY

Vertical storage is the intelligent answer for those looking for a fully flexible storage solution. All types of materials and products such as loose parts, containers (boxes, trays and recipients), small parts, spare parts, reels, bottles etc. can be stored in your vertical storage system. It consists of a pre-assembled base that allows easy handling and quick installation. This means that the storage system can be ready at your production facility within 48 hours.
The WMS software makes it easy to integrate the storage system into the workflow and is designed to interface with all types of ERP systems.

Tech. Code	GR80 Euro	Dimension mm	Weight machine kg	Drawers n°	Tray size mm	Drawers capacity kg	Drawers/hour maximum load n°	Max time of access to tray
P612051	(-)	1685 x 1675 x 5000 h	1880	32	1300 x 425	350	107	22"
P612052	(-)	2285 x 1675 x 5000 h	2207	32	1900 x 425	350	107	22"
P612053	(-)	2885 x 1675 x 5000 h	2519	32	3500 x 425	350	10	22"
P612071	(-)	1685 x 1675 x 7000 h	2567	52	1300 x 425	350	93	28"
P612072	(-)	2285 x 1675 x 7000 h	3052	52	1900 x 425	350	93	28"
P612073	(-)	2885 x 1675 x 7000 h	3513	52	2500 x 425	350	93	28"

(-) PRICE ON REQUEST

UNIVERSAL SHELVING L1006

ITEM: 45.400.222 - 45.401.222

Galvanized universal shelving. Quick and easy to assembly with an interlocking system for all elements and shelves, without the need for screws.
Can always be adapted to new items to be stored thanks to the flexibility of installation and rearrangement of shelves, drawers and individual elements with a 25 mm pitch.
Height of shelf edges only 25 mm to make the most of the shelves.

Tech. Code		P630800	P6308A00
GR79	Euro	276,46	190,70
Dimension	mm	1000 x 400 x 2000	1000 x 400 x 2000
Shelves	n°	5 x 160 Kg	5 x 160 Kg
Description		Universal shelving	Additional bay
Capacity	kg	2800	2800

UNIVERSAL SHELVING L1006 WITH FULL SIDED WALL PANELS

ITEM: 45.402.222 - 45.403.222

Universal shelves galvanized version with solid sheet sided panels. Quick and easy to assembly with an interlocking system for all the elements and shelves, without the use of screws. Always adapatable to new items to be stored thanks to the flexibility of installation and modification of the shelves, drawers and individual elements with a 25 mm pitch. Height of shelves edges of only 25 mm to make the most of the shelves. .

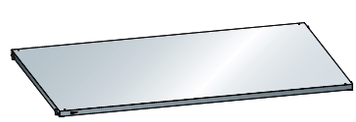
Tech. Code		P630900	P6309A00
GR79	Euro	(293,70)	(213,80)
Dimension	mm	1000 x 400 x 2000	1000 x 400 x 2000
Shelves	n°	5 x 160 Kg	5 x 160 Kg
Description		Universal shelves	Additional span
Range span	kg	1000	1000

PLAIN ADJUSTABLE SHELVES

ITEM: 50.054.222; 50.055.222

Plain galvanized shelves. With fixing hooks included. 25 mm shelf thickness in sheet steel.

Tech. Code		P6311A	P6311B
GR79	Euro	(29,80)	(33,40)
Dimension	mm	1000 x 400	1000 x 400
Load capacity	kg	160	220

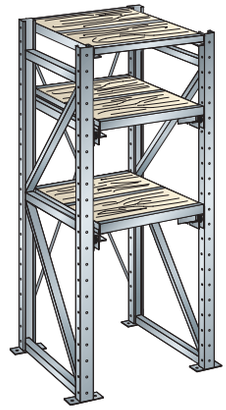


SHELVING WITH EXTRACTABLE SHELVES FOR HEAVY GOODS

LISTA

ITEM: 71.530 - 71.534 - 71.532 - 71.536 - 71.531 - 71.535 - 71.533 - 71.537

Shelves with pull-out shelves for heavy goods, with 2 pull-out frames (up to 65%) and a fixed frame as top shelf, each including pressed chipboard inserts, 40 mm thick. Possible tools with sided panels, additional removable and fixed frames, covers, sliding doors, shutters and bumpers for uprights. Base span including a diagonal pair for longitudinal stabilization, 2 support frames, ground anchorage and leveling plate set. Additional span including a support frame, ground anchor and leveling plate set. Drill holes in the uprights every 100 mm. Made of sheet steel.



P.....01 | P.....02

Tech. Code		P6400A01	P6400AC01	P6400B01	P6400BC01
GR79	Euro	(2752,40)	(2280,90)	(3043,70)	(2564,30)
Dimension	mm	890 x 860 x 2000	890 x 860 x 2000	1290 x 860 x 2000	1290 x 860 x 2000
Fixed frame		1	1	1	1
Removable frame		2	2	2	2
Colour		RAL 5012	RAL 5012	RAL 5012	RAL 5012
Description		Complete rack	Additional span	Complete rack	Additional span
Frame capacity	kg	1000	1000	1000	1000
Load capacity	kg	9000	9000	9000	9000

Tech. Code		P6400C01	P6400CC01	P6400D01	P6400DC01
GR79	Euro	(3333,00)	(2796,90)	(3640,90)	(3116,00)
Dimension	mm	1260 x 890 x 2000	1260 x 890 x 2000	1290 x 1260 x 2000	1290 x 1260 x 2000
Fixed frame		1	1	1	1
Removable frame		2	2	2	2
Colour		RAL 5012	RAL 5012	RAL 5012	RAL 5012
Description		Complete rack	Additional span	Complete rack	Additional span
Frame capacity	kg	800	800	800	800
Load capacity	kg	9000	9000	9000	9000

SHELVING WITH DRAWS 54X36E

LISTA

ITEM: 70.657

Ideal solution for large items weighing up to 200 kg per drawer, pull-out shelves for housing flush with the surface. Can also be used for storing NC tools. The shelving comes with 3 universal shelves, 2 pull-out shelves, 7 drawers (1x50 / 1x75 / 1x100 / 1x125 / 1x150 e 2x200 mm),1 rear wall, 2 side walls. Closure with KEY lock.
Possibility to modulate it by adding items from the List Catalog at will.

Tech. Code		P630700
GR79	Euro	(3681,94)
Dimension	mm	1117 x 706 x 2200
Colour		RAL 7035 + RAL 5012
Shelves capacity	kg	250
Capacity of pull-out shelves	kg	200

LIGHT SINGLE-SIDED CANTILEVER

ITEM: P6720

Single-sided cantilever kit, made up of 3 single-sided columns 2500mm and 4 shelves, columns distance between 1000mm, equipped with load holding pegs on the shelf tips and bases including fasteners and load chart. The cantilever is made up of:
- Single-sided colunm H2500 galvanized disassembled
- Base with holes for continuous surface complete with profiles+plates+ screws+dowels
- RAL 1033 yellow shelf with locking pin+cap
- Galvanized cross 1400x1000 disassemble column axis with screws
- Galvanized load retaing pegs 160xØ10 with M10x19 bushing
-PVC chart 180x594 and relative metal support PVC 180x510

Tech. Code		P6720KCS5	P6720KCS7
GR80	Euro	(1300,00)	(1400,00)
Dimension	mm	2100 x 680 x 2500	2100 x 880 x 2500
Load capacity	kg	690	480
Shelf capacity	kg	230	160
Single-sided column capacity	kg	1350	1095
Colour cantilever		Zinc	Galvanized zinc
Colour shelves		RAL 1033	RAL 1033

PALLET RACKS LIGHT SERIES

ITEM: P6721

The P6721 pallet rack series responds with versatility to every need and also guarantees good load capacity and safety in use.
Supplied in crate, all disassembled.
Composed of:
- M60I galvanized abutment mm h2500
- M60I mm. yellow RAL1033
- Galvanized shelf M60I-M110
- Dowel M10 x 95
- A4 pvc chart

Tech. Code		P6721PPL6	P6721PPL8	P6721MOD1	P6721MOD2
GR80	Euro	(1100,00)	(1200,00)	(1100,00)	(1250,00)
Dimension	mm	2220 x 600 x 2500	2220 x 800 x 2500	2160 x 600 x 2500	2160 x 800 x 2500
Load capacity	kg	850	850	850	850
Colour		Galvanized zinc	Galvanized zinc	Galvanized zinc	Galvanized zinc
Description		Shelves	Shelves	Add-on-module	Add-on-module

PALLET RACKS HEAVEY SERIES

ITEM: P6722

This system was created to meet the need to organise, store and stack at height (with different capacities), using front, side, reach, satellite forklift trucks or stacker cranes. The structural components of the storage system built with steel supplied with type 3.1 inspection certificates according to standard EN 10204; indications for use and maintenance in compliance with the UNI EN 15635 standard.
Composed of:
- Shoulder M110/80 3000 mm galvanized zinc
- Max capacity 8000 kg
- M110 shaped beam with connector
- Chart PVC A4
- Galvanized zinc M12x140 dowel

Tech. Code		P6722PP1	P6722PMOD1	P6722PP2	P6722PMOD2
GR80	Euro	(900,00)	(600,00)	(1000,00)	(700,00)
Dimension	mm	1990 x 1000 x 3000	1900 x 1000 x 3000	2890 x 1000 x 3000	2800 x 1000 x 3000
Load capacity	kg	2990	2990	2300	2300
Colour		Galvanized zinc	Galvanized zinc	Galvanized zinc	Galvanized zinc
Description		Shelves	Add-on-module	Shelves	Add-on-module

BOLTLESS SHELF RACKS

ITEM: P6723

The boltless shelf racks are a static storage system that guarantees extreme modularity, versatility and accessories.
Composed of:
- Mounts grey RAL 7038 mm.h2495
- RAL 7038 grey crossbar
- Foot/top cap in PVC
- Grey RAL 7038 top mm.1200 - Capacity kg.150
- Galvanized hook
- Adhesive label mm.80x25

Tech. Code		P6723SG1	P6723MA1	P6723SG2	P6723MA2
GR80	Euro	(250,00)	(170,00)	(275,00)	(190,00)
Dimension	mm	1200 x 500 x 2500	1200 x 500 x 2500	1200 x 600 x 2500	1200 x 600 x 2500
Shelf capacity	kg	150	150	150	150
Colour		RAL 7038	RAL 7038	RAL 7038	RAL 7038
Description		Shelves	Add-on module	Shelves	Add-on module

STORAGE SUPPORTS AND TRANSFER STATIONS

WODEX

PDF PDF

ITEM: WX9901

Transfer supports for nr. 2 drums, stackable Spill pallet in galvanized steel.

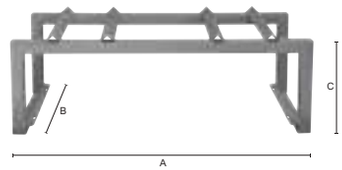
Tech. Code	GR58 Euro	Description	A mm	B mm	C mm	Storage capacity	Load capacity l
P6800VASCA	(384,00)	Spill pallet	1390	1160	170	-	270
P6800F2	(422,00)	Uprights	1500	550	850	2 drums of 200 L	-

DRUM STORAGE SUPPORTS

NEW

ITEM: WX9902

Horizontal supports for storing drums in RAL 7001 grey colour.



Tech. Code		P6801F1	P6801F2
GR58	Euro	(184,00)	(278,00)
A	mm	600	1180
B	mm	600	600
C	mm	380	380
Storage capacity		1 drum of 200 L	2 drums of 200 L

DRUM HOLDER TROLLEYS

NEW

ITEM: WX9903

Conceived specifically for handling within the company, the drum holder trolley allows the vertical and horizontal storage, with the use of special options, of 1 or 2 drums. Grey colour RAL 7001.
It is equipped with a push handle, two fixed wheels and two pivoting wheels with brakes.
Compliant with the International Standard UNI EN ISO3834-2:2021

Tech. Code		P6802F1	P6802F2
GR58	Euro	(740,00)	(784,00)
A	mm	860	1340
B	mm	860	850
C	mm	1170	1170
D	mm	220	330
E	mm	190	190
Storage capacity		1 Vertical drum	2 Vertical drums or 1 horizontal drum

SPILL PALLETS IN STEEL FOR DRUMS

NEW

ITEM: WX9904

Spill pallets in steel for the storage of 200-litre drums, positioned directly on galvanized grating. Grating height of 30 mm.
RAL 7001 gray colour.
Compliant with International Standard EN ISO 3834-2:2021

Tech. Code		P6803F1	P6803F2	P6803F4
GR58	Euro	(522,00)	(562,00)	(938,00)
A	mm	860	1340	2660
B	mm	860	850	850
C	mm	430	330	330
Storage capacity		1 drum of 200 L	2 drums of 200 L	4 drums of 200 L

Tech. Code		P6803F4SQ	P6803F8
GR58	Euro	(708,00)	(1417,00)
A	mm	1340	2720
B	mm	1250	1250
C	mm	300	300
Storage capacity		4 drums of 200 L	8 drums of 200 L

SPILL PALLETS IN STEEL FOR CISTERNS

NEW

ITEM: WX9905

Spill pallets in steel for the storage of 1000 L cisterns, positioned directly on galvanized grating. Colour grey RAL 7001.
Complies with the International standard EN ISO 3834-2:2021

Tech. Code		P6804C1	P6804C2	P6804C3
GR58	Euro	(1175,00)	(1821,00)	(2597,00)
A	mm	1340	2720	3280
B	mm	1650	1315	1315
C	mm	620	420	420
Storage capacity		1 cistern of 1000 L	2 cisterns of 1000 L	3 cisterns of 1000 L
Collection volume	l	1000	1000	1000

Indivisible package Suggested retail package - Unit price

SPILL PALLETS IN STEEL WITH INCLINED SUPPORT FOR CISTERNS

WODEX

NEW

ITEM: WX9906

Spill pallets complete with inclined support in steel for the storage of 1000 L cisterns. Pressed galvanized grating, mesh 44x33, height 30 mm. Colour grey RAL 7001.
Compliant with the International standard UNI EN ISO 3834-2:2021

Tech. Code		P6805C1S
GR58	Euro	(1562,00)
A	mm	1340
B	mm	1650
C	mm	1110
Storage capacity		1 cistern of 1000 L
Collection volume	l	1000
Capacity	kg	1200

SPILL PALLETS WITH POLYETHYLENE INTERIOR FOR 1000 L CISTERNS

WODEX

NEW

ITEM: WX9907

Watertight carbon steel spill pallets according to UNI 10025 with internal polyethylene lining for storage according to standard of a 1000 L cisterns. Used to protect the aquifers in case of accidental spills of dangerous and polluting substances, this secondary containment system is able to prevent and reduce potentially polluting situations. Grey in colour RAL 7001.
Technical data plate and safety labeling according to Legislative **Decree n.81 of 9 April 2008**
Execution according to **Welding Procedure Specification according to UNI EN 15609-1**

Tech. Code		P6806C1
GR58	Euro	(2846,00)
A	mm	1085
B	mm	1655
C	mm	730
Storage capacity		1 cistern of 1000 L
Collection volume	l	1000
Capacity	kg	1000

POLYETHYLENE SPILL PALLETS FOR DRUMS

WODEX

NEW

ITEM: WX9908

Spill pallets that can be moved with a forklift or transpallet thanks to the special housings for the forks obtained from the shaping of the bottom. Made of polyethylene for total protection against corrosion. These collection tanks, made of ecological polyethylene, are ideal for the storage of acids, alkaline solutions, oils, non-flammable chemicals and many other substances compatible with polyethylene. Exceptional resistance to oils, acids, bases and corrosives.
Polyethylene pallets 1200x1200x140 mm, colour black.

Tech. Code		P6807F2	P6807F4
GR58	Euro	(729,00)	(1183,00)
A	mm	1418	1418
B	mm	1018	1418
C	mm	515	515
Storage capacity		2 drums of 200 L	4 drums of 200 L
Collection volume	l	370	590
Capacity	kg	665	1000

SPILL PALLETS IN POLYETHYLENE FOR CISTERNS

WODEX

NEW

ITEM: WX9909

Spill pallets that can be moved with a forklift or transpallet thanks to the special housings for the forks obtained from the shaping of the bottom, made of polyethylene for total protection against corrosion. Large support surface, ideal for placing one or two 1000 L cisterns. These collection cisterns, made of ecological polyethylene, are ideal for the storage of acids, alkaline solutions, oils, non-flammable chemicals and many other substances compatible with polyethylene. Polyethylene pallets 1200x1200x140xmm, colour black.

Tech. Code		P6808C1	P6808C2
GR58	Euro	(1795,00)	(2461,00)
A	mm	1418	2380
B	mm	1418	1418
C	mm	985	748
Storage capacity		1 drum of 1000 L	2 drums of 1000 L
Collection volume	l	1150	1400
Capacity	kg	1500	2500

Indivisible package Suggested retail package - Unit price

COLLECTION TANK WITH CANOPY FOR 1000 L TANKS

WODEX NEW

ITEM: WX9910

Collection tank with canopy for 2 1000 L cisterns. Made of carbon steel profiles with high flexibility and resitance, assembled together according to static requirements **UNI EN ISO 9606-1: 2013 standard.** The tank has no doors and no walls, has a hot-dip galvanized lid structure that protrudes both in front and henind with a rear inclination for draining rainwater. Storage surface consisting of pressed, edged and hot-dip galvanized mesh size 44X33, removable as needed with a capacity of 1000 kg / m2. Height from the ground 100 mm with special supported feet.Colour grey RAL 7001.
Complies with the following community directives: **2009/104/CE** Work equipment.

Tech. Code		P6809C1	P6809C2
GR58	Euro	(2912,00)	(4485,00)
A	mm	2040	3500
B	mm	2000	1900
C	mm	2262	2110
Storage capacity		1 tank 1000 L	2 tanks 1000 L
Collection volume	l	1000	1000
Capacity	kg	1000	1000

DEPOSITS FOR OUTDOOR STORAGE FOR 1000 L CISTERNS

WODEX NEW

ITEM: WX9911

Deposits suitable for outdoor storage of 1000 L cisterns, consisting of side walls with lamellar-shaped air intakes to ensure air exchange and a lid supported by gas shock absorbers with the possibility of closing with a padlock to protect the content by unauthorized people. Storage surface made up of galvanized pressed grating, mesh 44x33, height 30 mm.
Colour Grey RAL 7001.
UNI EN ISO3834-3:2006 and annex V of the D.L. N.81/08.

Tech. Code		P6814C1
GR58	Euro	(7174,00)
A	mm	1350
B	mm	1660
C	mm	1900
Storage capacity		1 tank of 1000 L
Collection volume	l	1000

DEPOSITS FOR OUTDOOR STORAGE

WODEX NEW

ITEM: WX9912

Deposits with collection containers. For easy loading and unloading operations, the lid of the container is supported by gas shock absorbers. The sturdiness of the lid and doors (padlockable) protects the contents from unauthorized persons. Equipped with ventilation grilles. Pressed galvanized grating height 30 mm. Grey colour RAL 7001.
Compliant with the International Standare UNI EN ISO3834-2:2021

Tech. Code		P6816F2	P6816F4
GR58	Euro	(2544,00)	(2708,00)
A	mm	1350	1350
B	mm	860	1260
C	mm	1570	1540
Storage capacity		2 drums of 200 L	4 drums of 200 L

STACKABLE STEEL TANKS FOR DRUMS

WODEX NEW

ITEM: WX9913

Stackable steel tanks for the storage of 200 liter drums, positioned directly on galvanized grating. Pressed galvanized grating, mesh 44X33, height 30 mm. Colour grey RAL 7001. **Compliant with the International standard UNI EN ISO3834-2: 2021**

Tech. Code		P6817F4
GR58	Euro	(1656,00)
A	mm	1350
B	mm	1260
C	mm	1430
Storage capacity		4 x 200 L drums

ROUND BASE FOR DRUM HANDLING

ITEM: P6812

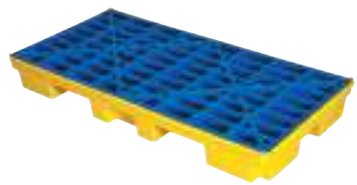
Round base for 200 l drum handling with four Ø 100 mm castors.

Tech. Code	GR80 Euro	Load capacity
P681200	(210,00)	1 x 200 L drum

INTERLOCKING CONTAINMENT STAND

ITEM: P6920

Interlocking containment stand in reinforced plastic. Grid with a high bearing capacity. Drip proof interlocking system on the long and short sides for high speed modularity. 80 l capacity.



Tech. Code		P6920F2
GR80	Euro	(255,00)
Dimension	mm	1320 x 660 x 150
Capacity	L	80
Load capacity	kg	1136

POLYETHYLENE STORAGE DEPOSITS

ITEM: P6950

Made of ecological medium density polyethylene LLDPE through rotational molding procedure. Resistant to corrosion against acids, alkalis, oils. 200 lt drums or 1000 lt ibc's storage.
Equipped with aeration grids printed on doors, to avoid gas saturation into the box.
Monolithic structure - no welding, solid construction, low shape for an easy access during loading and picking operations, doors opening at 180°, possibility to fix the box on the ground by specifics cables and hooks (optional). The deposit must be moved only empty, doors equipped with handles for opening and closing with lever padlock. Can be moved using a forklift truck due to the particular shaping of the bottom, direct pallet positioning into the deposit, pallet not include.

Tech. Code		P6950F2	P6950F4
GR80	Euro	(2387,00)	(2678,00)
Dimension	mm	1550 x 1000 x 1940	1540 x 1600 x 2000
Capacity		2 fusti da 200 L	4 fusti da 200 L
Collection volume	L	240	470

POLYETHYLENE STORAGE DEPOSITS

ITEM: P6955

Made of ecological medium density LLDPE polyethylene through rotational. Resistant to corrosion by numerous acids alkalis oils. Storage of 1000 liter tanks. Equipped with ventilation grids printed on doors to avoid gas accumulation inside the box. Monolithic structure without welding, door opening at 180°, possibility of anchoring to the ground by means of cables fixed to optional bolted eyelets in suitable holes. The boxes are equipped with handles for opening and closing with a padlockable lever. Opening and closing Movable (when empty) by forklift. Direct support of the pallet in the containers, pallet not supplied.

Tech. Code		P6955C1
GR80	Euro	(3390,00)
Dimension	mm	1540 x 1600 x 2350
Capacity		1 x 1000 L tank
Collection volume	L	1080

CONTAINERS FOR POLLUTING AND FLAMMABLE SUBSTANCES

ITEM: P6960

Containers are the right solution for storage of polluting and flammable substances. Suitable for the storage of dangerous substances even in small containers if expanded with optional, shelving collection volume 300/1000 lt.

Optional accessories:
GR - Ventilation grid for storage of flammable products.
SC - Internal shelving composed of 3 shelves W=2000mm x D=500mm for storing small containers.
RA - Access ramps with manual trolleys.
On request other models and accessories.

Tech. Code		P696001Z	P696002Z	P6960GR	P6960SC	P6960RA
GR80	Euro	(5262,00)	(7989,00)	(350,00)	(1078,00)	(418,00)
A est/int	mm	2350/2140	3150/2940	-	-	-
B est/int	mm	1150/940	2350/2140	-	-	-
C est/int	mm	2365/2000	2365/2000	-	-	-
Collection volume	L	300	1000	-	-	-
Storage area		2 m²	6 m²	-	-	-
Optional		-	-	Ventilation grill	Internal shelving	Access ramp

STORAGE DEPOSIT FOR TWO 1000 L TANKS

ITEM: P6962

The outside of the deposit is covered with galvanized metal sheets and is used to store two 1000 litre tanks outdoors. It consists of a steel collection tank that has been hand-painted with a two-component epoxy paint and finished with high solid acrylic paint, colour RAL 9006. Floor made from hot galvanized metal, walls and roof made from galvanized steel profiles and high relief galvanized corrugated sheet cladding, key lock. Can be handled using a forklift truck with fork extensions and adequate lifting capacity.
Complies with the following European directives: 2009/104/EC and Italian legislative decree 81/2008 annex V.

Optional accessories:
- Optional insulating roof
- Optional ventilation grilles for storing inflammable materials
- Optional acid-resistant lining for collection tank
- Supplied assembled.

Tech. Code		P6962C2
GR80	Euro	(7520,00)
Int. dimension	mm	3380 x 1340 x 2200
Ext. dimension	mm	3500 x 1520 x 2600
Capacity		2 collection tanks 1000 l
Collection volume	L	1000
Useful depth	mm	1655
Features		Hinged door

OUTDOOR STORAGE DEPOSITS FOR 1000 L TANKS

ITEM: P6961

Outdoor storage deposits without thermal insulation, suitable for storing two 1000 litre tanks. Designed for use with a special raised and inclined shelf that allows the contents to be transferred or stored. The cabinet is fitted with safety hooks to keep the doors in the open position and a 1000 lire collection tank. Galvanized grating support surface that can be removed for cleaning the collection tank, door with key lock, safety hooks to keep the doors in the open position, optional ventilation grilles for the storage of flammable materials with an opening 1/30th of the surface area **(Ministry of the Interior Circular no. 8 of 17/04/1985**). Optional stainless steel or acid resistant coated collection tank for corrosive substances. Complies with the following national directives: **Legislative decree 81/2008 annex** V Occupational Health and Safety act

Optional accessories:
- Ventilation openings for flammable materials
- Inclined support

Tech. Code		P6961C2
GR80	Euro	(7788,00)
Ext. dimension	mm	2875 x 2020 x 2345
Capacity		2 collection tanks 1000 l
Collection volume	L	1670
Capacity	kg	1000

CONTAINER MODULES WITH THERMAL INSULATION

ITEM: P6963

Outdoor Container Module consisting of a collection cistern in painted steel with a bi-component polyurethane cycle. The following article has a hot-galvanized grid base and side and roof composed of sandwich panels in class 0 mineral wool sp. 50 m / m interposed between galvanized sheets, fire reaction class A2 s1-d0. Model with two-leaf door and key lock closure and roof made with built-in-drain channels to drain rainwater sideways.
The container can be moved with a forklift equipped with an extended fork and of adequate capacity, it is also supplied assembled.
Internal-external painting with epoxy primer and bi-component polyurethane varnish in WHITE RAL 9016 colour. Complies with the consolidated text on work safety following national directives: Legislative Decree 81/2008 Annex V.

Tech. Code		P6963C	P6963NOC
GR80	Euro	(15572,00)	(20710,00)
Dim. Internal	mm	2080 x 2080 x 2000	4880 x 2080 x 2000
Dim. external	mm	3150 x 2350 x 2350	5150 x 2350 x 2350
Collection volume	L	1000	1700
Features		Insulated	-

RECYCLED 1000L CISTERNS

ITEM: P6965

Recycled cisterns of first choice of plastics, screwed cover, neutral colour.

Tech. Code		P6965PL	P6965MT	P6965LG
GR80	Euro	(180,00)	(235,00)	(203,00)
Capacity	L	1050	1050	1050
Valve		2"	2"	2"
Pallet		Plastic	Metal	Wood

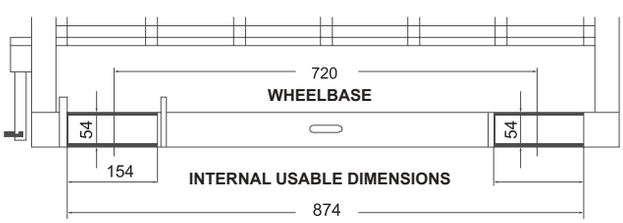
SHUTTLES FOR OVERHEAD MAINTENANCE

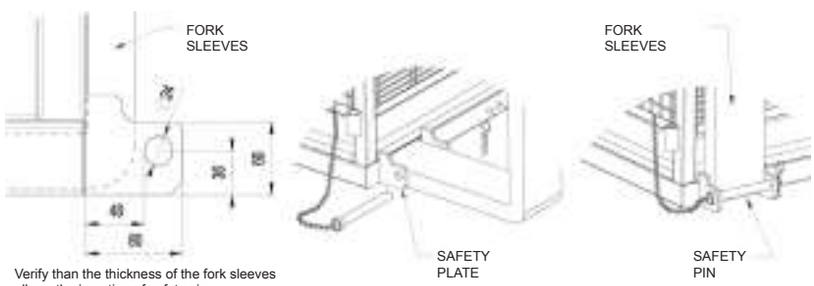
ITEM: P7007

Complete with:
- Tech net side to protect the operator, equipped with a gas cylinder which facilitates opening and closing, simplifying also the product storage when not in use
- Automatically lockable access door with anti-vibrating stop, opening only inwards and equipped with safety lock
- Rubber anti-slip and anti-static rubber shelf
- Polyester tool holder anti-crush tank
- Safety device to avoid accidental slippage of the forks
- Coupling for safety belt use

Equipped with
- Maintenance and user manual with start-up instruction in accordance with D.Lgs. 9 April 2008 n. 81, point 3.1.4 attachment VI
- Advertising panels to prevent major hazards
- Metal plate reporting equipment technical data

Tech. Code		P700701	P700701R
GR80	Euro	(930,00)	(1427,00)
A	mm	1000	1000
B	mm	1001	1001
C	mm	1100 / 2110	1100 / 2110
Capacity	kg	400	400
Version		Standard	With wheels (2 fixed and 2 castor with brake)





Verify than the thickness of the fork sleeves allows the insertion of safety pin

BIG BAG HOLDER

ITEM: P7010

Big Bag is a metallic structure designed to maximise bag filling processes. Big Bag holders while keeping the bulk bags well open and stretched over its entire length, they're structured to facilitate waste discharge and storage operations Essential in order to define a waste handling area within the warehouse premises. They can be easily and safely handled with a fork lift thanks to their convenient fastening clamps.
Struts can be taken off and stored inside the unit so to reduce dimensions and facilitate handling.

Tech. Code		P70101070	P70101070Z
GR80	Euro	(420,00)	(525,00)
A	mm	1070	1070
B	mm	1070	1070
C	mm	1350	1350
Capacity		1 Big Bag da 1000 l	1 Big Bag - 1000 l
Finishing		RAL 5010	hot-galvanised

BIG BAG HOLDER CONTAINERS WITH SPILL PALLET

ITEM: P7011

Containers equipped with watertight safety spill pallets for liquids, with removable galvanized grid. Construction made of 3 and 4 mm carbon steel, supplied with four removable uprights. External antii-corrosion treatment and safety treatment labeling.

Tech. Code		P70111B
GR80	Euro	(1816,00)
Dimension	mm	1000 x 1000 x 1860 h
Volume	l	208
Capacity	kg	1000
Colour		RAL 5010

BIG BAG

ITEM: P7014

Big Bag standard UN 13H3Y approved with four lifting straps. In polypropylene.

Tech. Code		P701401	P701402	P7014U2
GR80	Euro	12,00	15,00	14,00
Dimension	cm	90 x 90 x 120	90 x 90 x 120	90 x 90 x 120
Volume	m^3	0,97	0,97	0,97
Load capacity	kg	1000	1500	1000
Form		Closed bottom	With drain valve	Cloded bottom
Type approved		-	-	13H3Y

NET-SIDED GAS CYLINDER PALLET CONTAINERS

ITEM: P7019

Gas cylinder tanks container designed to store 9/12 items, padlockable

Tech. Code		P70191170	P7019RA
GR80	Euro	(1794,00)	(315,00)
A	mm	1130	-
B	mm	960	-
C	mm	2100	-
Capacity		9 - 12 Cylinders	Ramp

METAL PALLET CONTAINERS

ITEM: P7030

The containers are guaranteed free from burrs, with chamfered and rounded corners to avoid injury during use.
Surface treatment: Painting with polyester powder for outdoors baked at 190°C.
Standard colours: blue RAL 5010 - green RAL 6011 - grey RAL 7001 - orange RAL 2004 - light blue RAL 5012.

Tech. Code		P70301B	P70302B
GR80	Euro	(263,00)	(344,00)
A	mm	1000	1200
B	mm	800	800
C	mm	500	650
D	mm	130	130
E	mm	65	65
Load capacity	kg	1000	1000
Colour		RAL 5010	RAL 5010
		5	5

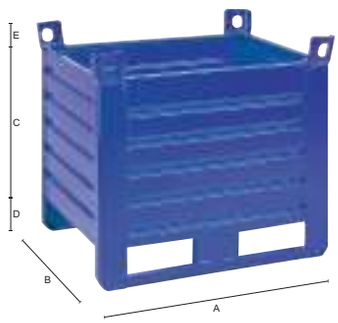
Indivisible package Suggested retail package - Unit price

STEEL PALLET CONTAINERS

ITEM: P7031

NEW

The containers are guaranteed free from burrs,with chamfered and rounded corners to avoid injuries during use. Surface treatment: Painted with polyester powder for outdoor use baked at 190°.



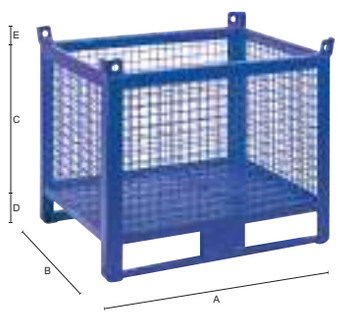
Tech. Code		P70311B	P70312B
GR80	Euro	(457,00)	(535,00)
A	mm	1200	1200
B	mm	800	800
C	mm	650	650
D	mm	150	150
E	mm	110	110
Capacity	kg	1500	2000
Colour		RAL 5010	RAL 5010
		5	5

METAL MESH PALLET CONTAINERS

ITEM: P7033

NEW

The metal mesh containers are suitable for handling and storing various types of goods, they are particularly useful in the event that the products contained must be clearly visible. They are guaranteed free from burrs, with chamfered and rounded corners to avoid injuries during use. Surface treatment: Painted with polyesterr powder for ourdoor use baked at 190°.

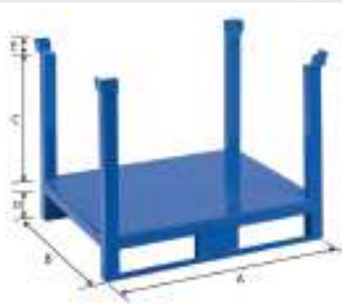


Tech. Code		P70331B	P70332B
GR80	Euro	(288,00)	(316,00)
A	mm	1000	1220
B	mm	800	800
C	mm	650	650
D	mm	130	130
E	mm	65	65
Capacity	kg	1000	1000
Colour		RAL 5010	RAL 5010
		5	5

METAL PALLETS STACKING RACK

ITEM: P7040

The pallets are guaranteed free from burrs, with chamfered and rounded corners to avoid injury during use.
Surface treatment: Painting with polyester powder for outdoors baked at 190°C.
Standard colours: blue RAL 5010 - green RAL 6011 - grey RAL 7001 - orange RAL 2004 - light blue RAL 5012.



Tech. Code		P70401B
GR80	Euro	(245,00)
A	mm	1000
B	mm	800
C	mm	600
D	mm	120
E	mm	60
Load capacity	kg	1500
Colour		RAL 5010

Indivisible package Suggested retail package - Unit price

SINGLE LADDERS IN ALUMINUM

ITEM: P7112

Single ladders in aluminum professional model for intensive use with a width of 430 mm and a rung 30 x 30 mm, a comfortable ladder in both the industrial and agricultural sector. Non-slip aluminum peg fixed with automatic riveting with rounded corners, non-slip PVC heel, welded upright max strength and lightness and jointed leg with rubber base and steel structure.
Complies to the UNI EN 131 Legislative Decree 81/2008 Art. 113 and to the Legislative Decre 206/2005 Art. 2 consumers.

Tech. Code		P711207	P711210	P711212	P711214
GR80	Euro	(71,60)	(97,70)	(112,10)	(126,40)
Steps	N°	7	10	12	14
H Closed	m	2,16	2,99	3,6	4,1
H max platform	m	2,00	2,82	3,35	3,87
Width	mm	430	430	430	430
Load capacity	kg	150	150	150	150
Weight	kg	3,4	5,0	5,9	6,6

ALUMINIUM LADDERS

ITEM: P7110

Professional model for intensive use, electrowelded structure, non-slip flat steps, automatic locking platform with safety hook, parapet with tool holder tank and bucket hook, anti-slip chocks and oversize anti-opening safety belt.
Capacity 150 kg.

Complies with UNI EN 14183 Legislative Decree 81/2008 Art. 113 and Legislative Decree 206/2005 Art 2-consumers.

Tech. Code		P71103	P71104	P71105	P71106	P71107
GR80	Euro	(97,10)	(117,90)	(128,90)	(157,20)	(175,70)
No. of steps		3	4	5	6	7
H Closed	m	1,45	1,75	2,00	2,30	2,60
H platform	m	0,70	0,95	1,20	1,45	1,70
Opening	m	0,80	1,00	1,20	1,40	1,60
Width	mm	450	480	510	540	570
Weight	kg	4,30	5,30	6,30	7,30	8,30

ALUMINIUM MULTI-POSITION LADDERS

ITEM: P7115

Telescopic aluminium ladders. It can be use as an extended, variable level position, and double ladder. Anti-slip knurled rung, wide base with oversize PVC feet for maximum grip. Quick-positioning hinges. Capacity 150 kg.

Complies with UNI EN 14183 Legislative Decree 81/2008 Art. 113 and Legislative Decree 206/2005 Art 2-consumers

Tech. Code		P711508	P711509	P711510	P711512
GR80	Euro	(233,90)	(262,30)	(297,10)	(342,30)
No. of steps		4+4	4+5	5+5	6+6
H Closed	m	1,30	1,55	1,55	1,83
Max. H double use	m	2,00	2,30	2,55	3,10
Max. H extension	m	4,15	4,70	5,25	6,40
Width	mm	564	564	637	710
Weight	kg	12,50	13,50	14,70	17,00

ALUMINUM SCAFFOLD

ITEM: P7116

Aluminum scaffolding with 4 wheels with brake, quick assembly without the use of screws or tools, closable without being disassembled. Quick closing with a click. Compliant with Legislative Decree 81/2008.

Tech. Code		P711601
GR80	Euro	(554,40)
Wheels Ø	mm	100
H total	cm	188
H on the floor	cm	82
Width	cm	155
Load capacity	kg	150
Weight	kg	29,9

ALUMINUM FOLDABLE PLATFORM

ITEM: P7117

Foldable aluminum platform and walking platform. Compliant with Legislative Decree 206/2005.

Tech. Code		P711702	P711703
GR80	Euro	(335,50)	(397,10)
Steps	n°	2	3
H from floor	cm	40	65
Total length	cm	142	210
Width	cm	42,5	42,5
Load capacity	kg	250	250
Weight	kg	7,85	11,8

ALUMINUM HANDRAIL

ITEM: P7118

Handrail accessory for platform P7117.

Tech. Code		P711801	P711802
GR80	Euro	(51,70)	(53,90)
Compatibility		2-step platform P711702	3-step platform P711703

ALUMINIUM STEP STOOLS ANODIZED

ITEM: P7120

Sturdy and versatile step stool for professional use, anodized aluminium structure, flat steps with anti-slip reinforced double profile (360 x 230 mm), anti-slip feet. Maximum hindrance when closed only 7 cm.
Complies with UNI EN 14183 Legislative Decree 81/2008 Art. 113 and Legislative Decree 206/2005 Art 2-consumers

Tech. Code		P71203	P71204
GR80	Euro	201,30	251,80
No. of steps		3	4
H Closed	m	1,12	1,43
H platform	m	0,69	0,92
Opening	m	0,75	1.00
Width	mm	497	515
Weight	kg	6,50	8

ELECTRO WELDED ALUMINIUM STEP STOOL

ITEM: P7121

Step stool made of electro-welded aluminium, 165 mm wide step with PVC inserts. Easily foldable with large 560×280 mm platform. Compliant with UNI EN 14183, Legislative Decree 81/2008 Art. 113 and Legislative Decree 206/2005 Art. 2 Consumer code

Tech. Code		P712103	P712104
GR80	Euro	217,00	234,90
Steps	N°	3	4
H closed	m	0.9	1.18
H platform	m	0.73	0.97
Opening	mm	0.72	0.9
Width	mm	800	800
Weight	kg	8.5	9.8

PLIABLE STEP LADDERS WITH WHEELS

ITEM: P7125

Electrowelded aluminium platform ladders. Pliable to facilitate transport and storage. Anti-slip flat steps. 760x440 mm platform with 1 meter parapet and tool holder tank. Equipped with handrail and handles for lifting, with two 175 mm diameter wheels. Brake system is automatically activated when staircase is on working position. Capacity 150 Kg.

Complies with Legislative Decree 81/2008 Art. 113 and Legislative Decree 206/2005 Art.2-consumers.

Tech. Code		P712506	P712508	P712510	P712512
GR80	Euro	(783,50)	(955,40)	(1102,70)	(1259,00)
No. of steps		6	8	10	12
H Closed	m	2,80	3,35	3,90	4,50
H platform	m	1,45	1,95	2,40	2,90
Opening	m	1,72	2,02	2,32	2,62
Width	m	1,00	1,00	1,00	1,20
Weight	kg	37,50	41,00	44,50	51,50

PLIABLE FOLDABLE STEP LADDERS

ITEM: P7126

Pliable step ladders in electro-welded aluminum. Foldable for easy transport and storage. 80mm non-slip flat steps. 730x250 mm platform with railing and tray. Equipped with handrails and handles for lifting, with two 75 mm diameter wheels to facilitate movement. Capacity 150 kg. Compliant with Legislative Decree 81/2008 Art. 113 - Only for Italian law.

Tech. Code		P712608
GR80	Euro	(624,60)
Steps	n°	8
H total	m	3
H platform	m	2,0
Width	mm	600
Load capacity	kg	150
Weight	kg	22,5

STEP LADDERS WITH WHEELS

ITEM: FCR03000001

Made of steel with aluminium steps. Swivel rubber wheels. 1.40 meter height platform. Equipped with pressure auto-braking system. When climbing on the first step, the ladder takes the locking position, then, pressing the release pedal, returns ready to be moved. Compliant with UNI EN 131/1.

Tech. Code		P7130150
GR24	Euro	(1628,00)
No. of steps		6
H total	m	2,45
H platform	m	1,40
Depth	m	1,20
Width	m	0,94
Max. capacity	kg	150
Weight	kg	53,69

Indivisible package Suggested retail package - Unit price

MODULAR PADS

ITEM: P7220

The most resistant auto-laying PVC tile. Interlocking laying without the use of glues or fittings. Ideal for industrial application.

APPLICATIONS: Industries, garages, depots, multi-purpose halls, exhibition halls, underground railway stations, airports, ships, sport clubs, laboratories, typographies; public places, platforms, etc.
Granular finish, available in 10 colours with customisable graphics - Resistant - Fire-proof - Anti-slip - Anti-scratch - Phono-absorbent - Washable - Carriageable - Antistatic - Resistant to oil and acids.

Tech. Code		P7220G68
GR80	Euro	19,21
Dimension	mm	510 x 510
Thickness	mm	7
Weight	kg/m²	9,2
Colour		Grigio

RAMPS - DESCENTS

ITEM: P7225

Descendant terminal finish for P7220 platforms.

Tech. Code		P7225G68G	P7225G68N
GR80	Euro	16,78	15,58
Dimension	mm	510 x 170	510 x 170
Thickness		7	7
Weight	kg	Yellow	0,7
Colour		Giallo	Black

ANGULAR ELEMENTS

ITEM: P7230

Descendant angle finish for P7220 platforms.

Tech. Code		P7230G68G	P7230G68N
GR80	Euro	11,36	11,36
Dimension	mm	160 x 160	160 x 160
Thickness	mm	7	7
Weight	kg	0,2	0,2
Colour		Giallo	Black

MODULAR PADS

ITEM: P7320

Resistant and functional PVC tile, ideal for high pedestrian traffic areas and indoor locations.
Interlocking assembly without the use of glues or fittings.

APPLICATIONS: Commercial places, offices, showrooms, multi-purpose halls, exhibition halls, sport clubs, laboratories, public places. Suitable also for industrial places.
Granular finish available in 10 colours with customisable graphics - Fire-proof - Anti-slip - Anti-scratch - Phono-absorbent - Washable - Antistatic - Resistant to common oils and acids.

Tech. Code		P7320G50
GR80	Euro	18,93
Dimension	mm	500 x 500
Thickness	mm	5.0
Weight	kg/m²	6,4
Colour		Grigio

RAMPS - DESCENTS

ITEM: P7325

Descendant terminal finish for P7320 platforms.

Tech. Code		P7325G50G	P7325G50N
GR80	Euro	17,66	(17,66)
Dimension	mm	500 x 160	500 x 160
Weight	kg	0,7	0,7
Colour		Yellow	Black

Indivisible package Suggested retail package - Unit price

ANGULAR ELEMENTS

ITEM: P7330

Descendant angle finish for P7320 platforms.

Tech. Code		P7330G50G	P7330G50N
GR80	Euro	11,36	(11,36)
Dimension	mm	160 x 160	160 x 160
Weight	kg	0,2	0,2
Colour		Yellow	Black

MODULAR PADS WITH RICE GRAIN FINISH

ITEM: P7421

Modular pads that guarantee excellent resistance and durability, with a high anti-slip factor (R12) which makes it perfect for workplaces, even with liquid or oil spills, absorbs shocks and noise and has anti-fatigue properties. It is applied by interlocking without the need for glues or fittings and withstands even extreme temperatures. With rice grain finish, available in black.

Resistant - Fire resistant - Non-slip (R12) - Anti-scratch - Washable - Anti-fatigue - Sound absorbing

Tech. Code		P7421ULT
GR80	Euro	16,55
Dimension	mm	520 x 520
Thickness	mm	14
Weight	kg/m²	2,38
Colour		Black

RAMPS-DESCENT WITH RICE GRAIN FINISH

ITEM: P7422

Downfeeds terminal finish for P7421 pads. Grey colour available on request.

Tech. Code		P7422ULTG	P7422ULTN
GR80	Euro	17,66	(17,66)
Dimension	mm	520 x 60	520 x 60
Weight	kg	0,24	0,24
Colour		Giallo	Black

ACCESS ANGLES WITH RICE GRAIN FINISH

ITEM: P7426

Universal corner finishes for P7421 platform. **Grey color available on request.**

Tech. Code		P7426AG	P7426AN
GR80	Euro	7,73	(7,73)
Dimension	mm	60 x 60	60 x 60
Weight	kg	0,025	0,025
Colour		Giallo	Black

MODULAR PADS

ITEM: P7430

The honeycomb design pad for uneven areas made from recycled PVC is an interlocking tile suitable for both indoor and outdoor environments. Produced using the latest generation polymers, this tile is ideal for making existing floors safe, even if uneven: flexible and adaptable. It can be laid quickly and easily on lawns, sown areas or any indoor and outdoor rigid or cement surface. Particularly safe for work areas as its honeycomb design, which allows the liquids to drain under the walkway, gives it a high slip resistance. The tile also has anti-fatigue properties. It requires no maintenance and can withstand all climatic conditions.

Tech. Code		P7430ULT
GR80	Euro	17,04
Dimension	mm	500 x 500
Thickness	mm	16
Weight	kg/m²	1.1
Colour		Black

RAMPS - DOWNFEEDS

ITEM: P7435

Ramps with rough slip-resistant finish for P7430 pads. This type of pad requires male and female ramps.

Tech. Code		P7435ULTG
GR80	Euro	11,14
Dimension	mm	490 x 60
Colour		Yellow
Weight	kg/m²	0,21
Interlocking		Male

ACCESS ANGLES

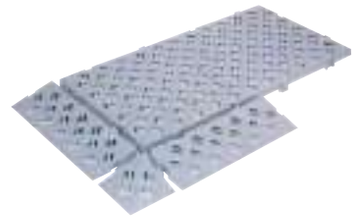
ITEM: P7440

Universal angle finishes for P7430 pad.

Tech. Code		P7440G50G
GR80	Euro	11,14
Dimension	mm	60 x 60
Weight	kg	0,026
Colour		Giallo

MODULAR PADS

ITEM: P7500



- Low density polyethylene
- Insulating and resistant to solvents, acids and grease
- Slip and shock absorption
- Docking in both directions
- Colour: grey
- Suitable to cover any surfaces and work areas both internal and external

Tech. Code		P750060X60	P7500ANG	P7500LAT
GR80	Euro	55,00	17,00	28,50
Module		Platform	Angle slide	Side slide
Dimension	mm	600 x 600 x 50	200 x 200 x 50	600 x 200 x 50
Capacity	kg/dm²	500	500	500

MODULAR PADS IN POLYETHYLENE

ITEM: P7510

The modular pads are made of insulating polyethylene, easy to put in place thanks to the hooking system between the various elements. They allow to create non-slip floors of any size. Tested for a working voltage up to 3 kV, have a discharge voltage of 20 kV, a yield strength of 840 kN per square meter. The workload is 210-280 kN per square meter. They can be supplied with lateral and angular ramps for even more functional floors.

- Standard colour: Green
- Colours on request: black, neutral, red, blue and light brown (minimum pack of 10 pieces)
- Ramps and angles: Black polyethylene

Tech. Code		P751050X50GR
GR80	Euro	13,50
Surface type		Grilled
Material - colour		Green Polyethylene
Dimension	mm	500 x 500 x 25h
Capacity	m²	210-280 KN
		10

ACCESSORIES FOR PADS IN POLYETHYLENE

ITEM: P7511

Accessories for pads in polyethylene P7510.

Tech. Code		P751113AN	P751150FE	P751150MS
GR80	Euro	4,00	6,50	6,50
Accessory		Angle	Ramp	Ramp
Type of Incastro		Male/Female	Female	Tap
Material - colour		Black polyethylene	Black polyethylene	Black polyethylene
Surface type		Full	Full	Full
Dimension	mm	130 x 130 x 0/25h	500 x 130 x 0/25h	500 x 130 x 0/25h
Capacity	m²	210-280 KN	210-280 KN	210-280 KN

MODULAR RAMP IN POLYPROPYLENE

ITEM: P7515

A full modular floor system that guarantees perfect adherence to the surface. Also available in self-extinguishing and conductive versions. It features a working voltage of 3 KV max. It has a yield load of approximately 710 kN per sq.m and a work load of 180-240 kN per sq.m. It comes complete with a side and corner joint for even more functional floor paving.

- Standard colour: Green
- Colour on request: light brown (minimum packaging 10 pieces)
- Angle ramp: Polypropylene colour black

Tech. Code		P751550X50P
GR80	Euro	18,50
Surface type		Full
Material - colour		Green polypropylene
Dimension	mm	500 x 500 x 25h
Capacity	m²	180-240 KN

MODULAR PLATFORMS IN POLYPROPYLENE

ITEM: P7516

Accessories for modular platforms in polypropylene P7515

Tech. Code		P751613AN	P751650FE	P751650MS
GR80	Euro	5,08	6,00	6,00
Accessory		Angle	Ramp	Ramp
Type of Incastro		Male/Female	Female	Tap
Material - colour		Black polypropylene	Black polypropylene	Black polypropylene
Surface type		Full	Full	Full
Dimension	mm	130 x 130 x 0/25h	500 x 130 x 0/25h	500 x 130 x 0/25h
Capacity	m²	210-240 KN	210-240 KN	210-240 KN

JUSTRITE
FLAMMABLE
INFLAMMABLE
INFLAMMABLE
Justrite.

ANTI-FATIGUE MATS PVC

ITEM: P7630

The anti-fatigue mat has a hard-wearing 14 mm thick base consisting of a wear-resistant surface bonded to an elastic microcellular vinyl backing to ensure maximum durability, comfort, cushioning and the absence of vibration. The rhombus structure provides traction and allows it to bend more easily. The design and the composition of the materials make it the most versatile solution for fatigue relief in both static and dynamic working positions. R10 slip rating according to standards DIN 51130 and BGR181. With RedStop™ slip-resistant backing to prevent sliding. Available with yellow borders along the sides to comply with OHSA 1910-144 directive and bevelled edges on all four edges to minimize risk of tripping. Free from DOP, DMF, ozone depleting substances, silicone or heavy metals.

Tech. Code		P7630G10	P7630G20	P7630G30	P7630G40
GR80	Euro	(75,00)	(225,00)	(400,00)	(1837,00)
Dimension	cm	60 x 91	91 x 150	91 x 300	60 x 2280
Thickness	mm	14	14	14	14
Weight	kg/m²	5.5	5.5	5.5	5.5
Classification		Bfl-S1	Bfl-S1	Bfl-S1	Bfl-S1
Material		PVC	PVC	PVC	PVC
Colour		Grey	Grey	Grey	Grey

Tech. Code		P7630NG10	P7630NG20	P7630NG30	P7630NG40
GR80	Euro	(72,00)	(217,00)	(427,00)	(1958,00)
Dimension	cm	60 x 91	91 x 150	91 x 300	60 x 2280
Thickness	mm	14	14	14	14
Weight	kg/m²	5.5	5.5	5.5	5.5
Classification		Bfl-S1	Bfl-S1	Bfl-S1	Bfl-S1
Material		PVC	PVC	PVC	PVC
Colour		Black-yellow	Black-yellow	Black-yellow	Black-yellow

ANTI-FATIGUE MATS THICKENED

NEW

ITEM: P7631

Thick and durable anti-fatigue mats that absorb whole body vibrations around machinery and forklifts. Microcellular vinyl with RedStop™ anti-slip backing to prevent sliding. Dense microcellular foam absorbs concentrated loads and full-body vibrations for workers standing around machinery, on forklifts and platforms, while the rugged diamond-embossed laminated surface ensures maximum durability. Recommended use: production plants, assembly lines, logistics and packaging warehouses, individual workstations.

Tech. Code		P7631NG10	P7631NG20	P7631NG30	P7631NG40
GR80	Euro	(1000,00)	(250,00)	(550,00)	(3700,00)
Width	cm	91 x 600	91 x 150	91 x 300	60 x 2280
Thickness	mm	25,4	25,4	25,4	25,4
Weight	kg/m²	6,4	6,4	6,4	6,4
Classification		Bfl-S1	Bfl-S1	Bfl-S1	Bfl-S1
Material		PVC on microcellular vinyl	PVC on microcellular vinyl	PVC on microcellular vinyl	PVC on microcellular vinyl
Colour		Black	Black	Black	Black

ANTI-FATIGUE MATS ESD

ITEM: P7730

Anti-fatigue mats ESD, the ergonomic benefit derives from a 9.4 mm thick walkable surface, made of anti-static dissipative vinyl sponge that reduces fatigue and the accumulation of electrostatic charges. The gravel texture provides non-directional grip and is easy to clean. An optional 10mm plug connected to the mat can be connected to an optional ground wire.

Tech. Code		P7730G10	P7730G20
GR80	Euro	(103,00)	(1111,00)
Width	m	0,91 x 1,5	0,91 x 18,3
Total thickness	mm	9,4	9,4
Weight	kg/m²	3	3
Material		Dissipative antistatic vinyl sponge	Dissipative antistatic vinyl sponge
Colour		Black-yellow	Black-yellow

ANTI-FATIGUE MATS ORANGE NITRILE RUBBER

NEW

ITEM: P7731

Anti-fatigue mats with surface structure that ensures a secure grip allowing the drainage of oil spills. The closed design ensures easy cleaning and prevents small items from getting under the mats. Entirely made of nitrile rubber compound, designed to resist industrial oils and aggresive chemicals. The mats are free-standing and do not require any special installation. Complete with high visibility orange nitrile rubber rim on three sides for added safety. Anti-slip. Slip resistance R10, according to DIN 51130 and BGR181. They do not contain DOP, DMF, ozone-depleting substances, silicon or heavy metals.

Tech. Code		P7731NA10	P7731NA20
GR80	Euro	(250,00)	(440,00)
Dimension	cm	66 x 102 x 2	97 x 163 x 2
Thickness	mm	20	20
Weight	kg/m²	15	15
Material		Nitrile rubber	Nitrile rubber
Colour		Black - Orange	Black - Orange

BINS FOR OILY WASTE

Justrite

ITEM: P7700

Pedal bins for oily waste with lid that stays closed when the bin is not in use. Designed to isolate the contents from sources of fire and limit the oxygen available. Durable powder-coated steel construction provides high chemical resistance. Swinging carrying handle for easy transport. FM approved, meets OSHA requirements. Meets TÜV. certification requirements. Colour Red.

Tech. Code		P7700100	P7700300	P7700500
GR80	Euro	(130,00)	(140,00)	(160,00)
Dimension	cm	30 x 40	35 x 46	41 x 51
Capacity	l	23	38	53
Ø External	mm	302	354	408
Weight	kg	3,8	4,8	6,4

RE-CYCLING CABINETS

ITEM: P8100

Cabinets in plastic, 2 doors for the differentiated items. Supplied un-assembled.
Packaging dimension: 800 x 400 x 275 mm.

Tech. Code		P81002
GR74	Euro	(101,24)
Dimension	mm	680 x 390 x 887
Capacity	L	2 x 110

ITEM: P8104

Cabinets in plastic, 3 doors for the differentiated items. Supplied un-assembled.
Packaging dimension: 1140 x 435 x 242 mm.

Tech. Code		P81040
GR74	Euro	(121,53)
Dimension	mm	1020 x 390 x 887
Capacity	L	3 x 110

DUST-BIN BAGS FOR RE-CYCLING

ITEM: P8200

Coloured, perfumed bags with a capacity of 110 liters indicated for re-cycling.

Tech. Code		P8200B	P8200V	P8200G	P8200A
GR74	Euro	7,20	7,20	7,20	7,20
Dimension	mm	700 x 1100	700 x 1100	700 x 1100	700 x 1100
Weight	g	45/50	45/50	45/50	45/50
Quantity rolls	pcs	20	20	20	20
Colour		White	Purple	Giallo	Azzurro

DUST-BIN HOLDERS

ITEM: P8102

In polypropylene complete with lid.

Tech. Code		P81020
GR74	Euro	29,00
Dimension	mm	580 x 880

RUBBISH BIN BAGS

ITEM: P8201

Industrial sacks in black rolls.

Tech. Code		P820110	P820111
GR74	Euro	7,20	5,80
Dimension	mm	720 x 1100	800 x 1100
Weight	g	60/65	70/75
Quantity rolls	pcs	20	10

ALPHABETICAL INDEX

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ITEM	PAG.
"V" GROOVE CAPS	C.89
12V BATTERY WELDERS	J.58
180° COUNTERBORES FOR CYLINDRICAL HEAD SCREWS	A.190
180° COUNTERBORES Z4 FOR CYLINDRICAL HEAD SCREWS	A.190
2 IN 1 THREADED GAUGES - GO/NO GO	D.63
300 IP TORX PLUS® TORQUE-INDICATOR, PISTOL GRIP	E.75
45° BENT JAW PIPE WRENCHES - 111	F.44
45° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS	F.13
45° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS	F.10
45° BENT SHAPED JAW PIPE WRENCHES - 100	F.44
45° BENT SLIM-LINE JAW SWEDISH MODEL PIPE WRENCHES	F.44
45° BENT THIN JAW SWEDISH MODEL PIPE WRENCHES	F.45
5-AXIS CLAMPING SYSTEM	C.82
80 WATT STYLUS WELDERS	J.58
90° BENT JAW SWEDISH MODEL PIPE WRENCHES	F.44
90° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS	F.13
90° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS IN FOAM	E.114
90° BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS IN SET	F.13
90° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS	F.10-F.11
90° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS IN FOAM	E.114
90° BENT NOSE PLIERS FOR INTERNAL CIRCLIPS IN SET	F.11
90° COUNTERBORES FOR HEAD SCREWS	A.189
90° HELIX SHOULDERING END MILLS	B.64
90° MALE Y-FITTINGS WITH CYLINDRICAL THREAD	L.55
90° SHOULDERING FLUTED MILLS	B.67
90° SHOULDERING MILLS - SCREW-ON SHANK	B.63
90° SHOULDERING MILLS SHANK WELDON	B.63
90° SHOULDERING MILLS WELDON SHANK	B.66
90° SHOULDERING SHELL MILLS - ABORE COUPLING	B.63
90° SHOULDERING SHELL MILLS - ARBOR COUPLING	B.66
90° STAINLESS STEEL SQUARES WITH BASE	F.104
ABRASIVE BELTS FOR PORTABLE MACHINES	G.23
ABRASIVE CLEAN & FINISH PADS IN NON-WOVEN SCOTCH-BRITE	G.18
ABRASIVE CLEAN & FINISH ROLLS	G.21
ABRASIVE CUP BRUSHES SUNBURST	G.28
ABRASIVE DISCS	G.14
ABRASIVE DISCS BRUSHES SUNBURST	G.28
ABRASIVE DISCS CUBITRON II	G.13
ABRASIVE DISCS CUBITRON II CX PRO	G.13
ABRASIVE FLAP WHEELS FOR SATINEX MACHINES	G.26
ABRASIVE FLAP WHEELS WITH HOLE	G.27
ABRASIVE SPIRAL BANDS - ALUMINIUM OXIDE	G.25
ABRASIVE SPIRAL BANDS - CERAMIC	G.26
ABRASIVE SPIRAL BANDS - ZIRCONIA	G.25
ABRASIVE SPONGES ON 4 SIDES	G.19
ABRASIVE STICKS	G.23
ABSORBENTS FOR OILS AND HYDROCARBONS	H.37
ABSORBENTS FOR OILS AND LIQUIDS	H.36
ACCESS ANGLES	P.60
ACCESS ANGLES WITH RICE GRAIN FINISH	P.59

ITEM	PAG.
ACCESSORIES FOR BLOW GUNS - BENT SPOUT	L.32
ACCESSORIES FOR HEIGHT GAUGES - KIT 16 PIECES	D.52
ACCESSORIES FOR HEIGHT GAUGES - KIT 20 PIECES	D.52
ACCESSORIES FOR HEIGHT GAUGES - KIT 7 PIECES	D.52
ACCESSORIES FOR INDUSTRIAL ASPIRATORS	N.75-N.76
ACCESSORIES FOR INFRARED HEATERS	N.78
ACCESSORIES FOR PADS IN POLYETHYLENE	P.61
ACCESSORIES FOR VACU-B HANDLING	M.29
ACETIC SILICONE SEALANTS	J.23
ACETIC SILICONE SEALANTS HEAT RESISTANT	J.24
ACETYLENE PRESSURE REDUCERS	J.53
ACRYLIC ENAMEL SPRAYS	J.33
ACTIROX FIBERED DISCS	G.12
ADAPATOR WITH WELDON SHANKS FOR SCREW-ON END MILLS	C.35
ADAPTER FITTINGS FOR IMPACT SOCKETS	E.56
ADAPTER JOINTS FOR SOCKET WRENCHES	E.49
ADAPTER JOINTS FOR SOCKETS	E.49
ADAPTER JOINTS WITH TRANSVERSE HOLE	E.49
ADAPTERS FOR SOCKET BITS	E.97-E.98
ADAPTOR WITH QUICK-RELEASE CHUCK 784 A/1	E.97
ADAPTORS FOR DRILLING UNITS	N.69
ADAPTORS FOR SCREW-ON END MILLS	C.35
ADDITIONAL NON-SLOTTED HALF-SHELF	P.5
ADDITIONAL SHELF MODULAR TROLLEY	P.41
ADDITIVE COATED CERAMIC FIBER DISCS	G.12
ADDITIVE FOR THE MAINTENANCE OF EMULSIFIABLE FLUIDS	H.27
ADDUCTION COOLING TUBES DIN 69893	C.49
ADHESIVE FABRIC-REINFORCED TAPES	N.129
ADHESIVE MASKING TAPES	N.128
ADHESIVE PRIMERS FOR NON-ADHESIVE PLASTIC	J.6
ADIACTINIC GLASS	J.64
ADIACTINIC MIRROR GLASS	J.64
ADJUSTABLE CALIPER PIN WRENCHES	E.13
ADJUSTABLE CLAMPS WITH SQUARE THREAD SCREW	C.91
ADJUSTABLE FOCUS MAGNIFYING GLASSES	D.77
ADJUSTABLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES	B.52
ADJUSTABLE HOOK WRENCHES	E.11
ADJUSTABLE LIFTING MONOBEAMS	M.64
ADJUSTABLE MALE PUSH-TO-CONNECT L-FITTINGS WITH CYLINDRICAL THREAD	L.57
ADJUSTABLE MILLS FOR CHAMFERING AND COUNTERBORING	B.98
ADJUSTABLE PLIERS	F.17
ADJUSTABLE PLIERS - RAPTOR®	F.17
ADJUSTABLE PLIERS FOR PIPES AND NUTS	F.16
ADJUSTABLE PLIERS FOR PIPES AND NUTS - COBRA®	F.16
ADJUSTABLE PLIERS FOR PIPES AND NUTS - IN SET	F.16
ADJUSTABLE PLIERS FOR PIPES IN SET	F.16
ADJUSTABLE PLIERS FOR TUBES AND NUTS	F.15
ADJUSTABLE PLIERS FOR TUBES AND NUTS - COBRA® XS	F.16
ADJUSTABLE PLIERS TAPERED FOR PIPES - COBRA® ES	F.16
ADJUSTABLE PLIERS WITH FRONT GRIP	F.17

ITEM	PAG.
ADJUSTABLE ROLLER WRENCHES	F.45
ADJUSTABLE SELF-LOCKING GRIP PLIERS	F.18
ADJUSTABLE SELF-LOCKING PLIERS WITH SWAN COLLAR JAWS	F.18
ADJUSTABLE SHELVES	P.22
ADJUSTABLE STOP BARR DEVICES	C.79
ADJUSTABLE TAP WRENCHES IN STEEL	F.88
ADJUSTABLE TAP WRENCHES IN ZINC ALLOY	F.88
ADJUSTABLE TORQUE SCREWDRIVERS 7400	E.75
ADJUSTABLE VICES	N.82
ADJUSTABLE VICES WITH GRIPS	N.82
ADJUSTABLE WRENCH PLIERS	F.17
AEROSOL SPRAY GUNS	H.26
AGGLOMERATED FIBER DISC	G.13
AGGLOMERATED VELCRO DISC	G.16
AGILE PLUS SEMI-ELECTRIC PALLET TRUCKS	M.87
AIR BELT SANDERS	L.24
AIR BLADES	H.31
AIR COMPRESSORS - CO-AXIAL LUBRICATED SINGLE-STAGE	L.60
AIR COMPRESSORS CO-AXIAL SINGLE-STAGE LUBRICATED	L.60
AIR COMPRESSORS WITH BELT DRIVE - SINGLE-STAGE	L.60
AIR COOLER - BAND SAW KIT	H.33
AIR COOLERS	H.33
AIR COOLING UNIT FOR ISG1000	C.52
AIR COOLING UNITS	H.33
AIR IMPACT WRENCHES	L.3-L.6, L.8-L.9
AIR PREPARATION UNITS FR+L MINI SERIES	L.36
AIR PREPARATION UNITS FR+L STANDARD SERIES	L.37
AIR RATCHET WRENCHES REVERSIBLE	L.7-L.8
AIR RUBBER HOSES	L.43
AIR-WATER HOSE REEL SAFETY SPEED CONTROL	L.44
AJUSTABLE OIL FILTER WRENCHES	F.45
ALFANUMERIC CHARACTERS	F.113
ALNICO ALLOY PERMANENT MAGNETS	N.99-N.100
ALPHATEC NITRILE GLOVES® 58-535W	K.24
ALPHNUMERIC CHARACTERS	F.113
ALUMINIUM LADDERS	P.54
ALUMINIUM MALLETS WITH NYLON HEADS 100 SH	F.67
ALUMINIUM MULTI-POSITION LADDERS	P.54
ALUMINIUM STEP STOOLS ANODIZED	P.55
ALUMINUM ALLOY RIVETS	F.92
ALUMINUM BRIDGE BARS AND ACCESSORIES- - D86 - D320	B.128
ALUMINUM FOLDABLE PLATFORM	P.55
ALUMINUM HANDRAIL	P.55
ALUMINUM OXIDE ABRASIVE CLOTH BELTS	G.22
ALUMINUM OXIDE ABRASIVE CLOTH ROLLS	G.21
ALUMINUM OXIDE ABRASIVE FIBER DISCS	G.12
ALUMINUM OXIDE ABRASIVE STONES	G.52
ALUMINUM OXIDE ABRASIVE STONES - INDIA	G.53
ALUMINUM OXIDE CLOTH SHEETS	G.18
ALUMINUM OXIDE COMBI-DISCS	G.17
ALUMINUM OXIDE FLEX ABRASIVE CLOTH ROLLS	G.19
ALUMINUM OXIDE FLEX ABRASIVE CLOTHS ROLLS	G.21
ALUMINUM OXIDE QUICK CHANGE DISCS	G.16
ALUMINUM SCAFFOLD	P.55
ALVELOLAR UNITS FOR AIR-COOLING ISG MACHINES	C.53
AMERICAN STYLE ALUMINIUM PIPE WRENCHES	F.44
AMERICAN STYLE PIPE WRENCHES	F.44

ITEM	PAG.
ANAEROBIC ADHESIVE ACTIVATOR	J.16
ANALOG 3D DIAL TASTERS	D.46
ANALOG 3D DIAL TASTERS IP67	D.45
ANALOG 3D TASTERS IP67	D.45
ANALOG FORCE GAUGES	D.86
ANALOG PRECISION DIAL INDICATORS	D.39
ANCHORING BRACKET SYSTEM KIT FOR FRONTAL ANCHORING OF JIB CRANES	M.25
ANCHORING BRACKET SYSTEM KIT FOR WALL-MOUNTED CRANES	M.25
ANEMOMETERS	D.93
ANGLE GRINDERS	N.40-N.46
ANGLE HEADS WITH ADJUSTABLE ANGLES FROM 0° TO 90°	C.55
ANGLE VICES WSM	N.83
ANGULAR ELEMENTS	P.58-P.59
ANGULAR EXTENSIONS FOR SOCKETS	E.48
ANSELL ALPHATEC GLOVES® WITH COTTON LINING IN ROUGH NITRILE	K.23
ANTI-ADHESIVE PROTECTIVE FOR WELDING	J.61
ANTI-FATIGUE MATS ESD	P.63
ANTI-FATIGUE MATS ORANGE NITRILE RUBBER	P.63
ANTI-FATIGUE MATS PVC	P.63
ANTI-FATIGUE MATS THICKENED	P.63
ANTI-MIST POLYCARBONATE PROTECTIVE GOOGLES	K.32
ANTI-OXIDANT PROTECTIVES	H.15-H.16, H.26
ANTI-SEIZE PASTES	B.29, B.25
ANTI-SEIZE PASTES FOR THE FOOD INDUSTRY	H.26
ANTI-SLIP MATS FOR DRAWERS	P.19
ANTI-VIBRATION STANDS	N.13
ANTISTATIC CLEANER	J.30
ANVIL SHIM FOR THREADING INSERTS	B.50
APPLICATOR GUNS DUAL CARTRIDGE	J.20
APPROVED TRESTLES	M.90
ARAMID FIBER THERMAL PROTECTION GLOVES	K.17
ARBORS FOR FLAT BRUSHES	G.31
ARGON PRESSURE REDUCERS WITH FLOW METER	J.53
ASSISTED CHECK FOR SCREWING AND TAPPING	N.8
ASSORTMENT OF 100 CHARACTERS IN CASING	F.113
ASSORTMENT OF 100 CHARACTERS IN CASING AND CHARACTER HOLDER	F.113
ATTACHMENTS FOR EMAX EVOLUTION	G.70
ATTACHMENTS FOR ESPERT 500	G.71
ATTACHMENTS FOR SAFETY SHIELDS	N.10
AUTOMATIC CENTRE PUNCHES, MICRO SERIES	F.64, F.112
AUTOMATIC PUNCHES	F.64
AUTOMATIC SELF-ADJUSTING FRONT INSULATION STRIPPER PLIERS	F.22
AUTOMATIC SELF-ADJUSTING MULTISTRIP 10 INSULATION STRIPPER PLIERS	F.22
AUTOMATIC SHRINKING MACHINE	C.52
AUTOMATIC VERTICAL STORAGE - INTERNAL BAY	P.42
AUTOMATIC WIRE STRIPPERS	F.23
AXIAL TOOLHOLDERS VDI DIN 69880	C.63
AXIAL TOOLHOLDERS VDI FOR BORING BAR DIN 69880	C.64
AXIAL TOOLHOLDERS VDI FOR DRILLING DIN 69880	C.64
BA SINGLE CONE COLLETS WITH RIBBED BORE	C.66
BA SINGLE CONE COLLETS WITH SMOOTH BORE	C.66
BACK UP PADS HARD FOR FIBER DISCS ACTIROX	G.14
BACK-UP PADS FOR CUBITRON II FIBER DISCS	G.14
BACK-UP PADS FOR FIBER DISCS	G.14
BACK-UP PADS MEDIUM/HARD FOR FIBER DISCS	G.14
BACKING PADS FOR QUICK CHANGE DISCS TYPE R	G.17
BACKSPOT FACING AND REAMING CUTTERS	B.115

ITEM	PAG.
BALANCED STANDARD NUTS FOR ER COLLETS DIN6499	C.45
BALL NOSE END MILLS FOR ALUMINUM ALLOYS Z3	A.149
BALL NOSE END MILLS FOR ALUMINUM Z2	A.150
BALL NOSE END MILLS VARIABLE PITCH Z4	A.148
BALL NOSE END MILLS Z2	A.143-A.145, A.147, A.151
BALL NOSE MICRO END MILLS Z2	A.152-A.154
BALL POINT MARKERS	F.111
BALLASTED CANTILEVER MOTORIZED CRANES WITH ELECTRIC LIFTING AND EXTRACTION	M.78
BALLASTED CANTILEVERED CRANES WITH MANUAL EXTENSION	M.76
BALLASTED REVOLVING CRANES 360 ° WITH MANUAL EXTENSION	M.74
BALLASTED REVOLVING CRANES 360° WITH MANUAL EXTENSION	M.74
BALLASTED REVOLVING CRANES WITH ELECTRIC LIFTING AND EXTENSION	M.75
BALLASTED REVOLVING CRANES WITH PROGRESSIVE LIFTING AND MANUAL EXTENSION	M.75
BAND HOLDERS FOR SPIRAL BANDS	G.26
BAND SAW BLADES M42 - BASIC PERFORMANCE	A.207
BAND SAW BLADES M42 - BASIC PLUS PERFORMANCE	A.205-A.206
BAND SAW BLADES M42 - BASIC UNIFLEX	A.200
BAND SAW BLADES M42 - BULLDOG	A.202
BAND SAW BLADES M42 - LION	A.198
BAND SAW BLADES M42 - PROFILE	A.203
BAND SAW BLADES M42 - PROFILE SUPERIOR	A.204
BAND SAW BLADES M51 - BASIC PLUS UNIFLEX	A.208
BAND SAWS COMPACT 18V	N.31
BAND SAWS INVERTER - SNIP 125MI	N.14
BAND SAWS INVERTER- SNIP 176MI	N.14
BAND SAWS PORTABLE INVERTER - SNIP 105MI	N.14
BASE FOR ARNOLD SC VICES	C.85
BASE WITH ADJUSTABLE PIN	N.82
BASIC ELECTRODES FOR CARBON STEEL	J.56
BASIC HARNESS SCAFFOLDING KIT	K.44
BASIC THREAD INSERTS REPAIR KIT	N.109
BASIC TOOL BOXES	F.85
BATTERIE PER STRUMENTI DIGITALI	D.94
BATTERIES	D.94, N.86
BATTERIES 20V	N.35
BATTERY ACID NEUTRALIZERS	H.36
BATTERY CHARGER	N.34
BATTERY CHARGER 20V	N.35
BATTERY CHARGER CABINETS WITH COMPARTMENTS	P.25
BATTERY CHARGER CABINETS WITH SWING DOORS	P.25
BATTERY LIFTING MAGNETS BM	M.61
BATTERY LIFTING MAGNETS BMP	M.62
BATTERY POWERED LIFTER	M.72
BATTERY POWERED MINI LIFTERS	M.71
BATTERY RATCHETS 12V	N.26
BATTERY RIVETERS	F.91
BATTERY SEALING TOOL FOR PLASTIC STRAPPING	N.124
BATTERY STRAPPING TOOL	N.124
BATTERY-POWERED LIFTERS WITH FIXED FORKS	M.73
BAYONET COUPLINGS WITH SPRING	L.46
BAYONET PLUGS WITH HOSE CONNECTION SLEEVE	L.46
BEARING GREASES	H.18
BEARING GREASES FOR THE FOOD INDUSTRY	H.20
BEARINGS GREASE	C.72, H.19
BELT SANDERS	N.49
BELTS FOR FILES	G.23
BENCH BELT SANDERS	N.20

ITEM	PAG.
BENCH DEMAGNETISERS	N.86
BENCH GRINDERS 230V	N.18
BENCH GRINDERS 400V	N.18
BENCH GRINDERS IN CAST IRON 400V	N.18
BENCH TYPE IMPACT MANUAL MACHINES	F.112
BENCH VICES - CAST IRON	N.79
BENCH VICES - STEEL	N.80-N.81
BENCHES WITH WOODEN TOP	P.8
BENDERS FOR LIGHT METALS	F.47
BENT NOSE PLIERS FOR EXTERNAL CIRCLIPS	F.13
BENT NOSE PLIERS FOR INTERNAL CIRCLIPS	F.11
BEVEL BRUSHES	G.30
BEVEL PROTRACTORS	D.49
BEVEL PROTRACTORS WITH MAGNIFIER	D.49
BEVELED EDGE SQUARES 90°	D.56
BEVELED STRAIGHT EDGES	D.56
BI-COMPONENT EPOXY QUICK ADHESIVES	J.20
BI-COMPONENT EPOXY QUICK ADHESIVES CHARGED WITH STEEL	J.20
BI-COMPONENT INSTANT CYANOACRYLATE ADHESIVES	J.6
BI-COMPONENT TOUGH EPOXY ADHESIVES WITH HIGH VISCOSITY	J.20
BI-METAL HOLE SAWS	N.62
BI-METAL HOLE SAWS - SHARK	N.62
BI-METAL HOLE SAWS IN CASE	N.63
BI-METAL HOLE SAWS IN CASE - SHARK	N.63
BIG BAG	M.65, P.52
BIG BAG HOLDER	P.51
BIG BAG HOLDER CONTAINERS WITH SPILL PALLET	P.52
BINS FOR OILY WASTE	P.64
BIOCIDAL ADDITIVE FORMALDEHYDE FREE	H.26
BIOCIDE ADDITIVE FORMALDEHYDE FREE	H.27
BIT HOLDER SCREWDRIVERS WITH MAGNET 821/1	E.100
BIT HOLDER SCREWDRIVERS WITH TELESCOPIC BLADE 817 R	E.100
BIT HOLDERS	E.97
BIT HOLDERS ADAPATORS SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS	E.69
BIT-HOLDER SCREWDRIVERS	E.98, E.100
BIT-HOLDER SCREWDRIVERS STUBBY WITH INSERT SET	E.98
BITS AND HOLDERS - BIT-CHECK SET 10 TX UNIVERSAL 1	E.101
BITS AND HOLDERS - BIT-CHECK SET 10 UNIVERSAL 4	E.101
BITS AND HOLDERS - IN SET	E.102
BITS AND HOLDERS BIT-CHECK SET 10 UNIVERSAL 1	E.101
BITS AND HOLDERS BIT-CHECK SET 30 BITORSION 1	E.102
BITS AND HOLDERS BIT-CHECK SET 30 METAL 1	E.100
BITS AND HOLDERS BIT-CHECK SET 30 TX UNIVERSAL 1	E.101
BITS AND HOLDERS BIT-CHECK SET 30 UNIVERSAL 1	E.101
BITS AND HOLDERS BIT-CHECK SET 7 DIAMOND 1	E.102
BITS AND HOLDERS SET KRAFTFORM KOMPAKT 50	E.102
BITS FOR HEXAGONAL SOCKET HEAD SCREWS	E.92-E.93
BITS FOR HEXAGONAL SOCKET HEAD SCREWS 840/1 Z	E.92
BITS FOR HEXAGONAL SOCKET HEAD SCREWS 840/4 Z	E.92
BITS FOR PHILLIPS® SCREWS 851/1 BDC	E.89
BITS FOR PHILLIPS® SCREWS 851/1 BTZ	E.89
BITS FOR PHILLIPS® SCREWS 851/1 Z	E.89
BITS FOR PHILLIPS® SCREWS 851/4 BTH	E.90
BITS FOR PHILLIPS® SCREWS 851/4 BTZ	E.90
BITS FOR PHILLIPS® SCREWS 851/4 J	E.89
BITS FOR PHILLIPS® SCREWS 851/4 TZ	E.90
BITS FOR PHILLIPS® SCREWS 851/4 Z	E.90

ITEM	PAG.
BITS FOR POZIDRIV® SCREWS 855/1 BDC	E.91
BITS FOR POZIDRIV® SCREWS 855/1 Z	E.91
BITS FOR POZIDRIV® SCREWS 855/4 BTZ	E.91
BITS FOR POZIDRIV® SCREWS 855/4 TZ	E.91
BITS FOR POZIDRIV® SCREWS 855/4 Z	E.92
BITS FOR SLOTTED SCREWS 800/1 Z	E.88
BITS FOR SLOTTED SCREWS 800/4 Z	E.88
BITS FOR TAMPER TORX® SCREWS 867/1 Z BO	E.95
BITS FOR TORX PLUS® SCREWS 867/1 IP	E.94
BITS FOR TORX® SCREWS 867/1	E.93
BITS FOR TORX® SCREWS 867/1 BDC	E.94
BITS FOR TORX® SCREWS 867/1 BTZ	E.93
BITS FOR TORX® SCREWS 867/4 Z	E.94
BITS WITH SPHERICAL HEAD FOR SOCKET HEAD SCREWS 842/1 Z	E.93
BLACK GRANITE INSPECTION PLATES WITH STAND	D.48
BLACK RUBBER MONOLITHIC MALLETS	F.71
BLACK RUBBER WHEELS – SHEET METAL DISC	N.94, N.96
BLACK SILICONE GASKETING	J.26
BLADES 32.50 FOR SAFETY CUTTERS	F.54
BLADES 37040 FOR SAFETY CUTTERS	F.51
BLADES 45.60 FOR SAFETY CUTTERS	F.54
BLADES 5232 FOR SAFETY CUTTERS	F.52
BLADES 60099 SAFETY CUTTERS	F.52
BLADES 65232 FOR SAFETY CUTTERS	F.53
BLADES 79.60 FOR SAFETY CUTTERS	F.53
BLADES 7940 FOR SAFETY CUTTERS	F.53
BLADES 92.66 FOR SAFETY CUTTERS	F.52
BLADES 92043 FOR SECURITY CUTTERS	F.51
BLADES 99.70 FOR SAFETY CUTTERS	F.52-F.53
BLADES FOR AIR RECIPROCATING SAWS	L.26, N.54
BLADES FOR DEBURRING TOOLS	F.58
BLADES FOR SECUMAX 350 SAFETY CUTTERS	F.51
BLADES FOR UNIVERSAL SAWS - BLADES FOR METAL	N.54
BLADES FOR UNIVERSAL SAWS - BLADES FOR WOOD	N.53
BLADES FOR UNIVERSAL SAWS - BLADES FOR WOOD WITH NAILS/METAL	N.53-N.54
BLANK T-NUTS	C.95
BLOW GUNS	L.31
BLOW GUNS - EXTENDEND REACH SPOUT	L.32
BLOW GUNS - IN NYLON PA6 WITH BENT SPOUT	L.32
BLOW GUNS AJUSTABLE MULTIFLOW	L.31
BLOW GUNS EXTENDED REACH	L.32
BLOW GUNS IN ACETALIC RESIN - BENT SPOUT	L.33
BLOW GUNS IN NYLON PA6	L.31
BLOW GUNS IN PLASTIC - EXTENDEND REACH BENT SPOUT	L.33
BLOW GUNS WITH RUBBER PROTECTION	L.31
BLOW GUNS WITH RUBBER SPOUT	L.32
BLOW GUNS WITH SILENT NOZZEL	L.31
BOLT ANCHOR FAZ II MODEL	N.112
BOLT ANCHOR ZINC-PLATED STEEL	N.111
BOLT ANCHOR ZINC-PLATED STEEL FOR NON-CRACKED CONCRETE MOD. VE.7CE	N.113
BOLT ANCHOR ZINC-PLATED STEEL FOR NON-CRACKED CONCRETE MOD. VE.A	N.112
BOLT CUTTERS	F.38
BOLT CUTTERS COMBICUT® 433	F.38
BOLT CUTTERS UNIBOLT® 430	F.39
BOLT CUTTERS WAGGONIT® 980	F.39
BOLT CUTTERS WITH INCLINED BLADES FLUSH-CUT 437	F.39
BOLT END CUTTING NIPPERS FOR MECHANICS	F.30

ITEM	PAG.
BOLT-ON SWIVEL EYE BOLTS	M.54
BOLTED SHELF RACKS IN AISI 304 STAINLESS STEEL	P.28
BOLTLESS SHELF RACKS	P.45
BORE GAUGES FOR BLIND HOLES	D.32
BORE GAUGES RANGE 18 - 150 MM 0.001 RESOLUTION	D.32
BORE GAUGES RANGE 6-18 MM 0.001 RESOLUTION	D.32
BORE GAUGES SET	D.33
BORE GAUGES WITH CARBIDE CONTACTS	D.33
BORE GAUGES WITH STEEL CONTACTS	D.33
BOREHOLE MICROMETERS WITH ANALOGUE READOUT	D.26
BOREHOLE MICROMETERS WITH ANALOGUE READOUT IN SET	D.27
BORING BARS - D,75 - D53,10	B.128
BORING BARS - D29,75 - D88,10	B.129
BORON AND FORMALDEHYDE RELEASER FREE MINERAL FLUIDS	H.4
BORON AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS	H.3-H.4
BORON-CHLORINE AND FORMALDEHYDE RELEASER-FREE SEMI-SYNTHETIC FLUIDS	H.5
BORON-CHLORINE AND FORMALDHEYDE RELEASER-FREE SEMI-SYNTHETIC FLUIDS	H.3, H.5
BOTTOM CLOSING FOR CABINETS	P.6
BOX SEALING TAPES	N.127
BOXES FOR JOBBER DRILLS SET - EMPTY	A.49
BRASS FIXING PO	N.110
BRASS SHIM ROLLS MS 63	D.66
BRIGHT STEEL STRAIGHT EDGES	F.107
BRISTLE BRUSH ON SHAFT BB-ZS	G.28
BROACHES FOR HEXAGONAL HOLES - SHANK 12	B.130
BROACHES FOR HEXAGONAL HOLES - SHANK 16	B.130
BROACHING HEADS FOR POLYGONAL HOLES AND SURFACE PROFILES	B.129
BROAD WASHERS	C.95
BRUSHES	F.114
BUCKETS FOR MANUAL CHAIN HOISTS	M.35
BURINS	F.64
BURNISHING TOOLS	B.54
BURNS FIRS AID KIT FOR WELDERS	K.46
BUSH FOR GRINDING WHEELS	N.20
BUSH WITH CLUTCH FOR TAPPING	C.46
BUSH WITHOUT CLUTCH FOR TAPPING	C.46-C.47
BUSHES FOR TAPPING WITH ADJUSTABLE CLUTCH	N.9
BUSHES FOR TAPPING WITH ADJUSTABLE CLUTCH SIZE 3 BUSHES WITH CLUTCH FOR DIN376 M20 TO M36 TAPS	N.9
BUSHES WITH BIT HOLDER 1/4 “HEXAGONAL ATTACHMENT	N.10
BUSHES WITH DRILL CHUCK	N.10
BUSHES WITH DRILL CHUCKS	N.10
BUTTON-HEAD DOUBLE HEX TAT HEAD GREASE NIPPLES	J.36
BUTTON-HEAD HEX TAT HEAD GREASE NIPPLES	J.36
CABINET DRAWERS 36 X 36 E	P.15
CABINET DRAWERS 54 X 36 E	P.15
CABINETS FOR COMPUTERS 36X36E	P.20
CABINETS FOR COMPUTERS WITH WHEELS 36 X 36 E	P.20
CABINETS FOR HEAVY GOODS	P.24
CABINETS FOR WORKBENCHES	P.6
CABINETS FOR WORKBENCHES - 630MM	P.6
CABINETS NC HINGED DOOR	P.10
CABINETS WITH 2 DOORS WITH SHELVES	P.22
CABINETS WITH DRAWERS FOR WORK BENCHES	P.9
CABINETS WITH FULL EXTENSION DRAWERS	P.13
CABINETS WITH FULL EXTENSION DRAWERS 54 X 27 EH	P.13
CABINETS WITH HINGED DOORS	P.21

ITEM	PAG.
CABINETS WITH SHEET METAL DOORS	P.22
CABINETS WITH SLIDING DOORS	P.23
CABLE REELS MANUAL	N.89-N.90
CABLE SHEARS	F.35-F.36
CABLE SHEARS FOR ROPES AND STEEL WIRE	F.36
CABLE SHEARS FOR VDE INSULATED CABLES 1000 VOLTS	F.36
CABLE SHEARS VDE INSULATED 1000 VOLT	F.36
CABLE STRIPPERS	F.24
CABLE TERMINAL FOR WELDING CABLES	J.51
CABLE TIES FOR STANDARD CABLING POLYAMIDE 6.6	F.98
CABLE TIES PLIERS	F.99
CALIBRATED CARBON STEEL STRIPES KIT	D.67
CALIBRATED CARBON STEEL TAPES	D.67
CALIBRATED STAINLESS STEEL STRIPES	D.67
CALIBRATED STAINLESS STEEL TAPES	D.67
CANTILEVER CRANE WITH LIFTING AND ELECTRIC EXTENSION	M.77
CARBIDE ROTARY BURRS	G.45-G.46
CARBIDE ROTARY BURRS - KEL TYPE	G.42
CARBIDE ROTARY BURRS - KUD TYPE	G.40
CARBIDE ROTARY BURRS - RBF TYPE	G.41
CARBIDE ROTARY BURRS - RBF TYPE - IN KIT	G.44
CARBIDE ROTARY BURRS - SKM TYPE	G.42
CARBIDE ROTARY BURRS - SPG TYPE	G.42
CARBIDE ROTARY BURRS - TREE TYPE	G.43
CARBIDE ROTARY BURRS - WRC TYPE	G.41
CARBIDE ROTARY BURRS - WRC TYPE - IN KIT	G.44
CARBIDE ROTARY BURRS - ZYAS TYPE	G.40
CARBIDE ROTARY BURRS - ZYAS TYPE - IN KIT	G.44
CARBIDE ROTARY BURRS FOR DIES	G.43
CARBIDE ROTARY BURRS WITH EXTENDED SHANK - WRC TYPE	G.41
CARBIDE ROTARY BURRS WITH EXTENDED SHANK - ZYAS TYPE	G.40
CARBIDE SCRIBERS	F.65
CARBON FIBRE DIGITAL CALIPERS	D.5
CARBON STEEL TAPES	D.66
CARDAN JOINTS FOR DRIVE SOCKETS	E.48
CARDAN JOINTS FOR DRIVE SOCKETS WITH SECURITY LOCK	E.49
CARDBOARD SHIPPING BOXES	N.130
CARTRIDGE GAS WELDER	J.59
CARTRIDGE ROLLS	G.26
CAST IRON SCREW CLAMPS	F.78
CENTERING PINS FOR DRILLING UNITS	N.69
CENTESIMAL MACHINE REAMERS	A.180, A.182
CENTRAL FEMALE-FEMALE-MALE T-FITTINGS	L.54
CENTRE DRILLS TYPE A	A.43-A.44
CENTRE DRILLS TYPE A - LONG SERIES	A.44
CENTRE DRILLS TYPE B	A.45
CENTRE DRILLS TYPE R	A.45
CENTRE SPOTTING DRILLS 120°	A.46-A.47
CENTRE SPOTTING DRILLS 142°	A.47-A.48
CENTRE SPOTTING DRILLS 90°	A.45-A.47
CENTRE SPOTTING DRILLS 90° - LONG SERIES	A.46
CERAMIC BLADES FOR DEBURRERS	F.54
CERAMIC FIBRE STONES	G.55
CERAMIC FLAP DISCS	G.8
CERAMIC GAUGE BLOCK SETS	D.64
CERAMIC QUICK CHANGE DISCS	G.17
CERAMIC VELCRO COATED DISCS	G.15

ITEM	PAG.
CHAIN LUBRICANTS	H.19
CHAMFER END MILLS Z4 - 90°	A.156
CHECKMASTER SOFTWARE PRO	E.85
CHIP SHIELD FOR STAR-TIP BLOW GUNS	L.33
CHISELS FOR BUILDERS	F.62-F.63
CHISELS FOR ELECTRICIANS	F.62
CHISELS FOR MECHANICS	F.61
CHISELS FOR METAL	F.61-F.62
CHISELS FOR WOOD	F.63
CHISELS WITH HAND PROTECTION GUARD FOR METAL	F.61
CHISELS, PUNCHES AND BURINS IN SET	F.61
CHUCKS FOR PORTABLE TAPPING MACHINES	N.39
CHUCKS FOR THREADED COUPLIN DIN 69871 SK FORM AD+B	C.10
CHUCKS FOR THREADED COUPLING DIN 69871 SK AD+B	C.9
CHUCKS FOR THREADED COUPLING DIN 69893 HSK A	C.30-C.31
CHUCKS FOR THREADED COUPLING MAS 403 BT AD+B	C.20
CHUCKS HAWK EYE BT AD+B	C.16
CHUCKS HAWK EYE® DIN 69893 HSK A	C.26
CIRCUMFERENCE TAPES	F.107
CLAK QUICK CHANGE MODULAR FLAT PARALLELS	C.83
CLAK QUICK CHANGE MODULAR FLAT PARALLELS - SET OF 10 PAIRS	C.83
CLAK QUICK CHANGE MODULAR FLAT PARALLELS - SET OF 6 PAIRS	C.83
CLAMP GRIP PLIERS	F.19
CLAMP LEVERS - MALE THREAD	N.119
CLAMP METERS	E.63
CLAMP SET T-SLOT 16MM	C.92
CLAMPING PINS APS-140	C.100
CLAMPING SCREWS FOR SHELL MILL HOLDERS	C.50
CLAMPING SCREWS FOR WELDON CHUCKS	C.49
CLAMPING VICE LC	C.81
CLAMPING VICES STANDARD FLEX	C.80
CLASSIC ALUMINIUM MAGNETIC SPIRIT LEVELS	F.106
CLEAN GO WELDING FUMES ASPIRATORS	N.77
CLEANER - DEGREASER	J.29
CLEANERS FOR ELECTRIC AND ELECTRONIC DEVICES	J.30
CLEANERS FOR TAPER COUPLINGS AND COLLET CHUCKS	C.44
CLEANING CLOTH FORM NON-WOVEN MATERIAL	J.45
CLEANING RODS FOR TUBING	G.31
CLICK TYPE TORQUE SCREWDRIVERS	E.76
CLOTH QUICK CHANGE DISCS	G.17
CLOTHES LOCKERS DIRTY/CLEAN	P.24
COARSE PITCH THREADED GAUGES	D.60
COARSE THREADED FITTING SEALANTS	J.11
COLD ZINC PROTECTOR	J.28
COLLAPSIBLE CRATES IN PP	P.35
COLLECTION TANK WITH CANOPY FOR 1000 L TANKS	P.48
COLOURED STRETCH FILMS	N.127
COLOURLESS MINERAL-GLASS FLAT PLATE	J.64
COLUMN FOR BENCH GRINDERS	N.20
COLUMN MOUNTED JIB CRANES WITH ARTICULATED ARM	M.16
COLUMN MOUNTED JIB CRANES WITH BEAM ARM	M.14
COLUMN MOUNTED JIB CRANES WITH OVERHEAD BEAM ARM	M.15
COLUMN-MOUNTED JIB CRANES WITH GIS SYSTEM KB PROFILE ARM	M.11
COMB PARTITION - 400MM	P.34
COMB PARTITION - 600MM	P.34
COMBI SHELL MILL HOLDER CHUCKS DIN 2080	C.34
COMBI SHELL MILL HOLDER CHUCKS DIN 69893 HSK A	C.31-C.32

ITEM	PAG.
COMBI-DISC BACKING PADS	G.17
COMBI-DRIVE SHELL MILL HOLDER CHUCKS DIN 69871 SK AD+B	C.12
COMBINATION DRILL TAP - M	A.83
COMBINATION DRIVERS 3/8” FOR HEXAGONAL SOCKET HEAD SCREWS	E.39
COMBINATION PLIERS FOR ELECTRIANS AND CABLING	F.22
COMBINATION RATCHET WRENCHES 144T	E.5
COMBINATION RATCHET WRENCHES 144T IN SET	E.5
COMBINATION RATCHET WRENCHES 72T	E.4, N.100
COMBINATION RATCHET WRENCHES 72T IN FOAM	E.108
COMBINATION RATCHET WRENCHES 72T IN SET	E.4-E.5
COMBINATION RATCHET WRENCHES WITH SWIVEL HEAD	E.6, P.41
COMBINATION RATCHET WRENCHES WITH SWIVEL HEAD IN SET	E.6
COMBINATION UNITS FILTER / REGULATOR	L.38
COMBINATION WRENCHES	E.2-E.3
COMBINATION WRENCHES IN FOAM	E.108, L.45, N.13
COMBINATION WRENCHES IN SET	E.2-E.3
COMBINATION WRENCHES INCH	E.4
COMBINATION WRENCHES WITH REVERSIBLE RATCHET	E.5-E.6
COMBINATION WRENCHES WITH REVERSIBLE RATCHET IN FOAM	E.108
COMBINATION WRENCHES WITH REVERSIBLE RATCHET IN SET	E.6
COMBINDED THREADED-DRILLING TAP BITS WITH HEXAGONAL DRIVE 1/4” - SET	E.99
COMBINED BENCH GRINDERS 230V	N.18
COMBINED BENCH GRINDERS 400V	N.18
COMBINED ECOLOGICAL BENCH GRINDERS IN ALUMINUM 400 VOLT	N.19
COMBINED MILL HOLDERS DIN 69871 SK AD+B	C.11
COMBINED SHELL MILL HOLDER CHUCKS MAS 403 BT AD+B	C.21-C.22
COMBINED THREADED DRILLING TAP BITS WITH HEXAGONAL DRIVE 1/4”	E.99
COMPACT MAGNETIC TORPEDO LEVELS	F.106
COMPACT MULTIPLE VENTED SAFETY OUTLETS - SERIES 320 ESAFE MULTI-LINK	L.50
COMPACT SYKLOP RATCHETS WITH TOOL KIT	E.50
COMPARTMENT ORGANIZERS	F.85
COMPOSITE POLYESTER STRAPS	N.123
COMPRESSED AIR HOSE REELS	L.44
COMPRESSED AIR HOSE REELS “MINI”	L.44
COMPRESSED AIR SPRAY	J.31
COMPRESSOR GUN IN KIT	L.34
COMPUTER CABINETS	P.21
CONCENTRATED ANTIFREEZE	H.15
CONCENTRATED DETERGENT FOR FLOOR CLEANING MACHINES	J.32
CONCENTRATED SAFETY CLEANER	J.29
CONICAL DRILL BIT SET FOR SHEET METAL	N.58
CONICAL DRILLS FOR SHEET METAL	N.58
CONICAL EXTRACTORS FOR SCREWS AND STUDS	F.90
CONICAL EXTRACTORS FOR SCREWS AND STUDS IN SET	F.90
CONICAL PIN PUNCHES	F.64
CONICAL STEP DRILL BIT SET	N.58
CONICAL STEP DRILLS	N.57
CONTACT DIGITAL TACHOMETERS	D.79
CONTACTLESS VOLT DETECTOR	E.58
CONTAINER MODULES WITH THERMAL INSULATION	P.50
CONTAINERS FOR POLLUTING AND FLAMMABLE SUBSTANCES	P.49
CONTAINERS WITH OPENABLE BOTTOM	P.37
CONTINUOUS COTTON WIRE GLOVES	K.25
CONTINUOUS WIRE GLOVES TOTAL GRIP NBR	K.19
CONVEX CAPS	C.89
COPPER HAMMERS	F.69
CORDLESS ANGLE GRINDER BATTERY OPERATED 18V	G.9, N.33
CORDLESS ANGLE GRINDERS BATTERY OPERATED 18V	N.32-N.33
CORDLESS IMPACT WRENCHES 12V	N.26
CORDLESS IMPACT WRENCHES 18V	N.29-N.30
CORDLESS MAGNETIC BASE DRILLS WITH 18 V BATTERY	N.6
CORDLESS REVERSIBLE SCREWDRIVERS BATTERY OPERATED 20V	N.30-N.31
CORDLESS SCREDRIVER DRILLS BATTERY OPERATED 12V	N.24
CORDLESS SCREWDRIVER DRILLS 12V	N.23-N.24
CORDLESS SCREWDRIVER DRILLS 18V	N.26
CORDLESS SCREWDRIVER DRILLS BATTERY OPERATED 12V	N.23-N.25
CORDLESS SCREWDRIVER DRILLS BATTERY OPERATED 18V	N.27
CORDLESS SCREWDRIVER DRILLS WITH 18V PERCUSSION	N.28
CORDLESS SCREWDRIVER DRILLS WITH BATTERY PERCUSSION 12V	N.25
CORDLESS SCREWDRIVER DRILLS WITH PERCUSSION 18 V	N.28
CORDLESS SCREWDRIVER DRILLS WITH PERCUSSION BATTERY OPERATED 18V	N.27
CORDLESS SCREWDRIVERS DRILLS BATTERY OPERATED 18V	N.27
CORDLESS STRAIGHT GRINDERS BATTERY OPERATED 18V	N.33
CORLESS ANGLE GRINDERS BATTERY OPERATED 18V	N.32
CORNER - ROUNDING END MILLS	A.155
CORNER RADIUS END MILLS FOR ALUMINUM ALLOYS Z3	A.139
CORNER RADIUS END MILLS WITH VARIABLE PITCH Z4	A.111, A.136
CORNER RADIUS END MILLS Z4	A.137-A.138
CORNER RADIUS MICRO END MILLS Z2	A.140
COTTON POLISHING DISCS	G.38
COUNTERSINKS 60° Z3	A.187-A.188
COUNTERSINKS 90° Z3	A.185-A.188
COUNTERSINKS 90° Z3 WITH HEXAGONAL DRIVE 1/4”	E.99
COUNTERSINKS 90° Z3 WITH LONG CYLINDRICAL SHANK	A.188
COUNTERSINKS 90° Z3 WITH MORSE TAPER SHANK	A.187
COUNTERSINKS VARIALBE PITCH A 90° Z3	A.189
COUPLING FITTINGS MALE THREADED WITH SPRING	L.46
COUPLING FLUIDS	D.92
COUPLINGS EXTENSION FOR IMPACT SOCKETS	E.56
COUPLINGS FOR BI-METAL HOLE SAWS	N.62
COVER DRAIN PROTECTIVE MAT	H.37
COWHIDE GRAIN LEATHER GLOVES	K.17
COWHIDE GRAIN LEATHER/COTTON GLOVES	K.17
COWHIDE GRAIN SPLIT LEATHER GLOVES	K.17
CRANES FORKABLE WITH FORKLIFT	M.68
CRANKED CLAMPS	C.92
CREW NECK SWEATSHIRT	K.3
CRIMPING PILERS FOR END SLEEVES	F.21
CRIMPING PLIERS	F.19
CRIMPING PLIERS FOR END SLEEVES	F.20-F.21
CRIMPING PLIERS FOR END SLEEVES (FERRULES)	F.21
CRIMPING PLIERS FOR END SLEEVES (FERRULES) 1000 VOLTS VDE	F.21
CRINKLED LATEX GLOVES	K.24
CROSS CUTTING END MILLS Z2	A.128
CROWBARS	F.73
CROWBARS FOR CARPENTERS	F.72-F.73
CUBITRON II ABRASIVE CLOTH BELTS	G.22
CUP BRUSHES	G.30
CUP GRINDING WHEELS	G.50
CURVED POLYGONAL WRENCHES HEAVY DUTY	E.10
CUT OFF INSERTS	B.93
CUT RESISTANCE GLOVES COATED IN POLYURETHAN SIZE B	K.23
CUT RESISTANCE GLOVES COATED IN POLYURETHANE - C CUT	C.18, D.15, F.65, F.73, K.23, M.15, N.47

ITEM	PAG.
CUT RESISTANT GLOVES COATED IN POLYURETHANE D CUT	K.23
CUT-OFF BENCH SAWS FOR PUNCHES	N.15
CUT-RESISTANT GLOVES IN CONTINOUS WIRE COATED IN POLYETHYLENE FIBER	K.22
CUT-RESISTANT GLOVES IN FIBER WITH DOUBLE COATING 3/4 IN NITRILE	K.22
CUTTERS FOR WELDED WIRE-MESH WAGGONIT® 985	F.40
CUTTERS WITH SNAP-OFF BLADES	F.48-F.49
CUTTERS WITH SNAP-OFF BLADES 18 MM	F.49
CUTTERS WITH SNAP-OFF BLADES 9MM	F.49
CUTTERS WITH SNAP-OFF BLADES-INTERLOCK	F.50
CUTTING BITS - ACETYLENE	J.52
CUTTING BITS -PROPANE-METHANE	J.52
CUTTING FLUIDS	H.10-H.11
CUTTING NIPPERS 15° FOR ELECTRONICS AND FINE MECHANICS	F.32
CUTTING NIPPERS 27° FOR ELECTRONICS AND FINE MECHANICS	F.32
CUTTING NIPPERS FOR ELECTRONICS AND FINE MECHANICS	F.31-F.33
CUTTING NIPPERS FOR ELECTRONICS AND PRECISION MECHANICS	F.30-F.31
CUTTING NIPPERS FOR ELECTRONICS SUPER KNIPS®	F.33-F.34
CUTTING NIPPERS FOR ELECTRONICS SUPER KNIPS® XL	F.34
CUTTING NIPPERS FOR ELECTRONICS SUPER KNIPS®XL	F.34
CUTTING NIPPERS FOR ELETRONICS SUPER KNIPS®	F.34
CUTTING NIPPERS FOR PLASTIC MATERIALS	F.30
CUTTING TWEEZERS	F.27
CYANOACRYLATE INSTANT ADHESIVES	J.3-J.5
CYCLE COUNTERS FOR HOISTS	M.7
CYLINDER TROLLEYS	P.39
CYLINDRICAL CUP WHEELS	G.50
CYLINDRICAL FEMALE THREADED L - FITTINGS	L.54
CYLINDRICAL FEMALE THREADED T - FITTINGS	L.54
CYLINDRICAL HANDLES FIXED IN DUROPLAST - FEMALE THREAD	N.116
CYLINDRICAL MALE THREADED PLUGS	L.53
CYLINDRICAL MALE/FEMALE THREADED L - FITTINGS	L.54
CYLINDRICAL REVOLVING HANDLES IN DUROPLAST - MALE THREAD	N.116
DE-MINERALIZED WATER	J.33
DEAD CENTRES	C.77
DEBURRERS WITH CERAMIC BLADE	F.54
DEBURRING TOOLS SET TYPE E ERGOBURR	F.57
DEBURRING TOOLS TYPE 1 IN SET	F.56
DEBURRING TOOLS TYPE B IN SET	F.56
DEBURRING TOOLS TYPE BURR BI IN SET	F.56
DEBURRING TOOLS TYPE C IN SET	F.56
DEBURRING TOOLS TYPE D IN SET	F.56
DEBURRING TOOLS TYPE E IN SET	F.56
DEBURRING TOOLS TYPE F IN SET	F.56
DEBURRING TOOLS TYPE FR ID IN SET	F.56
DEBURRING TOOLS TYPE FR OD IN SET	F.56
DEEP GROOVING AND PARTING BLADES - SINGLE SIDE	B.47
DEPOSITS FOR OUTDOOR STORAGE	P.48
DEPOSITS FOR OUTDOOR STORAGE FOR 1000 L CISTERNS	P.48
DEPRESSED CENTRE CUTTING DISCS	G.3
DEPRESSED CENTRE GRINDING DISCS	G.4
DEPRESSED CENTRE GRINDING WHEELS, CUBITRON II	G.4
DEPTH VERNIER CALIPERS	D.14
DERMA-PROTECTIVE CREAM FOR HANDS	J.43
DETERGENT FOR HOT CLEANING SYSTEM	J.32
DETERGENT FOR LAPPED SURFACES	D.49
DETERGENTS FOR HYDRO CLEANERS	J.32
DEVICE FOR AUTOMATIC LUBRICATION OF THE TOOL	N.6

ITEM	PAG.
DEVICES FOR THE TURNING OF SOFT JAWS OUTLOCK	C.79
DF-2 CLEANING WELDING FUMES ASPIRATORS	N.77
DIAGONAL CUTTING NIPPERS	F.27
DIAGONAL CUTTING NIPPERS FOR PLASTIC MATERIALS	F.30
DIAGONAL CUTTING NIPPERS SEMI-FLUSH	F.31
DIAGONAL CUTTING NIPPERS TWINFORCE®	F.29
DIAGONAL CUTTING NIPPERS VDE INSULATED 1000 VOLTS	F.28
DIAL BORE GAUGES	D.33
DIAL CALIPERS	D.11
DIAL GAUGES FOR EXTERNAL MEASUREMENTS	D.32
DIAL GAUGES FOR INTERNAL MEASUREMENTS	D.31
DIAL HEIGHT GAUGES	D.54
DIAL INDICATOR Ø 56	D.36
DIAL INDICATOR Ø 58	D.36
DIAL INDICATORS Ø 40	D.37-D.38
DIAL INDICATORS Ø 57	D.38
DIAL INDICATORS Ø 58	D.36-D.37
DIAL INDICATORS Ø 60	D.37
DIAL INDICATORS Ø 80	D.38
DIAL INDICATORS Ø 88	D.38
DIAL TEST ACCESSORIES	D.39
DIAMOND DRESSERS	G.52
DIAMOND FILES FOR PNEUMATIC FILING MACHINES	G.68
DIAMOND MULTI-TIPPED DRESSER	G.52
DIAMOND PASTES - TYPE KD	G.57
DIAMOND PASTES FOR LAPPING	G.57
DIAMOND WHEELS FORM 11V9	G.58
DIAMOND WHEELS FORM 12A2D	G.58
DIAMOND WHEELS FORM 1A1	G.58
DIAMOND WHEELS FORM 1A1R	G.58
DIE STOCKS IN STEEL	F.90
DIE STOCKS IN ZINC ALLOY	F.89
DIGITAL AMPEROMETRIC PLIERS	D.89
DIGITAL CALIPERS	D.3, D.5
DIGITAL CALIPERS IP54 WITH ABSOLUTE FUNCTION	D.3
DIGITAL CALIPERS IP66	D.6
DIGITAL CALIPERS IP67	D.2-D.5
DIGITAL CALIPERS IP67 WITH PRESET	D.2
DIGITAL CALIPERS WITH ABSOLUTE FUNCTION	D.4
DIGITAL CALIPERS WITH INTERCHANGEABLE TIPS	D.9
DIGITAL CALIPERS WITH PRESET	D.4
DIGITAL CALIPERS WORK SERIES	F.105
DIGITAL CHRONOMETERS	D.80
DIGITAL COATING THICKNESS GAUGES	D.90
DIGITAL COMPARATORS	D.35
DIGITAL COUNTING SCALES	D.87
DIGITAL COUNTING SYSTEMS	D.88
DIGITAL DEPTH CALIPERS IP54	D.7
DIGITAL DEPTH CALIPERS IP67	D.6
DIGITAL DEPTH CALIPERS WITH MOBILE BRIDGE IP67	D.7
DIGITAL DEPTH CALIPERS WITH PUSH ROD IP67	D.6
DIGITAL DIAL INDICATORS	D.34-D.36
DIGITAL DISK MICROMETERS FOR GEARS IP65	D.29
DIGITAL FINE BORING HEADS - D3 - D88.10	B.127
DIGITAL HANGING SCALES	D.86
DIGITAL HEIGHT GAUGES	D.54
DIGITAL HEIGHT GAUGES WITH CHROMED STEEL CASING	D.54

ITEM	PAG.
DIGITAL INDICATORS IP67	D.34
DIGITAL INSTRUMENTS FOR EXTERNAL SEEGER MEASUREMENTS WITH ON-AXIS NOZZLES - IP54	D.30
DIGITAL MANUAL ROCKWELL HARDNESS TESTERS	D.69
DIGITAL MICROMETERS	D.19
DIGITAL MICROMETERS FOR SMALL HOLES IN SET - IP65	D.26
DIGITAL MICROMETERS IP65	D.18
DIGITAL MICROMETERS IP67	D.17
DIGITAL MICROSCOPES COMPLETE WITH STAND	D.73
DIGITAL MULTIMETERS	D.89, E.63
DIGITAL PROTACTOR/ INCLINOMETERS	D.58
DIGITAL PROTACTOR/INCLINOMETERS	D.58
DIGITAL SHORE HARDNESS TESTERS	D.68
DIGITAL UNIVERSAL PROTRACTORS WITH SPIRIT LEVEL	D.50
DIN 69871 A/D AND MAS403 BT MODULAR MASTER SHANKS	B.125
DIRECT MOUNTING INDEPENDENT CHUCKS	C.72
DISHED WASHERS	C.96
DISINFECTANT - DEODORANT SPRAY	J.44
DISK END MILLS FOR THIN-LAYER CUTTING	B.93
DISK MICROMETERS FOR GEARS	D.29
DISPOSABLE EARPLUGS	K.37
DISPOSABLE EARPLUGS WITH STRING	K.37
DISPOSABLE FULL OVERALLS WITH HOOD	K.27
DISPOSABLE GLOVES EMBOSSED IN NITRILE	K.25
DISPOSABLE GLOVES IN EMBOSSED NITRILE	K.24
DISPOSABLE GLOVES IN VINYL	K.25
DISPOSABLE LATEX GLOVES WITH POWDER COATING	K.25
DISPOSABLE NITRILE GLOVES	K.24
DISPOSABLE POWDER-FREE NITRILE GLOVES POWDER FREE	K.25
DISSOLDERING PIPES	J.59
DISTANCE METER DETECTOR LASER	F.111
DISTRIBUTORS FOR STRETCH FILM COILS	N.127
DIVIDERS WITH SETTING WING	F.102
DMC INTERCHANGEABLE HEADS	B.106
DMP INTERCHANGEABLE HEADS	B.104
DOSING NEEDLES	J.18
DOSING NEEDLES KIT	J.18
DOUBLE COLUMN DIGITAL HEIGHT GAUGES	D.53
DOUBLE ENDED OFFSET RING WRENCHES	E.9
DOUBLE ENDED TUBULAR BOX WRENCHES	E.13
DOUBLE ENDED TUBULAR BOX WRENCHES HEAVY DUTY IN SET	E.13
DOUBLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES	B.52
DOUBLE GUIDED SELF-CENTERING CHUCKS 3 JAWS	C.67
DOUBLE GUIDED SELF-CENTERING CHUCKS 3 JAWS AND 3 CLAMPS	C.68
DOUBLE GUIDED SELF-CENTERING CHUCKS 4 JAWS	C.68
DOUBLE HEADED SOCKET WRENCHES	E.14
DOUBLE HOOK DEPTH VERNIER CALIPERS	D.14
DOUBLE HOOK DIGITAL DEPTH CALIPERS IP54	D.8
DOUBLE LEVER ACTION CUTTING NIPPERS	F.29
DOUBLE LEVER ACTION CUTTING NIPPERS COBOLT®	F.29
DOUBLE LEVER ACTION CUTTING NIPPERS WITH BENT HEAD COBOLT®	F.29
DOUBLE LEVER ACTION CUTTING NIPPERS WITH SPRING COBOLT®	F.29
DOUBLE LEVER SHEARS FOR SHEET METAL	F.40
DOUBLE MAGNIFYING GLASSES	D.76
DOUBLE OPEN ENDED WRENCHES	E.7-E.8
DOUBLE OPEN ENDED WRENCHES FOR FITTINGS	E.9
DOUBLE OPEN ENDED WRENCHES IN FOAM	E.108

ITEM	PAG.
DOUBLE OPEN ENDED WRENCHES IN SET	E.7
DOUBLE OPEN ENDED WRENCHES INCH	E.8
DOUBLE RUBBER HOSE FOR OXY/ACETYLENE	J.54
DOUBLE SCISSORS ELECTRIC ELEVATING PLATFORMS	M.84
DOUBLE SIDE HEXAGONAL INSERTS SHELL MILLS	B.62
DOUBLE SIDE INSERTS TOROIDAL SHELL MILLS FOR ADVANCE FEED	B.80
DOUBLE SOCKET WRENCHES LIGHT MODEL	E.14
DOUBLE-SIDE INSERTS HIGH FEED END MILLS	B.78
DOUBLE-SIDE INSERTS TOROIDAL END MILLS FOR ADVANCE FEED	B.79
DOUBLE-SIDED TAPES	N.128
DOUBLE-SIDED TROLLEY WITH WOLF-MOUTH CONTAINERS	P.29
DOVETAIL CUTTERS	A.170
DRAWERS 27 X 27 E	P.15
DRAWERS 36 X 27 E	P.15
DRAWERS FOR CABINETS	P.22
DRAWERS FOR WORKBENCHES	P.6
DRAWN COPPER HAMMERS 80 BRINELL	F.72
DRILL BIT SET FOR CONCRETE SDS-PLUS WITH TWO CUTTERS	N.66
DRILL BIT SET FOR MASONRY/CONCRETE	N.65
DRILL BITS FOR BI-METAL HOLE SAWS	N.62
DRILL BITS FOR CONCRETE SDS-PLUS WITH FOUR CUTTERS	N.67
DRILL BITS FOR CONCRETE SDS-PLUS WITH TWO CUTTERS	N.66
DRILL BITS FOR METAL WITH “HEXAGONAL DRIVE 1/4”	E.98
DRILL BUSHES DIN 172 – LONG SERIES	N.107
DRILL BUSHES DIN 172 – SHORT SERIES	N.106
DRILL BUSHES DIN 179 – LONG SERIES	N.106
DRILL BUSHES DIN 179 – SHORT SERIES	N.106
DRILLING MACHINE WITH 6 SPEEDS	N.3
DRILLING MACHINES 18CO	N.2
DRILLING MACHINES 25TM	N.2
DRILLING MACHINES 30LE	N.3
DRILLING MACHINES WITH MAGNETIC BASE	N.5
DRILLS - EXTRA-LONG SERIES	A.40-A.41
DRILLS - LONG SERIES	A.38-A.39
DRILLS DOUBLE LAND 5XD - COOLANT HOLES	A.16
DRILLS FOR HOLE CUTTERS WX7495 AND WX7500	N.64
DRILLS MORSE TAPER SHANK	A.42-A.43
DRILLS MORSE TAPER SHANK - EXTRA-LONG SERIES	A.41
DRILLS MORSE TAPER SHANK - LONG SERIES	A.43
DRILLS REAMERS 3XD - COOLANT HOLES	A.17
DRILLS REAMERS 5XD - COOLANT HOLES	A.19
DRILLS REINFORCED SHANK 12XD - COOLANT HOLES	A.15
DRILLS REINFORCED SHANK 20XD - COOLANT HOLES	A.15
DRILLS REINFORCED SHANK 3XD	A.9-A.10
DRILLS REINFORCED SHANK 3XD - COOLANT HOLES	A.11, A.17
DRILLS REINFORCED SHANK 5XD	A.12
DRILLS REINFORCED SHANK 5XD - COOLANT HOLES	A.8, A.13, A.18
DRILLS REINFORCED SHANK 5XD Z3 - COOLANT HOLES	A.14
DRILLS REINFORCED SHANK 7XD - COOLANT HOLES	A.14
DRILLS WITH INTERCHANGEABLE HEAD - 5XD WELDON SHANK	B.102
DRILLS WITH INTERCHANGEABLE HEAD - 8XD WELDON SHANK	B.103
DRILLS WITH MAGNETIC BASE	N.5
DRILLS WITH REDUCED SHANK	N.59
DRILLS WITH REINFORCED SHANK - COOLANT HOLES	A.18
DRILLS WITH REINFORCED SHANK 180° 3XD - COOLANT HOLES	A.20
DRIVEN TOOL HOLDERS BMT55	C.59
DRIVEN TOOL HOLDERS KIT BMT 65	C.59

ITEM	PAG.
DRIVEN TOOL HOLDERS MZ1	C.61
DRIVEN TOOL HOLDERS MZ2	C.62
DRIVEN TOOL HOLDERS N44	C.60
DRIVEN TOOL HOLDERS N55	C.61
DRIVEN TOOL HOLDERS NL	C.57
DRIVEN TOOL HOLDERS NZ	C.58
DRIVEN TOOL HOLDERS S68	C.62
DRIVEN TOOL HOLDERS VDI30 DIN5480	C.57
DRIVEN TOOL HOLDERS VDI40 DIN5480	C.57
DRIVING RING DIN 6366/1 FOR COMBI SHELL MILL HOLDERS	C.50
DRUM HOLDER TROLLEYS	P.46
DRUM STORAGE SUPPORTS	P.46
DRUMS LIFTING CLAMPS	M.42
DRY PRESSURE MANOMETERS - BOTTOM CONNECTION - ABS CASE	L.39
DRY PRESSURE MANOMETERS - REAR CONNECTION - ABS CASE	L.39
DUAL-COMPONENT PLASTIC HANDLES FOR FILES	G.67
DUST-BIN BAGS FOR RE-CYCLING	P.64
DUST-BIN HOLDERS	P.64
DYNAMOMETRIC SCREWDRIVERS	E.67-E.68, E.74-E.75
DYNAMOMETRIC SCREWDRIVERS IN SET	E.68, B.111
DYNAMOMETRIC SCREWDRIVERS INSULATED UP TO 1000 VOLTS IN SET	E.72
E BALL NOSE END MILLS Z2	A.146
EARMUFFS	K.36-K.37
ECCENTRIC BUSHINGS FOR CNC LATHES	B.131
ECOLOGICAL BENCH GRINDERS IN ALUMINUM 400 VOLT	N.19
ECOLOGICAL GRINDERS IN CAST IRON 400V	N.19
ECOLOGICAL POLISHING MACHINES	N.19
ELASTIC SPLIT SLEEVE	K.28
ELECTRIC ANGLE GRINDERS	G.31, N.41, N.43, N.45
ELECTRIC AXIAL GRINDERS	N.48
ELECTRIC BALLASTED CANTILEVER CRANES WITH PROGRESSIVE LIFTING AND MANUAL EXTENSION	M.77
ELECTRIC BALLASTED OVERHANGING CRANES WITH MANUAL EXTENSION	M.76
ELECTRIC BELT SANDERS	N.49
ELECTRIC CHAIN HOISTS - GP	M.2
ELECTRIC CHAIN HOISTS - HANDY	M.3
ELECTRIC CHAIN HOISTS ATEX - ZONA 2	M.5
ELECTRIC CHAIN HOISTS ATEX - ZONA 22	M.4
ELECTRIC ELEVATING PLATFORMS	M.82, M.84
ELECTRIC LIFT PALLET TRUCKS	M.88
ELECTRIC MARKING PENS	N.86
ELECTRIC ORBITAL SANDERS	N.49
ELECTRIC PALLET TRUCKS EX15L	M.87
ELECTRIC REVERSIBLE ANGLED DRILLS	N.37
ELECTRIC ROTO-ORBITAL SANDERS	N.49
ELECTRIC SDS PLUS REVERSIBLE ROTARY HAMMERS	N.39
ELECTRIC TAPPING MACHINES WITH ARTICULATED ARM JOYTAP	N.7
ELECTRIC TAPPING MACHINES WITH ARTICULATED ARM SNIPER	N.6
ELECTRIC TILTING PLATFORMS	M.85
ELECTRIC TROLLEY FOR BEAMS	M.8
ELECTRIC TROLLEY FOR BEAMS - ATEX	M.8
ELECTRIC UNIVERSAL SAWS	N.50
ELECTRIC VACUJET VACUUM LIFTERS	M.31
ELECTRICALLY OPERATED DIGITAL TORQUE WRENCHES	E.80
ELECTRICALLY POWERED LIFTING MAGNETS	M.60
ELECTRICIAN'S KNIFE INSULATED 1000 VOLTS VDE	F.24
ELECTRICIAN'S SCISSORS	F.41-F.42

ITEM	PAG.
ELECTRICIAN'S SCISSORS - STAINLESS STEEL BLADES	F.42
ELECTRICIAN'S SCISSORS INSULATED 1000V	F.42
ELECTRO WELDED ALUMINIUM STEP STOOL	P.56
ELECTRODE HOLDER PLIERS	J.50
ELECTRODE WELDING KIT	J.50
ELECTRODES FOR STAINLESS STEEL	J.56
ELECTRONIC CALIBRATION SYSTEMS PERFECTCONTROL®	E.87
ELECTRONIC DEPTH SENSOR	N.8
ELECTRONIC DYNAMOMETERS	M.44-M.45
ELECTRONIC EDGE FINDERS	D.46
ELECTRONIC EDGE FINDERS LUMINOUS	D.46
ELECTRONIC MEASURING GAUGES FOR EXTERNAL MEASUREMENT - IP54	D.30
ELECTRONIC MEASURING GAUGES FOR INTERNAL MEASUREMENT - IP54	D.30
ELECTRONIC TORQUE WRENCHES	E.79
ELECTRONIC WELDING MASKS	J.63
EMERGENCY KIT ANTI-OIL SPILL	H.37
EMULSION OXYGENATORS	H.29
END BRUSHES WITH SHANK	G.29
END CUTTING NIPPERS FOR MECHANICS	F.30
END MILLS FOR ALUMINUM ALLOYS LEFT HELIX Z1	A.121
END MILLS FOR ALUMINUM ALLOYS Z1	A.120
END MILLS FOR ALUMINUM ALLOYS Z2	A.122
END MILLS FOR ALUMINUM ALLOYS Z3	A.122-A.124
END MILLS FOR BEVELING 120° Z4	A.156
END MILLS FOR SLOTTING Z2	A.98
END MILLS FOR SLOTTING Z2 CENTER CUTTING	A.99
END MILLS FOR SLOTTING Z3	A.101
END MILLS FOR SLOTTING Z4	A.107
END MILLS LONG SERIES Z3	A.105
END MILLS LONG SERIES Z4	A.114
END MILLS VARIABLE PITCH LONG SERIES Z4	A.116
END MILLS VARIABLE PITCH LONG SERIES Z5	A.119
END MILLS WITH VARIABLE HELIX AND CHIP BREAKER FOR TROCHOIDAL MILLING Z5	A.117
END MILLS WITH VARIABLE PITCH CORNER RADIUS AND CHIP BREAKER FOR TROCHOIDAL MILLING Z5	A.118
END MILLS WITH VARIABLE PITCH Z3	A.104
END MILLS WITH VARIABLE PITCH Z4	A.108-A.110
END MILLS WITH VARIABLE PITCH Z5	A.116
END MILLS WITH VARIALBE PITCH Z4	A.110
END MILLS Z2	A.97, A.160-A.161, A.163
END MILLS Z3	A.100, A.102-A.103
END MILLS Z4	A.106, A.112-A.113, A.115
END-CUTTING BOLT CUTTERS COMBICUT® 433V	F.38
ENERGY ABSORBING SYSTEM	K.42
ENGINEER'S BLUE	D.48
ENGINEER'S FILES - FLAT	G.60
ENGINEER'S FILES - HALF-ROUND	G.61
ENGINEER'S FILES - IN SET	G.62
ENGINEER'S FILES - ROUND	G.61
ENGINEER'S FILES - SQUARE	G.62
ENGINEER'S FILES - TRIANGULAR	G.62
ER COLLECT CHUCKS MAS 403 BT AD+B	C.15
ER COLLET CHUCKS CYLINDRICAL SHANK DIN 1835A	C.36
ER COLLET CHUCKS DIN 2080 AD	C.34
ER COLLET CHUCKS DIN 69871 SK AD+B	A.24, A.37, C.3-C.4
ER COLLET CHUCKS DIN 69893 HSK A	C.25
ER COLLET CHUCKS FLAT CYLINDRICAL SHANK DIN 1835A	C.36

ITEM	PAG.
ER COLLET CHUCKS MAS 403 BT AD+B	C.15
ER COLLET MINI CHUCKS MAS 403 BT AD+B	C.16
ER MINI COLLET CHUCKS CYLINDRICAL SHANK DIN 1835A	C.35
ER MINI COLLET CHUCKS DIN 69871 SK AD+B	C.4
ER MINI COLLET CHUCKS DIN 69893 HSK A	C.25-C.26
ER MINI COLLET CHUCKS MAS 403 BT AD+B	C.16
ER SPRING COLLECTS EXTRA PRECISE	C.39
ER TAPPING ATTACHMENTS	C.43
ER/EX COLLET CHUCKS VDI DIN 6499/B	C.64
ER11 SPRING COLLETS - EXTRA-PRECISE	C.38
ER11 SPRING COLLETS - STANDARD	C.38
ER11 SPRING COLLETS SET	C.38
ER16 SPRING COLLETS - EXTRA-PRECISE	C.38-C.39
ER16 SPRING COLLETS - STANDARD	C.39
ER16 SPRING COLLETS FOR RIGID TAPPING	C.43
ER16 SPRING COLLETS SET	C.39
ER20 SPRING COLLETS - EXTRA-PRECISE	C.39-C.40
ER20 SPRING COLLETS - STANDARD	C.40
ER20 SPRING COLLETS SET	C.40
ER25 SPRING COLLETS - EXTRA-PRECISE	C.40
ER25 SPRING COLLETS - SEALED	C.41
ER25 SPRING COLLETS - STANDARD	C.41
ER25 SPRING COLLETS FOR RIGID TAPPING	C.43
ER25 SPRING COLLETS SET	C.41
ER32 SPRING COLLETS - EXTRA-PRECISE	C.41
ER32 SPRING COLLETS - SEALED	C.42
ER32 SPRING COLLETS - SEALED AA	C.42
ER32 SPRING COLLETS - STANDARD	C.42
ER32 SPRING COLLETS FOR RIGID TAPPING	C.43
ER32 SPRING COLLETS SET	C.42
ER40 SPRING COLLETS - EXTRA-PRECISE	C.42
ER40 SPRING COLLETS - STANDARD	C.43
ER40 SPRING COLLETS SET	C.43
ER8 SPRING COLLETS - STANDARD	C.38
ERGONOMIC HANDLES	F.56
EVA TRAY MODULES WITH 1 EMPTY TRAY	E.111
EVA TRAY MODULES WITH 2 EMPTY TRAYS	E.111
EVA TRAY MODULES WITH PLASTIC TRAY	E.111
EVOCAM VIDEO-MICROSCOPES II	D.84
EXCHANGEABLE CUTTER HEADS FOR BOLT CUTTERS 437	F.39
EXCHANGEABLE CUTTER HEADS FOR BOLT CUTTERS 71 72	F.38
EXCHANGEABLE CUTTER HEADS FOR BOLT CUTTERS UNIBOLT® 430	F.39
EXCHANGEABLE CUTTER HEADS FOR BOLT CUTTERS WAGGONIT® 980	F.39
EXCHANGEABLE CUTTER HEADS FOR BOLT CUTTERS WX3870	F.38
EXCHANGEABLE CUTTER HEADS FOR WELDED WIRE-MESH WAGGONIT® 985	F.40
EXTENDED MAGNETIC DIAL INDICATOR STANDS	D.43
EXTENDED NUTS FOR T-SLOTS	C.94
EXTENDED PNEUMATIC GRINDERS	L.21
EXTENSION BRIDGES AND ACCESSORIES - D86 - D320	B.128
EXTENSION NUTS	C.94
EXTENSION TUBE FOR STAR-TIP BLOW GUNS	L.33
EXTENSIONS FOR COLUMN MOUNTED CRANES	M.16
EXTENSIONS FOR SOCKETS	E.48
EXTENSIONS WITH SAFETY LOCK FOR SOCKETS	E.48
EXTERNAL COUNTERSINKS 90° Z3	A.189
EXTERNAL GROOVING ISO 7 BRAZED TOOLS	B.55
EXTERNAL GROOVING TOOLHOLDERS TRIANGOLAR INSERTS	B.51

ITEM	PAG.
EXTERNAL MICROMETERS	D.19-D.21
EXTERNAL MICROMETERS IN SET	D.21
EXTERNAL MICROMETERS SET	D.20
EXTERNAL MICROMETERS WITH DIAL INDICATOR	D.19
EXTERNAL THREADS DIGITAL MICROMETERS IP65	D.28
EXTERNAL THREADS MICROMETERS	D.29
EXTERNAL TURNING ISO 2 BRAZED TOOLS	B.55
EXTERNAL TURNING ISO 6 BRAZED TOOLS	B.55
EXTERNAL TURNING TOOL HOLDERS FOR POSITIVE INSERTS - R SHAPE	B.14
EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - C SHAPE	B.4-B.5
EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - D SHAPE	B.5-B.6
EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - S SHAPE	B.6-B.7
EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - T SHAPE	B.7
EXTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - W SHAPE	B.8
EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - C SHAPE	B.9, B.11
EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - D SHAPE	B.12
EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - K SHAPE	B.14
EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - S SHAPE	B.15
EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - T SHAPE	B.16
EXTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - V SHAPE	B.17-B.19
EXTERNAL TURNING TOOLHOLDERS FOR NEGATIVE INSERTS - V SHAPE	B.8
EXTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - R SHAPE	B.15
EXTRA-FLAT CHISELS FOR MECHANICS	F.60
EXTRACTION WRENCH FOR TIPS	C.75
EXTRACTOR-SEPARATORS FOR BEARINGS	F.76
EXTRACTORS/PULLERS FOR MORSE CONES	N.56
EYE AND FACE WASH UNIT IN ABS	K.47
EYE WASH KIT	K.46
FACE DRIVERS	C.77
FACE MILLS FOR SINGLE-SIDED SQUARE INSERTS	B.61
FACE SHIELDS FOR WELDING	J.62
FALL ARRESTING DEVICES	K.43
FAST ACTION DIGITAL MICROMETERS - BLUETOOTH - IP67	A.82, D.25
FAST ACTION DIGITAL MICROMETERS SET - BLUETOOTH - IP67	D.26
FAST INTERNAL DIAL SNAP GAUGES	D.31
FELT FLAP DISCS	G.11
FEMALE CONNECTORS FOR WELDING CABLES	J.51
FEMALE CYLINDRICAL THREAD BALL VALVES	L.56
FEMALE HOSE CONNECTIONS WITH THREADED HEAD	L.55
FEMALE-FEMALE CYLINDRICAL THREAD BALL VALVES	L.55
FERRITE RUBBER PERMANENT MAGNETS	N.100
FIBER DISCS ACTIROX ADDITIVE	G.12
FIBER DISCS CERABOND X	G.13
FIBER DISCS STEARATE CERAMIC	G.13
FILES FOR MECHANICS IN FOAM	E.119, G.65
FILES FOR PNEUMATIC FILERS	G.65
FILLET WELD GAUGES 7 BLADES	D.65
FILTER REGULATORS MINI SERIES	L.36
FILTER REGULATORS STANDARD	L.37
FILTERING RESPIRATORS FFP1	K.40
FILTERING RESPIRATORS FFP2	K.40
FILTERING RESPIRATORS WITH VALVE FFP3	K.41
FILTERING RESPIRATORS WITH VALVE FFP1	K.40
FILTERING RESPIRATORS WITH VALVE FFP2	K.40-K.41
FINAL FILTER CARTRIDGE	H.41
FINE BORING HEADS - D3 - D8,10	B.127
FINE PITCH THREADED GAUGES	D.60

ITEM	PAG.
FINISHING INDEXABLE END MILLS	B.85, B.87
FIRE RESISTANT EN SAFETY CABINETS	P.26
FIREPROOF JACKET II CAT.	K.6
FIREPROOF JACKET III CAT.	K.7
FIREPROOF OVERALLS II CAT.	K.7
FIREPROOF TROUSERS II CAT.	K.6
FIREPROOF TROUSERS III CAT.	K.7
FIRST AID KIT	K.47
FIRST AID KIT - STANDARD	K.47
FIRST AID KIT IN CABINET	K.46
FIRST AID KIT IN CASE	K.45
FIXED DRIVE MILL HOLDER DIN 69871 SK AD+B	C.10
FIXED HANDLES IN DUROPLAST - FEMALE THREAD	N.117
FIXED LIFTING MONOBEAMS	M.63
FIXED T-HANDLE HEXAGONAL WRENCHES	E.25-E.26
FIXED T-HANDLE HEXAGONAL WRENCHES IN FOAM	E.110
FIXED T-HANDLE HEXAGONAL WRENCHES IN SET	E.26
FIXED-DRIVE SHELL MILL HOLDER CHUCKS DIN 69871 SK 40 AD+B	C.11
FIXED-DRIVE SHELL MILL HOLDER CHUCKS DIN 69893 HSK A	C.30
FIXED-DRIVE SHELL MILL HOLDER CHUCKS DIN69871 SK 50 AD+B	C.11
FIXED-DRIVE SHELL MILL HOLDER CHUCKS MAS 403 BT AD	C.21
FLAGDRIVERS FOR TORX® SCREWS	B.33, E.32
FLANGE SEALANT WITH LOW MECHANICAL STRENGTH	J.15
FLANGE SEALANT WITH MEDIUM MECHANICAL STRENGTH	J.16
FLANGE SEALANTS FOR HIGH TEMPERATURES	J.15
FLAP DISCS ALUMINIUM OXIDE	G.6
FLAP DISCS CARBIDE SILICON	G.7
FLAP DISCS CONICA CUBITRON II	G.8
FLAP DISCS ZIRCONIUM	G.5
FLAP DISCS ZIRCONIUM STEARATE	G.8
FLAP GRINDING DISCS	G.6
FLAP WHEELS IN NON-WOVEN FABRIC WITH SHANK	G.24
FLAP WHEELS REDUCER FLANGES	G.27
FLAP WHEELS WITH SHANK	G.24
FLAT BRUSHES	F.114
FLAT BRUSHES FOR USE ON STATIONARY MACHINES	G.31
FLAT CUTTING DISCS	G.2-G.3
FLAT CUTTING DISCS CUBITRON II	G.2
FLAT CUTTING DISCS FOR NON-FERROUS MATERIALS	G.3
FLAT DIAMOND NEEDLE FILES	G.66
FLAT FLAP DISCS CUBITRON II	G.8
FLAT MICRO END MILLS Z2	A.129-A.130
FLAT NEEDLE FILES	G.63
FLAT NOSE PLIERS	F.4
FLAT NOSE PLIERS FOR FINE MECHANICS	F.8
FLAT NOSE PLIERS FOR MECHANICS	F.4
FLAT NOSE PLIERS VDE INSULATED 1000 VOLTS	F.4
FLAT SCRAPERS	F.60
FLAT SCRAPERS WITH HM INSERT	F.60
FLAT SQUARES FOR MECHANICS	F.103
FLAT SQUARES IN GALVANIZED STEEL FOR FACTORIES	F.104
FLAT WASHERS	C.95
FLEXIBLE EARPHONE INSERTS	K.38
FLEXIBLE MAGNECTIC SPRING PICK UP CLAWS	E.103
FLEXIBLE MAGNETIC DIAL INDICATOR STANDS	D.43
FLEXIBLE MAGNETIC PICK UP TOOLS	E.103
FLEXIBLE MAGNETIC PICK-UP TOOLS	E.103

ITEM	PAG.
FLEXIBLE METAL FUNNELS WITH FILTER	F.119
FLEXIBLE NYLON HOSE FOR GREASE COMPRESSORS	J.34
FLEXIBLE SCREWDRIVERS FOR SOCKETS 1/4”	E.50
FLEXIBLE SMOOTHING POLISHERS	G.32
FLEXIBLE SPRING PICK UP CLAWS	E.103
FLOOR ROLL HOLDER	J.44
FLOOR SCALES	D.89
FOAM INSERTS	P.20
FOLDABLE HYDRAULIC CRANES	M.89
FOLDABLE HYDRAULIC CRANES WITH LOW PROFILE LEGS	M.90
FOLDING MAGNIFIER	D.76
FOLDING MAGNIFIERS	D.76
FOLDING SAWHORSES	F.88
FOLDING WORKBENCHES	F.87-F.88
FORK MOUNTED HOOKS	M.67
FORKED CLAMPS WITH BEVEL	C.92
FORM KNURLING WHEELS - AA TYPE	B.53
FORM KNURLING WHEELS - BL TYPE	B.53
FORM KNURLING WHEELS - BR TYPE	B.53
FORM KNURLING WHEELS - GE TYPE	B.54
FORM KNURLING WHEELS - GV TYPE	B.54
FORMING TAP - M	A.73
FORMING TAP FOR BLIND AND THROUGH HOLES - BSP	A.81
FORMING TAP FOR BLIND AND THROUGH HOLES - M	A.72-A.73
FORMING TAP FOR BLIND THROUGH HOLES - MF	A.77
FORWARD AND BACKWARD CHAMFER END MILLS - 45°	A.157
FOUNDATION COUNTERPLATES FOR COLUMN MOUNTED JIB CRANES	M.19
FOUNDATION PLINTHS AND CAGES FOR COLUMN CRANES	M.11-M.12, M.14-M.16, M.19
FOUR FLUTE HSS END MILL - CENTRE CUTTING	A.162
FOUR FLUTE HSS ROUGHING END MILL - CENTRE CUTTING	A.167
FOUR-FLUTE HSS END MILL - CENTRE-CUTTING	A.164
FR+L GROUPS	L.38
FRONT AND BACK DEBURRING TOOLS	A.190
FULL FACE MASK	K.41
FUNNELS	F.119
GALVANIZED STEEL SQUARES FOR BLACKSMITHS	F.104
GARMENT LOCKERS DIRTY/CLEAN STAINLESS STEEL AISI 304	P.28
GAS AND VAPOR FILTERS FOR SEMI-MASKS	K.41
GAS ISO 228 THREADED GAUGES	D.62
GAS LEAK DETECTORS	J.31
GASKET MASTICS	J.25
GAUGE BLOCK SETS	D.64
GEAR OILS	H.15
GEAR TOOTH DIGITAL CALIPERS	D.15
GEAR TOOTH VERNIER CALIPERS	D.15
GEOMENTRY AND CUTTING CONDITIONS	B.62
GEOMETRIES AND CUTTING CONDITIONS	B.96, B.108
GEOMETRY AND CUTTING CONDITIONS	B.61, B.67-B.72, B.78-B.84, B.92, B.95, B.97, B.100, B.110
GEOMETRY AND CUTTING CONDITIONS - BALL FINISH NOSE	B.86, B.88
GEOMETRY AND CUTTING CONDITIONS - TUNG-ALUMILL	B.75-B.76
GEOMETRY AND CUTTING CONDITIONS - TUNGFORCEREC	B.73-B.74
GERMAN TYPE HAMMERS	F.66
GESSWEIN ABRASIVE GRINDERS - FOR HARD MATERIALS	G.35
GESSWEIN ABRASIVE STONES - DIE MAKER (DF)	G.54
GESSWEIN ABRASIVE STONES - EDM	G.54
GESSWEIN ABRASIVE STONES - OIL TREATED (OT)	G.54
GLASS CLEANING	J.30

ITEM	PAG.
GLASSES FOR ANTI-NOISE HEADPHONES	K.32
GLOSSMETER	D.92
GLOVES COATED IN NBR	K.19
GLOVES COATED IN NBR ACTIVARMR® HYCRON®	K.18
GLOVES DOUBLE COATED IN NBR	K.19
GLOVES IN CONTINUOUS DYNEEMA® WIRE COATED IN POLYURETHANE	A.91, F.97, K.22
GLOVES IN CONTINUOUS NYLON WIRE COATED IN POLYURETHANE	K.20
GLOVES IN NYLON SPANDEX COATED IN MICROPOROUS NITRILE	K.21
GLOVES IN NYLON/SPANDEX 3/4 COATED IN NITRIL FOAM SANITIZED	K.21
GLOVES IN NYLON/SPANDEX WITH 2/4 COATED IN NITRIL FOAM SANITIZED	K.21
GLOVES IN NYLON/SPANDEX WITH 4/4 COATED IN NITRIL FOAM SANITIZED COATING	K.22, N.66, N.113
GLOVES IN POLYESTER COATED IN POLYURETHANE	B.99, G.23, G.48, K.20
GLOVES NITRILE COATED POLYESTER	K.19
GO/ NO GO PLUG GAUGES	D.59
GO/NG LIMIT PLUG GAUGES SET	D.59
GRANITE INSPECTION PLATES	D.48
GREASE AIR PULSOMETERS FOR 180-200 KG DRUMS	J.37
GREASE AIR PULSOMETERS FOR 20-30 KG DRUMS	J.37
GREASE GUNS	J.34
GREASE LEVER COMPRESSORS	J.34
GREASE NIPPLE COVERS	J.35
GREASE PRESSURE SYRINGE	J.34
GREY RUBBER WHEELS - POLYAMIDE CORE	N.93
GRINDING CARRIERS IN STEEL	C.79
GRINDING SEGMENTS	G.51
GRINDING WHEEL DRESSERS	G.52
GRINDING WHEELS	G.49-G.50
GRINDING WHEELS FOR EXTERNAL ROUND SURFACE RECTIFYING PROCESSING	G.51
GRINDING WHEELS FOR FLAT SURFACE RECTIFYING PROCESSING	G.51
GRIPS FOR ADJUSTABLE VICES WX7965	N.82
GROOVING AND SLOTTING CUTTERS	B.91-B.92
GROOVING INSERTS - SG16	B.51
GROOVING INSERTS SG16 SET	B.51
GROUND CLAMPS	J.50
GROUND CLAMPS SCREW TYPE	J.50
HACKSAW AND CUTTING NIPPERS IN FOAM	E.116
HACKSAW BLADES	F.55
HACKSAW BLADES MINI	F.55
HACKSAWS	F.55
HALF ROUND BENT NOSE PILERS	F.6
HALF ROUND BENT NOSE PLIERS	F.6
HALF ROUND BENT NOSE PLIERS VDE INSULATED 1000 V	F.7
HALF ROUND BENT NOSE PLIERS VDE INSULATED 1000 VOLTS	F.7
HALF ROUND BENT NOSE PLIERS VDE INSULATED1000 VOLTS	F.7
HALF ROUND LONG BENT NOSE PLIERS	F.7
HALF ROUND NOSE FOR MECHANICS	F.5
HALF ROUND NOSE PILERS FOR MECHANICS	F.8
HALF ROUND NOSE PLIERS	F.5
HALF ROUND NOSE PLIERS VDE INSULATED 1000 VOLTS	F.6
HALF-MASKS FOR GAS AND VAPOURS	J.33, K.41
HALF-ROUND BENT NOSE PLIERS FOR MECHANICS	F.9
HALF-ROUND NOSE PLIERS	F.5
HALF-ROUND NOSE PLIERS FOR MECHANICS	F.8
HALOGEN MAGNIFIERS	D.75
HAMMERHEAD BOLTS	C.93
HAMMERLOCKS FOR LIFTING CHAIN SLINGS	M.51

ITEM	PAG.
HAMMERS AND MALLETS IN FOAM	E.115
HAMMERS AND MALLETS NON-REBOUND IN FOAM	E.115
HAMMERS FOR CARPENTERS	F.66
HAMMERS WITH SAFETY GUARD COLLAR	F.72
HAND HELD REFRACTOMETERS	H.29
HAND OPERATED TROLLEYS - ATEX	M.9
HAND PALLET TRUCKS	M.85
HAND REAMERS	A.179
HAND RIVETERS FOR THREADED INSERTS	F.92-F.93
HAND RIVETING TOOLS FOR BLIND RIVETS	F.91
HAND TAP 2-PIECE SET - BSP	A.84
HAND TAP 3-PIECE SET - M	A.84
HAND TAP 3-PIECE SET FOR HARDENED - M	A.84
HAND TAP 3° FINISHING - M	N.60
HAND-HELD DISC SANDERS	L.25
HAND-WASH CREAM	J.42
HAND-WASH GEL	J.42
HAND-WASH LIQUID	J.42
HAND-WASH PASTE	J.43
HAND-WASHING CREAM	J.44
HANDLES FOR CARPENTER'S HAMMERS	F.66
HANDLES FOR HAMMERS	F.72
HANDLES FOR HAMMERS AND MALLETS	F.66-F.68
HANDLES FOR HAMMERS DIN STANDARD	F.72
HANDLES FOR HAMMERS IN COPPER WX5495	F.69
HANDLES FOR MALLETS AND HAMMERS SUPERCRAFT	F.71
HANDLES FOR MALLETS WX5450	F.68
HANDLES FOR MODULAR SYSTEM	J.52
HANDLES FOR NON-REBOUND MALLETS	F.69
HANDLES FOR STRETCH FILMS	N.127
HANDLES IN DUROPLAST - THREADED BLIND HOLE	N.118
HANDLES IN TECHNOPOLYMER - THREADED BLIND HOLE	N.117-N.118
HANDLES IN TECHNOPOLYMER - THROUGH HOLE	N.117
HANDLES IN TECHNOPOLYMER REVOLVING AND FLIPPABLE	N.116
HANDPIECES PNEUMATIC IMPULSE	G.68
HANGING CABINETS FOR SMALL PARTS	P.29
HARDNESS SHORE TEST BLOCKS	D.68
HARNESSES	K.42
HAWK EYE CHUCKS SK AD+B	C.5
HEADBAND EARPLUGS	K.38
HEADED REDUCTION SLEEVES	C.66
HEADGEAR MASKS	J.63
HEADPHONES ANTI-NOISE	K.37
HEADPHONES BLUETOOTH	K.36
HEAT GUNS	N.50
HEAT RESISTANT GLOVES IN SPLIT FLEECE WITH KEVLAR SEAMS	K.18
HEAT SEALABLE PLASTIC STRAPS IN POLYROYLENE PET GREEN KNURLED	N.123
HEAVY DUTY BUCKET FOR POURING	F.119
HEAVY DUTY DOUBLE ENDED OFFSET SOCKET WRENCHES	E.14
HEAVY DUTY DOUBLE ENDED OFFSET SOCKET WRENCHES IN SET	E.14
HEAVY DUTY PINCERS	F.35
HEAVY DUTY SCREW CLAMPS STBM	F.77
HEAVY-DUTY ANCHOR SLM WITH SCREW TE 8.8	N.111
HEAVY-DUTY ANCHOR TA M-S MODEL WITH TE SCREW	N.111
HEAVY-DUTY CUTTING NIPPERS VDE INSULATED 1000 VOLTS	F.28
HEAVY-DUTY DIAGONAL CUTTING NIPPERS	F.28-F.29
HEIGHT ADJUSTABLE WOODEN TOP WORKBENCHES	P.4

ITEM	PAG.
HEIGHT GAUGES	D.55
HEIGHT GAUGES IP67	D.50
HEIGHT GAUGES WITH 2D ELECTRONIC	D.53
HELICAL MILLS FOR HEAVY-DUTY CHAMFERING	B.64, B.68
HELMET MASKS FOR WELDING	J.62
HELMET MASKS FOR WELDING WITH LIFTING GLASS-HOLDER	J.62
HEXAGONAL IMPACT SOCKETS 1/2”	E.54
HEXAGONAL IMPACT SOCKETS 1/2” LONG AND REDUCED VERSION	E.55
HEXAGONAL IMPACT SOCKETS 1/2” LONG VERSION	E.54-E.56
HEXAGONAL IMPACT SOCKETS 3/4”	E.55
HEXAGONAL IMPACT SOCKETS 3/4” LONG VERSION	E.55
HEXAGONAL KEYS MALE IN INCHES WITH POCKET SUPPORT IN SET	E.18
HEXAGONAL KEYS MALE WITH POCKET SUPPORT IN SET	E.18
HEXAGONAL L KEYS	E.17-E.18
HEXAGONAL L KEYS AND STUBBY SCREWDRIVER IN FOAM	E.109
HEXAGONAL L KEYS FOR EQUIPMENT	E.17
HEXAGONAL L KEYS IN SET	E.17
HEXAGONAL L KEYS IN SET 950/9 SM N	E.18
HEXAGONAL L KEYS WITH BALL POINT END IN SET 950 PKS/9 SM N	E.18
HEXAGONAL L KEYS WITH EXTRA SHORT SIDE IN SET 950 PKLS/9 SM	E.22
HEXAGONAL NUT DRIVERS WITH HANDLE	E.15
HEXAGONAL NUT DRIVERS WITH HANDLE IN FOAM	E.109
HEXAGONAL NUTDRIVERS WITH HANDLE	E.16
HEXAGONAL NUTDRIVERS WITH HANDLE 395 HO	E.15
HEXAGONAL NUTDRIVERS WITH HANDLE 395 HO/7 SM IN SET	E.16
HEXAGONAL NUTDRIVERS WITH HANDLE IN SET	E.15
HEXAGONAL NUTS FOR ER COLLETS DIN6499	C.45
HEXAGONAL SCREWDRIVERS	E.22
HEXAGONAL SCREWDRIVERS WITH BALL END	E.23
HEXAGONAL SCREWDRIVERS WITH BALL END IN FOAM	E.109
HEXAGONAL SCREWDRIVERS WITH BALL END IN SET	E.23
HEXAGONAL SCREWDRIVERS WITH BALL HEAD	E.23
HEXAGONAL SOCKETS 1”	E.45
HEXAGONAL SOCKETS 1/ 2”	E.40
HEXAGONAL SOCKETS 1/2” SET 22 PIECES IN ABS CASE	E.53
HEXAGONAL SOCKETS 1/2”	E.40-E.41
HEXAGONAL SOCKETS 1/4” SET 19 PIECES IN ABS CASE	E.51
HEXAGONAL SOCKETS 14”	E.35
HEXAGONAL SOCKETS 3/4” SET 14 PIECES IN METAL CASE	E.53
HEXAGONAL SOCKETS 3/4”	E.44
HEXAGONAL SOCKETS 3/8”	E.37
HEXAGONAL SOCKETS 3/8” SET 19 PIECES IN ABS CASE	E.53
HEXAGONAL WRENCHES WITH HANDLE	E.24
HEXAGONAL WRENCHES WITH HANDLE FOR TORX® SCREWS	E.31
HEXAGONAL WRENCHES WITH HANDLE IN FOAM	E.110
HIGH ACCURACY MECHANICAL EDGE FINDERS	D.46
HIGH FEED END MILLS - COOLANT HOLE Z6	A.142
HIGH FEED END MILLS - Z2 - Z3	A.141
HIGH PERFORMANCE FLAP DISCS	G.7
HIGH PERFORMANCE GREASES	H.21
HIGH PERFORMANCE GREASES FOR THE FOOD INDUSTRY	H.22
HIGH PERFORMANCE NEAT CUTTING OILS	H.10
HIGH PERFORMANCES ROUGHNESS TESTERS	D.73
HIGH PRECISION BORING HEADS - D9,75 - D320	B.127
HIGH PRECISION FAST INTERNAL DIAL SNAP GAUGES	D.31
HIGH PRECISION SQUARES	F.103
HIGH SPEED PNEUMATIC GRINDERS	L.18

ITEM	PAG.
HIGH TEMPERATURE GREASES FOR THE FOOD INDUSTRY	H.22
HIGH VISIBILITY JACKET	K.4
HIGH VISIBILITY ORANGE VEST - 100% POLYESTER	K.4
HIGH-PRECISION BORING TOOL KIT D9,75 - D164	B.124
HIGH-PRECISION BORING TOOL KIT D9,75 - D88,10	B.124
HIGH-PRESSURE MANUAL VICES FOR 5-AXES MACHING CENTER - SELF-CENTERING SC	C.85
HIGH-RESISTANCE BLUE IRON STRAPS	N.121
HINGED LIDS IN TOP QUALITY POLYPROPYLENE	P.34
HINGED LIDS IN TOP QUALITY POLYPROPYLENE FIRST CHOICE - 600MM	P.35
HM ROUND GROUND TOOL BITS	B.57
HOIST PUSH-BUTTON SWITCHES	M.6
HOLDERS FOR DEBURRING BLADES	F.58
HOLDERS FOR ISG WITH LIQUID COOLING	C.53
HOLE COVER PLUGS - ROUND SHAPE IN BLACK POLYETHYLENE	N.120
HOLE COVER PLUGS RECTANGULAR SHAPE IN BLACK POLYETHYLENE	N.121
HOLE COVER PLUGS SQUARE SHAPE IN BLACK POLYETHYLENE	N.120
HOLE CUTTERS FOR STEEL	N.63
HOLE CUTTERS WITH CARBIDE TIPS	N.65
HOLLOW PUNCH DIES	F.25
HOLLOW PUNCH DIES IN SET	F.25
HOOK CHISELS FOR MECHANICS	F.61
HOOK WRENCHES	E.10
HOOKS FOR JOINING PLASTIC CHAINS	K.44
HOOKS MADE OF GALVANIZED STEEL FOR HOLDING STRAPPING TEXTILES AND COMPOSITES	N.123
HOOKS WITH SAFETY LATCH FOR LIFTING LIFTING CHAIN SLINGS	M.53
HORIZONTAL LIFTING CLAMPS SETS OF PAIRS	M.38
HORIZONTAL PROFILE PROJECTOR	D.85
HORIZONTAL QUICK CLAMPS WITH ANTI-RELEASE LEVER	N.103
HORIZONTAL SPIRIT LEVELS	D.56-D.57
HORIZONTAL SPIRIT LEVELS GRINDED	D.57
HOSE CLAMPS MM 12 W2B AISI 430 IN ROLLS	F.99
HOSE CLAMPS MM 14 W2B AISI 430 IN SET	F.99
HOSE CLAMPS MM 9 W2B AISI 430 IN SET	F.99
HOSE CLAMPS STAINLESS STEEL BAND WITH TRUNNION W2 AISI 430	F.101
HOSE CLAMPS STAINLESS STEEL W2B AISI 430 DIN 3017	F.100
HOSE CLAMPS STAINLESS STEEL W4 AISI 304 DIN 3017	F.100
HOSE REELS FOR COMPRESSED AIR	L.44
HOT GLUE GUNS	J.25
HP MACHINE REAMERS - VARIABLE FLUTES	A.183
HSS DMO5 (M2) CIRCULAR SAW BLADES	A.209
HSS ROTARY BURRS	G.47-G.48
HSS-CO 12% RECTANGULAR GROUND TOOL BITS	B.57
HSS-CO 12% ROUND GROUND TOOL BITS	B.57
HSS-CO 12% SQUARE GROUND TOOL BITS	B.57
HSSE HOLE CUTTERS FOR STEEL AND STAINLESS STEEL	N.64
HYBRID ADHESIVES	J.2
HYBRID CUTTING AND GRINDING DISCS	G.4
HYDRAULIC ADAPTORS DIN 1835A	C.34
HYDRAULIC BOTTLE JACKS	M.90
HYDRAULIC CHUCKS DIN 69871 SK AD+B	A.16, C.5
HYDRAULIC CHUCKS DIN 69893 HSK A	C.26
HYDRAULIC CHUCKS MAS 403 BT AD+B	C.18
HYDRAULIC CHUCKS STRONG LOCKING DIN 69871 SK AD+B	A.12, C.6
HYDRAULIC CHUCKS STRONG LOCKING DIN 69893 HSK A	C.27
HYDRAULIC CHUCKS STRONG LOCKING MAS 403 BT AD+B	C.18
HYDRAULIC CRANES-LIGHT SERIES	M.89

ITEM	PAG.
HYDRAULIC EXTRACTORS	F.76
HYDRAULIC GREASE NIPPLES - 45 DEGREES	J.35
HYDRAULIC GREASE NIPPLES - 90 DEGREES	J.36
HYDRAULIC GREASE NIPPLES-STRAIGHT	J.35
HYDRAULIC JACK FOR INDUSTRIAL HANDLING	M.91
HYDRAULIC OILS	H.13
HYDRAULIC PRESSES	N.85
HYGRO METERS FOR MATERIALS	D.93
HYGROMETERS FOR MATERIALS - PROBES	D.93
ILLUMINATION FOR POCKET MAGNIFYING LENSES	D.78
IMG CLAMPING SYSTEM	C.84
IMPACT SOCKET WRENCHES 1/2" FOR SCREWS WITH HEX SOCKET	E.55
IMPACT WRENCHES BATTERY OPERATED 18V	N.28
IMPACT WRENCHES HIGH TORQUE 18 V	N.30
IN LINE SCREWDRIVERS 4V	N.31
INDEXABLE DRILLS 3XD WELDON SHANK	B.109
INDEXABLE DRILLS 3XD WELDON SHANK - SCREW FIXING	B.107
INDEXABLE MILLS FOR CHAMFERING	B.97-B.98
INDEXABLE MILLS FOR CHAMFERING AND CENTERING	B.96
INDUSTRIAL ASPIRATOR HURRICANE 55	N.74
INDUSTRIAL ASPIRATOR/SEPARATORS TWISTOIL 280	N.73
INDUSTRIAL ASPIRATORS STORM 3600	N.74
INDUSTRIAL ASPIRATORS/SEPARATORS TWISTOIL	N.73
INDUSTRIAL BELT SANDERS	N.21
INDUSTRIAL CABLE REELS SAFETY SPEED CONTROL	N.91
INDUSTRIAL CABLE REELS WITH SPRING	N.90
INFRARED HEATERS	N.78
INFRARED THERMOMETERS	D.80-D.81
INSERT BITS AND INSERT HOLDERS - INDUSTRIAL SET 31 PIECES	E.100
INSERT BITS FOR PHILLIPS® SCREWS	E.89-E.80, E.89
INSERT BITS FOR POZIDRIV® SCREWS	E.91
INSERT BITS FOR SLOTTED SCREWS	E.88, E.98
INSERT BITS FOR TAMPER TORX® SCREWS	E.95
INSERT BITS FOR TORX® SCREWS	E.93-E.94
INSERTS FOR DEEP GROOVING AND PARTING - DOUBLE SIDE	B.47
INSERTS FOR EXTERNAL THREADING	B.50
INSERTS FOR GROOVING AND PARTING - SINGLE SIDE	B.44, B.46-B.47
INSERTS FOR INTERNAL THREADING	B.50
INSERTS FOR PARTING, GROOVING AND TURNING - DOUBLE SIDE	B.45
INSERTS FOR SLOTS	B.131
INSERTS IN HM FOR FLAT SCRAPERS	F.60
INSERTS TOOL HOLDERS	B.131
INSIDE GROOVES DIGITAL CALIPERS	D.8
INSIDE GROOVES DIGITAL CALIPERS IP67	D.8
INSIDE GROOVES DIGITAL CALIPERS WITH INTERCHANGEABLE TIPS	D.10
INSIDE GROOVES VERNIER CALIPERS	D.14
INSIDE MICROMETERS WITH MODULARS EXTENSION RODS	D.28
INSIDE/OUTSIDE DIGITAL CALIPERS WITH LONG POINTS	D.10
INSIDE/OUTSIDE GROOVES DIGITAL CALIPERS IP54	D.9
INSIDE/OUTSIDE GROOVES DIGITAL CALIPERS IP67	D.9
INSTANT CYANOACRYLIC ADHESIVES	J.3-J.4
INSULATED NUTDRIVERS 1000 VOLTS WITH HEXAGONAL SOCKETS WITH HANDLE	E.16
INSULATING ADHESIVE TAPES	N.128
INSULATION AND CUTTING STRIPPER PLIERS AUTOMATIC	F.22
INSULATION AND CUTTING STRIPPER PLIERS STRIPAX ULTIMATE	F.22
INTEGRAL ANGLE HEADS	C.54
INTERCHANGEABLE BLADES SERIES 28369 FOR TORQUE WRENCHES	E.72
INTERCHANGEABLE BLADES SERIES 2859 FOR DYNAMOMETRIC SCREWDRIVERS	E.69-E.71
INTERCHANGEABLE MEASUREMENT TIPS	D.41
INTERCHANGEABLE PUNCH DIES	F.26
INTERCHANGEABLE PUNCH DIES WITH HANDLE	F.25
INTERCHANGEABLE TIPS FOR LIVE CENTRES	C.75-C.76
INTERFACE PLATES FOR APS-140 CON TCT 150	C.102
INTERLOCKING CONTAINMENT STAND	P.49
INTERMEDIATE PUSH-TO-CONNECT L-FITTINGS	L.57-L.58
INTERMEDIATE PUSH-TO-CONNECT-FITTINGS	L.58
INTERNAL GROOVING ISO 354R BRAZED TOOLS	B.56
INTERNAL GROOVING TOOLHOLDERS TRIANGOLAR INSERTS	B.51
INTERNAL TURNING ISO 9 BRAZED TOOLS	B.56
INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - C SHAPE	B.5
INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - D SHAPE	B.6
INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - T SHAPE	B.7
INTERNAL TURNING TOOLHOLDERS - NEGATIVE INSERTS - W SHAPE	B.9
INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - C SHAPE	B.10-B.11
INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - D SHAPE	B.13
INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - T SHAPE	B.16
INTERNAL TURNING TOOLHOLDERS - POSITIVE INSERTS - V SHAPE	B.17-B.18
INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - C SHAPE	B.10
INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - D SHAPE	B.14
INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - T SHAPE	B.17
INTERNAL TURNING TOOLHOLDERS FOR POSITIVE INSERTS - V SHAPE	B.18
INVERTED DOVETAIL CUTTERS	A.171
INVERTER WELDING MACHINE	J.46
INVERTER WELDING MACHINES	J.46
IRON STANDS FOR INSPECTION PLATES	D.48
JACK PIPE BENDING MACHINE	N.84
JAWS FOR ADJUSTABLE VICES	N.82
JAWS FOR VICES WX7800	N.79
JAWS FOR VICES WX7810 - WX7860 - WX7870	N.79
JAWS FOR VICES WX7900	N.81
JAWS FOR VICES WX7910	N.82
JET GAUGES WITH STEEL PINS	D.65
JET GUNS FOR LIQUID DISTRIBUTION	L.34
JIG SAW BLADES FOR ACRYLIC MATERIAL	N.53
JIG SAW BLADES FOR ALUMINIUM AND NON-FERROUS METALS	N.53
JIG SAW BLADES FOR CERAMIC MATERIALS	N.53
JIG SAW BLADES FOR METAL	N.52-N.53
JIG SAW BLADES FOR WOOD	N.51-N.52
JIG SAW BLADES FOR WOOD WITH METAL	N.52
JIG SAWS	N.50
JOBBER DRILL SETS	N.60
JOBBER DRILLS	A.26-A.36
JOBBER DRILLS CARBIDE-TIPPED	A.34
JOBBER DRILLS FOR SMALL PRODUCTION SERIES	N.59
JOBBER DRILLS KIT	A.49-A.50
JOINTED MAGNETIC KEY SWITCH HOLDER	D.43
JUGS	F.118
KB TRAVELLING CRANES	M.27
KEYLESS DRILL CHUCKS	N.55
KEYS FOR ELECTRICAL PANELS AND CABINETS	E.33
KIT TOOL BOX FOR PROFESSIONALS	N.67
KNEE PAD IN POLYURETHANE	K.29
KNOB HANDLES IN DUROPLAST - FEMALE THREAD	N.117
KNURLED LOBE KNOBS IN TECHNOPOLYMER - ZINC PLATED STUD	N.115

ITEM	PAG.
KRAFTFORM MICRO SCREWDRIVERS - KIT 12 FOR ELECTRONICS WITH POUCH	E.64
L KEYS FOR TAMPER TORX® SCREWS IN A SET	E.32
L KEYS FOR TORQUE® SCREWS IN SET	E.28
L KEYS FOR TORX® SCREWS	E.28
L KEYS FOR TORX® SCREWS IN SET	E.28
L KEYS MULTICOLOUR HF1 WITH HOLDING FUNCTION FOR TORX® SCREWS IN SET 967 SL/9 TX	E.29
L-KEYS HEX-PLUS MULIT COLOUR HF 1, METRIC, BLACKLASER, WITH HOLDING FUNCTION IN SET 950/9	E.21
LABEL LIST - SCRIPT	P.16
LABORATORY PRESSURE SPRAYERS	F.117
LABORATORY SCALES	D.87
LADDER LOCK CLOSURE STRAPS	M.48
LADDER LOCK CLOSURE, HOOK-ENDED STRAPS	M.48
LAMP STANDS	N.88
LARGE EXTERNAL MICROMETERS	D.22-D.23
LARGE REVERSIBLE SHELVES	P.5
LARGE TROLLEYS	P.40
LASER DISTANCE METERS	F.110
LASER DISTANCES DETECTOR	F.111
LATERAL FEMALE-FEMALE-MALE T-FITTINGS	L.54
LATEX DISPOSABLE GLOVES POWDER FREE COATING	K.25
LED FLOOD LIGHTS	N.88
LED ILLUMINATED MAGNIFIERS	D.74-D.75
LED LAMP MAGNIFIERS	N.88
LED LAMPS FOR MACHINE TOOLS	N.89
LED MAGNIFIERS	D.77
LED TORCHES	E.116, F.76, N.86-N.87
LEEB IMPACT HARDNESS TESTERS	D.70-D.71
LEFT-HAND FIXED DIE - M	A.86
LEFT-HAND FIXED DIE - MF	A.86
LEVER ACTION BARREE PUMPS	J.38
LEVER ACTION BARREL PUMPS	J.38
LEVER CLAMPS - FEMALE THREAD	N.120
LEVER CLAMPS EZS	F.79
LEVER CLAMPS GH	F.78
LEVER TEST INDICATORS	D.39-D.40
LEVERS FOR RATCHET HEADS AND SLIDING HEADS	E.47
LIDS FOR COLLASPIBLE CRATES IN PP	P.35
LIFTERS FOR BENCH VICES	N.81
LIFTING CHAIN SLINGS	M.51
LIFTING CHAIN SLINGS WITH SHORTENING GRAB HOOKS	M.52
LIFTING CLAMPS FOR MATERIALS WITH PARALLEL SIDES	M.40
LIFTING CLAMPS FOR ROUND MATERIALS	M.40
LIFTING CLAMPS INTERNAL GRIP	M.43
LIFTING CLAMPS WITH ANTI-DAMAGING PADS	M.39
LIFTING CLAMPS WITH EXTERNAL GRIP	M.43
LIFTING CLAMPS WITH NON-MARKING PADS	M.39
LIFTING CROSS MONOBEAMS FOR BIG BAGS	M.65
LIFTING FIBER SLINGS	M.50
LIFTING HOOKS WITH SAFETY LATCH FOR LIFTING CHAINS	M.53
LIFTING LIFTING CHAIN SLINGS WITH SHORTENING GRAB HOOKS	M.52
LIFTING MAGNETS - NEO	M.56
LIFTING MAGNETS FOR SHEET METAL	M.58-M.59
LIFTING SCREW CLAMPS	M.41
LIGHT MAGNIFIERS 10X	D.77
LIGHT SINGLE-SIDED CANTILEVER	P.44
LINEAR CHARACTER HOLDERS	F.113

ITEM	PAG.
LINEAR SAFETY HOSES HI-VISIBILITY WITH FAST CONNECTIONS SERIES 320 DN7.6	L.43
LIQUID ACTIVATORS FOR MULTIBOND ADHESIVES	J.19
LIQUID GASKET	J.26
LIQUID PAINT MARKERS	F.111
LIQUID VACUUM CLEANER - ACCESSORIES AND SPARE PARTS Ø 40MM	N.72
LIQUID VACUUM CLEANERS - ACCESSORIES AND SPARE PARTS Ø 36MM	N.72
LIQUID VACUUM CLEANERS BREEZY 25	N.71
LIQUID VACUUM CLEANERS BREEZY 35	N.71
LIQUID VACUUM CLEANERS BREEZY 50	N.71
LIQUID VACUUM CLEANERS BREEZY 70	N.71
LITHIUM BATTERIES	N.34
LITHIUM BATTERIES RESISTANT TO CHEMICAL AGENTS	N.34
LITHIUM CELL BATTERY CHARGERS	N.35
LIVE CENTRES FOR LIGHT LOAD OPERATIONS	C.73
LIVE CENTRES FOR MEDIUM LOAD	C.74
LIVE CENTRES FOR MEDIUM LOADS	C.74
LIVE CENTRES IN WOODEN BOX WITH INTERCHANGEABLE TIPS KIT	C.74
LOAD CELL FOR GIS HOISTS	M.7
LOBE KNOBS 6 LOBES IN DUROPLAST - FEMALE THREAD	N.115
LOBE KNOBS 6 LOBES IN DUROPLAST - MALE THREAD	N.114
LOBE KNOBS 8 LOBES IN TECHNOPOLYMER - FEMALE THREAD	N.115
LOBE KNOBS 8 LOBES IN TECHNOPOLYMER - MALE THREAD	N.114
LONG COMBINATION WRENCHES	E.4
LONG HEXAGONAL L KEYS IN SET 950 SPKL/9 SM N	E.21
LONG HEXAGONAL L KEYS IN STAINLESS STEEL IN SET 3950 PKL/9	E.21
LONG HEXAGONAL L KEYS IN STAINLESS STEEL IN SET 3950 SPK/9 SM	E.21
LONG HEXAGONAL L KEYS MEASUREMENT IN INCHES IN SET 950 PKL/13 SZ N	E.22
LONG HEXAGONAL L KEYS MEASUREMENT IN INCHES IN SET 950PKL/9 SZ N	E.22
LONG HEXAGONAL L KEYS WITH BALL END	E.20
LONG HEXAGONAL L KEYS WITH BALL END AND MAGNET	E.19-E.20
LONG HEXAGONAL L KEYS WITH BALL END AND MAGNET IN A SET	E.19
LONG HEXAGONAL L KEYS WITH BALL END IN SET	E.20
LONG HEXAGONAL L KEYS WITH BALL END MEASUREMENT IN INCHES	E.22
LONG HEXAGONAL L KEYS WITH BALL POINT END	E.19
LONG HEXAGONAL L KEYS WITH BALL POINT END IN SET 950 PKL//9 BM N	E.19
LONG HEXAGONAL L KEYS WITH MAGNET IN SET	E.21
LONG HEXAGONAL L KEYS WITH RETAINING FUNCTION IN SET	E.21
LONG HEXAGONAL SOCKETS 1/2”	E.41
LONG HEXAGONAL SOCKETS 1/4”	E.35
LONG HEXAGONAL SOCKETS 1/4”	E.35
LONG HEXAGONAL SOCKETS 3/4”	E.44
LONG HEXAGONAL SOCKETS 3/8”	E.38
LONG L KEYS FOR TAMPER TORX® SCREWS - SET 967 SPKL/9 BO	E.32
LONG L KEYS FOR TORQUE® SCREWS IN SET	E.28
LONG L KEYS FOR TORX® SCREW WITH BALL POINT END IN SET	E.29
LONG L KEYS FOR TORX® SCREWS WITH BALL POINT END	E.29
LONG NOSE BENT PLIERS	F.7
LONG POLYGONAL SOCKETS 1/2”	E.41
LONG POLYGONAL SOCKETS 3/8”	E.38
LONG REVERSIBLE RATCHETS 1/2”	E.46
LONG SERIES END MILLS CENTER CUTTING Z3	A.166
LONG-LASTING UNIVERSAL GREASE	H.20
LUBRICANTS FOR CHAINS	H.20
LUBRICANTS FOR THE FOOD INDUSTRY	H.21
LUBRICATING FLUID FOR DIAMOND PASTES AND FLUIDS	G.57
LUBRICATOR HEADS	J.35
MACHINE REAMERS	A.179-A.181

ITEM	PAG.
MACHINE REAMERS ECOSPEED	A.182
MACHINE REAMERS WITH MORSE TAPER SHANK	A.183
MACHINE TOOL CLEANING FLUIDS	H.28
MAGNETIC “V” PRISMS	C.96
MAGNETIC BIT HOLDERS	E.96-E.97
MAGNETIC BIT HOLDERS WITH RETAINING RING 899/4/1	E.97
MAGNETIC DIAL GAUGE STANDS	D.44
MAGNETIC DIAL INDICATOR STANDS	D.44
MAGNETIC DIAL INDICATOR STANDS MB-B	D.42
MAGNETIC DIAL INDICATOR STANDS MB-BV	D.42
MAGNETIC DIAL INDICATOR STANDS MB-F2	D.42
MAGNETIC FLEXIBLE RODS	E.103
MAGNETIC JAWS FOR VICES	N.83
MAGNETIC LEVELS TORPEDO	F.106
MAGNETIC MAGNIFIERS 5X	D.75
MAGNETIC PLATES	C.86
MAGNETIC POCKET SPIRIT LEVELS WITH 360° ADJUSTABLE VIAL	F.105
MAGNETIC POCKET SPIRT LEVELS	F.105
MAGNETIC POSITIONERS	J.51
MAGNETIC SPIRIT LEVELS	D.58
MAGNETIC SPIRIT LEVELS SLIM - 2 VIALS	F.105
MAGNETIC TORPEDO LEVELS	F.106
MAGNETIC TORPEDO LEVELS - CONTRACTOR	F.106
MAGNETIC TORPEDO LEVELS WITH 360° ADJUSTABLE VIAL	F.106
MAGNIFYING GLASSES	D.76-D.77
MALE ADJUSTABLE PUSH-TO-CONNECT T-FITTINGS WITH CYLINDRICAL THREAD	L.58
MALE CONNECTORS FOR WELDING CABLES	J.51
MALE HOSE CONNECTIONS WITH CYLINDRICAL HEAD	L.55
MALE HOSE CONNECTIONS WITH TAPERED THREAD	L.55
MALE STRAIGHT FITTINGS WITH CYLINDRICAL THREAD	L.56-L.57
MALE THREADED FITTINGS WITH MILLED NUT	L.46
MALE-MALE L-FITTINGS WITH CONICAL THREAD	L.54
MALE/ FEMALE CYLINDRICAL THREAD BALL VALVES	L.56
MALLETS IN DRAWN COPPER 80 BRINELL	F.68
MALLETS NON-REBOUND WITH NYLON HEADS 100 SH	F.70
MANDRELS FOR WIRE THREAD INSERTS	N.109
MANEUVER LEVERS FOR POLYGONAL WRENCHES HEAVY DUTY	E.10
MANOMETERS	L.38
MANTIS COMPACT STEREO VIEWERS	D.84
MANTIS ELITE STEREO VIEWERS	D.84
MANUAL BALANCING TELESCOPIC FORKS	M.66
MANUAL BAND SAW MACHINES	N.16
MANUAL CHAIN HOISTS	M.35
MANUAL CLAMP FOR 200 LITERS DRUM TILT	M.68
MANUAL CLAMPS FOR 200 LITERS	M.67
MANUAL DIAMOND DRESSERS	G.52
MANUAL GRAVITY FEED BANDSAW MACHINES	N.16
MANUAL LEVER GREASERS	J.37
MANUAL LEVER SHEARS	N.84
MANUAL LIFT PALLET TRUCKS	M.88
MANUAL LIFTERS	M.72
MANUAL LIFTERS WITH FIXED FORKS	M.73
MANUAL MINI LIFTERS	M.70
MANUAL POLYESTER STRAP TENSIONER	N.125
MANUAL RIVETERS FOR BLIND RIVETS	F.91
MANUAL SHRINKING MACHINES	C.52
MANUAL STANDS FOR SHORE ANALOG HARDNESS TESTERS	D.68

ITEM	PAG.
MANUAL STAPLERS 35-M SERIES	F.96
MANUAL STAPLERS SERIES 113	F.94
MANUAL STAPLERS SERIES T50	F.94
MANUAL THREADERS FOR HYDRAULIC MAINTENANCE	F.47
MANUAL TROLLEYS FOR BEAMS	M.7
MASTER JAWS DOUBLE GUIDED SERIES	C.68
MASTER JAWS SERIES	C.69-C.70
MATERIAL FOR FIXING WORKTOPS	P.10
MAUAL DISPENSER PRO PUMP	J.18
MEASURING AND CUTTING TOOL SET	E.116
MEASURING STANDS	D.44
MEASURING STANDS WITH GRANITE TABLE	D.45
MEASURING TAPES	F.110
MECHANICAL CALIBRATION SYSTEMS MANUTORK®	E.86
MECHANICAL EDGE FINDERS	D.47
MECHANICAL PULLERS WITH 2 JAWS	F.74-F.75
MECHANICAL PULLERS WITH 3 JAWS	F.75
MECHANICAL RACK AND PINION JACK FOR INDUSTRIAL HANDLING	M.91
METAL CLAMP LEVERS - MALE THREAD	N.119
METAL CONTAINERS	P.36
METAL DIVIDERS 12 E	P.19
METAL DIVIDERS 18 E	P.19
METAL DIVIDERS 6 E	P.18
METAL DIVIDERS 9 E	P.19
METAL LEVER CLAMPS - FEMALE THREAD	N.120
METAL MESH PALLET CONTAINERS	P.53
METAL PALLET CONTAINERS	P.52
METAL PALLETS STACKING RACK	P.53
METAL SECURITY SEALS	N.122
METALLIC STAPLES 92 SERIES	F.95
METALLIC STAPLES SERIES 113	F.94
METALLIC STAPLES SERIES 35	F.96-F.97
METALLIC STAPLES SERIES 80 TH	F.95
METALLIC STAPLES SERIES ROLL-A	F.97
METALLIC STAPLES SERIES WP	F.96
METHYLIC CYANOACRYLATE INSTANT ADHESIVES	J.5
METRIC TAPE MEASURES	F.107-F.108
METRIC TAPE MEASURES WITH STEEL TAPE	F.108
METRIC THREADING SET M3-M12 - 16 PCS	N.56
METRIC THREADING SET M3-M12 - 22 PCS	N.56
METRIC THREADING SET M3-M12 - 43 PCS	N.56
METTALLIC STAPLES SERIES T50	F.94
MICRO DRILLS REINFORCED SHANK	A.8
MICRO GRINDER EMAX EVOLUTION	G.70
MICRO GRINDER ESPERT 500	G.71
MICRO HEXAGONAL SCREWDRIVERS	E.23, E.62
MICRO HEXAGONAL SCREWDRIVERS IN SET	E.23, E.62
MICRO SCREWDRIVERS FOR PHILLIPS® SCREWS	E.61
MICRO SCREWDRIVERS FOR POZIDRIV® SCREWS	E.61
MICRO SCREWDRIVERS FOR SLOTTED AND PH-PZ SCREWS IN FOAM	E.111
MICRO SCREWDRIVERS FOR SLOTTED AND PHILLIPS® SCREWS IN SET	E.62
MICRO SCREWDRIVERS FOR SLOTTED SCREWS	E.61
MICRO SCREWDRIVERS FOR TORX® SCREWS	E.30, E.62
MICRO SCREWDRIVERS FOR TORX® SCREWS IN FOAM	E.111
MICRO SCREWDRIVERS FOR TORX® SCREWS IN SET	E.30, E.62
MICRO SCREWDRIVERS KRAFTFORM-SET 2035/6 A	E.63
MICRO SCREWDRIVERS WITH HEXAGONAL SOCKET	E.16, E.61

ITEM	PAG.
MICRO SCREWDRIVERS WITH HEXAGONAL SOCKET IN FOAM	E.109
MICROMETER HOLDER BASE	D.21
MILLING CUTTERS IN HM WITH QUICKIN QUICK COUPLING	N.69
MILLING CUTTERS IN HM WITH WELDON COUPLING 19	N.68
MILLING CUTTERS IN HSS WITH QUICKIN QUICK COUPLING	N.68
MILLING CUTTERS IN HSS WITH WELDON COUPLING 19	N.68
MILLING TOOL FOR INTERNAL AND EXTERNAL GROOVING	B.94
MINI DIGITAL INCLINOMETERS WITH MAGNETIC FIXING SYSTEM	D.58
MINI HACKSAWS	F.55
MINI NUTS FOR ER COLLETS DIN6499	C.44
MINI SERIES TROLLEYS WITH 2 TRAYS	P.37
MINI-LUSTER FILERS FOR EMAX EVOLUTION	G.68
MINIMAL LUBRICATING CONTROL UNIT FOR MACHINES	H.12
MINIMAL LUBRICATING CONTROL UNIT FOR SAWING MACHINES	H.12
MITER SAWS BATTERY OPERATED 12V	N.25
MIXING NOZZLES FOR HYBRID ADHESIVES	J.2
MOBILE ELECTRIC ELEVATING PLATFORMS	M.83
MOBILE ELEVATING PLATFORMS	M.81
MOBILE ELEVATING PLATFORMS WITH ROLLERS	M.81-M.82
MODULAR DRAWERS	P.30
MODULAR DRILLS WITH INTERCHANGEABLE HEAD - 3XD WELDON SHANK	B.101
MODULAR FLEXO HOSE 1/2”	J.39
MODULAR FLEXO HOSE 1/4”	J.39
MODULAR FLEXO HOSE 3/4”	J.39
MODULAR PADS	P.58, P.60-P.61
MODULAR PADS IN POLYETHYLENE	P.61
MODULAR PADS WITH RICE GRAIN FINISH	P.59
MODULAR PLATFORMS IN POLYPROPYLENE	P.61
MODULAR RAMP IN POLYPROPYLENE	P.61
MODULAR REDUCTION AND EXTENSION ADAPTERS	B.126
MODULAR ROLLING TOOL BOXES	F.83
MODULAR TROLLEY WOODEN SHELF	P.41
MODULES APS-140 E - PREMIUM	C.100
MODULES APS-140 E - PREMIUM LIGHT	C.100
MODULES APS-140 E BASIC	C.100
MOLYBDENUM BISULPHIDE GREASE	H.22
MOLYBDENUM BISULPHIDE MULTIPURPOSE ANTI-SPATTER	J.60
MOLYBDENUM DISULPHIDE GREASES	H.21
MONOBLOC VERNIER CALIPERS	D.12
MONOBLOCK DRAWING VERNIER CALIPERS	F.102
MONOBLOCK VERNIER CALIPERS	D.11-D.13
MORSE TAPER ADAPTERS FOR BORING UNITS	N.69
MORSE TAPER ADAPTERS FOR DRILLING UNITS	N.69
MOTORIZED CANTILEVERED CRANES BALLASTED	M.80
MOTORIZED CRANES ROTATING AT 210 ° BALLASTED	M.79
MOTORIZED CRANES ROTATING AT 210° BALLASTED	M.79
MOTORIZED HYDRAULIC PRESSES	N.85
MOULD PROTECTIVES	H.16
MOUNTED POINTS WITH PINK ALUMINUM OXIDE	G.33-G.34
MOVABLE BRIDGES	D.7
MOVABLE JIB CRANES WITH ARTICULATED ARM	M.17
MOVABLE SC JIB CRANES	M.13
MULTI FLUTE SUPER FINISHING END MILLS - CENTRE CUTTING	A.125
MULTI-DIAMETER CUTTER WITH HEXAGONAL DRIVE 1/4”	E.99
MULTI-FUNCTION 90° END MILLS Z2	A.158
MULTI-PURPOSE HIGH TEMPERATURE GREASES	H.19, H.21
MULTI-PURPOSE HYDRAULIC OILS	H.14
MULTI-PURPOSE LUBRICANTS	J.27
MULTI-PURPOSE SPRAY ADHESIVE	J.25
MULTI-TASKING TWINKEY® WRENCHES	E.33
MULTIBOND ACRYLATE ADHESIVES	J.19
MULTIBOND ADHESIVE + ACTIVATOR KIT	J.20
MULTIFUNCTION 4 IN 1 FOR MAINTENANCE	J.17
MULTIFUNCTION DIGITAL INDICATORS	D.34
MULTIFUNCTION STRIPER PLIERS FOR ELECTRICIANS AND CABLE TECHNICIANS	F.22
MULTIFUNCTION WELDERS	J.47
MULTIFUNCTIONAL CUTTERS WITH TRAPEZOID BLADE	F.50
MULTIFUNCTIONAL END MILLS FOR ROUND INSERTS	B.84
MULTIFUNCTIONAL END MILLS ROUND INSERTS	B.83
MULTIFUNCTIONAL MILLING TOOL WITH INTERCHANGEABLE HEADS - SCREW ON COUPLING	B.89
MULTIFUNCTIONAL PLIERS FOR PROFESSIONAL ELECTRICIAN’S	F.21
MULTIPLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES	B.52
MULTIPURPOSE ANTI-SPATTER	J.61
MULTIPURPOSE FLANGE SEALANTS	J.16
MULTIPURPOSE GREASES	H.18
MULTIPURPOSE GREASES FOR THE FOOD INDUSTRY	H.20
MULTIPURPOSE PLIERS FOR WELDING	J.51
MULTIPURPOSE SCISSORS	F.43
MULTIPURPOSE SCISSORS SECUMAX 564	F.43
MULTIPURPOSE SCISSORS SECUMAX 565	F.43
MULTIPURPOSE SCRAPERS	F.49
MULTIPURPOSE SHEARS	F.43
NC CABINETS WITH SHUTTERS 54 X 27 E	P.10
NC TABLE SUPPORT NC 36 X 27 E	P.11
NC TROLLEYS FOR TRANSPORT 36 X 27 E	P.11
NEEDLE FILES IN SET	G.65
NEODYMIUM PERMANENT MAGNETS	N.100
NET-SIDED GAS CYLINDER PALLET CONTAINERS	P.52
NEUTRAL DETERGENT	J.31
NEUTRAL SILICONE SEALANTS	J.23
NIBBLING SHEARS	F.40
NIPPERS FOR BLACKSMITHS AND CONCRETERS	F.35
NITRILE COATED COTTON GLOVES - NITROTOUGH™	K.19
NO REBOUND MALLETS SECURAL	F.71
NO-REBOUND HAMMERS BLACKCRAFT	F.71
NO-REBOUND HAMMERS SUPERCRAFT	F.70
NON-METALLIC THIXOTROPIC ANAEROBIC PASTES	J.21
NON-REBOUND POLYURETHANE MALLETS	F.69
NON-REINFORCED CUTTING DISCS	G.3
NON-WOVEN FABRIC CLOTH FLAP WHEELS WITH HOLE	G.27
NON-WOVEN MATERIAL FOR FILTER MATS	H.38
NON-WOVEN MIXED FLAP WHEELS FOR HAND-HELD GLAZING MACHINES	G.27
NON-WOVEN WHEELS FOR SATINEX MACHINES	G.27
NOZZLE FOR CNC LATHES – 10 BARS	J.40
NOZZLE FOR JJ LATHES – 10 BARS	J.40
NOZZLE FOR LATHES – 100 BARS	J.41
NOZZLE FOR LATHES – 33 BARS	J.41
NOZZLE FOR SB LATHES – 10 BARS	J.40
NPT THREADED GAUGES	D.62
NUT COVERS IN BLACK POLYETHYLENE	N.121
NUTS FOR HAWK EYE PLIERS	C.45
NUTS FOR T-SLOTS	C.94
NUTS WITH WASHER	C.94
NUTSETTERS	E.95

ITEM	PAG.
NUTSETTERS IN STAINLESS STEEL	E.96
NUTSETTERS MAGNETIC DESIGN	E.96
NYLON ANCHOR SX MODEL, WITH RIM AND SCREW	N.110
NYLON GLOVES COATED WITH SANITIZED NITRILE FOAM	K.21
NYLON GLOVES LIGHT WEIGHT COATED IN POLYURETHANE	K.20
NYLON REPLACEMENT TIPS 100 SH FOR MALLETS	F.67
NYLON REPLACEMENT TIPS SUPERCRAFT	F.70
NYLON TIPS 100 SH FOR MALLETS WX5650	F.70
OFFICE SCISSORS	F.43
OFFICE SCISSORS WITH ROUNDED ENDS	F.43
OIL BRASS SYRINGES	J.38
OIL MIST COLLECTORS FOR EMULSIONS	H.40
OLEO-PNEUMATIC RIVETERS FOR THREADED INSERTS	F.93
OLEOPNEUMATIC RIVETERS FOR RIVETS	F.92
ONE PIECE DISPOSABLE OVERALLS WITH HOOD	J.33, K.26-K.27
ONE-WAY FLOW CONTROLLERS	L.59
OPEN ENDED SLOGGING WRENCHES	E.15
OPTICAL AND CONTACT DIGITAL TACHOMETERS	D.78
OPTICAL MEASURING SYSTEM	D.85
ORIENTING FLOW REGULATORS FOR CYLINDERS WITH TAPER THREAD - SHORT	L.59
OUTDOOR STORAGE DEPOSITS FOR 1000 L TANKS	P.50
OVAL BRUSHES	F.114
OVERSHOE WITH INTERGRATED SAFETY TIP	K.14
OXYGEN PRESSURE REDUCERS	J.53
PADLOCKS	F.87
PAINT SPRAY GUNS GRAVITY FEED	L.35
PAINT SPRAY GUNS GRAVITY FEED PROFESSIONAL USE	L.35
PAINT SPRAY GUNS SUCTION FEED	L.35
PAIR OF PIPE WRENCH JAWS FOR VICES WX7840	N.80
PAIRS OF PARALLEL V-BLOCKS	D.55
PAIRS OF PARALLEL X-BLOCKS	D.55
PALLET RACKS HEAVEY SERIES	P.45
PALLET RACKS LIGHT SERIES	P.45
PANTOGRAPH LAMPS WITH MAGNIFYING LENS	N.88
PANTOGRAPH PALLET TRUCK HX10E + AUTOLEVEL	M.89
PAPER ROLL BOBIN	J.44
PAPER ROLL HOLDER KIT	P.3
PARAFFIN SPRAY GUNS	L.34
PARALLEL LATHE ECOCA	N.12
PEN MICROSCOPES	D.78
PENETRATING THREADLOCKERS WITH MEDIUM/HIGH MECHANICAL RESISTANCE	J.10
PERCUSSION IMPACT SCREWDRIVERS	E.67
PERFORATED GALVANIZED STEEL CONTAINERS	P.36
PERFORATED LOCKERS	P.23
PERFORATED PANEL/SHELVES	P.4
PERFORATED SIDE PANELS	P.5
PERISTALTIC HAND PUMPS	J.18
PERMANENT INK MARKERS	F.112
PERMANENT MAGNETIC SQUARES	C.96
PH-CONTROL PAPERS	H.28
PILERS FOR EXTERNAL CIRCLIPS WITHOUT HOLES	F.15
PIN FOR ABRASIVE WRAPPED ROLLS	G.26
PIN GAUGE SETS	D.63
PIN PUNCH SET IN FOAM	E.115
PIN PUNCHES	F.63
PIN PUNCHES IN SET	F.64
PIN TYPE DIGITAL DEPTH CALIPERS IP54	D.8

ITEM	PAG.
PIPE CUTTERS FOR FLEXIBLE PIPES	F.46
PIPE CUTTERS FOR PLASTIC PIPES	F.46, L.42
PLAIN ADJUSTABLE SHELVES	P.43
PLASMA CUTTING	J.47
PLASTIC BOXES	P.18
PLASTIC CHAIN STANCHIONS FOR DELIMITATIONS	K.44
PLASTIC CONTAINERS	P.33
PLASTIC SIGN CHAINS	K.44
PLASTIC STRAPS IN POLYROPYLENE PP BLACK KNURLED	N.122
PLASTIC TOOL BOXES	F.85-F.86
PLASTIC TRAYS	E.107
PLATES A 2 MODULES APS-140 E	C.101
PLATES A 4 MODULES APS-140 E	C.101
PLATFORM SCALE	D.88
PLATFORM TROLLEYS	P.38, P.40
PLIABLE FOLDABLE STEP LADDERS	P.56
PLIABLE STEP LADDERS WITH WHEELS	P.56
PLIERS AND CUTTING NIPPERS IN FOAM	E.113
PLIERS AND CUTTING NIPPERS IN SET	F.2
PLIERS AND CUTTING NIPPERS VDE INSULATED 1000 VOLTS IN FOAM	E.114
PLIERS AND CUTTING NIPPERS VDE INSULATED 1000 VOLTS IN SET	F.3
PLIERS FOR ELECTRONICS AND PRECISION MECHANICS	F.8-F.9
PLIERS FOR EXTERNAL CIRCLIPS WITHOUT HOLES	F.15
PLIERS FOR INTERNAL AND EXTERNAL ELASTIC CIRCLIPS IN SET	F.15
PLIERS FOR MECHANICS WITH HALF-ROUND ARCHING NOSE	F.7
PLIERS FOR METAL CLAMPS WITH EARS	F.25
PLIERS FOR PLASTIC PIPES AND SIPHONS 81 01 250	F.17
PLIERS FOR PLASTIC PIPES AND SIPHONS 81 11 250	F.17
PLIERS IN SET	F.17
PLUG-IN OPEN ENDED RING WRENCHES 9X12 MM FOR TORQUE WRENCHES	E.84
PLUG-IN OPEN ENDED WRENCHES 14X18 MM FOR TORQUE WRENCHES	E.83
PLUG-IN OPEN ENDED WRENCHES 22X28 MM FOR TORQUE WRENCHES	E.84
PLUG-IN OPEN ENDED WRENCHES 9X12 MM FOR TORQUE WRENCHES	E.83
PLUG-IN OPEN ENDED WRENCHES FOR TORQUE WRENCHES	E.82-E.83
PLUG-IN RING WRENCHES 14X18 MM FOR TORQUE WRENCHES	E.84
PLUG-IN RING WRENCHES 22X28 MM FOR TORQUE WRENCHES	E.84
PLUG-IN RING WRENCHES 9X12 MM FOR TORQUE WRENCHES	E.83
PLUGS WITH CYLINDRICAL MALE THREAD AND NBR O-RING	L.53
PLUNGE CUTTER FOR FOAM INSERTS	P.20
PNEUMATIC ANGLE GRINDERS	L.23-L.24
PNEUMATIC ANGLE IMPACT WRENCHES	L.8
PNEUMATIC CHAIN HOISTS - ATEX	M.9
PNEUMATIC DIE GRINDERS	G.44, L.19-L.22
PNEUMATIC DRILLS	L.11-L.14
PNEUMATIC ENGRAVING PENS	L.16
PNEUMATIC FILERS	G.68
PNEUMATIC GRINDERS	L.18, L.20-L.22
PNEUMATIC GRINDERS WITH HIGH SPEED TURBINE	L.17
PNEUMATIC IMPACT WRENCHES	L.9-L.11
PNEUMATIC JIGSAWS	L.26
PNEUMATIC LAPPING TOOLS	L.27
PNEUMATIC MANIPULATORS WITH DOUBLE CABLE	M.34
PNEUMATIC MANIPULATORS WITH RIGID ARMS	M.34
PNEUMATIC PERCUSSION HAMMERS	L.26
PNEUMATIC RIVETERS FOR BLIND RIVETS	F.91-F.92
PNEUMATIC SHAPERS	L.26
PNEUMATIC STAPLERS 35.19-E	F.97

ITEM	PAG.
PNEUMATIC STAPLERS ROLL-A SERIES	F.97
PNEUMATIC STAPLERS SERIES 35	F.96
PNEUMATIC STAPLERS SERIES 80	F.95
PNEUMATIC STAPLERS SERIES 92	F.95
PNEUMATIC STAPLERS WP SERIES	F.96
PNEUMATIC TAPPERS	L.14-L.15
PNEUMATIC WASHING TANKS	N.70
PNUEMATIC GRINDERS	L.18
POCKET TAPE MEASURES	F.108-F.110
POCKET TAPE MEASURES FATMAX	F.109
POCKET TAPE MEASURES RUBBERFLEX	F.108
POCKET TAPE MEASURES WIDE BLADE	F.109
POLIFLEX SHANK-MOUNTED ABRASIVE GRINDERS	G.35
POLISH FOR STAINLESS STEEL	J.28
POLISHED IRON STRAPS	N.121
POLISHING ABRASIVE PASTES	G.37
POLISHING BRUSHES FOR BAND SAW MACHINES	A.210
POLISHING MACHINES	N.18
POLISHING OIL FOR GRANITE	D.49
POLYAMIDE HOSES 98 SHORE A	L.41
POLYAMIDE HOSES PA12	L.42
POLYAMIDE HOSES PA12 C	L.42
POLYAMIDE PLUGS	L.58
POLYAMIDE WHEELS	N.94, N.97
POLYCARBONATE PROTECTIVE EYEWEAR	K.30
POLYESTER AND COTTON OVERALL COATS BLUE - WHITE - BLACK	K.6
POLYESTER GLOVES COATED IN NITRILE EDGE®	K.21
POLYESTER GLOVES POLYURETHANE COATED	D.23, K.20
POLYESTER STRAP SHEARS	N.126
POLYETHILENE SCRAP HOLDERS	P.37
POLYETHYLENE SIGNAGE TAPE	K.44
POLYETHYLENE SPILL PALLETS FOR DRUMS	P.47
POLYETHYLENE STORAGE DEPOSITS	P.49
POLYGONAL SOCKET 1/2”	E.40
POLYGONAL SOCKETS 1”	E.45
POLYGONAL SOCKETS 1/2”	E.39
POLYGONAL SOCKETS 1/4”	E.35
POLYGONAL SOCKETS 3/8”	E.37
POLYGONAL SOCKETS 3/8” SET OF 19 PIECES IN ABS CASE	E.52
POLYPROPYLENE CONTAINERS	P.33
POLYPROPYLENE CONTAINERS FIRST CHOICE - 800MM	P.35
POLYPROPYLENE LIDS FIRST CHOICE - 800MM	P.35
POLYTHENE BUBBLE WRAP ROLLS	N.130
POLYURETHANE COATED HAMMERS NO REBOUND	F.71
POLYURETHANE FACES FOR NON-REBOUND MALLETS	F.69
POLYURETHANE FOAM	J.24
POLYURETHANE HOSES 98 SHORE A	L.41
POLYURETHANE PALLET TRUCK ROLLERS TR - STEEL CENTRE	N.95
POLYURETHANE SEALANTS	J.22
POLYURETHANE TIPS 95 SH FOR MALLETS WX5450	F.68
POLYURETHANE TIPS SECURAL	F.71
POLYURETHANE WHEELS - ALUMINIUM CENTRE	N.94, N.97
POLYURETHANE WHEELS - CAST IRON CENTRE	N.94, N.98
POLYURETHANE WHEELS - POLYAMIDE CENTRE	N.94, N.96
POLYVALENT ANTISPATTERS	J.61
PORTABLE HYDRAULIC PIPE BENDER	F.47
PORTABLE MANUAL PIPE BENDERS	F.47

ITEM	PAG.
PORTABLE ROUGHNESS TESTER	D.71
PORTABLE ROUGHNESS TESTERS	D.71
PORTABLE ROUGHNESS/SURFACE PROFILER TESTERS	D.73
PORTABLE SATIN FINISHING MACHINES FOR STAINLESS STEEL	N.46
PORTABLE TAPPING MACHINES	N.39
PORTAL CRANES WITH GIS SYSTEM PROFILE	M.20
POSITIVE BLADES FOR DEBURRING TOOLS TYPE B	A.191
POST-ACTIVATOR FOR CYANOACRYLATE ADHESIVES	J.6
POWER CHUCKS DIN 69871 SK FORMA AD+B	A.9, A.30, C.5
POWER CHUCKS DIN 69893 HSK A	C.26
POWER CHUCKS MAS 403 BT AD+B	C.16
POWERFLEX M42 BAND SAW BLADES - BASIC PLUS UNIFLEX	A.199
POWERFLEX M42 BAND SAW BLADES - BASIC UNIFLEX	A.200, N.14
PRACTIBOX STORAGE CABINETS	P.29-P.30
PRE-ASSEMBLED 1/4” SPIRAL HOSE KIT	L.45
PRE-ASSEMBLED LINEAR HOSE KIT SERIES 320 DN7.6	L.43
PRE-ASSEMBLED SPIRAL HOSE KIT SERIES 320 DN7.6	L.45
PRECIFORCE® CRIMPING PLIERS	F.19-F.20
PRECISION DIGITAL SCALES	D.87
PRECISION GRINDING WHEELS	G.49-G.50
PRECISION LEVER TEST INDICATORS	D.39
PRECISION MODULAR CLAMPING VICES MAXIGRIP	C.80
PRECISION PARALLELS	C.83
PRECISION VICE	C.85
PRECISION VICE TCT	C.81
PREMIUM QUALITY DOUBLE LEVER SHEARS FOR SHEET METAL	F.40-F.41
PRESETTING EYE TRIM II	B.37, C.54
PRESSURE MANOMETERS - BOTTOM CONNECTION - STEEL CASE WITH GLYCERINE	L.39
PRESSURE MANOMETERS - REAR CONNECTION - STEEL CASE WITH GLYCERINE	L.39
PRESSURE OILERS	F.116
PRESSURE REDUCERS WITH HANDFLOW METER FOR ARGON/CO2	J.53
PRESSURE REGULATORS	L.38
PRESSURE REGULATORS MINI SERIES	L.36
PRESSURE REGULATORS STANDARD	L.37
PRESSURE SPRAYERS	F.118
PRO TOOL CHEST TOOL BOXES	F.86
PROBE HOLDER EXTENSIONS	D.51
PROBE TIPS - SPARE PARTS	D.46
PROBE TIPS SPARE PARTS	D.45
PROBES FOR DIGITAL THERMOMETERS	D.81
PROBES FOR K-TYPE DIGITAL THERMOMETERS	D.81
PROBES FOR ULTRASONIC THICKNESS GAUGES	D.91
PROBES WITH HM SPHERE	D.51
PROBES WITH RUBY SPHERE	D.51
PROCORE BATTERIES	N.35
PROFESSIONAL HAND OPERATED GREASE PUMPS	J.34
PROFESSIONAL LEVER AND GUN COMPRESSORS	J.34
PROFESSIONAL MULTIPURPOSE SCISSORS	F.43
PROPANE PRESSURE REDUCERS	J.53
PROTECTION FACE VISOR	K.34
PROTECTIONS FOR PULLERS	F.76
PROTECTIVE CERAMIC FOR WELDING	J.61
PROTECTIVE COVER FOR SCISSORS WX4770	F.41
PROTECTIVE EYEWEAR	B.19, C.84, G.43, K.29-K.31, M.20
PROTECTIVE EYEWEAR WITH ELASTIC HEAD BAND	K.31
PROTECTIVE FACE SHIELDS	K.34
PROTECTIVE GOGGLES	K.31, K.33

ITEM	PAG.
PROTECTIVE HELMETS	K.43
PROTECTIVE POLYCARBONATE EYEWEAR	K.30
PROTECTIVE PVC BOOTS	K.14
PROTECTIVE SLEEVING FOR LIFTING SLINGS	M.48
PROTECTIVE TUBULAR NETS SHOCK-PROOF	N.129
PROTECTIVES FOR METALS	H.16
PROTECTOR WITH HIGH ZINC CONTENT	J.28
PROTRACTORS	F.102
PSC ISO 26623-1 AND HSK A DIN 69893 MODULAR MASTER SHANKS	B.125
PTFE LUBRICANTS	H.23
PULL STUDS	C.47-C.48
PUMP OILERS	F.117
PURE TUNGSTEN ELECTRODES	J.56
PUSH BUTTON CONTROLS FOR HOISTS	M.6
PUSH BUTTON PANEL FOR HOISTS IN ATEX ENVIRONMENTS	M.5
PVC APRONS	K.28
QUADRUPLE LIFTING SLINGS	M.50
QUALITY CONTROL OF WELDED JOINTS	J.60
QUALITY STATION	P.25
QUICK CHANGE STATIC TOOL HOLDER TURRETS	C.62
QUICK CLAMP DOUBLE SYSTEM	N.104
QUICK CLAMPS	N.103-N.104
QUICK CONNECTOR FOR HOIST PUSH-BUTTON CONTROLS OR POWER SUPPLIES	M.7
QUICK COUPLING ARBORS	G.9
QUICK COUPLING FEMALE THREADED - PROFILE EU-DN7.5	L.48
QUICK COUPLING FEMALE WITH FEMALE THREAD - MULTI PROFILE	L.47
QUICK COUPLINGS FEMALE THREADED	L.46-L.47
QUICK COUPLINGS FEMALE THREADED - MIGNON DN5	L.51
QUICK COUPLINGS FEMALE THREADED WITH CONNECTING SLEEVE	L.47
QUICK COUPLINGS FEMALE THREADED WITH SPRING	L.47
QUICK COUPLINGS FEMALE WITH FEMALE THREAD - MIGNON DN5	L.50
QUICK COUPLINGS FEMALE WITH HOSE CONNECTOR - MULTI PROFILE	L.48
QUICK COUPLINGS FEMALE WITH MALE THREAD - MIGNON DN5	L.50
QUICK COUPLINGS FEMALE WITH MALE THREAD - MULTI PROFILE	L.47
QUICK COUPLINGS FEMALE WITH MALE THREAD - UNI-ISO 6150 A-6 PROFILE	L.51
QUICK COUPLINGS FEMALE WITH SPRING - MIGNON DN5	L.51
QUICK COUPLINGS FEMALE WITH SPRING- MULTI PROFILE	L.48
QUICK COUPLINGS MALE THREADED	L.46-L.47
QUICK COUPLINGS MALE THREADED - MIGNON DN5	L.51
QUICK COUPLINGS MALE THREADED - PROFILE EU-DN7.5	L.48
QUICK COUPLINGS MALE THREADED WITH CONNECTING SLEEVE	L.46
QUICK COUPLINGS MALE THREADED WITH SPRING	L.46
QUICK COUPLINGS MALE WITH HOSE - PROFILE EU-DN7.5	L.48
QUICK COUPLINGS WITH MALE THREAD - UNI-ISO 6150 A-6 PROFILE	L.51
QUICK COUPLINGS WITH SPRING - MIGNON DN5	L.51
QUICK COUPLINGS WITH SPRING - PROFILE EU-DN7.5	L.48
QUICK EPOXY COMPOUNDS	J.21
QUICK FEED DIGITAL MICROMETERS IP65	D.17
QUICK HORIZONTAL CLAMPS	N.101-N.102
QUICK PENETRATING RELEASE AGENT WITH LUBRICATING ACTION	J.27
QUICK PUSH ROD CLAMPS	N.102
QUICK REDUCTIONS PUSH-TO-CONNECT-FITTINGS	L.59
QUICK RELEASE SAFETY COUPLINGS SERIES 320 DN7.6	L.50
QUICK VERTICAL CLAMPS	N.101
QUICK-CLAMPING DRILL CHUCKS DIN 69871 SK A	C.12
QUICK-CLAMPING DRILL CHUCKS DIN 69871 SK AD+B	C.12
QUICK-CLAMPING DRILL CHUCKS MAS 403 BT A	C.22
QUICK-CLAMPING DRILL CHUCKS MAS 403 BT AD+B	C.22
QUICK-SNAP PLASTIC HANDLES FOR NEEDLE FILES	G.67
RADIAL TOOLHOLDERS VDI DIN 69880	C.63
RADIUS GAUGES FOR CONCAVE AND CONVEX MEASUREMENTS	D.65
RAMPS - DESCENTS	P.58
RAMPS - DOWNFEEDS	P.60
RAMPS-DESCENT WITH RICE GRAIN FINISH	P.59
RANDOM OBITAL SANDERS	L.25
RASEN BELT SEPARATOR N	H.30
RATCHET ACTION CABLE CUTTERS FOR COPPER AND ALUMINUM CABLES	F.24
RATCHET ACTION CABLE CUTTERS FOR COPPER AND ALUMINUM CABLES Ø 52 MM	F.24
RATCHET ACTION CABLE CUTTERS FOR COPPER AND ALUMINUM Ø 60 MM	F.24
RATCHET HEADS WITH SAFETY LOCK	E.47
RATCHET INSERTS FOR TORQUE WRENCHES	E.82
RATCHET INSERTS WITH FINE TOOTH DENTURE	E.82
RATCHET INSERTS WITH PUSH THROUGH SQUARE DRIVE	E.82
RATCHET INSERTS WITH SAFETY LOCK	E.82
RATCHET PIPE CUTTERS FOR PLASTIC PIPES	F.46
RATCHET TENSIONER STRAPS	M.48
RATCHET TENSIONER, HOOK-ENDED STRAPS	M.49
RATCHET WRENCHES WITH FRONTAL ACCESS	E.7
RE-CYCLING CABINETS	P.64
READY TO USE OIL FOR BAND SAWS	A.210, H.9, N.15
RECHARGEABLE LI-ION 18650 BATTERIES	N.87
RECOMMENDED HEADS AND DATA - TUNGMEISTER	B.90
RECOMMENDED TOOL GEOMETRY AND CUTTING CONDITIONS	B.119
RECYCLED 1000L CISTERNS	P.51
RED SILICONE AUTO-LEVELING GASKETING	J.26
REDUCER CM FOR BITS DIN 69871 SK AD	C.13
REDUCER CM FOR BITS MAS 403 BT AD	C.23
REDUCER CM FOR BURRS DIN 69871 SK A	C.13
REDUCER CM FOR BURRS MAS 403 BT A	C.22
REDUCER JOINTS FOR SOCKET WRENCHES	E.49
REDUCER JOINTS WITH TRANSVERSE HOLE	E.49
REDUCING BUSHES FOR TAPPING MACHINES	N.10
REDUCTION BUSH FOR DRILLS	N.56
REDUCTION NIPPLES WITH CYLINDRICAL HEAD	L.52
REDUCTION NIPPLES WITH TAPERED HEAD	L.52
REDUCTION SLEEVES FOR HYDRAULIC CHUCKS	C.44
REDUCTION SLEEVES FOR POWER CHUCKS Ø20 - SEALED	C.44
REDUCTION SLEEVES FOR POWER CHUCKS Ø32 - SEALED	C.44
REDUCTIONS FOR CIRCULAR BLADES	A.209
REINFORCED FLEXIBLE SHAFTS	G.69
REINFORCED NIPPERS FOR BLACKSMITHS AND CONCRETERS	F.35
REINFORCED SPLIT APRONS	K.28
REMOTE READING DYNAMOMETERS FOR CRANES	M.45
RENEWABLE PLANT BASED NEAT CUTTING OILS	H.7-H.8
REPLACEMENT BLADES FOR PIPES CUTTERS DP50	F.47
REPLACEMENT FACE SHIELD BRACKETS	K.34
REPLACEMENT LENS FOR PROTECTIVE GOGGLES	K.33
REPLACEMENT SCREWS FOR FIXING SLOTTING INSERTS	B.131
REPLACEMENT TIPS FOR PLIERS FOR CIRCLIPS	F.10-F.12, F.14
RESIN HANDLES FOR MECHANIC'S FILES	G.67
RETAINERS FOR CYLINDER COUPLINGS	J.13-J.14
RETAINERS FOR CYLINDRICAL COUPLINGS	J.13
REVERSIBLE AIR DRILLS	L.12-L.13
REVERSIBLE AIR RATCHET WRENCHES	L.7

ITEM	PAG.
REVERSIBLE CHAIN PIPE WRENCHES	F.45
REVERSIBLE DRILLS	N.37
REVERSIBLE IMPACT DRILLS	N.38
REVERSIBLE PNEUMATIC DRILLS	L.13
REVERSIBLE RATCHET WRENCHES 4 IN 1	E.7
REVERSIBLE RATCHETS	B.56, E.46-E.47
REVERSIBLE ROTARY HAMMERS SDS PLUS	N.39
REVOLVING BALLASTED MOTORIZED CRANES 270° WITH ELECTRIC LIFTING AND EXTENSION	M.78
RHOMBOIDAL NUTS FOR T-SLOTS	C.95
RIBBED CHISELS FOR MECHANICS	F.60
RIBBED MAT	P.38
RIGHT-HAND FIXED DIE - BSP	A.87
RIGHT-HAND FIXED DIE - BSPT	A.89
RIGHT-HAND FIXED DIE - BSW	A.88
RIGHT-HAND FIXED DIE - M	A.85-A.86
RIGHT-HAND FIXED DIE - MF	A.85
RIGHT-HAND FIXED DIE - NPT	A.89
RIGHT-HAND FIXED DIE - PG	A.89
RIGHT-HAND FIXED DIE - TIN - M	A.87
RIGHT-HAND FIXED DIE - TIN - MF	A.87
RIGHT-HAND FIXED DIE - UNC	A.88
RIGHT-HAND FIXED DIE - UNF	A.88
RING ENDED SLOGGING WRENCHES	E.15
RINGS FOR TURNING JAWS	C.79
RIVETING TOOLS FOR BLIND RIVETS	F.90-F.91
ROCKWELL HARDNESS TESTERS	D.69
ROLLERS PROFILE B	B.54
ROTARY FELT LAPPING TOOLS WITH SYNTHETIC SUPPORT	G.37
ROTARY HAMMERS BATTERY OPERATED 18V	N.32
ROTATING BASES FOR VICES WX7800	N.79
ROTATING BASES FOR VICES WX7810	N.79
ROTATING BASES FOR VICES WX7830	N.80
ROTATING BASES FOR VICES WX7840	N.80
ROTO-ORBITAL PNEUMATIC SANDERS	L.25
ROUGHING END MILLS FOR ALUMINUM ALLOYS Z3	A.134-A.135
ROUGHING END MILLS MULTI-CUTTING	A.132
ROUGHING END MILLS MULTI-CUTTING-VARIABLE HELIX	A.133
ROUGHING END MILLS Z4 VARIALBLE HELIX	A.131
ROUGHNESS SPECIMENS KIT	D.72
ROUGHNESS TESTERS SJ-210	D.72
ROUND BASE FOR DRUM HANDLING	P.49
ROUND COLUMN MOUNTED JIB CRANE WITH GIS SYSTEM KB PROFILE ARM	M.12
ROUND DIAMOND NEEDLE FILES	G.66
ROUND LIFTING SLINGS	M.46
ROUND NEEDLE FILES	G.64
ROUND NOSE PLIERS VDE INSULATED 1000 VOLTS	F.7
ROUND PINS FOR ADJUSTABLE HOOK WRENCHES	E.11
RUBBER HAMMERS	F.71
RUBBER HOSE FOR ACETYLENE	J.54
RUBBER HOSE FOR OXYGEN	J.54
RUBBER TIP SET FOR STAR-TIP BLOW GUNS	L.33
RUBBISH BIN BAGS	P.64
RUMP GLOVES FOR WELDERS	K.18
RUMP SPLIT GLOVES	K.17-K.18
RUST REMOVERS	H.17
RUTILE ELECTRODES FOR CARBON STEEL	J.56

ITEM	PAG.
SAFETY BLOW GUNS	L.31
SAFETY CABINET PPE AND FIRE FIGHTING EQUIPMENT	P.26
SAFETY CABINETS FOR PAINTS AND SOLVENTS	P.25
SAFETY CONTAINERS WITH PLUNGER AND PLATE IMPREGNATED	J.38
SAFETY CONTAINERS WITH SPRAYER	J.38
SAFETY COUPLINGS & NIPPLES - SERIES 320 ESAFE, DN 7.6	L.49-L.50
SAFETY CUPBOARDS FOR HAZARDOUS SUBSTANCES	P.26
SAFETY CUTTER SSECUMAX 350	F.51
SAFETY CUTTERS	F.53
SAFETY CUTTERS SECUMAX 145	F.51
SAFETY CUTTERS SECUMAX 150	F.51
SAFETY CUTTERS SECUMAX 320	F.51
SAFETY CUTTERS SECUMAX EASYSAFE	F.51
SAFETY CUTTERS SECUNORM 175	F.54
SAFETY CUTTERS SECUNORM 300	F.53
SAFETY CUTTERS SECUNORM 380	F.53
SAFETY CUTTERS SECUNORM 525	F.53
SAFETY CUTTERS SECUNORM 540	F.53
SAFETY CUTTERS SECUNORM MIZAR	F.52
SAFETY CUTTERS SECUPRO 625	F.52
SAFETY CUTTERS SECUPRO MARTEGO	F.52
SAFETY CUTTERS SECUPRO MAXISAFE	F.52
SAFETY CUTTERS SECUPRO MERAK	F.52
SAFETY CUTTERS WITH SNAP-OFF BLADES 25 MM - FATMAX	F.50
SAFETY CUTTERS WITH TRAPEZOID BLADE	F.50
SAFETY DEVICE FOR HOSES	J.54
SAFETY DEVICE FOR REDUCERS	J.54
SAFETY DEVICE FOR TORCHES	J.54
SAFETY FACE SHIELDS	K.34
SAFETY HELMETS	K.35
SAFETY KEYS FOR EASYSAFE CUTTERS	F.51
SAFETY ROPES	K.42
SAFETY SHIELDS FOR DRILLS	N.10
SAFETY SHIELDS FOR GRINDING WHEELS	N.11
SAFETY SHIELDS FOR LATHES	N.11
SAFETY SHOES	C.91, J.52, K.9-K.11, K.13-K.14, L.30, M.17, M.23
SAFETY SHOES S3 FOR WELDERS	K.14
SAFTEY CUTTERS SECUNORM 500	F.53
SCALE MAGNIFIER KIT 10X	D.78
SCALE PALLET TRUCKS	M.86
SCALE PALLET TRUCKS WITH PRINTER	M.86
SCALES FOR PALLETS	D.88
SCISSORS FOR ELECTRICIAN'S - STAINLESS STEEL BLADES	F.42
SCREW CLAMPS	F.77-F.78
SCREW CLAMPS REINFORCED SERIES	F.77
SCREW CLAMPS REINFORCED SERIES SGM	F.77
SCREW CLAMPS ROLLED STEEL	F.78
SCREW CLAMPS STANDARD SERIES	F.77
SCREW CLAMPS WITH DEEP THROAT SGTM	F.78
SCREW LEVER CLAMPS	F.78
SCREW SUPPORTS	C.88
SCREW SUPPORTS - "ATLAS" TYPE	C.89
SCREW SUPPORTS HEAVY TYPE	C.89
SCREW SUPPORTS WITH MAGNETIC BASE	C.88
SCREWDRIVERS 1000 VOLT INSULATED IN FOAM	E.113
SCREWDRIVERS 1000 VOLT VDE INSULATED IN SET	E.66
SCREWDRIVERS FOR PHILLIPS® SCREWS	E.58-E.59

ITEM	PAG.
SCREWDRIVERS FOR PHILLIPS® SCREWS 350 PH	E.59
SCREWDRIVERS FOR PHILLIPS® SCREWS 350 SK PH	E.59
SCREWDRIVERS FOR PHILLIPS® SCREWS IN SET	E.58
SCREWDRIVERS FOR POZIDRIV® SCREWS	E.60
SCREWDRIVERS FOR POZIDRIV® SCREWS 355 PZ	E.60
SCREWDRIVERS FOR SLOTTED SCREWS	E.56-E.57
SCREWDRIVERS FOR SLOTTED SCREWS 334 SK	E.57
SCREWDRIVERS FOR SLOTTED SCREWS 335	E.57
SCREWDRIVERS FOR SLOTTED SCREWS IN SET	E.56
SCREWDRIVERS FOR SOCKETS 1/4"	E.50
SCREWDRIVERS FOR TAMPER TORX® SCREWS 367 BO	E.33
SCREWDRIVERS FOR TAMPER TORX® SCREWS KIT 367/6 TORX® BO	E.33
SCREWDRIVERS FOR TAMPER TORX® WITH POCKET SUPPORT IN SET	E.32
SCREWDRIVERS FOR TORX® PLUS SCREWS 367 IP	E.33
SCREWDRIVERS FOR TORX® SCREWS	E.29
SCREWDRIVERS FOR TORX® SCREWS 367	E.30
SCREWDRIVERS FOR TORX® SCREWS IN FOAM	E.110
SCREWDRIVERS FOR TORX® SCREWS IN SET	E.29
SCREWDRIVERS FOR TORX® SCREWS WITH POCKET SUPPORT IN SET	E.28
SCREWDRIVERS INSULATED SERIES - SET 160 I/6 VDE	E.66
SCREWDRIVERS INSULATED SERIES 1000 VOLTS KRAFTFORM PLUS - SET 160 I/7 VDE	E.66
SCREWDRIVERS INSULATED SERIES FOR PHILLIPS® SCREWS 162I PH VDE	E.60
SCREWDRIVERS INSULATED SERIES FOR POZIDRIV® SCREWS 165I PZ VDE	E.61
SCREWDRIVERS INSULATED SERIES FOR SLOTTED SCREWS 160I VDE	E.58
SCREWDRIVERS INSULATED SERIES-SET 160 I/165 I/7 VDE	E.66
SCREWDRIVERS KRAFTFORM PLUS - SET	E.65
SCREWDRIVERS KRAFTFORM PLUS - SET 334/6	E.65
SCREWDRIVERS KRAFTFORM PLUS - SET 932/6	E.65
SCREWDRIVERS KRAFTFORM PLUS 367/6 TORX® HF IN SET	E.31
SCREWDRIVERS KRAFTFORM PLUS 367/6 TORX® IN SET	E.30
SCREWDRIVERS KRAFTFROM PLUS - SET 335/350/355/6	E.65
SCREWDRIVERS PREMIUM QUALITY - SET IN FOAM	E.112-E.113
SCREWDRIVERS PREMIUM QUALITY IN SET	E.64
SCREWDRIVERS STUBBY FOR SLOTTED SCREWS	E.57
SCREWDRIVERS STUBBY SERIES FOR PHILLIPS® SCREWS	E.59
SCREWDRIVERS VDE 1000 VOLT INSULATED IN SET	E.65-E.66
SCREWDRIVERS VDE 1000 VOLT INSULATED SERIES FOR PHILLIPS® SCREWS	E.59
SCREWDRIVERS VDE 1000 VOLT INSULATED SERIES FOR POZIDRIV® SCREWS	E.60
SCREWDRIVERS VDE 1000 VOLT INSULATED SERIES FOR SLOTTED SCREWS	E.57
SCREWDRIVERS WITH HOLDING FUNCTION FOR TORX® SCREWS 367 HF	E.30
SCREWS AND CHEMICAL FIXING FOR COLUMN MOUNTED JIB CRANES	M.18
SCRIBERS	F.65
SCRIBERS WITH CARBIDE COATED TIP	F.65
SDS - MAX FLAT CHISELS FOR ROTARY AND DEMOLITION HAMMERS	N.67
SDS - MAX POINTED CHISELS FOR ROTARY AND DEMOLITION HAMMERS	N.67
SDS - PLUS FLAT CHISELS FOR ROTARY AND DEMOLITION HAMMERS	N.67
SDS - PLUS POINTED CHISELS FOR ROTARY AND DEMOLITION HAMMERS	N.67
SEALED SAFETY GOGGLES	K.32
SEALS FOR PLASTIC STRAPS IN POLYROPYLENE	N.122
SELF ROLL-UP ANCHORING SYSTEMS	M.49
SELF TAPPING THREAD INSERTS - STAINLESS STEEL AISI 303	N.107
SELF-ADHESIVE FELT DISCS	G.37
SELF-ADJUSTABLE WRENCHES VDE ISOLATED 1000 VOLTS	F.45
SELF-BALANCING TELESCOPIC FORKS	M.66
SELF-CENTERING CHUCK KEYS	C.72
SELF-CENTERING CHUCKS 3 JAWS	C.67, C.69
SELF-CENTERING CHUCKS 4 JAWS	C.67, C.69

ITEM	PAG.
SELF-LOCKING PLIERS WITH DOUBLE ADJUSTMENT	F.18
SELF-LOCKING PLIERS WITH FORK JAWS	F.18
SELF-TAPPING THREAD INSERTS - GALVANIZED STEEL	N.107
SELF-TILTING SCRAP HOLDERS	P.36
SELFCENTERING CHUCK KEYS	C.72
SEMI AUTOMATIC DRILL DRIFTS	N.56
SEMI-AUTOMATIC SAWING MACHINES	N.17
SEMI-MASK WITH TWO FILTERS FOR GAS AND VAPOR	K.41
SEMI-ROUND DIAMOND NEEDLE FILES	G.66
SEMI-ROUND NEEDLE FILES	G.63
SEPARATORS FOR TROUGHS	P.17
SET OF ASSORTED TOOLS IN FOAM	E.115-E.116
SET OF CUTTING TOOLS AND ILLUMINATION IN FOAM	E.115
SET OF DEPTH EXTENSIONS AND BASE FOR DIAL INDICATORS	D.42
SET OF DIAMOND NEEDLE FILES	G.66
SET OF FLAGDRIVERS FOR TORX® SCREWS	E.32
SET OF HEXAGONAL WRENCHES WITH T-HANDLES	E.24
SET OF INSULATED TOOLS VDE 1000 VOLTS	F.3
SET OF MICRO HEXAGONAL SCREWDRIVERS IN FOAM	E.109
SET OF PERFORATED SIDE PANELS	P.4
SET OF PLIERS FOR INTERNAL AND EXTERNAL CIRCLIPS	F.14
SET OF SCREWDRIVERS STUBBY FOR SLOTTED AND PHILLIPS® SCREWS	E.67
SET OF UNIVERSAL AND ADJUSTABLE PLIERS	F.2
SETTING CALIBRATION AND MEASURING BENCH	D.83
SETTING RINGS FOR BORE GUAGES AND MICROMETERS	D.59
SHANK MOUNTED FELT BOBS	G.36
SHANK MOUNTED SOFT COTTON STRING BUFFS	G.37
SHANK MOUNTED SOFT FELT WHEELS	G.37
SHANK MOUNTED VENTILATED COTTON DISCS	G.38
SHANK-MOUNTED ABRASIVE GRINDERS	G.33
SHANK-MOUNTED DIAMOND GRINDERS	G.59
SHANK-MOUNTED FELT BOBS	G.36
SHAPED STANDARD CLAMPS	C.90
SHEARS FOR CUTTING COPPER AND ALUMINUM CABLES	F.43
SHEARS FOR CUTTING METAL STRAPS	N.122
SHEARS FOR METALLIC STRAPS	N.122
SHEARS FOR SHEET METAL AMERICAN MODEL	F.41
SHELVING WITH DRAWS 54X36E	P.44
SHELVING WITH EXTRACTABLE SHELVES FOR HEAVY GOODS	P.44
SHORE HARDNESS TESTERS	D.68
SHORT SLEEVE POLO	K.3
SHORTENING GRAB HOOKS FOR LIFTING CHAIN SLINGS	M.52
SHRINK FIT CHUCKS DIN 69871 SK AD+B	C.7-C.9
SHRINK FIT CHUCKS DIN 69893 HSK A	C.28-C.29
SHRINK FIT CHUCKS MAS 403 BT AD+B	C.19-C.20
SHRINK FIT EXTENSIONS	C.34
SHUTTLES FOR OVERHEAD MAINTENANCE	P.51
SIDE-CUTTER PLIERS WITH STRIPPER VDE INSULATED 1000 VOLTS	F.23
SIGMA ELASTIC RUBBER WHEELS – ALUMINIUM CENTRE	N.95
SILANE MODIFIED POLYMER SEALANTS	J.22
SILENCED BLOW GUNS STAR-TIP	L.33
SILENCER NOZZLE FOR STAR-TIP BLOW GUNS	L.33
SILENCERS	L.56
SILENT-TYPE CIRCULAR BLADES WITH HARD METAL TEETH FOR CUTTING ALLUMINIUM	A.209
SILICON CARBIDE DRESSER STICKS	G.52
SILICONE ANTIFOAM	H.27
SILICONE CARTRIDGE GUN	J.24

ITEM	PAG.
SILICONE CARTRIDGE GUNS	J.24
SILICONE CARTRIDGE PNEUMATIC GUNS	J.24
SILICONE FREE ANTIFOAM	H.28
SILICONE GREASE	H.24
SILICONE LUBRICANTS	H.23-H.24
SILICONE RELEASE AGENTS	H.24
SIMPLE GUIDE SELF-CENTERING CHUCKS	C.70
SINGLE FORM KNURLING HOLDERS FOR CONVENTIONAL LATHES	B.52
SINGLE LADDERS IN ALUMINUM	P.54
SINGLE OPEN ENDED WRENCHES	E.9-E.10
SINGLE SIDE SQUARE SHOULDERING END MILLS	B.71, B.73-B.75
SINGLE SIDE SQUARE SHOULDERING SHELL MILLS	B.72
SINGLE STUDS	C.93
SINGLE-POLE VOLTAGE TESTERS STANDARD VDE	E.58
SINGLE-SIDE INSERTS SQUARE SHOULDERING END MILLS	B.81-B.82
SINGLE-SIDE SQUARE SHOULDERING END MILLS	B.69
SINGLE-SIDE SQUARE SHOULDERING SHELL MILLS	B.70
SINTERGRIP INSERTS	C.82
SINTERGRIP LOCKING SYSTEM	C.82
SIZE 1 HSS MODULAR COUNTERSINKING MILLING CUTTERS	B.119
SIZE 1 MODULAR INSERT DRILLS AND PILOTS	B.120
SIZE 1 MODULAR SPOT-FACING END MILLS	B.118
SIZE 1 MODULAR TOOL HOLDER	B.118
SKATES AND TROLLEY SKATES WITH POLYURETHANE WHEELS	M.92
SKATES AND TROLLEY WITH NYLON WHEELS	M.92
SLAG-STRIKING HAMMERS	J.50
SLEDGE HAMMERS	F.72
SLEDGE HAMMERS WITH TWO FLAT HEADS	F.72
SLEW LIMITERS FOR COLUMN MOUNTED JIB CRANES	M.25
SLEW LIMITERS FOR WALL MOUNTED JIB CRANES	M.21-M.24
SLIDEWAY OILS	H.14
SLIDING T-HANDLE HEXAGONAL WRENCHES	E.24
SLIDING T-HANDLE HEXAGONAL WRENCHES IN FOAM	E.110
SLIDING T-HANDLE HEXAGONAL WRENCHES IN SET	E.25
SLIDING T-HANDLE SWIVEL HEAD HEXAGONAL WRENCHES	E.26
SLIDING T-HANDLE SWIVEL HEAD HEXAGONAL WRENCHES IN SET	E.26
SLIM HAND BRUSHES	F.115
SLIM SHRINK FIT CHUCKS DIN 69871 SK AD+B	C.8
SLITTING CUTTERS	A.172
SLITTING SAW BLADES HSS 1838-B - COARSE TOOTHING	A.174
SLITTING SAW BLADES HSS DIN 1837-A FINE TOOTHING	A.173
SLITTING SAW HOLDERS DIN 1837-A AND DIN 1838-B	A.174, C.63
SLITTING SAWS COARSE TOOTHING	A.159
SLITTING SAWS FINE TOOTHING	A.159
SLOTTED PARTITIONS 36 E	P.19
SLOTTED PARTITIONS AND METAL DIVICERS IN KIT 36 X 36 E	P.18
SLOTTED PARTITIONS AND METAL DIVIDERS IN KIT 27 X 36 E	P.18
SLOTTED PARTITIONS AND METAL DIVIDERS IN KIT 36 X 27 E	P.18
SLOTTED PARTITIONS AND METAL DIVIDERS IN KIT 54 X 36 E	P.18
SMALL CYLINDER TROLLEYS	P.39
SMALL DOUBLE OPEN ENDED WRENCHES	E.8
SMALL GRAFIX CUTTERS	F.54
SMALL HOLES DEPTH DIGITAL CALIPERS IP67	D.7
SMALL PARTS CASES	F.80
SMALL PARTS ORGANIZERS	P.31
SMALL PARTS TOOLBOX	F.84
SMOOTH BOTTOM POLYPROPYLENE CONTAINERS	P.33

ITEM	PAG.
SNAP-OFF BLADES 18 MM	F.49
SNAP-OFF BLADES 25 MM	F.50
SNAP-OFF BLADES 9 MM	F.48
SOCKET DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS	E.42
SOCKET DRIVERS 1/2" FOR SCREWS WITH XZN® PROFILE	E.43
SOCKET DRIVERS 1/2" FOR TORX SCREWS	E.43
SOCKET DRIVERS 1/2" FOR TORX® SCREWS	E.43
SOCKET DRIVERS 1/2" FOR PHILIPS® SCREWS	E.44
SOCKET DRIVERS 1/4" FOR HEXAGONAL SOCKET HEAD SCREWS	E.36
SOCKET DRIVERS 1/4" FOR PHILLIPS® SCREWS	E.37
SOCKET DRIVERS 1/4" FOR SLOTTED SCREWS	E.36
SOCKET DRIVERS 1/4" FOR TORX® SCREWS	E.36
SOCKET DRIVERS 3/4" FOR HEXAGONAL SOCKET HEAD SCREWS	E.44
SOCKET DRIVERS 3/4" FOR TORX® SCREWS	E.45
SOCKET DRIVERS 3/8" FOR HEXAGONAL SOCKET HEAD SCREWS	E.38-E.39
SOCKET DRIVERS 3/8" FOR TORX® SCREWS	E.39
SOCKET SET 1/2" - 36 TOOLS	E.53, E.119
SOCKET SET 1/4" - 44 TOOLS	E.50, E.117
SOCKET SET 1/4" - 55 TOOLS	E.51, E.117
SOCKET SET 1/4" AND 1/2" - 66 TOOLS	E.51, E.118
SOCKET SET 3/8" - 39 TOOLS	E.52, E.117
SOCKET WRENCH ADAPATERS SERIES 2859 FOR TORQUE® SCREWDRIVERS	E.69
SOCKET WRENCHES 1/2" - SET OF 40 TOOLS	E.53, E.119
SOCKET WRENCHES 1/4" AND 1/2" - SET OF 71 TOOLS	E.52, E.118
SOCKET WRENCHES FOR RING NUTS KM	E.11-E.12
SOCKET WRENCHES FOR SELF LOCKING RING NUTS GUK	E.12
SOCKET WRENCHES WITH 1/4" HEXAGONAL END	E.35
SOCKET WRENCHES WITH 3/4" HEXAGONAL END	E.44
SOCKET WRENCHES WITH 3/8" HEXAGONAL END	E.38
SOCKETS 1/2" FOR SPARK-PLUGS	E.41
SOCKETS 3/8" FOR SPARK-PLUGS	E.38
SOCKETS DRIVERS 1/2" FOR HEXAGONAL SOCKET HEAD SCREWS - SPHERICAL HEAD	E.43
SOFT FLAP DISCS	G.9
SOFT FLAP GRINDING DISCS	G.9
SOFT JAWS	C.71
SOFT JAWS - 1,5 X 60°	C.70
SOFT TOP JAWS SERIES	C.68
SOFTSHELL JACKET	K.3
SOLDERING GUNS 100 W	J.58
SOLDERING IRON 120 W	J.58
SOLDERING STATIONS	J.58
SOLID CARBIDE DRILLS	A.37
SOLID CARBIDE STUB DRILLS	A.25
SOLID PAINT STICKS	F.111
SOLID WIRE FOR CARBON STEELS	J.57
SOLID WIRE FOR STAINLESS STEELS	J.57
SOLVEX® NITRILE GLOVES WITH SANDBLASTED FINISH	K.23
SPARE ANVILS SET	D.28
SPARE CUTTER HEADS COMBICUT® 433V	F.38
SPARE CUTTER HEADS FOR BOLT CUTTERS COMBICUT® 433	F.38
SPARE CUTTING HEADS FOR HAND THREADERS	F.47
SPARE PARTS FOR DOUBLE GUIDED SELF-CENTERING CHUCKS	C.69
SPARE PARTS FOR EUROONE MASKS	J.63
SPARE PARTS FOR MIG-MAG WIRE TORCH	J.49
SPARE PARTS FOR TIG TORCHES	J.48
SPARE SCREWS FOR ADJUSTABLE CLAMPS	C.91
SPARE TIE ROD FOR KJ45 S	F.93

ITEM	PAG.
SPARE TIE ROD FOR KJ60	F.93
SPARE TIPS FOR AUTOMATIC PUNCHES	F.64
SPARE WHEELS FOR PIPE CUTTERS	F.46
SPATULAS	F.115
SPATULAS IN STAINLESS STEEL	F.115
SPECIALLY SANITIZED GLOVES COATED IN PVC	K.24
SPECIFIC GRINDING WHEELS FOR RECT. PROCESSING " JONES AND SHIPMAN"	G.51
SPHERICAL SEAT WASHERS	C.95
SPILL PALLETS IN POLYETHYLENE FOR CISTERNS	P.47
SPILL PALLETS IN STEEL FOR CISTERNS	P.46
SPILL PALLETS IN STEEL FOR DRUMS	P.46
SPILL PALLETS IN STEEL WITH INCLINED SUPPORT FOR CISTERNS	P.47
SPILL PALLETS WITH POLYETHYLENE INTERIOR FOR 1000 L CISTERNS	P.47
SPINDLE SPEEDERS	C.55
SPINDLE WITH NEOPRENE THRUST	N.104
SPIRAL FLUTE 15° LEFT-HAND TAP FOR THROUGH HOLES - M	A.69
SPIRAL FLUTE 15° TAP FOR BLIND HOLES - BSP	A.79
SPIRAL FLUTE 15° TAP FOR BLIND HOLES - COOLANT HOLES - M	A.64
SPIRAL FLUTE 15° TAP FOR BLIND HOLES - M	A.56, A.66
SPIRAL FLUTE 25° RIGHT-HAND TAP FOR BLIND HOLES - M	A.69
SPIRAL FLUTE 35° TAP FOR BLIND HOLES - BSP	A.80
SPIRAL FLUTE 35° TAP FOR BLIND HOLES - MF	A.76
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - BSP	A.81
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M	A.57, A.60-A.65, A.67, A.69-A.71
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - M - OVERSIZED	A.58
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - MF	A.74-A.75
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - UNC	A.77-A.78
SPIRAL FLUTE 40° TAP FOR BLIND HOLES - UNF	A.78-A.79
SPIRAL FLUTE 40° TAP FOR BLIND HOLES E - M	A.65
SPIRAL FLUTE 40° TAP FOR BLIND HOLES EXTRA-LONG SHANK - M	A.59
SPIRAL FLUTE 40° TAP FOR THREAD INSERTS - EG - M	A.83
SPIRAL FLUTE 40° TAPS - M	A.63
SPIRAL FLUTE 45° TAP FOR BLIND HOLES - MF	A.76
SPIRAL FLUTE 48° TAPS - M	A.68
SPIRAL FLUTE TAPS FOR BLIND HOLES - M	N.61
SPIRAL HOSE SET WITH 1/4" BSP BLOW GUNS SERIES 320 DN7.6	L.45
SPIRAL HOSES IN POLYAMIDE PA12	L.40
SPIRAL HOSES IN POLYAMIDE PA12 CON CODOLI	L.40
SPIRAL HOSES IN POLYAMIDE PA12 WITH TONGS	L.40
SPIRAL HOSES IN POLYAMIDE PA6	L.40
SPIRAL HOSES IN POLYURETHANE PU 98A PU 98A	L.41
SPIRAL POINT TAP FOR THROUGH HOLES - BSP	A.79-A.80
SPIRAL POINT TAP FOR THROUGH HOLES - M	A.60-A.68, A.70
SPIRAL POINT TAP FOR THROUGH HOLES - M - OVERSIZED	A.58
SPIRAL POINT TAP FOR THROUGH HOLES - MF	A.73-A.75
SPIRAL POINT TAP FOR THROUGH HOLES - UNC	A.77
SPIRAL POINT TAP FOR THROUGH HOLES - UNF	A.78
SPIRAL POINT TAP FOR THROUGH HOLES- MF	A.76
SPIRAL POINT TAP FOR THROUGH-HOLES - M	A.56-A.57
SPIRAL POINT TAP FOR THROUGH-HOLES EXTRA-LONG SHANK - M	A.59
SPIRAL POINT TAPS - M	A.62
SPIRIT LEVELS SLIM - 2 VIALS	F.105
SPLIT APRONS	K.27
SPLIT APRONS FOR WELDING APPLICATIONS	K.27
SPLIT GAITERS	K.28
SPOKED HANDWHEELS IN RE-ENFORCED DUROPLAST	N.118
SPOKED HANDWHEELS IN RE-ENFORCED DUROPLAST WITH HANDLE	N.118-N.119

ITEM	PAG.
SPOT FACING AND REAMING CUTTERS - 1 CUTTING EDGE	B.111
SPOT FACING AND REAMING CUTTERS - 2 CUTTING EDGE	B.113
SPRAY PUMPS FOR SPRAYERS WX7020	F.118
SPRAYERS WITH VAPORIZER	F.118
SPRING BALANCERS - ATEX SERIE RUN 1600	L.30
SPRING BALANCERS - ATEX SERIE RUN 2000	L.30
SPRING BALANCERS - HEAVY SERIE RUN 2000	M.32
SPRING BALANCERS - HEAVY SERIE RUN 2700	L.29
SPRING BALANCERS - HEAVY SERIE RUN 3000	M.32-M.33
SPRING BALANCERS - LIGHT SERIE RUN 1600	L.27
SPRING BALANCERS - LIGHT SERIE RUN 2000	L.28
SPRING BALANCERS - LIGHT SERIE RUN 2500	L.28
SPRING BALANCERS - MEDIUM SERIE RUN 2000	L.29
SPRING BALANCERS - SERIE NYLON RUN 1600	L.28
SPRING BALANCERS - SERIE WITH SAFETY BLOCK RUN LOCK 2500	L.29
SPRING BALANCERS ATEX SERIE RUN 2100	M.33
SPRING BALANCERS FLEX LIGHT SERIES	L.27
SPRING BALANCERS MATIC WITH COMPRESSED AIR HOSE	L.27
SPRING BAR TWEEZERS WITH CARBON FIBRE TIPS	F.26-F.27
SPRING CLAMPS	F.79
SPRING COLLECTS ER EXTRA PRECISE	C.39
SPRING GAS LIGHTERS	J.51
SPRING PLUNGERS WITH HEXAGON SOCKET AND THRUST PIN, STEEL	N.105
SPRING PLUNGERS WITH SLOT AND BALL, STAINLESS STEEL	N.105
SPRING PLUNGERS WITH SLOT AND BALL, STEEL	N.105
SQUARE DIAMOND NEEDLE FILES	G.66
SQUARE NEEDLE FILES	G.64
SQUARE SHOULDERING SHELL MILLS	B.76
SQUARE SPIRIT LEVELS	D.57-D.58
SQUARED SCRAPED SPIRIT LEVELS	D.57
SQUARES FOR CARPENTRY	F.103-F.104
STACKABLE STEEL TANKS FOR DRUMS	P.48
STACKER GX12/29 EVO GEL	M.88
STACKER RX 10/16 EVO GEL 1000KG	M.87
STAINLESS STEEL COATING	J.28
STAINLESS STEEL FLAT EDGE SQUARES 90°	D.55
STAINLESS STEEL FLEXIBLE RULERS	F.106
STAINLESS STEEL RULERS WITH BEVEL	F.107
STAINLESS STEEL RULERS WITH MILLIMETER GRADUATION WITHOUT BEVEL	F.107
STAINLESS STEEL SEMIRIGID RULERS	F.106
STAINLESS STEEL SHIM ROLLS 18CR 9 NI	D.66
STAINLESS STEEL SQUARES WITH BASE	D.56
STAND FOR INVERTER BAND SAW MACHINES SNIP 105MI - 125MI - 176MI	N.15
STANDARD BLADES FOR DEBURRING TOOLS TYPE B	A.191
STANDARD CLAMPS	C.90
STANDARD MOTOR FOR EMAX EVOLUTION	G.70
STANDARD MOTOR FOR ESPERT 500	G.71
STANDARD NUTS FOR ER COLLETS	C.45
STANDING MAGNIFIERS 10X	D.77
STANDS FOR ROUGHNESS TESTERS	D.72
STATIC SUPPORTS WITH ADJUSTABLE HEIGHT FOR BENCHES	P.9
STATIC TOOL HOLDER TURRET COMPONENTS	C.65
STATIC TOOL HOLDERS BMT55	C.59
STATIC TOOL HOLDERS BMT65	C.60
STATIC TOOL HOLDERS N44	C.60
STATIC TOOL HOLDERS N55	C.61
STATIC TOOL HOLDERS NL	C.58

ITEM	PAG.
STATIC TOOL HOLDERS NZ	C.58
STEATITE CHALKS	F.112
STEEL COVER COATED WITH OIL-RESISTANT RUBBER	P.3
STEEL COVER COATED WITH OIL-RESISTANT RUBBER FOR WOODEN WORKTOPS	P.3
STEEL MALLETS WITH NYLON HEAD 100 SH	F.67
STEEL MALLETS WITH POLYURETHANE HEAD 95 SH	F.68
STEEL PALLET CONTAINERS	P.53
STEEL PALLETS APS-140	C.102
STEEL SCREW CLAMPS	F.79
STEEL TOP WORKBENCHES	P.3
STEP LADDERS WITH WHEELS	P.57
STEREO MICROSCOPES	D.74
STITCHED SISAL MOPS FOR CLEANING METALS	G.38
STOPBAR DEVICE FOR TRESTLES	M.90
STOPPERS WITH TAP FOR JERRYCANS	H.26
STORAGE DEPOSIT FOR TWO 1000 L TANKS	P.50
STORAGE SUPPORTS AND TRANSFER STATIONS	P.45
STRAIGHT CONNECTORS	L.57
STRAIGHT FLUTE TAP FOR BLIND AND THROUGH HOLES - NPT	A.81-A.82
STRAIGHT FLUTE TAP FOR BLIND AND THROUGH HOLES - PG	A.82
STRAIGHT FLUTE TAP FOR BLIND AND THROUGH-HOLES - M	A.56
STRAIGHT FLUTE TAP FOR BLIND HOLES - M	A.71
STRAIGHT FLUTE TAP FOR BLIND HOLES LEFT-HAND THREAD - MF	A.75
STRAIGHT FLUTE TAP FOR THROUGH HOLES - M	A.70
STRAIGHT FLUTE TAP FOR THROUGH-HOLES REDUCED SHANK - M	A.59
STRAIGHT FLUTE TAP LEFT-HANDED THREAD - M	A.58
STRAIGHT FLUTE TAPS FOR THROUGH HOLES - M	N.61
STRAIGHT HOSES POLYURETHENE WOVEN EXTRA FLEXIBLE	L.43
STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS	F.11-F.12
STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS IN FOAM	E.114
STRAIGHT NOSE PLIERS FOR EXTERNAL CIRCLIPS IN SET	F.12
STRAIGHT NOSE PLIERS FOR INTERNAL CIRCLIPS	F.9-F.10
STRAIGHT NOSE PLIERS FOR INTERNAL CIRCLIPS IN FOAM	E.114
STRAIGHT NOSE PLIERS FOR INTERNAL CIRCLIPS IN SET	F.10
STRAIGHT SLIP-COUPLING HANDPIECES	G.69
STRAP HOLDERS FOR PLASTIC STRAPS	N.126
STRAP STRETCHER FOR PLASTIC STRAPS WITH SEAL	N.125
STRAP STRETCHERS FOR METALLIC STRAPS WITHOUT SEALS	N.124
STRAP STRETCHERS FOR PLASTIC STRAPS WITH SEAL	N.124
STRAP WRENCHES FOR OIL FILTERS	F.45
STRAPPING TEXTILES COATED WITH HOT MELT IN POLYESTER	N.123
STRIPPER PLIERS	F.23
STRIPPING KNIVES INSULATED 1000 VOLTS VDE	F.24
STUB DRILLS	A.21-A.23
STUB DRILLS CARBIDE-TIPPED	A.24
STUB DRILLS FOR SMALL PRODUCTION SERIES	N.60
STUBBY REVERSIBLE RATCHETS	E.46
SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 27 X 36 E	P.17
SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 36 X 27 E	P.17
SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 36 X 36 E	P.17
SUBDIVISION MATERIAL IN PLASTIC BOXES IN KIT 54 X 36 E	P.17
SUBLAND TWIST DRILLS 180°	A.48
SUBLAND TWIST DRILLS 90°	A.48
SUBLAND TWIST DRILLS 90° - SHORT SERIES	A.49
SUCTION CUPS FOR TRANSPORT	F.79
SUNBURST RADIAL ABRASIVE BRUSHES	G.28
SUPER FINISHING END MILLS	A.127
SUPER FINISHING END MILLS WITHOUT CENTRE CUTTING Z6 WTIH VARABLE PITCH	A.126
SUPERCRAFT HAMMERS NO REBOUND	F.70
SUPERCRAFT HAMMERS NO-REBOUND	F.70
SUPPORT FOR ABRASIVE STONES	G.56
SUPPORT FOR MIG TORCHES	J.49
SUPPORT FOR SCREWDRIVERS	E.67
SUPPORT FOR TIG TORCHES .	J.48
SUPPORTS FOR ABRASIVE STONES	G.56
SURFACE TREATMENT DISCS	G.11
SUSPENDED 230/240V MOTORS COMPLETE WITH CONTRONIC RHEOSTAT	G.69
SUSPENSION ARMS FOR MOTORS	G.69
SWING ARM LAMPS	N.88
SWIVEL CHAIR WITH SCREW ADJUSTMENT	P.7
SWIVEL CHAIRS WITH LIFT ADJUSTMENT	P.7
SWIVEL EYE BOLTS	M.54
SWIVEL EYE BOLTS WITH RING	M.54
SWIVEL EYE NUTS FEMALE	M.55
SWIVEL EYE NUTS FEMALE WITH RING	M.55
SWIVEL HOOKS WITH SAFETY LATCH	M.53
SWIVEL STOOLS WITH GAS ELEVATION	P.7
SYNTHERIZED BORON CARBIDE HAND LAPPING, GRIT-BIT	G.54
SYNTHETIC CUTTING FLUIDS	H.11
SYNTHETIC FILTER KIT FOR INTERNAL CARTRIDGE OF LTEC MIST COLLECTORS	H.41
SYNTHETIC PRE-FILTER CELLS FOR MIST COLLECTORS	H.41
T-HANDLE KEYS FOR COOLANT PIPES	C.49
T-HANDLE LEVERS WITH SLIDING SQUARE DIRVE AND SAFETY LOCK	E.47
T-HANDLE LEVERS WITH SLIDING SQUARE DRIVE	E.47
T-HANDLE SWIVEL HEXAGONAL SOCKET WRENCHES	E.17
T-HANDLE SWIVEL HEXAGONAL SOCKET WRENCHES IN SET	E.17
T-HANDLE TAP WRENCHES	F.89
T-HANDLE WRENCHES WITH FIXED SHAFT FOR TORX® SCREWS	E.31
T-HANDLE WRENCHES WITH FIXED SHAFT FOR TORX® SCREWS IN SET	E.31
T-HANDLE WRENCHES WITH HEXAGONAL SOCKET	E.16
T-HANDLE WRENCHES WITH SQUARE SWIVEL DRIVE	E.54
T-SHIRTS	K.2
T-SLOT CUTTERS	A.169
TAP BITS WITH HEXAGONAL DRIVE 1/4”	E.99
TAP BITS WITH HEXAGONAL DRIVE 1/4” - SET	E.99
TAP CUTTING LANCES	J.52
TAP EXTRACTORS FOR BROKEN TAPS	N.65
TAP FOR NUTS	N.61
TAP HOLDER BUSHINGS FOR TAPPING MACHINES	L.16
TAP WRENCHES	E.96
TAPE STRETCHERS	N.129
TAPER COUPLINGS FOR DRILL SPINDLES	N.55
TAPER MALE THREADED PLUGS	L.53
TAPER PIN HAND REAMERS	A.184
TAPER PIN MACHINE REAMERS	A.184
TAPER THREADED NIPPLES	L.51
TAPER THREADED REDUCTION NIPPLES	L.52
TAPER THREADED REDUCTIONS	L.52-L.53
TAPER THREADED SLEEVES	L.53
TAPERS FOR CHARACTER HOLDERS	F.112
TAPPING CHUCKS AXIAL COMPENSATION DIN 2080	C.32
TAPPING CHUCKS WITH AXIAL COMPENSATION DIN 69871 SK A	C.13
TAPPING CHUCKS WITH AXIAL COMPENSATION MAS 403 BT A	C.23
TAPPING CHUCKS WITHOUT AXIAL COMPENSATION DIN 69871 SK A	C.12

ITEM	PAG.
TAPPING CHUCKS WITHOUT AXIAL COMPENSATION DIN 69893 HSK A	C.32
TAPPING CHUCKS WITHOUT AXIAL COMPENSATION MAS 403 BT A	C.23
TAPPING PASTE	H.9
TAPS DRILL-OUT KIT	A.50
TAPS DRILL-OUT TOOLS	A.50
TAPS FOR WIRE THREAD INSERTS	N.109
TCT CIRCULAR SAW BLADES FOR FERROUS DRY-CUT METALS	A.209
TEFLON TAPES	L.53
TELESCOPIC FORKABLE CRANES WITH FORKLIFT	M.68
TELESCOPIC MIRRORS	F.48
TELESCOPIC MIRRORS IN STAINLESS STEEL	F.48
TELESCOPIC MIRRORS WITH LED LIGHT	F.48
TELESCOPIC MIRROWS	F.48
TELESCOPIC RODS WITH MAGNETIC TERMINAL	E.103
TELESCOPIC TILTING CRANES WITH FORKLIFT	M.68
TESTING INSTRUMENTS FOR TORQUE TOOLS	E.85
THERMAL FRICTION DRILLS	N.61
THERMO HYGROMETERS FOR ENVIRONMENTS WITH INTERNAL SENSOR	D.93
THERMOCOUPLE PROBES FOR PROBE THERMOMETERS	D.82
THERMOMETERS BY PROBE	D.82
THICK WASHERS	C.95
THICKNESS GAUGES	D.66
THREAD INSERTS REPAIR KITS	N.109
THREAD INSERTS REPAIR KITS MULTIDIMENSION	N.110
THREAD MILLING CUTTER - NPT	A.90
THREAD MILLING CUTTER 2XD - BSP	A.90
THREAD MILLING CUTTER 2XD - M-MF	A.90
THREAD MILLING CUTTER 2XD - UN	A.91
THREAD PITCH GAUGES	D.65
THREAD REPAIR FILES	F.90
THREADED BARS	C.93
THREADED BEVEL TWIST KNOTTED BRUSHES	G.30
THREADED COUPLING CARBIDE CHUCKS WITH STRAIGHT SHANK	C.35
THREADED COUPLING CARBIDE CHUCKS WITH STRAIGHT SHANK - C3180	C.35
THREADED FITTING SEALANTS	J.10-J.12
THREADED FITTING SEALANTS PRECISE	J.11
THREADED FITTINGS SEALING CORD	J.12
THREADED INSERTS WITH ROUND HEAD IN GALVANIZED STEEL	F.94
THREADING INDEXABLE END MILLS	B.99
THREADLOCKERS WITH HIGH MECHANICAL RESISTANCE	J.8-J.9
THREADLOCKERS WITH LOW MECHANICAL RESISTANCE	J.7
THREADLOCKERS WITH MEDIUM MECHANICAL RESISTANCE	J.7-J.8
THREE FLUTE HSS END MILL - CENTRE CUTTING	A.161, A.163
THREE POINTS INTERNAL MICROMETERS	D.27
THREE POINTS INTERNAL MICROMETERS - BLUETOOTH - IP67	D.25
THREE POINTS INTERNAL MICROMETERS SET	D.27
THREE POINTS INTERNAL MICROMETERS SET - BLUETOOTH - IP67	D.25
THREE-POINTS INTERNAL MICROMETERS	D.27
THROTTLE BODY ROUND BRUSHES	F.114
TILTING BELT SANDERS	N.21
TIMING DEVICE FOR GIS HOISTS	M.7
TIN ALLOY AT 50% IN RODS	J.59
TIN ALLOY AT 50% IN WIRE COILS	J.59
TOMMY BARS FOR HEAVY DUTY TUBULAR BOX WRENCHES	E.13
TOOL BAGS WITH REMOVABLE PANELS	F.87
TOOL BLOCK FOR PARTING BLADES	B.48
TOOL BOX ROLLING WORKSHOP	F.83

ITEM	PAG.
TOOL BOXES	F.79-F.80, F.84-F.86
TOOL CABINETS NEW GRAND PRIX	E.107
TOOL CABINETS WITH ABS TOP	E.104-E.105
TOOL CABINETS WITH WOODEN TOP	E.105
TOOL CLAMP	C.51
TOOL HOLDER BAGS	F.84, F.86
TOOL HOLDER BELT BAGS	F.86
TOOL HOLDER IN SET 36 X 36 E	P.11
TOOL HOLDER SUPPORTS CAPTO	P.12
TOOL HOLDER SUPPORTS HSK	P.12
TOOL HOLDER SUPPORTS ISO-SK	P.11
TOOL HOLDER SUPPORTS TO BE DRILLED INDEPENDENTLY	P.12
TOOL HOLDER SUPPORTS VDI	P.12
TOOL HOLDER TROLLEYS AND 15" NOTEBOOK	F.87
TOOL HOLDERS FOR ISG MACHINES WITH AIR COOLING SYSTEM	C.53
TOOL HOOKS UNIPOK	P.4
TOOL TROLLEY CABINETS WITH ABS TOP AND PROTECTIVE-EDGE PROFILES	E.105
TOOLBOX	F.84
TOOLHOLDERS FOR GROOVING AND CUTTING	B.44
TOOLHOLDERS FOR PARTING, GROOVING AND CUTTING SINGLE SIDE	B.46
TOOLHOLDERS FOR PARTING, GROOVING AND TURNING	B.45
TOOLHOLDERS FOR PARTING,GROOVING AND TURNING	B.47
TOOTHED CLAMPS	C.90
TOOTHED SUPPORT SET	C.88
TOOTHED SUPPORTS	C.88
TOP QUALITY POLYPROPYLENE CONTAINERS	P.34
TOP QUALITY POLYPROPYLENE DRAWERS	P.34
TORCHES FOR MIG-MAG WIRE WELDING	J.49
TORQUE INDICATOR SCREWDRIVERS	E.75
TORQUE INDICATOR SCREWDRIVERS PRE-SET FOR HEXAGON SOCKET SCREWS 300 HEX	E.74
TORQUE INDICATOR SCREWDRIVERS PRE-SET FOR TORX® SCREWS 300 TX	B.26, E.74
TORQUE WRENCHES CLICK-ACTION	E.76-E.78
TORQUE WRENCHES ELECTROMECHANICAL	E.80
TORQUE WRENCHES ELECTROMECHANICAL WITH MOUNT FOR INSERTS	E.80
TORQUE WRENCHES FOR INSERT TOOLS	E.78
TORQUE WRENCHES INDICATING AND CLICK-TYPE ANGLE-CONTROLLED	E.79
TORQUE WRENCHES SLIP TYPE	E.75-E.77
TORQUE WRENCHES WITH HANDLE	E.71
TORQUE WRENCHES WITH RATCHET	E.78
TOUCH SCREEN PORTABLE HARDNESS TESTERS - WITH PRINTER	D.70
TR-POLYURETHANE ROLLERS – CAST ALUMINIUM CENTRE	N.98
TR-ROLL POLYURETHANE WHEELS – CAST ALUMINIUM CENTRE	N.95
TRADITIONAL CLOTHES LOCKERS	P.24
TRAMMELS FOR TRACING	F.102
TRAMP OIL SEPARATORS TOS 2.0	H.34
TRAMP OIL SEPARATORS TOS 2.0 - SPARE PARTS	H.35
TRANSPARENT HOT MELT GLUE STICKS	J.25
TRANSPARENT STRETCH FILMS	N.126-N.127
TRANSVERSAL PARTITION	P.33
TRAPEZOID BLADES	F.50
TRIANGULAR DIAMOND NEEDLE FILES	G.66
TRIANGULAR NEEDLE FILES	G.64
TRIANGULAR SCRAPERS	F.60
TROLLEY ACCESSORIES	E.106-E.107
TROLLEY FOR TAPPING MACHINES	N.8-N.9
TROLLEY IN POLYPROPYLENE	P.35
TROLLEY IN SHEET METAL WITH NET SIDES	P.40

ITEM	PAG.
TROLLEY STRAP HOLDERS FOR METAL STRAPS	N.125
TROLLEY STRAP HOLDERS FOR PLASTIC STRAPS	N.125-N.126
TROLLEY WITH TRANSPARENT DRAWERS	P.30
TROLLEYS FOR MANUAL CHAIN HOISTS	M.35
TROLLEYS IN STAINLESS STEEL AISI 304	P.28
TROLLEYS WITH 112 ASSORTMENT OF TOOLS	E.121
TROLLEYS WITH 155 ASSORTMENT OF TOOLS	E.122
TROLLEYS WITH 238 ASSORTMENT OF TOOLS	E.123
TROLLEYS WITH 3 TRAY LEVELS DISASSEMBLED DRAW TRAYS	P.37
TROLLEYS WITH 3 TRAYS	P.38
TROUGHS 9 E	P.17
TROUGHS SUBDIVISION MATERIAL IN KIT 36 X 27 E	P.16
TROUGHS SUBDIVISION MATERIAL IN KIT 36 X 36 E	P.16
TROUGHS SUBDIVISION MATERIAL IN KIT 54 X 36 E	P.16
TRUNNION OF CLOSURE FOR HOSE CLAMPS MM12	F.99
TUNGSTEN ELECTRODES IN LANTHANUM	J.57
TURNED SHORT NUTS	C.94
TURNED TALL NUTS	C.94
TURNING NEGATIVE INSERTS - C SHAPE	B.26-B.27
TURNING NEGATIVE INSERTS - D SHAPE	B.28-B.29
TURNING NEGATIVE INSERTS - S SHAPE	B.30
TURNING NEGATIVE INSERTS - T SHAPE	B.31
TURNING NEGATIVE INSERTS - V SHAPE	B.32
TURNING NEGATIVE INSERTS - W SHAPE	B.33-B.34
TURNING POSITIVE INSERTS - C SHAPE	B.35-B.36, B.112, B.114, B.116
TURNING POSITIVE INSERTS - D SHAPE	B.37-B.38
TURNING POSITIVE INSERTS - K SHAPE	B.38
TURNING POSITIVE INSERTS - R SHAPE	B.39
TURNING POSITIVE INSERTS - S SHAPE	B.39
TURNING POSITIVE INSERTS - T SHAPE	B.40
TURNING POSITIVE INSERTS - V SHAPE	B.41-B.42
TWEEZERS - STAINLESS STEEL	F.26
TWIN CUTTER BORING ROUGHING HEADS - D23.50 - D87.50	B.126
TWIST DRILLS FOR MASONRY/CONCRETE	N.65
TWISTED KNOT CYLINDRICAL CUP BRUSHES	G.31
TWO FLUTE HSS BALL NOSE END MILL - CENTRE CUTTING	A.165
TWO FLUTE HSS END MILL - CENTRE CUTTING	A.160
TWO-SIDE INSERTS HIGH FEED END MILLS	B.77
TWO-SIDE INSERTS TOROIDAL END MILLS FOR ADVANCE FEED	B.79
TYPE G DEBURRING TOOL	F.57
TYPE-K DIGITAL THERMOMETERS	D.80
TYRE INFLATORS	L.34
TYRE INFLATORS PROFESSIONAL	L.34
ULTRASONIC THICKNESS GAUGES	D.91
UNC THREADED GAUGES	D.61
UNDERLAY FOR FOAM INSERTS	P.20
UNF THREADED GAUGES	D.61-D.62
UNIBURR DEBURRING TOOLS	F.57
UNIONBOX PLASTIC CONTAINERS	P.32
UNITIZED DISCS	G.11
UNIVERSAL ABSORBENT PADS	H.37
UNIVERSAL ABSORBENTS	H.36
UNIVERSAL ANALOGIC HARDNESS TESTERS	D.70
UNIVERSAL ASPIRATORS MINI STORM	N.75
UNIVERSAL BEVELLING MACHINES FOR EDGES UP TO 15MM	N.47
UNIVERSAL CLEANER - DEGREASER	J.30
UNIVERSAL COMBINATION PLIERS	F.2-F.3
UNIVERSAL COMBINATION PLIERS STRONG TYPE	F.3
UNIVERSAL COMBINATION PLIERS VDE INSULATED 1000 VOLTS	F.3
UNIVERSAL CYANOACRYLATE INSTANT GEL ADHESIVES	J.6
UNIVERSAL DETERGENT	J.31
UNIVERSAL DIGITAL BEVEL PROTRACTORS	D.49
UNIVERSAL DIGITAL CALIPERS WITH DIAL INDICATOR IP54	D.10
UNIVERSAL DISMANTLING STRIPPER TOOL-ERGOSTRIP®	F.24
UNIVERSAL EMERGENCY KIT ANTI-SPILL	H.37
UNIVERSAL GREASE	H.18-H.19
UNIVERSAL JOINTS FOR IMPACT SOCKETS	E.56
UNIVERSAL PIPE CUTTERS	F.46
UNIVERSAL PLIERS HIGH LEVERAGE VDE INSULATED TYPE 1000 VOLTS	F.4
UNIVERSAL PLUG FU WITH RIM AND SCREW	N.110
UNIVERSAL REDUCTION SLEEVES	C.66
UNIVERSAL SAFETY SOLVENT	J.32
UNIVERSAL SAW BLADES FOR METAL	N.54
UNIVERSAL SHELVING L1006	P.43
UNIVERSAL SHELVING L1006 WITH FULL SIDED WALL PANELS	P.43
UNIVERSAL SUPERSTRUCTURE	P.8
UNIVERSAL WORKTOPS	P.9
UPSIDE DOWN RADIAL TOOLHOLDERS VDI DIN 69880	C.63
VACUJET VACUUM LIFTERS	M.30
VACUJET VACUUM LIFTERS WITHOUT POWER SUPPLY	M.31
VACUUM CLEANERS - ACCESSORIES AND SPARE MOTOR PARTS	N.72
VACUUM CLEANERS - ACCESSORIES AND SPARE PARTS FILTER KITS	N.72
VACUUM LIFTERS VACU-B	M.28
VACUUM PLATES	C.103
VACUUM PUMP	C.103
VASELINE GREASES FOR THE FOOD INDUSTRY	H.21
VCI PACKAGING	H.16
VELCRO COATED ABRASIVE DISCS HOLED CORUNDUM	G.15
VELCRO COATED CORUNDUM ABRASIVE DISCS	G.15
VELCRO DISCS FOR SUPERFINISHING	G.16
VENTILATED COTTON POLISHING DISCS	G.38
VENTURI MIXER	H.30
VERNIER CALIPERS	D.12, F.105
VERTICAL LEVER TEST INDICATORS	D.40
VERTICAL LIFTING CLAMPS	M.36-M.37
VERTICAL PROFILE PROJECTOR	D.85
VERTICAL TRANSPORT TROLLEYS	P.39
VIBRATION METERS	D.92
VIBRATION-CONTROL RUBBER MOUNTS WITH 1 THREADED HOLE AND 1 THREADED PIN	N.92
VIBRATION-CONTROL RUBBER MOUNTS WITH 2 THREADED PINS	N.91
VIBRATION-CONTROL RUBBER MOUNTS WITH SINGLE THREADED PIN	N.92
VICES FOR COLUMN DRILLS	N.81
VIDEOENDOSCOPES	D.79
VIDEOENDOSCOPES PROBES	D.79
VISCOUS CYANOACRYLATE INSTANT ADHESIVES	J.5
VISION STORAGE CABINETS	P.32
VISION STORAGE DRAWER CABINETS	P.32
VOLTAGE AND CONTINUITY TESTER	E.63
VOLUMETRIC MIXER	H.30
WAFFLE BACKING FOR VELCRO DISCS	G.16
WALL DISPENSER	J.43
WALL HOLDER FOR DRUMS WITH DISPENSER	J.43
WALL MOUNTED ARTICULATING JIB CRANES	M.24
WALL MOUNTED JIB CRANES WITH BEAM ARM	M.22

ITEM	PAG.
WALL MOUNTED JIB CRANES WITH GIS KB ARM	M.21
WALL MOUNTED OVERHEAD BEAM JIB CRANES	M.23
WALL ROLL HOLDER	J.44
WALL SHELVING FOR DRAWERS	P.34
WASTE REDUCING ABRASIVE CLOTH ROLLS	G.19, G.21
WATER HARDNESS CONTROL PAPERS	H.29
WATERPROOF SILICON CARBIDE SHEETS	G.18
WEB LIFTING SLINGS	M.47
WELD SEAM CALIPERS	D.15, D.65
WELDING GLASSES	K.32
WELDING GLOVES IN SHEEP SKIN/COWHIDE LEATHER	K.18
WELDING TORCH TIG	J.48
WELDON CHUCKS DIN 2080	C.34
WELDON CHUCKS DIN 69871 SK AD+B	C.6-C.7
WELDON CHUCKS DIN 69893 HSK A	C.27
WELDON CHUCKS MAS 403 BT AD+B	C.17
WHEEL BRUSHES	G.30
WHEEL BRUSHES TWIST KNOTTED WIRE	G.30
WHEEL BRUSHES WITH SHANK	G.29
WHEELED PEDAL GREASERS	J.37
WHEELED SERVICE TOOL CASES	F.81, F.84
WHEELED SERVICE TOOL CASES - 62 TOOLS	F.81
WHEELED SERVICE TOOL CASES TSA - 51 TOOLS	F.82
WHEELED SERVICE TOOL CASES TSA APPROVED	A.35, F.81-F.82
WHEELED SERVICE TOOL CASES TSA APPROVED WITH KIT FOR MECHANICS - 51 TOOLS	F.82
WHEELED SERVICE TOOL CASES TSA WITH SET FOR ELECTRICIANS - 45 TOOLS	F.83
WHEELED SERVICE TOOL CHESTS	F.83
WHEELS OF CBN FORM 11V9	G.59
WHEELS OF CBN FORM 12A2D	G.59
WHEELS OF CBN FORM 1A1	G.59
WHEELS SET FOR BENCHES	P.5
WIDE MOUTH DRUMS	F.119
WING NUTS IN TECHNOPOLYMER - ZINC PLATED STUD	N.115
WIRE HAND BRUSHES	F.114-F.115, J.50
WIRE STRIPPERS	F.23
WIRE STRIPPERS INSULATED 1000 VOLTS	F.23
WIRE THREAD INSERTS STAINLESS STEEL - M	N.108
WIRE THREAD INSERTS STAINLESS STEEL - MF	N.108
WIRE WELDING TORCHES MIG-MAG	J.49
WOOD BARS FOR LAPPING AND POLISHING	G.55

ITEM	PAG.
WOODEN CHIPBOARD PALLETS	N.130
WOODEN FOLDING RULERS	F.108
WOODEN HANDLES FOR MECHANICS FILES IN FOAM	G.67
WOODEN HANDLES WITH BRASS CHUCK FOR NEEDLE FILES	G.67
WOODEN TOP WORKBENCHES	P.3
WOODRUFF KEYSEATS CUTTERS	A.168
WORK BENCH WITH T-SLOTS FOR TAPPING MACHINES	N.9
WORK GLOVES HEAT RESISTANT CRUSADER FLEX®	K.18
WORK GLOVES IN CONTINUOUS NYLON THREAD COATED IN NITRIL FOAM	K.22
WORK GLOVES IN CONTINUOUS NYLON THREAD COATED IN TEXTURED NITRILE	K.22
WORK GLOVES IN FABRIC IMPREGNATED WITH YELLOW NBR	K.19
WORK GLOVES IN NEOPRENE	K.24
WORK GLOVES IN NYLON COATED IN MICROPOROUS NITRILE	K.21
WORK GLOVES IN NYLON COATED IN POLYURETHANE	K.20
WORK GLOVES IN NYLON COATED WITH POLYURETHANE	K.20
WORK GLOVES IN SPECIAL BLEND NITRILE SANITIZED	K.23
WORK OVERALLS	K.4
WORK TROLLEYS WITH 2 TRAYS	P.38
WORK TROUSERS	K.3
WORKBENCHES IN AISI 304 STAINLESS STEEL WITH LOWER SHELF	P.28
WORKSHOP ALTIMETER	D.50
WORKSTATIONS ON WHEELS	P.10
WORKTOPS IN BEECHWOOD	P.9
WORKTOPS IN MULTIPLEX	P.9
WORKWEAR DUNGAREES - 100% SANFORIZED COTTON	K.5
WORKWEAR JACKETS - 100% SANFORIZED MASSAUA COTTON	K.5
WORKWEAR MULTI-USE SECURITY CATEGORY III	K.4
WORKWEAR OVERALL COAT - 100% SANFORIZED COTTON	K.5
WORKWEAR TROUSERS - 100% SANFORIZED MASSAUA COTTON	K.5
WRENCHES FOR ELECTRICAL PANELS AND CABINETS	E.34
WRENCHES FOR HAWK EYE NUTS	C.50
WRENCHES FOR HIGH CLAMPING CHUCKS	C.50
WRENCHES FOR MINI NUTS	C.49
WRENCHES FOR POWER CHUCKS	C.50
WRENCHES FOR STANDARD AND BALANCED RING NUTS	C.49
ZERO SETTERS	D.47
ZERO SETTERS WITH LED	D.47
ZIRCONIA ABRASIVE CLOTH BELTS	G.22
ZIRCONIA ABRASIVE FIBER DISCS	G.12
ZIRCONIUM VELCRO COATED ABRASIVE DISCS	G.15

TERMS OF SALE AND DELIVERY

1 SCOPE
Our terms of sale and delivery apply exclusively. We do not recognize customer conditions opposing or deviating from our terms of sale and delivery unless expressly validated in writing. Our terms of sale and delivery always apply, even if the delivery goes ahead with knowledge of opposing or deviating terms of sale and delivery made by the customer. Our terms of sale and delivery also apply to all present and future business transactions with the customer.
All agreements made between us and the customer for the implementation of the present contract are made in writing.

2 OFFER AND CONTRACT CONCLUSION
Our offers are non-binding and noncommittal in every aspect if not agreed otherwise.
Order is considered accepted only if it has been confirmed by us in writing. The same applies to additions, changes or special agreements.
Drawings, illustrations, weight and measurement data or other performance data are only binding if these have been expressly agreed upon in writing.

3 PRICES
Our prices are quoted in EUROs, if not otherwise reported in our order confirmation, and are „from factory" including loading in the plant.
They do not include packaging, freight, insurance, duty or other expenses. Any additional cost is invoiced separately.
Tax as required by law (value added tax) is not included in our prices. The lawful amount as of the day of invoicing will be listed
separately on the invoice.
If certain prices are not agreed upon, then the prices valid at the time of the delivery apply.

4 PAYMENT TERMS
Payment terms have to be confirmed by us in writing a payment is not made according to the date agreed on the order confirmation, we are entitled without further reminder to charge an interest rate of 8 % p. a. over and above the respective base interest rate.

5 DELIVERY TERMS
The indicated delivery time begins with the dispatch of the order confirmation, but not before all technical questions have been clarified and the customer has provided all documents, permits, releases, and the agreed deposit has been paid.
The delivery time is agreed between the Contracting Parties. It assumes that all commercial and technical questions between the Contracting Parties have been clarified and the customer has fulfilled all his obligations such as providing the necessary official certificates or permits or a deposit. If this is not the case, then the delivery time will be extended accordingly.
This does not apply if the delay is caused by the supplier.
Foreseeable delays will be communicated by the supplier as soon as possible.
The delivery time is deemed as kept if the product has left the plant or if it is ready for dispatch by the deadline.
As far as an acceptance has to take place, with the exception of a justified refusal of acceptance, the date of acceptance or, if necessary, the notice of acceptance applies.
If the dispatch and/or the acceptance of the delivery are delayed through circumstances arising from the customer, then any costs incurred will be charged, beginning one month after the dispatch or acceptance notice. If the dispatch is delayed on the customer's request, then the supplier is entitled, after setting a reasonable deadline, to use the items as he sees fit .
If the delivery time is not kept due to a "Force Majeure" or other circumstances beyond the control of the supplier, then the delivery time will be delayed accordingly. The supplier will communicate to the customer the beginning and the end of such an event as soon as possible.
The customer can withdraw from the contract without notice, if the supplier is unable to complete the full service.
The customer can withdraw from the contract if a part of the order cannot be delivered and he has a justified cause for refusing a partial delivery. If this is not the case, then the customer has to pay the contract price due for the partial delivery. The same applies in the case of the supplier's insolvency. If the impossibility or insolvency occurs during the course of acceptance or if the customer is solely or predominantly responsible for these events, payment remains obligatory.

6 TRANSFER OF RISK
The risk is transferred to the customer once the object of the delivery has left the factory, including any partial deliveries or where the supplier has offered additional services such as delivery costs or delivery and installation. Where an acceptance is going to take place, it is authoritative for the transfer of risk. Transfer of risk must be completed on the acceptance date, or immediately after the supplier's acceptance notice.
The customer cannot reject the acceptance in case of an insignificant defect.
Partial shipments are allowed.

7 CLAIMS FOR DEFECTS
In case of material or legal defects in the delivery, the supplier offers guarantee, disqualifying all other claims, as follows:
Material Defects
All parts found to be flawed as a result of circumstances prior to the transfer of risk, are to be fixed or replaced without charge by parts free of defects as chosen by the supplier. The ascertainment of such defects has to be communicated immediately to the supplier. Replaced parts become property of the supplier in writing.
To carry out all the improvements and replacement deliveries necessary for the supplier, the customer has to provide the necessary time and opportunity as per agreement with the supplier; otherwise the supplier is free from the resulting responsibilities for the consequences.

There is no guarantee in the following cases: Inappropriate or inadequate use, incorrect assembly or activation by the customer or by a third party, natural wear, incorrect or negligent handling, improper maintenance, inappropriate operative materials, incorrect construction works, inadequate construction foundation, chemical, electrochemical or electric interferences - as long as the supplier is not responsible for these.
The supplier is only responsible for defects in the material delivered by the customer if he or she should have recognised the defects as expected from a professional. For preparations according to the drawing of the customer, the supplier is responsible only for the execution according to the drawings.
If the customer or a third party makes alterations, the supplier is not responsible for their consequences.
The same applies to alterations of the delivered object made without the consent of the supplier.

8 COPYRIGHT
The customer takes on all responsibilities for the documentation to be presented by him or her, such as drawings, instructions, samples etc. The customer has to ensure that the instruction drawings presented by him or her do not infringe the copyright laws of third parties. The supplier is not obliged to prove to the customer whether the protection rights of third parties are infringed by the submission of offers due to a presentation made by him or her. If a liability of the supplier arises from facts based on claims, the customer must indemnify the supplier.

9 EXPIRATION
All claims by the customer - whatever the legal reasons may be - expire after 12 months.

10 RETURNS AND REFUNDS
For returns and refunds, an administration fee of up to 20% of the value of the item applies, unless the reason for return or refund is a circumstance for which we are accountable.

11 PRACTICABLE RIGHT, COMPETENT COURT, PARTIAL NULLITY
For every legal relationship between the supplier and the customer, only the italian laws are considered valid.
The Competent Court is the court corresponding to the domicile of the supplier. The supplier is, however, entitled to file complaints in the main domicile of the customer.
If an article of these conditions is to become void or ineffective, wholly or partly, the remaining sections remain unaffected.
The ineffective article is replaced by the corresponding legal regulation.

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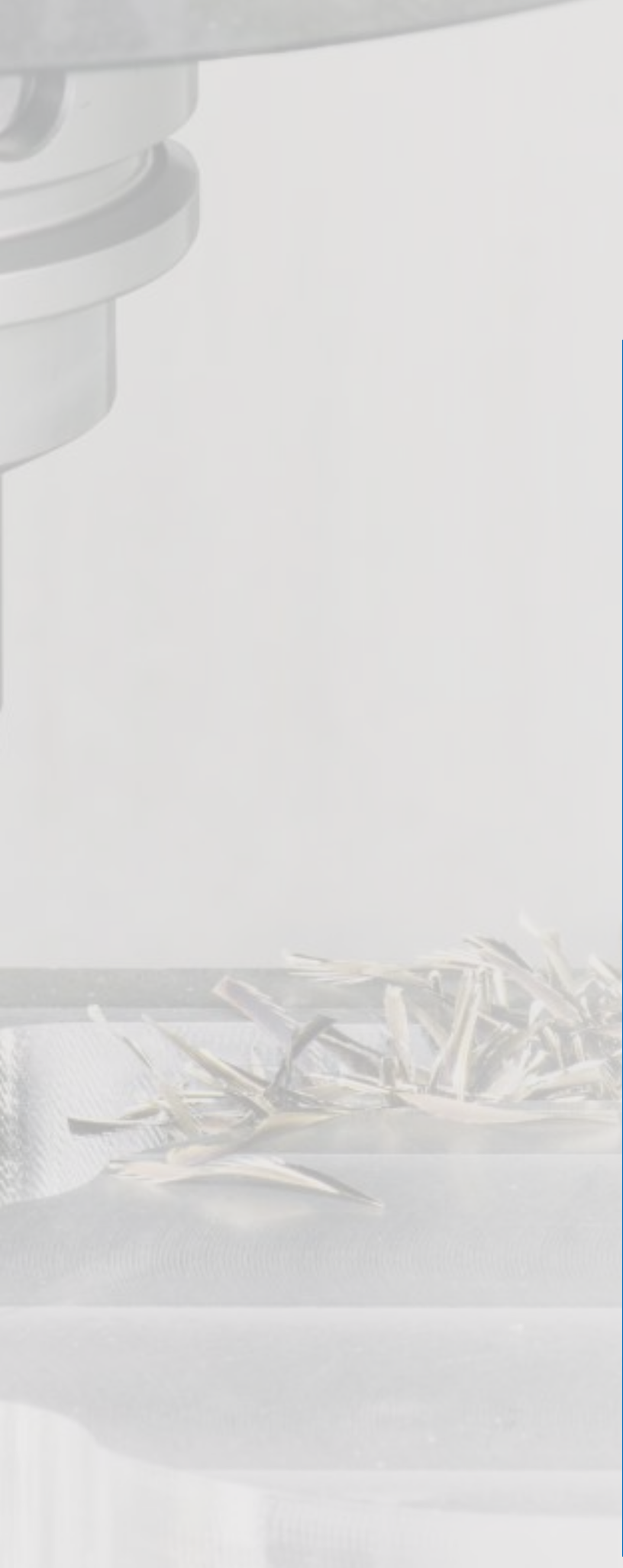

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