



Quick Catalogue

STANDARD MACHINE ELEMENTS WORLDWIDE

elesa[®]

ELESA

Products range

-  **1 | OPERATING ELEMENTS**
Spoked handwheels, solid handwheels, arm handwheels, crank handles
-  **2 | CLAMPING KNOBS**
Lobe knobs, grip knobs
-  **3 | CLAMPING LEVERS**
Adjustable handles, lever handles
-  **4 | LIFT & PULL HANDLES**
Bridge handles, flush pull handles, tubular handles
-  **5 | FIXED & REVOLVING HANDLES**
Fixed handles, revolving handles, fold-away handles
-  **6 | CONTROL ELEMENTS**
Control knobs, control levers
-  **7 | POSITION INDICATORS**
Gravity indicators, positive drive indicators, direct drive indicators, handwheels with indicator
-  **8 | INDEXING AND POSITIONING ELEMENTS**
Indexing plungers, lock pins, spring plungers
-  **9 | MACHINE ELEMENTS**
Grub-screws, thrust pads, ring, washers, locking elements, vibration-damping elements, transfer units, magnets, bull's eye levels, transmission elements
-  **10 | LEVELLING ELEMENTS AND SUPPORTS**
Levelling elements, bearing end caps, connecting clamps, supports and guides
-  **11 | HINGES AND CONNECTIONS**
Plastic hinges, metal hinges, connecting angles
-  **12 | LATCHES**
Latches with knob, snap locks, latches with key, hook clamps, toggle clamps
-  **13 | ACCESSORIES FOR HYDRAULIC SYSTEMS**
Plugs, breather caps, level indicators, flow indicators
-  **14 | CASTORS AND WHEELS**
Injected polyurethane wheels, technopolymer wheels, rubber wheels, Duroplast wheels
-  **15 | CONNECTING CLAMPS**
Connecting clamps for tubes, tubes and accessories, linear actuators and clamp connectors
-  **RH | HANDLES FOR SPECIAL APPLICATIONS**
Handles for instruments and equipment, handles for machines and protections, stainless steel handles, "CLEAN" handles for medical and food processing equipment



ELESA

Technology and Design

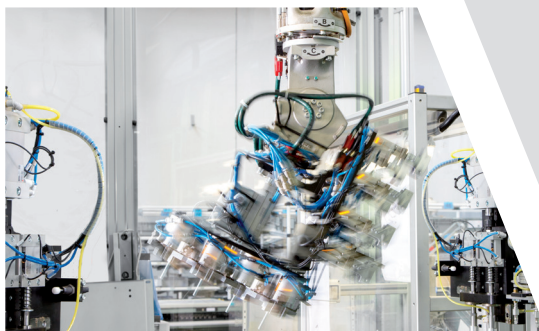


Established in 1941, ELESA is the international reference for standard components destined for the mechanical, machinery and industrial equipment sectors.

An excellent combination of **technology and design** has given rise to a **diverse production** thanks to the constant commitment to follow developments in engineering plastics and metal technology. A corporate culture strongly committed to **product quality** combined with an innate sensitivity for **design and ergonomic research** led to the creation of products unique and recognisable worldwide as ELESA products.

- 180 PATENTS AND REGISTERED DESIGNS
- 39 INDUSTRIAL DESIGN AWARDS
- WORLDWIDE DISTRIBUTION
- 40,000 PRODUCT CODES AVAILABLE ON STOCK
- CUSTOMISED SOLUTIONS
- TECHNICAL COMPETENCE AT THE CUSTOMERS' SERVICE





Design and production activities are concentrated at the headquarters in Monza. An area of over 70,000 square meters - 27,000 covered - tens of millions of pieces are produced every year by utilising the **latest automated production technologies**. In the Logistics Centre over 40,000 product codes are ready to be shipped worldwide.

Quality - Environment - Safety

- Quality Management System certified according to **ISO 9001** by **British Standards Institution (BSI)** since 1993.
- Environmental Management System certified according to **ISO 14001** since 2007.
- Occupational Health and Safety Management System certified according to **BS OHSAS 18001** since 2012.
- **Authorised Economic Operator Full** certified by the European Custom Agency since 2014: recognition of full reliability of customs procedures.



ELESA is associated with:



Italian Association
of Machine Tool Manufacturers



Unione Costruttori Italiani Macchine Automatiche
per il Confezionamento e l'Imballaggio

Italian Packaging Machinery
Manufacturers Association

SOCIOWI
ITALIAN INSTITUTE OF UNIFICATION



ELESA

Focused on the international market

ELESA guarantees the reliability of its products, designed and manufactured in Italy at the headquarters in Monza. Authentically "Made in Italy" which has become popular around the world and particularly appreciated by the most qualified machine manufacturers.



Eleza France S.A.



Eleza (UK) Ltd



Eleza USA Corporation



Eleza Scandinavia AB (SE)

ELESA products are sold in more than 60 countries worldwide through 12 subsidiaries and qualified distributors in the major industrialised countries, ensuring an efficient and timely service. The international distribution network provides all customer services in addition to professional technical advice.



STANDARD MACHINE ELEMENTS WORLDWIDE



ELESA+GANTER is the commercial joint venture between two world leaders in the production of standard industrial components. A brand in over 35 countries with subsidiaries and qualified distributors.



Elesa+Ganter Austria GmbH



Elesa-Ganter Iberica S.L.



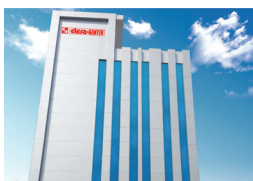
Elesa+Ganter Polska Sp. zo.o.



Elesa+Ganter China Ltd.



Elesa+Ganter CZ s.r.o.



Elesa and Ganter India PVT LTD



Elesa+Ganter Türkiye

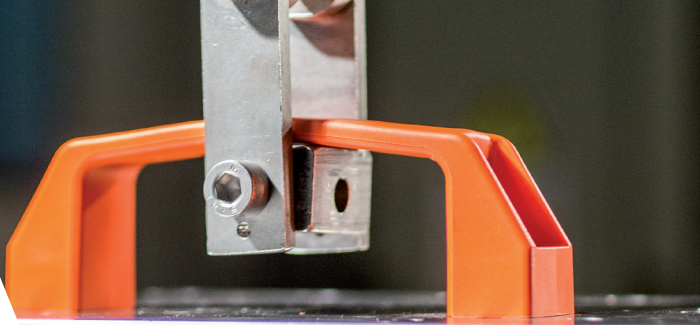


Drabbe
An Elesa+Ganter Company



Elesa has been cooperating for over 45 years with Otto Ganter GmbH & Co. KG (Germany) – a qualified manufacturer of standard elements according to its own GN standards or DIN German standards, which identify the corresponding products – to offer the widest range of components for machinery and industrial equipment.





ELESA

The utmost competence

Research & Development

ELESA continues to invest in R&D and in particular in the innovation of its production technologies with the aim of creating new products or to further improve performance and reliability of existing ones.

Testing laboratory

An internal testing laboratory with the most advanced equipment and measuring instruments, studies the evolution of new technopolymers in order to extend their use in more high performing applications in the field of industrial components. All standard products in the ELESA range are subjected to mechanical, physical, chemical and durability testing in order to provide correct and reliable technical data.

The ELESA laboratory is at the disposal of customers for carrying out tests that simulate specific or particularly heavy conditions of use.

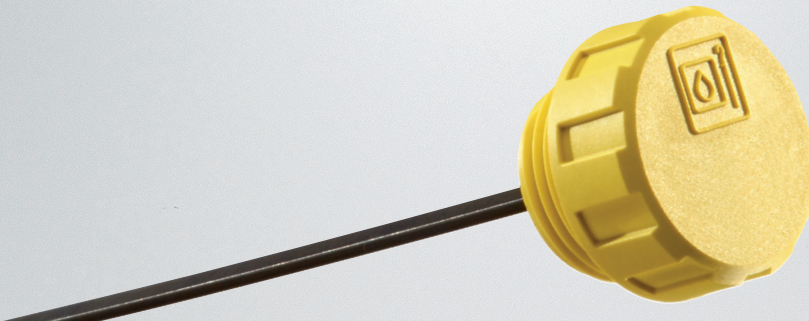
ELESA is associated with:

proplast

PLASTICS INNOVATION POLE

ELESA

Customised solutions



In addition to the widest range of standard machine elements available on the market, ELESA offers customised technical solutions in order to meet the customer's specific needs. Production flexibility, technical know-how, R&D constant activity and customer care allow for quick answers and competitive solutions.

Product customisation

Logos and text by tampoprinting, laser-engraving and moulding.

Special colours

Non standard colour options.

Special materials and shapes

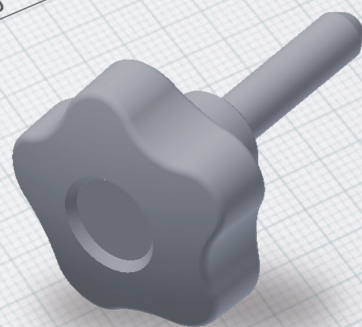
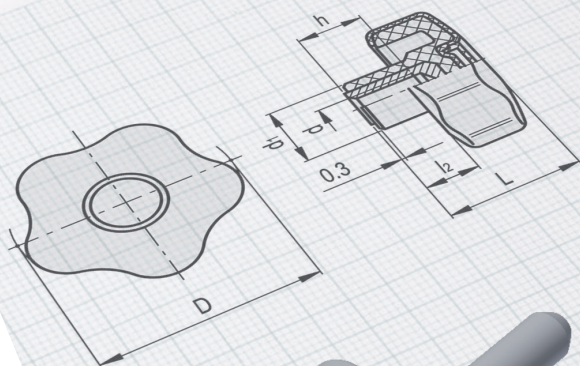
Special technopolymers, stainless steel and metals; special shapes, dimensions and metal inserts.

Surface treatments

Black-oxide coating, zinc-plating, nickel plating, chrome-plating, anodising, epoxy-resin coating.

Machining service

Bosses with hole and keyway in compliance with DIN Standards.



2D and 3D CAD
drawings with
automatic
dimensioning

ELESA

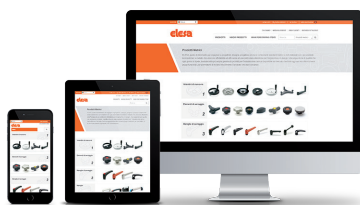
Customer service



166
General
Catalogue



166.1
New Products
Supplement



The catalogues

Always attentive to the designers' needs, ELESa offers a Catalogue and the New Products Supplement in different languages also available on DVD and on elesa.com.

Each product sheet features full technical descriptions, data, drawings and dimension tables allowing the designer to easily identify the correct product code and description when ordering.

www.elesa.com

From your desktop, tablet or smartphone ELESa's website is always updated, fast and easy to navigate. The **MyELESa** area allows website users to create and manage favourites and add to Cart products for quotation requests.

Free download of 2D and 3D CAD drawings with automatic dimensioning for every product code in the most common formats.



Golden Quality Seal
eCATALOGSolutions
powered by cadenas.de

"Golden Quality Seal" Award received from CADENAS GmbH for the high-quality smart 3D engineering data.



3D animations and videos

For deeper information on the technical characteristics of products and their applications. Follow us on YouTube!



ELESa Newsletter

Stay up to date with the latest ELESa news. Keep updated about new products, exhibitions or interesting technical details. Sign up on elesa.com!



Customer care

To answer all technical questions or to provide commercial information, an internal sales staff is constantly in contact with sales engineers in the field.



Road-show

To optimise customers' time, ELESa bring its product range directly to customers' premises. An easy and time-saving way to present the latest new products. ELESa sales engineers are available to customise technical sessions to highlight specific product features.

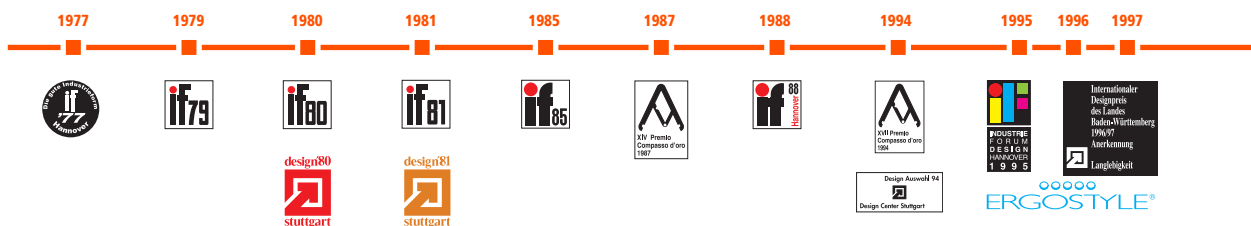


ELESA Design

Since the 50's, ELESA has been actively involved in the cultural revision of machine tool aesthetics, that was taking shape around that time, by innovating the design of accessories and components for the mechanical industry, machinery and industrial equipment. An ongoing commitment to which ELESA has always been loyal over the decades, as proven by the 39 industrial design awards from the most prestigious juries, received over the last 40 years.

“ We design our products to offer perfect *functionality* and the best *ergonomics*, whilst keeping in mind the creation of *unique designs* recognisable the world over as ELESA products, many times we have achieved our goal. ”

The years in which ELESA products have received Industrial Design awards:

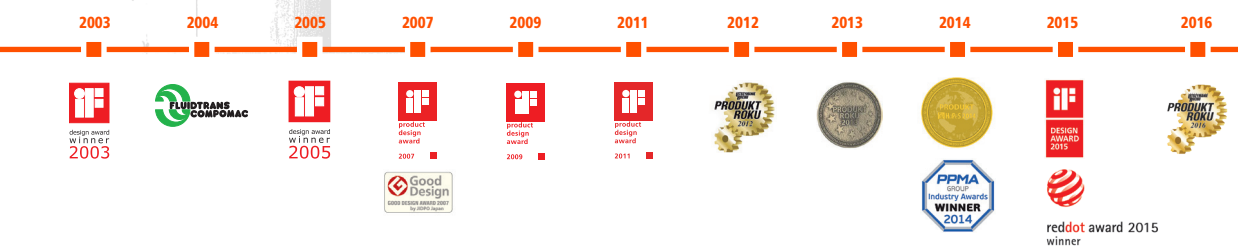




Every single detail be it aesthetic or functional is essential and can significantly improve the perception of a product.



ELESA design helps to enhance the value and quality of your products.



ERGOSTYLE®
by ELESa

ERGOSTYLE®
by ELESa

Ergonomics and Design the service of functionality and security

Ergostyle® elements were initially conceived for a series of new market segment applications including hospital and medical equipment, sports and leisure equipment, scientific instrumentation and office furniture. Nowadays Ergostyle elements are also applied in more traditional industrial sectors whose machines and equipment have undergone a profound aesthetic and design renovation over the last few decades. Elements with soft and elegant shapes with inserts in 7 ELECOLORS allow the components to be better integrated on machinery from an aesthetical point of view. In addition, the coloured inserts can be used to differentiate machinery functions, contributing to enhance their value.



○ ○ ○ ○ ○ ®

FIVE POINTS:
a discreet trademark that distinguishes
all ERGOSTYLE® products

elecolors®



* Trademark application

ELESA SUPER - technopolymer



When the advantages of engineering plastics combine favourably with metal



“SUPER-Technopolymers” - new technopolymers with high mechanical and thermal performance - represent the latest evolution of engineering polymer materials for the industrial sector.

The most technologically advanced industries, such as automotive, aviation and electronics, have long understood the benefits of using these new generation engineering plastics. The possibility to replace metal, commonly called “metal replacement”, in more numerous applications, is now possible with the use of high performance engineering plastics.

In order to have technopolymer products in applications which have been so far a prerogative of the metal products, the design phase needs to be performed with great expertise by optimising shapes and thickness, to benefit from all the typical characteristics of polymeric materials.

ELESA has developed several components made of SUPER-technopolymer able to guarantee the following advantages:

- high mechanical performance
- corrosion resistance
- lightness
- non magnetic
- low coefficient of friction
- maintenance free
- thermal insulation
- coloured material throughout



STAINLESS STEEL, WHITE COLOUR, DIRT-PROOF SURFACES



SAFE, COMFORTABLE AND NON-SLIP GRIP



CHROME-PLATED TECHNOPOLYMER

High Performing Items:
standard components made
of engineering plastics with
innovative features and stainless
steel to meet needs
of specific industries.

ELESA

High performing items



CORROSION RESISTANCE

Components made of technopolymer with AISI 303, 304 or 316 stainless steel inserts or entirely in stainless steel. Excellent corrosion resistance for applications in sectors where provisions of law make it mandatory to use corrosion resistant materials.

- food processing, pharmaceutical and chemical



WHITE COLOUR WITH DIRT-PROOF SURFACES

Smooth surface in white colour RAL 9002 for easy cleaning and AISI 303 or 304 stainless steel inserts. Compact shape and lack of cavities avoid any deposit of dirt, dust or machining residues.

- medical and hospital equipment



SAFE, COMFORTABLE AND NON-SLIP GRIP

The soft-touch surface in thermoplastic elastomer (TPE) provides a secure, comfortable grip even under unfavourable conditions of use, such as in the presence of moisture and grease and improves the comfort for the operator's hand, allowing absorption of any vibrations during operation.

- fitness, rehab and disability aids and equipment
- high precision instruments
- equipment subject to unfavourable climatic conditions



CHROME-PLATED TECHNOPOLYMER

Technopolymer components with chrome-plated surface resistant to acetone, sea water, formic acid, ethyl alcohol, detergents and chlorine solutions.

- equipment for outdoor environments subject to unfavourable climatic conditions
- machines and tools subject to frequent cleaning cycles



SANITATION AGAINST BACTERIAL INFECTIONS



SELF-EXTINGUISHING TECHNOPOLYMER



CONDUCTIVE TECHNOPOLYMER



COMPLIANCE TO ATEX EUROPEAN DIRECTIVE

SANITATION AGAINST BACTERIAL INFECTIONS

The special technopolymer containing antimicrobial additives (mixture of silver ions on an inorganic ceramic base without chemicals, antibiotics or pesticides) prevents the deposit of any unhealthy organisms such as microbes, bacteria, mildew and fungi, preventing their reproduction.

- medical, hospital, rehab and disability aids and equipment
- machines for the food-processing and pharmaceutical industry
- urban and public fittings



SELF-EXTINGUISHING TECHNOPOLYMER

Special technopolymer certified "V0" in accordance with UL-94 V (Underwriters Laboratories) for use in public environments where flame-proof material is required.

- urban and public fittings
- entertainment equipment



CONDUCTIVE TECHNOPOLYMER

The special technopolymer prevents the accumulation of electrostatic charge between bodies with different electric potential. The ESD-C label (Electrostatic Discharge-Conductive), indelibly printed on the surface of the elements, identifies the specific conductive feature according to the standards EN 100015/1 and IEC 61340-5-1.

- assembly lines for electronic components
- "ESD- Protected" area



COMPLIANT WITH ATEX EUROPEAN DIRECTIVE

Components complying with health and safety requirements according to 94/9 /EC ATEX European directive (explosive atmospheres) for equipment in Group II, category 2GD.

- equipment and machines for use in environments subject to explosion risk



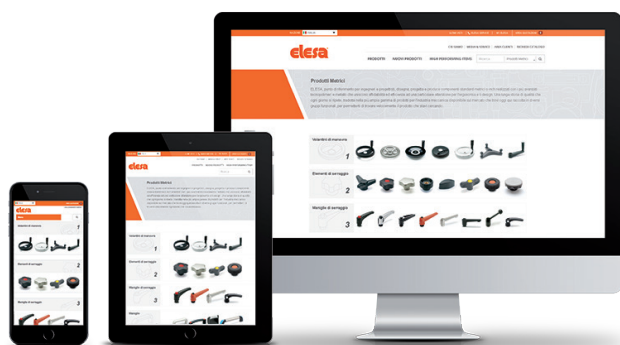
A quick glimpse
into the Elesa
product range

ELESA

Quick Catalogue



The Quick Catalogue presents a significant, albeit narrow selection of the ELESa product range to quickly become familiar with the range of plastic and metal standard components entirely published on elesa.com: where you can find technical data sheets, dimensional drawings and full size tables, always updated. Available also in the paper Catalogue 166 and in the New Products Supplement 166.1. Ask now for your free of charge copy.



elesa.com

Elesa catalogue always updated.
Free download of 2D and 3D CAD drawings
with automatic dimensioning.



166



166.1

**166 Catalogue and 166.1
New Products Supplement**

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1

Operating elements



Ergonomic design, wide range of materials, diameters from 80 mm to 375 mm for all maneuvering operations on machinery and equipment.

VRTP.

Spoked handwheels

Technopolymer



Black-oxide steel boss, H7 reamed hole with anodised aluminium or technopolymer boss cap plate, in Ergostyle colours.
Diameters: 80 - 100 - 125 - 160 - 200 - 250 - 300 - 375 mm

VRTP-P-SST

Spoked handwheels with solid section

Technopolymer



AISI 304 stainless steel boss, with AISI 304 stainless steel boss cap plate.
Technopolymer and plate adhesive certified in compliance with FDA (U.S. Food and Drug Administration).
Diameters: 80 - 100 - 125 - 160 - 200 mm

GN 322 - GN 322.3

Spoked handwheels

Cast aluminium



H7 reamed hole.
Diameters: 125 - 140 - 160 - 200 - 250 mm

GN 924 - GN 924.3 - GN 924.7

Spoked handwheels

Cast aluminium



H7 reamed hole.
Diameters: 125 - 140 - 160 - 200 mm

GN 949

Spoked handwheels

Cast stainless steel



Turned rim. H8 reamed hole.
Diameters: 100 - 125 - 140 - 160 - 200 mm

VR.FP

Spoked handwheels

Duroplast, not drilled hub



Black-oxide steel hub, uncovered front end.
Diameters: 100 - 125 - 140 - 160 - 180 - 200 - 250 - 300 - 375 mm

GN 950.6 - DIN 950

Spoked handwheels

AISI 316L stainless steel or cast iron



H9 or H7 reamed hole.
Also available with keyway.
Diameters: 80 - 100 - 125 - 140 - 160 - 200 - 250 mm

GN 227.2

Spoked handwheels

AISI 304 pressed stainless steel



Welded hub with H9 reamed pass-through hole or H11 square pass-through hole.
Diameters: 160 - 200 - 250 - 315 - 400 mm

ETW.375

Spoked handwheels

Technopolymer



ERGOSTYLE®

Black-oxide steel boss, H7 reamed hole with technopolymer boss cap in Ergostyle colours.
Diameter: 375 mm

EMW.**Monospoke handwheels**
Technopolymer

ERGOSTYLE®

Black-oxide steel boss, H7 reamed hole with technopolymer boss cap in Ergostyle colours.
Diameter: 350 mm

EYK.**Three-arm handwheels**
Technopolymer

ERGOSTYLE®

Black-oxide steel boss, H7 reamed hole with technopolymer boss cap in Ergostyle colours.
Diameters: 275 - 400 mm

ETK.**Three-arm handwheels**
Technopolymer

ERGOSTYLE®

Black-oxide steel boss, H7 reamed hole with technopolymer boss cap in Ergostyle colours.
Diameter: 400 mm

VDS.**Solid handwheels**
Technopolymer

INOX
STAINLESS
STEEL

Black-oxide or stainless steel boss, H7 reamed hole. Light-grey technopolymer boss cap, also available in Ergostyle colours.
Diameters: 80 - 100 - 125 - 150 - 175 - 200 - 250 - 300 mm

VDN.FP**Solid handwheels**
Duroplast

INOX
STAINLESS
STEEL

Black-oxide or stainless steel hub, uncovered front end, not drilled or with H7 reamed hole.
Diameters: 50 - 63 - 80 - 100 - 125 - 140 - 150 - 175 - 200 - 225 - 250 - 300 - 350 mm

VDT.**Solid handwheels**
Technopolymer

Black-oxide steel boss, H7 reamed hole.
Diameters: 100 - 125 - 160 - 200 mm

GN 321**Solid handwheels**
Cast aluminium

H7 reamed hole.
Diameters: 80 - 100 - 125 - 140 - 160 - 200 - 250 mm

GN 923 - GN 923.3 - GN 923.7**Solid handwheels**
Cast aluminium

H7 reamed hole.
Diameters: 80 - 100 - 125 - 140 - 160 - 200 mm

MT.**Crank handles**
Technopolymer

Black-oxide steel boss, H9 square pass-through hole; black-oxide steel hub with H9 blind hole or H7 reamed pass-through hole.
Dimensions: 50 - 64 - 80 - 100 - 130 - 160 - 210 mm

GN 472.3**Crank handles**
Cast aluminium

H7 reamed hole or H11 square pass-through hole.
Dimensions: 80 - 100 - 125 mm

EKH.**Crank handles**
Technopolymer

ERGOSTYLE®

Technopolymer hub cap in Ergostyle colours. Black-oxide steel hub, H7 reamed hole.
Dimensions: 100 - 125 mm

DIN 468 - DIN 469**Crank handles**
Cast iron

H7 reamed hole or H11 square pass-through hole.
Dimensions: 80 - 100 - 125 - 160 - 200 - 250 mm



2

Clamping knobs



Ergonomics, design and quality of materials to offer a more secure grip and maximum comfort for all manual clamping. Colours help to identify and differentiate various functions.

VB.639

Three-arm knobs
Technopolymer



Black-oxide steel boss with plain blind hole; brass or AISI 303 stainless steel boss with threaded blind or pass-through hole; zinc-plated steel threaded stud. Diameters: 45 - 63 - 80 - 100 - 130 - 140 mm

VCT.

Lobe knobs
Technopolymer



Black-oxide steel boss with plain blind hole; brass boss with threaded blind or pass-through hole; zinc-plated steel threaded stud. Cap available in six colours. Also available in self-extinguish technopolymer certified UL-94 V0 (VCT.AE-V0). Diameters: 25 - 32 - 40 - 50 - 63 - 74 - 95 mm

VCT-LP

Lobe knobs
with retaining chain,
technopolymer



Brass boss with threaded pass-through hole; threaded zinc-plated steel stud. Diameters: 25 - 32 - 40 - 50 - 63 mm

VCT.SOFT

Lobe knobs
Soft-touch technopolymer



Brass boss with threaded blind hole or zinc-plated steel threaded stud. Cap available in six colours. Diameters: 43 - 53 - 66 - 77 mm

VCTS-Z

Safety lobe knobs
Technopolymer, push action



Black-oxide steel or AISI 303 stainless steel clamping knobs with toothed element for coupling to zinc alloy insert moulded in the knob. Available with threaded hole or stud. Diameters: 40 - 50 mm

VC.692

Lobe knobs
with solid section
Technopolymer,
easy cleaning



Black or white colour similar to RAL 9002 (VC.692 CLEAN). Brass or AISI 303 stainless steel boss, threaded blind hole; zinc-plated steel or AISI 303 stainless steel threaded stud with or without chamfered end with acetal resin or brass bolt (VC.692-SST-p-P). Diameters: 25 - 32 - 40 - 50 - 60 mm

VTT

Knobs with solid section
Technopolymer, easy cleaning



Black or white colour similar to RAL 9002 (VTT-CLEAN). Brass or AISI 304 stainless steel boss with threaded blind hole; zinc-plated steel or AISI 304 stainless steel threaded stud. Diameters: 25 - 32 - 40 - 50 mm

VMT-SST

Lobe knobs with solid section
AISI 303 or AISI 316L
stainless steel, easy cleaning



Hub with plain blind or threaded hole. Diameters: 40 - 50 - 60 mm

VLS.

Safety lobe knobs
Technopolymer



Brass boss with threaded blind hole or AISI 303 stainless steel threaded stud. Technopolymer security key with stainless steel anti-intrusion profile, available in fold-away or ball key version. Diameters: 42 - 55 mm

VC.192

Lobe knobs
Duroplast, easy cleaning



Black-oxide steel, AISI 303 stainless steel or brass boss with plain or threaded blind hole; zinc-plated or AISI 303 stainless steel threaded stud. Diameters: 25 - 32 - 40 - 50 - 60 - 70 - 85 - 100 mm

VCM. - VCM-SST

Lobe knobs
Aluminium or AISI 304
or AISI 316L stainless steel



Hub with H7 reamed blind hole, threaded hole or pin. Diameters: 40 - 50 - 60 - 70 mm

GN 5335 - GN 5335.4

Lobe knobs
AISI 303 or AISI 316L
stainless steel, easy cleaning



Hub with H7 reamed blind or threaded hole, threaded pin. Diameters: 40 - 50 - 60 mm

ELK.

Knobs with rear lobes
Technopolymer



ERGOSTYLE®

Black-oxide steel boss with H9 reamed blind or H7 reamed pass-through hole; brass boss with threaded blind hole; zinc-plated steel threaded stud.
Cap in Ergostyle colours, ultrasonically welded to the hub body.
Diameters: 45 - 56 - 70 mm

VTR.

Knobs
Technopolymer



Brass boss, square, threaded blind or pass-through hole; zinc-plated steel threaded stud.
Diameters: 32 - 40 - 50 - 60 mm

VTRM-SST

Knobs
Stainless steel,
easy cleaning



INOX
STAINLESS
STEEL

Threaded blind hole.
Diameters: 32 - 40 - 50 - 60 mm

MDA.

Fluted grip knobs
Technopolymer,
assembly with screws



Grey closing cap.
Assembly by means of pass-through hexagonal-head screws or standard lock nuts (not supplied) to be press-fitted inside the knob.
Diameters: 30 - 40 - 50 mm

EWN.

Wing nuts
Technopolymer



INOX
STAINLESS
STEEL

Brass or AISI 303 stainless steel boss, threaded blind or pass-through hole; zinc-plated steel or AISI 303 stainless steel threaded stud with or without chamfered end with acetal resin or brass bolt (EWN.SST-p-P).
Cap in Ergostyle colours.
Diameters: 47 - 55 - 63 - 70 mm

EWNM-SST

Wing nuts
AISI 304 stainless steel



INOX
STAINLESS
STEEL

Threaded blind or pass-through hole, threaded pin.
Diameters: 40 - 48 - 55 mm

ESN.

Single wing nuts
Technopolymer



ERGOSTYLE®

Brass boss, threaded pass-through hole.
Cap in Ergostyle colours.
Dimensions: 55 - 70 mm

CT.476

Wing knobs
Technopolymer



INOX
STAINLESS
STEEL

Brass boss with threaded pass-through or blind hole; zinc-plated steel or AISI 303 stainless steel threaded stud.
Diameters: 20 - 25 - 30 - 40 - 48 - 56 mm

GN 433 - GN 434

Wing knobs
AISI CF-8 stainless steel



INOX
STAINLESS
STEEL

Hub with threaded pin or blind hole.
Diameters: 26 - 34 mm

BT.

Fluted grip knobs
Technopolymer
or conductive technopolymer



INOX
STAINLESS
STEEL

Brass or AISI 303 stainless steel boss with threaded pass-through or blind hole; zinc-plated steel or AISI 303 stainless steel threaded stud.
The conductive technopolymer prevents accumulation of electrostatic charge (BT-ESD).
Diameters: 16 - 20 - 25 - 32 - 40 - 50 mm

B.193

Knurled grip knobs
Duroplast



INOX
STAINLESS
STEEL

Brass or AISI 303 stainless steel boss with threaded pass-through or blind hole.
Zinc-plated steel or AISI 303 stainless steel threaded stud.
Diameters: 15 - 18 - 22 - 25 - 30 - 35 - 40 - 50 mm

BM.193-SST

Knurled grip knobs
AISI 304 stainless steel



INOX
STAINLESS
STEEL

Hub with threaded blind hole or pin.
Diameters: 20 - 24 - 28 mm

DIN 464

Knurled grip knobs
Steel or stainless steel



INOX
STAINLESS
STEEL

Threaded pin.
Diameters: 12 - 16 - 20 - 24 - 30 - 36 mm

MBT.

Diamond cut knurled knobs
Technopolymer



Brass boss with plain or threaded blind hole; zinc-plated steel threaded stud.
Cap in six colours.
Diameters: 30 - 40 - 50 - 60 - 70 mm

MBT.SOFT

Fluted grip knobs
Soft-touch technopolymer



SOFT

Brass boss with threaded blind hole or zinc-plated steel threaded stud.
Diameters: 45 - 55 mm



3

Clamping levers



Adjustable handles and levers in a wide range of materials for repetitive clamping operations where the lever turning angle is limited due to lack of space. Available with push buttons and levers in different colours to identify and differentiate the various functions.

ERX.

Adjustable handles
Technopolymer



ERGOSTYLE®



Push button in Ergostyle colours with glossy finish. Technopolymer element with brass or AISI 303 stainless steel boss, threaded blind hole; zinc-plated or AISI 303 stainless steel threaded stud. Dimensions: 30 - 44 - 63 - 78 - 95 - 108 mm

ERX-CR

Adjustable handles
Technopolymer chrome-plated



ERGOSTYLE®



Technopolymer element with brass boss and threaded blind hole. Dimensions: 44 - 63 - 78 - 95 mm

ERX-AV

Adjustable handles
Quick assembly, technopolymer

ERGOSTYLE®



Adjustable push button for quick screwing during assembly by means of screwdrivers. Clamping element in technopolymer with brass boss and threaded blind hole; zinc-plated steel threaded stud. Dimension: 78 mm

ERS.

Safety adjustable handles
Push action, technopolymer

ERGOSTYLE®



Technopolymer clamping element with black-oxide steel or brass boss with threaded blind hole; black-oxide threaded stud. In case of accidental shocks, the lever turns freely without affecting the clamping action. Dimensions: 44 - 63 mm

MRX.

Adjustable handles
Technopolymer



ERGOSTYLE®



Technopolymer clamping element with brass or AISI 303 stainless steel boss and threaded blind hole; zinc-plated or AISI 303 stainless steel threaded stud. Dimensions: 42 - 63 - 80 - 100 mm

MRT.

Adjustable handles
Technopolymer



ERGOSTYLE®



Technopolymer clamping element with brass or AISI 303 stainless steel boss and threaded blind hole; zinc-plated or AISI 303 stainless steel threaded stud. Technopolymer push button, glossy finish. Dimensions: 42 - 65 - 80 mm

MR.

Adjustable handles
Technopolymer



Technopolymer clamping element with black-oxide or brass boss with plain or threaded blind hole; zinc-plated steel threaded stud. Dimensions: 42 - 63 - 80 - 100 mm

ERZ.

Adjustable handles
Technopolymer, steel clamping element



ERGOSTYLE®



Zinc alloy insert for coupling to the clamping element. Black-oxide steel or AISI 303 stainless steel clamping element, threaded hole or threaded pin. Dimensions: 44 - 63 - 78 - 95 mm

ERM.

Adjustable handles
Zinc alloy, steel clamping element



ERGOSTYLE®



Orange, red, grey or black colour. Black-oxide steel or AISI 303 stainless steel clamping element, threaded hole or threaded pin. Dimensions: 44 - 63 - 78 - 95 mm

GN 300 - GN 300.1 - GN 300.5

Adjustable handles
Zinc alloy or stainless steel



ERGOSTYLE®



Zinc alloy or stainless steel lever. Black-oxide steel or AISI 303 stainless steel clamping element, threaded hole or threaded pin. Dimensions: 30 - 45 - 63 - 78 - 92 - 108 mm

ERW.

Adjustable handles
Flat lever, technopolymer



ERGOSTYLE®



Technopolymer element with brass or AISI 303 stainless steel boss, threaded blind hole; zinc-plated or AISI 303 stainless steel threaded stud. Dimensions: 30 - 44 - 63 - 78 mm

GN 302

Adjustable handles
Zinc alloy, steel clamping element



ERGOSTYLE®



Black-oxide steel clamping element, threaded hole or threaded pin. Dimensions: 30 - 45 - 63 - 78 mm

GN 300.4

Adjustable handles
with torque amplifier,
zinc alloy and steel



Black-oxide steel clamping element,
threaded hole or threaded pin.
Dimensions: 63 - 78 - 92 - 108 mm

GN 6337.3

Adjustable handles
Push action, steel



Black-oxide steel clamping element,
threaded hole or threaded pin.
Duroplast handle.
Dimensions: 70 - 87 - 109 mm

GN 125

Adjustable handles
Steel



Black-oxide steel lever with straight or slightly
inclined arm. Black-oxide steel clamping element,
threaded hole or threaded pin.
Duroplast handle.
Dimensions: 100 - 120 - 130 - 145 mm

GN 212.4

Adjustable handles
Steel



Black-oxide steel clamping element,
threaded hole or threaded pin.
Duroplast handle.
Dimensions: 87 - 102 - 116 - 132 - 148 mm

ERFW.

Flat lever handles
Technopolymer



ERGOSTYLE®

Brass boss with threaded blind hole, cylindrical blind
hole and brass reinforcement with transversal
semi-machined hole for pinning to shaft.
Dimensions: 44 - 63 - 78 mm

ERF.

Lever handles
Technopolymer



ERGOSTYLE®

Brass boss with threaded blind hole or zinc-plated
steel threaded stud; cylindrical blind hole, brass
reinforcement with transversal semi-machined hole for
pinning to shaft; square blind hole,
transversal set screw.
Dimensions: 44 - 63 - 78 - 95 mm

MF.

Lever handles
Technopolymer



Brass boss, threaded blind hole or zinc-plated steel
threaded stud, cylindrical or square blind hole and
brass reinforcement with transversal semi-machined
hole for pinning to shaft.
Dimensions: 42 - 63 - 80 - 100 mm

M.180

Lever handles
Duroplast



Black-oxide steel boss with cylindrical blind hole.
Brass boss with cylindrical blind, threaded blind or
square hole with transversal semi-machined hole for
pinning to shaft.
Dimensions: 79 - 99 - 118 mm

DIN 6337

Lever handles
Steel



Cylindrical or threaded pass-through hole.
Dimensions: 60 - 76 - 95 - 119 - 152 mm

DIN 99

Lever handles
Steel or stainless steel



Plain or threaded pass-through hole.
Dimensions: 50 - 63 - 80 - 100 - 125 - 160 mm

GN 99.7 - GN 99.8

**Clamping nuts
with double lever**
Steel or stainless steel



Threaded pass-through hole.
Dimensions: 50 - 60 - 80 - 100 - 120 mm

GN 150 - GN 150.5

Split hubs
Steel or stainless steel



Cylindrical head screws with black-oxide steel or
AISI 304 stainless steel hexagon socket.
Dimensions: 24 - 28 - 32 mm

LAC.

Cam clamping levers
Technopolymer



SUPER-technopolymer cam sliding base.
Rotating pin with zinc-plated or AISI 303 stainless
steel threaded hole; zinc-plated or AISI 303 stainless
steel threaded stud. LAC.R cam lever with adjustable
knurled ring-nut.
Dimensions: 63 - 79 mm

GN 927

Cam clamping levers
Zinc-alloy



Rotating pin and clamping element with
zinc-plated steel threaded hole or stud.
Zinc-plated steel bushing with contact insert in
technopolymer or fully in technopolymer.
Dimensions: 63 - 82 - 101 mm

GN 927.5

Cam clamping levers
Stainless steel



Rotating pin and clamping element with AISI 303
stainless steel threaded hole or stud. AISI 303 stainless
steel bushing with technopolymer contact insert.
Dimensions: 63 - 82 - 101 mm

4

Lift & Pull handles



Wide range of shapes, types and materials.

The ergonomic design provides a comfortable and secure grip for the operator's hand.

M.843 Bridge handles Technopolymer



Six different colours or white colour similar to RAL 9002 (M.843 CLEAN) with glossy finish for application on medical and hospital equipment and on food processing machines. Brass or AISI 303 stainless steel bosses with threaded holes.
Assembly centre distance: 86 - 117 - 179 - 300 mm

M.643 Bridge handles Technopolymer



Brass bosses with threaded blind holes for back mounting or pass-through holes for cylindrical-head screws with hexagon socket (front mounting) (M.643-FM). M.643 HT in technopolymer with high thermic resistance (max 200° C). Assembly centre distance: 86 - 94 - 117 - 120 - 132 - 150 - 179 - 235 - 300 mm

GN 565 Handles Aluminium or stainless steel



Oval cross section, aluminium with natural, anodised finish or with epoxy resin coating, black colour. AISI 304 stainless steel (GN 565.5). Back mounting with threaded blind holes or front mounting with pass-through holes for cylindrical-head screws. Assembly centre distances: 100 - 112 - 117 - 120 - 128 - 132 - 160 - 164 - 179 - 192 - 196 - 300 - 350 - 400 - 500 mm

EBP. Bridge handles Technopolymer



Boss caps in Ergostyle colours. EBP.SAN in antimicrobial technopolymer. EBP.FLX in technopolymer added with elastomer for mounting on curved surfaces. Pass-through holes for cylindrical-head screws with hexagon socket or brass bosses with threaded blind holes.
Assembly centre distance: 93 - 117 - 132 - 150 - 179 mm

EBR-SW Handle with microswitch Technopolymer



Microswitch with push button with NO and NC change-over contact. One red LED and one green LED indicate the microswitch status. Pass-through holes for cylindrical-head screws with hexagon socket. Suitable for mounting on machine doors or protections.
Assembly centre distance: 132 mm

EBR-PN Handle with pneumatic valve Technopolymer



The handle allows the direct drive of a single-acting pneumatic actuator (execution 3/2) or double acting (execution 5/2). Supplied with quick couplings for direct fitting of a tube (Ø4 mm) for pneumatics. Brass bosses, threaded blind holes.
Assembly centre distance: 132 mm

M.443 Bridge handles Technopolymer



Available in black, orange, grey and red colour. M.443 AE-V0 in self-extinguish technopolymer certified UL-94 V0. M.443-ESD in conductive technopolymer. Pass-through holes for cylindrical-head screws, for countersunk head screws, for hexagonal-head screws or nuts. Assembly centre distances: 94 - 117 - 120÷122 - 132 - 140 - 149÷152 - 150 - 160 - 179 - 235 mm

M.543 Bridge handles Technopolymer



Available in black or orange colour. Brass bosses, threaded blind holes or threaded studs.
Assembly centre distance: 94 - 105 - 117 - 132 - 179 mm

M.943 Bridge handles Technopolymer



Brass bosses with threaded blind holes or blind holes for self-tapping screws. Suitable for applications on a 19" rack and instruments in general.
Assembly centre distance: 88 - 120 mm

MMT. Handles for heat insulation Steel and technopolymer



Threaded blind holes with steel base bosses, chromed matte surface. MMT handles are particularly suitable for application on surfaces subjected to high temperatures.
Assembly centre distance: 120 - 180 mm

GN 425 Handles Steel, stainless steel, aluminium



Round section in chrome-plated, black-oxide, AISI 303 stainless steel or aluminium with anodised finish or with epoxy resin coating. Threaded blind holes. AISI 304 stainless steel GN 425.3, welded mounting. Assembly centre distance: 88 - 100 - 120 - 125 - 160 - 180 - 200 - 235 - 250 - 300 mm

GN 565.2 - GN 565.7 Inclined handles Aluminium or stainless steel



Aluminium with natural, anodised finish or with epoxy resin coating. AISI 304 stainless steel GN 565.7. Back mounting with threaded blind holes or front mounting with pass-through holes for cylindrical-head screws with hexagon socket.
Assembly centre distances: 112 - 128 - 160 mm

MFH - GN 224

Finger handles

Technopolymer



Available in steel (GN 224.1) or stainless steel (GN 224.5).
Blind holes for fitting by means of no. 2 self-tapping screws or threaded holes.
Assembly centre distances: 30 - 40 mm

ESP.

Guard safety handles

Technopolymer



Technopolymer covers in Ergostyle colours. Pass-through holes for cylindrical head screws with hexagon socket, hexagon head screws, countersunk head screws, or lock nuts. The complete closure of the handle represents a safety feature for the operator's fingers.
Assembly centre distance: 94 mm

GN 430 - GN 430.1

Guard safety handles

Aluminium



Mounting with M6 screws.
Particularly suitable for applications on revolving and sliding doors or drawers.
Available with label holder.
Assembly centre distance:
66 - 86 - 106 - 156 - 206 - 256 - 356 - 456 mm

PR-PF

Flush pull handles

for snap-in assembly,
technopolymer



Compact shape. The internal profile of the cavity offers a safe, comfortable and ergonomic grip.
PR-PF-AE-V0 in technopolymer certified self-extinguishing UL-94 V0.
Dimensions: 92 - 137 mm

EPR.

Flush pull handles

for snap-in or screw assembly,
technopolymer



Cover in Ergostyle colours. EPR.: pass-through holes for AISI 304 stainless steel self-tapping screws. EPR-PF: snap-in assembly, grey-black colour or white colour similar to RAL 9002 (EPR-PF-CLEAN) or technopolymer certified self-extinguishing UL-94 V0 (EPR-PF-AE-V0).
Dimensions: 90 - 110 - 120 mm

ERB.

Bi-directional flush pull handles

for snap-in or screw assembly,
technopolymer



ERB.: assembly by means of 4 zinc-plated steel self-tapping screws. ERB-PF: snap-in assembly, grey-black colour or white colour similar to RAL 9002 (ERB-PF-CLEAN) or technopolymer certified self-extinguishing UL-94 V0, grey-black colour (ERB-PF-AE-V0).
Dimensions: 115 - 130 mm

MPE - MPR

Folding handle

with return spring,
technopolymer



AISI 303 stainless steel pin,
AISI 302 stainless steel springs.
Mounting with countersunk screws.
Dimensions: 135 - 141 mm

GN 425.8

Folding handle with recessed tray

Steel or stainless steel



Die-cast zinc alloy tray with epoxy resin coating, black colour.
Mounting with pass-through holes for countersunk head screws.
Dimensions: 150 - 170 mm

GN 426

Tubular handles

Aluminium or stainless steel



Aluminium bar or tube with epoxy resin coating, black colour. GN 426.1 with double curve or AISI 304 stainless steel GN 426.5. Threaded blind holes Ø 20 mm into the bar or aluminium or AISI 303 stainless steel tapped bosses into the tube with Ø ≥ 28 mm.
Assembly centre distance: 200 - 250 - 300 - 400 mm

ETH.

Tubular handles

Technopolymer and aluminium



Aluminium tube with epoxy resin coating, metallflake graphite colour or natural aluminium; technopolymer handle shanks; technopolymer screw covers in Ergostyle colours. Pass-through holes for cylindrical-head screws with hexagon socket, hexagonal-head screws or lock nuts.
Assembly centre distance: 300 - 500 - 700 - 1000 mm

M.1043

Tubular handles

Technopolymer, aluminium,
stainless steel



Aluminium tube with epoxy resin coating, metallflake graphite colour, anodised aluminium or AISI 304 stainless steel. Technopolymer handle shanks and anti-rotation tube end plugs. Pass-through holes for cylindrical-head screws with hexagon socket. Assembly centre distance: 200 - 300 - 350 - 400 - 500 - 600 - 700 mm

M.1066

Tubular handles

Technopolymer, aluminium,
stainless steel



Aluminium tube with epoxy resin coating, metallflake graphite colour, anodised or AISI 304 stainless steel; technopolymer handle shanks. Back mounting with zinc steel screws and threaded holes. Front mounting with cylindrical-head screws, black-oxide nuts and washers. Assembly centre distance: 200 - 250 - 300 - 400 - 500 - 600 mm

GN 333.1

Tubular handles

Zinc alloy and aluminium



Aluminium tube, anodised, natural or with epoxy resin coating. Technopolymer side plugs. Zinc alloy die-cast handle shanks with epoxy resin coating. AISI 304 stainless steel GN 333.5. Threaded blind mounting holes.
Assembly centre distance: 200 - 300 - 400 - 500 mm

M.1053

Offset tubular handles

Technopolymer
and aluminium



Aluminium tube with epoxy resin coating, metallflake graphite colour, anodised aluminium, natural colour. Technopolymer handle shanks. Pass-through holes for cylindrical-head screws, hexagonal-head screws or nuts. M.1053-P tubular handles with movable handle shanks.
Assembly centre distance: 300 - 350 - 400 - 500 - 600 - 700 mm

GN 333.3

Tubular handles with movable handle shanks

Technopolymer and aluminium



Aluminium tube, anodised, natural or with epoxy resin coating. Technopolymer side plugs. Zinc alloy die-cast handle shanks with epoxy resin coating.
Threaded blind mounting holes.
Assembly centre distance: 242 - 392 - 492 - 592 mm



5

Fixed & revolving handles



For use on rods or action levers, on handwheels and crank handles for rotating or maneuvering operations. The special care in the design and ergonomics enables a secure grip and offers maximum comfort to the operator's hand.

L.652

T-Handles
Technopolymer



Black, orange, red colour. Natural aluminium or with black colour, epoxy resin coating (L.652M). Brass boss, plain or threaded blind hole or zinc-plated steel threaded stud.
Dimensions: 40 - 55 - 67 - 80 - 94 mm

L.652-S

Safety T-Handles
Technopolymer, push action



Technopolymer clamping element, brass boss with threaded blind hole or zinc-plated steel threaded stud. In case of accidental shocks, the handle turns freely without affecting the clamping action.
L.652-X adjustable handles with "pull" action.
Dimensions: 67 - 80 mm

EKK.

Knurled grip knobs
Technopolymer



ERGOSTYLE®

Available in Ergostyle colours. Brass boss, threaded blind hole or zinc-plated steel threaded stud.
Dimensions: 16 - 18 - 21 - 25 - 31 mm

GN 676.5

Knobs
Stainless steel



Plain or knurled rim, threaded blind hole.
Dimensions: 21 - 25 - 31 mm

I.150

Mushroom knobs
Duroplast



Threaded blind hole.
Dimensions: 25 - 32 mm

GN 75.5

Knobs
Stainless steel



Threaded blind hole or threaded pin.
Dimensions: 16 - 20 - 25 - 32 - 36 mm

EBK.SOFT

Mushroom lobe handles
Soft-touch technopolymer



ERGOSTYLE®

Brass boss with threaded blind hole or zinc-plated steel threaded stud. Also available with technopolymer centre cap in Ergostyle colours or with transparent technopolymer magnifying lens and labels with marks and symbols.
Dimensions: 43 - 50 mm

EBS+x

Revolving handle
Technopolymer



ERGOSTYLE®

Zinc-plated steel shank, hexagon socket at threaded end. EBS+x SOFT technopolymer coated with "soft-touch" elastomer: improves the grip even in the presence of oils, greases and sweat from the hand.
Dimensions: 45 - 48 mm

IEL.N SOFT

Mushroom handles
Soft-touch technopolymer



Plain blind hole, press-fit assembly by means of the elastic coupling. Also available with transparent technopolymer magnifying lens and labels with marks and symbols (IEL.N-H SOFT).
Dimension: 47 - 65 mm

SH.N

Spherical knobs
Duroplast,
with magnifying lens



Transparent technopolymer magnifying lens for the application of labels with marks and symbols. Technopolymer self-locking boss, plain blind hole, press-fit assembly by means of the elastic coupling.
Dimensions: 35 - 40 - 45 mm

I.622

Tapered handles
Technopolymer



Six different colours. I.622-CLEAN in white colour similar to RAL 9002. I.222 in Duroplast, black colour. Plain or threaded blind hole or technopolymer self-locking boss with plain blind hole, press-fit assembly by means of the elastic coupling.
Dimensions: 25 - 32 - 42 - 55 - 68 - 87 mm

PLX.

Spherical knobs
Duroplast



Threaded blind hole; brass boss with threaded blind hole; slightly cone-shaped plain blind hole, press-fit assembly by means of the elastic coupling.
Dimensions: 12 - 16 - 20 - 25 - 30 - 32 - 35 - 40 - 45 - 50 mm

PLM**Spherical knobs***Steel or stainless steel*

Plain or threaded blind hole.
 Diameters: 16 - 20 - 25 - 32 - 40 - 50 mm

EGH.SOFT**Cylindrical lobe handle***Soft-touch technopolymer***ERGOSTYLE®**

Plain blind hole, press-fit assembly by means of the elastic coupling.
 Dimension: 85 mm

I.280**Cylindrical handles***Duroplast*

Threaded blind hole; zinc-plated steel threaded stud.
 I.580 in technopolymer; blind hole for press-fit assembly by means of the elastic coupling.
 Dimensions: 28 - 40 - 50 - 65 - 80 - 90 - 102 - 115 mm

I.680 SOFT**Cylindrical handles***Soft-touch technopolymer*

These handles improve the grip even in the presence of oils, greases and sweat from the hand.
 Threaded blind hole.
 Dimensions: 65 - 80 - 90 mm

I.780**Cylindrical handles***Technopolymer*

Black or red colour.
 Threaded blind hole.
 Dimensions: 65 - 80 - 90 mm

IF - IFF**Cylindrical handles***with protection, technopolymer*

Brass boss with threaded blind hole or zinc-plated steel threaded stud.
 Dimension: 112 mm

BL.366 - BL.368**Lever arms***Steel and Duroplast*

BL.366 BL.368 matte chrome-plated steel arm.
 BL.666 BL.668 zinc-plated steel arm.
 Handles in Duroplast or technopolymer, black colour.
 Dimensions: from 57 to 203 mm

DIN 39**Shaped handles***Steel or AISI 316L stainless steel*

Threaded pin.
 Dimensions: 16 - 20 - 25 - 32 - 36 mm

I.301+x**Revolving handles***Duroplast*

Zinc-plated steel or 303 stainless steel shank, hexagon socket at threaded end.
 Dimensions: 28 - 40 - 50 - 65 - 80 - 90 - 102 - 116 mm

I.601+x**Revolving handles***Technopolymer*

Zinc-plated steel or 303 stainless steel shank, hexagon socket at threaded end.
 Dimensions: 40 - 50 - 65 - 80 - 90 mm

I.621+x**Revolving handles***Technopolymer*

Zinc-plated steel or 303 stainless steel shank, hexagon socket at threaded end.
 Dimensions: 35 - 45 - 60 - 65 - 73 - 80 - 90 - 101 mm

I.731+x**Revolving handles***Technopolymer*

Zinc-plated steel shank, hexagon socket at threaded end.
 Dimensions: 20 - 23 mm

I.644**Revolving handle***Technopolymer with antimicrobial protection*

Zinc-plated steel shank, hexagon socket at threaded end.
 This handle prevents any deposit of bacteria, mildew and fungi, offering a sanitised effect on the surface.
 Dimension: 90 mm

GN 798**Revolving handles***Aluminium*

Zinc-plated steel shank, hexagon socket at threaded end.
 This handle prevents any deposit of bacteria, mildew and fungi, offering a sanitised effect on the surface.
 Dimensions: 42 - 56 - 59 - 74 - 84 mm

IRS.820**Two volume safety fold-away handles***Technopolymer*

Black-oxide or AISI 303 stainless steel shank, technopolymer base. The special return mechanism "Fold-O-matic" automatically folds the handle into the retracted position.
 Dimensions: 56 - 65 - 80 - 90 mm



GN, DIN, PLM



6

Control elements



For use on precision instruments or to perform adjustment operations.
Available with or without flange, with indexes or graduations.

IZP.

Knurled control knobs Technopolymer



Plain base, triangular index or precision graduation, laser-engraved.
Anodised aluminium self-adhesive front plate.
Plain blind hole, assembly by means of a stainless steel transversal grub screw.
Diameters: 27 - 32 - 35 - 40 mm

IZN.380

Knurled control knobs Technopolymer



Technopolymer boss cap; matte anodised aluminium flange, triangular index or precision graduation, black colour, laser-engraved. Black-oxide steel boss, H7 reamed hole. Assembly by means of keyway or transversal elastic pin or grub screw.
Diameters: 32 - 37 - 42 - 48 - 52 - 58 - 63 - 80 mm

GN 727

Knurled control knobs with adjustable spindle, aluminium



Chrome-plated steel base; knurled or perpendicular anodised aluminium profile knob; technopolymer cap. Holes for assembly screws parallel or perpendicular to the spindle axis. Numbering with 10 or 15 marks on the chrome-plated base and 50 marks on the knob.
Diameters: 27 - 34 mm

GN 723.4

Knurled control knobs Aluminium



Anodised aluminium with plain flange, triangular index or precision graduation, laser-engraved. H8 reamed hole. Assembly by means of a stainless steel transversal grub screw with hexagon socket. GN 723.3 flanges are available to optimise use of GN 723.4 knurled knobs.
Diameters: 27 - 34 - 42 mm

GN 726 - GN 726.1

Knurled control knobs Aluminium



With or without plain base, triangular index or precision graduation; technopolymer cap, plain surface or with black index.
H8 reamed hole. Assembly by means of a stainless steel transversal grub screw with hexagon socket.
Diameters: 22 - 27 - 34 - 42 mm

GN 436 - GN 436.1

Slotted control knobs Stainless steel AISI 304



With or without plain base, triangular index or precision graduation.
H8 reamed hole. Assembly by means of a stainless steel transversal grub screw with hexagon socket.
Diameters: 24 - 28 mm



GN 700

Locking and continuous control indexing mechanism Aluminium and steel



Knurled knob and ring. Black-oxide steel base; ground and hardened steel locking mechanism. Steel boss, H7 reamed hole and keyway; assembly to the spindle by means of keyway or transversal pin. Suitable for adjusting control machine spindles in clockwise and anti-clockwise rotation and to keep the spindle in the preferred position. Diameter: 66 mm

GN 200

Indexing mechanism with stop and positioning device Steel or stainless steel



With or without zinc-plated steel lever arm and Duroplast handle. Boss, H7 reamed hole and keyway; assembly to the spindle by means of keyway or transversal pin. The internal mechanism allows small rotational movements (6° or multiples) and the positioning of machine parts.
Diameters: 44 - 52 mm

MBT+I

Diamond cut knurled control knobs with revolving handle, technopolymer



Cap available in six different colours.
Brass boss, plain blind hole, assembly by means of a transversal grub screw.
Diameters: 40 - 50 - 60 - 70 - 85 - 100 mm

EGK.SOFT

Grip knobs arranged for clicking operation



"Soft-touch" technopolymer.
Technopolymer closing cap in the Ergostyle colours. Black-oxide steel boss, H7 reamed hole.
Assembly by means of a keyway, a transversal pin or a set screw.
Diameters: 50 - 63 mm

LBR.

Control levers arranged for clicking operation, technopolymer



Technopolymer lever body; chromed-plated steel lever arm, Duroplast cylindrical handle; anodised aluminium self-adhesive front plate.
Plain hole with flat face or black-oxide steel boss, H7 reamed hole.
Dimensions: 81 - 108 - 127 - 170 mm

ELC.

Control levers arranged for clicking operation, technopolymer



Technopolymer boss cap in the Ergostyle colours. Black-oxide or stainless steel boss, H7 reamed hole.
Dimensions: 67 - 85 - 110 - 140 mm



Position indicators



To provide in a numerical measurement the position reached in the regulation of a wide range of variables such as strokes, flows, capacities and for the setting of speed variators, with reading accuracy and reliability.

GA01 - GA02 - GA05

Position indicators
Gravity drive

PA01 - PA02 - PA05

Position indicators
Positive drive



Zinc-plated steel case; AISI 303 stainless steel bezel; glass window; anodised natural aluminium dial; clockwise or anti-clockwise graduation. Wide range of available ratios.

GA11 - GA12

Position indicators
Gravity drive

PA11 - PA12

Position indicators
Positive drive



Technopolymer case and bezel; transparent technopolymer window ultrasonically welded to the case (IP67 for GA or IP65 for PA protection class, according to IEC 529); anodised aluminium dial; clockwise or anti-clockwise graduation. Wide range of available ratios.

MBT-GA

Knobs with integral indicator
Gravity drive



Technopolymer knob and bezel; transparent technopolymer window ultrasonically welded to the case (IP 67 protection class, according to IEC 529); anodised aluminium dial; clockwise or anti-clockwise graduation. Black-oxide steel boss, H7 reamed blind hole. Wide range of available ratios.

GW12

Digital-analogue position indicators
Gravity drive

PW12

Digital-analogue position indicators
Positive drive



Technopolymer case and bezel; transparent technopolymer window ultrasonically welded to the case (IP67 for GW or IP65 for PW protection class, according to IEC 529); anodised aluminium dial. Five-digits roller counter. Wide range of available readings.

MBT-GW

Knobs with digital-analogue position indicator
Gravity drive



Technopolymer knob and bezel; transparent technopolymer window ultrasonically welded to the case (IP 67 protection class, according to IEC 529); anodised aluminium dial. Black-oxide steel boss, H7 reamed blind hole. Wide range of available readings.

Lobe knobs

for position indicators
Technopolymer or aluminium



Black-oxide or AISI 303 stainless steel boss, H7 reamed hole. Diameters: 60 - 70 - 80 - 85 - 100 - 110 - 120 - 160 - 200 - 250 mm

DD50 - DD51 - DD52R

Digital position indicators
direct drive



Technopolymer case and base; transparent window; 3, 4 or 5 digit roller counter. Black-oxide or AISI 303 stainless steel boss fitted to the shaft with a grub screw. Orange, grey or anthracite colour. DD50 - boss Ø 10H7, DD51 - boss Ø 14H7, DD52R - boss Ø 20H7. Wide range of available readings.

DD51-E - DD52R-E

Electronic position indicators
direct drive,
5 or 6-digit display,
technopolymer



Orange or grey colour. LCD display with values visualization in units of measure (mm, inches or degrees). Absolute or incremental mode, reading orientation. The visualization parameters can be set by the operator. Protection class IP67 according to IEC 529. DD51-E - boss Ø 14H7, DD52R-E - boss Ø 20H7.

MPI-15

Magnetic measuring system
Length and angle modes



Multifunction LCD with 5 function keys. Absolute / incremental mode. External battery power supply 1.5 VDC. Material of the magnetic sensor envelope: anodised aluminium.

TYPE OF READING

Analogue: the reading is displayed by two rotating pointers over a graduated dial.

Digital-analogue: the reading is directly displayed by a roller counter and by a rotating pointer over a graduated dial.

Digital: the reading is directly displayed by a roller counter.

LCD Digital: the reading is directly displayed by a digital electronic display

TYPE OF FUNCTIONING

Gravity movement: it is used when the handwheel spindle is either horizontal or max 60° inclined. The rotation of the handwheel with the indicator makes the pointers move while the dial, appropriately counterbalanced, is kept still by the gravity force.

Positive drive movement: it is used on control spindles in any position. The rotation of the handwheel with the indicator makes the pointers move while the dial is kept still by an anchor pin fitted to the machine.

Direct drive movement: in is used on control spindles in any position, the indicator is directly assembled onto the control spindle and is kept in position by means of a referring back pin.



8

Indexing and positioning elements



Standard elements to make repetitive operations easier in positioning parts on machinery and equipment. High quality and variety of production materials (black-oxide steel, zinc-plated steel, stainless steel and SUPER-technopolymer). Wide range of shapes, sizes and executions.

PMT.100 - PMT.101

Indexing plungers
SUPER-technopolymer body



With or without rest position.
Black-oxide hardened steel or AISI 303 stainless steel plunger.
Technopolymer knob, black or red colour.
Plunger Ø: 5 - 6 - 8 - 10 mm

GN 617 - GN 617.1

Indexing plungers
Steel or stainless steel



With or without rest position. Black-oxide steel plunger with hardened or nickel-plated AISI 303 stainless steel end. With or without technopolymer or AISI 303 stainless steel knob. Standard executions: with or without knob and locking nut.
Plunger Ø: 5 - 6 - 8 - 10 mm

PMT.110

Indexing plungers
SUPER-technopolymer body



Black-oxide hardened steel or AISI 303 stainless steel plunger.
Technopolymer knob.
Standard executions: with or without locking nut.
Plunger Ø: 8 - 10 mm

GN 514

Indexing plungers with locking device
Steel



Nitrided steel plunger.
Technopolymer control button (PUSH-PUSH locking device).
Standard executions: with or without locking nut.
Plunger Ø: 6 - 8 mm

GN 414 - GN 414.1

Indexing plungers
with safety device,
steel or stainless steel



Black-oxide hardened steel or AISI 303 stainless steel plunger.
Technopolymer knob with red push button for the plunger lock/unlock.
Standard executions: with or without locking nut.
Plunger Ø: 6 - 8 - 10 mm

GN 7336.8

Indexing plungers
with safety clamping knob
Steel



Nitrided and black-oxide steel plunger.
Technopolymer knob and closing cover, grey colour.
These plungers are suitable when it is necessary to position, lock and make secure machine elements simultaneously.
Plunger Ø: 6 - 8 mm

GN 717 - GN 717-C

Indexing plungers
Steel or stainless steel



With or without rest position.
AISI 303 stainless steel plunger.
Technopolymer knob or stainless steel ring.
Standard executions: with or without locking nut.
Plunger Ø: 3 - 4 - 5 - 6 - 8 mm

GN 413

Indexing plungers
Steel or stainless steel



With or without rest position.
AISI 303 stainless steel plunger.
AISI 301 stainless steel ring.
Standard executions: with or without locking nut.
Plunger Ø: 5 - 6 - 8 - 10 mm

GN 607 - GN 607.1

Indexing plungers
Steel or stainless steel



Black-oxide steel plunger with hardened or nickel-plated AISI 303 stainless steel end; black-oxide steel or stainless steel locking nut. Technopolymer knob.
Standard executions: with or without locking nut.
Plunger Ø: 6 - 8 mm

GN 822

Mini indexing plungers
Steel or stainless steel



With or without rest position.
Technopolymer knob.
Suitable for assembly on thin sheets thanks to their very small dimensions.
Plunger Ø: 4 - 5 - 6 - 7 mm

GN 822.7

Mini indexing plungers
Stainless steel



With or without rest position.
Technopolymer knob.
Suitable for assembly on thin sheets thanks to their very small dimensions.
Plunger Ø: 4 - 5 - 6 - 7 - 8 - 10 mm

GN 608

Indexing plungers with flange
Zinc-alloy



Two mounting holes; black-oxide steel plunger with hardened end. Technopolymer knob.
Also available with rest position (GN 608.1).
Suitable for assembly on thin sheets thanks to their very small dimensions.
Plunger Ø: 6 - 8 mm

GN 817.3**Indexing plungers**
with flange, steel

Two mounting holes; ground black-oxide steel plunger with hardened end. Technopolymer knob.
Also available with rest position (GN 817.3-C).
Suitable for highly precise positioning.
Plunger Ø: 8 - 10 mm

GN 612**Lever indexing plungers**
Steel or stainless steel

Rest position. Turned and nitrided steel or turned and nickel-plated AISI 303 stainless steel plunger.
Black-oxide steel or stainless steel lever with or without technopolymer cover. Black-oxide steel or stainless steel locking nut. Standard executions: with or without locking nut. Plunger Ø: 4 - 5 - 6 - 8 - 10 mm

PMT.200**Lever indexing plungers**
SUPER-technopolymer body

Rest position. Black-oxide hardened steel or AISI 303 stainless steel plunger.
Self-lubricating technopolymer lever.
Standard executions: with or without locking nut.
Plunger Ø: 6 - 8 mm

GN 417**Indexing plungers**
Zinc-alloy

AISI 303 stainless steel plunger.
Stainless steel ring.
GN 417-C with rest position and technopolymer knob.
Plunger Ø: 4 - 5 - 6 - 8 - 10 mm

GN 113.6**Ball lock pins**
Stainless steel

Stainless steel balls; technopolymer knob, red or black colour with holes for retaining ring.
By pressing the push button the two balls are freed and the pin can be pulled-out or inserted.
Pin Ø: 5 - 6 - 8 - 10 - 12 - 16 mm

GN 114.2**Lock pins**
Steel

AISI 304 stainless steel pawls; technopolymer knob, with holes for retaining ring; technopolymer push button, red colour.
By pressing the push button the two pawls are freed and the pin can be pulled-out or inserted.
Pin Ø: 6 - 8 - 10 - 12 mm

GN 214.2 - GN 214.3**Lock pins***Steel or stainless steel*

AISI 304 stainless steel pawls.
AISI 301 stainless steel ring.
Technopolymer push button, red colour.
By pressing the push button the two pawls are freed and the pin can be pulled-out or inserted.
Pin Ø: 6 - 8 - 10 - 12 - 16 mm

GN 111**Ball chains***Brass and stainless steel*

Mainly used together with the different types of lock pins.
The ball chain feature is flexibility.

GN 513**Threaded spring elements***Steel*

Black-oxide and case-hardened steel end.
Standard executions: semispherical or prismatic end, with plunger or female thread.
Threadings: M12x1.5 - M16x1.5 - M20x1.5

GN 615**Ball spring plungers***Steel or stainless steel*

Hardened steel or hardened stainless steel ball.
Threadings: M3 - M4 - M5 - M6 - M8 - M10 - M12 - M16 - M20 - M24

GN 615.2**Ball spring plungers***Technopolymer*

Hardened stainless steel or technopolymer ball.
Threadings: M6 - M8 - M10

GN 615.7**Threaded ball spring plungers***with switch, steel*

Standard executions with normally closed or open contacts.
Threadings: M6 - M8 - M10

GN 614**Ball spring plungers***Technopolymer or stainless steel*

Hardened stainless steel or technopolymer ball.
Diameters: 3 - 4 - 5 - 6 - 8 - 10 - 12 mm

GN 614.5**Ball spring plungers***Smooth body, technopolymer*

Hardened stainless steel or technopolymer ball.
Diameters: 4 - 5 - 6 - 8 - 10 mm

GN 715**Side thrust spring pins***Aluminium and steel*

Zinc-plated hardened steel oscillating pin.
Practical and versatile elements for positioning and mounting items to be processed.
Pin Ø: 3 - 5 - 6 - 8 - 10



9

Machine elements



A wide range of standard elements for applications on industrial equipment and machines. Quality materials and high precision in production offer high reliability.

GN 6311.1

Thrust pads with elastic ring
Steel



With or without technopolymer protection. Elastic ring: steel spring wire. These thrust pads are used to transmit clamping forces by means of DIN 6332 grub screws, hexagon socket head. Grub screw/thrust pad coupling by means of a retaining ring.

Diameters: 16 - 20 - 25 - 32 mm

GN 632.1 - GN 632.5

Grub screws
spherical end, steel



Hexagon socket head. These grub screws can be used to realise different locking systems. Levers, knobs or handles can be fitted to the threaded end by means of pins. Threadings: M6 - M8 - M10 - M12

GN 346

Thrust pads
ball joint and threaded hole, steel



These thrust pads are used to transmit clamping forces. They can be adapted on irregular or non-parallel surfaces and allow locking without transmitting the rotation to the surface to be locked.

Diameters: 16 - 20 - 24 - 30 mm

DIN 444 - DIN 444-NI

Eye screws
Steel or stainless steel



These screws are used mainly for coupling up moulds, connections, equipment, etc. Threadings: M5 - M6 - M8 - M10 - M12 - M16 - M20

DIN 6319 - DIN 6319-NI

Concave and convex washers
Steel, AISI 303 or AISI 316 stainless steel



These washers are used mainly for locking mechanical parts on non-parallel surfaces. External diameters: 12 - 17 - 21 - 24 - 28 - 30 - 36 - 44 - 56 - 68 - 78 - 92 mm

GN 184 - GN 184.5

Washers for screws
Steel or stainless steel



These washers are used on shafts to fit handwheels with an axial keyway. Diameters: 16 - 20 - 22 - 25 - 28 - 32 - 36 - 40 - 45 - 52 mm

DIN 508

T-Nuts
Steel or stainless steel



Groove width DIN 650: 5 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24 - 28 mm

GN 506

T-Nuts
with guide and no-slip device



Zinc-plated steel, stainless steel ball and spring. The device provided with a ball and spring, located inside the dowel, allows it to slide in aluminium sections avoiding accidental vertical slipping. Groove width: 5 - 6 - 8 mm

GN 505.4 - GN 505.5

T-Nuts
quick-insert, steel or stainless steel



These T-Nuts are suitable for quick insert in aluminium sections. A simple rotation clockwise by 90° assures the anchoring. Groove width: 8 to 10 mm

GN 918 - GN 918.5

Cam locking levers
Steel



Duroplast handle. Nitrided and black-oxide steel or hardened and nickel-plated steel screw. Eccentric or helical with "pull" or "push" cam, in case-hardened and black-oxide steel or nickel-plated AISI 303 stainless steel (GN 918.5). The system is self-locking at any angular positioning. Cam diameter: 50 mm

RDB

Toothed clamping elements
SUPER-technopolymer



The toothed elements are used to secure coupled parts at a given angle. With or without built-in case. ML-RDB: AISI 301 stainless steel push springs facilitating the detachment of the clamping elements. Diameters: 32 to 40 mm

GN 187.4 - GN 187.4-NI

Toothed clamping elements
Steel or AISI 316 LHC stainless steel



The toothed elements are used to secure coupled parts at a given angle. Designed to be combined with GN 187.1 cases and GN 187.2 push spring. Diameters: 22 - 27 - 32 - 40 mm

ANPS

Dismountable split set collars

Clamping assembly, technopolymer



Cylindrical head screws with hexagon socket and AISI 316 stainless steel nuts. Suitable for assembly on idle shafts as end stops, for fixing end limit switches, pulleys, supporting pins or other components. Internal diameters: from 12 to 40 mm

GN 707.2

Dismountable split set collars

clamping assembly, steel, stainless steel or aluminium



Phosphatised black-oxide steel or AISI 304 stainless steel grub screws; cylindrical head with hexagon socket. These split set collars can be used not only as end stops, but also for fixing other components, such as end limit switches. Internal diameters: from 6 to 40 mm

DIN 580

Lifting eyebolts

AISI 304 stainless steel or AISI 316



Threadings: M8 - M10 - M12 - M16 - M20 - M24

GN 1130

Lifting lock pins

Steel or stainless steel



Stainless steel balls and spring. Diameters: 8 - 10 - 12 - 16 - 20 mm

DIN 172 - DIN 179

Guide bushings

Steel



Diameters: from 2 to 30 mm

ELEROLL roller tracks

Technopolymer and polyurethane



They can be used to create sliding benches, suitable for several applications: feeding and discharging benches, in construction machinery, storage and picking systems, packaging machinery. Technopolymer roller elements with high load capacity. Antitrace thermoplastic polyurethane roller elements. Ball elements for the omnidirectional handling.

DVA.1 - DVA.2 - DVA.3

Vibration-damping elements

Rubber and steel or AISI 304 stainless steel



Threaded studs or bosses with threaded blind hole in different combinations. Natural rubber NR vibration-damping body, hardness 40, 55, 70 ± 5 Shore A. Diameters: 8 - 10 - 15 - 20 - 25 - 30 - 40 - 50 - 60 - 70 - 75 - 100 - 125 mm

DVB.6 - DVB.7

Vibration-damping elements

Rubber and steel or AISI 304 stainless steel



Threaded studs or bosses with threaded blind hole. Natural rubber NR vibration-damping body, hardness 40, 55, 70 ± 5 Shore A. Diameters: 20 - 25 - 32 - 38 - 43 - 50 - 60 mm

DVC.1 - DVC.2 - DVC.3

Vibration-damping elements

Rubber and steel or AISI 304 stainless steel



Threaded studs or bosses with threaded blind hole in different combinations. Natural rubber NR vibration-damping body, hardness 40, 55, 70 ± 5 Shore A. Diameters: 10 - 15 - 20 - 25 - 30 - 35 - 40 - 50 - 60 - 70 - 75 - 95 mm

Flat retaining magnets



Housing in zinc-plated steel (RMA, RMB, RMC), lacquered steel (RME), technopolymer (RMT) or stainless steel (RMC). Pass-through hole, threaded stud or hook-shaped. Magnet in hard ferrite, (SmCo) samarium cobalt, (NdFeB) neodymium-iron-boron or (AlNiCo) aluminium-nickel-cobalt, shielded with high performances. $\varnothing D = 6$ to 125 L = 4.5 to 26

Flat retaining magnets with no-slip coating



Zinc-plated steel threaded insert with pass-through hole, male and female threads, knob or ring. (NdFeB) Neodymium-iron-boron magnet. The elastomer surface increases the friction coefficient. These magnets are suitable for use on sensitive surfaces. $\varnothing D = 12$ to 88 L = 6 to 8.5

Cylindric retaining magnets



Housing in natural steel (RML), zinc-plated steel (RML, RMN), red colour lacquered steel (RMP) or brass (RMM), with or without smooth or threaded stud. (AlNiCo) Aluminium-nickel-cobalt magnet, shielded with high performances and moderate overall dimensions. $\varnothing D = 4$ to 63 L = 10 to 65

Unshielded flat retaining magnets



(SmCo) Samarium cobalt, (NdFeB) neodymium-iron-boron magnet, working temperatures from 80°C to 200°C. Dimensions: 4 to 56

BEL-PM

Bull's eye levels

for mounting in suitable housings



Anodised aluminium body, natural or black colour. With smooth reference surface or threaded stud. They are used to control the horizontal positioning of machines, devices, equipment and instruments.

BEL-MS

Monodirectional screw-on levels

for screw mounting



Brass body with epoxy resin coating, grey or black colour. Execution with top view, top and side view, top and both side view. They are used to control the horizontal positioning of machines, devices, equipment and instruments.



10

Levelling elements and supports



Components for assembly on machinery, machine guards and equipment built with profile systems and for the building up of production lines. Shapes, sizes and combinations of different materials allow their application in several industrial sectors.

LX

Levelling elements

Technopolymer base, steel or AISI 304 stainless steel stem



Base with adjusting hexagon or screwdriver slot.
Bases Ø: 25 - 30 - 40 - 50 - 60 mm
Threadings: M6 - M8 - M10 - M12 - M16

LS.A

Levelling elements

Technopolymer base, steel or AISI 304 stainless steel stem



Base with or without NBR rubber no-slip disk.
On request zinc-plated steel or AISI 304 stainless steel nut.
Bases Ø: 25 - 32 - 40 - 50 mm
Threadings: M8 - M10 - M12 - M14 - M16

LV.A

Levelling elements

Technopolymer base, steel or AISI 304 stainless steel stem



Base with or without NBR rubber no-slip disk. On request zinc-plated steel or AISI 304 stainless steel nut. LV.A-ESD-C conductive technopolymer that prevents the accumulation of electrostatic charge. Bases Ø: 60 - 70 - 80 - 100 - 125 mm Threadings: M8 - M10 - M12 - M14 - M16 - M20 - M24

LV.F

Levelling elements for ground mounting

Technopolymer base, steel or AISI 304 stainless steel stem



Base with or without NBR rubber no-slip disk.
On request zinc-plated steel or AISI 304 stainless steel nut. Ground mounting by means of two holes at 180° supplied covered by a diaphragm.
Bases Ø: 80 - 100 - 125 mm
Threadings: M8 - M10 - M12 - M14 - M16 - M20 - M24

SMQ-SST

Stems for levelling elements

AISI 304 stainless steel



Spheric articulated stems with adjusting square.
Threadings: M8 - M10 - M12 - M16 - M20 - M24

LM.

Levelling elements

Steel or stainless steel base and stem



Ball joint with threaded hole or stem.
LM.AC with technopolymer antistatic bearing protection. LM.TR with NBR rubber no-slip coating. Zinc-plated steel or AISI 304 stainless steel nut.
Bases Ø: 25 - 32 - 40 - 50 - 60 mm
Threadings: M8 - M10 - M12 - M16 - M20 - M24

LM.SV

Vibration-damping levelling elements

Steel base and stem



Ball joint with threaded hole or stem.
PUR elastomer damping element, glued into the base housing. Zinc-plated steel nut.
Bases Ø: 32 - 40 - 50 - 60 mm
Threadings: M10 - M12 - M16

LMR.

Levelling elements

Steel or stainless steel base and stem



Ball joint with threaded hole or stem. NBR rubber no-slip disk. Threaded stem with hexagon socket head at the upper end and spanner flats at the lower end. Zinc-plated steel or AISI 304 stainless steel nut.
Bases Ø: 50 - 60 - 80 - 100 - 120 mm
Threadings: M8 - M10 - M12 - M16 - M20 - M24

LMRS.

Levelling elements

Stainless steel base and stem



NBR rubber no-slip disk, vulcanised to the base. AISI 303 stainless steel stem and adjustable sleeve. Stainless steel assembly screw, glued to the stem base.
Bases Ø: 60 - 80 - 100 mm
Threadings: M16 - M20 - M24

LMR.F

Levelling elements for ground mounting

Steel or stainless steel base and stem



Zinc-plated steel or AISI 304 stainless steel anchoring bracket. NBR rubber no-slip disk. Threaded stem with hexagon socket and spanner flats at the base.
Bases Ø: 50 - 60 - 80 - 100 mm
Threadings: M8 - M10 - M12 - M16 - M20 - M24

LMY

Levelling elements

Stainless steel base and stem



Ball joint with threaded hole or stem. Base with or without NBR rubber no-slip disk. Screw with adjusting hexagon, hexagon socket and thread flats, hexagon upper end or adjustable sleeve for the protection. AISI 304 stainless steel nut. Bases Ø: 80 - 100 - 120 mm
Threadings: M8 - M10 - M12 - M16 - M20

LMP

Levelling elements

Steel or stainless steel base and stem



Ball joint with threaded hole or stem. LMP.TR with thermoplastic elastomer (TPE) no-slip coating. LMP.TV with vulcanised rubber (NBR) no-slip coating. Zinc-plated or AISI 304 stainless steel nut. Bases Ø: 40 - 50 - 60 - 80 mm
Threadings: M8 - M10 - M12 - M16 - M20 - M24

LWA

Vibration-damping levelling elements

Steel base and stem



NR rubber damping element. Vibration-damping levelling elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines. Bases Ø: 80 - 120 - 160 - 200 mm
Threadings: M12 - M16 - M20

NDX.Q - MDX.T

Square end-caps for tubes

Technopolymer



Brass boss, threaded pass-through hole. Also available execution for heavy loads with nickel-plated brass boss, threaded pass-through hole (ND.Q).
Threadings: M8 - M10 - M12 - M14 - M16 - M20 - M24

STC

Square tube connectors

Technopolymer and steel or stainless steel



Black or grey colour. Monodimensional two-way, bidimensional two, three or four-way, tridimensional three, four, five or six-way connector.
With or without zinc-plated or stainless steel reinforcement.
For structures composed of square profiles.

MSX.

Connecting clamps

Technopolymer



Fitting by means of a stainless steel M5 cylindrical-head screw with hexagon socket and nut.
The profile of the holes is designed to fit both tubes with round and square cross section; the latter prevents the elements from rotating.

MSR.

Connecting clamps

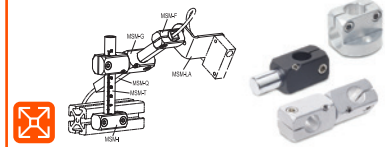
Technopolymer and aluminium



Base with screw covers in six colours.
Clamping by means of cylindrical head screws with hexagon socket.
Alluminium profile connecting tubes with standard lengths from 100 to 2000 mm.

Connecting clamps

Aluminium



Black or natural colour.
Clamping by means of cylindrical head screws with AISI 304 stainless steel hexagon socket.
The profile of the holes is designed to fit both tubes with round and square cross section; the latter prevents the elements from rotating.

MSM-T - MSM-Q

Connecting tubes

Round or square



MSM-T: AISI 304 stainless steel.
Bar for Ø = 8 and 10 mm;
tube for Ø = 12, 16 and 20 mm
MSM-Q: anodised aluminium square tubes, with or without precision graduations (mm).
Sections: 10 - 12 - 16 mm

BAS3

Tripod supports

Technopolymer



Zinc-plated or AISI 304 stainless steel M10 screws, nuts and washers. Assembly on series LS.A, LV.A, LV.F levelling elements. The three bearings of the base are supplied with brass bosses, threaded pass-through hole for the assembly of the stem.
Tube housing holes Ø: 42 - 48 - 50 - 60 - 45x45 mm

GC.

Connection joints

Technopolymer



M8 cylindrical-head screws with hexagon socket and zinc-plated or AISI 304 stainless steel nuts.
Tube housing holes Ø: 42 - 48 - 50 - 60 - 45x45 mm

MPG-2 - MPG-S

Guide rail clamps

Technopolymer and stainless steel



With or without AISI 304 stainless steel pin.
AISI 304 stainless steel washers, screws and clamping nuts.
Housing for round, trapezoidal or rectangular guides.
Pins Ø: 12 - 14 - 16 mm

SPF.

Guide rail brackets

for linear positioning, technopolymer



Nickel-plated AISI 431 stainless steel eye screw and AISI 304 stainless steel washer. Technopolymer clamping knob and nickel-plated brass hexagonal end for clamping by means of a key, threaded hole. Without knob, with AISI 304 stainless steel clamping nut. Guide housing holes Ø: 12 - 14 - 16 mm

UCF

Self-aligning brackets

square flanged, technopolymer



AISI 304 stainless steel bushings and washers. High quality chrome steel bearing.
Technopolymer closed or drilled cover for pass-through shafts.
Shaft diameters: 25 - 30 mm

UCFL

Self-aligning brackets

oval flanged, technopolymer



AISI 304 stainless steel bushings and washers. High quality chrome steel bearing.
Technopolymer closed or drilled cover for pass-through shafts.
Shaft diameters: 25 - 30 mm

FLEXIBLE AUTOMATION COMPONENTS





11

Hinges and connections



A wide range of engineering plastics and metal hinges including technopolymer, SUPER-technopolymer, aluminium and stainless steel available in various types of assembly, rotation angles, load resistance or with integrated safety switch.

CFT.

Hinges with screw-covers Technopolymer



Technopolymer rotating pin and screw-covers. Assembly by means of pass-through holes for countersunk head, cylindrical head, hexagonal head screws or nuts. Rotation angle: max 200° (-20° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 40 - 49 - 65 mm

CFA.

Hinges Technopolymer



AISI 303 stainless steel or technopolymer (CFAX.) rotating pin. Assembly by means of nickel-plated brass bosses, threaded hole; nickel-plated steel threaded studs; pass-through holes and slotted holes (CFA-SL) for cylindrical head screws. Rotation angle: max 215° (-35° and +180° being 0° the condition where the two surfaces are on the same plane). Dimensions: 40 - 49 - 65 - 97 mm

CFL.

Hinges Technopolymer



AISI 303 stainless steel rotating pin. Assembly by means of pass-through holes for cylindrical head screws. Rotation angle: max 200° (-20° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimension: 102 mm

CFM.

Hinges SUPER-technopolymer



AISI 303 stainless steel rotating pin. Nickel-plated steel threaded studs; pass-through holes for countersunk head or cylindrical head screws; pass-through slotted holes for cylindrical head screws. Rotation angle: max 270° (-90° and +180° being 0° the condition where the two surfaces are on the same plane). CFM-CLEAN white similar to RAL 9002. Dimensions: 30 - 40 - 50 - 60 mm

CFSQ

Hinges with built-in safety switch SUPER-technopolymer



Safety switch with one normally closed change-over contact (NC) and one normally open change-over contact (NO). Positive opening in compliance with IEC EN 60947-5-1. Double insulation of the internal circuits. Approved by UL:E360222. Dimension: 53 mm

CFSW.

Hinges with built-in safety multiple switch SUPER-technopolymer



Switch with 4 electric contacts, which can be set in production: normally open (NO) or normally closed (NC). Standard executions 2NO+2NC and 1NO+3NC. Positive opening in compliance with IEC EN 60947-5-1. Double insulation of the internal circuits. Approved by UL:E360222, IMQ:CA02.04800. Dimension: 110 mm

CFMW.

Hinges SUPER-technopolymer



These hinges can be assembled with CFSW. hinge with safety switch. Technopolymer rotating pin. Assembly by means of pass-through holes for countersunk-head, cylindrical head screws or hexagonal nuts. Rotation angle: max 180° (0° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 70 - 110 mm

CFH.

Hinges Technopolymer



AISI 303 stainless steel rotating pin. Assembly by means of pass-through holes for cylindrical head screws. Rotation angle: max 275° (-95° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimension: 50 mm

CMM-SST

Hinges AISI 316 stainless steel



AISI 316 stainless steel rotating pin. Rotation angle: max 270° (-90° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). CMM die-cast zinc alloy. CMM-BL aluminium. Dimensions: 30 - 40 - 50 - 60 mm

CMM-AL

Hinges Aluminium



AISI 304 stainless steel rotating pin. Mounting with pass-through holes for countersunk head screws. Rotation angle: max 270° (-90° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 40 - 50 - 60 mm

CFMY

Hinges for removable doors Technopolymer



Technopolymer rotating pin. Mounting with pass-through holes for countersunk head screws. Rotation angle: max 270° (-90° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 40 - 50 - 60 mm

CMMY

Hinges for removable doors Die-cast zinc alloy



AISI 303 stainless steel rotating pin. Mounting with pass-through holes for countersunk head screws. Rotation angle: max 270° (-90° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 40 - 50 - 60 mm

CFJ.**Tamperproof hinges**
Technopolymer

AISI 303 stainless steel rotating pin, totally moulded in the hinge body. Assembly by means of nickel-plated brass bosses, threaded hole; nickel-plated steel threaded studs; pass-through holes for hexagonal head screws. Rotation angle: max 275° (-95° and +180° being 0° the condition where the two surfaces are on the same plane). Dimension: 50 mm

CFV.**Hinges with snap-in positions**
Technopolymer

AISI 303 stainless steel rotating pin. Assembly by means of pass-through holes for countersunk head or hexagonal head screws. The detent device allows four different detent positions of the door: -90°, 0°, 70° and 115°. Rotation angle: max 210° (-90° and +120° being 0° the condition where the two surfaces are on the same plane). Resistant torque of about 3 Nm. Dimension: 65 mm

CFP.**Hinges with snap-in positions**
Screw-covers, technopolymer

Pass-through holes for countersunk, cylindrical or hexagonal head screws. The detent device allows four different detent positions of the door: 0°, 80°, 120° and 170°. Resistant torque of about 1.1 Nm. Rotation angle: max 195° (-15° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimension: 50 mm

CFU.**Hinges with adjustable friction**
Technopolymer

Technopolymer rotating pin. AISI 304 stainless steel screw and AISI 303 stainless steel adjusting boss. Assembly by means of pass-through holes for cylindrical head screws. Rotation angle: max 275° (-95° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Resistant torque max: 1.4 - 4 Nm. CFU-CLEAN in white similar to RAL 9002. Dimensions: 40 - 60 mm

CMUF**Hinges with adjustable friction**
Zinc-alloy

Technopolymer conical friction elements, zinc-plated steel screw and nut. Mounting with pass-through holes for countersunk head screws. Rotation angle: max 270° (-90° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Resistant torque max: 2 - 4 - 6.5 Nm. Dimensions: 40 - 50 - 60 mm

GN 136**Thin hinges**
Steel or stainless steel

AISI 304 stainless steel rotating pin. Assembly by means of pass-through holes for cylindrical head, countersunk head screws or without holes for welding. Rotation angle: max 280° (-100° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 40 - 50 - 60 mm

CMD-AL**Hinge for thin doors**
Aluminium

AISI 304 stainless steel rotating pin. Technopolymer guide bushings for pin. Assembly by means of stainless steel self-tapping screws and semi-rounded head screws. Rotation angle: max 185° (-5° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimension: 45 mm

CFF.**Hinges for thin doors**
Technopolymer

AISI 303 stainless steel rotating pin. Assembly by means of nickel-plated brass bosses, threaded hole or nickel-plated steel threaded studs. Rotation angle: max 200° (-10° and +190° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 30 - 40 - 48 - 66 mm

CFD.**Hinges for thin doors**
Technopolymer

AISI 303 stainless steel rotating pin. Assembly by means of nickel-plated brass bosses, threaded hole; nickel-plated steel threaded studs; pass-through holes for cylindrical head screws. Rotation angle: max 205° (-15° and +190° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 30 - 40 - 48 - 66 mm

CFG.**Hinges for profiles**
Technopolymer

One or two (CFL) nickel-plated rotating pins. Technopolymer centring inserts for aluminium profiles from 6 to 12 mm. Assembly by means of pass-through holes. Rotation angle: CFG: max 280° (-100° and +180°). CFL: max 260°/275° (-95° and +165°/180°) being 0° the condition where the two interconnected surfaces are on the same plane. Dimension: 36 mm

CFO.**Offset lift-off hinge**
Technopolymer

Technopolymer adjustable pin with octagonal slot. Technopolymer covers for pin slot and screw-covers. Assembly by means of pass-through holes. Offset lift-off hinges have been designed to adjust possible misalignments between the door and the frame. Dimension: 64 mm

CFN.**In line lift-off hinge**
Technopolymer

Technopolymer hinge body and adjustable pin with octagonal slot. Assembly by means of nickel-plated brass bosses, threaded hole; nickel-plated steel threaded studs. In line lift-off hinges have been designed to adjust possible misalignments between the door and the frame. Dimension: 64 mm

CMN**Hinges for removable doors**
Die-cast zinc alloy

Black or grey colour. Assembly by means of threaded holes. Dimension: 63 mm

SQT.**Angles for profile structures**
Technopolymer

Two slots for M8 screws; two holes for M8 screws and centring slides; slot and hole for M8 screws. Technopolymer covers are available on request. For the assembly of structures made out of aluminium profiles in a very easy way. Dimensions: 40 - 43 mm

SQMA - SQMF**Angles for profile structures**
Aluminium

Natural colour or black or grey epoxy resin coating. Technopolymer closing cap. Assembly by means of zinc-plated steel screws, nuts and washers. Dimensions: 30 - 40 - 45 mm



12

Latches



Different types of latches in plastic or metal with knob or key to lock electrical panels or machine doors.

Hook clamps, push-pull or latch-type toggle clamps in zinc-plated or stainless steel designed for industrial uses complete the range.

CM. - CMT.AE-V0

Lever latches

fold-away or key-type knob



CM.: nickel-plated zinc alloy rotor, stator and knob; brass nut; zinc-plated steel closing lever and screw. CMT.AE-V0: rotor, stator, fold-away knob, closing lever and nut in technopolymer certified self-extinguish UL-94 V0. IP 65 protection class. Rotation 90°. Dimensions: 18 - 20 - 24 - 32 mm



VCTK. - VCMK.

Cam latches

Steel or technopolymer knob



VCTK: technopolymer knob; chrome-plated zinc alloy stator and rotor; zinc-plated steel latch cam, screw, spring washer and nut; aluminium distance element. VCMK: stainless steel knob, stator and rotor, latch cam, screw and washer, nut and distance element. Knob diameter: 50 mm



VCK.

Cam latches with knob

Duroplast knob, steel or stainless steel cam



Zinc-plated or stainless steel plain stud; zinc-plated or stainless steel latch spring to compensate door thickness. Standard executions: opening to the right side or left side. Knob diameter: 50 - 60 - 70 mm



BOCK

Cam latches with key

Steel or stainless steel cam



BOCK: nickel-plated steel shank; nickel-plated brass guide bushing and locking nut; sintered and vaporised steel latch cam; zinc-plated steel latch spring; BOCK-SST: stainless steel shank, guide bushing and locking nut, latch cam and spring. Technopolymer key. Standard executions: opening to the right side or left side. Lengths: 46 - 54 - 64 mm



VCML

Lever latches

Stainless steel knob



Stainless steel stator, closing lever, screw, washer and nut. Rotation 90° right. IP 65 protection class. Knob diameter: 50 mm



VC.308 - VC.309

Lever latches

Technopolymer knob with lock



Zamac stator and rotor; brass nut; zinc-plated steel spring washer, positioning washer and closing lever; two nickel-plated brass keys, removable in two positions at 180° (locked or unlocked position). Standard executions: opening to the right side or left side; lock with different combinations, one combination; different combinations and master-key or without lock. Knob diameter: 40 mm



MDA-LS

Lever latches

Technopolymer knob



Technopolymer cap. MDA-LS: zinc alloy threaded body and lever, zinc-plated steel screw and locking nut. Neoprene clamping bolt. MDA-LS-SST: AISI 316 stainless steel threaded body, screw and locking nut, AISI 304 stainless steel lever. IP 65 protection class. Rotation 90° right. Knob diameter: 53 mm



CSM.

Lever latches

Steel handle with lock



Zinc alloy stator, rotor and nut; stainless steel front plate; zinc-plated steel closing lever; two nickel-plated brass keys, removable in two positions at 180°. IP 65 protection class. Rotation 90° right. Standard executions: lock with different combinations or one combination. Handle dimension: 80 mm



CSMT-A

Lever latches

Technopolymer handle with lock and anti-rotation device



Technopolymer stator and nut; zinc alloy rotor; stainless steel front plate; zinc-plated steel closing lever; two nickel-plated brass keys, removable in two positions at 180°. IP 65 protection class. Rotation 90° right. Standard executions: lock with different combinations or one combination. Handle dimension: 80 mm



ELCK

Lever latches

Operation by means of technopolymer lever



Zinc alloy stator and rotor, brass nut, zinc-plated steel lever, positioning washer and spring washer. Two nickel-plated brass keys removable in two positions (locked or unlocked position). Standard executions: lock with one combination, opening on the right or left side or both sides. Dimensions: 67 - 85 mm



CS-RPR.

Lever latches

with reprogrammable lock, steel



Chrome-plated zinc alloy stator and rotor and stainless steel front plate; brass nut; zinc-plated steel closing lever and screw. Rotation 180° with key removable in two positions. Accessories: kit of keys containing the programming key and use keys. Dimensions: 20 - 25 - 30 mm



CS.

Lever latches

with lock, zinc alloy



Zinc alloy stator and rotor, brass nut, zinc-plated steel lever, positioning washer and spring washer. Two nickel-plated brass keys removable in two positions at 180°. Standard executions: lock with different combinations or one combination. Dimensions: from 13 to 30 mm



CQ. - CQT.AE-V0

Lever latches

with recessed key



CQ.: nickel-plated zinc alloy stator and rotor, brass or zinc alloy nut, zinc-plated steel shaped closing lever and screw. CQ. SST: stainless steel stator and rotor; two-wing or triangular groove for key. CQT.AE-V0: self-extinguish technopolymer UL-94 V0; stainless steel self-tapping screw. Rotation 90°. Dimensions: 16 - 18 - 20 - 24 - 28 - 60 - 32 mm

CQT.FM

Quick-assembly lever latches

with recessed key,
technopolymer



CQT.FM-AE-V0: technopolymer black colour.
CQT.FM-CR: technopolymer chrome-plated body.
Silicone packing ring, stainless steel washer and self-tapping screw. Technopolymer key.
Rotation 90°. IP 65 protection class.
Dimensions: 18 - 20 - 22 - 25 - 30 mm

GN 315

Snap locks

technopolymer and zinc alloy



Technopolymer unlocking button, light-grey colour; steel adjusting spacer, black colour; zinc alloy threaded body; zinc-plated steel locking nut.
Adjusting distance: from 18 to 28 mm

CLT.

Latches for cabinets

with handle for rod controls,
technopolymer



Chrome-plated zinc alloy handle shank with NBR rubber OR; silicon and NBR synthetic rubber packing rings; zinc-plated steel screws. Standard executions: lock with different combinations, with one combination or for technopolymer key with zamac insert and two-wing groove, European style stator, execution with IP 65 protection class. Dimension: 160 mm

CAR.

Rod controls

Steel



Zinc-plated rod guides, chrome-plated zinc alloy toothed wheel.
Nickel-plated zinc alloy or technopolymer body.
Length: 347 mm

EBR-CH

Handle with safety locking device

Technopolymer



ERGOSTYLE®

Anti-intrusion profiled key.
AISI 304 stainless steel pin with technopolymer push button.
Pass-through holes for cylindrical-head screws with hexagon socket.
Assembly centre distance: 132 mm

BMS

Snap door lock

Technopolymer



Standard executions: snap lock and unlock (BMS), or snap lock and lever for manual release (BMS.L).
When the lever is locked, the maximum load at breakage of the door lock is = 2500 N.

BPS

Ball-shaped door lock

Technopolymer



The clamp, in which the ball fixed to the closing door is inserted, is a mechanical stop device also to the door movement.
Opening release strength is = 30 N.
Assembly by means of a self-tapping screw or cylindrical-head screw with hexagon socket.

GN 702

Stop locks with 4 indexing positions (90°)

Zinc alloy



These stop locks are suitable for clamping drawers or doors in applications subject to strong vibrations.
Standard executions: assembly by means of base flange with two holes for countersunk head screws, body with threaded hole or with threaded nut.

PR-CH

Flush pull handles with lever latch

Snap-in assembly,
technopolymer



Two nickel-plated brass or technopolymer keys. Standard executions: lock with key removable in two positions, rotation by 90°, placed on the right or on the left. Lock with one combination, different combinations or different combinations and master-key or electrical panel lock type with triangular, square or two-wing groove. Zinc-plated or stainless steel closing lever LPR. Dimension: 117 mm

CSMH

Latches with push handle

Technopolymer
and zinc alloy



Handle in black or grey colour. Standard executions: lock with different combinations or one combination. Two nickel-plated brass keys removable in two positions at 90°. Assembly by means of 4 zinc-plated steel screws co-moulded into the base. The overturning of the handle in its seat moves the spindle axially with the lever in the direction of the swing-door until the locking position. Dimension: 128 mm, adjusting distance: from 13 to 75 mm

GN 115.10

Flush pull handles with lever latch

Zinc alloy



Handle in black or grey colour. Standard executions: triangular, square 7x7 or two-wing groove for key, positioned to the right or to the left. Assembly by means of 5 zinc-plated steel screws. GN 115 zinc-plated steel closing lever.
Dimension: 128 mm, adjusting distance: from 13 to 75 mm

TLA.

Hook clamps

Steel or stainless steel



TLA: basic hook clamp.
TLAL: hook clamp with padlock hole.
TLAS: hook clamp with security stop and red technopolymer push button.
Special executions on request: catch brackets in different shapes and finishes. Dimensions: 102 - 140 - 193 mm

TLE.

Hook clamps

Steel or stainless steel



TLE.Z: zinc-plated or AISI 304 stainless steel basic hook clamp.
TLEL.Z: zinc-plated steel hook clamp with padlock hole.
Special executions on request: catch brackets in different shapes and finishes.
Dimension: 52 mm

TLF.

Adjustable hook clamps

Steel or stainless steel



TLF: basic hook clamp.
TLFS: hook clamp with security stop and red technopolymer push button.
Special executions on request: catch brackets in different shapes and finishes.
Dimensions: 138 to 150 mm

TLM.**Adjustable hook clamps***Steel or stainless steel*

TLM: basic hook clamp.
 TLM.L: hook clamp with padlock hole.
 Special executions on request: catch brackets in different shapes and finishes.
 Dimension: 88 mm

TLL.**Adjustable hook clamp***Steel*

Special executions on request: AISI 304 stainless steel hook clamps.
 Dimension: 125.5 mm

TLY.**Hook clamps***Steel*

Welding mounting.
 Special executions on request: AISI 304 stainless steel hook clamps.
 Dimension: 81 mm

MVA.**Vertical toggle clamps***with folded base, steel or stainless steel*

Ground and hardened steel support bushings; red polyurethane handle.
 MVA-SST: stainless steel.
 Dimensions: 67 - 85 - 110.5 - 129 - 164 - 223 mm

MVB.L**Vertical toggle clamps, long life series***with straight base, steel*

Hardened, black-oxide and ground steel rotating pins and support bushings; zinc-plated steel adjusting screw and nut; red polyurethane handle. With opening clamping lever and two folded washers or solid clamping lever.
 Dimensions: 86 - 91 - 129.5 - 161 - 203 mm

MGA.L**Toggle-joint mechanisms***Steel*

Hardened, black-oxide and ground steel rotating pins and support bushings; zinc-plated steel adjusting screw and nut.
 Dimensions: 57.5 - 58.5 - 115 mm

MOAS.**Horizontal toggle clamps***with folded base and anti release lever, steel or stainless steel*

With opening clamping lever and two folded washers or solid clamping lever and retainer for welding.
 Ground and hardened steel support bushings; red polyurethane handle. Anti-release lever to prevent accidental opening in the presence of strong vibrations.
 Dimensions: 118 - 172 - 196 - 270 - 305 - 306.5 mm

MFC.**Push-pull clamps***Steel*

Zinc-plated steel rivets and push lever; brass or pressed steel base; red polyurethane handle.
 Dimensions: 86 - 116 - 122 - 164.5 - 182 - 238 - 316 mm

MTC.**Latch clamps***Steel or stainless steel*

Zinc-plated steel rivets, pulling hook, oscillating pin and nuts; red polyurethane handle.
 MTC-SST: stainless steel.
 Dimensions: 98 - 152 - 220 mm

MTL.**Latch clamps, heavy-duty series***with safety device, steel*

Hardened and ground steel pins; red polyurethane handle.
 The safety device prevents accidental opening even in the presence of strong vibrations.
 Dimension: 318 mm

MTB.**Latch clamps***with safety stop, steel or stainless steel*

Zinc-plated steel rivets; red polyurethane handle. With or without eyelet, T or hook tie rod.
 MTB-SST: stainless steel.
 The safety device prevents accidental opening even in the presence of strong vibrations.
 Dimensions 103 - 153 - 222 mm

MTP.**Latch clamps, heavy-duty series***Steel or stainless steel*

Hardened and ground steel shank; zinc-plated steel pulling hook, oscillating pin and nuts.
 MTP-SST: stainless steel.
 Dimensions: 226 - 282 mm

MTS.**Weldable latch clamps, heavy-duty series***Steel or stainless steel*

Hardened and ground steel shank; zinc-plated steel pulling hook, oscillating pin and nuts.
 MTS-SST: stainless steel.
 Dimensions: 221 - 277 mm

MTR.**Weldable latch clamps***Steel*

Hardened and ground steel shank; natural steel pulling hook, oscillating pin and nuts.
 With clamping hole by removable tube or with clamping lever.
 Dimensions: 220 - 334 mm

PVC.**Pneumatic clamps***with toggle-joint support, steel*

Zinc-plated rivets and pins; black-oxide steel cylinder support screws; hardened steel cylinder support bushings, rotating pin and seeger ring.
 Dimensions: from 163 to 362 mm



13

Accessories for hydraulic systems



Components to meet various applications on hydraulic systems. Different production materials to resist to: different liquids and oils; low or high temperatures and for use in environments subject to risk of explosion (ATEX line).

TN. - TNR.

Plugs

Technopolymer



TN. with NBR rubber packing ring.
TNR. with NBR rubber O-Ring.
Max. continuous working temp.: 100°C
Metric threadings (pitch 1.5): M10 - M12 - M14 - M16 - M18 - M20 - M22 - M25 - M26 - M35 - M40
GAS threadings: 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2

TN-EX

Plugs

Technopolymer



NBR rubber packing ring.
TN-EX plugs comply with Health and Safety Requirements defined in 94/9/EC ATEX European Directive (explosive atmospheres) for equipments in Group II, category 2GD.
GAS threadings: 3/8 - 1/2 - 3/4

TCD. - TCR.

Oil fill plugs

Technopolymer



TCD. with NBR rubber packing ring. TCD+a with phosphatised steel dipstick. TCR. with NBR rubber O-Ring. Max. continuous working temp.: 100°C Metric threadings (pitch 1.5): M10 - M12 - M14 - M16 - M18 - M20 - M22 - M25 - M26 - M35 - M40 GAS threadings: 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2

TSD. - TSR.

Oil drain plugs

Technopolymer



Graphic symbol "drain". TSD. with NBR rubber packing ring. TSR. with NBR rubber O-Ring. Max. continuous working temp.: 100°C
Metric threadings (pitch 1.5): M10 - M12 - M14 - M16 - M18 - M20 - M22 - M25 - M26 - M35 - M40
GAS threadings: 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2

TMB.

Magnetic plugs

Aluminium



Magnetic element with an attractive power to keep metal particles in oil. NBR rubber packing ring. Max. continuous working temp.: 180°C
Metric threadings: M14 - M16 - M20 - M26 - M33 - M40 - M42
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2

TCE.

Plugs

with hexagon socket



TCE. in technopolymer. GN 749 zinc-plated steel. NBR rubber packing ring.
Max. continuous working temp.: 100°C
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4

GN 741

Plugs

Aluminium



NBR rubber (GN 741) or FKM (GN 742) packing ring for high temperatures.
Max. continuous working temp.: 100°C (GN 741) or 180°C (GN 742).
Metric threadings (pitch 1.5): M14 - M16 - M20 - M26
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2

TPC.

Oil fill plugs

for push-fit, technopolymer



Graphic symbol "fill", with or without side breather hole. Two NBR rubber O-rings.
TPC+a with phosphatised steel flat dipstick.
Max. continuous working temp.: 100°C
Diameters: 20 - 26 mm

T.440

Plugs

Technopolymer



With or without phosphatised steel flat dipstick. NBR rubber packing ring.
Max. continuous working temp.: 100°C
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2

SFN.

Breather caps

Technopolymer



Orange technopolymer cover; black technopolymer threaded connector or zinc-plated steel sheet bayonet. With or without air filter in polyurethane foam mesh "tech-foam". NBR rubber flat packing ring. Max. continuous working temp.: 100°C Diameters: 30 - 40 - 57 - 70 mm
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2 - 2

SFP. - SFP-EX

Breather caps

with splash guard, technopolymer



Orange technopolymer cover; black threaded connector. Splash guard with or without "tech-foam" (SFP-EX) or "tech-fil" (SFP) air filter. NBR rubber packing ring. Max. continuous working temp.: 100°C (SFP) - 80°C (SFP-EX). SFP-EX breather caps comply with European Directive ATEX 94/9/EC.
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2 - 2

SFP+a - SFP+a-EX

Breather caps

with splash guard and flat dipstick, technopolymer



Technopolymer cover and or sheet bayonet; splash guard with or without air filter. NBR rubber packing ring. Phosphatised steel dipstick. Max. continuous working temp.: 100°C (SFP+a) - 80°C (SFP+a-EX). Diameters: 30 - 40 - 57 - 70 mm Metric threadings (pitch 1.5): M16 - M18 - M20 - M22
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 1 1/2 - 2

TVD.

Breather caps with vacuum breaker valve
Technopolymer



Red colour with EPDM synthetic rubber membrane gasket, green colour with FKM synthetic rubber membrane gasket. Threaded connector in black colour. EPDM (red cover) or FKM (green cover) flat packing ring. Max. continuous working temp.: 50°C
GAS threading: 1 1/4

SFV.

Valve breather caps
Technopolymer



Technopolymer cover, with "valve" symbol and black threaded connector. NBR rubber packing ring. Valve: technopolymer sealing disk with NBR rubber O-Ring and stainless steel spring set at 10 mb or 100 mb. Max. continuous working temp.: 100°C
Metric threadings (pitch 1.5): M16 - M18 - M20 - M22
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1

SFW.

Pressurised breather caps
with double valve, technopolymer



Technopolymer cover, with "valve" symbol. Threaded connector or sheet bayonet; "tech-foam" ring-shaped air filter. NBR rubber packing ring. Overpressure valve set at around 0.350 bar. Suction valve set at around 0.030 bar. Max. continuous working temp.: 100°C
GAS threadings: 3/4 - 1 1/4 - 2

SMN. - SMW.

Pressurised breather caps
simple or with double valve
and threaded connector, steel



Chrome-plated steel cover; zinc-plated steel flange; zinc-plated steel threaded connector. NBR rubber packing ring. SMW, with overpressure valve set at around 0.350 bar and suction valve set at around 0.030 bar. Also available with dipstick. "Tech-foam" ring-shaped air filter.
GAS threadings: 1/4 - 3/4

FRF+C

Flange
for threaded cap, technopolymer



Flange in technopolymer with threaded connector or in zinc-plated steel with bayonet (FRB+C); technopolymer basket. Cork impregnated MGS based rubber. Assembly by means of six self-tapping screws.
GAS threading: 1 1/4

PLRB+C

Side mount
for bayonet cap, technopolymer



Technopolymer mount with NBR rubber packing ring; zinc-plated steel bayonet flange or technopolymer flange with threaded connector (PLRF+C) and flat gasket in cork impregnated MGS based rubber; technopolymer basket.
GAS threading for series PLRF+C: 1 1/4

HGFT. - HGFT-EX

Oil level indicators
Technopolymer



Transparent technopolymer window. Standard executions with or without matte anodised aluminium star-shaped contrast screen. NBR rubber packing ring. HGFT-EX indicators comply with European Directive ATEX 94/9/EC. Max. continuous working temp.: 100°C at 3 bar pressure. GAS threadings: 3/8 - 1/2 - 3/4 - 1 - 1 1/4 - 2

GN 743

Oil level indicators
Aluminium



Natural glass or ESG safety glass window (GN 743.1). NBR rubber or FKM (GN 743.1) flat packing ring. Max. continuous working temp.: 100°C or 180°C (GN 743.1). Metric threadings (pitch 1.5): M14 - M16 - M20 - M26 - M27 - M33 - M40 - M42
GAS threadings: 3/8 - 1/2 - 3/4 - 1 1/4

GN 743.2

Oil level indicators
Brass



Natural glass window or ESG safety glass (GN 743.3) window. NBR or FKM (GN 743.3) rubber packing ring. Max. continuous working temp.: 100°C or 180°C (GN 743.3). Metric threadings (pitch 1.5): M16 - M20 - M26 - M27 - M33
GAS threadings: 3/8 - 1/2 - 3/4 - 1

GN 743.6

Oil level indicators
Aluminium



ESG safety glass window. FKM packing ring. Comply with European Directive ATEX 94/9/EC. Max. continuous working temp.: 150°C
Metric threadings (pitch 1.5): M16 - M20 - M26 - M27
GAS threadings: 3/8 - 1/2 - 3/4

HGFT-PR

Oil level indicators
with prismatic window, technopolymer



Transparent technopolymer prismatic window. NBR or FKM (HGFT-HT-PR) synthetic rubber packing ring. Max. continuous working temp.: 100°C at 3 bar pressure (HGFT-PR) or 140°C at 7 bar pressure (HGFT-HT-PR).
GAS threadings: 1/2 - 3/4 - 1

GN 744

Oil level indicators
with prismatic window, aluminium



Transparent technopolymer prismatic window. NBR rubber packing ring. Max. continuous working temp.: 100°C
Metric threadings (pitch 1.5): M20 - M26 - M27 - M33
GAS threadings: 1/2 - 3/4 - 1

HRT.

Oil level indicators
push-fit, technopolymer



Transparent technopolymer window. White lacquered aluminium contrast screen. HRT-T: with bimetallic thermometer and graduated scale up to 100°C. NBR rubber O-Ring. Max. continuous working temp.: 100°C.
Diameters: 28 - 36 - 42 - 64 mm

HE.

Oil level indicators
push-fit, polycarbonate



White lacquered aluminium contrast screen with red level line. NBR rubber O-Ring. Max. continuous working temp.: 100°C These indicators are suitable for assembly on reservoirs with limited pressures.
Diameters: 18 - 21 - 28 - 32 - 38 - 43 - 47 mm

HFTX.

Oil level indicators
Technopolymer



Matte anodised aluminium star-shaped contrast screen. NBR rubber packing ring. Max. continuous working temp.: 100°C
Metric threadings (pitch 1.5): M16 - M20 - M25 - M26 - M27 - M30 - M35 - M40
GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4

HFTX-PR

Oil level indicators

with prismatic window, technopolymer



A continuous series of prisms provide a clear and immediate reading of the oil level due to refraction effect.

NBR rubber packing ring.

Max. continuous working temp.: 100°C

GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1 - 1 1/4

HCFE-EX

Oil circulation sights

Technopolymer



NBR rubber packing ring.

HCFE-EX comply with Health and Safety Requirements defined in 94/9/EC ATEX European Directive (explosive atmospheres) for equipments in Group II, category 2GD.

GAS threadings: 3/8 - 1/2 - 3/4

HVF.

Visual flow indicators

Technopolymer ends



PYREX glass window; brass tie rods; technopolymer axis and rotor propeller; NBR rubber packing rings; brass bosses with cylindrical gas threading according to UNI ISO 228/1. Max. continuous working temp.: 100°C. Functioning with two-way flow. GAS threadings: 1/4 - 3/8 - 1/2 - 3/4 - 1

HCZ.

Column level indicators

with or without protection frame, technopolymer



Zinc-plated steel screws and nuts. Step-shaped packing rings for the seal on the reservoir walls and NBR rubber O-Ring screw underneath.

White lacquered aluminium contrast screen. With or without thermometer; with or without SUPER-technopolymer protection frame.

Max. continuous working temp.: 90°C

Assembly centre distances: 76 - 127 - 254 mm

HGX. - HCX-PT

Column level indicators

with or without protection frame, technopolymer



HGX., HCX-AR, HCX-PT: zinc-plated steel screws, nuts and washers.

HCX-SST, HCX-BW-SST, HCX-PT-SST: AISI 304 stainless steel screws, nuts and washers.

HCX-VT, HCX-PT-VT: SUPER-technopolymer screws, AISI 304 stainless steel nuts and washers.

NBR or FKM synthetic rubber O-Ring. White lacquered aluminium contrast screen.

HCX-AR for use with fluids containing alcohol.

HCX-BW-SST for use with hot water.

Max. continuous working temp.: 80°C or 90°C Assembly centre distances: 76 - 127 - 254 mm

HCK. - SLCK

Column level indicators

with or without transparent protection, technopolymer



Technopolymer assembly ends. Aluminium support. Transparent polycarbonate tube. HCK-GL with PYREX glass tube, also suitable for use with glycol-based solutions.

With or without transparent polycarbonate front protection. Zinc-plated or stainless steel screws, nuts and washers. NBR rubber or FKM O-Ring.

Max. continuous working temp.: 100°C or 130°C (HCK-GL). Assembly centre distances: 76 - 127 - 176 - 254 - 381 - 508 mm

SLCK kit for the electric control of the fluid level.

HCX-E - HCX-ST - HCX-STL

Column level indicators

Transparent technopolymer



MIN level electrical sensor (HCX-E).

MAX temperature electrical sensor (HCX-ST).

Temperature electrical probe (HCX-STL).

Zinc-plated steel screws, nuts and washers. NBR rubber O-Ring. Technopolymer float with magnetic element to activate the contact.

Technopolymer sensor bracket with a built-in relay.

Swivelling two-pin connectors. Available with electrical contact NO or NC.

Max. continuous working temp.: 90°C

Assembly centre distances: 127 - 254 mm

HCY-E

Column level indicators

with MIN level electrical sensor, technopolymer



Nickel-plated brass screws. NBR rubber O-Ring. Red technopolymer float with magnetic element to activate the contact.

Watertight sensor bracket with a built-in relay. Right side output connector. Available with electrical contact NO or NC.

White lacquered aluminium contrast screen.

Max. continuous working temp.: 80°C

Assembly centre distances: 76 - 127 - 254 mm

HFL-E - HFLT-E

Rapid levels with float

Technopolymer



TPE flat gasket or NBR rubber O-Ring. Connector with or without sensor with side output and reed switch.

AISI 304 stainless steel dipstick (HFL-E) or technopolymer dipstick featuring two raised scales (HFLT-E). With or without NBR rubber float.

Assembly by means of zinc-plated steel flange or 1" Gas threaded connector.

Max. continuous working temp.: 80°C

HFL-E and HFLT-E rapid levels show a minimum or maximum default level.



14

Castors and Wheels



A wide range of castors and wheels, suitable for manual (4 km/h) or mechanical (16 km/h) handling for trucks and equipment. The range includes wheels with fixed or turning plate bracket, with or without brakes; specific series destined for heavy loads; drive wheels and pallet truck rollers.

RE.FF

Injected polyurethane wheels
Technopolymer centre body



RE.FF-N: zinc-plated or AISI 304 stainless steel sheet bracket, fixed or turning plate (also with centre pass-through hole) with or without brake.
Wheel Ø: 80 - 100 - 125 - 150 mm

RE.F5

Mould-on polyurethane wheels
Aluminium centre body



Hub with ball bearings. RE.F5-N: zinc-plated steel sheet bracket, fixed or turning plate (also with centre pass-through hole) with or without brake.
RE.F5-H: steel sheet bracket for medium-heavy loads, fixed or turning plate, with or without brake.
Wheel Ø: 80 - 100 - 125 - 150 - 200 mm

RE.F4

Mould-on polyurethane wheels
Cast iron centre body



Hub with ball bearings. RE.F4-H: steel sheet bracket for medium-heavy loads, fixed or turning plate, with or without brake.
Wheel Ø: 100 - 125 - 150 - 200 mm

RE.F4-WH - RE.F4-WEH

Mould-on polyurethane wheels
Electro-welded steel bracket for heavy loads



RE.F4-WH: electro-welded steel bracket for heavy loads, fixed or turning plate, with or without brake.
RE.F4-WEH: electro-welded steel bracket for extra-heavy loads, fixed or turning plate, with or without brake.
Wheel Ø: 125 - 150 - 200 - 250 - 300 mm

RE.F8

Technopolymer wheels
Monolithic



RE.F8-N: zinc-plated or AISI 304 stainless steel sheet bracket, fixed or turning plate (also with centre pass-through hole) with or without brake.
RE.F8-H: steel sheet bracket for medium-heavy loads, fixed or turning plate, with or without brake.
Wheel Ø: 65 - 80 - 100 - 125 - 150 - 200 mm

RE.F8-WH

Technopolymer wheels
Electro-welded steel bracket for heavy loads



Hub with ball bearings. RE.F8-WH: electro-welded steel sheet bracket for heavy loads, fixed or turning plate, with or without brake.
Wheel Ø: 125 - 150 - 200 mm

RE.G1

Thermoplastic rubber wheels
Technopolymer centre body



RE.G1-N: zinc-plated or AISI 304 stainless steel sheet bracket, fixed or turning plate (also with centre pass-through hole) with or without brake.
Wheel Ø: 80 - 100 - 125 - 150 mm

RE.E2

Vulcanised rubber wheels
Technopolymer centre body



RE.E2-N: zinc-plated steel sheet bracket, fixed or turning plate (also with centre pass-through hole) with or without brake.
Wheel Ø: 80 - 100 - 125 - 150 - 180 - 200 mm

RE.E3

Vulcanised rubber wheels
Steel centre body



RE.E3-N: zinc-plated steel sheet bracket, fixed or turning plate (also with centre pass-through hole) with or without brake.
Wheel Ø: 80 - 100 - 125 - 150 - 200 mm

RE.G2

Elastic rubber wheels
Aluminium centre body



Hub with ball bearings. RE.G2-H: steel sheet bracket for medium-heavy loads, fixed or turning plate, with or without brake.
Wheel Ø: 100 - 125 - 160 - 200 mm

RE.C7

Wheels for the general public
Vulcanised rubber coating



Technopolymer centre body. Zinc-plated steel sheet bracket, fixed or turning plate (also with centre pass-through hole or threaded pin) with or without brake. RE.C7-G: twin wheels version.
Wheel Ø: 40 - 50 - 60 - 80 mm

RE.C6

Wheels for the general public
Injected polyurethane coating



Technopolymer centre body. Zinc-plated steel sheet bracket, fixed or turning plate (also with centre pass-through hole or threaded pin) with or without brake. RE.C6-G: twin wheels version.
Wheel Ø: 40 - 50 - 60 mm



15

Connecting clamps



Connectors and fixed or adjustable connection clamps for square and round section tubes for the building-up of light and modular structures. Available in aluminium or stainless steel with natural finish or with epoxy resin coating, black colour.

GN 131 - GN 131-NI

Two-way connecting clamps
Aluminium or stainless steel



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Special executions on request: different combinations of holes.
Holes Ø: 10 - 12 - 14 - 15 - 16 - 18 mm

GN 132

Two-way connecting clamps
Aluminium



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Special executions on request: different combinations of holes.
Holes Ø: 20 - 25 - 30 - 32 - 35 - 40 - 42 - 45 - 48 - 50 - 55 - 60 mm

GN 134

Two-way connecting clamps
Aluminium



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Available with square holes, round holes or combination of square and round holes.
Holes Ø: 20 - 25 - 30 - 32 - 35 - 40 - 42 - 45 - 48 - 50 mm

GN 145 - GN 145-NI

Connecting clamps with mounting base
Aluminium or stainless steel



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Holes Ø: 10 - 12 - 14 - 15 - 16 - 18 - 20 mm

GN 146

Connecting clamps with mounting base
Aluminium



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Holes Ø: 20 - 25 - 30 - 32 - 35 - 40 - 42 - 45 - 48 - 50 - 55 - 60 mm

GN 162 - GN 162-NI

Connecting clamp bases
Aluminium or stainless steel



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Holes Ø: 10 - 12 - 14 - 15 - 16 - 18 - 20 mm

GN 191 - GN 191-NI

T-shaped connecting clamps
Aluminium or stainless steel



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Special executions on request: different combinations of holes.
Holes Ø: 10 - 12 - 14 - 15 - 16 - 18 - 20 mm

GN 192

T-shaped connecting clamps
Aluminium



Natural or with epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
Special executions on request: different combinations of holes.
Holes Ø: 20 - 25 - 30 - 32 - 35 - 40 - 42 - 45 - 48 - 50 - 55 - 60 mm

GN 282

Pivoting connecting clamps
Aluminium



Natural or with epoxy resin coating, black colour.
With continuous adjustment or adjustment by 15° snaps.
AISI 304 stainless steel screws and nuts.
Holes Ø: 40 - 65 mm

GN 291 - GN 291.1

Linear actuators
Steel



AISI 303 stainless steel worm screw with trapezoidal threading; brass slider. Standard executions: right or left threaded screw, projecting on one side or both sides.
Stroke: 65 - 70 - 100 - 115 - 150 - 165 - 170 - 200 - 215 - 220 - 265 - 270 - 300 - 315 - 320 - 720 mm

GN 132.2

Two-way connecting clamps
for linear actuators, aluminium



Epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
With or without technopolymer sliding bushings.
Holes Ø: 30 - 40 - 50 - 60 mm

GN 146.1

Connecting clamps with mounting base
for linear actuators, aluminium



Epoxy resin coating, black colour.
AISI 304 stainless steel screws and nuts.
With or without technopolymer sliding bushing.
Holes Ø: 30 - 40 - 50 - 60 mm

**RH**

Handles for special applications



High standards and performances in terms of quality, design and care to surface finishes allow the application of these handles on equipment and instruments destined for sectors with very specific requirements.

RH-UG

Tubular handles

Rectangular cross section, technopolymer and aluminium



Technopolymer handle shanks and aluminium tube, natural or black colour. Back mounting, zinc-plated steel tapped bosses; front mounting, pass-through holes for stainless steel cylindrical-head screws and zinc-plated self-locking nuts. Suitable for use on a 19" rack. Assembly centre distances: 55 - 88 - 100 - 120 - 180 mm

RH-A1

Tubular handles

Oval cross section, aluminium



Aluminium handle shanks, available inclined or straight; threaded blind holes for M5 screws. Aluminium bar, ground surface. Technopolymer end caps. Suitable for use on a 19" rack and instruments in general. Assembly centre distances: 88 - 100 - 120 - 200 mm

RH-S1

Handles

Rectangular cross section, aluminium



Natural or black colour. Threaded blind holes. A careful machining process ensures the elimination of all sharp edges. Suitable for use on a 19" rack and instruments in general.

Assembly centre distances: 25 - 55 - 88 - 120 - 180 mm

RH-AR

Handles

Rectangular cross section, aluminium



Aluminium handle shanks and bar. Threaded blind holes. Assembly centre distances: 300 - 500 mm

RH-M3

Tubular handles

Technopolymer and aluminium



Technopolymer handle shanks. Pass-through holes for zinc-plated steel cylindrical-head screws with hexagon socket, nuts and washers. Aluminium bar, natural or black colour. Assembly centre distances: 200 - 300 - 400 mm

RH-TL.U3

Tubular handles

Aluminium and stainless steel



Extruded aluminium handle shanks. Threaded blind holes. AISI 304 stainless steel tube, ground surface. Turned AISI 303 stainless steel side end elements. These handles ensure an ergonomic grip during frequent operations. Assembly centre distances: 300 - 500 - 700 mm

RH-GM.B

Bent tubular handles

Aluminium and stainless steel



Aluminium handle shanks, epoxy resin coating. Threaded blind holes. AISI 304 stainless steel tube, ground surface. Technopolymer end caps. Assembly centre distances: 500 - 600 mm

RH-HS-30

Modular tubular handles

Aluminium



Aluminium die-cast T-shaped connecting shanks, connecting joints and end shanks. Epoxy resin coating. Front mounting, threaded holes for zinc-plated and passivate steel M12x80 screws and washers. Aluminium tube, ground surface. Tube lengths: 200 - 300 - 400 - 500 - 600 - 700 mm Curve angles: 45° - 90°

RH-BG

Bent handles

Oval cross section, aluminium



Aluminium bar, natural or black colour. Threaded blind holes. Assembly centre distances: 400 - 600 - 800 mm

RH-ER-33

U-shaped and double-curved handles

Stainless steel



AISI 304 stainless steel tube, ground surface with a high resistance to strong impacts and scratches. AISI 303 stainless steel tapped bosses for cylindrical-head screws with hexagon socket and washers. Standard executions: double-curved, angular or U-shaped. Assembly centre distances: 300 - 350 - 500 mm

RH-AK

Handles

Cast aluminium



Epoxy resin coating. Front mounting, pass-through holes for cylindrical-head screws with hexagon socket, stainless steel nuts and washers; back mounting, threaded blind holes. Assembly centre distances: 96 - 140 mm

RH-EG

Shaped handles

Stainless steel microfusion



Threaded blind holes. Assembly centre distances: 140 - 180 mm

RH-ST**Handles***Round cross section, steel*

Steel bar, chrome-plated surface.
Chrome-plated brass washers.
Threaded blind holes.
Assembly centre distances: 32 - 42 - 55 - 64 - 76 - 88 mm

RH-SS**Handles***Round cross section, steel*

Steel bar, ground and chrome-plated surface.
Plastic central grip. Chrome-plated brass end supports.
Threaded blind holes.
Assembly centre distances: 55 - 88 - 100 - 120 - 180 - 200 mm

RH-EF**Handles***Oval flat cross section, AISI 303 stainless steel*

Threaded holes for AISI 304 stainless steel screws and washers.
Assembly centre distances: 100 - 120 - 150 - 180 - 250 - 350 mm

RH-OA**Handles***Oval flat cross section, aluminium*

Natural or black colour.
Threaded blind holes.
Assembly centre distances: 55 - 88 - 100 - 120 - 180 - 200 - 235 - 250 mm

RH-MK**Folding handles***Steel or stainless steel*

Round cross section bar in steel with ground surface or AISI 303 stainless steel (RH-EK).
Stop spring in steel or stainless steel (RH-EK) to keep the handle open or folded back.
Zinc-plated or stainless steel (RH-EK) washers and nuts.
Assembly centre distances: 100 - 120 - 180 - 250 mm

RH-EE-01 - RH-EE-02 - RH-EE-03**Flush pull foldaway handle***AISI 304 stainless steel*

Return spring from work to rest position. Pass-through holes for M4 or M5 countersunk-head screws.
This handle is generally used on devices where it is requested to save space.
Dimensions: 75 - 120 - 132 mm

RH-SG**Flush pull handles***Technopolymer and aluminium*

Natural or black colour. Technopolymer side covers.
Back mounting by means of two rubber profiles that ensure a firm and safe assembly, front mounting by means of pass-through holes for M4 countersunk-head screws and a lower rubber profile.
Suitable for use with plates having a thickness between 1.0 and 2.5 mm. Dimensions: 100x90 - 118x90 - 167x90 mm

RH-SK**Folding handles with recessed tray***Aluminium*

Light grey or black colour. With return spring from work to rest position or click device to stop the handle in both positions. Pass-through holes for M4 countersunk-head screws. This handle is shaped inside in order to make a more comfortable grip.
Assembly centre distances: 50 - 79 mm

RH-EL**Handles***Regular profile, stainless steel*

Threaded blind holes.
Assembly centre distances: 60 - 80 - 100 - 130 mm

RH-LG**Handles***Regular profile, aluminium*

Natural or black colour.
Threaded blind holes or pass-through holes for M4 countersunk head screws.
Assembly centre distances: 30 - 45 - 70 - 90 mm

RH-GZ**Simple or extensible feet***Zinc alloy*

Soft PVC no-slip foot. Technopolymer safety locking device, red colour.
Standard executions: simple or extensible foot.
Assembly by means of M4 screws and nuts.

RH-FG16**Tubular handle with built-in safety switch***Technopolymer*

Technopolymer handle shanks and PVC tube. IP 65 protection class. With a button and two leds (red and green) indicating the locked and unlocked state. By pressing the button, the operator requires access to the protected area through external logic (PLC).
Assembly centre distance: 180 mm

RH-FG11**Tubular handles****with built-in microswitch***Technopolymer*

Microswitch with standard or protruding push-button, with green or red built-in led. Normally open contact (NO) and normally closed contact (NC). By pressing the button, the operator requires access to the protected area through external logic (PLC). Assembly centre distance: 160 mm

RH-MA**Handles***Steel and technopolymer with elastomer*

Steel return spring. Back mounting, holes for self-tapping screws; front mounting, holes for M4 or M5 countersunk-head screws. Suitable to be assembled on instruments, suitcases and similar applications.
Dimensions: 203 - 223 - 238 - 241 - 268 mm

RH-ET-CLEAN**Handles***AISI 303 stainless steel*

Threaded blind holes for AISI 304 stainless steel screws and washers.
Standard executions: bridge-shaped or double-curved handle.
Assembly centre distances: 100 - 120 - 140 - 200 mm

New products

MZD

Adjustable torque limiting knobs

Technopolymer



Black-oxide steel boss with threaded blind hole or threaded screw. Grey closing cap.
Adjustable torques from 0.2 to 1.0 Nm
Diameter 47 mm

VTD

Torque limiting knob

Technopolymer



Zinc-plated steel boss with threaded blind hole.
Grey closing cap.
Max limiting torques 2, 3, 4, 6 Nm.
Diameters 60 - 80 mm

DD52R-E-RF

Electronic position indicators

Data transmission by radio frequency



Orange or grey colour. LCD display with values visualization in units of measure (mm, inches or degrees). Absolute or incremental mode, reading orientation. The visualization parameters can be set by the operator. Protection class IP65 or IP67 according to EN 60529.
AISI 304 stainless steel boss with hole Ø 20H7.

DVF.6 - DVF.7

Vibration-damping elements

Silicone rubber and stainless steel



Threaded studs or bosses with threaded blind hole.
Silicone rubber (MVQ) vibration-damping body, RAL 7040 grey colour, hardness 55±5 Shore A.
Diameters: 32 - 38 - 43 - 50 - 60 mm

ZCL - ZCR

Spur Gears and racks

Technopolymer, pressure angle 20°



Gears with solid hub or plain pass-through hole.
Modules 0.5, 1.0, 1.5, 2.0, 2.5, 3.0.
Square section racks with or without steel core, T-shaped or with mounting bracket.
Modules 0.5, 1.0, 1.5, 2.0, 3.0, 4.0.

LM-HD-SST

LM.F-HD-SST

Levelling elements
Hygienic Design



Base with or without holes for ground mounting.
AISI 304 stainless steel stem and adjustable sleeve.
Protective ring, blue colour, in compliance with FDA.
Bases Ø: 80 - 100 - 120 mm
Threadings: M16 - M20 - M24

CMDX-AL

Hinges for thin doors

Aluminium



Bodies on the same plane or raised with opening to the right or to the left side. AISI 304 stainless steel rotating pin. Technopolymer guide bushings for pin. Assembly by means of stainless steel self-tapping screws (included in the supply). Rotation angle: max 185° (-5° and +180° being 0° the condition where the two interconnected surfaces are on the same plane). Dimensions: 50 - 70 - 90 mm

CFMR.

Spring hinges

for automatic return, SUPER-technopolymer



Aluminium rotating pin, technopolymer end caps.
Return torques 0.35 or 0.70 Nm for door automatic opening/closing. Rotation angle: max 270° (-90° and +180° being 0° the condition where the two interconnected surfaces are on the same plane).
Dimension: 67 mm

HCK-E - HCK-E-ST

HCK-E-STL

Column level indicators
with level and temperature electrical sensors



HCK-E: MIN level electrical sensor, HCK-E-ST: with MIN level and MAX temperature sensors, HCK-E-STL: MIN level sensor and temperature probe. NO, NC, SW contacts valid only for MIN level. Zinc-plated or stainless steel screws, nuts and washers. NBR or FKM synthetic rubber O-Ring. Assembly centre distances: 127 - 176 - 254 - 381 - 508 mm

HCV-E - HCV-E-ST

HCV-E-STL

Column level indicators
with level and temperature electrical sensors



HCV-E: MIN level electrical sensor, HCV-E-ST: with MIN level and MAX temperature sensors, HCV-E-STL: MIN level sensor and temperature probe. NO, NC, SW contacts valid only for MIN level. Zinc-plated steel screws, nuts and washers. NBR synthetic rubber O-Ring.
Assembly centre distances: 127 - 254 mm

RE.F2

Soft polyurethane wheels

Aluminium centre body



RE.F2-N: zinc-plated steel sheet bracket, fixed plate without brake or turning plate with brake. RE.F2-H: steel sheet bracket for medium-heavy loads, fixed plate without brake or turning plate with brake. RE.F2-WH: electro-welded steel bracket for heavy loads, fixed plate without brake or turning plate with brake. Wheel Ø: 100 - 125 - 160 - 200 mm

RE.F7-N-HT

Duroplast wheels

Steel or stainless steel sheet bracket, high temperatures



Duroplast wheel body. Resistant to temperatures up to 300°C.
Zinc-plated steel sheet or stainless steel sheet turning plate bracket, without brake.
Wheel Ø: 80 - 100 mm

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Monza (Milan) Italy

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