

Standard Machine Elements Worldwide



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Elesa + Ganter

ELESA+GANTER® is a commercial joint-venture between the two world leaders of standard machine elements: Elesa S.p.A (Monza, Milano, Italy) and Otto Ganter GmbH & Co. KG (Furtwangen, Germany). ELESA® (founded in 1941) and OTTO GANTER (founded in 1894) have been co-operating for more than 35 years to create market synergies and to develop products which are in line with the market. In 1995 the two companies started to set up a common sales network under the trademark ELESA+GANTER® to offer the widest range of standard machine elements with a unique design, a perfect service and with the ability to create special customized solutions in a very short time.

The joint-venture made its first steps into the East-European market and today it covers more than 35 industrialised countries.

In order to create a closer relationship with the customers, ELESA+GANTER branch offices were founded: ELESA+GANTER Austria, ELESA-GANTER Iberica (Spain), ELESA+GANTER Polska (Poland), ELESA+GANTER China, ELESA+GANTER CZ (Czech Republic) and lately ELESA+GANTER India.

A full localised stockholding of standard elements, trained staff and an on-site machining service combine to provide a wealth of knowledge to the customers. Almost all the requirements can be easily satisfied when dealing with metal and plastic elements.

Thanks to the close liaison with well educated engineers from ELESA and GANTER special technical solutions can be developed focusing on design, performance and industry quality.

ERP systems are the heart of a powerful service. Managing and controlling every step in the production, logistics and offices. Full stock availability ensures complete deliveries on time.



Points of strength

- technological background of the two established mother companies
- · innovation in combination with decades of experience
- · unique design
- optimised and widest product range of standard machine elements, driven by the market
- · worldwide distribution network
- full stock availability with fast delivery times
- · customised solutions
- perfect service including technical assistance









































The Original design is one of the most relevant characteristics of the ELESA+GANTER elements, coming from a combination of thorough ergonomic research and special styling care. The products are protected by more than 150 international patents and they have been selected and awarded by the most prestigious international Industrial Design juries, such as "International Forum Design" Hannover (Germany), "Design Center" Stuttgart (Germany), "Compasso d'Oro" Milan (Italy) and "Fluidtrans Compomac" Milan (Italy), Good Design Award (Japan).

Standard Machine Elements Worldwide

WORLDWIDE SALES NETWORK

Europe

Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Macedonia, The Netherlands, Norway, Poland, Portugal, Rumania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey



Asic

China, India, Indonesia, Israel, Japan, Singapore, South-Korea, Taiwan, Thailand

Africa

South Africa

Oceania

Australia, New Zealand

America

Argentina, Brazil, Canada, Mexico, USA



WORKING FOR THE DESIGNER

General index

ELESA+GANTER has always been attentive to designers' needs and now makes available a catalogue on DVD with CAD 2D and 3D drawings of all its











Elesa



After more than 70 years leadership in the design and manufacture of new and innovative standard machine elements for the mechanical industry made up of a wide variety of engineering plastics, ELESA has earned the status of reference point for designers and builders. 31 International Awards in Industrial Design prove a business culture focused on its natural inclination for design and ergonomic product features. Modern and flexible manufacturing facilities with fully automatic production units and vast stock availability ensure the

highest level of service and a timely distribution via a worldwide network. An R&D technical competence together with a high performing test laboratory allow the transformation of specific customer needs into new customised solutions, in addition to the widest range of standard items available on the market. ISO 14001 certification of ELESA's manufacturing facilities, shows a firm commitment in respect to the environment.















ELESA – ERGOSTYLE – OOOO ELESA-CLAYTON are registered trade marks of Elesa S.p.A.













Ganter



For more than 100 years, Ganter has designed and manufactured standard machine elements made of a wide variety of different metallic materials and by applying a unique variety of manufacturing methods and surface treatments. Why is Ganter the supplier of choice for standard machine elements for all industrial sectors worldwide? We combine a thorough understanding of the need of mechanical engineers with expertise in the exacting requirements of machine design. We then maintain an extensive

product range and provide customers with excellent support services. Ganter is proud to define customer orientation as the core of its business philosophy, expressed for example by the capability to design and manufacture special Versions for specific customer needs or by an automated warehouse, which allows timely and complete deliveries. There is no minimum order limit on standard items. We can also deliver portions of large custom orders, on an as-needed basis, for your just-in-time manufacturing.





For custom orders, our dedicated Service Centre configures single standard parts, or combinations of parts, to suit your specific needs regarding shape and function.











High performing items



STAINLESS STEEL PRODUCTS

The high corrosion resistance of stainless steel have made it into one of the most sought-after materials in many sectors of industry. Elesa+Ganter's product range includes a wide assortment of rustproof products, spread over all product groups. It covers both all-stainless steel standard elements as well as stainless steel

and plastic composites.

The materials used are AISI303, AISI304 and AISI316, resistant to rust, acid and heat depending on alloys.

Designed for:

 Food industry, chemical industry, medical engineering, demanding climatic conditions and atmospheres or aggressive substances



ANTIMICROBIAL PROTECTION

The products of the Elesa+Ganter SAN LINE stop the deposit of any undesired organisms such as microbes, bacteria, mildew and fungi which are the major causes of unpleasant odours, discoloration, degradation and the formation of biofilm on surfaces and prevent them from reproducing. Hence a hygienic and

precautionary action is guaranteed even after several cleaning cycles at high temperatures with soap and solvents in the long term.

A special technopolymer including antimicrobial additives – a mixture of silver ions on an inorganic ceramic base – chemical free without any antibiotic drugs or pesticides which may be released on the operator's hands.

Designed for:

- Medical and hospital equipment
- Disability aids
- Machines for the food processing and pharmaceutical industry
- Equipment for catering services
- Urban and public fittings



ANTISTATIC ACTION

The special conductive technopolymer (ESD-C Electrostatic Discharge Conductive) prevents the transfer of electrostatic discharge between bodies with different electric potential. The new antistatic elements line is suitable for ESD PROTECTED AREAS (EPA) where components which are susceptible to electrostatic discharges are to be handled with the minimum risk of

damage. The printed mark ESD-C on the surface of every single element identifies the particular antistatic feature according to EN 100015/1 and IEC 61340-5-1.

Designed for:

- Assembly lines for electronical components
- ESD-Protected Area (EPA)



WHITE AGAINST THE DIRT

Industrial handles, lobe and knurled knobs in RAL 9002 white colour with glossy finish to make cleaning operations easier. AISI 303 stainless steel metal inserts in compliance with the most rigorous sanitary laws. Compact shape and lack of cavities to avoid any deposit of dirt, dust and machining residues.

These are the major functional characteristics of Elesa+Ganter CLEAN line in addition to a modern design and high performance.

Designed for:

- Medical and hospital equipment
- · Operating rooms
- Hospital fittings



FOR A SAFER GRIP

Lobe shaped or fluted grip knobs together with two-volume or knurled handles represent the "SOFT" line. Commonly known as Soft-touch, these new elements have been developed by Elesa+Ganter's R&D department for use on machinery and equipment requiring frequent tightening, or for applications subject to severe

stress. The major characteristics of "SOFT" products are to ensure a safer and more stable ergonomic grip and to improve the comfort of the operator's hand, increasing adherence to the element and absorbing vibrations even in unfavorable environmental conditions such as humidity, aridity, heat, cold and grease.

Designed for:

- · Disability aids
- · High-precision instruments
- Fitness machines
- Gardening and unfavorable climatic conditions



OIL LEVEL SIGHT GLASSES FOR SPECIAL APPLICATIONS

Elesa+Ganter's extensive range of oil level sight glasses also provides solutions for highly demanding requirements, for instance high temperatures, high pressure loads or aggressive substances.

The most recent development is an ATEX sight glass for use in explosion hazard atmospheres.

Designed for:

 Industrial products such as gears, used in applications where the components must comply with ATEX guidelines



Ergonomy and Design at their best



THE ERGOSTYLE® RANGE

Conceived for a broad spectrum of applications, typical of new market segments, Ergostyle® elements are destined for hospital and medical equipment and laboratory fittings, office furnishings, leisure and sporting equipment, and, generally, wherever aesthetics and user-friendliness are key requirements for the market success of a product.

A basic feature of the new elements, besides a perfect ergonomic function, is that of adding to the quality and value of the equipment for which they have been designed, by fully blending with it.

ERGONOMIC DESIGN

We believe that good design should start with a thorough understanding of the product's functions, which in our case means taking into account the full set of movements inolved in each operation of opening and closing, clamping, adjusting, setting or moving and evaluating for each of them the interplay between man and machine taking place when the control element is being used.

Ergostyle® elements are therefore not just simply designed to look good and provide a comfortable fit for the hand, but also make life easier for the operator every time they are being used and keep doing so throughout the lifespan of the object they have been designed for.

So, it is after all no real wonder that at its very first appearance Ergostyle® should obtain several of the world's most distinguished recognitions.

















Customized Solutions

ELESA+GANTER offer the world's largest range of standard machine elements. On top of that, special customized versions and technical solutions are offered due to an increasing demand of the industry.

Elesa+Ganter's Know-How in manufacturing as well as a flexible, customer orientated organization allow to respond quickly and with ultimate cost effciency to non-standard requirements. This applies especially when special versions and designs are involved thanks to an extraordinarily large number of different production technologies.

This is where you'll find a selection of items to match your requirements.

Contact us – almost everything can be done.

SPECIAL SHAPES

Dimensions, Threads.

SPECIAL COLOURS

Almost all the standard machine elements can be produced in nearly all colours.

SPECIAL SURFACE TREATMENTS

Plastic Powder Coating.

BURNISHING

Zinc-, Nickel- and Chrome-plating, Anodising.

SPECIAL PRODUCT BRANDING*

Logos, Indications, Graphic elements, Signals.

* Tampo-printing and high precision laser engraving allow this kind of personalization.

















00000

Be sure to look for them: a small unobtrusive mark, making a world of difference.

1 Operating elements

VRTP



Spoked handwheels

Material black matte technopolymer, black-oxide steel hoss

Versions without handle, with revolving or with fold-away handle Diameters 80 to 375 mm

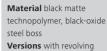




technopolymer, coloured caps, black-oxide steel boss Versions without handle, with revolving or fold-away handle Diameters 100 to 200 mm



Crank handles



or fold-away handle

Dimensions 50 to 210 mm

GN 322



Spoked handwheels

Material aluminium. turned and polished Versions without handle, with revolving or with fold-away handle Diameters 125 to 250 mm



INOX

Material black glossy duroplast, black-oxide or stainless steel hub Versions without handle with

Solid handwheels

revolving handle Diameters 50 to 350 mm MT-AT





Material black matte technopolymer, black-oxide steel boss

Versions with revolving or fold-away handle

Dimensions 50 to 160 mm

DIN 950



Spoked handwheels

Material cast iron or

Versions without handle, with revolving or with fixed handle Diameters 80 to 500 mm





Solid handwheels

Material black glossy duroplast black-oxide steel hub Versions without handle, with revolving, with fold-away or safety fold-away handle Diameters 100 to 250 mm

GN 471



Crank handles

Material aluminium, black plastic coated Versions with revolving handle, with fold-away handle Diameters 50 to 160 mm

GN 227.2



INOX

Stainless steel spoked handwheels

Material pressed stainless steel, sandblasted finish, welded hub

Versions without handle, with revolving handle

Diameters 160 to 400 mm

EMW

ERGOSTYLE*

Monospoke handwheels



Material black matte technopolymer, black-oxide steel boss

Versions with revolving or fold-away handle Diameter 350 mm

GN 472.3



Crank handles

Material aluminium, black plastic coated Version with fold-away handle (black glossy duroplast) Diameters 80 to 125 mm

VDS.



Solid handwheels

Material black matte technopolymer, black-oxide steel boss

Versions without handle, with revolving, fold-away or with safety fold-away handle Diameters 80 to 300 mm

GN 323



Solid handwheels

Material aluminium, black plastic coated Versions without handle, with revolving handle Diameters 80 to 250 mm

DIN 468



Crank handles

Material cast iron, black plastic coated **Versions** with revolving or fixed handle (steel, polished) Diameters 63 to 315 mm



Solid handwheels

Material grey-black matte technopolymer, coloured caps, black-oxide steel boss Versions with revolving or with fold-away handle Diameters 125 to 175 mm





Safety solid handwheels

Material aluminium, black plastic coated, polished rim Versions without handle, with revolving handle Diameters 140 to 160 mm

EKH. ERGÖSTYLE*



Crank handles

Material black matte technopolymer, coloured caps, black-oxide steel boss Versions with revolving or fold-away handle Dimensions 100 to 125 mm



2 Clamping knobs

VB.639

INOX

Three-arm knobs

Material black matte technonolymer Assembly black-oxide steel, brass or stainless steel tapped boss; zinc-plated steel threaded stud Diameters 63 to 130 mm

DIN 6335

Star knobs

Material cast iron or aluminium

Assembly reamed blind or through hole, tapped blind or through hole

Diameters 32 to 100 mm

B.193 INOX

Knurled grip knobs

Material black glossy duroplast

Assembly brass or stainless steel threaded boss, zinc-plated or stainless steel threaded stud

Diameters 15 to 50 mm

VCT.

Lobe knobs

Material black matte technopolymer, coloured caps Assembly black-oxide or brass threaded or plain boss, zincplated steel threaded stud Diameters 25 to 95 mm

DIN 6336

Lobe knobs

Material cast iron or aluminium

Assembly reamed blind or through hole, tapped blind or through hole

Diameters 32 – 80 mm

DIN 466

INOX

Knurled grip knobs

Material steel or stainless

Assembly tapped through hole or threaded stud

Diameters 12 to 40 mm

VCT.SOFT

SOFT

Lobe knobs

Material technopolymer coated with "soft-touch" black elastomer, coloured caps **Assembly** brass tapped boss or zinc-plated steel threaded

Diameters 43 to 53 mm

VLS.

INOX

Security lobe knobs

Material black matte technopolymer Assembly brass tapped boss,

stainless steel threaded stud Security key with stainless steel anti-intrusion profile

Diameters 42 to 55 mm

MBT.

Diamond cut knurled knobs

Material black matte technopolymer

Assembly brass boss with plain or tapped hole; zincplated steel threaded stud

Diameters 31 to 69 mm

VC.692

NOX

stud

Lobe knobs

Material black matte technopolymer Assembly brass or stainless steel threaded boss, zinc-plated or stainless steel threaded stud

Diameters 32 to 60 mm

ELK. ERGÖSTYLE

Lobe knobs

Material grey-black matte technopolymer, coloured caps Assembly black-oxide steel or brass boss with hole, zincplated steel threaded stud Diameters 45 to 70 mm

EWN.

ERGOSTYLE" INOX

Wing nuts

Material grey-black matte technopolymer, coloured caps Assembly brass or stainless steel tapped boss, zinc-plated or stainless steel threaded stud Dimensions 32 to 70 mm



Fast mounting lobe knobs

Material black matte technopolymer Assembly square through hole with elastic ring for push-fit assembly

Diameters 50 to 63 mm

VL.640 FP

Lobe knobs

Material black glossy technopolymer

Assembly black-oxide steel hub with blind or tapped hole or not drilled

Diameters 50 to 130 mm

CT.476

INOX

Wing knobs

Material black matte technopolymer

Assembly brass or stainless steel threaded boss, zinc-plated or stainless steel threaded stud

Dimensions 20 to 40 mm

Wing knobs

GN 5335

INOX

Lobe knobs



NOX

Fluted grip knobs

Material black matte technopolymer Assembly brass or stainless steel threaded boss. zinc-plated or stainless steel threaded stud

Diameters 16 to 50 mm

GN 431

INOX

Material sandblasted matte stainless steel Assembly blind hole or threaded stud

Dimensions 25 to 36 mm











3 Clamping levers

ERX. ERGÖSTYLE INOX

Adjustable handles

Lever body technopolymer Assembly technopolymer clamping element, brass or stainless steel tapped boss, zinc-plated or stainless steel threaded stud

Dimensions 30 to 108 mm

GN 3004



Adjustable handles with high tightening clamping force

Lever body zinc alloy die-cast, plastic coated Assembly nitrided steel, tapped hole or threaded pin Dimensions 63 to 108 mm

ERF. FRGOSTYLE*

Lever handles

Lever body technopolymer Assembly brass boss with tapped hole or threaded stud, cylindrical or square blind hole, transversal set screw Dimensions 44 to 95 mm

ERZ. ERGÖSTYLE' INOX

Adjustable handles

Lever body technopolymer, with zinc alloy insert Assembly black-oxide or stainless steel clamping element, tapped hole or threaded pin Dimensions 44 to 95 mm

GN 302

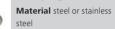
Adjustable handles

Lever body zinc alloy die-cast, plastic coated Assembly black-oxide steel clamping element, tapped hole or threaded pin

Dimensions 30 to 78 mm

DIN 99

INOX



Assembly plain or tapped through hole with straight or 20° inclined arm

Clamping levers

Dimensions 50 to 200 mm

ERM. ERGÖSTYLE INOX

Adjustable handles

Lever body zinc alloy die-cast, epoxy resin coating Assembly black-oxide or stainless steel clamping element, tapped hole or threaded pin

Dimensions 44 to 95 mm

MRX.

INOX

Adjustable handles

Lever body technopolymer Assembly technopolymer clamping element, brass or stainless steel tapped boss, zinc-plated or stainless steel threaded stud

Dimensions 40 to 100 mm



Clamping nuts with

double lever

Material steel or stainless steel

Assembly tapped through hole

Dimensions 47 to 118 mm

ERX.AV ERGÖSTYLE INOX

Adjustable handles for quick assembly

Lever body technopolymer Assembly technopolymer clamping element, cavity for quick assembly, brass tapped boss, zinc-plated threaded pin Dimension 78 mm

MR.

Adjustable handles

Lever body technopolymer Assembly technopolymer clamping element, black-oxide steel or brass boss with plain or tapped blind hole, zinc-plated threaded stud

Dimensions 40 to 100 mm

GN 212 INOX

Handle levers

Material black oxide steel or stainless steel

Assembly tapped hole or plain blind hole, angled lever Dimensions 22 to 40 mm

GN 300

INOX

Adjustable handles

Lever body zinc alloy die-cast, plastic coated Assembly black-oxide steel or stainless steel clamping element, tapped hole or threaded pin

Dimensions 30 to 108 mm

GN 212.3

INOX

Adjustable tension handles

Material black oxide steel or stainless steel

Assembly tapped hole or threaded pin, straight or angled lever

Dimensions 21 to 40 mm

GN 150

Split hubs

Material black oxide sintered steel

Dimensions 24 to 32 mm



NOX

Adjustable handles

Lever body sandblasted matte stainless steel Assembly stainless steel clamping element, tapped hole or threaded pin Dimensions 45 to 92 mm



Adjustable handles

Material black oxide steel **Assembly** tapped hole or threaded pin, straight or 15° inclined arm

Dimensions 32 to 45 mm



GN 316

Ratchet spanner

Material Hardened steel Versions hole with keyway, with threaded insert or with square insert

Dimensions 12 to 26 mm (diameter of the insert bore)



4 U-Handles

GN 565

INOX

Handles

Material aluminium or stainless steel Assembly tapped blind or through holes

Centre distances

100 to 500 mm

M 443

Handles

Material black, orange, grey or red matte technopolymer Assembly through holes for cylindrical-,countersunk-, hexagonal-head screws or standard lock nuts

Centre dist. 93.5 to 235 mm

ERB. ERGÖSTYLE GIAN

Bi-directional flush pull handles

Material grey-black or white matte technopolymer Assembly 4 zinc-plated steel self-tapping screws

Dimension 130 mm

GN 565.2

Inclined Handles

Material aluminium Assembly tapped blind holes Centre distances 112 to 160 mm

GN 425

INOX

Handles

Material stainless steel or steel, chrome-plated, black oxide or plastic coated finish Assembly tapped blind holes Centre distances 55 to 235 mm

GN 426.1

Cabinet handles

Material aluminium black or silver plastic coated or natural

Versions double-curved or straight

Centre distances 200 to 500 mm

M.843

Handles

Material glossy

technopolymer in six different colours, M.243 in black glossy duroplast

Assembly brass bosses with tapped holes

Centre dist. 86 to 300 mm

GN 425.2

Folding handles

Material steel, chrome-plated finish Assembly back mounting **Centre distances** 100 to 180 mm

GN 333

Tubular handles

Material aluminium. anodised, black or silver plastic coated or natural **Versions** straight or inclined

Centre distances 180 to 1000 mm

M.643

Handles

Material black matte technopolymer

Assembly brass die-cast zinc alloy or brass bosses, tapped blind holes or through holes for cylindrical-head screws Centre dist. 86 to 300 mm

GN 730

Guard safety handles

Material aluminium, anodised, black or silver plastic coated or natural Assembly tapped blind holes Centre distances

90 to 120 mm

GN 666

INOX

Tubular handles

Material aluminium, anodised or black plastic coated or stainless steel **Versions** straight or inclined

shanks

Centre distances 200 to 600 mm

GN 559

Handles

Material aluminium, black plastic coated Versions closed-ended

or open-ended handle Assembly tapped blind holes

Centre distance 128 mm

ESP. ERGÖSTYLE*

Guard safety handles

Material grey-black matte technopolymer, coloured

Assembly through holes for cylindrical- or countersunk-head screws

Centre distance 93.5 mm

M.1066 BM

Tubular handles

Material aluminium tube, epoxy resin white coating. technopolymer shanks

Assembly zinc-plated steel screws with tapped blind holes Centre dist. 200 to 600 mm

EBP. ERGOSTYLE SAN



Bridge handles

animicrobial technopolymer, coloured caps

cylindrical-head screws or brass bosses with tapped blind holes Centre dist. 93.5 to 179 mm



EPR. ERGOSTYLE CLEAN

Flush pull handles

Material grey-black or white matte technopolymer, coloured screw cover Assembly snap-in assembly or through holes for stainless

steel self-tapping screws Dimensions 90 to 120 mm

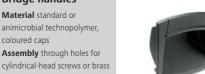
Tubular handles

ETH. ERGÖSTYLE

Material aluminium tube epoxy resin matte coating, technopolymer handle shanks, coloured covers Anti-rotation system

Assembly through holes **Centre dist.** 300 – 1000 mm









5 Fixed, revolving and fold-away handles

I 652





Material black, orange or red matte technopolymer Assembly brass boss with plain or tapped blind hole; zinc-plated steel threaded stud

Dimensions 40 to 94 mm

EBK+x FRGOSTYLE

Two-volume revolving handles

Material black matte technopolymer Assembly zinc-plated steel

threaded stud

Diameter 50 mm

1 280



Handles Material black glossy duronlast Assembly tapped blind

Dimensions 28 to 116 mm

1.622

Handles



technopolymer in six colours, I.222 in duroplalst Assembly tapped or plain blind hole, or self-locking boss, plain blind hole Dimensions 25 to 90 mm

EKK. ERGÖSTYLE



I.601+x

INOX

Revolving handles



Material black matte technopolymer Assembly zinc-plated or

stainless steel shank, hexagon socket at threaded end Dimensions 40 to 90 mm

DIN 319

INOX

Ball knobs

Material technopolymer, duroplast, aluminium, steel or stainless steel

GN 676.5

INOX

Revolving handles

Material aluminium, zinc-plated steel or black matte technopolymer Assembly threaded or plain

Dimensions 21 to 31 mm

zinc-plated pin

I.621+x

Two-volume revolving



technopolymer Assembly zinc-plated steel shank, hexagon socket at

threaded end Dimensions 45 to 90 mm

IH.N

Assembly plain or tapped

blind hole

Dimensions 12 to 50 mm

Knobs with

magnifying lens

Material black matte

technopolymer, with

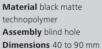
magnifying lens for labels

Assembly plain blind hole

Dimensions 40 to 50 mm

1.580 N

Handles



DIN 98

Revolving handles



Material aluminium, zinc-plated steel or black matte technopolymer

Assembly threaded or plain zinc-plated pin

Dimensions 54 to 117 mm

IEL-SOFT

Two-volume handles

Material black matte soft-touch elastomer IEL.N-H with magnifying lens Assembly plain blind hole

Dimension 65 mm

EGH.SOFT ERGÖSTYLE SOFT

Handle

Material technopolymer coated with black "soft-touch" elastomer Assembly plain blind hole Dimension 85 mm

IR.620

Two-volume fold-away handles

Material black matte technopolymer; black-oxide steel stud; sintered and oxidised steel flat base for embedded mounting

Dimensions 45 to 90 mm

EBK.SOFT ERGÖSTYLE SOFT

Two-volume handles

Material technopolymer coated with "soft-touch" black elastomer, coloured caps Assembly brass boss with tapped blind hole, zinc-plated steel threaded stud

Diameter 43 to 50 mm

GN 310

INOX Lever arms

Material black-oxide steel or stainless steel Versions with ball-, conical-, rounded- or cylindrical knob Dimensions 63 to 250 mm

GN 598.5

INOX



Fold-away handles Material black glossy

duroplast Versions black-oxide

steel or stainless steel stud Dimensions 90 to 119 mm



6 Control elements

GN 164



Scale rings

Material matte chromeplated steel, with or without standard scale Assembly reamed hole with or without friction ring

Dimensions 30 to 60 mm

GN 729



Material aluminium, black anodised, white laserengraved index line Assembly reamed hole Dimensions 34 or 42 mm

GN 700



Locking and continuous control knobs

Material black-oxide steel with black anodised aluminium knoh and scale

Dimension 66 mm

GN 726



Knurled control knobs

Material aluminium, black anodised Assembly with reamed hole

Dimensions 22 to 42 mm

or with collet



Grip knobs

Material technopolymer coated with "soft-touch" elastomer, coloured caps Assembly black-oxide steel boss, reamed hole

Diameters 50 to 63 mm

GN 750



Control levers

Material black-oxide steel with black glossy duroplast

Versions reamed through hole with or without keyway, square through hole

Dimensions 32 or 50 mm

GN 726.1



Knurled control knobs

Material aluminium, black anodised

Versions with triangular index, plain surface or precision graduation Dimensions 22 to 42 mm

GN 736.1



Control handwheels

Material aluminium, black anodised, with or without revolving handle

Assembly reamed hole with or without keyway, with collet and graduated ring

Dimensions 52 or 62 mm

ELC. ERGÖSTYLE



Control levers

Material gray-black matte technopolymer, with coloured caps

Assembly black-oxide steel boss, reamed hole

Dimensions 67 to 140 mm

GN 726.2



Knurled control knobs with flange

Material aluminium, black anodised

Versions with triangular index, plain surface or precision graduation

Dimensions 27 to 42 mm

MBT+I



Diamond cut knurled knobs with revolving handle

Material black matte technopolymer Assembly brass boss, plain blind hole

Diameters 40 to 60 mm

LBR.



Control levers

Technopolymer body, chrome-plated steel arm, Duroplast handle; anodised aluminium plate

Assembly black-oxide steel boss, plain hole with flat face **Dimensions** 81 to 170 mm

IZP.



Knurled control knobs

Material black technopolymer; anodised aluminium front plate; laserengraved triangular index or precision graduation

Assembly plain blind hole Diameters 27 to 40 mm

GN 727



Control knobs with adjustable spindle

Material matte chromeplated steel with black anodised aluminium knob Versions holes parallel or vertical to spindle axis Dimensions 27 or 34 mm

GN 215



Indexing levers

Material black-oxide steel with black glossy duroplast handle

Assembly reamed hole with keyway

Dimensions 54 or 60 mm

IZN.380



Knurled control knobs

Material technonolymer anodised aluminium flange with index or precision graduation in black colour Assembly black-oxide steel boss, reamed hole Diameters 32 to 80 mm

GN 200



INOX

Indexing mechanisms Material black-oxide steel or stainless steel

Versions knurled surface. matte chrome-plated steel with precision graduations, with 1 or 2 lever arms Dimensions 44 or 52 mm

GN 900



Adjustable slide units

Material aluminium natural anodised

Versions with control knob, handwheel, digital position indicator or adjustable spindle Dimensions 50 to 260 mm



7 Rotary controls

GA01, GA02, **GA05**



Gravity position indicators

Material zinc-plated steel case, glass window; use on horizontal or max 60° inclined

Standard ratios 6/1 to 100/1 Diameters 50 to 113 mm

IZN.



Knurled knobs for GA indicators

Material black technopolymer Assembly black-oxide steel boss, reamed blind hole Diameters 60 to 80 mm

VAD.



Solid handwheels with or without revolving handle for **GA or PA indicators**

Material aluminium. epoxy-resin coating, reamed through hole

Diameters 80 to 250 mm

GA11 GA12



Gravity position indicators

Material technopolymer case and window. IP 67; use on horizontal or max 60° inclined spindle

Standard ratios 6/1 to 40/1 Diameters 50 to 68 mm

MBT.



Diamond cut knurled knobs for GA or PA indicators

Material black matte technopolymer Assembly black-oxide steel

boss, reamed blind hole Diameters 60 to 80 mm

DD50



Direct drive digital position indicators

Material technopolymer case and base ultrasonically welded; black-oxide steel bushing, reamed hole, Colours: orange, grey (anthracite on request)

MBT.50-GA11. MBT.70-GA12



Knobs with indicators

Material technopolymer knobs with integral gravity position indicator. IP 67; black-oxide steel boss. reamed blind hole

Standard ratios 6/1 to 40/1 Diameters 51 to 70 mm

VHT.

INOX



Lobe knobs for GA or PA indicators

Material black matte technopolymer

Assembly black-oxide steel or stainless steel boss, reamed blind hole

Diameters 85 to 110 mm

DD51



Height

DD50: 38,5 mm DD51: 47 mm DD52R: 66 mm

Number of digits

DD50: 3 digits DD51: 4 digits DD52R: 5 digits

GW12



Digital-analogue gravity position indicators

Material technopolymer case and window. IP 67 Std. readings after one turn 0000 2 to 0005 0 Diameter 68 mm

VRTP.



Two spoke handwheels for GA indicators

Material black matte technopolymer

Assembly black-oxide steel boss, reamed through hole Diameters 160 to 250 mm

DD52R



Standard readings after one revolution

DD50: 0.10 to 10.0 DD51: 00 50 to 010 0 DD52R: 000.50 to 0010.0

Special Versions

St. steel bushings, reduction sleeves, special readings

PA11 PA12



Positive drive indicators

Material technopolymer case and window. IP 65 Standard ratios 10/1 to 30/1 Diameters 50 to 68 mm

VDC.



Solid handwheels with or without revolving handle for **GA or PA indicators**

Material black duroplast Assembly black-oxide steel boss, reamed through hole Diameters 125 to 200 mm

GN 953.6



Clamping plates

for Position indicators DD52R and GN 954 6 for DD51 Material zinc die casting, adjustable hand lever GN 302 Dimensions B8 to B20

PW12



Digital-analogue positive drive indicators

Material technopolymer case and window. IP 65 Std. readings after one turn 0000.2 to 0005.0 Diameter 68 mm

VDSC+I



Solid handwheels with revolving handle for GA indicators

Material black matte technopolymer Assembly black-oxide steel boss, reamed through hole. Diameters 125 to 200 mm

DE51



Electronic indicators

Direct drive absolute optical electronic position indicators; absolute multi-turn encoder, LCD display for target and current position

Material technopolymer; black-oxide steel bushing



8 Indexing elements

GN 617

INOX

Indexing plungers

Material black-oxide steel or stainless steel Assembly with or without technopolymer or stainless steel knob, with or without rest position and locking nut Dimensions M10 to M20



Indexing plungers

Material zinc die-casting, black plastic coated Assembly stainless steel plunger with stainless steel lifting ring or with black technopolymer knob Dimensions 4 to 8 mm **GN 614** INOX

C-----

Smooth ball spring plungers

Material technopolymer, brass or stainless steel Ball technopolymer or stainless steel Dimensions 3 to 12 mm

GN 613

INOX Stainless Steel

Indexing plungers

Material black-oxide steel or stainless steel Assembly with or without technopolymer or stainless steel knob and locking nut Dimensions M10 to M20



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Knurled knobs with indexing plungers

Material zinc-plated steel Assembly stainless steel plunger with technopolymer knurled knob Dimensions M10 to M16 **GN 815**

INOX

Threaded plungers with screwdriver slotted head

Material black-oxid steel or stainless steel

Dimensions M4 to M12

GN 817

INOX Stainless Steel

Indexing plungers

Material black-oxide steel or stainless steel Assembly with or without black technopolymer knob, with or without rest position and locking nut

Dimensions M8 to M20



INOX Statebase Steel

Lever indexing plungers with rest position

Material black-oxide steel or stainless steel Assembly with or without lever cover and locking nut Dimensions M12 to M20 **GN 610**

Spring loaded shells

Material nickel-plated steel Spring stainless steel Dimensions 2.2 to 5 mm

GN 822

Mini indexing plungers

Material zinc-plated steel Assembly with black technopolymer knob, with or without rest position Dimensions M8 or M10



INOX Stainless Steel

Mounting blocks

Material black-oxide steel or stainless steel Assembly fixing holes parallel or vertical to plunger Dimensions M12 to M20



Side thrust pins

Material aluminium
Pin zinc-plated steel
or technopolymer,
with or without NBR
synthetic rubber gasket
Dimensions 3 to 10 mm

GN 717

INOX Stainless Steel

Indexing plungers

Material zinc-plated steel or stainless steel Assembly with stainless steel lifting ring or with black technopolymer knob, with or without rest position

Dimensions M6 to M12

GN 615

NOX

Threaded ball spring plungers

Material black-oxide steel or stainless steel Assembly spring with normal or heavy end force

Dimensions M3 to M24

GN 113.5 INOX

Ball lock pins

Material stainless steel 1.4305 or 1.4542 (hardenend) Assembly technopolymer knob

Dimensions 5 to 16 mm

GN 608



Indexing plungers with flange

Plunger black-oxide steel Assembly zinc-plated die-cast zinc alloy flange with black technopolymer knob, with or without rest position Dimensions 6 or 8 mm



INOX

Indexing plungers

Material technopolymer, plunger black-oxide steel or stainless steel

Versions with or without rest position and locking nut **Dimensions** M10 to M20



INOX Stainless Steel



Pins with axial lock

Material zinc-plated steel or stainless steel Assembly push button operated locking pawls, technopolymer knob or stainless steel knob (GN 114.6) Dimensions 8 to 20 mm





9 Machine elements

GN 913.3

INOX

Grub screws

Material black-oxide steel or stainless steel **Bolt** technopolymer or brass **Dimensions** M4 to M12 Length 6 to 100 mm



INOX

Levelling washers

Material zinc-plated steel or stainless steel Dimensions 25 to 80 mm Height 8 to 20 mm

GN 707.2 INOX

Split set collars

Material black-oxide steel or stainless steel Assembly grub screws, cylindrical head with hexagon socket

Dimensions 20 to 65 mm



INOX

Grub screws with hall terminal

Material black-oxide steel or stainless steel Assembly ball, reversible or non-reversible flat-faced ball **Dimensions** M4 to M16 Length 6 to 50 mm



INOX

Levelling sets Material zinc-plated steel or

stainless steel Versions with or without locknut

Dimensions 25 to 80 mm Height 28 to 126 mm

DIN 580

INOX

Lifting eye bolts

Material zinc-plated steel or stainless steel Versions threaded stud or tapped hole

Dimensions M8 to M36

GN 606

INOX

Set screws with ball terminal

Material black-oxide steel or stainless steel Assembly ball, reversible or

non-reversible flat-faced ball **Dimensions** M4 to M16 Length 10 to 80 mm

DIN 6319

INOX

Concave and convex washers

Material case-hardened steel or stainless steel

Dimensions 6.4 to 56 mm For screws M6 to M48



INOX



Lifting eye bolts (rotating)

Material tempered steel, pink plastic coated or stainless steel Versions with or without

spanner **Dimensions** M8 to M36

GN 346



Material zinc-plated steel **Dimensions** M8 to M16



INOX

Serrated locking plates

Material sintered steel or stainless steel

Versions with tapped hole or bore in the center

Dimensions 22 to 40 mm Number of teeth 48 or 60

GN 509

Material zinc-plated steel or stainless steel Balls zinc-plated steel or stainless steel

Ball transfer units

Dimensions 15 to 30 mm

DIN 444

INOX

Eye screws

Material black-oxide steel or stainless steel **Dimensions** M6 to M20

Length 50 to 160 mm

GN 184

INOX

Washers for countersunk head SCREWS

Material black-oxide steel or stainless steel

Dimensions 16 to 52 mm For screws M4 to M6

GN 918.1

INOX

Cam locking levers

Material black-oxide steel or stainless steel

Versions with ball lever or with hexagon

Dimension 50 mm

DIN 508

INOX

T-Nuts

Material stainless steel or black-oxide steel, class 8 or 10 Dimensions M4 to M24 Width 5 to 28 mm



Cam levers

Material technopolymer Assembly rotating pin zinc-plated or stainless steel, with tapped hole or threaded stud

Dimension 79 mm

GN 927

Clamping levers with eccentrical cam

Material zinc alloy die-cast, black plastic coated Assembly zinc-plated steel with tapped hole or threaded stud

Dimensions 63 to 101 mm







10 Joints

DIN 808 W



Universal joints with needle bearing

Material hardened steel Assembly with plain hole or with keyway; single or double body

Dimensions 22 to 70 mm

GN 648.1 INOX





Ball joints

Material zinc-plated steel or stainless steel Assembly with tapped hole or threaded stud Versions self lubricated or lubrication possible **Dimensions** 5 to 25 mm

BJT INOX

Rod ends



Material tecnopolymer, selflubricating spherical cap Assembly with threaded hole or threaded pin

Hole dimensions 6 to 14 mm

DIN 808 G

INOX

Universal joints with friction bearing

Material hardened steel or stainless steel Assembly with plain hole or with keyway; single or double body

Dimensions 16 to 58 mm

GN 751

INOX

Fork joints / Fork heads DIN 71752

Material zinc-plated steel or stainless steel Versions with right-hand, left-hand or fine thread Dimensions 4 to 20 mm

FJT INOX

Forks



Material tecnopolymer Assembly with threaded hole, clip pin or pin and seager ring.

Hole dimensions 6 to 14 mm

GN 808.2

with friction bearing Material steel

Assembly with plain hole or with keyway Dimensions 22 to 58 mm

Universal joint shafts

GN 752

INOX

Joint pieces

Material zinc-plated steel or stainless steel **Applications** for combination with fork joints GN 751 / fork heads DIN 71752

Dimensions 6 to 16 mm



GN 808.3

Universal joint shafts with needle bearing

Material steel Assembly with plain hole or with keyway Dimensions 22 to 58 mm

GN 782



Axial ball joints

Material zinc-plated steel Versions with male or female thread Dimensions M8 or M10



GN 908



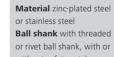
Universal joints

Material black-oxide steel Versions single or double body with friction bearing Dimensions 13 to 32 mm

DIN 71802

INOX

Angled ball joints



without safety catch Dimensions 8 to 19 mm

GN 808.1



Gaiters for universal joints

Material black rubber (neoprene) for single joints or black smooth elastomer for double joints Dimensions 16 to 58 mm

GN 710



Dust caps for angled ball joints DIN 71802

Material black rubber Dimensions 12 to 25.5 mm.

for angled ball joints DIN 71802: 8 to 19 mm



11 Levelling elements

LS.A INOX

Levelling elements

Material black matte technopolymer, zinc-plated or stainless steel threaded stem (M8 to M16) with regulation hexagon, NBR synthetic rubber no-slip disk Diameters 25 to 50 mm

LV.A-125-ACV

INOX



Levelling elements for heavy duties

Material technopolymer, zinc-plated or st. steel threaded stem (M20 to M30) with regulation hexagon. NBR synthetic rubber no-slip disk Diameter 125 mm

GC INOX

Connection joints

Material black matte technopolymer, zinc-plated or stainless steel screws, and nuts

Tube assembly holes G1 1/4" to G2"

GN 343.3

INOX

Levelling elements

Material technopolymer with zinc-plated steel or stainless steel ball joint

Versions with or without NBR rubber no-slip disk

Diameters 25 to 60 mm, M6 to M16

GN 340

INOX

Levelling elements

Material zinc-plated steel or stainless steel with NBR rubber no-slip disk fixed by a screw Diameters 50 to 120 mm M8 to M30

MPG

INOX

Guide rail clamps

Material black matte technopolymer, stainless steel screw, nut and pin. One or two cavities for round or trapezoidal guides

GN 343.2 INOX

Levelling elements

Material zinc-plated steel or stainless steel Versions with or without

gliding or not-gliding plastic

Diameters 25 to 60 mm, M8 to M24

GN 341.1

INOX

Levelling elements

Material stainless steel with NBR rubber no-slip disk vulcanised to the base Versions threaded stem with adjustable sleeve Diameters 60 to 100 mm,

SPR.V

INOX



Guide rail brackets

Material technopolymer Clamping system for linear and angular positioning technopolymer knob with nickel-plated brass insert, stainless steel eye screw, nut, screw and washer

GN 343.1

INOX

Levelling elements

Material zinc-plated steel or stainless steel Versions with or without gliding or not-gliding plastic

cap Diameters 25 to 60 mm

LW.A



Vibration damping elements

M16 to M24

Material Zinc-plated steel with Natural Rubber disk Assembly zinc-plated stems (M12x1,25 to M20x1,5) Diameters 80 to 200 mm

DVA

INOX

Vibration damping elements

Material natural rubber with zinc-plated or stainless steel base Assembly threaded holes or threaded studs.

Diameters 8 to 100 mm Threadings M3 to M16

LV.A

INOX (A)



Levelling elements

M6 to M16

Material black matte technopolymer, zinc-plated or stainless steel threaded stem (M8 to M24) with regulation hexagon, NBR synthetic rubber no-slip disk Diameters 60 to 125 mm

NDX.



Square and Round end-caps

Material technopolymer, black matte finish Assembly nickel-plated brass bushing with tapped hole (from M8 to M24) Dimensions 20 to 60 mm

TSLB INOX

Side mounting top bracket

Material black matte technopolymer, zinc-plated or stainless steel screw, nut and washer

Tube assembly hole G1 1/4" to G2'

LV.F





Levelling elements for ground mounting

Material technopolymer, zinc-plated or st. steel threaded stem (M8 to M24) with regulation hexagon. NBR synthetic rubber no-slip disk. Diameters 80 to 125 mm

BAS3

INOX

Support bases

Material technopolymer Assembly brass bosses, tapped through holes Zinc-plated or stainless steel screws and washers Tube assembly hole G1 1/4" to G2'

MSR.



Connecting clamps

Material technopolymer base, T-shaped and device clamps; screw-covers in six colours: aluminium profile tubes (100 to 2000 mm) **Assembly** cylindrical head screws with hexagon socket



12 Hinges

CFA.



Hinges

Material technopolymer, stainless steel rotation pin Assembly threaded bushings and studs or through holes Rotation max 220° Dimensions 39.5 to 96.5 mm **GN 127**



Hinges

Material zinc-alloy die-cast, black plastic coated Versions horizontally, vertically or to both positions adjustable Dimension 76 x 60 mm CFO.



Offset lift-off hinge

Material technopolymer Assembly through holes; this hinge allows the adjustment of the inclination of the door on the frame Dimension 64 mm

CFA+ERS



Hinges with friction brake

Material technopolymer, black-oxide steel rotation pin Assembly through holes, unlimited number of door-stop positions, rotation max 220° Dimensions 49.5 to 96.5 mm CFR.



Adjustable hinges

Material technopolymer, stainless steel rotation pin, horizontal and vertical adjustments

Assembly through holes Rotation angle max 270° Dimension 60 mm CFN.



In line lift-off hinge

Material technopolymer Assembly threaded bushings or studs; this hinge allows the adjustment of the inclination of the door on the frame. Dimension 64 mm

CFT.



Hinges with screw covers

Material black technopolymer Assembly through holes Rotation max 200° Dimension 49.5 mm CFD.



Hinges for thin doors

Material technopolymer, stainless steel rotation pin Assembly threaded bushings or studs

Rotation max 215°. **Dimensions** 30.5 to 66 mm

CFP.



Detent position hinges

Material technopolymer Assembly through holes Detent positions 0° (closed), 80°, 120° and 170° Rotation max 180° Dimension 50 mm

CFM.



Hinges with friction

Material technopolymer, stainless steel rotation pin Assembly threaded studs or through holes

Rotation max 270°. **Dimensions** 40 to 60 mm

CFU.



Hinges with adjustable friction

Material technopolymer Assembly through holes for cylindrical head screws, Stainless steel adjusting screw Rotation max 275° Dimension 40 to 60 mm CFS.



Safety hinges

Material technopolymer, stainless steel rotation pin, built-in safety switch Assembly threaded studs or through holes

Rotation max 180° Dimension 52 mm

GN 237



Hinges

Material zinc-alloy die-cast, stainless steel or aluminium Rotation pin stainless steel Dimensions 40 to 60 mm CFJ.



Tamperproof hinges

Material black technopolymer, moulded in stainless steel rotation pin Assembly threaded bushings and studs or through holes Rotation max 270° Dimension 50 mm **GN 128**



Hinges

Material steel with brass washer

Rotation pin steel or brass **Dimensions** 40 to 200 mm

GN 238



Hinges

Material zinc-alloy die-cast, black or silver plastic coated with plastic cap

Versions one- or two-sidedadjustable, not adjustable **Dimensions** 42 to 60 mm CFI.



т.

Material technopolymer, nickel-plated steel rotation pins; centering inserts for slots (8 or 10 mm)

Double hinges for

aluminium profiles

Assembly through holes **Dimension** 36 mm

GN 129



Hinges

Material steel, zinc-plated Versions with 2 or 3 parts Rotation pin nickel-plated brass Dimensions 25.6 to 49 mm



13 Latches

GN 115

INOX

Locks

Material zinc alloy die-cast or stainless steel Versions with triangular or square spindle, slot, double bit star knob wrench or T-handle Latch distance 4 to 50 mm

GN 218

Cam latches

Material sintered steel Versions with left or right turn clamping direction Dimensions 35 to 80 mm

CSMT-A

Antirotation locks

Material technopolymer handle and stator: zinc alloy rotor

Versions locks with the same or with different combinations Dimension 50 mm

CMT.AE-VO

Latches with fold-away knob

Material CMT. self-extinguish technopolymer SBR rubber sealing washer; zinc-plated steel self-tapping screw **Rotation** 90°

Dimensions 32 to 35.5 mm

CQT.AE-V0

Door locks

Material self-extinguish technopolymer SBR rubber sealing washer; zinc-plated steel self-tapping screw Rotation 90°

Dimension 32 mm



Latches with handle

Material technonolymer zinc-alloy handle shank Versions keys for locks with the same or different combinations or with two-wings profiled insert Dimension 157 mm



GN 119 INOX

Door locks

Material zinc pressure die-cast or stainless steel Versions with triangular or square spindle, with double bit or with star knob Clamp range 17 to 65 mm



Mini-Locks

Material zinc pressure die-cast, chrome-plated Versions with triangular or square spindle, slot, wrench or loackable wrench with key Latch distance



CAR.

Rod controls

Material technopolymer or nickel plated zinc-alloy and zinc-plated rod guides Accessories rod guides and rod guides extensions Dimension 347 mm



GN 117

Door locks

Material steel, zinc-plated Door thickness 1.5 to 12 mm



Door locks

7.5 to 19.5 mm

Material technopolymer knob; metal components Versions clockwise or anticlockwise opening, locks with the same or with different combinations Diameter 40 mm



Sheet metal punch

Material hardened steel, suited for punching holes into sheet metal up to 2 mm thickness

Dimensions 14.1 or 20.1 mm



Knob technopolymer, DIN 6336

CS.

Latches with lock

Material metal components, straight or bent closing levers for different door thickness Versions locks with the same or with different combinations



Handle with safety locking device

Material technopolymer handle, stainless steel pin. Technopolymer keys with anti-intrusion-profiled stainless steel insert

Centre distance 132 mm



NOX

Door locks

Material duroplast knob, steel or stainless steel metal. components Versions clockwise or

anticlockwise opening Diameters 50 to 70 mm



Material technopolymer handle and stator, chromeplated zinc alloy rotor **Versions** locks with the same or with different combinations

CKE.

Locking bolt

Material technopolymer, stainless steel lever. Technopolymer keys with anti-intrusion-profiled stainless steel insert Dimension 54 mm



INOX

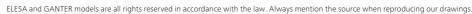
Door locks

Material technopolymer key, steel or stainless steel metal components

Versions clockwise or anticlockwise opening Diameter 24 mm







Dimension 50 mm

Door locks

14 Toggle, power and hook clamps

GN 810

INOX



Vertical clamps with horizontal base

Material zinc-plated steel or stainless steel Versions with forked or solid clamping arm Holding force 900 to 4600 N





Latch clamps with pulling action

Material zinc-plated steel or stainless steel Holding force 1600 to 7000 N

GN 864



Material black-oxide steel Air pressure max, 10 bar **Holding force** 4070 to 13300 N Piston size 20 to 50 mm

GN 820





or stainless steel Versions with forked or solid clamping arm

Holding force 400 to 6200 N

GN 852



Latch clamps -Heavy duty type

Material black-oxide forged steel or stainless steel Versions with fixing holes or for welding

Holding force 14000 to 28000 N

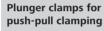
GN 821 INOX

Hook clamps

Material zinc-plated steel or stainless steel Versions with or without safety catch, for safety with padlock or with lock

Holding force 4000 N

GN 842



Material zinc-plated steel with brass or black oxide steel base

Holding force 1200 to 45000 N **GN 860**

Pneumatically operated clamps

Material zinc-plated steel Versions with forked or solid clamping arm

Holding force 700 to 3000 N GN 831

INOX

Hook clamps

Material zinc-plated steel or stainless steel Versions with or without selflocking safety catch, or for safety with padlock Holding force 1000 N

GN 844



Plunger clamps for push-pull clamping

Material zinc-plated steel with black oxide brass base Versions right or left turn clamping action

Holding force 900 to 1300 N

GN 890



Pneumatically operated plunger clamps for push-pull applications

Material black-oxide/ zinc-plated steel Holding force 1200 to 25000 N

TLA.

INOX **Hook clamps**

Material zinc-plated or stainless steel

Special Versions unplated or nickel-plated steel, padlock holes or security stop; different catch brackets

Dimension 193.5 mm

GN 850



Hook clamps with pulling action

Material zinc-plated steel Versions with pulling plunger or pulling hook

Holding force 2000 to 4000 N GN 807

INOX Strainless Steel

Clamping bolts

Material zinc-plated steel or stainless steel Versions with or without protective cap

Dimensions M4 to M14 Length 23 to 128 mm

TLF.

INOX

Adjustable hook clamps Material zinc-plated or

stainless steel

Special Versions

unplated or nickel-plated steel: different catch brackets

Dimension 138 to 150 mm

GN 851

INOX

Latch clamps with pulling action

Material zinc-plated steel or stainless steel

Holding force 1600 to 7000 N

GN 708.1

INOX

Clamping bolts

Pressure pad neoprene,

Dimensions M5 to M10

TLI.



INOX



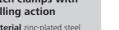
Material zinc-plated or stainless steel Special Versions unplated steel or nickel-plated steel Dimension 90 mm

Hook clamps











Material zinc-plated steel or stainless steel

bonded to the stud

Length 45 to 77 mm

15 Accessories for hydraulic systems

TN.



Plugs

Material

black technopolymer, NBR packing ring

Max. temperature 130°C Threadings G1/8" to G1 1/2", M10x1.5 to M40x1.5





Breather caps with splash guard

Material technopolymer, NBR packing ring **Max. temp.** 100°C/120°C Diameters 30 to 70 mm

Threadings G1/4" to G2" M16x1.5 to M22x1.5

HFTX



Oil level indicators

Material transparent technopolymer, aluminium contrast screen, NBR packing ring

Max. temperature 110°C Threadings G1/4" to G1 1/4", M16x1.5 to M40x1.5

TCD. TSD.



Material black or red technopolymer, NBR packing ring; "Fill" (TCD) or "Drain" (TSD) symbol

Max. temperature 130°C Threadings G1/8" to G1 1/2", M10x1.5 to M40x1.5



Valve breather caps

Material technopolymer, NBR packing ring, Safety valve set at 0.010 or 0.100 bar

Max. temperature 120°C Threadings G1/4" to G1", M16x1.5 to M22x1.5



INOX

Oil level indicators

Material aluminium brass or stainless steel, float-glass or ESG-glass window

Max. temperature 100°C or 180°C

Threadings M16x1.5 to M42x1.5, G3/8" to G1 1/2"

T.440

Plugs

Material

black technopolymer, NBR packing ring Flat dipstick T.440+a Max. temperature 120°C Threadings G1/4" to G1 1/2"



Double-valve breather caps

Material technopolymer, NBR packing ring, Safety (0.350) and suction (0.030 bar) valves

Max. temperature 100°C Threadings G3/4 "to G1 1/4"





ATEX-Level indicators

Material aluminium. ESG-glass window, FPM packing ring

Max. temperature 150°C Threadings

M16x1.5 to M27x2, G3/8" to G3/4"

TMA.

Magnetic plugs

Material aluminium, NBR packing ring Max. temperature 130°C Threadings G1/4" to G3/4"



Double-valve breather caps with basket

Material chrome- and zinc-plated steel Safety (0.350) and suction (0.030 bar) valves

Max. temperature 115°C Dimension 80 mm

HGFT.HT-PR

Oil level indicators

Material black or red technopolymer, prismatic transparent window NBR packing ring

Max. temperature 140°C 7 har pressure Threadings G1/2 " to G1"

GN 749

Plugs with hexagon socket for application with high pressures

Material steel, zinc-plated Max temperature 100°C or 180°C

Threadings M8x1 to M48x2, G 1/8" to G 1 1/2 "

FRF+C FRB+C

Flange

Material technopolymer or in zinc-plated steel flange with technopolymer basket, Threaded (G1 1/4") or with havonet steel attachment

HCFE.

Oil circulation sights

Material transparent technopolymer, NBR packing ring

Max. temperature 110°C Threadings G3/8" to G1 1/4"

SFN.

Breather caps

Material technopolymer, NBR packing ring Max. temperature 120°C (100°C with air filter)

Diameters 30 to 70 mm Threadings G1/4" to G2"





Oil level indicators

Material black or red technopolymer, transparent window, aluminium contrast screen, NBR packing ring.

Max. temperature 100°C, 3 bar pressure Threadings G3/8" to G2"

HE.



Oil level indicators push-fit

Material transparent polycarbonate, aluminium contrast screen. NBR packing ring

Max. temperature 100°C Diameters 18 to 47mm



HCX. INOX

Column level indicators

Transparent technopolymer, NBR or FKM O-rings, aluminium contrast screen, zinc-plated or st. steel screws Max. temperature 90°C Centre dist. 76 to 254 mm

HCX/E+STL



Column level indicators

MIN level sensors and temperature electrical probe, transparent technopolymer Features see HCX Swivelling two-pin connectors Centre dist. 127 mm

HCX/VT



Column level indicators

Transparent technopolymer NBR O-rings, aluminium contrast screen. technopolymer screws Max. temperature 90°C Centre dist. 76 to 254 mm

HCY/E+ST



Column level indicators

MIN level MAX temperature electrical sensors, transparent technopolymer, nickel-plated brass screws, NBR O-rings

Centre dist. 76 to 254 mm

HCX.INOX-BW



Column level indicators

Hot water resistant transparent technopolymer FKM O-rings, aluminium contrast screen, st. steel screws, max. temp. 80°C Centre dist. 76 to 254 mm

HCL.



Column level indicators

U shaped protections, transparent tube with lenticular effect in acryl, zinc-plated steel screws, NBR O-rings, max. temp. 70°C Centre dist. 300 to 500 mm

HCX/AR



Column level indicators

Alcohol resistant transparent technopolymer, NBR O-rings aluminium contrast screen, zinc-plated steel screws

Max. temperature 80°C Centre dist. 76 to 254 mm

HCZ-P



Level indicators with protection

Transparent technopolymer NBR O-rings, aluminium contrast screen, zinc-plated steel screws

Max. temperature 90°C Centre dist. 76 to 127 mm

HCX/P



Column level indicators with protection frame

Transparent technopolymer with zinc-alloy protection frame

Features see HCX Centre dist. 127 mm

HFL-E HFLT-E



Column level indicators with MIN level electrical sensor

Technopolymer, Stainless steel or technopolymer dipstick, NBR float, threaded coupler or flange with holes for screws Dimension 500 mm

HCX/E



Column level indicators

MIN level electrical sensor, transparent technopolymer Features see HCX Swivelling two-pin connector Centre dist. 127 mm



16 Tube clamp connectors

GN 131

INOX

Two-way connector clamps

Material aluminium blank or black plastic coated or stainless steel

Versions with clamping screws or adjustable levers Bores B10 to B18



T-angle connector clamps, multi part

Material aluminium blank or black plastic coated Versions with clamping screws or adjustable levers **Bores or Square bores** B20 to B50 or V20 to V50

GN 291

Linear actuators

Material precision steel tube, chrome-plated, stainless steel upon request

Versions right and/or left hand thread

Standard travel lengths 65 to 320 mm

GN 132



Two-way connector clamps

Material aluminium blank or black plastic coated Versions with clamping screws or adjustable levers Bores B20 to B50



Tube connectors, split assembly

Material aluminium blank or black plastic coated Versions with clamping screws or adjustable levers **Bores or Square bores**

B20 to B50 or V20 to V50

GN 131.1

INOX



Linear actuator connectors

Material aluminium black plastic coated or stainless steel Versions with clamping screws or adjustable levers Bores B18 to B50

GN 133



Two-way connector clamps

Material aluminium blank or black plastic coated Versions with clamping screws or adjustable levers Bores B12 to B50



Swivel clamp connector joints

Material aluminium blank or black plastic coated Versions with clamping screws or adjustable levers Bores B12 to B50

GN 473

Foot clamp mountings

Material aluminium black anodized or matt ground Versions with clamping screws or adjustable levers Bores B8 to B20

GN 134



Two-way connector clamps, multi part

Material aluminium blank or black plastic coated Versions with clamping screws or adjustable levers Bores or square bores B20 to B50 or V20 to V50



Swivel clamp

Material aluminium blank or black plastic coated Versions with clamping screws or adjustable levers Bores B12 to B50

connector joints

GN 475

Twistable two-way clamp mountings

Material aluminium black anodized or matt ground Versions with clamping screws or adjustable levers

GN 145

INOX

Flanged connector clamps

Material aluminium blank or black plastic coated or stainless steel

Versions with clamping screws or adjustable levers Bores B10 to B50

GN 990

INOX

Construction tubings

Material steel, zinc-plated, aluminium blank or anodised or stainless steel

Round or square diameters 10 to 50 mm or V10 to V50

GN 479



Sensor holders

Bores B8 to B16

Material stainless steel, matt shot-blasted

Versions with several bores Bores B8 to B18

GN 162



Base plate connector clamps

Material aluminium blank or black plastic coated or stainless steel

Versions with clamping screws or adjustable levers Bores B10 to B50

GN 992



Threaded tube inserts for Construction

tubings GN 990

Material aluminium For round or square tube diameters 20 to 50 mm or V20 to V50 (ø 10 to 18 available in plastic GN 991)

GN 480.1



INOX

Material aluminium or

Retaing rods/tubings

stainless steel Versions rods, tubings or squares with or without scale Diameters rods, tubings

D8 to D20

Dimension squares V10 to V16



17 Castors and wheels

RE.FF



Injected polyurethane wheels

Cover Injected polyurethane
Centre Technopolymer
Bracket Zinc-plated steel
or stainless steel
Diameters 80 to 150 mm
Load* 1200 to 3500 N

RE.C7



Rubber wheels for the general public

Cover Grey anti-trace vulcanised rubber Centre Technopolymer Bracket zinc-plated steel Diameters 50 to 80 mm Load* 350 to 550 N

RE.F5



Mould-on polyurethane wheels

Cover Mould-on polyurethane Centre Die-cast aluminium Bracket Zinc-plated steel Diameters 80 to 200 mm Load* 2200 to 8500 N

RE.F8



Monolithic (hard tread) wheels

Cover and Centre Technopolymer Bracket Zinc-plated steel or stainless steel

Diameters 65 to 150 mm **Load*** 200 to 5000 N

RE.G1



Thermoplastic rubber wheels

Cover Grey anti-trace thermoplastic

Centre Technopolymer Bracket Zinc-plated steel Diameters 80 to 150 mm Load* 700 to 1800 N

RE.E2



Vulcanised rubber wheels

Cover Vulcanised rubber NBR
Centre Technopolymer
Bracket Zinc-plated steel
Diameters 80 to 200 mm

Load* 650 to 2250 N

RE.E3



Vulcanised rubber wheels

Cover Vulcanised rubber NBR **Centre** Two zinc-plated and riveted disks.

Bracket Zinc-plated steel **Diameters** 80 to 200 mm **Load*** 650 to 2300 N

18 Retaining magnets

GN 50.1



Retaining magnets without thread

Material Steel
Magnets HF, SC, ND
Adhesive forces 5 to 1300 N
Diameter 6 to 125 mm

GN 58



Pot magnets with bore

Material Steel
Magnets AN
Adhesive forces 30 to 80 N
Diameter 19 to 38 mm

GN 54 1



Retaining magnets smooth finish

Material Steel
Magnets SC, ND
Adhesive forces 8 to 700 N
Diameter 6 to 32 mm

GN 50.3



Retaining magnets with threaded stud

Material Steel
Magnets HF, ND
Adhesive forces 4 to 350 N
Diameter 10 to 63 mm

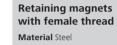
GN 51.2



Retaining magnets with rubber jacket; with female thread

Material Steel
Magnets ND
Adhesive forces 10 to 420 N
Diameter 12 to 88 mm

GN 52.2



Material Steel
Magnets AN, ND
Adhesive forces 2 to 1300 N
Diameter 6 to 63 mm

GN 50.2



Retaining magnets with female thread

Material Steel Magnets HF, SC, ND Adhesive forces 5 to 1300 N Diameter 6 to 125 mm

GN 51.5



Retaining magnets with rubber jacket with female thread

Material Steel
Magnets ND
Adhesive forces 35 to 420 N
Diameter 22 to 88 mm

GN 52.3



Retaining magnets with female thread

Material Steel
Magnets AN
Adhesive forces 20 to 150 N
Diameter 12,5 to 35 mm

GN 50.25



INOX

Retaining magnets with female thread

Material Stainless Steel Magnets HF Adhesive forces 32 to 280 N Diameter 25 to 63 mm

GN 51.3



Retaining magnets with rubber jacket with threaded stud

Material Steel
Magnets ND
Adhesive forces 50 to 420 N
Diameter 22 to 88 mm

GN 52.4



Retaining magnets with stud

Material Steel
Magnets AN, ND
Adhesive forces 2 to 1300 N
Diameter 6 to 63 mm

GN 50.4



Retaining magnets with bore

Material Steel
Magnets HF
Adhesive forces 14 to 680 N
Diameter 16 to 100 mm

GN 51.4



Retaining magnets with rubber jacket with bore

Magnets ND Adhesive forces 35 to 210 N Diameter 22 to 66 mm

GN 60



Button-type magnets with bore

Material Steel
Magnets AN
Adhesive forces 7 to 66 N
Diameter 13 to 33 mm

GN 50.45



Retaining magnets with bore

INOX

Material Stainless Steel
Magnets HF
Adhesive forces 22 to 230 N
Diameter 20 to 63 mm

GN 52.1



Retaining magnets smooth finish

Material Steel
Magnets AN, ND
Adhesive forces 2 to 660 N
Diameter 4 to 63 mm

GN 62



U-Magnets with bore

Material Steel Magnets AN Adhesive forces 45 to 470 N Diameter 22 to 79 mm



Electronic Catalogue

The electronic version of the Elesa+Ganter General Catalogue on DVD or on www.elesa-ganter.com offers the design-engineer the possibility to search for the right element for the application either by going through the catalogue pages on the video or by selecting from the menus.

For each product series you can find:

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- technical information
- line drawings and related dimension tables
- 2D CAD drawings
- 3D CAD drawings









ELESA S.p.A.
Via Pompei 29
20052 Monza (Milano) ITALY
Phone: +39 039 28 11.1
Fax: +39 039 83 63 51
www.elesa.com
info@elesa.com

OTTO GANTER GmbH & Co.KG Triberger Straße 3 78120 Furtwangen GERMANY Phone: +49 7723 65 07 130 Fax: +49 7723 65 07 165 www.ganter-griff.com info@ganter-griff.de