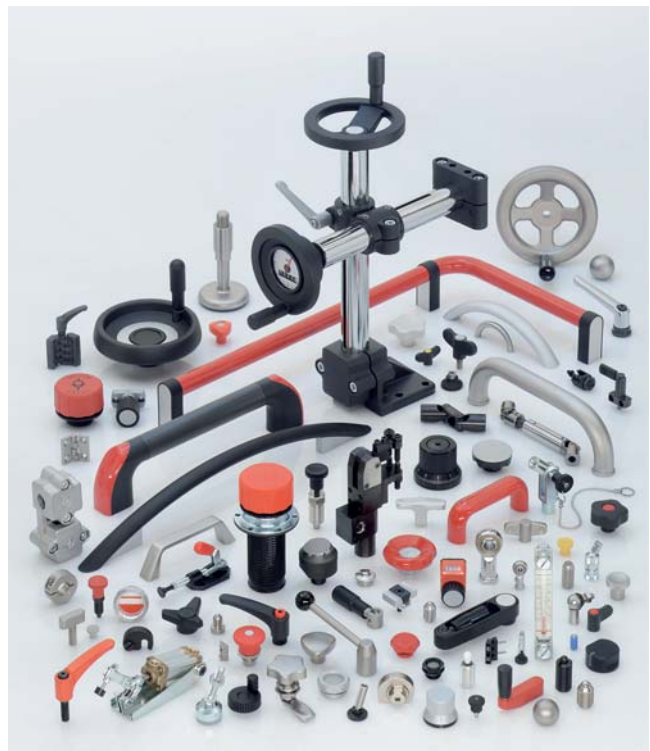


GANTER

STANDARD MACHINE ELEMENTS

Press kit 2008



www.ganter-griff.com

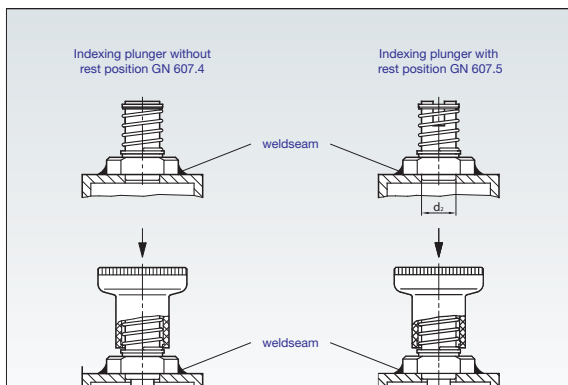
Table of contents

Indexing plungers with or without rest position for welded fixing	3
Tubular handles with electrical switching function.....	4
Positive locking of building elements in a freely defined angle.....	5
Standard machine elements with very high corrosion resistance and in ultimate material quality.....	6
„Longlife“ clamps live longer.....	7
Study ratchet spanner with different inserts.....	8
The GN 238 hinge combines easiest adjustability with high quality design.....	9
Oil level sight glasses for every application now also available with ATEX conformance.....	10
Cam-action indexing plunger with safety feature.....	11
Extensive range of adjustable slide units with modular structure.....	12
Extensive range of tube clamp connectors and linear actuators.....	13
Clamping levers with eccentric cam for safe, rapid and torque-free clamping action.....	14
Clamping, holding, gripping and positioning workpieces.....	15

Indexing plungers with and without rest position for welded fixing



Indexing plunger with and without rest position



Function

News from Ganter in Furtwangen

Ganter's extensive range of indexing plungers now also includes indexing plungers for welded fixing.

Two designs are available:

indexing plungers without rest position (GN 607.4)
and indexing plungers with rest position (GN 607.5).

They are used mainly on steel square tubing or in thin-walled sheet steel panels which cannot be tapped and threaded.

The indexing plungers are made of burnished steel, the indexing pin is hardened. The mat black head is made of plastic (thermoplastic polyamide PA) and cannot be dismantled.

The shoulder (d2) has been realised for easier positioning.

To prevent heat deformation, the plastic knob with the in-moulded indexing pin should be driven in after welding using a soft-head mallet.

The pressure springs in the GN 607.4 and GN 607.5 indexing plungers are integrated in the head which allows a low overall height. The GN 607.5 indexing plungers are used in cases where the indexing pin is temporarily not allowed to protrude. After pulling out, the head is turned by 90°. The pressure spring and the index bolt mechanism are integrated in this design version, guaranteeing perfect function at all times. An index notch prevents the disengaged knob from turning back accidentally or through shock impact.

Find out more in the Internet at www.ganter-griff.com

PRESS-BOX



Ansprechpartner | Contact

Axel Weber

Durchwahl | direct extension

+ 49 (0) 7723 6507-226

E-Mail | Email

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

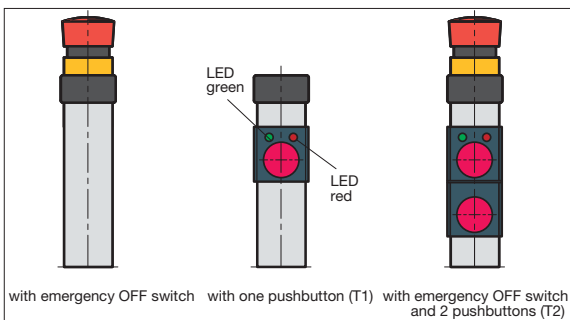
Fax +49 (0) 7723 4659

www.ganter-griff.com

Tubular handles with electrical switching function



*Tubular handles GN332 (angled shanks)
Tubular handles GN331 (straight shanks)*



Variants for different applications

News from Ganter in Furtwangen

GN 331 / GN 332 tubular handles with electrical switching function are designed for unlocking safety tumblers in sliding or rotating guard doors.

All switches, pushbuttons and LEDs, normally installed in external operating panels, are here integrated in a robust and attractively shaped tubular handle. While unlocking the tumbler with the thumb pushing the release button, the same hand can be used to open the guard door. To account for different applications, there are design versions with emergency OFF switch and two freely assignable pushbuttons which may be used as START or RESET button, for instance.

The design version with one pushbutton (T1) involves a changeover contact element. Both the LEDs are integrated in the breaker enclosure, with the option of displaying various operating states via these LEDs and allowing the user to monitor or operate the machine directly at the door or gate, for instance.

The second pushbutton is freely assignable as make contact element in the design version with two pushbuttons (T2). The tubular handles are made of aluminium and are either textured mat black (plastic coated) or anodised in natural colour. The handle stubs are zinc die-cast and textured mat black (plastic coated).

A set with caps in the colours red, green and blue is supplied for every pushbutton. Couplings for plug connectors (GN 331.1) with the appropriate cables are available for tubular handles with electrical switching function.

Find out more in the Internet at www.ganter-griff.com

PRESS-BOX

Ansprechpartner | Contact

Axel Weber

Durchwahl | direct extension

+ 49 (0) 7723 6507-226

E-Mail | Email

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

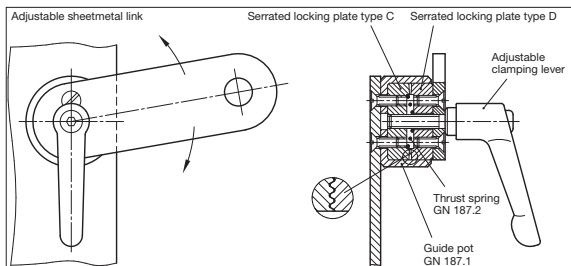
www.ganter-griff.com



Positive locking of building elements in a freely defined angle.



Locking plates
with guide pot and a thrust spring



Application example

Interesting product from Ganter in Furtwangen

With the serrated locking plates GN 187 Ganter now offers a method for positively interlocking building elements in a freely defined angle. For every application, two GN 187 serrated locking plates are used, if required together with a guide pot and a thrust spring. The serrated locking plates have 60 teeth and therefore the smallest setting angle of 6°.

They are made of nitrided black oxidised steel, the guide pot is made of burnished steel, and the thrust spring made of stainless steel.

Four sizes for different installation options are available (Form A to D).

- Form A: Tapped hole in the centre with two countersunk holes for cap screws
- Form B: Bore in the centre with two countersunk bores for cheese-head screws
- Form C: Tapped hole in the centre with two tapped holes for bolt-on fitting
- Form D: Bore in the centre with two tapholes for bolt-on fitting

The various forms of the serrated locking plates can be interchanged and combined, for instance in connection with an adjustable clamping lever (combination of the serrated locking plates with Form C and D).

Serrated locking plates are ideal for adjustable straps on sheet metal constructions, for connections of trip cams, for connections of two link rods, etc.

Find out more in the big GANTER-NORMELEMENTE catalogue or in the Internet at www.ganter-griff.de

PRESS-BOX

Ansprechpartner | Contact

Axel Weber

Durchwahl | direct extension

+ 49 (0) 7723 6507-226

E-Mail | Email

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com



Standard Machine Elements by Ganter with very high corrosion resistance and in ultimate material quality.



Extract from the Ganter range of stainless steel (INOX) products

News from Ganter in Furtwangen

Corrosion resistance, hygiene and material quality are highly important properties in many areas, for instance in the pharmaceutical and the food industry, hospital engineering, water and wastewater systems, the packaging industry, conveyor engineering, mechanical engineering and plant construction.

Ganter of Furtwangen supplies these industries with an extensive range of standard stainless steel (INOX) elements such as machine, closing, fixture, connecting, drive, clamping and fixing elements in consistent top quality and with long service life. In general, the term INOX is used for rust and acid resistant steel grades.

Stainless steel has a minimum 12 percent fraction of chromium dissolved in austenitic or ferritic mixed crystal solid solution. The ultimate effect is that the high proportion of chromium forms a thick protective coating of chromium oxide on the surface of the material. Depending on use and requirements, Ganter of Furtwangen uses different stainless steel materials.

Find out more in our big catalogue "GANTER Standard Machine Elements" or in the Internet at www.ganter-griff.com

PRESS-BOX



Ansprechpartner | *Contact*

Axel Weber

Durchwahl | *direct extension*

+ 49 (0) 7723 6507-226

E-Mail | *Email*

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com

“Longlife” clamps live longer



Vertical-clamps GN 910 and GN 910.1



Clamping bolts

News from Ganter in Furtwangen

The “Longlife” vertical clamps (GN 910.1 and GN 910) are advanced developments of the GN 810.1 and GN 810 range of vertical clamps. Unlike the steel sheet designs, the clamping and lever arms are made with precision castings or die-cast forgings.

All other steel sheet components have been reinforced. The clamping and lever arm and the steel sheet components are zinc-plated and blue chromated for additional protection against corrosion.

Bearing bolts and bearing bushes are case hardened and ground, making them suitable for applications in which substantial forces act and where an extra long service life is required.

Extensive tests have shown that the proper function (under load) is guaranteed even after one million clamping cycles.

The GN 910 and GN 910.1 vertical clamps differ in their mounting (with horizontal or vertical base).

GN 804 spring spindles made of zinc-plated and blue chromated steel can be used to compensate workpiece tolerances and for presetting the required clamping force, with a hex bolt used to change the prestressing of the cup spring. Other designs are available as alternatives, for instance with an elastic protective cap which is simply plugged over the bolt head. Moving clamping members made of stainless steel, steel or plastic round off the product range.

Find out more in our big catalogue “GANTER NORMELEMENTE”, New Products 2007 or in the Internet at www.ganter-griff.de.

PRESS-BOX

Ansprechpartner | Contact

Axel Weber

Durchwahl | direct extension

+ 49 (0) 7723 6507-226

E-Mail | Email

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com



Sturdy ratchet spanner with different inserts ...



*Different ratchet spanners
with diverse inserts*



Standard - ratchet spanner

... by Ganter in Furtwangen

The GN 316 ratchet spanners by Ganter in Furtwangen are used mainly for "stationary" applications. The spanners are ideal for use with machines and devices. A variety of different inserts (see photo) make the spanners the perfect all-round tool. Available as square key, hexagonal key, with thread or with notch.

The outstanding feature of the new GN 316 ratchet spanners is the extremely sturdy design with a permissible torque of as much as 180 Nm. The combination of ease of handling and attractive design is another feature of this new product.

The GN 316 ratchet spanners are made of steel and are fitted with a plastic-powder coated housing (black, structured mat).

All parts subject to wear are hardened.

The trip cam moved to the neutral position will disable the ratchet function, allowing torque to be transmitted in both directions for tightening or loosening.

The different inserts can be changed by taking off the retaining screw and removing the cover sheet.

Individual inserts, special custom-made solutions and ratchets with different lengths of the lever are available.

Find out more in the GANTER STANDARD MACHINE ELEMENTS catalogue, under „New Products 2007“ or in the internet at

www.ganter-griff.de

PRESS-BOX



Ansprechpartner | *Contact*

Axel Weber

Durchwahl | *direct extension*

+ 49 (0) 7723 6507-226

E-Mail | *Email*

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com

The GN 238 hinge combines easiest adjustability with high quality design



News from Ganter in Furtwangen

The GN 238 hinges made by Ganter in Furtwangen have been developed as technically and visually perfect solutions for positioning doors. Their outstanding features are the easy installation and the sophisticated design.

These hinges have adjusting disks made of tempered steel underneath the plastic cap, with the disks fitted with a cutting ring in the underside which cuts into the radial ribs of the die-cast zinc wings when the countersunk screw is tightened and which creates a rigid and stable formlock. This functional principle is patented and is capable of compensating dimensional variances in the fixing hole of as much as 1.5 mm (adjustment range). This is a substantial advantage during installation.

Ganter have developed a cap for the adjustment disk and the fixing screw in order to guarantee a high quality design. This cap provides extra protection from dust and dirt particles.

In all, Ganter offers three different design variants in two colours (black and silver).

Adjustable on both sides, adjustable on one side and with normal holes for countersunk screws (non-adjustable).

Find out more about these and other new products in „GANTER-NORMELEMENTE -New Products 2007“ or in the Internet at www.ganter-griff.de.

Ask for our free GANTER Catalogue including DVD with 3D data!

PRESS-BOX



Ansprechpartner | *Contact*

Axel Weber

Durchwahl | *direct extension*

+ 49 (0) 7723 6507-226

E-Mail | *Email*

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com

Oil level sight glasses for every application now also available with ATEX conformance



Oil level sight glasses in different versions

News from Ganter in Furtwangen

Ganter has for many years been a well-known supplier of oil sight glasses made of plastic and aluminium. The range of products has now been enlarged to include oil sight glasses made of stainless steel and brass. In addition, an "ATEX" sight glass made of aluminium has been developed for use in explosion hazard atmospheres which is available in three sizes with different threads, complying with the directives of the European Union for explosion protection.

The entire range of the new oil sight glasses is supplied in scratchproof toughened glass in highly stable dimensions.

They are sealed with an O-ring (FPM, Viton®) at the glass circumference and not on the planar side, which means that the sealing tightness does not depend on the axial contact pressure force.

The outer sealing ring is embedded in a radial undercut on the planar side, with the effect that the seal cannot be lost and, above all, will not be squeezed out during tightening. As the seal is relatively soft, it is also suited for sealing uneven surfaces.

Depending on temperature requirements, sight glasses with temperature resistance ratings of up to 100° C or up to 180° C are available. The new brass and stainless steel oil sight glasses can also be used on pressurised containers or containers exposed to vacuum.

The oil sight glass types GN 743.7 and GN 743.8 have a cone-shaped external thread which allows metal contact sealing. When tightened, the cone-shaped outer tube thread "R" engages and locks with the appropriate cylindrical internal thread "Rp". As additional sealing agents (hemp or Teflon tape) are normally used, the outer thread is "roughened" to make sure the sealant is not displaced during locking.

Find out more about the new sight glasses and other new products in "GANTER-NORMELEMENTE-New Products 2007" or in the Internet at www.ganter-griff.de or ask for our free major GANTER catalogue with DVD.

PRESS-BOX



Ansprechpartner | Contact

Axel Weber

Durchwahl | direct extension

+ 49 (0) 7723 6507-226

E-Mail | Email

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com

Cam-action indexing plunger with Safety Feature



GN 712 Plunger pin protruding in the base position



GN 712.1 Plunger pin recessed in the base position

News from Ganter in Furtwangen

Ganter of Furtwangen / Black Forest has enlarged its indexing plunger range by adding cam indexing plungers. To account for different applications and uses, the cam indexing plungers are available with the plunger pin either protruding in the base position (GN 712) or with the plunger pin recessed in the base position GN 712.1).

The plunger pin can be moved out and retracted by turning the latch anti-clockwise by 90° or 120° over a guide cam.

Ganter supplies the cam indexing plungers with a variety of different guide cams. Depending on cam design, the spring-loaded plunger pin either returns automatically to the initial position or locks in place in the indexing position.

In the safety option design, the plunger pin is locked in the indexing position by means of a safety notch which secures the unit against inadvertent resetting. To move the plunger pin in design version GN 712, the latch must first be pulled out of the indexing notch, while it must be pushed in in design version GN 712.1.

The casing of the cam indexing plunger is made of zinc-plated blue chromated steel. The plunger pins are nitrided.

NIROSTA stainless steel designs are also available as types GN 712.5 or GN 712.6, with the casings made of stainless steel and the plunger pins chemically nickel-plated.

Depending on intended use, the matching GN 612.1 holders can be used as mounting assists. These are available with fixing bores arranged parallel or perpendicular to the indexing plunger.

Find out more in the catalogue under „New Products 2007“ or in the internet at www.ganter-griff.de.



PRESS-BOX

Ansprechpartner | Contact

Axel Weber

Durchwahl | direct extension

+ 49 (0) 7723 6507-226

E-Mail | Email

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com

Extensive range of adjustable slide units with modular structure



Different applications of adjustable slide units



News from Ganter in Furtwangen

Ganter in Furtwangen features a new and extensive range of adjustable slide units (GN 900) with modular structure. Potential applications include the precision adjustment of soldering and welding heads, stop adjustments, inkjet printer and measuring camera adjustments, laser heads and sensors.

Slides are available in widths of 30, 50, 80 and 120 mm, with an outside slide with four different strokes for every slide size and width. Customised dimensions are possible.

The adjustment slides can be combined into a wide variety of different axis configurations. Special clamping devices allow fast and safe mounting.

The slides are made of extruded anodised aluminium and boast high bearing loads, good friction values, high-grade slide guidance, eloxal-hardened surfaces, tight-fit spindle adjustment and an adjustable lever for slide clamping. The other parts of the adjustable slide units are made of stainless steel and plastic.

The design of the adjustable slide units with scale dial allows precision adjustments of 0.05 mm and with digital position dial of 0.02 mm.

A rotary table disk for manual operation (GN 900.6) is also available. This is an adjusting element which enlarges the range of use of the adjusting slides and units even further. For the rotary motion the knob features a high-grade worm gear and QD adjustment. It can also be used without adjustment slide.

Find out more in the new product catalogue „GANTER STANDARD ELEMENTS“ or in the Internet at www.ganter-griff.de

PRESS-BOX



Ansprechpartner | *Contact*

Axel Weber

Durchwahl | *direct extension*

+ 49 (0) 7723 6507-226

E-Mail | *Email*

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com

Extensive range of tube clamp connectors and linear actuators



News from Ganter in Furtwangen

The new 2006 catalogue of the extensive range of GANTER standard elements also features "tube clamp connectors and linear actuators". This wide-ranging product segment within the immense range of machine and fixture elements is a program for a wide variety of different applications.

The tube clamping connectors are made of high-grade cast aluminium and NIROSTA stainless steel. Using standard commercial round or square tubing made of steel, stainless steel or aluminium, they can be quickly assembled into efficient functional systems.

In addition, linear actuators can be assembled within tube clamp connectors into connector clamps for manual operation.

Depending on application, matching screw sets, articulated pedestals with insert bushing (for round and square tubes), handwheels matching the linear actuators (also with integrated position indicator) and linear actuators with laser-engraved longitudinal scales are available.

Ask for our free CD-ROM.

If you want to find out more about the large GANTER product range, look into the "GANTER STANDARD ELEMENTS – New Products 2006" catalogue.

PRESS-BOX



Ansprechpartner | *Contact*

Axel Weber

Durchwahl | *direct extension*

+ 49 (0) 7723 6507-226

E-Mail | *Email*

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com

Clamping levers with eccentric cam for safe, rapid and torque-free clamping action



News from Ganter in Furtwangen

The GN 927 clamping levers with eccentric cam by Ganter of Furtwangen are used for rapid-action clamping and releasing, unlike clamps with threads allowing the torque-free clamping action and preventing damage to the clamping surface.

The space between the eccentric lever cam and the clamping contact surface in the GN 927 clamping levers with eccentric cam can be adjusted by means of a precision thread, allowing the clamping position with the maximum clamping force to be selected with a minimum of effort. The position of the lever in relation to the clamping axis can so also be determined.

The lever made of plastic-coated die-cast zinc is designed such that the clamping movement of the lever does not exceed the maximum clamping force.

This, in turn, results in a rotation angle limitation under maximum clamping force (self-locking).

There are no loose parts. All elements are interlinked in their proper position.

These clamping levers with eccentric cam allow clamping force as high as 8 kN.

Find out more in the new GANTER 2006 catalogue or in the Internet at www.ganter-griff.de

PRESS-BOX



Ansprechpartner | *Contact*

Axel Weber

Durchwahl | *direct extension*

+ 49 (0) 7723 6507-226

E-Mail | *Email*

axel.weber@ganter-griff.de

Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

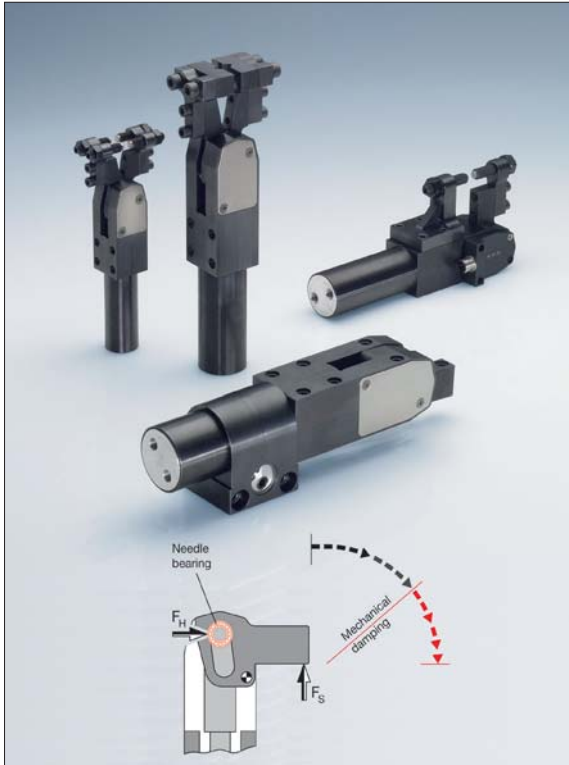
78120 Furtwangen

Phone +49 (0) 7723 6507-0

Telefax +49 (0) 7723 4659

www.ganter-griff.com

Clamping, holding, gripping and positioning workpieces...



... in attachments and handling systems

The pneumatically operated power clamps GN 864, GN 865 and GN 866 by Ganter of Furtwangen are used for clamping, gripping and positioning workpieces in attachments and handling systems.

These power clamps are small, compact and light and use a minimum of air, with a system life of approx. 20 million clamping cycles. This is particularly important and advantageous for handling systems.

With their cylinder diameters of 20, 32 and 40 mm they can develop very high clamping and retaining forces, with the kinematics designed such that a self-locking mechanism grips in the clamping position. As the closing of the clamping arm is rapid and the actual clamping movement is slow, there is normally no need for pneumatic damping.

The needle bearing clamping mechanism delivers ultimate clamping forces and minimises wear and tear.

The steel cylinder with its frontal air connections forms a unit with the clamping mechanism, resulting in high stability with minimum dimensions and virtually unlimited mounting and attachment options.

The clamping mechanism in the GN 864 version is protected from dirt and foreign particles which are likely to impair the proper function (e.g. during welding).

The power clamps are available with a wide range of accessories such as screw holders, counterstays for contact pressure screws, clamping jaw holders for clamping arms and clamping jaw blanks, limit switches (inductive sensor) clamping holders, etc.

The accompanying photo clearly shows the function of the power clamps (sectional drawing).

Find out more in the GANTER STANDARD ELEMENTS catalogue, the new products 2007 or on the Internet at www.ganter-griff.de

PRESS-BOX

Ansprechpartner | Contact

Axel Weber

Durchwahl | direct extension

+ 49 (0) 7723 6507-226

E-Mail | Email

axel.weber@ganter-griff.de



Otto Ganter GmbH & Co. KG

Normteilefabrik

Triberger Straße 3

78120 Furtwangen

Phone +49 (0) 7723 6507-0

Fax +49 (0) 7723 4659

www.ganter-griff.com