WE GENERATE EXCITEMENT.

Since its founding by Andreas Maier in 1890, our company has lived though many exciting times. Today we are the leading manufacturer in Europe, supplying over 5,000 different products from the fields of clamping, hand tools and locks. With this extensive product range we can meet all of our customers’ needs and requirements. But providing optimal quality means meeting the challenges at all levels: Expert consultation, modern team organisation, individual solutions (including special developments), flexibility in response to changing conditions, etc. And we ourselves find this so exciting that we look forward every day to shaping the market together with our employees and our customers – both now and in the future. That is something you can count on.

1  Service from genuine experts
2  Short delivery times
3  Guaranteed quality standard
4  Warranty
5  Individual development

COMAPNY HISTORY
1890  Company founded as a lock manufacturer by Andreas Maier.
1920  Product range extended to include spanners.
1928  Production line assembly of “Fellbach locks”.
1951  AMF introduces clamping elements and diversifies into workpiece and tool clamping technology.
1965  Toggle clamps extend the AMF product range. AMF catalogues are now printed in ten languages.
1975  Further specialisation into hydraulic clamping technology.
1982  Clamping and fixture systems round off AMF’s clamping expertise.
1996  AMF team organisation in all sectors of the business. Quality management with certification to ISO 9001.
2001  AMF Service Guarantee for all products.
2004  Introduction of the ZPS zero-point clamping system.
2007  The magnetic clamping technology extends the AMF product range.
2009  Development and marketing of AMF Vacuum clamping technology.
2012  AMF-Brite and AMF-Cleaner for automated labelling and cleaning via the tool spindle.

E  Made in Germany

It goes without saying that our range of products is developed and manufactured by our team of employees in Germany.

Product History
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1920  Product range extended to include spanners.
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Produkte auf der Cover
Installation-clamping module, item Nr. 6206 LA, Nr. 6306 LA, page 43.

MANAGING DIRECTORS
1. Johannes Maier
2. Volker Göbel

THE AMF SERVICE GUARANTEE
1. Assuredly on the way to the top

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Our innovations and highlights ...

NEW!

INSTAL LATION CLAMPING MODULE, ROUND
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NEW!

INSTALLATION CLAMPING MODULE, ROUND, WITH INDEXING
No. 6206ILA, page 43

NEW!

AIR-HYDRAULIC PUMP
No. 6370ZD-004, page 84

NEW!

INSTALLATION CLAMPING MODULE, ROUND, SCREW-IN VERSION
No. 6203L-02, page 39

NEW!

QUICK FITTING COUPLING, GALVANISED, PNEUMATIC
No. 6370ZSK, page 90
... at a glance

INSTALLATION CLAMPING MODULE FOR AUTOMATION SOLUTIONS
No. 6103HA-20-05, page 64

NEW!
CLAMPING FEMALE NIPPLE
No. 6370ZN, page 77

INSTALLATION CLAMPING MODULE K10.2
No. 6204HA / No. 6204IHA, page 14

NEW!
HOSE SET, HYDRAULIC
No. 6370ZS-06-2000 page 88

NEW!
COVER CAP
No. 6204ZS-02, page 31
By using modern AMF zero-point systems, you optimize fixture and workpiece changeover in your production, correspondingly reduce set-up times on the machine and so save money!

The benefits of zero-point clamping technology are obvious:

- Increase in machine run-time
- Very fast workpiece or fixture changeover
- High repeatability
- A uniform interface for all machines
- Positioning and clamping in a single step
The clamping nipple in our zero-point system is the interface between the machine table and the workpiece or fixture. It ensures exact positioning and secure clamping. The resulting work forces are transferred through the clamping nipple to the clamping module.

The precisely manufactured clamping modules of the AMF Zero-Point System ensure a secure and firm hold of the workpiece or fixture to be clamped. With the high pull-in, closing and holding forces, they are suitable for every application.
YOUR ADVANTAGES - THOUGHT THROUGH IN DETAIL

Experience a zero point clamping system that, through its innovative and forward-looking features, presents its strengths in use in an advanced way.

Numerous advantages speak for themselves and make the AMF zero-point system into a technology that revolutionizes the zero-point clamping technology market.
**LARGE INTAKE CATCHMENT**

No laborious searching for the holes anymore - self-centring via the diagonal side surfaces of the engagement nipple screw.

**FORM FIT**

The balls are optimally encapsulated on 3 sides. As a result, the clamping nipple always remains firmly clamped in the module.

**RUSTPROOF STAINLESS STEEL**

High-alloy, hardened tool steel - and so no corrosion.

**GOOD HOLDING, PULL-IN AND LOCKING FORCES**

Ball surface is 784% greater than with traditional ball systems.

<table>
<thead>
<tr>
<th>Size</th>
<th>Holding force</th>
<th>Pull-in/locking force</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>hydr.</td>
</tr>
<tr>
<td>K5</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>K10</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>K20</td>
<td>55</td>
<td>20</td>
</tr>
<tr>
<td>K40</td>
<td>105</td>
<td>40</td>
</tr>
</tbody>
</table>

**SWING-FREE**

Swing-free run-in and run-out through the optimal contour of the clamping nipple.

**THREE-POINT PRINCIPLE**

Power transmission by means of the three-point principle! This optimised force distribution prevents shearing load on the balls.

**MEDIA FEED**

Due to the lateral media feed, low pallet thicknesses are possible and fewer feed holes are necessary.

**NO BALL CAGE**

The balls lie freely in the ball canal. This freedom of movement enables the balls to continuously re-position themselves.

**BLOW OUT**

Our system has a pneumatic blow-out installed at the factory. As a result, chips and dirt inside are effectively blown out.

**SIMPLE CLEANING**

Our zero-point clamping systems can be blown out very simply with a commercially available compressed air cleaning pistol and do not require complicated suctioning out.

**SAFETY SYSTEM**

Process reliability - Clamping module always opens. A piston blockade is thus impossible.

Subject to technical alterations.
FAQS ABOUT ZERO-POINT CLAMPS AND THE AMF ZERO-POINT SYSTEM

WHAT IS PULL-IN FORCE / HOLDING FORCE?

- The pull-in force describes the force with which the nipple is pulled in and clamped with positive interlocking in the clamping module. The holding force, in contrast, specifies the maximum permissible pull force of the engagement nipple screw.

WHAT IS REPEATABILITY?

- The repeatability specifies the tolerance range within which the recorded reference points on the workpiece lie after removal and reclamping of the same workpiece. The repeatability, also called repetition accuracy, is below 0.005mm.

WHAT ADVANTAGES RESULT FROM THE USE OF ZERO-POINT, SLIT AND UNDERSIZE NIPPLES?

- These different types of nipples offset the spacing tolerances of nipples and clamping modules. The fixed reference point is achieved through the zero-point nipple; the slit nipple serves to compensate for the still-free axis. The undersize nipple does not have a centring function, but only a clamping and holding function.

CAN I INSERT THE CLAMPING NIPPLE DIRECTLY INTO THE WORKPIECE FOR MACHINE PROCESSING?

- The high costs for chucking fixtures and workpiece clamping can be effectively saved here if the clamping nipples are mounted in the workpiece, which is clamped directly using the clamping modules. As a result, a complete 5-sided processing of the workpiece is possible in one chucking. With the different nipple sizes (attaching thread M6 to M16), workpieces of different sizes can be clamped.

HOW DOES THE SYSTEM COMPENSATE FOR HEAT, SUCH AS FROM METAL CUTTING?

- Through the different clamping nipple designs, the system can compensate for temperature differences between the workpiece and the clamping module easily and controllably. For a graphic depiction of the nipple array, see page 47 of the catalogue. If you have other technical questions, please contact us at any time.

WHAT SHOULD BE THE SPACING TOLERANCE OF THE CLAMPING NIPPLES AND THE CLAMPING MODULES IF SELF-PRODUCED?

- The recommended spacing tolerance of clamping nipples and clamping modules is +/- 0.01mm.
WHERE CAN I GET AN INSTALLATION DIAGRAM OR INSTALLATION MANUAL?

We are happy to send them immediately when customers request them by e-mail.

IS THE CLAMPING MODULE SUITABLE FOR ERODING?

The module is optimally suited for all normal processes, such as eroding, grinding, cutting and turning. Through the complete sealing, the clamping module can be used in liquids and under rough ambient conditions.

IS THE CLAMPING MODULE SUITABLE FOR USE ON INJECTION MOULDING MACHINES?

Especially when injection moulds are changed frequently, the costs for a zero-point solution are amortized within the shortest of times for such machines. Unlike with mechanical clamps, clamping takes place quickly and easily just by pressing a button.

HOW HIGH IS THE MAX. OPERATING TEMPERATURE OF THE CLAMPING MODULES?

The maximum processing temperature is 80°C in the standard design. Clamping modules for use at higher temperatures can be requested at any time.

WHAT IS BLOW-OUT AND HOW DOES IT WORK?

Blow-out using compressed air is guided through the floor of the clamping module and blows out contamination, such as chips, coolant or the like from the central opening and from the sphere space of the module.

WHEN DO I USE THE HYDRAULIC PRESSURE INTENSIFIER AND WHEN THE PNEUMATIC PRESSURE INTENSIFIER?

Hydraulic pressure intensifier: This transforms the pneumatic into hydraulic pressure in a ratio of 1:8 to open hydraulic modules. Pneumatic pressure intensifier: This is used to intensify the pneumatic pressure in the ratio of 1:2 for pneumatic clamping modules and compensates for pressure fluctuations in the supply line.

HOW DOES THE PATENTED SAFETY SYSTEM WORK IN THE HYDRAULIC CLAMPING MODULE AND WHEN IS IT USED?

If the piston seal begins to leak, the spring space quickly fills with oil. The result is: The piston blocks and the module can no longer be opened. Destruction of the clamped fixture of the clamping module would then be unavoidable. Here, the patented safety system ensures that the oil in the spring space can escape and the piston can be operated.
ARE YOU PRODUCING YET OR STILL SETTING UP?

THE CALCULATION IS VERY SIMPLE!
It has been shown that you can reduce your set-up times by over 90% through the use of the AMF Zero-Point System. High machine standstill times are avoided, set-up times minimized and cash saved...
Take the time to calculate your savings potential with the AMF Zero-Point System very simply.

SAMPLE CALCULATION OF A CUSTOMER BEFORE AND AFTER USE OF THE ZERO-POINT SYSTEM

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Without zero-point clamping system</th>
<th>With the AMF Zero Point System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine costs</td>
<td>€ 100,-- / h</td>
<td>€ 100,-- / h</td>
</tr>
<tr>
<td>Number of set-ups per shift (8h)</td>
<td>4 x</td>
<td>4 x</td>
</tr>
<tr>
<td>Set-up time per procedure</td>
<td>30 mins</td>
<td>2 mins</td>
</tr>
<tr>
<td>Set-up time per shift (8h)</td>
<td>120 mins (2 h)</td>
<td>8 mins (0.13 h)</td>
</tr>
<tr>
<td>Set-up costs per shift (8h)</td>
<td>€ 200,--</td>
<td>€ 13,--</td>
</tr>
<tr>
<td>Set-up costs per shift each year (250 working days)</td>
<td>€ 50,000,--</td>
<td>€ 3,250,--</td>
</tr>
<tr>
<td>Annual savings per shift (8h)</td>
<td></td>
<td>€ 46,750,--</td>
</tr>
</tbody>
</table>

DRASTICALLY REDUCED SET-UP TIMES GUARANTEE YOU WILL EXPERIENCE
A RAPID RATIONALISATION EFFECT
If previously 120 mins had to be invested in four tooling procedures in a shift, the use of the AMF Zero Point System will reduce this to only 8 mins. Rapid switching of equipment and workpieces as well as tooling in parallel with operating time outside of the machine results in the rationalisation effect described. The savings in our customer example of €140,250 per year, for three-shift production utilisation, guarantees rapid amortisation of the invested amounts of approx. €3,750 for a 4-capacity clamping station including accessories.

Tooling times drastically reduced from 120 mins to 8 mins - through the use of the AMF Zero Point System.

Whether one, two or three-shift operation - the savings from the AMF Zero Point System speak for themselves!
### Colour Coding System for Hydraulic and Pneumatic Clamping Modules

Table portion with bright ORANGE background: Open hydraulically!

Table portion with bright BLUE background: Open pneumatically!

#### Table K02, K5, K10 and K10.2

<table>
<thead>
<tr>
<th></th>
<th>K02</th>
<th>K5</th>
<th>K10 and K10.2</th>
<th>K10.3</th>
<th>K20</th>
<th>K20.3</th>
<th>K40</th>
</tr>
</thead>
<tbody>
<tr>
<td>pneum. hydr.</td>
<td>pneum.</td>
<td>pneum.</td>
<td>pneum.</td>
<td>pneum.</td>
<td>pneum.</td>
<td>pneum.</td>
<td>pneum.</td>
</tr>
<tr>
<td>Pull-in/locking force in the system up to [kN]</td>
<td>0,23</td>
<td>5,0</td>
<td>1,5</td>
<td>10,0</td>
<td>8,5</td>
<td>10,0</td>
<td>20,0</td>
</tr>
<tr>
<td>Holding force [kN]</td>
<td>6,0</td>
<td>13,0</td>
<td>13,0</td>
<td>25,0</td>
<td>25,0</td>
<td>25,0</td>
<td>55,0</td>
</tr>
<tr>
<td>Service according to... clamping cycles [pc.]</td>
<td>150,000</td>
<td>250,000</td>
<td>800,000</td>
<td>400,000</td>
<td>400,000</td>
<td>2,000,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Min./max. operating pressure for opening [bar]</td>
<td>6 / 14</td>
<td>50 / 60</td>
<td>8 / 12</td>
<td>50 / 60</td>
<td>8 / 12</td>
<td>5 / 8</td>
<td>50 / 60</td>
</tr>
<tr>
<td>Min./max. operating pressure for reclamping [bar]</td>
<td>-</td>
<td>-</td>
<td>5 / 6</td>
<td>-</td>
<td>5 / 6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Opening volume [cm³]</td>
<td>1,0</td>
<td>1,5</td>
<td>1,5</td>
<td>3,0</td>
<td>3,0</td>
<td>17,0</td>
<td>10,0</td>
</tr>
<tr>
<td>Closing volume [cm³]</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pre-positioning [mm]</td>
<td>1,0</td>
<td>4,0</td>
<td>4,0</td>
<td>6,5</td>
<td>6,5</td>
<td>6,5</td>
<td>12,0</td>
</tr>
<tr>
<td>Repeatability [mm]</td>
<td>&lt; 0,02</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
</tr>
</tbody>
</table>

#### Table Horizontal K20 and Compact K10

<table>
<thead>
<tr>
<th></th>
<th>Horizontal K20</th>
<th>Horizontal K40</th>
<th>Compact K10</th>
<th>Turbine K23</th>
<th>Heavy duty K20</th>
</tr>
</thead>
<tbody>
<tr>
<td>pneum. hydr.</td>
<td>hydr.</td>
<td>hydr.</td>
<td>hydr.</td>
<td>hydr.</td>
<td>hydr.</td>
</tr>
<tr>
<td>Pull-in/locking force in the system up to [kN]</td>
<td>20</td>
<td>40</td>
<td>13</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>Holding force [kN]</td>
<td>55</td>
<td>105</td>
<td>25</td>
<td>23</td>
<td>105</td>
</tr>
<tr>
<td>Service according to... clamping cycles [pc.]</td>
<td>1,500,000</td>
<td>100,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Min./max. operating pressure for opening [bar]</td>
<td>50 / 60</td>
<td>50 / 60</td>
<td>50 / 60</td>
<td>25 / 50</td>
<td>50 / 60</td>
</tr>
<tr>
<td>Min./max. operating pressure for reclamping [bar]</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Opening volume [cm³]</td>
<td>10,0</td>
<td>27,0</td>
<td>3,5</td>
<td>7,5</td>
<td>10,0</td>
</tr>
<tr>
<td>Closing volume [cm³]</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10,7</td>
<td>-</td>
</tr>
<tr>
<td>Pre-positioning [mm]</td>
<td>11,0</td>
<td>11,0</td>
<td>4,0</td>
<td>1,0</td>
<td>12,0</td>
</tr>
<tr>
<td>Repeatability [mm]</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
<td>&lt; 0,005</td>
</tr>
</tbody>
</table>
Zero-point clamping does not have to be expensive. With the K10.2 clamping module we offer you the best technology at a favourable price.

The advantages speak for themselves:

- Outstanding price-performance ratio
- Drastically reduced tooling time
- Immediate improvement of productivity
- Repeat accuracy < 5um
- Stainless steel
- Form fit
- Fitting depth of only 22 mm!
6 COMPONENTS FOR PERFECT CLAMPING -
5 BAR COMPRESSED AIR FOR OPENING WITH
THE AIR HYDRAULIC PUMP

1. Absolutely insensitive to lateral and pull forces that arise. Precision ground support surfaces made of hardened stainless steel for plane-parallel clamping ≤ 0.005 mm.

2. Hardened piston - the combination of form fit and self-locking results in reliable and constant clamping.

3. Precision balls for optimal power transmission as well as vibration-inhibiting and wear-resistant use.

4. Ball support made of stainless steel seals the clamping module against dirt and liquids.

5. Robust plate springs for maximum pull-in, closing and holding forces.

6. Module floor with integrated air jet function.

A. The low installation depth of the clamping modules of 22 mm permits a height of the base plate of only 28 mm (without blow out, only 24 mm).
Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The installation clamping module K10.2 with 4-way indexing is opened with the air-hydraulic pump, order no. 426569, with 5 bar pneumatic input pressure.
The clamping module has high holding, pull-in and locking forces. It is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

On request:
- Installation diagrams

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>dia. LK</th>
<th>M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>427369</td>
<td>K10.2</td>
<td>112</td>
<td>22</td>
<td>50</td>
<td>30</td>
<td>8</td>
<td>77</td>
<td>M6</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>427369</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td></td>
<td>0.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>428490</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td></td>
<td>0.6</td>
</tr>
</tbody>
</table>

No. 6204IHA
Installation clamping module K10.2 with 4-way indexing
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.
The indexing function of the clamping module prevents the pallet from twisting, enabling exact positioning every 90°.

Note:
The installation clamping module K10.2 with 4-way indexing is opened with the air-hydraulic pump, order no. 426569, with 5 bar pneumatic input pressure.
The clamping module has high holding, pull-in and locking forces. It is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

On request:
- Installation diagrams

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>dia. LK</th>
<th>M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>428490</td>
<td>K10.2</td>
<td>112</td>
<td>22</td>
<td>50</td>
<td>30</td>
<td>8</td>
<td>77</td>
<td>M6</td>
<td>22</td>
</tr>
</tbody>
</table>
Design:
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment. The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Advantage:
Low overall height of only 36 mm.

Design:
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Advantage:
Low overall height of only 36 mm.
No. 6204S6HA-001
Sextuple clamping station
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules' contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Advantage:
Low overall height of only 36 mm.

No. 6204S8HA-001
8-fold clamping station
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules' contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Advantage:
Low overall height of only 36 mm.
No. 6204S4HA-002
Quadruple clamping station
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

36 mm

| Design: | Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment. The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected. |
| Application: | e.g. for DMG / DMU 50 EVO |
| Advantage: | Low overall height of only 36 mm. |

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>427492</td>
<td>K10.2</td>
<td>4 x 10</td>
<td>4 x 25</td>
<td></td>
<td>37</td>
</tr>
</tbody>
</table>

No. 6204S4HA-003
Quadruple clamping station
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

36 mm

| Design: | Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 80 mm. Clamping is with M16 socket head screws. At least two fitting holes are attached for alignment. The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected. |
| Application: | e.g. for Mazak Variaxis 500 |
| Advantage: | Low overall height of only 36 mm. |

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>427518</td>
<td>K10.2</td>
<td>4 x 10</td>
<td>4 x 25</td>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>
No. 6204S6HA-002

Sextuple clamping station

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.

The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

e.g. for DMG / DMU 50

Advantage:

Low overall height of only 36 mm.

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.

The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

e.g. for DMG / DMU 50

Advantage:

Low overall height of only 36 mm.

No. 6204S6HA-003

Sextuple clamping station

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 100 mm. Clamping is with M16 socket head screws. At least two fitting holes are attached for alignment.

The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

e.g. for Mazak Variaxis 630

Advantage:

Low overall height of only 36 mm.

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 100 mm. Clamping is with M16 socket head screws. At least two fitting holes are attached for alignment.

The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

e.g. for Mazak Variaxis 630

Advantage:

Low overall height of only 36 mm.
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.

The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:
e.g. for DMG / DMU 70 EVO

Advantage:
Low overall height of only 36 mm.

---

Hydraulic clamping bracket for optimised clamping times on K10.2 clamping stations. Bottom-mounted clamping nipple.

The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Design:
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.

The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

---

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>427567</td>
<td>K10.2</td>
<td>6 x 10</td>
<td>6 x 25</td>
<td></td>
<td>62</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>427591</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>
No. 6204K1HA-001

Single clamping bracket
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:
Hydraulic clamping bracket for optimised clamping times on K10.2 clamping stations. Installation clamping module K10.2 with 4-way indexing. Bottom-mounted clamping nipple. The insertion dimension is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out</th>
<th>S [mm]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>428060</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td>●</td>
<td>150</td>
<td>32</td>
</tr>
<tr>
<td>428086</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td>●</td>
<td>200</td>
<td>38</td>
</tr>
<tr>
<td>428102</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td>●</td>
<td>240</td>
<td>42</td>
</tr>
</tbody>
</table>

No. 6204K1HA-004

Single clamping bracket
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:
Hydraulic clamping bracket for optimised clamping times on K10.2 clamping stations. Installation clamping module K10.2 with 4-way indexing. Bottom-mounted clamping nipple. The insertion dimension is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out</th>
<th>S [mm]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>428128</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td>●</td>
<td>150</td>
<td>45</td>
</tr>
<tr>
<td>428144</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td>●</td>
<td>200</td>
<td>50</td>
</tr>
<tr>
<td>428169</td>
<td>K10.2</td>
<td>10</td>
<td>25</td>
<td>●</td>
<td>240</td>
<td>54</td>
</tr>
</tbody>
</table>
No. 6204K2HA-011

Double clamping bracket
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:
Hydraulic clamping bracket for optimised clamping times on K10.2 clamping stations. Bottom-mounted clamping nipple.
The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>S</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>427864</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>150</td>
<td>31</td>
</tr>
<tr>
<td>427880</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>180</td>
<td>37</td>
</tr>
</tbody>
</table>

No. 6204K2HA-013

Double clamping bracket
Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:
Hydraulic clamping bracket for optimised clamping times on K10.2 clamping stations. Bottom-mounted clamping nipple.
The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>S</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>427906</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>190</td>
<td>57</td>
</tr>
<tr>
<td>427575</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>220</td>
<td>63</td>
</tr>
</tbody>
</table>
**No. 6204K2HA-001**

**Double clamping bracket**

Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out S [mm]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>427666</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>70</td>
</tr>
<tr>
<td>427663</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>100</td>
</tr>
<tr>
<td>427708</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>120</td>
</tr>
<tr>
<td>427724</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>160</td>
</tr>
<tr>
<td>427740</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>200</td>
</tr>
</tbody>
</table>

**Design:**

Hydraulic clamping bracket for optimised clamping times on K10.2 clamping stations. Bottom-mounted clamping nipple.
The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

---

**No. 6204K2HA-006**

**Double clamping bracket**

Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out S [mm]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>427765</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>110</td>
</tr>
<tr>
<td>427781</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>140</td>
</tr>
<tr>
<td>427807</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>160</td>
</tr>
<tr>
<td>427823</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>200</td>
</tr>
<tr>
<td>427849</td>
<td>K10.2</td>
<td>2 x 10</td>
<td>2 x 25</td>
<td>●</td>
<td>240</td>
</tr>
</tbody>
</table>

**Design:**

Hydraulic clamping bracket for optimised clamping times on K10.2 clamping stations. Bottom-mounted clamping nipple.
The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

---

Subject to technical alterations.
No. 6204S6HA-008

Sextuple clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 100 mm. Clamping is with M16 socket head screws. At least two fitting holes are attached for alignment.
The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Advantage:

Low overall height of only 36 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>427625</td>
<td>K10.2</td>
<td>6x10</td>
<td>6x25</td>
<td></td>
<td>55</td>
</tr>
</tbody>
</table>

No. 6204WU12HA-001

12-fold clamping cube

Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Design:

Hydraulic clamping cube for set-up-time-optimized clamping on clamping station 6204S6HA-008. It is fastened with the clamping nipple below.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>427641</td>
<td>K10.2</td>
<td>12x10</td>
<td>12x25</td>
<td></td>
<td>210</td>
</tr>
</tbody>
</table>
No. 6204P-S2

Fixture plate
High-strength aluminium, suitable for double clamping station K10.2

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>L</th>
<th>R</th>
<th>S</th>
<th>SM</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429266</td>
<td>K10.2</td>
<td>166</td>
<td>396</td>
<td>120</td>
<td>M12</td>
<td>30</td>
<td>200</td>
<td>6</td>
</tr>
</tbody>
</table>

Note:
On request, we can incorporate mounting holes according to your specifications in the fixture plate.

On request:
Other dimensions, insertion dimensions and number of clamping nipples equipped.

No. 6204P-S4

Fixture plate
High-strength aluminium, suitable for quadruple clamping station K10.2

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>L</th>
<th>R</th>
<th>S</th>
<th>SM</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429282</td>
<td>K10.2</td>
<td>366</td>
<td>366</td>
<td>200</td>
<td>M12</td>
<td>30</td>
<td>200</td>
<td>10</td>
</tr>
</tbody>
</table>

Note:
On request, we can incorporate mounting holes according to your specifications in the fixture plate.

On request:
Other dimensions, insertion dimensions and number of clamping nipples equipped.
## No. 6204P-S6
### Fixture plate
High-strength aluminium, suitable for sextuple clamping station K10.2

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>L</th>
<th>R</th>
<th>S</th>
<th>SM</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429308</td>
<td>K10.2</td>
<td>366</td>
<td>566</td>
<td>200</td>
<td>M12</td>
<td>30</td>
<td>200</td>
<td>16</td>
</tr>
</tbody>
</table>

**Note:**
On request, we can incorporate mounting holes according to your specifications in the fixture plate.

**On request:**
- Other dimensions, insertion dimensions and number of clamping nipples equipped.

![Fixture plate diagram](image1)

## No. 6204P-S8
### Fixture plate
High-strength aluminium, suitable for octuple clamping station K10.2

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>L</th>
<th>R</th>
<th>S</th>
<th>SM</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429324</td>
<td>K10.2</td>
<td>366</td>
<td>770</td>
<td>200</td>
<td>M12</td>
<td>30</td>
<td>200</td>
<td>22</td>
</tr>
</tbody>
</table>

**Note:**
On request, we can incorporate mounting holes according to your specifications in the fixture plate.

**On request:**
- Other dimensions, insertion dimensions and number of clamping nipples equipped.

![Fixture plate diagram](image2)
The Zero-Point-System in use

AMF-Clean-Stick in use: automated cleaning of clamping fixture and machine table
No. 6370ZN-10
Clamping nipple for clamping modules K10
Hardened, for hydraulic and pneumatic clamping modules size K10.

Design:
Order no. 303610: Zero point nipple
Order no. 303636: Slit nipple
Order no. 304519: Undersized nipple
Order no. 304535: Protection nipple

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>H1</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303610</td>
<td>K10</td>
<td>22.0</td>
<td>15</td>
<td>8</td>
<td>19</td>
<td>16</td>
<td>-</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>303636</td>
<td>K10</td>
<td>22.0</td>
<td>15</td>
<td>8</td>
<td>19</td>
<td>16</td>
<td>-</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>304519</td>
<td>K10</td>
<td>21.8</td>
<td>15</td>
<td>8</td>
<td>19</td>
<td>16</td>
<td>-</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>304535</td>
<td>K10</td>
<td>21.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>M 8</td>
<td>-</td>
<td>30</td>
</tr>
</tbody>
</table>

No. 6370ZNS-001
Engagement nipple screw
Strength class 10.9.
Suitable for clamping nipple, article no. 6370ZN.

On request:
Engagement nipple screws in various lengths and materials (e.g. high-grade stainless steel).

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>M</th>
<th>L</th>
<th>L1</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303578</td>
<td>K10</td>
<td>M 8</td>
<td>37</td>
<td>6</td>
<td>30</td>
</tr>
</tbody>
</table>
**No. 6370ZNM**

**Clamping female nipple**

Strength class 10.
Suitable for clamping nipple No. 6370ZN

**Application:**
Clamping female nipple for fastening the clamping nipple.

**Note:**
By gluing the clamping female nipple in the clamping nipple with medium adhesive it is protected against twisting when loosening the socket head screw.

1 = Clamping female nipple
2 = Clamping nipple
3 = Socket head screw

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>SW</th>
<th>H</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>429985</td>
<td>K10</td>
<td>14</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

| Material: polyethylene |

**No. 6204ZS**

**Cover cap**

Material: polyethylene

**Application:**
Cover and protective caps for mounting screws of the K10.2, K10.3, K20.3 clamping modules.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Packaging unit [St]</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>428664</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

| Material: polyethylene |

**No. 6204ZS**

**Cover cap**

**NEW!**

Polyethylene

**Application:**
Cover and protective cap for cylinder and positioning boreholes in clamping stations.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Packaging unit [St]</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>430165</td>
<td>M12</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>430181</td>
<td>M16</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>
**No. 6370ZS**  
High Pressure Hose

**Design:**
Steel fitting, galvanized and passivated. Hose of synthetic material with high tensile brassed steel-wire braid.

**Application:**
High pressure hose is used for hydraulic connection of surface-mounted clamping modules or clamping stations to the pressure generator, such as the pressure intensifier or air-hydraulic pump.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>430017</td>
<td>750</td>
<td>375</td>
<td>9.8</td>
<td>4.8</td>
<td>8</td>
<td>2000</td>
<td>265</td>
</tr>
</tbody>
</table>

**Note:**
Sealing in accordance with DIN 3852 Form B through edge seal and cutting ring.

**No. 6370ZSK**  
Quick Disconnect Coupler

zinc-plated.  
Max. operating pressure 325 bar.

**Application:**
Since the clamping modules after blow-off of the opening pressure are mechanically locked, the hose is then uncoupled by means of the quick couplings. The advantage of this is that there are no interfering lines.

**Note:**
Flat-sealing quick coupling with G1/4 internal thread. For G1/4 external thread a threaded stud is enclosed.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Nominal bore [NW]</th>
<th>Nominal flow [l/min]</th>
<th>SW [mm]</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>427856</td>
<td>6</td>
<td>12</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>427872</td>
<td>6</td>
<td>12</td>
<td>22</td>
<td>170</td>
</tr>
</tbody>
</table>

**No. 6370ZR-011**  
Tube fittings

for high-pressure hose with outer diameter 8 mm and internal diameter 4 mm, with olive ring.

**Note:**
Sealing in accordance with DIN 3852 Form B through edge seal and cutting ring.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>SW</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429910</td>
<td>19</td>
<td>55</td>
</tr>
</tbody>
</table>
No. 6370ZD-004  
Air-Hydraulic Pump  
Max. operating pressure 60 bar.

Design:
Compact, air-pressure-operated hydraulic intensification pump for single-acting circuits. The pump is fitted with an integrated safety valve that regulates the hydraulic output pressure. The safety valve is set in the factory to the max. operating pressure of 60 bar.  
The extension element in the oil tank allows the pump to be adjusted horizontally and vertically.  
Air connection thread: G1/4  
Oil connection thread: G1/4

Application:
The air-hydraulic pump is used for opening for hydraulic clamping modules or hydraulic clamping stations.

Note:
The use of purified, lubricated compressed air is recommended for operation of the pump.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Pneum. pressure min. [bar]</th>
<th>Pneum. pressure max. [bar]</th>
<th>Oil capacity usable [cm³]</th>
<th>Flow rate max. [cm³/min]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>426569</td>
<td>4</td>
<td>6</td>
<td>1000</td>
<td>750</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Subject to technical alterations.
The market requirements for a modern zero-point system are widely varied. Different model sizes, holding forces or integrated automation solutions - with our “Zero Point” system we offer components for every requirement and for every standard.

Convince yourself!
TRY IT FOR YOURSELF AND TAKE ADVANTAGE OF THE MANY FEATURES THAT MAKE THE AMF ZERO POINT SYSTEM SO SPECIAL:

- Clamping module in built-in or external mount versions
- Various model sizes for different processing forces and applications
- Heavy-load clamping module for even more extreme holding forces
- Clamping module as flange version for simplified installation
- Horizontal rapid-clamp cylinder for fast, vertical palettisation
- A wide range of automated solutions
- High-end clamping module for full automation
- Various hydraulic clamping stations
- Air-hydraulic pump for rapid opening of the clamping module
- Comprehensive accessories offer the perfect complement
The Zero-Point-System to perfection
INSTALLATION 
CLAMPING 
MODULES

The AMF installation clamping modules are used with low space requirement and low overall height. For installation in pallets, machine tables, clamping brackets and cubes. Usable when cutting, grinding, eroding and on plastic-processing machines as well as for fixture construction with mounting fixtures and handling systems. The AMF clamping modules can be installed in all positions. Whether vertical or overhead - mounting works completely without assembly tools.

Installation clamping modules are available in five different sizes:

> **Clamping modules K40** - dia. 148 mm - pull-in/locking force up to 40 kN - holding force 105 kN
> **Clamping modules K20** - dia. 112 mm - pull-in/locking force up to 20 kN - holding force 55 kN
> **Clamping modules K10** - dia. 78 mm - pull-in/locking force up to 10 kN - holding force 25 kN
> **Clamping modules K5** - dia. 45 mm - pull-in/locking force up to 5 kN - holding force 13 kN
> **Clamping modules K02** - dia. 22 mm - pull-in/locking force up to 0.23 kN - holding force 6 kN
FLEXIBLE SYSTEM - THE ZERO-POINT-SYSTEM ADAPTS PERFECTLY TO YOUR REQUIREMENTS

> Differing AMF clamping modules from Ø 22 to Ø 148 mm can be used in combination.
> Smallest depth gauges from 23 mm are realised simply, flexibly and quickly.
> Thanks to the innumerable possible combinations between differently sized clamping modules and nipples, direct workpiece clamping is straightforward and specific.
No. 6203L-02
Installation clamping module, round, screw-in version
Pneumatic opening.
Opening operating pressure: min. 6 bar - max. 14 bar
Cover and piston hardened.
Repeatability < 0.02 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module has one connection:
1x pneum. opening (1).
For simple installation, we recommend the AMF face spanner under order no. 50914.

On request:
- Installation diagrams

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>dia. D3</th>
<th>H</th>
<th>HA</th>
<th>T</th>
<th>T1</th>
<th>T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>427286</td>
<td>K02</td>
<td>22</td>
<td>10</td>
<td>M20x1,5</td>
<td>18</td>
<td>M5</td>
<td>49,05</td>
<td>2,05</td>
<td>4,5</td>
<td>25</td>
<td>47</td>
</tr>
</tbody>
</table>

Order no.
Pull-in/locking force up to [N]
Holding force [N]
Weight [g]
### Installation clamping module, round

**No. 6370EARH**

**Installation clamping module, round, screw-in version**

*Hydraulic opening.*

Opening operating pressure: min. 50 bar - max. 60 bar

Cover and piston hardened.

Repeatability < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>305953</td>
<td>K 5</td>
<td>5</td>
<td>13</td>
<td>150</td>
</tr>
</tbody>
</table>

**Application:**

Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry. With small space requirement and low overall height.

**Note:**

The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

The contact surface is the upper surface of the housing.

The clamping module has one connection: 1x hydr. opening (1).

For simple installation, we recommend the AMF face spanner under order no. 41046.

**On request:**

- Installation diagrams

**Dimensions:**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>dia. LK</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>305953</td>
<td>K 5</td>
<td>M45 x 1</td>
<td>15</td>
<td>39</td>
<td>19,8</td>
<td>5,8</td>
<td>36</td>
<td>14</td>
</tr>
</tbody>
</table>

**No. 6370EARL**

**Installation clamping module, round, screw-in version**

*Pneumatic opening.*

Opening operating pressure: min. 8 bar - max. 12 bar

Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar

Cover and piston hardened.

Repeatability < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>305979</td>
<td>K 5</td>
<td>1,5</td>
<td>13</td>
<td>150</td>
</tr>
</tbody>
</table>

**Application:**

Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry. With small space requirement and low overall height.

**Note:**

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

The contact surface is the upper surface of the housing. Use of the pneumatic pressure booster 6370ZVL-005 is recommended.

The clamping module has two connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).

For simple installation, we recommend the AMF face spanner under order no. 41046.

**On request:**

- Installation diagrams

**Dimensions:**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>dia. LK</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>305979</td>
<td>K 5</td>
<td>M45 x 1</td>
<td>15</td>
<td>39</td>
<td>19,8</td>
<td>5,8</td>
<td>36</td>
<td>14</td>
</tr>
</tbody>
</table>
Installation clamping module, round

**No. 6370EARHA**

**Installation clamping module, round**

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

**Application:**
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

**Note:**
The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out [kN]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>428680</td>
<td>K10</td>
<td>10</td>
<td>25</td>
<td>5</td>
<td>0,45</td>
</tr>
<tr>
<td>427971</td>
<td>K20</td>
<td>20</td>
<td>55</td>
<td>10</td>
<td>1,40</td>
</tr>
<tr>
<td>429845</td>
<td>K40</td>
<td>40</td>
<td>105</td>
<td>15</td>
<td>3,40</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order no.</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>428680</td>
</tr>
<tr>
<td>427971</td>
</tr>
<tr>
<td>429845</td>
</tr>
</tbody>
</table>

**No. 6370EARLA**

**Installation clamping module, round**

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 8 bar - max. 12 bar
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

**Application:**
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

**Note:**
The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL-005 is recommended.

The clamping module with blow-out and support control has three connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

**On request:**
- Installation diagrams
- Automation solutions

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Blow out [kN]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>305375</td>
<td>K10</td>
<td>8</td>
<td>25</td>
<td>5</td>
<td>0,45</td>
</tr>
<tr>
<td>303016</td>
<td>K20</td>
<td>17</td>
<td>55</td>
<td>10</td>
<td>1,40</td>
</tr>
<tr>
<td>303057</td>
<td>K40</td>
<td>30</td>
<td>105</td>
<td>15</td>
<td>3,40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order no.</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>305375</td>
</tr>
<tr>
<td>303016</td>
</tr>
<tr>
<td>303057</td>
</tr>
</tbody>
</table>

ANDREAS MAIER FELLBACH · www.amf.de

Subject to technical alterations.
**No. 6370EAIHA**

Installation clamping module with indexing

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

**Application:**
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

**Note:**
The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

**On request:**
- Installation diagrams

### Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>428425</td>
<td>K20</td>
<td>20</td>
<td>55</td>
<td></td>
<td>1,4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>428441</td>
<td>K20</td>
<td>17</td>
<td>55</td>
<td></td>
<td>1,4</td>
</tr>
</tbody>
</table>

---

**No. 6370EAILA**

Installation clamping module with indexing

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 8 bar - max. 12 bar
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

**Application:**
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

**Note:**
The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL-005 is recommended.

The clamping module with blow-out and support control has three connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

**On request:**
- Installation diagrams

### Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>428425</td>
<td>K20</td>
<td>20</td>
<td>55</td>
<td></td>
<td>1,4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>428441</td>
<td>K20</td>
<td>17</td>
<td>55</td>
<td></td>
<td>1,4</td>
</tr>
</tbody>
</table>
No. 6206LA
Installation clamping module, round
Opening operating pressure:
K10.3 min. 5 bar
K20.3 min. 4.5 bar
Cover and piston hardened. Repeatability < 0.005 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x pneum. opening (1), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

On request:
- Installation diagrams

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>428730</td>
<td>K10.3</td>
<td>10</td>
<td>25</td>
<td></td>
<td>1.4</td>
</tr>
<tr>
<td>428755</td>
<td>K20.3</td>
<td>17</td>
<td>55</td>
<td></td>
<td>2.6</td>
</tr>
</tbody>
</table>

No. 6206ILA
Installation clamping module, round, with indexing
Opening operating pressure:
K10.3 min. 5 bar
K20.3 min. 4.5 bar
Cover and piston hardened. Repeatability < 0.005 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x pneum. opening (1), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

On request:
- Installation diagrams

Dimensions:
**Installation clamping module, square**

**No. 6370EAQHA**

**Installation clamping module, square**

Hydraulic opening.

Pneumatic blow-out.

Opening operating pressure: min. 50 bar - max. 60 bar

Cover and piston hardened.

Repeatability < 0.005 mm.

---

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>305250</td>
<td>K10</td>
<td>10</td>
<td>25</td>
<td></td>
<td>0.55</td>
</tr>
<tr>
<td>305276</td>
<td>K20</td>
<td>20</td>
<td>55</td>
<td>●</td>
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</tr>
<tr>
<td>305282</td>
<td>K40</td>
<td>40</td>
<td>105</td>
<td>●</td>
<td>3.55</td>
</tr>
</tbody>
</table>

**Application:**

Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry. A square clamping module prevents the pallet from twisting. The indexing function enables exact positioning every 90°.

**Note:**

The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

**On request:**

- Installation diagrams
- Automation solutions

---

**Dimensions:**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>H1</th>
<th>L</th>
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<th>dia. LK</th>
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</tbody>
</table>

---

**No. 6370EAQLA**

**Installation clamping module, square**

Pneumatic opening.

Pneumatic blow-out.

Opening operating pressure: min. 6 bar - max. 12 bar

Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar

Cover and piston hardened.

Repeatability < 0.005 mm.

---

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in locking force up to</th>
<th>Holding force</th>
<th>Blow out</th>
<th>Weight [Kg]</th>
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</tbody>
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**Application:**

Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry. A square clamping module prevents the pallet from twisting. The indexing function enables exact positioning every 90°.

**Note:**

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL-005 is recommended.

The clamping module with blow-out and support control has three connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

**On request:**

- Installation diagrams
- Automation solutions

---

**Dimensions:**

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<td>42</td>
</tr>
</tbody>
</table>

Subject to technical alterations.

---

**ANDREAS MAIER FELLBACH**

- www.amf.de
Installation clamping module, heavy-duty

No. 6201H
Installation clamping module, heavy-duty, round

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Holding force 105 kN
Diameter 124 mm

Holding force 55 kN
Diameter 112 mm

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry. The installed heavy-duty clamping module K20 has the same max. holding force as the clamping module K40. The example here is that the clamping nipple has the same outside dimensions as the clamping nipple in the clamping module K20. As a result, a uniform clamping nipple size can be achieved in all fixtures, and the same module size can be achieved on the machine tables.

Note:
The heavy duty installation clamping module, despite small installation dimensions, has increased holding force through the reinforced design. Due to the cartridge construction, simplified installation in the body is possible.

The clamping module is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

The clamping module has one connection: 1x hyd. opening (1).

On request:
- Installation diagrams
- Automation solutions

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
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MORE EXTREME HOLDING FORCES - WITH SAME INTERFACE

1. Heavy duty clamping modules for extreme processing forces
2. Clamping nipple K20 as the same interface between the two clamping modules
3. Clamping module K20 for all other applications
SIMPLIFIED INSTALLATION IN THE BODY
- THE INSTALLATION CLAMPING MODULE AS FLANGE VERSION

The flange version of the installation clamping module has a centring ring on the underside. This allows simplified and precisely positioned installation of the module in the body. Through the low depth of the required mounting hole for the centring ring, existing fixtures and be easily and inexpensively refitted with the AMF Zero-Point System. The clamping module can be operated from the outside via a tube connection or from the bottom via an O-ring connection.
### No. 6151HA

**Installation clamping module, round, flange version**

- Hydraulic opening.
- Pneumatic blow-out.
- Opening operating pressure: min. 50 bar - max. 60 bar
- Cover and piston hardened.
- Repeatability < 0.005 mm.

**Order no.**

<table>
<thead>
<tr>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
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<th>Weight [Kg]</th>
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**Application:**

Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

**Note:**

The flange version permits a simplified installation in the body. This is exactly positioned via the centring function. The clamping module can be operated from the outside via a tube connection or from the bottom via an O-ring connection. The clamping module with blow-out and support control has two connections: 1x pneum. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

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### No. 6151L

**Installation clamping module, round, flange version**

- Pneumatic opening.
- Opening operating pressure: min. 8 bar - max. 12 bar
- Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
- Cover and piston hardened.
- Repeatability < 0.005 mm.

**Order no.**

<table>
<thead>
<tr>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Weight [Kg]</th>
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<tr>
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**Application:**

Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

**Note:**

The flange version permits a simplified installation in the body. This is exactly positioned via the centring function. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, this must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL-005 is recommended. The clamping module has two connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).

### Dimensions:

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<td>G1/4</td>
<td>11.9</td>
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</tbody>
</table>

Subject to technical alterations.
Looking for a simple, flexible and modular clamping solution that satisfies your requirements for a modern, cost-efficient and cost-optimised manufacturing process?

This is guaranteed by the immensely varied AMF zero point clamping system „Zero-Point“.

The manufacture of prototypes, small batch series and testing and measuring fixtures used to be a challenging field of application. Flexibility was to some degree limited by a fixed depth gauge.

The variable depth gauge recently developed by AMF has eliminated these boundaries. A simple displacement of the clamping modules enables the depth gauges to be quickly adapted to your specific needs.

This additional flexibility drastically cuts your tooling costs and machine downtimes, not only for medium and large batch series, but also for prototypes and small batch series, as well as test devices.
> Clamping brackets for direct workpiece clamping in simple 5-sided machining
> Variable depth gauge by easily displacing the clamping modules on a grooved or grid plate
> Easy to adapt various module sizes to suit the application at hand.
> Five standard thread sizes for the clamping nipple in the workpiece to choose from - M5, M6, M8, M12, M16
> Use of threaded adapter sleeves enables the clamping nipple to be mounted in any size of locating bores in the workpiece.
> Direct workpiece clamping can be realised by the simplest of means
> Prototypes, small batch series, test and measuring devices, installation devices can be clamped using the AMF-Zero-Point-System in a manner that fulfills your future needs.
The Zero-Point-System to perfection
SURFACE-MOUNTED CLAMPING MODULES

The AMF surface-mounted clamping modules are installed on pallets, machine tables, clamping brackets and cubes. Usable when cutting, grinding, eroding and on plastic-processing machines as well as for fixture construction with mounting fixtures and handling systems.

The AMF clamping modules can be installed in all positions. Whether vertical or overhead - mounting works completely without assembly tools.

Surface-mounted clamping modules are available in four different sizes:

- **Clamping modules K40** - dia. 148 mm - pull-in/locking force up to 40 kN - holding force 105 kN
- **Clamping modules K20** - dia. 112 mm - pull-in/locking force up to 20 kN - holding force 55 kN
- **Clamping modules K10** - dia. 78 mm - pull-in/locking force up to 10 kN - holding force 25 kN
- **Clamping modules K5** - dia. 62 mm - pull-in/locking force up to 5 kN - holding force 13 kN
Surface-mounted clamping module, round

No. 6370AARH
Surface-mounted clamping module, round
Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

On request:
- Individual housing

Dimensions:

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<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to [kN]</th>
<th>Holding force [kN]</th>
<th>Weight [g]</th>
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<td>300</td>
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</table>

Pneumatic opening.
Opening operating pressure: min. 8 bar - max. 12 bar
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

Use of the pneumatic pressure booster 6370ZVL-005 is recommended.
The clamping module has two connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).

On request:
- Individual housing

Dimensions:

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<th>Order no.</th>
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Subject to technical alterations.
No. 6370AARH
Surface-mounted clamping module, round
Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

<table>
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<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to (kN)</th>
<th>Holding force (kN)</th>
<th>Blow out</th>
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Application:
Zero-point clamping system in combination with clamping flanges 6370ZB for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

On request:
- Individual housing
- Automation solutions

Dimensions:
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<td>32,50</td>
<td>G1/4</td>
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</table>

No. 6370AARL
Surface-mounted clamping module, round
Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 8 bar - max. 12 bar
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to (kN)</th>
<th>Holding force (kN)</th>
<th>Blow out</th>
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<td>K40</td>
<td>30</td>
<td>105</td>
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<td>6.6</td>
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</tbody>
</table>

Application:
Zero-point clamping system in combination with clamping flanges 6370ZB for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

Use of the pneumatic pressure booster 6370ZVL-005 is recommended.

The clamping module with blow-out and support control has three connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)

On request:
- Individual housing
- Automation solutions

Dimensions:
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<td>62</td>
<td>32,50</td>
<td>G1/4</td>
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</table>
No. 6370ZB

Clamping flange, Set

consisting of two single-clamp buckles. Nitrided and burnished.

<table>
<thead>
<tr>
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<th>Size</th>
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</table>

Application:

Clamping flanges are used to fasten surface-mounted clamping modules on the machine table.

On request:

- Special clamping flanges for various T-slot tables
- Clamping flange and housing manufactured as a single piece

Examples of machine-table mounting:

K10 - Groove distance 50 mm

K20 - Groove distance 50 mm

K40 - Groove distance 50 mm

Groove distance 63 mm

Groove distance 63 mm

Groove distance 63 mm

Groove distance 80 mm

Groove distance 80 mm

Groove distance 80 mm
No. 6370HARH

Horizontal rapid-clamping cylinder

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

---

Order no. Size Pull-in-locking force up to [kN] Holding force [kN] Advance motion, hyd. suspension piston max. weight per catching piston [kN] Weight [Kg]
---
303065 K20 20 56 5 5 2.1
306217 K20 20 56 5 5 2.1
303107 K40 40 105 - 8 5.2
306258 K40 40 105 - 8 5.2

---

Design:
As standard, there is a manual (hand power) or hydraulic run-out and run-in movements of the suspension piston.
- Cylinder has one connection: 1x hydr. opening (1).
- Cylinder with hydraulic advance motion has three connections: 1x hydr. opening (1), Run out 1x hydr. suspension piston opening (5), run in 1x hydr. suspension piston opening (4).

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry. For installation in clamping brackets, cubes and towers, The horizontal rapid-clamping cylinder is used to change fixtures quickly and easily by means of the suspension piston with manual power, hydraulic or handling device.

Note:
The horizontal rapid-clamping cylinder has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). The maximum weight per suspension piston must not exceed 5 kN at K20 and 8 kN at K40.

On request:
- Installation diagrams

---

Dimensions:

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<th>Order no.</th>
<th>Size</th>
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---

Subject to technical alterations.
HORIZONTAL RAPID-CLAMPING CYLINDER

This is how to make vertical palletization quick and uncomplicated:

➢ No searching for the holes
➢ No hydraulic or pneumatic pre-tensioning
➢ No damage from zero-point hole and nipple
➢ No risk of injury
➢ Reduced set-up times and thus cost savings

Whether by hand, with crane, handling device or robot: Horizontal rapid-clamping cylinders offer maximum protection and comfort.

Flexibly usable in clamping towers, clamping brackets, automated handling devices or in general machine building.

➢ After the pallet has been mounted, it can easily be pushed in and out. This process can be automated, if desired.
Compact cylinder

4-way clamping pallet mounted on round table for fast fixture changeover

In injection moulding, the tools are successfully changed in a way that optimizes set-up time through the use of the AMF Zero-Point System. With friendly recommendation of Robert Bosch GmbH, Waiblingen.
No. 6370KARH
Compact cylinder
Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
For retrofitting to modular profiles, columns, tombstones and cubes. Can be used with thin wall sections.

Note:
There are 5 standard connection options. 4 connections are installed laterally on the outside surface at a 90° angle. Connection is also possible in the base of the compact cylinder.

On request:
- Installation diagrams
- Automation solutions

Dimensions:

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</table>

Subject to technical alterations.
The Zero-Point-System...

With friendly recommendation of Bäuml CNC-Fertigungs-GmbH & Co. KG, Weiden.
The high precision of the AMF Zero-Point System permits use in grinding.

Use in the food industry.

With friendly recommendation of Bäuml CNC-Fertigungs-GmbH & Co. KG, Weiden.
AUTOMATION SOLUTIONS FROM AMF

The enormous capability and flexibility of use of modern processing machines is undisputed. To be able to use these capabilities in reality requires more than just fast machines. An automation solution consists today of a number of multiply linked, versatile products and technologies.

Through the possibility of a fully automatic and process-sure machine configuration, our automation solutions meet the requirements for seamless integration into the automation system. Numerous sensing options, optional media ducts and blow-out and blow-off of the modules speak for themselves!

Persuade yourself of the automation potential of the AMF zero-point clamping modules!

_1A IS THE MODULE LOCKED?
Through the direct monitoring of the piston position (opened) by means of pneumatic back pressure, the position can be sensed by means of a differential pressure switch.

_1B IS THE MODULE LOCKED?
With an open module, the integrated stop valve creates a pneumatic or hydraulic static pressure, which is sensed via a differential pressure switch.
2 DIRT AND CHIPS IN THE CLAMPING MODULE?
Blowing out with compressed air cleans the inside from all dirt and chips and can be used simultaneously for workpiece support control by means of a differential pressure sensor.

3 ARE MEDIA DUCTS TO A FIXTURE NECESSARY?
Oil, compressed air, water, etc. can be run through our couplings without leaks.

4 DIRT AND CHIPS UNWELCOME IN THE MODULE?
The lagging central lock prevents penetration of dirt and chips when the clamping nipple is being run out. The central lock replaces the previously required protection nipple.

5 CHIPS AND DIRT? IS A WORKPIECE LYING WITHOUT GAP OR NOT?
The blow-out function with compressed air cleans the support surfaces and can be used simultaneously for workpiece support control by means of a differential pressure sensor.

6 IS THE CLAMPING NIPPLE PRESENT ON THE FIXTURE?
The retracting nipple actuates a stop valve, which eliminates the pneumatic or hydraulic static pressure. This condition is sensed via a differential pressure switch.

7 IS THE MODULE OPEN OR CLOSED?
The integrated inductive sensor can sense the piston position (open/closed) of the clamping module.
No. 6103HA-20-05
Installation clamping module for automation solutions

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.
With locking control (pneumatic) and support control (pneumatic).

Order no. | Size | Pull-in/locking force up to | Holding force | Blow out | Weight |
---|---|---|---|---|---|
428409 | K20 | 20 | 55 | | 1.4 |

Design:
Centrical blow-out, support control and locking control.

Application:
Zero-point clamping system for automation solutions for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Notes:
- Installation diagrams
- Additional automation options

Dimensions:

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<td>34</td>
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No. 6100H-20-06
Installation clamping module for automation solutions

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.
With locking control (hydraulic or pneumatic), support control (pneumatic) and nipple sensing.

Order no. | Size | Pull-in/locking force up to | Holding force | Weight |
---|---|---|---|---|
427161 | K20 | 20 | 55 | 2.8 |

Design:
Support surfaces as island design with integrated blow-out, locking control and nipple sensing.

Application:
Zero-point clamping system for automation solutions for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Notes:
- Installation diagrams
- Additional automation options

Dimensions:

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Automation solutions from AMF

Automation solution (order no. 427161) with lock and support control as well as nipple sensing in use in a fully automated production process with robot loading.

„Turbine“ high-end clamping module (order no. 420919) in use in a fully automated production process with robot loading.
No. 6102H

„Turbine“ high-end clamping module for full automation

Hydraulic opening.
Opening operating pressure: 25-50 bar
Retensioning operating pressure: 20 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
For fully automatic clamping solutions for use as machine table support in processing centres with automatic pallet changing system or robot loading and for installation in pallets, machine tables, clamping brackets and cubes. Many possible versatile uses in automation.

Note:
Hardened support surfaces as island design with integrated support control. Additional blowing off of the support surfaces by centrically running-out turbine spindles and blowing out of the sphere space. Additional hydraulic 6 mm lift-out of the pallet to be changed for easier pallet removal.

Sensing options:
- Support control (pneumatic)
- Locking control (hydraulic)

Turbine has six connections:
1x hydr. opening (1) / 1x hydr. retensioning (2) / 1x pneum. support control (3) / 1x blow-off, blow-out and pneum. turbine blow-off (4) / 1x hydr. locking control (5) / 1x run out short stroke piston (6).

On request:
- Installation diagrams

Dimensions:

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Order no. 420919 K23

Pull-in/locking force up to 23 kN
Holding force 23 kN
Weight 4.8 Kg
„TURBINE“ HIGH-END CLAMPING MODULE FOR FULL AUTOMATION

This high-end clamping module is used for optimised tool clamping times in fully automatic processing centres with pallet changing systems or robot loading.

- Turbine blow-off of the hardened support and housing surface
- Pneumatic support control
- Hydraulic unlocking control
- Hydraulic lifting of the pallet (6 mm) after opening of the clamping module
- Material: stainless steel
- Hardened support surface on the connection fitting with defined, measurable height
Installation clamping module

No. 6101L

Installation clamping module with sensor monitor, mounting flange

Pneumatic opening.

Opening operating pressure: min. 8 bar - max. 12 bar
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Pneumatic opening.

Opening operating pressure: min. 8 bar - max. 12 bar
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Pneumatic opening.

Opening operating pressure: min. 8 bar - max. 12 bar
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
Zero-point clamping system for automation solutions for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The installation clamping module with sensor monitor contains 2 inductive sensors (connection type: S8 plug, cable length: 150 mm) for condition control (open / locked). This is pneumatically opened (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).

Use of the pneumatic pressure intensifier 6370ZVL-005 is recommended.

Clamping module has two connections: 1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).

On request:
- Installation diagrams
- Additional automation options

Dimensions:

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<td>11,0</td>
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</table>
The module interior is completely sealed. As a result, the system is optimally protected against liquids and dirt.

Customer solution for an increased clamping of the workpiece.
Hydraulic clamping station

No. 6370S2-001
Double clamping station
Hydraulic unlocking.
Clamping modules’ contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
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<th>Weight</th>
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Note:
On request, we can incorporate mounting holes to your requirements in the base plate.

Dimensions:

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No. 6370S2-002
Double clamping station
Hydraulic unlocking.
Clamping modules’ contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

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Note:
On request, we can incorporate mounting holes to your requirements in the base plate.

On request:
Other dimensions, insertion dimensions and number of clamping nipples equipped.

Dimensions:

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<td>G1/4</td>
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<td>320</td>
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</tbody>
</table>

Subject to technical alterations.
No. 6370S4-001
Quadruple clamping station
Hydraulic unlocking.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Weight</th>
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<td>110.0</td>
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Note:
On request, we can incorporate mounting holes to your requirements in the base plate.

Dimensions:

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<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
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<th>B</th>
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<td>320</td>
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</tbody>
</table>

No. 6370S6-001
Sextuple clamping station
Hydraulic unlocking.
Clamping modules’ contact surface:
Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Pull-in/locking force up to</th>
<th>Holding force</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>426734</td>
<td>K10</td>
<td>6 x 10</td>
<td>6 x 25</td>
<td>17.5</td>
</tr>
<tr>
<td>424119</td>
<td>K20</td>
<td>6 x 20</td>
<td>6 x 55</td>
<td>75.0</td>
</tr>
<tr>
<td>426759</td>
<td>K40</td>
<td>6 x 40</td>
<td>6 x 105</td>
<td>175.0</td>
</tr>
</tbody>
</table>

Note:
On request, we can incorporate mounting holes to your requirements in the base plate.

On request:
Other dimensions, insertion dimensions and number of clamping nipples equipped.

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>HA</th>
<th>K</th>
<th>L</th>
<th>L1</th>
<th>dia. N</th>
<th>R</th>
<th>S</th>
<th>SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>426734</td>
<td>K10</td>
<td>240</td>
<td>340</td>
<td>7</td>
<td>14.5</td>
<td>84</td>
<td>100</td>
<td>20</td>
<td>G1/4</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>424119</td>
<td>K20</td>
<td>396</td>
<td>596</td>
<td>10</td>
<td>20.0</td>
<td>50</td>
<td>200</td>
<td>20</td>
<td>G1/4</td>
<td>46</td>
<td>200</td>
</tr>
<tr>
<td>426759</td>
<td>K40</td>
<td>546</td>
<td>846</td>
<td>15</td>
<td>24.0</td>
<td>86</td>
<td>320</td>
<td>20</td>
<td>G1/4</td>
<td>61</td>
<td>320</td>
</tr>
</tbody>
</table>
### Fixture plate

**No. 6370P2**

High-strength aluminium, suitable for double clamping station

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>L</th>
<th>R</th>
<th>S</th>
<th>SM</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>426700</td>
<td>K10</td>
<td>146</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>30</td>
<td>100</td>
<td>2.5</td>
</tr>
<tr>
<td>425041</td>
<td>K20</td>
<td>196</td>
<td>396</td>
<td>120</td>
<td>M12</td>
<td>40</td>
<td>200</td>
<td>6.0</td>
</tr>
<tr>
<td>429783</td>
<td>K40</td>
<td>296</td>
<td>546</td>
<td>120</td>
<td>M12</td>
<td>45</td>
<td>320</td>
<td>19.0</td>
</tr>
</tbody>
</table>

**Note:**
On request, we can incorporate mounting holes according to your specifications in the change pallet.

**On request:**
Other dimensions, insertion dimensions and number of clamping nipples equipped.

![Diagram of fixture plate](image1)

### Fixture plate

**No. 6370P4**

High-strength aluminium, suitable for quadruple clamping station

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>L</th>
<th>R</th>
<th>S</th>
<th>SM</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>429767</td>
<td>K10</td>
<td>240</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>30</td>
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<td>4.5</td>
</tr>
<tr>
<td>425033</td>
<td>K20</td>
<td>396</td>
<td>396</td>
<td>200</td>
<td>M12</td>
<td>40</td>
<td>200</td>
<td>16.0</td>
</tr>
<tr>
<td>426809</td>
<td>K40</td>
<td>546</td>
<td>546</td>
<td>320</td>
<td>M12</td>
<td>45</td>
<td>320</td>
<td>35.0</td>
</tr>
</tbody>
</table>

**Note:**
On request, we can incorporate mounting holes according to your specifications in the change pallet.

**On request:**
Other dimensions, insertion dimensions and number of clamping nipples equipped.

![Diagram of fixture plate](image2)

---

Subject to technical alterations.
No. 6370P6
Fixture plate
High-strength aluminium, suitable for sextuple clamping station

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>L</th>
<th>R</th>
<th>S</th>
<th>SM</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>426775</td>
<td>K10</td>
<td>240</td>
<td>386</td>
<td>120</td>
<td>M10</td>
<td>30</td>
<td>100</td>
<td>7.5</td>
</tr>
<tr>
<td>426791</td>
<td>K20</td>
<td>396</td>
<td>596</td>
<td>200</td>
<td>M12</td>
<td>40</td>
<td>200</td>
<td>25.0</td>
</tr>
<tr>
<td>426817</td>
<td>K40</td>
<td>546</td>
<td>866</td>
<td>320</td>
<td>M12</td>
<td>45</td>
<td>320</td>
<td>56.0</td>
</tr>
</tbody>
</table>

Note:
On request, we can incorporate mounting holes according to your specifications in the change pallet.

On request:
Other dimensions, insertion dimensions and number of clamping nipples equipped.
### Clamping nipple for clamping modules K02

**Order no. 6203ZN-02**

Clamping nipple for clamping modules K02

Hardened, for pneumatic clamping module no. 6203L.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>H1</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>427302</td>
<td>K02</td>
<td>10,0</td>
<td>7,14</td>
<td>17,5</td>
<td>15</td>
<td>M5</td>
<td>2,5</td>
<td>4</td>
</tr>
<tr>
<td>427328</td>
<td>K02</td>
<td>10,0</td>
<td>7,14</td>
<td>17,5</td>
<td>15</td>
<td>M5</td>
<td>2,5</td>
<td>4</td>
</tr>
<tr>
<td>427344</td>
<td>K02</td>
<td>9,95</td>
<td>7,14</td>
<td>17,5</td>
<td>15</td>
<td>M5</td>
<td>2,5</td>
<td>4</td>
</tr>
</tbody>
</table>

**Design:**

- Order no. 427302: Zero point nipple
- Order no. 427328: Slit nipple
- Order no. 427344: Undersized nipple

---

### Clamping nipple for clamping modules K05

**Order no. 6370ZN-5**

Clamping nipple for clamping modules K5

Hardened, for hydraulic and pneumatic clamping modules size K5.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>H1</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>306019</td>
<td>K5</td>
<td>15,0</td>
<td>10</td>
<td>6</td>
<td>12,7</td>
<td>10,2</td>
<td>-</td>
<td>2,5</td>
<td>15</td>
</tr>
<tr>
<td>306035</td>
<td>K5</td>
<td>15,0</td>
<td>10</td>
<td>6</td>
<td>12,7</td>
<td>10,2</td>
<td>-</td>
<td>2,5</td>
<td>15</td>
</tr>
<tr>
<td>306050</td>
<td>K5</td>
<td>14,8</td>
<td>10</td>
<td>6</td>
<td>12,7</td>
<td>10,2</td>
<td>-</td>
<td>2,5</td>
<td>15</td>
</tr>
<tr>
<td>306076</td>
<td>K5</td>
<td>14,8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>M6</td>
<td>-</td>
<td>12</td>
</tr>
</tbody>
</table>

**Design:**

- Order no. 306019: Zero point nipple
- Order no. 306035: Slit nipple
- Order no. 306050: Undersized nipple
- Order no. 306076: Protection nipple

---

### Clamping nipple for clamping modules K10

**Order no. 6370ZN-10**

Clamping nipple for clamping modules K10

Hardened, for hydraulic and pneumatic clamping modules size K10.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>H1</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303610</td>
<td>K10</td>
<td>22,0</td>
<td>15</td>
<td>8</td>
<td>19</td>
<td>16</td>
<td>-</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>303636</td>
<td>K10</td>
<td>22,0</td>
<td>15</td>
<td>8</td>
<td>19</td>
<td>16</td>
<td>-</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>304519</td>
<td>K10</td>
<td>21,8</td>
<td>15</td>
<td>8</td>
<td>19</td>
<td>16</td>
<td>-</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>304535</td>
<td>K10</td>
<td>21,8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>M 8</td>
<td>-</td>
<td>30</td>
</tr>
</tbody>
</table>

**Design:**

- Order no. 303610: Zero point nipple
- Order no. 303636: Slit nipple
- Order no. 304519: Undersized nipple
- Order no. 304535: Protection nipple

---

### Clamping nipple for clamping modules K20

**Order no. 6370ZN-20**

Clamping nipple for clamping modules K20

Hardened, for hydraulic and pneumatic clamping modules size K20.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>H1</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303149</td>
<td>K20</td>
<td>32,0</td>
<td>25</td>
<td>12</td>
<td>28</td>
<td>23</td>
<td>-</td>
<td>5</td>
<td>110</td>
</tr>
<tr>
<td>303156</td>
<td>K20</td>
<td>32,0</td>
<td>25</td>
<td>12</td>
<td>28</td>
<td>23</td>
<td>-</td>
<td>5</td>
<td>110</td>
</tr>
<tr>
<td>303164</td>
<td>K20</td>
<td>31,8</td>
<td>25</td>
<td>12</td>
<td>28</td>
<td>23</td>
<td>-</td>
<td>5</td>
<td>110</td>
</tr>
<tr>
<td>303172</td>
<td>K20</td>
<td>31,8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>M 8</td>
<td>-</td>
<td>110</td>
</tr>
</tbody>
</table>

**Design:**

- Order no. 303149: Zero point nipple
- Order no. 303156: Slit nipple
- Order no. 303164: Undersized nipple
- Order no. 303172: Protection nipple

---

### Clamping nipple for clamping modules K40

**Order no. 6370ZN-40**

Clamping nipple for clamping modules K40

Hardened, for hydraulic and pneumatic clamping modules size K40.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>H1</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303180</td>
<td>K40</td>
<td>40,0</td>
<td>25</td>
<td>16</td>
<td>34</td>
<td>29</td>
<td>-</td>
<td>5</td>
<td>180</td>
</tr>
<tr>
<td>303198</td>
<td>K40</td>
<td>40,0</td>
<td>25</td>
<td>16</td>
<td>34</td>
<td>29</td>
<td>-</td>
<td>5</td>
<td>180</td>
</tr>
<tr>
<td>303206</td>
<td>K40</td>
<td>39,8</td>
<td>25</td>
<td>16</td>
<td>34</td>
<td>29</td>
<td>-</td>
<td>5</td>
<td>180</td>
</tr>
<tr>
<td>303214</td>
<td>K40</td>
<td>39,8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>M 8</td>
<td>-</td>
<td>180</td>
</tr>
</tbody>
</table>

**Design:**

- Order no. 303180: Zero point nipple
- Order no. 303198: Slit nipple
- Order no. 303206: Undersized nipple
- Order no. 303214: Protection nipple

---

Subject to technical alterations.
ARRANGEMENT OF CLASSIC CLAMPING NIPPLE

This arrangement of the clamping modules always optimally positions the pallet to be changed. At the same time, the zero-point nipple always represents the reference point. The slit nipple serves to compensate for the free axis. The undersize nipple has only a clamping and holding function.

ARRANGEMENT OF OPTIONAL CLAMPING NIPPLE

The exclusive use of slit nipples compensates for stronger temperature influences. The reference point always remains in the centre of the pallet. Of course, temperature influences from machine processing can generally be ignored since the heat generated is conducted away by the chips and coolant.
No. 6370ZNS-001
Engagement nipple screw
Strength class 10.9.
Suitable for clamping nipple, article no. 6370ZN.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>M</th>
<th>L</th>
<th>L1</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>306092</td>
<td>K 5</td>
<td>M 6</td>
<td>25</td>
<td>3,4</td>
<td>18</td>
</tr>
<tr>
<td>303578</td>
<td>K10</td>
<td>M 8</td>
<td>37</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>303222</td>
<td>K20</td>
<td>M12</td>
<td>54</td>
<td>9,0</td>
<td>70</td>
</tr>
<tr>
<td>303230</td>
<td>K40</td>
<td>M16</td>
<td>69</td>
<td>10,0</td>
<td>130</td>
</tr>
</tbody>
</table>

On request:
Engagement nipple screws in various lengths and materials (e.g. high-grade stainless steel).

No. 6370ZNS-002
Horizontal engagement nipple screw
Strength class 10.9.
Suitable for clamping nipple, article no. 6370ZN.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>M</th>
<th>L</th>
<th>L1</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303248</td>
<td>K20</td>
<td>M12</td>
<td>56</td>
<td>10,5</td>
<td>100</td>
</tr>
<tr>
<td>303255</td>
<td>K40</td>
<td>M16</td>
<td>73</td>
<td>13,0</td>
<td>200</td>
</tr>
</tbody>
</table>

On request:
Horizontal engagement nipple screw in various lengths and materials (e.g. high-grade stainless steel).

Dimensions for machining nipple mountings.

<table>
<thead>
<tr>
<th>Size</th>
<th>ØD1</th>
<th>ØM</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>K02</td>
<td>7,17</td>
<td>M 5</td>
<td>3,6</td>
<td>14</td>
</tr>
<tr>
<td>K5</td>
<td>10,0</td>
<td>M 6</td>
<td>2,5</td>
<td>12</td>
</tr>
<tr>
<td>K10</td>
<td>15,0</td>
<td>M 8</td>
<td>3,5</td>
<td>16</td>
</tr>
<tr>
<td>K20</td>
<td>25,0</td>
<td>M12</td>
<td>5,5</td>
<td>23</td>
</tr>
<tr>
<td>K40</td>
<td>25,0</td>
<td>M16</td>
<td>5,5</td>
<td>30</td>
</tr>
</tbody>
</table>

Figure:
Shown with clamping nipple and engagement nipple screw.
No. 6370ZNM
Clamping female nipple
Strength class 10.
Suitable for clamping nipple No. 6370ZN

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>M</th>
<th>SW</th>
<th>H</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429969</td>
<td>K6</td>
<td>M6</td>
<td>10</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>429985</td>
<td>K10</td>
<td>M8</td>
<td>14</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>430009</td>
<td>K20</td>
<td>M12</td>
<td>21</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>430025</td>
<td>K40</td>
<td>M16</td>
<td>28</td>
<td>17</td>
<td>50</td>
</tr>
</tbody>
</table>

Note:
The floating nipple is supported by bearings so that it is axially mobile and is used when large distance and angle tolerances between the nipple holes have to be compensated. The nipple has only a holding function and does not take on any lateral load.

No. 6370ZNSN
Floating nipple
Hardened, for hydraulic and pneumatic clamping modules.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D2</th>
<th>H1</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>340059</td>
<td>K10</td>
<td>21,8</td>
<td>12,0</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>305912</td>
<td>K20</td>
<td>31,8</td>
<td>15,5</td>
<td>23</td>
<td>80</td>
</tr>
<tr>
<td>326982</td>
<td>K40</td>
<td>39,8</td>
<td>20,0</td>
<td>29</td>
<td>160</td>
</tr>
</tbody>
</table>

Note:
The floating nipple is supported by bearings so that it is axially mobile and is used when large distance and angle tolerances between the nipple holes have to be compensated. The nipple has only a holding function and does not take on any lateral load.

No. 6370ZNSSN
Engagement nipple screw
Strength class 10.9.
Suitable for floating nipple, article no. 6370ZNSN.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D2</th>
<th>M</th>
<th>L</th>
<th>L1</th>
<th>L2</th>
<th>L3</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>340034</td>
<td>K10</td>
<td>11,0</td>
<td>M6</td>
<td>35</td>
<td>6</td>
<td>16,1</td>
<td>12,9</td>
<td>24</td>
</tr>
<tr>
<td>305938</td>
<td>K20</td>
<td>13,5</td>
<td>M10</td>
<td>50</td>
<td>9</td>
<td>23,1</td>
<td>17,9</td>
<td>55</td>
</tr>
<tr>
<td>326908</td>
<td>K40</td>
<td>17,0</td>
<td>M12</td>
<td>59</td>
<td>10</td>
<td>29,1</td>
<td>19,9</td>
<td>100</td>
</tr>
</tbody>
</table>

Application:
Clamping female nipple for fastening the clamping nipple.

Note:
By gluing the clamping female nipple in the clamping nipple with medium adhesive it is protected against twisting when loosening the socket head screw.
1 = Clamping female nipple
2 = Clamping nipple
3 = Socket head screw

Subject to technical alterations.
Clamping nipple „Heavy duty“

No. 6201ZN
Clamping nipple for clamping modules „Heavy duty“
Hardened, for hydraulic clamping modules article-nos. 6201H-20.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>H1</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>423970</td>
<td>K20</td>
<td>32.0</td>
<td>25</td>
<td>16</td>
<td>28</td>
<td>23</td>
<td>-</td>
<td>5</td>
<td>80</td>
</tr>
<tr>
<td>423996</td>
<td>K20</td>
<td>32.0</td>
<td>25</td>
<td>16</td>
<td>28</td>
<td>23</td>
<td>-</td>
<td>5</td>
<td>80</td>
</tr>
<tr>
<td>424010</td>
<td>K20</td>
<td>31.8</td>
<td>25</td>
<td>16</td>
<td>28</td>
<td>23</td>
<td>-</td>
<td>5</td>
<td>80</td>
</tr>
<tr>
<td>303172</td>
<td>K20</td>
<td>31.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>M8</td>
<td>-</td>
<td>110</td>
</tr>
</tbody>
</table>

Design:
Order no. 423970: Zero point nipple
Order no. 423996: Slit nipple
Order no. 424010: Undersized nipple
Order no. 303172: Protection nipple

Hardened, for hydraulic clamping modules article-nos. 6201H-20.

Strength class 10.9.
Suitable for clamping nipple article-nos. 6201ZN.

No. 6201ZS
Engagement nipple screw „Heavy duty“

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>M</th>
<th>L</th>
<th>L1</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>424036</td>
<td>K20</td>
<td>M16</td>
<td>70</td>
<td>9</td>
<td>120</td>
</tr>
</tbody>
</table>

On request:
Engagement nipple screws in various lengths and materials (e.g. high-grade stainless steel).
No. 6370ZA

Protective shield
made of tempering steel, suitable for article-nos. 6370 A, E, S.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. D1</th>
<th>HA</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>422345</td>
<td>K10</td>
<td>50</td>
<td>15</td>
<td>7</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>422360</td>
<td>K20</td>
<td>76</td>
<td>25</td>
<td>10</td>
<td>5</td>
<td>340</td>
</tr>
<tr>
<td>422386</td>
<td>K40</td>
<td>112</td>
<td>25</td>
<td>15</td>
<td>5</td>
<td>1130</td>
</tr>
</tbody>
</table>

Application:
The protective shield is used when through-holes must be set in the area of the module cover. As a result, the module cover is protected from damage.

No. 6370ZNSA

Engagement nipple screw for protective shield
Strength class 10.9.
Suitable for article-nos. 6370 A, E, S.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>M</th>
<th>L</th>
<th>L1</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>422402</td>
<td>K10</td>
<td>M8</td>
<td>44</td>
<td>6</td>
<td>33</td>
</tr>
<tr>
<td>422428</td>
<td>K20</td>
<td>M12</td>
<td>64</td>
<td>9</td>
<td>80</td>
</tr>
<tr>
<td>422444</td>
<td>K40</td>
<td>M16</td>
<td>84</td>
<td>10</td>
<td>145</td>
</tr>
</tbody>
</table>
No. 6102ZN
Clamping nipple for „Turbine“ high-end clamping module
Hardened, for hydraulic high-end clamping module article no. 6102H.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>dia. D3</th>
<th>dia. LK</th>
<th>H</th>
<th>H2</th>
<th>H1</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>426502</td>
<td>K23</td>
<td>32,0</td>
<td>25</td>
<td>68</td>
<td>6,4</td>
<td>50</td>
<td>38</td>
<td>23</td>
<td>10</td>
<td>5</td>
<td>370</td>
</tr>
<tr>
<td>426528</td>
<td>K23</td>
<td>32,0</td>
<td>25</td>
<td>68</td>
<td>6,4</td>
<td>50</td>
<td>38</td>
<td>23</td>
<td>10</td>
<td>5</td>
<td>370</td>
</tr>
<tr>
<td>426544</td>
<td>K23</td>
<td>31,8</td>
<td>25</td>
<td>68</td>
<td>6,4</td>
<td>50</td>
<td>38</td>
<td>23</td>
<td>10</td>
<td>5</td>
<td>370</td>
</tr>
</tbody>
</table>

Design:
Order no. 426502: Zero point nipple
Order no. 426528: Slit nipple
Order no. 426544: Undersized nipple

Hardened, for hydraulic high-end clamping module article no. 6102H.

Order no. 426502: Zero point nipple
Order no. 426528: Slit nipple
Order no. 426544: Undersized nipple

No. 6370ZZ
Positioning nipple
Hardened.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>H</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>306241</td>
<td>K5</td>
<td>15</td>
<td>48</td>
<td>60</td>
</tr>
<tr>
<td>306167</td>
<td>K10</td>
<td>22</td>
<td>48</td>
<td>85</td>
</tr>
<tr>
<td>306183</td>
<td>K20 / G1000</td>
<td>32</td>
<td>64</td>
<td>225</td>
</tr>
<tr>
<td>306209</td>
<td>K40</td>
<td>40</td>
<td>82</td>
<td>455</td>
</tr>
<tr>
<td>306225</td>
<td>G2000</td>
<td>47</td>
<td>82</td>
<td>550</td>
</tr>
</tbody>
</table>

Application:
The positioning nipple makes all of the surface-mounted modules easier to align. It can be clamped directly in the machine spindle, thus achieving the desired gauges when the machine is traversed.

No. 6370ZMSH
Mounting key for horizontal rapid-clamping cylinder
Suitable for article-nos. 6370HARH.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>426556</td>
<td>K20</td>
<td>520</td>
</tr>
<tr>
<td>426558</td>
<td>K40</td>
<td>940</td>
</tr>
</tbody>
</table>

Application:
The mounting key is needed for installation of the threaded sleeve of the horizontal rapid-clamping cylinder.

Subject to technical alterations.
Support control, pneumatic

No. 6984-30
Support control, pneumatic
max. operating pressure 10 bar.

Design:
Housing from hardened and burnished steel. Pistons are tempered, nitrided and ground.
Compression spring from stainless steel.

Application:
The support control is used in fixtures where a signal indicating a correctly supported workpiece is required to enable machining. Lightweight workpieces should be clamped before being pressurised with compressed air.

Features:
The support control works like a pneumatic back-pressure nozzle. The position is extended from its initial position by a pressure spring. Once applied, the air jet flows through the hollow piston and the radial discharge hole on the support control housing to outside. The discharge hole is sealed as soon as a workpiece is mounted and the piston is pushed downwards by min. 1 mm. The air flow backs up, the internal air pressure rises. The pressure value must be transferred to the control by an appropriate pressure signal converter. The system is relatively insensitive to fine chips.

Note:
The pressure signal converter is not included in the supply scope.
Effective piston surface with closed nozzle = 0.95 cm²
Piston force = piston surface x air pressure + spring force

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Article no.</th>
<th>Stroke max. [mm]</th>
<th>Spring force min. [N]</th>
<th>Spring force max. [N]</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>325217</td>
<td>6984-30</td>
<td>5</td>
<td>1.9</td>
<td>2.6</td>
<td>36</td>
</tr>
</tbody>
</table>

Installation drawing

Switching stroke min. 1 mm

Pressure signal connection

Air connection

Effective piston surface with closed nozzle = 0.95 cm²
Piston force = piston surface x air pressure + spring force
No. 6370ZMMG

Coupling mechanism adapter
Suitable for installation clamping module nos. 6370FARH / FARL.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>424002</td>
<td>K20</td>
<td>5</td>
<td>56</td>
<td>33</td>
<td>18</td>
<td>65</td>
<td>35</td>
<td>13</td>
<td>6H7</td>
<td>9</td>
<td>G1/8</td>
<td>12</td>
<td>45</td>
<td>0,9</td>
</tr>
<tr>
<td>424184</td>
<td>K40</td>
<td>5</td>
<td>56</td>
<td>33</td>
<td>18</td>
<td>65</td>
<td>45</td>
<td>13</td>
<td>6H7</td>
<td>9</td>
<td>G1/8</td>
<td>12</td>
<td>45</td>
<td>1,0</td>
</tr>
</tbody>
</table>

Application:
Couplings are used for loss-free transfer of liquid and gaseous media and are adjusted to the cover height of the installation clamping modules.

Note:
The coupling mechanism and nipple must be guided approx. 2-3 mm before contact with the axial sealing surfaces. The radial position tolerance (+/- 0.2 mm) must not be exceeded. The couplings can only be coupled in a depressurised state.
The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula $F \ [N] = 15.4 \times p \ [\text{bar}]$ and must be taken into account.

No. 6370ZMM

Screw-in coupling mechanism
max. operating pressure 400 bar.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Nominal bore [NW]</th>
<th>A</th>
<th>dia. B</th>
<th>C</th>
<th>G</th>
<th>K</th>
<th>dia. P</th>
<th>SW</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>424267</td>
<td>K10</td>
<td>5</td>
<td>M30x1,5</td>
<td>24</td>
<td>19</td>
<td>29,0</td>
<td>7</td>
<td>25</td>
<td>22</td>
<td>74</td>
</tr>
<tr>
<td>424200</td>
<td>K20</td>
<td>5</td>
<td>M30x1,5</td>
<td>24</td>
<td>19</td>
<td>29,0</td>
<td>10</td>
<td>25</td>
<td>22</td>
<td>65</td>
</tr>
<tr>
<td>424226</td>
<td>K40</td>
<td>5</td>
<td>M30x1,5</td>
<td>24</td>
<td>24</td>
<td>31,5</td>
<td>15</td>
<td>25</td>
<td>22</td>
<td>96</td>
</tr>
</tbody>
</table>

Application:
Couplings are used for loss-free transfer of liquid and gaseous media and are adjusted to the cover height of the installation clamping modules.

Note:
The coupling mechanism and nipple must be guided approx. 2-3 mm before contact with the axial sealing surfaces. The radial position tolerance (+/- 0.2 mm) must not be exceeded. The couplings can only be coupled in a depressurised state. The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula $F \ [N] = 15.4 \times p \ [\text{bar}]$ and must be taken into account.
No. 6370ZMNG

**Coupling nipple adapter**

Suitable for coupling mechanism no. 6370ZMMG / ZMM

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Nominal bore (NW)</th>
<th>dia. A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>G</th>
<th>K</th>
<th>dia. P</th>
<th>T</th>
<th>U</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>624242</td>
<td>K30/K40</td>
<td>5</td>
<td>35</td>
<td>30</td>
<td>60</td>
<td>20</td>
<td>47.5</td>
<td>38.5</td>
<td>5.5</td>
<td>20</td>
<td>40</td>
<td>320</td>
</tr>
</tbody>
</table>

**Application:**

The coupling nipple adapter is the counterpart to the coupling mechanicals and is used in the change pallet, in which the clamping nipples are also located. Couplings are used for loss-free transfer of liquid and gaseous media and are adjusted to the height of the installation clamping modules.

**Note:**

The mounting housings of the two parts must be guided approx. 2-3 mm before contact with the axial sealing surfaces. This function is taken over by the coupling nipple adapter through the centring function. The medium can be passed on at the top over the pipe connection or over the O-ring connection. The radial position tolerance (+/- 0.2 mm) must not be exceeded. The couplings can only be coupled in a depressurised state. The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula $F [N] = 15.4 \times p [\text{bar}]$ and must be taken into account.

---

No. 6370ZMN

**Screw-in coupling nipple**

max. operating pressure 400 bar.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Nominal bore (NW) A</th>
<th>dia. B</th>
<th>G</th>
<th>dia. H</th>
<th>K</th>
<th>L</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>630008</td>
<td>M24x1.5</td>
<td>20</td>
<td>27</td>
<td>13.5</td>
<td>14</td>
<td>4.5</td>
<td>56</td>
</tr>
</tbody>
</table>

**Application:**

Couplings are used for the leakage-free connection of hydraulic oil supplies.

**Note:**

The coupling mechanism and nipple must be guided approx. 2-3 mm before contact with the axial sealing surfaces. The radial position tolerance (+/- 0.2 mm) must not be exceeded. The couplings can only be coupled in a depressurised state. The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula $F [N] = 15.4 \times p [\text{bar}]$ and must be taken into account.
### Air-Hydraulic Pump

**No. 6370ZD-004**

**Air-Hydraulic Pump**
Max. operating pressure 60 bar.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Pneum. pressure min. [bar]</th>
<th>Pneum. pressure max. [bar]</th>
<th>Oil capacity usable [cm³]</th>
<th>Flow rate max. [cm³/min]</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>426569</td>
<td>4</td>
<td>6</td>
<td>1000</td>
<td>750</td>
<td>5.9</td>
</tr>
</tbody>
</table>

**Design:**
Compact, air-pressure-operated hydraulic intensification pump for single-acting circuits. The pump is fitted with an integrated safety valve that regulates the hydraulic output pressure. The safety valve is set in the factory to the max. operating pressure of 60 bar.

The extension element in the oil tank allows the pump to be adjusted horizontally and vertically.

Air connection thread: G1/4

**Ordering information:**

- **Size**
- **Oil capacity** [cm³]
- **Flow rate** [cm³/min]
- **Ratio**
- **max. no. of clamping cylinders**
- **Weight** [Kg]

**Note:**
The use of purified, lubricated compressed air is recommended for operation of the pump.

### Pressure intensifier

**No. 6370ZD**

**Pressure intensifier**
Max. operating pressure 60 bar.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>Oil capacity [cm³]</th>
<th>Flow rate [cm³/min]</th>
<th>Ratio</th>
<th>max. no. of clamping cylinders</th>
<th>Weight [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303354</td>
<td>2</td>
<td>653</td>
<td>431</td>
<td>1 : 8.1</td>
<td>36 (Typ 20), 16 (Typ 40)</td>
<td>9.5</td>
</tr>
</tbody>
</table>

**Design:**
Compact, air-pressure-operated hydraulic pressure intensifier for single-acting circuits. Complete with air-pressure regulator, air manometer, oil manometer and oil fill level display.

**Application:**
The pressure intensifier is used for opening for hydraulic clamping modules or hydraulic clamping stations.
No. 6370ZVL-005
Pneumatic pressure booster

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Input pressure (bar)</th>
<th>Output pressure (bar)</th>
<th>Connection</th>
<th>Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>427088</td>
<td>2,5-8</td>
<td>4,5-10</td>
<td>G1/4</td>
<td>1,5</td>
</tr>
</tbody>
</table>

**Design:**
Pressure intensifier with possibility to adjust the pneumatic output pressure, incl. manometer construction kit, sound absorbers and flange mounting.

**Application:**
For strengthening the operating pressure with pneumatic clamping modules and compensation for pressure fluctuations in the supply line.

**Note:**
The pressure intensifier can be mounted in every installation position. For operation, filtered (40μm), unlubricated compressed air as per ISO 8573-1 is required. The pressure intensifier is suitable for ambient temperatures of +5 – +60 °C.

---

No. 6370ZVL-004
Pneumatic pressure booster set

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Input pressure (bar)</th>
<th>Output pressure (bar)</th>
<th>Connection</th>
<th>Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>421396</td>
<td>2,5-8</td>
<td>4,5-10</td>
<td>G1/4</td>
<td>2,5</td>
</tr>
</tbody>
</table>

**Design:**
Pressure intensifier group with possibility to adjust the pneumatic output pressure, incl. manometer construction kit, sound absorbers, flange mounting, pressure control valve, manual direction valve, coupling plug, connections and plastic tube.

**Application:**
For strengthening the operating pressure with pneumatic clamping modules and compensation for pressure fluctuations in the supply line.

**Note:**
The pressure intensifier can be mounted in every installation position. For operation, filtered (40μm), unlubricated compressed air as per ISO 8573-1 is required. The pressure intensifier sub-assembly is suitable for ambient temperatures of +5 – +60 °C.

---

No. 6370ZVL-006
Pneumatic pressure booster cabinet

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Input pressure (bar)</th>
<th>Output pressure (bar)</th>
<th>B x H x T</th>
<th>Connection</th>
<th>Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>427104</td>
<td>2,5-8</td>
<td>4,5-10</td>
<td>200 x 300 x 155</td>
<td>G1/4</td>
<td>7,0</td>
</tr>
</tbody>
</table>

**Design:**
Connection-ready pressure-intensifier cabinet with possibility to adjust the pneumatic output pressure.

**Application:**
For strengthening the operating pressure with pneumatic clamping modules and compensation for pressure fluctuations in the supply line.

**Note:**
The connection-ready pressure intensifier cabinet is shipped with wall-mounting bracket and can be mounted in every installation position. For operation, filtered (40μm), unlubricated compressed air as per ISO 8573-1 is required. The pressure cabinet is suitable for ambient temperatures of 0 – +40 °C.
**Accessories**

**No. 6370ZR**

**Pipe fittings, brass**

for pipes external Ø 8 mm, internal Ø 4 mm.
Max. operating pressure 100 bar.

**Application:**

Fittings for piping of surface-mounted clamping modules and flange versions.

**Note:**

* Article 429936: Seamless hydraulic pipe, phosphate-coated and lubricated, Ø 8x2 mm, length 2.0 m, made of steel (fully killed cast steel) in accordance with DIN 2391 C normalised, bright-annealed (NBK) cold-drawn.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Fig. No.</th>
<th>Connection</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>320986</td>
<td>1</td>
<td>G1/4</td>
<td>80</td>
</tr>
<tr>
<td>305409</td>
<td>1</td>
<td>G1/8</td>
<td>44</td>
</tr>
<tr>
<td>321000</td>
<td>2</td>
<td>G1/4</td>
<td>31</td>
</tr>
<tr>
<td>305417</td>
<td>2</td>
<td>G1/8</td>
<td>23</td>
</tr>
<tr>
<td>321026</td>
<td>3</td>
<td>G1/4</td>
<td>95</td>
</tr>
<tr>
<td>306425</td>
<td>3</td>
<td>G1/8</td>
<td>60</td>
</tr>
<tr>
<td>321042</td>
<td>4</td>
<td>-</td>
<td>37</td>
</tr>
<tr>
<td>321067</td>
<td>5</td>
<td>-</td>
<td>56</td>
</tr>
<tr>
<td>427983</td>
<td>6</td>
<td>G1/8</td>
<td>16</td>
</tr>
<tr>
<td>429015</td>
<td>6</td>
<td>G1/4</td>
<td>44</td>
</tr>
<tr>
<td>429936</td>
<td>7</td>
<td>-</td>
<td>475</td>
</tr>
</tbody>
</table>

**Order no.**

427856 427872

427872 429910

429936

**No. 6370ZS**

**High Pressure Hose**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>429951</td>
<td>750</td>
<td>375</td>
<td>9.8</td>
<td>4.8</td>
<td>8</td>
<td>500</td>
<td>90</td>
</tr>
<tr>
<td>429977</td>
<td>750</td>
<td>375</td>
<td>9.8</td>
<td>4.8</td>
<td>8</td>
<td>800</td>
<td>120</td>
</tr>
<tr>
<td>429993</td>
<td>750</td>
<td>375</td>
<td>9.8</td>
<td>4.8</td>
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<td>1250</td>
<td>180</td>
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<td>430017</td>
<td>750</td>
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<td>9.8</td>
<td>4.8</td>
<td>8</td>
<td>2000</td>
<td>265</td>
</tr>
<tr>
<td>430033</td>
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<td>375</td>
<td>9.8</td>
<td>4.8</td>
<td>8</td>
<td>3000</td>
<td>380</td>
</tr>
</tbody>
</table>

**Design:**

Steel fitting, galvanized and passivated. Hose of synthetic material with high tensile brassed steel-wire braid.

**Application:**

High pressure hose is used for hydraulic connection of surface-mounted clamping modules or clamping stations to the pressure generator, such as the pressure intensifier or air-hydraulic pump.
No. 6370ZSK
Quick Disconnect Coupler
zinc-plated.
Max. operating pressure 325 bar.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Nominal bore [NW]</th>
<th>Nominal flow [l/min]</th>
<th>SW [mm]</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>427856</td>
<td>6</td>
<td>12</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>427872</td>
<td>6</td>
<td>12</td>
<td>22</td>
<td>170</td>
</tr>
</tbody>
</table>

Application:
Since the clamping modules after blow-off of the opening pressure are mechanically locked, the hose is then uncoupled by means of the quick couplings. The advantage of this is that there are no interfering lines.

Note:
Flat-sealing quick coupling with G1/4 internal thread. For G1/4 external thread a threaded stud is enclosed.

No. 6370ZR-011
Tube fittings
for high-pressure hose with outer diameter 8 mm and internal diameter 4 mm, with olive ring.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>SW</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429910</td>
<td>19</td>
<td>55</td>
</tr>
</tbody>
</table>

Note:
Sealing in accordance with DIN 3852 Form B through edge seal and cutting ring.
No. 6370ZS-06-2000
Hose set, hydraulic

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Length [m]</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>430082</td>
<td>2</td>
<td>730</td>
</tr>
</tbody>
</table>

**Design:**
The connection set includes:
1x hydraulic connecting tube, length 2 m
2x straight screw pipe connections
2x straight screwed sockets
1x T-screw connection
1x manometer 0-100 bar
1x straight female stud coupling
2x quick fitting coupling sleeves
2x quick fitting coupling plugs
2x Cu sealing washers for G1/4

**Application:**
This set is used for the hydraulic connection of extension clamping modules or clamping stations for pressure generators such as pressure boosters or air-hydraulic pumps.

**Note:**
Hose pre-fitted, filled with hydraulic oil and vented incl. quick fitting coupling (plugs and sleeves (6370ZSK)). Additionally included in the set are plugs, sleeves and 2x screwed connections.
The Zero-Point-System in use

ANDREAS MAIER FELDBACH • www.amf.de

ZERO-POINT-SYSTEMS 89
No. 6370ZVT

Manifold
Steel, burnished.
Max. operating pressure 400 bar.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Nominal bore [NW]</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>R</th>
<th>Oil connections</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>429878</td>
<td>6</td>
<td>-</td>
<td>50</td>
<td>30</td>
<td>G1/4</td>
<td>4</td>
<td>480</td>
</tr>
<tr>
<td>429894</td>
<td>6</td>
<td>200</td>
<td>50</td>
<td>30</td>
<td>G1/4</td>
<td>6</td>
<td>2025</td>
</tr>
</tbody>
</table>

Application:
Screwed connections are used for the pneumatic connection of extension clamping modules or clamping stations.

Max. operating pressure 12 bar.
For hose diameter 8 mm.

No. 6370ZR-02

Push-in fittings, pneumatic
Max. operating pressure 12 bar.
For hose diameter 8 mm.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Fig. No.</th>
<th>Connection</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>421479</td>
<td>1</td>
<td>G1/8</td>
<td>14</td>
</tr>
<tr>
<td>421453</td>
<td>1</td>
<td>G1/4</td>
<td>16</td>
</tr>
<tr>
<td>430108</td>
<td>2</td>
<td>G1/8</td>
<td>19</td>
</tr>
<tr>
<td>430124</td>
<td>2</td>
<td>G1/4</td>
<td>27</td>
</tr>
</tbody>
</table>

Application:
Screwed connections are used for the pneumatic connection of extension clamping modules or clamping stations.

No. 6370ZSK

Quick fitting coupling, galvanised, pneumatic

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Nominal bore [NW]</th>
<th>Nominal flow [l/min]</th>
<th>SW [mm]</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>430041</td>
<td>4,2</td>
<td>563</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>430086</td>
<td>5,0</td>
<td>563</td>
<td>14</td>
<td>27</td>
</tr>
</tbody>
</table>

Application:
Since the clamping modules are mechanically locked after discharging the opening pressure, the hose can then be disconnected by means of the quick fitting couplings. The advantage of this is that there are no interfering lines.

Note:
No. 6370ZVL-700
Footrest valve, pneumatic

NEW!

**Application:**
For controlling pneumatic clamping modules.

**Note:**
manual Footrest valve
valve function: 3/2 closed, monostable, latching

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Air connection</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>477570</td>
<td>G1/4</td>
<td>610</td>
</tr>
</tbody>
</table>

No. 6370ZS-07
Hose, pneumatic

NEW!

Polyurethane, outside calibrated.
Max. operating pressure 10 bar.

**Application:**
Hoses are used for the pneumatic connection of extension clamping modules or clamping stations.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Hose dia. [mm]</th>
<th>Length [m]</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>430140</td>
<td>8</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>
No. 6370ZF
Special grease for zero-point clamping modules

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Suitable for ambient temperature (°C)</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>426494</td>
<td>0-80</td>
<td>250</td>
</tr>
</tbody>
</table>

Application:
Special grease for maintenance work on zero-point clamping modules.

No. 6370ZVL
Manual directional valves

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Air connection</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>305383</td>
<td>4/3</td>
<td>G1/4</td>
<td>250</td>
</tr>
<tr>
<td>305391</td>
<td>2/2</td>
<td>G1/4</td>
<td>100</td>
</tr>
</tbody>
</table>

order no. 305383

Circuit: hydraulic clamping module

order no. 114298

Circuit: hydraulic clamping module with blow-out

order no. 305391

Circuit: pneumatic clamping module

order no. 305383

Circuit: pneumatic clamping module with turbo and blow-out

order no. 305383
With our „Gonzales” and „Unitool” clamping modules, we offer flexibility in retrofitting and expanding your existing zero-point clamping technology. As a result, a complete replacement of the system you currently use is no longer absolutely necessary. You keep your investment as low as possible and still take advantage of the benefits of the AMF Zero-Point System.

„GONZALES“ CLAMPING MODULE (FIG. LEFT)
Your existing Speedy 1000/2000 or DockLock 1000 modules can be exchanged for our corresponding „Gonzales” modules if you meet the following requirements:

➤ Unlike Speedy 1000/2000 and DockLock 1000, „Gonzales” requires a hydraulic unclamping pressure of min. 50 bar / max. 60 bar.
➤ With countersunk installation, replacement is only possible if there is enough space for the larger covers of the „Gonzales” modules (cover dia. 112 mm or 140 mm).
➤ Modules with media ducts cannot be exchanged
➤ Use „Gonzales” modules exclusively with „Gonzales” modules in one clamping.

With the „Gonzales” modules, the corresponding nipples of the systems Speedy 1000/2000 and DockLock 1000 can be clamped.

„Gonzales” nipples can be clamped with the corresponding Speedy 1000/2000 and DockLock 1000 modules.

„UNITOOL“ CLAMPING MODULE (FIG. RIGHT)
Our „Unitool” clamping module fits the nipple of the Unilock system (dia. 40 mm). The Unitool nipple also fits the Unilock system module (NSE-138).

RUSTPROOF STAINLESS STEEL
High-alloy, hardened tool steel - and so no corrosion.

SAFETY SYSTEM
Process reliability - Clamping module always opens. A piston blockade is thus impossible (only Gonzales modules).

FORM FIT
The balls are optimally encapsulated on 3 sides. As a result, the clamping nipple always remains firmly clamped in the module.
Power transmission by means of the three-point principle! This optimised force distribution prevents shearing load on the balls.

The balls lie freely in the ball canal. This freedom of movement enables the balls to continuously re-position themselves.

Swing-free run-in and run-out through the optimal contour of the clamping nipple (only Gonzales modules).

Power transmission by means of the three-point principle! This optimised force distribution prevents shearing load on the balls.

All depictions are model presentations of the functional principle.
No. 6370EGRH
Installation clamping module “Gonzales”, round
Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
Use „Gonzales“ modules exclusively with „Gonzales“ modules in one clamping. When changing systems, observe the following: Unlike Speedy 1000/2000 and DockLock 1000, „Gonzales“ modules require an unclamping pressure of min. 50 bar / max. 60 bar. With recessed installation, observe the cover diameter D 112 mm / 140 mm. The installation clamping module is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module has one connection: 1x hydr. opening (1).

On request:
- Installation diagrams
- Automation solutions

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>dia. LK</th>
<th>M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>305201</td>
<td>1000</td>
<td>112</td>
<td>32</td>
<td>80</td>
<td>36</td>
<td>10</td>
<td>92</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>306043</td>
<td>1000</td>
<td>112</td>
<td>32</td>
<td>80</td>
<td>36</td>
<td>10</td>
<td>91</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>305219</td>
<td>2000</td>
<td>140</td>
<td>47</td>
<td>110</td>
<td>36</td>
<td>10</td>
<td>122</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

No. 6370EGQH
Installation clamping module “Gonzales”, square
Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry. A square clamping module prevents the pallet from twisting. The indexing function enables positioning every 90°. Specially suitable for use in turning.

Note:
Use „Gonzales“ modules exclusively with „Gonzales“ modules in one clamping. When changing systems, observe the following: Unlike Speedy 1000/2000 and DockLock 1000, „Gonzales“ modules require an unclamping pressure of min. 50 bar / max. 60 bar. With recessed installation, observe dimension L 120 mm / 150 mm. The clamping module is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module has one connection: 1x hydr. opening (1).

On request:
- Installation diagrams
- Automation solutions

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>H1</th>
<th>L</th>
<th>L1</th>
<th>dia. LK</th>
<th>M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>305227</td>
<td>1000</td>
<td>32</td>
<td>80</td>
<td>36</td>
<td>10</td>
<td>5</td>
<td>120</td>
<td>100</td>
<td>92</td>
<td>M5</td>
<td>26</td>
</tr>
<tr>
<td>305235</td>
<td>2000</td>
<td>47</td>
<td>110</td>
<td>36</td>
<td>10</td>
<td>5</td>
<td>150</td>
<td>130</td>
<td>122</td>
<td>M5</td>
<td>26</td>
</tr>
</tbody>
</table>
Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar
Cover and piston hardened.
Repeatability < 0.005 mm.

Surface-mounted clamping module “Gonzales”, round

Order no. | Size | Pull-in/locking force up to | Holding force | Weight |
---|---|---|---|---|
303362 | 1000 | 15 | 25 | 2.3 |
303388 | 2000 | 25 | 55 | 3.5 |

Application:
Zero-point clamping system in combination with clamping flanges 6370ZB for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
Use „Gonzales“ modules exclusively with „Gonzales“ modules in one clamping. When changing systems, observe the following: Unlike Speedy 1000/2000 and DockLock 1000, „Gonzales“ modules require an unclamping pressure of min. 50 bar / max. 60 bar. The surface-mounted clamping module is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module has one connection: 1x hydr. opening (1).

On request:
- Automation solutions

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. D</th>
<th>dia. DB</th>
<th>dia. DN</th>
<th>HA</th>
<th>K</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>303362</td>
<td>1000</td>
<td>112</td>
<td>110</td>
<td>32</td>
<td>40</td>
<td>18.5</td>
<td>G1/8</td>
</tr>
<tr>
<td>303388</td>
<td>2000</td>
<td>140</td>
<td>139</td>
<td>47</td>
<td>40</td>
<td>18.5</td>
<td>G1/8</td>
</tr>
</tbody>
</table>

Subject to technical alterations.
Pneumatic opening.

Application:
Zero-point clamping system for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL-005 is recommended.

On request:
- Installation diagrams
- Automation solutions

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>dia. D</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>HA</th>
<th>dia. LK</th>
<th>M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>303580</td>
<td>148</td>
<td>40</td>
<td>102</td>
<td>57</td>
<td>15</td>
<td>118</td>
<td>M8</td>
<td>42</td>
</tr>
</tbody>
</table>

Pneumatic opening.

Application:
Zero-point clamping system in combination with clamping flanges 6370ZB for set-up-time-optimized clamping with cutting and non-cutting processing in all areas, also in the food, pharmaceutical and chemical industry.

Note:
The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL-005 is recommended.

On request:
- Automation solutions

Dimensions:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>dia. D</th>
<th>dia. DB</th>
<th>dia. DN</th>
<th>HA</th>
<th>K</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>303586</td>
<td>148</td>
<td>146</td>
<td>40</td>
<td>62</td>
<td>32.5</td>
<td>G1/4</td>
</tr>
</tbody>
</table>
Clamping nipple „Gonzales 1000“

Dimensions for the nipple mounting:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>303404</td>
<td>1000</td>
<td>32</td>
<td>25</td>
<td>34.0</td>
<td>M8</td>
<td>4.8</td>
<td>70</td>
</tr>
<tr>
<td>303420</td>
<td>1000</td>
<td>32</td>
<td>25</td>
<td>34.0</td>
<td>M8</td>
<td>4.8</td>
<td>70</td>
</tr>
<tr>
<td>303446</td>
<td>1000</td>
<td>32</td>
<td>25</td>
<td>34.0</td>
<td>M8</td>
<td>4.8</td>
<td>70</td>
</tr>
<tr>
<td>303461</td>
<td>1000</td>
<td>32</td>
<td>-</td>
<td>29.2</td>
<td>M8</td>
<td>12.0</td>
<td>55</td>
</tr>
</tbody>
</table>

Design:
Order no. 303404: Zero point nipple
Order no. 303420: Slit nipple
Order no. 303446: Undersized nipple
Order no. 303461: Protection nipple

Note:
Tightening torque of the clamping nipple max. 20 Nm. Min. screw grade 8.8.

Clamping nipple „Gonzales 1000“ with high collar, hardened.

Dimensions for the nipple mounting:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Size</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>H</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>305128</td>
<td>1000</td>
<td>32</td>
<td>25</td>
<td>49</td>
<td>M8</td>
<td>19.8</td>
<td>125</td>
</tr>
<tr>
<td>305144</td>
<td>1000</td>
<td>32</td>
<td>25</td>
<td>49</td>
<td>M8</td>
<td>19.8</td>
<td>125</td>
</tr>
<tr>
<td>305169</td>
<td>1000</td>
<td>32</td>
<td>25</td>
<td>49</td>
<td>M8</td>
<td>19.8</td>
<td>125</td>
</tr>
<tr>
<td>303461</td>
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<td>32</td>
<td>-</td>
<td>29.2</td>
<td>M8</td>
<td>12.0</td>
<td>55</td>
</tr>
</tbody>
</table>

Design:
Order no. 305128: Zero point nipple
Order no. 305144: Slit nipple
Order no. 305169: Undersized nipple
Order no. 303461: Protection nipple

Note:
Tightening torque of the clamping nipple max. 20 Nm. Min. screw grade 8.8.
Clamping nipple „Gonzales 2000“

Hardened.
Clamping nipples can also be used in Speedy 2000.

<table>
<thead>
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<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
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Design:
Order no. 303412: Zero point nipple
Order no. 303438: Slit nipple
Order no. 303453: Undersized nipple
Order no. 303479: Protection nipple

Note:
Tightening torque of the clamping nipple max. 20 Nm. Min. screw grade 8.8.

Dimensions for the nipple mounting:

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No. 6370ZNG-20

Clamping nipple „Gonzales 2000“

<table>
<thead>
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</table>

No. 6370ZNSG

Nipple key „Gonzales“
for clamping nipple no. 6370ZNG/ZNGH „Gonzales 1000“. 
Dimensions for the nipple mounting:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>dia. DN</th>
<th>dia. D1</th>
<th>dia. D2</th>
<th>H</th>
<th>M</th>
<th>T</th>
<th>Weight [g]</th>
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Design:
Order no. 304352: Zero point nipple
Order no. 304592: Slit nipple
Order no. 304618: Undersized nipple
Order no. 304634: Protection nipple
We are your partner in innovation for solutions to mechanical, pneumatic and hydraulic clamping problems.

- Reduction of set-up times
- Advice
- Automation solutions
- CAD data in over 60 formats with kinematics and collision functions

Just test us!

With AMF you are always a step ahead! AMF CAD data are transmitted to sub-assemblies with active links. This feature can be exploited by the CAD systems Solid Works, Unigraphic, Inventor and Catia V5.

Further advantages:
- Complete transmission of the structure tree, including all accessories, with all CAD systems!
- When parts lists are generated, the article designations from the structure tree are automatically incorporated.
- Ordering procedures can thus be initiated directly.
- In addition, sample functions are transmitted which a) increase computer speed and b) simplify the job of the tool designer.
- When they are not needed, the sample functions can be suppressed.
WE GENERATE EXCITEMENT.

Since its founding by Andreas Maier in 1890, our company has lived through many exciting times. Today we are the leading manufacturer in Europe, supplying over 5,000 different products from the fields of clamping, hand tools and locks. With this extensive product range we can meet all of our customers’ needs and requirements. But providing optimal quality means meeting the challenges at all levels: Expert consultation, modern team organisation, individual solutions (including special developments), flexibility in response to changing conditions, etc. And we ourselves find this so exciting that we look forward every day to shaping the market together with our employees and our customers – both now and in the future. That is something you can count on.

COMPANY HISTORY

1890 Company founded as a lock manufacturer by Andreas Maier.
1920 Product range extended to include spanners.
1928 Production line assembly of “Fellbach locks”.
1951 AMF introduces clamping elements and diversifies into workpiece and tool clamping technology.
1965 Toggle clamps extend the AMF product range. AMF catalogues are now printed in ten languages.
1975 Further specialisation into hydraulic clamping technology.
1982 Clamping and fixture systems round off AMF’s clamping expertise.
1996 AMF team organisation in all sectors of the business. Quality management with certification to ISO 9001.
2001 AMF Service Guarantee for all products.
2004 Introduction of the ZPS zero-point clamping system.
2007 The magnetic clamping technology extends the AMF product range.
2009 Development and marketing of AMF Vacuum clamping technology.
2012 AMF-Bitiler and AMF-Cleaner for automated labelling and cleaning via the tool spindle.

5 Individual development

And if the product you need doesn’t exist? Just ask us: We will find the best solution for you – whether it is a special version or a completely new development.

4 Warranty

We stand by our high quality standards. We handle customer complaints very liberally and without red tape – whenever possible even after the end of the warranty period.

3 Guaranteed quality standard

AMF stands for manufacturing in-house with the utmost care. A tradition we have upheld since 1890 – and naturally for many years now with a modern quality management system to ISO 9001.

2 Short delivery times

AMF’s finished goods inventory with over 5,000 items guarantees a delivery readiness of 98%. You can also count on each warehouse item you order being shipped to you on the same day.

1 Service from genuine experts

Different tasks, different solutions. In AMF’s professional product range, you can find the right solution quickly and reliably either from your local dealer or with help from the specialists in our teams. A phone call is all it takes.

E Made in Germany

It goes without saying that our range of products is developed and manufactured by our team of employees in Germany.