ZIMMER GROUP — THE KNOW-HOW FACTORY

OUR KNOW-HOW FACTORY WORKS WITH ALL INDUSTRIES AND DELIVERS EVERYTHING FROM A SINGLE SOURCE.
OUR PRODUCT RANGE IS FAR REACHING, BOTH IN ITS DEPTH AND ITS BREADTH.

DO YOU HAVE A DEVELOPMENT PROBLEM? WE’LL SOLVE IT! SET US A CHALLENGE IN RESEARCH AND DEVELOPMENT.
COUNTLESS INNOVATIONS ORIGINATE FROM OUR COMPANY. WE ARE ENTHUSIASTIC ABOUT NEW PRODUCTS AND PRIDE OURSELVES ON OUR CORPORATE PIONEERING SPIRIT.

BRAZIL, ARGENTINA, BOLIVIA, CHILE, ECUADOR, GUAYANA, PARAGUAY, PERU, URUGUAY, VENEZUELA:
ZIMMER GROUP SOUTH AMERICA
IMP. EXP. LTDA
Rua Brilh A. Antônio 130 Barro Faria Lima
BR 00735-362 Barra Gamaerias – RS
+55 54 2102-5400
Fax: +55 54 3451-6494
info.br@zimmer-group.com
www.zimmer-group.com.br

CHINA:
ZIMMER GROUP CHINA LTD.
Level 2408 Bldg 4 No. 517
Fu Ta East 3rd Rd.
CN 200131 Pudong, Shanghai
T +86 21 6326-5000
Fax: +86 21 6326-5000
info.cn@zimmer-group.com
www.zimmer-group.com

FRANCE:
ZIMMER GROUP FRANCE SARL
8, Rue Sophie Germain
FR 67720 Hœrdt
T +33 388 833896
Fax: +33 388 833975
info.fr@zimmer-group.com
www.zimmer-group.fr

ITALY:
ZIMMER GROUP ITALIA S.R.L.
Vale Montegrappe, 7
IT 27100 Piacca
T +39 0382 571-142
Fax: +39 0382 571-173
info.it@zimmer-group.com
www.zimmer-group.it

SPAIN, PORTUGAL:
ZIMMER GROUP IBERIA S.L.U.
C/ Charles Darwin 5, Nave 11
ES 28005 Alcalá de Henares/Madrid
T +34 91 882 2623
Fax: +34 91 882 8301
info.es@zimmer-group.com
www.zimmer-group.com

SOUTH KOREA:
ZIMMER GROUP ASIA LTD.
KOREAN OFFICE
1301 Stockton digital valley 5, Boakkidong 244, Gwangcheon-Gu, KR 00813 Seoul
T: +82 2 2083-5691
Fax: +82 2 2083-5690
info.kl@zimmer-group.com
www.zimmer-group.com

TAIWAN, SINGAPORE, BRUNEI, CAMBODIA, INDONESIA, LAOS, MALAYSIA, MYANMAR, PHILIPPINES, THAILAND, VIETNAM, AUSTRALIA, NEW ZEALAND:
ZIMMER GROUP ASIA LTD.
SF 3, No. 15, Jogsuk Rd., Taoyuan Dist., TW 330 Taoyuan City
T (+886) 3 301 6829
Fax: (+886) 3 301 6829
info.asia@zimmer-group.com
www.zimmer-group.com

USA, COLOMBIA, MEXICO:
ZIMMER GROUP US INC.
1095 6th Street Ct SE
US Hickory, NC, 28602
T +1 828 855 9722
Fax: +1 828 855 9723
info.us@zimmer-group.com
www.zimmer-group.com

ZIMMER GROUP — THE KNOW-HOW FACTORY

OUR KNOW-HOW FACTORY WORKS WITH ALL INDUSTRIES AND DELIVERS EVERYTHING FROM A SINGLE SOURCE.
OUR PRODUCT RANGE IS FAR REACHING, BOTH IN ITS DEPTH AND ITS BREADTH.

DO YOU HAVE A DEVELOPMENT PROBLEM? WE’LL SOLVE IT! SET US A CHALLENGE IN RESEARCH AND DEVELOPMENT.
COUNTLESS INNOVATIONS ORIGINATE FROM OUR COMPANY. WE ARE ENTHUSIASTIC ABOUT NEW PRODUCTS AND PRIDE OURSELVES ON OUR CORPORATE PIONEERING SPIRIT.

BRAZIL, ARGENTINA, BOLIVIA, CHILE, ECUADOR, GUAYANA, PARAGUAY, PERU, URUGUAY, VENEZUELA:
ZIMMER GROUP SOUTH AMERICA
IMP. EXP. LTDA
Rua Brilh A. Antônio 130 Barro Faria Lima
BR 00735-362 Barra Gamaerias – RS
+55 54 2102-5400
Fax: +55 54 3451-6494
info.br@zimmer-group.com
www.zimmer-group.com.br

CHINA:
ZIMMER GROUP CHINA LTD.
Level 2408 Bldg 4 No. 517
Fu Ta East 3rd Rd.
CN 200131 Pudong, Shanghai
T +86 21 6326-5000
Fax: +86 21 6326-5000
info.cn@zimmer-group.com
www.zimmer-group.com

FRANCE:
ZIMMER GROUP FRANCE SARL
8, Rue Sophie Germain
FR 67720 Hœrdt
T +33 388 833896
Fax: +33 388 833975
info.fr@zimmer-group.com
www.zimmer-group.fr

ITALY:
ZIMMER GROUP ITALIA S.R.L.
Vale Montegrappe, 7
IT 27100 Piacca
T +39 0382 571-142
Fax: +39 0382 571-173
info.it@zimmer-group.com
www.zimmer-group.it

SPAIN, PORTUGAL:
ZIMMER GROUP IBERIA S.L.U.
C/ Charles Darwin 5, Nave 11
ES 28005 Alcalá de Henares/Madrid
T +34 91 882 2623
Fax: +34 91 882 8301
info.es@zimmer-group.com
www.zimmer-group.com

SOUTH KOREA:
ZIMMER GROUP ASIA LTD.
KOREAN OFFICE
1301 Stockton digital valley 5, Boakkidong 244, Gwangcheon-Gu, KR 00813 Seoul
T: +82 2 2083-5691
Fax: +82 2 2083-5690
info.kl@zimmer-group.com
www.zimmer-group.com

TAIWAN, SINGAPORE, BRUNEI, CAMBODIA, INDONESIA, LAOS, MALAYSIA, MYANMAR, PHILIPPINES, THAILAND, VIETNAM, AUSTRALIA, NEW ZEALAND:
ZIMMER GROUP ASIA LTD.
SF 3, No. 15, Jogsuk Rd., Taoyuan Dist., TW 330 Taoyuan City
T (+886) 3 301 6829
Fax: (+886) 3 301 6829
info.asia@zimmer-group.com
www.zimmer-group.com

USA, COLOMBIA, MEXICO:
ZIMMER GROUP US INC.
1095 6th Street Ct SE
US Hickory, NC, 28602
T +1 828 855 9722
Fax: +1 828 855 9723
info.us@zimmer-group.com
www.zimmer-group.com
ZIMMER GROUP
COMMITTED TO OUR CUSTOMERS

WE HAVE SUCCEEDED FOR YEARS BY OFFERING OUR CUSTOMERS INNOVATIVE AND INDIVIDUALIZED SOLUTIONS. ZIMMER HAS GROWN CONTINUOUSLY AND TODAY WE HAVE REACHED A NEW MILESTONE: THE ESTABLISHMENT OF THE KNOW-HOW FACTORY. IS THERE A SECRET TO OUR SUCCESS?

Foundation. Excellent products and services have always been the foundation of our company's growth. Zimmer is a source of ingenious solutions and important technical innovations. This is why customers with high expectations for technology frequently find their way to us. When things get tricky, Zimmer Group is in its best form.

Style. We have an interdisciplinary approach to everything we do, resulting in refined process solutions in six technology fields. This applies not just to development but to production. Zimmer Group serves all industries and stands ready to resolve even the most unique and highly individualized problems. Worldwide.

Motivation. Customer orientation is perhaps the most important factor of our success. We are a service provider in the complete sense of the word. With Zimmer Group, our customers have a single, centralized contact for all of their needs. We approach each customer's situation with a high level of competence and a broad range of possible solutions.
TECHNOLOGIES

HANDLING TECHNOLOGY

MORE THAN 30 YEARS OF EXPERIENCE AND INDUSTRY KNOWLEDGE: OUR PNEUMATIC, HYDRAULIC AND ELECTRICAL HANDLING COMPONENTS AND SYSTEMS ARE GLOBAL LEADERS.

Components. More than 2,000 standardized grippers, swivel units, robotic accessories and much more. We offer a complete selection of technologically superior products that are ready for rapid delivery.

Semi-standard. Our modular approach to design enables custom configurations and high rates of innovation for process automation.

DAMPING TECHNOLOGY

INDUSTRIAL DAMPING TECHNOLOGY AND SOFT CLOSE PRODUCTS EXEMPLIFY THE INNOVATION AND PIONEERING SPIRIT OF THE KNOW-HOW FACTORY.

Industrial damping technology. Whether standard or customized solutions, our products stand for the highest cycle rates and maximum energy absorption with minimal space requirements.

Soft Close. Development and mass production of pneumatic and fluid dampers with extraordinary quality and rapid delivery.

OEM and direct. Whether they need components, returning mechanisms or complete production lines – we are the trusted partner of many prestigious customers.

LINEAR TECHNOLOGY

WE DEVELOP LINEAR COMPONENTS AND SYSTEMS THAT ARE INDIVIDUALLY ADAPTED TO OUR CUSTOMERS’ NEEDS.

Clamping and braking elements. We offer you more than 4,000 types for profiled and round rails as well as for a variety of guide systems from all manufacturers. It makes no difference whether you prefer manual, pneumatic, electric or hydraulic drive.

Flexibility. Our clamping and braking elements ensure that movable components such as Z-axes or machining tables maintain a fixed position and that machines and systems come to a stop as quickly as possible in an emergency.

www.zimmer-group.com
PROCESS TECHNOLOGY

MAXIMUM EFFICIENCY IS ESSENTIAL FOR SYSTEMS AND COMPONENTS USED IN PROCESS TECHNOLOGY. HIGH-LEVEL CUSTOM SOLUTIONS ARE OUR TRADEMARK.

A rich reservoir of experience. Our know-how ranges from the development of materials, processes and tools through product design to production of series products.

Deep production capabilities. The Zimmer Group pairs these capabilities with flexibility, quality and precision, even when making custom products.

Series production. We manufacture demanding products out of metal (MIM), elastomers and plastics with flexibility and speed.

MACHINE TECHNOLOGY

ZIMMER GROUP DEVELOPS INNOVATIVE METAL, WOOD AND COMPOSITE MATERIAL PROCESSING TOOL SYSTEMS FOR ALL INDUSTRIES. NUMEROUS CUSTOMERS CHOOSE US AS THEIR SYSTEMS AND INNOVATION PARTNER.

Knowledge and experience. Industry knowledge and a decades-long development partnership in exchangeable assemblies, tool interfaces and systems make us bound for new challenges around the world.

Components. We deliver numerous standard components from stock and develop innovative, customized systems for OEM and end customers – far beyond the metal and wood processing industries.

Variety. Whether you have machining centers, lathes or flexible production cells, the power tools, holders, assemblies and drilling heads of Zimmer Group are ready for action.

SYSTEM TECHNOLOGY

ZIMMER GROUP IS ONE OF THE LEADING SPECIALISTS IN THE DEVELOPMENT OF CUSTOMIZED SYSTEM SOLUTIONS WORLDWIDE.

Customized. A team made up of more than 20 experienced designers and project engineers develop and produce customized solutions for special tasks in close collaboration with end customers and system integrators. It doesn’t matter if it is a simple gripper and handling solution or a complex system solution.

Solutions. These system solutions are used in many industries, from mechanical engineering to the automotive and supplier industries to plastics engineering and consumer goods industries, all the way to foundries. The Know-how Factory helps countless companies to thrive competitively by increasing automation efficiency.

www.zimmer-group.com
PRODUCT BENEFITS
PRODUCT FAMILY 5000

Gripper Series 5000

Is installing the most powerful components important to you?

► Increase the safety of your machine by installing a gripper from this series
► It offers you up to 30% higher gripping force and up to 10% higher static forces and moments
► Using it means you can install gripper fingers that are up to 10% longer than the best-known models in the market
► And you can be sure that these grippers give you the same performance as electrically driven grippers

Do you want to use one gripper for any task?

► Cut the number of articles you manage
► And so reduce your design and stock-keeping costs to a minimum
► The gripper guarantees you process reliability, no matter what the environmental conditions
► Corrosion protection included
► Select either a pneumatic or electrical drive, to give you maximum flexibility when creating your design

Are details important to you?

► The transverse sensor grooves mean you can change the piston position sensing quickly and easily, wherever the gripper is installed
► Only one interference contour check required, because a spacer compensates for the height difference between the electrical and pneumatic gripper
► With additional pin holes underneath the cover plate for customer-specific attachments
► With integrated lubrication reservoir
Do you want state-of-the-art technology in your machine?

- The gripper’s Steel Linear Guide combines proven linear guide principles with the very latest sealing and technology
- You benefit from one of the most robust and long-lasting grippers currently available on the market, with a maintenance-free working life of up to 30 million cycles

Do you want a wide range of accessories, perfectly tailored to your gripper?

- **UB universal jaws**
  Machinable gripper blanks that you can customize specifically for your applications.

- **EB adjustment jaws**
  For tool-free adjustment of the gripping range by moving the locking jaws. Allows for different part sizes to be gripped with just a single set of gripper fingers.

- **WB interchangeable jaws**
  For quickly changing individual gripper fingers. A fixed part (on gripper side) and a loose part set (on jaw side) are needed for this.

- **LB L-jaws**
  Fast and simple way to enable your gripper fingers to also be mounted laterally.

- **DSV pressure safety valve**
  The safety of your machine design will increase thanks to this pressure safety valve, which prevents the gripper from opening unintentionally in the event of a drop in air pressure.

- **2-position sensor**
  Space-saving and simple option for querying 2 positions with just one sensor. Quick programming saves time when compared to the setup of conventional sensors.

- **ADS pressure piece**
  You hit the limit stop of the pressure piece when picking up the workpiece. When depositing the workpiece or opening the gripper, the workpiece is fed into a clamping chuck or similar intake via the pretensioned spring.

- Many more accessories can be found in our main catalog or on our website.
<table>
<thead>
<tr>
<th>SERIES PRODUCT FAMILY 5000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2-JAW PARALLEL GRIPPERS PNEUMATIC</strong></td>
</tr>
<tr>
<td>SERIES GPP5000</td>
</tr>
<tr>
<td><strong>2-JAW PARALLEL GRIPPERS PNEUMATICALLY INTELLIGENT</strong></td>
</tr>
<tr>
<td>SERIES GPP5000IL</td>
</tr>
<tr>
<td><strong>2-JAW PARALLEL GRIPPERS ELECTRIC</strong></td>
</tr>
<tr>
<td>SERIES GEP5000</td>
</tr>
<tr>
<td><strong>3-JAW CONCENTRIC GRIPPERS PNEUMATIC</strong></td>
</tr>
<tr>
<td>SERIES GPD5000</td>
</tr>
<tr>
<td><strong>3-JAW CONCENTRIC GRIPPERS PNEUMATICALLY INTELLIGENT</strong></td>
</tr>
<tr>
<td>SERIES GPD5000IL</td>
</tr>
<tr>
<td><strong>3-JAW CONCENTRIC GRIPPERS ELECTRIC</strong></td>
</tr>
<tr>
<td>SERIES GED5000</td>
</tr>
<tr>
<td><strong>2-JAW ANGULAR GRIPPERS PNEUMATIC</strong></td>
</tr>
<tr>
<td>SERIES GPW5000</td>
</tr>
<tr>
<td><strong>ADJUSTMENT JAWS</strong></td>
</tr>
<tr>
<td>EB5000 SERIES</td>
</tr>
<tr>
<td><strong>ANGLE FLANGE</strong></td>
</tr>
<tr>
<td>SERIES WFR</td>
</tr>
</tbody>
</table>

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
PRODUCT ADVANTAGES

“The best”

► Steel Linear Guide – The superior guidance system concept

The steel / steel guide stands for lasting precision, durability and a long service life—featuring maintenance intervals of up to 30 million gripping cycles. Benefit from these features and increase the profitability and process reliability of your machine.

► Leakproof and corrosion protected – The universal gripper

Suitable for virtually all ambient conditions, with a sealed guide up to IP67 and corrosion protection as standard, you are able to use this gripper universally. As a result, the range of models in your production is reduced, along with a reduction in associated storage and process costs.

► Aluminum Linear Guide – The alternative

Reduced to those aspects which are the most important, the steel / aluminum guide variant offers significantly better performance when compared to a similar gripper with a T-groove travel guide, and is on par with the best principles of toothed guidance systems.

BENEFITS IN DETAIL

1. Wedge hook mechanism
   - Supports to absorb high forces and moments
   - Synchronized gripper jaw movement

2. Gripper jaw
   - Gripper fingers mounted using removable centering sleeves
   - Lubricated for life via incorporated lubrication slots

3. Steel Linear Guide
   - Steel in steel guide
   - Enables use of extremely long gripper fingers
   - Also available in steel / aluminum variant

4. Mounting block
   - mounting for inductive proximity switch

5. Integrated gripping force safety device
   - Spring built into cylinder chamber as an energy store

6. Drive
   - Double-acting pneumatic rotor cylinder

7. Mounting and positioning
   - Alternatively, on several sides for customized mounting
   - Pneumatic and electrical versions identical apart from height

8. Sensing slot
   - mounting and positioning of magnetic field sensors

9. Dual lip seal
   - IP64 and up to IP67 (with purged air) for Protector version
   - Prevents grease from being squeezed out, increasing service life
### SERIES CHARACTERISTICS

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GPP50XX</strong></td>
<td>-00 -20 -21 -24 -AL</td>
</tr>
<tr>
<td><strong>N</strong> Long stroke</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>NC</strong> Long stroke / Spring closing</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>NO</strong> Long stroke / Spring opening</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>S</strong> High-strength</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>SC</strong> High-strength / Spring closing</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>SO</strong> High-strength / Spring opening</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>Steel / steel guide</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>Steel / aluminum guide</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>15 million maintenance-free cycles</strong> (max.)</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>30 million maintenance-free cycles</strong> (max.)</td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>Inductive sensor</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>Magnetic field sensor</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>Protected against corrosion</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>Purged air</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>Temperature-resistant</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>IP40</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>IP64</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>IP67</strong></td>
<td>● ● ● ● ●</td>
</tr>
<tr>
<td><strong>IP67</strong> with purged air (max. 0.5 bar)</td>
<td>● ● ● ● ●</td>
</tr>
</tbody>
</table>

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Stroke per jaw [mm]</th>
<th>Gripping force [N]</th>
<th>Weight [kg]</th>
<th>IP class</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5003</td>
<td>2.5</td>
<td>140 - 205</td>
<td>0.08 - 0.12</td>
<td>IP40 / IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5004</td>
<td>2 - 4</td>
<td>200 - 630</td>
<td>0.15 - 0.3</td>
<td>IP40 / IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5006</td>
<td>3 - 6</td>
<td>330 - 1080</td>
<td>0.26 - 0.44</td>
<td>IP40 / IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5008</td>
<td>4 - 8</td>
<td>520 - 1670</td>
<td>0.53 - 0.76</td>
<td>IP40 / IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5010</td>
<td>5 - 10</td>
<td>885 - 2990</td>
<td>0.85 - 1.31</td>
<td>IP40 / IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5013</td>
<td>6 - 13</td>
<td>1410 - 4400</td>
<td>1.5 - 2.26</td>
<td>IP40 / IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5016</td>
<td>8 - 16</td>
<td>2090 - 6600</td>
<td>2.9 - 4.4</td>
<td>IP40 / IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5025</td>
<td>14 - 25</td>
<td>3280 - 9130</td>
<td>6.1 - 8.75</td>
<td>IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5030</td>
<td>17 - 30</td>
<td>5000 - 13550</td>
<td>9.2 - 13.7</td>
<td>IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5035</td>
<td>20 - 35</td>
<td>6100 - 15900</td>
<td>15.8 - 23.3</td>
<td>IP64 / IP67*</td>
</tr>
<tr>
<td>GPP5045</td>
<td>26 - 45</td>
<td>10200 - 26950</td>
<td>33 - 50</td>
<td>IP64 / IP67*</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
MAXIMUM GRIPPER FINGER LENGTH

Example 1
Vertical force application point
a = 0 mm
b = 200 mm

Example 2
Horizontal force application point
a = 200 mm
b = 0 mm

Example 3
Maximum permissible projection
a = 120 mm
b = 160 mm

The examples show the maximum horizontal (a) and vertical (b) gripper finger length using the example of a GPP5013N-00-A, which is represented by the blue area.
GRIPPING FORCE AS A FUNCTION OF GRIPPER FINGER LENGTH

![Gripping force diagram](image)

**Example 4**
Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{55^2 + 58^2} = 80 \Rightarrow 2125 \text{ N} \]

**GUIDE CHARACTERISTICS**

**Steel / aluminum guide and steel / steel guide in comparison**
In general, the maximum possible length of gripper fingers of a steel / aluminum guide is lower in comparison to the steel / steel guide, due to the lower yield point of aluminum. While the maximum gripper finger length in the horizontal (a) and vertical (b) direction can be fully utilized for the steel / steel guide, the maximum gripper finger length that is specified in the technical data for the steel / aluminum guide is reduced by 20% at a horizontal (a) projection. The lower efficiency of a steel / aluminum guide also leads to a higher decrease in gripping force at an increased gripping finger length and to a reduction in service life as a result of a lower resistance to wear.

**Steel / aluminum guide**
Steel / aluminum guides are very common worldwide. They are available in many different forms and are installed in virtually all commercially available grippers from an extremely wide variety of manufacturers. The steel / aluminum grippers from Zimmer Group are available as AL variants of the tried-and-tested 5000 Series. Their designs are geared toward the important aspects and they are very cost-effective.

**Steel / steel guide**
Steel / steel guides are the best and first choice wherever durability and robustness are essential. The Steel Linear Guide from Zimmer Group is also clearly distinguished from a steel / aluminum guide thanks to its exclusive design featuring higher material characteristics.

**Steel Linear Guide – Added value in detail**
- Steel in steel guide
- IP64 and up to IP67 (with sealing air) in the protector version
- Corrosion protected
- Up to 30 million maintenance-free cycles (max.)
**2-JAW PARALLEL GRIPPERS**

**SERIES GPP5000 FUNCTIONAL DESCRIPTION**

**GRIPPING COMPONENTS**

**Universal jaws – UB5000**
Can be used immediately or for individual reprocessing
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.

**Adjustment jaws – EB5000**
For tool-free adaptation of the gripper range
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.

**Interchangeable jaws – WB5000**
Enable fast change of individual gripper fingers
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

**THE GRIPPING COMPONENTS CAN BE COMBINED!**
The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.
**ENERGY SUPPLY**

**Pneumatic threaded connections**
Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.

**Pressure safety valve – DSV**
Ensures safe retention of force and position if the system pressure drops.
The integrated double check valve, which can be unlocked, retains the system pressure of the gripper in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled bleeding of the gripper.

Data, Drawings, 3-D Models, Operating Instructions ➔ www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
SERIES GPP5000 FUNCTIONAL DESCRIPTION

ENERGY SUPPLY

Quick exhaust valve – DEV
For rapid bleeding of the compressed air and preventing back pressure
The inline valves make a faster cycle time possible and prevent the formation of condensate in grippers with a small cylinder volume. To ensure the function, the valve must be installed as close to the gripper’s air connection as possible.

SENSORS

Inductive sensors – NJ *
For direct position sensing of the gripper jaws
The sensor is guided into the intake as far as it will go and fixed in place using the lateral clamping screw. Tuning to the desired position then takes place by adjusting the cam switch. The sensors are available in versions with 5 m cables with exposed leads and 0.3 m cable with connector, as well as with direct plug orientation.
* Not for variant AL-A
1-point magnetic field sensors – MFS
For non-contact sensing of the piston position
These sensors are installed in the C-groove of the gripper and detect the magnet attached to the piston of the gripper. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The variants are available in versions with 5 m cables with exposed leads and 0.3 m cable with connector.
2-point magnetic field sensors – MFS
With two freely programmable switching points
Using the programming unit integrated in the cable, two switch points can be freely defined for this sensor. To do so, the sensor is clamped in the C-groove, the gripper approaches position one and the position is taught in using the teach button. Afterwards, the second position is approached with the gripper and programmed. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The sensors are available in versions with 5 m cables with exposed leads and 0.3 m cable with connector.

Plug-in connectors
For extending and fabricating the connection lines for the sensors
Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.
**Centering sleeves**

For defined position measurement of the gripper fingers

The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.
# 2-JAW PARALLEL GRIPPERS

## INSTALLATION SIZE GPP5003

### PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>-00-A / -20-A / -21-A / -24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel / steel guide</td>
</tr>
</tbody>
</table>

#### Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>14</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>13</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>550</td>
</tr>
</tbody>
</table>

### -AL-A

#### Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>12</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>12</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>500</td>
</tr>
</tbody>
</table>

### VARIANTS

<table>
<thead>
<tr>
<th>-00-A / -20-A</th>
<th>-21-A / -24-A</th>
<th>-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel / steel guide</td>
<td>Steel / steel guide</td>
<td>Steel / aluminum guide</td>
</tr>
</tbody>
</table>

![Image of gripper variants]
### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
<th>GPP5003N-00-A</th>
<th>GPP5003NC-00-A</th>
<th>GPP5003NO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>140</td>
<td>195</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>150</td>
<td>205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>55</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.025</td>
<td></td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>0.01</td>
<td>0.025</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>65</td>
<td>60</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td></td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>2.1</td>
<td>4.8</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td></td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.08</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Version</th>
<th>GPP5003N-20-A</th>
<th>GPP5003NC-20-A</th>
<th>GPP5003NO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - Protector Version</th>
<th>GPP5003N-21-A</th>
<th>GPP5003NC-21-A</th>
<th>GPP5003NO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td></td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.1</td>
<td>0.12</td>
<td>0.12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Protector Version</th>
<th>GPP5003N-24-A</th>
<th>GPP5003NC-24-A</th>
<th>GPP5003NO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td></td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td></td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.1</td>
<td>0.12</td>
<td>0.12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
<th>GPP5003N-AL-A</th>
<th>GPP5003NC-AL-A</th>
<th>GPP5003NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>60</td>
<td>55</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
<td></td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.08</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

### Maximum gripper finger length

- **Steel Linear Guide**
  - 20 [mm]
  - 40 [mm]
  - 60 [mm]
  - 80 [mm]
  - 100 [mm]

- **Aluminum Linear Guide**
  - 20 [mm]
  - 40 [mm]
  - 60 [mm]
  - 80 [mm]
  - 100 [mm]

### Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{a^2 + b^2} \]

Data, Drawings, 3-D Models, Operating Instructions: [www.zimmer-group.com](http://www.zimmer-group.com)
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5003

TECHNICAL DRAWINGS

NC / NO
-00-A / -20-A / -AL-A

1

4x M3x6

1

2x Ø 5H7x2

1

2x M2

2

32

18

50

8

22

24

38

10.8

33.7

8

35

16

17

17

15

19

14.5

21.5

22

8

2x Ø 1.5H7

2x M2.5

DIN912*

4x M2.5

DIN912*

2x M2.5

Y

X

X

Y

2x M2

2x M3

M3

2x M3

2x M2.5

4x M2.5

4x M2.5x4

4x M2.5

1

2x Ø 5H7x2

2

M3

1

2

2

2

10.5

8

2x Ø 1.5H7

3

14.5

14.5

2.5

2.5

2

2

19

19

35

35

19

19

www.zimmer-group.com
Data, Drawings, 3-D Models, Operating Instructions
TECHNICAL DRAWINGS

Hoseless air feed-through M2
Hoseless air feed-through M3

Order no. -00-A / -20-A / -21-A / -24-A / -AL-A

H [mm] 21.5 27.8
h [mm] 12.5 18.8

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Air purge connection option (max. 0.5 bar)
6. Attachment option for customer-specific fittings
7. Adapter
8. Gripper
9. Air connection (close)
10. Air connection (open)
11. Air connection, alternative (close)
12. Air connection, alternative (open)

Position sealing air connection option

Data, Drawings, 3-D Models, Operating Instructions: www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5003

► ACCESORIES

4 [piece] Centering Disc
CENTERING DISC
DST06510 015761

2 [piece] Centering Disc
CENTERING DISC
DST06510 015761

► INCLUDED IN DELIVERY

www.zimmer-group.com  ▶ Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- **UB5003AL** Universal jaw aluminium
- **UB5003ST** Universal jaw steel
- **KF50N** Rubber Coated Tape Knobbed
- **EB5003AL** Aluminum adjustment jaw
- **EB5003ST** Steel adjustment jaw

ENERGY SUPPLY

- **GVM3** Straight Fittings - Barb Style Connection
- **WVM3** Angled Fittings - Barb Style Connection
- **DEV04** Quick Exhaust Valve
- **DSV1-8** Pressure safety valve
- **DSV1-8E** Pressure safety valve with quick exhaust

SENSORS

- **MFS01-S-KHC-P1-PNP** Magnetic field sensor Angled Cable 0.3 m - Connector M8
- **MFS02-S-KHC-P1-PNP** Magnetic field sensor Straight Cable 0.3 m - Connector M8
- **MFS01-S-KHC-P2-PNP** 2-Position-Sensor Cable 0.3 m - Connector M8
- **MFS02-S-KHC-P2-PNP** 2-Position-Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

- **KAG500** Plug-in connector Straight Cable 5m - Socket M8 (female)
- **S8-G-3** Plug-in connector customizable Straight - Connector M8
- **S12-G-3** Plug-in connector customizable Straight - Connector M12
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5004

> PRODUCT SPECIFICATIONS

|-00-A / -20-A / -21-A / -24-A

- **Steel / steel guide**

**Gripping force diagram**

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

<table>
<thead>
<tr>
<th>[N]</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>625</td>
<td>575</td>
<td>525</td>
<td>475</td>
<td>425</td>
<td>375</td>
<td>325</td>
<td>275</td>
<td>225</td>
<td>175</td>
</tr>
</tbody>
</table>

- **Forces and moments**

Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 14 |
| My [Nm] | 29 |
| Fa [N]  | 750 |

- **AL-A**

- **Steel / aluminum guide**

**Gripping force diagram**

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

<table>
<thead>
<tr>
<th>[N]</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>625</td>
<td>575</td>
<td>525</td>
<td>475</td>
<td>425</td>
<td>375</td>
<td>325</td>
<td>275</td>
<td>225</td>
<td>175</td>
</tr>
</tbody>
</table>

- **Forces and moments**

Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 10 |
| My [Nm] | 25 |
| Fa [N]  | 700 |

> VARIANTS

<table>
<thead>
<tr>
<th>-00-A / -20-A</th>
<th>-21-A / -24-A</th>
<th>-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steel / steel guide</strong></td>
<td><strong>Steel / steel guide</strong></td>
<td><strong>Steel / aluminum guide</strong></td>
</tr>
</tbody>
</table>

www.zimmer-group.com  Data, Drawings, 3-D Models, Operating Instructions
## TECHNICAL DATA

### Order no. GPP5004N-00-A GPP5004NC-00-A GPP5004NO-00-A GPP5004S-00-A GPP5004SC-00-A GPP5004SO-00-A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw (mm)</td>
<td>4 4 4 2 2 2</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>200 280 440 600</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>215 295 470 630</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>80 80 160 160</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.015 0.015 0.025 0.015 0.015 0.025</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.2 0.2 0.2 0.2 0.2 0.2</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>80 75 75 75 70 70</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01 0.01 0.01 0.01 0.01 0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3 4 4 3 4 4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8 7 7 8 7 7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6 6 6 6 6 6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90 -10 ... +90 -10 ... +90 -10 ... +90 -10 ... +90 -10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>5 12 12 5 12 12</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64 IP64 IP64 IP64 IP64 IP64</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>Yes Yes Yes Yes Yes Yes</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.16 0.21 0.21 0.16 0.21 0.21</td>
</tr>
</tbody>
</table>

### Order no. GPP5004N-20-A GPP5004NC-20-A GPP5004NO-20-A GPP5004S-20-A GPP5004SC-20-A GPP5004SO-20-A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130</td>
</tr>
</tbody>
</table>

### Order no. GPP5004N-21-A GPP5004NC-21-A GPP5004NO-21-A GPP5004S-21-A GPP5004SC-21-A GPP5004SO-21-A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67* IP67* IP67* IP67* IP67* IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.25 0.3 0.25 0.3 0.25 0.3</td>
</tr>
</tbody>
</table>

### Order no. GPP5004N-24-A GPP5004NC-24-A GPP5004NO-24-A GPP5004S-24-A GPP5004SC-24-A GPP5004SO-24-A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67* IP67* IP67* IP67* IP67* IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.25 0.3 0.25 0.3 0.25 0.3</td>
</tr>
</tbody>
</table>

### Order no. GPP5004N-AL-A GPP5004NC-AL-A GPP5004NO-AL-A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.18 0.18 0.18</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>75 70 70</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP40 IP40 IP40</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No No No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.15 0.2 0.2</td>
</tr>
</tbody>
</table>

### Maximum gripper finger length

#### Steel Linear Guide

![Graph](image1.png)

### Aluminum Linear Guide

![Graph](image2.png)

### Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5004

TECHNICAL DRAWINGS
**TECHNICAL DRAWINGS**

Hoseless air feed-through M3

- Gripper attachment
- Energy supply
- Fixing for gripper finger
- Integrated slot for magnetic field sensor
- Air purge connection option (max. 0.5 bar)
- Attachment option for customer-specific fittings
- Adapter
- Gripper

Hoseless air feed-through M5

- Air connection (close)
- Air connection (open)
- Air connection, alternative (close)
- Air connection, alternative (open)

**Order no.**

<table>
<thead>
<tr>
<th>H [mm]</th>
<th>L [mm]</th>
<th>h [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>39.6</td>
<td>8</td>
<td>23.6</td>
</tr>
</tbody>
</table>

**Position**

- Sealing air connection option
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5004

► ACCESORIES

► INCLUDED IN DELIVERY

4 [piece] Centering Disc 015761
2 [piece] Centering Disc 024230
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5004AL: Universal jaw aluminium
- UB5004ST: Universal jaw steel
- EB5004AL: Aluminium adjustment jaw
- EB5004ST: Steel adjustment jaw
- WB5004L: Changeable jaw, loose-part-set
- WB5004F: Changeable jaw, fix-part

ENERGY SUPPLY

- GVM5: Straight Fittings - Quick Connect Style
- WVM5: Angled Fittings - Quick Connect Style
- DEV04: Quick Exhaust Valve
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- MFS01-S-KHC-P1-PNP: Magnetic field sensor Angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor Straight Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position-Sensor Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position-Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

- KAG500: Plug-in connector Straight Cable 5m - Socket M8 (female)
- S8-G-3: Plug-in connector customizable Straight - Connector M8

Data, Drawings, 3-D Models, Operating Instructions → www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5006

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm]  43
Mx [Nm]  70
My [Nm]  46
Fa [N]  1250

-AL-A
Steel / aluminum guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm]  40
Mx [Nm]  60
My [Nm]  45
Fa [N]  1200

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide
### TECHNICAL DATA

<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>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-00-A</td>
<td>6</td>
<td>330</td>
<td>360</td>
<td>0.025</td>
<td>0.015</td>
<td>125</td>
<td>125</td>
<td>100</td>
<td>0.01</td>
<td>3</td>
<td>8</td>
<td>7</td>
<td>-10...+90</td>
<td>11</td>
<td>IP64</td>
<td>Yes</td>
<td>0.28</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006NC-00-A</td>
<td>6</td>
<td>455</td>
<td>485</td>
<td>0.015</td>
<td>0.035</td>
<td>125</td>
<td>125</td>
<td>90</td>
<td>0.01</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>-10...+90</td>
<td>24</td>
<td>IP64</td>
<td>Yes</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006NO-00-A</td>
<td>6</td>
<td>740</td>
<td>800</td>
<td>0.025</td>
<td>0.025</td>
<td>280</td>
<td>280</td>
<td>90</td>
<td>0.03</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>-10...+90</td>
<td>24</td>
<td>IP64</td>
<td>Yes</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006S-00-A</td>
<td>3</td>
<td>1020</td>
<td>1080</td>
<td>0.015</td>
<td>0.015</td>
<td>280</td>
<td>280</td>
<td>85</td>
<td>0.03</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>-10...+90</td>
<td>24</td>
<td>IP64</td>
<td>Yes</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006SC-00-A</td>
<td>3</td>
<td>280</td>
<td>280</td>
<td>0.015</td>
<td>0.015</td>
<td>1080</td>
<td>1080</td>
<td>85</td>
<td>0.03</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>-10...+90</td>
<td>24</td>
<td>IP64</td>
<td>Yes</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006SO-00-A</td>
<td>3</td>
<td>740</td>
<td>800</td>
<td>0.025</td>
<td>0.025</td>
<td>280</td>
<td>280</td>
<td>85</td>
<td>0.03</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>-10...+90</td>
<td>24</td>
<td>IP64</td>
<td>Yes</td>
<td>0.35</td>
<td>0.35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Operating temperature [°C]</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-20-A</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>GPP5006NC-20-A</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>GPP5006NO-20-A</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>GPP5006S-20-A</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>GPP5006SC-20-A</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>GPP5006SO-20-A</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Protection to IEC 60529</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-21-A</td>
<td>IP67*</td>
</tr>
<tr>
<td>GPP5006NC-21-A</td>
<td>IP67*</td>
</tr>
<tr>
<td>GPP5006NO-21-A</td>
<td>IP67*</td>
</tr>
<tr>
<td>GPP5006S-21-A</td>
<td>IP67*</td>
</tr>
<tr>
<td>GPP5006SC-21-A</td>
<td>IP67*</td>
</tr>
<tr>
<td>GPP5006SO-21-A</td>
<td>IP67*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-24-A</td>
<td>0.37</td>
</tr>
<tr>
<td>GPP5006NC-24-A</td>
<td>0.44</td>
</tr>
<tr>
<td>GPP5006NO-24-A</td>
<td>0.44</td>
</tr>
<tr>
<td>GPP5006S-24-A</td>
<td>0.37</td>
</tr>
<tr>
<td>GPP5006SC-24-A</td>
<td>0.44</td>
</tr>
<tr>
<td>GPP5006SO-24-A</td>
<td>0.44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Permissible weight per jaw max [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-AL-A</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006NC-AL-A</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006NO-AL-A</td>
<td>0.35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Length of the gripper fingers max. [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-AL-A</td>
<td>90</td>
</tr>
<tr>
<td>GPP5006NC-AL-A</td>
<td>85</td>
</tr>
<tr>
<td>GPP5006NO-AL-A</td>
<td>85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Protection to IEC 60529</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-AL-A</td>
<td>IP40</td>
</tr>
<tr>
<td>GPP5006NC-AL-A</td>
<td>IP40</td>
</tr>
<tr>
<td>GPP5006NO-AL-A</td>
<td>IP40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006N-AL-A</td>
<td>0.28</td>
</tr>
<tr>
<td>GPP5006NC-AL-A</td>
<td>0.35</td>
</tr>
<tr>
<td>GPP5006NO-AL-A</td>
<td>0.35</td>
</tr>
</tbody>
</table>

### Maximum gripper finger length

![Graph showing maximum gripper finger length](image)

### Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5006

TECHNICAL DRAWINGS
**TECHNICAL DRAWINGS**

N / S
-00-A / -20-A / -AL-A

Hoseless air feed-through M3

N / NC / NO / S / SC / SO
-21-A / -24-A

Hoseless air feed-through M5

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter
9. Gripper
10. Clamping sensor (not for variant AL-A)
11. Switch cam adjustment (not for variant AL-A)
12. Air connection (close)
13. Air connection (open)
14. Air connection, alternative (close)
15. Air connection, alternative (open)

**Position 16 sealing air connection option**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>-00-A / -20-A / -21-A / -24-A</th>
<th>-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>H [mm]</td>
<td>36.5</td>
<td>47.7</td>
</tr>
<tr>
<td>L [mm]</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>h [mm]</td>
<td>15.5</td>
<td>29.7</td>
</tr>
</tbody>
</table>
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5006

► ACCESORIES

► INCLUDED IN DELIVERY

4 [piece] Centering Disc
024230

2 [piece] Centering Disc
024231
RECOMMENDED ACCESSORIES

**GRIPPING COMPONENTS**

- **UB5006AL** Universal jaw aluminium
- **UB5006ST** Universal jaw steel
- **EB5006AL** Aluminium adjustment jaw
- **EB5006ST** Steel adjustment jaw
- **WB5006L** Changeable jaw, loose part-set
- **WB5006F** Changeable jaw, fix part

**ENERGY SUPPLY**

- **WVM5** Angled Fittings - Quick Connect Style
- **DSV1-8** Pressure safety valve
- **DSV1-8E** Pressure safety valve with quick exhaust

**SENSORS**

- **NJ4-E2SK-01** Inductive Proximity Switch Cable 0.3 m - Connector M8
- **MFS01-S-KHC-P1-PNP** Magnetic field sensor Angled Cable 0.3 m - Connector M8
- **MFS02-S-KHC-P2-PNP** 2-Position-Sensor Cable 0.3 m - Connector M8
- **MFS02-S-KHC-P2-PNP** Magnetic field sensor Straight Cable 0.3 m - Connector M8
- **MFS01-S-KHC-P2-PNP** 2-Position-Sensor Cable 0.3 m - Connector M8

* Not for variant AL-A

**CONNECTIONS / OTHER**

- **KAG500** Plug-in connector Straight Cable 5m - Socket M8 (female)

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5008

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

**Gripping force diagram**
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

<table>
<thead>
<tr>
<th>[N]</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>110</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC / NO</td>
<td>N</td>
<td>S</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

**Forces and moments**
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>105</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>65</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>1900</td>
</tr>
</tbody>
</table>

-AL-A
Steel / aluminum guide

**Gripping force diagram**
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

<table>
<thead>
<tr>
<th>[N]</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>110</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC / NO</td>
<td>N</td>
<td>S</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

**Forces and moments**
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>95</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>60</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>1800</td>
</tr>
</tbody>
</table>

VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide
## TECHNICAL DATA

### Order no.

<table>
<thead>
<tr>
<th>GPP5008N-00-A</th>
<th>GPP5008NC-00-A</th>
<th>GPP5008NO-00-A</th>
<th>GPP5008S-00-A</th>
<th>GPP5008SC-00-A</th>
<th>GPP5008SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>520</td>
<td>710</td>
<td>1150</td>
<td>1580</td>
<td>1670</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>560</td>
<td>750</td>
<td>1240</td>
<td>430</td>
<td>430</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>0.035</td>
<td>0.025</td>
<td>0.045</td>
<td>0.035</td>
<td>0.025</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.035</td>
<td>0.045</td>
<td>0.025</td>
<td>0.035</td>
<td>0.045</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>125</td>
<td>115</td>
<td>115</td>
<td>115</td>
<td>105</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>10 ... +90</td>
<td>10 ... +90</td>
<td>10 ... +90</td>
<td>10 ... +90</td>
<td>10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>22</td>
<td>43</td>
<td>43</td>
<td>22</td>
<td>43</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.53</td>
<td>0.63</td>
<td>0.63</td>
<td>0.53</td>
<td>0.63</td>
</tr>
</tbody>
</table>

### Technical data - High Temperature Version

<table>
<thead>
<tr>
<th>GPP5008N-20-A</th>
<th>GPP5008NC-20-A</th>
<th>GPP5008NO-20-A</th>
<th>GPP5008S-20-A</th>
<th>GPP5008SC-20-A</th>
<th>GPP5008SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.66</td>
<td>0.76</td>
<td>0.76</td>
<td>0.66</td>
<td>0.76</td>
</tr>
</tbody>
</table>

### Technical data - Protector Version

<table>
<thead>
<tr>
<th>GPP5008N-21-A</th>
<th>GPP5008NC-21-A</th>
<th>GPP5008NO-21-A</th>
<th>GPP5008S-21-A</th>
<th>GPP5008SC-21-A</th>
<th>GPP5008SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.66</td>
<td>0.76</td>
<td>0.76</td>
<td>0.66</td>
<td>0.76</td>
</tr>
</tbody>
</table>

### Technical data - High Temperature Protector Version

<table>
<thead>
<tr>
<th>GPP5008N-24-A</th>
<th>GPP5008NC-24-A</th>
<th>GPP5008NO-24-A</th>
<th>GPP5008S-24-A</th>
<th>GPP5008SC-24-A</th>
<th>GPP5008SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.66</td>
<td>0.76</td>
<td>0.76</td>
<td>0.66</td>
<td>0.76</td>
</tr>
</tbody>
</table>

### Maximum gripper finger length

- **Steel Linear Guide**
  - N: 40
  - SC / SO: 40
  - NC / NO / S: 80

- **Aluminum Linear Guide**
  - NC-AL / NO-AL: 40
  - N-AL: 40

### Resulting gripper finger length for determining the gripping force

\[ b = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5008

TECHNICAL DRAWINGS
**TECHNICAL DRAWINGS**

![Diagram of Hoseless air feed-through M3 and M5](image)

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

**Position sealing air connection option**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>-00-A / -20-A / -21-A / -24-A</th>
<th>-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>H [mm]</td>
<td>42.8</td>
<td>55.7</td>
</tr>
<tr>
<td>L [mm]</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>h [mm]</td>
<td>24.8</td>
<td>37.7</td>
</tr>
</tbody>
</table>
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5008

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc
024231
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5008AL: Universal jaw aluminium
- UB5008ST: Universal jaw steel
- EB5008AL: Aluminium adjustment jaw
- EB5008ST: Steel adjustment jaw
- WB5008L: Changeable jaw, loose-part set
- WB5008F: Changeable jaw, fix-part

ENERGY SUPPLY

- WVM5: Angled Fittings - Quick Connect Style
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- NJ4-E2SK-01: Inductive Proximity Switch Cable 0.3 m - Connector M8
- MFS01-S-KHC-P1-PNP: Magnetic field sensor Angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP: 2-Position-Sensor Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP: Magnetic field sensor Straight Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position-Sensor Straight Cable 0.3 m - Connector M8

* Not for variant AL-A

CONNECTIONS / OTHER

- KAG500: Plug in connector Straight Cable 5m - Socket M8 (female)
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5010

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

► Gripping force diagram

 Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

<table>
<thead>
<tr>
<th>[mm]</th>
<th>N</th>
<th>NC / NO</th>
<th>S</th>
<th>SC / SO</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1850</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>850</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>650</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[Nm]</th>
<th>Mr</th>
<th>Mx</th>
<th>My</th>
<th>Fa</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>125</td>
<td>95</td>
<td>2700</td>
<td></td>
</tr>
</tbody>
</table>

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

-AL-A

Steel / aluminum guide

► Gripping force diagram

 Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

<table>
<thead>
<tr>
<th>[mm]</th>
<th>N</th>
<th>NC / NO</th>
<th>S</th>
<th>SC / SO</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1850</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>850</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>650</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[Nm]</th>
<th>Mr</th>
<th>Mx</th>
<th>My</th>
<th>Fa</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>115</td>
<td>90</td>
<td>2500</td>
<td></td>
</tr>
</tbody>
</table>

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide

www.zimmer-group.com  ▶  Data, Drawings, 3-D Models, Operating Instructions
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5010N-00-A</th>
<th>GPP5010NC-00-A</th>
<th>GPP5010NO-00-A</th>
<th>GPP5010S-00-A</th>
<th>GPP5010SC-00-A</th>
<th>GPP5010SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw (mm)</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>885</td>
<td>1260</td>
<td>1940</td>
<td>2750</td>
<td>2890</td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>945</td>
<td>1320</td>
<td>2080</td>
<td>810</td>
<td>810</td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>375</td>
<td>375</td>
<td>810</td>
<td>810</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.06</td>
<td>0.05</td>
<td>0.08</td>
<td>0.06</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>44</td>
<td>92</td>
<td>92</td>
<td>44</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.87</td>
<td>1.09</td>
<td>1.09</td>
<td>0.87</td>
<td>1.09</td>
<td>1.09</td>
</tr>
</tbody>
</table>

---

## Technical data - High Temperature Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5010N-20-A</th>
<th>GPP5010NC-20-A</th>
<th>GPP5010NO-20-A</th>
<th>GPP5010S-20-A</th>
<th>GPP5010SC-20-A</th>
<th>GPP5010SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.09</td>
<td>1.31</td>
<td>1.31</td>
<td>1.09</td>
<td>1.31</td>
<td>1.31</td>
</tr>
</tbody>
</table>

---

## Technical Data - Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5010N-21-A</th>
<th>GPP5010NC-21-A</th>
<th>GPP5010NO-21-A</th>
<th>GPP5010S-21-A</th>
<th>GPP5010SC-21-A</th>
<th>GPP5010SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.09</td>
<td>1.31</td>
<td>1.31</td>
<td>1.09</td>
<td>1.31</td>
<td>1.31</td>
</tr>
</tbody>
</table>

---

## Technical Data - High Temperature Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5010N-AL-A</th>
<th>GPP5010NC-AL-A</th>
<th>GPP5010NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>140</td>
<td>135</td>
<td>135</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.85</td>
<td>1.09</td>
<td>1.09</td>
</tr>
</tbody>
</table>

---

## Maximum gripper finger length

Steel Linear Guide:

- N
- NC / NO / S

Aluminum Linear Guide:

- SC / SO

Data, Drawings, 3-D Models, Operating Instructions: www.zimmer-group.com

---

Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{a^2 + b^2} \]
Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com  47
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5010

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc
018187
### RECOMMENDED ACCESSORIES

#### GRIPPING COMPONENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB5010AL</td>
<td>Universal jaw aluminium</td>
</tr>
<tr>
<td>UB5010ST</td>
<td>Universal jaw steel</td>
</tr>
<tr>
<td>EB5010AL</td>
<td>Aluminium adjustment jaw</td>
</tr>
<tr>
<td>EB5010ST</td>
<td>Steel adjustment jaw</td>
</tr>
<tr>
<td>WB5010L</td>
<td>Changeable jaw, loose-part-set</td>
</tr>
<tr>
<td>WB5010F</td>
<td>Changeable jaw, fix-part</td>
</tr>
</tbody>
</table>

#### ENERGY SUPPLY

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WV1-8X8</td>
<td>Angled Fittings - Quick Connect Style</td>
</tr>
<tr>
<td>DSV1-8</td>
<td>Pressure safety valve</td>
</tr>
<tr>
<td>DSV1-8E</td>
<td>Pressure safety valve with quick exhaust</td>
</tr>
</tbody>
</table>

#### SENSORS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ4-E2SK-01</td>
<td>Inductive Proximity Switch Cable 0.3 m - Connector M8</td>
</tr>
<tr>
<td>MFS01-S-KHC-P1-PNP</td>
<td>Magnetic field sensor Angled Cable 0.3 m - Connector M8</td>
</tr>
<tr>
<td>MFS02-S-KHC-P1-PNP</td>
<td>Magnetic field sensor Straight Cable 0.3 m - Connector M8</td>
</tr>
<tr>
<td>MFS01-S-KHC-P2-PNP</td>
<td>2-Position-Sensor Cable 0.3 m - Connector M8</td>
</tr>
<tr>
<td>MFS02-S-KHC-P2-PNP</td>
<td>2-Position-Sensor Cable 0.3 m - Connector M8</td>
</tr>
</tbody>
</table>

* Not for variant AL-A

#### CONNECTIONS / OTHER

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAG500</td>
<td>Plug-in connector Straight Cable 5m - Socket M8 (female)</td>
</tr>
</tbody>
</table>
# 2-JAW PARALLEL GRIPPERS
## INSTALLATION SIZE GPP5013

### PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Variant</th>
<th>Gripping force diagram</th>
<th>Forces and moments</th>
</tr>
</thead>
<tbody>
<tr>
<td>-00-A / -20-A / -21-A / -24-A</td>
<td>Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.</td>
<td>Displays static forces and moments that can also have an effect, besides the gripping force.</td>
</tr>
<tr>
<td>-AL-A</td>
<td>Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variant</th>
<th>Gripping force diagram</th>
<th>Forces and moments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel / steel guide</td>
<td>Steel / aluminum guide</td>
<td></td>
</tr>
</tbody>
</table>

### FORCES AND MOMENTS

- **Steel / steel guide**
  - Mr [Nm]: 110
  - Mx [Nm]: 150
  - My [Nm]: 130
  - Fa [N]: 3300

- **Steel / aluminum guide**
  - Mr [Nm]: 100
  - Mx [Nm]: 145
  - My [Nm]: 120
  - Fa [N]: 3200

### VARIANTS

- **-00-A / -20-A**
  - Steel / steel guide

- **-21-A / -24-A**
  - Steel / steel guide

- **-AL-A**
  - Steel / aluminum guide
<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5013N-00-A</th>
<th>GPP5013NC-00-A</th>
<th>GPP5013NO-00-A</th>
<th>GPP5013S-00-A</th>
<th>GPP5013SC-00-A</th>
<th>GPP5013SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw (mm)</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>1410</td>
<td>1920</td>
<td>3100</td>
<td>4220</td>
<td>1120</td>
<td>1120</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>1490</td>
<td>1860</td>
<td>3280</td>
<td>4400</td>
<td>1120</td>
<td>1120</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>510</td>
<td>510</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.09</td>
<td>0.07</td>
<td>0.11</td>
<td>0.09</td>
<td>0.07</td>
<td>0.11</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>0.09</td>
<td>0.11</td>
<td>0.08</td>
<td>0.09</td>
<td>0.11</td>
<td>0.06</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>510</td>
<td>510</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>200</td>
<td>185</td>
<td>185</td>
<td>185</td>
<td>185</td>
<td>170</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>88</td>
<td>171</td>
<td>171</td>
<td>88</td>
<td>171</td>
<td>171</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.5</td>
<td>1.9</td>
<td>1.9</td>
<td>1.5</td>
<td>1.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5013N-20-A</th>
<th>GPP5013NC-20-A</th>
<th>GPP5013NO-20-A</th>
<th>GPP5013S-20-A</th>
<th>GPP5013SC-20-A</th>
<th>GPP5013SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.86</td>
<td>2.26</td>
<td>2.26</td>
<td>1.86</td>
<td>2.26</td>
<td>2.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5013N-21-A</th>
<th>GPP5013NC-21-A</th>
<th>GPP5013NO-21-A</th>
<th>GPP5013S-21-A</th>
<th>GPP5013SC-21-A</th>
<th>GPP5013SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.86</td>
<td>2.26</td>
<td>2.26</td>
<td>1.86</td>
<td>2.26</td>
<td>2.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5013N-AL-A</th>
<th>GPP5013NC-AL-A</th>
<th>GPP5013NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Length of the gripper fingers max. * [mm]</td>
<td>180</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>IP class</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.5</td>
<td>1.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Maximum gripper finger length:

Steel Linear Guide

Aluminum Linear Guide

Resulting gripper finger length for determining the gripping force:

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5013
TECHNICAL DRAWINGS

Hoseless air feed-through M5

Order no. -00-A / -20-A / -21-A / -24-A -AL-A

<table>
<thead>
<tr>
<th>Position</th>
<th>Sealing air connection option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Gripper attachment</td>
</tr>
<tr>
<td></td>
<td>2 Energy supply</td>
</tr>
<tr>
<td></td>
<td>3 Fixing for gripper finger</td>
</tr>
<tr>
<td></td>
<td>4 Integrated slot for magnetic field sensor</td>
</tr>
<tr>
<td></td>
<td>5 Mounting block (not for variant AL-A)</td>
</tr>
<tr>
<td></td>
<td>6 Air purge connection option (max. 0,5 bar)</td>
</tr>
<tr>
<td></td>
<td>7 Attachment option for customer-specific fittings</td>
</tr>
<tr>
<td></td>
<td>8 Adapter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5013 / 2-Jaw Parallel Grippers / pneumatic / Grippers</th>
</tr>
</thead>
<tbody>
<tr>
<td>H [mm]</td>
<td>62.4 / 78.6</td>
</tr>
<tr>
<td>L [mm]</td>
<td>16 / 10</td>
</tr>
<tr>
<td>h [mm]</td>
<td>32.4 / 48.6</td>
</tr>
</tbody>
</table>
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5013

► ACCESORIES

Inset: 4-piece Centering Disc Centering Disc
018187 019280

2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5013  /   2-Jaw Parallel Grippers  /   pneumatic  /   Grippers

www.zimmer-group.com  ► Data, Drawings, 3-D Models, Operating Instructions
**RECOMMENDED ACCESSORIES**

**GRIPPING COMPONENTS**

- UB5013AL: Universal jaw aluminium
- UB5013ST: Universal jaw steel
- EB5013AL: Aluminium adjustment jaw
- EB5013ST: Steel adjustment jaw
- WB5013L: Changeable jaw, loose-part-set
- WB5013F: Changeable jaw, fix-part

**ENERGY SUPPLY**

- WV1-8X8: Angled Fittings - Quick Connect Style
- DEV06: Quick Exhaust Valve
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

**SENSORS**

- NJ9-E25: Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP: Magnetic field sensor angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor straight Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position Sensor Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position Sensor Cable 0.3 m - Connector M8

*Not for variant AL-A*

**CONNECTIONS / OTHER**

- KAG500: Plug-in connector Straight Cable 5m - Socket M8 (female)
- S8-G-3: Plug-in connector customizable Straight - Connector M8
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5016

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>Mx [Nm]</th>
<th>My [Nm]</th>
<th>Fa [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td>145</td>
<td>195</td>
<td>185</td>
<td>5200</td>
</tr>
</tbody>
</table>

-AL-A
Steel / aluminum guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>Mx [Nm]</th>
<th>My [Nm]</th>
<th>Fa [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>185</td>
<td>180</td>
<td>5000</td>
</tr>
</tbody>
</table>

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide
# TECHNICAL DATA

## Order no.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5016N-00-A</th>
<th>GPP5016NC-00-A</th>
<th>GPP5016NO-00-A</th>
<th>GPP5016S-00-A</th>
<th>GPP5016SC-00-A</th>
<th>GPP5016SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per Jaw (mm)</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>2090</td>
<td>2860</td>
<td>4610</td>
<td>6310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>2220</td>
<td>2990</td>
<td>4900</td>
<td>6600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>770</td>
<td>770</td>
<td>1700</td>
<td>1700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.13</td>
<td>0.11</td>
<td>0.24</td>
<td>0.13</td>
<td>0.11</td>
<td>0.24</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>245</td>
<td>226</td>
<td>225</td>
<td>225</td>
<td>215</td>
<td>215</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>166</td>
<td>332</td>
<td>332</td>
<td>166</td>
<td>332</td>
<td>332</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>2.9</td>
<td>3.7</td>
<td>3.7</td>
<td>2.9</td>
<td>3.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

## Order no.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5016N-20-A</th>
<th>GPP5016NC-20-A</th>
<th>GPP5016NO-20-A</th>
<th>GPP5016S-20-A</th>
<th>GPP5016SC-20-A</th>
<th>GPP5016SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>3.6</td>
<td>4.4</td>
<td>4.4</td>
<td>3.6</td>
<td>4.4</td>
<td>4.4</td>
</tr>
</tbody>
</table>

## Order no.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5016N-21-A</th>
<th>GPP5016NC-21-A</th>
<th>GPP5016NO-21-A</th>
<th>GPP5016S-21-A</th>
<th>GPP5016SC-21-A</th>
<th>GPP5016SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>3.6</td>
<td>4.4</td>
<td>4.4</td>
<td>3.6</td>
<td>4.4</td>
<td>4.4</td>
</tr>
</tbody>
</table>

## Order no.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5016N-AL-A</th>
<th>GPP5016NC-AL-A</th>
<th>GPP5016NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per Jaw max [kg]</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>215</td>
<td>210</td>
<td>210</td>
</tr>
<tr>
<td>IP class</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>2.9</td>
<td>3.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

## Maximum gripper finger length

![Steel Linear Guide](image1)

![Aluminum Linear Guide](image2)

### Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5016

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

Installation size GPP5016 / 2-Jaw Parallel Grippers / pneumatic / Grippers

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
### TECHNICAL DRAWINGS

- **N / S**
  - 00-A / 20-A / -AL-A

- **N / NC / NO / S / SC / SO**
  - 21-A / 24-A

---

**Hoseless air feed-through M5**

---

**Order no.**

<table>
<thead>
<tr>
<th></th>
<th>00-A / 20-A / 21-A / 24-A</th>
<th>-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>H [mm]</td>
<td>79.2</td>
<td>99.1</td>
</tr>
<tr>
<td>L [mm]</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>h [mm]</td>
<td>39.2</td>
<td>59.1</td>
</tr>
</tbody>
</table>

---

**Position**

- Sealing air connection option

---

**Key Points**

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

---

**Gripper**

**Clamping sensor (not for variant AL-A)**

**Switch cam adjustment (not for variant AL-A)**

**Air connection (close)**

**Air connection (open)**

**Air connection, alternative (close)**

**Air connection, alternative (open)**
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5016

► ACCESORIES

4 [piece] Centering Disc
019387

2 [piece] Centering Disc
019280

► INCLUDED IN DELIVERY

Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5016AL: Universal jaw aluminium
- UB5016ST: Universal jaw steel
- EB5016AL: Aluminium adjustment jaw
- EB5016ST: Steel adjustment jaw
- WB5016L: Changeable jaw, loose part-set
- WB5016F: Changeable jaw, fix part

ENERGY SUPPLY

- WV1-8X8: Angled Fittings - Quick Connect Style
- DEV08: Quick Exhaust Valve
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- NJ8-E2S: Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP: Magnetic field sensor Angled Cable 0,3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor Straight Cable 0,3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position-Sensor Cable 0,3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position-Sensor Cable 0,3 m - Connector M8

* Not for variant AL-A

CONNECTIONS / OTHER

- KAG500: Plug-in connector Straight Cable 5m - Socket M8 (female)
- S8-G-3: Plug-in connector customizable Straight - Connector M8
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5025

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 180 |
| Mx [Nm] | 205 |
| My [Nm] | 225 |
| Fa [N]  | 7500 |

VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide
## TECHNICAL DATA

### Technical data

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5025N-00-A</th>
<th>GPP5025NC-00-A</th>
<th>GPP5025NO-00-A</th>
<th>GPP5025S-00-A</th>
<th>GPP5025SC-00-A</th>
<th>GPP5025SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>3280</td>
<td>4510</td>
<td>6360</td>
<td>8730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>3490</td>
<td>4710</td>
<td>6760</td>
<td>9130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>1220</td>
<td>1220</td>
<td>2370</td>
<td>2370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.33</td>
<td>0.28</td>
<td>0.57</td>
<td>0.33</td>
<td>0.28</td>
<td>0.57</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>0.33</td>
<td>0.57</td>
<td>0.28</td>
<td>0.33</td>
<td>0.57</td>
<td>0.28</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of the gripper Àngers max. [mm]</td>
<td>310</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>220</td>
<td>220</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>420</td>
<td>830</td>
<td>830</td>
<td>420</td>
<td>830</td>
<td>830</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>6.1</td>
<td>7.65</td>
<td>7.65</td>
<td>6.1</td>
<td>7.65</td>
<td>7.65</td>
</tr>
</tbody>
</table>

### Technical Data - High Temperature Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5025N-20-A</th>
<th>GPP5025NC-20-A</th>
<th>GPP5025NO-20-A</th>
<th>GPP5025S-20-A</th>
<th>GPP5025SC-20-A</th>
<th>GPP5025SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>7.20</td>
<td>8.75</td>
<td>8.75</td>
<td>7.2</td>
<td>8.75</td>
<td>8.75</td>
</tr>
</tbody>
</table>

### Technical Data - Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5025N-21-A</th>
<th>GPP5025NC-21-A</th>
<th>GPP5025NO-21-A</th>
<th>GPP5025S-21-A</th>
<th>GPP5025SC-21-A</th>
<th>GPP5025SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>7.20</td>
<td>8.75</td>
<td>8.75</td>
<td>7.2</td>
<td>8.75</td>
<td>8.75</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)

### Technical Data - High Temperature Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5025N-24-A</th>
<th>GPP5025NC-24-A</th>
<th>GPP5025NO-24-A</th>
<th>GPP5025S-24-A</th>
<th>GPP5025SC-24-A</th>
<th>GPP5025SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>7.20</td>
<td>8.75</td>
<td>8.75</td>
<td>7.2</td>
<td>8.75</td>
<td>8.75</td>
</tr>
</tbody>
</table>

### Maximum gripper finger length

![Graph showing maximum gripper finger length](image)

### Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5025

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

www.zimmer-group.com  Data, Drawings, 3-D Models, Operating Instructions
Hoseless air feed-through M5

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter
9. Gripper
10. Clamping sensor (not for variant AL-A)
11. Switch cam adjustment (not for variant AL-A)
12. Air connection (close)
13. Air connection (open)
14. Air connection, alternative (close)
15. Air connection, alternative (open)
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5025

► ACCESORIES

► INCLUDED IN DELIVERY

4 [piece] Centering Disc
030529

2 [piece] Centering Disc
019387

www.zimmer-group.com  ▶ Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5025AL Universal jaw aluminium
UB5025ST Universal jaw steel
EB5025AL Aluminum adjustment jaw
EB5025ST Steel adjustment jaw
WB5025L Changeable jaw, loose-part-set
WB5025F Changeable jaw, fix-part

ENERGY SUPPLY

WV1-8X8 Angled Fittings - Quick Connect Style
DEV08 Quick Exhaust Valve
DSV1-8 Pressure safety valve
DSV1-8E Pressure safety valve with quick exhaust

SENSORS

NJ8-E2S Inductive proximity switch - Connector M8
MFS01-S-KHC-P1-PNP Magnetic field sensor Angled Cable 0.3 m - Connector M8
MFS02-S-KHC-P1-PNP Magnetic field sensor Straight Cable 0.3 m - Connector M8
MFS01-S-KHC-P2-PNP 2-Position-sensor Cable 0.3 m - Connector M8
MFS02-S-KHC-P2-PNP 2-Position-sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

KAG500 Plug-in connector Straight Cable 5m - Socket M8 (female)
S8-G-3 Plug-in connector customizable Straight - Connector M8
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5030

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>210</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>290</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>310</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>9500</td>
</tr>
</tbody>
</table>

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide
### TECHNICAL DATA

#### Order no.

<table>
<thead>
<tr>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5030N-00-A</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
</tr>
<tr>
<td>Closing time [s]</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
</tr>
<tr>
<td>Protected against corrosion</td>
</tr>
<tr>
<td>Weight [kg]</td>
</tr>
</tbody>
</table>

#### Order no.

<table>
<thead>
<tr>
<th>Technical Data - High Temperature Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5030N-20-A</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
</tr>
</tbody>
</table>

#### Order no.

<table>
<thead>
<tr>
<th>Technical Data - Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5030N-21-A</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
</tr>
<tr>
<td>Weight [kg]</td>
</tr>
</tbody>
</table>

#### Order no.

<table>
<thead>
<tr>
<th>Technical Data - High Temperature Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5030N-24-A</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
</tr>
<tr>
<td>Weight [kg]</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)

### Maximum gripper finger length

![Graph showing maximum gripper finger length](image)

### Resulting gripper finger length for determining the gripping force

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5030

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

Installation size GPP5030 / 2-Jaw Parallel Grippers / pneumatic / Grippers

www.zimmer-group.com
TECHNICAL DRAWINGS

Hoseless air feed-through M5

- Gripper attachment
- Energy supply
- Fixing for gripper finger
- Integrated slot for magnetic field sensor
- Mounting block
- Air purge connection option (max. 0.5 bar)
- Attachment option for customer-specific fittings
- Adapter

Gripper attachment
Energy supply
Fixing for gripper finger
Integrated slot for magnetic field sensor
Mounting block
Air purge connection option (max. 0.5 bar)
Attachment option for customer-specific fittings
Adapter

Gripper
Clamp for sensor
Switch cam adjustment
Air connection (close)
Air connection (open)
Air connection, alternative (close)
Air connection, alternative (open)
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5030

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc

030529

www.zimmer-group.com ► Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5030AL  Universal jaw aluminium
UB5030ST  Universal jaw steel
EB5030AL  Aluminum adjustment jaw
EB5030ST  Steel adjustment jaw
WB5030L  Changeable jaw, loose part-set
WB5030F  Changeable jaw, fix-part

ENERGY SUPPLY

WV1-8X8  Angled Fittings - Quick Connect Style
DEV08    Quick Exhaust Valve
DSV1-8   Pressure safety valve
DSV1-8E  Pressure safety valve with quick exhaust

SENSORS

NJ6-E2S  Inductive proximity switch - Connector M8
MFS01-S-KHC-P1-PNP Magnetic field sensor Angled Cable 0.3 m - Connector M8
MFS02-S-KHC-P1-PNP Magnetic field sensor Straight Cable 0.3 m - Connector M8
MFS01-S-KHC-P2-PNP 2-Position Sensor Cable 0.3 m - Connector M8
MFS02-S-KHC-P2-PNP 2-Position Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

KAG500  Plug-in connector Straight Cable 5m - Socket M8 (female)
S8-G-3   Plug-in connector customizable Straight - Connector M8

www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5035

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 260
Mx [Nm] 430
My [Nm] 450
Fa [N] 10400

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide
# TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5035N-00-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NC-00-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NO-00-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035S-00-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SC-00-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SO-00-A</td>
<td></td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>35</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>6100</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>6300</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>1900</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.5</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>12.5</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>365</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.05</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 to +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>1185</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>Yes</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>15.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5035S-20-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NC-20-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NO-20-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035S-20-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SC-20-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SO-20-A</td>
<td></td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 to +130</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5035N-21-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NC-21-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NO-21-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035S-21-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SC-21-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SO-21-A</td>
<td></td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>20.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5035N-24-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NC-24-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035NO-24-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035S-24-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SC-24-A</td>
<td></td>
</tr>
<tr>
<td>GPP5035SO-24-A</td>
<td></td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 to +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>20.2</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)

### Maximum gripper finger length

![Diagram of gripper finger length](image.png)

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5035

TECHNICAL DRAWINGS
TECHNICAL DRAWINGS

Hoseless air feed-through M5

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

Gripper
Clamp for sensor
Switch cam adjustment
Air connection (close)
Air connection (open)
Air connection, alternative (close)
Air connection, alternative (open)
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5035

► ACCESORIES

6 [piece]
Centering Disc
035358

► INCLUDED IN DELIVERY
RECOMMENDED ACCESSORIES

ENERGY SUPPLY

- GV1-4X8 Straight Fittings - Quick Connect Style
- WV1-4X8 Angled Fittings - Quick Connect Style
- DSV1-4 Pressure safety valve
- DSV1-4E Pressure safety valve with quick exhaust

SENSORS

- NJ8-E2S Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP Magnetic field sensor Angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP Magnetic field sensor Straight Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP 2-Position-Sensor Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP 2-Position-Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

- KAG500 Plug-in connector Straight Cable 5 m - Socket M8 (female)
- S8-G-3 Plug-in connector customizable Straight - Connector M8

www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5045

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>-00-A / -20-A / -21-A / -24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel / steel guide</td>
</tr>
</tbody>
</table>

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>390</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>580</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>600</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>11500</td>
</tr>
</tbody>
</table>

VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide
**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5045N-00-A</th>
<th>GPP5045NC-00-A</th>
<th>GPP5045NO-00-A</th>
<th>GPP5045S-00-A</th>
<th>GPP5045SC-00-A</th>
<th>GPP5045SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>26</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>10200</td>
<td>13700</td>
<td>19400</td>
<td>26050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>10700</td>
<td>14200</td>
<td>20300</td>
<td>26950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>3500</td>
<td>3500</td>
<td>6650</td>
<td>6650</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.05</td>
<td>0.55</td>
<td>0.9</td>
<td>0.55</td>
<td>0.55</td>
<td>0.9</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>0.05</td>
<td>0.9</td>
<td>0.55</td>
<td>0.55</td>
<td>0.9</td>
<td>0.55</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Length of the gripper [mm]</td>
<td>400</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>4.5</td>
<td>6.5</td>
<td>6.5</td>
<td>6.5</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>2420</td>
<td>4400</td>
<td>4400</td>
<td>2420</td>
<td>4400</td>
<td>4400</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>33</td>
<td>40.5</td>
<td>40.5</td>
<td>41.5</td>
<td>41.5</td>
<td>41.5</td>
</tr>
</tbody>
</table>

**Order no.**

<table>
<thead>
<tr>
<th>GPP5045N-20-A</th>
<th>GPP5045NC-20-A</th>
<th>GPP5045NO-20-A</th>
<th>GPP5045S-20-A</th>
<th>GPP5045SC-20-A</th>
<th>GPP5045SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

**Order no.**

<table>
<thead>
<tr>
<th>GPP5045N-21-A</th>
<th>GPP5045NC-21-A</th>
<th>GPP5045NO-21-A</th>
<th>GPP5045S-21-A</th>
<th>GPP5045SC-21-A</th>
<th>GPP5045SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>41.5</td>
<td>49</td>
<td>49</td>
<td>42.5</td>
<td>50</td>
</tr>
</tbody>
</table>

**Order no.**

<table>
<thead>
<tr>
<th>GPP5045N-24-A</th>
<th>GPP5045NC-24-A</th>
<th>GPP5045NO-24-A</th>
<th>GPP5045S-24-A</th>
<th>GPP5045SC-24-A</th>
<th>GPP5045SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>41.5</td>
<td>49</td>
<td>49</td>
<td>42.5</td>
<td>50</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)

**Maximum gripper finger length**

Data, Drawings, 3-D Models, Operating Instructions  ➔ www.zimmer-group.com

---

**Technical Data - High Temperature Version**

<table>
<thead>
<tr>
<th>GPP5045N-00-A</th>
<th>GPP5045NC-00-A</th>
<th>GPP5045NO-00-A</th>
<th>GPP5045S-00-A</th>
<th>GPP5045SC-00-A</th>
<th>GPP5045SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
</tbody>
</table>

**Technical Data - Protector Version**

<table>
<thead>
<tr>
<th>GPP5045N-20-A</th>
<th>GPP5045NC-20-A</th>
<th>GPP5045NO-20-A</th>
<th>GPP5045S-20-A</th>
<th>GPP5045SC-20-A</th>
<th>GPP5045SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

**Technical Data - High Temperature Protector Version**

<table>
<thead>
<tr>
<th>GPP5045N-24-A</th>
<th>GPP5045NC-24-A</th>
<th>GPP5045NO-24-A</th>
<th>GPP5045S-24-A</th>
<th>GPP5045SC-24-A</th>
<th>GPP5045SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

---

**Resulting gripper finger length for determining the gripping force**

\[ x = \sqrt{a^2 + b^2} \]
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5045

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

- Gripper
- Clamp for sensor
- Switch cam adjustment
- Air connection (close)
- Air connection (open)
- Air connection, alternative (close)
- Air connection, alternative (open)

N / S
-00-A / -20-A

Hoseless air feed-through M6

N / NC / NO / S / SC / SO
-21-A / -24-A
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5045

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc
036784
RECOMMENDED ACCESSORIES

ENERGY SUPPLY

- GV1-4X8 Straight Fittings - Quick Connect Style
- WV1-4X8 Angled Fittings - Quick Connect Style
- DSV1-4 Pressure safety valve
- DSV1-4E Pressure safety valve with quick exhaust

SENSORS

- NJ8-E2S Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP Magnetic field sensor Angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP Magnetic field sensor Straight Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP 2-Position-Sensor Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP 2-Position-Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

- KAG500 Plug-in connector Straight Cable 5 m - Socket M8 (female)
- SB-G-3 Plug-in connector customizable Straight - Connector M8
2-JAW PARALLEL GRIPPERS
SERIES GPP5000IL

PRODUCT ADVANTAGES

“The hybrid”

- Pneumatic drive combined with IO-Link technology
- Up to 50% reduction in cycle times and up to 90% less compressed air usage
- Connection over just one pneumatic line and IO-Link cable
- Integrated valve technology, sensor technology, status display, pressure monitoring and temperature monitoring
- Part detection down to +/- 0.05 mm for a tolerance range that can be taught for any value
- 32 workpieces data sets can be programmed
- Protected from corrosion and sealed in accordance with IP64
- Up to 30 million cycles without maintenance

SERIES CHARACTERISTICS

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP50XXIL</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>●</td>
</tr>
<tr>
<td>☑️ IO-Link</td>
<td></td>
</tr>
<tr>
<td>Spring closing C</td>
<td>●</td>
</tr>
<tr>
<td>Spring opening O</td>
<td></td>
</tr>
<tr>
<td>High-strength S</td>
<td></td>
</tr>
<tr>
<td>30 million maintenance-free cycles (max.)</td>
<td>●</td>
</tr>
<tr>
<td>Integrated sensing</td>
<td>●</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>●</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>●</td>
</tr>
<tr>
<td>Purged air</td>
<td>●</td>
</tr>
</tbody>
</table>
| IP 54             | ●       | ●  | ●  | ●   | ●  | ●  | IP64

www.zimmer-group.com   Data, Drawings, 3-D Models, Operating Instructions
**BENEFITS IN DETAIL**

1. **Wedge hook mechanism**
   - Supports to absorb high forces and moments
   - Synchronized gripper jaw movement

2. **Gripper jaw**
   - Gripper fingers mounted using removable centering sleeves
   - Lubricated for life via incorporated lubrication slots

3. **Steel Linear Guide**
   - Steel in steel guide
   - Enables use of extremely long gripper fingers

4. **Dual lip seal**
   - IP64
   - Prevents grease from being squeezed out, increasing service life

5. **Integrated gripping force safety device**
   - Spring built into cylinder chamber as an energy store

6. **Mounting and positioning**
   - Alternatively, on several sides for customized mounting

7. **Position sensing**
   - Integrated Hallsensor

8. **Integrated valve technology**
   - Activation of the gripper by means of a compressed air supply

9. **Integrated control module**
   - Single-cable solution via IO-Link
   - Pressure, temperature, position and other parameters are readable

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Stroke per jaw [mm]</th>
<th>Gripping force [N]</th>
<th>Weight [kg]</th>
<th>IP class</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5006IL</td>
<td>3 - 6</td>
<td>330 - 1080</td>
<td>0.45 - 0.53</td>
<td>IP64</td>
</tr>
<tr>
<td>GPP5008IL</td>
<td>4 - 8</td>
<td>520 - 1670</td>
<td>0.75 - 0.87</td>
<td>IP64</td>
</tr>
<tr>
<td>GPP5010IL</td>
<td>5 - 10</td>
<td>885 - 2890</td>
<td>1.23 - 1.45</td>
<td>IP64</td>
</tr>
</tbody>
</table>

**FURTHER INFORMATION IS AVAILABLE ONLINE**

All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com). Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.
2-JAW PARALLEL GRIPPERS
SERIES GPP5000IL FUNCTIONAL DESCRIPTION

GRIPPING COMPONENTS

Universal jaws – UB5000
Can be used immediately or for individual reprocessing
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.

Adjustment jaws – EB5000
For tool-free adaptation of the gripper range
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.

Interchangeable jaws – WB5000
Enable fast change of individual gripper fingers
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

THE GRIPPING COMPONENTS CAN BE COMBINED!
The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.
**Pneumatic threaded connections**

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.

**Pressure safety valve – DSV**

The throttle check valve integrated into the supply air line retains the system pressure in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. Control voltage and actuator voltage must be maintained for this purpose.
Centering sleeves
For defined position measurement of the gripper fingers
The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.
# 2-JAW PARALLEL GRIPPERS
## INSTALLATION SIZE GPP5006iL

### PRODUCT SPECIFICATIONS

#### Gripping force diagram

- Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

#### Forces and moments

- Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>Mx [Nm]</th>
<th>My [Nm]</th>
<th>Fa [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>70</td>
<td>46</td>
<td>1250</td>
</tr>
</tbody>
</table>

### TECHNICAL DATA

#### Order no.

- GPP5006iL-10-A
- GPP5006NC-10-A
- GPP5006NO-10-A
- GPP5006S-10-A
- GPP5006SC-10-A
- GPP5006SO-10-A

<table>
<thead>
<tr>
<th>Control</th>
<th>GPP5006iL-10-A</th>
<th>GPP5006NC-10-A</th>
<th>GPP5006NO-10-A</th>
<th>GPP5006S-10-A</th>
<th>GPP5006SC-10-A</th>
<th>GPP5006SO-10-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>330</td>
<td>455</td>
<td>674</td>
<td>1020</td>
<td>1080</td>
<td>1080</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>360</td>
<td>485</td>
<td>800</td>
<td>1250</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>125</td>
<td>125</td>
<td>280</td>
<td>280</td>
<td>280</td>
<td>280</td>
</tr>
<tr>
<td>Cycle count max. [cycle/min]</td>
<td>360</td>
<td>250</td>
<td>360</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>100</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>11</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.45</td>
<td>0.53</td>
<td>0.53</td>
<td>0.45</td>
<td>0.53</td>
<td>0.53</td>
</tr>
</tbody>
</table>

---

2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5006iL

www.zimmer-group.com | Data, Drawings, 3-D Models, Operating Instructions
TECHNICAL DRAWINGS

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Air purge connection option
5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
6. Attachment option for customer-specific fittings
7. Energy supply IO-Link (M12, 5-pole)
8. Ground
9. Status display

Installation size GPP5006IL / 2-Jaw Parallel Grippers / pneumatic / Grippers

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5006IL

► ACCESORIES

► INCLUDED IN DELIVERY

4 [piece] Centering Disc
024230

2 [piece] Centering Disc
024231

2 [piece] Filters
CFILT00010

www.zimmer-group.com ► Data, Drawings, 3-D Models, Operating Instructions
**RECOMMENDED ACCESSORIES**

**GRIPPING COMPONENTS**

- **UB5006AL**: Universal jaw aluminium
- **UB5006ST**: Universal jaw steel
- **EB5006AL**: Aluminium adjustment jaw
- **EB5006ST**: Steel adjustment jaw
- **WB5006L**: Changeable jaw, loose part-set
- **WB5006F**: Changeable jaw, fix part

**ENERGY SUPPLY**

- **GVM5**: Straight Fittings - Quick Connect Style
- **DSV06**: Return valve

**CONNECTIONS / OTHER**

- **KAG500IL**: Plug-in connector straight 5 m - plug, socket M12
- **SCM-C-00-00-A**: Smart Communication Module
## PRODUCT SPECIFICATIONS

### Gripping force diagram

- Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

### Forces and moments

- Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>My [Nm]</td>
<td>105</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>1900</td>
</tr>
</tbody>
</table>

## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5008N-IL-10-A</th>
<th>GPP5008NC-IL-10-A</th>
<th>GPP5008NO-IL-10-A</th>
<th>GPP5008S-IL-10-A</th>
<th>GPP5008SC-IL-10-A</th>
<th>GPP5008SO-IL-10-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>520</td>
<td>710</td>
<td>8</td>
<td>1150</td>
<td>1580</td>
<td>4</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>560</td>
<td>750</td>
<td>1240</td>
<td>1670</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>190</td>
<td>190</td>
<td>430</td>
<td>430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycle count max. [cycle/min]</td>
<td>290</td>
<td>200</td>
<td>290</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>125</td>
<td>115</td>
<td>115</td>
<td>115</td>
<td>115</td>
<td>115</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>22</td>
<td>43</td>
<td>43</td>
<td>22</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.75</td>
<td>0.87</td>
<td>0.87</td>
<td>0.75</td>
<td>0.87</td>
<td>0.87</td>
</tr>
</tbody>
</table>
TECHNICAL DRAWINGS

Installation size GPP5008IL / 2-Jaw Parallel Grippers / pneumatic / Grippers

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Air purge connection option
5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
6. Attachment option for customer-specific fittings
7. Energy supply IO-Link (M12, 5-pole)
8. Ground
9. Status display

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5008IL

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
024231

2 [piece] Filters
CFILT00010

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5008AL - Universal jaw aluminium
UB5008ST - Universal jaw steel
EB5008AL - Aluminium adjustment jaw
EB5008ST - Steel adjustment jaw
WB5008L - Changeable jaw, loose part-set
WB5008F - Changeable jaw, fix part

ENERGY SUPPLY

GVM5 - Straight Fittings - Quick Connect Style
DSV06 - Return valve

CONNECTIONS / OTHER

KAG500IL - Plug-in connector straight 5 m - plug, socket M12
SCM-C-00-00-A - Smart Communication Module

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5010IL

PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

TECHNICAL DATA

Order no.
Control
Stroke per jaw [mm]
Gripping force in closing [N]
Gripping force in opening [N]
Gripping force secured by spring min. [N]
Cycle count max. [cycle/min]
Length of the gripper fingers max. [mm]
Repetition accuracy +/- [mm]
Operating pressure min. [bar]
Operating pressure max. [bar]
Nominal operating pressure [bar]
Operating temperature [°C]
Air volume per cycle [cm³]
Integrated valve technology
Integrated position sensing
Voltage [V]
Current consumption max. [A]
Protection to IEC 60529
Weight [kg]

Technical data
GPP5010N-IL-10-A  GPP5010NC-IL-10-A  GPP5010NO-IL-10-A  GPP5010S-IL-10-A  GPP5010SC-IL-10-A  GPP5010SO-IL-10-A

N  NC / NO  NC / NO  N  N  N

Mr [Nm]  75
My [Nm]  125
Fa [N]  2700
NC / NO / SC / SO

Gripper attachment
Energy supply
Fixing for gripper finger
Air purge connection option
Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
Attachment option for customer-specific fittings
Energy supply IO-Link (M12, 5-pole)
Ground
Status display
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5010IL

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
018187

2 [piece] Filters
CFILT00010

www.zimmer-group.com  ► Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5010AL  Universal jaw aluminium
UB5010ST  Universal jaw steel
EB5010AL  Aluminium adjustment jaw
EB5010ST  Steel adjustment jaw
WB5010L  Changeable jaw, loose part-set
WB5010F  Changeable jaw, fix part

ENERGY SUPPLY

GV1-8X8  Straight Fittings - Quick Connect Style

CONNECTIONS / OTHER

KAG500IL  Plug-in connector straight 5 m - plug, socket M12
SCM-C-00-00-A  Smart Communication Module

www.zimmer-group.com
# 2-JAW PARALLEL GRIPPERS
## INSTALLATION SIZE GPP5013IL

### PRODUCT SPECIFICATIONS

#### Gripping force diagram
![Gripping force diagram](image)

Show the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

<table>
<thead>
<tr>
<th>Forces and moments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displays static forces and moments that can also have an effect, besides the gripping force.</td>
</tr>
</tbody>
</table>

#### Forces and moments
- \( M_x > Nm \)
- \( M_y > Nm \)
- \( M_r > Nm \)
- \( F_a > N \)

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>110</th>
</tr>
</thead>
<tbody>
<tr>
<td>My [Nm]</td>
<td>130</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>3300</td>
</tr>
</tbody>
</table>

### TECHNICAL DATA

#### Order no.
- GPP5013N-IL-10-A
- GPP5013NC-IL-10-A
- GPP5013NO-IL-10-A
- GPP5013S-IL-10-A
- GPP5013SC-IL-10-A
- GPP5013SO-IL-10-A

#### Technical data

<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>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5013N-IL-10-A</td>
<td>13</td>
<td>1410</td>
<td>1490</td>
<td>2.4</td>
<td>2.4</td>
<td>200</td>
<td>0.01</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>3 ... +50</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
<td>0.12</td>
<td>IP64</td>
<td>2.5</td>
</tr>
<tr>
<td>GPP5013NC-IL-10-A</td>
<td>13</td>
<td>1920</td>
<td>1860</td>
<td>510</td>
<td>2.4</td>
<td>185</td>
<td>0.01</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>5 ... +50</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
<td>0.12</td>
<td>IP64</td>
<td>2.9</td>
</tr>
<tr>
<td>GPP5013NO-IL-10-A</td>
<td>13</td>
<td>3100</td>
<td>3280</td>
<td>510</td>
<td>2.4</td>
<td>185</td>
<td>0.01</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>5 ... +50</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
<td>0.12</td>
<td>IP64</td>
<td>2.9</td>
</tr>
<tr>
<td>GPP5013S-IL-10-A</td>
<td>6</td>
<td>4220</td>
<td>4400</td>
<td>1120</td>
<td>2.4</td>
<td>185</td>
<td>0.01</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>5 ... +50</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
<td>0.12</td>
<td>IP64</td>
<td>2.5</td>
</tr>
<tr>
<td>GPP5013SC-IL-10-A</td>
<td>6</td>
<td>4220</td>
<td>4400</td>
<td>1120</td>
<td>2.4</td>
<td>185</td>
<td>0.01</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>5 ... +50</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
<td>0.12</td>
<td>IP64</td>
<td>2.5</td>
</tr>
<tr>
<td>GPP5013SO-IL-10-A</td>
<td>6</td>
<td>4220</td>
<td>4400</td>
<td>1120</td>
<td>2.4</td>
<td>185</td>
<td>0.01</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>5 ... +50</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
<td>0.12</td>
<td>IP64</td>
<td>2.9</td>
</tr>
</tbody>
</table>

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5013IL

ACCESORIES

INCLUDED IN DELIVERY

6 [piece] Centering Disc
018187

2 [piece] Filters
CFILT00011
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5013AL: Universal jaw aluminium
- UB5013ST: Universal jaw steel
- EB5013AL: Aluminium adjustment jaw
- EB5013ST: Steel adjustment jaw
- WB5013L: Changeable jaw, loose part-set
- WB5013F: Changeable jaw, fix part

ENERGY SUPPLY

- GV1-8X8: Straight Fittings - Quick Connect Style

CONNECTIONS / OTHER

- KAG5001L: Plug-in connector straight 5 m - plug, socket M12
- SCM-C-00-00-A: Smart Communication Module

www.zimmer-group.com
## 2-JAW PARALLEL GRIPPERS
### INSTALLATION SIZE GPP5016IL

### PRODUCT SPECIFICATIONS

#### Gripping force diagram
![Gripping force diagram](image)

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

#### Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 145 |
| My [Nm] | 195 |
| Fa [N]  | 5200 |

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5016N-IL-10-A</th>
<th>GPP5016NC-IL-10-A</th>
<th>GPP5016NO-IL-10-A</th>
<th>GPP5016S-IL-10-A</th>
<th>GPP5016SC-IL-10-A</th>
<th>GPP5016SO-IL-10-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>2090</td>
<td>2860</td>
<td>4610</td>
<td>6310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>2220</td>
<td>2990</td>
<td>4900</td>
<td>6600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>770</td>
<td>770</td>
<td>1700</td>
<td>1700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>245</td>
<td>225</td>
<td>225</td>
<td>215</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>166</td>
<td>332</td>
<td>332</td>
<td>166</td>
<td>332</td>
<td>332</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>4.4</td>
<td>5.1</td>
<td>5.1</td>
<td>4.4</td>
<td>5.1</td>
<td>5.1</td>
</tr>
</tbody>
</table>

www.zimmer-group.com ➤ Data, Drawings, 3-D Models, Operating Instructions
Installation size GPP5016IL / 2-Jaw Parallel Grippers / pneumatic / Grippers

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Air purge connection option
5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
6. Attachment option for customer-specific fittings
7. Energy supply IO-Link (M12, 5-pole)
8. Ground
9. Status display

TECHNICAL DRAWINGS

NC / NO / SC / SO

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com  109
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5016IL

► ACCESORIES

INCLUDED IN DELIVERY

6 [piece] Centering Disc
019387

2 [piece] Filters
CFILT00011

www.zimmer-group.com  ►  Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5016AL: Universal jaw aluminium
- UB5016ST: Universal jaw steel
- EB5016AL: Aluminium adjustment jaw
- EB5016ST: Steel adjustment jaw
- WB5016L: Changeable jaw, loose part set
- WB5016F: Changeable jaw, fix part

ENERGY SUPPLY

- GV1-8X8: Straight Fittings - Quick Connect Style

CONNECTIONS / OTHER

- KAG500IL: Plug-in connector straight 5 m - plug, socket M12
- SCM-C-00-00-A: Smart Communication Module

www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5025IL

PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments

<table>
<thead>
<tr>
<th>N</th>
<th>N</th>
<th>N</th>
<th>N</th>
<th>N</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>9000</td>
<td>2100</td>
<td>5400</td>
<td>1200</td>
<td>3600</td>
<td>7200</td>
</tr>
<tr>
<td>7000</td>
<td>2000</td>
<td>5000</td>
<td>1100</td>
<td>3000</td>
<td>6000</td>
</tr>
<tr>
<td>5000</td>
<td>1500</td>
<td>4000</td>
<td>900</td>
<td>2500</td>
<td>5000</td>
</tr>
<tr>
<td>3000</td>
<td>1000</td>
<td>3000</td>
<td>600</td>
<td>1500</td>
<td>3000</td>
</tr>
<tr>
<td>1000</td>
<td>400</td>
<td>1000</td>
<td>200</td>
<td>500</td>
<td>1000</td>
</tr>
</tbody>
</table>

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Displays static forces and moments that can also have an effect, besides the gripping force.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPP5025N-IL-10-A</th>
<th>GPP5025NC-IL-10-A</th>
<th>GPP5025NO-IL-10-A</th>
<th>GPP5025S-IL-10-A</th>
<th>GPP5025SC-IL-10-A</th>
<th>GPP5025SO-IL-10-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>3280</td>
<td>4510</td>
<td>6360</td>
<td>8730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>3490</td>
<td>4710</td>
<td>6760</td>
<td>9130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>1220</td>
<td>1220</td>
<td>2370</td>
<td>2370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>310</td>
<td>265</td>
<td>265</td>
<td>220</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>420</td>
<td>830</td>
<td>420</td>
<td>830</td>
<td>830</td>
<td>830</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>8.5</td>
<td>10.4</td>
<td>10.4</td>
<td>8.5</td>
<td>10.4</td>
<td>10.4</td>
</tr>
</tbody>
</table>
# TECHNICAL DRAWINGS

NC / NO / SC / SO

**1. Gripper attachment**

**2. Energy supply**

**3. Fixing for gripper finger**

**4. Air purge connection option**

**5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)**

**6. Attachment option for customer-specific fittings**

**7. Energy supply IO-Link (M12, 5-pole)**

**8. Ground**

**9. Status display**

---

Installation size GPP5025IL / 2-Jaw Parallel Grippers / pneumatic / Grippers

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GPP5025IL

► ACCESORIES

► INCLUDED IN DELIVERY

- 6 [piece] Centering Disc
  030529
- 2 [piece] Filters
  CFILT00011

www.zimmer-group.com  ► Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5025AL Universal jaw aluminium
UB5025ST Universal jaw steel
EB5025AL Aluminum adjustment jaw
EB5025ST Steel adjustment jaw
WB5025L Changeable jaw, loose part-set
WB5025F Changeable jaw, fix part

ENERGY SUPPLY

GV1-8X8 Straight Fittings - Quick Connect Style

CONNECTIONS / OTHER

KAG500IL Plug-in connector straight 5 m - plug, socket M12
SCM-C-00-00-A Smart Communication Module

www.zimmer-group.com
SECURED CONFIGURATION EXAMPLES
GPP5000IL / GPD5000IL SERIES

► GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KAG500IL

Remove the KAG500IL connector
and wire up the open end of the
cable directly to the control system
terminal strip.

Power
1-4 grippers
24V 5A power supply unit

► GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KAG500IL

Remove the KAG500IL connector
and wire up the open end of the
cable directly to the control system
terminal strip.

Power
1-4 grippers
24V 5A power supply unit
**GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)**

- **IO-Link connection cable**: 5 m M12-connecting cable 5x0.34 (max. cable length 10 m)
- **Order No.**: KAG500IL
- **24V master supply**
- **Field bus**: EtherCAT
- **Control system**: Beckhoff
- **1-4 grippers**: 24V 5A power supply unit

**GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (SIEMENS)**

- **IO-Link connection cable**: 5 m M12-connecting cable 5x0.34 (max. cable length 10 m)
- **Order No.**: KAG500IL
- **24V master supply**
- **Field bus**: PROFINET
- **Control system**: e.g. Siemens S7 1200
- **1-4 grippers**: 24V 5A power supply unit
2-JAW PARALLEL GRIPPERS
SERIES GEP5000

PRODUCT ADVANTAGES

“ALL in ONE”

► Approximately the same gripping force as a comparable pneumatic gripper
► Self locking mechanism in case of power drop
► Same connection hole patterns as a comparable pneumatic gripper
► Plug and play – single-cable solution, supports incredibly easy control using I/O signals or IO-Link
► Integrated ACM control module - option of configuring gripping force, travel time and switching points
► Protected from corrosion and sealed in accordance with IP64
► Brushless DC motor – up to 30 million cycles without maintenance

SERIES CHARACTERISTICS

<table>
<thead>
<tr>
<th>Installation size</th>
<th>GEP50XX</th>
<th>Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IL-00</td>
<td>IO-00</td>
</tr>
<tr>
<td>IO-Link</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Digital I/O</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>30 million maintenance-free cycles (max.)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Integrated sensing</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Gripping force adjustable</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Self locking mechanism</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Purged air</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>IP64</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
**BENEFITS IN DETAIL**

1. **Wedge hook mechanism**
   - Supports to absorb high forces and moments
   - Synchronized gripper jaw movement

2. **Gripper jaw**
   - Gripper fingers mounted using removable centering sleeves
   - Lubricated for life via incorporated lubrication slots

3. **Dual lip seal**
   - Enables IP64
   - Prevents grease from being squeezed out, increasing service life

4. **Steel Linear Guide**
   - Steel in steel guide
   - Enables use of extremely long gripper fingers

5. **Mounting and positioning**
   - Alternatively, on several sides for customized mounting
   - Pneumatic and electrical versions identical apart from height

6. **BLDC motor**
   - Wear-resistant brushless DC motor

7. **Advanced control module**
   - Integrated control module with single-cable solution
   - Gripping force, travel time and query programmable via the control panel on the housing

8. **Drive train**
   - Combination of trapezoidal spindle and gear
   - Durable and robust

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Stroke per jaw [mm]</th>
<th>Gripping force [N]</th>
<th>Weight [kg]</th>
<th>IP class</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEP5006</td>
<td>6</td>
<td>540 - 960</td>
<td>0.79</td>
<td>IP64*</td>
</tr>
<tr>
<td>GEP5008</td>
<td>8</td>
<td>650 - 1150</td>
<td>1.16</td>
<td>IP64*</td>
</tr>
<tr>
<td>GEP5010</td>
<td>10</td>
<td>980 - 1520</td>
<td>1.66</td>
<td>IP64*</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)

**FURTHER INFORMATION IS AVAILABLE ONLINE**

All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com). Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.
2-JAW PARALLEL GRIPPERS
SERIES GEP5000 FUNCTIONAL DESCRIPTION

GRIPPING COMPONENTS

**Universal jaws – UB5000**
Can be used immediately or for individual reprocessing
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.

**Adjustment jaws – EB5000**
For tool-free adaptation of the gripper range
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.

**Interchangeable jaws – WB5000**
Enable fast change of individual gripper fingers
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

---

**THE GRIPPING COMPONENTS CAN BE COMBINED!**
The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.
**CONNECTIONS / OTHER**

**Plug-in connectors**
For extending and fabricating the connection lines
Cables with a length of 10 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M12. A 5 m long cable with connector / socket is available for the IO-Link connection.

**Centering sleeves**
For defined position measurement of the gripper fingers
The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP5006

PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 43
Mx [Nm] 70
My [Nm] 46
Fa [N] 1250

TECHNICAL DATA - BASIC VERSION

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEP5006IL-00-A</td>
</tr>
<tr>
<td>Control</td>
<td>I/O-Link</td>
</tr>
<tr>
<td>Drive</td>
<td>BLDC motor</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>6</td>
</tr>
<tr>
<td>Self locking mechanism</td>
<td>mechanical</td>
</tr>
<tr>
<td>Control time [s]</td>
<td>0.035</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.4</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>100</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>5 ... 50</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>5</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.79</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)

TECHNICAL DATA - MODES

TECHNICAL DATA - N mode

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEP5006IL-00-A</td>
</tr>
<tr>
<td>Gripping force ⇐ min. / max. [N]</td>
<td>540 / 960</td>
</tr>
<tr>
<td>Gripping force ⇒ min. / max. [N]</td>
<td>540 / 960</td>
</tr>
<tr>
<td>Travel time ⇐ min. / max. [s]</td>
<td>0.15 / 0.22</td>
</tr>
<tr>
<td>Travel time ⇒ min. / max. [s]</td>
<td>0.15 / 0.22</td>
</tr>
</tbody>
</table>

TECHNICAL DATA - NC mode

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEP5006IL-00-A</td>
</tr>
<tr>
<td>Gripping force ⇐ min. / max. [N]</td>
<td>-</td>
</tr>
<tr>
<td>Gripping force ⇒ min. / max. [N]</td>
<td>540 / 960</td>
</tr>
<tr>
<td>Travel time ⇐ min. / max. [s]</td>
<td>0.15 / 0.22</td>
</tr>
<tr>
<td>Travel time ⇒ min. / max. [s]</td>
<td>0.13</td>
</tr>
</tbody>
</table>

TECHNICAL DATA - NO mode

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEP5006IL-00-A</td>
</tr>
<tr>
<td>Gripping force ⇐ min. / max. [N]</td>
<td>-</td>
</tr>
<tr>
<td>Gripping force ⇒ min. / max. [N]</td>
<td>540 / 960</td>
</tr>
<tr>
<td>Travel time ⇐ min. / max. [s]</td>
<td>0.13</td>
</tr>
<tr>
<td>Travel time ⇒ min. / max. [s]</td>
<td>0.15 / 0.22</td>
</tr>
</tbody>
</table>
TECHNICAL DRAWINGS

1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)

Installation size GEP5006 / 2-Jaw Parallel Grippers / electrical / Grippers

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP5006

► ACCESORIES

► INCLUDED IN DELIVERY

4 [piece] Centering Disc
024230

2 [piece] Centering Disc
024231

► INFRASTRUCTURE IO-LINK

IO-Link
Master (externally)

Power adapter

IO-Link
Master (internally)

B12-Y-5IL

KAG500IL

IO-Link
Grippers

www.zimmer-group.com Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5006AL  Universal jaw aluminium
UB5006ST  Universal jaw steel
EB5006AL  Aluminium adjustment jaw
EB5006ST  Steel adjustment jaw
WB5006L  Changeable jaw, loose part-set
WB5006F  Changeable jaw, fix part

RECOMMENDED ACCESSORY GEP5006IL-00-A

CONNECTIONS / OTHER

KAG500IL  Plug-in connector straight 5 m - plug, socket M12
B12-Y-5IL  Y-Plug-in Connector
SCM-C-00-00-A  Smart Communication Module

RECOMMENDED ACCESSORY GEP5006IO-00-A

CONNECTIONS / OTHER

KAG1000B8  Plug-in Connector Straight Cable 10 m - Female M12
KAW1000B8  Plug-in Connector Angled Cable 10 m - Female M12
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP5008

PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 60
Mx [Nm] 105
My [Nm] 65
Fa [N] 1900

TECHNICAL DATA - BASIC VERSION

Order no. GEP5008IL-00-A GEP5008IO-00-A
Control
Drive BLDC motor BLDC motor
Stroke per jaw [mm] 8 8
Self locking mechanism mechanical mechanical
Control time [s] 0.035 0.035
Permissible weight per jaw max [kg] 0.7 0.7
Length of the gripper fingers max. [mm] 125 125
Repetition accuracy +/- [mm] 0.01 0.01
Operating temperature [°C] 5 ... 50 5 ... 50
Voltage [V] 24 24
Current consumption max. [A] 5 5
Protection to IEC 60529 IP64* IP64*
Weight [kg] 1.16 1.16

TECHNICAL DATA - MODES

Order no. GEP5008IL-00-A GEP5008IO-00-A

Gripping force

Gripping force min. / max. [N]

<table>
<thead>
<tr>
<th>Mode</th>
<th>GEP5008IL-00-A</th>
<th>GEP5008IO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>650 / 1150</td>
<td>650 / 1150</td>
</tr>
<tr>
<td>NC</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NO</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Gripping force min. / max. [N]

<table>
<thead>
<tr>
<th>Mode</th>
<th>GEP5008IL-00-A</th>
<th>GEP5008IO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NC</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NO</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Travel time

<table>
<thead>
<tr>
<th>Mode</th>
<th>GEP5008IL-00-A</th>
<th>GEP5008IO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>NC</td>
<td>0.18 / 0.29</td>
<td>0.18 / 0.29</td>
</tr>
<tr>
<td>NO</td>
<td>0.15</td>
<td>0.15</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)

---

**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)

---

**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)

---

**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)

---

**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP5008

► ACCESSORIES

 ► INCLUDED IN DELIVERY

6 (piece)
Centering Disc
024231

► INFRASTRUCTURE IO-LINK

Power adapter
B12-Y-5IL
KAG500IL

 ► IO-Link
Master (internally)

 ► IO-Link
Master (external)

 ► IO-Link
Grippers

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
### RECOMMENDED ACCESSORIES

#### GRIPPING COMPONENTS

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="UB5008AL" /></td>
<td>Universal jaw aluminium</td>
</tr>
<tr>
<td><img src="image2" alt="UB5008ST" /></td>
<td>Universal jaw steel</td>
</tr>
<tr>
<td><img src="image3" alt="EB5008AL" /></td>
<td>Aluminium adjustment jaw</td>
</tr>
<tr>
<td><img src="image4" alt="EB5008ST" /></td>
<td>Steel adjustment jaw</td>
</tr>
<tr>
<td><img src="image5" alt="WB5008L" /></td>
<td>Changeable jaw, loose part-set</td>
</tr>
<tr>
<td><img src="image6" alt="WB5008F" /></td>
<td>Changeable jaw, fix part</td>
</tr>
</tbody>
</table>

### CONSTRUCTIONS / OTHER

**Recommended Accessory:** GEP5008IL-00-A

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7" alt="KAG500IL" /></td>
<td>Plug-in connector straight 5 m - plug, socket M12</td>
</tr>
<tr>
<td><img src="image8" alt="B12-Y-SIL" /></td>
<td>Y-Plug-in Connector</td>
</tr>
<tr>
<td><img src="image9" alt="SCM-C-00-00-A" /></td>
<td>Smart Communication Module</td>
</tr>
</tbody>
</table>

**Recommended Accessory:** GEP5008IO-00-A

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image10" alt="KAG1000B8" /></td>
<td>Plug-in Connector Straight Cable 10 m - Female M12</td>
</tr>
<tr>
<td><img src="image11" alt="KAW1000B8" /></td>
<td>Plug-in Connector Angled Cable 10 m - Female M12</td>
</tr>
</tbody>
</table>

---

Data, Drawings, 3-D Models, Operating Instructions: [www.zimmer-group.com](http://www.zimmer-group.com)
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP5010

PRODUCT SPECIFICATIONS

Gripping force diagram

- Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
- Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 75 |
| My [Nm] | 125 |
| Fa [N]  | 95 |
| Fa [N]  | 2700 |

- TECHNICAL DATA - BASIC VERSION

Order no. | GEP5010IL-00-A | GEP5010IO-00-A
---|---|---
Control | Digital I/O | Digital I/O
Drive | BLDC motor | BLDC motor
Stroke per jaw [mm] | 10 | 10
Self locking mechanism | mechanical | mechanical
Control time [s] | 0.035 | 0.035
Permissible weight per jaw max [kg] | 1.3 | 1.3
Length of the gripper fingers max. [mm] | 160 | 160
Repetition accuracy +/- [mm] | 0.01 | 0.01
Operating temperature [°C] | 5 ... 50 | 5 ... 50
Voltage [V] | 24 | 24
Current consumption max. [A] | 5 | 5
Protection to IEC 60529 | IP64* | IP64*
Weight [kg] | 1.66 | 1.66

* with purged air (max. 0.5 bar)

- TECHNICAL DATA - MODES

Gripping force

| GEP5010IL-00-A | GEP5010IIO-00-A |
---|---|
Gripping force \(\rightarrow\) min. / max. [N] | 980 / 1520 | 980 / 1520 |
Gripping force \(\rightarrow\) min. / max. [N] | 980 / 1520 | 980 / 1520 |
Travel time \(\rightarrow\) min. / max. [s] | 0.21 / 0.32 | 0.21 / 0.32 |
Travel time \(\rightarrow\) min. / max. [s] | 0.21 / 0.32 | 0.21 / 0.32 |

Gripping force

| GEP5010IL-00-A | GEP5010IIO-00-A |
---|---|
Gripping force \(\rightarrow\) min. / max. [N] | - | - |
Gripping force \(\rightarrow\) min. / max. [N] | - | - |
Travel time \(\rightarrow\) min. / max. [s] | 0.21 / 0.32 | 0.21 / 0.32 |
Travel time \(\rightarrow\) min. / max. [s] | 0.16 | 0.16 |

Gripping force

| GEP5010IL-00-A | GEP5010IIO-00-A |
---|---|
Gripping force \(\rightarrow\) min. / max. [N] | - | - |
Gripping force \(\rightarrow\) min. / max. [N] | - | - |
Travel time \(\rightarrow\) min. / max. [s] | 0.16 | 0.16 |
Travel time \(\rightarrow\) min. / max. [s] | 0.21 / 0.32 | 0.21 / 0.32 |
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP5010

ACCESORIES

- Centering Disc
- Power adapter
- Grippers
  - Master (external)
  - Master (internally)

INCLUDED IN DELIVERY

- 6 (piece) Centering Disc

INFRASETRUCTURE IO-LINK

- Power adapter
- B12-Y-5IL
- KAG500IL
- Grippers
  - IO-Link Master (external)
  - IO-Link Master (internally)
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5010AL: Universal jaw aluminium
- UB5010ST: Universal jaw steel
- EB5010AL: Aluminium adjustment jaw
- EB5010ST: Steel adjustment jaw
- WB5010L: Changeable jaw, loose part-set
- WB5010F: Changeable jaw, fix part

RECOMMENDED ACCESSORY GEP5010IL-00-A

CONNECTIONS / OTHER

- KAG500IL: Plug-in connector straight 5 m - plug, socket M12
- B12-Y-SIL: Y-Plug-in Connector
- SCM-C-00-00-A: Smart Communication Module

RECOMMENDED ACCESSORY GEP5010IO-00-A

CONNECTIONS / OTHER

- KAG1000B8: Plug-in Connector Straight Cable 10 m - Female M12
- KAW1000B8: Plug-in Connector Angled Cable 10 m - Female M12

www.zimmer-group.com
SECURED CONFIGURATION EXAMPLES
GEP5000 / GED5000 SERIES

► GPP5000IL / GPDP5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KAG500IL

1 gripper
24 V 5 A power supply unit with boost
Phoenix Contact
Order No. 2866750

2 grippers
24 V 10 A power supply unit with boost
Phoenix Contact
Order No. 2866763

3-4 grippers
24 V 20 A power supply unit with boost
Phoenix Contact
Order No. 2866776

Control system
Beckhoff

► GPP5000IL / GPDP5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KAG500IL

Control system
e.g. Siemens ET200SP

1 gripper
24 V 5 A power supply unit with boost
Phoenix Contact
Order No. 2866750

2 grippers
24 V 10 A power supply unit with boost
Phoenix Contact
Order No. 2866763

3-4 grippers
24 V 20 A power supply unit with boost
Phoenix Contact
Order No. 2866776
GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KAG500IL

Connector M12, N-coded, 3-pin

Y adapter
B12-Y-5IL

IO-Link master
Port class B
Beckhoff

Field bus
EtherCAT

24V master supply

Power distributor CASB00030
Weidmüller 1989340000
quadruple

2 grippers
24V 10A power supply unit with boost
Phoenix Contact
Order No. 2866763

1 gripper
24V 5A power supply unit with boost
Phoenix Contact
Order No. 2866750

3-4 grippers
24V 20A power supply unit with boost
Phoenix Contact
Order No. 2866776

24V 20A power supply

Control system
Beckhoff

e.g. Siemens S7 1200
SECURED CONFIGURATION EXAMPLES
GEP5000 / GED5000 SERIES

GEP5000 / GED5000 (DIGITAL IO) WIRING TO CONTROL CABINET

- 1 gripper
  24V 5A power supply unit with boost
  Phoenix Contact
  Order No. 2866750

- 2 grippers
  24V 10A power supply unit with boost
  Phoenix Contact
  Order No. 2866763

- 3-4 grippers
  24V 20A power supply unit with boost
  Phoenix Contact
  Order No. 2866776

Control system
Beckhoff / Siemens

TERMINAL STRIP

Power

Data, Drawings, 3-D Models, Operating Instructions
3-JAW CONCENTRIC GRIPPERS
SERIES GPD5000

PRODUCT ADVANTAGES

“The best”

Steel Linear Guide –
The superior guidance system concept
The steel / steel guide stands for lasting precision, durability and a long service life—featuring maintenance intervals of up to 30 million gripping cycles. Benefit from these features and increase the profitability and process reliability of your machine.

Leakproof and corrosion protected – The universal gripper
Suitable for virtually all ambient conditions, with a sealed guide up to IP67 and corrosion protection as standard, you are able to use this gripper universally. As a result, the range of models in your production is reduced, along with a reduction in associated storage and process costs.

Aluminum Linear Guide – The alternative
Reduced to those aspects which are the most important, the steel / aluminum guide variant offers significantly better performance when compared to a similar gripper with a T-groove travel guide, and is on par with the best principles of toothed guidance systems.

BENEFITS IN DETAIL

1. Wedge hook mechanism
   - high forces and moments capacity
   - Synchronized gripper jaw movement
2. Gripper jaw
   - Gripper fingers mounted using removable centering sleeves
   - Lubricated for life via incorporated lubrication slots
3. Mounting block
   - mounting for inductive proximity switch
4. Integrated gripping force safety device
   - Spring built into cylinder chamber as an energy store
5. Sensing slot
   - mounting and positioning of magnetic field sensors
6. Mounting and positioning
   - Alternatively, on several sides for customized mounting
   - Pneumatic and electrical versions identical apart from height
7. Drive
   - Double-acting pneumatic rotor cylinder
8. Steel Linear Guide
   - Steel in steel guide
   - Enables use of extremely long gripper fingers
   - Also available in steel / aluminum variant
9. Dual lip seal
   - IP64 and up to IP67 (with purged air) for Protector version
   - Prevents grease from being squeezed out, increasing service life
### SERIES CHARACTERISTICS

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GPDS0XX</strong></td>
<td>-00</td>
</tr>
</tbody>
</table>

- **N**: Long stroke
- **NC**: Long stroke / Spring closing
- **NO**: Long stroke / Spring opening
- **S**: High-strength
- **SC**: High-strength / Spring closing
- **SO**: High-strength / Spring opening
- **Steel / steel guide**
- **Steel / aluminum guide**
- **15 million maintenance-free cycles** (max.)
- **30 million maintenance-free cycles** (max.)
- **Inductive sensor**
- **Magnetic field sensor**
- **Protected against corrosion**
- **Purged air**
- **Temperature-resistant**

- **IP40**
- **IP64**
- **IP67**

*with purged air (max. 0.5 bar)

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Stroke per jaw</th>
<th>Gripping force</th>
<th>Weight</th>
<th>IP class</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>[mm]</strong></td>
<td><strong>[N]</strong></td>
<td><strong>[kg]</strong></td>
<td></td>
</tr>
<tr>
<td>GPDS003</td>
<td>2.5</td>
<td>310 - 465</td>
<td>0.14 - 0.22</td>
</tr>
<tr>
<td>GPDS004</td>
<td>2 - 4</td>
<td>460 - 1520</td>
<td>0.27 - 0.41</td>
</tr>
<tr>
<td>GPDS006</td>
<td>3 - 6</td>
<td>740 - 2370</td>
<td>0.48 - 0.58</td>
</tr>
<tr>
<td>GPDS008</td>
<td>4 - 8</td>
<td>1260 - 3910</td>
<td>0.83 - 1</td>
</tr>
<tr>
<td>GPDS010</td>
<td>5 - 10</td>
<td>2290 - 7160</td>
<td>1.45 - 1.9</td>
</tr>
<tr>
<td>GPDS013</td>
<td>6 - 13</td>
<td>3770 - 11450</td>
<td>2.6 - 3.7</td>
</tr>
<tr>
<td>GPDS016</td>
<td>8 - 16</td>
<td>6870 - 20330</td>
<td>5.7 - 7.5</td>
</tr>
<tr>
<td>GPDS025</td>
<td>14 - 25</td>
<td>8430 - 22850</td>
<td>11.8 - 15.4</td>
</tr>
<tr>
<td>GPDS030</td>
<td>17 - 30</td>
<td>12130 - 32400</td>
<td>21 - 27.5</td>
</tr>
<tr>
<td>GPDS035</td>
<td>20 - 35</td>
<td>16600 - 45200</td>
<td>37.8 - 42</td>
</tr>
<tr>
<td>GPDS045</td>
<td>26 - 45</td>
<td>27900 - 72500</td>
<td>78.6 - 99.9</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
3-JAW CONCENTRIC GRIPPERS
SERIES GPD5000 FUNCTIONAL DESCRIPTION

GRIPPING COMPONENTS

Universal jaws – UB5000
Can be used immediately or for individual reprocessing
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.

Adjustment jaws – EB5000
For tool-free adaptation of the gripper range
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.

Interchangeable jaws – WB5000
Enable fast change of individual gripper fingers
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.
GRIPPING COMPONENTS

Pressure piece – ADS5000
When the gripper fingers are open, the pressure piece is used for spring-supported positioning of the workpiece against a limit stop. This greatly reduces the loads on the gripper that arise during joining.

ENERGY SUPPLY

Pneumatic threaded connections
Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.
**ENERGY SUPPLY**

**Pressure safety valve – DSV**
Ensures safe retention of force and position if the system pressure drops

The integrated double check valve, which can be unlocked, retains the system pressure of the gripper in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled bleeding of the gripper.

**Quick exhaust valve – DEV**
For rapid bleeding of the compressed air and preventing back pressure

The inline valves make a faster cycle time possible and prevent the formation of condensate in grippers with a small cylinder volume. To ensure the function, the valve must be installed as close to the gripper's air connection as possible.
**SENSORS**

**Inductive sensors – NJ**

For direct position sensing of the gripper jaws

The sensor is guided into the intake as far as it will go and fixed in place using the lateral clamping screw. Tuning to the desired position then takes place by adjusting the cam switch. The sensors are available in versions with 5 m cables with exposed leads and 0.3 m cable with connector, as well as with direct plug orientation.

*Not for variant AL-A*

**2-point magnetic field sensors – MFS**

With two freely programmable switching points

Using the programming unit integrated in the cable, two switch points can be freely defined for this sensor. To do so, the sensor is clamped in the C-groove, the gripper approaches position one and the position is taught in using the teach button. Afterwards, the second position is approached with the gripper and programmed. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The sensors are available in versions with 5 m cables with exposed leads and 0.3 m cable with connector.
1-point magnetic field sensors – MFS

For non-contact sensing of the piston position

These sensors are installed in the C-groove of the gripper and detect the magnet attached to the piston of the gripper. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The variants are available in versions with 5 m cables with exposed leads and 0.3 m cable with connector.
**CONNECTIONS / OTHER**

**Plug-in connectors**  
For extending and fabricating the connection lines for the sensors  
Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.

**Centering sleeves**  
For defined position measurement of the gripper fingers  
The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

\[
\begin{align*}
\text{Mr [Nm]} & : 7 \\
\text{Mx [Nm]} & : 14 \\
\text{My [Nm]} & : 13 \\
\text{Fa [N]} & : 550 \\
\end{align*}
\]

-AL-A

Steel / aluminum guide

Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

\[
\begin{align*}
\text{Mr [Nm]} & : 6 \\
\text{Mx [Nm]} & : 12 \\
\text{My [Nm]} & : 12 \\
\text{Fa [N]} & : 500 \\
\end{align*}
\]

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide
### TECHNICAL DATA

#### Order no. GPD5003N-00-A GPD5003NC-00-A GPD5003NO-00-A

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw (mm)</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>310</td>
<td>440</td>
<td>465</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>335</td>
<td>130</td>
<td>130</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>0.015</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.015</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>65</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>4.2</td>
<td>9.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.14</td>
<td>0.18</td>
<td>0.18</td>
</tr>
</tbody>
</table>

#### Order no. GPD5003N-20-A GPD5003NC-20-A GPD5003NO-20-A

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

#### Order no. GPD5003N-21-A GPD5003NC-21-A GPD5003NO-21-A

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.18</td>
<td>0.22</td>
<td>0.22</td>
</tr>
</tbody>
</table>

#### Order no. GPD5003N-24-A GPD5003NC-24-A GPD5003NO-24-A

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.18</td>
<td>0.22</td>
<td>0.22</td>
</tr>
</tbody>
</table>

#### Order no. GPD5003N-AL-A GPD5003NC-AL-A GPD5003NO-AL-A

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>60</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.14</td>
<td>0.17</td>
<td>0.17</td>
</tr>
</tbody>
</table>
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5003

TECHNICAL DRAWINGS
Title: TECHNICAL DRAWINGS

N / NC / NO
-00-A / -20-A / -AL-A

N / NC / NO
-21-A / -24-A

Hoseless air feed-through M3

Legend:
1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Air purge connection option (max. 0.5 bar)
6. Attachment option for customer-specific fittings
7. Adapter
8. Gripper

A. Air connection (close)
B. Air connection (open)
C. Air connection, alternative (close)
D. Air connection, alternative (open)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5003

► ACCESORIES

► INCLUDED IN DELIVERY

6-piece
Centering Disc

DST06510

www.zimmer-group.com  ► Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5003AL Universal jaw aluminium
UB5003ST Universal jaw steel
KFS0N Rubber-Coated Tape Knobbed
EB5003AL Aluminum adjustment jaw
EB5003ST Steel adjustment jaw
ADS5003-01 Pressure piece N / S

ADS5003-02 Pressure piece NC / NO / SC / SO

ENERGY SUPPLY

GVM3 Straight Fittings - Barb Style Connection
WVM3 Angled Fittings - Barb Style Connection
DSV1-8 Pressure safety valve
DSV1-8E Pressure safety valve with quick exhaust

SENSORS

MFS01-S-KHC-P1-PNP Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS02-S-KHC-P1-PNP Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS01-S-KHC-P2-PNP 2-Position-Sensor Cable 0,3 m - Connector M8
MFS02-S-KHC-P2-PNP 2-Position-Sensor Cable 0,3 m - Connector M8

CONNECTIONS / OTHER

KAG500 Plug-in connector Straight Cable 5m - Socket M8 (female)
S12-G-3 Plug-in connector customizable Straight - Connector M12
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5004

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 14
Mx [Nm] 29
My [Nm] 23
Fa [N] 750

-AL-A
Steel / aluminum guide

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 10
Mx [Nm] 25
My [Nm] 20
Fa [N] 700

VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide
### TECHNICAL DATA

#### Order no.

<table>
<thead>
<tr>
<th>Technical data</th>
<th>GPD5004N-00-A</th>
<th>GPD5004NC-00-A</th>
<th>GPD5004NO-00-A</th>
<th>GPD5004S-00-A</th>
<th>GPD5004SC-00-A</th>
<th>GPD5004SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw (mm)</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>460</td>
<td>650</td>
<td>460</td>
<td>1010</td>
<td>1430</td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>500</td>
<td>690</td>
<td>500</td>
<td>1100</td>
<td>1520</td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>420</td>
<td>420</td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.025</td>
<td>0.018</td>
<td>0.028</td>
<td>0.025</td>
<td>0.018</td>
<td>0.028</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>80</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>11</td>
<td>21</td>
<td>21</td>
<td>11</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.27</td>
<td>0.33</td>
<td>0.33</td>
<td>0.27</td>
<td>0.33</td>
<td>0.33</td>
</tr>
</tbody>
</table>

#### Order no.

<table>
<thead>
<tr>
<th>Technical Data - High Temperature Version</th>
<th>GPD5004N-20-A</th>
<th>GPD5004NC-20-A</th>
<th>GPD5004NO-20-A</th>
<th>GPD5004S-20-A</th>
<th>GPD5004SC-20-A</th>
<th>GPD5004SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

#### Order no.

<table>
<thead>
<tr>
<th>Technical Data - Protector Version</th>
<th>GPD5004N-21-A</th>
<th>GPD5004NC-21-A</th>
<th>GPD5004NO-21-A</th>
<th>GPD5004S-21-A</th>
<th>GPD5004SC-21-A</th>
<th>GPD5004SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.35</td>
<td>0.41</td>
<td>0.41</td>
<td>0.35</td>
<td>0.41</td>
<td>0.41</td>
</tr>
</tbody>
</table>

#### Order no.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.35</td>
<td>0.41</td>
<td>0.41</td>
<td>0.35</td>
<td>0.41</td>
<td>0.41</td>
</tr>
</tbody>
</table>

*with purged air (max. 0,5 bar)

#### Order no.

<table>
<thead>
<tr>
<th>Technical data</th>
<th>GPD5004N-AL-A</th>
<th>GPD5004NC-AL-A</th>
<th>GPD5004NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.18</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.27</td>
<td>0.32</td>
<td>0.32</td>
</tr>
</tbody>
</table>
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5004

> TECHNICAL DRAWINGS
TECHNICAL DRAWINGS

Hoseless air feed-through M3

Gripper attachment
Energy supply
Fixing for gripper finger
Integrated slot for magnetic field sensor
Air purge connection option (max. 0.5 bar)
Attachment option for customer-specific fittings
Adapter
Gripper

Air connection (close)
Air connection (open)
Air connection, alternative (close)
Air connection, alternative (open)
ACCESORIES

INCLUDED IN DELIVERY

6 [piece]
Centering Disc

015761
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5004AL: Universal jaw aluminium
- UB5004ST: Universal jaw steel
- EB5004AL: Aluminum adjustment jaw
- EB5004ST: Steel adjustment jaw
- WB5004L: Changeable jaw, loose part-set
- WB5004R: Changeable jaw, fix part

- ADS5004-01: Pressure piece N / S
- ADS5004-02: Pressure piece NC / NO / SC / SO

ENERGY SUPPLY

- GVM5: Straight Fittings - Quick Connect Style
- WM5: Angled Fittings - Quick Connect Style
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- MFS01-S-KHC-P1-PNP: Magnetic field sensor angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor straight Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position-Sensor Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position-Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

- KAG500: Plug-in connector Straight Cable 5m - Socket M8 (female)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5006

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

► Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

-AL-A

Steel / aluminum guide

► Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

► Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 43
Mx [Nm] 70
My [Nm] 46
Fa [N] 1250

► Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 40
Mx [Nm] 60
My [Nm] 45
Fa [N] 1200

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide
<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS006N-00-A</th>
<th>GPDS006NC-00-A</th>
<th>GPDS006NO-00-A</th>
<th>GPDS006S-00-A</th>
<th>GPDS006SC-00-A</th>
<th>GPDS006SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>740</td>
<td>1020</td>
<td>1620</td>
<td>2240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>800</td>
<td>1080</td>
<td>1750</td>
<td>2370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>280</td>
<td>280</td>
<td>620</td>
<td>620</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.028</td>
<td>0.018</td>
<td>0.038</td>
<td>0.028</td>
<td>0.018</td>
<td>0.038</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>100</td>
<td>90</td>
<td>90</td>
<td>85</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>22</td>
<td>43</td>
<td>43</td>
<td>22</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.48</td>
<td>0.58</td>
<td>0.58</td>
<td>0.48</td>
<td>0.58</td>
<td>0.58</td>
</tr>
</tbody>
</table>

**Technical Data - High Temperature Version**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS006N-20-A</th>
<th>GPDS006NC-20-A</th>
<th>GPDS006NO-20-A</th>
<th>GPDS006S-20-A</th>
<th>GPDS006SC-20-A</th>
<th>GPDS006SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.61</td>
<td>0.71</td>
<td>0.71</td>
<td>0.61</td>
<td>0.71</td>
<td>0.71</td>
</tr>
</tbody>
</table>

**Technical Data - Protector Version**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS006N-21-A</th>
<th>GPDS006NC-21-A</th>
<th>GPDS006NO-21-A</th>
<th>GPDS006S-21-A</th>
<th>GPDS006SC-21-A</th>
<th>GPDS006SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.61</td>
<td>0.71</td>
<td>0.71</td>
<td>0.61</td>
<td>0.71</td>
<td>0.71</td>
</tr>
</tbody>
</table>

**Technical Data - High Temperature Protector Version**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS006N-24-A</th>
<th>GPDS006NC-24-A</th>
<th>GPDS006NO-24-A</th>
<th>GPDS006S-24-A</th>
<th>GPDS006SC-24-A</th>
<th>GPDS006SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.61</td>
<td>0.71</td>
<td>0.71</td>
<td>0.61</td>
<td>0.71</td>
<td>0.71</td>
</tr>
</tbody>
</table>

**Technical Data**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS006N-AL-A</th>
<th>GPDS006NC-AL-A</th>
<th>GPDS006NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>90</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.47</td>
<td>0.57</td>
<td>0.57</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5006

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00A / -20A / -AL-A

Installation size GPD5006 / 3-Jaw Concentric Grippers / pneumatic / Grippers

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
**TECHNICAL DRAWINGS**

1. **N / S**
   -00-A / -20-A / -AL-A

2. **N / NC / NO / S / SC / SO**
   -21-A / -24-A

---

**Hoseless air feed-through M4**

---

- **1.** Gripper attachment
- **2.** Energy supply
- **3.** Fixing for gripper finger
- **4.** Integrated slot for magnetic field sensor
- **5.** Mounting block (not for variant AL-A)
- **6.** Air purge connection option (max. 0.5 bar)
- **7.** Attachment option for customer-specific fittings
- **8.** Adapter

---

**N / NC / NO / S / SC / SO**

---

**Installation size:** GPD5006 / 3-Jaw Concentric Grippers / pneumatic / Grippers

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5006

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
024230
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5006AL: Universal jaw aluminium
- UB5006ST: Universal jaw steel
- EB5006AL: Aluminium adjustment jaw
- EB5006ST: Steel adjustment jaw
- WB5006L: Changeable jaw, loose-parts set
- WB5006F: Changeable jaw, fix-part

- ADS5006-01: Pressure piece N / S
- ADS5006-02: Pressure piece NC / NO / SC / SO

ENERGY SUPPLY

- WVM5: Angle Fitting - Quick Connect Style
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- NJ4-E2SK-01: Inductive Proximity Switch
- MFS01-S-KHC-P1-PNP: Magnetic field sensor Angled
- MFS02-S-KHC-P1-PNP: Magnetic field sensor Straight
- MFS01-S-KHC-P2-PNP: 2-Position Sensor Cable
- MFS02-S-KHC-P2-PNP: 2-Position Sensor Cable

*Not for variant AL-A
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5008

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

-AL-A

Steel / aluminum guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide
## TECHNICAL DATA

### Technical data

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5008N-00-A</th>
<th>GPD5008NC-00-A</th>
<th>GPD5008NO-00-A</th>
<th>GPD5008S-00-A</th>
<th>GPD5008SC-00-A</th>
<th>GPD5008SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw (mm)</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>1260</td>
<td>1690</td>
<td>1340</td>
<td>1770</td>
<td>2960</td>
<td>3910</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>950</td>
<td>950</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.048</td>
<td>0.035</td>
<td>0.055</td>
<td>0.048</td>
<td>0.035</td>
<td>0.055</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>125</td>
<td>115</td>
<td>115</td>
<td>115</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.1</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Stationary operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>51</td>
<td>90</td>
<td>90</td>
<td>51</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.83</td>
<td>1</td>
<td>1</td>
<td>0.83</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Technical Data - High Temperature Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5008N-20-A</th>
<th>GPD5008NC-20-A</th>
<th>GPD5008NO-20-A</th>
<th>GPD5008S-20-A</th>
<th>GPD5008SC-20-A</th>
<th>GPD5008SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

### Technical Data - Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5008N-21-A</th>
<th>GPD5008NC-21-A</th>
<th>GPD5008NO-21-A</th>
<th>GPD5008S-21-A</th>
<th>GPD5008SC-21-A</th>
<th>GPD5008SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.03</td>
<td>1.2</td>
<td>1.2</td>
<td>1.03</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

### Technical Data - Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5008N-24-A</th>
<th>GPD5008NC-24-A</th>
<th>GPD5008NO-24-A</th>
<th>GPD5008S-24-A</th>
<th>GPD5008SC-24-A</th>
<th>GPD5008SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.03</td>
<td>1.2</td>
<td>1.2</td>
<td>1.03</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

### Technical Data - High Temperature Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5008N-AL-A</th>
<th>GPD5008NC-AL-A</th>
<th>GPD5008NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>110</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP40</td>
<td>IP40</td>
<td>IP40</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.83</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
**TECHNICAL DRAWINGS**

Hoseless air feed-through M4

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

Gripper

1. Gripper
2. Clamping sensor (not for variant AL-A)
3. Switch cam adjustment (not for variant AL-A)
4. Air connection (close)
5. Air connection (open)
6. Air connection, alternative (close)
7. Air connection, alternative (open)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5008

► ACCESORIES

► INCLUDED IN DELIVERY

6 (piece) Centering Disc
024231
**RECOMMENDED ACCESSORIES**

**GRIPPING COMPONENTS**

- **UB5008AL**: Universal jaw aluminium
- **UB5008ST**: Universal jaw steel
- **EB5008AL**: Aluminum adjustment jaw
- **EB5008ST**: Steel adjustment jaw
- **WB5008L**: Changeable jaw, loose part-set
- **WB5008F**: Changeable jaw, fix part

- **ADS5008-01**: Pressure piece N / S
- **ADS5008-02**: Pressure piece NC / NO / SC / SO

**ENERGY SUPPLY**

- **WVM5**: Angled Fittings - Quick Connect Style
- **DSV1-8**: Pressure safety valve
- **DSV1-8E**: Pressure safety valve with quick exhaust

**SENSORS**

- **NJ4-EZSK-01**: Inductive Proximity Switch, Cable 0.3 m - Connector M8
  *Not for variant AL-A*
- **MFS01-S-KHC-P1-PNP**: Magnetic field sensor Angled, Cable 0.3 m - Connector M8
- **MFS02-S-KHC-P1-PNP**: Magnetic field sensor Straight, Cable 0.3 m - Connector M8
- **MFS01-S-KHC-P2-PNP**: 2-Position Sensor Cable, 0.3 m - Connector M8
- **MFS02-S-KHC-P2-PNP**: 2-Position Sensor Cable, 0.3 m - Connector M8

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
# 3-JAW CONCENTRIC GRIPPERS
## INSTALLATION SIZE GPD5010

### PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>-00-A / -20-A / -21-A / -24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel / steel guide</td>
</tr>
</tbody>
</table>

#### Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

![Gripping force diagram](image)

#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>125</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>95</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>2700</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel / aluminum guide</td>
</tr>
</tbody>
</table>

#### Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

![Gripping force diagram](image)

#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>115</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>90</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>2500</td>
</tr>
</tbody>
</table>

### VARIANTS

<table>
<thead>
<tr>
<th>-00-A / -20-A</th>
<th>-21-A / -24-A</th>
<th>-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel / steel guide</td>
<td>Steel / steel guide</td>
<td>Steel / aluminum guide</td>
</tr>
</tbody>
</table>
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5010N-00-A</td>
</tr>
<tr>
<td>Stroke per jaw (mm)</td>
<td>10</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>2290</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>2400</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>850</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.005</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>1.3</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>160</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>100</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5010N-20-A</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5010N-21-A</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5010N-24-A</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5010N-AL-A</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>1.1</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>140</td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>No</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.4</td>
</tr>
</tbody>
</table>
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5010

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00A / -20A / -AL-A

Installation size GPD5010  /  3-Jaw Concentric Grippers  /  pneumatic  /  Grippers

www.zimmer-group.com  Data, Drawings, 3-D Models, Operating Instructions
TECHNICAL DRAWINGS

Hoseless air feed-through M5

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

Gripper
Clamping sensor (not for variant AL-A)
Switch cam adjustment (not for variant AL-A)
Air connection (close)
Air connection (open)
Air connection, alternative (close)
Air connection, alternative (open)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5010

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
018187

www.zimmer-group.com  ► Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5010AL Universal jaw aluminium
UB5010ST Universal jaw steel
EB5010AL Aluminum adjustment jaw
EB5010ST Steel adjustment jaw
WB5010L Changeable jaw, loose-part-set
WB5010R Changeable jaw, fix-part

ADS5010-01 Pressure piece N / S
ADS5010-02 Pressure piece NC / NO / SC / SO

ENERGY SUPPLY

WV1-8X8 Angled Fittings - Quick Connect Style
DSV1-8 Pressure safety valve
DSV1-8E Pressure safety valve with quick exhaust

SENSORS

NJ4-E2SK-01 Inductive Proximity Switch Cable 0,3 m - Connector M8
MFS01-S-KHC-P1-PNP Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS01-S-KHC-P2-PNP Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS02-S-KHC-P1-PNP 2-Position Sensor Cable 0,3 m - Connector M8
MFS02-S-KHC-P2-PNP 2-Position Sensor Cable 0,3 m - Connector M8

*Not for variant AL-A
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5013

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm]  110
Mx [Nm]  150
My [Nm]  130
Fa [N]   3300

-AL-A
Steel / aluminum guide

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm]  100
Mx [Nm]  145
My [Nm]  120
Fa [N]   3200

VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

-AL-A
Steel / aluminum guide
### TECHNICAL DATA

**Order no.**

- **Technical Data**
  - GPD5013N-00-A
  - GPD5013NC-00-A
  - GPD5013NO-00-A
  - GPD5013S-00-A
  - GPD5013SC-00-A
  - GPD5013SO-00-A

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5013N-20-A</th>
<th>GPD5013NC-20-A</th>
<th>GPD5013NO-20-A</th>
<th>GPD5013S-20-A</th>
<th>GPD5013SC-20-A</th>
<th>GPD5013SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw (mm)</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>3770</td>
<td>5060</td>
<td>8310</td>
<td>11160</td>
<td>11450</td>
<td>11450</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>3910</td>
<td>5200</td>
<td>8600</td>
<td>11200</td>
<td>11450</td>
<td>11450</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>0.19</td>
<td>0.15</td>
<td>0.25</td>
<td>0.19</td>
<td>0.15</td>
<td>0.25</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>1200</td>
<td>1200</td>
<td>2850</td>
<td>2850</td>
<td>2850</td>
<td>2850</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>0.19</td>
<td>0.25</td>
<td>0.15</td>
<td>0.19</td>
<td>0.25</td>
<td>0.15</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>200</td>
<td>185</td>
<td>185</td>
<td>170</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>230</td>
<td>415</td>
<td>415</td>
<td>230</td>
<td>415</td>
<td>415</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>2.8</td>
<td>3.7</td>
<td>3.7</td>
<td>2.6</td>
<td>3.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

**Order no.**

- **Technical Data - High Temperature Version**
  - GPD5013N-21-A
  - GPD5013NC-21-A
  - GPD5013NO-21-A
  - GPD5013S-21-A
  - GPD5013SC-21-A
  - GPD5013SO-21-A

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5013N-24-A</th>
<th>GPD5013NC-24-A</th>
<th>GPD5013NO-24-A</th>
<th>GPD5013S-24-A</th>
<th>GPD5013SC-24-A</th>
<th>GPD5013SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>180</td>
<td>170</td>
<td>170</td>
<td>170</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>3.35</td>
<td>4.3</td>
<td>4.3</td>
<td>3.15</td>
<td>4.3</td>
<td>4.3</td>
</tr>
</tbody>
</table>

*with purged air (max. 0,5 bar)

**Order no.**

- **Technical Data - Protector Version**
  - GPD5013N-AL-A
  - GPD5013NC-AL-A
  - GPD5013NO-AL-A

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5013N-AL-A</th>
<th>GPD5013NC-AL-A</th>
<th>GPD5013NO-AL-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>180</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>2.7</td>
<td>3.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5013

TECHNICAL DRAWINGS
TECHNICAL DRAWINGS

N / S
-00-A / -20-A

N / NC / NO / S / SC / SO
-21-A / -24-A

Hoseless air feed-through M5

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

9. Gripper
10. Clamping sensor (not for variant AL-A)
11. Switch cam adjustment (not for variant AL-A)
12. Air connection (close)
13. Air connection (open)
14. Air connection, alternative (close)
15. Air connection, alternative (open)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5013

ACCESSORIES

INCLUDED IN DELIVERY

6 [piece] Centering Disc
018187
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5013AL: Universal jaw aluminium
- UB5013ST: Universal jaw steel
- EB5013AL: Aluminium adjustment jaw
- EB5013ST: Steel adjustment jaw
- WB5013L: Changeable jaw, loose part-set
- WB5013F: Changeable jaw, fix part

- ADS5013-01: Pressure piece N / S
- ADS5013-02: Pressure piece NC / NO / SC / SO

ENERGY SUPPLY

- WV1-8X8: Angled Fittings - Quick Connect Style
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- NJ8-E2S: Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP: Magnetic field sensor Angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor Straight Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position Sensor Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

- KAG500: Plug-in connector Straight Cable 5m - Socket M8 (female)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5016

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Forces and moments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr [Nm]</td>
</tr>
<tr>
<td>Mx [Nm]</td>
</tr>
<tr>
<td>My [Nm]</td>
</tr>
<tr>
<td>Fa [N]</td>
</tr>
</tbody>
</table>

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide
<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5016N-00-A</th>
<th>GPD5016NC-00-A</th>
<th>GPD5016NO-00-A</th>
<th>GPD5016S-00-A</th>
<th>GPD5016SC-00-A</th>
<th>GPD5016SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TECHNICAL DATA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Order no.</strong></td>
<td>GPD5016N-20-A</td>
<td>GPD5016NC-20-A</td>
<td>GPD5016NO-20-A</td>
<td>GPD5016S-20-A</td>
<td>GPD5016SC-20-A</td>
<td>GPD5016SO-20-A</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>7.4</td>
<td>9.2</td>
<td>9.2</td>
<td>7.4</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>*with purged air (max. 0.5 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order no.</td>
<td>GPD5016N-21-A</td>
<td>GPD5016NC-21-A</td>
<td>GPD5016NO-21-A</td>
<td>GPD5016S-21-A</td>
<td>GPD5016SC-21-A</td>
<td>GPD5016SO-21-A</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>7.4</td>
<td>9.2</td>
<td>9.2</td>
<td>7.4</td>
<td>9.2</td>
<td>9.2</td>
</tr>
</tbody>
</table>

Data, Drawings, 3-D Models, Operating Instructions ➤ www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5016

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

Installation size GPD5016  /  3-Jaw Concentric Grippers  /  pneumatic  /  Grippers

www.zimmer-group.com  ▶  Data, Drawings, 3-D Models, Operating Instructions
TECHNICAL DRAWINGS

N / S
-00-A / -20-A

N / NC / NO / S / SC / SD
-21-A / -24-A

Hoseless air feed-through M4

Diagram with parts labeled:
1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block (not for variant AL-A)
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

Diagram with parts labeled:
9. Gripper
10. Clamping sensor (not for variant AL-A)
11. Switch cam adjustment (not for variant AL-A)
12. Air connection (close)
13. Air connection (open)
14. Air connection, alternative (close)
15. Air connection, alternative (open)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5016

► ACCESORIES

► INCLUDED IN DELIVERY

<table>
<thead>
<tr>
<th>6 [piece] Centering Disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>019387</td>
</tr>
</tbody>
</table>
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5016AL
Universal jaw aluminium

UB5016ST
Universal jaw steel

EB5016AL
Aluminium adjustment jaw

EB5016ST
Steel adjustment jaw

WB5016L
Changeable jaw, loose part-set

WB5016F
Changeable jaw, fix part

ADS5016-01
Pressure piece N / S

ADS5016-02
Pressure piece NC / NO / SC / SO

ENERGY SUPPLY

WV1-8X8
Angled Fittings - Quick Connect Style

DSV1-8
Pressure safety valve

DSV1-8E
Pressure safety valve with quick exhaust

SENSORS

NJ8-E2S
Inductive proximity switch - Connector M8

MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS01-S-KHC-P2-PNP
2-Position Sensor Cable 0,3 m - Connector M8

MFS02-S-KHC-P2-PNP
2-Position Sensor Cable 0,3 m - Connector M8

CONNECTIONS / OTHER

KAG500
Plug-in connector Straight Cable 5m - Socket M8 (female)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5025

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide

www.zimmer-group.com
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5025N-00-A</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>25</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>8430</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>3130</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>0.6</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.6</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>7</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>8730</td>
</tr>
<tr>
<td>Length of the gripper Àngers max. [mm]</td>
<td>310</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.05</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>1025</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>11.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5025N-20-A</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5025N-21-A</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical Data - High Temperature Protector Version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPD5025N-24-A</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>14</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5025

TECHNICAL DRAWINGS

Installation size GPD5025 / 3-Jaw Concentric Grippers / pneumatic / Grippers

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
TECHNICAL DRAWINGS

N / S
-00-A / -20-A

N / NC / NO / S / SC / SO
-21-A / -24-A

Hoseless air feed-through M5

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

9. Gripper
10. Clamp for sensor
11. Switch cam adjustment
12. Air connection (close)
13. Air connection (open)
14. Air connection, alternative (close)
15. Air connection, alternative (open)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5025

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
030529

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5025AL  Universal jaw aluminium
UB5025ST  Universal jaw steel
EB5025AL  Aluminium adjustment jaw
EB5025ST  Steel adjustment jaw
WB5025L  Changeable jaw, loose part-set
WB5025F  Changeable jaw, fix part

ADS5025-01  Pressure piece N / S
ADS5025-02  Pressure piece NC / NO / SC / SO

ENERGY SUPPLY

WV1-8X8  Angled Fittings - Quick Connect Style
DSV1-8  Pressure safety valve
DSV1-8E  Pressure safety valve with quick exhaust

SENSORS

NJS-E2S  Inductive proximity switch - Connector M8
MFS01-S-KHC-P1-PNP  Magnetic field sensor Angled Cable 0.3 m - Connector M8
MFS02-S-KHC-P1-PNP  Magnetic field sensor Straight Cable 0.3 m - Connector M8
MFS01-S-KHC-P2-PNP  2-Position Sensor Cable 0.3 m - Connector M8
MFS02-S-KHC-P2-PNP  2-Position Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

KAG500  Plug-in connector Straight Cable 5m - Socket M8 (female)
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

<table>
<thead>
<tr>
<th>Steel / steel guide</th>
</tr>
</thead>
</table>

Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>210</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>290</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>310</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>9500</td>
</tr>
</tbody>
</table>

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5030N-00-A</th>
<th>GPD5030NC-00-A</th>
<th>GPD5030NO-00-A</th>
<th>GPD5030S-00-A</th>
<th>GPD5030SC-00-A</th>
<th>GPD5030SO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>12130</td>
<td>16560</td>
<td>23150</td>
<td>31620</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>12540</td>
<td>16970</td>
<td>23930</td>
<td>32400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>4430</td>
<td>4430</td>
<td>8470</td>
<td>8470</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>1.13</td>
<td>1.0</td>
<td>1.9</td>
<td>1.13</td>
<td>1.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>1.13</td>
<td>1.9</td>
<td>1.0</td>
<td>1.13</td>
<td>1.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>9.5</td>
<td>9.5</td>
<td>9.5</td>
<td>9.5</td>
<td>9.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>300</td>
<td>250</td>
<td>250</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>1780</td>
<td>3000</td>
<td>3000</td>
<td>1780</td>
<td>3000</td>
<td>3000</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>21</td>
<td>27.5</td>
<td>27.5</td>
<td>21</td>
<td>27.5</td>
<td>27.5</td>
</tr>
</tbody>
</table>

### Technical Data - High Temperature Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5030N-20-A</th>
<th>GPD5030NC-20-A</th>
<th>GPD5030NO-20-A</th>
<th>GPD5030S-20-A</th>
<th>GPD5030SC-20-A</th>
<th>GPD5030SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>

### Technical Data - Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5030N-21-A</th>
<th>GPD5030NC-21-A</th>
<th>GPD5030NO-21-A</th>
<th>GPD5030S-21-A</th>
<th>GPD5030SC-21-A</th>
<th>GPD5030SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>24</td>
<td>30.5</td>
<td>30.5</td>
<td>24</td>
<td>30.5</td>
<td>30.5</td>
</tr>
</tbody>
</table>

### Technical Data - High Temperature Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPD5030N-24-A</th>
<th>GPD5030NC-24-A</th>
<th>GPD5030NO-24-A</th>
<th>GPD5030S-24-A</th>
<th>GPD5030SC-24-A</th>
<th>GPD5030SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
<td>-10 ... +130</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>24</td>
<td>30.5</td>
<td>30.5</td>
<td>24</td>
<td>30.5</td>
<td>30.5</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5030

TECHNICAL DRAWINGS
## TECHNICAL DRAWINGS

**N / S**
-00-A / -20-A

**Hoseless air feed-through M5**

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

**N / NC / NO / S / SC / SO**
-21-A / -24-A

- **Installation size GPD5030 / 3-Jaw Concentric Grippers / pneumatic / Grippers**
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5030

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
030529
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5030AL: Universal jaw aluminium
- UB5030ST: Universal jaw steel
- EB5030AL: Aluminium adjustment jaw
- EB5030ST: Steel adjustment jaw
- WB5030L: Changeable jaw, loose-part-set
- WB5030R: Changeable jaw, fix-part

ENERGY SUPPLY

- WV1-4X8: Angled Fittings - Quick Connect Style
- DSV1-4: Pressure safety valve
- DSV1-4E: Pressure safety valve with quick exhaust

SENSORS

- NJ8-E2S: Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP: Magnetic field sensor Angled Cable 0.3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor Straight Cable 0.3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position Sensor Cable 0.3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position Sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

- KAG500: Plug-in connector Straight Cable 5m - Socket M8 (female)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5035

► PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A
Steel / steel guide

► Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

► Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>260</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>430</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>450</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>10400</td>
</tr>
</tbody>
</table>

► VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide
## TECHNICAL DATA

<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>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GPD5035N-00-A</td>
<td>35</td>
<td>16600</td>
<td>17100</td>
<td>6700</td>
<td>1.2</td>
<td>1.2</td>
<td>12.5</td>
<td>250</td>
<td>0.05</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>2904</td>
<td>-10 ... +90</td>
<td>IP64</td>
<td>37.8</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>GPD5035NC-00-A</td>
<td>35</td>
<td>23300</td>
<td>23800</td>
<td>6700</td>
<td>1.1</td>
<td>2.3</td>
<td>12.5</td>
<td>226</td>
<td>0.05</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>5477</td>
<td>-10 ... +90</td>
<td>IP64</td>
<td>42</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>GPD5035NO-00-A</td>
<td>35</td>
<td>31500</td>
<td>32500</td>
<td>6700</td>
<td>2.3</td>
<td>1.2</td>
<td>12.5</td>
<td>226</td>
<td>0.05</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>5477</td>
<td>-10 ... +90</td>
<td>IP64</td>
<td>42</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>GPD5035S-00-A</td>
<td>20</td>
<td>44200</td>
<td>45200</td>
<td>12700</td>
<td>1.1</td>
<td>1.1</td>
<td>12.5</td>
<td>200</td>
<td>0.05</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>5477</td>
<td>-10 ... +90</td>
<td>IP64</td>
<td>42</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>GPD5035SC-00-A</td>
<td>20</td>
<td>44200</td>
<td>45200</td>
<td>12700</td>
<td>2.3</td>
<td>2.3</td>
<td>12.5</td>
<td>200</td>
<td>0.05</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>5477</td>
<td>-10 ... +90</td>
<td>IP64</td>
<td>42</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>GPD5035SO-00-A</td>
<td>20</td>
<td>44200</td>
<td>45200</td>
<td>12700</td>
<td>2.3</td>
<td>2.3</td>
<td>12.5</td>
<td>200</td>
<td>0.05</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>5477</td>
<td>-10 ... +90</td>
<td>IP64</td>
<td>42</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

**Order no.**

<table>
<thead>
<tr>
<th>GPD5035N-20-A</th>
<th>GPD5035NC-20-A</th>
<th>GPD5035NO-20-A</th>
<th>GPD5035S-20-A</th>
<th>GPD5035SC-20-A</th>
<th>GPD5035SO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>2904</td>
<td>5477</td>
<td>2904</td>
<td>5477</td>
<td>5477</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>37.8</td>
<td>42</td>
<td>42</td>
<td>37.8</td>
<td>42</td>
</tr>
</tbody>
</table>

**Order no.**

<table>
<thead>
<tr>
<th>GPD5035N-21-A</th>
<th>GPD5035NC-21-A</th>
<th>GPD5035NO-21-A</th>
<th>GPD5035S-21-A</th>
<th>GPD5035SC-21-A</th>
<th>GPD5035SO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>2904</td>
<td>5477</td>
<td>2904</td>
<td>5477</td>
<td>5477</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>43.8</td>
<td>48</td>
<td>48</td>
<td>43.8</td>
<td>48</td>
</tr>
</tbody>
</table>

**Order no.**

<table>
<thead>
<tr>
<th>GPD5035N-24-A</th>
<th>GPD5035NC-24-A</th>
<th>GPD5035NO-24-A</th>
<th>GPD5035S-24-A</th>
<th>GPD5035SC-24-A</th>
<th>GPD5035SO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
<td>10 ... +130</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>2904</td>
<td>5477</td>
<td>2904</td>
<td>5477</td>
<td>5477</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>43.8</td>
<td>48</td>
<td>48</td>
<td>43.8</td>
<td>48</td>
</tr>
</tbody>
</table>

* with purged air (max. 0.5 bar)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5035

TECHNICAL DRAWINGS
TECHNICAL DRAWINGS

N / S
-00-A / -20-A

N / NC / NO / S / SC / SO
-21-A / -24-A

Hoseless air feed-through M8

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

9. Gripper
10. Clamp for sensor
11. Switch cam adjustment
12. Air connection (close)
13. Air connection (open)
14. Air connection, alternative (close)
15. Air connection, alternative (open)

Installation size GPD5035 / 3-Jaw Concentric Grippers / Pneumatic / Grippers

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5035

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc

035358
### RECOMMENDED ACCESSORIES

#### ENERGY SUPPLY
- **GV1-4X8**: Straight Fittings - Quick Connect Style
- **WV1-4X8**: Angled Fittings - Quick Connect Style
- **DSV1-4**: Pressure safety valve
- **DSV1-4E**: Pressure safety valve with quick exhaust

#### SENSORS
- **NJ8-E2S**: Inductive proximity switch - Connector M8
- **MFS01-S-KHC-P1-PNP**, **MFS02-S-KHC-P1-PNP**, **MFS01-S-KHC-P2-PNP**, **MFS02-S-KHC-P2-PNP**: Magnetic field sensor
- **2-Position-Sensor Cable**: 0.3 m - Connector M8

#### CONNECTIONS / OTHER
- **KAG500**: Plug-in connector Straight Cable 5 m - Socket M8 (female)
- **SB-G-3**: Plug-in connector customisable Straight - Connector M8

Installation size GPD5035 / 3-Jaw Concentric Grippers / Pneumatic Grippers

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5045

▸ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

▸ Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

▸ Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>Mx [Nm]</th>
<th>My [Nm]</th>
<th>Fa [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mr 390
Mx 580
My 600
Fa 11500

▸ VARIANTS

-00-A / -20-A
Steel / steel guide

-21-A / -24-A
Steel / steel guide
### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS04SN-00-A</th>
<th>GPDS04SNC-00-A</th>
<th>GPDS04SNNO-00-A</th>
<th>GPDS04SS-00-A</th>
<th>GPDS04SSC-00-A</th>
<th>GPDS04SSO-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>26</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>27900</td>
<td>36900</td>
<td>53500</td>
<td>70600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>28850</td>
<td>37850</td>
<td>55400</td>
<td>72500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>9000</td>
<td>9000</td>
<td>17100</td>
<td>17100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>2.0</td>
<td>1.7</td>
<td>2.8</td>
<td>2.0</td>
<td>1.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>2.0</td>
<td>2.8</td>
<td>1.7</td>
<td>2.0</td>
<td>2.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>12.5</td>
<td>12.5</td>
<td>12.5</td>
<td>12.5</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>250</td>
<td>225</td>
<td>225</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>6.5</td>
<td>6.5</td>
<td>8</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10...+90</td>
<td>-10...+90</td>
<td>-10...+90</td>
<td>-10...+90</td>
<td>-10...+90</td>
<td></td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>6500</td>
<td>12400</td>
<td>12400</td>
<td>12400</td>
<td>12400</td>
<td></td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td></td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>78.6</td>
<td>86.5</td>
<td>86.5</td>
<td>80</td>
<td>88</td>
<td>88</td>
</tr>
</tbody>
</table>

#### Technical data - High Temperature Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS04SN-20-A</th>
<th>GPDS04SNC-20-A</th>
<th>GPDS04SNNO-20-A</th>
<th>GPDS04SS-20-A</th>
<th>GPDS04SSC-20-A</th>
<th>GPDS04SSO-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>-10...+130</td>
<td>-10...+130</td>
<td>-10...+130</td>
<td>-10...+130</td>
<td>-10...+130</td>
<td></td>
</tr>
</tbody>
</table>

#### Technical data - Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS04SN-24-A</th>
<th>GPDS04SNC-24-A</th>
<th>GPDS04SNNO-24-A</th>
<th>GPDS04SS-24-A</th>
<th>GPDS04SSC-24-A</th>
<th>GPDS04SSO-24-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>90.5</td>
<td>98.4</td>
<td>98.4</td>
<td>91.9</td>
<td>99.9</td>
<td>99.9</td>
</tr>
</tbody>
</table>

#### Technical data - High Temperature Protector Version

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GPDS04SN-21-A</th>
<th>GPDS04SNC-21-A</th>
<th>GPDS04SNNO-21-A</th>
<th>GPDS04SS-21-A</th>
<th>GPDS04SSC-21-A</th>
<th>GPDS04SSO-21-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection to IEC 60529</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
<td>IP67*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>90.5</td>
<td>98.4</td>
<td>98.4</td>
<td>91.9</td>
<td>99.9</td>
<td>99.9</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5045

TECHNICAL DRAWINGS

NC / NO / SC / SO
-00A / -20A

Installation size GPD5045 / 3-Jaw Concentric Grippers / pneumatic / Grippers

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Mounting block
6. Air purge connection option (max. 0.5 bar)
7. Attachment option for customer-specific fittings
8. Adapter

---

1. Gripper
2. Clamp for sensor
3. Switch cam adjustment
4. Air connection (close)
5. Air connection (open)
6. Air connection, alternative (close)
7. Air connection, alternative (open)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5045

► ACCESORIES

► INCLUDED IN DELIVERY

6 piece Centering Disc
036784

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

ENERGY SUPPLY

GV1-4X8
Straight Fittings - Quick Connect Style

WV1-4X8
Angled Fittings - Quick Connect Style

DSV1-4
Pressure safety valve

DSV1-4E
Pressure safety valve with quick exhaust

SENSORS

NJ8-E2S
Inductive proximity switch - Connector M8

MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8

2-Position-Sensor Cable 0,3 m - Connector M8

MFS02-S-KHC-P2-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS01-S-KHC-P2-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS02-S-KHC-P2-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

CONNECTIONS / OTHER

KAG500
Plug-in connector Straight Cable 5m - Socket M8 (female)

SB-G-3
Plug-in connector customiz- able Straight - Connector M8
PRODUCT ADVANTAGES

“The hybrid”

- Pneumatic drive combined with IO-Link technology
- Up to 50% reduction in cycle times and up to 90% less compressed air usage
- Connection over just one pneumatic line and IO-Link cable
- Integrated valve technology, sensor technology, status display, pressure monitoring and temperature monitoring
- Part detection down to +/- 0.05 mm for a tolerance range that can be taught for any value
- 32 workpieces data sets can be programmed
- Protected from corrosion and sealed in accordance with IP64
- Up to 30 million cycles without maintenance

SERIES CHARACTERISTICS

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPD50XXIL</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>NC</td>
</tr>
<tr>
<td></td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td>SO</td>
</tr>
</tbody>
</table>

- IO-Link
- Spring closing C
- Spring opening O
- High-strength S
- 30 million maintenance-free cycles (max.)
- Integrated sensing
- Integrated valve technology
- Protected against corrosion
- Purged air
- IP64
**BENEFITS IN DETAIL**

1. **Wedge hook mechanism**
   - high forces and moments capacity
   - Synchronized gripper jaw movement

2. **Gripper jaw**
   - Gripper fingers mounted using removable centering sleeves
   - Lubricated for life via incorporated lubrication slots

3. **Steel Linear Guide**
   - Steel in steel guide
   - Enables use of extremely long gripper fingers

4. **Dual lip seal**
   - IP64
   - Prevents grease from being squeezed out, increasing service life

5. **Integrated gripping force safety device**
   - Spring built into cylinder chamber as an energy store

6. **Mounting and positioning**
   - Alternately, on several sides for customized mounting

7. **Position sensing**
   - Integrated Hallsensor

8. **Integrated valve technology**
   - Activation of the gripper by means of a compressed air supply

9. **Integrated control module**
   - Single-cable solution via IO-Link
   - Pressure, temperature, position and other parameters are readable

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Stroke per jaw [mm]</th>
<th>Gripping force [N]</th>
<th>Weight [kg]</th>
<th>IP class</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPDS006IL</td>
<td>3 - 6</td>
<td>740 - 2370</td>
<td>0.75 - 0.85</td>
<td>IP64</td>
</tr>
<tr>
<td>GPDS008IL</td>
<td>4 - 8</td>
<td>1260 - 3910</td>
<td>1.25 - 1.45</td>
<td>IP64</td>
</tr>
<tr>
<td>GPDS010IL</td>
<td>5 - 10</td>
<td>2290 - 7180</td>
<td>2.1 - 2.5</td>
<td>IP64</td>
</tr>
</tbody>
</table>

**FURTHER INFORMATION IS AVAILABLE ONLINE**

All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com). Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.
GRIPPING COMPONENTS

Universal jaws – UB5000
Can be used immediately or for individual reprocessing
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery.
The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.

Adjustment jaws – EB5000
For tool-free adaptation of the gripper range
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.

Interchangeable jaws – WB5000
Enable fast change of individual gripper fingers
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

THE GRIPPING COMPONENTS CAN BE COMBINED!
The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.
**ENERGY SUPPLY**

**Pneumatic threaded connections**
Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.

**Pressure safety valve – DSV**
The throttle check valve integrated into the supply air line retains the system pressure in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. Control voltage and actuator voltage must be maintained for this purpose.
Centering sleeves
For defined position measurement of the gripper fingers
The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.
## 3-JAW CONCENTRIC GRIPPERS
### INSTALLATION SIZE GPD5006IL

### PRODUCT SPECIFICATIONS

#### Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 43 |
| My [Nm] | 70 |
| Fa [N]  | 1250 |

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>GPDS006IL-10A</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>6</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>740</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>800</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>330</td>
</tr>
<tr>
<td>Cycle count max. [cycle/min]</td>
<td>0.4</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>100</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>100</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5...+50</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>22</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>0.10</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.75</td>
</tr>
</tbody>
</table>
TECHNICAL DRAWINGS

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Air purge connection option
5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
6. Attachment option for customer-specific fittings
7. Energy supply IO-Link (M12, 5-pole)
8. Ground
9. Status display

N / S
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5006IL

► ACCESORIES

► INCLUDED IN DELIVERY

- 6 [piece] Centering Disc
  024230
- 2 [piece] Filters
  CFILT00010
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5006AL  Universal jaw aluminium
UB5006ST  Universal jaw steel
EB5006AL  Aluminium adjustment jaw
EB5006ST  Steel adjustment jaw
WB5006L   Changeable jaw, loose part-set
WB5006F   Changeable jaw, fix part

ENERGY SUPPLY

GVM5  Straight Fittings - Quick Connect Style
DSV06  Return valve

CONNECTIONS / OTHER

KAG500IL  Plug-in connector straight 5 m - plug, socket M12
SCM-C-00-00-A  Smart Communication Module

www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5008IL

PRODUCT SPECIFICATIONS

Gripping force diagram

- Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments

- Displays static forces and moments that can also have an effect, besides the gripping force.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Technical data</th>
<th>GPD5008NL-10-A</th>
<th>GPD5008SCIL-10-A</th>
<th>GPD5008G-10-A</th>
<th>GPD5008SIL-10-A</th>
<th>GPD5008SCIL-10-A</th>
<th>GPD5008SOIL-10-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
<td>IO-Link</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>1260</td>
<td>1690</td>
<td>2780</td>
<td>3730</td>
<td>3910</td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>1340</td>
<td>1770</td>
<td>2960</td>
<td>950</td>
<td>950</td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>430</td>
<td>430</td>
<td>210</td>
<td>160</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Cycle count max. [cycle/min]</td>
<td>210</td>
<td>160</td>
<td>210</td>
<td>160</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>125</td>
<td>115</td>
<td>115</td>
<td>115</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Repetition accuracy ± [mm]</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5...+50</td>
<td>+5...+50</td>
<td>+5...+50</td>
<td>+5...+50</td>
<td>+5...+50</td>
<td></td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td></td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.25</td>
<td>1.45</td>
<td>1.45</td>
<td>1.25</td>
<td>1.45</td>
<td>1.45</td>
</tr>
</tbody>
</table>
Gripper attachment
Energy supply
Fixing for gripper finger
Air purge connection option
Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
Attachment option for customer-specific fittings
Energy supply IO-Link (M12, 5-pole)
Ground
Status display
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5008IL

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
024231

2 [piece] Filters
CFILT00010
# RECOMMENDED ACCESSORIES

## GRIPPING COMPONENTS

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB5008AL</td>
<td>Universal jaw aluminium</td>
</tr>
<tr>
<td>UB5008ST</td>
<td>Universal jaw steel</td>
</tr>
<tr>
<td>EB5008AL</td>
<td>Aluminium adjustment jaw</td>
</tr>
<tr>
<td>EB5008ST</td>
<td>Steel adjustment jaw</td>
</tr>
<tr>
<td>WB5008L</td>
<td>Changeable jaw, loose-part-set</td>
</tr>
<tr>
<td>WB5008F</td>
<td>Changeable jaw, fix-part</td>
</tr>
</tbody>
</table>

## ENERGY SUPPLY

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVM5</td>
<td>Straight Fittings - Quick Connect Style</td>
</tr>
<tr>
<td>DSV06</td>
<td>Return valve</td>
</tr>
</tbody>
</table>

## CONNECTIONS / OTHER

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAG500IL</td>
<td>Plug-in connector straight 5 m - plug, socket M12</td>
</tr>
<tr>
<td>SCM-C-00-00-A</td>
<td>Smart Communication Module</td>
</tr>
</tbody>
</table>
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5010IL

PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

TECHNICAL DATA

Order no. GPD5010N-IL-10-A GPD5010NC-IL-10-A GPD5010NO-IL-10-A GPD5010S-IL-10-A GPD5010SC-IL-10-A GPD5010SO-IL-10-A
Control
Stroke per jaw [mm] 10 10 10 5 5 5
Gripping force in closing [N] 2290 3140 5050 6930
Gripping force in opening [N] 2400 3250 5280 7160
Gripping force secured by spring min. [N] 1.3 1.3 1.3 1.3
Cycle count max. [cycle/min] 130 100 100 100 100 100
Permissible weight per jaw max [kg] 1.3 1.3 1.3 1.3 1.3 1.3
Length of the gripper fingers max. [mm] 160 145 145 145 145 145
Repetition accuracy +/- [mm] 0.01 0.01 0.01 0.01 0.01 0.01
Operating pressure min. [bar] 3 4 4 3 4 4
Operating pressure max. [bar] 8 7 7 8 7 7
Nominal operating pressure [bar] 6 6 6 6 6 6
Operating temperature [°C] +5 ... +50 +5 ... +50 +5 ... +50 +5 ... +50 +5 ... +50 +5 ... +50
Air volume per cycle [cm³] 100 200 200 100 200 200
Integrated valve technology Yes Yes Yes Yes Yes Yes
Integrated position sensing Yes Yes Yes Yes Yes Yes
Voltage [V] 24 24 24 24 24 24
Current consumption max. [A] 0.10 0.10 0.10 0.10 0.10 0.10
Protection to IEC 60529 IP64 IP64 IP64 IP64 IP64 IP64
Weight [kg] 2.1 2.5 2.5 2.1 2.5 2.5

Technical data

www.zimmer-group.com  Data, Drawings, 3-D Models, Operating Instructions
TECHNICAL DRAWINGS

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Air purge connection option
5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
6. Attachment option for customer-specific fittings
7. Energy supply IO-Link (M12, 5-pole)
8. Ground
9. Status display

Installation size GPD5010IL / 3-Jaw Concentric Grippers / pneumatic / Grippers
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5010IL

► ACCESSORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
018187

1 [piece] Filters
CFILT00011
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5010AL Universal jaw aluminium
UB5010ST Universal jaw steel
EB5010AL Aluminium adjustment jaw
EB5010ST Steel adjustment jaw
WB5010L Changeable jaw, loose part-set
WB5010F Changeable jaw, fix part

ENERGY SUPPLY

GV1-8X8 Straight Fittings - Quick Connect Style

CONNECTIONS / OTHER

KAG500IL Plug-in connector straight 5 m - plug, socket M12
SCM-C-00-00-A Smart Communication Module

www.zimmer-group.com
PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 110
Mx [Nm] 150
My [Nm] 130
Fa [N] 3300

TECHNICAL DATA

Order no. | GP5013N-IL-10-A | GP5013NC-IL-10-A | GP5013NO-IL-10-A | GP5013S-IL-10-A | GP5013SC-IL-10-A | GP5013SO-IL-10-A
--- | --- | --- | --- | --- | --- | ---
Control | | | | | | |
Stroke per jaw [mm] | 13 | 13 | 13 | 6 | 6 | 6
Gripping force in closing [N] | 3770 | 5060 | 8310 | 11160 | | |
Gripping force in opening [N] | 3910 | 5200 | 8600 | 11450 | 11450 | 11450
Gripping force secured by spring min. [N] | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4
Permissible weight per jaw max. [kg] | 1290 | 1290 | 2850 | 2850 | | |
Length of the gripper fingers max. [mm] | 200 | 185 | 185 | 185 | 170 | 170
Repetition accuracy +/- [mm] | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01
Operating pressure min. [bar] | 3 | 4 | 4 | 3 | 4 | 4
Operating pressure max. [bar] | 8 | 7 | 7 | 8 | 7 | 7
Nominal operating pressure [bar] | 6 | 6 | 6 | 6 | 6 | 6
Operating temperature [°C] | +5 ... +50 | +5 ... +50 | +5 ... +50 | +5 ... +50 | +5 ... +50 | +5 ... +50
Air volume per cycle [cm³] | 230 | 415 | 415 | 230 | 415 | 415
Integrated valve technology | Yes | Yes | Yes | Yes | Yes | Yes
Integrated position sensing | Yes | Yes | Yes | Yes | Yes | Yes
Voltage [V] | 24 | 24 | 24 | 24 | 24 | 24
Current consumption max. [A] | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12
Protection to IEC 60529 | IP64 | IP64 | IP64 | IP64 | IP64 | IP64
Weight [kg] | 4.4 | 5.3 | 5.3 | 4.6 | 5.3 | 5.3
TECHNICAL DRAWINGS

NC / NO / SC / SO

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Air purge connection option
5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
6. Attachment option for customer-specific fittings
7. Energy supply IO-Link (M12, 5-pole)
8. Ground
9. Status display
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5013IL

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece] Centering Disc
018187

2 [piece] Filters
CFILT00011

www.zimmer-group.com  ► Data, Drawings, 3-D Models, Operating Instructions
**RECOMMENDED ACCESSORIES**

**GRIPPING COMPONENTS**

- UB5013AL: Universal jaw aluminium
- UB5013ST: Universal jaw steel
- EB5013AL: Aluminium adjustment jaw
- EB5013ST: Steel adjustment jaw
- WB5013L: Changeable jaw, loose part-set
- WB5013F: Changeable jaw, fix part

**ENERGY SUPPLY**

- GV1-8X8: Straight Fittings - Quick Connect Style

**CONNECTIONS / OTHER**

- KAG500IL: Plug-in connector straight 5 m - plug, socket M12
- SCM-C-00-00-A: Smart Communication Module

www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5016IL

PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 145 |
| Mx [Nm] | 195 |
| My [Nm] | 185 |
| Fa [N]  | 5200 |

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>GPDP015N-10-1A</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>GPDP015N-10-1A</td>
</tr>
</tbody>
</table>
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5016IL

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc
019387

2 [piece]
Filters
CFILT00011
## RECOMMENDED ACCESSORIES

### GRIPPING COMPONENTS

- **UB5016AL**: Universal jaw aluminium
- **UB5016ST**: Universal jaw steel
- **EB5016AL**: Aluminium adjustment jaw
- **EB5016ST**: Steel adjustment jaw
- **WB5016L**: Changeable jaw, loose part set
- **WB5016F**: Changeable jaw, fix part

### ENERGY SUPPLY

- **GV1-8X8**: Straight Fittings - Quick Connect Style

### CONNECTIONS / OTHER

- **KAG500IL**: Plug-in connector straight 5 m - plug, socket M12
- **SCM-C-00-00-A**: Smart Communication Module
# PRODUCT SPECIFICATIONS

### Gripping force diagram

![Gripping force diagram](image)

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

<table>
<thead>
<tr>
<th>Mr [Nm]</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mx [Nm]</td>
<td>205</td>
</tr>
<tr>
<td>My [Nm]</td>
<td>225</td>
</tr>
<tr>
<td>Fa [N]</td>
<td>7500</td>
</tr>
</tbody>
</table>

---

# TECHNICAL DATA

## Order no.

<table>
<thead>
<tr>
<th>Control</th>
<th>GPDS255IL-10-A</th>
<th>GPDS255NCIL-10-A</th>
<th>GPDS255NOIL-10-A</th>
<th>GPDS255SIL-10-A</th>
<th>GPDS255SCIL-10-A</th>
<th>GPDS255SOIL-10-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [mm]</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Gripping force in closing [N]</td>
<td>8430</td>
<td>11560</td>
<td>11680</td>
<td>16240</td>
<td>22270</td>
<td></td>
</tr>
<tr>
<td>Gripping force in opening [N]</td>
<td>8730</td>
<td>11860</td>
<td>11860</td>
<td>16820</td>
<td>22850</td>
<td></td>
</tr>
<tr>
<td>Gripping force secured by spring min. [N]</td>
<td>3130</td>
<td>3130</td>
<td>3130</td>
<td>6030</td>
<td>6030</td>
<td></td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>310</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>220</td>
<td>220</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
<td>+5 ... +50</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>1025</td>
<td>1750</td>
<td>1750</td>
<td>1025</td>
<td>1750</td>
<td>1750</td>
</tr>
<tr>
<td>Integrated valve technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated position sensing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>14.9</td>
<td>18.6</td>
<td>18.6</td>
<td>14.9</td>
<td>18.6</td>
<td>18.6</td>
</tr>
</tbody>
</table>
TECHNICAL DRAWINGS

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Air purge connection option
5. Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
6. Attachment option for customer-specific fittings
7. Energy supply IO-Link (M12, 5-pole)
8. Ground
9. Status display

Installation size GPD5025IL / 3-Jaw Concentric Grippers / pneumatic / Grippers

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com  239
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5025IL

► ACCESORIES

> INCLUDED IN DELIVERY

6 [piece] Centering Disc
030529

2 [piece] Filters
CFILT00011

www.zimmer-group.com   Data, Drawings, 3-D Models, Operating Instructions
### RECOMMENDED ACCESSORIES

#### GRIPPING COMPONENTS

- **UB5025AL**: Universal jaw aluminium
- **UB5025ST**: Universal jaw steel
- **EB5025AL**: Aluminium adjustment jaw
- **EB5025ST**: Steel adjustment jaw
- **WB5025L**: Changeable jaw, loose part-set
- **WB5025F**: Changeable jaw, fix part

#### ENERGY SUPPLY

- **GV1-8X8**: Straight Fittings - Quick Connect Style

#### CONNECTIONS / OTHER

- **KAG500IL**: Plug-in connector straight 5 m - plug, socket M12
- **SCM-C-00-00-A**: Smart Communication Module

Data, Drawings, 3-D Models, Operating Instructions  
[www.zimmer-group.com](http://www.zimmer-group.com)
SECURED CONFIGURATION EXAMPLES

GPP5000IL / GPD5000IL SERIES

► GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KAG500IL

TERMINAL STRIP

Remove the KAG500IL connector
and wire up the open end of the
cable directly to the control system
terminal strip.

1-4 grippers
24V 5A power supply unit

► GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KAG500IL

TERMINAL STRIP

Remove the KAG500IL connector
and wire up the open end of the
cable directly to the control system
terminal strip.

1-4 grippers
24V 5A power supply unit
GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)

- IO-Link connection cable 5 m M12-connecting cable 5x0.34 (max. cable length 10 m)
  - Order No. KAG500IL
- 24V master supply
- Field bus EtherCAT
- Control system Beckhoff

GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (SIEMENS)

- IO-Link connection cable 5 m M12-connecting cable 5x0.34 (max. cable length 10 m)
  - Order No. KAG500IL
- 24V master supply
- Field bus PROFINET
- Control system e.g. Siemens S7 1200

1-4 grippers
- 24V 5A power supply unit
PRODUCT ADVANTAGES

“ALL in ONE”

- Approximately the same gripping force as a comparable pneumatic gripper
- Self locking mechanism in case of power drop
- Same connection hole patterns as a comparable pneumatic gripper
- Plug and play – single-cable solution, supports incredibly easy control using I/O signals or IO-Link
- Integrated ACM control module - option of configuring gripping force, travel time and switching points
- Protected from corrosion and sealed in accordance with IP64
- Brushless DC motor – up to 30 million cycles without maintenance

SERIES CHARACTERISTICS

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td>GED50XX</td>
<td>IL-00</td>
</tr>
<tr>
<td>IO-Link</td>
<td></td>
</tr>
<tr>
<td>Digital I/O</td>
<td></td>
</tr>
<tr>
<td>30 million maintenance-free cycles (max.)</td>
<td></td>
</tr>
<tr>
<td>Integrated sensing</td>
<td></td>
</tr>
<tr>
<td>Gripping force adjustable</td>
<td></td>
</tr>
<tr>
<td>Self locking mechanism</td>
<td></td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td></td>
</tr>
<tr>
<td>Purged air</td>
<td></td>
</tr>
<tr>
<td>IP 64</td>
<td></td>
</tr>
</tbody>
</table>
BENEFITS IN DETAIL

1. **Wedge hook mechanism**
   - high forces and moments capacity
   - Synchronized gripper jaw movement

2. **Gripper jaw**
   - Gripper fingers mounted using removable centering sleeves
   - Lubricated for life via incorporated lubrication slots

3. **Dual lip seal**
   - Enables IP64
   - Prevents grease from being squeezed out, increasing service life

4. **Steel Linear Guide**
   - Steel in steel guide
   - Enables use of extremely long gripper fingers

5. **Mounting and positioning**
   - Alternatively, on several sides for customized mounting
   - Pneumatic and electrical versions identical apart from height

6. **BLDC motor**
   - Wear-resistant brushless DC motor

7. **Advanced control module**
   - Integrated control module with single-cable solution
   - Gripping force, travel time and query programmable via the control panel on the housing

8. **Drive train**
   - Combination of trapezoidal spindle and gear
   - Durable and robust

TECHNICAL DATA

| Installation size | Stroke per jaw [mm] | Gripping force [N] | Weight [kg] | IP class *
|-------------------|---------------------|-------------------|-------------|----------|
| GED5006           | 6                   | 540 - 960         | 1.09        | IP64*
| GED5008           | 8                   | 650 - 1150        | 1.66        | IP64*
| GED5010           | 10                  | 980 - 1520        | 2.33        | IP64*

*with purged air (max. 0.5 bar)

FURTHER INFORMATION IS AVAILABLE ONLINE

All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.
3-JAW CONCENTRIC GRIPPERS
SERIES GED5000 FUNCTIONAL DESCRIPTION

**GRIPPING COMPONENTS**

**Universal jaws – UB5000**
Can be used immediately or for individual reprocessing
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.

**Adjustment jaws – EB5000**
For tool-free adaptation of the gripper range
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.

**Interchangeable jaws – WB5000**
Enable fast change of individual gripper fingers
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

---

**THE GRIPPING COMPONENTS CAN BE COMBINED!**
The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.
GRIPPING COMPONENTS

Pressure piece – ADS5000
When the gripper fingers are open, the pressure piece is used for spring-supported positioning of the workpiece against a limit stop. This greatly reduces the loads on the gripper that arise during joining.

CONNECTIONS / OTHER

Centering sleeves
For defined position measurement of the gripper fingers
The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GED5006

PRODUCT SPECIFICATIONS

Gripping force diagram
Show the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 43
Mx [Nm] 70
My [Nm] 46
Fa [N] 1250

TECHNICAL DATA - BASIC VERSION

Order no. GED5006IL-00-A GED5006IO-00-A
Control
Drive BLDC motor BLDC motor
Stroke per jaw [mm] 6 6
Self locking mechanism mechanical mechanical
Control time [s] 0.035 0.035
Permissible weight per jaw max [kg] 0.4 0.4
Length of the gripper fingers max. [mm] 100 100
Repetition accuracy +/- [mm] 0.01 0.01
Operating temperature [°C] 5 ... 50 5 ... 50
Voltage [V] 24 24
Current consumption max. [A] 5 5
Protection to IEC 60529 IP64* IP64*
Weight [kg] 1.09 1.09

*with purged air (max. 0.5 bar)

TECHNICAL DATA - MODES

Technical data - N mode

Order no. GED5006IL-00-A GED5006IO-00-A
Gripping force 540 / 960 540 / 960
Gripping force 540 / 960 540 / 960
Travel time 0.15 / 0.22 0.15 / 0.22
Travel time 0.15 / 0.22 0.15 / 0.22

Technical data - NC mode

Order no. GED5006IL-00-A GED5006IO-00-A
Gripping force 540 / 960 540 / 960
Gripping force 540 / 960 540 / 960
Travel time 0.15 / 0.22 0.15 / 0.22
Travel time 0.15 / 0.22 0.15 / 0.22

Technical data - NO mode

Order no. GED5006IL-00-A GED5006IO-00-A
Gripping force 540 / 960 540 / 960
Gripping force 540 / 960 540 / 960
Travel time 0.13 0.13
Travel time 0.13 0.13
1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)

Installation size GED5006 / 3-Jaw Concentric Grippers / electrical / Grippers

Data, Drawings, 3-D Models, Operating Instructions  ➔ www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GED5006

► ACCESORIES

► INCLUDED IN DELIVERY

6 (piece)
Centering Disc
024230

► INFRASTRUCTURE IO-LINK

IO-Link
Master (internally)
Power adapter
B12-Y-5IL
KAG500IL
IO-Link
Master (external)

www.zimmer-group.com ► Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5006AL Universal jaw aluminium
UB5006ST Universal jaw steel
EB5006AL Aluminium adjustment jaw
EB5006ST Steel adjustment jaw
WB5006L Changeable jaw, loose-part-set
WB5006F Changeable jaw, fix-part

ADS5006-05 Pressure piece

RECOMMENDED ACCESSORY GED5006IL-00-A

CONNECTIONS / OTHER

KAG500IL Plug-in connector straight
5 m - plug, socket M12
B12-Y-6IL V-Plug-in Connector
SCM-C-00-00-A Smart Communication Module

RECOMMENDED ACCESSORY GED5006IO-00-A

CONNECTIONS / OTHER

KAG1000BB Plug-in Connector Straight
Cable 10 m - Female M12
KAW1000BB Plug-in Connector Angled
Cable 10 m - Female M12
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GED5008

PRODUCT SPECIFICATIONS

Gripping force diagram

Forces and moments

TECHNICAL DATA - BASIC VERSION

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>GED5008IL-00-A</td>
</tr>
<tr>
<td>Drive</td>
<td>BLDC motor</td>
</tr>
<tr>
<td>Stroke per jaw [mm]</td>
<td>8</td>
</tr>
<tr>
<td>Self locking mechanism</td>
<td>mechanical</td>
</tr>
<tr>
<td>Control time [s]</td>
<td>0.035</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.7</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>125</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>5 ... 50</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>5</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64*</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>1.66</td>
</tr>
</tbody>
</table>

*with purged air (max. 0.5 bar)

TECHNICAL DATA - MODES

Gripping force

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data - N mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>GED5008IL-00-A</td>
<td>GED5008IO-00-A</td>
</tr>
<tr>
<td>Gripping force ~</td>
<td>~ min. / max. [N]</td>
</tr>
<tr>
<td>Gripping force ~</td>
<td>~ min. / max. [N]</td>
</tr>
<tr>
<td>Travel time ~</td>
<td>~ min. / max. [s]</td>
</tr>
<tr>
<td>Travel time ~</td>
<td>~ min. / max. [s]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data - NC mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>GED5008IL-00-A</td>
<td>GED5008IO-00-A</td>
</tr>
<tr>
<td>Gripping force ~</td>
<td>~ min. / max. [N]</td>
</tr>
<tr>
<td>Gripping force ~</td>
<td>~ min. / max. [N]</td>
</tr>
<tr>
<td>Travel time ~</td>
<td>~ min. / max. [s]</td>
</tr>
<tr>
<td>Travel time ~</td>
<td>~ min. / max. [s]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data - NO mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>GED5008IL-00-A</td>
<td>GED5008IO-00-A</td>
</tr>
<tr>
<td>Gripping force ~</td>
<td>~ min. / max. [N]</td>
</tr>
<tr>
<td>Gripping force ~</td>
<td>~ min. / max. [N]</td>
</tr>
<tr>
<td>Travel time ~</td>
<td>~ min. / max. [s]</td>
</tr>
<tr>
<td>Travel time ~</td>
<td>~ min. / max. [s]</td>
</tr>
</tbody>
</table>
TECHNICAL DRAWINGS

1. Gripper attachment
2. Energy supply (M12, 8-pole)
3. Fixing for gripper finger
4. Air purge connection option
5. Attachment option for customer-specific fittings
6. Energy supply IO-Link (M12, 5-pole)
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GED5008

► ACCESORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc
024231

► INFRASTRUCTURE IO-LINK
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5008AL Universal jaw aluminium
UB5008ST Universal jaw steel
EB5008AL Universal jaw aluminium
EB5008ST Universal jaw steel
WB5008L Changeable jaw, loose part-set
WB5008F Changeable jaw, fix part

ADS5008-05 Pressure piece

RECOMMENDED ACCESSORY GED5008IL-00-A

CONNECTIONS / OTHER

KAG500IL 3D-Link Plug-in connector straight 5 m - plug, socket M12
B12-Y-BIL 3D-Link Smart Communication Module

RECOMMENDED ACCESSORY GED5008IO-00-A

CONNECTIONS / OTHER

KAG1000BB Plug-in Connector Straight Cable 10 m - Female M12
KAW1000BB Plug-in Connector Angled Cable 10 m - Female M12

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GED5010

PRODUCT SPECIFICATIONS

Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm] 75
My [Nm] 125
Fa [N] 95
Fa [N] 2700

TECHNICAL DATA - BASIC VERSION

Order no. GED5010IL-00-A GED5010IO-00-A
Control
Drive BLDC motor BLDC motor
Stroke per jaw [mm] 10 10
Self locking mechanism mechanical mechanical
Control time [s] 0.035 0.035
Permissible weight per jaw max [kg] 1.3 1.3
Length of the gripper fingers max. [mm] 160 160
Repetition accuracy +/- [mm] 0.01 0.01
Operating temperature [°C] 5 ... 50 5 ... 50
Voltage [V] 24 24
Current consumption max. [A] 5 5
Protection to IEC 60529 IP64* IP64*
Weight [kg] 2.33 2.33

*with purged air (max. 0.5 bar)

TECHNICAL DATA - MODES

Order no. GED5010IL-00-A GED5010IO-00-A
Gripping force - min. / max. [N] 980 / 1520 980 / 1520
Gripping force + min. / max. [N] 980 / 1520 980 / 1520
Travel time - min. / max. [s] 0.21 / 0.32 0.21 / 0.32
Travel time + min. / max. [s] 0.21 / 0.32 0.21 / 0.32

Order no. GED5010IL-00-A GED5010IO-00-A
Gripping force - min. / max. [N] - -
Gripping force + min. / max. [N] - -
Travel time - min. / max. [s] 0.21 / 0.32 0.21 / 0.32
Travel time + min. / max. [s] 0.16 0.16

Order no. GED5010IL-00-A GED5010IO-00-A
Gripping force - min. / max. [N] - -
Gripping force + min. / max. [N] - -
Travel time - min. / max. [s] 0.16 0.16
Travel time + min. / max. [s] 0.21 / 0.32 0.21 / 0.32
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GED5010

► ACCESSORIES

► INCLUDED IN DELIVERY

6 [piece]
Centering Disc
018187

► INFRASTRUCTURE IO-LINK
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5010AL
Universal jaw aluminium

UB5010ST
Universal jaw steel

EB5010AL
Aluminium adjustment jaw

EB5010ST
Steel adjustment jaw

WB5010L
Changeable jaw, loose part-set

WB5010F
Changeable jaw, fix part

ADS5010-05
Pressure piece

RECOMMENDED ACCESSORY GED5010IL-00-A

CONNECTIONS / OTHER

KAG500IL
Plug-in connector straight 5 m - plug, socket M12

B12-Y-SIL
V-Plug-in Connector

SCM-C-00-00-A
Smart Communication Module

RECOMMENDED ACCESSORY GED5010IO-00-A

CONNECTIONS / OTHER

KAG1000BB
Plug-in Connector Straight Cable 10 m - Female M12

KA1000BB
Plug-in Connector Angled Cable 10 m - Female M12
SECURED CONFIGURATION EXAMPLES
GEP5000 / GED5000 SERIES

► GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KA0500IL

1 gripper
24V 5A power supply unit with boost
Phoenix Contact
Order No. 2866750

2 grippers
24V 10A power supply unit with boost
Phoenix Contact
Order No. 2866763

3-4 grippers
24V 20A power supply unit with boost
Phoenix Contact
Order No. 2866776

Control system
Beckhoff

Control system master clamp
Beckhoff

4xIO-Link

TERMINAL STRIP

Power

► GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KA0500IL

1 gripper
24V 5A power supply unit with boost
Phoenix Contact
Order No. 2866750

2 grippers
24V 10A power supply unit with boost
Phoenix Contact
Order No. 2866763

3-4 grippers
24V 20A power supply unit with boost
Phoenix Contact
Order No. 2866776

Control system
Siemens

CM 4xIO-Link

TERMINAL STRIP

Power

www.zimmer-group.com  Data, Drawings, 3-D Models, Operating Instructions
GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)

IO-Link connection cable
5 m M12-connecting cable 5x0.34
(max. cable length 10 m)
Order No. KA0500IL

Connector M12, N-coded, 3-pin

Y adapter B12-Y-5IL

IO-Link master
Port class B
Beckhoff

Field bus
EtherCAT

24V master supply

Power distributor CASB00030
Weidmüller 1989340000

2 grippers
24V 10A power supply unit with boost
Phoenix Contact
Order No. 2866763

1 gripper
24V 5A power supply unit with boost
Phoenix Contact
Order No. 2866750

3 grippers
24V 20A power supply unit with boost
Phoenix Contact
Order No. 2866776

Control system
Beckhoff

24V 20A power supply

3-4 grippers
24V 20A power supply unit with boost
Phoenix Contact
Order No. 2866776

Control system
Beckhoff

PROFINET

24V master supply

Data, Drawings, 3-D Models, Operating Instructions www.zimmer-group.com
SECURED CONFIGURATION EXAMPLES
GEP5000 / GED5000 SERIES

► GEP5000 / GED5000 (DIGITAL IO) WIRING TO CONTROL CABINET

- **1 gripper**
  - 24V 5A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866750

- **2 grippers**
  - 24V 10A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866763

- **3-4 grippers**
  - 24V 20A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866776

Control system
Beckhoff / Siemens

TERMINAL STRIP

Power
2-JAW ANGULAR GRIPPERS
SERIES GPW5000

PRODUCT ADVANTAGES

“The Universal One”

- Highest performance with the smallest dimensions
  Features a one-of-a-kind ratio of net mass to gripper finger length and gripping moment. The performance of your machine is increased as a result.

- Versatile applicability
  Thanks to standard functionality such as IP64 and corrosion protection, you are able to use these grippers in almost any of your applications. Even the toughest environments are no problem.

- Robust and process-reliable
  Thanks to a maintenance-free design up to 30 million cycles and the most solid force transmission possible, process assurance is maximized.

SERIES CHARACTERISTICS

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Base version</th>
<th>Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPW50XX</td>
<td>NC</td>
<td>-00</td>
</tr>
<tr>
<td>Spring closing C</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>30 million maintenance-free cycles (max.)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Inductive sensor</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Magnetic field sensor</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Protected against corrosion</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Purged air</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>IP 64</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Temperature-resistant</td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>

www.zimmer-group.com > Data, Drawings, 3-D Models, Operating Instructions
BENEFITS IN DETAIL

1. Positively driven lever mechanism
   - synchronized the movement of the gripper jaws

2. Gripper jaw
   - Gripper fingers mounted using removable centering sleeves

3. Removable centering sleeves
   - quick and economical positioning of the gripper fingers

4. Integrated gripping force safety device
   - Spring built into cylinder chamber as an energy store

5. Drive
   - Double-acting pneumatic rotor cylinder

6. Mounting and positioning
   - Alternatively, on several sides for customized mounting

7. Sensing slot
   - mounting and positioning of magnetic field sensors

8. Dual lip seal
   - IP64
   - Prevents grease from being squeezed out, increasing service life

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Installation size</th>
<th>Stroke per jaw</th>
<th>Gripping force</th>
<th>Weight</th>
<th>IP class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[°]</td>
<td>[N]</td>
<td>[kg]</td>
<td></td>
</tr>
<tr>
<td>GPW5008</td>
<td>+15/-2</td>
<td>1450</td>
<td>0.9</td>
<td>IP64</td>
</tr>
<tr>
<td>GPW5013</td>
<td>+15/-2</td>
<td>4200</td>
<td>3</td>
<td>IP64</td>
</tr>
<tr>
<td>GPW5025</td>
<td>+15/-2</td>
<td>14500</td>
<td>12.1</td>
<td>IP64</td>
</tr>
</tbody>
</table>

FURTHER INFORMATION IS AVAILABLE ONLINE

All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.
2-JAW ANGULAR GRIPPERS
SERIES GPW5000 FUNCTIONAL DESCRIPTION

GRIPPING COMPONENTS

Universal jaws – UB5000
Can be used immediately or for individual reprocessing
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.

Adjustment jaws – EB5000
For tool-free adaptation of the gripper range
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.

Interchangeable jaws – WB5000
Enable fast change of individual gripper fingers
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.
GRIPPING COMPONENTS

L-gripper jaw – LB5000
Fast and easy method for adapting and installing the gripper fingers on the sides.

THE GRIPPING COMPONENTS CAN BE COMBINED!
The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.

ENERGY SUPPLY

Pneumatic threaded connections
Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.
Pressure safety valve – DSV
Ensures safe retention of force and position if the system pressure drops
The integrated double check valve, which can be unlocked, retains the system pressure of the gripper in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled bleeding of the gripper.

Attachment kit
The attachment kit is installed on the gripper using the fastening material included in the scope of delivery. The attachment kit enables sensing of the gripper positions via inductive proximity switches.
**SENSORS**

**Inductive sensors – NJ**
For direct position sensing of the gripper jaws
The sensor is guided into the intake as far as it will go and fixed in place using the lateral clamping screw. Tuning to the desired position then takes place by adjusting the cam switch. The sensors are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector, as well as with direct plug orientation.

**2-point magnetic field sensors – MFS**
With two freely programmable switching points
Using the programming unit integrated in the cable, two switch points can be freely defined for this sensor. To do so, the sensor is clamped in the C-groove, the gripper approaches position one and the position is taught in using the teach button. Afterwards, the second position is approached with the gripper and programmed. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The sensors are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.
1-point magnetic field sensors – MFS
For non-contact sensing of the piston position
These sensors are installed in the C-groove of the gripper and detect the magnet attached to the piston of the gripper. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The variants are available in versions with 5 m cables with exposed leads and 0.3 m cable with connector.
CONNECTIONS / OTHER

Plug-in connectors
For extending and fabricating the connection lines for the sensors
Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.

Centering sleeves
For defined position measurement of the gripper fingers
The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.
2-JAW ANGULAR GRIPPERS
INSTALLATION SIZE GPW5008

PRODUCT SPECIFICATIONS

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

TECHNICAL DATA

Order no.
GPW5008NC-00-A

<table>
<thead>
<tr>
<th>Technical data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [*]</td>
<td>+15/-2</td>
</tr>
<tr>
<td>Gripping moment in closing max. [Nm]</td>
<td>33</td>
</tr>
<tr>
<td>Gripping moment secured by spring min. [Nm]</td>
<td>7.5</td>
</tr>
<tr>
<td>Gripping force in closing max. (at 0°) [N] *</td>
<td>1450</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.1</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>0.17</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>0.7</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>115</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>35</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*measured from top edge of gripper jaw

Order no.
GPW5008NC-20-A

Technical Data - High Temperature Version

| Operating temperature [°C] | -10 ... +130 |

www.zimmer-group.com  Data, Drawings, 3-D Models, Operating Instructions
**TECHNICAL DRAWINGS**

1. Gripper attachment
2. Energy supply
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Fixing for mounting block
6. Fixing clamping bracket (KHA)
7. Air purge connection option
8. Mounting possibility for stroke adjustment

screws

1. Mounting possibility for cam switch
2. Adapter
3. Gripper
4. Air connection (close)
5. Air connection (open)
6. Air connection, alternative (close)
7. Air connection, alternative (open)

Hoseless air feed-through

Installation size GPW5008 / 2-Jaw Angular Grippers / pneumatic / Grippers
2-JAW ANGULAR GRIPPERS
INSTALLATION SIZE GPW5008

► ACCESORIES

6 [piece]
Centering Disc
024231

► INCLUDED IN DELIVERY
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

UB5008AL Universal jaw aluminium
UB5008ST Universal jaw steel
EB5008AL Aluminium adjustment jaw
EB5008ST Steel adjustment jaw
LB5008 L-jaw
WB5008L Changeable jaw, loose-part-set

WB5008F Changeable jaw, fix-part

ENERGY SUPPLY

WVM5 Angled Fittings - Quick Connect Style
DSV1-8 Pressure safety valve
DSV1-8E Pressure safety valve with quick exhaust

SENSORS

ANS0084 Attachment Kit for Inductive Proximity Switch
NJ8-E2S Inductive proximity switch - Connector M8
MFS01-S-KHC-P1-PNP Magnetic field sensor Angled Cable 0.3 m - Connector M8
MFS02-S-KHC-P1-PNP Magnetic field sensor Straight Cable 0.3 m - Connector M8
MFS01-S-KHC-P2-PNP 2-Position sensor Cable 0.3 m - Connector M8
MFS02-S-KHC-P2-PNP 2-Position sensor Cable 0.3 m - Connector M8

CONNECTIONS / OTHER

KAG500 Plug-in connector Straight Cable 5m - Socket M8 (female)
2-JAW ANGULAR GRIPPERS
INSTALLATION SIZE GPW5013

PRODUCT SPECIFICATIONS

Gripping force diagram
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

Forces and moments
Displays static forces and moments that can also have an effect, besides the gripping force.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPW5013NC-00-A</td>
<td></td>
</tr>
<tr>
<td>Stroke per jaw [*]</td>
<td>+15/-2</td>
</tr>
<tr>
<td>Gripping moment in closing max. [Nm]</td>
<td>130</td>
</tr>
<tr>
<td>Gripping moment secured by spring min. [Nm]</td>
<td>39.5</td>
</tr>
<tr>
<td>Gripping force in closing max. (at 0°) [N] [*]</td>
<td>4200</td>
</tr>
<tr>
<td>Closing time [s]</td>
<td>0.08</td>
</tr>
<tr>
<td>Opening time [s]</td>
<td>0.12</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
<td>2.4</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>185</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.01</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
<td>4</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
<td>8</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
<td>6</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +90</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
<td>160</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
<td>IP64</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>3</td>
</tr>
</tbody>
</table>

*measured from top edge of gripper jaw

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPW5013NC-20-A</td>
<td></td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>-10 ... +130</td>
</tr>
</tbody>
</table>
2-JAW ANGULAR GRIPPERS
INSTALLATION SIZE GPW5013

► ACCESORIES

► INCLUDED IN DELIVERY

4 [piece] Centering Disc 018187
2 [piece] Centering Disc 019280
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5013AL: Universal jaw aluminium
- UB5013ST: Universal jaw steel
- EB5013AL: Aluminum adjustment jaw
- EB5013ST: Steel adjustment jaw
- LB5013: L-jaw
- WB5013L: Changeable jaw, loose-part set
- WB5013F: Changeable jaw, fix-part

ENERGY SUPPLY

- WV1-8X8: Angled Fittings - Quick Connect Style
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- ANS0084: Attachment Kit for Inductive Proximity Switch
- NJ8-E2S: Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP: Magnetic field sensor Angled Cable 0,3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor Straight Cable 0,3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position sensor Cable 0,3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position sensor Cable 0,3 m - Connector M8

CONNECTIONS / OTHER

- KAG500: Plug-in connector Straight Cable 5m - Socket M8 (female)
2-JAW ANGULAR GRIPPERS
INSTALLATION SIZE GPW5025

PRODUCT SPECIFICATIONS

**Gripping force diagram**
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length.

**Forces and moments**
Displays static forces and moments that can also have an effect, besides the gripping force.

| Mr [Nm] | 180 |
| My [Nm] | 225 |
| Fa [N]  | 7500 |

TECHNICAL DATA

**Order no.**

<table>
<thead>
<tr>
<th>GPW5025NC-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke per jaw [&quot;]</td>
</tr>
<tr>
<td>Gripping moment in closing max. [Nm]</td>
</tr>
<tr>
<td>Gripping moment secured by spring min. [Nm]</td>
</tr>
<tr>
<td>Gripping force in closing max. (at 0°) [N]*</td>
</tr>
<tr>
<td>Closing time [s]</td>
</tr>
<tr>
<td>Opening time [s]</td>
</tr>
<tr>
<td>Permissible weight per jaw max [kg]</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
</tr>
<tr>
<td>Operating pressure min. [bar]</td>
</tr>
<tr>
<td>Operating pressure max. [bar]</td>
</tr>
<tr>
<td>Nominal operating pressure [bar]</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
</tr>
<tr>
<td>Air volume per cycle [cm³]</td>
</tr>
<tr>
<td>Protection to IEC 60529</td>
</tr>
<tr>
<td>Weight [kg]</td>
</tr>
</tbody>
</table>

*measured from top edge of gripper jaw

**Order no.**

<table>
<thead>
<tr>
<th>GPW5025NC-20-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
</tr>
</tbody>
</table>
2-JAW ANGULAR GRIPPERS
INSTALLATION SIZE GPW5025

► ACCESORIES

4 [piece] Centering Disc
030529
2 [piece] Centering Disc
019387

► INCLUDED IN DELIVERY

www.zimmer-group.com ▶ Data, Drawings, 3-D Models, Operating Instructions
RECOMMENDED ACCESSORIES

GRIPPING COMPONENTS

- UB5025AL: Universal jaw aluminium
- UB5025ST: Universal jaw steel
- EB5025AL: Aluminium adjustment jaw
- EB5025ST: Steel adjustment jaw
- LB5025: L-jaw
- WB5025L: Changeable jaw, loose-part set

WB5025F: Changeable jaw, fix-part

ENERGY SUPPLY

- WV1-8X8: Angled Fittings - Quick Connect Style
- DSV1-8: Pressure safety valve
- DSV1-8E: Pressure safety valve with quick exhaust

SENSORS

- ANS0084: Attachment Kit for Inductive Proximity Switch
- NJ8-E2S: Inductive proximity switch - Connector M8
- MFS01-S-KHC-P1-PNP: Magnetic field sensor angled Cable 0,3 m - Connector M8
- MFS02-S-KHC-P1-PNP: Magnetic field sensor straight Cable 0,3 m - Connector M8
- MFS01-S-KHC-P2-PNP: 2-Position sensor Cable 0,3 m - Connector M8
- MFS02-S-KHC-P2-PNP: 2-Position sensor Cable 0,3 m - Connector M8

CONNECTIONS / OTHER

- KAG500: Plug-in connector straight Cable 5m - Socket M8 (female)
PRODUCT ADVANTAGES

Easy and fast
Easy gripper finger adjustment to fit various workpieces saves time and money

Reproducible and durable
The numbering of the detent notches allows you to easily configure the gripper finger length and FEM-calculated adjustment jaws guarantee maximum process reliability

You can install one and the same adjustment jaw within the same 5000 gripper range on various gripper types of identical size and combine it with the respective accessory parts. The increases flexibility and reduces the diversity of parts in equal measure, which in turn reduces the storage costs

THE BEST PRODUCT FOR YOUR APPLICATION

Our products welcome the challenge!
Extreme conditions, all over the world—our tried and tested components and systems give you endless possibilities. Find the best product for your specific use:
www.zimmer-group.com
SETTING THE GRIPPER FINGER POSITION IN UNDER 10 SECONDS

Unlocking

Adjusting

Locking

* Pressure pieces are screwed on and can be removed to minimize interference contours

FURTHER INFORMATION IS AVAILABLE ONLINE
All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.
PRODUCT SPECIFICATIONS

Gripping force diagram

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

Order no. | EB5003AL | EB5003ST |
---|---|---|
Compatible with installation size | GPP5003 / GPD5003 | GPP5003 / GPD5003 |
Max. adjustment range [mm] | 21 | 24 |
Spacing [mm] | 7x3 | 8x3 |
Weight per adjustment jaw [kg] | 0.04 | 0.09 |

Fastening the adjustment jaw
Fixing for gripper finger
Adjustment mechanism (removable)

Technical data
PRODUCT SPECIFICATIONS

Gripping force diagram

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

Order no. | Compatible with installation size | Max. adjustment range [mm] | Spacing [mm] | Weight per adjustment jaw [kg]
---|---|---|---|---
EB5004AL | EB5004 ST | GPP5004 / GPD5004 | GPP5004 / GPD5004 | 28 | 32 | 7x4 | 8x4 | 0.06 | 0.13

Technical data

Order no. | EB5004AL | EB5004ST |
---|---|---|
Fastening the adjustment jaw | ① | ① |
Fixing for gripper finger | ② | ② |
Adjustment mechanism (removable) | ③ | ③ |
**ADJUSTMENT JAWS**
**INSTALLATION SIZE EB5006**

**PRODUCT SPECIFICATIONS**

**Gripping force diagram**
Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>EB5006AL</th>
<th>EB5006ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible with installation size</td>
<td>GPP5006 / GEP5006 / GPDS006 / GDES006</td>
<td>GPP5006 / GEP5006 / GPDS006 / GDES006</td>
</tr>
<tr>
<td>Max. adjustment range [mm]</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Spacing [mm]</td>
<td>7x5</td>
<td>8x5</td>
</tr>
<tr>
<td>Weight per adjustment jaw [kg]</td>
<td>0.10</td>
<td>0.20</td>
</tr>
</tbody>
</table>

**Technical data**

1. Fastening the adjustment jaw
2. Fixing for gripper finger
3. Adjustment mechanism (removable)

**ADJUSTMENT JAWS**
**INSTALLATION SIZE EB5006**

**PRODUCT SPECIFICATIONS**

**Gripping force diagram**
Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

<table>
<thead>
<tr>
<th>Order no.</th>
<th>EB5006AL</th>
<th>EB5006ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible with installation size</td>
<td>GPP5006 / GEP5006 / GPDS006 / GDES006</td>
<td>GPP5006 / GEP5006 / GPDS006 / GDES006</td>
</tr>
<tr>
<td>Max. adjustment range [mm]</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Spacing [mm]</td>
<td>7x5</td>
<td>8x5</td>
</tr>
<tr>
<td>Weight per adjustment jaw [kg]</td>
<td>0.10</td>
<td>0.20</td>
</tr>
</tbody>
</table>

**Technical data**

1. Fastening the adjustment jaw
2. Fixing for gripper finger
3. Adjustment mechanism (removable)
ADJUSTMENT JAWS
INSTALLATION SIZE EB5008

PRODUCT SPECIFICATIONS

Gripping force diagram

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

Technical data

<table>
<thead>
<tr>
<th>Order no.</th>
<th>EB5008AL</th>
<th>EB5008ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>compatible with installation size</td>
<td>GPP5008 / GEP5008 / GPD5008 / GED5008 / GPW5008</td>
<td>GPP5008 / GEP5008 / GPD5008 / GED5008 / GPW5008</td>
</tr>
<tr>
<td>Max. adjustment range [mm]</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>Spacing [mm]</td>
<td>8x5</td>
<td>9x5</td>
</tr>
<tr>
<td>Weight per adjustment jaw [kg]</td>
<td>0.14</td>
<td>0.34</td>
</tr>
</tbody>
</table>

ADJUSTMENT JAWS
INSTALLATION SIZE EB5008

Order no.

EB5008AL
EB5008ST

Technical data

1. Fastening the adjustment jaw
2. Fixing for gripper finger
3. Adjustment mechanism (removable)
ADJUSTMENT JAWS
INSTALLATION SIZE EB5010

PRODUCT SPECIFICATIONS

Gripping force diagram

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

Order no. EB5010AL EB5010ST Compatibility with installation size GPP5010 / GEP5010 / GDP5010 / GED5010 GPP5010 / GEP5010 / GDP5010 / GED5010
Max. adjustment range [mm] 54 60
Spacing [mm] 9x6 10x6
Weight per adjustment jaw [kg] 0.19 0.45

Technical data

1 Fastening the adjustment jaw
2 Fixing for gripper finger
3 Adjustment mechanism (removable)
PRODUCT SPECIFICATIONS

Gripping force diagram

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

Order no. | EB5013AL | EB5013ST
---|---|---
Compatible with installation size | GPP5013 / GPD5013 / GPW5013 | GPP5013 / GPD5013 / GPW5013
Max. adjustment range [mm] | 63 | 70
Spacing [mm] | 9x7 | 10x7
Weight per adjustment jaw [kg] | 0.30 | 0.75

Data, Drawings, 3-D Models, Operating Instructions: www.zimmer-group.com
**ADJUSTMENT JAWS**

**INSTALLATION SIZE EB5016**

---

**PRODUCT SPECIFICATIONS**

**Gripping force diagram**

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

**Technical data**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>EB5016AL</th>
<th>EB5016ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible with installation size</td>
<td>GPP5016 / GPDS5016</td>
<td>GPP5016 / GPDS5016</td>
</tr>
<tr>
<td>Max. adjustment range [mm]</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td>Spacing [mm]</td>
<td>9x8</td>
<td>10x8</td>
</tr>
<tr>
<td>Weight per adjustment jaw [kg]</td>
<td>0.56</td>
<td>1.35</td>
</tr>
</tbody>
</table>

---

**ADJUSTMENT JAWS**

**INSTALLATION SIZE EB5016**

---

**Order no.**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>EB5016AL</th>
<th>EB5016ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible with installation size</td>
<td>GPP5016 / GPDS5016</td>
<td>GPP5016 / GPDS5016</td>
</tr>
<tr>
<td>Max. adjustment range [mm]</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td>Spacing [mm]</td>
<td>9x8</td>
<td>10x8</td>
</tr>
<tr>
<td>Weight per adjustment jaw [kg]</td>
<td>0.56</td>
<td>1.35</td>
</tr>
</tbody>
</table>
ADJUSTMENT JAWS
INSTALLATION SIZE EB5025

PRODUCT SPECIFICATIONS

Gripping force diagram

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

Technical data

<table>
<thead>
<tr>
<th>Order no.</th>
<th>EB5025AL</th>
<th>EB5025ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible with installation size</td>
<td>GPPS025 / GPD5025 / GPW5025</td>
<td>GPPS025 / GPD5025 / GPW5025</td>
</tr>
<tr>
<td>Max. adjustment range [mm]</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Spacing [mm]</td>
<td>9x10</td>
<td>10x10</td>
</tr>
<tr>
<td>Weight per adjustment jaw [kg]</td>
<td>0.81</td>
<td>1.95</td>
</tr>
</tbody>
</table>

1. Fastening the adjustment jaw
2. Fixing for gripper finger
3. Adjustment mechanism (removable)

Data, Drawings, 3-D Models, Operating Instructions  www.zimmer-group.com
PRODUCT SPECIFICATIONS

Gripping force diagram

Displays the maximum possible gripping force of the gripper in relation to the gripper finger length.

Order no. Compatible with installation size Max. adjustment range [mm] Spacing [mm] Weight per adjustment jaw [kg]

<table>
<thead>
<tr>
<th>EB5030AL</th>
<th>EB5030ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5030 / GPD5030</td>
<td>GPP5030 / GPD5030</td>
</tr>
<tr>
<td>96</td>
<td>108</td>
</tr>
<tr>
<td>8x12</td>
<td>9x12</td>
</tr>
<tr>
<td>1.07</td>
<td>2.63</td>
</tr>
</tbody>
</table>

Technical data

Order no. Compatibility Installation size Max. adjustment range [mm] Spacing [mm] Weight per adjustment jaw [kg]

1. Fastening the adjustment jaw
2. Fixing for gripper finger
3. Adjustment mechanism (removable)
Flexible connection to your robot
Adapter plate manufactured according to EN ISO 9409-1 matches for a variety of 40 different types of robot manufacturers. In addition, also available for robots with hollow axle.

1st step: Select adapter plate
Simply define the type of robot and you get the appropriate adapter plate.

About 100 different variants
Adapter plates and angle flanges can be combined with 16 different grippers - with the result of more than 100 different varieties. Choose from our main catalog your appropriate gripper. There you will find the most diverse designs: some with other without gripping force safety device, protected from dust or temperature resistant.

2nd step: Select Angle flange
Choose a gripper and there follows the right angle flange.

Extend the functionality of your Angle flange
Cover plate, discharge nozzle or programming pins, with the extensive accessory, you can quickly and individually integrate additional functions.

3rd step: Select accessories
### 1st step:

**Order no.:** Adapter plate  
**Connecting flange EN-ISO9409-1 TK 31.5**  
**ViperS650**  
Pro Six  
LR mate 200  
KR5 six  
RV1, RV2, RV3, RV4, RV5, RV6  
HP3, HP5, HP6  
RX60, TX40, TX60, RS20, RS40, RS60, RS80  
**Order no.:** APR05

### 2nd step:

**Order no.:** Angle flange  
**Connecting flange EN-ISO9409-1 TK 40**  
140, 2400L, 1600-5, 1600-7  
**Viper S13400**  
smart six  
M-6iB, M16iB, M710iC/20L  
FS06, FC06, FA06, FS10C, FC10C  
KR16L6 (KS)  
RV/12  
UP8, HP6, HP20, IA20  
RX90, RX130XL  
**Order no.:** APR01

### 3rd step:

**Order no.:** Accessories  
**Cover plate**  
WFR03  
WFR04  
**Discharge nozzle**  
WFR03 + WFR04  
**Programming pins**  
WFR03 + WFR04  
**Order no.:** ABWFR01

**All other informations about your gripper, you will find in our catalog or online at:**  
[www.zimmer-group.com](http://www.zimmer-group.com)
# CHECKLIST

## GRIPPERS

<table>
<thead>
<tr>
<th>Customer number</th>
<th>Telephone number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>Fax number</td>
</tr>
<tr>
<td>Contact</td>
<td>E-mail</td>
</tr>
<tr>
<td>Mr.</td>
<td>Mrs.</td>
</tr>
<tr>
<td>Request</td>
<td>Desired date</td>
</tr>
<tr>
<td>Order</td>
<td>Order No.</td>
</tr>
<tr>
<td>Parallel grippers</td>
<td>Concentric grippers</td>
</tr>
<tr>
<td>Other / if yes, which type</td>
<td></td>
</tr>
</tbody>
</table>

### Drive

- **Pneumatic**
- **Electrical**
- **Hydraulic**

**Operating pressure** [bar]  
**Voltage** [V]

### Required stroke

- **Per jaw** [mm]  
- **Total stroke** [mm]

### Gripper finger length

**Gripper top edge to force application point** [mm]

### Ambient conditions

- **Clean / Dry**
- **Small amount of swarf / Coolant overspray**
- **Large amount of swarf / Coolant under pressure / Grinding agent**
- **Chemical substances / if yes, which**

**Temperature** [°C]  
**Cycles** per minute

### Required force

- **Gripping force** [N]  
- **Workpiece weight** kg  
- **Workpiece weight** g

### Gripping type

- **Internal gripping**
- **External gripping**
- **Frictional fit**
- **Form fit**

**Prism angle** [°]  
**Friction coefficient**  
**Axis acceleration** [m/s²]

### Self-locking

- **Not required**
- **In closing**
- **In opening**  
- **Pressure safety valve**

[298] www.zimmer-group.com
Desired accessories

- Inductive sensor
- Magnetic field sensor
- With Cable
- Plugable

- Separate cable / if yes, how long [m]
- Pressure safety valve
- Pneumatic fittings / if yes, which
  - Straight fitting
  - Angled fitting
  - Air flow control valve

Notes / Comments

Editor / Date

Attachment

- Sketch
- 3D model
- Others
The contents of this catalog are not legally binding and are intended solely for informational purposes. Any final agreement will be in the form of a written order confirmation from Zimmer GmbH, which occurs only subject to the respective current General Terms and Conditions of Sale and Delivery of Zimmer GmbH. These can be found online at www.zimmer-group.com.

All of the products listed in this catalog are designed for their intended use, e.g. machines for automation. The recognized technical regulations for safety and professional work must be followed for use and installation. Furthermore, the respective laws, guidelines from TÜV, guidelines from the respective trade association and VDE stipulations shall apply.

The technical data listed in this catalog must be observed by the user. The conditions of use may not fall below or exceed the specified data. If information is missing, it cannot be assumed that there are no upper or lower limits or no limitations for specific use cases. Consultation is required in these cases.

Disposal is not included in the price, which would have to be taken into account accordingly in the event of return to or disposal by Zimmer GmbH.

**TECHNICAL DATA AND FIGURES**

The technical data and figures have been compiled with great care and to the best of our knowledge. We cannot guarantee that the information is up to date, correct or complete.

The specifications and information—such as figures, drawings, descriptions, dimensions, weights, materials, technical and other performance data and the described products and services—contained in general product descriptions, Zimmer GmbH catalogs, brochures and price lists in any form are subject to change and may be modified or updated at any time without prior notification. They are binding only to the extent expressly specified in a contract or order confirmation. Slight deviations from such descriptive product information shall be considered approved and shall not affect fulfillment of agreements insofar as they are reasonable for the customer.

**LIABILITY**

Products from Zimmer Group are subject to the German Product Liability Act. This catalog does not contain any guarantees, assurances of quality or procurement agreements for the products it depicts, neither expressly nor implied, including for the availability of products. Advertising statements relating to quality features, properties or applications for the products are not legally binding.

To the extent permitted by law, Zimmer GmbH is exempt from any liability for direct or indirect damage, subsequent damage and requests of any kind or on any legal basis resulting from the use of information contained in this catalogue.

**TRADEMARK, COPYRIGHT AND REPRODUCTION**

The depiction of commercial property rights in this catalog—such as brands, logos, registered trademarks or patents—does not include the granting of licenses or use rights. Their use is not permitted without the expressed written agreement of Zimmer GmbH. All contents of this catalog are the intellectual property of Zimmer GmbH. For the purposes of copyright, any unlawful use of intellectual property, including excerpts, is prohibited. Reprinting, copying or translating (including in the form of excerpts) are permitted only with the prior written consent of Zimmer GmbH.

**STANDARDS**

DECLARATION OF INCORPORATION IN TERMS OF THE EC DIRECTIVE 2006/42/EC ON MACHINERY (ANNEX II 1 B)

We hereby declare that our elements meet the following basic requirements of the Machinery Directive 2006/42/EC as an incomplete machine

No.1.1.2., No.1.1.3., No.1.1.5., No.1.3.2, No. 1.3.4, No. 1.3.7, No.1.5.3, No.1.5.4, No.1.5.8., No.1.6.4, No.1.7.1, No.1.7.3, No.1.7.4.

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with electronic versions of the incomplete machine’s special documents via our documentation department should they have reason to request them. The incomplete machine may only be commissioned if the machine or system in which the incomplete machine is to be installed has been determined to satisfy the conditions of the Machinery Directive 2006/42/EC and the EC Declaration of Conformity has been produced in accordance with Annex II A.