Handling technology
Gripper series GEP2000

THE KNOW-HOW FACTORY

www.zimmer-group.com
THE KNOW-HOW FACTORY
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.
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.
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.
## ELECTRIC GRIPPERS
### OVERVIEW OF SERIES

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<tr>
<th>Series</th>
<th>GEP9000</th>
<th>GEP2000</th>
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<td>Stroke per jaw [mm]</td>
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<td>Voltage [V]</td>
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<td>Current consumption max. [A]</td>
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<td>Weight [kg]</td>
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<td>Corrosion resistance</td>
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<tr>
<td>Magnetic field sensor</td>
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<th>Safety characteristics</th>
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<tr>
<td>Spring opening O</td>
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<td>Self locking mechanism</td>
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<td>Maintenance-free cycles (max.)</td>
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<td>10 million</td>
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www.zimmer-group.com - Data, Drawings, 3D Models, Operating Instructions
<table>
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<th>GEP5000</th>
<th>GED5000</th>
<th>GEH6000IL</th>
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<td>6 - 10</td>
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<td>0 - 80</td>
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<td>540</td>
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<td>5</td>
<td>7.5</td>
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<td>0.79 - 1.66</td>
<td>1.09 - 2.33</td>
<td>0.78 - 2.6</td>
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<table>
<thead>
<tr>
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<th>GED5000</th>
<th>GEH6000IL</th>
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<tbody>
<tr>
<td>64</td>
<td>64</td>
<td>54</td>
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<tr>
<td>30 million</td>
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<td>5 million</td>
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</table>
2-JAW PARALLEL GRIPPERS
SERIES GEP2000

PRODUCT ADVANTAGES

“The electric compact one”

Largest stroke in small installation space
Do you require a large stroke, due to the fact that you are operating either a form fit gripper or a large range of parts but the installation space and the load capacity of your application is limited? Then this gripper is perfect for you!

Adjustable gripping force
Using pressures that are too high can damage your workpieces! You can optimally adjust the gripping force to your workpiece by means of the integrated potentiometer or over the control system via IO-Link.

The simplest activation
It is your choice whether you want to control the gripper by means of I/O ports—like a valve—or if you prefer the version with IO-Link. Both have this in common: they are easy to integrate into your control system.

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.de

HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GEP2013</th>
<th>-</th>
<th>-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>IO-Link control</td>
<td>IL 00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital control</td>
<td>IO 00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital control + integrated analog query</td>
<td>IO 05</td>
<td></td>
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</tr>
</tbody>
</table>
Adjustable gripping force

- Four-level gripping force adjustment via rotary switch for digital gripper control
- For the IO-Link variant, gripping force can be conveniently adjusted using the control system

Operating safety

- Mechanical self-locking mechanism, which means that in the event of a power failure, the workpiece is held securely
- Gripper can be mechanically opened by means of an Allen key
**CONTROL**

**GEP2000 SERIES**

1. **IO-LINK CONTROL — GEP2000IL-00-A**

![Diagram of IO-LINK CONTROL — GEP2000IL-00-A](image)

2. **DIGITAL CONTROL — GEP2000IO-00-A**

![Diagram of DIGITAL CONTROL — GEP2000IO-00-A](image)

3. **DIGITAL CONTROL + INTEGRATED ANALOG SENSING — GEP2000IO-05-A**

![Diagram of DIGITAL CONTROL + INTEGRATED ANALOG SENSING — GEP2000IO-05-A](image)
1. **IO-LINK CONTROL — GEP2000IL-00-A**
   - Single-cable solution—control system data, status/sensor data and power supply over a single cable
   - Bi-directional data transmission
   - Gripping force and gripping speed can be configured using software
   - 32 workpieces data sets can be programmed
   - Parts detection in range of +/- 0.05 mm with freely teachable area
   - Status data such as temperature and cycle number can be read out
   - Can be integrated into ZIMMER HMI

2. **DIGITAL CONTROL — GEP2000IO-00-A**
   - Single-cable solution—control system data and power supply over a single cable
   - Gripper commissioning by means of digital signals
   - Optional digital gripper position feedback via external sensors
   - Gripping force adjustment in four levels to the object being gripped, using rotary switch
   - Can be integrated into ZIMMER HMI

3. **DIGITAL CONTROL + INTEGRATED ANALOG SENSING — GEP2000IO-05-A**
   - Single-cable solution—control system data, sensor data and power supply over a single cable
   - Gripper activation by means of digital signals
   - Integrated analog feedback of the gripper position
   - Gripping force adjustment in four levels to the object being gripped, using rotary switch
   - Can be integrated into ZIMMER HMI
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP2010

PRODUCT SPECIFICATIONS

Gripping force diagram

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

Mx [Nm] 7
My [Nm] 7
Fz [N] 5.5

TECHNICAL DATA

Order no. | Technical Data | GEP2010IL-00-A | GEP2010IO-00-A | GEP2010IO-05-A
---|---|---|---|---
Control | I/O-Link | I/O | I/O
Integrated position sensing | Using process data | No | Analog 0 to 10 V
Stroke per jaw [mm] | 10 | 10 | 10
Gripping force safety device | mechanical | mechanical | mechanical
Control time [s] | 0.03 | 0.03 | 0.03
Permissible weight per jaw max [kg] | 0.10 | 0.10 | 0.10
Length of the gripper fingers max. [mm] | 80 | 80 | 80
Repetition accuracy +/- [mm] | 0.05 | 0.05 | 0.05
Voltage [V] | 24 | 24 | 24
Current consumption max. [A] | 1 | 1 | 1
Operating temperature [°C] | +5 ... +60 | +5 ... +60 | +5 ... +60
Minimum positioning path per jaw [mm] | 0.5 | 0.5 | 0.5
Protection to IEC 60529 | IP40 | IP40 | IP40
Weight [kg] | 0.31 | 0.31 | 0.31

TECHNICAL DATA OF THE FORCE LEVELS

Order no. | Level 1 | GEP2010IL-00-A | GEP2010IO-00-A | GEP2010IO-05-A
---|---|---|---|---
Gripping force [N] | 50 | 50 | 50
Closing time / Opening time [s] | 0.3 / 0.3 | 0.3 / 0.3 | 0.3 / 0.3

Order no. | Level 2 | GEP2010IL-00-A | GEP2010IO-00-A | GEP2010IO-05-A
---|---|---|---|---
Gripping force [N] | 100 | 100 | 100
Closing time / Opening time [s] | 0.25 / 0.25 | 0.25 / 0.25 | 0.25 / 0.25

Order no. | Level 3 | GEP2010IL-00-A | GEP2010IO-00-A | GEP2010IO-05-A
---|---|---|---|---
Gripping force [N] | 150 | 150 | 150
Closing time / Opening time [s] | 0.22 / 0.22 | 0.22 / 0.22 | 0.22 / 0.22

Order no. | Level 4 | GEP2010IL-00-A | GEP2010IO-00-A | GEP2010IO-05-A
---|---|---|---|---
Gripping force [N] | 200 | 200 | 200
Closing time / Opening time [s] | 0.19 / 0.19 | 0.19 / 0.19 | 0.19 / 0.19
TECHNICAL DRAWINGS

GEP2010IL-00-A

1. Gripper attachment
2. Energy supply IO-Link (M12, 5-pole)
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Energy supply (M8, 4-pole)
6. Energy supply (M8, 5-pole)
7. Gripping force setting
8. Gripper mounting clamp

Installation size GEP2010 / 2-Jaw Parallel Grippers / electrical / Grippers

www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP2010

► INCLUDED IN DELIVERY

Centering Disc
390677

► YOU CAN FIND CONFIGURATION EXAMPLES ON PAGE 24 / 25
RECOMMENDED ACCESSORY GEP2010IL-00-A

1. Plug-in connector straight 5 m - plug / socket M12
KAG500IL

2. Adapter plate
AP2010

RECOMMENDED ACCESSORY GEP2010IO-00-A

3. 2-Position-Sensor Cable 0.3 m - Connector M8
MFSP25KHC-02

4. Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500B4

5. Plug-in connector customizable Straight - Connector M8
S8-G-3

6. Magnetic field sensor Straight Cable 0.3 m - Connector M8
MFS204SKHC

7. Magnetic field sensor Angled Cable 0.3 m - Connector M8
MFS103SKHC

RECOMMENDED ACCESSORY GEP2010IO-05-A

8. Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500B5

9. Plug-in connector customizable Straight - Connector M8
S8-G-3

10. Adapter plate
AP2010

TECHNICAL DRAWINGS ACCESSORIES

Adapter plate for fastening the gripper from above
# 2-JAW PARALLEL GRIPPERS
## INSTALLATION SIZE GEP2013

## 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

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<td>GEP2013IL-00-A</td>
<td>I/O - Link</td>
<td>Using process data</td>
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<td>100</td>
<td>0.05</td>
<td>24</td>
<td>2</td>
<td>+5 ... +60</td>
<td>IP40</td>
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<tr>
<td>GEP2013IO-00-A</td>
<td>I/O</td>
<td>No</td>
<td>13</td>
<td>mechanical</td>
<td>0.055</td>
<td>0.15</td>
<td>100</td>
<td>0.05</td>
<td>24</td>
<td>2</td>
<td>+5 ... +60</td>
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<td>0.54</td>
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<tr>
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<td>Analog 0 to 10 V</td>
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<td>100</td>
<td>0.05</td>
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<td>2</td>
<td>+5 ... +60</td>
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### TECHNICAL DATA OF THE FORCE LEVELS

#### Level 1

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<tr>
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<td>0.32 / 0.32</td>
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<tr>
<td>GEP2013IO-05-A</td>
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<td>0.32 / 0.32</td>
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<td>GEP2013IO-00-A</td>
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<tr>
<td>GEP2013IO-05-A</td>
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<td>0.26 / 0.26</td>
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<td>0.23 / 0.23</td>
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<tr>
<td>GEP2013IO-00-A</td>
<td>360</td>
<td>0.23 / 0.23</td>
</tr>
<tr>
<td>GEP2013IO-05-A</td>
<td>360</td>
<td>0.23 / 0.23</td>
</tr>
</tbody>
</table>

www.zimmer-group.com ➤ Data, Drawings, 3-D Models, Operating Instructions
1. Gripper attachment
2. Energy supply IO-Link (M12, 5-pole)
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Energy supply (MB, 4-pole)
6. Energy supply (MB, 5-pole)
7. Gripping force setting
8. Gripper mounting clamp

TECHNICAL DRAWINGS

Installation size GEP 2013 / 2-Jaw Parallel Grippers / electrical / Grippers

GEP2013IL-00-A

1. Gripper attachment
2. Energy supply IO-Link (M12, 5-pole)
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Energy supply (MB, 4-pole)
6. Energy supply (MB, 5-pole)
7. Gripping force setting
8. Gripper mounting clamp

www.zimmer-group.com
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP2013

► INCLUDED IN DELIVERY

6 (piece)
Centering Disc

380677

► YOU CAN FIND CONFIGURATION EXAMPLES ON PAGE 24 / 25
RECOMMENDED ACCESSORY GEP2013IL-00-A

1. Plug-in connector straight 5 m - plug / socket M12
   KAG500IL
2. Adapter plate
   AP2013

RECOMMENDED ACCESSORY GEP2013IO-00-A

3. 2-Position-Sensor Cable 0.3 m - Connector M8
   MFSP2SKHC-02
4. Plug-in connector straight cable 5m - Socket M8 (female)
   KAG500B4
5. Plug-in connector customisable straight - Connector M8
   S8-G-3
6. Magnetic field sensor straight cable 0.3 m - Connector M8
   MFS204SKHC
7. Magnetic field sensor angled cable 0.3 m - Connector M8
   MFS103SKHC
8. Plug-in connector straight cable 5m - Socket M8 (female)
   KAG500
9. Plug-in connector customisable straight - Connector M8
   S8-G-3
10. Adapter plate
    AP2013

RECOMMENDED ACCESSORY GEP2013IO-05-A

11. Plug-in connector straight cable 5m - Socket M8 (female)
    KAG500B5
12. Adapter plate
    AP2013

TECHNICAL DRAWINGS ACCESSORIES

- Adapter plate for fastening the gripper from above
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP2016

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

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<td>I/O</td>
<td>I/O</td>
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<td>Integrated position sensing</td>
<td>Using process data</td>
<td>No</td>
<td>Analog 0 to 10 V</td>
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<tr>
<td>Stroke per jaw [mm]</td>
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<td>16</td>
<td>16</td>
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<tr>
<td>Gripping force safety device</td>
<td>mechanical</td>
<td>mechanical</td>
<td>mechanical</td>
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<tr>
<td>Control time [s]</td>
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<td>0.055</td>
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<td>Permissible weight per jaw max [kg]</td>
<td>0.21</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>Length of the gripper fingers max. [mm]</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Repetition accuracy +/- [mm]</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Voltage [V]</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Current consumption max. [A]</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>+5 to +60</td>
<td>+5 to +60</td>
<td>+5 to +60</td>
</tr>
<tr>
<td>Minimum positioning path per jaw [mm]</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</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>0.9</td>
<td>0.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

TECHNICAL DATA OF THE FORCE LEVELS

Level 1

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GEP2016IL-00-A</th>
<th>GEP2016IO-00-A</th>
<th>GEP2016IO-05-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gripping force [N]</td>
<td>125</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>Closing time / Opening time [s]</td>
<td>0.44 / 0.44</td>
<td>0.44 / 0.44</td>
<td>0.44 / 0.44</td>
</tr>
</tbody>
</table>

Level 2

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GEP2016IL-00-A</th>
<th>GEP2016IO-00-A</th>
<th>GEP2016IO-05-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gripping force [N]</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Closing time / Opening time [s]</td>
<td>0.39 / 0.39</td>
<td>0.39 / 0.39</td>
<td>0.39 / 0.39</td>
</tr>
</tbody>
</table>

Level 3

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GEP2016IL-00-A</th>
<th>GEP2016IO-00-A</th>
<th>GEP2016IO-05-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gripping force [N]</td>
<td>375</td>
<td>375</td>
<td>375</td>
</tr>
<tr>
<td>Closing time / Opening time [s]</td>
<td>0.35 / 0.35</td>
<td>0.35 / 0.35</td>
<td>0.35 / 0.35</td>
</tr>
</tbody>
</table>

Level 4

<table>
<thead>
<tr>
<th>Order no.</th>
<th>GEP2016IL-00-A</th>
<th>GEP2016IO-00-A</th>
<th>GEP2016IO-05-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gripping force [N]</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Closing time / Opening time [s]</td>
<td>0.3 / 0.3</td>
<td>0.3 / 0.3</td>
<td>0.3 / 0.3</td>
</tr>
</tbody>
</table>
 TECHNICAL DRAWINGS

1. Gripper attachment
2. Energy supply IO-Link (M12, 5-pole)
3. Fixing for gripper finger
4. Integrated slot for magnetic field sensor
5. Energy supply (M8, 4-pole)
6. Energy supply (M8, 5-pole)
7. Gripping force setting
8. Gripper mounting clamp

---

GEP2016IL-00-A

- 2x M6x10
- 2x ø9H7

---

GEP2016IO-00-A

- 2x M6x10
- 2x ø9H7

---

GEP2016IO-05-A

- 2x M6x10
- 2x ø9H7
2-JAW PARALLEL GRIPPERS
INSTALLATION SIZE GEP2016

► INCLUDED IN DELIVERY

Centering Disc

343453

► YOU CAN FIND CONFIGURATION EXAMPLES ON PAGE 24 / 25
**RECOMMENDED ACCESSORY GEP2016IL-00-A**

1. **Plug-in connector straight 5 m - plug / socket M12**
   - KAG500IL
   - Adapter plate
   - AP2016

**RECOMMENDED ACCESSORY GEP2016IO-00-A**

2. **2-Position-Sensor Cable 0.3 m - Connector M8**
   - MFSP2SKHC-02

3. **Plug-in connector Straight Cable 5m - Socket M8 (female)**
   - KAG500B4

4. **Plug-in connector customi- zable Straight - Connector M8**
   - S8-G-3

5. **Magnetic field sensor Straight Cable 0.3 m - Connector M8**
   - MFS204SKHC

6. **Magnetic field sensor Angled Cable 0.3 m - Connector M8**
   - MFS103SKHC

7. **Adapter plate**
   - AP2016

**RECOMMENDED ACCESSORY GEP2016IO-05-A**

8. **Plug-in connector Straight Cable 5m - Socket M8 (female)**
   - KAG500B5

9. **Adapter plate**
   - AP2016

**TECHNICAL DRAWINGS ACCESSORIES**

- Adapter plate for fastening the gripper from above
SECURED CONFIGURATION EXAMPLES
GEP2000 SERIES

GEP2000-IL-00-A (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
- Control system Beckhoff
- Control cabinet Beckhoff
- 1-2 grippers 24V 5A power supply unit with boost Phoenix Contact Order No. 2866750
- 3-4 grippers 24V 10A power supply unit with boost Phoenix Contact Order No. 2866763
- Remove the KAG500IL connector and wire up the open end of the cable directly to the control system terminal strip.

GEP2000-IL-00-A (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
- Control cabinet Siemens
- 1-2 grippers 24V 5A power supply unit with boost Phoenix Contact Order No. 2866750
- 3-4 grippers 24V 10A power supply unit with boost Phoenix Contact Order No. 2866763
- Remove the KAG500IL connector and wire up the open end of the cable directly to the control system terminal strip.

GEP2000-IL-00-A (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
- Control system Beckhoff
- IO-Link master Port class B Beckhoff
- Field bus EtherCAT
- 1-2 grippers 24V 5A power supply unit with boost Phoenix Contact Order No. 2866750
- 3-4 grippers 24V 10A power supply unit with boost Phoenix Contact Order No. 2866763
**GEP2000-IL-00-A (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

- **Field bus**
  - PROFINET

- **24V master supply**

- **IO-Link master**
  - Port class B
  - Siemens

- **Control system**
  - e.g. Siemens S7 1200

- **1-2 grippers**
  - 24V 5A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866750

- **3-4 grippers**
  - 24V 10A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866763

---

**GEP2000-IO-00-A (DIGITAL IO) WIRING TO CONTROL CABINET**

- **Connecting cable**
  - 5 m M8-connecting cable 4x0.34
  - (max. cable length 10 m)
  - Order No. KAG500B4

- **Control system**
  - Beckhoff / Siemens

- **1-2 grippers**
  - 24V 5A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866750

- **3-4 grippers**
  - 24V 10A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866763

---

**GEP2000-IO-05-A (DIGITAL IO / ANALOG) WIRING TO CONTROL CABINET**

- **Connecting cable**
  - 5 m M8-connecting cable 5x0.34
  - (max. cable length 10 m)
  - Order No. KAG500B5

- **Control system**
  - Beckhoff / Siemens

- **1-2 grippers**
  - 24V 5A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866750

- **3-4 grippers**
  - 24V 10A power supply unit with boost
  - Phoenix Contact
  - Order No. 2866763
CHECKLIST
Gripper

Customer number
Company
Contact
Mr. ☐ Mrs. ☐

☐ Request
☐ Order
☐ Parallel gripper
☐ Other / If yes, which type

Desired date
Req. No.
Ord No.

Drive
☐ Pneumatic
☐ Electric
☐ Hydraulic

Operating pressure
bar
Voltage
Volts

Required stroke
Per jaw
mm
or
Total stroke
mm

Gripper finger length
Gripper top edge to force application point
mm

Ambient conditions
☐ Clean / Dry
☐ Small amount of swarf
☐ Large amount of swarf
☐ Chemical substances / If yes, which
Coolant overspray
under pressure of grinding agents

Temperature
°C
Cycles
per minute

Required force
Gripping force
N
or
Workpiece weight
kg ☐ g ☐

Gripping type
☐ Gripping inward
☐ Gripping outward
☐ Frictional fit
☐ Form fit

Prism angle
°
Coefficient of friction

Axis acceleration
m/s²

Self Locking
☐ Not required
☐ When closing
☐ When opening
☐ Pressure safety valve

Customer number
Company
Contact
Mr. ☐ Mrs. ☐

☐ Request
☐ Order
☐ Parallel gripper
☐ Other / If yes, which type

Desired date
Req. No.
Ord No.

Drive
☐ Pneumatic
☐ Electric
☐ Hydraulic

Operating pressure
bar
Voltage
Volts

Required stroke
Per jaw
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Total stroke
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Workpiece weight
kg ☐ g ☐

Gripping type
☐ Gripping inward
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☐ Frictional fit
☐ Form fit

Prism angle
°
Coefficient of friction

Axis acceleration
m/s²

Self Locking
☐ Not required
☐ When closing
☐ When opening
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Customer number
Company
Contact
Mr. ☐ Mrs. ☐

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☐ Other / If yes, which type

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Ord No.

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Mr. ☐ Mrs. ☐

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☐ Order
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Operating pressure
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Prism angle
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Coefficient of friction

Axis acceleration
m/s²

Self Locking
☐ Not required
☐ When closing
☐ When opening
☐ Pressure safety valve

Customer number
Company
Contact
Mr. ☐ Mrs. ☐

☐ Request
☐ Order
☐ Parallel gripper
☐ Other / If yes, which type

Desired date
Req. No.
Ord No.

Drive
☐ Pneumatic
☐ Electric
☐ Hydraulic

Operating pressure
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Volts

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Per jaw
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Workpiece weight
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☐ Form fit

Prism angle
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Coefficient of friction

Axis acceleration
m/s²

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☐ Not required
☐ When closing
☐ When opening
☐ Pressure safety valve

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Company
Contact
Mr. ☐ Mrs. ☐

☐ Request
☐ Order
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☐ Gripping inward
☐ Gripping outward
☐ Frictional fit
☐ Form fit

Prism angle
°
Coefficient of friction

Axis acceleration
m/s²

Self Locking
☐ Not required
☐ When closing
☐ When opening
☐ Pressure safety valve
Desired accessories
- Inductive sensor
- Magnetic field sensor
- With cable
- Pluggable
- Separate cable / If yes, how long [ ] m
- Straight fitting
- Angled fitting
- Pressure safety valve
- Pneumatic fittings / If yes, which
  - Straight
  - Angled
  - Flow control valve

Notes/comments

Editor/Date

Desired accessories
- Sketch
- 3D model
- Other
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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.