Handling technology
Module for Universal Robots

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.
HMI – HUMAN MACHINE INTERFACE
EASY TO INTEGRATE – EASY TO USE

SIMPLE OPERATION

Operating Industrie 4.0 components from Zimmer Group is just as easy and flexible as installing them. What originally applied primarily for industrial control systems is now also available for robots.

In doing so, operation is integrated completely into the robot control system. As a result, the Zimmer Group components can now be configured manually using the robot control panel directly and integrated into the robot program sequence. An external PLC control system is not required to do this. The Universal Robots specialists oriented themselves toward the already familiar Zimmer HMI to create a uniform, intuitive user interface for the user.

The user can control the complete IO-Link gripper portfolio from the Zimmer Group using this tailor-made complete system and can use pneumatic, electrical, servo-electric as well as digital Zimmer Group components with innovative robots from Universal Robots.

BECAUSE SIMPLE IS SIMPLY BETTER

This integration makes it possible for the user to enable maximum levels of flexibility and straightforward adaptation, storage and restoring device parameters during the creation of new application-specific profiles.

Furthermore, the Zimmer HMI supports condition monitoring or predictive maintenance of the components. This makes it possible for any user to implement and commission Zimmer Group components within a few minutes. This simplifies the interaction of robots and handling components considerably.

CONFIGURATION

► Graphic component selection

Easiest assignment of a Zimmer gripper to the robot
MANUAL OPERATION

- Generating the gripper process parameters
  such as gripping forces, gripper positions, gripping speed, etc.

AUTOMATIC MODE ROBOT

- Use of function blocks
  such as Open gripper / Close gripper, etc. for easy operation
HUMAN – ROBOT
DIFFERENT FORMS OF INTERACTION

CONVENTIONAL COMPONENTS

► Automation cell
  ► Separated workspaces
  ► Workpiece handling in a secure area
  ► All gripping systems can be used
  ► Decoupled work
  ► No contact necessary
  ► Maximum speed

► Coexistence
  ► Detection of presence
  ► Workpiece handling in a secure area
  ► All gripping systems can be used
  ► Separated workspaces
  ► Decoupled work
  ► No contact necessary
  ► Reduced speed
HRC COMPONENTS

 Cooperation

- Zones of action
- Workpiece handling in a secure area
- Gripper with special HRC geometry
- Secure holding of the workpiece even if the power supply fails
- Shared workspaces
- Coupled work
- No contact necessary
- Reduced speed

 Collaboration

- Shared workspaces
- Workpiece handling in a unsecure area
- Gripper with special HRC geometry and reliable gripping force limiter
- Gripping force limited to a max. of 140 N as per ISO/TS 15066
- Secure holding of the workpiece even if the power supply fails
- Coupled work
- Contact is necessary
- Reduced speed
HMI CONFIGURATION PACKAGE
EASY-TO-USE PACKAGE

MAXIMUM PERFORMANCE INCLUDED

The combination of Zimmer Group components, the Zimmer Easy-to-Use Package and UR robots ensure the easiest integration as well as intuitive operation. Maximum performance included!

FOR MORE INFORMATION ABOUT THE EASY-TO-USE PACKAGE VISIT US AT:
www.zimmer-group.com

Software + Cables and accessories + IO-Link master

Zimmer Group gripper *

UR robot *
(industrial / collaborative)

* Available separately

FOR MORE INFORMATION ABOUT UNIVERSAL ROBOTS VISIT US AT:
www.universal-robots.com
Part number | Article | Description
---|---|---
ZUB068713 | IO-Link master | IO-Link master
| Connecting cable, M8 4-pin 5 m | Cable for supplying power to the master
| Cable for connecting the Modbus to the master | Communications cable between the robot and master RJ 45
| UR-Caps (software) | HMI for UR robots

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### Required accessories according to gripper series

<table>
<thead>
<tr>
<th>Part number</th>
<th>Article</th>
<th>Description</th>
<th>GPDS0001L GPP5000IL</th>
<th>GEP2000IL GEH6000IL GEP5000IL GED5000IL</th>
<th>HRC-01 HRC-03 HRC-04 HRC-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAG500</td>
<td>Connecting cable M8 3-pin 5 m</td>
<td>STO cable (Safe Torque Off)</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KAG500IL</td>
<td>Connecting cable M12 5-pin 5 m</td>
<td>Connection between gripper and Y adapter</td>
<td>✔ ✔ ✔ ✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B12-Y-5IL</td>
<td>Y adapter</td>
<td>Splitting between data and power supply</td>
<td>✔ ✔ ✔ ✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KAG500-02</td>
<td>Connecting cable (Y to Power)</td>
<td>Connecting cable to power adapter</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CELE01442</td>
<td>Power adapter</td>
<td>Power adapter for power supply (24V/10A)</td>
<td>✔</td>
<td></td>
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</tr>
</tbody>
</table>

### Optional accessories

<table>
<thead>
<tr>
<th>Part number</th>
<th>Article</th>
<th>Description</th>
<th>GPDS0001L GPP5000IL</th>
<th>GEP2000IL GEH6000IL GEP5000IL GED5000IL</th>
<th>HRC-01 HRC-03 HRC-04 HRC-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZUB000009</td>
<td>UR3 energy chain</td>
<td>Energy chain for robot of type UR3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZUB000010</td>
<td>UR5 energy chain</td>
<td>Energy chain for robot of type UR5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZUB000011</td>
<td>UR10 energy chain</td>
<td>Energy chain for robot of type UR10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1 The Easy-to-Use Package is required once per robot and enables the operation of up to 4 different IO-Link grippers.
2 The power adapter provides 10 A (15 A peak). Please observe the current draw of the respective gripper series.
3 These additions are needed each for one gripper. The energy chains are optional here.
4 The following hose outer diameter is recommended: GPD/GPP5006: 4 mm / GPD/GPP5008: 4 mm / GPD/GPP5010: 6 mm

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Data, Drawings, 3-D Models, Operating Instructions ➼ www.zimmer-group.com
HUMAN-ROBOT COLLABORATION
EASY TO INTEGRATE – EASY TO HANDLE

WHAT IS HUMAN-ROBOT COLLABORATION?
The demographic development in industrial countries will lead to comprehensive changes in the working world in coming years. In the future, people will collaborate more and more with robots or have their work supported by robots. For this vision of a collaborative working world to become reality, however, we need more than just a new kind of safe robot with overload limiters, comprehensive sensors and fast-reacting control systems. The tool at the end of the robot also has to satisfy comprehensive requirements with respect to occupational safety, work environment, use of equipment, approval and acceptance, etc. The directives concerning specification of the safety-related requirements for robots, ISO 10218 and their technical specification ISO/TS 15066, currently describe the forms of collaboration. Even though these regulations are currently valid, they are being revisited by both DIN and CEN in the context of collaborative use of robots. That's why a product developed for this purpose should go beyond the current requirements. The HRC gripper series from Zimmer Group have been designed in accordance with recommendations from BG/DGUV (German occupational insurance association / German Social Accident Insurance).

HRC FROM THE EXPERTS
As a pioneer and one of the world's leading manufacturers of HRC grippers, Zimmer Group develops components specifically for this work environment to reduce the physical load on the employees, mitigate against monotonous work steps, prevent accidents and increase the efficiency of workflows through human-robot collaboration.

EASY TO INTEGRATE
Naturally, however, not only the world's best HRC grippers are available for Universal Robots, but also a comprehensive system module specially matched to your model. This provides a broad selection of grippers and handling components with corresponding accessories, so that you don't have to worry about compatibility and integration. Of course, this system module also includes HRC and Industrie 4.0 components that are compatible with your robot. These open up numerous advantages for you: easy to install, easy to configure, easy to operate, advanced diagnostics and preventive maintenance as well as the ability to make replacements while operation is in progress.

EASY TO HANDLE
The components are operated either using the central control system or, as is the case for most components, using the integrated control panel or via an app. The app offers users the maximum level of flexibility when creating, storing and restoring device parameters and also provides assistance during diagnostics/preventive maintenance. Furthermore, the HRC grippers and conventional grippers offer the user practical, pre-programmed movement profiles, which can be adjusted to the individual requirements of the gripping application with just a few mouse clicks. This ensures that complete implementation and commissioning are possible for any user within just a few minutes.
## HRC COMPONENTS
### THE SERIES AT A GLANCE

#### 2-JAW PARALLEL GRIPPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Stroke per jaw:</th>
<th>Gripping force (max.):</th>
<th>Weight:</th>
<th>IP class:</th>
<th>Maintenance-free (max.):</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRC-03-072844</td>
<td>10 mm</td>
<td>&lt; 140 N</td>
<td>0.68 kg</td>
<td>40</td>
<td>10 million cycles</td>
<td>Mechanically self-locking mechanism in the event of power drop</td>
</tr>
<tr>
<td>HRC-04-072810</td>
<td>6 mm</td>
<td>&lt; 140 N</td>
<td>0.76 kg</td>
<td>40</td>
<td>10 million cycles</td>
<td>Gripping force safety device in case of pressure failure via integrated spring</td>
</tr>
</tbody>
</table>

#### 2-JAW ANGULAR GRIPPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Stroke per jaw:</th>
<th>Gripping force (max.):</th>
<th>Weight:</th>
<th>IP class:</th>
<th>Maintenance-free (max.):</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRC-05-072836</td>
<td>37.5°</td>
<td>&lt; 140 N</td>
<td>0.82 kg</td>
<td>40</td>
<td>10 million cycles</td>
<td>Gripping force safety device in case of pressure failure via integrated spring</td>
</tr>
</tbody>
</table>

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**www.zimmer-group.com**

► Data, Drawings, 3-D Models, Operating Instructions
## 2-JAW PARALLEL GRIPPERS

<table>
<thead>
<tr>
<th></th>
<th>ELECTRIC</th>
<th>COLLABORATIVE</th>
<th>ELECTRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HRC-01-072802</strong></td>
<td>Stroke per jaw: 60 mm</td>
<td>Gripping force (max.): 950 N</td>
<td>Weight: 1.6 kg</td>
</tr>
<tr>
<td>* [IO-Link]</td>
<td><strong>HRC-01-072819</strong></td>
<td>Stroke per jaw: 60 mm</td>
<td>Gripping force (max.): &lt; 140 N</td>
</tr>
<tr>
<td><strong>HRC-01-072824</strong></td>
<td>Stroke per jaw: 60 mm</td>
<td>Gripping force: 950 N</td>
<td>Weight: 1.6 kg</td>
</tr>
<tr>
<td>* * [IO-Link]</td>
<td><strong>HRC-01-072830</strong></td>
<td>Stroke per jaw: 60 mm</td>
<td>Gripping force (max.): &lt; 140 N</td>
</tr>
</tbody>
</table>

STO safety functions + mechanical self-locking mechanism in the event of a power drop

**HRC-03-072844**  | Stroke per jaw: 10 mm | Gripping force (max.): < 140 N | Weight: 0.82 kg | IP class: 40 | Maintenance-free (max.): 10 million cycles |
| * * [IO-Link] | **HRC-04-072810**  | Stroke per jaw: 6 mm | Gripping force (max.): < 140 N | Weight: 0.76 kg | IP class: 40 | Maintenance-free (max.): 10 million cycles |

Gripping force safety device in case of pressure failure via integrated spring

**HRC-05-072836**  | Stroke per jaw: 37.5° | Gripping force (max.): < 140 N | Weight: 0.82 kg | IP class: 40 | Maintenance-free (max.): 10 million cycles |
| * * [IO-Link] | **HRC-04-072810**  | Stroke per jaw: 6 mm | Gripping force (max.): < 140 N | Weight: 0.76 kg | IP class: 40 | Maintenance-free (max.): 10 million cycles |

Gripping force safety device in case of pressure failure via integrated spring

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* Suitable for UR5
** Suitable for UR10
CONVENTIONAL COMPONENTS

OPTIONAL

Universal Robot
UR3
UR5
UR10

OPTIONAL

Adapter plate
APR000002

Modular Construction System (MCS)
GEH6000IL

GH6000

Adapter plate
APR000016

GPP5004
GPP5006
GPP5004IL
GPP5006IL

GPD5006
GPD5006IL

GEP5006
GED5006

Adapter plate
APR000017

GEP2010

Adapter plate
APR000018

GEP2013
GEP2016

Rotary distributor
DVR50

Collision protection
CSR50

Angle flange
WFR000002

Axis compensation module
ARS0P

Tool changer
HWR2050

Tool changer
WWR50

Option

Energy chain
UR3=
ZUB000009

UR5=
ZUB000010

UR10=
ZUB000011

Universal Robot
UR3
UR5
UR10

www.zimmer-group.com ➤ Data, Drawings, 3-D Models, Operating Instructions
# CONVENTIONAL COMPONENTS

## THE SERIES AT A GLANCE

### 2-JAW PARALLEL GRIPPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>PNEUMATIC</th>
<th>ELECTRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5000</td>
<td><img src="image1" alt="GPP5000" /></td>
<td><img src="image2" alt="GEP2000" /></td>
</tr>
<tr>
<td>Number of installation sizes:</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Stroke per jaw:</td>
<td>2 mm - 45 mm</td>
<td>10 mm - 16 mm</td>
</tr>
<tr>
<td>Gripping force:</td>
<td>140 N - 26950 N</td>
<td>50 N - 500 N</td>
</tr>
<tr>
<td>Weight:</td>
<td>0.08 kg - 50 kg</td>
<td>0.31 kg - 0.9 kg</td>
</tr>
<tr>
<td>IP class:</td>
<td>64/67</td>
<td>40</td>
</tr>
<tr>
<td>Maintenance-free (max.):</td>
<td>30 million cycles</td>
<td>10 million cycles</td>
</tr>
</tbody>
</table>

### PNEUMATICALLY INTELLIGENT

<table>
<thead>
<tr>
<th>Model</th>
<th><img src="image3" alt="GPP5000IL" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP5000IL</td>
<td><img src="image4" alt="GEP5000" /></td>
</tr>
<tr>
<td>Number of installation sizes:</td>
<td>3</td>
</tr>
<tr>
<td>Stroke per jaw:</td>
<td>3 mm - 10 mm</td>
</tr>
<tr>
<td>Gripping force:</td>
<td>330 N - 2890 N</td>
</tr>
<tr>
<td>Weight:</td>
<td>0.45 kg - 1.45 kg</td>
</tr>
<tr>
<td>IP class:</td>
<td>64</td>
</tr>
<tr>
<td>Maintenance-free (max.):</td>
<td>30 million cycles</td>
</tr>
</tbody>
</table>

### 2-JAW PARALLEL GRIPPERS WITH LONG STROKE

<table>
<thead>
<tr>
<th>Model</th>
<th>PNEUMATIC</th>
<th>ELECTRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH6000</td>
<td><img src="image5" alt="GH6000" /></td>
<td><img src="image6" alt="GEH6000IL" /></td>
</tr>
<tr>
<td>Number of installation sizes:</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Stroke per jaw:</td>
<td>20 mm - 200 mm</td>
<td></td>
</tr>
<tr>
<td>Gripping force:</td>
<td>120 N - 3400 N</td>
<td></td>
</tr>
<tr>
<td>Weight:</td>
<td>0.3 kg - 22.7 kg</td>
<td></td>
</tr>
<tr>
<td>IP class:</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Maintenance-free (max.):</td>
<td>10 million cycles</td>
<td></td>
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</table>

### 3-JAW CONCENTRIC GRIPPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>PNEUMATIC</th>
<th>ELECTRIC</th>
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<tbody>
<tr>
<td>GPD5000</td>
<td><img src="image7" alt="GPD5000" /></td>
<td><img src="image8" alt="GED5000" /></td>
</tr>
<tr>
<td>Number of installation sizes:</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Stroke per jaw:</td>
<td>2 mm - 45 mm</td>
<td></td>
</tr>
<tr>
<td>Gripping force:</td>
<td>510 N - 72500 N</td>
<td></td>
</tr>
<tr>
<td>Weight:</td>
<td>0.14 kg - 99.9 kg</td>
<td></td>
</tr>
<tr>
<td>IP class:</td>
<td>64/67</td>
<td></td>
</tr>
<tr>
<td>Maintenance-free (max.):</td>
<td>30 million cycles</td>
<td></td>
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### PNEUMATICALLY INTELLIGENT

<table>
<thead>
<tr>
<th>Model</th>
<th><img src="image9" alt="GPD5000IL" /></th>
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<tbody>
<tr>
<td>GPD5000IL</td>
<td><img src="image10" alt="GED5000" /></td>
</tr>
<tr>
<td>Number of installation sizes:</td>
<td>3</td>
</tr>
<tr>
<td>Stroke per jaw:</td>
<td>3 mm - 10 mm</td>
</tr>
<tr>
<td>Gripping force:</td>
<td>740 N - 7160 N</td>
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<tr>
<td>Weight:</td>
<td>0.75 kg - 2.5 kg</td>
</tr>
<tr>
<td>IP class:</td>
<td>64</td>
</tr>
<tr>
<td>Maintenance-free (max.):</td>
<td>30 million cycles</td>
</tr>
</tbody>
</table>

### 2-JAW ANGULAR GRIPPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>PNEUMATIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPW5000</td>
<td><img src="image11" alt="GPW5000" /></td>
</tr>
<tr>
<td>Number of installation sizes:</td>
<td>3</td>
</tr>
<tr>
<td>Stroke per jaw:</td>
<td>+15° / -2°</td>
</tr>
<tr>
<td>Gripping force:</td>
<td>1450 N - 14500 N</td>
</tr>
<tr>
<td>Weight:</td>
<td>0.9 kg - 12.1 kg</td>
</tr>
<tr>
<td>IP class:</td>
<td>64</td>
</tr>
<tr>
<td>Maintenance-free (max.):</td>
<td>30 million cycles</td>
</tr>
</tbody>
</table>
CONVENTIONAL COMPONENTS
CONNECTION VIA MCS

Universal Robot
UR3
UR5
UR10

OPTIONAL

Energy chain
UR3= ZUB000009
UR5= ZUB000010
UR10= ZUB000011

OPTIONAL

Rotary distributor
DVR50
Collision protection
CSR50
Axis compensation module
AR50P
Tool changer
HWR2050
Tool changer
WWR50

OPTIONAL

Adapter plate
APR000002
Modular Construction System (MCS)

Adapter plate
APR000004
MGP804
MGW904
Adapter plate
APR000005
MGP806
MGW806
Adapter plate
APR000006/ AP1100
GPP1100

Angle flange
WFR000001

GZ1000
ZK1000
LG1000
HM1030
CONVENTIONAL COMPONENTS
THE SERIES AT A GLANCE

2-JAW PARALLEL GRIPPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of installation sizes</th>
<th>Stroke per jaw</th>
<th>Gripping force</th>
<th>Weight</th>
<th>IP class</th>
<th>Maintenance-free (max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPP1000</td>
<td>1</td>
<td>4 mm - 16 mm</td>
<td>100 N</td>
<td>0.16 kg - 0.20 kg</td>
<td>30</td>
<td>2 million cycles</td>
</tr>
<tr>
<td>MGP800</td>
<td>8</td>
<td>1 mm - 12 mm</td>
<td>6 N - 400 N</td>
<td>0.006 kg - 0.46 kg</td>
<td>40</td>
<td>10 million cycles</td>
</tr>
</tbody>
</table>

2-JAW PARALLEL GRIPPERS WITH LONG STROKE

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of installation sizes</th>
<th>Stroke per jaw</th>
<th>Gripping force</th>
<th>Weight</th>
<th>IP class</th>
<th>Maintenance-free (max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH6000</td>
<td>5</td>
<td>20 mm - 200 mm</td>
<td>120 N - 3400 N</td>
<td>0.3 kg - 22.7 kg</td>
<td>40</td>
<td>10 million cycles</td>
</tr>
</tbody>
</table>

2-JAW ANGULAR GRIPPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of installation sizes</th>
<th>Stroke per jaw</th>
<th>Gripping force</th>
<th>Weight</th>
<th>IP class</th>
<th>Maintenance-free (max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GZ1000</td>
<td>3</td>
<td>8° - 11°</td>
<td>62 N - 315 N</td>
<td>0.015 kg - 0.125 kg</td>
<td>30</td>
<td>10 million cycles</td>
</tr>
<tr>
<td>MGW800</td>
<td>8</td>
<td>37.5°</td>
<td>5 N - 325 N</td>
<td>0.01 kg - 0.45 kg</td>
<td>30</td>
<td>10 million cycles</td>
</tr>
</tbody>
</table>

GRIPPERS FOR SPECIAL TASKS

<table>
<thead>
<tr>
<th>Model</th>
<th>Total stroke in Ø</th>
<th>Gripping diameter (min.)</th>
<th>Gripping diameter (max.)</th>
<th>Slip force (max.)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>LG1000</td>
<td>2.5 mm - 3.5 mm</td>
<td>8 mm - 15 mm</td>
<td>10.5 mm - 18.5 mm</td>
<td>53 N - 58 N</td>
<td>0.028 kg - 0.041 kg</td>
</tr>
<tr>
<td>HM1000</td>
<td>Adhesive force (max.)</td>
<td>27 N - 450 N</td>
<td>Weight:</td>
<td>0.06 kg - 2.2 kg</td>
<td></td>
</tr>
</tbody>
</table>

CUTTING TONGS

<table>
<thead>
<tr>
<th>Model</th>
<th>Stroke per jaw</th>
<th>Gripping moment in closing</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZK1000</td>
<td>4.25° - 13°</td>
<td>14 Nm - 400 Nm</td>
<td>0.06 kg - 0.67 kg</td>
</tr>
</tbody>
</table>

MCS – MODULAR CONSTRUCTION SYSTEM

The modular construction system (MCS) can be used to create a workpiece-specific solution without increased engineering efforts. This is made possible by the harmonized individual components.

The product portfolio includes profiles, compensation modules, suction cup mounts as well as gripper fingers that guarantee a secure grip on the workpiece during motion. For a complete overview of all the MCS components, refer to our "Handling technology 3" catalog or visit us online at www.zimmer-group.com.
MODULAR CONSTRUCTION SYSTEM (MCS) CONNECTION EXAMPLES

**CONNECTION EXAMPLE**

**GPP1000 SERIES**

**UR ROBOTS UR3 / UR5 / UR10**

1. Adapter plate APR000002
2. MCS Profile*
3. Adapter plate APR000006
4. Series GPP1000

* See the Handling technology 3 catalog

**CONNECTION EXAMPLE**

**MGP800 and MGW800 SERIES**

**UR ROBOTS UR3 / UR5 / UR10**

1. Adapter plate APR000002
2. MCS Profile*
3. MCS Clamp SO-23120022*
4. Adapter plate APR000004/APR000005
5. Series MGP800 and MGW800

* See the Handling technology 3 catalog

**CONNECTION EXAMPLE**

**GEH6000IL/GH6000 SERIES**

**UR ROBOTS UR3 / UR5 / UR10**

1. Adapter plate APR000002
2. MCS Profile*
3. MCS Cross clamp*
4. MCS Profile*
5. Series GEH6000IL/GH6000

* See the Handling technology 3 catalog
The contents and data correspond to the status as of printing. Edition 02/2019.

Zimmer Group reserves the right to technical changes and improvements through constant ongoing development of products and services.

This catalog was created with great care and all information has been checked for accuracy. However, we assume no liability for incorrect or incomplete information.

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