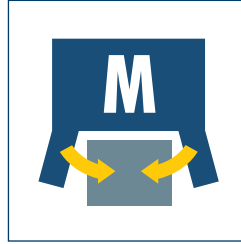




**Sizes**  
10 .. 40



**Weight**  
0.069 kg .. 1.246 kg



**Gripping moment**  
0.3 Nm .. 12.0 Nm



**Opening angle per finger**  
90°



**Workpiece weight**  
0.08 kg .. 0.92 kg

### Application example



Rotational adjustment for reorientation of workpieces

① 2-Finger Radial Gripper LGR 32

② Rotary Actuator SRU 25.1-180-91

## Universal Gripper

Universal 180°-Angle Gripper with excellent cost/performance ratio.

### Area of application

universal application in clean and slightly dirty environments.

### Your advantages and benefits

#### Function optimized gripper type

for maximum cost effectiveness

#### Matching SCHUNK C-slot switch

for a process reliable position interrogation

#### Hard-anodized or hardened functional components

for long lifetime

#### Centering sleeves

for an repeat accurate exchange of grippers and fingers

#### Compact dimensions

for minimized disturbing contours



### General information on the series

#### Housing material

Aluminum alloy, hard-anodized

#### Base jaw material

Steel

#### Working principle

Wedge-hook kinematics

#### Actuation

Pneumatic, with filtered compressed air (10 µm): Dry, lubricated or non-lubricated

Pressure medium: Requirements on quality of the compressed air according to

DIN ISO 8573-1: 6 4 4.

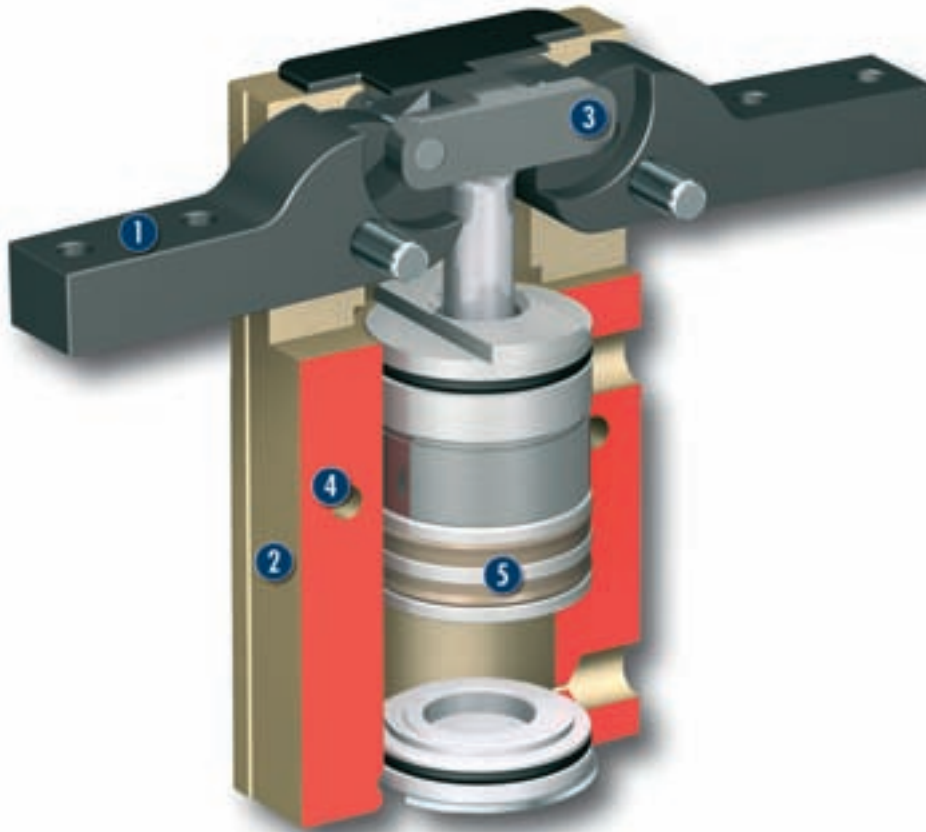
#### Scope of delivery

Centering elements, assembly and operating instruction with manufacturer's declaration

#### Warranty

24 months

### Sectional diagram



- 1 Base jaws**  
for the connection of workpiece-specific gripper fingers
- 2 Housing**  
weight-optimised through application of hard-anodized, high-strength aluminum alloy
- 3 Kinematics**  
crank mechanism for centric gripping
- 4 Centering and mounting possibilities**  
for universal assembly of the gripper
- 5 Drive**  
pneumatic

### Function description

180° angular grippers (radial grippers) are advantageous in that they save an additional stroke movement. Since each jaw rotates away by 90°, they are mostly removed from the work area; a stroke movement to retract the entire gripper can be omitted.

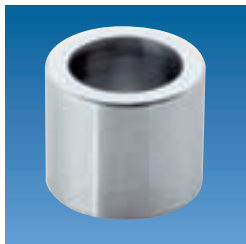
### Options and special information

Monitoring with a SCHUNK MMS 22 or RMS 22 sensor is not possible. The use of the recommended sensors MZN and RZN is not compulsory.

### Accessories

Accessories from SCHUNK – the suitable supplement for maximum functionality, reliability and performance of all automation modules.

Centering sleeves



Fittings



MZN/RZN magnetic switches



SDV-P pressure maintenance valves



KV/KA sensor cables



V sensor distributors



① For the exact size of the required accessories, availability of this size and the designation and ID, please refer to the additional views at the end of the size in question. You will find more detailed information on our accessory range in the "Accessories" catalog section.

### General information on the series

#### Gripping moment

is the arithmetic total of gripping moments for each claw jaw.

#### Finger length

The finger length is measured from the upper edge of the gripper housing in direction to the main axis. "If the max. admissible finger length is exceeded, the speed of motions of the jaws has to be reduced and/or the opening angle has to be diminished, as it is done with heavy fingers. The service life of the gripper can shorten."

#### Repeat accuracy

is defined as the spread of the limit position after 100 consecutive strokes.

#### Workpiece weight

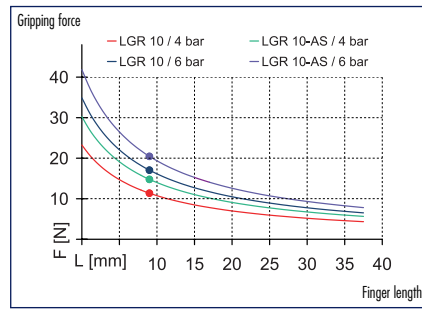
The recommended workpiece weight is calculated for a force-type connection with a coefficient of friction of 0.1 and a safety factor of 2 against slippage of the workpiece on acceleration due to gravity  $g$ . Considerably heavier workpiece weights are permitted with form-fit gripping.

#### Closing and opening times

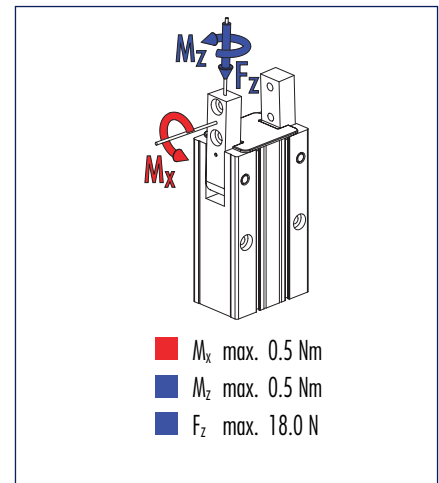
Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.



### Gripping force, O.D. gripping



### Finger load

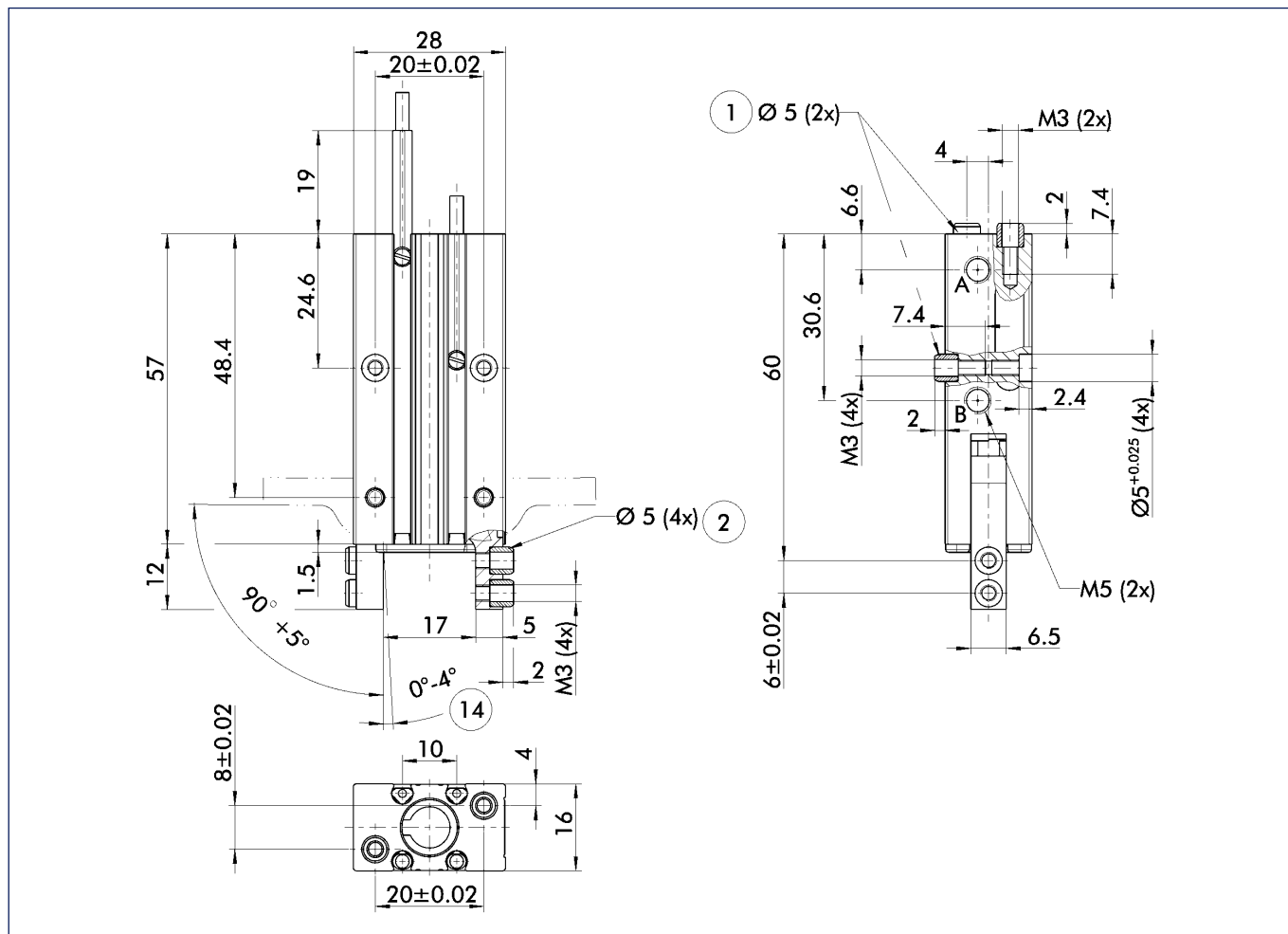


① Moments and forces apply per base jaw and may occur simultaneously.  $M_y$  may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing. Service life may reduce.

### Technical data

Description	LGR 10		LGR 10-AS	
	ID	0312970	ID	0312971
Opening angle per jaw	[°]	90.0		90.0
Opening angle per jaw up to	[°]	2.0		2.0
Closing moment	[Nm]	0.3		0.36
Closing moment ensured by spring	[Nm]			0.06
Weight	[kg]	0.069		0.07
Recommended workpiece weight	[kg]	0.08		0.1
Air consumption per double stroke	[cm <sup>3</sup> ]	1.2		1.45
Nominal pressure	[bar]	6.0		6.0
Minimum pressure	[bar]	2.0		4.0
Maximum pressure	[bar]	8.0		6.5
Closing time	[s]	0.07		0.07
Opening time	[s]	0.06		0.06
Max. permitted finger length	[mm]	25.0		25.0
Max. permitted weight per finger	[kg]	0.04		0.04
IP class		40		40
Min. ambient temperature	[°C]	-10.0		-10.0
Max. ambient temperature	[°C]	90.0		90.0
Repeat accuracy	[mm]	0.02		0.02

### Main views

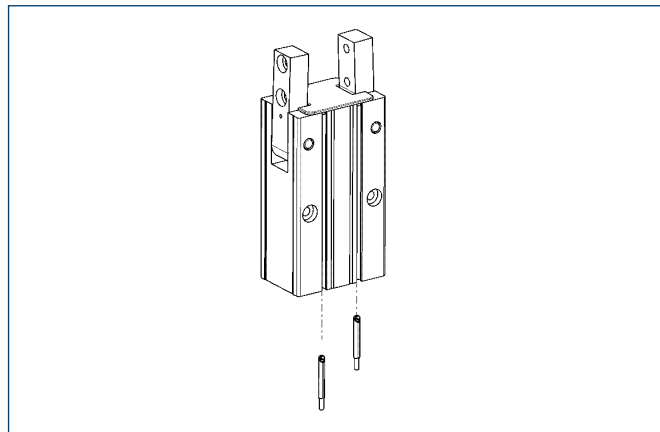


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can also be used (see "Accessories" catalog section) for I.D. or O.D. gripping as an alternative or in addition to the spring-loaded, mechanical gripping force safety device.

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- ⑭ Clamping reserve per finger

### Sensor System



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID	Recommended product
MZN 1-06VPS-KRD	0312990	
RZN 1-05ZRS-KRD	0312991	

① Two sensors (NO contacts) are required for each gripper, plus extension cables as an option.

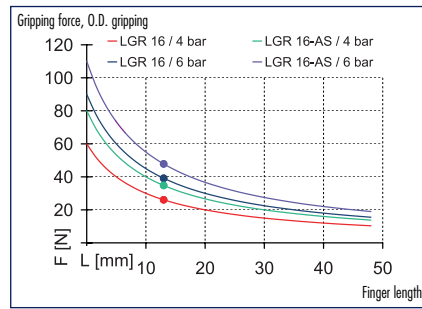
Extension cables for proximity switches/magnetic switches

Description	ID
KA BG08-L 3P-0300-PNP	0301622
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-PNP	0301502
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497

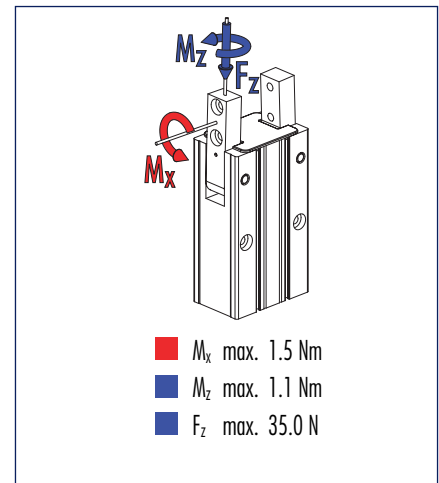
① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



### Gripping force, O.D. gripping



### Finger load

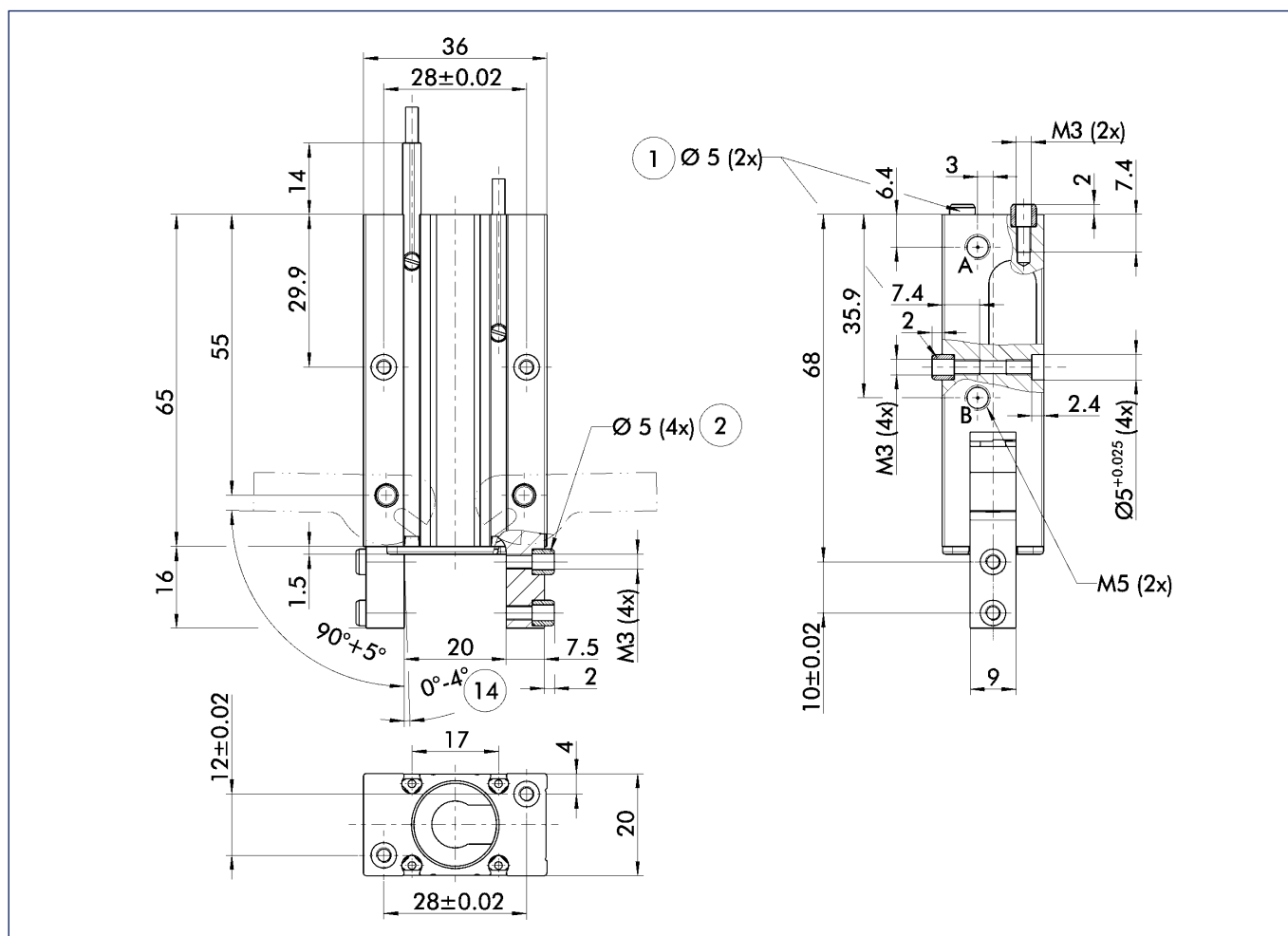


ⓘ Moments and forces apply per base jaw and may occur simultaneously.  $M_y$  may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing. Service life may reduce.

### Technical data

Description	LGR 16		LGR 16-AS	
	ID	0312972	ID	0312973
Opening angle per jaw	[°]	90.0	90.0	90.0
Opening angle per jaw up to	[°]	2.0	2.0	2.0
Closing moment	[Nm]	0.9	1.1	1.1
Closing moment ensured by spring	[Nm]		0.2	0.2
Weight	[kg]	0.137	0.139	0.139
Recommended workpiece weight	[kg]	0.19	0.21	0.21
Air consumption per double stroke	[cm <sup>3</sup> ]	3.8	3.82	3.82
Nominal pressure	[bar]	6.0	6.0	6.0
Minimum pressure	[bar]	2.0	4.0	4.0
Maximum pressure	[bar]	8.0	6.5	6.5
Closing time	[s]	0.07	0.07	0.07
Opening time	[s]	0.06	0.06	0.06
Max. permitted finger length	[mm]	32.0	32.0	32.0
Max. permitted weight per finger	[kg]	0.05	0.05	0.05
IP class		40	40	40
Min. ambient temperature	[°C]	-10.0	-10.0	-10.0
Max. ambient temperature	[°C]	90.0	90.0	90.0
Repeat accuracy	[mm]	0.02	0.02	0.02

### Main views

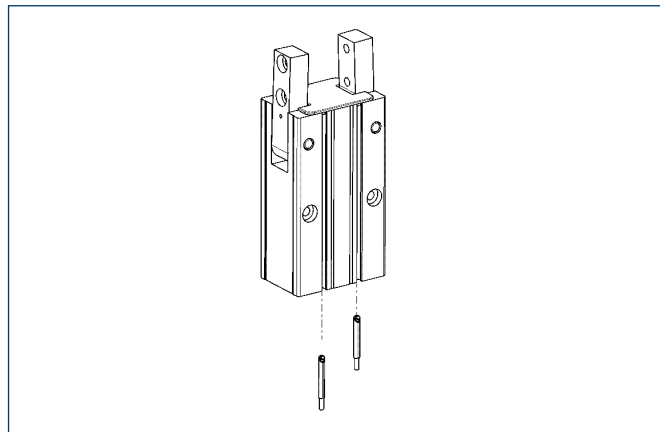


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can also be used (see "Accessories" catalog section) for I.D. or O.D. gripping as an alternative or in addition to the spring-loaded, mechanical gripping force safety device.

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- ⑭ Clamping reserve per finger

### Sensor System



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID	Recommended product
MZN 1-06VPS-KRD	0312990	
RZN 1-05ZRS-KRD	0312991	

① Two sensors (NO contacts) are required for each gripper, plus extension cables as an option.

Extension cables for proximity switches/magnetic switches

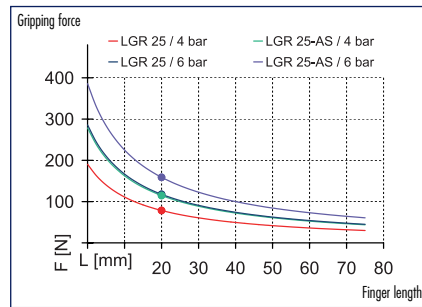
Description	ID
KA BG08-L 3P-0300-PNP	0301622
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-PNP	0301502
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497

① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

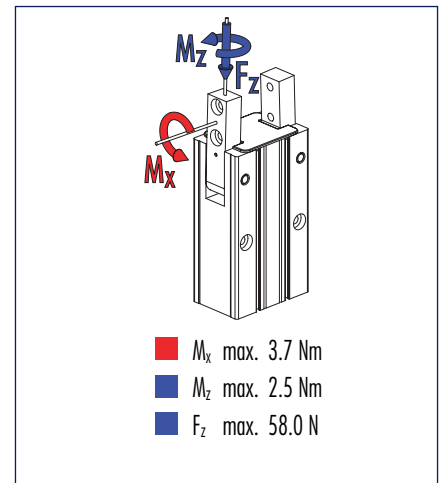




### Gripping force, O.D. gripping



### Finger load

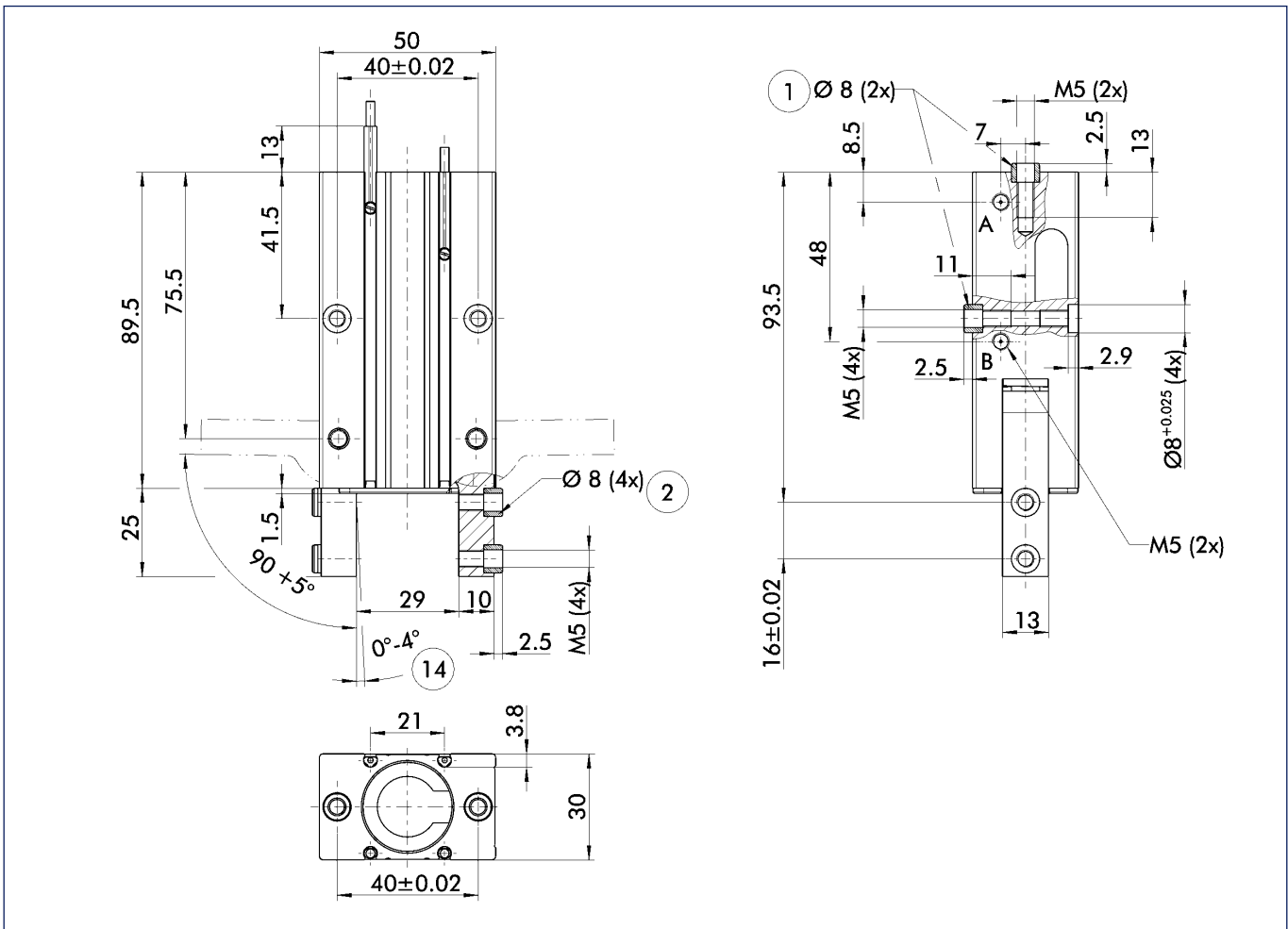


ⓘ Moments and forces apply per base jaw and may occur simultaneously.  $M_y$  may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing. Service life may reduce.

### Technical data

Description	LGR 25		LGR 25-AS	
	ID	0312974	ID	0312975
Opening angle per jaw	[°]	90.0	90.0	90.0
Opening angle per jaw up to	[°]	2.0	2.0	2.0
Closing moment	[Nm]	4.0	5.4	5.4
Closing moment ensured by spring	[Nm]		1.4	1.4
Weight	[kg]	0.4	0.409	0.409
Recommended workpiece weight	[kg]	0.58	0.65	0.65
Air consumption per double stroke	[cm <sup>3</sup> ]	13.0	9.31	9.31
Nominal pressure	[bar]	6.0	6.0	6.0
Minimum pressure	[bar]	2.0	4.0	4.0
Maximum pressure	[bar]	8.0	6.5	6.5
Closing time	[s]	0.1	0.1	0.1
Opening time	[s]	0.09	0.09	0.09
Max. permitted finger length	[mm]	50.0	50.0	50.0
Max. permitted weight per finger	[kg]	0.1	0.1	0.1
IP class		40	40	40
Min. ambient temperature	[°C]	-10.0	-10.0	-10.0
Max. ambient temperature	[°C]	90.0	90.0	90.0
Repeat accuracy	[mm]	0.02	0.02	0.02

### Main views

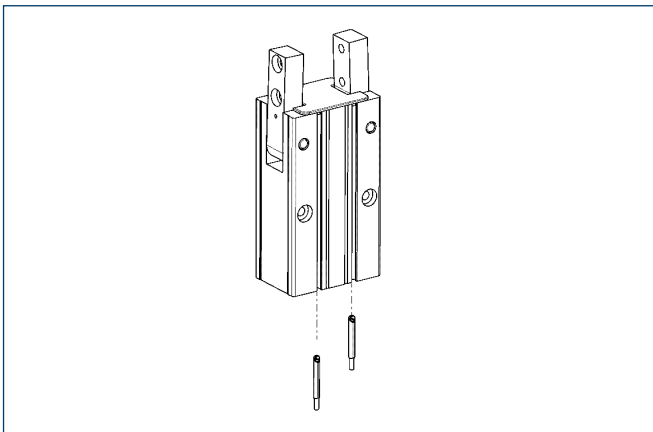


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can also be used (see "Accessories" catalog section) for I.D. or O.D. gripping as an alternative or in addition to the spring-loaded, mechanical gripping force safety device.

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- ⑭ Clamping reserve per finger

### Sensor System



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID	Recommended product
MZN 1-06VPS-KRD	0312990	
RZN 1-05ZRS-KRD	0312991	

① Two sensors (NO contacts) are required for each gripper, plus extension cables as an option.

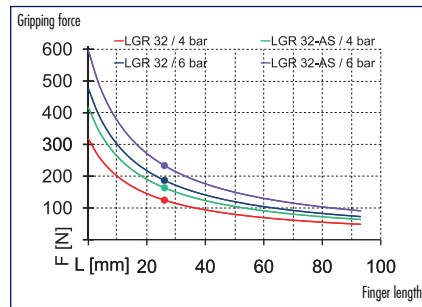
Extension cables for proximity switches/magnetic switches

Description	ID
KA BG08-L 3P-0300-PNP	0301622
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-PNP	0301502
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497

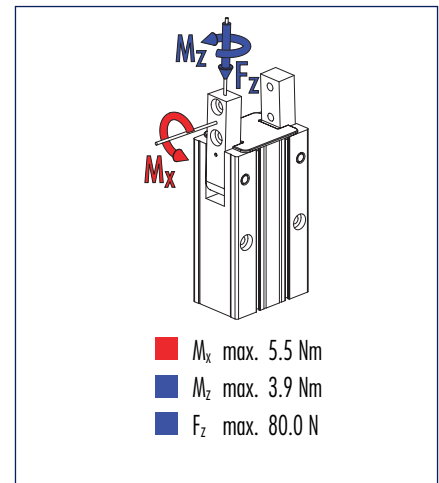
① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



### Gripping force, O.D. gripping



### Finger load

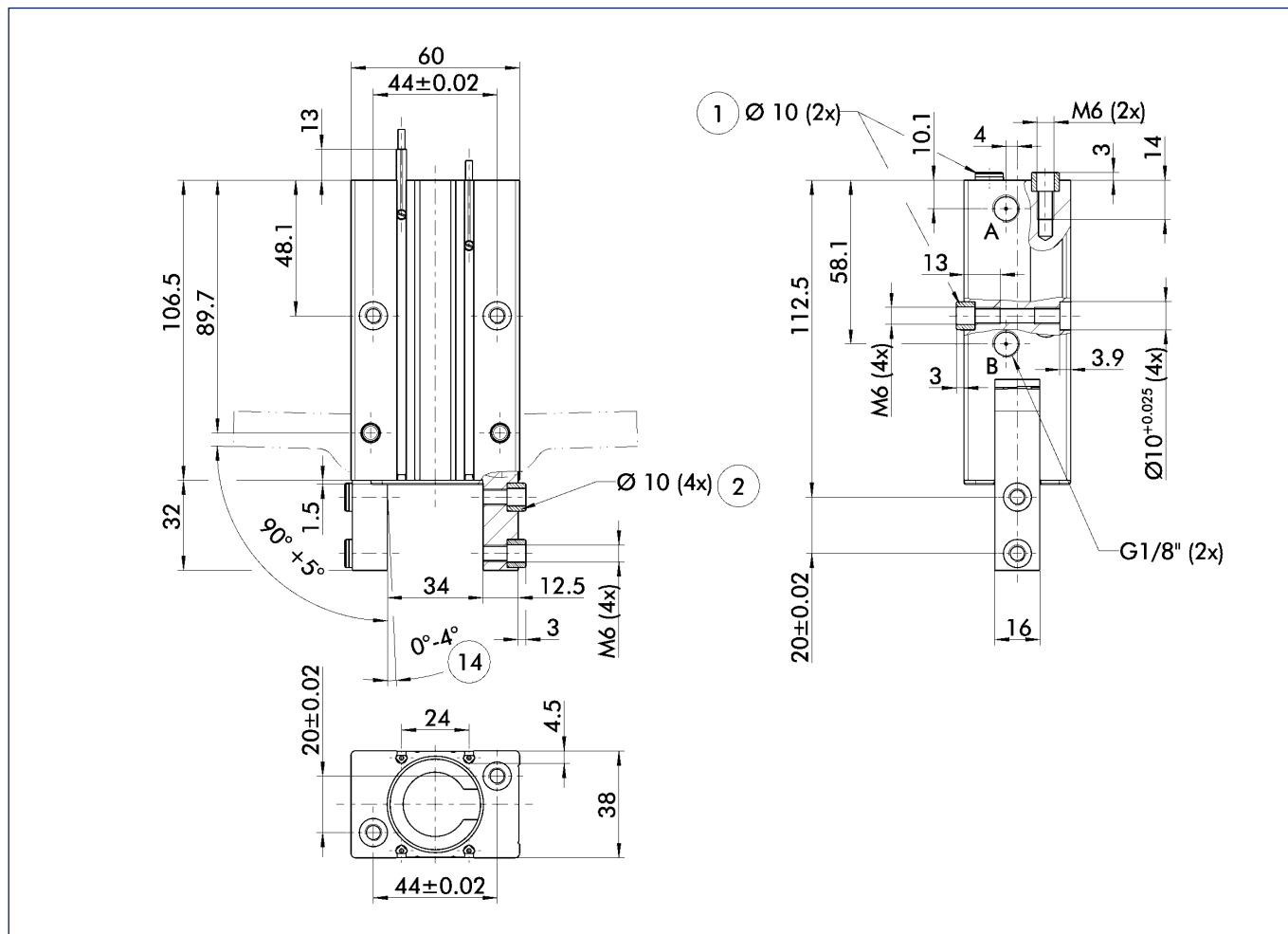


ⓘ Moments and forces apply per base jaw and may occur simultaneously.  $M_y$  may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing. Service life may reduce.

### Technical data

Description	LGR 32		LGR 32-AS	
	ID	0312976	ID	0312977
Opening angle per jaw	[°]	90.0		90.0
Opening angle per jaw up to	[°]	2.0		2.0
Closing moment	[Nm]	8.0		10.0
Closing moment ensured by spring	[Nm]			2.0
Weight	[kg]	0.735		0.75
Recommended workpiece weight	[kg]	0.93		0.96
Air consumption per double stroke	[cm <sup>3</sup> ]	25.0		15.3
Nominal pressure	[bar]	6.0		6.0
Minimum pressure	[bar]	2.0		4.0
Maximum pressure	[bar]	8.0		6.5
Closing time	[s]	0.11		0.11
Opening time	[s]	0.12		0.12
Max. permitted finger length	[mm]	62.0		62.0
Max. permitted weight per finger	[kg]	0.13		0.13
IP class		40		40
Min. ambient temperature	[°C]	-10.0		-10.0
Max. ambient temperature	[°C]	90.0		90.0
Repeat accuracy	[mm]	0.02		0.02

### Main views

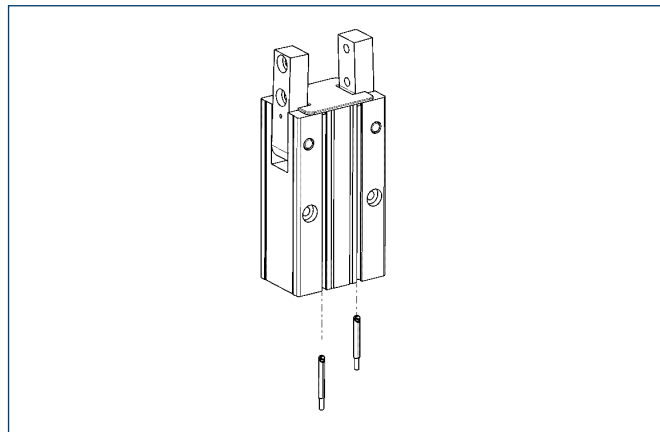


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can also be used (see "Accessories" catalog section) for I.D. or O.D. gripping as an alternative or in addition to the spring-loaded, mechanical gripping force safety device.

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- ⑭ Clamping reserve per finger

### Sensor System



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID	Recommended product
MZN 1-06VPS-KRD	0312990	
RZN 1-05ZRS-KRD	0312991	

① Two sensors (NO contacts) are required for each gripper, plus extension cables as an option.

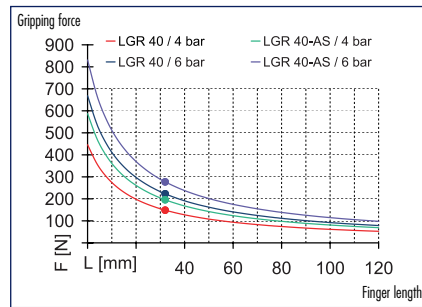
Extension cables for proximity switches/magnetic switches

Description	ID
KA BG08-L 3P-0300-PNP	0301622
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-PNP	0301502
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497

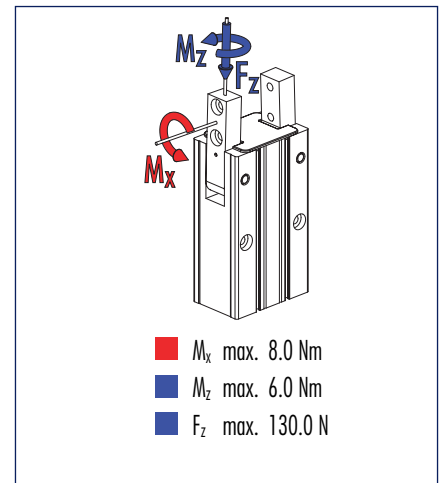
① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



### Gripping force, O.D. gripping



### Finger load

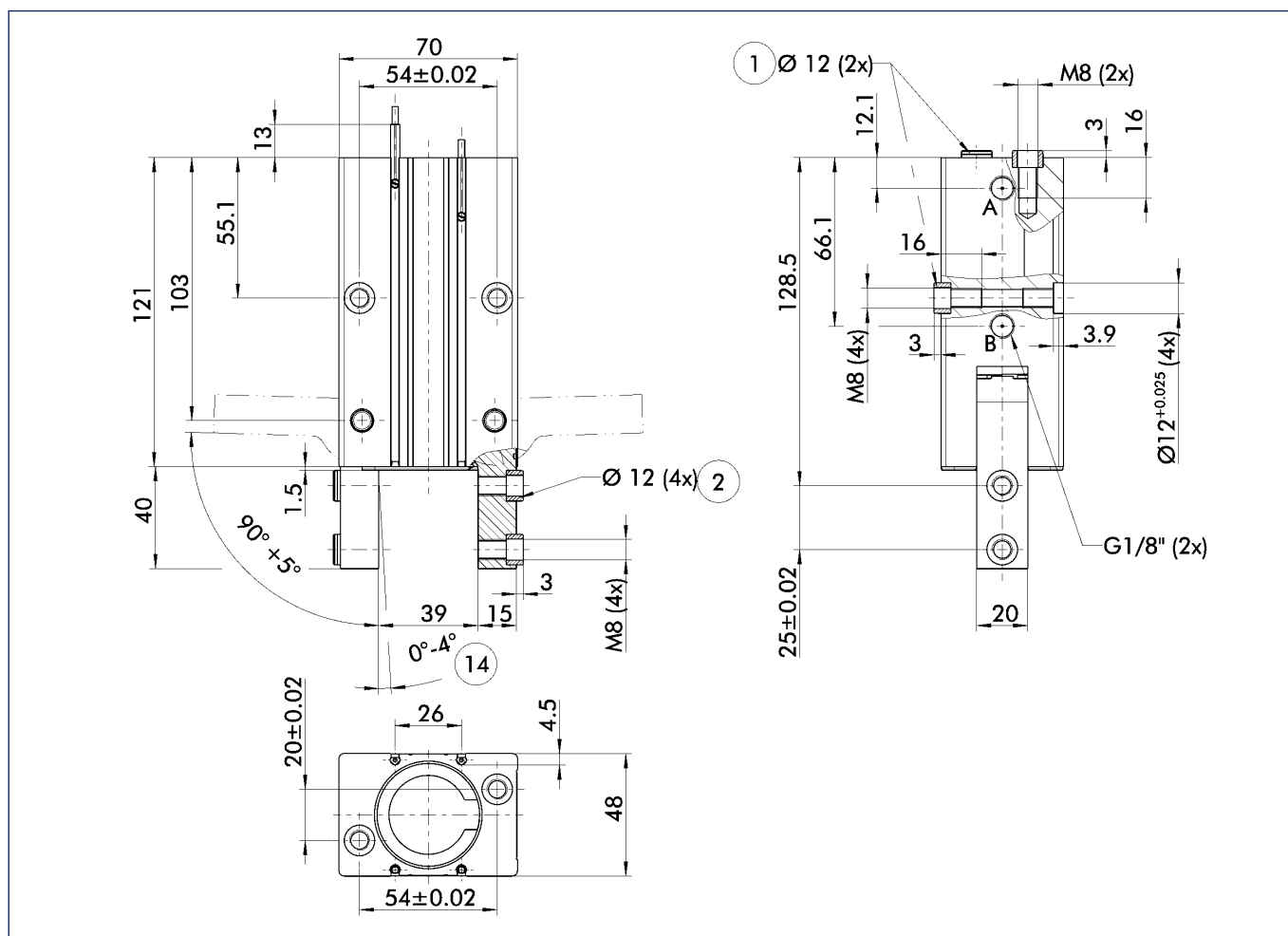


① Moments and forces apply per base jaw and may occur simultaneously.  $M_y$  may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing. Service life may reduce.

### Technical data

Description	LGR 40		LGR 40-AS	
	ID	0312978	ID	0312979
Opening angle per jaw	[°]	90.0	90.0	90.0
Opening angle per jaw up to	[°]	2.0	2.0	2.0
Closing moment	[Nm]	12.0	15.0	15.0
Closing moment ensured by spring	[Nm]		3.0	3.0
Weight	[kg]	1.246	1.268	1.268
Recommended workpiece weight	[kg]	1.15	1.15	1.15
Air consumption per double stroke	[cm <sup>3</sup> ]	42.0	24.0	24.0
Nominal pressure	[bar]	6.0	6.0	6.0
Minimum pressure	[bar]	2.0	4.0	4.0
Maximum pressure	[bar]	8.0	6.5	6.5
Closing time	[s]	0.11	0.11	0.11
Opening time	[s]	0.18	0.18	0.18
Max. permitted finger length	[mm]	80.0	80.0	80.0
Max. permitted weight per finger	[kg]	0.22	0.22	0.22
IP class		40	40	40
Min. ambient temperature	[°C]	-10.0	-10.0	-10.0
Max. ambient temperature	[°C]	90.0	90.0	90.0
Repeat accuracy	[mm]	0.02	0.02	0.02

### Main views

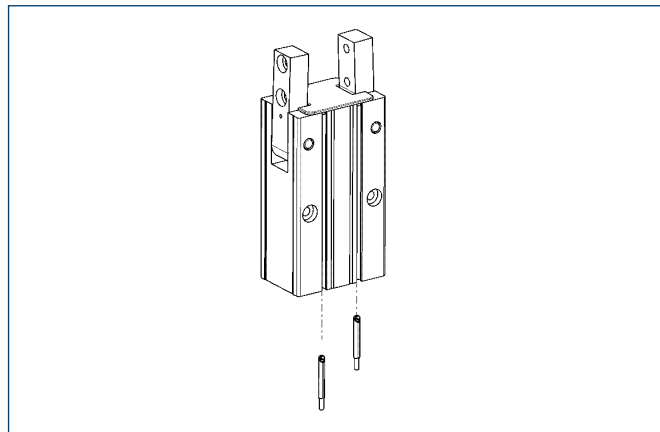


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can also be used (see "Accessories" catalog section) for I.D. or O.D. gripping as an alternative or in addition to the spring-loaded, mechanical gripping force safety device.

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- ⑭ Clamping reserve per finger

### Sensor System



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID	Recommended product
MZN 1-06VPS-KRD	0312990	
RZN 1-05ZRS-KRD	0312991	

① Two sensors (NO contacts) are required for each gripper, plus extension cables as an option.

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG08-L 3P-0300-PNP	0301622
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-PNP	0301502
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497

① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.