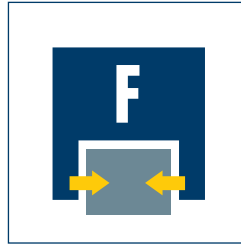




Sizes
8 .. 40



Weight
0.034 kg .. 1.5 kg



Gripping force
27 N .. 1090 N



Stroke per finger
2 mm .. 13 mm



Workpiece weight
0.065 kg .. 2.05 kg

Application example



pneumatic double transfer unit

① 2-Finger Parallel Gripper LGP 20

② Universal Rotary Actuator SRU 26

Universal Gripper

Universal 2-Finger Parallel Gripper with T-slot guidance and excellent cost/performance ratio.

Area of application

Universal application in clean surroundings, such as assembly areas.

Your advantages and benefits

Function optimized gripper type

for maximum cost effectiveness

Stable, ground T-groove guiding

for highest precision in handling

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



Information about 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-lubricate
Pressure medium: Requirements on quality of the compressed air according to
DIN ISO 8573-1: 6 4 4.

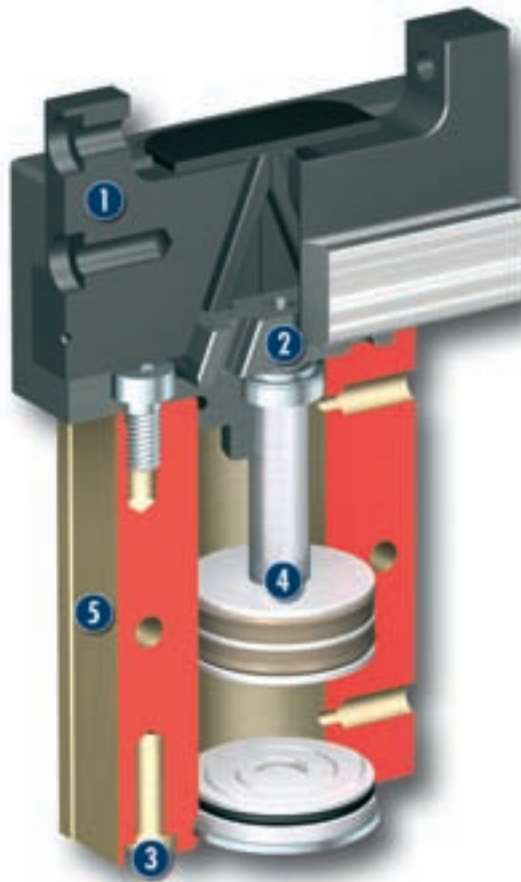
Scope of delivery

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 Wedge-hook design**
for high power transmission and centric gripping
- 3 Centering and mounting possibilities**
for assembly of the gripper to a base area and at the long side
- 4 Drive**
pneumatic piston drive
- 5 Housing**
weight-optimised through application of hard-anodized, high-strength aluminum alloy

Function description

The round piston is moved up or down by means of compressed air. Through its angular active surfaces, the wedge hook transforms this motion into the lateral, synchronous gripping movement of both base jaws.

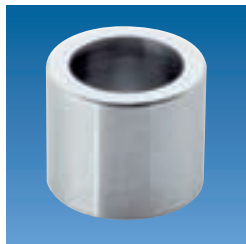
Options and special information

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



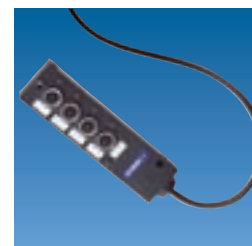
MZN/RZN magnetic switches



KV/KA sensor cables



V sensor distributors



SDV-P pressure maintenance valves



- 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 force

is the arithmetic total of the gripping force applied to each jaw at distance P (see illustration), measured from the upper edge of the gripper.

Finger length

is measured from the upper edge of the gripper housing in the direction of the main axis.

Repeat accuracy

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

Workpiece weight

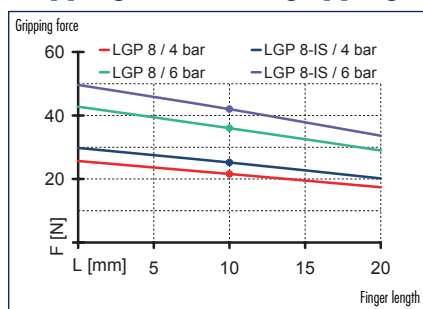
The recommended workpiece weight is calculated for a force-type connection with a coefficient of friction of 0.1 and a safety factor of 2 against slippage of the workpiece on acceleration due to gravity g. Considerably heavier workpiece weights are permitted with form-fit gripping.

Closing and opening times

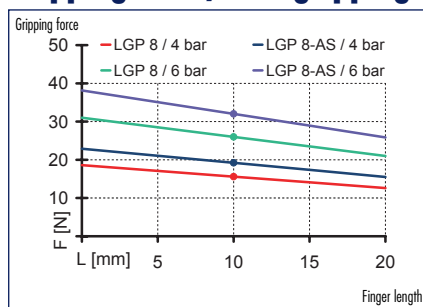
Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.



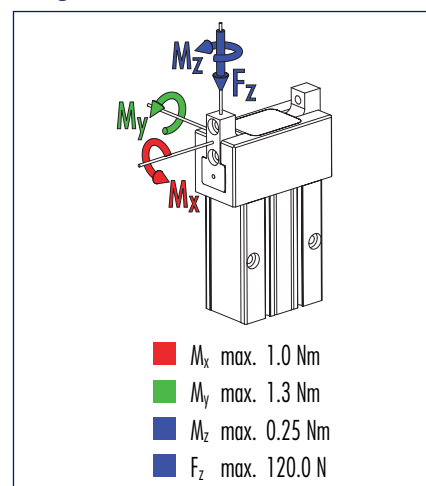
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

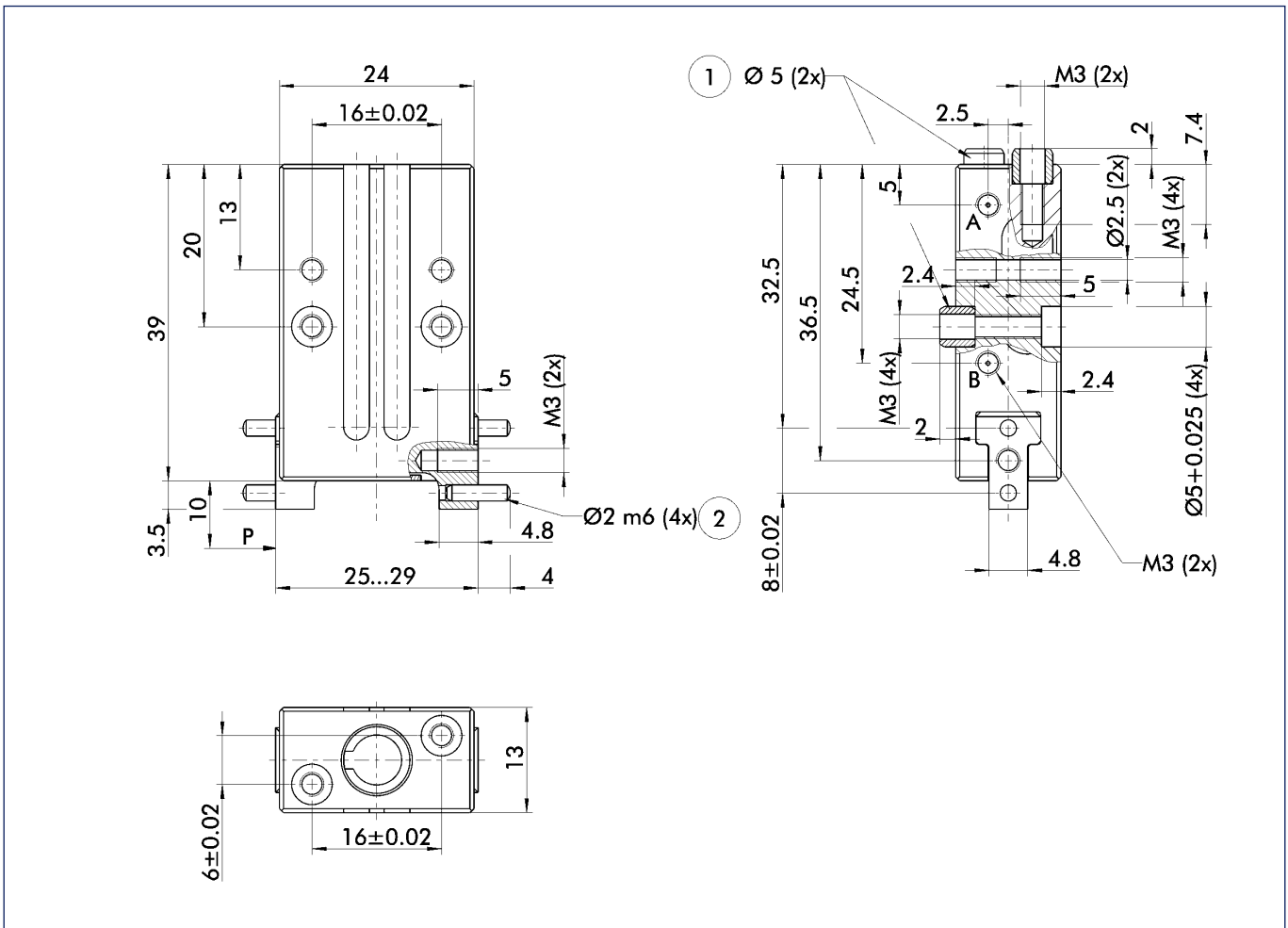


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	LGP 8		LGP 8-AS		LGP 8-IS	
	ID	0312900	0312901	0312902		
Stroke per finger	[mm]	2.0	2.0	2.0		
Closing force	[N]	26.0	32.0			
Opening force	[N]			42.0		
Min. spring force	[N]		6.0	6.0		
Weight	[kg]	0.034	0.036	0.036		
Recommended workpiece weight	[kg]	0.13	0.13	0.13		
Air consumption per double stroke	[cm ³]	0.9	0.9	0.9		
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]	0.01	0.01	0.02		
Opening time	[s]	0.01	0.02	0.01		
Closing/ opening time with spring only	[s]		0.03	0.03		
Max. permitted finger length	[mm]	20.0	20.0	20.0		
Max. permitted weight per finger	[kg]	0.025	0.025	0.025		
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		

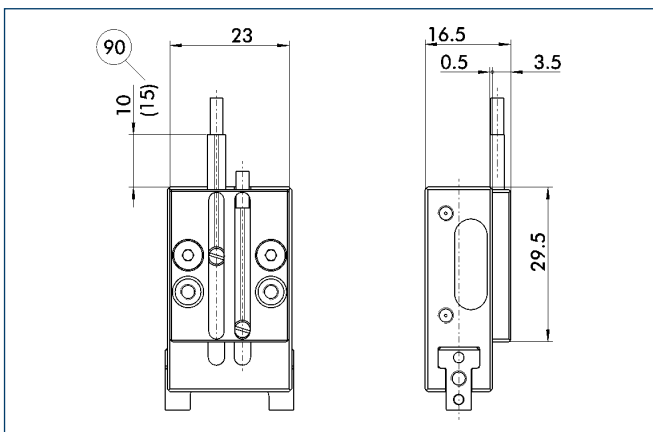
Main views



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

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection

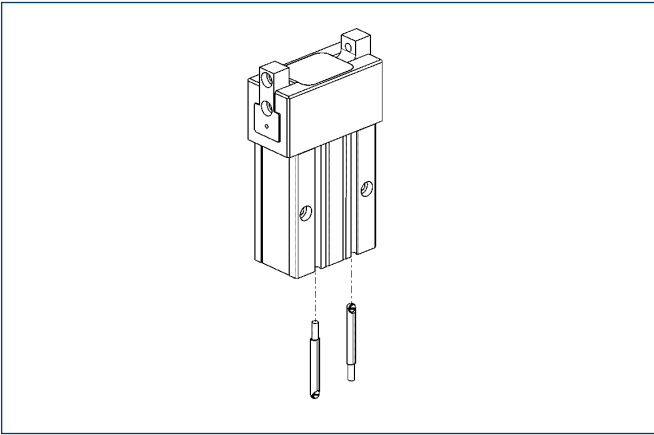
LGP with clamping plate for sensor



⑨ In case of outside locking device

The magnetic switches have to be clamped together with the clamping plate at the gripper housing.

Sensor system



Electronic magnetic switches / Reed Switches, for direct mounting

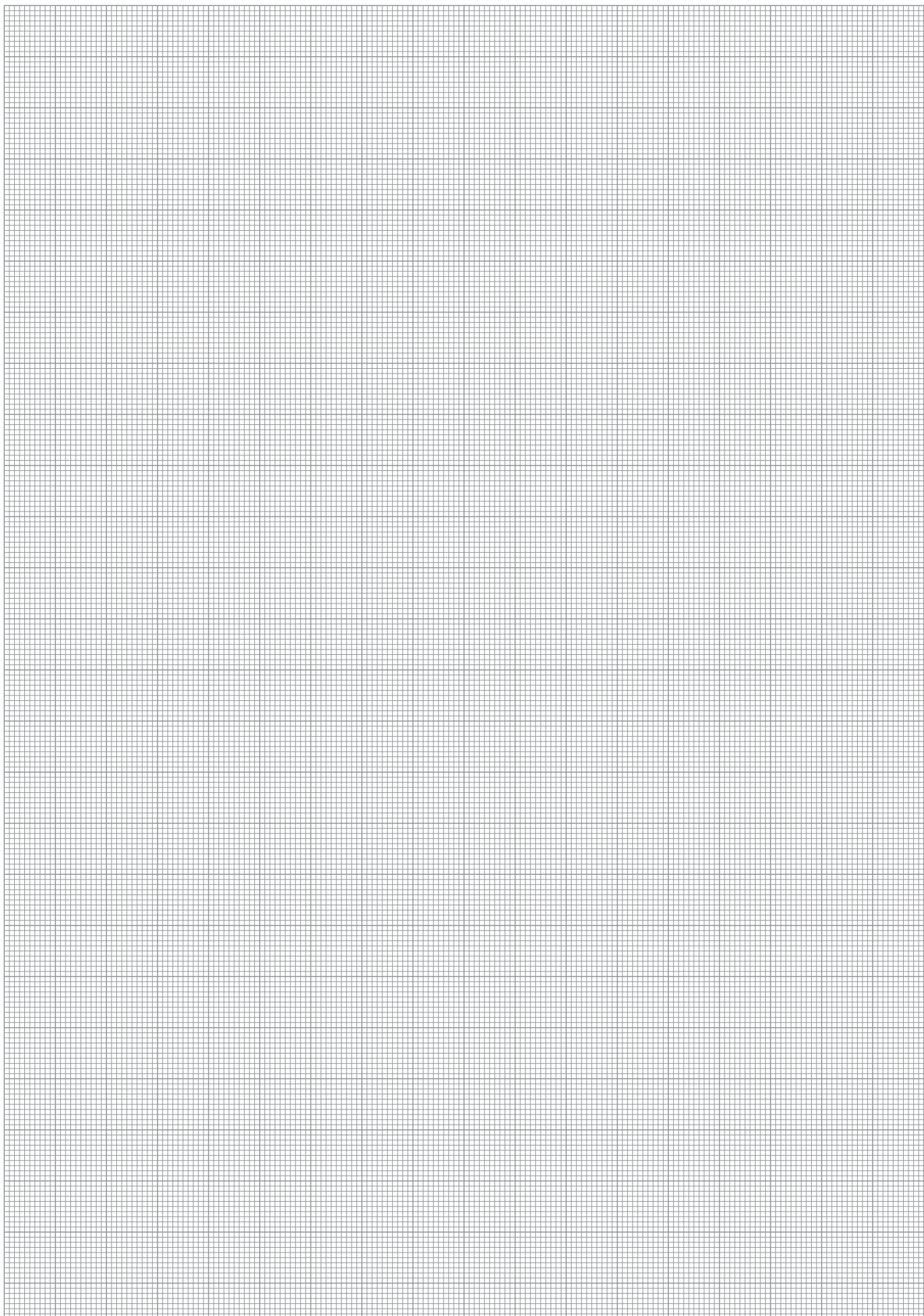
Description	ID
MZN 1-06VPS-KRD	0312990
RZN 1-05ZRS-KRD	0312991

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

Extension cables for proximity switches/magnetic switches

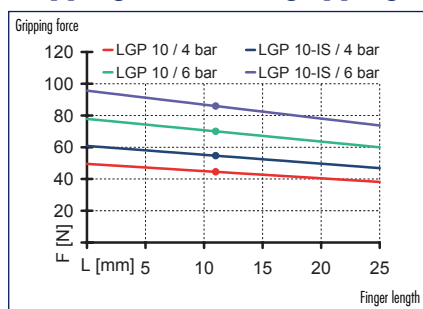
Description	ID
KA BG08-L 3P-0300-PNP	0301622
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-PNP	0301502
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497

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

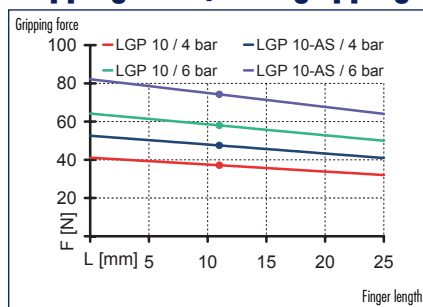




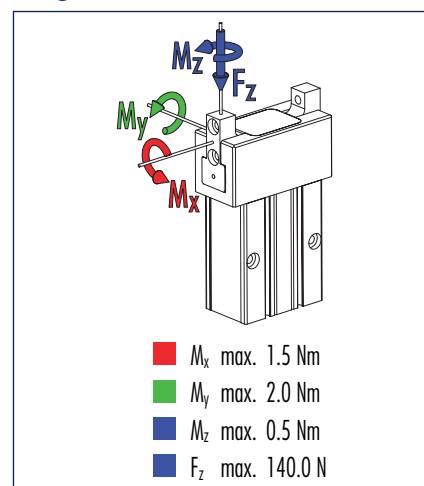
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

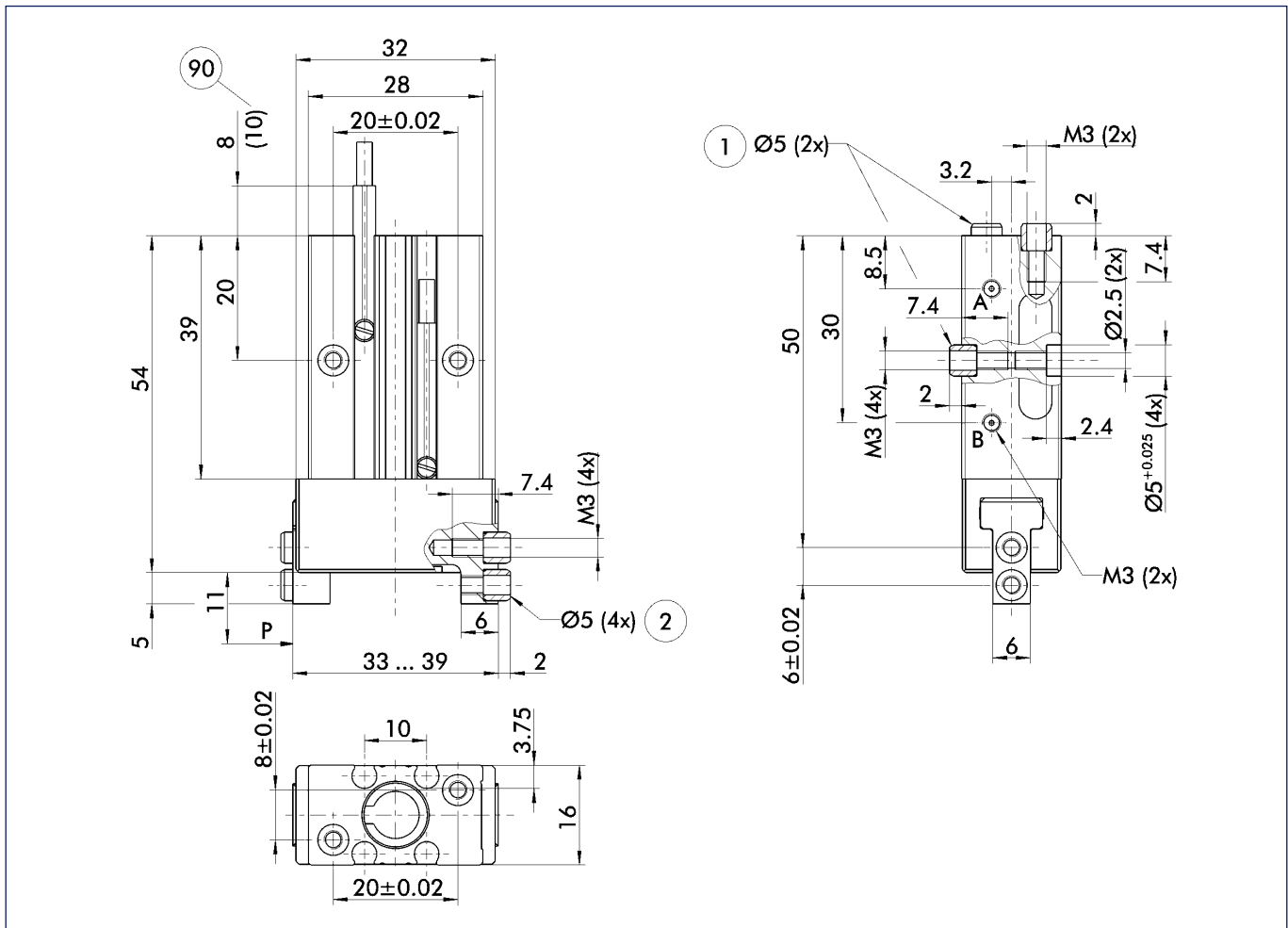


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description		LGP 10	LGP 10-AS	LGP 10-IS
	ID	0312903	0312904	0312905
Stroke per finger	[mm]	3.0	3.0	3.0
Closing force	[N]	58.0	74.0	
Opening force	[N]			86.0
Min. spring force	[N]		16.0	16.0
Weight	[kg]	0.07	0.075	0.075
Recommended workpiece weight	[kg]	0.29	0.29	0.29
Air consumption per double stroke	[cm ³]	1.8	1.8	1.8
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]	0.01	0.01	0.02
Opening time	[s]	0.01	0.02	0.01
Closing/ opening time with spring only	[s]		0.04	0.04
Max. permitted finger length	[mm]	25.0	25.0	25.0
Max. permitted weight per finger	[kg]	0.04	0.04	0.04
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

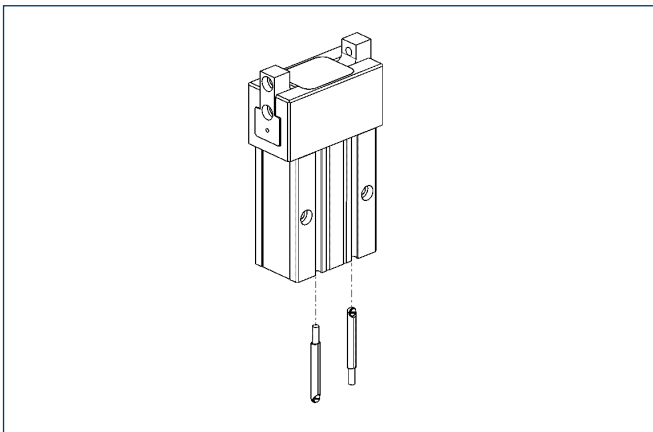
Main views



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

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- 90 In case of outside locking device

Sensor system



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID
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.

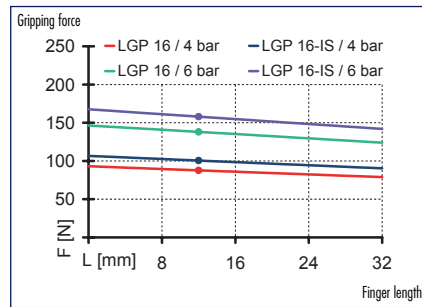
Extension cables for proximity switches/magnetic switches

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

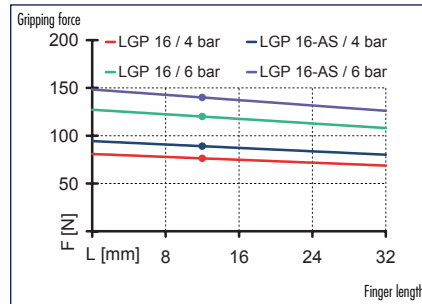
① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



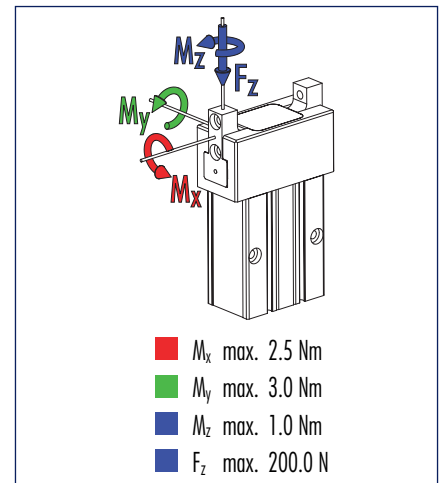
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

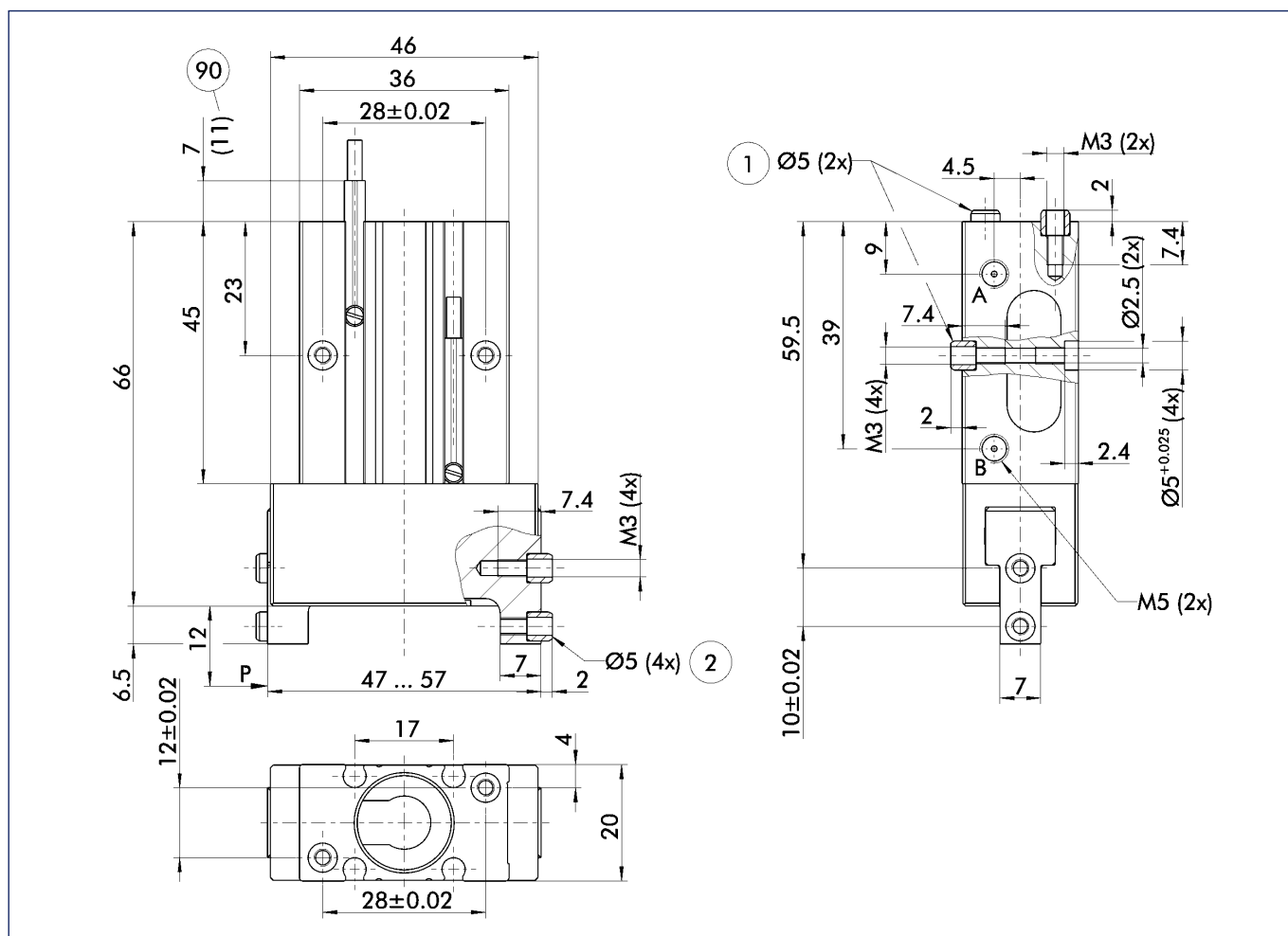


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	LGP 16		LGP 16-AS		LGP 16-IS	
	ID	0312906	0312907	0312908		
Stroke per finger	[mm]	5.0	5.0	5.0		5.0
Closing force	[N]	120.0	140.0			
Opening force	[N]	138.0				158.0
Min. spring force	[N]			20.0		20.0
Weight	[kg]	0.15	0.16			0.16
Recommended workpiece weight	[kg]	0.6	0.6			0.6
Air consumption per double stroke	[cm ³]	7.0	7.0			7.0
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]	0.02	0.02			0.03
Opening time	[s]	0.02	0.03			0.02
Closing/ opening time with spring only	[s]		0.05			0.05
Max. permitted finger length	[mm]	32.0	32.0			32.0
Max. permitted weight per finger	[kg]	0.06	0.06			0.06
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

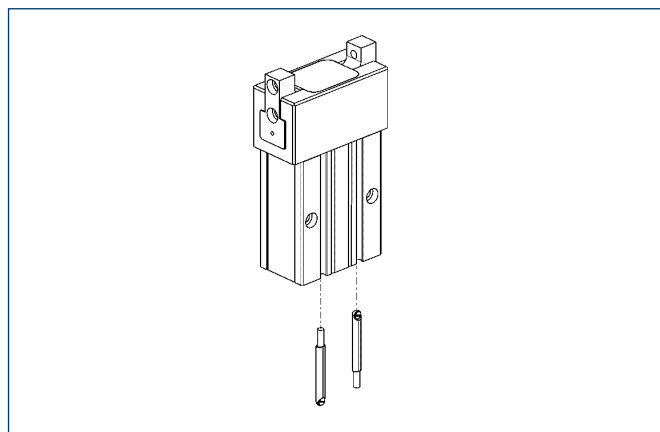
Main views



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

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- 90 In case of outside locking device

Sensor system



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID
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.

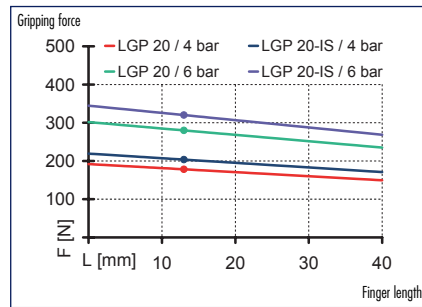
Extension cables for proximity switches/magnetic switches

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

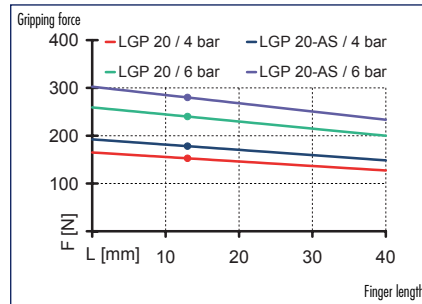
① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



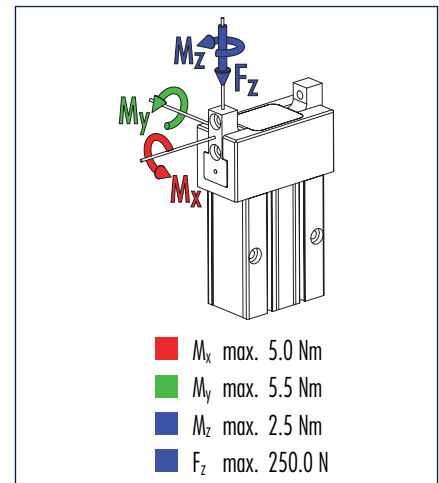
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

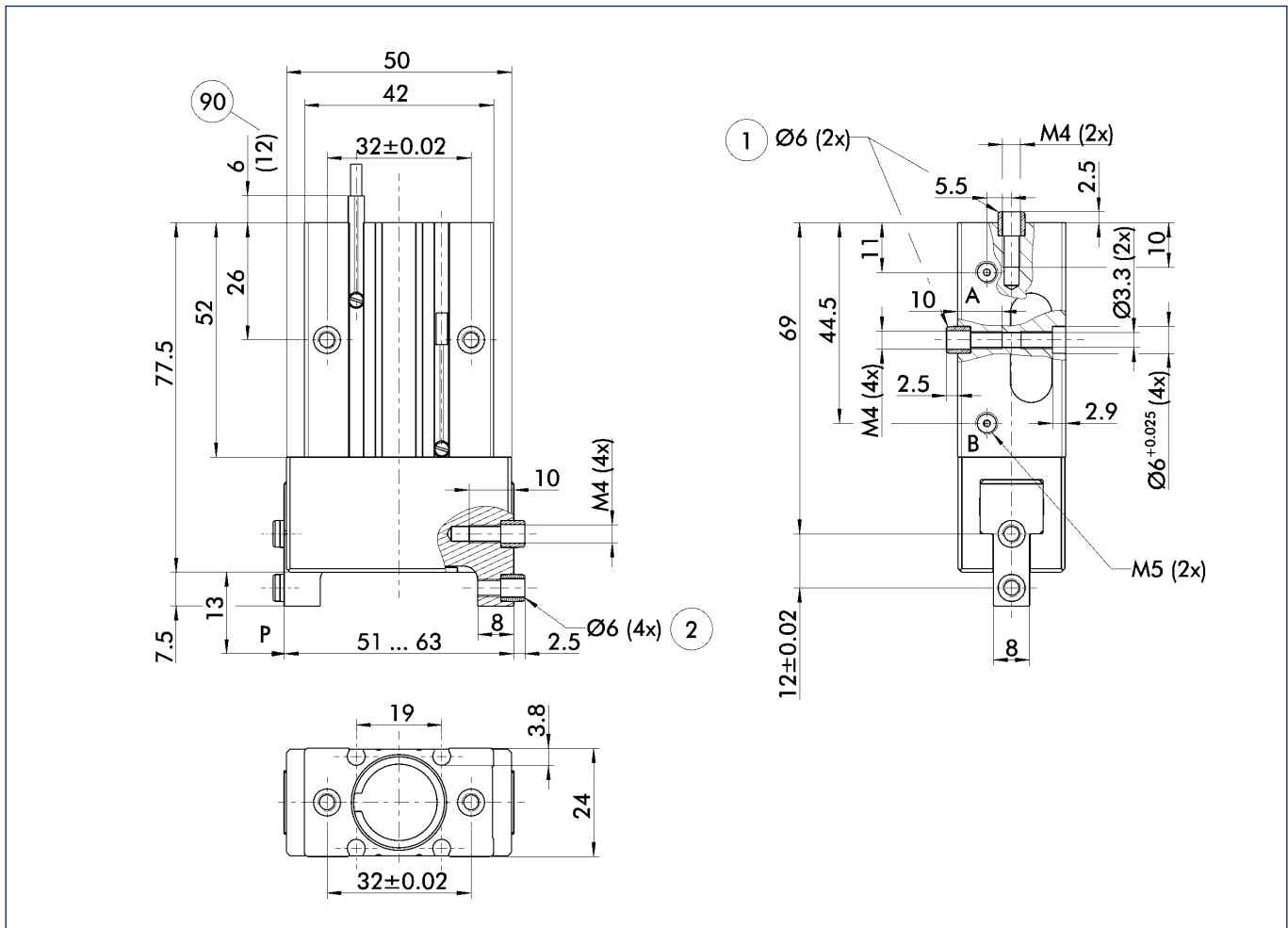


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	ID	LGP 20	LGP 20-AS	LGP 20-IS
		0312909	0312910	0312911
Stroke per finger	[mm]	6.0	6.0	6.0
Closing force	[N]	240.0	280.0	
Opening force	[N]	280.0		320.0
Min. spring force	[N]		40.0	40.0
Weight	[kg]	0.24	0.25	0.25
Recommended workpiece weight	[kg]	1.2	1.2	1.2
Air consumption per double stroke	[cm ³]	13.0	13.0	13.0
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]	0.03	0.02	0.04
Opening time	[s]	0.03	0.04	0.02
Closing/ opening time with spring only	[s]		0.08	0.08
Max. permitted finger length	[mm]	40.0	40.0	40.0
Max. permitted weight per finger	[kg]	0.09	0.09	0.09
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

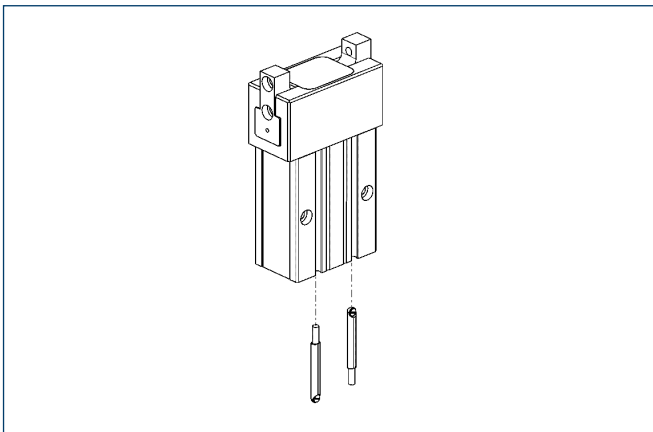
Main views



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

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- 90 In case of outside locking device

Sensor system



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID
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.

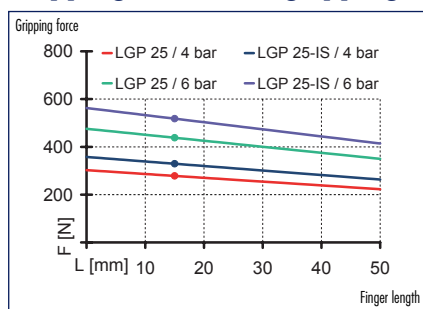
Extension cables for proximity switches/magnetic switches

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

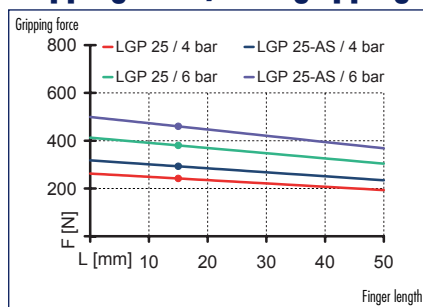
① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



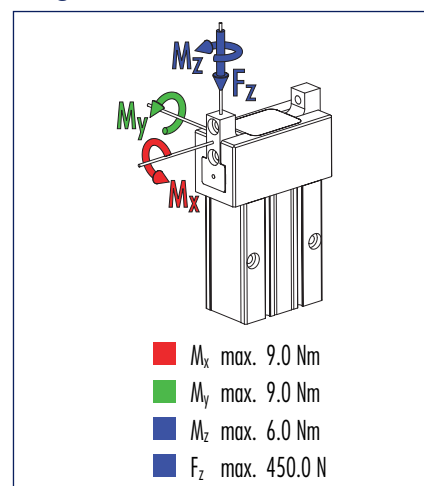
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load



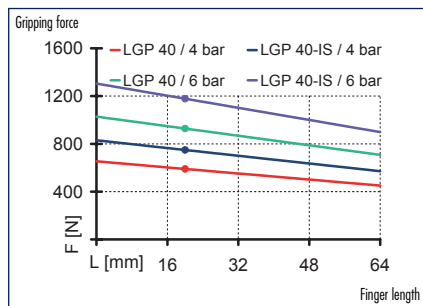
① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

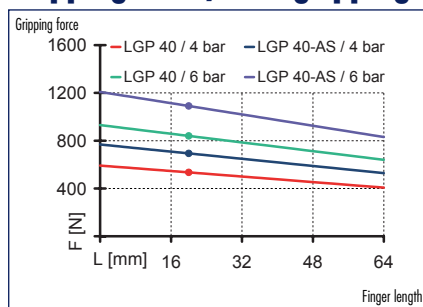
Description		LGP 25	LGP 25-AS	LGP 25-IS
	ID	0312912	0312913	0312914
Stroke per finger	[mm]	8.0	8.0	8.0
Closing force	[N]	380.0	460.0	
Opening force	[N]	438.0		518.0
Min. spring force	[N]		80.0	80.0
Weight	[kg]	0.46	0.48	0.48
Recommended workpiece weight	[kg]	1.9	1.9	1.9
Air consumption per double stroke	[cm ³]	27.0	27.0	27.0
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]	0.05	0.04	0.07
Opening time	[s]	0.05	0.07	0.04
Closing/ opening time with spring only	[s]		0.12	0.12
Max. permitted finger length	[mm]	50.0	50.0	50.0
Max. permitted weight per finger	[kg]	0.12	0.12	0.12
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



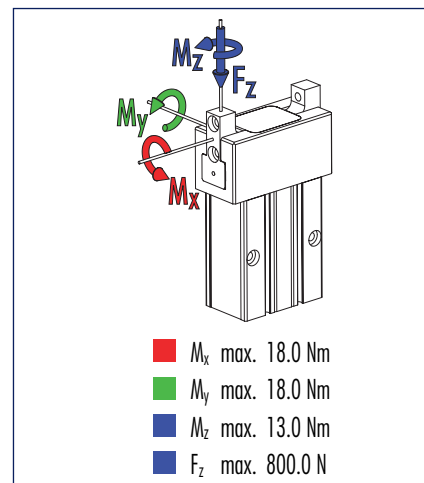
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

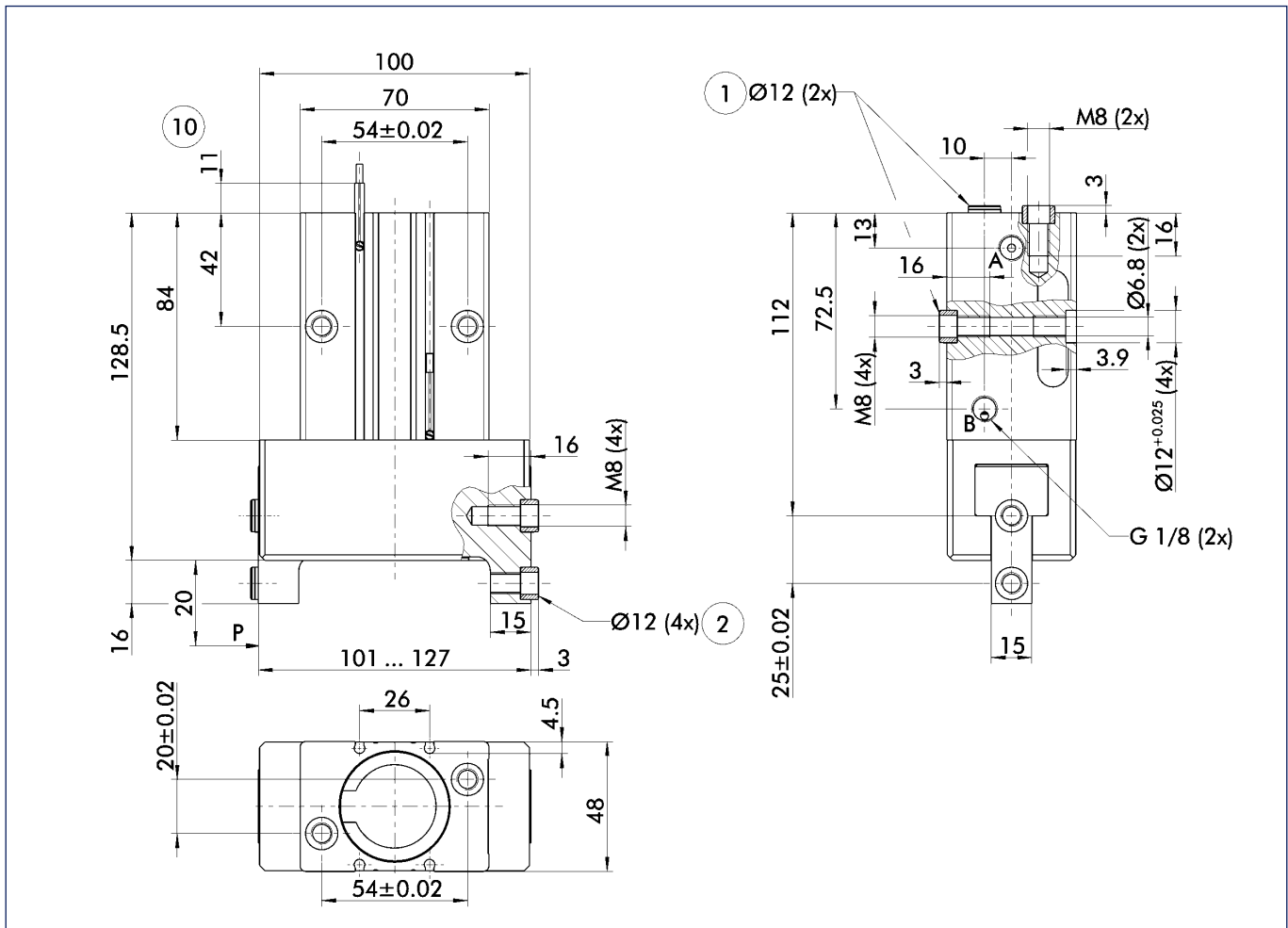


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description		LGP 40	LGP 40-AS	LGP 40-IS
	ID	0312915	0312916	0312917
Stroke per finger	[mm]	13.0	13.0	13.0
Closing force	[N]	840.0	1090.0	
Opening force	[N]	928.0		1178.0
Min. spring force	[N]		250.0	250.0
Weight	[kg]	1.5	1.6	1.6
Recommended workpiece weight	[kg]	4.2	4.2	4.2
Air consumption per double stroke	[cm ³]	89.0	89.0	89.0
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]	0.1	0.08	0.12
Opening time	[s]	0.1	0.12	0.08
Closing/ opening time with spring only	[s]		0.2	0.2
Max. permitted finger length	[mm]	64.0	64.0	64.0
Max. permitted weight per finger	[kg]	0.3	0.3	0.3
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

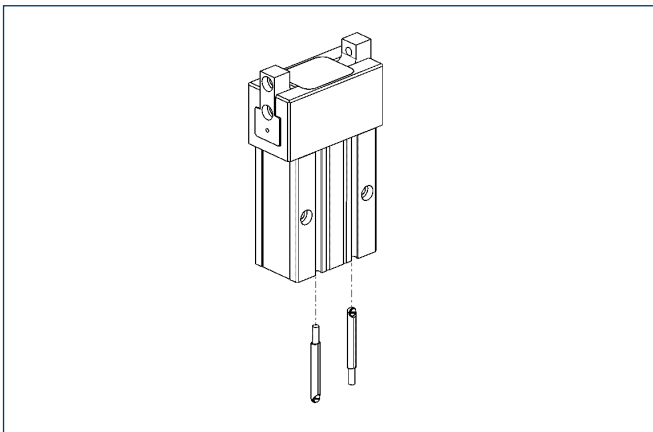
Main views



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

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- ⑩ Projection only with AS version

Sensor system



Electronic magnetic switches / Reed Switches, for direct mounting

Description	ID
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.