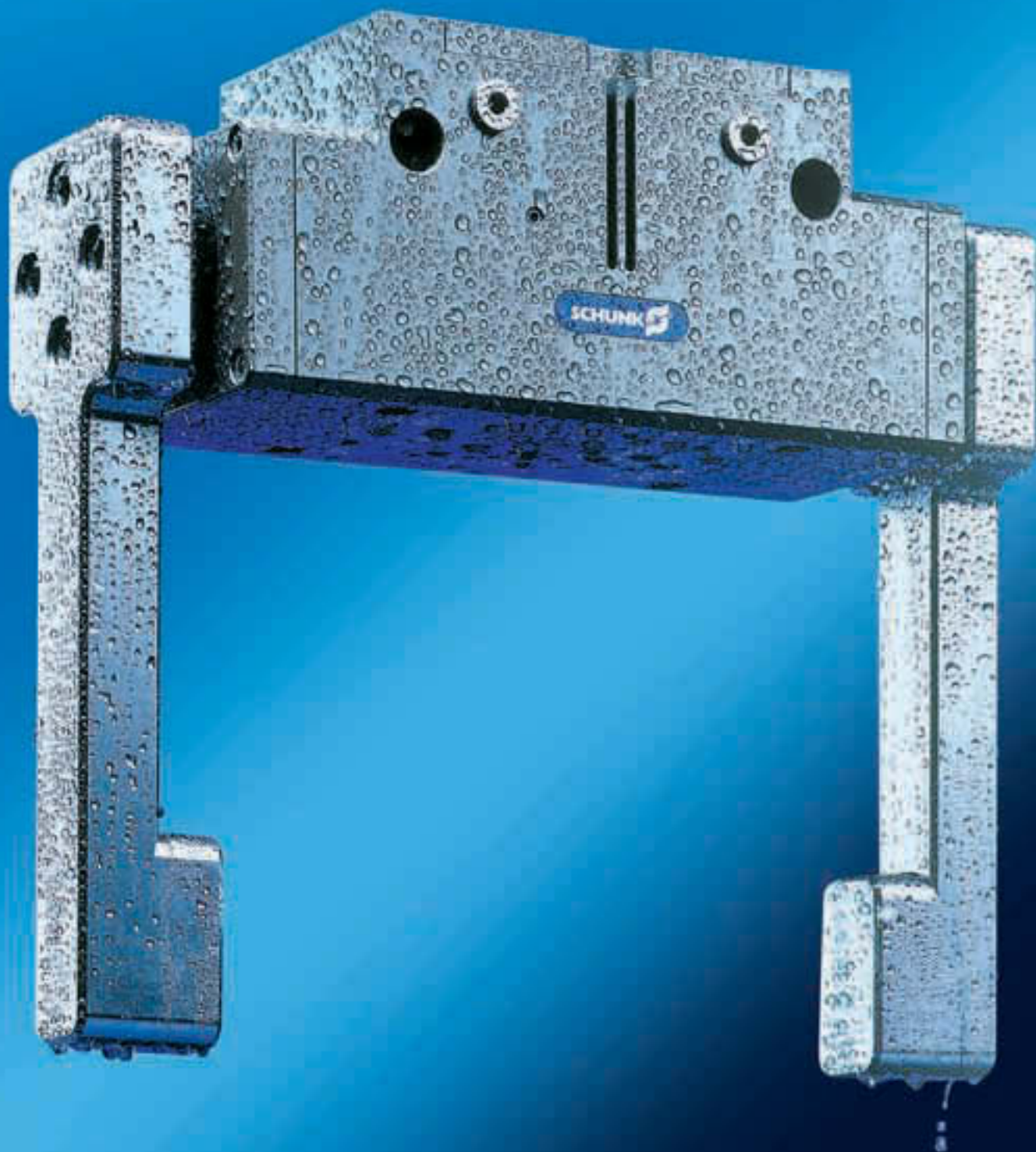


Pneumatic Gripping Modules

Pneumatic · 2-Finger Parallel Grippers



2-FINGER PARALLEL GRIPPERS

Series	Size	Page
Grippers for Small Components		
MPG		18
MPG	20	22
MPG	25	26
MPG	32	30
MPG	40	34
MPG	50	38
MPG	64	42
KTG		46
KTG	50	50
KGG		54
KGG	80	58
KGG	140	62
KGG	220	66
KGG	280	70
RH		74
RH	901K	78
RH	901K ST10	82
RH	905	86
RH	907	90
RH	925	94
RH	940	98
RH	9010	102
RH	918	106
RH	806 KP	110
RH	801 KP	112
Universal Grippers		
PGN-plus		114
PGN-plus	40	118
PGN-plus	50	124
PGN-plus	64	130
PGN-plus	80	136
PGN-plus	100	142
PGN-plus	125	148
PGN-plus	160	154
PGN-plus	200	160
PGN-plus	240	166
PGN-plus	300	172
PGN-plus	380	178
PGN		184
PGN	50	188
PGN	64	192
PGN	80	196

Series	Size	Page
Universal Grippers		
PGN	100	200
PGN	125	204
PGN	160	208
PGN	200	212
PGN	300	216
PGN	380	220
PGF		224
PGF	50	228
PGF	64	232
PGF	80	236
PGF	100	240
PGF	125	244
PGM		248
PGM	29	252
PGM	38	256
PGM	50	260
PGM	60	264
PGM	82	268
PGM	96	272
PGM	120	276
PGM	140	280
Sealed Grippers		
DPG-plus		284
DPG-plus	50	288
DPG-plus	64	292
DPG-plus	80	296
DPG-plus	100	300
DPG-plus	125	304
DPG-plus	160	308
DPG-plus	200	312
Long-stroke Grippers		
PFH		316
PFH	30	320
PFH	40	324
PFH	50	328
PFH	200	332
PSH metric		340
PSH metric	22	344
PSH metric	32	348
PSH metric	42	352
PSH metric	52	356

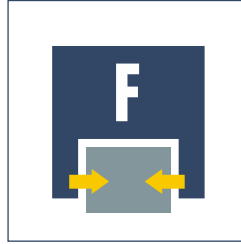
Series	Size	Page
Long-stroke Grippers		
PSH inch		360
PSH inch	22	364
PSH inch	32	368
PSH inch	42	372
PSH inch	52	376
Heavy-load Grippers		
SPG		380
SPG	100	384



Sizes
20 .. 64



Weight
0.038 kg .. 1.1 kg



Gripping force
28 N .. 270 N



Stroke per finger
2 mm .. 10 mm



Workpiece weight
0.14 kg .. 1.0 kg

Application example



Pneumatically driven, dual-axis automatic insertion unit for small components

1 MPG 32 2-Finger Parallel Gripper with standard finger blanks

2 FST-S 10-40 Mini-slide for vertical movement

3 FST-S 16-90 Mini-slide for horizontal movement

Grippers for small components

2-Finger parallel gripper with smooth actuating base jaws guided on roller bearings

Area of application

Gripping and movement of small to medium-sized workpieces in clean environments, such as assembly, testing, laboratory and pharmaceutical applications

Your advantages and benefits

Roller bearing guidance

for precise gripping through base jaw guide with minimum play

Base jaws guided on double roller bearings

ensuring low friction and smooth running actuation

Mounting from three sides in three screw directions

for universal and flexible gripper assembly

Air supply via hose-free direct connection or fitting connections

for the flexible supply of compressed air in all automation systems



General information on the series

Working principle

Wedge-hook kinematics

Housing material

Aluminum alloy, hard-anodized

Cover material

Steel

Base jaw material

Steel

Actuation

Pneumatic, with filtered compressed air (10 µm): Dry, lubricated or non-lubricated
 Pressure medium: Required quality class of compressed air according to DIN ISO 8573-1: Quality class 4

Warranty

24 months

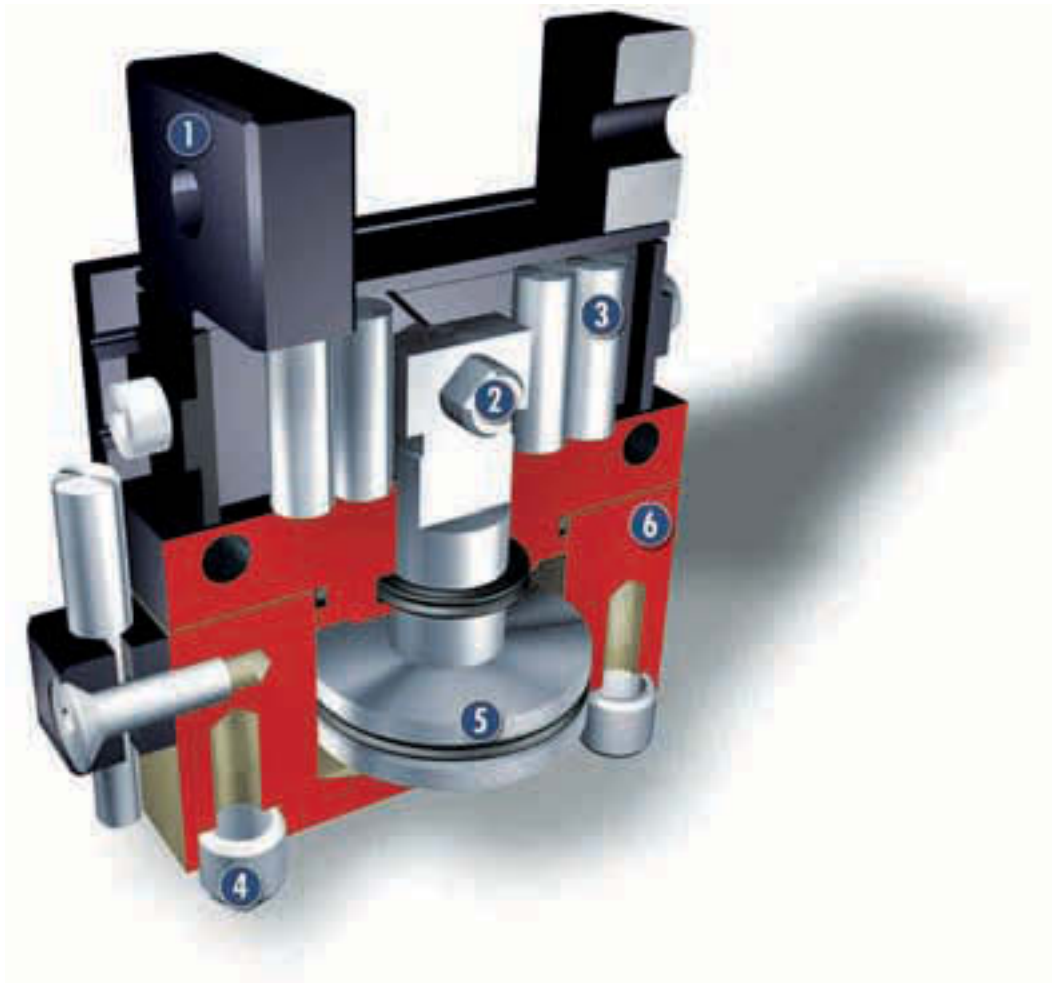
Scope of delivery

Brackets for proximity switches, centering sleeves, O-rings for direct connection, assembly and operating manual with manufacturer's declaration

Gripping force safety device

with either mechanical gripping force safety device or SDV-P pressure maintenance valve

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 Roller bearing guide**
precise gripping through base jaw guide with minimum play
- 4 Centering and mounting possibilities**
for mounting the gripper by the base surface and the longitudinal sides
- 5 Drive**
piston drive system for compressed air actuation
- 6 Housing**
weight-reduced through the use of a hard-anodized, high-strength aluminum alloy

Function description

The piston is moved up and down by compressed air. The wedge is at the upper end of the piston rod and engages in the angular slots of the two base jaws, and in so doing transform this movement into the synchronized opening or closing of the base fingers.

Options and special information

Additional mounting bores

for centering the fingers via sleeves, instead of normal mounting surfaces, are available on request as a special version.

Accessories

SCHUNK accessories – the suitable complement for the highest level of functionality, reliability and controlled production of all automation modules.

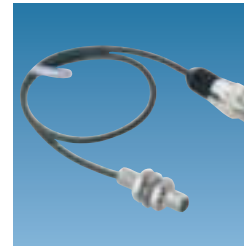
Centering sleeves



Fittings



IN inductive proximity switches



W/WK/KV/GK sensor cables



HM carbide inserts



Quentes plastic inserts



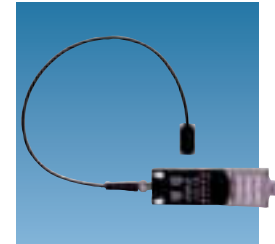
SDV-P pressure maintenance valves



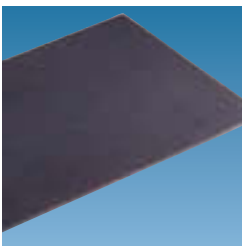
V sensor distributors



FPS flexible position sensor



HKI gripper pads



Finger blanks



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 can 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 base 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

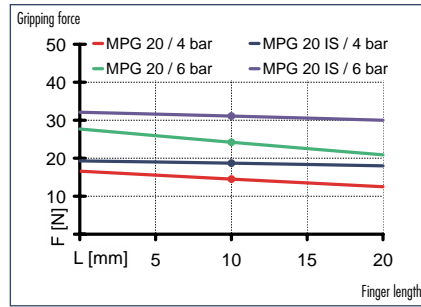
The recommended workpiece weight is calculated for a force-type connection with a coefficient of friction of 0.1 and a safety factor of 2 against slippage of the workpiece on acceleration due to gravity g. Considerably heavier workpiece weights are permitted with form-fit clamping.

Closing and opening times

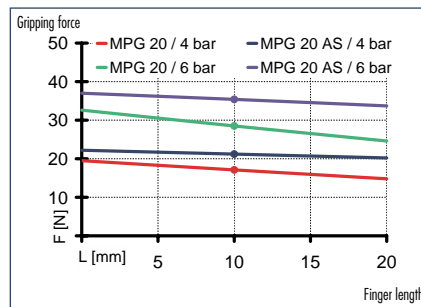
Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.



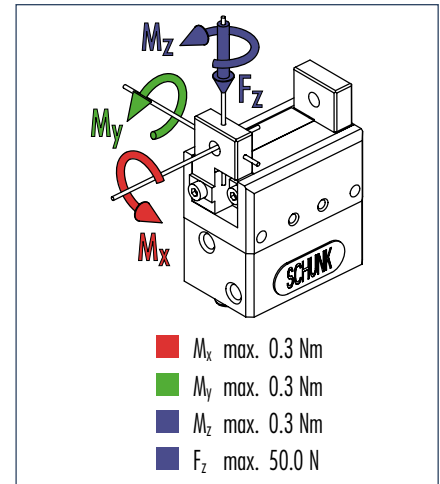
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

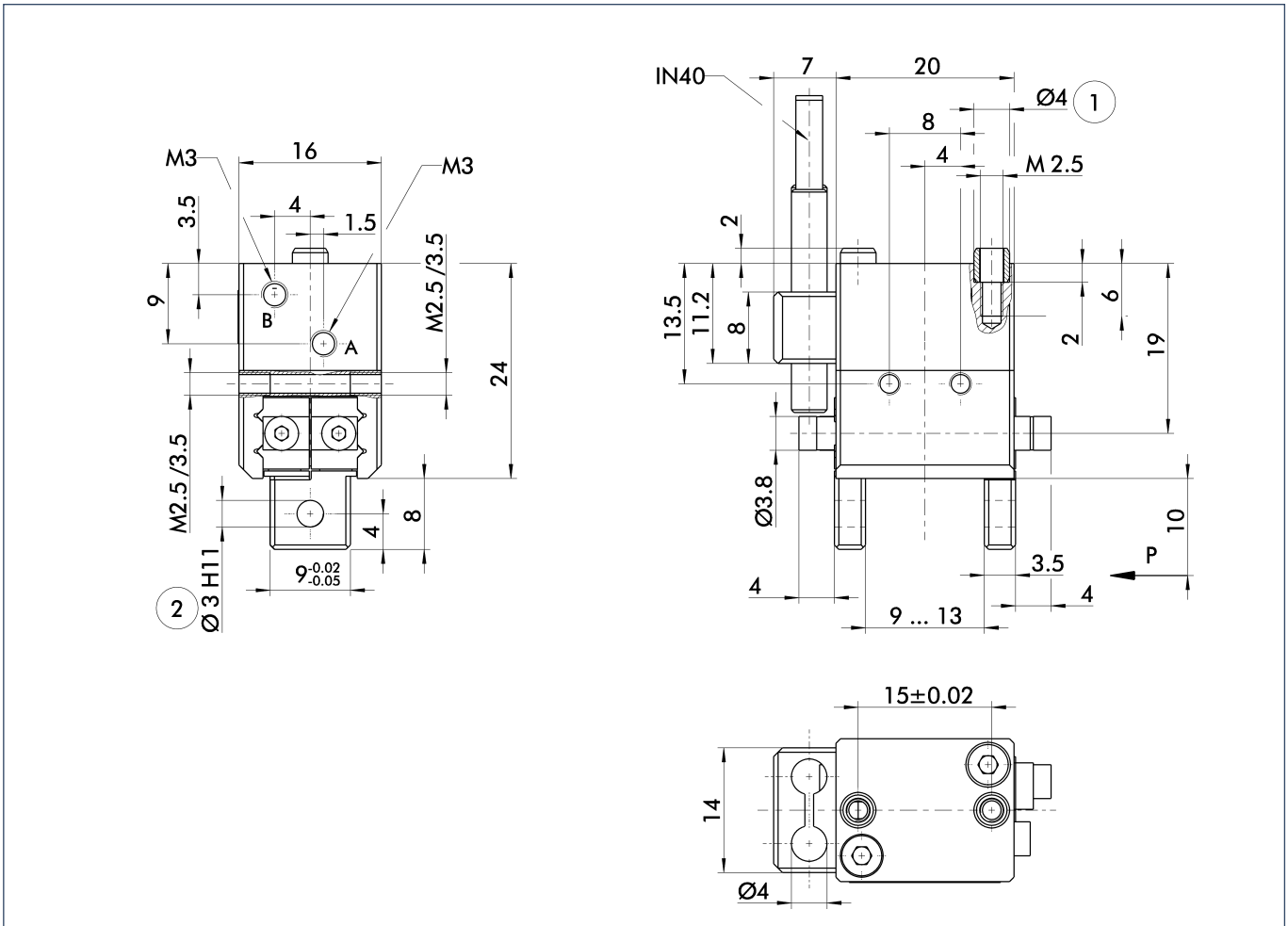


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	ID	MPG 20	MPG 20 AS	MPG 20 IS	MPG 20 FPS
		0340009	0340039	0340059	0340069
Stroke per finger	[mm]	2.0	2.0	2.0	2.0
Closing force	[N]	28.0	36.0		28.0
Opening force	[N]	24.0		35.0	24.0
Min. gripping force through spring	[N]		8.0	7.0	
Weight	[kg]	0.038	0.045	0.045	0.045
Recommended workpiece weight	[kg]	0.14	0.14	0.14	0.14
Air consumption per double stroke	[cm ³]	0.6	1.35	1.07	0.62
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	2.0	4.0	4.0	2.0
Maximum pressure	[bar]	8.0	6.5	6.5	8.0
Closing time	[s]	0.03	0.02	0.03	0.03
Opening time	[s]	0.03	0.03	0.02	0.03
Closing/opening time with spring only	[s]		0.1	0.1	
Max. permitted finger length	[mm]	20.0	20.0	20.0	20.0
Max. permitted weight per finger	[kg]	0.012	0.012	0.012	0.012
IP rating		30	30	30	30
Min. ambient temperature	[°C]	-10.0	-10.0	-10.0	-10.0
Max. ambient temperature	[°C]	90.0	90.0	90.0	90.0
Repeat accuracy	[mm]	0.02	0.02	0.02	0.02

Main views

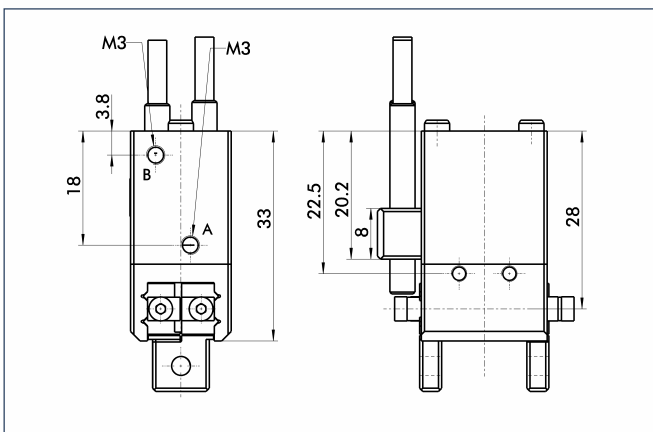


The drawing shows the gripper in the basic version with open jaws, the dimensions do not include the options described below.

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.

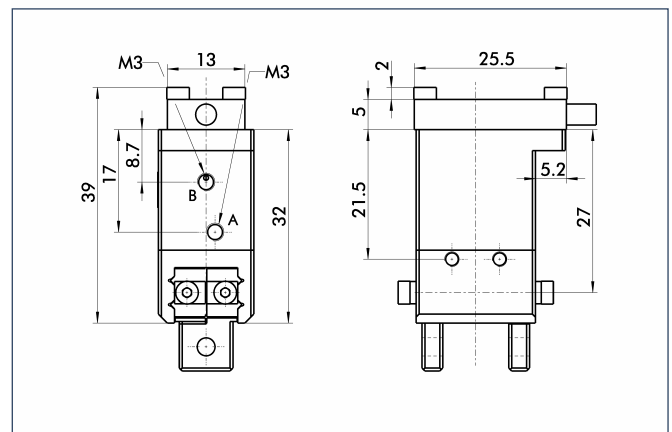
- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection

AS/IS gripping force safety device



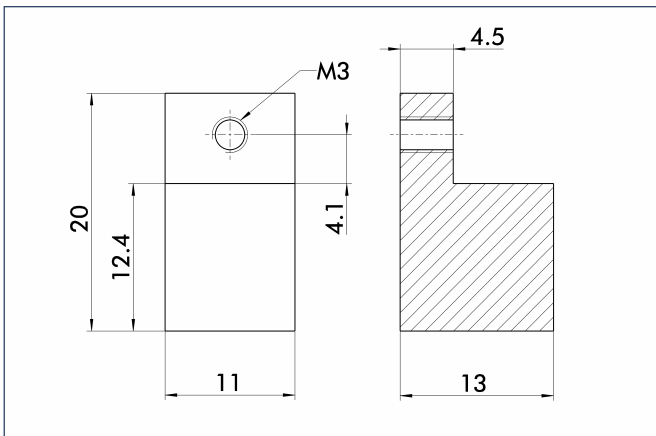
The mechanical gripping force safety device ensures a minimum gripping force even if there is a drop in pressure. This acts as closing force in the AS version, and as opening force in the IS version. In addition, the gripping force safety device can also be employed as a gripping force booster or for single-acting gripping.

FPS measuring system



The FPS flexible position sensor can distinguish between five freely programmable ranges or switching points for the stroke of a gripper and can be used in conjunction with a PC as a measuring system.

Finger blanks



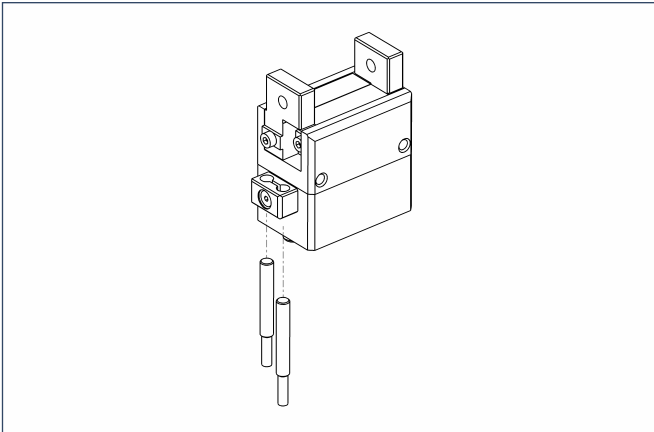
Finger blanks for customized subsequent machining, incl. screw connection diagram

Description	Housing material	Scope of delivery	ID
ABR 20	Aluminum	2	0340210



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

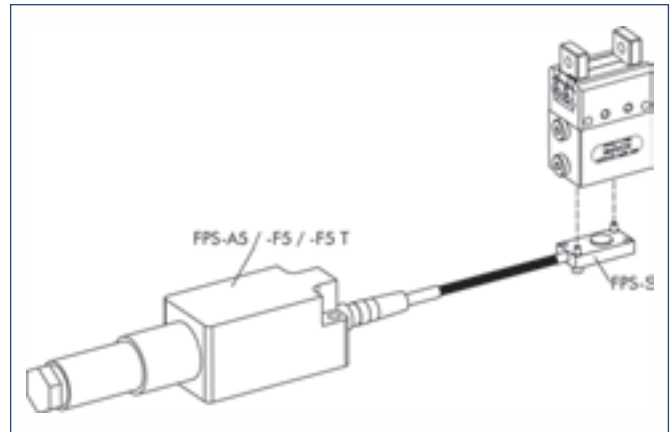
Sensor system



End position monitoring: Inductive proximity switches, for direct mounting

Description	ID	Recommended product
IN 40/S-M12	0301574	
IN 40/S-M8	0301474	•
INK 40/S	0301555	

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



Measuring system: FPS position monitor

Description	ID
FPS-A5	0301802
FPS-F5	0301805
FPS-F5 T	0301807
FPS-S 13	0301705

When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5/ F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.

Extension cables for proximity switches /magnetic switches

Description	ID
GK 3-M8	0301622
KV 10-M12	0301596
KV 10-M8	0301496
KV 20-M12	0301597
KV 20-M8	0301497
KV 3-M12	0301595
KV 3-M8	0301495
W 3-M12	0301503
W 5-M12	0301507
WK 3-M8	0301594
WK 5-M8	0301502

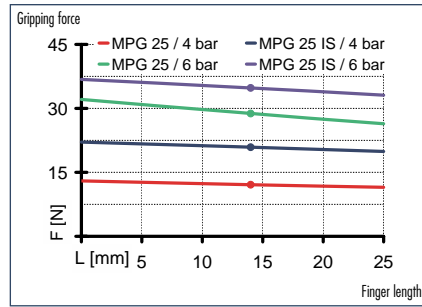
① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



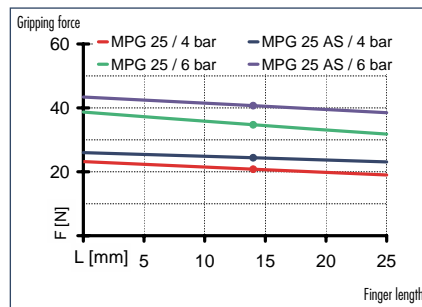
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



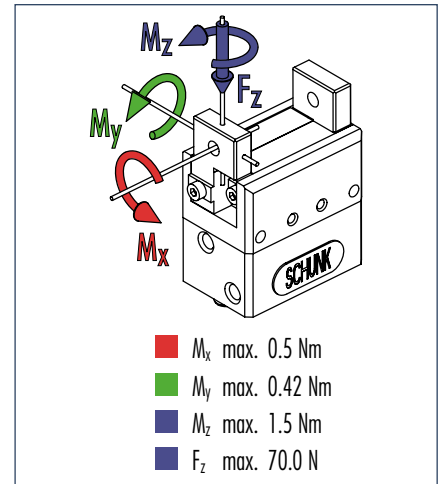
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

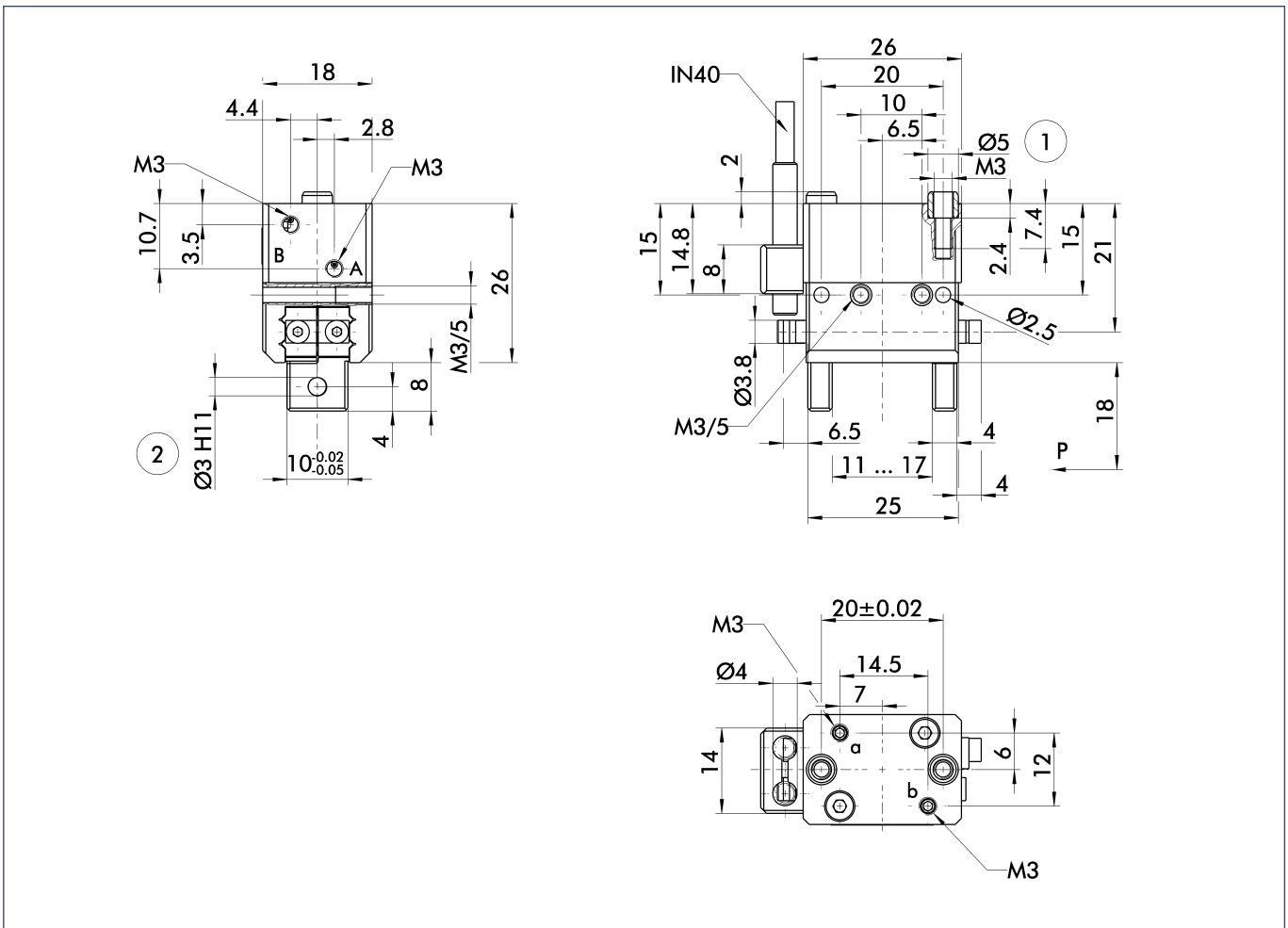


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	ID	MPG 25	MPG 25 AS	MPG 25 IS	MPG 25 FPS
		0340010	0340040	0340060	0340070
Stroke per finger	[mm]	3.0	3.0	3.0	3.0
Closing force	[N]	31.0	41.0		31.0
Opening force	[N]	28.0		40.0	28.0
Min. gripping force through spring	[N]		10.0	9.0	
Weight	[kg]	0.06	0.075	0.075	0.065
Recommended workpiece weight	[kg]	0.15	0.15	0.15	0.15
Air consumption per double stroke	[cm ³]	1.08	2.39	1.95	1.14
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	2.0	4.0	4.0	2.0
Maximum pressure	[bar]	8.0	6.5	6.5	8.0
Closing time	[s]	0.03	0.02	0.03	0.03
Opening time	[s]	0.03	0.03	0.02	0.03
Closing/opening time with spring only	[s]		0.1	0.1	
Max. permitted finger length	[mm]	25.0	25.0	25.0	25.0
Max. permitted weight per finger	[kg]	0.02	0.02	0.02	0.02
IP rating		30	30	30	30
Min. ambient temperature	[°C]	-10.0	-10.0	-10.0	-10.0
Max. ambient temperature	[°C]	90.0	90.0	90.0	90.0
Repeat accuracy	[mm]	0.02	0.02	0.02	0.02

Main views

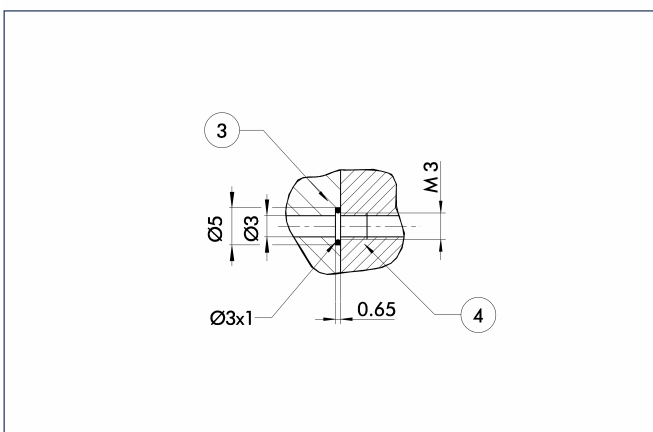


The drawing shows the gripper in the basic version with open jaws, the dimensions do not include the options described below.

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

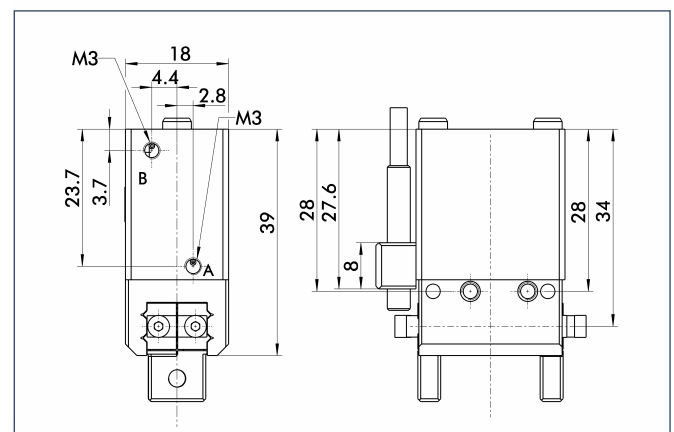
Hoseless direct connection



- ③ Adapter
- ④ Gripper

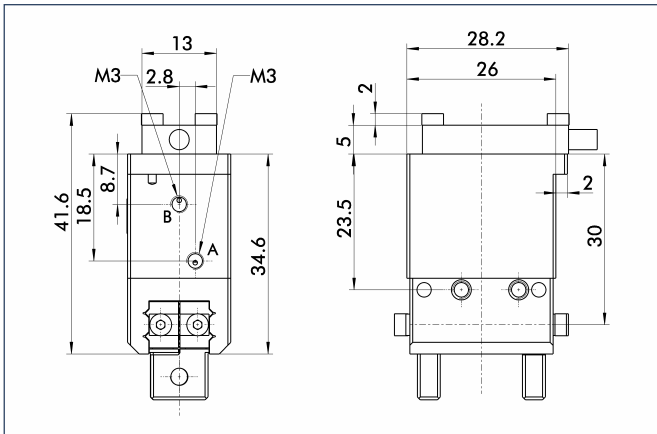
The direction connection is used for supplying compressed air to the gripper without vulnerable hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

AS/IS gripping force safety device



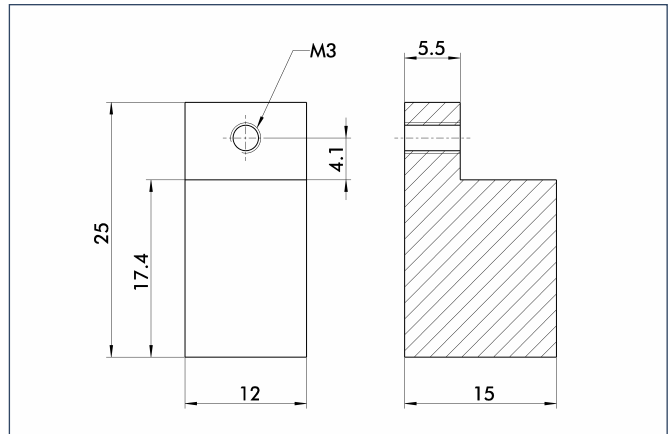
The mechanical gripping force safety device ensures a minimum gripping force even if there is a drop in pressure. This acts as closing force in the AS version, and as opening force in the IS version. In addition, the gripping force safety device can also be employed as a gripping force booster or for single-acting gripping.

FPS measuring system



The FPS mounting kit is used for mounting the FPS sensor on the gripper. The FPS system can distinguish between five freely programmable ranges or switching points for the stroke of a gripper and can be used in conjunction with a PC as a measuring system.

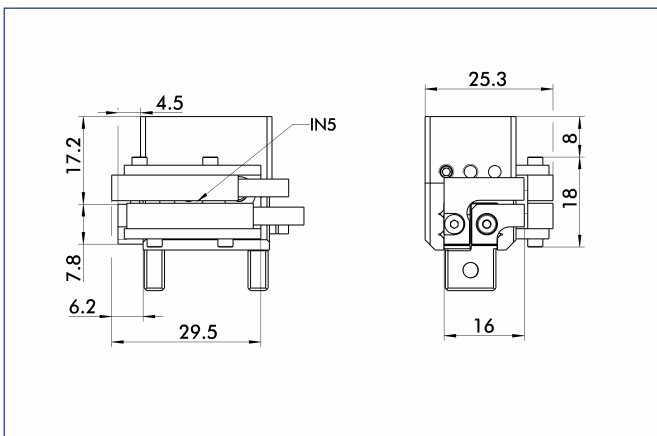
Finger blanks



Finger blanks for customized subsequent machining, incl. screw connection diagram

Description	Material	Scope of delivery	ID
ABR 25	Aluminum	2	0340211

Mounting kit for proximity switch



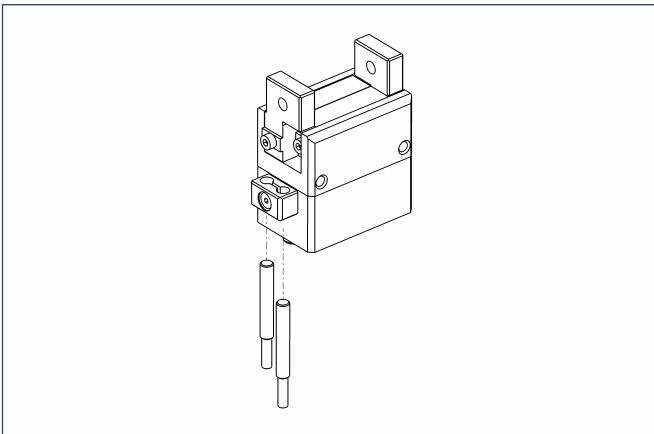
The mounting kit includes a bracket, switch cams and mounting screws. Proximity switches must be ordered separately.

Description	ID
AS-MPG 25	0340150



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

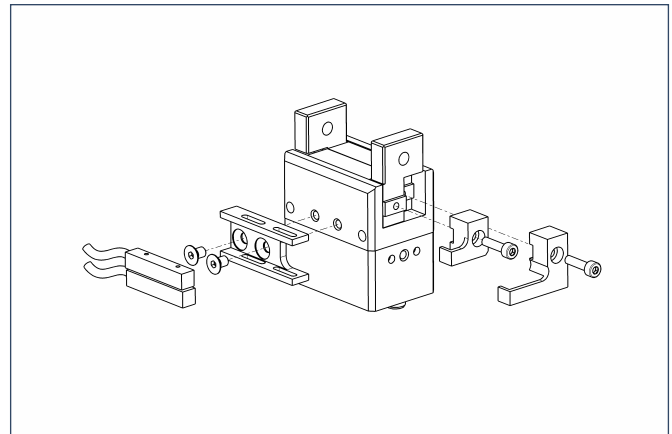
Sensor system



End position monitoring: Inductive proximity switches, for direct mounting

Description	ID	Recommended product
IN 40/S-M12	0301574	
IN 40/S-M8	0301474	•
INK 40/S	0301555	

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



End position monitoring: Inductive proximity switches, mounted with mounting kit

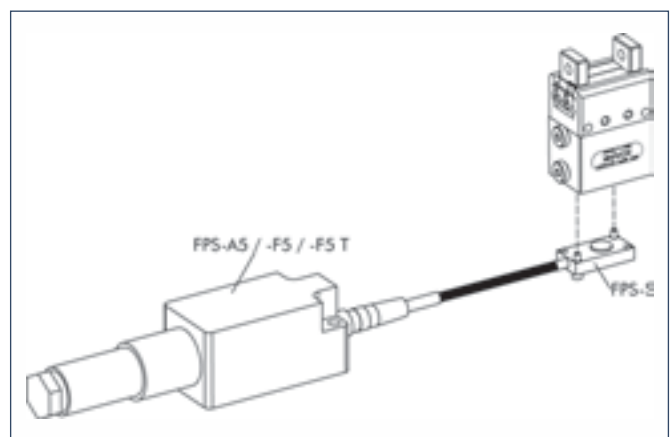
Description	ID	Recommended product
AS-MPG 25	0340150	
IN 5/S-M12	0301569	
IN 5/S-M8	0301469	•

- 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
GK 3-M8	0301622
KV 10-M12	0301596
KV 10-M8	0301496
KV 20-M12	0301597
KV 20-M8	0301497
KV 3-M12	0301595
KV 3-M8	0301495
W 3-M12	0301503
W 5-M12	0301507
WK 3-M8	0301594
WK 5-M8	0301502

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



Measuring system: FPS position monitor

Description	ID
FPS-A5	0301802
FPS-F5	0301805
FPS-F5 T	0301807
FPS-S 13	0301705

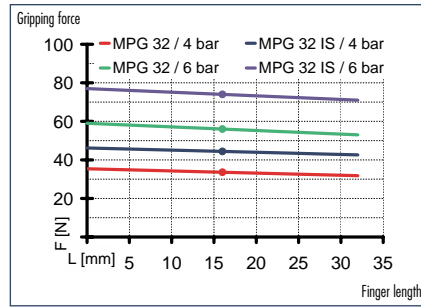
When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.



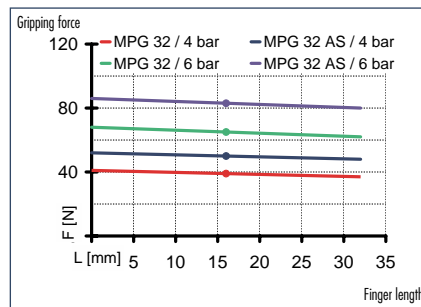
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



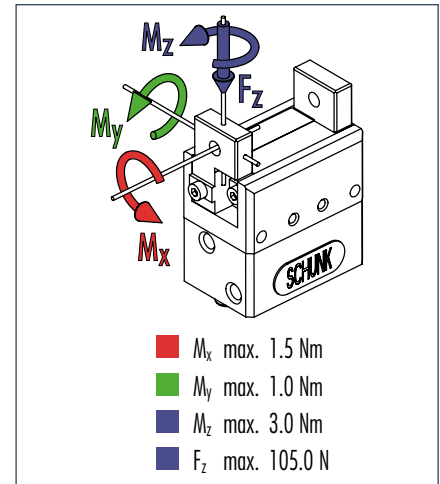
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

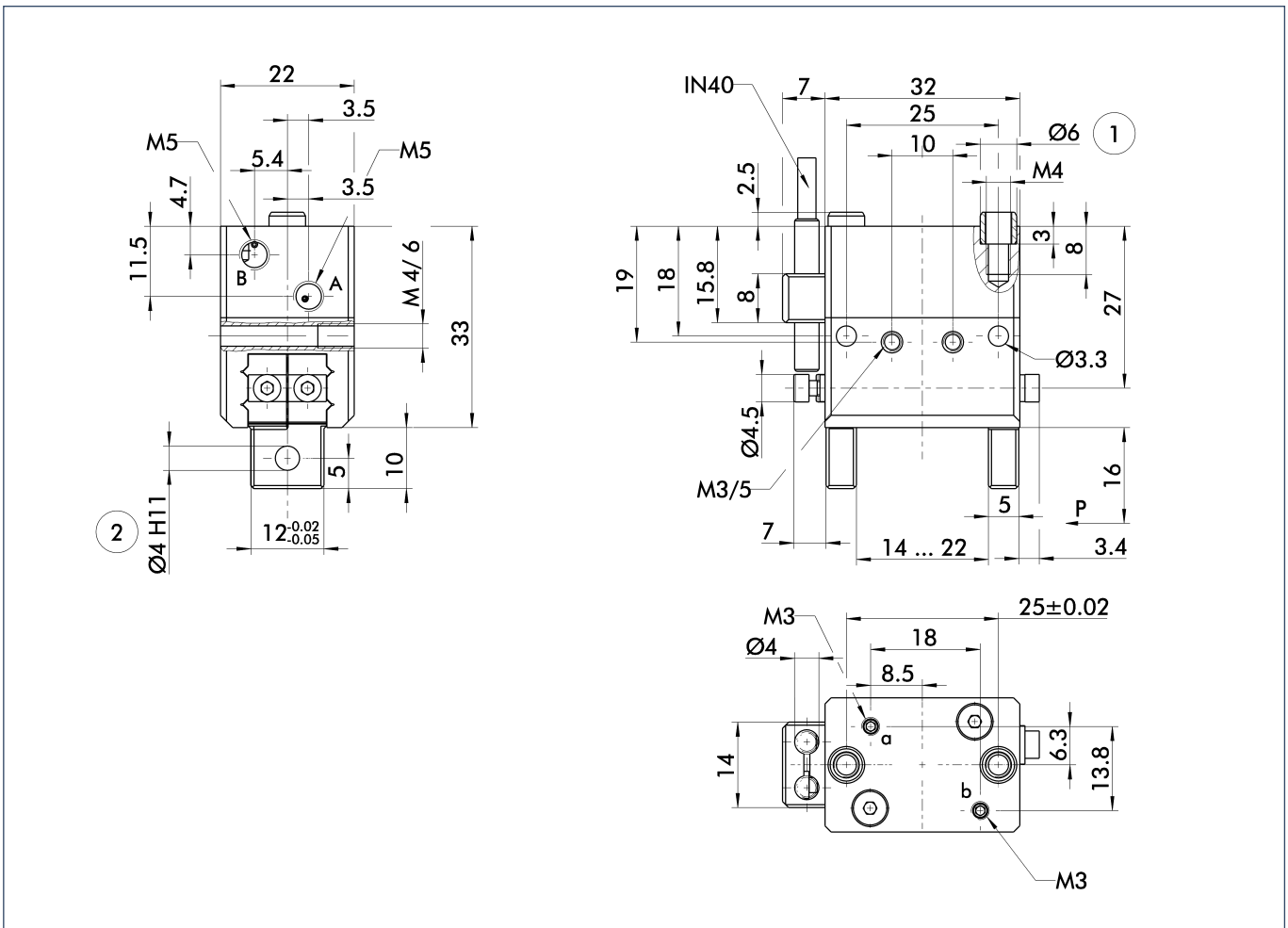


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	ID	MPG 32	MPG 32 AS	MPG 32 IS	MPG 32 FPS
		0340011	0340041	0340061	0340071
Stroke per finger	[mm]	4.0	4.0	4.0	4.0
Closing force	[N]	65.0	85.0		65.0
Opening force	[N]	55.0		90.0	55.0
Min. gripping force through spring	[N]		20.0	25.0	
Weight	[kg]	0.12	0.14	0.14	0.14
Recommended workpiece weight	[kg]	0.325	0.325	0.325	0.325
Air consumption per double stroke	[cm ³]	2.55	5.03	4.49	2.59
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	2.0	4.0	4.0	2.0
Maximum pressure	[bar]	8.0	6.5	6.5	8.0
Closing time	[s]	0.04	0.03	0.04	0.04
Opening time	[s]	0.04	0.04	0.03	0.04
Closing/opening time with spring only	[s]		0.2	0.2	
Max. permitted finger length	[mm]	32.0	32.0	32.0	32.0
Max. permitted weight per finger	[kg]	0.04	0.04	0.04	0.04
IP rating		30	30	30	30
Min. ambient temperature	[°C]	-10.0	-10.0	-10.0	-10.0
Max. ambient temperature	[°C]	90.0	90.0	90.0	90.0
Repeat accuracy	[mm]	0.02	0.02	0.02	0.02

Main views

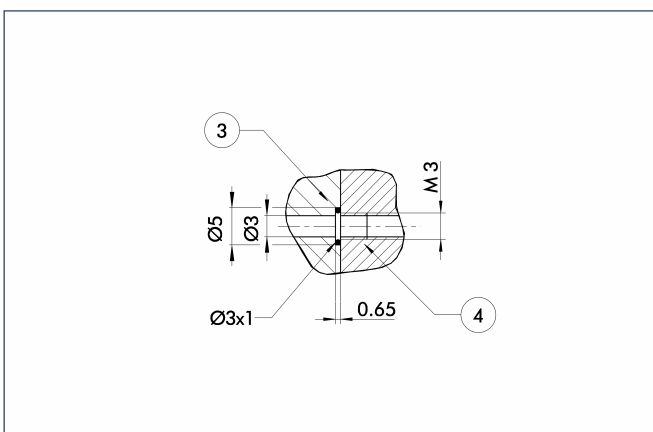


The drawing shows the gripper in the basic version with open jaws, the dimensions do not include the options described below.

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

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.

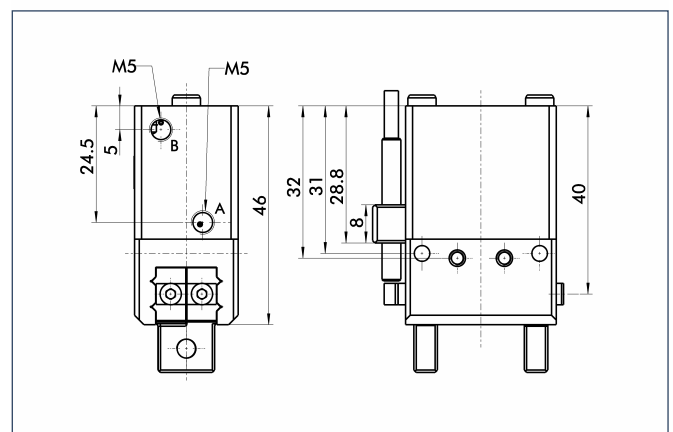
Hoseless direct connection



- ③ Adapter
- ④ Gripper

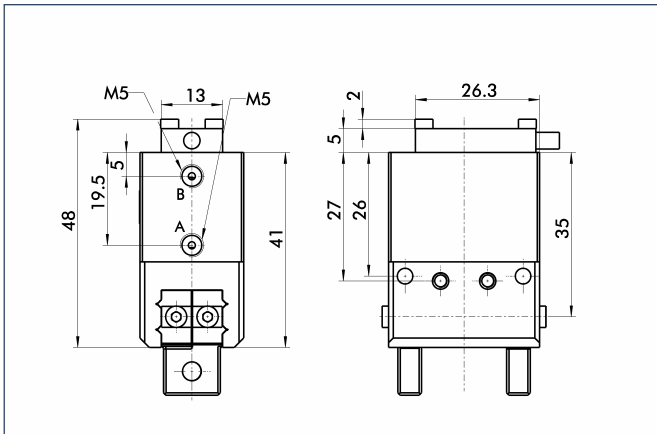
The direction connection is used for supplying compressed air to the gripper without vulnerable hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

AS/IS gripping force safety device



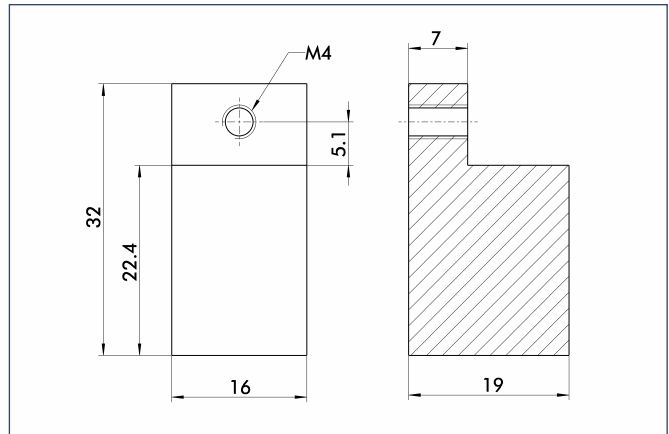
The mechanical gripping force safety device ensures a minimum gripping force even if there is a drop in pressure. This acts as closing force in the AS version, and as opening force in the IS version. In addition, the gripping force safety device can also be employed as a gripping force booster or for single-acting gripping.

FPS measuring system



The FPS mounting kit is used for mounting the FPS sensor on the gripper. The FPS system can distinguish between five freely programmable ranges or switching points for the stroke of a gripper and can be used in conjunction with a PC as a measuring system.

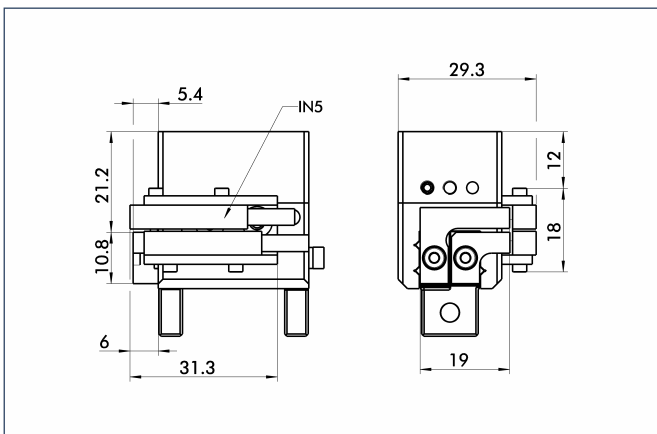
Finger blanks



Finger blanks for customized subsequent machining, incl. screw connection diagram

Description	Housing material	Scope of delivery	ID
ABR 32	Aluminum	2	0340212

Mounting kit for proximity switch



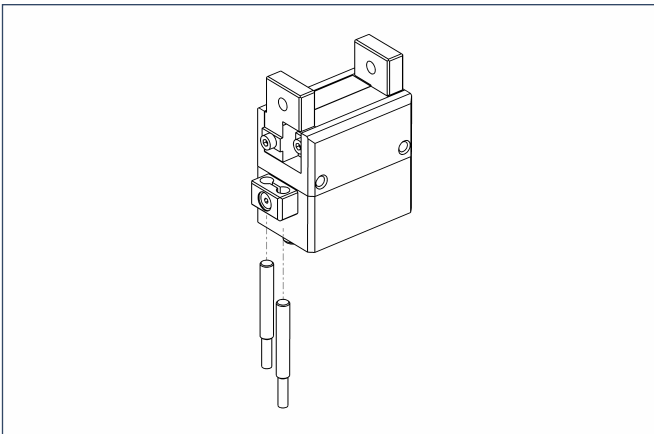
The mounting kit includes a bracket, switch cams and mounting screws. Proximity switches must be ordered separately.

Description	ID
AS-MPG 32	0340151



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

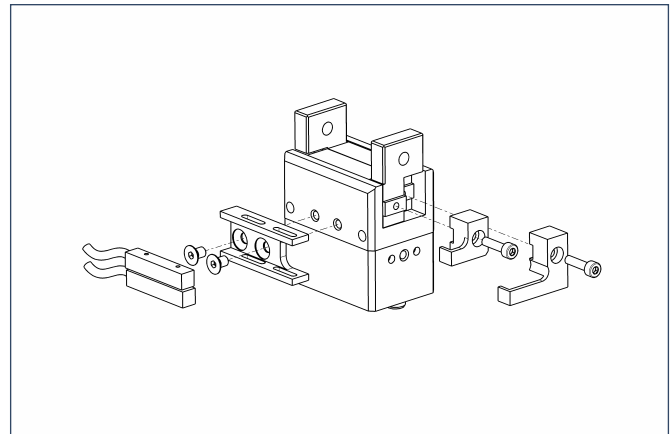
Sensor system



End position monitoring: Inductive proximity switches, for direct mounting

Description	ID	Recommended product
IN 40/S-M12	0301574	
IN 40/S-M8	0301474	•
INK 40/S	0301555	

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



End position monitoring: Inductive proximity switches, mounted with mounting kit

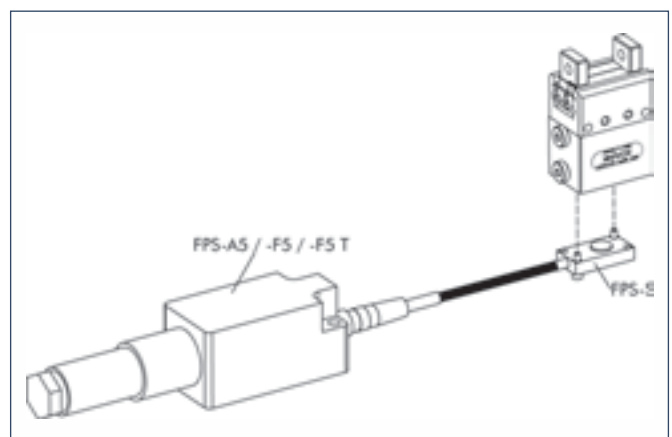
Description	ID	Recommended product
AS-MPG 32	0340151	
IN 5/S-M12	0301569	
IN 5/S-M8	0301469	•

- 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
GK 3-M8	0301622
KV 10-M12	0301596
KV 10-M8	0301496
KV 20-M12	0301597
KV 20-M8	0301497
KV 3-M12	0301595
KV 3-M8	0301495
W 3-M12	0301503
W 5-M12	0301507
WK 3-M8	0301594
WK 5-M8	0301502

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



Measuring system: FPS position monitor

Description	ID
FPS-A5	0301802
FPS-F5	0301805
FPS-F5 T	0301807
FPS-S 13	0301705

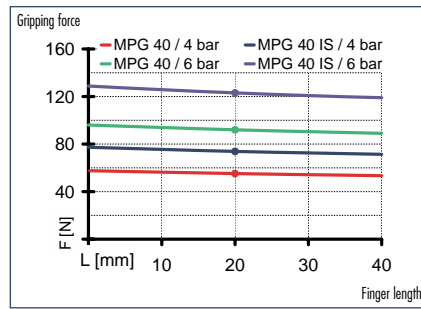
When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.



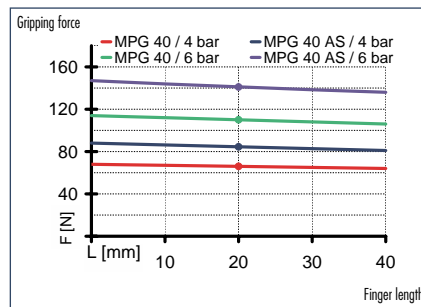
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



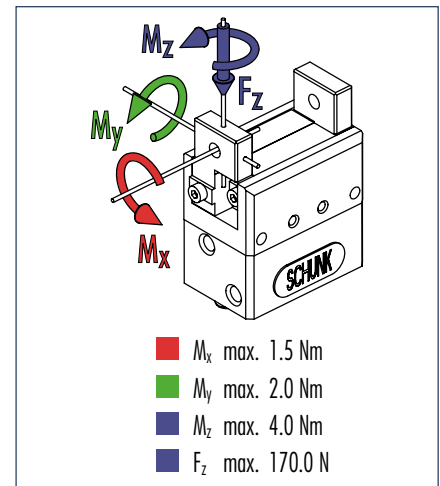
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

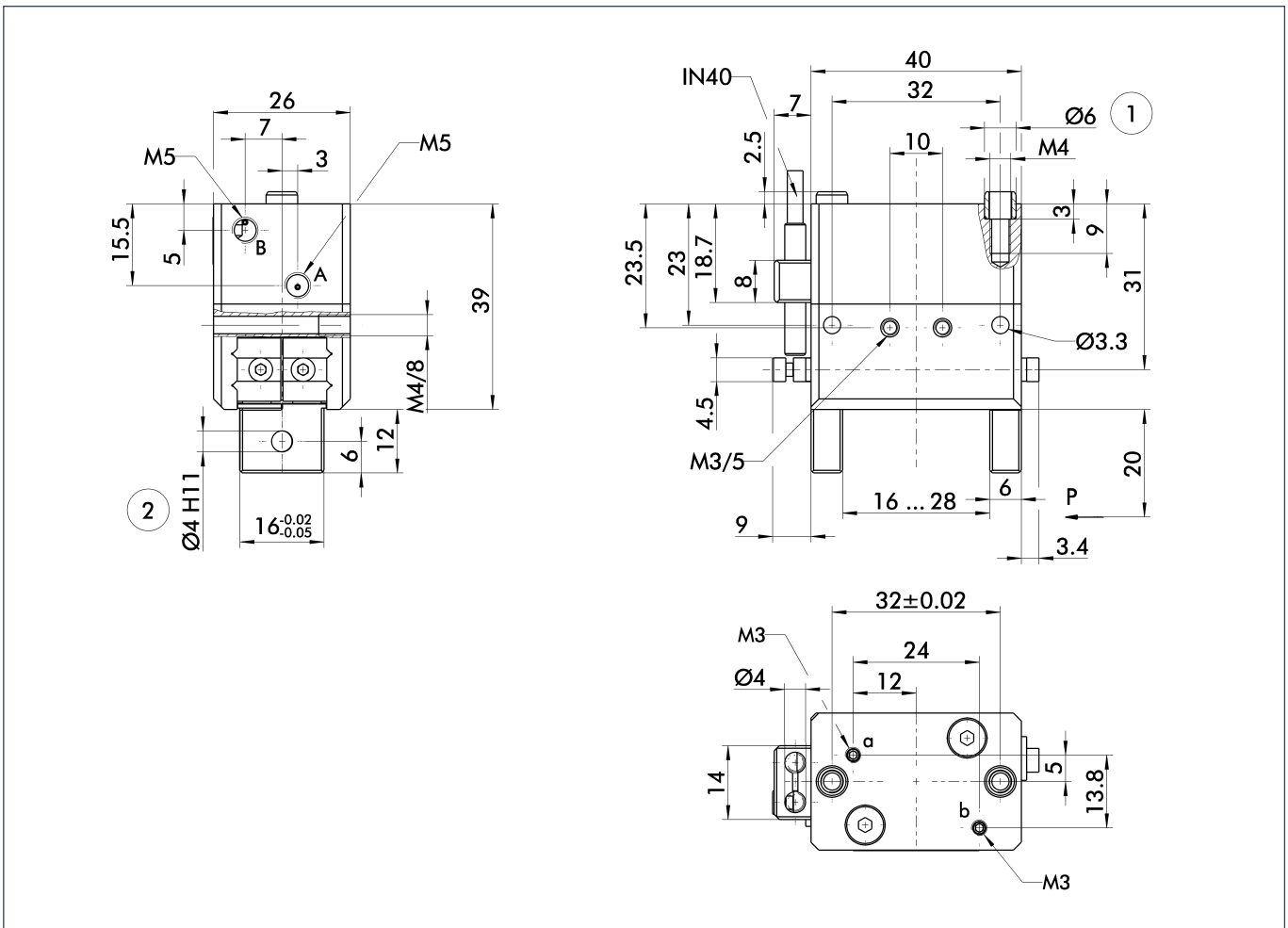


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	ID	MPG 40	MPG 40 AS	MPG 40 IS
		0340012	0340042	0340062
Stroke per finger	[mm]	6.0	6.0	6.0
Closing force	[N]	110.0	145.0	
Opening force	[N]	90.0		135.0
Min. gripping force through spring	[N]		35.0	25.0
Weight	[kg]	0.2	0.26	0.26
Recommended workpiece weight	[kg]	0.55	0.55	0.55
Air consumption per double stroke	[cm ³]	5.76	12.5	10.98
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	0.03	0.05
Opening time	[s]	0.05	0.05	0.03
Closing/opening time with spring only	[s]		0.2	0.2
Max. permitted finger length	[mm]	40.0	40.0	40.0
Max. permitted weight per finger	[kg]	0.08	0.08	0.08
IP rating		30	30	30
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

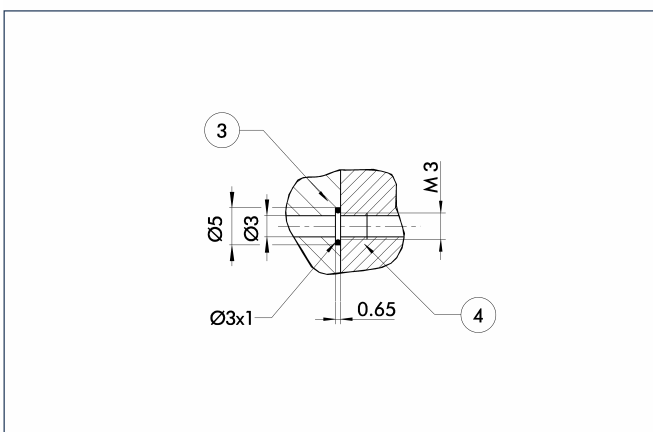


The drawing shows the gripper in the basic version with open jaws, the dimensions do not include the options described below.

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

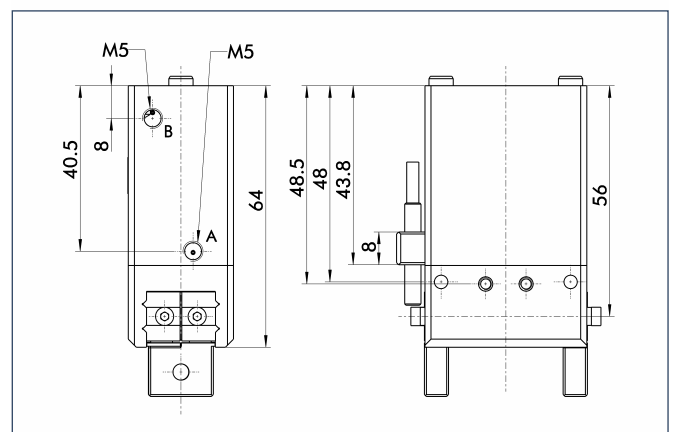
Hoseless direct connection



- ③ Adapter
- ④ Gripper

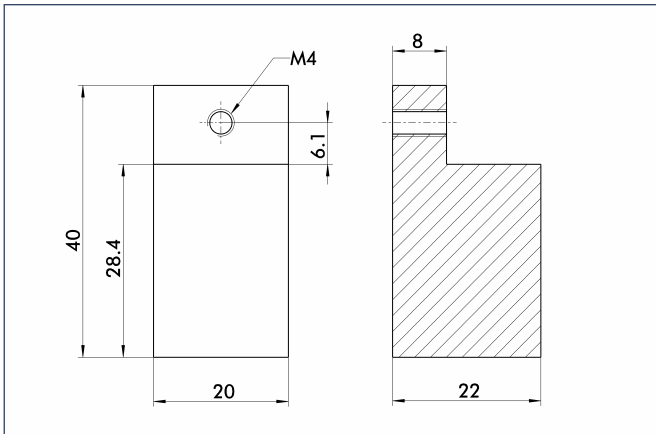
The direction connection is used for supplying compressed air to the gripper without vulnerable hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

AS/IS gripping force safety device



The mechanical gripping force safety device ensures a minimum gripping force even if there is a drop in pressure. This acts as closing force in the AS version, and as opening force in the IS version. In addition, the gripping force safety device can also be employed as a gripping force booster or for single-acting gripping.

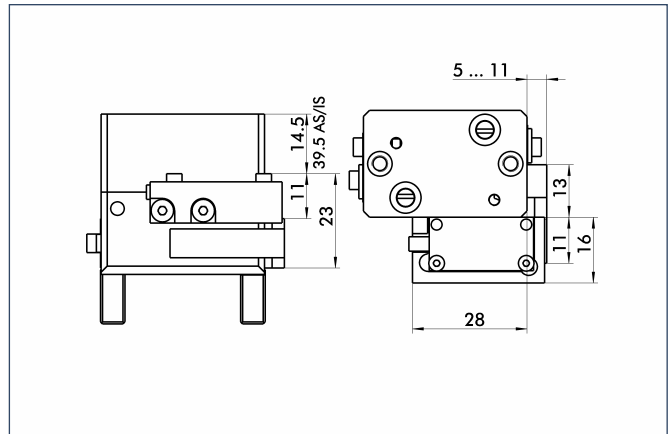
Finger blanks



Finger blanks for customized subsequent machining, incl. screw connection diagram

Description	Material	Scope of delivery	ID
ABR 40	Aluminum	2	0340213

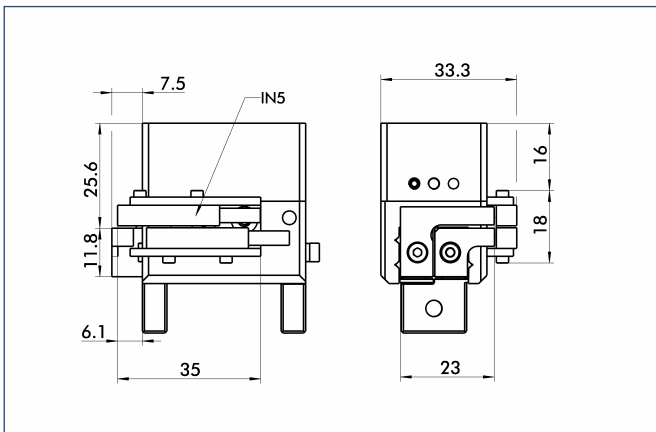
Mounting kit for FPS



The FPS flexible position sensor can distinguish between five freely programmable ranges or switching points for the stroke of a gripper and can be used in conjunction with a PC as a measuring system.

Description	ID
AS-MPG 40	0301762

Mounting kit for proximity switch



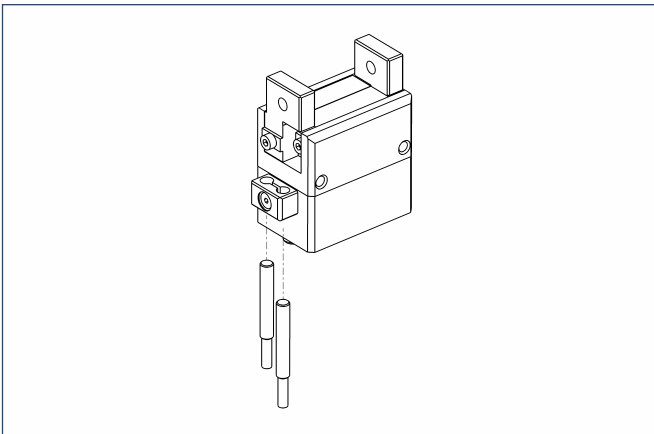
The mounting kit includes a bracket, switch cams and mounting screws. Proximity switches must be ordered separately.

Description	ID
AS-MPG 40	0340152



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

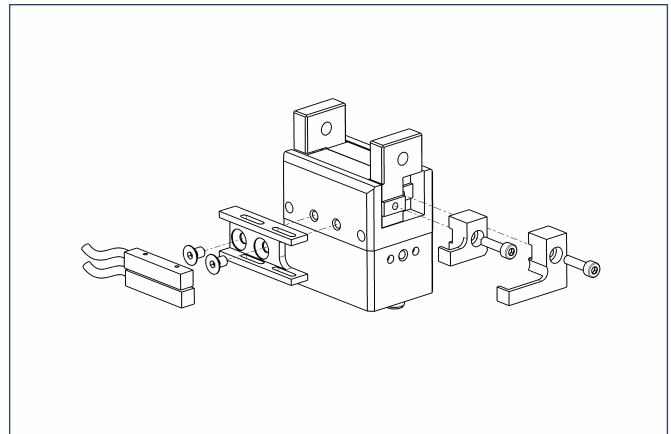
Sensor system



End position monitoring: Inductive proximity switches, for direct mounting

Description	ID	Recommended product
IN 40/S-M12	0301574	
IN 40/S-M8	0301474	•
INK 40/S	0301555	

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



End position monitoring: Inductive proximity switches, mounted with mounting kit

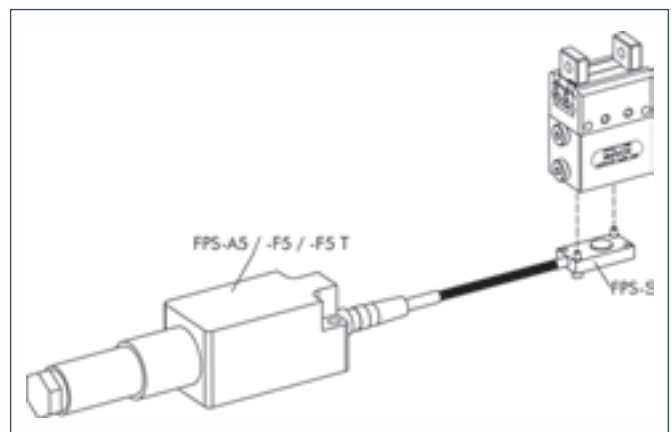
Description	ID	Recommended product
AS-MPG 40	0340152	
IN 5/S-M12	0301569	
IN 5/S-M8	0301469	•

- 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
GK 3-M8	0301622
KV 10-M12	0301596
KV 10-M8	0301496
KV 20-M12	0301597
KV 20-M8	0301497
KV 3-M12	0301595
KV 3-M8	0301495
W 3-M12	0301503
W 5-M12	0301507
WK 3-M8	0301594
WK 5-M8	0301502

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



Measuring system: FPS position monitor

Description	ID
AS-MPG 40	0301762
FPS-A5	0301802
FPS-F5	0301805
FPS-F5 T	0301807
FPS-S 13	0301705

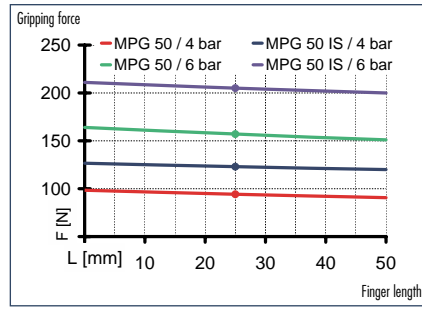
When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.



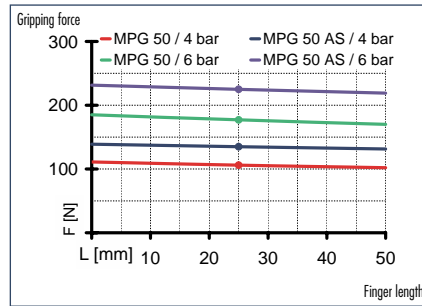
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



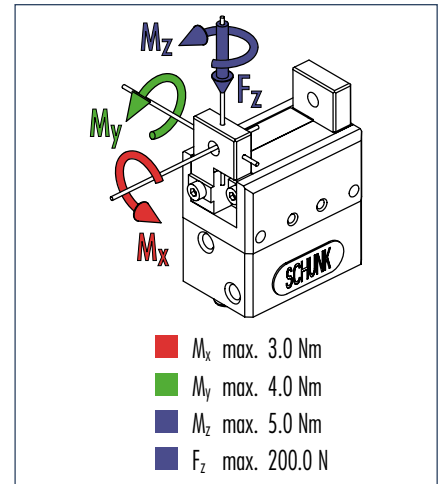
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

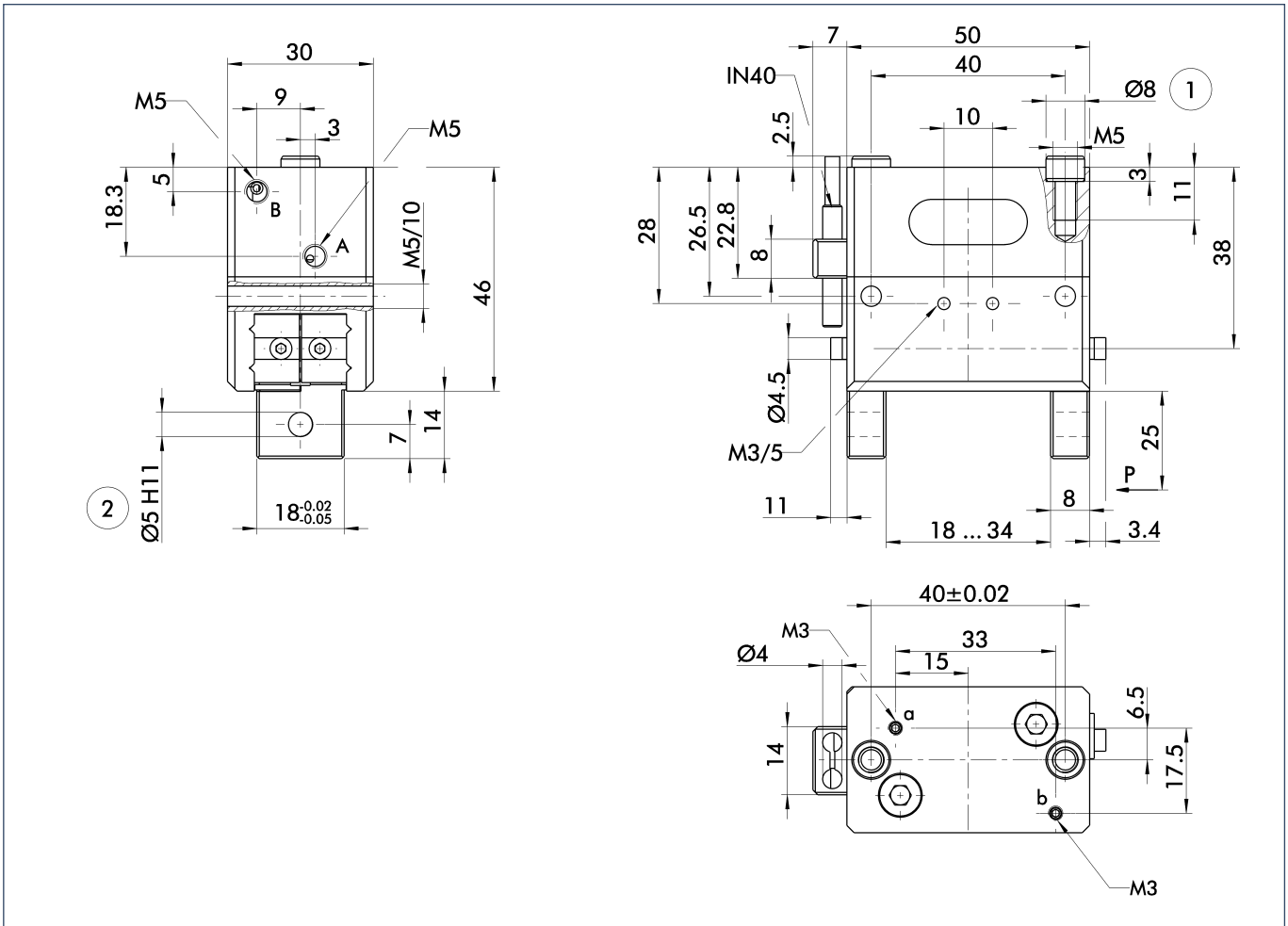


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	ID	MPG 50	MPG 50 AS	MPG 50 IS
		0340013	0340043	0340063
Stroke per finger	[mm]	8.0	8.0	8.0
Closing force	[N]	175.0	225.0	
Opening force	[N]	155.0		210.0
Min. gripping force through spring	[N]		50.0	35.0
Weight	[kg]	0.35	0.65	0.65
Recommended workpiece weight	[kg]	0.85	0.85	0.85
Air consumption per double stroke	[cm ³]	11.33	19.98	16.6
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]		0.3	0.3
Max. permitted finger length	[mm]	50.0	50.0	50.0
Max. permitted weight per finger	[kg]	0.14	0.14	0.14
IP rating		30	30	30
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

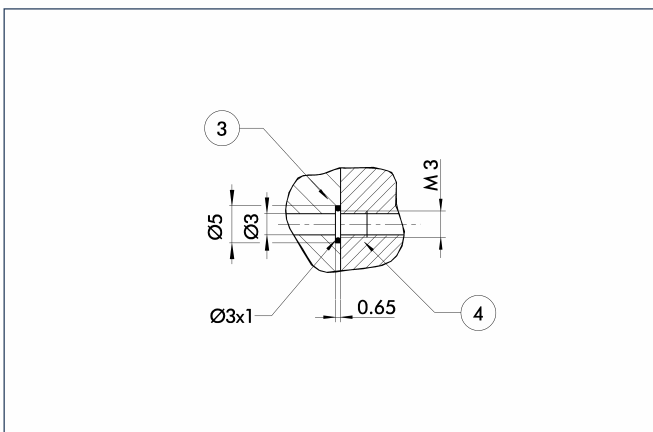


The drawing shows the gripper in the basic version with open jaws, the dimensions do not include the options described below.

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

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.

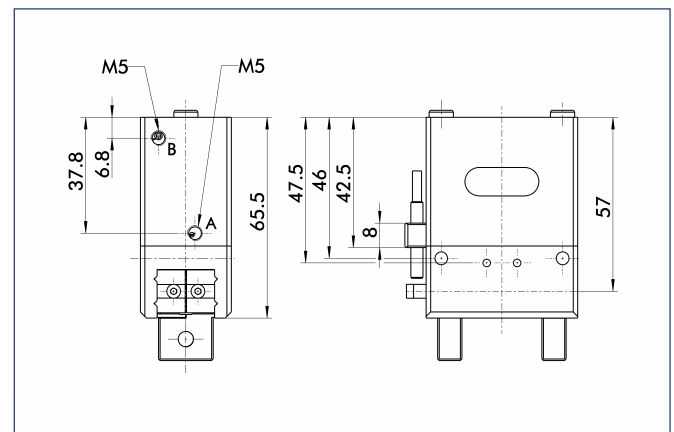
Hoseless direct connection



- ③ Adapter
- ④ Gripper

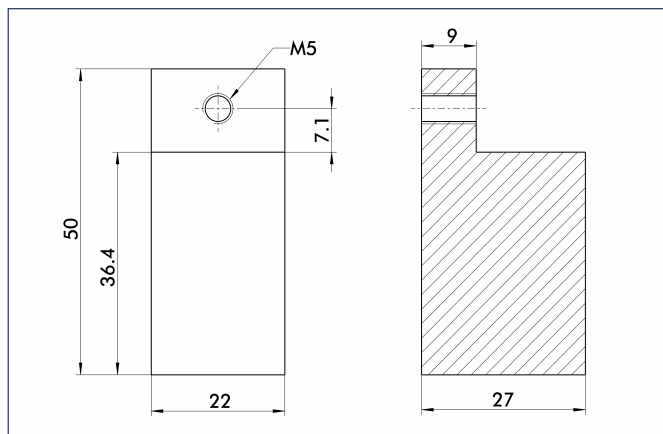
The direction connection is used for supplying compressed air to the gripper without vulnerable hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

AS/IS gripping force safety device



The mechanical gripping force safety device ensures a minimum gripping force even if there is a drop in pressure. This acts as closing force in the AS version, and as opening force in the IS version. In addition, the gripping force safety device can also be employed as a gripping force booster or for single-acting gripping.

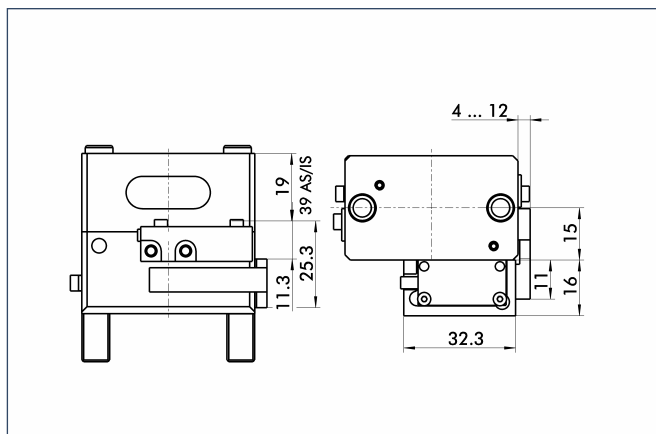
Finger blanks



Finger blanks for customized subsequent machining, incl. screw connection diagram

Description	Housing material	Scope of delivery	ID
ABR 50	Aluminum	2	0340214

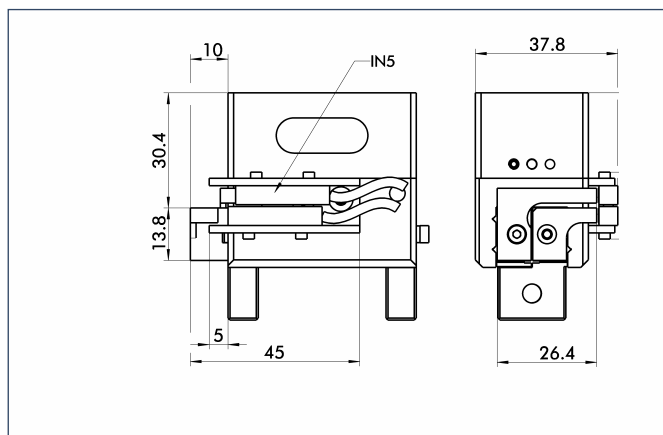
Mounting kit for FPS



The FPS flexible position sensor can distinguish between five freely programmable ranges or switching points for the stroke of a gripper and can be used in conjunction with a PC as a measuring system.

Description	ID
AS-MPG 50	0301763

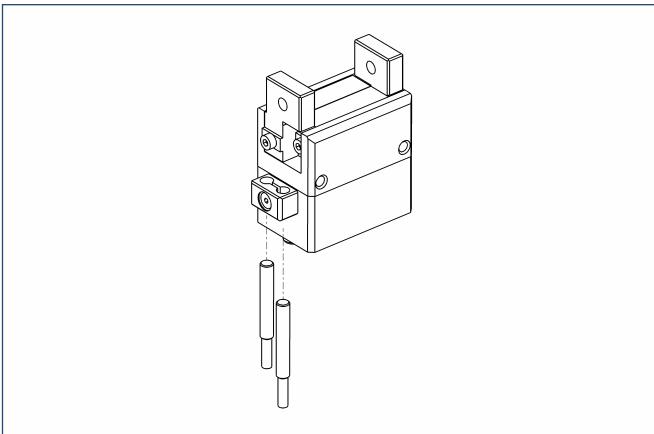
Mounting kit for proximity switch



The mounting kit includes a bracket, switch cams and mounting screws. Proximity switches must be ordered separately.

Description	ID
AS-MPG 50	0340153

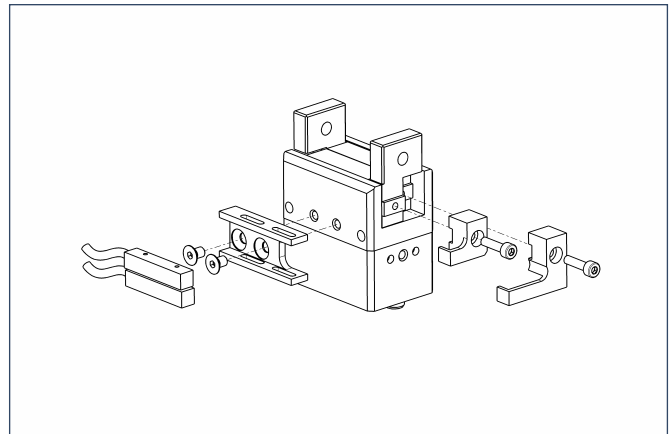
Sensor system



End position monitoring: Inductive proximity switches, for direct mounting

Description	ID	Recommended product
IN 40/S-M12	0301574	
IN 40/S-M8	0301474	•
INK 40/S	0301555	

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



End position monitoring: Inductive proximity switches, mounted with mounting kit

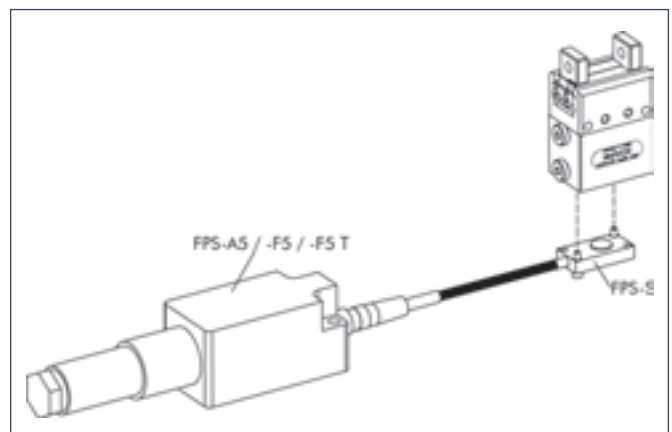
Description	ID	Recommended product
AS-MPG 50	0340153	
IN 5/S-M12	0301569	
IN 5/S-M8	0301469	•

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
GK 3-M8	0301622
KV 10-M12	0301596
KV 10-M8	0301496
KV 20-M12	0301597
KV 20-M8	0301497
KV 3-M12	0301595
KV 3-M8	0301495
W 3-M12	0301503
W 5-M12	0301507
WK 3-M8	0301594
WK 5-M8	0301502

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



Measuring system: FPS position monitor

Description	ID
AS-MPG 50	0301763
FPS-A5	0301802
FPS-F5	0301805
FPS-F5 T	0301807
FPS-S 13	0301705

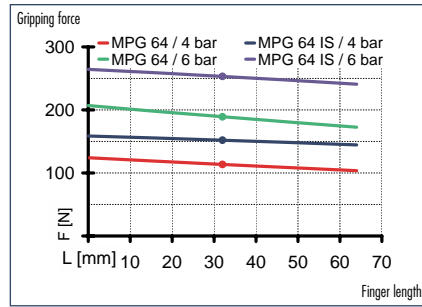
When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.



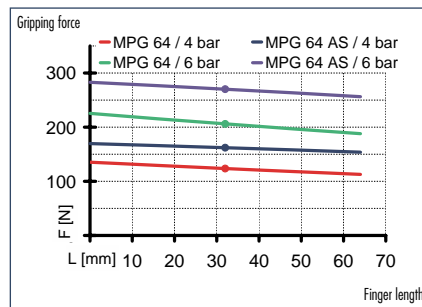
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



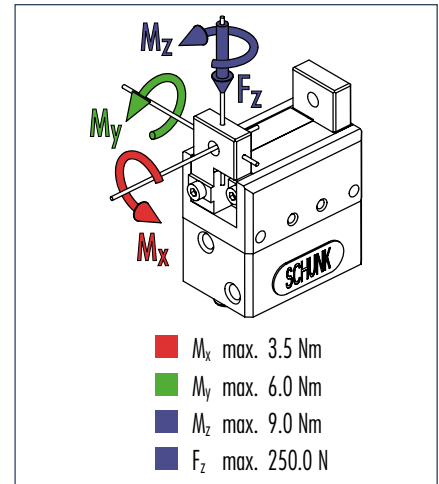
Gripping force, I.D. gripping



Gripping force, O.D. gripping



Finger load

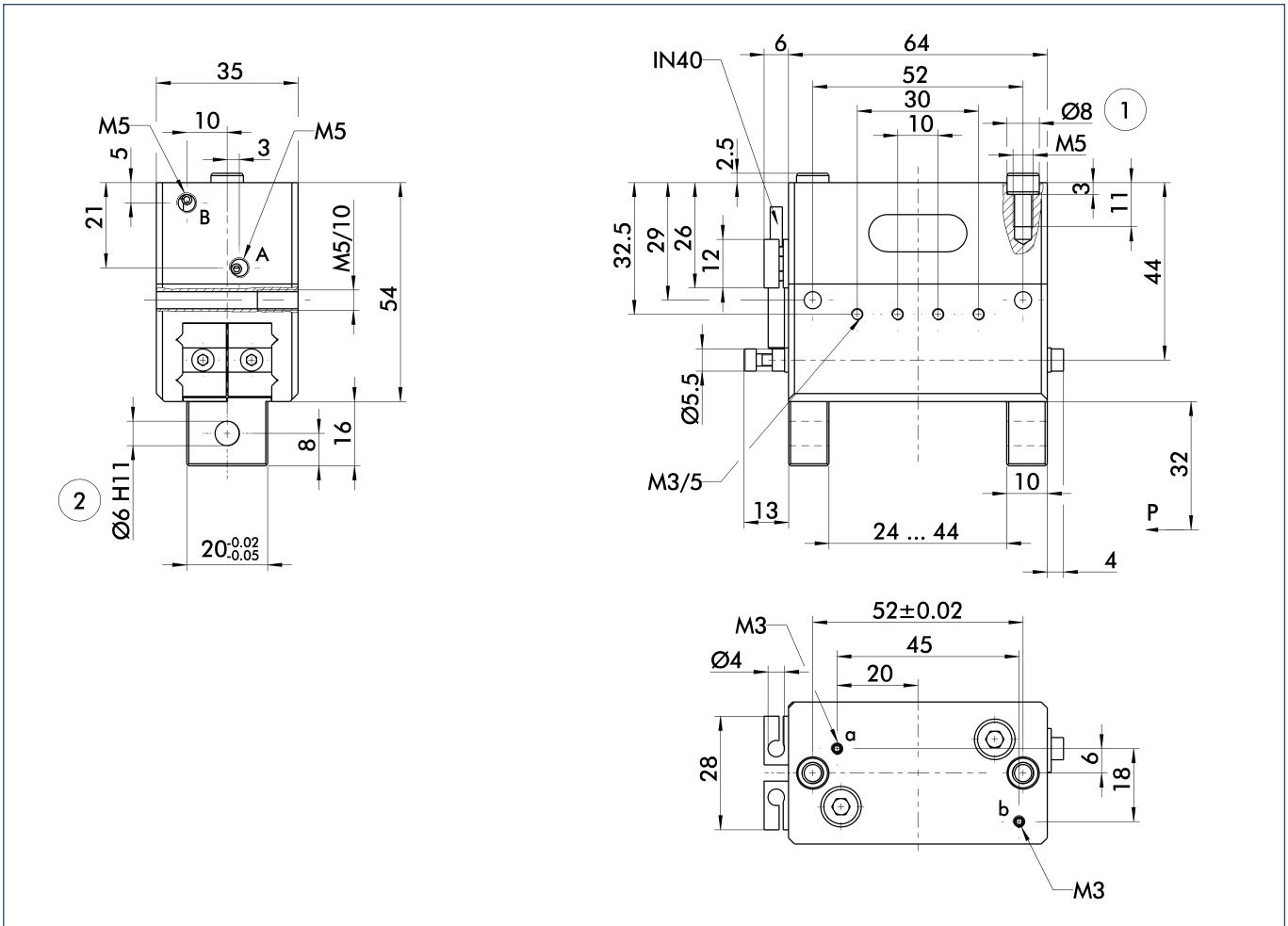


① Moments and forces apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing.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

Technical data

Description	ID	MPG 64	MPG 64 AS	MPG 64 IS
		0340014	0340044	0340064
Stroke per finger	[mm]	10.0	10.0	10.0
Closing force	[N]	200.0	270.0	
Opening force	[N]	190.0		255.0
Min. gripping force through spring	[N]		70.0	55.0
Weight	[kg]	0.6	1.1	1.1
Recommended workpiece weight	[kg]	1.0	1.0	1.0
Air consumption per double stroke	[cm ³]	18.85	28.58	26.6
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]		0.3	0.3
Max. permitted finger length	[mm]	64.0	64.0	64.0
Max. permitted weight per finger	[kg]	0.24	0.24	0.24
IP rating		30	30	30
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

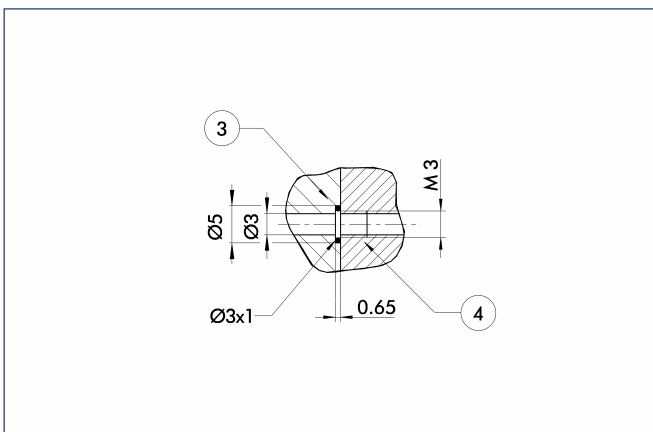


The drawing shows the gripper in the basic version with open jaws, the dimensions do not include the options described below.

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

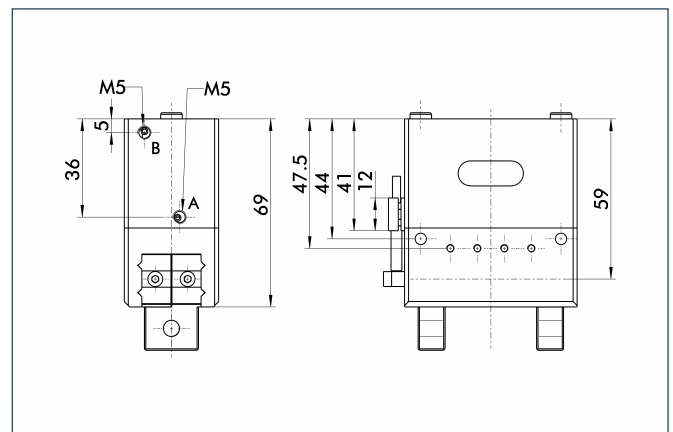
Hoseless direct connection



- ③ Adapter
- ④ Gripper

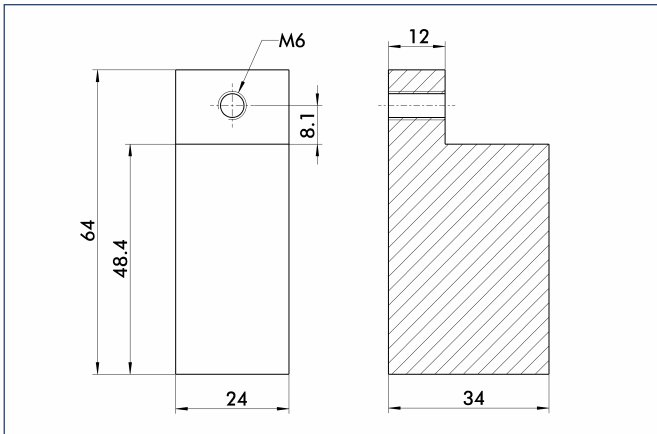
The direction connection is used for supplying compressed air to the gripper without vulnerable hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

AS/IS gripping force safety device



The mechanical gripping force safety device ensures a minimum gripping force even if there is a drop in pressure. This acts as closing force in the AS version, and as opening force in the IS version. In addition, the gripping force safety device can also be employed as a gripping force booster or for single-acting gripping.

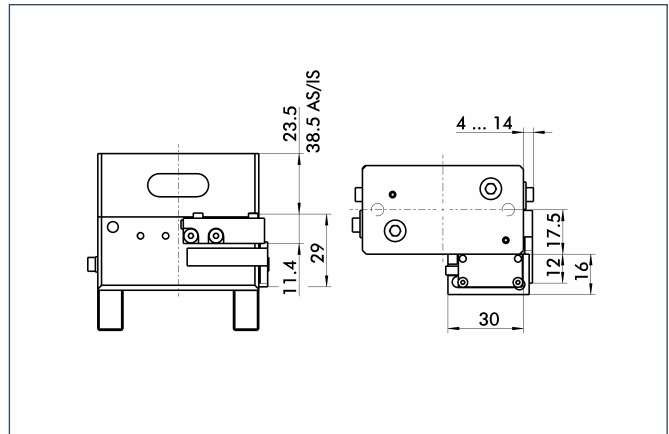
Finger blanks



Finger blanks for customized subsequent machining, incl. screw connection diagram

Description	Material	Scope of delivery	ID
ABR 64	Aluminum	2	0340215

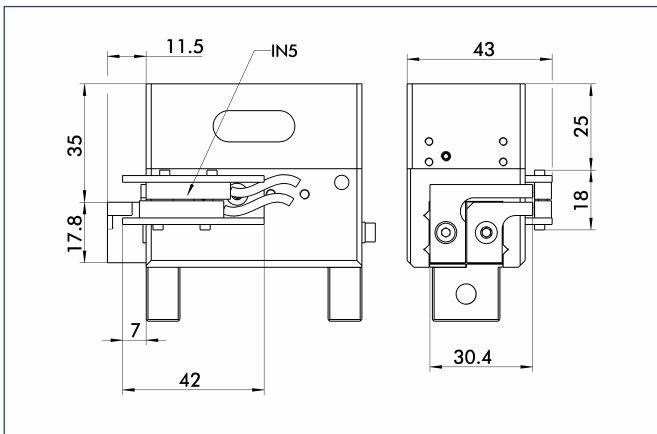
Mounting kit for FPS



The FPS flexible position sensor can distinguish between five freely programmable ranges or switching points for the stroke of a gripper and can be used in conjunction with a PC as a measuring system.

Description	ID
AS-MPG 64	0301764

Mounting kit for proximity switch



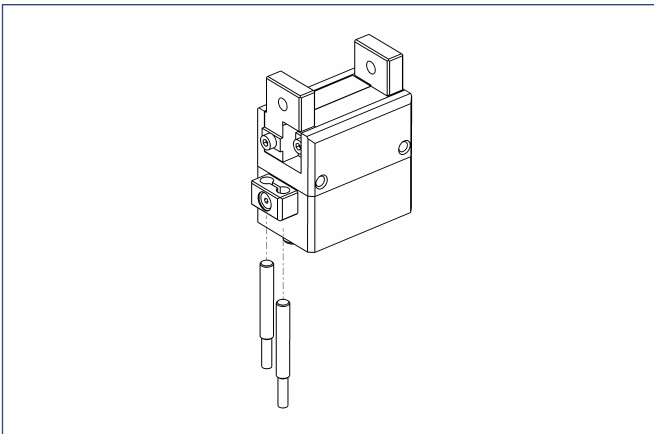
The mounting kit includes a bracket, switch cams and mounting screws. Proximity switches must be ordered separately.

Description	ID
AS-MPG 64	0340154



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

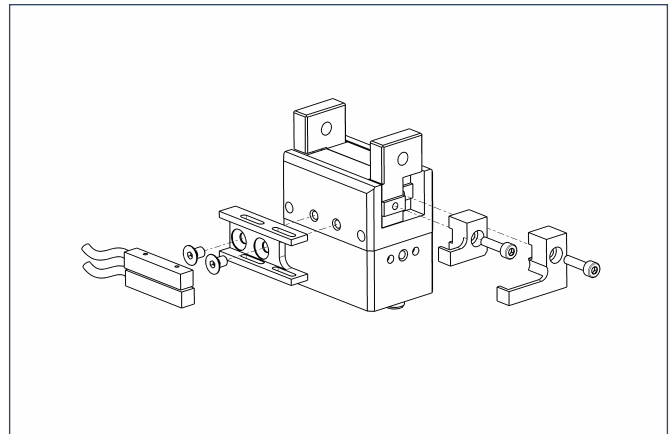
Sensor system



End position monitoring: Inductive proximity switches, for direct mounting

Description	ID	Recommended product
IN 40/S-M12	0301574	
IN 40/S-M8	0301474	•
INK 40/S	0301555	

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



End position monitoring: Inductive proximity switches, mounted with mounting kit

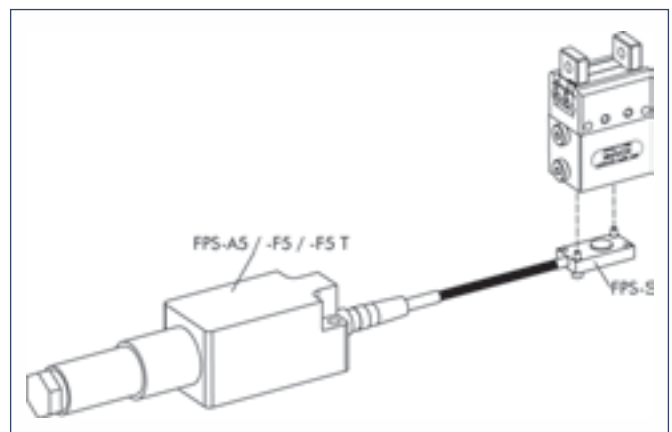
Description	ID	Recommended product
AS-MPG 64	0340154	
IN 5/S-M12	0301569	
IN 5/S-M8	0301469	•

- 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
GK 3-M8	0301622
KV 10-M12	0301596
KV 10-M8	0301496
KV 20-M12	0301597
KV 20-M8	0301497
KV 3-M12	0301595
KV 3-M8	0301495
W 3-M12	0301503
W 5-M12	0301507
WK 3-M8	0301594
WK 5-M8	0301502

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



Measuring system: FPS position monitor

Description	ID
AS-MPG 64	0301764
FPS-A5	0301802
FPS-F5	0301805
FPS-F5 T	0301807
FPS-S 13	0301705

When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.