



Sizes
65 ... 230



Weight
0.33 kg ... 16.3 kg



Gripping moment
6.44 Nm ... 934.2 Nm



Angle per jaw
20°



Workpiece weight
0.8 kg ... 35.8 kg

Application example



Rotary feed unit for shafts

1 2-Finger Angular Gripper PWG

2 Rotary Actuator SRU-plus

3 Linear axis with toothed-belt drive
HSB Beta

Universal Gripper

robust 2-finger angular gripper with spring-supported gripping force maintenance device

Field of application

for universal use in clean and slightly dirty environments

Your advantages and benefits

Variable top jaw design

as gripper is available both as a jaw version (-B) and a finger version (-F)

FPS measuring system

monitoring of jaw position or of 5 ranges by means of the add-on FPS sensor

Gripping force maintenance device

always with an integrated gripping force maintenance device for a high process reliability

Can be used in tough environments

thanks to the gripper's sturdy construction



General note to the series

Principle of function

Toggle drive system

Housing material

Aluminum alloy, hard-anodized

Base jaw material

Steel

Actuation

pneumatic, with filtered compressed air (10 microns): dry, lubricated or non-lubricated

Pressure medium: Required quality class of compressed air according to

DIN ISO 8573-1: 6 4 4

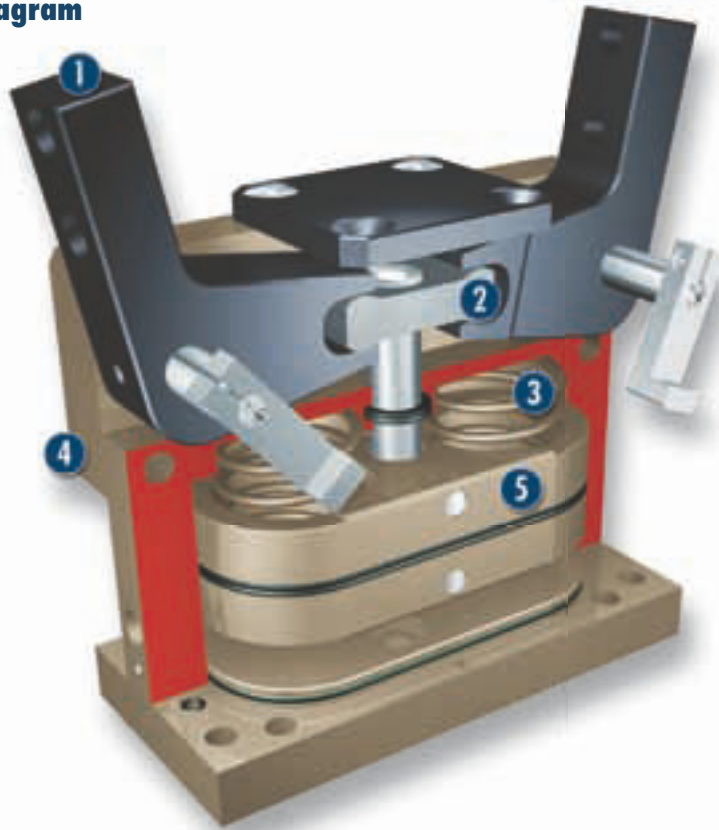
Warranty

24 months (details, general terms and conditions and operation manuals can be downloaded under www.schunk.com)

Scope of delivery

Brackets for proximity switches, control cams, centering sleeves, O-rings for direct connection, assembly and operating manual with declaration of incorporation

Sectional diagram



- 1 Base jaw**
for the connection of workpiece-specific gripper fingers
- 2 Lever mechanism**
for precise and synchronized gripping
- 3 Gripping force maintenance device**
mechanic gripping force maintenance for O.D. gripping
- 4 Housing**
weight-optimized through application of hard-anodized, high-strength aluminum alloy
- 5 Drive**
pneumatic oval piston for maximum driving force

Functional description

180° angular grippers (radial grippers) are advantageous in order to avoid additional stroke motions. Since each jaw rotates away by 90°, they are mostly removed from the work area; a stroke motion to retract the entire gripper can be omitted. The kinematics transforms this vertical motion into a synchronous and rotatory gripping motion of the base jaws.

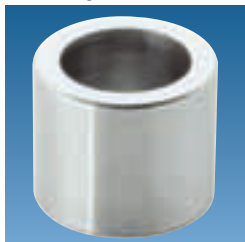
Options and special information

This series is especially suitable for handling crankshafts and camshafts.

Accessories

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

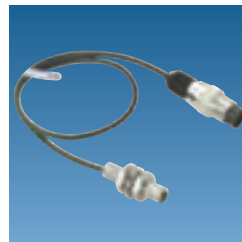
Centering sleeves



Fittings



Inductive proximity switches



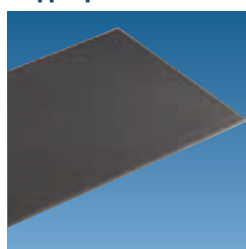
Sensor cables



Plastic inserts



Gripper pads



Pressure maintenance valve



Sensor Distributor



Flexible Position Sensor



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 note to the series

Gripping moment

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 jaw motions have 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

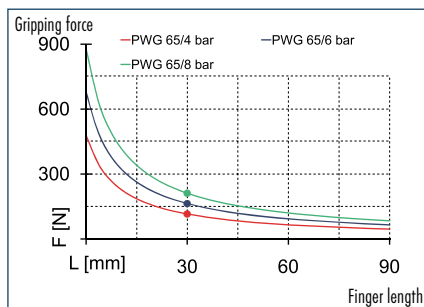
The recommended workpiece weight is calculated for a force-type connection with a coefficient of friction of 0.1 and a safety factor of 2 against slippage of the workpiece on acceleration due to gravity g . Considerably heavier workpiece weights are permitted with form-fit gripping.

Closing and opening times

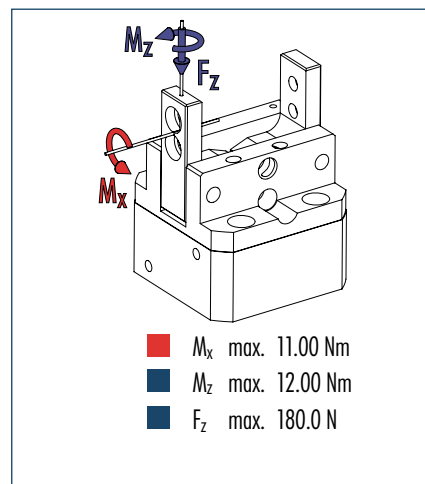
Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.



Gripping force, O.D. gripping



Finger load



① The indicated moments and forces are static values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PWG 65-F	PWG 65-B
ID		0302630	0302631
Opening angle per jaw	[°]	20	20
Closed angle per jaw up to	[°]	4	4
Closing moment	[Nm]	6.44	6.44
Spring-actuated closing moment	[Nm]	1.7	1.7
Weight	[kg]	0.33	0.33
Recommended workpiece weight	[kg]	0.8	0.8
Air consumption per double stroke	[cm³]	8	8
Min./max. operating pressure	[bar]	4/8	4/8
Nominal operating pressure	[bar]	6	6
Closing/opening time	[s]	0.01/0.02	0.01/0.02
Max. permitted finger length	[mm]	60	60
Max. permitted weight per finger	[kg]	0.15	0.15
IP class		20	20
Min./max. ambient temperature	[°C]	-10/90	-10/90
Repeat accuracy	[mm]	0.05	0.05

⑤③ Connection for shaft support
⑧① Depth of the centering sleeve hole in the matching part

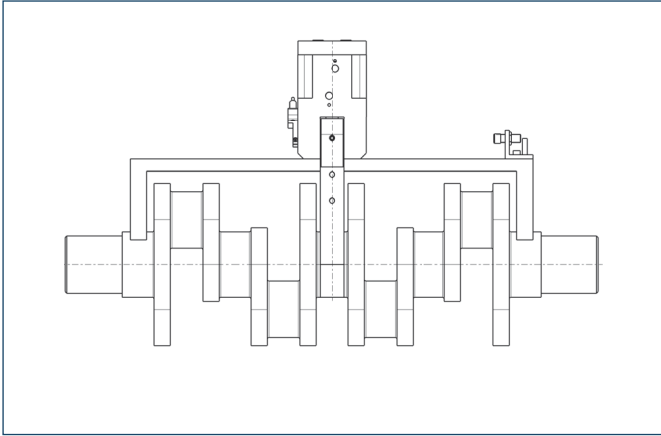
Technical drawing of a mechanical part, likely a bush or sleeve, showing dimensions and callouts:

- Callout 3:** Points to the outer diameter of the part.
- Callout 4:** Points to the inner diameter of the part.
- Dimensions:**
 - Outer diameter: $\varnothing 5$
 - Inner diameter: $\varnothing 3$
 - Length: $0.6_{0.1}$
 - Thread: $M 3$
- Material:** $\varnothing 3 \times 1$

-

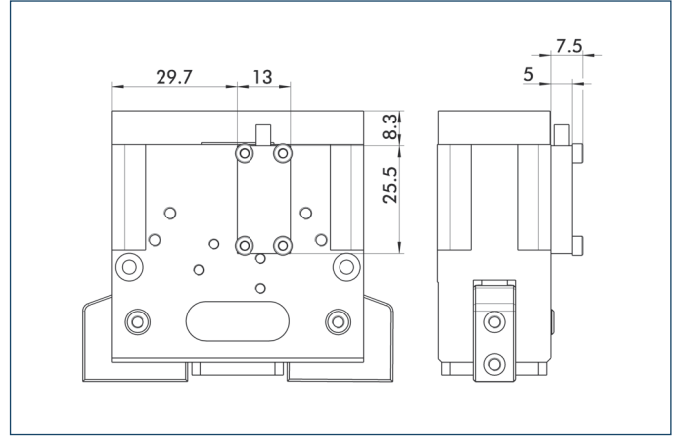
- 967

Shaft support



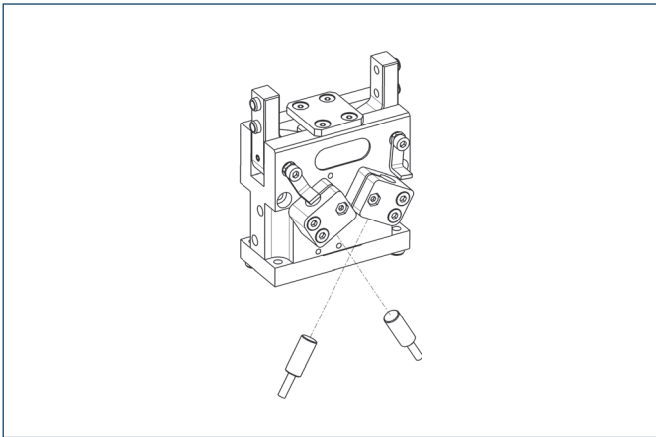
The complete assembly group for handling of cranks and cam shafts can be supplied on request.

FPS Flexible Position Sensor



Up to three intermediate positions of the PWG can be monitored via the FPS flexible position sensor.

Inductive proximity switches

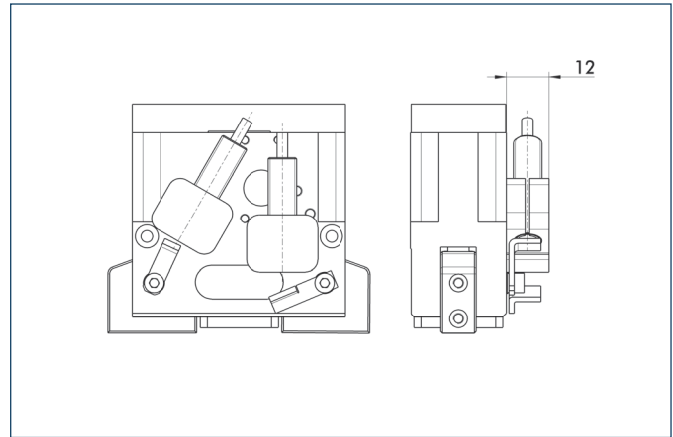


End position monitoring for direct mounting

Description	ID	Recommended product
Inductive proximity switches		
IN 60-S-M8	0301485	•
IN 60-S-M12	0301585	
INK 60-S	0301553	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Cable extensions		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	

- ① Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.
- ① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Mounting kit for proximity switch



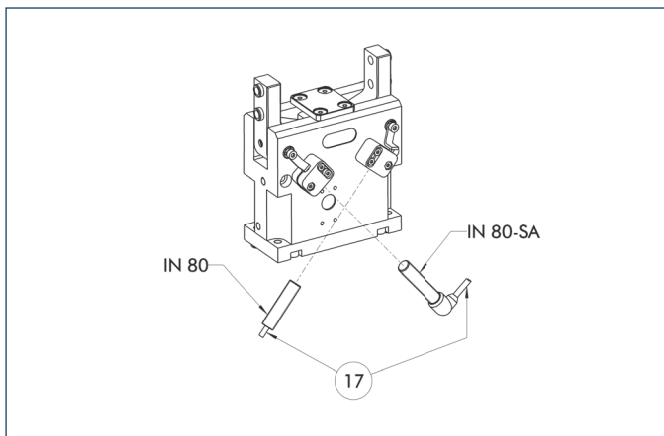
Description	ID
Mounting kit for proximity switch	
HG-PWG 65	0300764

- ① This mounting kit needs to be ordered optionally as an accessory.



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

Inductive proximity switches



17 Cable outlet

End position monitoring mounted with mounting kit

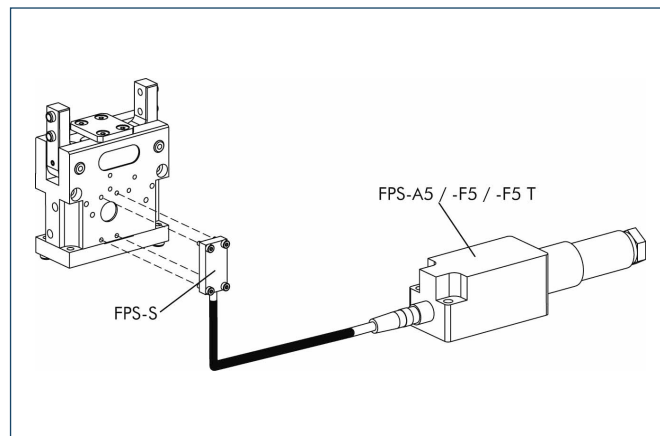
Description	ID	Recommended product
Mounting kit for proximity switch		
HG-PWG 65	0300764	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
IN-C 80-S-M8	0301475	
INK 80-SL	0301579	
Inductive proximity switch with lateral outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

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

① This mounting kit needs to be ordered optionally as an accessory.

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

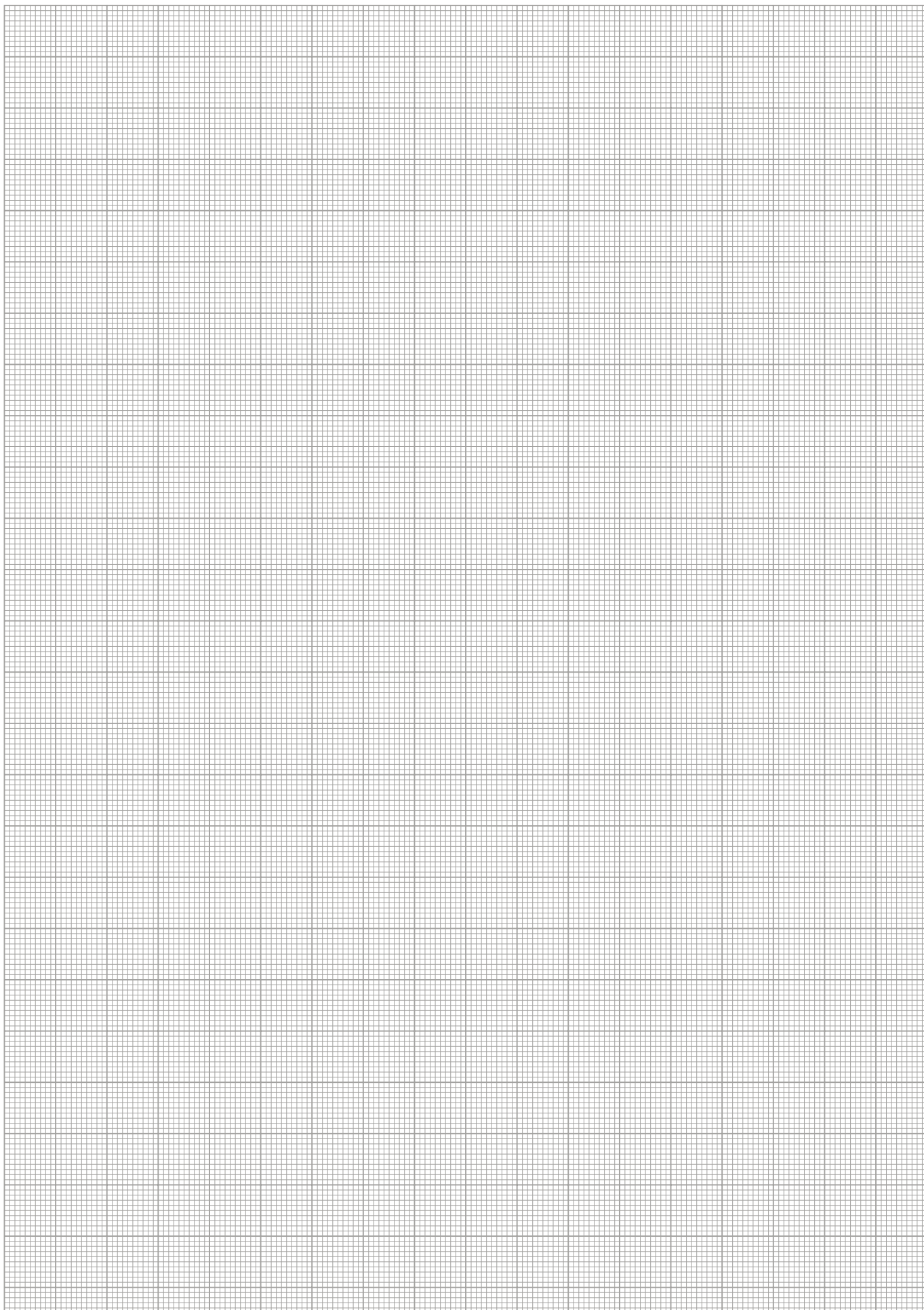
Flexible Position Sensor



Flexible position monitoring of up to five positions

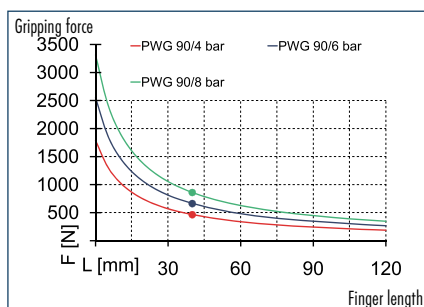
Description	ID
Sensor	
FPS-S 13	0301705
Electronic Processor	
FPS-F5	0301805
FPS-F5 T	0301807

① When using a FPS system, a FPS sensor (FPS-S) and a control unit (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.

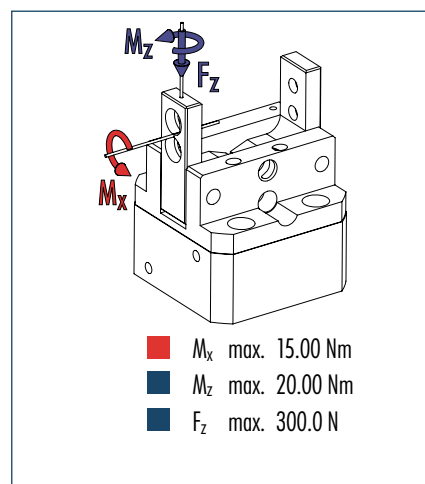




Gripping force, O.D. gripping



Finger load



① The indicated moments and forces are static values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

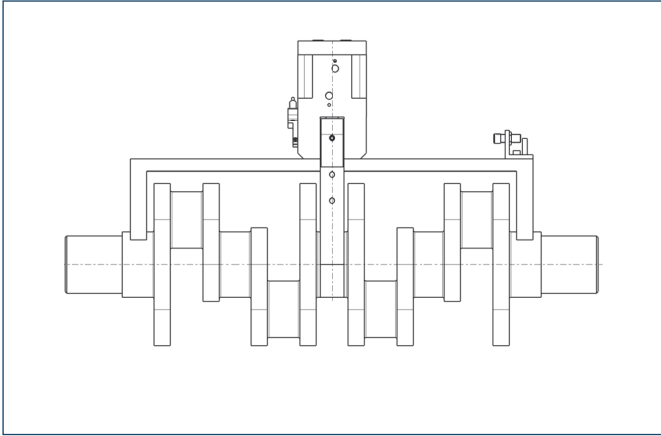
Description	PWG 90-F	PWG 90-B
ID	0302632	0302633
Opening angle per jaw [°]	20	20
Closed angle per jaw up to [°]	4	4
Closing moment [Nm]	35.69	35.69
Spring-actuated closing moment [Nm]	9	9
Weight [kg]	0.99	1.06
Recommended workpiece weight [kg]	3.3	3.3
Air consumption per double stroke [cm³]	35	35
Min./max. operating pressure [bar]	4/8	4/8
Nominal operating pressure [bar]	6	6
Closing/opening time [s]	0.03/0.06	0.03/0.06
Max. permitted finger length [mm]	80	80
Max. permitted weight per finger [kg]	0.5	0.5
IP class	20	20
Min./max. ambient temperature [°C]	-10/90	-10/90
Repeat accuracy [mm]	0.05	0.05

⑤3 Connection for shaft support
⑧0 Depth of the centering sleeve hole in the matching part

-
- Technical drawing of the 16 g6 valve assembly, showing a side view and a top view with dimensions.
- Side View Dimensions:**
- Overall height: 16 ± 0.02
 - Top flange thickness: 5
 - Valve seat diameter: 16 g6
- Top View Dimensions:**
- Overall width: 10.5
 - Mounting hole diameter: M5
 - Mounting hole offset from center: 2.5
 - Distance between mounting holes: 10.4
 - Distance from mounting hole to valve seat: 40
 - Valve seat diameter: 16 ± 0.02
 - Distance from valve seat to mounting hole: 31
 - Overall length: 111
 - Mounting hole diameter: $\varnothing 8$
 - Mounting hole offset from center: 5
 - Mounting hole offset from edge: 7
 - Mounting hole offset from edge: 21

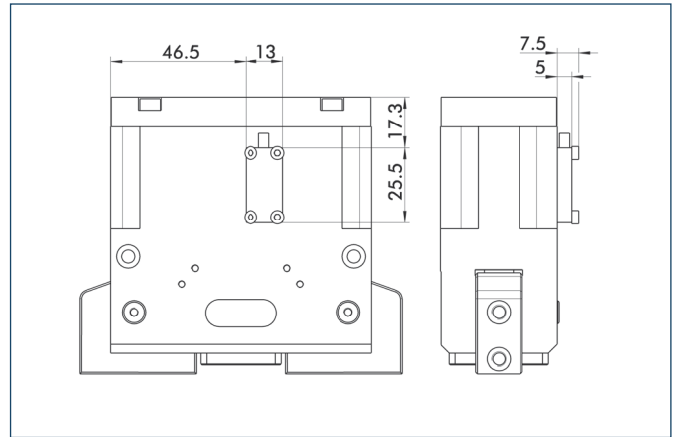
- 973

Shaft support



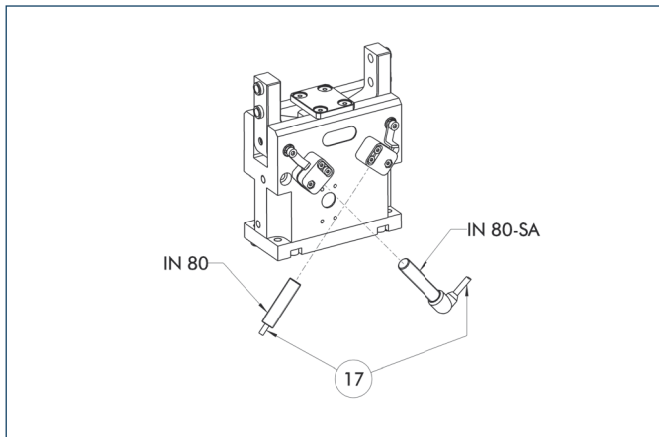
The complete assembly group for handling of cranks and cam shafts can be supplied on request.

Flexible Position Sensor



Up to three intermediate positions of the PWG can be monitored via the FPS flexible position sensor.

Inductive proximity switches



17 Cable outlet

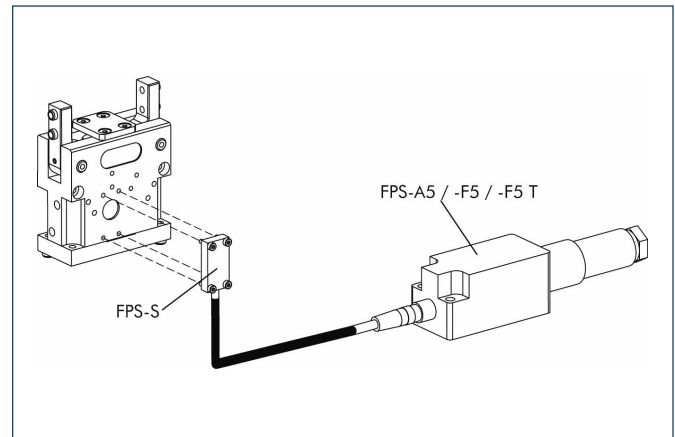
End position monitoring for direct mounting

Description	ID	Recommended product
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
IN-C 80-S-M8	0301475	
Inductive proximity switch with lateral outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Cable extensions		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	

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

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

Flexible Position Sensor



Flexible position monitoring of up to five positions

Description	ID
Sensor	
FPS-S 13	0301705
Electronic Processor	
FPS-F5	0301805
FPS-F5 T	0301807

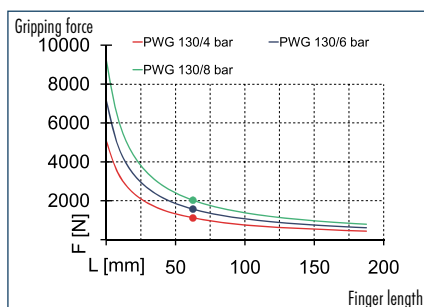
① When using a FPS system, a FPS sensor (FPS-S) and a control unit (FPS-F5 / F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.



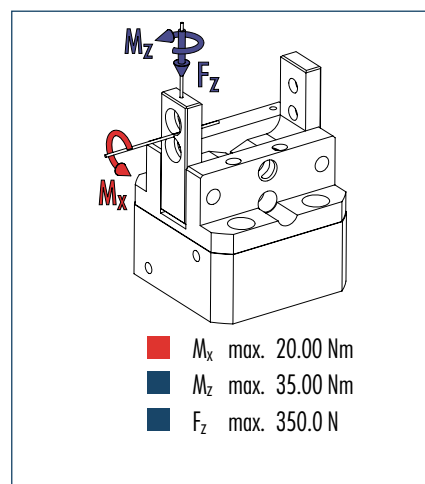
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



Gripping force, O.D. gripping



Finger load

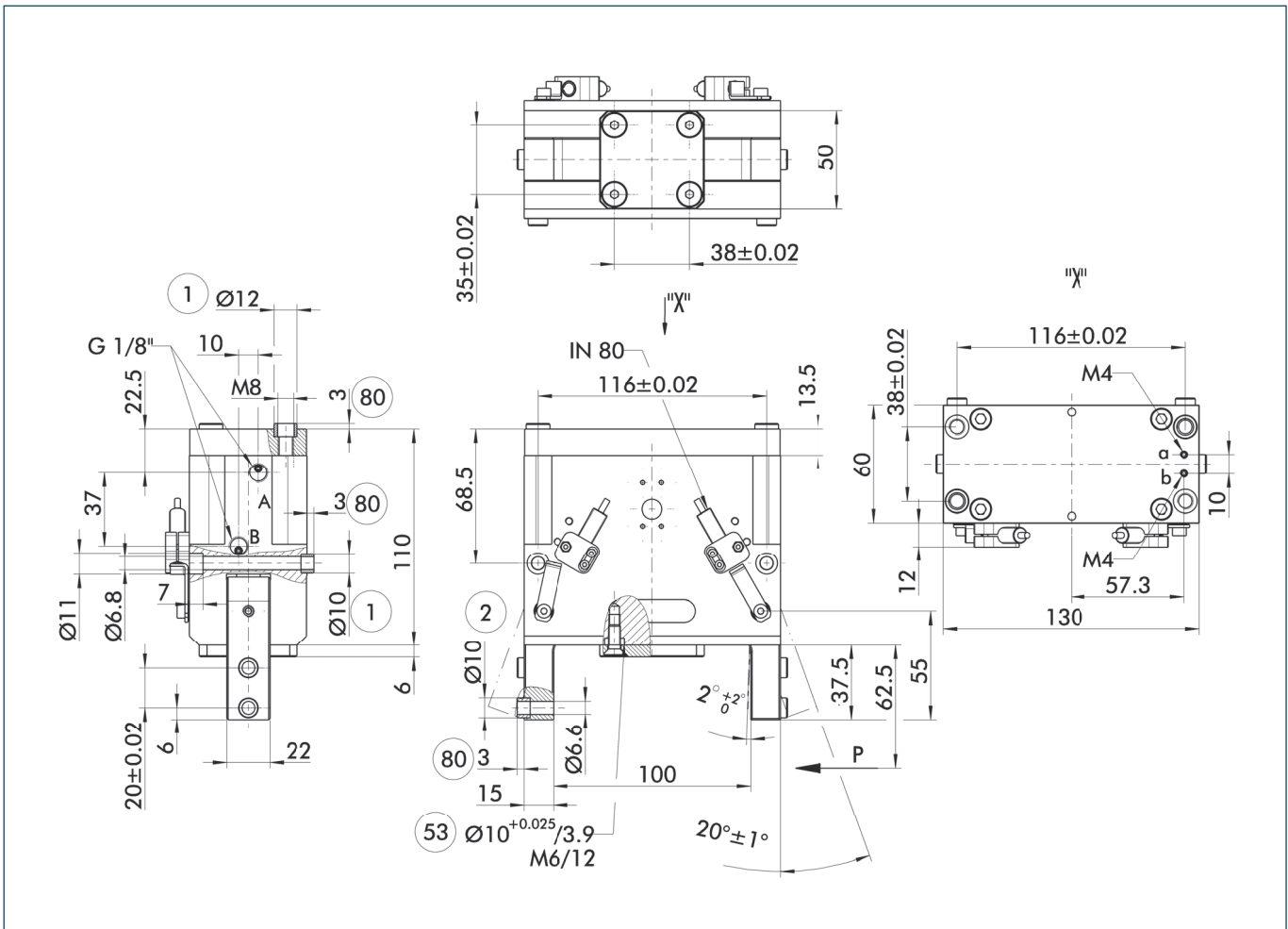


① The indicated moments and forces are static values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description	PWG 130-F	PWG 130-B
ID	0302634	0302635
Opening angle per jaw [°]	20	20
Closed angle per jaw up to [°]	4	4
Closing moment [Nm]	125.4	125.4
Spring-actuated closing moment [Nm]	34.2	34.2
Weight [kg]	2.6	2.8
Recommended workpiece weight [kg]	8	8
Air consumption per double stroke [cm³]	120	120
Min./max. operating pressure [bar]	4/8	4/8
Nominal operating pressure [bar]	6	6
Closing/opening time [s]	0.1/0.19	0.1/0.19
Max. permitted finger length [mm]	125	125
Max. permitted weight per finger [kg]	1	1
IP class	20	20
Min./max. ambient temperature [°C]	-10/90	-10/90
Repeat accuracy [mm]	0.05	0.05

Main view



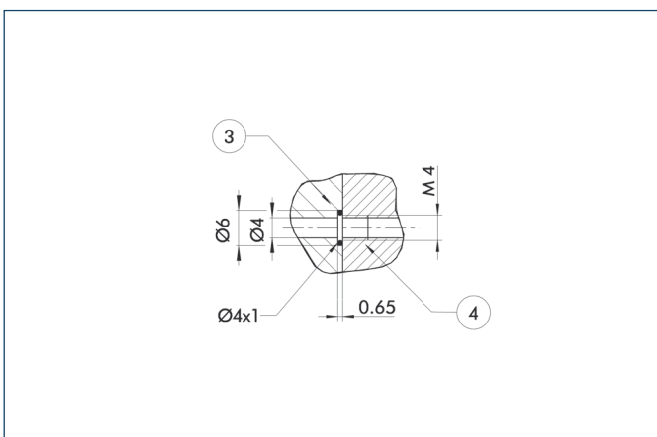
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can be used to hold the position in case of pressure drop (see "Accessories" catalog section).

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

53 Connection for shaft support
80 Depth of the centering sleeve hole in the matching part

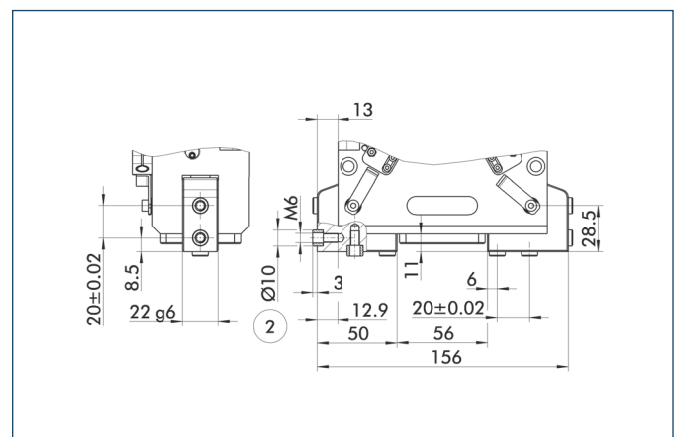
Hose-free direct connection



③ Adapter
④ Gripper

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

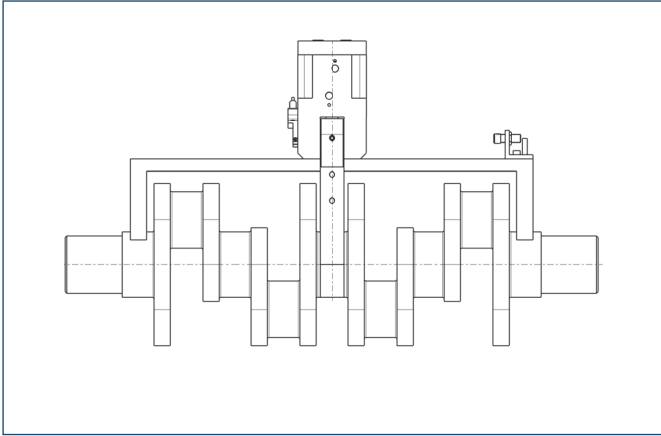
Jaw version



② Finger connection

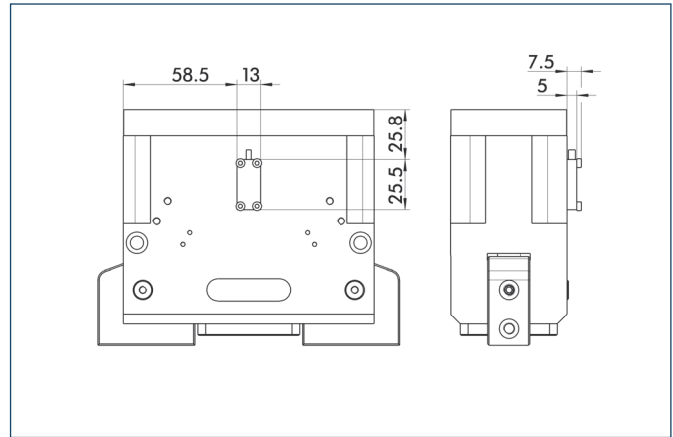
Divergent dimensions of version "B" (jaw version)

Shaft support



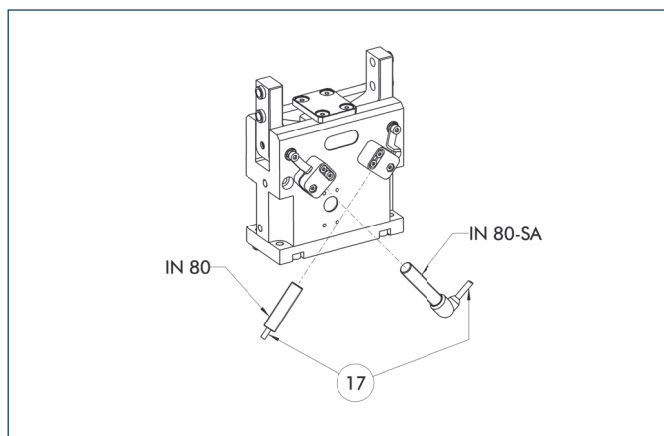
The complete assembly group for handling of cranks and cam shafts can be supplied on request.

Flexible Position Sensor



Up to three intermediate positions of the PWG can be monitored via the FPS flexible position sensor.

Inductive proximity switches



17 Cable outlet

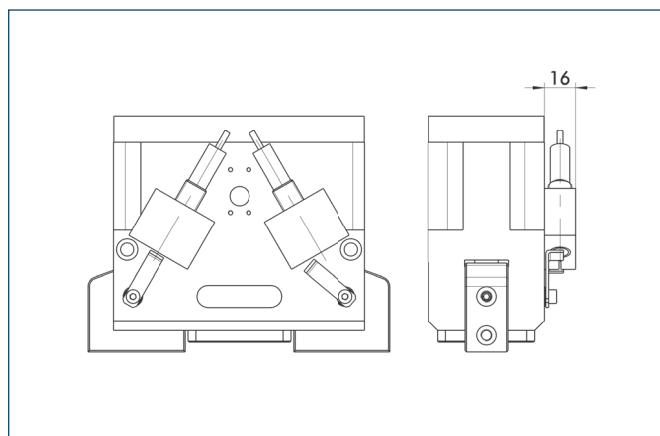
End position monitoring for direct mounting

Description	ID	Recommended product
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
IN-C 80-S-M8	0301475	
Inductive proximity switch with lateral outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Cable extensions		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	

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

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

Mounting kit for proximity switch



Description	ID
Mounting kit for proximity switch	
HG-PWG 130-230	0300763

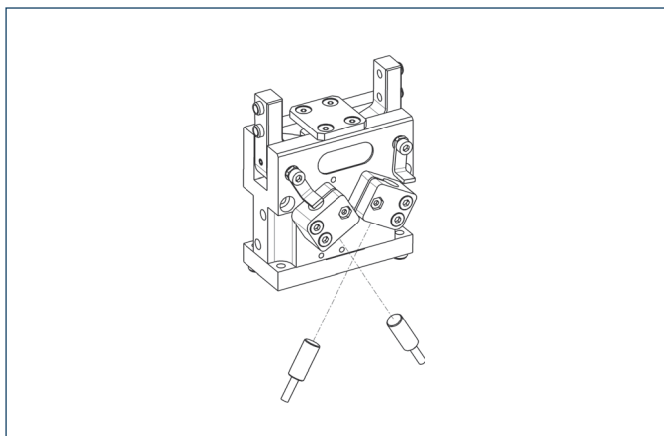
① This mounting kit needs to be ordered optionally as an accessory.

① The proximity switches must be ordered separately.



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

Inductive proximity switches

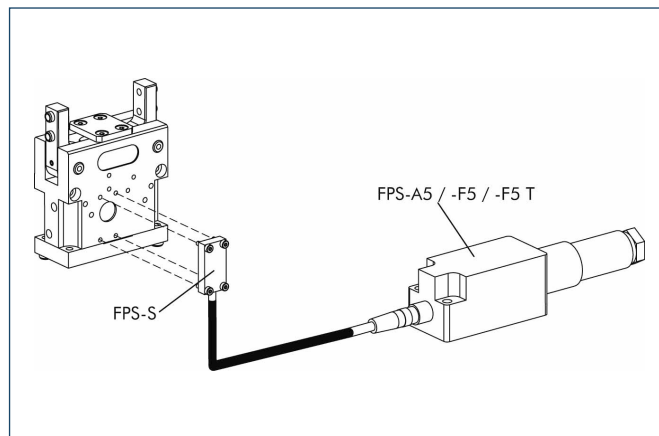


End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch		
HG-PWG 130-230	0300763	
Inductive proximity switches		
IN 120-S-M12	0301592	•
INK 120-S	0301562	

- ① Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.
- ① This mounting kit needs to be ordered optionally as an accessory.
- ① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

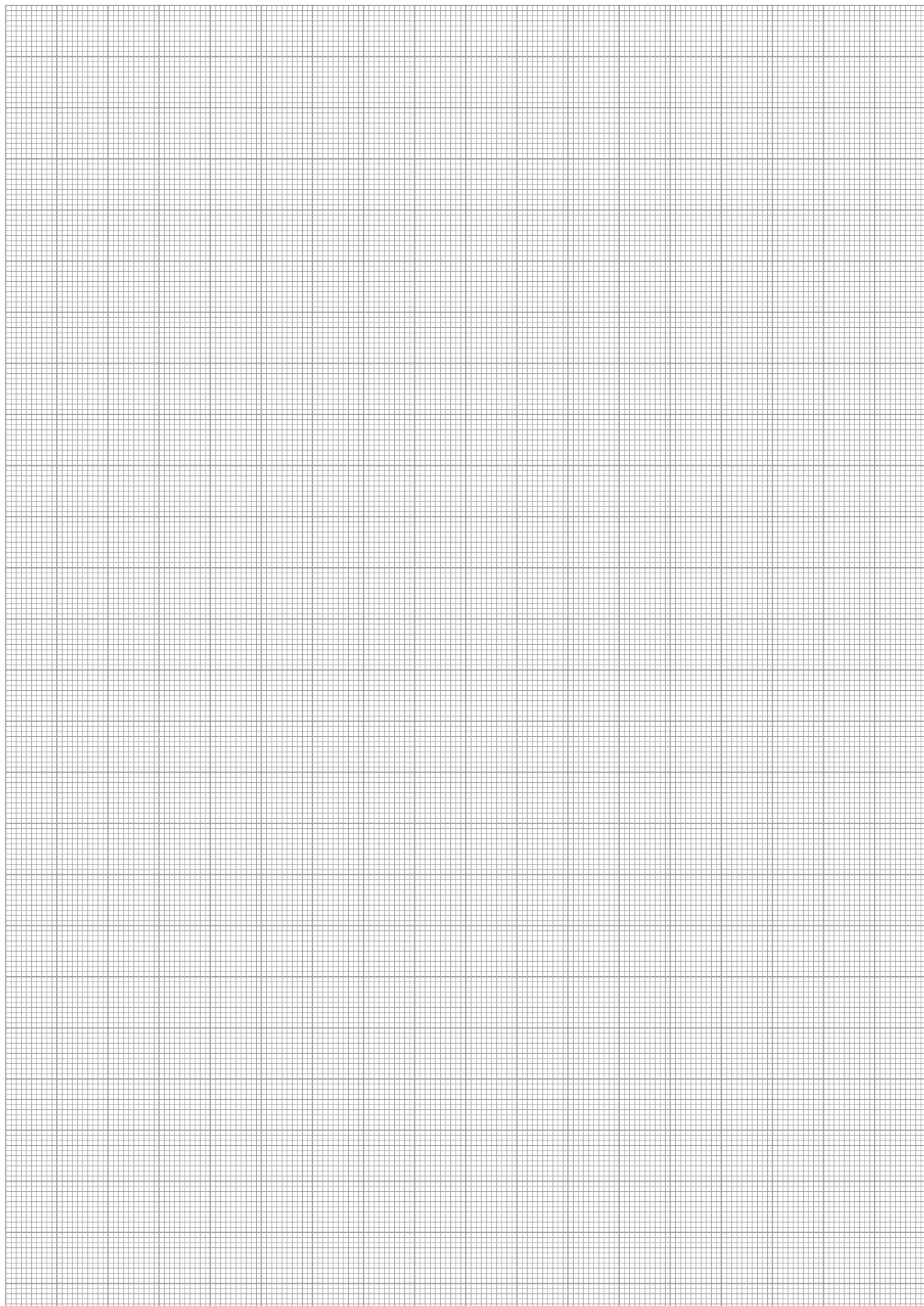
Flexible Position Sensor



Flexible position monitoring of up to five positions

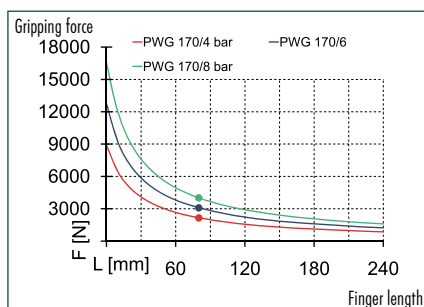
Description	ID
Sensor	
FPS-S 13	0301705
Electronic Processor	
FPS-F5	0301805
FPS-F5 T	0301807

- ① When using a FPS system, a FPS sensor (FPS-S) and a control unit (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.

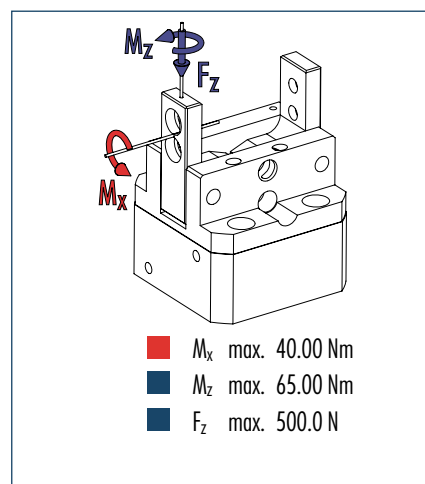




Gripping force, O.D. gripping



Finger load

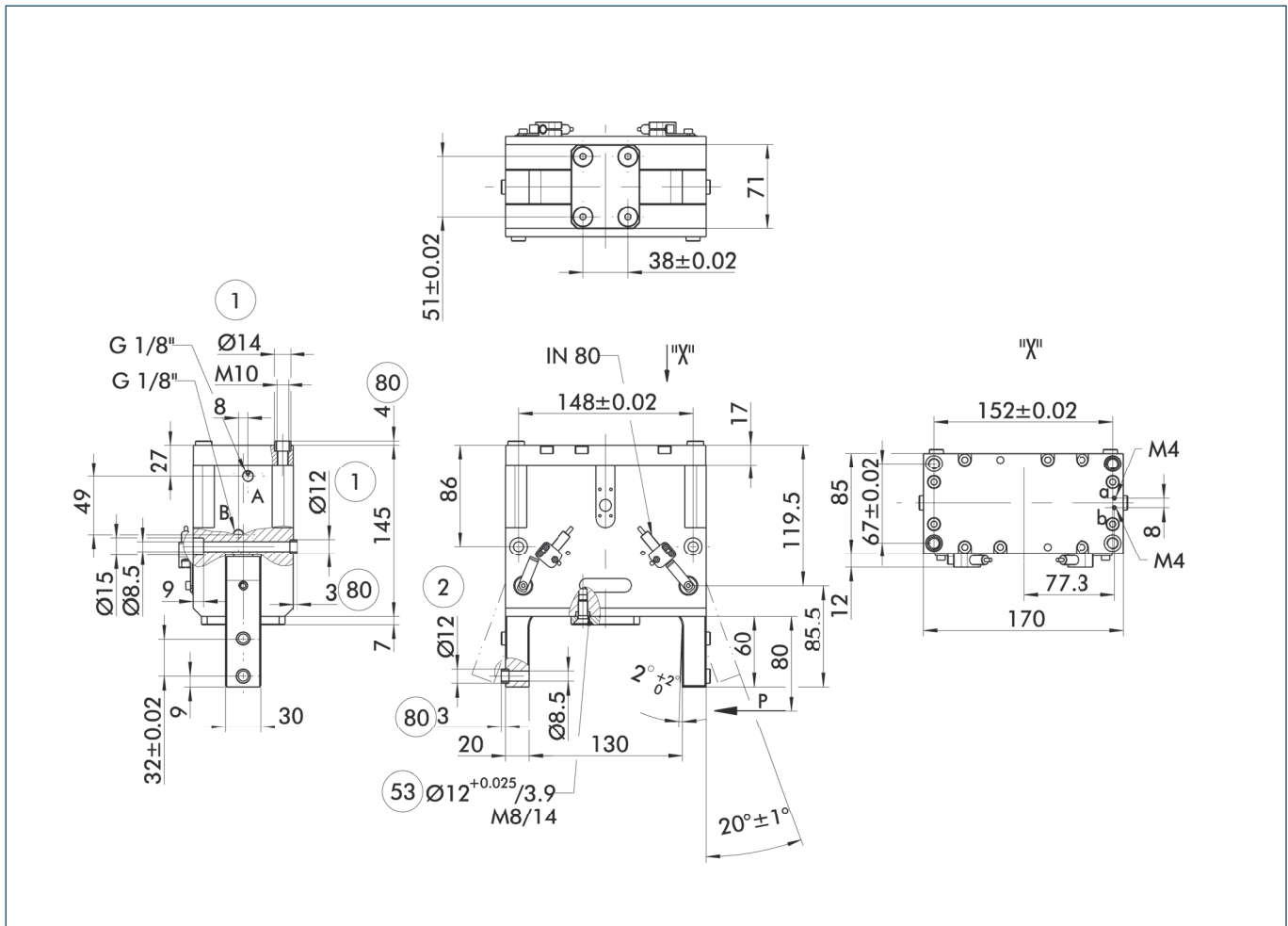


① The indicated moments and forces are static values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description	PWG 170-F	PWG 170-B
ID	0302636	0302637
Opening angle per jaw [°]	20	20
Closed angle per jaw up to [°]	4	4
Closing moment [Nm]	324.9	324.9
Spring-actuated closing moment [Nm]	80.4	80.4
Weight [kg]	6.6	7
Recommended workpiece weight [kg]	15.7	15.7
Air consumption per double stroke [cm³]	320	320
Min./max. operating pressure [bar]	4/8	4/8
Nominal operating pressure [bar]	6	6
Closing/opening time [s]	0.27/0.3	0.27/0.3
Max. permitted finger length [mm]	160	160
Max. permitted weight per finger [kg]	2.5	2.5
IP class	20	20
Min./max. ambient temperature [°C]	-10/90	-10/90
Repeat accuracy [mm]	0.05	0.05

Main view



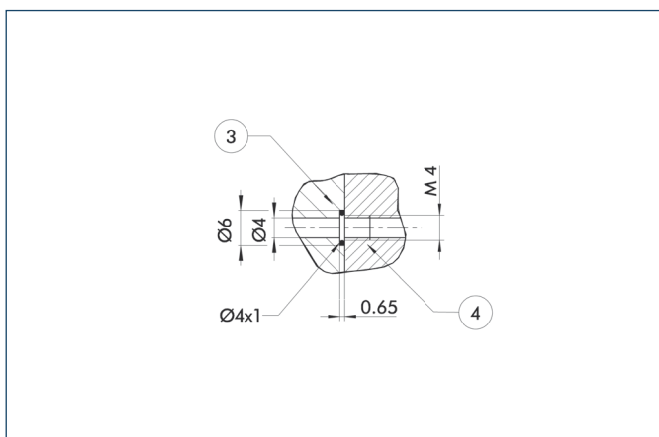
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- The SDV-P pressure maintenance valve can be used to hold the position in case of pressure drop (see “Accessories” catalog section).

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

- ⑤③ Connection for shaft support
⑧⑦ Depth of the centering sleeve hole in the matching part

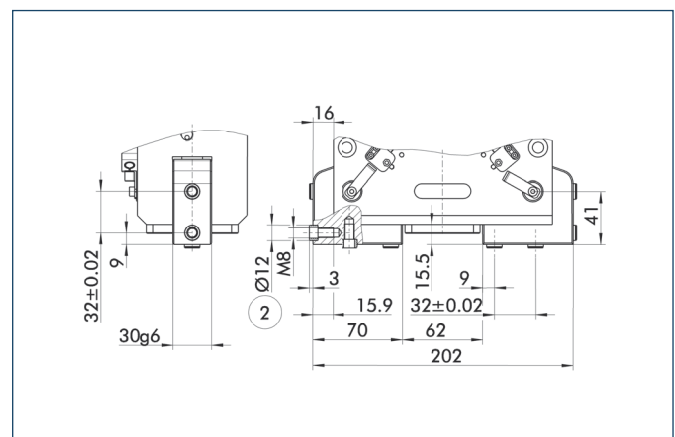
Hose-free direct connection



- 3 Adapter
- 4 Gripper

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

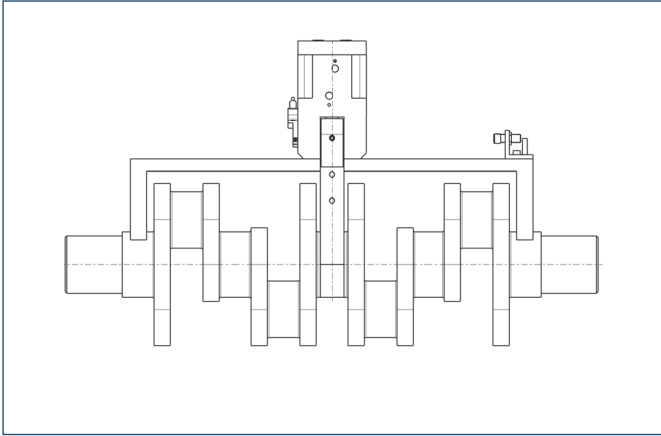
Jaw version



- ② Finger connection

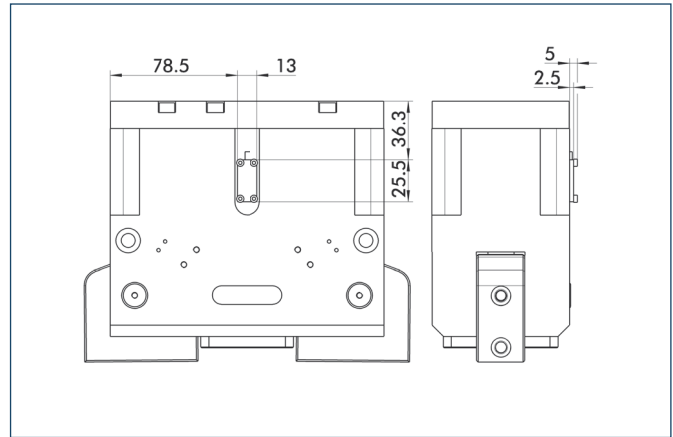
Divergent dimensions of version "B" (jaw version)

Shaft support



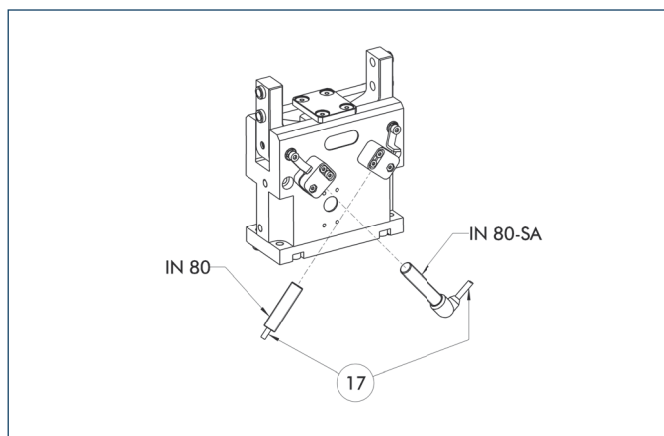
The complete assembly group for handling of cranks and cam shafts can be supplied on request.

Flexible Position Sensor



Up to three intermediate positions of the PWG can be monitored via the FPS flexible position sensor.

Inductive proximity switches



17 Cable outlet

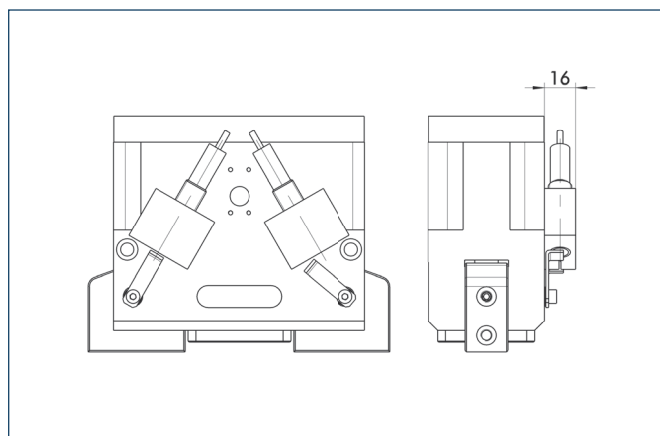
End position monitoring for direct mounting

Description	ID	Recommended product
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
IN-C 80-S-M8	0301475	
Inductive proximity switch with lateral outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Cable extensions		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	

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

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

Mounting kit for proximity switch



Description ID

Mounting kit for proximity switch

HG-PWG 130-230 0300763

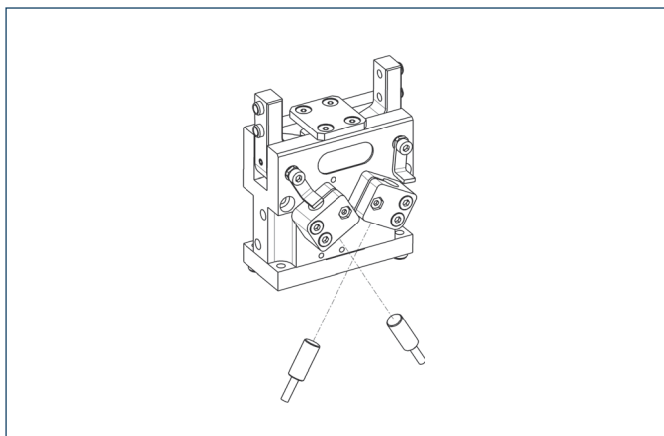
① This mounting kit needs to be ordered optionally as an accessory.

① The proximity switches must be ordered separately.



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

Inductive proximity switches

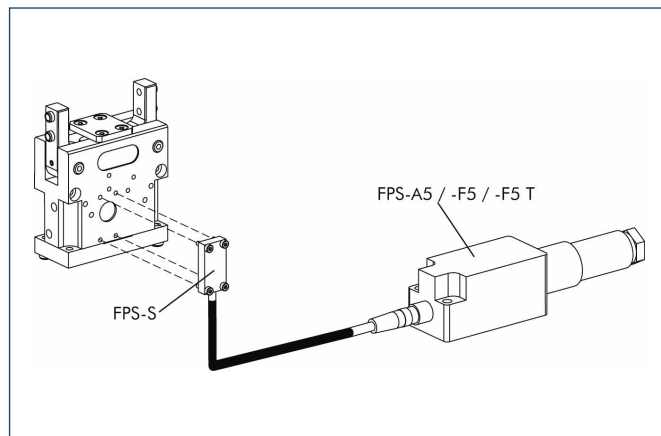


End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch		
HG-PWG 130-230	0300763	
Inductive proximity switches		
IN 120-S-M12	0301592	•
INK 120-S	0301562	

- ① Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.
- ① This mounting kit needs to be ordered optionally as an accessory.
- ① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

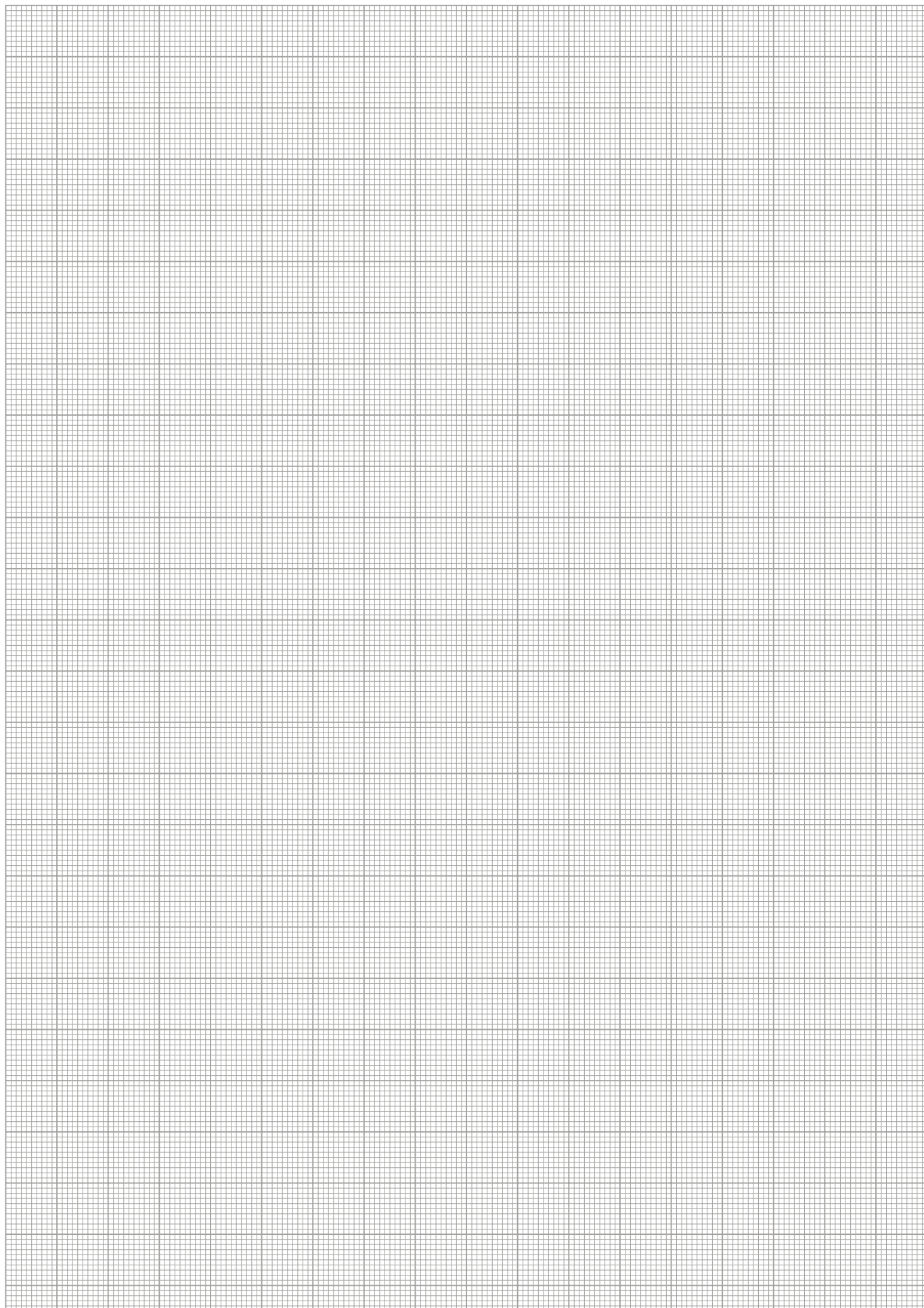
Flexible Position Sensor



Flexible position monitoring of up to five positions

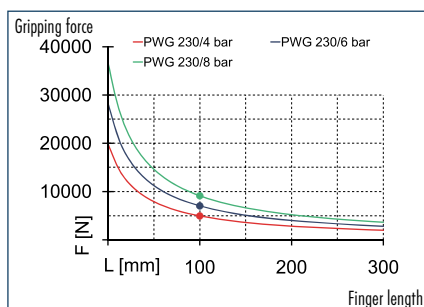
Description	ID
Sensor	
FPS-S 13	0301705
Electronic Processor	
FPS-F5	0301805
FPS-F5 T	0301807

- ① When using a FPS system, a FPS sensor (FPS-S) and a control unit (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.

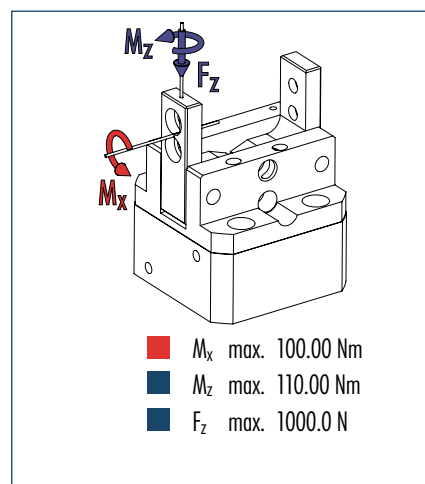




Gripping force, O.D. gripping



Finger load

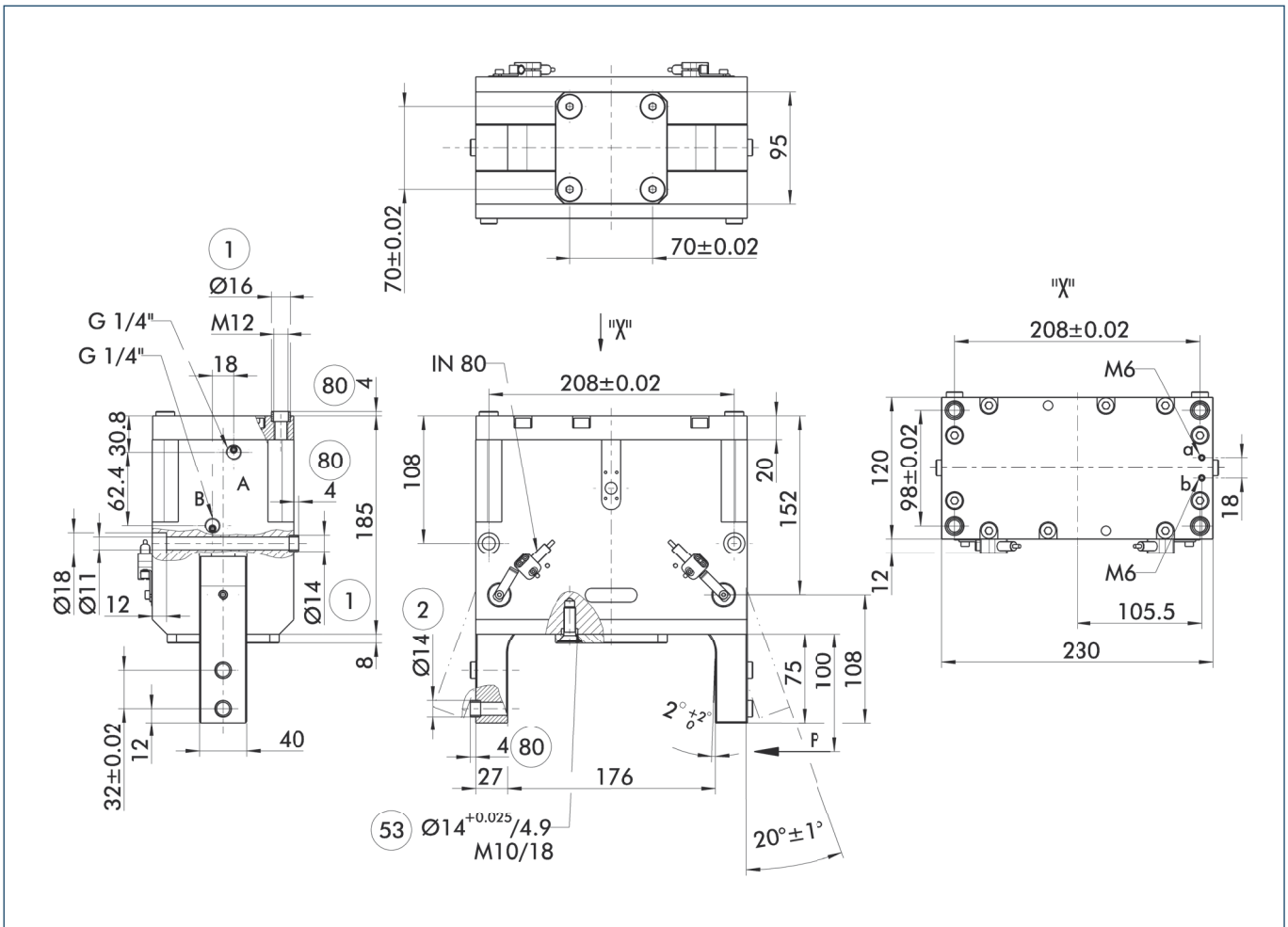


① The indicated moments and forces are static values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description	PWG 230-F	PWG 230-B
ID	0302638	0302639
Opening angle per jaw	20	20
Closed angle per jaw up to	4	4
Closing moment	934.2	934.2
Spring-actuated closing moment	237.6	237.6
Weight	15.8	16.3
Recommended workpiece weight	35.8	35.8
Air consumption per double stroke	860	860
Min./max. operating pressure	4/8	4/8
Nominal operating pressure	6	6
Closing/opening time	0.35/0.45	0.35/0.45
Max. permitted finger length	200	200
Max. permitted weight per finger	4	4
IP class	20	20
Min./max. ambient temperature	-10/90	-10/90
Repeat accuracy	0.05	0.05

Main view



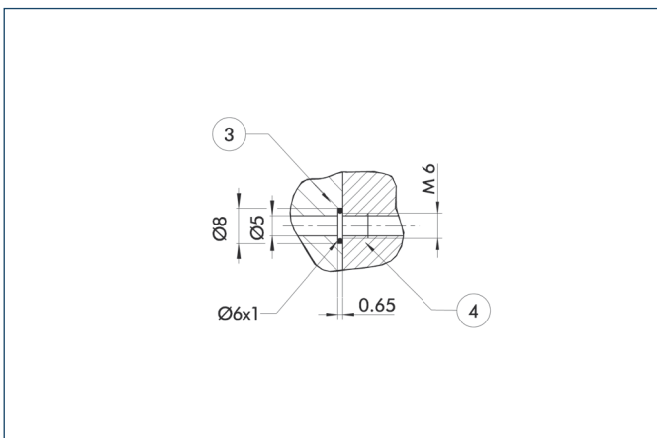
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can be used to hold the position in case of pressure drop (see "Accessories" catalog section).

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

53 Connection for shaft support
80 Depth of the centering sleeve hole in the matching part

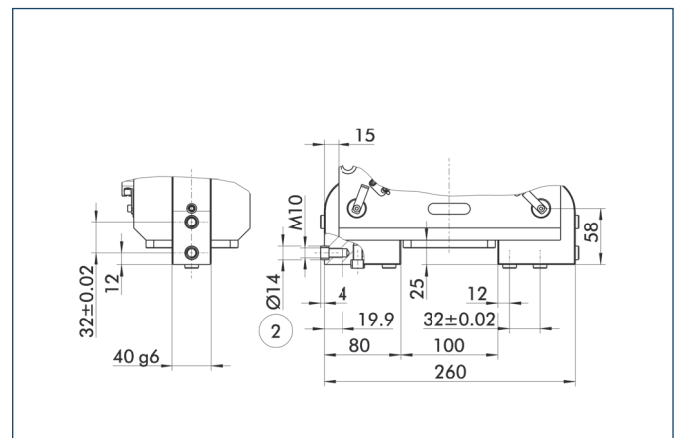
Hose-free direct connection



③ Adapter
④ Gripper

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

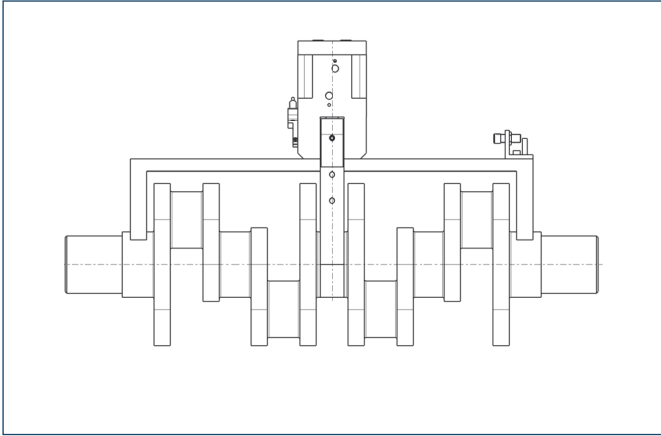
Jaw version



② Finger connection

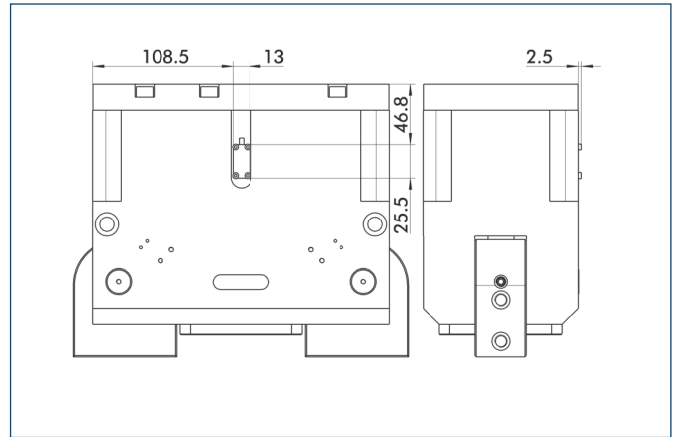
Divergent dimensions of version "B" (jaw version)

Shaft support



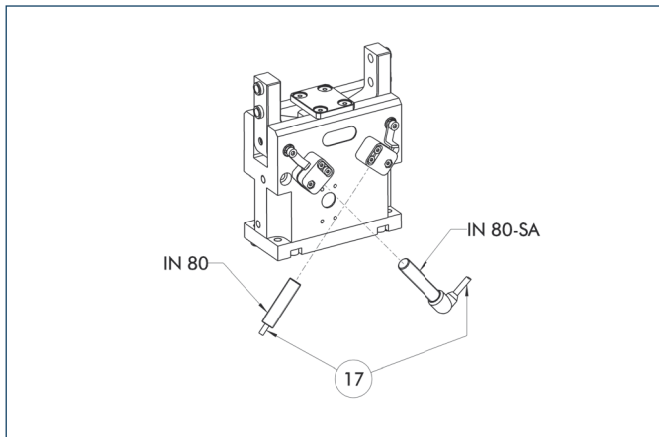
The complete assembly group for handling of cranks and cam shafts can be supplied on request.

Flexible Position Sensor



Up to three intermediate positions of the PWG can be monitored via the FPS flexible position sensor.

Inductive proximity switches



17 Cable outlet

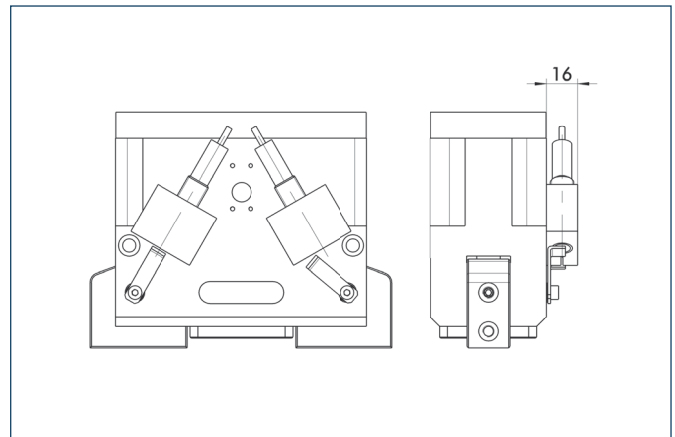
End position monitoring for direct mounting

Description	ID	Recommended product
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
IN-C 80-S-M8	0301475	
Inductive proximity switch with lateral outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Cable extensions		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	

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

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

Mounting kit for proximity switch

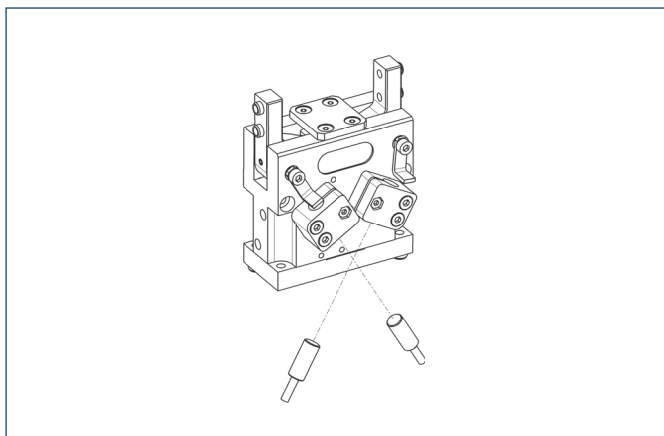


Description	ID
Mounting kit for proximity switch	
HG-PWG 130-230	0300763

① This mounting kit needs to be ordered optionally as an accessory.

① The proximity switches must be ordered separately.

Inductive proximity switches

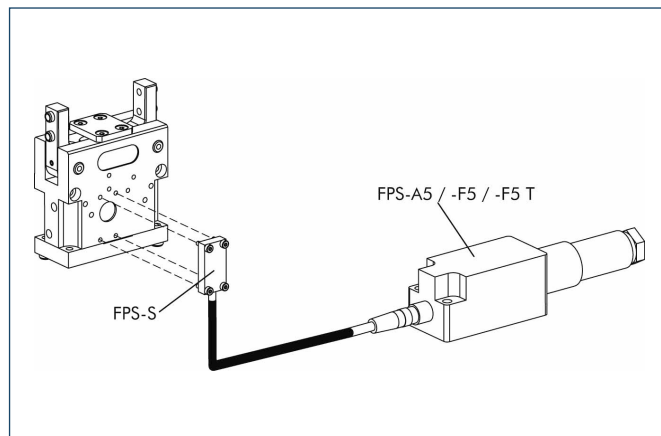


End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch		
HG-PWG 130-230	0300763	
Inductive proximity switches		
IN 120-S-M12	0301592	•
INK 120-S	0301562	

- ① Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.
- ① This mounting kit needs to be ordered optionally as an accessory.
- ① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Flexible Position Sensor



Flexible position monitoring of up to five positions

Description	ID
Sensor	
FPS-S 13	0301705
Electronic Processor	
FPS-F5	0301805
FPS-F5 T	0301807

- ① When using a FPS system, a FPS sensor (FPS-S) and a control unit (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.