



Superior Clamping and Gripping



Product Information

Gripper for small components RH

Cost-effective. Easy. Economical.

RH gripper for small components

A cost-efficient gripping system, which is particularly suitable for simple cases of application

Field of application

Use in clean environmental conditions (e.g. assembly or packaging areas) with low process forces.



Advantages – Your benefits

Economical gripper series for simple applications with low loads in clean environments

Maintenance-free with low weight

Excellent price-performance ratio making it an attractive option for low-budget applications



Sizes
Quantity: 5



Weight
0.17 .. 1.1 kg



Gripping force
80 .. 460 N



Stroke per jaw
8 .. 40 mm



Workpiece weight
0.4 .. 2.3 kg

Functional description

RH grippers work with pneumatic pistons, which produce a synchronized motion due to kinematics that vary depending on the type.



① RH 907
2-finger small components gripper

② RH 925
2-finger small components gripper

③ RH 9010
2-finger parallel gripper with long stroke

General notes about the series

Operating principle: Wedge-hook kinematics

Actuation: pneumatic, with filtered compressed air as per ISO 8573-1:2010 [7:4:4].

Warranty: 24 months

Scope of delivery: Centering elements, assembly, and operating instruction with manufacturer's declaration.

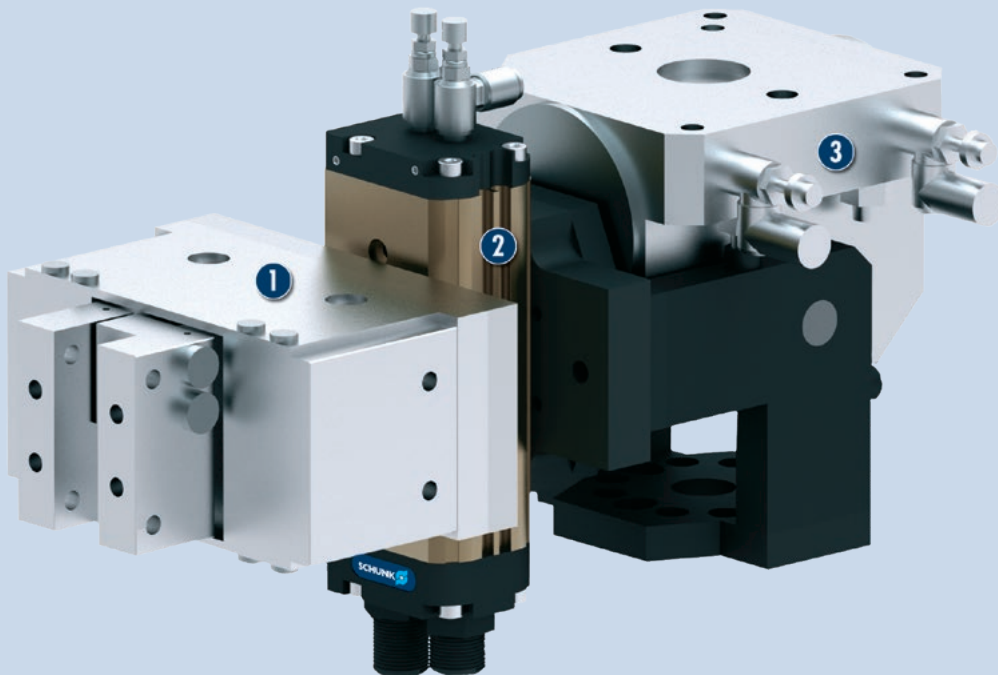
Gripping force: is the arithmetic sum of the individual force applied to each jaw at distance P (see illustration).

Finger length: is measured from the reference surface as the distance P in direction to the main axis.
The maximum permissible finger length applies until the nominal operating pressure is achieved. With higher pressures, the finger length must be reduced proportionally to the nominal operating pressure.

Repeat accuracy: is defined as a distribution of the end Position for 100 consecutive strokes.

Workpiece weight: is calculated for force-fit gripping with a coefficient of static friction of 0.1 and a safety factor of 2 against workpiece slippage at acceleration due to gravity g. For form-fit or capture gripping, there are significantly higher permissible workpiece weights.

Closing and opening times: are purely the times that the base jaws or fingers are in motion. Valve switching times, hose fill times, or PLC reaction times are not included, and are to be considered when cycle times are calculated.



Application example

Transfer station with simultaneous 90° reorientation of the workpiece in two axes

- ① RH gripper for small components
- ② Miniature swivel unit SRU-mini

- ③ SKE swivel unit

SCHUNK offers more ...

The following components make the product RH even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



Fittings



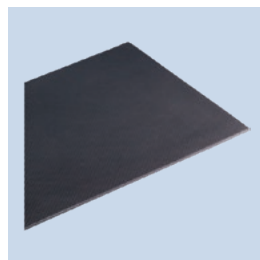
Sensor system



Sensor cables



Pressure maintenance valve



Gripper pads



Plastic inserts

① For more information on these products can be found on the following product pages or at schunk.com. Please contact us: SCHUNK technical hotline +49-7133-103-2696

Options and special information

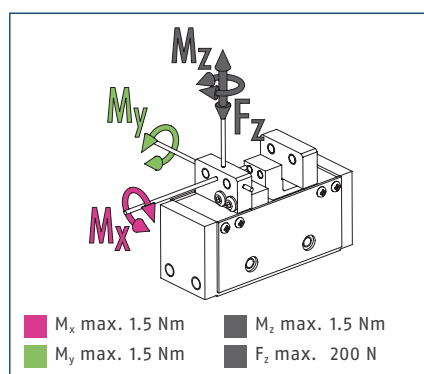
In order to keep the manufacturing costs and thus the sales prices low, the RH series is designed for low-cost production. Therefore repair works are generally not economically feasible.

RH 907

Gripper for small components



Max. loads

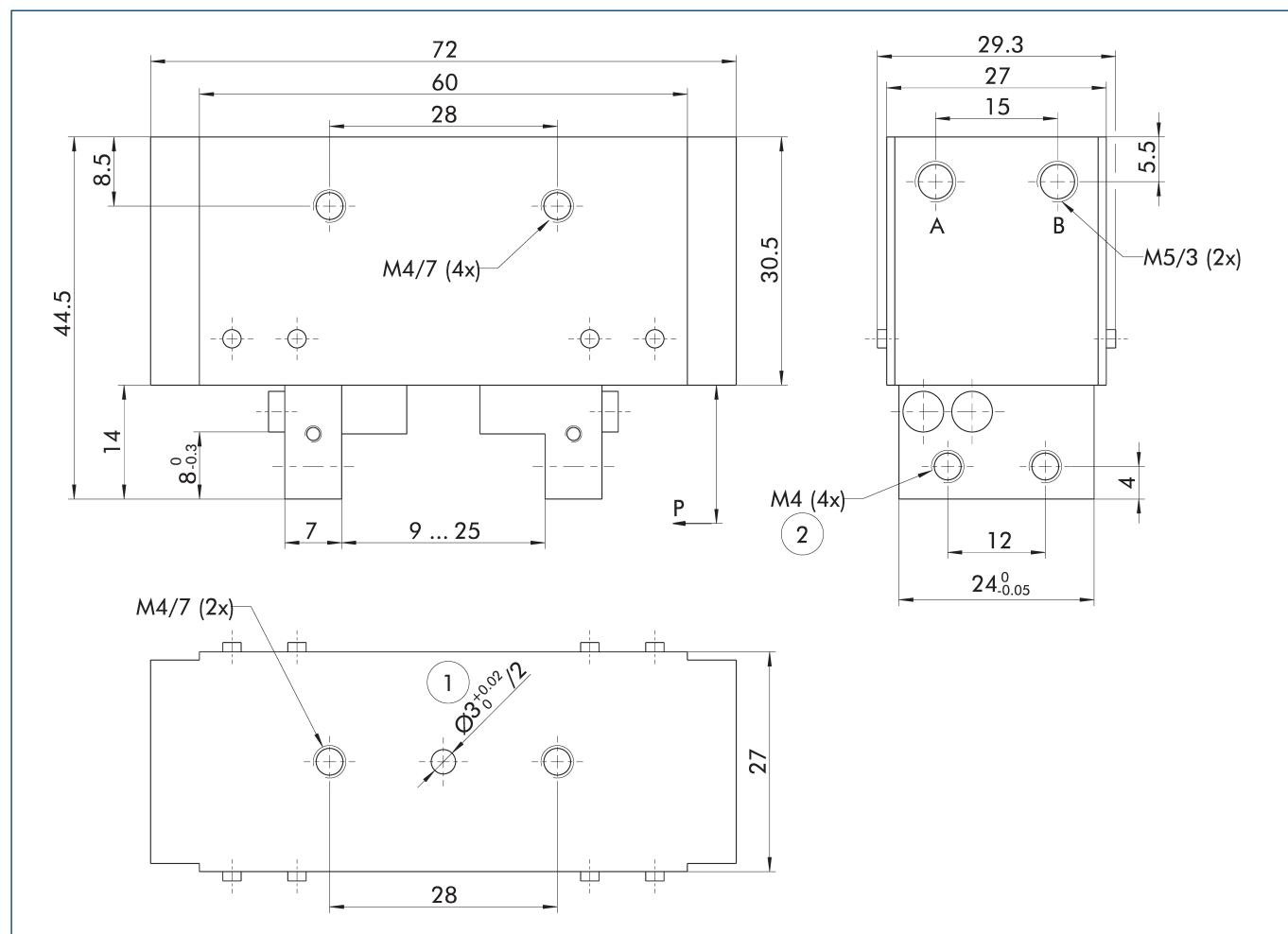


① The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		RH 907
ID		0360200
Stroke per jaw	[mm]	8
Closing/opening force	[N]	80/80
Integrated monitoring		no
Weight	[kg]	0.17
Recommended workpiece weight	[kg]	0.4
Fluid consumption double stroke	[cm ³]	2
Min./nom./max. operating pressure	[bar]	2/6/7
Closing/opening time	[s]	0.17/0.17
Max. permissible finger length	[mm]	20
Max. permissible mass per finger	[kg]	0.05
Protection class IP		30
Min./max. ambient temperature	[°C]	5/60
Repeat accuracy	[mm]	0.01

Main view



The drawing shows the gripper in the basic version with closed jaws, without dimensional consideration of the options described below.

- ① The SDV-P pressure maintenance valve can be used as a gripping force maintenance device (see catalog section on accessories).

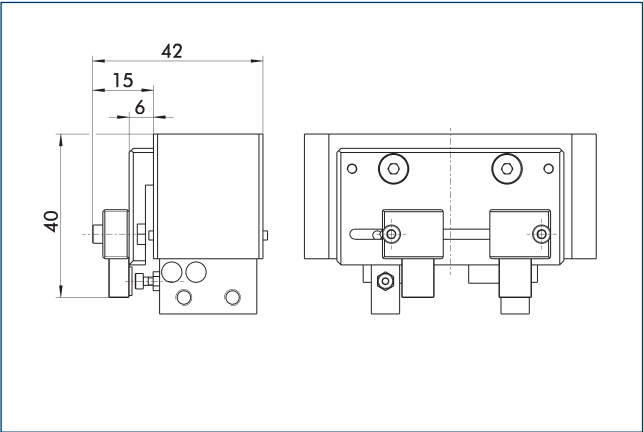
A, a Main / direct connection, gripper opening

B, b Main / direct connection, gripper closing

① Gripper connection

② Finger connection

Attachment kit for proximity switch

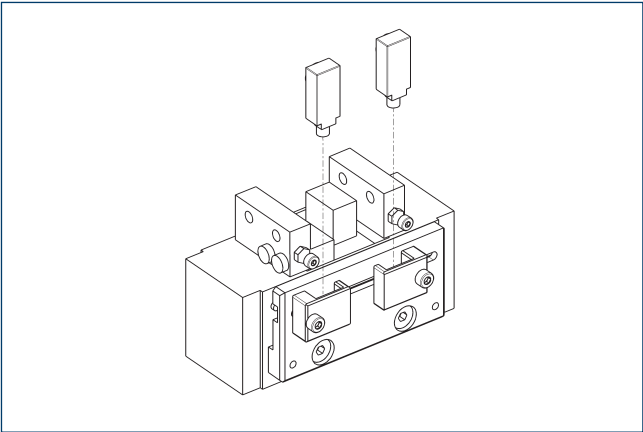


End position monitoring can be mounted with an attachment kit.

Description	ID	
Attachment kit for proximity switch		
AS-RH 907	0360206	

ⓘ This attachment kit needs to be ordered optionally as an accessory.

Inductive Proximity Switches



Directly mounted end position monitoring.

Description	ID	Often combined
Inductive proximity switches		
IN 8-S-M12	0301581	
IN 8-S-M8	0301481	
INK 8-S	9700052	
Cable extension		
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	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	
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	
Sensor distributor		
V2-M12	0301776	●
V2-M8	0301775	●
V4-M12	0301747	
V4-M8	0301746	
V8-M12	0301752	
V8-M8	0301751	

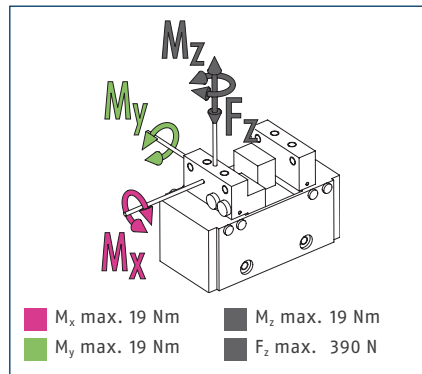
ⓘ Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

RH 925

Gripper for small components



Max. loads

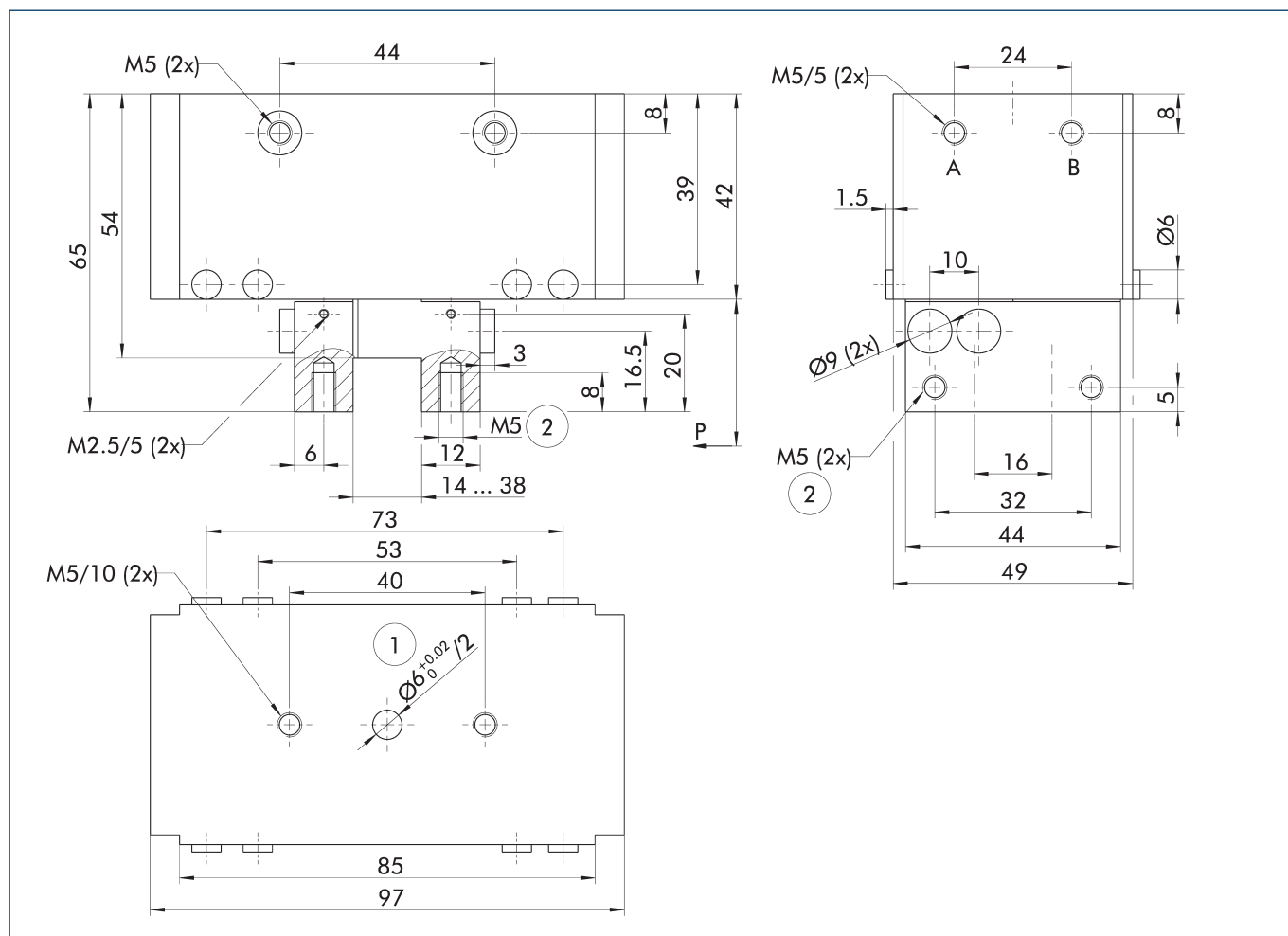


① The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		RH 925	RH 925 PX
ID		0360300	0360301
Stroke per jaw	[mm]	12	12
Closing/opening force	[N]	270/270	270/270
Integrated monitoring		no	no
Weight	[kg]	0.55	0.55
Recommended workpiece weight	[kg]	1.3	1.3
Fluid consumption double stroke	[cm ³]	8	8
Min./nom./max. operating pressure	[bar]	2/6/7	2/6/7
Closing/opening time	[s]	0.5/0.5	0.5/0.5
Max. permissible finger length	[mm]	30	30
Max. permissible mass per finger	[kg]	0.08	0.08
Protection class IP		30	30
Min./max. ambient temperature	[°C]	5/60	5/60
Repeat accuracy	[mm]	0.02	0.02

Main view



The drawing shows the gripper in the basic version with closed jaws, without dimensional consideration of the options described below.

- ① The SDV-P pressure maintenance valve can be used as a gripping force maintenance device (see catalog section on accessories).

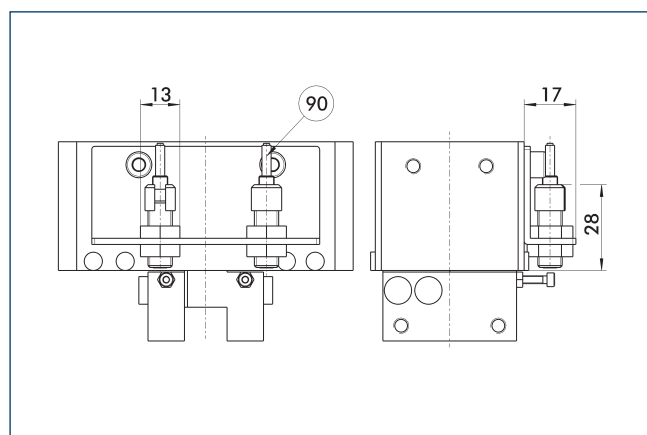
A, a Main / direct connection, gripper opening

B, b Main / direct connection, gripper closing

① Gripper connection

② Finger connection

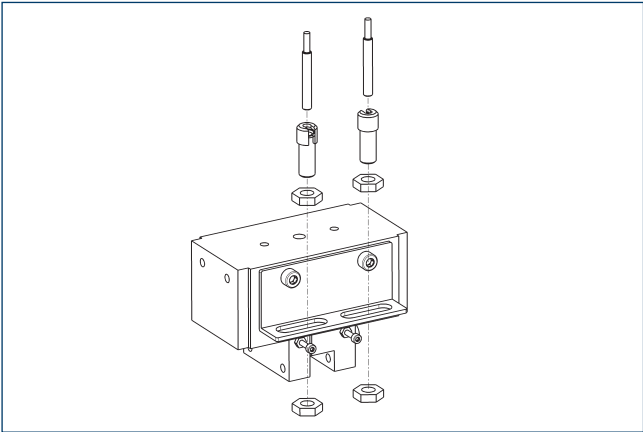
Attachment to the proximity switch



⑨0 Sensor IN ...

For PX versions, the attachment kit for attachment is delivered with the proximity switch.

Inductive Proximity Switches



End position monitoring can only be mounted directly with "PX version"

Description	ID	Often combined
Inductive proximity switches		
IN 50-S-M12	0301575	●
INK 50-S	0301560	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
clip for plug/socket		
CLI-M12	0301464	
Connection cables		
KA BG12-L 3P-0500-PNP	30016369	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Sensor distributor		
V2-M12	0301776	●
V4-M12	0301747	
V8-M12	0301752	

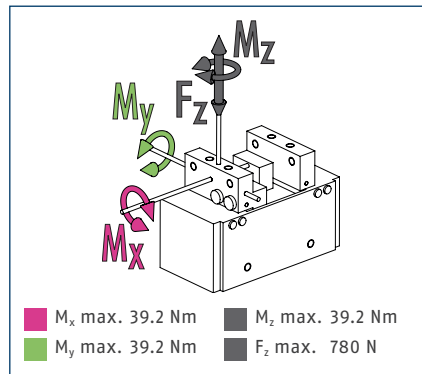
❗ Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

RH 940

Gripper for small components



Max. loads

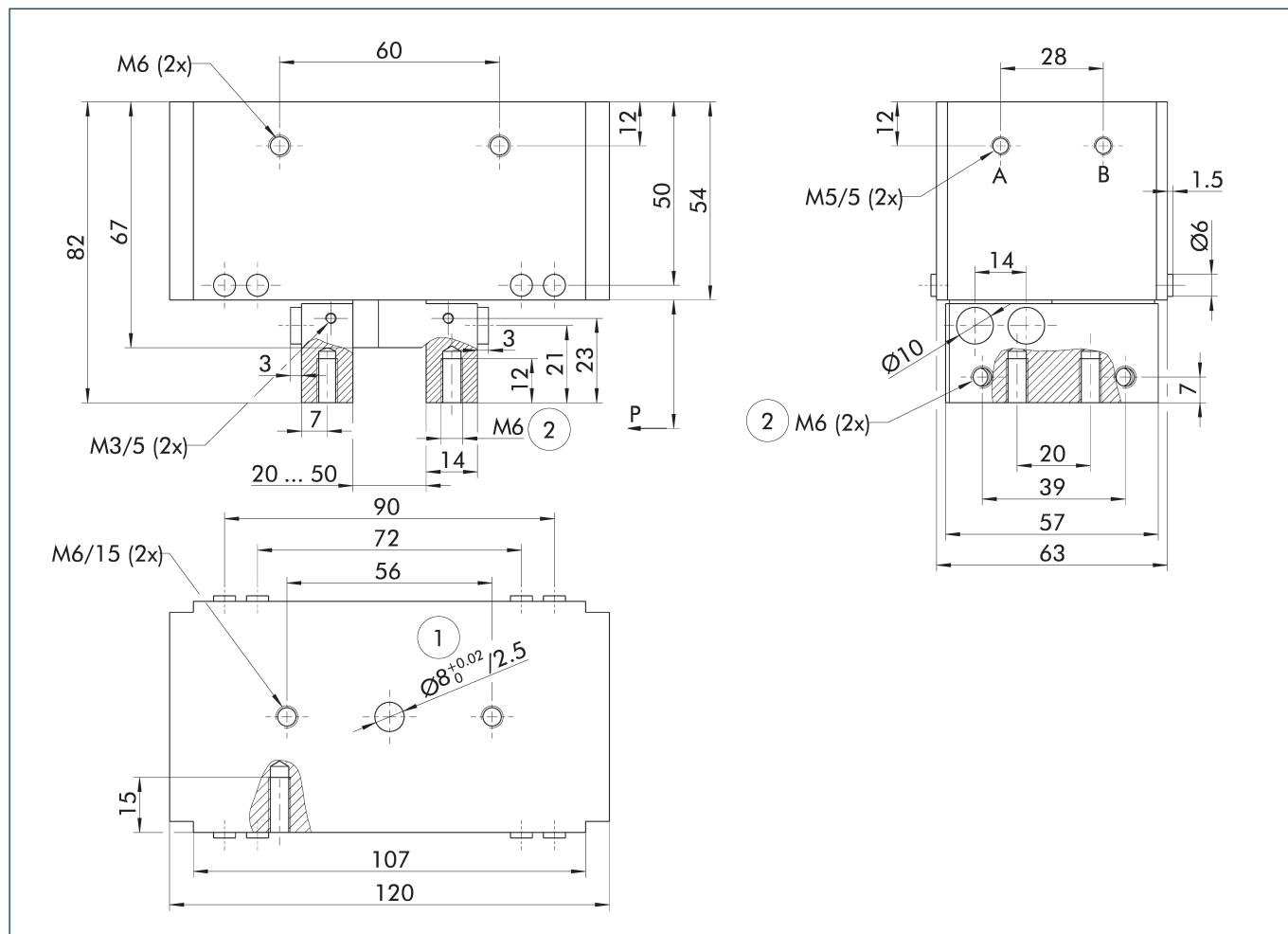


① The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		RH 940	RH 940 PX
ID		0360310	0360311
Stroke per jaw	[mm]	15	15
Closing/opening force	[N]	460/460	460/460
Integrated monitoring		no	no
Weight	[kg]	1.1	1.1
Recommended workpiece weight	[kg]	2.3	2.3
Fluid consumption double stroke	[cm ³]	14	14
Min./nom./max. operating pressure	[bar]	2/6/7	2/6/7
Closing/opening time	[s]	0.5/0.5	0.5/0.5
Max. permissible finger length	[mm]	50	50
Max. permissible mass per finger	[kg]	0.13	0.13
Protection class IP		30	30
Min./max. ambient temperature	[°C]	5/60	5/60
Repeat accuracy	[mm]	0.02	0.02

Main view



The drawing shows the gripper in the basic version with closed jaws, without dimensional consideration of the options described below.

- ① The SDV-P pressure maintenance valve can be used as a gripping force maintenance device (see catalog section on accessories).

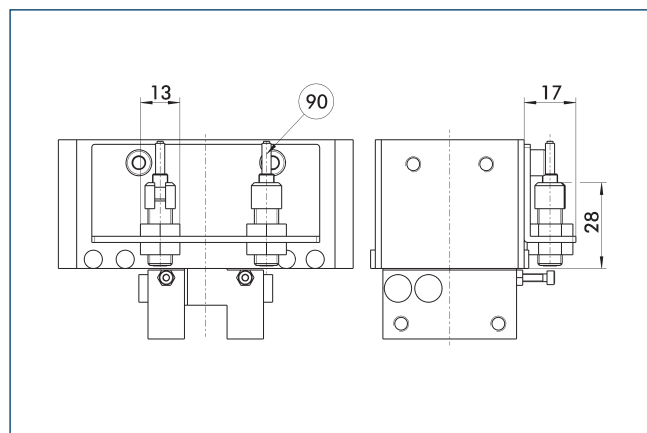
A, a Main / direct connection, gripper opening

B, b Main / direct connection, gripper closing

① Gripper connection

② Finger connection

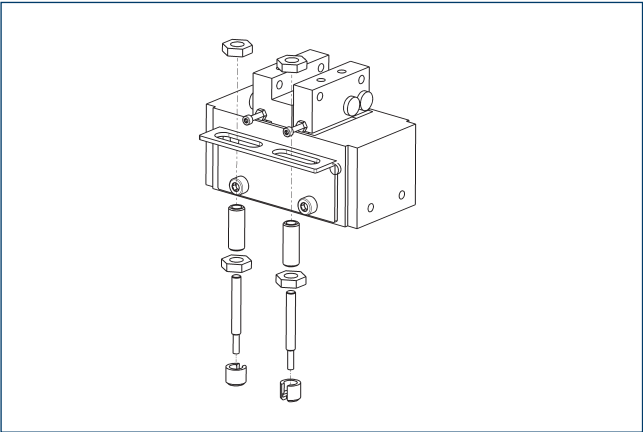
Attachment to the proximity switch



⑨ Sensor IN ...

For PX versions, the attachment kit for attachment is delivered with the proximity switch.

Inductive Proximity Switches



End position monitoring can only be mounted directly with "PX version"

Description	ID	Often combined
Inductive proximity switches		
IN 50-S-M12	0301575	●
INK 50-S	0301560	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
clip for plug/socket		
CLI-M12	0301464	
Connection cables		
KA BG12-L 3P-0500-PNP	30016369	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Sensor distributor		
V2-M12	0301776	●
V4-M12	0301747	
V8-M12	0301752	

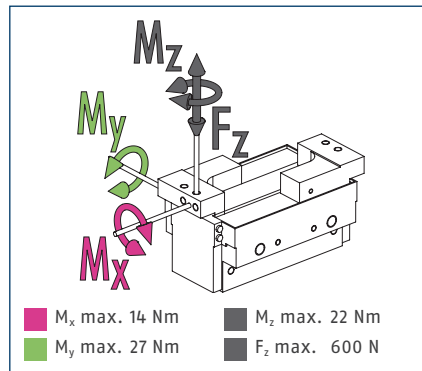
❗ Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

RH 9010

Gripper for small components



Max. loads

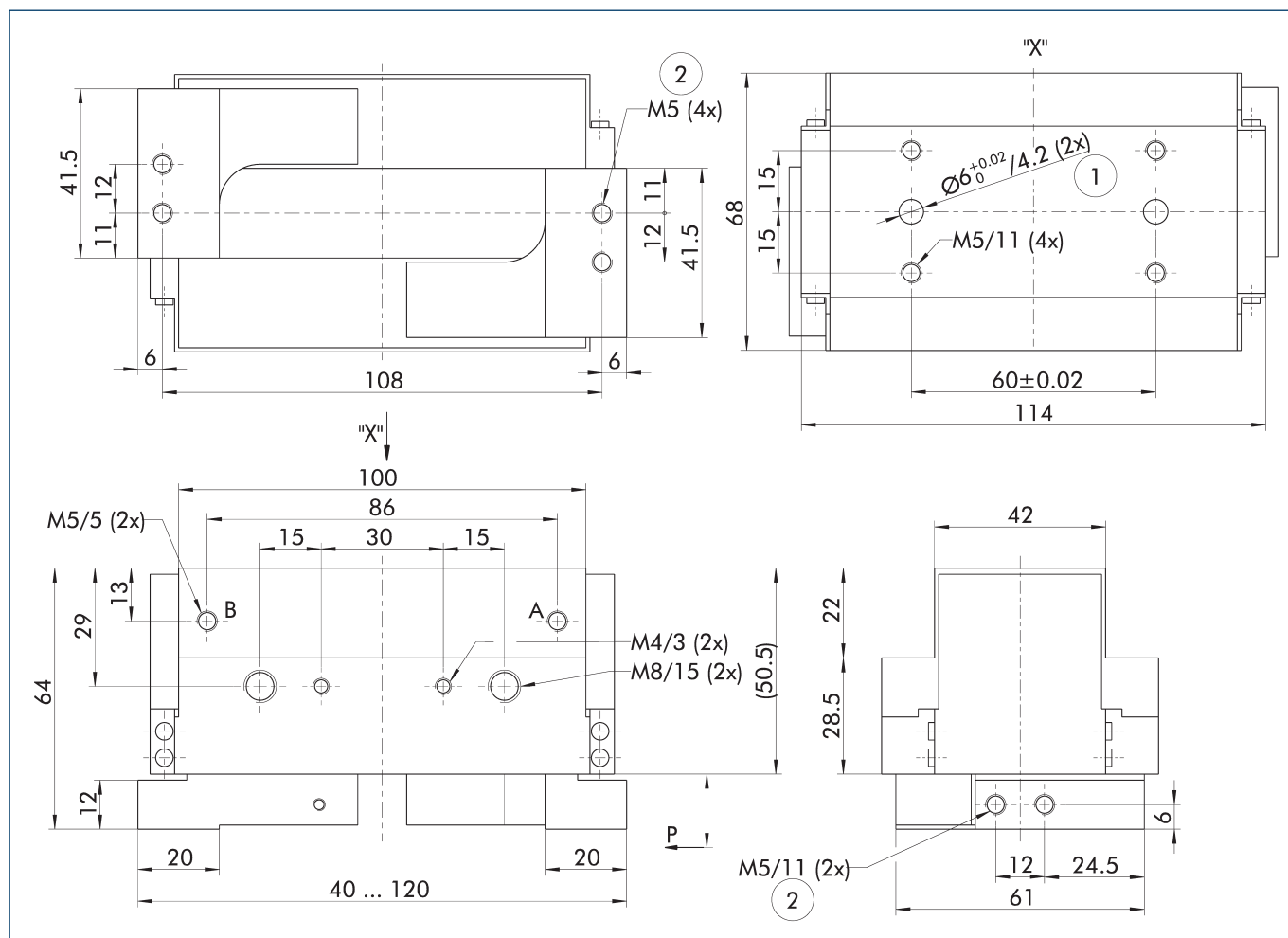


① The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		RH 9010
ID		0360141
Stroke per jaw	[mm]	40
Closing/opening force	[N]	150/150
Integrated monitoring		no
Weight	[kg]	0.89
Recommended workpiece weight	[kg]	0.75
Fluid consumption double stroke	[cm ³]	8
Min./nom./max. operating pressure	[bar]	2/6/7
Closing/opening time	[s]	0.5/0.5
Max. permissible finger length	[mm]	100
Max. permissible mass per finger	[kg]	0.15
Protection class IP		30
Min./max. ambient temperature	[°C]	5/60
Repeat accuracy	[mm]	0.02

Main view



The drawing shows the gripper in the basic version with closed jaws, without dimensional consideration of the options described below.

- ① The SDV-P pressure maintenance valve can be used as a gripping force maintenance device (see catalog section on accessories).

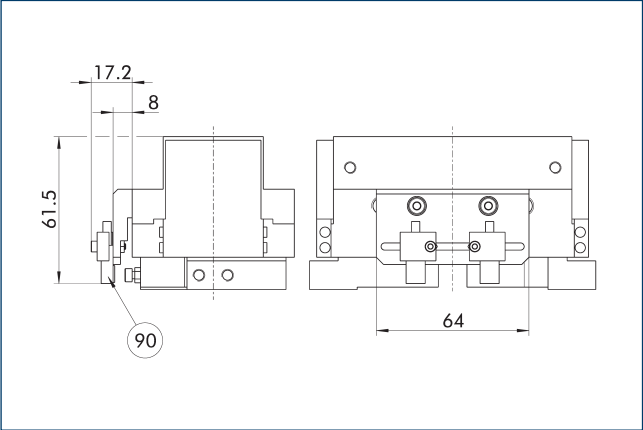
A, a Main / direct connection, gripper opening

B, b Main / direct connection, gripper closing

① Gripper connection

② Finger connection

Attachment kit for proximity switch



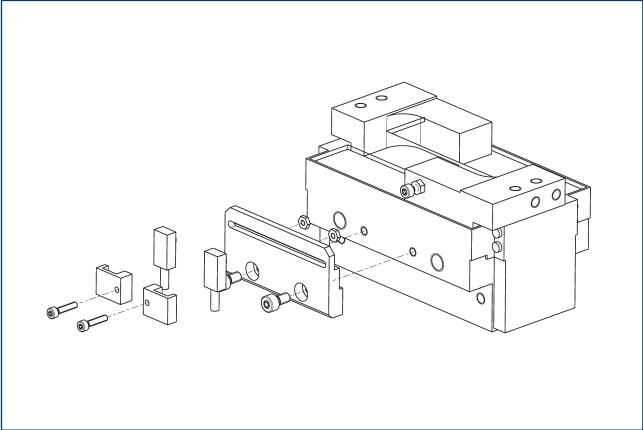
90 Sensor IN ...

End position monitoring can be mounted with an attachment kit.

Description	ID
Attachment kit for proximity switch	
AS-RH 9010	0360207

ⓘ This attachment kit needs to be ordered optionally as an accessory.

Inductive Proximity Switches



End position monitoring can be mounted with an attachment kit.

Description	ID	Often combined
Inductive proximity switches		
IN 8-S-M12	0301581	
IN 8-S-M8	0301481	●
INK 8-S	9700052	
Cable extension		
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	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	
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	
Sensor distributor		
V2-M12	0301776	●
V2-M8	0301775	●
V4-M12	0301747	
V4-M8	0301746	
V8-M12	0301752	
V8-M8	0301751	

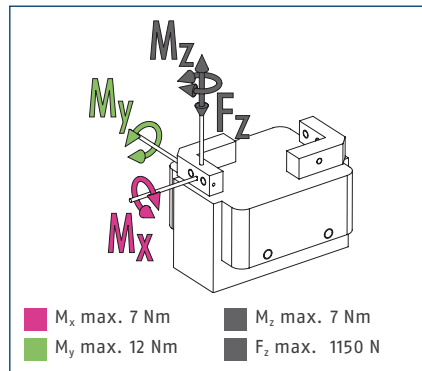
ⓘ Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

RH 918

Gripper for small components



Max. loads

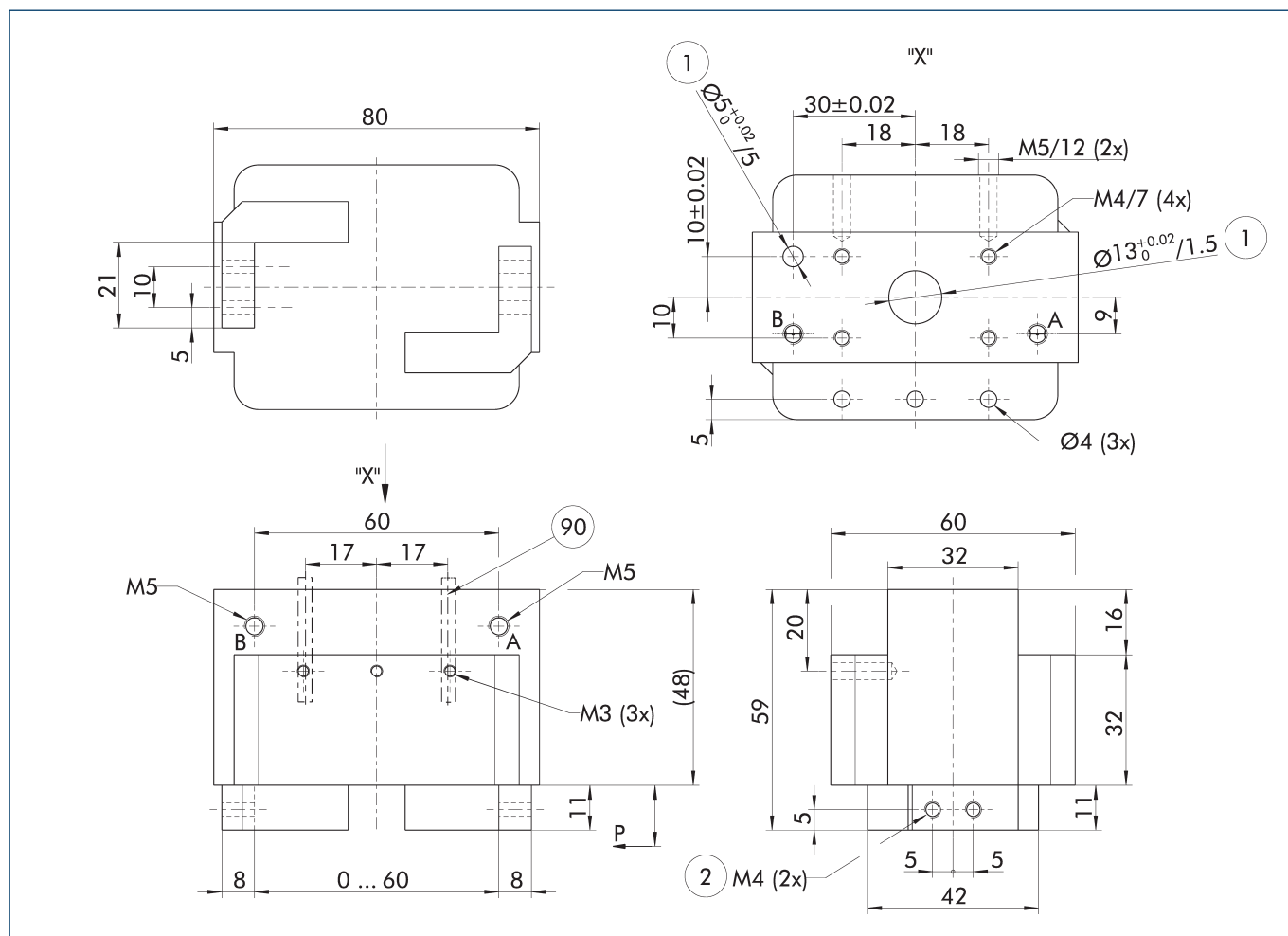


① The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		RH 918
ID		0360140
Stroke per jaw	[mm]	30
Closing/opening force	[N]	100/100
Integrated monitoring		no
Weight	[kg]	0.48
Recommended workpiece weight	[kg]	0.5
Fluid consumption double stroke	[cm ³]	16
Min./nom./max. operating pressure	[bar]	2/6/7
Closing/opening time	[s]	0.4/0.4
Max. permissible finger length	[mm]	65
Max. permissible mass per finger	[kg]	0.12
Protection class IP		30
Min./max. ambient temperature	[°C]	5/60
Repeat accuracy	[mm]	0.02

Main view



The drawing shows the gripper in the basic version with closed jaws, without dimensional consideration of the options described below.

- ① The SDV-P pressure maintenance valve can be used as a gripping force maintenance device (see catalog section on accessories).

A, a Main / direct connection, gripper opening

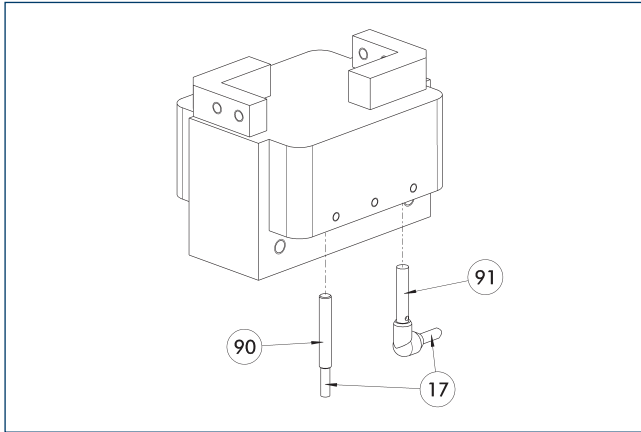
B, b Main / direct connection, gripper closing

① Gripper connection

② Finger connection

90 Sensor IN ...

Inductive Proximity Switches



① Cable outlet

② Sensor IN...-SA

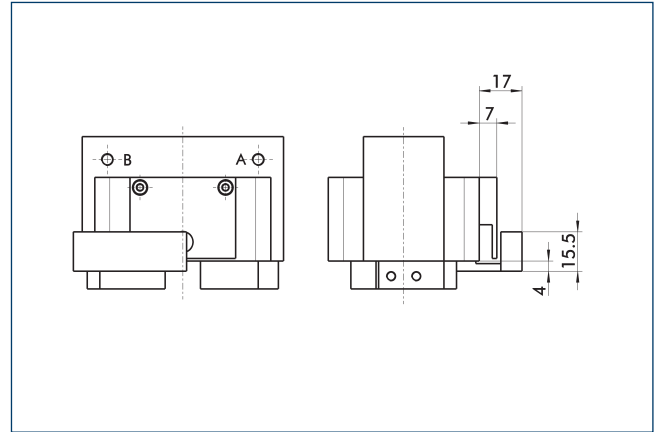
③ Sensor IN ...

Directly mounted end position monitoring.

Description	ID	Often combined
Inductive proximity switches		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	●
INK 40-S	0301555	
Inductive proximity switch with lateral cable outlet		
IN 40-S-M12-SA	0301577	
IN 40-S-M8-SA	0301473	●
INK 40-S-SA	0301565	
Cable extension		
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	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	
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	
Sensor distributor		
V2-M12	0301776	●
V2-M8	0301775	●
V4-M12	0301747	
V4-M8	0301746	
V8-M12	0301752	
V8-M8	0301751	

① Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

Attachment kit for FPS

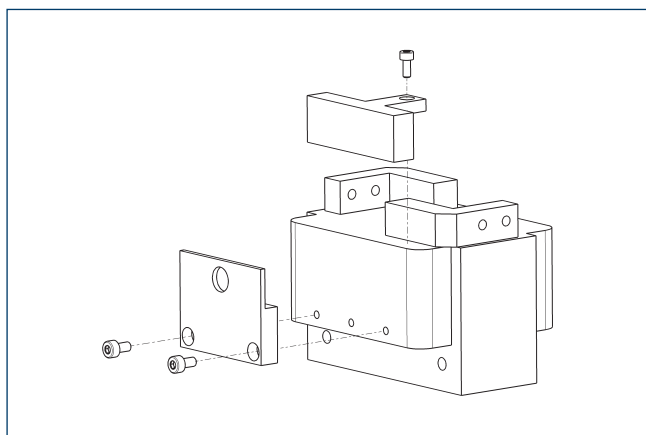


The following FPS position sensor can differentiate between five programmable areas or switching points for the stroke of a gripper, and can be used in connection with a PC as a measuring system.

Description	ID	
Attachment kit for FPS		
AS-FPS-RH 918	0301718	

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

Flexible position sensor



Flexible position monitoring of up to five positions.

Description	ID	Often combined
Attachment kit for FPS		
AS-FPS-RH 918	0301718	
Sensor		
FPS-S 13	0301705	
Cable extension		
KV BG08-SG08 3P-0050	0301598	
KV BG08-SG08 3P-0100	0301599	
Evaluation electronics		
FPS-F5	0301805	●

- ① When using an FPS system, an FPS sensor (FPS-S) as well as an electronic processor (FPS-F5 / F5 T) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are optionally available – see catalog chapter “Accessories.”

SCHUNK GmbH & Co. KG
Spann- und Greiftechnik

Bahnhofstr. 106 - 134
D-74348 Lauffen/Neckar
Tel. +49-7133-103-0
Fax +49-7133-103-2399
info@de.schunk.com
schunk.com

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