



Superior Clamping and Gripping



## Product Information

Gripper for small components RH 918

# RH

Gripper for small components

## 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.

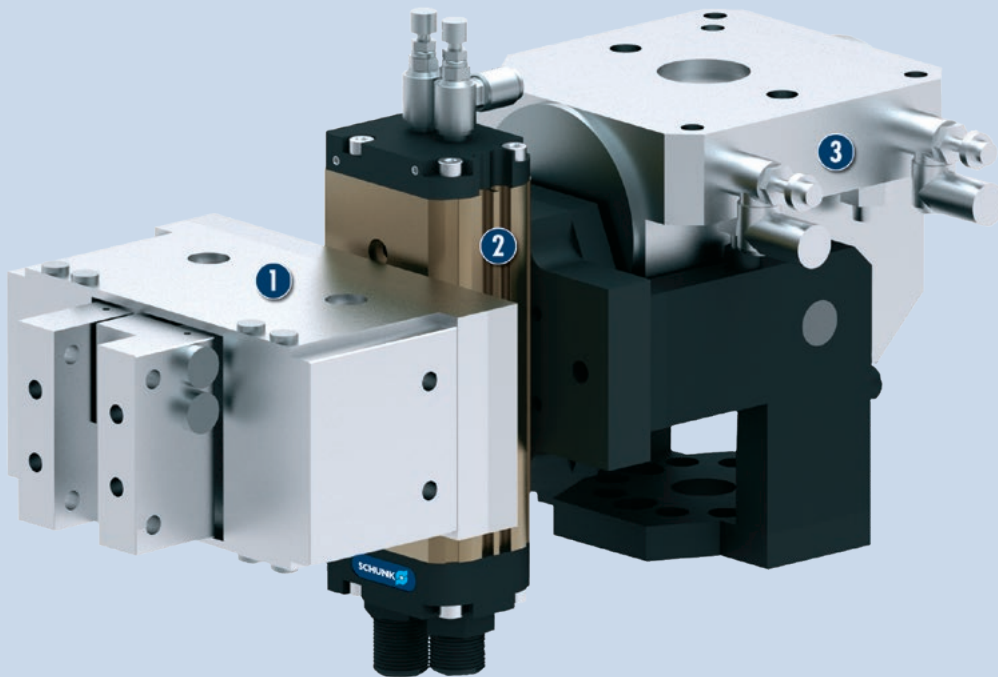
**Gripping force:** is the arithmetic sum of the individual force applied to each jaw at distance P (see illustration).

**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



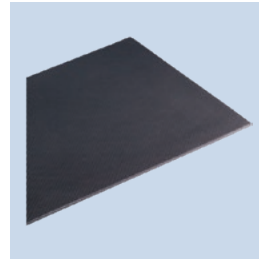
Sensor system



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](http://schunk.com). Please contact us: SCHUNK technical hotline +49-7133-103-2696

## Options and special information

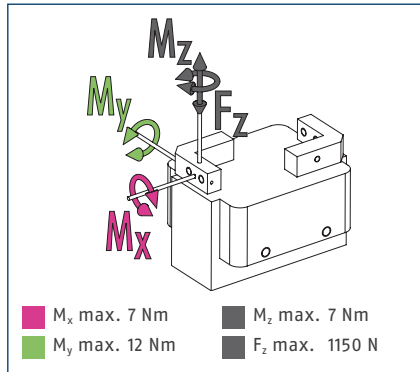
In order to keep the manufacturing costs and thus the sales prices low, the RH series is designed for low-cost production. Therefore repair works are generally not economically feasible.

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## Max. loads

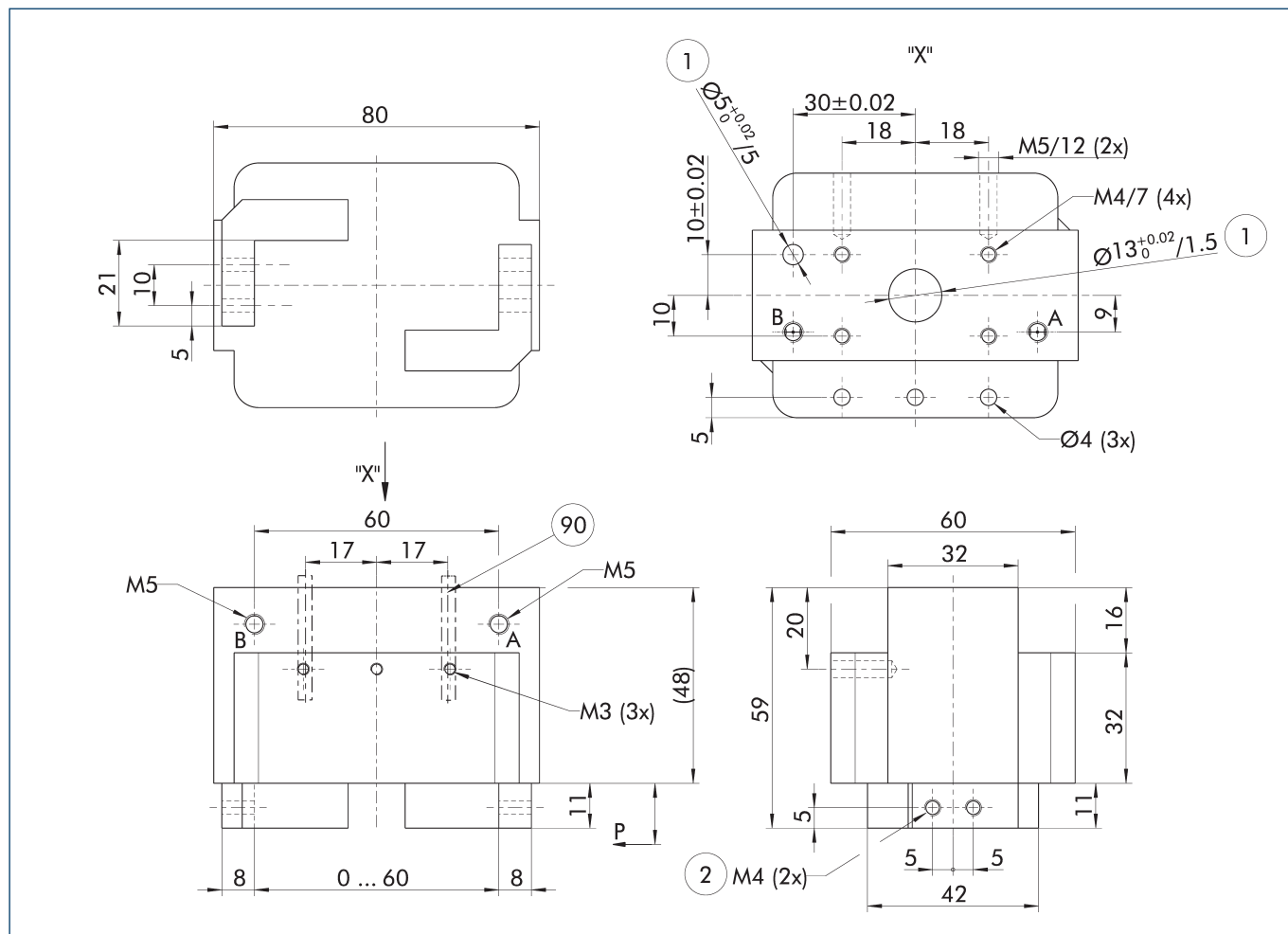


ⓘ The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously.  $M_y$  may arise in addition to the moment generated by the gripping force itself.

## 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 <sup>3</sup> ]	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

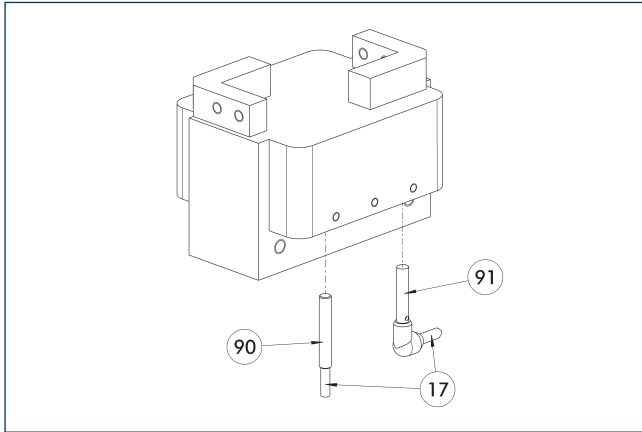
② Finger connection

90 Sensor IN ...

# RH 918

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## Inductive Proximity Switches



17 Cable outlet

91 Sensor IN..-SA

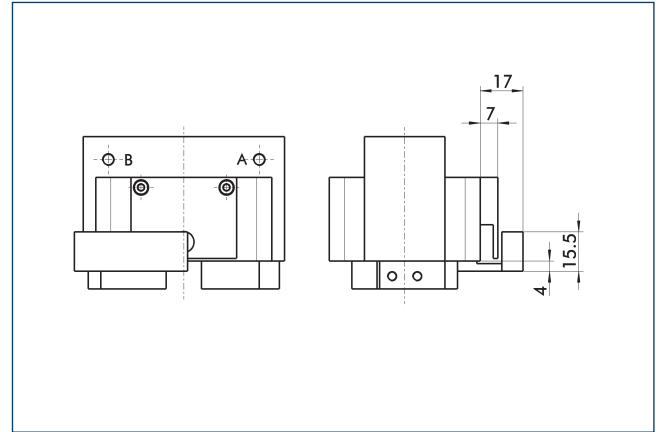
90 Sensor IN ...

Directly mounted end position monitoring.

Description	ID	Often combined
<b>Inductive proximity switches</b>		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	●
INK 40-S	0301555	
<b>Inductive proximity switch with lateral cable outlet</b>		
IN 40-S-M12-SA	0301577	
IN 40-S-M8-SA	0301473	●
INK 40-S-SA	0301565	
<b>Cable extension</b>		
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	
<b>clip for plug/socket</b>		
CLI-M12	0301464	
CLI-M8	0301463	
<b>Connection cables</b>		
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	
<b>Sensor distributor</b>		
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



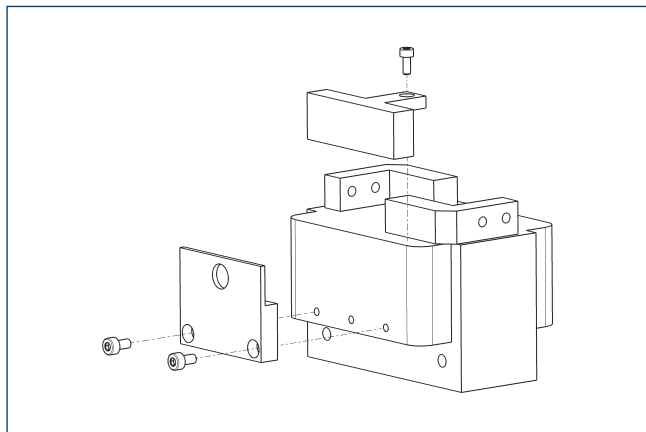
The following FPS position sensor can differentiate between five programmable areas or switching points for the stroke of a gripper, and can be used in connection with a PC as a measuring system.

Description	ID	
<b>Attachment kit for FPS</b>		
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."

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Jens Lehmann, German goalkeeper legend, SCHUNK brand ambassador since 2012 for safe, precise gripping and holding.  
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