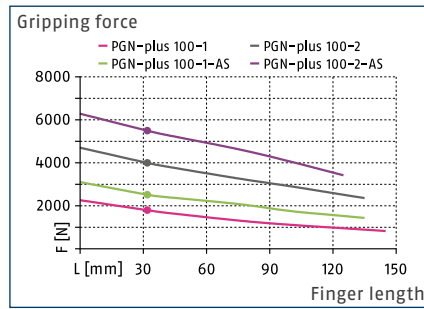


PZN-plus 100

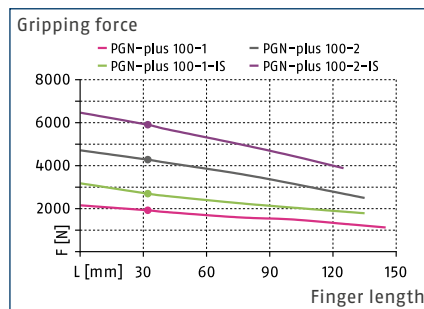
SCHUNK Grippers pneumatic | 3-Finger Centric Grippers | Universal Gripper



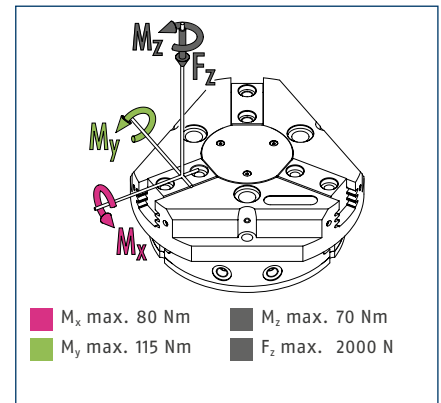
Gripping force, O.D. gripping



Gripping force, I.D. gripping



Finger load



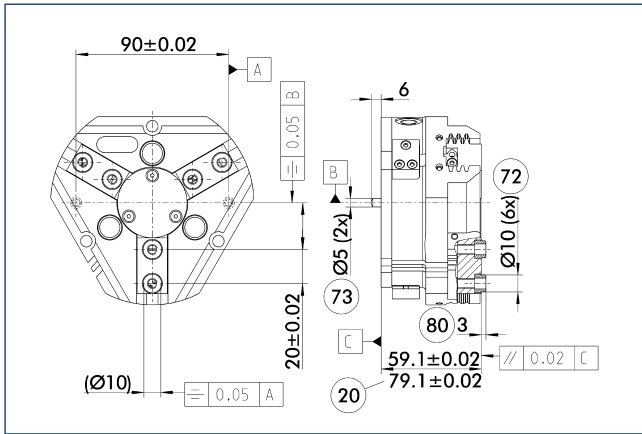
① The indicated moments and forces are static values, apply per base jaw and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself. If the max. permitted finger weight is exceeded, it is impreative to throttle the air supply so that the jaw movement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

Technical data

Description		PZN-plus 100-1	PZN-plus 100-2	PZN-plus 100-1-AS	PZN-plus 100-2-AS	PZN-plus 100-1-IS	PZN-plus 100-2-IS
ID		0303312	0303412	0303512	0303612	0303542	0303642
Stroke per jaw	[mm]	10	5	10	5	10	5
Closing- / opening force	[N]	1800/1920	4000/4280	2520/-	5500/-	-/2700	-/5900
min. spring force	[N]			720	1500	780	1620
Weight	[kg]	1.41	1.41	1.95	1.95	1.95	1.95
Recommended workpiece weight	[kg]	9	20	9	20	9	20
Fluid consumption per double stroke	[cm ³]	120	120	210	210	210	210
min. / max. operating pressure	[bar]	2/8	2/8	4/6.5	4/6.5	4/6.5	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing- / opening time	[s]	0.1/0.1	0.1/0.1	0.1/0.2	0.1/0.2	0.2/0.1	0.2/0.1
Closing- / opening time only with spring	[s]			0.25	0.25	0.25	0.25
max. permitted finger length	[mm]	145	135	135	125	135	125
max. permitted weight per finger	[kg]	1.1	1.1	1.1	1.1	1.1	1.1
IP class		40	40	40	40	40	40
min. / max. ambient temperature	[°C]	5/90	5/90	5/90	5/90	5/90	5/90
Repeat accuracy	[mm]	0.01	0.01	0.01	0.01	0.01	0.01
Cleanroom class ISO 14644-1		5	5	5	5	5	5
Options and their characteristics							
Dust-tight version		37303312	37303412	37303512	37303612	37303542	37303642
IP class		64	64	64	64	64	64
Weight	[kg]	1.9	1.9	2.44	2.44	2.44	2.44
Anti-corrosion version		38303312	38303412	38303512	38303612	38303542	38303642
High-temperature version		39303312	39303412	39303512	39303612	39303542	39303642
min. / max. ambient temperature	[°C]	5/130	5/130	5/130	5/130	5/130	5/130
Force intensified version		0372203	0372213	0372223		0372243	
Closing- / opening force	[N]	3240/3455	7200/7705	3960/-		-/4235	
Weight	[kg]	2.3	2.3			2.7	
Maximum pressure	[bar]	6	6	6		6	
max. permitted finger length	[mm]	100	80	80		80	
Precision version		0303342	0303442	0303492	0303592		

① The full gripping force according to the data table is only realised after around 100 gripping cycles.

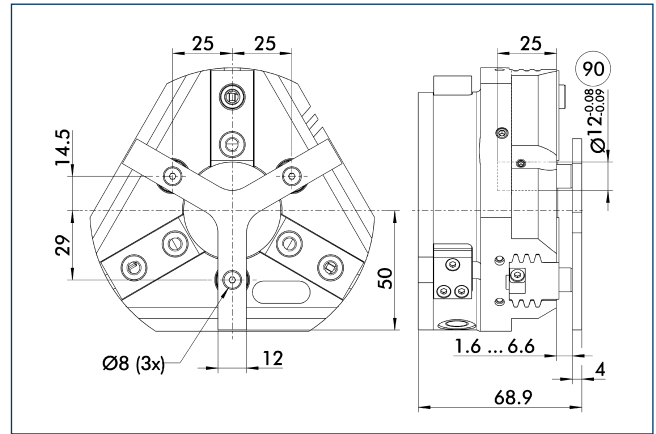
Precision version



- 20 For AS / IS version
- 72 Fit for centering sleeves
- 73 Fit for centering pins
- 80 Depth of the centering sleeve hole in the mating part

The indicated tolerances just refer to the types of precision versions shown in the chart of technical specifications. All other types of precision versions are available on request.

Spring-loaded pressure piece



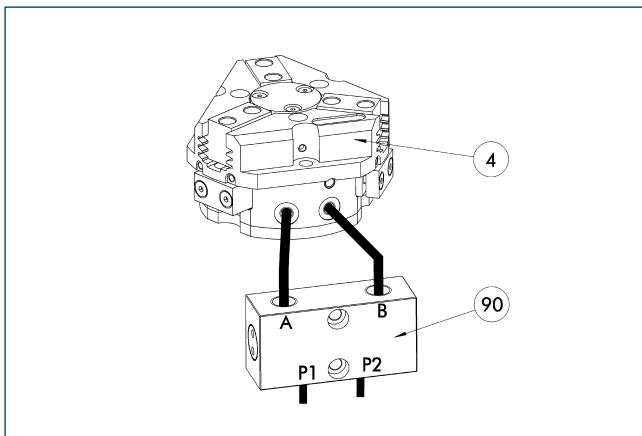
- 90 Guide pin

For spring-supported positioning of the workpiece against a stop after the gripper has opened. Especially developed for loading machines.

Description	ID	Stroke [mm]	Min. force [N]
Spring-loaded pressure piece			
A-PZN-plus/DPZ-plus 100	0303722	5	35

- ① The pressure piece cannot be combined with the dust-tight option. Please ask for details about a special pressure piece.

SDV-P pressure maintenance valve

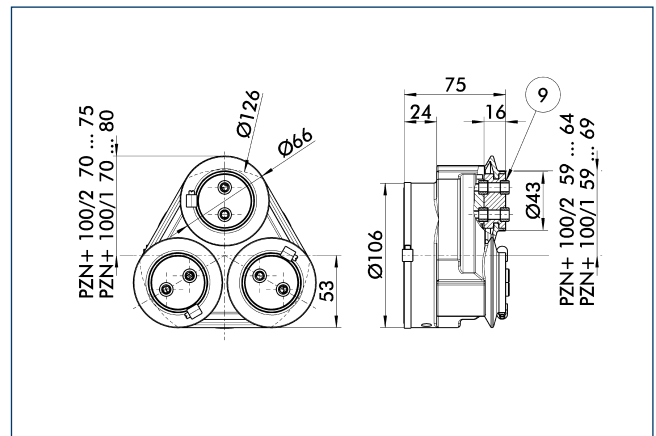


- 4 Gripper
- 90 SDV-P pressure maintenance valve

The SDV-P pressure maintenance valves ensure that the pressure in the piston chamber of pneumatic gripping, rotary, linear, and quick-change modules is maintained temporarily during an emergency stop.

Description	ID
Pressure maintenance valve	
SDV-P 04	0403130

HUE PZN-plus 100 protective cover



- 9 For mounting screw connection diagram, see basic version

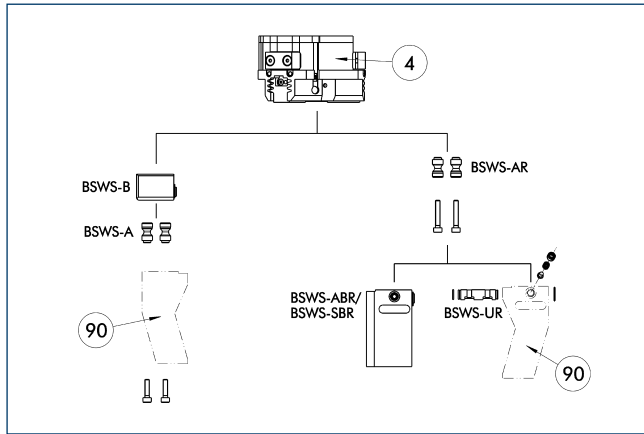
The HUE protective cover completely protects the gripper against external influences up to IP65 if an additional sealing of the cover bottom is provided as part of the application. The mounting diagram shifts by the height of the intermediate jaw.

Description	ID	Cleanroom class ISO 14644-1	IP class
Protection cover			
HUE PZN-plus 100	0303482	2	65

PZN-plus 100

SCHUNK Grippers pneumatic | 3-Finger Centric Grippers | Universal Gripper

BSWS jaw quick-change systems



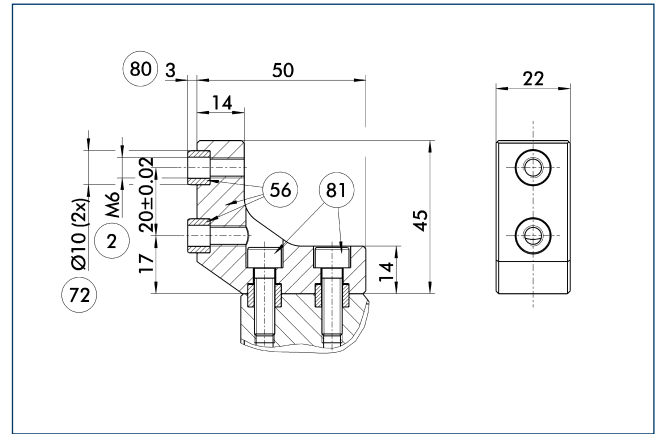
- ④ Gripper
- ⑨⑩ Customized gripper fingers

There are various jaw quick-change systems available for the grippers. For detailed information, refer to the appropriate product.

Description	ID	
Jaw quick-change system adapter		
BSWS-AR 100	0300094	
BSWS-A 100	0303026	
Jaw quick-change system base		
BSWS-B 100	0303027	
Finger blanks with jaw quick-change system		
BSWS-ABR-PGZN-plus 100	0300074	
BSWS-SBR-PGZN-plus 100	0300084	
Jaw quick-change system reversed		
BSWS-UR 100	0302993	

① Only the systems listed in the table can be used.

ZBA L-plus 100 intermediate jaws

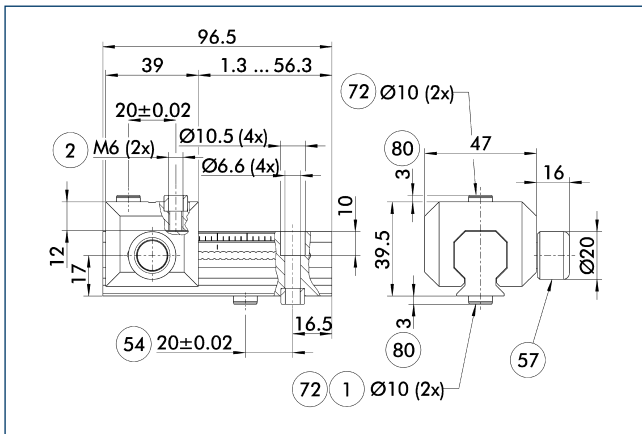


- ② Finger connection
- ⑤⑥ Included in delivery
- ⑦② Fit for centering sleeves
- ⑧⑩ Depth of the centering sleeve hole in the mating part
- ⑧① Not included in the scope of delivery

Optionally intermediate jaws can be used, enabling direct connection and alignment of top jaws and various standard accessories in Z-direction.

Description	ID	Material	Scope of delivery
Intermediate jaws			
ZBA-L-plus 100	0311742	Aluminum	1

UZZ 100 universal intermediate jaw

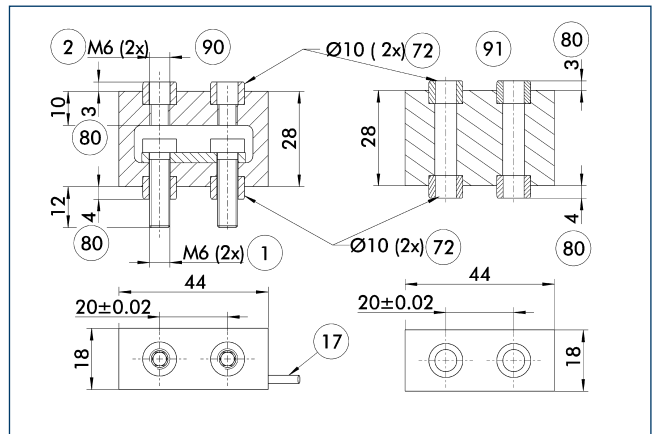


- ① Gripper connection
- ② Finger connection
- ⑤④ Optional right or left connection
- ⑤⑦ Locking
- ⑦② Fit for centering sleeves
- ⑧① Depth of the centering sleeve hole in the mating part

The universal intermediate jaw allows fast tool-free and reliable plugging and shifting of top jaws at the gripper.

Description	ID	Grid dimension [mm]
Universal intermediate jaw		
UZZ 100	0300044	2.5
UZZ-S 100	5518272	2.5
Finger blanks		
ABR-PGZN-plus 100	0300012	
SBR-PGZN-plus 100	0300022	

FMS-ZBA / ZBP 100 force-measuring jaws



- ① Gripper connection
- ② Finger connection
- ①⑦ Cable outlet
- ⑧① Depth of the centering sleeve hole in the mating part
- ⑨① Active intermediate jaws
- ⑨② Passive intermediate jaws

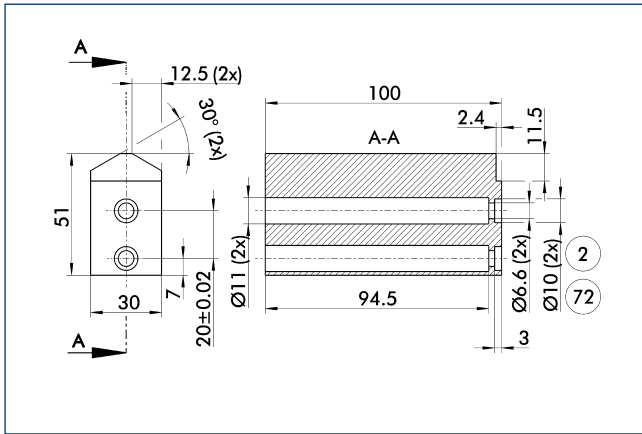
Force measuring jaws measure gripping forces, but can also determine workpiece weights or dimensional deviations. There are active and passive intermediate jaws (FMS-ZBA or FMS-ZBP). At least one active force measuring jaw is required per gripper, the rest can be passive. For each active jaw, a FMS-A control unit and a FMS-AK connection cable are required.

Description	ID	Often combined
Active intermediate jaws		
FMS-ZBA 100	0301836	
Passive intermediate jaws		
FMS-ZBP 100	0301837	
Connection cables		
FMS-AK0200	0301820	●
FMS-AK0500	0301821	
FMS-AK1000	0301822	
FMS-AK2000	0301823	
Electronic processor		
FMS-A1	0301810	

PZN-plus 100

SCHUNK Grippers pneumatic | 3-Finger Centric Grippers | Universal Gripper

ABR- / SBR-PGZN-plus 100 finger blanks



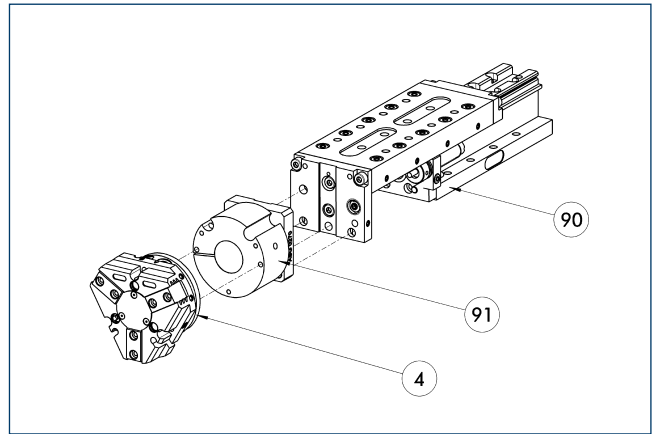
② Finger connection

⑦ Fit for centering sleeves

Finger blanks for customized subsequent machining.

Description	ID	Material	Scope of delivery
Finger blanks			
ABR-PGZN-plus 100	0300012	Aluminum	1
SBR-PGZN-plus 100	0300022	16MnCr5	1

Modular assembly automation



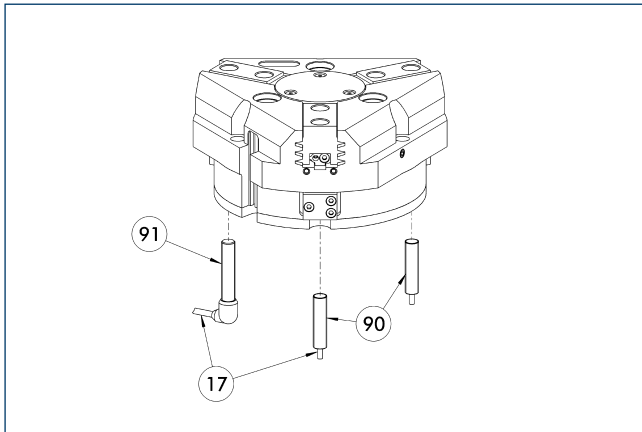
④ Gripper

⑨ ASG adapter plate

⑨ CLM / KLM / LM / ELM / ELS / HLM linear module

Gripper and linear modules can be combined with standard adapters out of the modular assembly system. For more information see our catalog "Modular Assembly Automation".

Inductive proximity switches



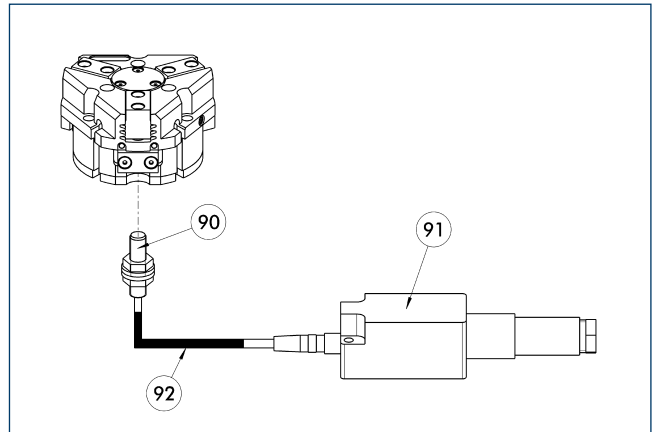
- 17 Cable outlet
- 90 IN ... sensor
- 91 IN ...-SA sensor

Directly mounted limit position monitor.

Description	ID	Often combined
Inductive proximity switches		
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	●
INK 80-S	0301550	
Inductive proximity switches with lateral outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	●
INK 80-S-SA	0301566	
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	
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-M8	0301775	●
V2-M12	0301776	●
V4-M12	0301747	
V4-M8	0301746	

- ① Two sensors (closer/S) are required for each unit, plus extension cables as an option. Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Flexible position sensor



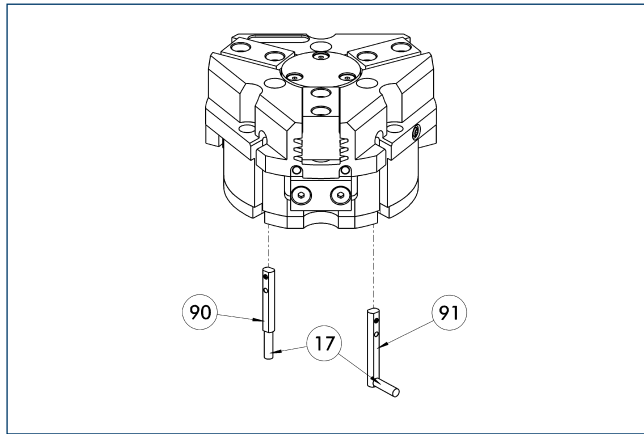
- 90 FPS-S sensor
- 91 FPS-F5 / -F5 T electronic processor
- 92 Cable extensions

Flexible position monitoring of up to five positions.

Description	ID	Often combined
Mounting kit for FPS		
AS-FPS-PGZN-plus 100-1	0301634	
AS-FPS-PGZN-plus 100-2/PZB 125	0301635	
Electronic processor		
FPS-F5	0301805	●
FPS-F5 T	0301807	
Sensor		
FPS-S M8	0301704	
Clip for plug / socket		
CLI-M8	0301463	

- ① When using a FPS system, a FPS sensor (FPS-S) and a control unit (FPS-F5 / F5 T) 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.

MMS electronic magnetic switches



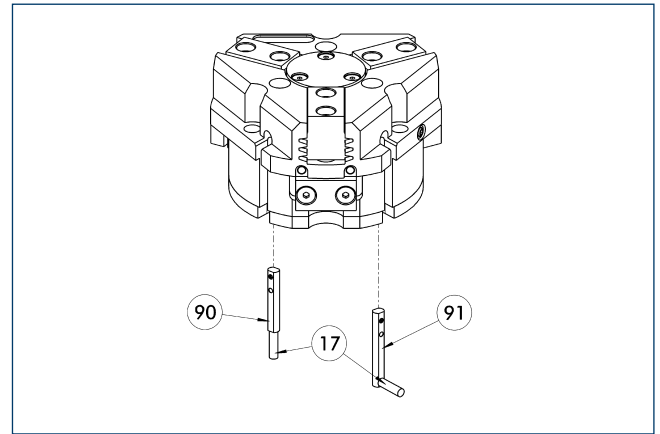
⑰ Cable outlet
 ⑨① MMS 22...-SA sensor
 ⑨② MMS 22... sensor

End position monitoring for mounting in the C-slot.

Description	ID	Often combined
MMS electronic magnetic switches		
MMS 22-S-M8-PNP	0301032	●
MMSK 22-S-PNP	0301034	
MMS electronic magnetic switches with lateral cable outlet		
MMS 22-S-M8-PNP-SA	0301042	●
MMSK 22-S-PNP-SA	0301044	
Reed switches		
RMS 22-S-M8	0377720	●
Cable extensions		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
Clip for plug / socket		
CLI-M8	0301463	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
RSS radio sensor system		
RSS-T2	0377710	
Sensor distributor		
V2-M8	0301775	●
V4-M8	0301746	
V8-M8	0301751	

① Two sensors (closer/S) are required for each unit, plus extension cables as an option. Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

MMS PI1 programmable magnetic switches



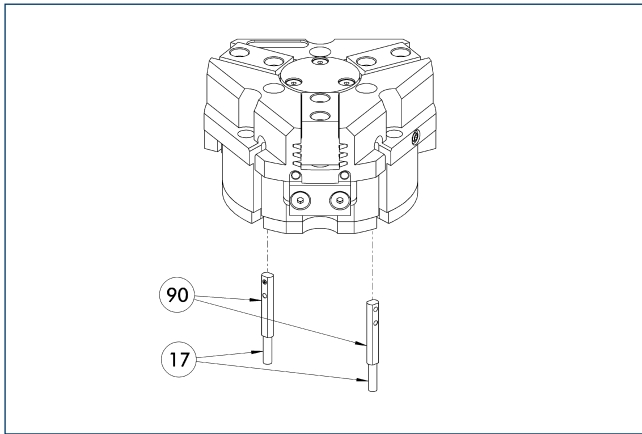
⑰ Cable outlet
 ⑨① MMS 22...-PI1-...-SA sensor
 ⑨② MMS 22...-PI1-... sensor

Position query with one programmable position per sensor and electronics integrated in sensor. Programmable via MT magnet teaching tool (included in the scope of delivery) or ST plug teaching tool (optional). Limit position query mounted in C-groove. If the ST plug teaching tools are listed in the table, teaching can only take place with the ST plug teaching tools.

Description	ID	Often combined
Plug teaching tool		
ST-MMS 22-PI1-PNP	0301025	
MMS PI1 programmable magnetic switches		
MMS 22-PI1-S-M8-PNP	0301160	●
MMSK 22-PI1-S-PNP	0301162	
MMS PI1-HD programmable magnetic switches with stainless steel housing		
MMS 22-PI1-S-M8-PNP-HD	0301110	●
MMSK 22-PI1-S-PNP-HD	0301112	
MMS PI1 programmable magnetic switches with lateral cable outlet		
MMS 22-PI1-S-M8-PNP-SA	0301166	●
MMSK 22-PI1-S-PNP-SA	0301168	

① Two sensors (closer/S) are required for each unit, plus extension cables as an option. Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm. Connection cable, cable extensions, and sensor distributors can be found in the table for the MMS 22.

MMS PI2 programmable magnetic switches



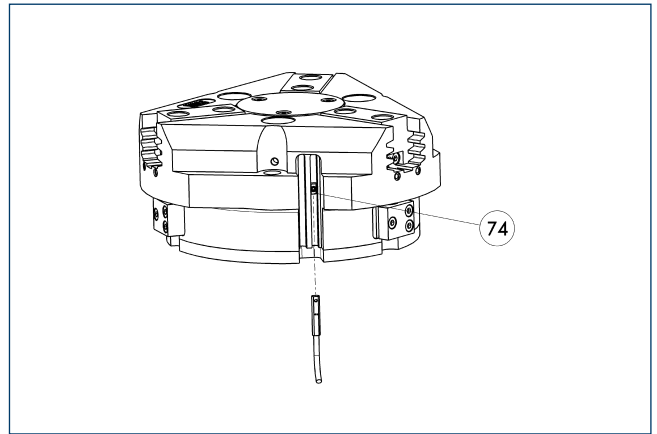
17 Cable outlet 90 MMS 22...-PI2... sensor

Position query with two programmable positions per sensor and electronics integrated in sensor. Programmable via MT magnet teaching tool (included in the scope of delivery) or ST plug teaching tool (optional). Limit position query mounted in C-groove. If the ST plug teaching tools are listed in the table, teaching can only take place with the ST plug teaching tools.

Description	ID	Often combined
Plug teaching tool		
ST-MMS 22-PI2-PNP	0301026	
MMS PI2 programmable magnetic switches		
MMS 22-PI2-S-M8-PNP	0301180	●
MMSK 22-PI2-S-PNP	0301182	
MMS PI2-HD programmable magnetic switches with stainless steel housing		
MMS 22-PI2-S-M8-PNP-HD	0301130	●
MMSK 22-PI2-S-PNP-HD	0301132	

① Per unit one sensor (closer/S) is required, optionally a cable extension. Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm. Connection cable, cable extensions, and sensor distributors can be found in the table for the MMS-P 22.

MMS-P programmable magnetic switches



74 Stop for MMS-P

Position monitoring with two programmable positions per sensor. The end position monitoring is mounted in the C-slot.

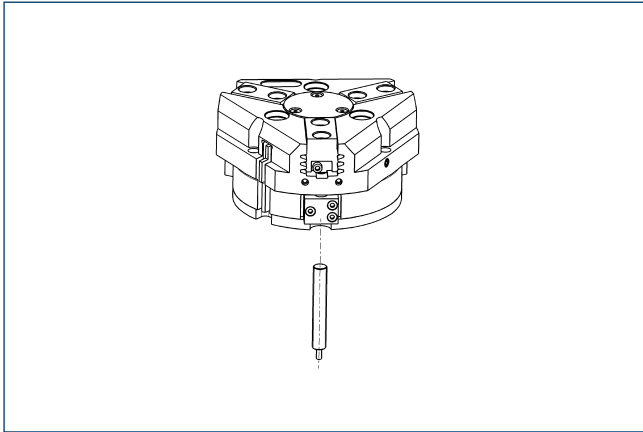
Description	ID	Often combined
MMS-P programmable magnetic switches		
MMSK-P 22-S-PNP	0301371	
MMS-P 22-S-M8-PNP	0301370	●
Clip for plug / socket		
CLI-M8	0301463	
Connection cables		
KA BG08-L 4P-0500	0307767	●
KA BG08-L 4P-1000	0307768	
KA BW08-L 4P-0500	0307765	
KA BW08-L 4P-1000	0307766	
Sensor distributor		
V2-M8-4P-2XM8-3P	0301380	

① Per unit one sensor (closer/S) is required, optionally a cable extension. Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

PZN-plus 100

SCHUNK Grippers pneumatic | 3-Finger Centric Grippers | Universal Gripper

APS-Z80 analog position sensor

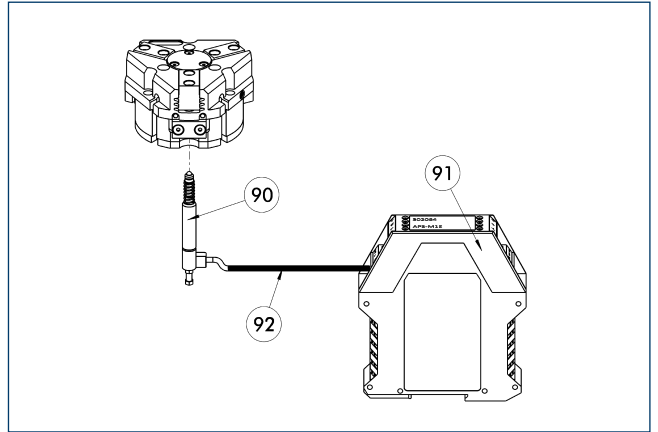


Contactlessly measuring, analog multi-position monitoring for any number of positions.

Description	ID	Often combined
Mounting kit for APS-Z80		
AS-APS-Z80-PGZN-plus 100-1	0302109	
AS-APS-Z80-PGZN-plus 100-2	0302110	
Sensor		
APS-Z80-K	0302072	
APS-Z80-M8	0302070	●

① When using an APS system, one mounting kit (AS-APS-Z80) and one APS-Z80 sensor is required per gripper.

APS-M1 analog position sensor



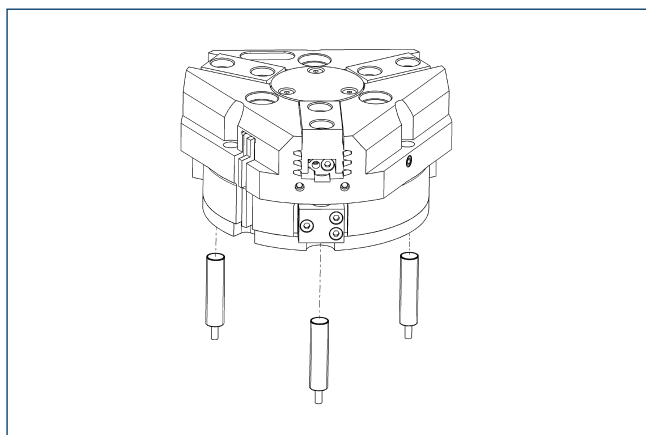
⑨⑩ APS-M1S sensor ⑨⑪ APS-K extension cable
 ⑨⑫ APS-M1E electronic processor

Analog multi position monitoring for any desired positions.

Description	ID	Often combined
Mounting kit for APS-M1		
AS-APS-M1-PGZN-plus 100-1	0302079	
AS-APS-M1-PGZN-plus 100-2	0302080	
Connection cables		
APS-K0200	0302066	●
APS-K0700	0302068	
Electronic processor		
APS-M1E	0302064	
Sensor		
APS-M1S	0302062	

① When using an APS system, for each gripper a mounting kit (AS-APS-M1), an APS-M1S sensor (incl. 3 m cable) as well as an electronics (APS-M1e) are required. An extension cable (APS-K) can be connected between the sensor and the electronics as an option. The max. cable length between the sensor and the electronics is 10 m, between the electronics and their control unit (PLC) it is max. 1 m.

Cylindrical reed switches



Limit position monitor can be mounted with mounting kit.

Description	ID	
Mounting kit for proximity switch		
AS-RMS 80 PGN/PZN-plus 100/125	0377726	
Reed switches		
RMS 80-S-M8	0377721	

- ① Two sensors (closer/S) are required for each unit, plus extension cables as an option. This mounting kit needs to be ordered optionally as an accessory. Two mounting kits are required per gripper. Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.