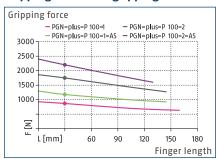
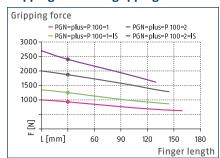


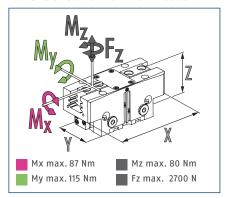
#### Gripping force O.D. gripping



## **Gripping force I.D. gripping**



#### **Dimensions and maximum loads**



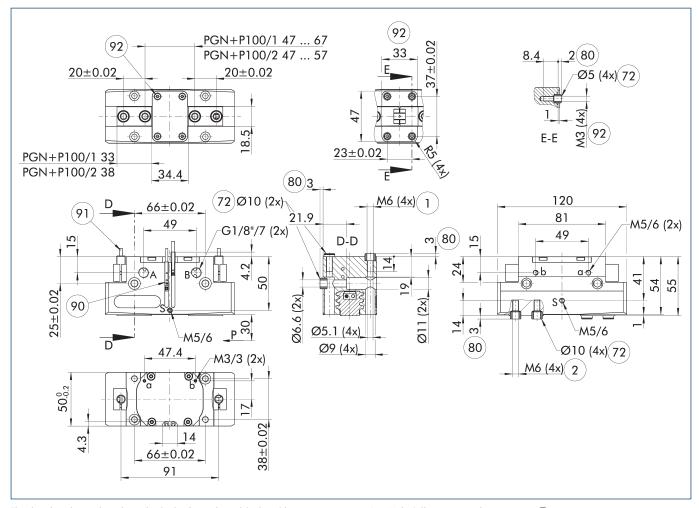
The indicated moments and forces are statical values, apply for each base jaw and may appear simultaneously. Loads may additionally occur to the moment produced by the gripping force itself.

#### **Technical data**

Description		PGN-plus-P 100-1	PGN-plus-P 100-2	PGN-plus-P 100-1-AS	PGN-plus-P 100-2-AS	PGN-plus-P 100-1-IS	PGN-plus-P 100-2-IS
ID		0318544	0318545	0318546	0318547	0318548	0318549
Stroke per jaw	[mm]	10	5	10	5	10	5
Closing/opening force	[N]	870/930	1750/1870	1180/-	2200/-	-/1250	-/2400
Min. spring force	[N]			310	450	320	530
Weight	[kg]	0.9	0.9	1.1	1.1	1.1	1.1
Recommended workpiece weight	[kg]	4.35	8.75	4.35	8.75	4.35	8.75
Cylinder volume per double stroke	[cm³]	55	55	84	84	92	92
Min./nom./max. operating pressure	[bar]	2.5/6/8	2.5/6/8	4/6/6.5	4/6/6.5	4/6/6.5	4/6/6.5
Min./max. air purge pressure	[bar]	0.5/1	0.5/1	0.5/1	0.5/1	0.5/1	0.5/1
Closing/opening time	[s]	0.06/0.06	0.06/0.06	0.05/0.09	0.05/0.09	0.09/0.05	0.09/0.05
Closing/opening time with spring	[s]			0.10	0.10	0.10	0.10
Max. permissible finger length	[mm]	160	145	145	130	145	130
Max. permissible weight per finger	[kg]	1.3	1.3	1.3	1.3	1.3	1.3
IP protection 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
Dimensions X x Y x Z	[mm]	120 x 50 x 55	120 x 50 x 55	120 x 50 x 81			
Options and their characteristics							
Dustproof version		1317570	1317571	1317572	1317574	1317578	1317581
IP protection class		64	64	64	64	64	64
Weight	[kg]	1.02	1.02	1.22	1.22	1.22	1.22
Corrosion-protected version		38318544	38318545	38318546	38318547	38318548	38318549
High-temperature version		39318544	39318545	39318546	39318547	39318548	39318549
Min./max. ambient temperature	[°C]	5/130	5/130	5/130	5/130	5/130	5/130
Precision version		0318550	0318551	0318552	0318553		

① It may take a few 100 gripping cycles until the full gripping force (as indicated in the data table) will be available.

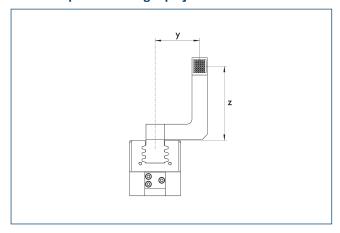
#### Main view

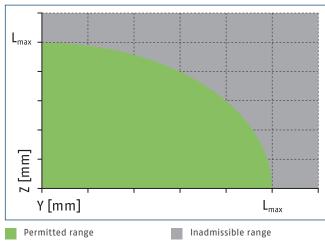


The drawing shows the gripper in the basic version with closed jaws, without dimensional consideration of the options described below.

- As an alternative/in addition to spring-assisted mechanical gripping force maintenance, the SDV-P pressure maintenance valve can be used for I.D. and O.D. gripping (see "Accessories" section of catalog).
- A, a Main / direct connection, gripper opening
- B, b Main / direct connection, gripper closing
- S Air purge connection
- (1) Gripper connection
- (2) Finger connection
- 72) Fit for centering sleeves
- 80 Depth of the centering sleeve hole in the counter part
- 90 Sensor MMS 22..
- (91) Sensor IN ...
- (92) Screw connection with centering for customized mounting (these centering sleeves are not included in the scope of delivery)

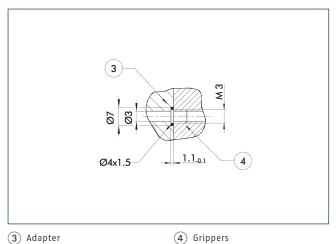
#### Maximum permitted finger projection





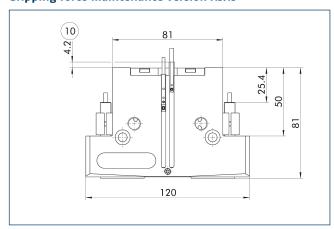
 $L^{\text{max}}$  is equivalent to the maximum permitted finger length, see the technical data table.

#### Hose-free direct connection M3



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

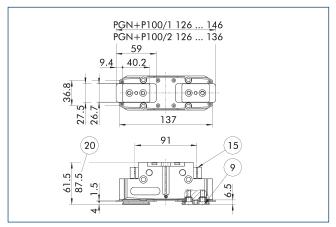
## **Gripping force maintenance version AS/IS**



10 Projection applies only for AS version

The mechanical gripping force maintenance device ensures that a minimum clamping force will be applied even if there is a drop in pressure. In the AS/S variant this acts as a closing force, in the IS variant as an opening force. Besides this, gripping force maintenance can be used to increase gripping force or for single actuated gripping.

#### **Dustproof version**



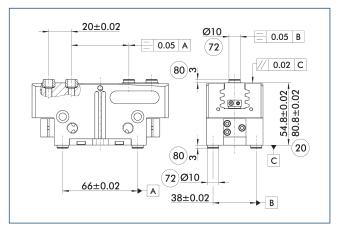
- (9) For mounting screw connection diagram, see basic version
- 15) Sealing bolt
- 20 For version AS/IS

The "dustproof" option increases the degree of protection against penetrating substances. The assembly diagram shifts by the height of the intermediate jaw. The finger length is still measured from the upper edge of the gripper housing.

Description	ID
Dust cover	
SAD PGN-plus-P 100	1347566

The "dustproof" option can either be ordered as a pre-mounted gripper version or can be retrofitted to the gripper using the "SAD PGN-plus-P" retrofit kit.

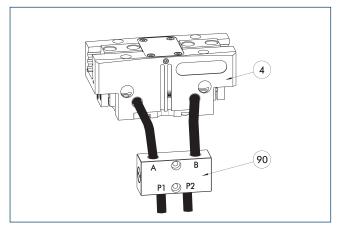
#### **Precision version**



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

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

#### SDV-P pressure maintenance valve



4 Grippers

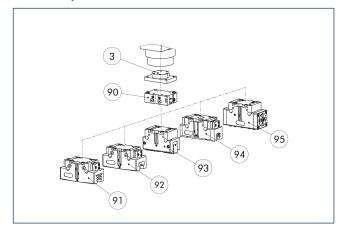
90 SDV-P pressure maintenance

The SDV-P pressure maintenance valve ensures in emergency STOP situations that the pressure in the piston chamber of pneumatic gripper, swivel, linear, and quick-change modules is temporarily maintained.

Description	ID	Recommended hose diameter			
		[mm]			
Pressure maintenance valve					
SDV-P 04	0403130	6			
SDV-P 07	0403131	8			
Pressure maintenance valve with air bleed screw					
SDV-P 04-E	0300120	6			
SDV-P 07-E	0300121	8			

① In order to achieve the specified closing and opening time for each gripper variant, the recommended hose diameter must be used. The direct allocation of the respective variant of the gripper for the respective SDV-P can be found at schunk.com.

#### SDV-P E-P pressure maintenance valve

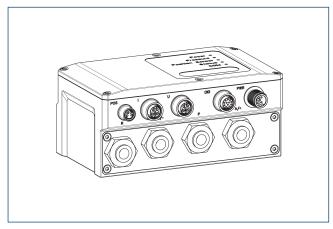


- (3) Adapter
- 90 SDV-P E-P pressure maintenance valve
- 91) 2-finger parallel gripper PGN-plus/PGN-plus-P
- 92 2-finger parallel gripper JGP-P
- 93) 2-finger angular gripper PWG-plus
- (94) 2-finger parallel gripper PGB
- 95) Sealed DPG-plus gripper

The SDV-P E-P pressure maintenance valves ensure that the pressure in the piston chamber is maintained temporarily during an emergency stop. SDV-P E-P can be directly connected to the listed grippers without the need for additional pneumatic hoses.

Description	ID	
Pressure maintenance valve		
SDV-P 100-E-P	0300126	

## Pneumatic positioning device PPD

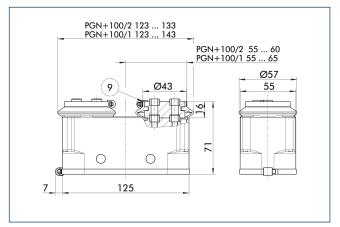


The PPD allows flexibility in all applications with pneumatic grippers through free positioning, gripping force and speed adjustment.

Description	ID
Pneumatic positioning device	
PPD 20-IOL	1540700
Adapter	
A GGN0804-1204-A	1540691
10-Link connection cable	
KA GGN1205-1212-IOL-00100-A	1540697
Voltage supply connection cable - cab	ole track compa
KA GLN12B05-LK-01000-A	1540660
Cable extension	
KV GGN0804-I0-00150-A	1540662
KV GGN0804-10-00300-A	1540663
Assembly set	
Assembly set PPD	1540705

① In addition to the PPD, a position sensor (SCHUNK IO-Link sensor or analog sensor (4...20 mA)) is required.

#### Protective cover HUE PGN-plus 100



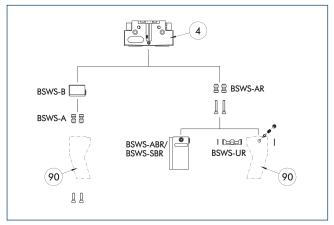
(9) For mounting screw connection diagram, see basic version

The HUE protective cover fully protects the gripper against external influences. The cover is suitable for applications of up to IP65 if an additional sealing of the cover bottom is provided. For detailed information, please see the HUE series. The connection diagram shifts by the height of the intermediate jaw.

Description	ID	IP protection class
Protection cover		
HUE PGN-plus 100	0371482	65

The HUE protective cover is not suitable for use on grippers with gripping force maintenance. An inductive monitoring of the gripper in connection with the HUE protective cover is not possible. SCHUNK recommends the use of magnetic sensors that are approved for the respective gripper variant.

#### BSWS jaw quick-change jaw systems



4 Grippers

90 Customized gripper fingers

There are various jaw quick-change systems available for the gripper. For detailed information, please refer to the corresponding product.

Description	ID	Scope of delivery				
Jaw quick-change system adapter pin						
BSWS-A 100	0303026	2				
BSWS-AR 100	0300094	2				
Quick-change jaw system base						
BSWS-B 100	0303027	1				
Jaw quick-change system finger blank						
BSWS-ABR-PGZN-plus 100	0300074	1				
BSWS-SBR-PGZN-plus 100	0300084	1				
Jaw quick-change system locking mechanism						
BSWS-UR 100	0302993	1				

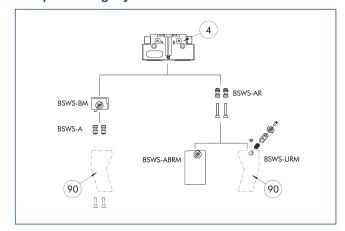
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked. Only systems that are listed in the table, can be used.

#### Fields of application

Series	Size	Variant	Suitability		
PGN-plus-P	100	-1 (6 bar)			
PGN-plus-P	100	-1-AS/1-IS (6 bar)			
PGN-plus-P	100	-2 (6 bar)			
PGN-plus-P	100	-2-AS/2-IS (6 bar)			
Legend					
	Can be combined without restrictions				
	Use with restrictions (see loading limits)				
0000	cannot be combined				

The load limits for describing the application limits can be found in the catalog chapter of the corresponding accessories.

#### Jaw quick-change system BSWS-M



(4) Grippers

**90** Customized gripper fingers

There are various jaw quick-change systems available for the gripper. For detailed information, please refer to the corresponding product.

Description	ID	Scope of delivery			
Jaw quick-change system adapter pin					
BSWS-A 100	0303026	2			
BSWS-AR 100	0300094	2			
Quick-change jaw system base					
BSWS-BM 100	1313902	1			
Jaw quick-change system finger blank					
BSWS-ABRM-PGZN-plus 100	1420853	1			
Jaw quick-change system locking mechanism					
BSWS-URM 100	1398403	1			

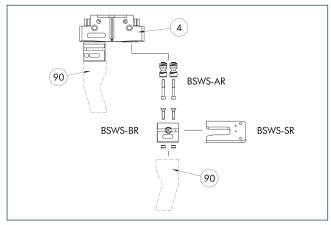
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked. Only systems that are listed in the table, can be used.

#### Fields of application

Series	Size	Variant	Suitability		
PGN-plus-P	100	-1 (6 bar)			
PGN-plus-P	100	-1-AS/1-IS (6 bar)			
PGN-plus-P	100	-2 (6 bar)			
PGN-plus-P	100	-2-AS/2-IS (6 bar)			
Legend					
	Can be combined without restrictions				
	Use with restrictions (see loading limits)				
0000	cannot be combined				

The load limits for describing the application limits can be found in the catalog chapter of the corresponding accessories.

#### Jaw quick-change system BSWS-R



(4) Grippers

**90** Customized gripper fingers

There are various jaw quick-change systems available for the gripper. For detailed information, please refer to the corresponding product.

detailed information, pieuse refer to the corresponding product.						
ID	Scope of delivery					
Jaw quick-change system adapter pin						
0300094	2					
1555933	1					
Storage system						
1555959	1					
Attachment kit for proximity switch						
1561458	1					
Inductive proximity switch						
0301574						
0301474						
0301555						
	10 cer pin 0300094 1555933 1555959 vitch 1561458 0301574 0301474					

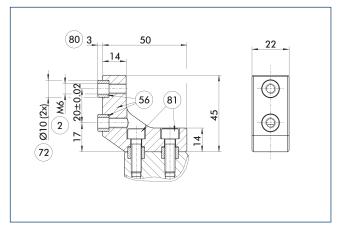
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked. Only systems that are listed in the table, can be used.

#### Fields of application

Series	Size	Variant	Suitability		
PGN-plus-P	100	-1 (6 bar)			
PGN-plus-P	100	-1-AS/1-IS (6 bar)			
PGN-plus-P	100	-2 (6 bar)			
PGN-plus-P	100	-2-AS/2-IS (6 bar)			
Legend					
	Can be combined without restrictions				
	Use with restrictions (see loading limits)				
0000	cannot be combined				

The load limits for describing the application limits can be found in the catalog chapter of the corresponding accessories.

#### ZBA-L-plus 100 intermediate jaws



- (2) Finger connection
- (56) Included in the scope of delivery
- 72) Fit for centering sleeves
- 80 Depth of the centering sleeve hole in the counter part
- 81) Not included in the scope of delivery

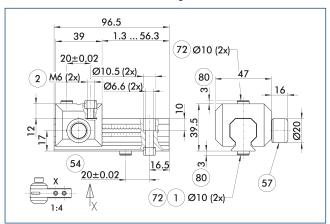
The optional ZBA-L-plus intermediate jaws allow the screw connection diagram of the top jaws to be rotated by 90°. This makes it easier to design and produce top jaws (particularly for long versions) because no deep through-bores are required.

Description	ID	Material	Finger interface	Scope of delivery
Intermediate jaw				
ZBA-L-plus 100	0311742	Aluminum	PGN-plus 100	1

# PGN-plus-P 100

Universal gripper

#### UZB 100 universal intermediate jaw



- 1 Gripper connection
- Finger connection
- (54) Optional right or left connection
- 57 Locking
- 72) Fit for centering sleeves
- 80 Depth of the centering sleeve hole in the counter part

The drawing shows the UZB universal intermediate jaw. The fully removable UZB-S slide (can also be ordered separately) allows for a quick jaw change.

_			
Description	ID	Grid dimension	
		[mm]	
Universal intermediate jaw			
UZB 100	0300044	2.5	
Finger blank			
ABR-PGZN-plus 100	0300012		
SBR-PGZN-plus 100	0300022		
Slide for universal intermediate jaw			
UZB-S 100	5518272	2.5	

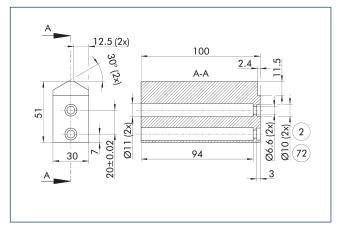
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked.

#### Fields of application

Series	Size	Variant	Suitability	
PGN-plus-P	100	-1 (6 bar)		
PGN-plus-P	100	-1-AS/1-IS (6 bar)		
PGN-plus-P	100	-2 (6 bar)		
PGN-plus-P	100	-2-AS/2-IS (6 bar)	0000	
Legend				
	Can be combined without restrictions			
	Use with restrictions (see loading limits)			
0000	cannot be combined			

The load limits for describing the application limits can be found in the catalog chapter of the corresponding accessories.

#### Finger blanks ABR/SBR-PGZN-plus 100



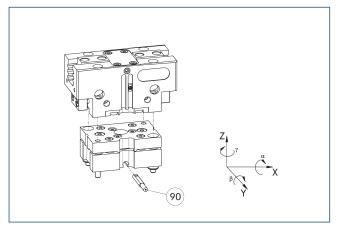
- (2) Finger connection
- (72) Fit for centering sleeves

The drawing shows the finger blank which can be reworked by the customer.

Description	ID	Material	Scope of delivery
Finger blank			
ABR-PGZN-plus 100	0300012	Aluminum (3.4365)	1
SBR-PGZN-plus 100	0300022	Steel (1.7131)	1

① In the PGL-plus-P gripper series, the use of finger blanks results in a limitation of the closing stroke. Please check this in detail in advance using the CAD data and adjust the reworking of the fingers accordingly.

#### Tolerance compensation unit TCU

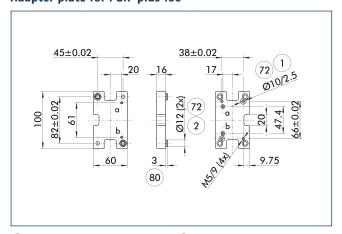


#### 90 Monitoring of locking

Grippers can be directly mounted without an adapter plate. Tolerance compensation unit and gripper have an identical screw connection diagram. Therefore the tolerance compensation units can be assembled later. Please consider the additional assembly height of the tolerance compensation unit. For details please refer to our catalog robot accessories.

Description	ID	Locking	Deflection	Often combined
Compensation unit				
TCU-P-100-2-MV	0324808	yes	±1°/±1,5°/±1,2°	•
TCU-P-100-3-0V	0324811	no	±1°/±1,5°/±1,2°	

## Adapter plate for PGN-plus 100

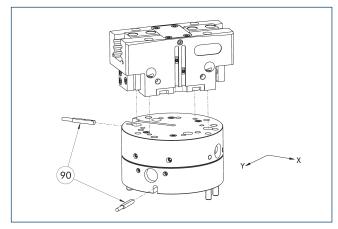


- 1 Robot-side connection
- 2) Tool-side connection
- 72) Fit for centering sleeves
- 80 Depth of the centering sleeve hole in the counter part

The adapter plate has integrated air feed-throughs in order to be able to use the hose-free direct connection of the appropriate gripper.

Description	ID
Tool side	
A-CWA-125-100-P	0305829

#### Compensation unit AGE-F



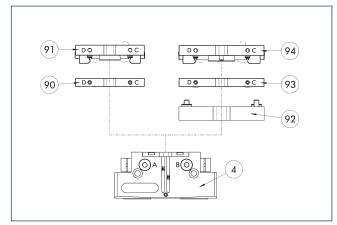
#### 90 Monitoring

The unit has direct connection possibilities for different grippers of the PGN-plus, PGN-plus-P and PZN-plus series. For more detailed information, please refer to the main view.

Description	ID	Compensation XY	Reset force	Often combined
		[mm]	[N]	
Compensation unit				
AGE-F-XY-080-1	0324960	± 5	39	
AGE-F-XY-080-2	0324961	± 5	85	
AGE-F-XY-080-3	0324962	± 5	90	•

① Due to the interfering contour, monitoring of the gripper is not possible.

#### Compact change system for grippers



- (4) Grippers
- (90) CWA compact change adapter
- 91) CWK compact change master
- 92 A-CWA adapter plate
- 93 CWA compact change adapter
- 94) CWK compact change master

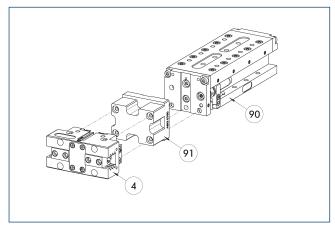
Grippers can be directly mounted without an adapter plate. For details see our catalog Gripping or Robot Accessories.

Description	ID	
Tool side		
A-CWA-125-100-P	0305829	
CWA compact change	adapter	
CWA-100-P	0305801	
CWK compact change	master	
CWK-100-P	0305800	

# PGN-plus-P 100

Universal gripper

## **Modular Assembly Automation**



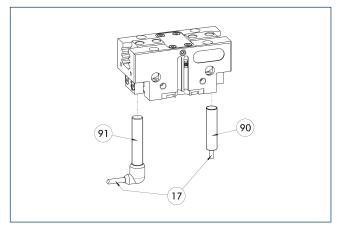
4 Grippers

91) ASG adapter plate

90 Linear module CLM/KLM/LM/ELP/ ELM/ELS/HLM

Grippers and linear modules can be combined with standard adapter plates from the modular assembly system. For more information see our main catalog "Modular Assembly Automation".

## **Inductive proximity switches**



17) Cable outlet

91) Sensor IN..-SA

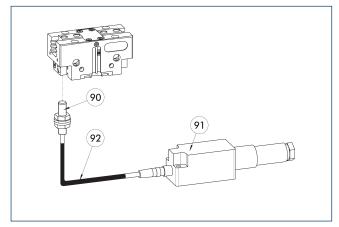
90 Sensor IN ...

Directly mounted end position monitoring.

Description	ID	Often combined
Inductive proximity switch		
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
INK 80-S	0301550	
Inductive proximity switch with la	teral cable ou	tlet
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	
Clip for connector/socket		
CLI-M12	0301464	
CLI-M8	0301463	
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	
Sensor distributor		
V2-M12	0301776	•
V2-M8	0301775	•
V4-M8	0301746	
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.

#### Flexible position sensor



90 FPS-S sensor

92 Cable extension

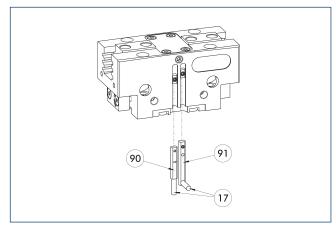
(91) FPS-F5 evaluation electronic

Flexible position monitoring of up to five positions.

Description	ID
Attachment kit for FPS	
AS-FPS-PGN-plus-P 100	1363897
Sensor	
FPS-S M8	0301704
Evaluation electronics	
FPS-F5	0301805
Cable extension	
KV BG08-SG08 3P-0050	0301598
KV BG08-SG08 3P-0100	0301599

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."

## **Electronic magnetic switch MMS**



17) Cable outlet

91) Sensor MMS 22...-SA

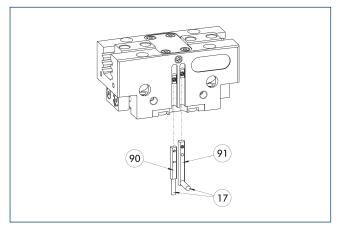
90 Sensor MMS 22..

End position monitoring for mounting in the C-slot.

Description	Ţ.	
Description	ID	Often combined
Electronic magnetic switch		
MMS 22-S-M8-PNP	0301032	•
MMSK 22-S-PNP	0301034	
Electronic magnetic switches with	lateral cable o	outlet
MMS 22-S-M8-PNP-SA	0301042	•
MMSK 22-S-PNP-SA	0301044	
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	
Clip for connector/socket		
CLI-M8	0301463	
Cable extension		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	•
Sensor distributor		
V2-M8	0301775	•
V4-M8	0301746	
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.

#### Programmable magnetic switch MMS 22-PI1



(17) Cable outlet

(91) Sensor MMS 22 ..-PI1-...-SA

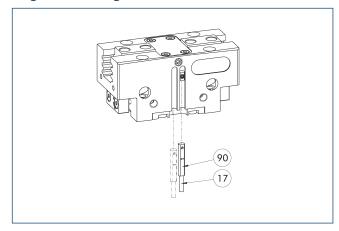
90 Sensor MMS 22 PI1-...

Position monitoring with one programmable position per sensor and integrated electronic system in the sensor. Can be programmed using MT magnetic teaching tool (included in the scope of delivery, ID 0301030) or ST plug teaching tool (optional). End position monitoring for mounting in the C-slot. If the ST plug teaching tools are listed in the table provided, teaching is only possible with the ST teaching tools.

Description	ID	Often combined			
Programmable magnetic switch					
MMS 22-PI1-S-M8-PNP	0301160	•			
MMSK 22-PI1-S-PNP	0301162				
Programmable magnetic switch	with lateral c	able outlet			
MMS 22-PI1-S-M8-PNP-SA	0301166	•			
MMSK 22-PI1-S-PNP-SA	0301168				
Programmable magnetic switch with stainless steel housing					
MMS 22-PI1-S-M8-PNP-HD	0301110	•			
MMSK 22-PI1-S-PNP-HD	0301112				

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.

#### Programmable magnetic switch MMS 22-PI2



(17) Cable outlet

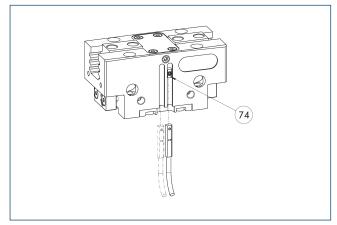
90 MMS 22...-PI2-... sensor

Position monitoring with two programmable positions per sensor and electronics integrated in the sensor. Can be programmed using MT magnetic teaching tool (included in the scope of delivery, ID 0301030) or ST plug teaching tool (optional). End position monitoring for mounting in the C-slot. If the ST plug teaching tools are listed in the table provided, teaching is only possible with the ST teaching tools.

Description	ID	Often combined				
Programmable magnetic switch						
MMS 22-PI2-S-M8-PNP	0301180	•				
MMSK 22-PI2-S-PNP	0301182					
Programmable magnetic switch with lateral cable outlet						
MMS 22-PI2-S-M8-PNP-SA	0301186	•				
MMSK 22-PI2-S-PNP-SA	0301188					
Programmable magnetic switch with stainless steel housing						
MMS 22-PI2-S-M8-PNP-HD	0301130	•				
MMSK 22-PI2-S-PNP-HD	0301132					

① One sensor is required per unit for monitoring two positions. Extension cables and sensor distributors are optionally available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor systems.

#### MMS-P programmable magnetic switch



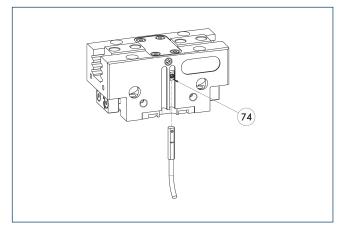
(74) Limit stop for sensor

Position monitoring with two programmable positions per sensor. End position monitoring for mounting in the C-slot.

Description	ID	Often combined				
Programmable magnetic switch						
MMSK-P 22-S-PNP	0301371					
MMS-P 22-S-M8-PNP	0301370	•				
Connection cables						
KA GLN0804-LK-00500-A	0307767	•				
KA GLN0804-LK-01000-A	0307768					
KA WLN0804-LK-00500-A	0307765					
KA WLN0804-LK-01000-A	0307766					
Clip for connector/socket						
CLI-M8	0301463					
Sensor distributor						
V2-M8-4P-2XM8-3P	0301380					

① One sensor is required per unit for monitoring two positions. Extension cables and sensor distributors are optionally available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor systems.

#### Analog position sensor MMS-A



74) Limit stop for sensor

Non-contact measuring, analog multi-position monitoring for any number of positions, easy to assemble in the C-slot. Can be programmed using MT magnetic teaching tool (included in the scope of delivery, ID 0301030) or ST plug teaching tool (optional). End position monitoring for mounting in the C-slot. If the ST plug teaching tools are listed in the chart provided, teaching is only possible with the ST teaching tools.

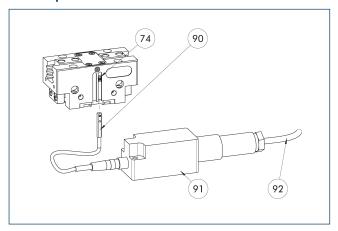
Description	ID
Analog position sensor	
MMS 22-A-10V-M08	0315825
MMS 22-A-10V-M12	0315828

① One sensor is required for each gripper. No additional mounting kit is required – the gripper is equipped for use of the sensor by default. Further information and technical data can be found in the catalog chapter sensor systems.

# PGN-plus-P 100

Universal gripper

#### Flexible position sensor with MMS-A



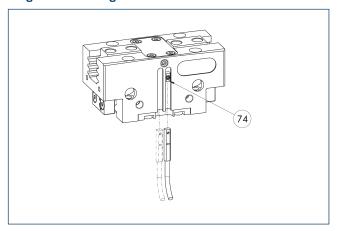
- (74) Limit stop for sensor
- (91) FPS-F5 evaluation electronic
- 90 MMS 22-A-... sensor
- (92) Connection cables

Flexible position monitoring of up to five positions. Sensor can be taught using MT magnetic teaching tool (included in the scope of delivery, ID 0301030) or ST plug teaching tool (optional). If the ST plug teaching tools are listed in the table provided, teaching is only possible with the ST teaching tools.

Description	ID
Analog position sensor	
MMS 22-A-05V-M08	0315805
Evaluation electronics	
FPS-F5	0301805
Sensor Teaching Tool	
MT-MMS 22-PI	0301030
Connection cables	
KA BG16-L 12P-1000	0301801

When using an FPS system, one MMS 22-A-05V and one evaluation electronics (FPS-F5) are required per each gripper, as well as an attachment kit (AS), if listed. On option, cable extensions (KV) are available - see catalog chapter "Accessories."

#### Programmable magnetic switch MMS-I0-Link



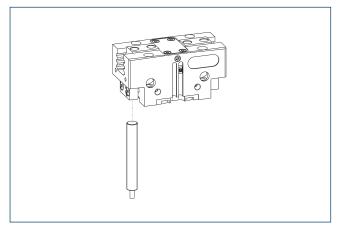
74) Limit stop for sensor

Sensor for multi-position monitoring through detection of the complete gripper stroke. The sensor is mounted directly in the C-slot of the gripper. The sensor is programmed for the gripper via the IO-Link interface, Magnet teaching tool MT (included in scope of delivery; ID 0301030) or the ST plug teaching tool (not included in scope of delivery; ID 0301026). An IO-Link master is required for operation.

Description	ID
Programmable mag	netic switch
MMS 22-I0L-M08	0315830
MMS 22-I0L-M12	0315835

① One sensor is required for each gripper. No additional mounting kit is required – the gripper is equipped for use of the sensor by default. Further information and technical data can be found in the catalog chapter sensor systems.

## APS-Z80 analog position sensor



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

Description	ID	Often combined			
Mounting kit for APS-Z80					
AS-APS-Z80-PGN-plus-P 100-1	1366219				
AS-APS-Z80-PGN-plus-P 100-2	1366224				
Analog position sensor					
APS-Z80-K	0302072				
APS-Z80-M8	0302070	•			

When using an APS system, one mounting kit (AS-APS-Z80) and one APS-Z80 sensor is required per gripper. The resolution of the sensor can be lower in the peripheral areas of the gripper. You can find further information on the product in the operating manual.