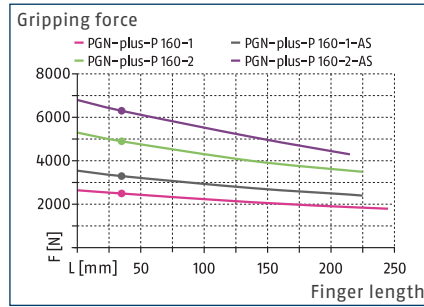


PGN-plus-P 160

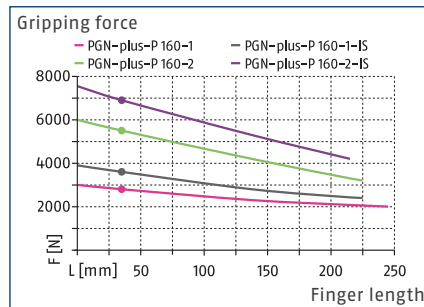
Universal gripper



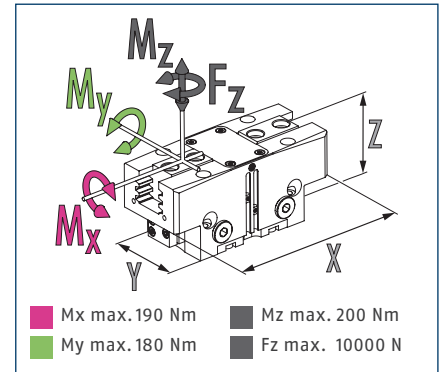
Gripping force O.D. gripping



Gripping force I.D. gripping



Dimensions and maximum loads



① The indicated moments and forces are static 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

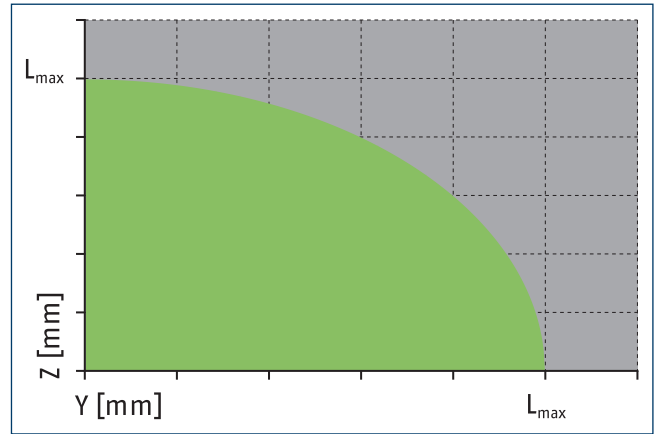
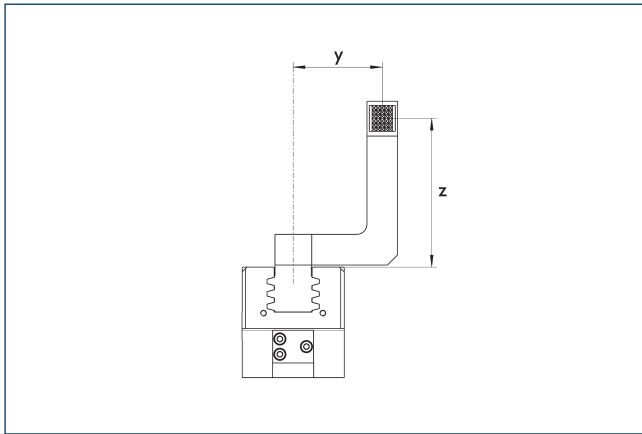
Description		PGN-plus-P 160-1	PGN-plus-P 160-2	PGN-plus-P 160-1-AS	PGN-plus-P 160-2-AS	PGN-plus-P 160-1-IS	PGN-plus-P 160-2-IS
ID		0318592	0318593	0318594	0318595	0318596	0318597
Stroke per jaw	[mm]	16	8	16	8	16	8
Closing/opening force	[N]	2500/2800	4900/5500	3300/-	6300/-	-/3600	-/6900
Min. spring force	[N]			800	1400	800	1400
Weight	[kg]	2.8	2.9	3.6	3.7	3.5	3.7
Recommended workpiece weight	[kg]	12.5	24.5	12.5	24.5	12.5	24.5
Cylinder volume per double stroke	[cm ³]	200	200	355	355	380	380
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]	0.1/0.1	0.1/0.1	0.1/0.2	0.1/0.2	0.2/0.1	0.2/0.1
Closing/opening time with spring	[s]			0.20	0.20	0.20	0.20
Max. permissible finger length	[mm]	245	225	225	215	225	215
Max. permissible weight per finger	[kg]	3.8	3.8	3.8	3.8	3.8	3.8
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]	192 x 72 x 77	192 x 72 x 77	192 x 72 x 117	192 x 72 x 117	192 x 72 x 117	192 x 72 x 117
Options and their characteristics							
Dustproof version		1317645	1317647	1317649	1317652	1317653	1317654
IP protection class		64	64	64	64	64	64
Weight	[kg]	3.2	3.2	4	4	4	4
Corrosion-protected version		1317631	1317632	1317638	1317639	1317641	1317644
High-temperature version		1317594	1317596	1317599	1317600	1317625	1317629
Min./max. ambient temperature	[°C]	5/130	5/130	5/130	5/130	5/130	5/130
Precision version		1317656	1317659	1317658	1317660		

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

PGN-plus-P 160

Universal gripper

Maximum permitted finger projection

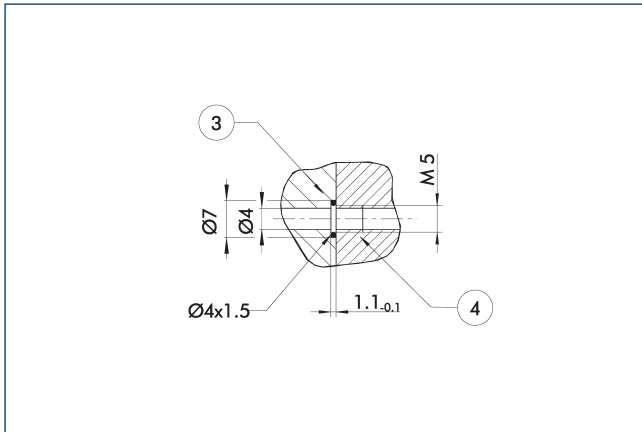


■ Permitted range

■ Inadmissible range

L_{max} is equivalent to the maximum permitted finger length, see the technical data table.

Hose-free direct connection M5

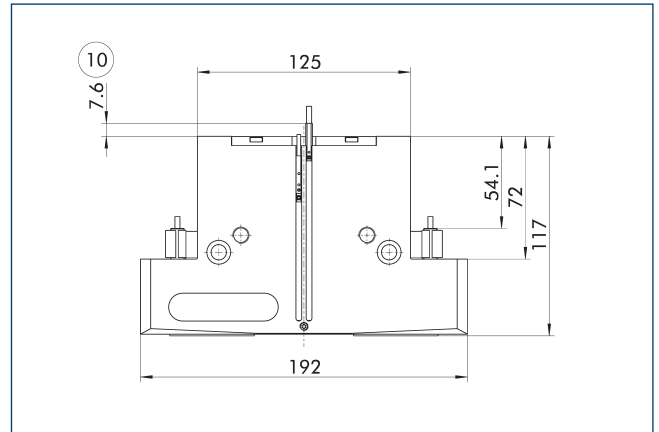


③ Adapter

④ Grippers

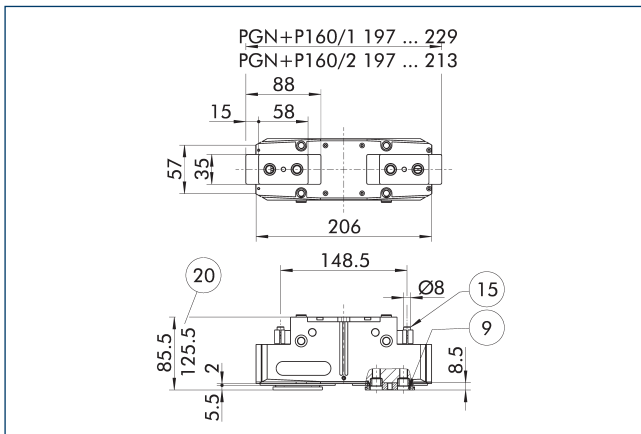
The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

Gripping force maintenance version AS/IS



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



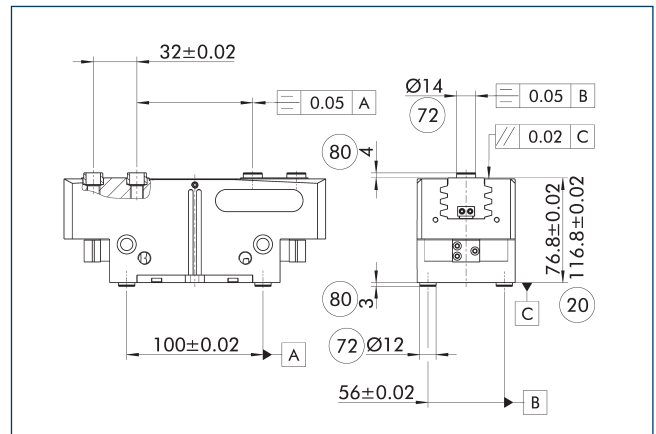
- ⑨ For mounting screw connection diagram, see basic version ⑮ Sealing bolt
 ⑳ For version AS/IS

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 160	1347575

- ① 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



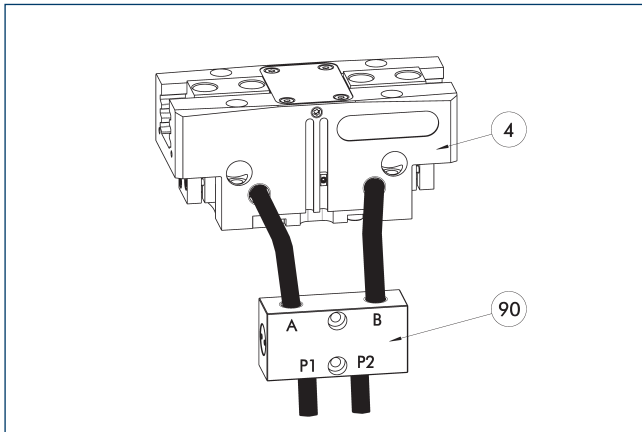
- ⑳ For version AS/IS ⑧① Depth of the centering sleeve hole in the counter part
 ⑦② Fit for centering sleeves

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.

PGN-plus-P 160

Universal gripper

SDV-P pressure maintenance valve



④ Grippers

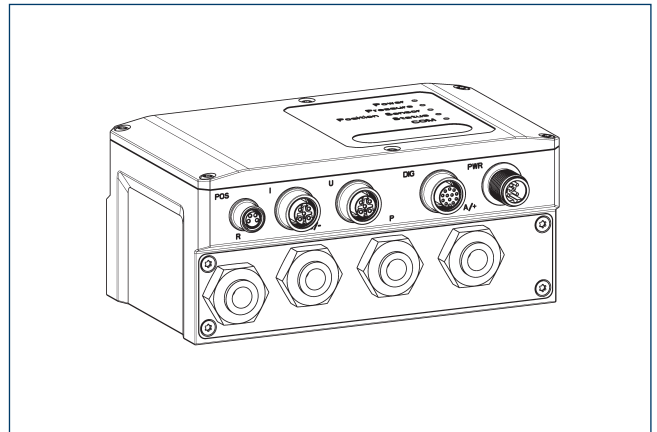
⑨ SDV-P pressure maintenance valve

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 07	0403131	8
Pressure maintenance valve with air bleed screw		
SDV-P 07-E	0300121	8
SDV-P 10-E	0300109	10

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.

Pneumatic positioning device PPD

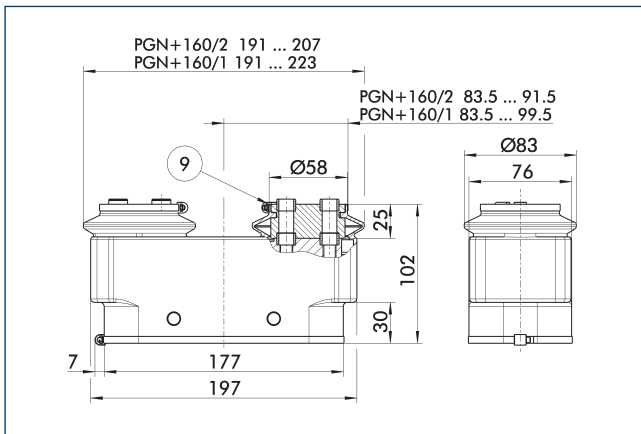


The PPD allows flexibility in all applications with pneumatic grippers through free positioning, gripping force and speed adjustment.

Description	ID	
Pneumatic positioning device		
PPD 20-IOL	1540700	
Adapter		
A GGN0804-1204-A	1540691	
IO-Link connection cable		
KA GGN1205-1212-IOL-00100-A	1540697	
Voltage supply connection cable - cable track compatible		
KA GLN12B05-LK-01000-A	1540660	
Cable extension		
KV GGN0804-IO-00150-A	1540662	
KV GGN0804-IO-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 160



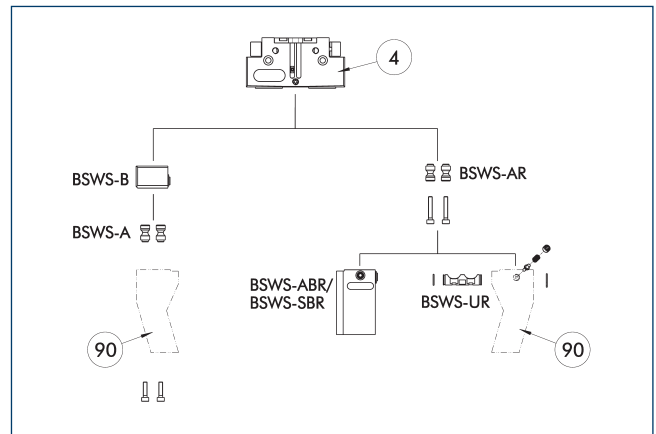
⑨ For mounting screw connection diagram, see basic version

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 160	0371484	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

⑨ 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 160	0303030	2
BSWS-AR 160	0300096	2
Quick-change jaw system base		
BSWS-B 160	0303031	1
Jaw quick-change system finger blank		
BSWS-ABR-PGZN-plus 160	0300076	1
BSWS-SBR-PGZN-plus 160	0300086	1
Jaw quick-change system locking mechanism		
BSWS-UR 160	0302995	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

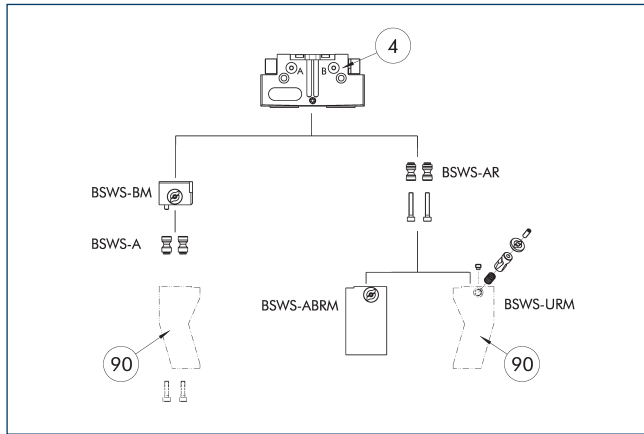
Series	Size	Variant	Suitability
PGN-plus-P	160	-1 (6 bar)	■■■■■
PGN-plus-P	160	-1-AS/1-IS (6 bar)	■■■■■
PGN-plus-P	160	-2 (6 bar)	■■■□□
PGN-plus-P	160	-2-AS/2-IS (6 bar)	■■■□□
Legend			
■■■■■	Can be combined without restrictions		
■■■□□	Use with restrictions (see loading limits)		
□□□□	cannot be combined		

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

PGN-plus-P 160

Universal gripper

Jaw quick-change system BSWS-M



④ Grippers ⑨⑩ 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 160	0303030	2
BSWS-AR 160	0300096	2
Quick-change jaw system base		
BSWS-BM 160	1418962	1
Jaw quick-change system finger blank		
BSWS-ABRM-PGZN-plus 160	1420855	1
Jaw quick-change system locking mechanism		
BSWS-URM 160	1420541	1

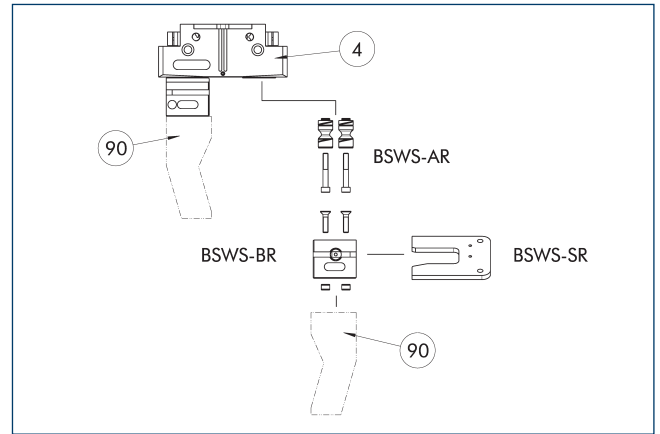
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked. Only systems that are listed in the table, can be used.

Fields of application

Series	Size	Variant	Suitability
PGN-plus-P	160	-1 (6 bar)	■■■■■
PGN-plus-P	160	-1-AS/1-IS (6 bar)	■■■■■
PGN-plus-P	160	-2 (6 bar)	■■□□
PGN-plus-P	160	-2-AS/2-IS (6 bar)	■■□□
Legend			
■■■■■	Can be combined without restrictions		
■■□□	Use with restrictions (see loading limits)		
□□□□	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 ⑨⑩ 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-AR 160	0300096	2
Quick-change jaw system base		
BSWS-BR 160	1555940	1
Storage system		
BSWS-SR 160	1555974	1
Attachment kit for proximity switch		
AS-IN80-BSWS-SR 125/160	1561467	1
Inductive proximity switch		
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	
INK 80-S	0301550	

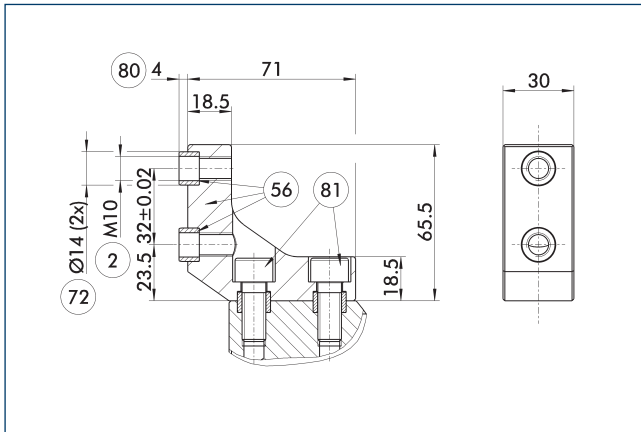
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked. Only systems that are listed in the table, can be used.

Fields of application

Series	Size	Variant	Suitability
PGN-plus-P	160	-1 (6 bar)	■■■■■
PGN-plus-P	160	-1-AS/1-IS (6 bar)	■■■■■
PGN-plus-P	160	-2 (6 bar)	■■□□
PGN-plus-P	160	-2-AS/2-IS (6 bar)	■■□□
Legend			
■■■■■	Can be combined without restrictions		
■■□□	Use with restrictions (see loading limits)		
□□□□	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 160 intermediate jaws

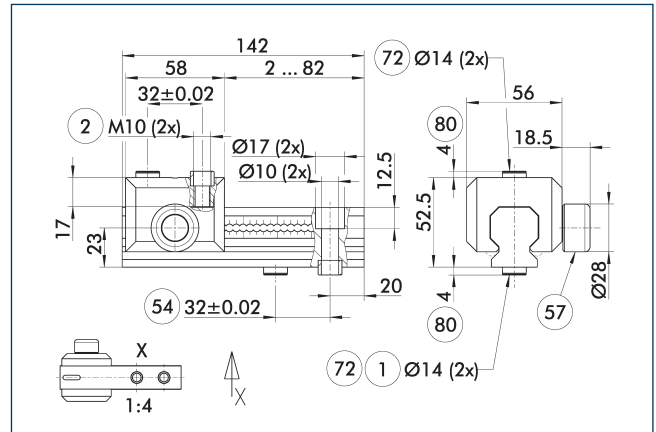


- ② Finger connection
- ⑤⑥ Included in the scope of delivery
- ⑦② Fit for centering sleeves
- ⑧① Depth of the centering sleeve hole in the counter part
- ⑧① Not included in the scope of delivery

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 160	0311762	Aluminum	PGN-plus 160	1

UZB 160 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 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
Universal intermediate jaw		
UZB 160	0300046	4
Finger blank		
ABR-PGZN-plus 160	0300014	
SBR-PGZN-plus 160	0300024	
Slide for universal intermediate jaw		
UZB-S 160	5518274	4

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

Fields of application

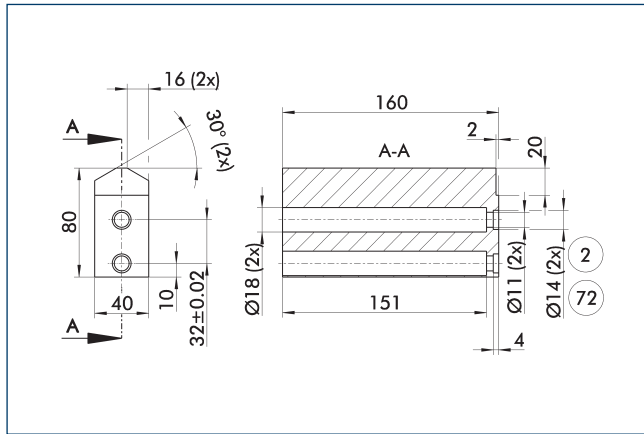
Series	Size	Variant	Suitability
PGN-plus-P	160	-1 (6 bar)	■■■■
PGN-plus-P	160	-1-AS/1-IS (6 bar)	■■□□
PGN-plus-P	160	-2 (6 bar)	■■□□
PGN-plus-P	160	-2-AS/2-IS (6 bar)	□□□□
Legend			
■■■■	Can be combined without restrictions		
■■□□	Use with restrictions (see loading limits)		
□□□□	cannot be combined		

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

PGN-plus-P 160

Universal gripper

Finger blanks ABR/SBR-PGZN-plus 160



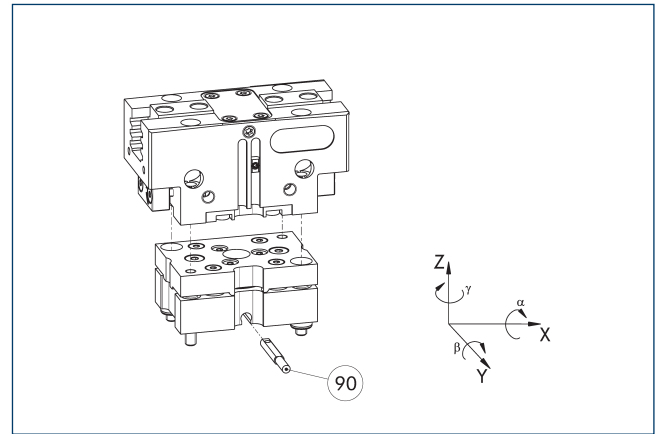
- ② Finger connection
- ⑦② Fit for centering sleeves

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

Description	ID	Material	Scope of delivery
Finger blank			
ABR-PGZN-plus 160	0300014	Aluminum (3.4365)	1
SBR-PGZN-plus 160	0300024	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

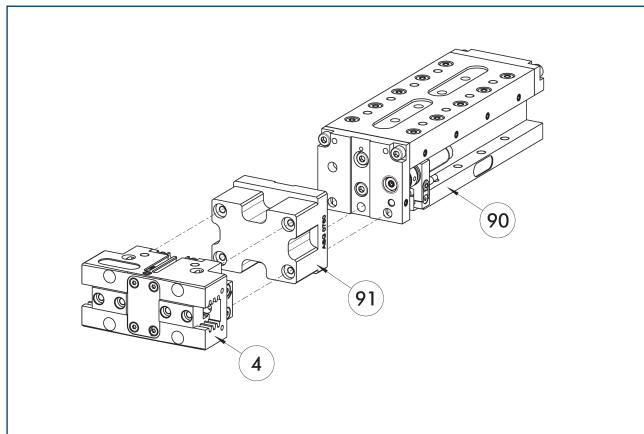


- ⑨⑩ Monitoring of locking

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-160-3-MV	0324846	yes	±1°/±2°/±1,5°	●
TCU-P-160-3-OV	0324847	no	±1°/±2°/±1,5°	

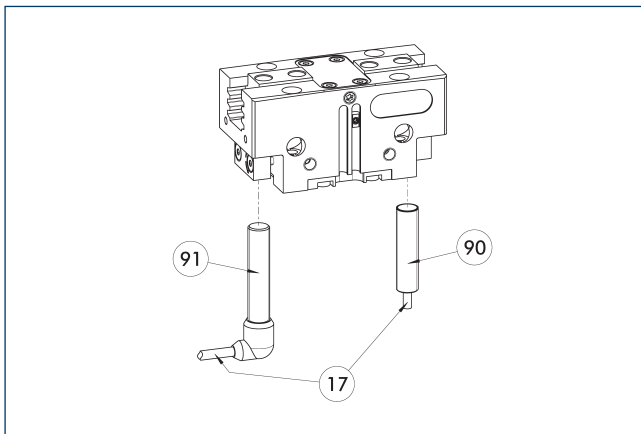
Modular Assembly Automation



- ④ Grippers
- ⑨⑩ Linear module CLM/KLM/LM/ELP/ELM/ELS/HLM
- ⑨① ASG adapter plate

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.

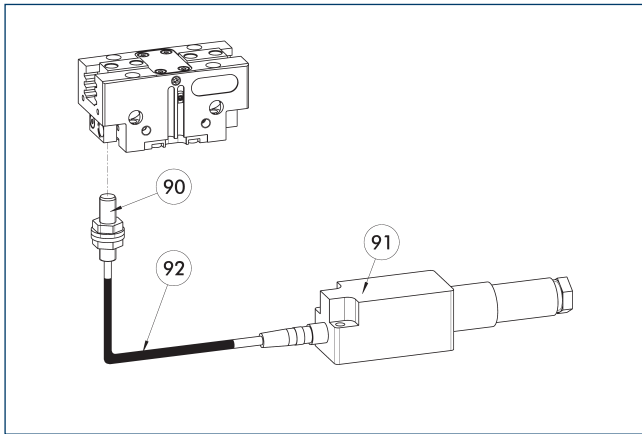
Description	ID	Often combined
Inductive proximity switch		
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	●
INK 80-S	0301550	
Inductive proximity switch with lateral cable outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	●
INK 80-S-SA	0301566	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 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	
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	

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.

PGN-plus-P 160

Universal gripper

Flexible position sensor



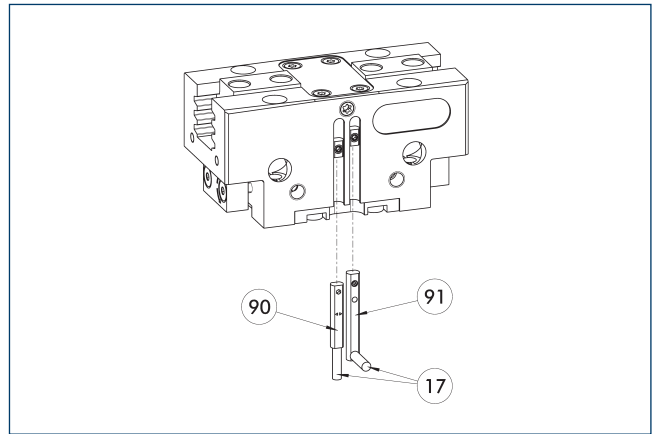
- ⑨⑩ FPS-S sensor
- ⑨① FPS-F5 evaluation electronic
- ⑨② Cable extension

Flexible position monitoring of up to five positions.

Description	ID	
Attachment kit for FPS		
AS-FPS-PGN-plus-P 160-1	1388823	
AS-FPS-PGN-plus-P 160-2	1388826	
Sensor		
FPS-S M8	0301704	
Evaluation electronics		
FPS-F5	0301805	
Cable extension		
KV BG08-SG08 3P-0050	0301598	
KV BG08-SG08 3P-0100	0301599	

- 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."

Electronic magnetic switch MMS



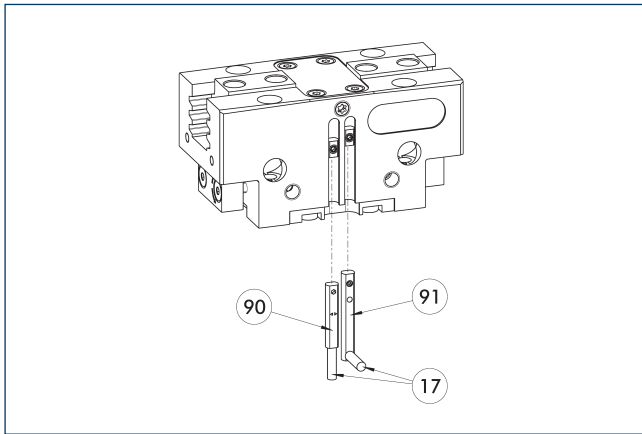
- ①⑦ Cable outlet
- ①⑨ Sensor MMS 22..
- ①① Sensor MMS 22...-SA

End position monitoring for mounting in the C-slot.

Description	ID	Often combined
Electronic magnetic switch		
MMS 22-S-M8-PNP	0301032	●
MMSK 22-S-PNP	0301034	
Electronic magnetic switches with lateral cable 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	

- 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.

Programmable magnetic switch MMS 22-PI1



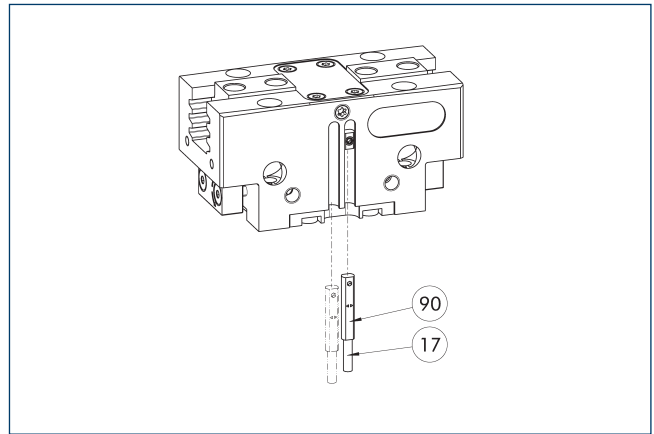
- ⑰ Cable outlet
- ⑲ Sensor MMS 22 ..-PI1-...-SA
- ① Sensor MMS 22 PI1-...

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 cable 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	

- 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.

Programmable magnetic switch MMS 22-PI2



- ⑰ Cable outlet
- ① 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.

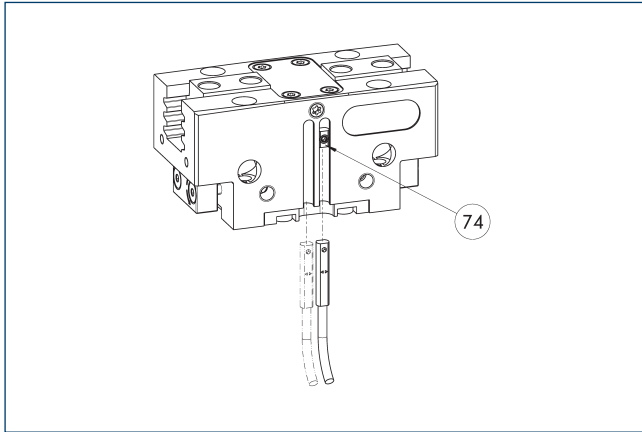
Description	ID	Often combined
Programmable magnetic switch		
MMS 22-PI2-S-M8-PNP	0301180	●
MMSK 22-PI2-S-PNP	0301182	
Programmable magnetic switch with lateral cable outlet		
MMS 22-PI2-S-M8-PNP-SA	0301186	●
MMSK 22-PI2-S-PNP-SA	0301188	
Programmable magnetic switch with stainless steel housing		
MMS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

PGN-plus-P 160

Universal gripper

MMS-P programmable magnetic switch



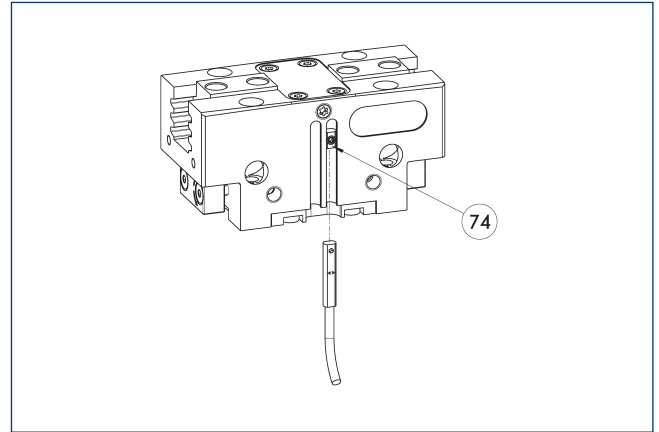
74 Limit stop for sensor

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



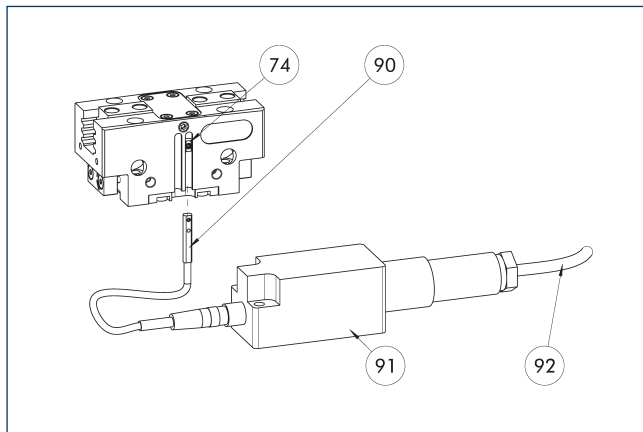
74 Limit stop for sensor

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.

Flexible position sensor with MMS-A



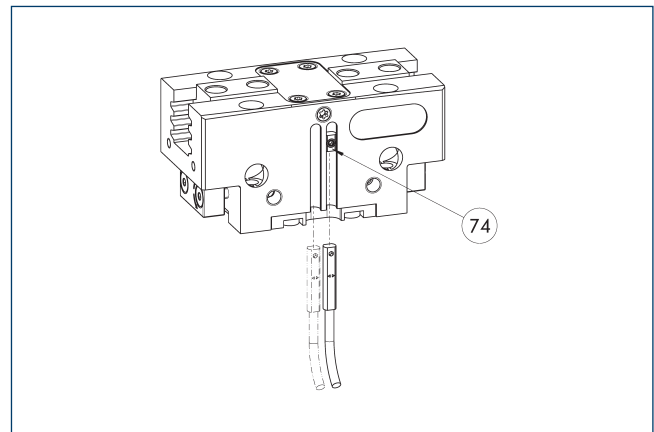
- ⑦④ Limit stop for sensor
- ⑨① FPS-F5 evaluation electronic
- ⑨② MMS 22-A-... sensor
- ⑨② Connection cables

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	

- ① 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-IO-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.

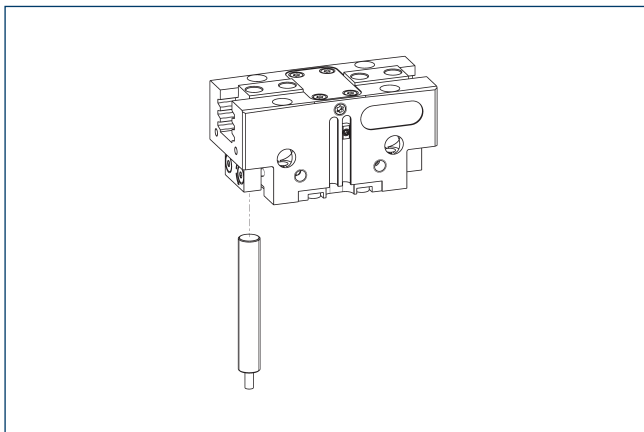
Description	ID	
Programmable magnetic switch		
MMS 22-IO-L-M08	0315830	
MMS 22-IO-L-M12	0315835	

- 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.

PGN-plus-P 160

Universal gripper

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 160-1	1374181	
AS-APS-Z80-PGN-plus-P 160-2	1374182	
Analog position 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. 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.