

Superior Clamping and Gripping



Product Information

Universal gripper PGN-plus-P 50

Reliable. Robust. Flexible. Universal gripper PGN-plus-P

Universal 2-finger parallel gripper with permanent lubrication, high gripping force, and high maximum moments due to the use of a multi-tooth guidance.

Field of application

Pneumatic universal gripper for handling of workpieces in universal applications. For universal use in clean to slightly dirty environments. Special versions available for dirty environments.

Advantages – Your benefits

Robust multi-tooth guidance for precise handling

High maximum moments possible suitable for using long gripper fingers

Lubricant pockets in the mult-tooth guidance ensure process reliability and extended maintenance intervals

Maximum piston surface area for maximum gripping forces

Mounting from two sides in three screw directions for universal and flexible gripper assembly

Air supply via hose-free direct connection or screw connections for universal and flexible gripper assembly

Comprehensive sensor accessory program for versatile querying possibilities and stroke position monitoring

Manifold options for special optimization for your specific case of application (dustproof, high-temperature, corrosion-protected, etc.)







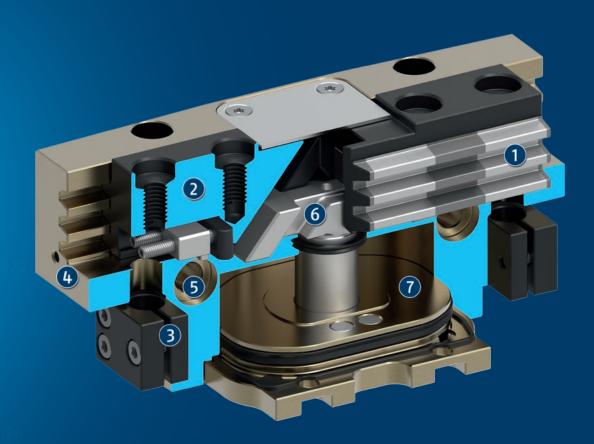






Functional description

The piston is moved up and down by compressed air. The angled active surfaces of the wedge-hook produce a synchronized, parallel jaw motion.



1 Multi-tooth guidance

Maximum service life due to lubricant pockets in the robust multi-tooth guidance, and absorption of high forces and torques by means of the large guidance support

② Base Jaw

with standardized screw connection diagram for the connection of the workpiece-specific gripper fingers

③ Bracket for sensors

Brackets for proximity switches and adjustable control cams in the housing

4 Housing

is weight-optimized due to the use of high-strength aluminum alloy

⑤ Centering and mounting possibilities for universal assembly of the gripper

6 Wedge-hook design

for high power transmission and minimal wear as a result of larger diagonal pull surfaces

7 Piston

Maximum force through maximum surface of drive piston

Detailed functional description

Dustproof version SD



The "dustproof" option increases the degree of protection against penetrating substances. This can either be ordered in a ready-mounted gripper version or else retrofitted to the gripper using the "SAD PGN-plus-P" retrofit kit.

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 version this acts as a closing force, and in the IS version as an opening force. The image shows the AS version. The gripping force maintenance can also be used to increase the gripping force or for one-way gripping.

- Multi-tooth guidance
- 2 Base Jaw
- 3 Bracket for sensors
- 4 Housing

- Centering and mounting possibilities
- 6 Wedge-hook design
- Piston
- 6 Gripping force maintenance device

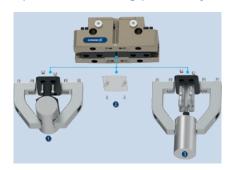
Settings of the control cams during monitoring with inductive proximity switches



Monitoring with inductive proximity switch can be performed as standard from size 64. In delivery state, the positions "gripper open" and "gripper closed" are preset with the control cams. The inductive sensors must be ordered separately and are slid into the housing up to the stop and clamped. In order to monitor any other position, such as "workpiece gripped" for example, both control cams can be individually set in the respective base jaws.

- Control cam preset for "gripper closed" position
- Control cam preset for "gripper open" position
- Holder with clamping screw for fixing the sensor
- Clamping screw for process-reliable fixing of the adjusted switching point
- Adjusting screw for setting any switching point

Optional mounting possibility under the cover sheet for customer-specific additional structure



In delivery state, a cover sheet is mounted to the gripper. This can be removed if necessary. Under the cover sheet are threads and fittings for mounting customer-specific designs for implementing additional functions.

- Additional centering or support of the workpiece
- 2 The cover plate (can be removed)
- **3** Ejector with external cylinder attached to the gripper

General notes about the series

Operating principle: Wedge gear with surface power

transmission

Housing material: Aluminum

Base jaw material: Steel

Actuation: pneumatic, with filtered compressed air as per

ISO 8573-1:2010 [7:4:4].

Warranty: 36 months

Service life characteristics: on request

Scope of delivery: Brackets for proximity switches, centering sleeves, 0-rings for direct connection, assembly instructions (operating manual with declaration of incorporation is available online)

Gripping force maintenance device: possible by using the version with mechanical gripping force maintenance or

pressure maintenance valve SDV-P

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

Handling tool for loading and unloading raw and finished parts and compensation of inaccurate position. A sensor distributor is used for routing signals through a cable.

- Sensor distributor V4
- Tolerance compensation unit TCU-Z
- Universal gripper PGN-plus-P
- 4 IN sensors
- Universal rotary actuator SRM

SCHUNK offers more ...

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



① For more information on these products can be found on the following product pages or at schunk.com.

Options and special information

Gripping force maintenance version AS/IS: The mechanical gripping force maintenance version ensures minimum gripping force even in the event of a pressure drop. In the AS/S version this acts as a closing force, in the IS version as an opening force.

High-temperature version V/HT: for use in hot environments

Precision version P: for the highest accuracy

Anti-corrosion version K: for use in corrosion-inducing atmospheres

ATEX version EX: for explosive environments

Dustproof version SD: absolutely dustproof, increased degree of protection against ingress of materials.

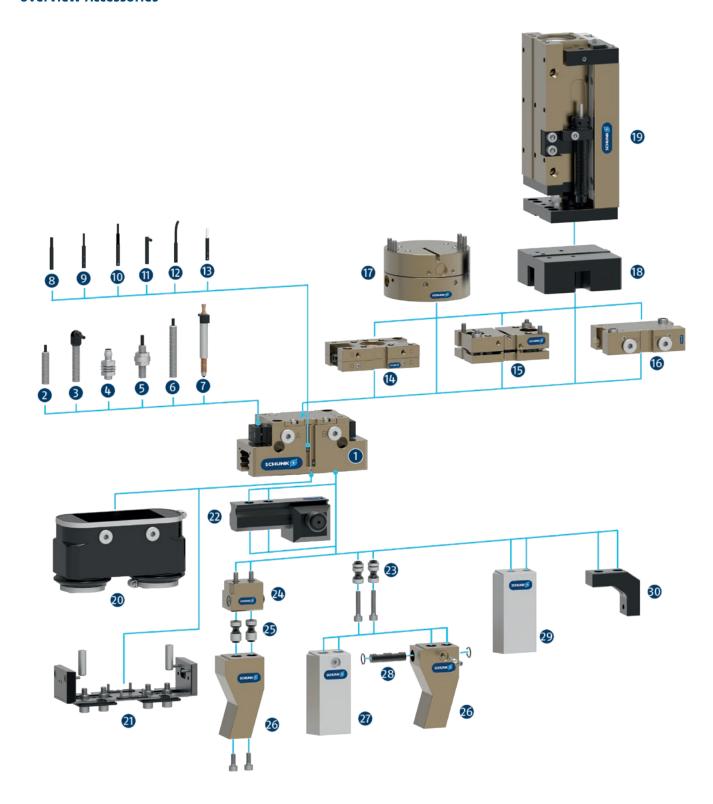
Integrated air purge connection: impedes the ingress of dirt into the inside of the gripper

NEW: Version with food -compliant lubrication (H1G): as a solution for an easy entry into medical technology, lab automation, pharmaceutical and food industry. The requirements of EN 1672-2:2020 are not fully met.

Additional versions: Various options can be combined with each other.

SCHUNK gripper PGN-plus-P

Overview Accessories



8

PGN-plus-P

Universal 2-finger parallel gripper with a high gripping force and high maximum moments due to the use of a multi-tooth guidance

Sensor system

2 IN ...

Inductive proximity switch with molded cable and straight cable outlet

Inductive proximity switch with molded cable and laberal cable outlet

IN-C 80

Inductive proximity switch, directly pluggable

FPS

Flexible position sensor for monitoring up to five different, freely selectable positions

APS-Z80

Inductive position sensor for precise position detection of the gripper jaws with analog output

APS-M1S

Mechanical measuring system for precise position detaction of the gripper jaw with analog output

8 MMS 22

Magnetic switch with straight cable outlet for monitoring a position

MMS 22-PI1

Magnetic switch with straight cable outlet for monitoring a freely programmable position

9 MMS 22-PI2

Magnetic switch with straight cable outlet for monitoring two freely programmable position

10 MMS 22-PI1-HD

MMS 22-PI1 in robust design

MMS 22-PI2-HD

MMS 22-PI2 in robust design

1 MMS 22-SA

Magnetic switch with lateral cable outlet for monitoring a position

MMS 22-PI1-SA

Magnetic switch with side cable outlet for monitoring a freely programmable position

MMS-P

Magnetic switch with straight cable outlet for monitoring two freely programmable position

B MMS-A

Analog magnetic switch with straight cable outlet for measuring the gripper jaw position with analog output and teach function

Complementary products

@ CWS

Manual change system with integrated air feed-through for simple exchange of the handling components

🚯 TCU

Tolerance compensation unit for compensating small tolerances in the plane

6 SDV-P-E-P

Pressure maintenance valve for temporary force and position maintenance

⚠ AGE

Compensation unit for compensation of large tolerances along the X and Y axes

B ASG

Adapter plate for combining various automation components in the modular system

📵 CLM

Linear module with pneumatic drive and scope-free pre-loaded junction rollers

4 HUE

Sleeve for protection against dirt

SAD

Dustproof version, retrofit kit

Finger Accessories

UZB

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

BSWS-AR

Adapter pin of the jaw quick-change system for fast, manual change of top jaws

BSWS-B

Locking mechanism of the jaw quick-change system for fast, manual exchange of top jaws

BSWS-A

Adapter pin of the jaw quick-change system for adaptation to the customized finger $\,$

- Customized fingers
- BSWS-ABR

Finger blank made of aluminum with interface to the jaw quick-change system

BSWS-SBR

Finger blank made of steel with interface to the jaw quick-change system

BSWS-UR

Locking mechanism for the integration of the jaw quickchange system into customized fingers

ABR/SBF

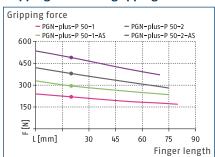
Finger blanks made of steel or aluminum with standardized screw connection diagram

30 ZBA

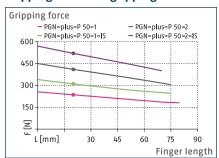
Intermediate jaws for reorientation of the mounting surface



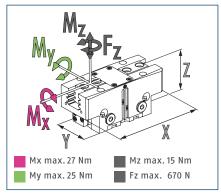
Gripping force O.D. gripping



Gripping force I.D. gripping



Dimensions and maximum loads



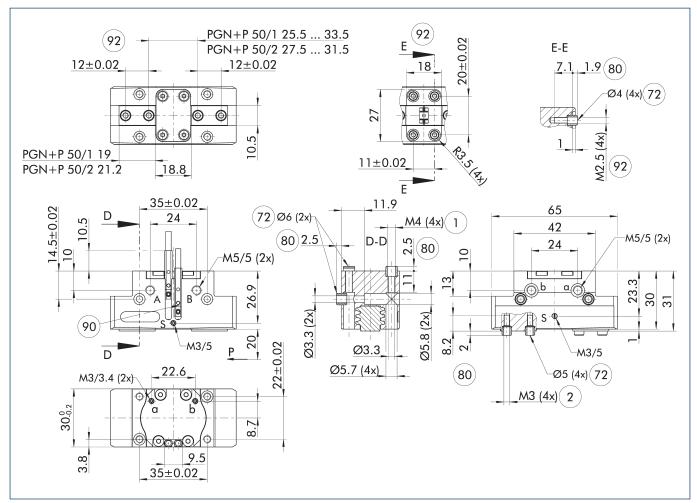
The indicated moments and forces are statical values, apply for each base jaw and may appear simultaneously. Loads may additionally occur to the moment produced by the gripping force itself.

Technical data

Description		PGN-plus-P 50-1	PGN-plus-P 50-2	PGN-plus-P 50-1-AS	PGN-plus-P 50-2-AS	PGN-plus-P 50-1-IS	PGN-plus-P 50-2-IS
ID		0318472	0318473	0318474	0318475	0318476	0318477
Stroke per jaw	[mm]	4	2	4	2	4	2
Closing/opening force	[N]	220/235	380/410	295/-	490/-	-/300	-/520
Min. spring force	[N]			75	110	65	110
Weight	[kg]	0.17	0.17	0.2	0.2	0.2	0.2
Recommended workpiece weight	[kg]	1.1	1.9	1.1	1.9	1.1	1.9
Fluid consumption double stroke	[cm³]	6	6	10	10	12	12
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]	0.015/0.015	0.015/0.015	0.015/0.025	0.015/0.025	0.025/0.015	0.025/0.015
Closing/opening time with spring	[s]			0.03	0.03	0.03	0.03
Max. permissible finger length	[mm]	80	75	75	70	75	70
Max. permissible mass per finger	[kg]	0.2	0.2	0.2	0.2	0.2	0.2
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]	65 x 30 x 31	65 x 30 x 31	65 x 30 x 47			
Options and their characteristics							
Dustproof version		1317516	1317527	1317531	1317534	1317539	1317541
IP protection class		64	64	64	64	64	64
Weight	[kg]	0.21	0.21	0.24	0.24	0.24	0.24
Corrosion-protected version		38318472	38318473	38318474	38318475	38318476	38318477
High-temperature version		39318472	39318473	39318474	39318475	39318476	39318477
Min./max. ambient temperature	[°C]	5/130	5/130	5/130	5/130	5/130	5/130
Precision version		0318478	0318479	0318480	0318481		
H1 grease version		1328472	1475830	1353810	1475833	1353811	1475836
Dustproof/H1 grease version		1475829	1475831	1475832	1475834	1475835	1475837
Weight	[kg]	0.21	0.21	0.24	0.24	0.24	0.24
IP protection class		64	64	64	64	64	64

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

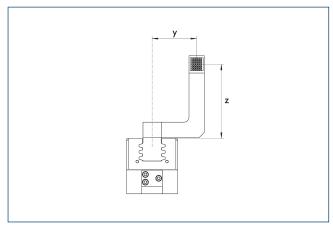
Main view

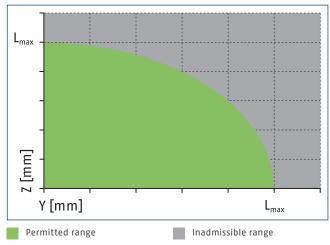


The drawing shows the gripper in the basic version with closed jaws, without dimensional consideration of the options described below.

- ① The SDV-P pressure maintenance valve can also be used for I.D. or 0.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see catalog section on accessories).
- 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..
- ©2 Screw connection with centering for customized mounting (these centering sleeves are not included in the scope of delivery)

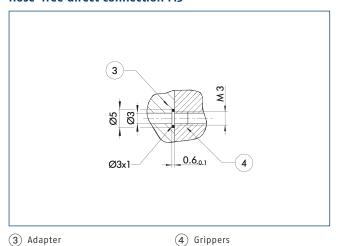
Maximum permitted finger projection





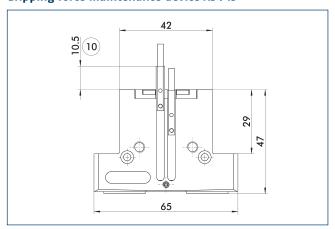
 L^{max} is equivalent to the maximum permitted finger length, see the technical data table.

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

Gripping force maintenance device AS / IS

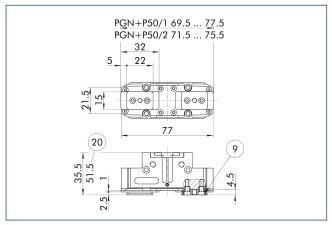


10 Projection applies only for AS version

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

plate.

Dustproof version



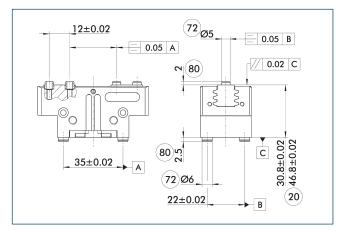
(9) For mounting screw connection (20) For AS / IS version diagram, see basic version

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 50	1347474

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.

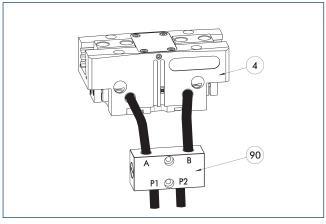
Precision version



- 20 For AS / IS version72) 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

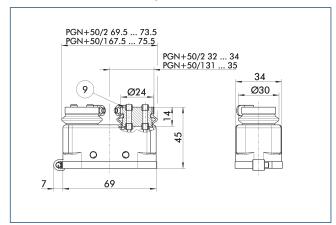
90 SDV-P pressure maintenance valve

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 04	0403130	6		
Pressure maintenance valve with air bleed screw				
SDV-P 04-E	0300120	6		

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.

Protective cover HUE PGN-plus 50



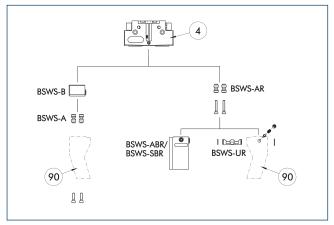
9 For mounting screw connection diagram, see basic version

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 50	0371479	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 50	0303020	2			
BSWS-AR 50	0300091	2			
Quick-change jaw system base	2				
BSWS-B 50	0303021	1			
Jaw quick-change system fing	Jaw quick-change system finger blank				
BSWS-ABR-PGZN-plus 50	0300071	1			
BSWS-SBR-PGZN-plus 50	0300081	1			
Jaw quick-change system locking mechanism					
BSWS-UR 50	0302990	1			

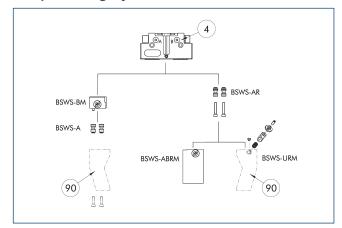
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked. Only systems that are listed in the table, can be used.

Fields of application

Series	Size	Variant	Suitability	
PGN-plus-P	50	-1 (6 bar)		
PGN-plus-P	50	-1-AS / -1-IS (6 bar)		
PGN-plus-P	50	-2 (6 bar)		
PGN-plus-P	50	-2-AS / -2-IS (6 bar)		
Legend				
	Can be combined without restrictions			
	Use with restrictions (see loading limits)			
0000	cannot be combine	d		

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 50	0303020	2			
BSWS-AR 50	0300091	2			
Quick-change jaw system base					
BSWS-BM 50	1313899	1			
Jaw quick-change system finger blank					
BSWS-ABRM-PGZN-plus 50	1420850	1			
Jaw quick-change system locking mechanism					
BSWS-URM 50	1380614	1			

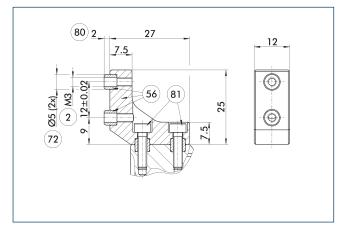
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked. Only systems that are listed in the table, can be used.

Fields of application

Series	Size	Variant	Suitability	
PGN-plus-P	50	-1 (6 bar)		
PGN-plus-P	50	-1-AS / -1-IS (6 bar)		
PGN-plus-P	50	-2 (6 bar)		
PGN-plus-P	50	-2-AS / -2-IS (6 bar)		
Legend				
	Can be combined without restrictions			
	Use with restrictions (see loading limits)			
0000	cannot be combine	d		

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

ZBA-L-plus 50 intermediate jaws

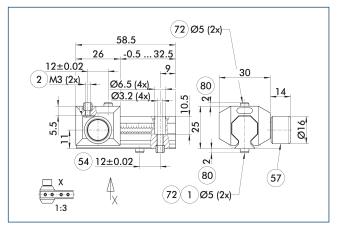


- 2 Finger connection
- 56 Included in the scope of delivery
- 72) Fit for centering sleeves
- 80 Depth of the centering sleeve hole in the counter part
- 81) Not included in the scope of delivery

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		Finger interface	Scope of delivery
Intermediate jaw				
ZBA-L-plus 50	0311712	Aluminum	PGN-plus 50	1

UZB 50 universal intermediate jaw



- 1 Gripper connection
- 2 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.

Description	ID	Grid dimension
		[mm]
Universal intermediate	jaw	
UZB 50	0300041	1.5
Finger blank		
ABR-PGZN-plus 50	0300009	
SBR-PGZN-plus 50	0300019	

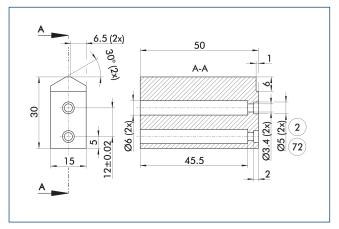
① If the operating pressure is higher than 6 bar, suitability for use beyond the application limits must be checked.

Fields of application

Series	Size	Variant	Suitability	
PGN-plus-P	50	-1 (6 bar)		
PGN-plus-P	50	-1-AS / -1-IS (6 bar)		
PGN-plus-P	50	-2 (6 bar)		
PGN-plus-P	50	-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 blank ABR- / SBR-PGZN-plus 50



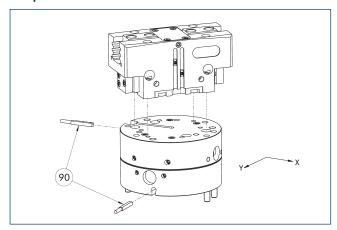
(2) Finger connection

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 50	0300009	Aluminum (3.4365)	1
SBR-PGZN-plus 50	0300019	Steel (1.7131)	1

Compensation unit AGE-F



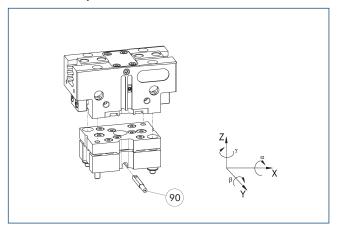
90 Monitoring

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-040-1	0324920	± 2	3	
AGE-F-XY-040-2	0324921	± 2	4	
AGE-F-XY-040-3	0324922	± 2	4.5	•

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

Tolerance compensation unit TCU

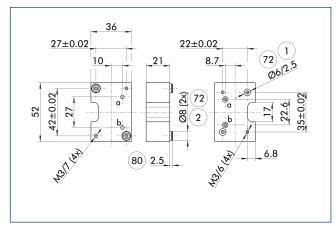


90 Monitoring of locking

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
Compensation unit			
TCU-P-050-3-0V	0324757	no	±1°/±1°/±1,5°

Adapter plate for PGN-plus 50

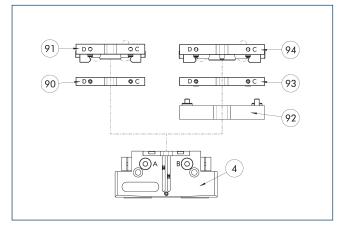


- 1) Robot-side connection
- 72) Fit for centering sleeves
- 2 Tool-side connection
- 80 Depth of the centering sleeve hole in the counter part

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-064-050-P	0305768	

Compact change system for grippers

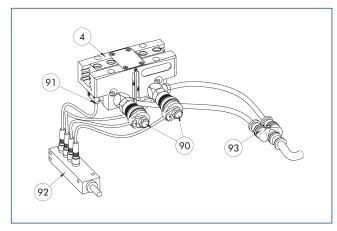


- (4) Grippers
- 90 CWA compact change adapter
- (91) CWK compact change master
- 92 A-CWA adapter plate
- **93** CWA compact change adapter
- (94) CWK compact change master

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

Description	ID
Tool side	
A-CWA-064-050-P	0305768
CWA compact change	adapter
CWA-050-P	0305751
CWK compact change	master
CWK-050-P	0305750

Attachment valves



- (4) Grippers
- 90 Micro valves
- 93 Y distributor

(92) Sensor distributor

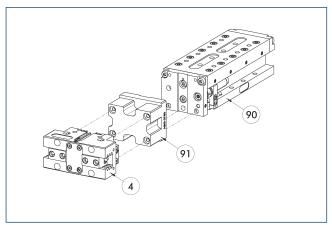
(91) Sensor

The set of attachment valves reduces the compressed air consumption as there is no need to ventilate or bleed the supply lines. This can also reduce cycle time. The hose-free direct assembly of the micro valves reduces the hosing effort for the gripper. To further simplify electrical connection of the valves and sensors, their signals can be bundled via an optional distributor.

Description	ID	Often combined
Add-on valve set		
ABV-MV15-M5	0303323	
ABV-MV15-M5-V2-M8	0303386	
ABV-MV15-M5-V4-M8	0303356	•
ABV-MV15-M5-V8-M8	0303357	

A set of attachment valves ABV is required per actuator. The ABV set contains two 3/2 micro valves, an Y-distributor for compressed air supply and optionally a sensor distributor with two, four or eight inputs or outputs. Sensors for monitoring the gripper need to be ordered separately. Pneumatic hoses are not included in the scope of delivery.

Modular Assembly Automation



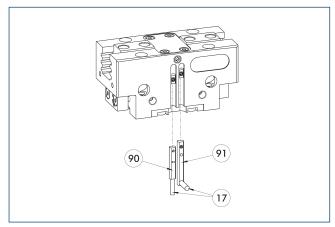
- (4) Grippers
- (91) ASG adapter plate
- © CLM/KLM/LM/ELP/ELM/ELS/HLM linear modules

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".

PGN-plus-P 50

Universal gripper

Electronic magnetic switch MMS



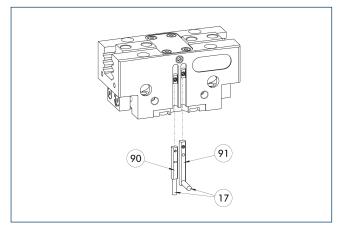
- 17) Cable outlet
- 91) Sensor MMS 22...-SA
- 90 Sensor MMS 22..

End position monitoring for mounting in the C-slot.

301032	
301032	
	•
301034	
iteral cable c	outlet
301042	•
301044	
301622	•
301623	
301594	
301502	
301463	
301495	
301496	
301497	•
301775	•
301746	
301751	
111111111111111111111111111111111111111	801622 801623 801594 801502 801463 801495 801497 801775 801746

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

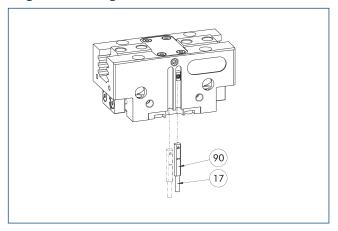
90 Sensor MMS 22 PI1-...

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) 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 stainles	s 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

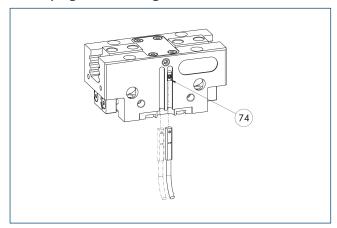
90 MMS 22...-PI2-... sensor

Position monitoring with two programmable positions per sensor and electronics built into the sensor. Can be programmed using MT magnetic teaching tool (included in the scope of delivery) 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 c	able outlet
MMS 22-PI2-S-M8-PNP-SA	0301186	•
MMSK 22-PI2-S-PNP-SA	0301188	
Programmable magnetic switch	with stainles	s 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



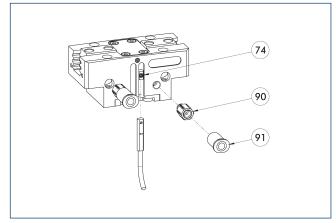
(74) Limit stop for sensor

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

Description	ID	Often combined
Programmable magnetic switch	h	
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 plug/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



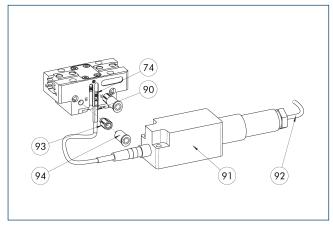
- (74) Limit stop for sensor
- 90 Flow control coupling, Ø 0.8 mm, for teaching process (ID 9953035 / not included in the scope of delivery)
- (91) Air connection (not included in the scope of delivery)

Multi-position monitoring with no-contact measuring analog sensor, can be mounted directly in the C-slot. The electronics are built into the sensor. Programmed using the MT magnetic teaching tool (included in the scope of delivery) or ST plug teaching tool (to be ordered separately).

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

① One sensor is required per unit. The output voltage of the sensor differs according to the unit and is typically between 0.3 and 10 V. For teaching the sensor, a flow control coupling is required to reduce the speed during the teaching process. The resolution of the sensor can be smaller in the peripheral areas of the gripper. For further information on the product, see operating manual.

Flexible position sensor with MMS-A



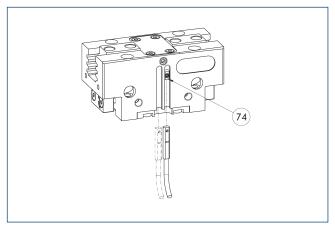
- (74) Limit stop for sensor
- 90 MMS 22-A-... sensor
- (91) FPS-F5 evaluation electronic
- (92) Connection cables
- (93) Flow control coupling, Ø 0.8 mm, for teaching process (ID 9953035 / not included in the scope of delivery)
- (94) Air connection (not included in the scope of delivery)

Flexible position monitoring of up to five positions.

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

When using an FPS system, an MMS 22-A-05V, and evaluation electronics (FPS-F5) are required for each gripper. For teaching the sensor, a flow control coupling is required to reduce the speed during the teaching process. The resolution of the sensor can be smaller in the peripheral areas of the gripper. For further information on the product, see operating manual.

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. Sensor programming on the gripper takes place via the IO-Link interface or the MT magnetic teach tool (included in scope of delivery). 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.



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

Folgen Sie uns | Follow us









