

SUPERIOR.

The SCHUNK multi-tooth guidance

PGN-plus 2-Finger-Parallel Gripper



Multi Tooth
Guidance

**SUPERIOR
PRECISION!**

Superior.

The SCHUNK multi-tooth guidance

Spreading the load across many shoulders – that is the principle behind the multi-tooth guidance developed by SCHUNK. The guidance tasks in parallel and centric grippers are no longer carried out using the classical T-slot; now multiple prismatic guidance arranged in parallel do the job.

Your advantages: forces and moments are distributed across multiple guiding areas. As a result, the guidances have a higher load capacity.

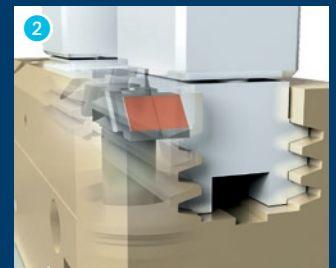
The effect: you can use longer gripper fingers with the same gripper size, without overloading the guidance. The added guiding area reduces the surface pressure – and therefore wear – to a minimum. The multi-tooth guidance ensures minimal guidance play throughout the gripper's service life.

- 30-year functional warranty, SCHUNK Longlife warranty
- Precise, process reliable handling
- Maximum gripping force
- Large moment and power absorption
- Trouble-free use of long gripper fingers
- Maximum service life

Longlife warranty

In addition to a 36-month warranty, we offer you a Europe-wide 30-year functional warranty, free of charge.

The SCHUNK longlife warranty guarantees repairs at the fixed SCHUNK price throughout the gripper's service life.



- ① The load on the multi-tooth guidance is spread across many shoulders.
- ② More power: The large space between the multi-tooth guidance allows for a particularly strong diagonal pull. This guarantees that the force of the powerful oval piston is exerted to the fullest extent while limiting wear and damage.

This total system has superior precision, strength and reliability.

Premium gripper range with SCHUNK multi-tooth guidance

PGN-plus



2-finger parallel gripper

PZN-plus



3-finger centric gripper

DPG-plus



Sealed 2-finger parallel gripper

DPZ-plus



Sealed 3-finger centric gripper

PGB-plus



2-finger parallel gripper with center bore

PZB-plus



3-finger centric gripper with center bore

PZV-plus



4-finger centric gripper

PGN-plus – the most versatile of all-rounders

The PGN-plus 2-finger parallel gripper, together with the PZN-plus 3-finger centric gripper, is undoubtedly the "best among its class" in the SCHUNK premium range of gripping modules. The first gripper with multi-tooth guidance. The first gripper with an oval piston drive concept. The first gripper with comprehensive accessories.

PGN-plus represents efficiency and precision in handling. It sets the technological standards in gripping technology. The versatile options for special application cases, neatly stepped sizes and large gripping forces make it an ideal solution for all your applications. PGN-plus is the quintessence of the best, perfectly combined in one universal product range.

Benefit from the leading expert in gripping technology:

- Sturdy multi-tooth guidance for precise handling
- Significantly higher moments loads, making it possible to use longer gripper fingers
- Higher gripping forces provided by oval pistons
- Fastened on two sides of the gripper in three screwing directions for universal and flexible gripper assembly
- Hose-free direct connection or connection via screws for flexible pressure supply in all automation solutions
- Comprehensive sensor accessories for manifold monitoring possibilities, including stroke position control
- Compact dimensions for minimum interfering contours in handling
- Wide variety of options for optimization tailored to your specific application



The PGN-plus series – for handling tasks ranging from small components through to the engine block

Sizes	40 to 380
Weight	0.17 to 39.5 kg
Gripping forces	140 to 21800 N
Stroke per finger	2.5 to 45 mm

Variants and standards for every gripping task

Environment



HUE dust cover

Soft plastic cover for long-lasting protection of grippers against fluids and dust.



High-temperature version of dust cover

For reliable use in hot environments.

Compatible with ...



TCU compensation unit

The TCU can be moved in the X, Y and Z directions, thereby enabling it to correct angle errors and compensate rotation.



Modular assembly automation

Versatile, standardized combinations of the modular design, e.g. multi-tooth guided gripper with linear units.



Cleanroom

PGN-plus is certified to EN ISO 14644 cleanroom class ISO 5 as standard, with the HUE dust cover also available as standard for use in ISO 2 cleanrooms. All SCHUNK premium products are delivered with cleanroom certification.



EX explosion protection version



All of SCHUNK's Premium products are also provided with ATEX certification as standard.

Further options

OD/ID gripping force safety device

The GKS mechanical gripping force safety device ensures that a minimum clamping force will be applied even if there is a drop of pressure. Besides this, the gripping force safety device can be used to increase gripping force or for single actuated gripping.

KVZ increased force version

For increased gripping force requirements when opening and closing.

P Precision version

Special modification of the high precision gripping module for absolute replacement accuracy when changing grippers.

Dust protection version

For use in dusty environments. Completely dust-proof versions with increased protection against penetrating materials for total reliability.

K corrosion-protected version

All steel parts are securely protected for use in corrosive environments.



V high-temperature version

For use in environments with high temperatures or aggressive fluids.

Machine tools



Spindle interfaces

The spindle interfaces are available as standard to increase your productivity, particularly when it comes to automatic machine operation.



Shank interface

GSW 20 gripper with shank interface for toolholders: loads and unloads machine tools fully automatically, using the centers' own machine axes.

... and much more

Superior gripper sensors

Sensor systems



MMS-P programmable magnetic switch

With adjustable hysteresis. For monitoring two switching points.



MMS electronic magnetic switch

Fitted to the gripper's C-slot to monitor a switching point.



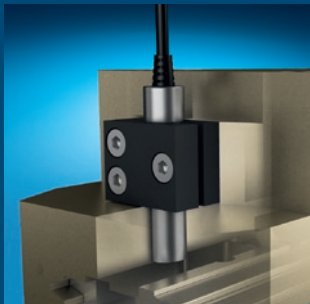
RMS reed switch

Mechanical magnetic switch. Fitted to the gripper's C-slot to monitor a switching point.



BSWS quick-change jaw system

Exchangeable gripper fingers enable quick refitting for handling other workpieces and minimize set-up times.



IN inductive proximity switch

For monitoring the current state of automation components.



FPS flexible position sensor

For monitoring up to 5 switching points.



APS analog position sensor

System consisting of sensors and electronics for precise recording of the gripper jaw position.



UZB universal intermediate jaw

Enables rapid adjustment of the stroke position, without tools, thanks to the grid system provided and the tool-free clamping device.



PA-3 pneumatic monitoring

Particularly resistant to contamination, can be used in explosive areas or in "wireless" applications.



RSS wireless monitoring system

Wireless sensor system for monitoring the signals and states of sensors and processes.



FMS force measuring system

For measuring the gripping forces during the gripping process or, for example, for checking process forces in the case of taught robot applications.



MV micro valves

Simple to integrate - fitted directly to the actuator. Benefit from the lowest possible energy consumption, short cycle times and the minimum of installation work.

SDV-P pressure maintenance valve for safe gripping forces ... and much more








Modular principle

The best standardization options to keep you flexible

Multi-tooth all-round solutions

SCHUNK provides superior quality multi-tooth guidance in a large portion of its products. In addition to standardized screw connection diagrams, SCHUNK's product range includes numerous product variants and a wide range of accessory components. We can therefore provide you with the right gripper for any type of application, whether that involves specific ambient effects such as

temperature, contamination or aggressive media, or cleanroom or explosive ambient conditions. It goes without saying that our range of services also includes the appropriate sensor systems. Furthermore, we offer you many additional options for reducing idle times and maximizing the flexibility of your plants.

							
GKS Gripping force safety device	■	■	■	■	■	■	
SD dust protection version	■	■					
K corrosion-protected version	■						
V high-temperature version	■	■	■	■	■	■	■
KVZ increased force version	■	■	■	■			
P precision version	■	■					
EX explosion protection version	■	■	■	■			
MMS-P programmable magnetic switch	■	■	■	■	■	■	■
APS analog position sensor	■	■			■	■	■
FPS flexible position sensor	■	■			■	■	■
PA3 pneumatic monitoring	■	■	■	■	■	■	■
RMS reed switch	■	■	■	■	■	■	■
RSS radio sensor system	■	■	■	■	■	■	■
FMS force measuring system	■	■			■	■	■
IN inductive proximity switch	■	■			■	■	■
MMS magnetic switch	■	■	■	■	■	■	■
ABR, SBR finger blanks	■	■			■	■	■
HUE dust cover	■	■					
BSWS quick-change jaw system	■	■			■	■	■
UZB universal intermediate jaw	■	■			■	■	■

Copy fax reply, complete and fax to +49-7133-103-2189

Please contact me

for a consultation by phone

for a personal consultation from the SCHUNK area sales manager

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