

PGN-plus-E Generation Permanent 2-Finger Parallel Gripper. The first simple electric Gripper with Multi-tooth Guidance, Digital Control and 24 V Drive.

Mechatronic universal genius

With the new SCHUNK gripper PGN-plus-E of the Generation Permanent, SCHUNK is applying the performance package of its new pneumatic universal gripper SCHUNK PGN-plus-P directly to the area of electric handling applications. Like its role model, the SCHUNK PGN-plus-E also has improved multi-tooth guidance for the accommodation of higher moment, a lubricant pocket through-hole in the guidance contour, and the proven diagonal-pull kinematics with a high surface coverage in all stroke positions. The mechatronic universal gripper is powered by a brushless DC servo motor. Therefore, permanently high process stability and a long service life with minimal maintenance requirements are ensured. The SCHUNK PGN-plus-E benefits from a unique accessory program. Nearly the entire spectrum of feasible automation applications can be mastered with the reliable performance of the modular system of universal grippers.

Fully integrated control and power electronics

The mechatronic universal gripper makes the switch from pneumatic to electric components particularly easy: it has an identical screw connection pattern to its pneumatic counterpart, and the 24 V gripper is easily controlled via digital I/O. Up to two gripping positions can also be monitored by means of an additional M8 standard connection. The necessary control and power electronics are already fully integrated in the compact module, so no additional space in the switch cabinet is required. Neither extensive mechatronic know-how nor additional programming is necessary for commissioning. The gripping force of the SCHUNK PGN-plus-E can be adjusted in four stages. The grippers will initially be available in size 80. Additional sizes are planned.

Benefit from the advantages:

- up to **50%** longer gripper fingers
- up to **120%** higher finger load
- **easy digital control and gripping force adjustment**



The new electric SCHUNK Grippers of the Generation Permanent!

Proven multi-tooth guidance with permanent lubrication, higher maximum moments, and adjustable gripping force.

Available starting January 2016



Size
80



Weight
1.0 kg



Gripping force
up to 500 N



Stroke per finger
8 mm



Workpiece weight
up to 2.5 kg

Product features

- Fully integrated control and power electronics
- Gripping force adjustable over four stages
- Improved SCHUNK multi-tooth guidance with a larger supporting dimension
- Increased maximum moment and force
- Lubricant pockets with flat lubricating wedge in the multi-tooth guidance
- Brushless DC servo motor
- Proven diagonal-pull kinematics with higher surface coverage in the limit positions
- Improved efficiency and wear reduction
- Precise repeat accuracy of 0.01 mm

Your advantage

- Simple commissioning and quick integration into existing systems
- Up to 50% longer gripper fingers due to higher maximum moments
- More space in the switch cabinet, because no external controllers are used
- Handling of higher workpiece weights with up to 50% higher gripping force
- Fast and even distribution of lubricant, also in the case of short strokes
- Reduced operating costs (TCO)
- More compact, efficient systems

Functional cross section

- 1 Multi-tooth guidance
- 2 Base jaw
- 3 Sensor systems
- 4 Housing
- 5 Centring and mounting options
- 6 Wedge hook principle
- 7 Spindle nut
- 8 Drive
- 9 Control electronics

