



Superior Clamping and Gripping



TANDEM® PGS3

Pneumatic Clamping Force Block

Perfection and Reliability for Simple Machine Loading

TANDEM PGS3

Pneumatic Clamping Force Block

TANDEM PGS3 – The Clamping Force Block makes it easy to Transition to Automated Machine Loading.

Maximum Performance in Terms of Cost-Performance

The TANDEM PGS3 is the new compact pneumatic clamping force block for automated metal cutting of small components. When it comes to precise and efficient clamping, the low-maintenance powerhouse scores despite its small size with a long jaw stroke, a remarkable clamping force, and high repeat accuracy.

– SCHUNK quality at an attractive price. Suitable for those who are new to automation and for those with many years' experience.

Flexible and fast set-up

The clamping force block allows fastening on the machine table – without needing an additional console plate. The TANDEM PGS3 can be directly mounted via the integrated flange on the machine tables, dividing heads or SCHUNK VERO-S NSL3 150 clamping stations of machining centers. Its compact design ensures the greatest possible use of the working space.

Productivity. Automation. Innovation.

A strong Combination Partner for light Machining and simple Automation Tasks.

The TANDEM PGS3 clamping force block – more potential for lean robots with a low handling weight.



**Set up. Start.
Be efficient.**

Efficiency Navigator

Integration time	+++
Cost-performance	++
Productivity	++
Energy	++
Flexibility	+
Conversion (time/cost)	+

+++ excellent performance
++ outstanding performance
+ very good performance



Direct assembly on the machine table. The flange is integrated so no additional console plates are needed.



Metal cutting of small to medium-sized workpieces. Simple and precisely done with perfectly matching components: SCHUNK gripper EGP-C and clamping force block TANDEM PGS3.



TANDEM PGS3

Pneumatic Clamping Force Block

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Available with standard or long stroke (-LH), centrally clamping

Scope of Delivery

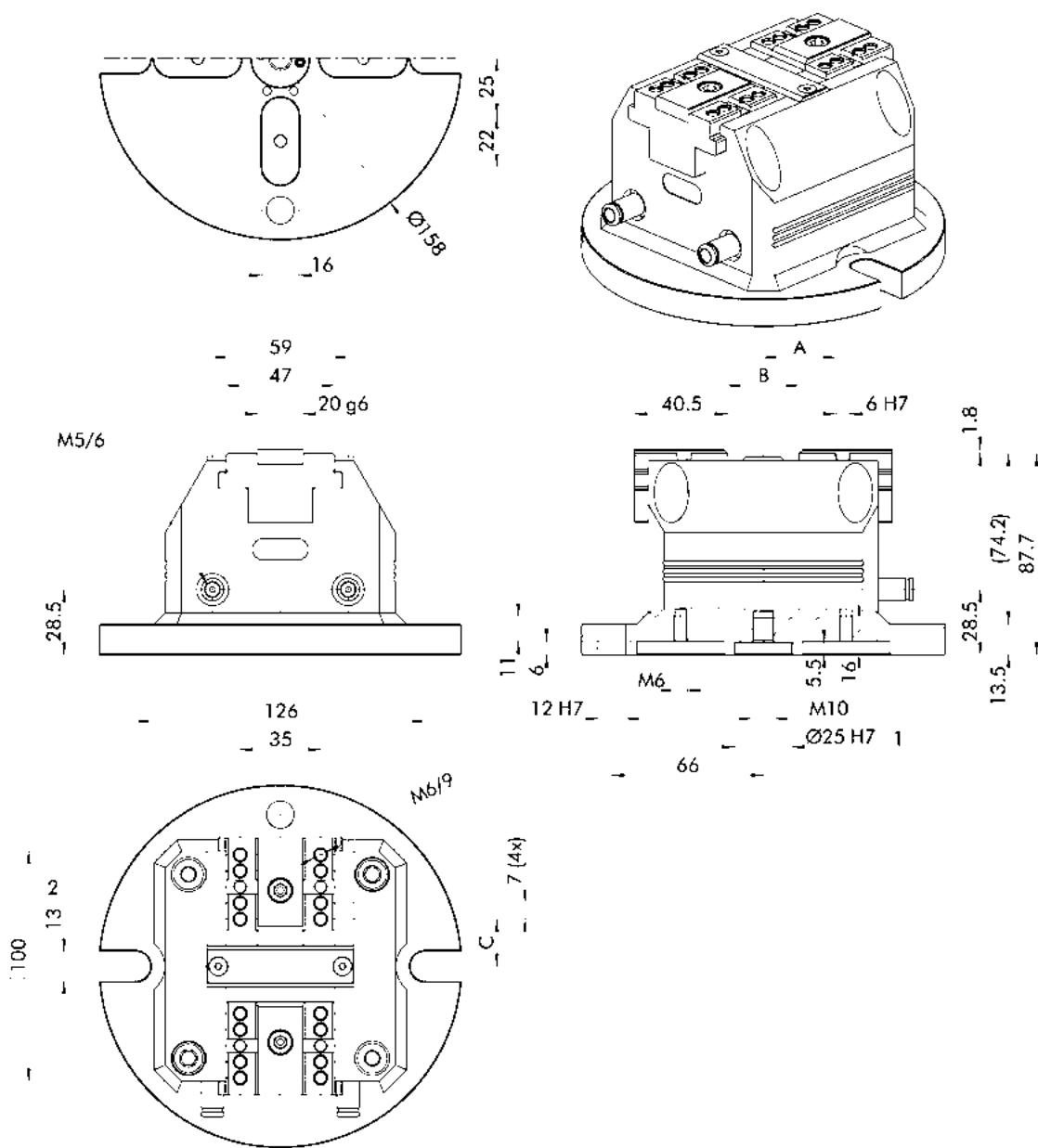
Clamping force block, fastening screws for system jaws, cover plug and operating manual; without system jaws, without clamping pin, without indexing pin

Technical Data

Description	ID	Stroke/Jaw	Clamping Force*	Max. Pressure	Repeat Accuracy	Max. Jaw Height	Weight
		[mm]	[N]	[bar]	Vise** [mm]	[mm]	[kg]
PGS3 100	1446779	2	10000	6	0.02	30	5
PGS3-LH 100	1446791	6	4500	6	0.02	45	5

*Clamping force is the arithmetic sum of the individual forces present at the chuck jaws at a clearance of "H" at maximum pressure and maximum torque.

**The repeat accuracy is the result from the end position spreads after 100 consecutive strokes.



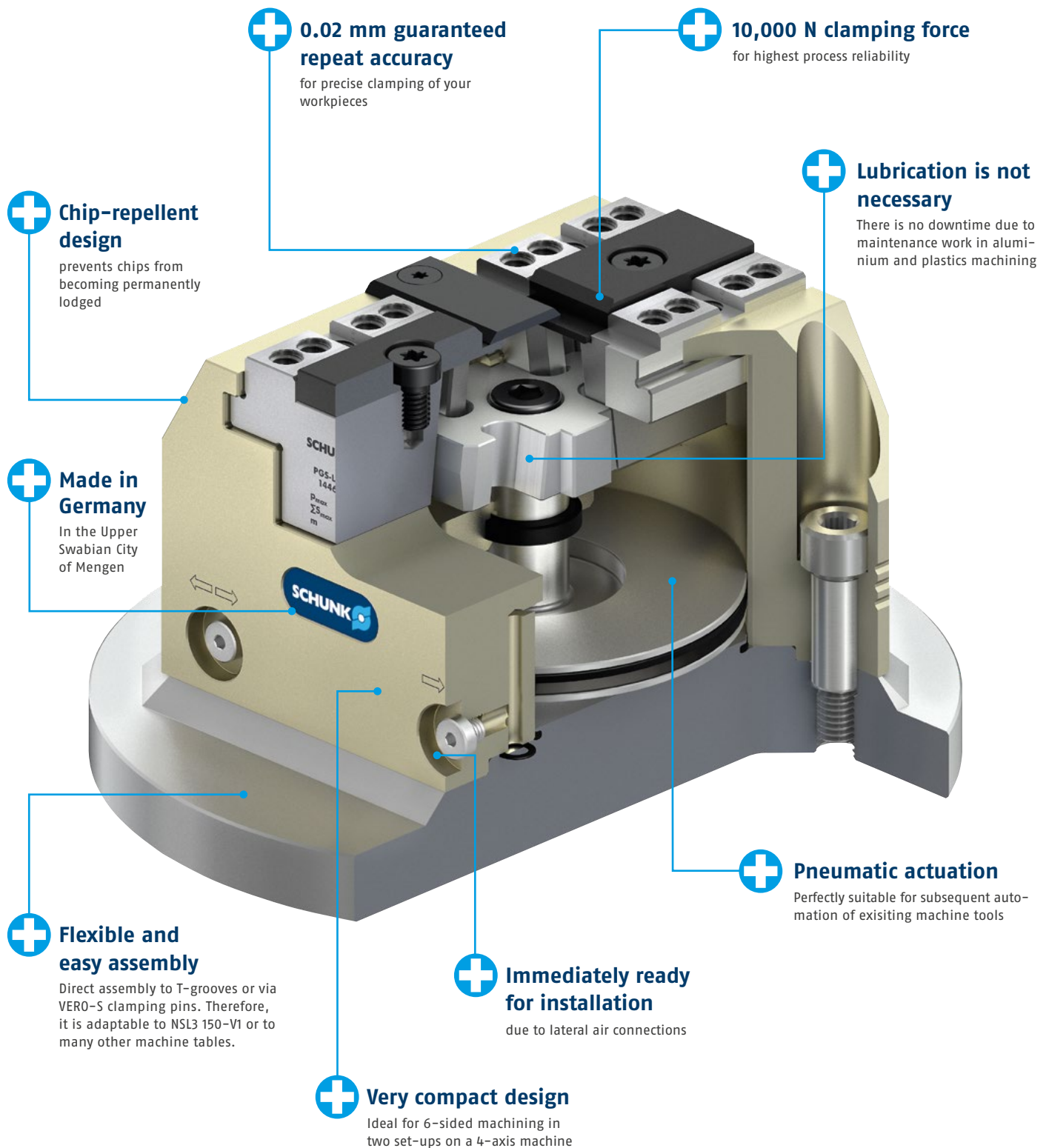
Subject to technical changes.

- ① Prepared for VERO-S
- ② Prepared for fastening with screws DIN7984 M12

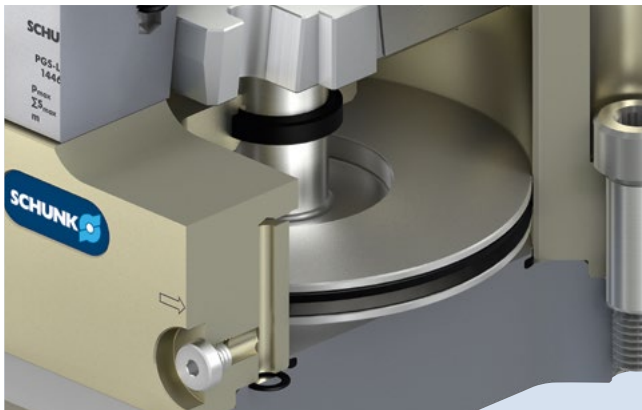
TANDEM PGS3

Pneumatic Clamping Force Block

High Precision and Reliability. Compact Design and Attractive Price.

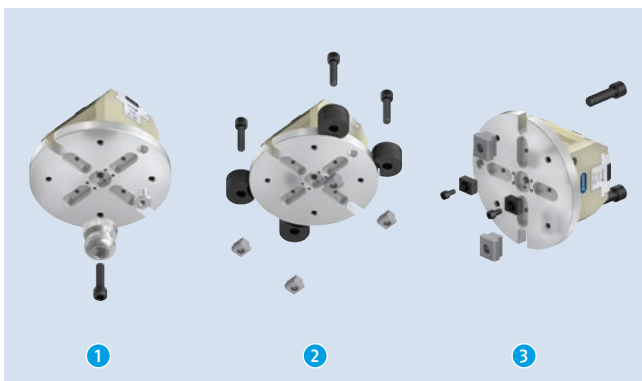


Technology



Pneumatic actuation

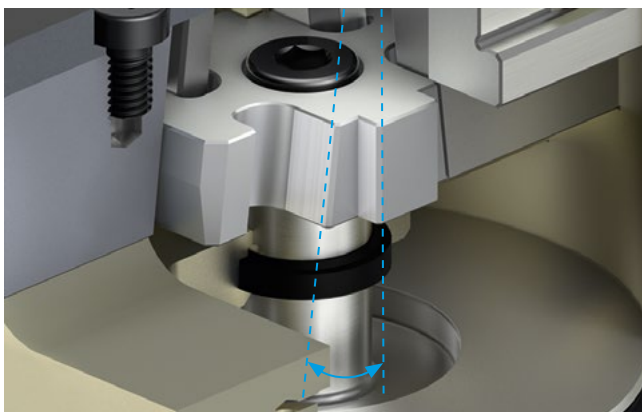
Clamping and loosening is done via a double-action pneumatic cylinder which is permanently pressurized.



Direct mounting onto machine tables

The PGS3 offers several integrated fastening options to the machine table. The clamping force block can be used for minimizing the set-up time: It can be fastened via the already existing VERO-S interface to the NSE3 quick-change pallet module. Alternatively, the PGS3 can be fastened via cylindrical clamps or T-nuts to the machine table.

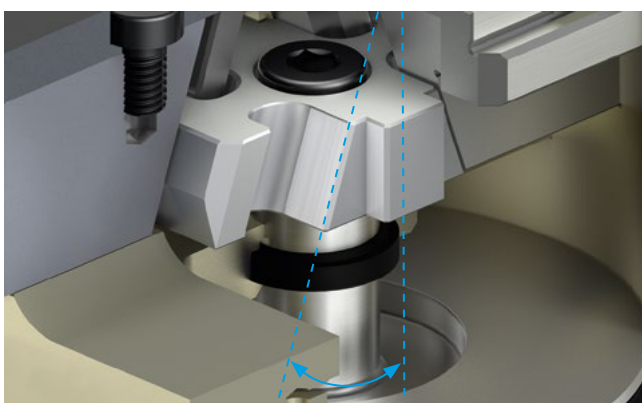
- ❶ Fastening via quick-change pallet system
- ❷ Fastening via cylindrical clamps
- ❸ Fastening via T-nuts



Standard stroke

For the standard stroke, a high force transmission is achieved via a small wedge angle.

Benefit: The PGS3 has high clamping forces



Long stroke

For a long stroke, a longer jaw stroke is achieved via an increased wedge angle. However, the LH version has a lower clamping force than the standard version.

Benefit: Longer jaw stroke



Simple structure and actuation

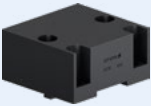
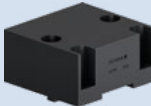
due to lateral air connections – without interfering contours for the machining processes.

Stroke ranges

Description	ID	A [mm]	B [mm]	C [mm]
PGS3 100	1446779	26 ... 28	21 ... 25	15 ... 17
PGS3-LH 100	1446791	25.5 ... 31.5	19 ... 31	14.5 ... 20.5

Accessories

	Description	Suitable for	Description	ID
	Standard clamping pin Standard clamping pin for positive connections between workpieces or devices with clamping modules. Holding force of the clamping pin = 35 kN (M10), 50 kN (M12)	NSLE3 150-V1-T	SPA	0471151
	Indexing pin Is used for position orientation of clamping pallets or clamping devices.	NSL3 150-V1-T	IXB V1	0471980
	Kingbolts For bottom-side connection. For different machine types on request.	–	–	–

	Description	Suitable for	Length [mm]	Width [mm]	Height [mm]	Weight [kg]	Description	ID
	Top jaw blank KTR Top jaw blank with tongue and groove and ready-made mounting bore holes to be set by the customer.	PGS3 100 PGS3-LH 100	47	55	25	0.8	KTR 100	402121
	Top jaw blank KTR-H High top jaw blank with tongue and groove and ready-made mounting bore holes to be set by the customer.	PGS3 100 PGS3-LH 100	47	55	48	1.6	KTR-H 100	402221

Well-equipped in less than no Time. The micron-precise Connection between Workpiece and Machine Table.

Plug&Play

TANDEM PGS3 and VERO-S System

VERO-S is the basis for flexible solutions that can be perfectly combined in the field of workpiece clamping. The quick-change pallet system completes your manufacturing process as well as the processes, and creates them more flexible: Position and clamp clamping devices from the modular system from SCHUNK fast and with pinpoint accuracy in the machine – right from lot size 1. Benefit from the advantages of high-precision clamping technology.

VERO-S is the right choice

- ✓ Significantly **less machine downtimes**
- ✓ **Can be combined with the clamping devices** from the SCHUNK product line for stationary use
- ✓ And what is more: Perfectly suitable for **adaption in automation technology**



SCHUNK modular system with more than 1,000 versions of workpiece clamping.
Click here to learn more.



J. Lehmann

Jens Lehmann, German goalkeeper legend,
SCHUNK brand ambassador since 2012
for safe, precise gripping and holding.
schunk.com/lehmann

