

PxG Planetary Servo Gear Units



PxG® PLANETARY SERVO GEAR UNIT

The PxG® planetary servo gear units incorporate materials, parts and components that have been developed together with industrial partners. This ensures a high level of surface protection, maximum service life for the bearings, gearing, lubricants and sealing elements.





CORROSION RESISTANCE

The housing surfaces of the gear units and the interfaces are already corrosion-protected as standard. Common coating procedures such as painting, for example, are not required.



BEARING SYSTEMS

Using the latest simulation procedures based on the finite element method, the distribution of contact pressure can be precisely calculated and the bearing service life can be accurately predicted.



GEARING SURFACES

The new processing and coating procedures produce tribologically optimized gearing surfaces. As a result, high torques are transmitted in a safe, precise and quiet manner.



SEALING SYSTEMS

The seal within the gear unit adapter is essential for the durability of gear units. As standard, the planetary servo gear units are equipped with the exclusive Premium Sine Seal oil seal.



TRIBOLOGICAL SYSTEMS

The planetary servo gear units are lubricated for life at the factory with SEW GearOil. This increases efficiency and improves wear resistance. Depending on the range of application, the lubricant can be flexibly selected.



PxG[®] planetary servo gear units



POTENTIAL USES / TYPICAL APPLICATIONS



P5.G.. Machine tool gantry

- Mounting press
- Drilling and pegging machine



P6.G.. Filling and transfer point

- Printing machine
- Diaper machine



P7.G., Delta kinematics

- Laser cutting machine
- Chain magazine and tool changer

ADVANTAGES AT A GLANCE



Easy!

Huge time savings due to rapid integration into existing systems thanks to 100% geometrical compatibility with the market standard.



Customized!

Configuration designed to precisely suit your requirements in terms of service life, precision and performance thanks to a comprehensive modular system.



Durable



Powerful!

High torque and simultaneously high speeds, even at 100% continuous duty.

OVERVIEW OF TECHNOLOGY







Planetary servo gear units		P5.G	P6.G	P7.G
Sizes		21, 22, 31, 32, 33, 41, 42, 43, 51, 52, 53, 61, 62, 63, 71, 72, 73 (NEW)		
Gear ratio	1-stage	3 – 10		4 – 5.5
	2-stage	12 – 100		16 – 55
	3-stage	64 – 1000		64 – 550
Acceleration torque		66 – 4200 Nm	40 – 2000 Nm	80 – 6150 Nm
Rotational clearance		3 – 4 arcmin		1 arcmin
Service life		20 000 h (DC 60%)	30 000 h (DC 100%)	20 000 h (DC 60%)
Output variants		Solid shaft (smooth, key or splining), flange block shaft with or without index bore		Flange block shaft without index bore
Lubrication for life		SEW GearOil Poly E1 or SEW Grease HL2 E1, also in H1 (food grade)		
Seal		Premium Sine Seal or labyrinth seal (in the case of grease lubrication)		



Corrosion resistance

Housing surfaces and the interfaces with corrosion protection as standard, no coating.

Bearing systems

Accurate bearing service life predictions using precise calculation of the contact pressure distribution.

Gearing surfaces

Precise and low-noise transfer of high torques using tribologically optimized gearing surfaces.

Sealing systems

Long service life thanks to exclusive Premium Sine Seal oil seal in the gear unit adapter.

Tribological systems

High efficiency and low wear thanks to lubrication for life with SEW GearOil from the factory.











