Servo right-angle gearheads High End



RPK⁺

The new high performance right-angle gearhead

The RPK⁺ sets standards in terms of power density, modularity and ease of installation – together with even greater design freedom.

TK⁺, TPK⁺ and TPK⁺ HIGH TORQUE New right-angle precision as flange version

The successor to our versatile hypoid gearhead with TP⁺ compatible output flange and hollow shaft (TK⁺), with optional planetary stage (TPK⁺/TPK⁺ HIGH TORQUE).

SK⁺ and SPK⁺ New right-angle precision as classic shaft version

The successor to our versatile hypoid gearhead with SP⁺ compatible output shaft (SK⁺), with optional planetary stage (SPK⁺).

Power density -

Increased productivity

Do you need a machine that operates at maximum productivity? Your servo right-angle gearhead offers 200% more torque, 100% faster speeds than equivalent products and thus creates the perfect conditions for maximum manufacturing efficiency.

Simple and convenient

From an optimized design with our cymex® software to the classic, patented WITTENSTEIN alpha motor mounting and oil/grease volume adapted to each model – WITTENSTEIN alpha right-angle gearheads make your life so much easier.



HG⁺
New hollow shaft precision

The successor to our versatile hypoid gearhead with hollow shaft on one/both sides.

V-Drive⁺ The plus stands for torque

The servo worm gearhead with solid shaft, hollow shaft and hollow shaft flange outputs.

Output type:

VDH⁺: Hollow shaft, smooth or keywayed VDT⁺: Output flange, flanged hollow shaft VDS⁺: Output shaft, smooth, keywayed, involute

Reliable and accurate

The low torsional backlash and high torsional rigidity of your WITTENSTEIN alpha right-angle gearhead assure maximum positioning accuracy of your drives and precision of your machines – even during highly dynamic operation up to 50,000 cycles/hour.

Maximum durability

Your WITTENSTEIN alpha right-angle gearhead is extremely reliable due to the overall design and 100% WITTENSTEIN alpha inspections: **"mount and forget"**. A length compensation feature integrated in your WITTENSTEIN alpha right-angle gearhead as standard maximizes the lifespan of your servo motor during high-speed continuous operation. RPK⁺

ΤK

TPK⁺

SK+

SPK⁺

́В Н

RPK⁺ – The new high performance right-angle gearhead

Sets standards in terms of power density, modularity and easy installation.



The new standard, also available as a right-angle version

The new RPK⁺ combines the advantages of the RP⁺ high performance planetary gearhead with stateof-the-art hypoid gearing. The new interface to the application simplifies installation and ensures maximum power density.



The RPK⁺ impresses with maximum power density

- · If your drive requires maximum performance
- · If you value world-class engineering
- · If you require an even more compact system

Performance data for right-angle version

Torsional backlash [arcmin]	< 3
Ratios [-]	66-5,500
Max. torque [N]	10,000
Max. input speed [rpm]	6,000
Efficiency [%]	≤ 92



The geometry of the RPK⁺ output flange is perfectly adapted to the high power density.

The RPK $^{\scriptscriptstyle +}$ high performance right-angle gearhead is optimized for rack and pinion applications.

The integrated slots reduce the design and installation requirements to a minimum.

High Performance Linear System For use where the individual requirements far exceed what has previously been possible. Compared to the industry standard, the values have been improved by 150% on average!

The pinions, which are specially adapted to the gearhead enable the transmission of maximum moving forces.

Further information is available in the High Perfor-mance Linear System catalog or on the Internet at www.rack-pinion.com

Performance data for linear system

Positioning accuracy [µm]	< 5*
Ratios [-]	66-5,500
Max. moving force per drive [N]	112,000
Movement speed [m/min]	30
Efficiency [%]	≤ 92

* Direct measuring system required



The RP⁺ is also available as the RPM⁺ actuator version. The RPM⁺ combines the advantages of the RP⁺ series in an even more compact design. Thanks to its special design, the permanently excited servo motor ensures maximum power density.



Flexibility during installation

