

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.

Right-angle gearheads
High End



RPK+



TK+



TPK+



SK+



SPK+



HG+



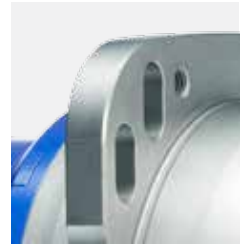
V-Drive+

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 state-of-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⁺ high performance right-angle gearhead is optimized for rack and pinion applications.

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

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

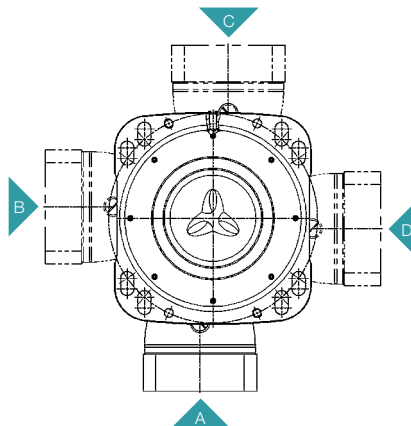
Further information is available in the High Performance Linear System catalog or on the Internet at www.rack-pinion.com

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

Flexibility during installation



Right-angle gearheads
High End



RPK+



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



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