

Low backlash planetary gearheads High End



alpheno®

Perfection in a new dimension

- Low backlash planetary gearhead with output shaft
- Cyclic or continuous operation
- Torsional backlash: ≤ 1 arcmin
- Ratio: 3-100

Product highlights:

- Maximum power density
- High axial and radial forces
- High torsional rigidity



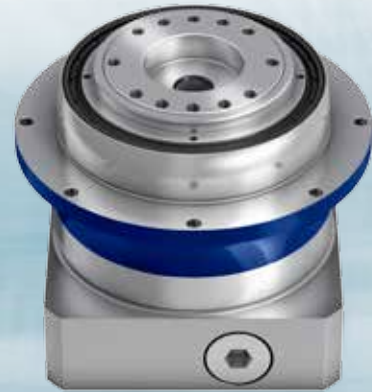
RP+

High-precision powerhouse

- Low backlash planetary gearhead with output flange
- Application in cyclic operation
- Torsional backlash: ≤ 1 arcmin
- Ratio: 4-220

Product highlights:

- Maximum torsional rigidity
- Maximum axial and radial forces
- Easy installation
- Optimized for rack and pinion applications



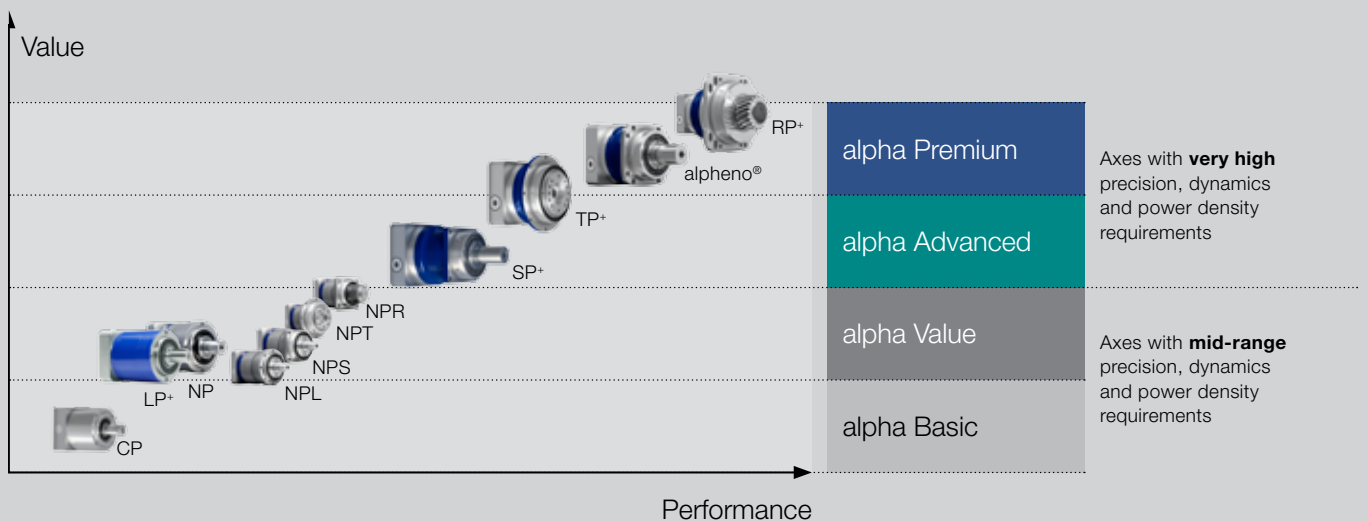
TP+ and TP+ HIGH TORQUE

Compact precision

- Low backlash planetary gearhead with output flange
- Cyclic operation
- Torsional backlash: ≤ 1 arcmin
- Ratio: 4-302.5

Product highlights:

- High torsional rigidity
- Space-saving design





SP+ and SP+ HIGH SPEED

The classic all-rounder

- Low backlash planetary gearhead with output shaft
- Application in cyclic or continuous operation
- Torsional backlash: ≤ 1 arcmin
- Ratio: 3-100

Product highlights:

- Multiple output configurations (SP+ HIGH SPEED)



HDP

Hygienically safe drive

- Low-backlash planetary gearhead in hygienic design with output flange
- Application in cyclic operation
- Torsional backlash: ≤ 1 arcmin
- Ratio: 22-55

Product highlights:

- Direct process integration
- Maximum power density and dynamics
- Fast, efficient and safe cleaning



HDV


Hygienically safe drive

- Low-backlash planetary gearhead in hygienic design with output shaft
- Application in cyclic or continuous operation
- Torsional backlash: ≤ 10 arcmin
- Ratio: 4-100

Product highlights:

- Direct process integration
- Fast, efficient and safe cleaning

Planetary gearheads
High End

	alpheno®
	RP+
	TP+
	SP+
	Hygienic Design

Maximum power density

And the torques?

Although the previous series achieved outstanding results, we managed to increase the torques by up to 40%. Raising the limits – Typical of WITTENSTEIN alpha!

Maximum positioning accuracy

Upon request, the High End planetary gearheads are available with torsional backlash of less than one arc minute. This significantly increases the positioning accuracy of your application.

Superior running thanks to helical teeth

Our High End planetary gearheads “whisper”. Compared to the straight-toothed gearheads, our helical-toothed gearheads are 6 dB(A) quieter during operation. And what a difference 64 instead of 70 decibels makes to added value. You will barely notice vibrations because these gearheads run so smoothly.

World-class lifespan

The seal rings on the High End planetary gearheads were specially developed and the material and geometry are both optimized to ensure an extremely long lifespan!

alpheno® – Perfection in a new dimension



WITTENSTEIN alpha sets standards

The alpheno® gear output interface facilitates a higher power transmission when compared to the industry standard which limits the transmitting torques of the gearhead. alpheno® transcends these limitations.

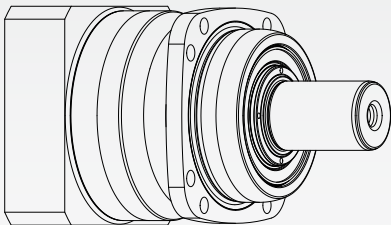
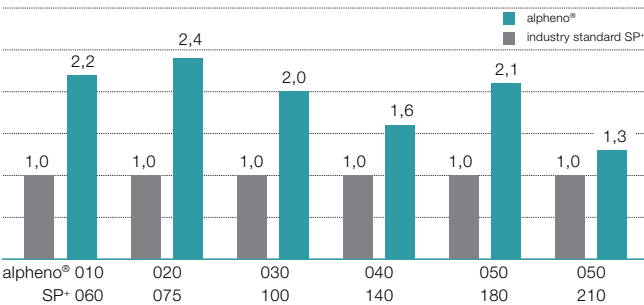


The technical advancement of alpheno® and its increased power can be directly utilized for your applications with the new design of the gear output.

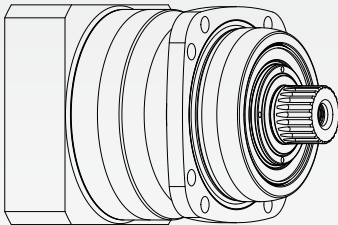
alpheno® convinces with highest power density

We offer you more performance in less space for the most compact drive requirements. This will allow your machine to perform better if specific system solutions are required.

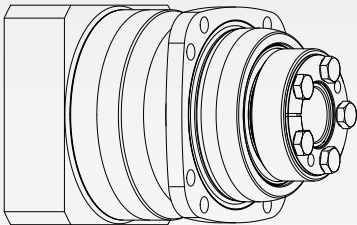
Power density of the industry standard and alpheno®



Smooth shaft



Involute



Slip-on shaft incl. shrink disk

Performance linear system
with alpheno® planetary gearhead
in an optimized version for rack
and pinion applications.

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



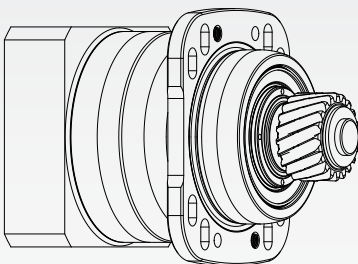
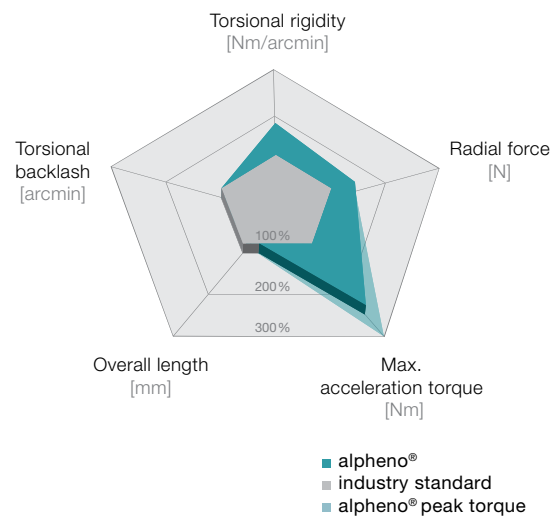
Planetary gearheads
High End



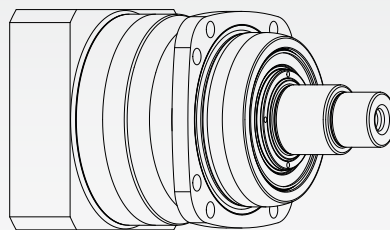
Performance data

alpheno® in comparison to the industry standard

Torsional backlash [arcmin]	< 1
Ratio [-]	3 - 100
Max. acceleration torque [Nm]	2800
alpha peak torque [Nm]	3360
Max. input speed [min ⁻¹]	6000
Efficiency [%]	97



Incl. pinion



Customer-specific

Options

Like the SP+ shaft gearhead, alpheno® is also available in a HIGH SPEED version and with a slip-on shaft at the gear output. A variant with optimized mass inertia guarantees a maximum level of energy efficiency. In combination with the WITTENSTEIN alpha rack-and-pinion portfolio, alpheno® represents an unbeatable drive bearing arrangement in the field of linear motion.