



## **XP+ HIGH TORQUE: “Xtreme” performance for premium drive axes**

**New planetary gearbox combines highest power density with  
Industry 4.0 connectivity**

**The new XP+ HIGH TORQUE planetary gearbox in WITTENSTEIN alpha GmbH’s alpha Premium Line offers the highest torque density and torsional rigidity of any planetary gearbox currently available in the market. Several impressive enhancements underline this: up to 144 percent more torque density than the market’s second best planetary gearbox of this kind, double the torsional rigidity, two-and-a-half times better tilting moment capacity and 15 percent less overall length without any increase in size or 30 percent less overall length and 50 percent less weight with comparable performance.**

The XP+ HIGH TORQUE stands for systematically increased performance and space-saving downsizing. Furthermore, thanks to cynapse – an integrated sensor module with a data logger and an IO-Link communication interface – this gearbox enables future-proof connections to digitalized drive axes and machines.

Machine tools, packaging equipment, automated handling systems and special-purpose machines profit especially from the performance characteristics of this new, WITTENSTEIN-built premium gearbox. It is first choice in any application where

- Very high positioning accuracy and repeatability are called for,
- Frequent changes of direction are the norm,
- Very short cycle times are required, and
- Maximum compactness and space savings matter.

### **New benchmark**

As the high-performance addition to the XP+ family, the XP+ HIGH TORQUE gearbox is designed to provide best-in-class precision, dynamics and power density – and it is regarded as the benchmark gearbox technology in all key disciplines. It achieves significantly higher process, feed and lever forces, unlocks extra dynamic potential and convinces with further improved control quality, precision and positioning repeatability. This results on the one hand in clearly enhanced performance, taking machine development into totally new dimensions, and on the other in systematically downsized drive

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WITTENSTEIN SE develops customized products, systems and solutions for highly dynamic motion, maximum-precise positioning and smart networking for mechatronic drive technology.



The new XP+ HIGH TORQUE planetary gearbox in WITTENSTEIN alpha’s alpha Premium Line

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#### **WITTENSTEIN SE**

Walter-Wittenstein-Str. 1  
97999 Igersheim · Germany

**Contact: Sabine Maier**  
Press Officer  
Phone +49 7931 493-10399  
Fax +49 7931 493-10301  
Email [sabine.maier@wittenstein.de](mailto:sabine.maier@wittenstein.de)  
[www.wittenstein.de](http://www.wittenstein.de)

solutions thanks to the enormous potential savings in space and weight. As with all gearboxes in WITTENSTEIN alpha's Premium segment, torsional backlash remains constant at less than one arcminute over the entire service life.

**Industry 4.0 connectivity made easy**

The XP+ HIGH TORQUE can be equipped with a smart cynapse module for integration into digitalized machine axes and networked production environments, allowing digital services to be used to monitor processes, increase machine uptime or detect faults predictively. The new series will kick off with a coaxial planetary gearbox in four different sizes, with five gear ratios and three output shapes on offer. Other variants are in preparation or can be adapted to specific customer requirements on request. WITTENSTEIN alpha's cymex® 5 software and in-house engineering expertise are invaluable aids when deciding which gearbox version best matches a particular application.

**Picture:**



**01- wittenstein-planetengetriebe-xp:** The new XP+ HIGH TORQUE planetary gearbox in WITTENSTEIN alpha's alpha Premium Line (source: WITTENSTEIN SE)

Texts and photographs in printable quality can be downloaded from [presse.wittenstein.de](http://presse.wittenstein.de).

**WITTENSTEIN SE – one with the future**

With around 2900 employees worldwide and sales of €426.6 million in 2019/20, WITTENSTEIN SE enjoys an impeccable reputation for innovation, precision and excellence in the field of cybertronic motion – not just in Germany but internationally. The Group possesses exceptional expertise for the mastery and further development of all technologies relevant to mechatronic drives and comprises six innovative Strategic Business Divisions. We develop, produce and sell products such as high-precision servo drives and linear systems, servo systems and motors as well as cybertronic drive systems for many areas of application including machine and plant construction, aerospace or oil and gas exploration. Nanotechnology and software components round off the portfolio. With 25 sites in more than 45 countries, the WITTENSTEIN Group ([www.wittenstein.de](http://www.wittenstein.de)) is represented in all major technology and sales markets.

**WITTENSTEIN SE**

Walter-Wittenstein-Str. 1  
97999 Igersheim · Germany

**Contact: Sabine Maier**  
Press Officer  
Phone +49 7931 493-10399  
Fax +49 7931 493-10301  
Email [sabine.maier@wittenstein.de](mailto:sabine.maier@wittenstein.de)  
[www.wittenstein.de](http://www.wittenstein.de)