

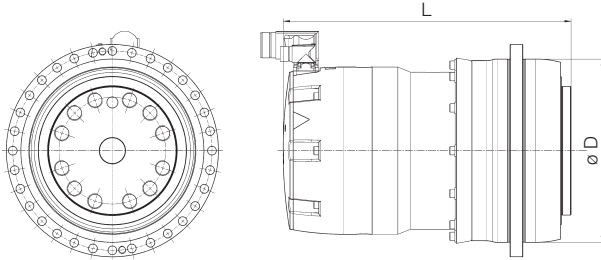
## Compact design at a glance



motion control



WITTENSTEIN motion control



### Contact

WITTENSTEIN motion control GmbH  
Walter-Wittenstein-Straße 1  
97999 Igersheim  
Germany

Tel. +49 7931 493-0  
Fax +49 7931 493-200  
E-Mail: [info-wmc@wittenstein.de](mailto:info-wmc@wittenstein.de)

WITTENSTEIN – being **one** with the future

[www.wittenstein-motion-control.de](http://www.wittenstein-motion-control.de)

#### Dimensions TPM+

Size	300	500
Diameter ø D	255 mm	285 mm
Minimum length L*	339 mm	363 mm

#### Dimensions TPM+ high torque

Size	300	500
Diameter ø D	255 mm	285 mm
Minimum length L*	387 mm	418 mm

\* depending on configuration

More productive  
More efficient  
More precise

## TPM+/TPM+ high torque Sizes 300/500

The new dimension by  
WITTENSTEIN motion control GmbH

Up to 10.000 Nm



**WITTENSTEIN motion control**

Your partner for top-quality  
industrial solutions

# TPM+/TPM+ high torque

## Sizes 300/500

### torque-dominant

high torque / compact design / extreme rigidity

### TPM+: More productive – More efficient – More precise

#### More productive ...

The benefits for your machines and plants: An actuator with a low moment on inertia and an extremely rigid drive train. For maximum precision, dynamics and extra productivity.

#### More efficient ...

Low torsional backlash, an output bearing with a high degree of tilting rigidity and integration of the gearhead pinion in the motor shaft result in smaller motors as well as reducing energy consumption and investment costs for the overall drive train.

#### More precise ...

Two negatives make a positive: Low levels of operating noise due to helical teeth and outstanding control properties ensure greater precision in your machines and plants. The result: Genuinely economical products.



New dimension: TPM+004 and TPM+500 show the high bandwidth.

# TPM+/TPM+ high torque

## Sizes 300/500

### dynamic

high torque / compact design / extreme rigidity

### TPM+ in a new dimension

The new sizes 300 and 500 meet the highest requirements concerning torque, compactness and dynamic.

The features: high rigidity, extreme precision and excellent performance make the TPM+ 300/500 actuators a fundamental contribution to increase the productivity of your machine.

Performance data TPM+		
Size	300	500
Ratio i	5,7,10,20,21,25,31,35,50,61,70,91,100	
Max. acceleration torque $T_{2B}$ [Nm]	up to 3.500	up to 6.000
Torsional backlash $j_t$ [Nm/arcmin]	< 2	
Max. torsional rigidity $c_{t21}$ [Nm/arcmin]	950	1.450

Performance data TPM+ high torque		
Size	300	500
Ratio i	22, 27.5, 38.5, 55, 66, 88, 110, 154, 220	
Max. acceleration torque $T_{2B}$ [Nm]	up to 5.500	up to 10.000
Torsional backlash $j_t$ [Nm/arcmin]	< 1,5	
Max. torsional rigidity $c_{t21}$ [Nm/arcmin]	1.200	2.000

# TPM+/TPM+ high torque

## Sizes 300/500

### extremely precise

high torque / compact design / extreme rigidity

### The technical features:

- high torque up to 10.000 Nm
- space-saving due to compact design with lowest dimensions

#### Construction kit:

- Gearbox TP+ 300 and 500 with all ratios
- optional with strengthened output bearing (special gear housing)

#### Motors of the 220 series

- 220 B: stall torque 13 Nm, maximum torque 44 Nm
- 220 D: stall torque 27 Nm, maximum torque 88 Nm
- 220 H: stall torque 67 Nm, maximum torque 165 Nm

#### Feedback options:

- Resolver
- Heidenhain EnDat Single/Multiturn Encoder
- SICK-STEGMANN HIPERFACE® Single/Multiturn Encoder
- optional with holding brake 72 Nm