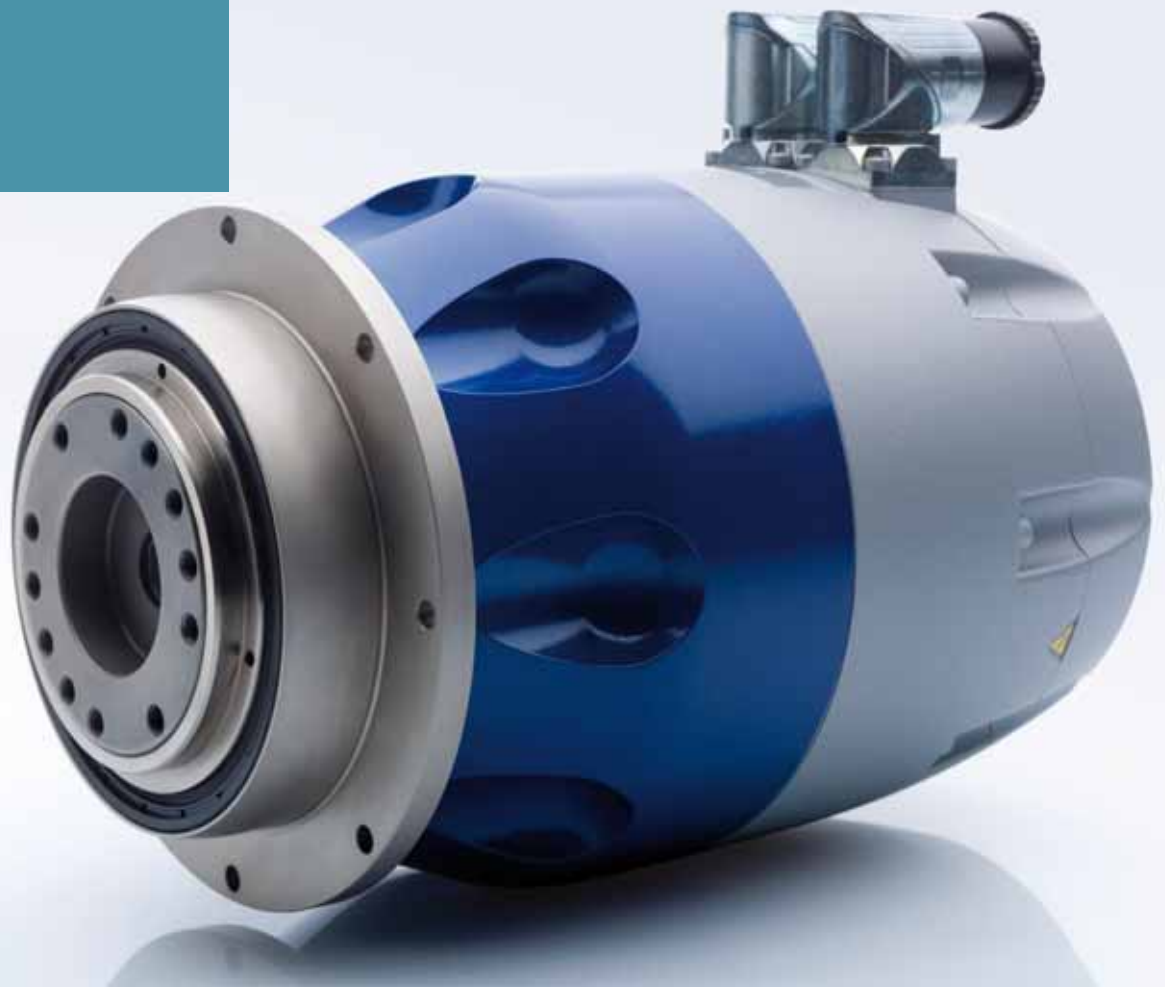


TPM⁺ power Rotary Servo Actuator

stronger
quieter
more compact



Servo actuator TPM+ power:

The powerful **motor/gearhead unit**

A system functions best when all the individual parts are integrated perfectly. The harmonious combination of motors, precision gearheads, electronics, sensors and software integrated in bus-compatible, electromechanical rotary and linear servo systems manufactured by WITTENSTEIN motion control GmbH is more than impressive.

Integration plays an important role here and is a decisive factor in increasing power density and dynamics.

TPM+ power
stronger, quieter,
more compact.



A real power pack!

Three attributes that characterize our new TPM+ power drive unit. Powerful: due to its dynamic, high-torque synchronous servo motors. Compact: due to the space-optimized design of motor and gearhead with significantly reduced length. Quiet: due to the proven helical-toothed gearhead. TPM+ power: A real power pack for high-torque applications with and high control accuracy.



Source: MAKA

Applications

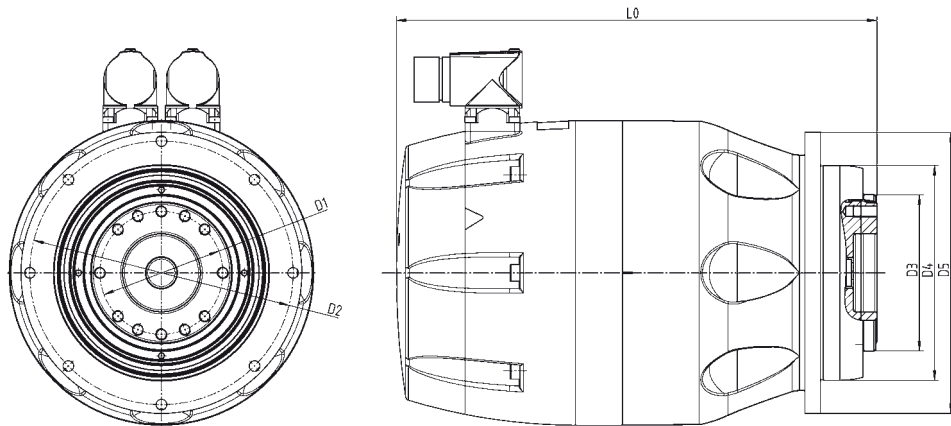
The new TPM+ power will set the tone in highly-dynamic, linear applications using rack & pinion or ball screws, as well as in rotary applications with high masses and disturbance forces, in the automation and processing markets.

TPM+ power	Size				
	004	010	025	050	110
Ratios, 1-stage	4, 5, 7, 10				
Ratios, 2-stage	16, 20, 25, 28, 35, 40, 50, 70, 100				
Max. acceleration torque [Nm]	50	130	380	750	1600
Max. torsional rigidity [Nm/arcmin]	12	33	86	190	610
Max. torsional backlash (reduced) [arcmin]	4 (2)	3 (1)			
Protection class	IP 65				
Insulating material class	F				
Mounting position	Any				

Versions

- Straight and angled plug connections
- Bus voltage 320V DC (optional for sizes 004, 010 and 025), 560V DC
- Temperature sensor KTY, PTC
- Motor feedback resolver, optical sensor EnDAT/Hiperface (optional)
- Permanent magnet holding brake (optional)
- UL approval
- Lubrication: synthetic oil, grease (optional), food grade lubrication (optional)

TPM+ power



TPM+ power	Size				
	004	010	025	050	110
Diameter D1	31.5	50	63	80	125
Diameter D2	79	109	135	168	233
Diameter D3	40 _{h7}	63 _{h7}	80 _{h7}	100 _{h7}	160 _{h7}
Diameter D4	64 _{h7}	90 _{h7}	110 _{h7}	140 _{h7}	200 _{h7}
Diameter D5	86	118	145	179	247
Length L0 [mm]					
<small>(Ratio 4, 5, 7, 10, 16, 20, 25, 28, 35)</small>					
Resolver without brake	164	205	242	281	337
Hiperface without brake	185	226	263	306	361
EnDAT without brake	189	230	267	306	361
Length L0 [mm]					
<small>(Ratio 40, 50, 70, 100)</small>					
Resolver without brake	149	175	197	236	307
Hiperface without brake	170	196	218	261	331
EnDAT without brake	174	200	222	261	331
Additional length with brake [mm]	20	19	24	40	50

TPMplus_power_flyer_en_2008 | Subject to technical changes



motion control