

TPM+ dynamic 050

Ratio	i	16		21		31		61		64		91	
		320	560	320	560	320	560	320	560	320	560	320	560
Intermediate circuit voltage	U_D V_{DC}	320	560	320	560	320	560	320	560	320	560	320	560
Max. acceleration torque at output (max. 1000 cycles per hour)	T_{2B} Nm	435		500		650		447		469		500	
Static output torque	T_{20} Nm	185		220		367		174		166		220	
Brake holding torque at output, 100°C	T_{2BR} Nm	208		273		403		793 ¹⁾		832 ¹⁾		1183 ¹⁾	
Max. speed	n_{2max} rpm	313		238		161		82		78		55	
Speed limit for T_{2B}	n_{2B} rpm	225		171		116		59		56		39	
Max. acceleration torque of motor	T_{Mmax} Nm	28.9		28.9		28.9		7.8		7.8		7.8	
Max. acceleration current of motor	I_{maxdyn} A_{eff}	70.0	40.0	70.0	40.0	70.0	40.0	20.8	12.0	20.8	12.0	20.8	12.0
Static motor current	I_0 A_{eff}	23.7	13.7	23.7	13.7	23.7	13.7	6.6	3.8	6.6	3.8	6.6	3.8
Moment of inertia (on motor shaft, without brake, with resolver)	J_t $kgm^2 \cdot 10^{-4}$	9.61		9.07		8.94		2.51		2.49		2.49	
Torsional backlash	j_t arcmin	Standard ≤ 3 / Reduced ≤ 1											
Torsional rigidity	C_t Nm/arcmin	–		145		130		123		–		100	
Tilting rigidity	C_K Nm/arcmin	560											
Max. axial force	F_{Amax} N	6130											
Max. tilting torque (distance from point of rotation to output flange 81.2 mm)	M_{Kmax} Nm	1335											
Weight (with resolver, without brake)	m kg	18.5						14.7					
Operating noise (measured at motor speed of 3000 rpm)	L_{pA} dB(A)	≤ 65											
Max. permitted housing temperature	°C	+90											
Ambient temperature	°C	0 to +40											
Protection class		IP 65											
Mounting position		Any											
Lubrication		Synthetic oil, lubricated for life											
Insulating material class		F											
Paint		Metallic blue 250 and natural cast aluminum											

Tolerances T, I and n: Maximum +/- 10%.

¹⁾ greater than T_{2B} of the gearhead. In an emergency, can be used approx. 1000 times while the motor is rotating.

Please refer to the instructions and graphic illustration of the speed and torque values in the chapter “Information”.