TP+ 004 1-stage

				1-stage			
Ratio [a]			***i***	**4**	**5**	**7**	**10**
cymex®-optimized acceleration torque (please contact us regarding the design)			T_{2Bcym} Nm	60	62	60	–
			T_{2Bcym} in.lb	531	549	531	–
Max. acceleration torque (max. 1000 cycles per hour)			T_{2B} Nm	55	55	55	35
			T_{2B} in.lb	487	487	487	310
Nominal output torque (with n_{1N})			T_{2N} Nm	28	28	28	18
			T_{2N} in.lb	248	248	248	159
Emergency stop torque (permitted 1000 times during the service life of the gearhead)			T_{2Not} Nm	100	100	100	100
			T_{2Not} in.lb	885	885	885	885
Nominal input speed (with T_{2N} and 20°C ambient temperature) [b]			n_{1N} rpm	3300	3300	4000	4000
Max. input speed			n_{1Max} rpm	6000	6000	6000	6000
Mean no load running torque (with n_1=3000 rpm and 20°C gearhead temperature) [c]			T_{012} Nm	0.95	0.80	0.60	0.45
			T_{012} in.lb	8.41	7.08	5.31	3.98
Max. torsional backlash			j_t arcmin	Standard ≤ 4 / Reduced ≤ 2			
Torsional rigidity [c]			C_{t12} Nm/ arcmin	12	12	11	8
			C_{t12} in.lb/ arcmin	106	106	97	71
Tilting rigidity			C_{2K} Nm/ arcmin	–			
			C_{2K} in.lb/ arcmin				
Max. axial force [d]			F_{2AMax} N	1630			
			F_{2AMax} lb_f	367			
Max. tilting moment			M_{2KMax} Nm	110			
			M_{2KMax} in.lb	974			
Efficiency at full load			η %	97			
Service life (For calculation, see the Chapter "Information")			L_h h	> 20000			
Weight incl. standard adapter plate			m kg	1.4			
			m lb_m	3.1			
Operating noise (with i=10 and n_1=3000 rpm no load)			L_{PA} dB(A)	≤ 58			
Max. permitted housing temperature			°C	+90			
			F	194			
Ambient temperature			°C	0 to +40			
			F	32 to 104			
Lubrication				Lubricated for life			
Paint				Blue RAL 5002			
Direction of rotation				Motor and gearhead same direction			
Protection class				IP 65			
Moment of inertia (relates to the drive)	B	11	J_1 kgcm²	0.17	0.14	0.11	0.09
			J_1 10^{-3} in.lb.s²	0.15	0.12	0.10	0.08
Clamping hub diameter [mm]	C	14	J_1 kgcm²	0.25	0.21	0.18	0.17
			J_1 10^{-3} in.lb.s²	0.22	0.19	0.16	0.15
	E	19	J_1 kgcm²	0.57	0.54	0.51	0.49
			J_1 10^{-3} in.lb.s²	0.50	0.47	0.45	0.43

Reduced mass moments of inertia available on request.

[a] Other ratios available on request
[b] For higher ambient temperatures, please reduce input speed
[c] Valid for clamping hub diameter of 14 mm
[d] Refers to center of the output shaft or flange