

SP+ 060 MF 2-stage

				2-stage										
Ratio ^{a)}		<i>i</i>		16	20	25	28	35	40	50	70	100		
cymex®-optimized acceleration torque (please contact us regarding the design)	T_{2Bcym}	Nm	58	58	60	58	60	58	60	54	—	—		
		in.lb	513	513	531	513	531	513	531	478	—	—		
Max. acceleration torque (max. 1000 cycles per hour)	T_{2B}	Nm	42	42	42	42	42	42	42	42	32	32		
		in.lb	372	372	372	372	372	372	372	372	283	283		
Nominal output torque (with n_{IN})	T_{2N}	Nm	26	26	26	26	26	26	26	26	17	17		
		in.lb	230	230	230	230	230	230	230	230	150	150		
Emergency stop torque (permitted 1000 times during the service life of the gearhead)	T_{2Not}	Nm	100	100	100	100	100	100	100	100	80	80		
		in.lb	885	885	885	885	885	885	885	885	708	708		
Nominal input speed (with T_{2N} and 20°C ambient temperature) ^{b)}		n_{IN}	rpm	4400	4400	4400	4400	4400	4400	4800	5500	5500		
Max. input speed		n_{1max}	rpm	6000	6000	6000	6000	6000	6000	6000	6000	6000		
Mean no load running torque (with $n_i=3000$ rpm and 20°C gearhead temperature) ^{c)}	T_{012}	Nm	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2		
		in.lb	4.4	3.5	3.5	2.7	2.7	2.7	2.7	2.7	2.7	1.8		
Max. torsional backlash		j_t	arcmin	Standard ≤ 6 / Reduced ≤ 4										
Torsional rigidity	C_{i21}	Nm/arcmin		4.5										
		in.lb/arcmin		40										
Max. axial force ^{d)}	F_{2AMax}	N		2400										
		lb _f		540										
Max. radial force ^{d)}	F_{2RMax}	N		2800										
		lb _f		630										
Max. tilting moment	M_{2KMax}	Nm		152										
		in.lb		1345										
Efficiency at full load		η	%	94										
Service life (For calculation, see the Chapter "Information")		L_h	h	> 20000										
Weight incl. standard adapter plate	m	kg		2.0										
		lb _m		4.4										
Operating noise (with $i=100$ and $n_i=3000$ rpm no load)		L_{PA}	dB(A)	≤ 58										
Max. permitted housing temperature		°C		+90										
		F		194										
Ambient temperature		°C		-15 to +40										
		F		5 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	kgcm ²	0.077	0.069	0.068	0.061	0.061	0.057	0.057	0.056	0.056	
				10 ⁻³ in.lb.s ²	0.068	0.061	0.060	0.054	0.054	0.050	0.050	0.050	0.050	
Clamping hub diameter [mm]	C	14	J_1	kgcm ²	0.17	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15	
				10 ⁻³ in.lb.s ²	0.15	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.13	

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 11 mm

^{d)} Refers to center of the output shaft or flange