

SP+ 140 MF 1-stage

				1-stage					
Ratio ^{a)}	<i>i</i>		3	4	5	7	10		
cymex®-optimized acceleration torque (please contact us regarding the design)	T_{2Bcym}	Nm	–	710	755	680	560		
		in.lb	–	6284	6682	6018	4956		
Max. acceleration torque (max. 1000 cycles per hour)	T_{2B}	Nm	390	660	660	660	530		
		in.lb	3451.5	5841	5841	5841	4691		
Nominal output torque (with n_n)	T_{2N}	Nm	200	360	360	360	220		
		in.lb	1770	3186	3186	3186	1947		
Emergency stop torque (permitted 1000 times during the service life of the gearhead)	T_{2Not}	Nm	1000	1250	1250	1250	1000		
		in.lb	8850	11063	11063	11063	8850		
Nominal input speed (with T_{2N} and 20°C ambient temperature ^{b)})	n_{1N}	rpm	2100	2100	2100	2600	2600		
Max. input speed	n_{1Max}	rpm	4000	4000	4000	4000	4000		
Mean no load running torque (with $n_l = 3000$ rpm and 20°C gearhead temperature ^{c)})	T_{012}	Nm	7.6	5.8	4.7	3.4	2.5		
		in.lb	67	51	42	30	22		
Max. torsional backlash	j_t	arcmin	Standard ≤ 3 / Reduced ≤ 1						
Torsional rigidity	C_{t21}	Nm/ arcmin	53						
		in.lb/ arcmin	469						
Max. axial force ^{d)}	F_{2AMax}	N	9870						
		lb _f	2221						
Max. radial force ^{d)}	F_{2RMax}	N	9900						
		lb _f	2228						
Max. tilting moment	M_{2KMax}	Nm	952						
		in.lb	8425						
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	17.2						
		lb _m	38.0						
Operating noise (with $i=10$ and $n_l = 3000$ rpm no load)	L_{PA}	dB(A)	≤ 65						
Max. permitted housing temperature			°C						
			°F						
Ambient temperature			°C						
			°F						
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)	G	24	J_1	kgcm ²	10.7	7.82	6.79	5.84	5.28
				10 ³ in.lb.s ²	9.45	6.92	6.01	5.17	4.67
Clamping hub diameter [mm]	I	32	J_1	kgcm ²	13.8	11.0	9.95	9.01	8.44
				10 ³ in.lb.s ²	12.3	9.72	8.81	7.97	7.47
	K	38	J_1	kgcm ²	14.9	12.1	11.0	10.1	9.51
				10 ³ in.lb.s ²	13.2	10.7	9.76	8.92	8.42
M	48	J_1	kgcm ²	29.5	26.7	25.6	24.7	24.2	
			10 ³ in.lb.s ²	26.1	23.6	22.7	21.9	21.4	

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 38 mm

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