

Product data sheet

CP

Low backlash planetary gearbox



Gearbox data	
Designation: CP025S-MF1-10-1G1-2S	
Gearbox type	CP
Gearbox size	025
Design keyword	Standard
Gearbox variation	Motor attachment gearbox
Gearbox stages	1
Gearbox ratio i	10
Output design	Key
Clamping hub diameter	24 mm
Gearbox backlash	Standard
Gearbox material number	20076929

Technical specifications		
Max. output torque (Depending on the specific boundary conditions of the application) ^{a) b) d)}	T _{2a}	144 Nm
Max. acceleration torque ^{d)} (max. 1000 cycles per hour)	T _{2B}	90 Nm
Nominal output torque (with n _{1N})	T _{2N}	45 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearbox) ^{a) b) d)}	T _{2Not}	187 Nm
Nominal input speed (with T _{2N} and 20°C ambient temperature) ^{c)}	n _{1N}	3600 min ⁻¹
Max. input speed	n _{1Max}	7000 min ⁻¹
Mean no load running torque (with n ₁ =3000 min ⁻¹ and 20°C gearbox temp.)	T ₀₁₂	0.19 Nm
Max. torsional backlash	j _t	≤ 12 arcmin
Torsional rigidity ^{a)}	C _{t21}	5.5 Nm/arcmin
Max. axial force ^{b)}	F _{2AMax}	1600 N
Max. radial force ^{b)}	F _{2RMax}	1200 N
Max. tilting moment	M _{2KMax}	54 Nm
Efficiency at full load	η	97 %
Service life (for calculation, see the Chapter "Information" in our product catalogue)	L _h	> 20000 h
Weight incl. standard adapter plate	m	2.9 kg
Operating noise (with n ₁ =3000 min ⁻¹ no load)	L _{PA}	≤ 62 dB(A)
Max. permitted housing temperature		90 °C
Ambient temperature		-15 °C to 40 °C
Lubrication		lubricated for life
Paint		Dark pearl gray
Protection class		IP 64
Inertia (relates to the drive)	J ₁	1.3 kgcm ²

- a) Valid for torque transmission only
b) Refers to center of the output shaft or flange
c) For higher ambient temperatures, please reduce input speed
d) Valid for: Smooth shaft
e) Must be ordered separately