

Product data sheet

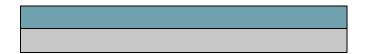
alpha

NP

Low backlash planetary gearbox



Gearbox data		
Designation: NP025S-MF2-70-1A1-1S		
Gearbox type	NP	
Gearbox size	025	
Design keyword	Standard	
Gearbox variation	Motor attachment gearbox	
Gearbox stages	2	
Gearbox ratio i	70	
Output design	Key	
Clamping hub diameter	9 mm	
Gearbox backlash	Standard	
Gearbox material number	10033194	



Technical specifications		
Max. output torque (Depending on the specific boundary conditions of the application)	Τ _{2α}	160 Nm
Max. acceleration torque (max. 1000 cycles per hour)	T _{2B}	100 Nm
Nominal output torque (with n_{1N})	T _{2N}	50 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearbox)	T _{2Not}	190 Nm
Nominal input speed (with T _{2N} and 20°C ambient temperature) ^{a)}	n _{1N}	4300 min ⁻¹
Max. input speed	n _{1Max}	8000 min ⁻¹
Mean no load running torque (with n ₁ =3000 min ⁻¹ and 20°C gearbox temp.) ^{b)}	T ₀₁₂	0.1 Nm
Max. torsional backlash	jt	≤ 10 arcmin
Torsional rigidity ^{b)}	C _{t21}	9.5 Nm/arcmin
Tilting rigidity	C _{2K}	24 Nm/arcmin
Max. axial force c)	F _{2AMax}	1900 N
Max. radial force c)	F _{2RMax}	2800 N
Max. tilting moment	M _{2KMax}	137 Nm
Efficiency at full load	ŋ	95 %
Service life (for calculation, see the Chapter "Information" in our product catalogue)	Lh	> 20000 h
Weight incl. standard adapter plate	m	4.1 kg
Operating noise (with n ₁ =3000 min ⁻¹ no load)	L _{PA}	≤ 60 dB(A)
Max. permitted housing temperature		90 °C
Ambient temperature		-15 °C to 40 °C
Lubrication		lubricated for life
Paint		Dark pearl gray / inno- vation blue
Protection class		IP 64
Inertia (relates to the drive)	J ₁	0.14 kgcm ²

a) For higher ambient temperatures, please reduce input speed
b) Depends on clamping hub diameter
c) Refers to center of the output shaft or flange