

Product data sheet

NP

Low backlash planetary gearhead



Gearhead data	
Designation: NP015S-MF1-10-1D1-1S	
Gear type	NP
Gear size	015
Design keyword	Standard
Gear variation	Motor attachment gearhead
Gear stages	1
Gear ratio i	10
Output design	Key
Clamping hub diameter	16 mm
Gear backlash	Standard
Gear material number	10033007

Technical specifications		
Max. output torque (depending on the specific boundary conditions of the application)	$T_{2\alpha}$	56 Nm
Nominal output torque (with n_{1N})	T_{2N}	19 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearhead)	T_{2Not}	80 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 gearhead temp.) ^{b)}	T_{012}	0.1 Nm
Max. torsional backlash	j_t	≤ 8 arcmin
Torsional rigidity ^{b)}	C_{t21}	2.8 Nm/arcmin
Tilting rigidity	C_{2K}	17 Nm/arcmin
Max. axial force ^{c)}	F_{2AMax}	1550 N
Max. radial force ^{c)}	F_{2RMax}	1700 N
Max. tilting moment	M_{2KMax}	62 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	1.9 kg
Operating noise (with $n_1=3000$ min ⁻¹ no load)	L_{PA}	≤ 59 dB(A)
Max. permitted housing temperature		90 °C
Ambient temperature		-15 °C to 40 °C
Lubrication		lubricated for life
Paint		dark pearl gray / innovation blue
Protection class		IP 64
Inertia (relates to the drive)	J_1	0.35 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