

Product data sheet

NP

Low backlash planetary gearbox



Gearbox data	
Designation: NP015S-MF2-15-0C1-1S	
Gearbox type	NP
Gearbox size	015
Design keyword	Standard
Gearbox variation	Motor attachment gearbox
Gearbox stages	2
Gearbox ratio i	15
Output design	Smooth shaft
Clamping hub diameter	14 mm
Gearbox backlash	Standard
Gearbox material number	10046120

Motor mounting parts (included in delivery)	
Incl. mounting parts for servo motor	SIEMENS AG 1FK2103-4AG00-0xA0
Adapter plate	10032108

Order designation
NP015S-MF2-15-0C1-1S / SIEMENS AG 1FK2103-4AG00-0xA0

Technical specifications		
Max. output torque (Depending on the specific boundary conditions of the application)	$T_{2\alpha}$	51 Nm
Max. acceleration torque (max. 1000 cycles per hour)	T_{2B}	31 Nm
Nominal output torque (with n_{1N})	T_{2N}	17 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearbox)	T_{2Not}	80 Nm
Nominal input speed (with T_{2N} and 20°C ambient temperature ^{a)})	n_{1N}	4000 min ⁻¹
Max. input speed	n_{1Max}	10000 min ⁻¹
Mean no load running torque (with $n_1=3000$ min ⁻¹ and 20°C gearbox temp.) ^{b)}	T_{012}	0.07 Nm
Max. torsional backlash	j_t	≤ 10 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	95 %
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}	≤ 65 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	0.14 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