

Product data sheet

LP⁺Gen3

Low backlash planetary gearhead



Gearhead data	
Designation: LP070S-MF1-10-1D1-3S	
Gear type	LP ⁺ Gen3
Gear size	070
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	10026149

Motor mounting parts (included in delivery)	
Incl. mounting parts for servo motor	ABB SDM261-000N6-070/40
Adapter plate	10000811
Gear bushing	10001216

Order designation
LP070S-MF1-10-1D1-3S / ABB SDM261-000N6-070/40

Technical specifications		
Max. acceleration torque (max. 1000 cycles per hour)	T _{2B}	37 Nm
Nominal output torque (with n _{2N})	T _{2N}	19 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearhead)	T _{2Not}	75 Nm
Nominal input speed (with T _{2N} and 20°C ambient temperature ^{a)})	n _{1N}	3700 min ⁻¹
Max. input speed	n _{1Max}	6000 min ⁻¹
Mean no load running torque (with n ₂ =3000 min ⁻¹ and 20°C gearhead temp.)	T ₀₁₂	0.15 Nm
Max. torsional backlash	j _t	≤ 8 arcmin
Torsional rigidity	C _{t21}	2.8 Nm/arcmin
Max. axial force ^{b)}	F _{2AMax}	1550 N
Max. radial force ^{b)}	F _{2RMax}	1450 N
Max. tilting moment	M _{2KMax}	61.6 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 kg
Operation noise (with n ₁ =3000 min ⁻¹ no load)	L _{PA}	≤ 64 dB(A)
Max. permitted housing temperature		90 °C
Ambient temperature		-15 °C to 40 °C
Lubrication		lubricated for life
Paint		Blue RAL 5002
Protection class		IP 64
Inertia (relates to the drive)	J ₁	0.21 kgcm ²

a) For higher ambient temperatures, please reduce input speed
b) Refers to center of the output shaft or flange, with n₂ = 100 min⁻¹