Product data sheet

WITTENSTEIN | alpha

LP⁺Gen3

Low backlash planetary gearhead



Order data	
Ordering code: LP070S-MF1-5-1D1-3S	
Gear type	LP⁺Gen3
Gear size	070
Design keyword	Standard
Gear variation	Motor attachment gearhead
Gear stages	1
Gear ratio i	5
Output design	Key
Clamping hub diameter	16 mm
Gear backlash	Standard
Gear articel code	10026147

Gear components (included in delivery)	
Incl. mounting parts for servo motor	Omron R7M-A75030-B
Adapter plate	10002487
Gear bushing	10000904

Technical specifications		
Max. acceleration torque (max. 1000 cycles per hour)	T_{2B}	40 Nm
Nominal output torque (with n_{1N})	T_{2N}	21 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_1=3000 min^{-1} and 20°C gearhead temp.)	T_{012}	0.2 Nm
Max. torsional backlash	j_t	≤ 8 arcmin
Torsional rigidity	C_{t21}	3.3 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	0.23 $kgcm^2$

a) For higher ambient temperatures, please reduce input speed
b) Refers to center of the output shaft or flange, with n_2 = 100 min^{-1}