

Product data sheet

LP⁺Gen3

Low backlash planetary gearhead



Order data	
Ordering code: LP155S-MF1-10-1L1-3S	
Gear type	LP ⁺ Gen3
Gear size	155
Design keyword	Standard
Gear variation	Motor attachment gearhead
Gear stages	1
Gear ratio i	10
Output design	Key
Clamping hub diameter	42 mm
Gear backlash	Standard
Gear article code	10026235

Gear components (included in delivery)	
Incl. mounting parts for servo motor	Rockwell MPL-A4540F
Adapter plate	10001851
Gear bushing	10000942

Technical specifications		
Max. acceleration torque (max. 1000 cycles per hour)	T _{2B}	400 Nm
Nominal output torque (with n _{1N})	T _{2N}	200 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearhead)	T _{2Not}	1000 Nm
Nominal input speed (with T _{2N} and 20°C ambient temperature) ^{a)}	n _{1N}	2000 min ⁻¹
Max. input speed	n _{1Max}	3600 min ⁻¹
Mean no load running torque (with n ₁ =3000 min ⁻¹ and 20°C gearhead temp.)	T ₀₁₂	2.5 Nm
Max. torsional backlash	j _t	≤ 8 arcmin
Torsional rigidity	C _{t21}	44 Nm/arcmin
Max. axial force ^{b)}	F _{2AMax}	6000 N
Max. radial force ^{b)}	F _{2RMax}	7500 N
Max. tilting moment	M _{2KMax}	660 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	17 kg
Operation noise (with n ₁ =3000 min ⁻¹ no load)	L _{PA}	≤ 69 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	15.7 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