Guide axis
ELFC-KF-80-500

Part number: 8062828





Data sheet

Feature	Value
Working stroke	500 mm
Size	80
Mounting position	Any
Guide	Recirculating ball bearing
Structural design	Guide
Position sensing	Via proximity switch For inductive sensors
Max. acceleration	15 m/s²
Max. speed	1.5 m/s
Duty cycle	100%
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 Zone III
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 7 according to ISO 14644-1
Degree of protection	IP40
Ambient temperature	0 °C...50 °C
2nd moment of area Iy	1370000 mm⁴
2nd moment of area Iz	1660000 mm⁴
Max. force Fy	5543 N
Max. force Fz	5543 N
Max. torque Mx	59.8 Nm
Max. torque My	56.2 Nm
Max. torque Mz	56.2 Nm
Max. force Fy total axis	900 N
Max. force Fz total axis	2700 N
Max. moment Mx total axis	59.8 Nm
Max. moment My total axis	56.2 Nm
Max. moment Mz total axis	56.2 Nm
Torsion moment of inertia It	90500 mm⁴
Displacement force	15 N
Reference service life	5000 km
Maintenance interval	Lifetime lubrication

Feature	Value
Fy with theoretical service life of 100 km (from a guide perspective only)	20400 N
Fz with theoretical service life of 100 km (from a guide perspective only)	20400 N
Mx with theoretical service life of 100 km (from a guide perspective only)	220 Nm
My with theoretical service life of 100 km (from a guide perspective only)	207 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	207 Nm
Moving mass	815 g
Basic weight with 0 mm stroke	1905 g
Additional weight per 10 mm stroke	73 g
Dynamic deflection (load moved)	0.05% of axis length, maximum 0.5 mm
Static deflection (load at standstill)	0.1 % of axis length
Material of end caps	Die cast aluminum, painted
Profile material	Wrought aluminum alloy, anodized
Note on materials	RoHS compliant
Cover strip material	high-alloy stainless steel
Slide carriage material	Steel
Guide rail material	Steel
Slide material	Die-cast aluminum