Guide axis
ELFC-KF-45-100

Part number: 8062802





Data sheet

Feature	Value
Working stroke	100 mm
Size	45
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	140000 mm⁴
2nd moment of area Iz	170000 mm⁴
Max. force Fy	880 N
Max. force Fz	880 N
Max. torque Mx	5.5 Nm
Max. torque My	4.7 Nm
Max. torque Mz	4.7 Nm
Max. force Fy total axis	300 N
Max. force Fz total axis	600 N
Max. moment Mx total axis	5.5 Nm
Max. moment My total axis	4.7 Nm
Max. moment Mz total axis	4.7 Nm
Torsion moment of inertia It	8500 mm⁴
Displacement force	4.5 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)	3240 N
Fz with theoretical service life of 100 km (from a guide perspective only)	3240 N
Mx with theoretical service life of 100 km (from a guide perspective only)	20 Nm
My with theoretical service life of 100 km (from a guide perspective only)	17 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	17 Nm
Moving mass	144 g
Basic weight with 0 mm stroke	384 g
Additional weight per 10 mm stroke	23 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