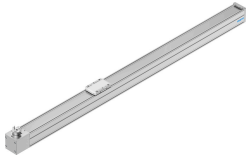


Toothed belt axis ELGC-TB-KF-60-1000

Part number: 8062781

FESTO



Data sheet

Feature	Value
Effective diameter of drive pinion	24.83 mm
Working stroke	1000 mm
Size	60
Stroke reserve	0 mm
Toothed-belt stretch	0.124 %
Toothed-belt pitch	3 mm
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With toothed belt
Type of motor	Stepper motor Servo motor
Functional principle of measuring system	Incremental
Position detection	Via proximity switch Via inductive sensors
Max. acceleration	15 m/s ²
Max. speed	1.5 m/s
Repetition accuracy	±0.1 mm
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 7 according to ISO 14644-1
Degree of protection	IP40
Ambient temperature	0 °C...50 °C
Impact energy in end positions	0,25 mJ
Note on the impact energy in the end positions	At maximum homing speed of 0.01 m/s
2nd moment of area Iy	441000 mm ⁴
2nd moment of area Iz	542000 mm ⁴
Max. drive torque	1.49 Nm
Max. force Fy	600 N

Feature	Value
Max. force Fz	1800 N
Max. force Fy total axis	3641 N
Max. force Fz total axis	3641 N
Fy at theoretical life value of 100 km (only guide consideration)	13400 N
Fz at theoretical life value of 100 km (only guide consideration)	13400 N
Max. idle running transfer resistance	15.6 N
Max. moment Mx	29.1 Nm
Max. moment My	31.8 Nm
Max. moment Mz	31.8 Nm
Max. moment Mx total axis	29.1 Nm
Max. moment My total axis	31.8 Nm
Max. moment Mz total axis	31.8 Nm
Mx at theoretical life value of 100 km (only guide consideration)	107 Nm
My at theoretical life value of 100 km (only guide consideration)	117 Nm
Mz at theoretical life value of 100 km (only guide consideration)	117 Nm
Distance between slide surface and guide centre	54.6 mm
Max. feed force Fx	120 N
Frictional torque independent of load	0.194 Nm
Torsional mass moment of inertia It	29800 mm ⁴
Mass moment of inertia JH per metre of stroke	0.0851 kgcm ²
Mass moment of inertia JL per kg of working load	1.5411 kgcm ²
Mass moment of inertia JO	0.8804 kgcm ²
Feed constant	78 mm/U
Maintenance interval	Life-time lubrication
Moving mass	482 g
Moving mass for 0 mm stroke	482 g
Weight of slide	139 g
Product weight	6027 g
Basic weight for 0 mm stroke	1775 g
Additional weight per 10 mm stroke	43 g
Dynamic deflection (moving load)	0.05% of the axis length, max. 0.5 mm
Static deflection (load in standstill)	0.1% of the axis length
Interface code, actuator	T42
Material end cap	Painted die cast aluminium
Material profile	Anodised wrought aluminium alloy
Note on materials	RoHS-compliant
Material cover tape	Stainless steel strip
Material drive cover	Painted die cast aluminium
Material guide slide	Tempered steel
Material guide rail	Tempered steel
Material pulleys	High-alloy stainless steel
Material slide	Die-cast aluminium
Material toothed belt	Polychloroprene with glass fibre