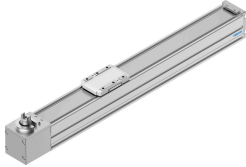


Toothed belt axis ELGC-TB-KF-45-300

Part number: 8062769

FESTO



Data sheet

Feature	Value
Effective diameter of drive pinion	19.1 mm
Working stroke	300 mm
Size	45
Stroke reserve	0 mm
Toothed-belt stretch	0.187 %
Toothed-belt pitch	2 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	1.2 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	0,13 mJ
Note on the impact energy in the end positions	At maximum homing speed of 0.01 m/s
2nd moment of area Iy	140000 mm ⁴
2nd moment of area Iz	170000 mm ⁴
Max. drive torque	0.716 Nm
Max. force Fy	300 N

Feature	Value
Max. force Fz	600 N
Max. force Fy total axis	880 N
Max. force Fz total axis	880 N
Fy at theoretical life value of 100 km (only guide consideration)	3240 N
Fz at theoretical life value of 100 km (only guide consideration)	3240 N
Max. idle running transfer resistance	7.8 N
Max. moment Mx	5.5 Nm
Max. moment My	4.7 Nm
Max. moment Mz	4.7 Nm
Max. moment Mx total axis	5.5 Nm
Max. moment My total axis	4.7 Nm
Max. moment Mz total axis	4.7 Nm
Mx at theoretical life value of 100 km (only guide consideration)	20 Nm
My at theoretical life value of 100 km (only guide consideration)	17 Nm
Mz at theoretical life value of 100 km (only guide consideration)	17 Nm
Distance between slide surface and guide centre	42.8 mm
Max. feed force Fx	75 N
Frictional torque independent of load	0.075 Nm
Torsional mass moment of inertia It	8500 mm ⁴
Mass moment of inertia JH per metre of stroke	0.0281 kgcm ²
Mass moment of inertia JL per kg of working load	0.9119 kgcm ²
Mass moment of inertia JO	0.1862 kgcm ²
Feed constant	60 mm/U
Maintenance interval	Life-time lubrication
Moving mass	169 g
Moving mass for 0 mm stroke	169 g
Weight of slide	55 g
Product weight	1448 g
Basic weight for 0 mm stroke	760 g
Additional weight per 10 mm stroke	23 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	V32
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