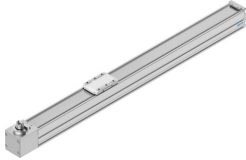


Toothed belt axis ELGC-TB-KF-45-1000

Part number: 8062773

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|---|--|
| Effective diameter of drive pinion | 19.1 mm |
| Working stroke | 1000 mm |
| Size | 45 |
| Stroke reserve | 0 mm |
| Toothed-belt pitch | 2 mm |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Design | Electromechanical linear axis With toothed belt |
| Type of motor | Stepper motor Servo motor |
| Symbol | 00991212 |
| Position detection | Via proximity switch For 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 | 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 |
| Storage temperature | -20 °C ... 60 °C |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C ... 50 °C |
| Impact energy in end positions | 1.25E-4 J |
| 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 | 880 N |
| Max. force Fz | 880 N |
| Max. force Fy total axis | 300 N |
| Max. force Fz total axis | 600 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 |

| Feature | Value |
|---|---|
| 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 |
| Reference service life | 5000 km |
| Maintenance interval | Lifetime lubrication |
| Moving mass | 169 g |
| Weight of slide | 55 g |
| Product weight | 3051 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 | Steel |
| Material guide rail | Steel |
| Material pulleys | High-alloy stainless steel |
| Material slide | Die-cast aluminium |
| Material toothed belt | Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating |