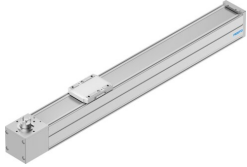


Belt driven linear actuator ELGC-TB-KF-80-600

Part number: 8062789

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|--|--|
| Drive pinion effective diameter | 33.42 mm |
| Working stroke | 600 mm |
| Size | 80 |
| Stroke reserve | 0 mm |
| Toothed belt pitch | 3 mm |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Structural design | with toothed belt |
| Motor type | Stepper motor Servo motor |
| Symbol | 00991212 |
| Position sensing | For proximity sensor For inductive proximity 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 | 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 the end positions | 7.5E-4 J |
| Note on the impact energy in the end positions | At maximum speed of the reference run of 0.01 m/s |
| 2nd moment of area Iy | 1370000 mm ⁴ |
| 2nd moment of area Iz | 1660000 mm ⁴ |
| Max. driving torque | 4.178 Nm |
| Max. force Fy | 5543 N |
| Max. force Fz | 5543 N |
| Max. force Fy total axis | 900 N |
| Max. force Fz total axis | 2700 N |
| 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 |
| Max. no-load resistance to shifting | 24.7 N |
| Max. torque Mx | 59.8 Nm |

| Feature | Value |
|--|---|
| Max. torque My | 56.2 Nm |
| Max. torque Mz | 56.2 Nm |
| Max. moment Mx total axis | 59.8 Nm |
| Max. moment My total axis | 56.2 Nm |
| Max. moment Mz total axis | 56.2 Nm |
| 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 |
| Distance between slide surface and guide center | 72.5 mm |
| Max. feed force Fx | 250 N |
| No-load driving torque | 0.413 Nm |
| Torsion moment of inertia It | 90500 mm ⁴ |
| Mass moment of inertia JH per meter of stroke | 0.1927 kgcm ² |
| Mass moment of inertia JL per kg of payload | 2.793 kgcm ² |
| Mass moment of inertia JO | 2.912 kgcm ² |
| Feed constant | 105 mm/U |
| Reference service life | 5000 km |
| Maintenance interval | Life-time lubrication |
| Moving mass | 901 g |
| Slide weight | 272 g |
| Product weight | 7870 g |
| Basic weight with 0 mm stroke | 3500 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 |
| Interface code, actuator | T46 |
| Material of end caps | Die cast aluminum, painted |
| Profile material | Wrought aluminum alloy, anodized |
| Note on materials | RoHS-compliant |
| Cover strip material | Stainless steel strip |
| Drive cover material | Die cast aluminum, painted |
| Slide carriage material | Steel |
| Guide rail material | Steel |
| Belt pulley material | High-alloy stainless steel |
| Slide material | Die-cast aluminum |
| Toothed belt material | Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating |