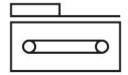
Belt driven linear actuator ELGC-TB-KF-60-1800

FESTO

Part number: 8062784





Data sheet

| Feature | Value |
|--|---|
| Drive pinion effective diameter | 24.83 mm |
| Working stroke | 1800 mm |
| Size | 60 |
| Stroke reserve | 0 mm |
| Toothed belt pitch | 3 mm |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Structural design | Electromechanical linear axis with toothed belt |
| Motor type | Stepper motor Servo motor |
| Position sensing | For proximity sensor For inductive proximity sensors |
| Max. acceleration | 15 m/s² |
| 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 | Product corresponds to Festo's internal product definition for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class | Class 7 according to ISO 14644-1 |
| Storage temperature | -20 °C60 °C |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C50 °C |
| Impact energy in the end positions | 0.25 mJ |
| 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 ly | 441000 mm ⁴ |
| 2nd moment of area Iz | 542000 mm ⁴ |
| Max. driving torque | 1.49 Nm |
| Max. force Fy | 3641 N |

| Feature | Value |
|--|---|
| Max. force Fz | 3641 N |
| Max. force Fy total axis | 600 N |
| Max. force Fz total axis | 1800 N |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 13400 N |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 13400 N |
| Max. no-load resistance to shifting | 15.6 N |
| Max. torque Mx | 29.1 Nm |
| Max. torque My | 31.8 Nm |
| Max. torque 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 with theoretical service life of 100 km (from a guide perspective only) | 107 Nm |
| My with theoretical service life of 100 km (from a guide perspective only) | 117 Nm |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 117 Nm |
| Distance between slide surface and guide center | 54.6 mm |
| Max. feed force Fx | 120 N |
| No-load driving torque | 0.194 Nm |
| Torsion moment of inertia It | 29800 mm ⁴ |
| Mass moment of inertia JH per meter of stroke | 0.0851 kgcm² |
| Mass moment of inertia JL per kg of payload | 1.5411 kgcm² |
| Mass moment of inertia JO | 0.8804 kgcm² |
| Feed constant | 78 mm/U |
| Reference service life | 5000 km |
| Maintenance interval | Life-time lubrication |
| Moving mass | 482 g |
| Slide weight | 139 g |
| Product weight | 9429 g |
| Basic weight with 0 mm stroke | 1775 g |
| Additional weight per 10 mm stroke | 43 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 | T42 |
| 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 oder Nitrilkautschuk (NBR) mit Glascord und Nylonüberzug |