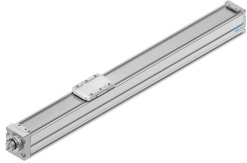


Ball screw linear actuator ELGC-BS-KF-45-400-10P

Part number: 8061487

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|--|---|
| Working stroke | 400 mm |
| Size | 45 |
| Stroke reserve | 0 mm |
| Reversing backlash | 150 µm |
| Screw diameter | 10 mm |
| Spindle pitch | 10 mm/U |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Structural design | Electromechanical linear axis with ball screw |
| Motor type | Stepper motor Servo motor |
| Spindle type | Ball screw drive |
| Symbol | 00991211 |
| Position sensing | For proximity sensor For inductive proximity sensors |
| Max. acceleration | 15 m/s ² |
| Max. rotational speed | 3600 rpm |
| Max. speed | 0.6 m/s |
| Repetition accuracy | ±0.015 mm |
| Duty cycle | 100% |
| LABS (PWIS) conformity | VDMA24364 zone III |
| Suitability for the production of Li-ion batteries | Metals with more than 1% by mass of 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 |
| Storage temperature | -20 °C ... 60 °C |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C ... 50 °C |
| Impact energy in the end positions | 5.0E-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 | 140000 mm ⁴ |
| 2nd moment of area Iz | 170000 mm ⁴ |
| No-load torque at maximum travel speed | 0.12 Nm |
| No-load torque at minimum travel speed | 0.032 Nm |
| Max. force Fy | 880 N |

| Feature | Value |
|--|--------------------------------------|
| Max. force Fz | 880 N |
| Max. force Fy total axis | 300 N |
| Max. force Fz total axis | 600 N |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 3240 N |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 3240 N |
| Max. torque Mx | 5.5 Nm |
| Max. torque My | 4.7 Nm |
| Max. torque 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 with theoretical service life of 100 km (from a guide perspective only) | 20 Nm |
| My with theoretical service life of 100 km (from a guide perspective only) | 17 Nm |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 17 Nm |
| Distance between slide surface and guide center | 42.8 mm |
| Max. radial force on actuator shaft | 180 N |
| Max. feed force Fx | 100 N |
| Torsion moment of inertia It | 8500 mm ⁴ |
| Mass moment of inertia JH per meter of stroke | 0.05056 kgcm ² |
| Mass moment of inertia JL per kg of payload | 0.02533 kgcm ² |
| Mass moment of inertia JO | 0.0082 kgcm ² |
| Feed constant | 10 mm/U |
| Reference service life | 5000 km |
| Maintenance interval | Life-time lubrication |
| Moving mass | 220 g |
| Additional weight per 10 mm stroke | 36 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 | V32 |
| Material of end caps | Die cast aluminum, painted |
| Profile material | Wrought aluminum alloy, anodized |
| Note on materials | RoHS-compliant |
| Cover strip material | High-alloy stainless steel |
| Drive cover material | Die cast aluminum, painted |
| Slide carriage material | Steel |
| Guide rail material | Steel |
| Slide material | Die-cast aluminum |
| Spindle nut material | Steel |
| Spindle material | Steel |