

Spindle axis ELGC-BS-KF-45-300-10P

Part number: 8061486

FESTO



Data sheet

| Feature | Value |
|--|--|
| Working stroke | 300 mm |
| Size | 45 |
| Stroke reserve | 0 mm |
| Reversing backlash theoretical | 0,15 mm |
| Spindle diameter | 10 mm |
| Spindle pitch | 10 mm/U |
| Mounting position | optional |
| Guide | Recirculating ball bearing guide |
| Design | Electromechanical linear axis With ball screw |
| Type of motor | Stepper motor Servo motor |
| Spindle type | Ball screw drive |
| Position detection | Via proximity switch Via inductive 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% 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 | 0,5 mJ |
| Note on the impact energy in the end positions | At maximum homing speed of 0.01 m/s |
| 2nd moment of area ly | 140000 mm ⁴ |
| 2nd moment of area lz | 170000 mm ⁴ |
| Idle torque at v _{max} | 0.12 Nm |

| Feature | Value |
|---|---------------------------------------|
| Idle torque at vmin | 0.032 Nm |
| Max. force Fy | 300 N |
| 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. 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. radial force at drive shaft | 180 N |
| Max. feed force Fx | 100 N |
| Torsional mass moment of inertia It | 8500 mm ⁴ |
| Mass moment of inertia JH per metre of stroke | 0.05056 kgcm ² |
| Mass moment of inertia JL per kg of working load | 0.02533 kgcm ² |
| Mass moment of inertia JO | 0.0082 kgcm ² |
| Feed constant | 10 mm/U |
| Maintenance interval | Life-time lubrication |
| Moving mass | 220 g |
| Additional weight per 10 mm stroke | 36 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 | High-alloy stainless steel |
| Material drive cover | Painted die cast aluminium |
| Material guide slide | Steel |
| Material guide rail | Steel |
| Material slide | Die-cast aluminium |
| Material spindle nut | Steel |
| Material spindle | Steel |