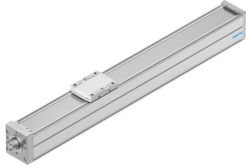


Ball screw axis ELGC-BS-KF-80-1000-16P

Part number: 8061505

FESTO



General operating condition

Data sheet

| Feature | Value |
|---|--|
| Working stroke | 1000 mm |
| Size | 80 |
| Stroke reserve | 0 mm |
| Reversing backlash | 150 µm |
| Screw diameter | 16 mm |
| Spindle pitch | 16 mm/U |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Structural design | 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 | 3750 rpm |
| Max. speed | 1 m/s |
| Repetition accuracy | ±0.01 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 | 0.002 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 |
| No-load torque at maximum travel speed | 0.396 Nm |
| No-load torque at minimum travel speed | 0.095 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 |

| Feature | Value |
|--|--------------------------------------|
| 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. torque Mx | 59.8 Nm |
| 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. radial force on actuator shaft | 500 N |
| Max. feed force Fx | 350 N |
| Torsion moment of inertia It | 90500 mm ⁴ |
| Mass moment of inertia JH per meter of stroke | 0.35257 kgcm ² |
| Mass moment of inertia JL per kg of payload | 0.064846 kgcm ² |
| Mass moment of inertia JO | 0.07856 kgcm ² |
| Feed constant | 16 mm/U |
| Reference service life | 5000 km |
| Maintenance interval | Life-time lubrication |
| Moving mass | 978 g |
| Additional weight per 10 mm stroke | 88 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 | High-alloy stainless steel |
| Drive cover material | Die cast aluminum, painted |
| Slide carriage material | Steel |
| Guide rail material | Steel |
| Slide material | Die-cast aluminum |
| Ball screw nut material | Steel |
| Spindle material | Steel |