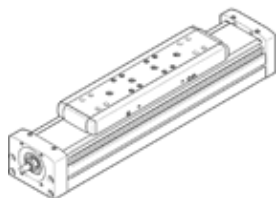


Spindle axis ELGA-BS-KF-120-500-0H-10P-ML

Part number: 8041840

FESTO

With recirculating ball bearing guide



Data sheet

| Feature | Value |
|--|--|
| Working stroke | 500 mm |
| Size | 120 |
| Stroke reserve | 0 mm |
| Spindle diameter | 25 mm |
| Spindle pitch | 10 mm/U |
| Assembly position | Any |
| Guide | Recirculating ball bearing guide |
| Design structure | Electromechanical linear axis with recirculating ball bearing spindle |
| Motor type | Stepper motor Servomotor |
| Spindle type | Ball screw actuator |
| Measuring method: displacement encoder | Incremental |
| Max. acceleration | 15 m/s ² |
| Max. speed | 3,600 1/min 0.6 m/s |
| Repetition accuracy | ±0,02 mm |
| PWIS conformity | VDMA24364 zone III |
| Protection class | IP40 |
| Ambient temperature | -10 ... 60 °C |
| Area moment of inertia 2nd degree Iy | 1,240E+03 mm ⁴ |
| Area moment of inertia 2nd degree Iz | 3,800E+03 mm ⁴ |
| No-load torque at maximum travel speed | 1.33 Nm |
| No-load torque at minimum travel speed | 1 Nm |
| Max. force Fy | 5,500 N |
| Max. force Fz | 6,890 N |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 20,240 N |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 25,355 N |
| Max. torque Mx | 104 Nm |
| Max. torque My | 680 Nm |
| Max. torque Mz | 680 Nm |
| Mx with theoretical service life of 100 km (from a guide perspective only) | 383 Nm |
| My with theoretical service life of 100 km (from a guide perspective only) | 2,502 Nm |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 2,502 Nm |
| Max. radial force at drive shaft | 500 N |
| Max. feed force Fx | 3,400 N |
| Torsional mass moment of inertia It | 247E+03 mm ⁴ |
| Mass moment of inertia JH per meter of stroke | 2.756 kgcm ² |
| Mass moment of inertia JL per kg of working load | 0.0253 kgcm ² |
| Mass moment of inertia, JO | 1.038 kgcm ² |
| Feed constant | 10 mm/U |
| Moving mass | 4,459 g |
| Additional slide weight | 3,600 g |
| Additional weight per 10 mm stroke | 101 g |

| Feature | Value |
|--|---------------------------------------|
| Dynamic deflection (load moved) | 0.05% of the axis length, max. 0.5 mm |
| Static deflection (load at standstill) | 0.1% of the axis length |
| Material of end caps | Wrought Aluminum alloy Anodized |
| Material of profile | Wrought Aluminum alloy Anodized |
| Materials note | Conforms to RoHS |
| Material drive cover | Wrought Aluminum alloy Anodized |
| Material guide slide | Steel |
| Material guide rail | Steel |
| Material slide | Wrought Aluminum alloy Anodized |
| Material spindle nut | Steel |
| Material spindle | Steel |