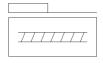
spindle axis ELGT-BS-120-1000-10P Part number: 8124463







Data sheet

| Feature | Value | |
|--|---|--|
| Working stroke | 1,000 mm | |
| Size | 120 | |
| Stroke reserve | 0 mm | |
| Reversing backlash | <= 0.15 μm | |
| Spindle diameter | 16 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 spindle | |
| Variants | Recommended for production facilities for the manufacture of lithium- | |
| | ion batteries | |
| Max. acceleration | 15 m/s2 | |
| Max. speed | 3,000 1/min | |
| | 0.5 m/s | |
| Repetition accuracy | ±0,02 mm | |
| Duty cycle | 100 % | |
| PWIS conformity | VDMA24364 zone III | |
| RSBP classification to CD-0033 | F1a | |
| Cleanroom class | ISO class 8 | |
| Protection class | IP20 | |
| Ambient temperature | 0 50 °C | |
| Permanent feed force | 1,265 N | |
| Area moment of inertia 2nd degree ly | 966E+03 mm4 | |
| Area moment of inertia 2nd degree Iz | 6,011E+03 mm4 | |
| No-load torque at maximum travel speed | 0.3 Nm | |
| No-load torque at minimum travel speed | 0.08 Nm | |
| Max. force Fy | 6,800 N | |
| Max. force Fz | 8,090 N | |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 25,051 N | |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 29,804 N | |
| Max. torque Mx | 300 Nm | |
| Max. torque My | 310 Nm | |
| Max. torque Mz | 310 Nm | |
| Mx with theoretical service life of 100 km (from a guide perspective only | 1,105 Nm | |
| My with theoretical service life of 100 km (from a guide perspective only) | 1,142 Nm | |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 1,142 Nm | |
| Max. radial force at drive shaft | 290 N | |
| Max. feed force Fx | 1,265 N | |
| Torsional mass moment of inertia It | 506E+03 mm4 | |
| Mass moment of inertia JH per metre of stroke | 0.3453 kgcm2 | |
| Mass moment of inertia JL per kg of working load | 0.0253 kgcm2 | |
| Mass moment of inertia, JO | 0.1306 kgcm2 | |



| Feature | Value | |
|--|---------------------------------------|--|
| Feed constant | 10 mm/U | |
| Moving mass | 2,019 g | |
| Product weight | 17,642 g | |
| Basic weight for 0 mm stroke | 5,259 g | |
| Additional weight per 10 mm stroke | 124 g | |
| 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 | |
| Interface code, actuator | T46 | |
| Material of end caps | Die-cast aluminium, painted | |
| Material of profile | Anodised wrought aluminium alloy | |
| Materials note | Conforms to RoHS | |
| Material drive cover | Die-cast aluminium, painted | |
| Material guide slide | Steel | |
| Material guide rail | Steel | |
| Material slide | Anodised wrought aluminium alloy | |
| Material spindle nut | Steel | |
| Material spindle | Steel | |