Belt driven linear actuator ELGA-TB-KF-80-1200-0H

FESTO

Part number: 8041863



Data sheet

| Feature | Value |
|--|---|
| Drive pinion effective diameter | 39.79 mm |
| Working stroke | 1200 mm |
| Size | 80 |
| Stroke reserve | 0 mm |
| Toothed belt elongation | 0.168 % |
| Toothed belt pitch | 5 mm |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Structural design | Electromechanical linear axis with toothed belt |
| Motor type | Stepper motor Servo motor |
| Measuring principle of linear potentiometer | Incremental |
| Max. acceleration | 50 m/s ² |
| Max. speed | 5 m/s |
| Repetition accuracy | ±0.08 mm |
| Duty cycle | 100% |
| Degree of protection | IP40 |
| Ambient temperature | -10 °C 60 °C |
| 2nd moment of area ly | 257180 mm⁴ |
| 2nd moment of area Iz | 913660 mm⁴ |
| Max. driving torque | 15.92 Nm |
| Max. force Fy | 2500 N |
| Max. force Fz | 3050 N |
| Max. no-load resistance to shifting | 50.3 N |
| Max. torque Mx | 36 Nm |
| Max. torque My | 228 Nm |
| Max. torque Mz | 228 Nm |
| Max. feed force Fx | 800 N |
| No-load driving torque | 1 Nm |
| Torsion moment of inertia It | 159250 mm⁴ |
| Mass moment of inertia JH per meter of stroke | 0.93 kgcm ² |
| Mass moment of inertia JL per kg of payload | 3.96 kgcm ² |
| Mass moment of inertia JO | 9.82 kgcm ² |
| Mass moment of inertia JW for additional slide | 7.61 kgcm ² |
| Feed constant | 125 mm/U |

| Feature | Value |
|--|--|
| Lubrication interval, distance dependent | 1000 km |
| Slide weight | 1900 g |
| Additional slide weight | 1530 g |
| Additional weight per 10 mm stroke | 51 g |
| Basic weight with 0 mm stroke | 4700 g |
| Profile material | Wrought aluminum alloy Anodized |
| Note on materials | Contains paint-wetting impairment substances RoHS-compliant |
| Cover strip material | Stainless steel strip |
| Drive cover material | Wrought aluminum alloy Anodized |
| Slide carriage material | Stainless steel |
| Guide rail material | Stainless steel |
| Belt pulley material | High-alloy stainless steel |
| Slide material | Wrought aluminum alloy Anodized |
| Toothed belt clamping component material | Cast stainless steel |
| Toothed belt material | Polychloroprene with glass cord and nylon coating |