

Belt driven linear actuator ELGR-TB-55-500-0H

Part number: 8083788

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|---|--|
| Drive pinion effective diameter | 28.65 mm |
| Working stroke | 500 mm |
| Size | 55 |
| Toothed belt elongation | 0.21 % |
| Toothed belt pitch | 3 mm |
| Mounting position | Any |
| Guide | Recirculating ball bearing |
| Structural design | Electromechanical linear axis With toothed belt |
| Motor type | Stepper motor Servo motor |
| Symbol | 00991212 |
| Max. acceleration | 50 m/s ² |
| Max. speed | 0.35 m/s ... 3 m/s |
| Repetition accuracy | ±0.1 mm |
| Duty cycle | 100% |
| LABS (PWIS) conformity | VDMA24364 Zone III |
| Degree of protection | IP20 |
| Ambient temperature | -10 °C ... 50 °C |
| 2nd moment of area Iy | 38300 mm ⁴ |
| 2nd moment of area Iz | 41180 mm ⁴ |
| Max. driving torque | 5 Nm |
| Max. force Fy | 300 N |
| Max. force Fz | 300 N |
| Max. no-load resistance to shifting | 27.9 N |
| Max. feed force Fx | 350 N |
| No-load driving torque | 0.4 Nm |
| Mass moment of inertia JH per meter of stroke | 0.19 kgcm ² |
| Mass moment of inertia JL per kg of payload | 2.05 kgcm ² |
| Feed constant | 90 mm/U |
| Reference service life | 5000 km |
| Additional moving mass per 10 mm stroke | 0.92 g |
| Product weight | 9340 g |
| Additional weight per 10 mm stroke | 78 g |
| Profile material | Wrought aluminum alloy Anodized |

| Feature | Value |
|--|---|
| Note on materials | RoHS compliant |
| Drive cover material | Wrought aluminum alloy Anodized |
| Belt pulley material | high-alloy stainless steel |
| Slide material | Wrought aluminum alloy Anodized |
| Toothed belt clamping component material | Beryllium copper |
| Toothed belt material | Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating |