

Toothed belt axis ELGR-TB-45-300-0H

Part number: 8083778

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|--------------------------------------------------|----------------------------------------------------|
| Effective diameter of drive pinion | 24.83 mm |
| Working stroke | 300 mm |
| Size | 45 |
| Toothed-belt stretch | 0.08 % |
| Toothed-belt pitch | 3 mm |
| Mounting position | optional |
| Guide | Recirculating ball bearing guide |
| Design | Electromechanical linear axis With toothed belt |
| Type of motor | Stepper motor Servo motor |
| Symbol | 00991212 |
| Max. acceleration | 50 m/s ² |
| Max. speed | 1 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 | 15700 mm ⁴ |
| 2nd moment of area Iz | 17940 mm ⁴ |
| Max. drive torque | 1.24 Nm |
| Max. force Fy | 100 N |
| Max. force Fz | 100 N |
| Max. idle running transfer resistance | 16.1 N |
| Max. feed force Fx | 100 N |
| Frictional torque independent of load | 0.2 Nm |
| Mass moment of inertia JH per metre of stroke | 0.11 kgcm ² |
| Mass moment of inertia JL per kg of working load | 1.54 kgcm ² |
| Feed constant | 78 mm/U |
| Reference service life | 5000 km |
| Additional moving mass per 10 mm stroke | 0.69 g |
| Product weight | 4730 g |
| Additional weight per 10 mm stroke | 50 g |
| Material profile | Wrought aluminium alloy Anodised |

| Feature | Value |
|--------------------------------------|---------------------------------------------------------------------------|
| Note on materials | RoHS-compliant |
| Material drive cover | Wrought aluminium alloy Anodised |
| Material pulleys | High-alloy stainless steel |
| Material slide | Wrought aluminium alloy Anodised |
| Material toothed belt clamping piece | Beryllium bronze |
| Material toothed belt | Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating |