

# Toothed belt axis ELGR-TB-45-400-0H

Part number: 8083779

FESTO



 General operating condition

## Data sheet

| Feature                                          | Value                               |
|--------------------------------------------------|-------------------------------------|
| Effective diameter of drive pinion               | 24.83 mm                            |
| Working stroke                                   | 400 mm                              |
| Size                                             | 45                                  |
| Toothed-belt stretch                             | 0.08 %                              |
| Toothed-belt pitch                               | 3 mm                                |
| Mounting position                                | optional                            |
| Guide                                            | Recirculating ball bearing guide    |
| Design                                           | With toothed belt                   |
| Type of motor                                    | Stepper motor<br>Servo motor        |
| Symbol                                           | 00991212                            |
| Max. acceleration                                | 50 m/s <sup>2</sup>                 |
| 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 <sup>4</sup>               |
| 2nd moment of area Iz                            | 17940 mm <sup>4</sup>               |
| 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 <sup>2</sup>              |
| Mass moment of inertia JL per kg of working load | 1.54 kgcm <sup>2</sup>              |
| Feed constant                                    | 78 mm/U                             |
| Reference service life                           | 5000 km                             |
| Additional moving mass per 10 mm stroke          | 0.69 g                              |
| Product weight                                   | 5230 g                              |
| Additional weight per 10 mm stroke               | 50 g                                |
| Material profile                                 | Wrought aluminium alloy<br>Anodised |
| Note on materials                                | RoHS-compliant                      |

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