

# Toothed belt axis ELGR-TB-35-300-0H

Part number: 8083772

FESTO



## Data sheet

| Feature                                          | Value                                              |
|--------------------------------------------------|----------------------------------------------------|
| Effective diameter of drive pinion               | 18.46 mm                                           |
| Working stroke                                   | 300 mm                                             |
| Size                                             | 35                                                 |
| Toothed-belt stretch                             | 0.094 %                                            |
| Toothed-belt pitch                               | 2 mm                                               |
| Mounting position                                | optional                                           |
| Guide                                            | Recirculating ball bearing guide                   |
| Design                                           | Electromechanical linear axis<br>With toothed belt |
| Type of motor                                    | Stepper motor<br>Servo motor                       |
| Max. acceleration                                | 50 m/s <sup>2</sup>                                |
| Max. speed                                       | 0.9 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                            | 3770 mm <sup>4</sup>                               |
| 2nd moment of area Iz                            | 4190 mm <sup>4</sup>                               |
| Max. drive torque                                | 0.46 Nm                                            |
| Max. force Fy                                    | 50 N                                               |
| Max. force Fz                                    | 50 N                                               |
| Max. idle running transfer resistance            | 10.8 N                                             |
| Max. feed force Fx                               | 50 N                                               |
| Frictional torque independent of load            | 0.1 Nm                                             |
| Mass moment of inertia JH per metre of stroke    | 0.026 kgcm <sup>2</sup>                            |
| Mass moment of inertia JL per kg of working load | 0.85 kgcm <sup>2</sup>                             |
| Feed constant                                    | 58 mm/U                                            |
| Reference service life                           | 5000 km                                            |
| Additional moving mass per 10 mm stroke          | 0.31 g                                             |
| Product weight                                   | 2220 g                                             |

| Feature                              | Value                                                 |
|--------------------------------------|-------------------------------------------------------|
| Additional weight per 10 mm stroke   | 25 g                                                  |
| Material profile                     | Wrought aluminium alloy<br>Anodised                   |
| Note on materials                    | RoHS-compliant                                        |
| 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 with glass filament and nylon coating |