

# Toothed belt axis EGC-70-1000-TB-KF-0H-GK

Part number: 3012497

FESTO



 [General operating condition](#)

## Data sheet

| Feature   | Value  |
|---|--|
| Effective diameter of drive pinion                                | 24.83 mm   |
| Working stroke  | 1000 mm  |
| Size  | 70   |
| Stroke reserve  | 0 mm   |
| Toothed-belt pitch  | 3 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                       |
| Symbol  | 00991212   |
| Max. acceleration   | 50 m/s <sup>2</sup>                                |
| Max. speed  | 5 m/s  |
| Repetition accuracy   | ±0.08 mm   |
| Duty cycle  | 100%   |
| LABS (PWIS) conformity  | VDMA24364 zone III                                 |
| Degree of protection  | IP40   |
| Ambient temperature   | -10 °C ... 60 °C                                   |
| 2nd moment of area Iy   | 395000 mm <sup>4</sup>                             |
| 2nd moment of area Iz   | 577000 mm <sup>4</sup>                             |
| Max. force Fy   | 1850 N   |
| Max. force Fz   | 1850 N   |
| Max. force Fy total axis  | 1850 N   |
| Max. force Fz total axis  | 1850 N   |
| Fy at theoretical life value of 100 km (only guide consideration) | 6842 N   |
| Fz at theoretical life value of 100 km (only guide consideration) | 6842 N   |
| Max. idle running transfer resistance                             | 14.5 N   |
| Max. moment Mx  | 16 Nm  |
| Max. moment My  | 51 Nm  |
| Max. moment Mz  | 51 Nm  |
| Max. moment Mx total axis   | 16 Nm  |
| Max. moment My total axis   | 51 Nm  |
| Max. moment Mz total axis   | 51 Nm  |
| Mx at theoretical life value of 100 km (only guide consideration) | 58.9 Nm  |
| My at theoretical life value of 100 km (only guide consideration) | 188 Nm   |

| Feature   | Value   |
|---|---|
| Mz at theoretical life value of 100 km (only guide consideration) | 188 Nm  |
| Max. feed force Fx  | 100 N   |
| Torsional mass moment of inertia It                               | 240000 mm <sup>4</sup>  |
| 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   |
| Material end cap  | Wrought aluminium alloy<br>Anodised                                       |
| Material profile  | Wrought aluminium alloy<br>Anodised                                       |
| Note on materials   | RoHS-compliant  |
| Material drive cover  | Wrought aluminium alloy<br>Anodised                                       |
| Material guide slide  | Steel   |
| Material guide rail   | Steel   |
| Material pulleys  | High-alloy stainless steel  |
| Material slide  | Wrought aluminium alloy<br>Anodised                                       |
| Material toothed belt clamping piece                              | Nickel-plated   |
| Material toothed belt   | Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating |