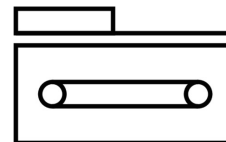


# Toothed belt axis EGC-70-500-TB-KF-0H-GK

Part number: 3012494

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature                                                           | Value                                              |
|-------------------------------------------------------------------|----------------------------------------------------|
| Effective diameter of drive pinion                                | 24.83 mm                                           |
| Working stroke                                                    | 500 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 with glass filament and nylon coating |