


# Belt driven linear actuator EGC-120-500-TB-KF-0H-GK

Part number: 3013365

FESTO



 [General operating condition](#)

## Data sheet

| Feature  | Value   |
|--|---|
| Drive pinion effective diameter  | 39.79 mm  |
| Working stroke   | 500 mm  |
| Size   | 120   |
| Stroke reserve   | 0 mm  |
| Toothed belt pitch   | 5 mm  |
| Mounting position  | Any   |
| Guide  | Recirculating ball bearing guide                |
| Structural design  | Electromechanical linear axis with toothed belt |
| Motor type   | 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  | 4620000 mm <sup>4</sup>                         |
| 2nd moment of area Iz  | 5650000 mm <sup>4</sup>                         |
| Max. force Fy  | 6890 N  |
| Max. force Fz  | 6890 N  |
| Max. force Fy total axis   | 6890 N  |
| Max. force Fz total axis   | 6890 N  |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 25383 N   |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 25383 N   |
| Max. no-load resistance to shifting  | 70 N  |
| Max. torque Mx   | 144 Nm  |
| Max. torque My   | 380 Nm  |
| Max. torque Mz   | 380 Nm  |
| Max. moment Mx total axis  | 144 Nm  |
| Max. moment My total axis  | 380 Nm  |
| Max. moment Mz total axis  | 380 Nm  |
| Mx with theoretical service life of 100 km (from a guide perspective only) | 531 Nm  |

| <b>Feature</b>   | <b>Value</b>                                      |
|--|---|
| My with theoretical service life of 100 km (from a guide perspective only) | 1400 Nm   |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 1400 Nm   |
| Max. feed force Fx   | 800 N   |
| Torsion moment of inertia It   | 2680000 mm <sup>4</sup>                           |
| Mass moment of inertia JH per meter of stroke                              | 0.93 kgcm <sup>2</sup>                            |
| Mass moment of inertia JL per kg of payload                                | 3.96 kgcm <sup>2</sup>                            |
| Feed constant  | 125 mm/U  |
| Reference service life   | 5000 km   |
| Material of end caps   | Wrought aluminum alloy<br>Anodized                |
| Profile material   | Wrought aluminum alloy<br>Anodized                |
| Note on materials  | RoHS-compliant                                    |
| Drive cover material   | Wrought aluminum alloy<br>Anodized                |
| Slide carriage material  | Steel   |
| Guide rail material  | Steel   |
| Belt pulley material   | High-alloy stainless steel                        |
| Slide material   | Wrought aluminum alloy<br>Anodized                |
| Toothed belt clamping component material                                   | Cast stainless steel                              |
| Toothed belt material  | Polychloroprene with glass cord and nylon coating |