

# Ball screw axis EGC-120-500-BS-10P-KF-0H-ML-GK

Part number: 3013575

FESTO



General operating condition

## Data sheet

| Feature  | Value                            |
|--|----------------------------------|
| Working stroke   | 500 mm                           |
| Size   | 120                              |
| Stroke reserve   | 0 mm                             |
| Screw diameter   | 25 mm                            |
| Spindle pitch  | 10 mm/U                          |
| Mounting position  | Any                              |
| Guide  | Recirculating ball bearing guide |
| Structural design  | with ball screw                  |
| Motor type   | Stepper motor<br>Servo motor     |
| Spindle type   | Ball screw                       |
| Symbol   | 00991211                         |
| Max. acceleration  | 15 m/s <sup>2</sup>              |
| Max. speed   | 0.6 m/s                          |
| Repetition accuracy  | ±0.02 mm                         |
| Duty cycle   | 100%                             |
| LABS (PWIS) conformity   | VDMA24364-B2-L                   |
| Degree of protection   | IP40                             |
| Ambient temperature  | -10 °C ... 60 °C                 |
| 2nd moment of area ly  | 5010000 mm <sup>4</sup>          |
| 2nd moment of area lz  | 5820000 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. 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                           |

| Feature  | Value                              |
|--|------------------------------------|
| 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. radial force on actuator shaft  | 500 N                              |
| Max. feed force Fx   | 1500 N                             |
| Torsion moment of inertia It   | 1430000 mm <sup>4</sup>            |
| Mass moment of inertia JH per meter of stroke                              | 2.756 kgcm <sup>2</sup>            |
| Feed constant  | 10 mm/U                            |
| Reference service life   | 5000 km                            |
| Material of end caps   | Wrought aluminum alloy<br>Anodized |
| Moment compensator material  | 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                              |
| Slide material   | Wrought aluminum alloy<br>Anodized |
| Ball screw nut material  | Steel                              |
| Spindle material   | Steel                              |