

# Ball screw axis EGC-80-100-BS-20P-KF-0H-ML-GK

Part number: 3013539

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature                                                                    | Value                            |
|----------------------------------------------------------------------------|----------------------------------|
| Working stroke                                                             | 100 mm                           |
| Size                                                                       | 80                               |
| Stroke reserve                                                             | 0 mm                             |
| Screw diameter                                                             | 15 mm                            |
| Spindle pitch                                                              | 20 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                                                                 | 1 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 Iy                                                      | 981000 mm <sup>4</sup>           |
| 2nd moment of area Iz                                                      | 1320000 mm <sup>4</sup>          |
| Max. force Fy                                                              | 3050 N                           |
| Max. force Fz                                                              | 3050 N                           |
| Max. force Fy total axis                                                   | 3050 N                           |
| Max. force Fz total axis                                                   | 3050 N                           |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 11236 N                          |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 11236 N                          |
| Max. torque Mx                                                             | 36 Nm                            |
| Max. torque My                                                             | 97 Nm                            |
| Max. torque Mz                                                             | 97 Nm                            |
| Max. moment Mx total axis                                                  | 36 Nm                            |
| Max. moment My total axis                                                  | 97 Nm                            |
| Max. moment Mz total axis                                                  | 97 Nm                            |
| Mx with theoretical service life of 100 km (from a guide perspective only) | 133 Nm                           |

| Feature                                                                    | Value                              |
|----------------------------------------------------------------------------|------------------------------------|
| My with theoretical service life of 100 km (from a guide perspective only) | 357 Nm                             |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 357 Nm                             |
| Max. radial force on actuator shaft                                        | 250 N                              |
| Max. feed force Fx                                                         | 650 N                              |
| Torsion moment of inertia It                                               | 255000 mm <sup>4</sup>             |
| Mass moment of inertia JH per meter of stroke                              | 0.346 kgcm <sup>2</sup>            |
| Feed constant                                                              | 20 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 |
| Spindle nut material                                                       | Steel                              |
| Spindle material                                                           | Steel                              |