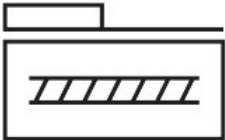


# Ball screw axis EGC-80-500-BS-20P-KF-0H-ML-GK Part number: 3013543

FESTO



## Data sheet

| Feature                                                           | Value                                            |
|-------------------------------------------------------------------|--------------------------------------------------|
| Working stroke                                                    | 500 mm                                           |
| Size                                                              | 80                                               |
| Stroke reserve                                                    | 0 mm                                             |
| Spindle diameter                                                  | 15 mm                                            |
| Spindle pitch                                                     | 20 mm/U                                          |
| Mounting position                                                 | optional                                         |
| Guide                                                             | Recirculating ball bearing guide                 |
| Design                                                            | Electromechanical linear axis<br>With ball screw |
| Type of motor                                                     | Stepper motor<br>Servo motor                     |
| Spindle type                                                      | Ball screw                                       |
| 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 at theoretical life value of 100 km (only guide consideration) | 11236 N                                          |
| Fz at theoretical life value of 100 km (only guide consideration) | 11236 N                                          |
| Max. moment Mx                                                    | 36 Nm                                            |
| Max. moment My                                                    | 97 Nm                                            |
| Max. moment Mz                                                    | 97 Nm                                            |
| Max. moment Mx total axis                                         | 36 Nm                                            |
| Max. moment My total axis                                         | 97 Nm                                            |

| Feature                                                           | Value                               |
|-------------------------------------------------------------------|-------------------------------------|
| Max. moment Mz total axis                                         | 97 Nm                               |
| Mx at theoretical life value of 100 km (only guide consideration) | 133 Nm                              |
| My at theoretical life value of 100 km (only guide consideration) | 357 Nm                              |
| Mz at theoretical life value of 100 km (only guide consideration) | 357 Nm                              |
| Max. radial force at drive shaft                                  | 250 N                               |
| Max. feed force Fx                                                | 650 N                               |
| Torsional mass moment of inertia It                               | 255000 mm <sup>4</sup>              |
| Mass moment of inertia JH per metre of stroke                     | 0.346 kgcm <sup>2</sup>             |
| Feed constant                                                     | 20 mm/U                             |
| Reference service life                                            | 5000 km                             |
| Material end cap                                                  | Wrought aluminium alloy<br>Anodised |
| Material driver                                                   | 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 slide                                                    | Wrought aluminium alloy<br>Anodised |
| Material spindle nut                                              | Steel                               |
| Material spindle                                                  | Steel                               |