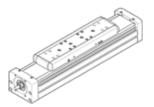
## Spindle axis ELGA-BS-KF-80-400-0H-10P-ML Part number: 8041825

With recirculating ball bearing guide



## **Data sheet**

| Feature  | Value                                   |
|--|---|
| Working stroke   | 400 mm                                  |
| Size   | 80                                      |
| Stroke reserve   | 0 mm                                    |
| Spindle diameter   | 15 mm                                   |
| Spindle pitch  | 10 mm/U                                 |
| Assembly position  | Any                                     |
| Guide  | Recirculating ball bearing guide        |
| Design structure   | Electromechanical linear axis           |
| 5  | with recirculating ball bearing spindle |
| Motor type   | Stepper motor                           |
| · ·  | Servomotor                              |
| Spindle type   | Ball screw actuator                     |
| Measuring method: displacement encoder                                     | Incremental                             |
| Max. acceleration  | 15 m/s2                                 |
| Max. speed   | 3,000 1/min                             |
|  | 0.5 m/s                                 |
| Repetition accuracy  | ±0,02 mm                                |
| PWIS conformity  | VDMA24364 zone III                      |
| Protection class   | IP40                                    |
| Ambient temperature  | -10 60 °C                               |
| Area moment of inertia 2nd degree ly                                       | 310E+03 mm4                             |
| Area moment of inertia 2nd degree Iz                                       | 977E+03 mm4                             |
| No-load torque at maximum travel speed                                     | 0.55 Nm                                 |
| No-load torque at minimum travel speed                                     | 0.3 Nm                                  |
| Max. force Fy  | 2,500 N                                 |
| Max. force Fz  | 3,050 N                                 |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 9,200 N                                 |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 11,224 N                                |
| Max. torque Mx   | 36 Nm                                   |
| Max. torque My   | 228 Nm                                  |
| Max. torque Mz   | 228 Nm                                  |
| Mx with theoretical service life of 100 km (from a guide perspective only  | 132 Nm                                  |
| My with theoretical service life of 100 km (from a guide perspective only) | 839 Nm                                  |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 839 Nm                                  |
| Max. radial force at drive shaft   | 250 N                                   |
| Max. feed force Fx   | 1,600 N                                 |
| Torsional mass moment of inertia It  | 67.3E+03 mm4                            |
| Mass moment of inertia JH per meter of stroke                              | 0.346 kgcm2                             |
| Mass moment of inertia JL per kg of working load                           | 0.0253 kgcm2                            |
| Mass moment of inertia, JO   | 0.097 kgcm2                             |
| Feed constant  | 10 mm/U                                 |
| Moving mass  | 1,370 g                                 |
| Additional slide weight  | 1,110 g                                 |
| Additional weight per 10 mm stroke   | 46.5 g                                  |

**FESTO** 



## FESTO

| Feature                                | Value                                 |  |
|--|---------------------------------------|--|
| Dynamic deflection (load moved)        | 0.05% of the axis length, max. 0.5 mm |  |
| Static deflection (load at standstill) | 0.1% of the axis length               |  |
| Material of end caps                   | Wrought Aluminum alloy                |  |
|  | Anodized                              |  |
| Material of profile                    | Wrought Aluminum alloy                |  |
|  | Anodized                              |  |
| Materials note                         | Conforms to RoHS                      |  |
| Material drive cover                   | Wrought Aluminum alloy                |  |
|  | Anodized                              |  |
| Material guide slide                   | Steel                                 |  |
| Material guide rail                    | Steel                                 |  |
| Material slide                         | Wrought Aluminum alloy                |  |
|  | Anodized                              |  |
| Material spindle nut                   | Steel                                 |  |
| Material spindle                       | Steel                                 |  |