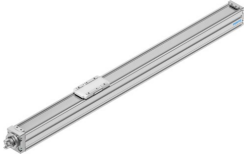


# Ball screw axis ELGC-BS-KF-32-800-8P

Part number: 8061483

FESTO



 General operating condition

## Data sheet

| Feature   | Value  |
|---|--|
| Working stroke  | 800 mm   |
| Size  | 32   |
| Stroke reserve  | 0 mm   |
| Reversing backlash  | 150 µm   |
| Screw diameter  | 8 mm   |
| Spindle pitch   | 8 mm/U   |
| Mounting position   | Any  |
| Guide   | Recirculating ball bearing   |
| Structural design   | Electromechanical linear axis<br>With ball screw                   |
| Motor type  | Stepper motor<br>Servo motor                                       |
| Spindle type  | Ball screw   |
| Symbol  | 00991211   |
| Position sensing  | Via proximity switch<br>For inductive sensors                      |
| Max. acceleration   | 15 m/s <sup>2</sup>  |
| Max. rotational speed                                     | 4500 rpm   |
| Max. speed  | 0.6 m/s  |
| Repetition accuracy                                       | ±0.015 mm  |
| Duty cycle  | 100%   |
| LABS (PWIS) conformity                                    | VDMA24364 Zone III   |
| Suitability for the production of Li-ion batteries        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 7 according to ISO 14644-1                                   |
| Storage temperature                                       | -20 °C ... 60 °C   |
| Degree of protection                                      | IP40   |
| Ambient temperature                                       | 0 °C ... 50 °C   |
| Impact energy in the end positions                        | 2.5E-4 J   |
| Note on the impact energy in the end positions            | At maximum speed of the reference run of 0.01 m/s                  |
| 2nd moment of area ly                                     | 38000 mm <sup>4</sup>  |
| 2nd moment of area lz                                     | 45000 mm <sup>4</sup>  |
| No-load torque at maximum travel speed                    | 0.04 Nm  |
| No-load torque at minimum travel speed                    | 0.02 Nm  |
| Max. force Fy   | 356 N  |
| Max. force Fz   | 356 N  |
| Max. force Fy total axis                                  | 150 N  |

| Feature  | Value                                |
|--|--------------------------------------|
| Max. force Fz total axis   | 300 N                                |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 1310 N                               |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 1310 N                               |
| Max. torque Mx   | 1.3 Nm                               |
| Max. torque My   | 1.1 Nm                               |
| Max. torque Mz   | 1.1 Nm                               |
| Max. moment Mx total axis  | 1.3 Nm                               |
| Max. moment My total axis  | 1.1 Nm                               |
| Max. moment Mz total axis  | 1.1 Nm                               |
| Mx with theoretical service life of 100 km (from a guide perspective only) | 5 Nm                                 |
| My with theoretical service life of 100 km (from a guide perspective only) | 4 Nm                                 |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 4 Nm                                 |
| Distance between slide surface and guide center                            | 31.4 mm                              |
| Max. radial force on actuator shaft  | 75 N                                 |
| Max. feed force Fx   | 40 N                                 |
| Torsion moment of inertia It   | 1700 mm <sup>4</sup>                 |
| Mass moment of inertia JH per meter of stroke                              | 0.02218 kgcm <sup>2</sup>            |
| Mass moment of inertia JL per kg of payload                                | 0.016211 kgcm <sup>2</sup>           |
| Mass moment of inertia JO  | 0.00274 kgcm <sup>2</sup>            |
| Feed constant  | 8 mm/U                               |
| Reference service life   | 5000 km                              |
| Maintenance interval   | Lifetime lubrication                 |
| Moving mass  | 83.4 g                               |
| Additional weight per 10 mm stroke   | 18 g                                 |
| Dynamic deflection (load moved)  | 0.05% of axis length, maximum 0.5 mm |
| Static deflection (load at standstill)                                     | 0.1 % of axis length                 |
| Interface code, actuator   | V25                                  |
| Material of end caps   | Die cast aluminum, painted           |
| Profile material   | Wrought aluminum alloy, anodized     |
| Note on materials  | RoHS compliant                       |
| Cover strip material   | high-alloy stainless steel           |
| Drive cover material   | Die cast aluminum, painted           |
| Slide carriage material  | Steel                                |
| Guide rail material  | Steel                                |
| Slide material   | Die-cast aluminum                    |
| Ball screw nut material  | Steel                                |
| Spindle material   | Steel                                |