

Ball Screw axis unit ELGS-BS-KF-45-800-10P-ST-M-H1-PLK-AA

Part number: 8083476

FESTO



Data sheet

| Feature | Value |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Working stroke | 800 mm |
| Size | 45 |
| Stroke reserve | 0 mm |
| Screw diameter | 10 mm |
| Spindle pitch | 10 mm/U |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Structural design | Electromechanical linear axis with ball screw With integrated drive |
| Position sensing | Motor encoder For proximity sensor |
| Rotor position sensor | Absolute encoder, single-turn |
| Rotor position sensor measuring principle | Magnetic |
| Temperature monitoring | Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output |
| Additional functions | User interface Integrated end-position sensing |
| Display | LED |
| Max. acceleration | 5 m/s ² |
| Max. speed | 0.25 m/s |
| Repetition accuracy | ±0.015 mm |
| Characteristics of digital logic outputs | Configurable Not galvanically isolated |
| Duty cycle | 100% |
| Insulation protection class | B |
| Max. current of digital logic outputs | 100 mA |
| Max. current consumption | 3 A |
| Logic max. current consumption | 0.3 A |
| DC nominal voltage | 24 V |
| Nominal current | 3 A |
| Parameterization interface | IO-Link® User interface |

| Feature | Value |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Permissible voltage fluctuations | +/- 15 % |
| Power supply, type of connection | Plug |
| Power supply, connection technology | M12x1, T-coded as per EN 61076-2-111 |
| Power supply, number of pins/wires | 4 |
| Certification | RCM compliance mark |
| CE marking (see declaration of conformity) | As per EU EMC directive As per EU RoHS directive |
| LABS (PWIS) conformity | VDMA24364 zone III |
| Storage temperature | -20 °C...60 °C |
| Relative air humidity | 0 - 90 % |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C...50 °C |
| Note on ambient temperature | Above an ambient temperature of 30°C, the power must be reduced by 2% per K. |
| 2nd moment of area Iy | 140000 mm ⁴ |
| 2nd moment of area Iz | 170000 mm ⁴ |
| Max. force Fy | 880 N |
| Max. force Fz | 880 N |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 3240 N |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 3240 N |
| Max. torque Mx | 5.5 Nm |
| Max. torque My | 4.7 Nm |
| Max. torque Mz | 4.7 Nm |
| Mx with theoretical service life of 100 km (from a guide perspective only) | 20 Nm |
| My with theoretical service life of 100 km (from a guide perspective only) | 17 Nm |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 17 Nm |
| Max. feed force Fx | 100 N |
| Guide value for payload, horizontal | 10 kg |
| Guide value for payload, vertical | 5 kg |
| Feed constant | 10 mm/U |
| Moving mass | 220 g |
| Product weight | 4234 g |
| Dynamic deflection (load moved) | 0.05% of axis length, maximum 0.5 mm |
| Static deflection (load at standstill) | 0.1 % of axis length |
| Number of digital logic outputs 24 V DC | 2 |
| Number of digital logic inputs | 2 |
| Work range of logic input | 24 V |
| Characteristics of logic input | Configurable Not galvanically isolated |
| IO-Link®, process data content OUT | Move in 1 bit Move out 1 bit Quit Error 1 bit Move Intermediate 1 bit |
| IO-Link®, process data content IN | State Device 1 bit State In 1 bit State Intermediate 1 bit State Move 1 bit State Out 1 bit |
| IO-Link®, service data contents IN | 32 bit force 32 bit position 32 bit speed |
| IO-Link®, data memory required | 0.5 KB |
| Input switching logic | PNP (positive switching) |
| Logic interface, connection type | Plug |

| Feature | Value |
|----------------------------------------|---------------------------------------------------------------------------|
| Logic interface, connection technology | M12x1, A-coded as per EN 61076-2-101 |
| Logic interface, number of poles/wires | 8 |
| Type of mounting | With internal thread With centering sleeve and pin With accessories |
| 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 |
| Slide carriage material | Steel |
| Guide rail material | Steel |