

# Mini slide unit

## EGSS-BS-KF-60-150-12P-ST-M-H1-PLK-AA

FESTO

Part number: 8083720



## Data sheet

| Feature                                   | Value   |
|---|---|
| Working stroke                            | 150 mm  |
| Size                                      | 60  |
| Stroke reserve                            | 0 mm  |
| Reversing backlash                        | 150 µm  |
| Screw diameter                            | 12 mm   |
| Spindle pitch                             | 12 mm/U   |
| Mounting position                         | Any   |
| Guide                                     | Recirculating ball bearing guide  |
| Structural design                         | Electrical mini-slide<br>with ball screw drive<br>With integrated drive     |
| Motor type                                | Stepper motor   |
| Homing                                    | Fixed stop block positive<br>Fixed stop block, negative<br>Reference switch |
| Spindle type                              | Ball screw drive  |
| Symbol                                    | 00997294  |
| Position sensing                          | Motor encoder<br>For proximity sensor                                       |
| Rotor position sensor                     | Absolute encoder, single-turn   |
| Rotor position sensor measuring principle | Magnetic  |
| Additional functions                      | User interface<br>Integrated end-position sensing                           |
| Display                                   | LED   |
| Ready status indication                   | LED   |
| Max. acceleration                         | 5 m/s <sup>2</sup>  |
| Max. speed                                | 0.24 m/s  |
| Repetition accuracy                       | ±0.015 mm   |
| Characteristics of digital logic outputs  | Configurable<br>Not galvanically isolated                                   |
| Duty cycle                                | 100%  |
| Insulation protection class               | B   |
| Max. current of digital logic outputs     | 100 mA  |
| Max. current consumption                  | 5300 mA   |
| DC nominal voltage                        | 24 V  |
| Nominal current                           | 5.3 A   |
| Parameterization interface                | IO-Link®<br>User interface  |

| Feature  | Value  |
|--|--|
| Rotor position sensor resolution               | 16 bit   |
| 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  |
| Power supply, connection pattern               | 00995989   |
| Certification                                  | RCM compliance mark  |
| KC characters                                  | KC EMC   |
| CE marking (see declaration of conformity)     | As per EU EMC directive<br>As per EU RoHS directive                                  |
| UKCA marking (see declaration of conformity)   | To UK instructions for EMC<br>To UK RoHS instructions                                |
| Vibration resistance                           | Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6 |
| Shock resistance                               | Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27                |
| Corrosion resistance class (CRC)               | 0 - No corrosion stress  |
| LABS (PWIS) conformity                         | VDMA24364 zone III   |
| Storage temperature                            | -20 °C ... 60 °C   |
| Relative air humidity                          | 0 - 90 %   |
| Degree of protection                           | IP40   |
| Protection class                               | III  |
| 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.         |
| Fixed bearing dynamic basic load rating        | 13321 N  |
| Linear guide dynamic basic load rating         | 13400 N  |
| Dynamic basic load rating, ball screw drive    | 4600 N   |
| Max. force Fy                                  | 4937 N   |
| Max. force Fz                                  | 4937 N   |
| Max. torque Mx                                 | 20 Nm  |
| Max. torque My                                 | 30 Nm  |
| Max. torque Mz                                 | 30 Nm  |
| Max. radial force on actuator shaft            | 420 N  |
| Max. feed force Fx                             | 250 N  |
| Guide value for payload, horizontal            | 10 kg  |
| Guide value for payload, vertical              | 10 kg  |
| Ball screw drive statistical basic load rating | 8500 N   |
| Linear guide statistical basic load rating     | 26900 N  |
| Feed constant                                  | 12 mm/U  |
| Statistical fixed bearing load rating          | 7000 N   |
| Reference value, running performance           | 5000 km  |
| Maintenance interval                           | Life-time lubrication  |
| Moving mass at 0 mm stroke                     | 675 g  |
| Additional moving mass per 10 mm stroke        | 40 g   |
| Product weight                                 | 4160 g   |
| Basic weight with 0 mm stroke                  | 2735 g   |
| Additional weight per 10 mm stroke             | 95 g   |
| Number of digital logic outputs 24 V DC        | 2  |
| Number of digital logic inputs                 | 2  |
| Logic input specification                      | Based on IEC 61131-2, type 1   |
| Work range of logic input                      | 24 V   |
| IO-Link®, SIO mode support                     | Yes  |
| Characteristics of logic input                 | Configurable<br>Not galvanically isolated  |

| Feature                                | Value   |
|--|---|
| IO-Link®, protocol version             | Device V 1.1  |
| IO-Link®, communication mode           | COM3 (230.4 kBd)  |
| IO-Link®, port class                   | A   |
| IO-Link®, number of ports              | 1   |
| IO-Link®, process data width OUT       | 2 Byte  |
| IO-Link®, process data content OUT     | 1 bit (move in)<br>1 bit (move out)<br>1 bit (quit error)                                 |
| IO-Link®, process data width IN        | 2 Byte  |
| IO-Link®, process data content IN      | 1 bit (state device)<br>1 bit (state move)<br>1 bit (state in)<br>1 bit (state out)       |
| IO-Link®, service data contents IN     | 32 bit force<br>32 bit position<br>32 bit speed   |
| IO-Link®, minimum cycle time           | 1 ms  |
| IO-Link®, data memory required         | 500 byte  |
| Max. cable length                      | 15 m outputs<br>15 m inputs<br>20 m for IO-Link® operation                                |
| Switching logic at outputs             | PNP (positive switching)  |
| Input switching logic                  | PNP (positive switching)  |
| IO-Link®, Connection technology        | Plug  |
| Logic interface, connection type       | Plug  |
| Logic interface, connection technology | M12x1, A-coded as per EN 61076-2-101  |
| Logic interface, number of poles/wires | 8   |
| Logic interface, connection pattern    | 00992264  |
| Type of mounting                       | With internal thread<br>With centering sleeve<br>With accessories<br>With cylindrical pin |
| Note on materials                      | RoHS-compliant  |
| Slide carriage material                | Roller bearing steel  |
| Guide rail material                    | Roller bearing steel  |
| Housing material                       | Wrought aluminum alloy, anodized  |
| Material of yoke plate                 | Wrought aluminum alloy, anodized  |
| Piston rod material                    | High-alloy stainless steel  |
| Slide material                         | Wrought aluminum alloy, anodized  |
| Spindle nut material                   | Roller bearing steel  |
| Spindle material                       | Roller bearing steel  |