

# Mini slide unit

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

FESTO

Part number: 8083720



 General operating condition

## Data sheet

Feature	Value
Working stroke	150 mm
Size	60
Stroke reserve	0 mm
Reversing backlash theoretical	150 µm
Spindle diameter	12 mm
Spindle pitch	12 mm/U
Mounting position	Any
Guide	Recirculating ball bearing guide
Design	With ball screw With integrated drive
Type of motor	Stepper motor
Referencing	Positive fixed stop block Negative fixed stop block
Spindle type	Ball screw
Symbol	00997294
Position detection	Motor encoder Via proximity switch
Rotor position sensor	Absolute encoder, single turn
Rotor position sensor, encoder measuring principle	magnetic
Protective function	Temperature monitoring
Additional functions	Built-in end-position sensing
Display	LED
Ready status indication	LED
Max. acceleration	5 m/s <sup>2</sup>
Max. speed	0.24 m/s
Speed "Speed press"	0.01 m/s
Repetition accuracy	±0.015 mm
Features of digital logic outputs	Configurable Not galvanically isolated
Duty cycle	100%
Insulation protection class	B
Max. current digital logic outputs	100 mA
Max. current consumption	5300 mA
Max. current consumption, logic	0.3 A
Nominal voltage DC	24 V
Nominal current	5.3 A

Feature	Value
Parameterisation interface	IO-Link® User interface
Rotor position transducer resolution	16 bit
Permissible voltage fluctuations	+/- 15 %
Power supply, connection type	Plug
power supply, connection system	M12x1, T-coded according to EN 61076-2-111
Power supply, number of pins/wires	4
Power supply, connection pattern	00995989
Approval	RCM
KC mark	KC-EMV
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Vibration resistance	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Cleanroom suitability, measured according to ISO 14644-14	Class 9 according to ISO 14644-1
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	Power must be reduced by 2% per K at ambient temperatures above 30°C.
Dynamic basic load rating fixed bearing	13321 N
Dynamic basic load rating linear guide	13400 N
Dynamic basic load rating ball screw	4600 N
Max. force Fy	4937 N
Max. force Fz	4937 N
Fy at theoretical life value of 100 km (only guide consideration)	13400 N
Fz at theoretical life value of 100 km (only guide consideration)	13400 N
Max. moment Mx	20 Nm
Max. moment My	30 Nm
Max. moment Mz	30 Nm
Mx at theoretical life value of 100 km (only guide consideration)	107 Nm
My at theoretical life value of 100 km (only guide consideration)	117 Nm
Mz at theoretical life value of 100 km (only guide consideration)	117 Nm
Max. radial force at drive shaft	420 N
Max. feed force Fx	250 N
Reference value effective load, horizontal	10 kg
Reference value effective load, vertical	10 kg
Static basic load rating ball screw	8500 N
Static basic load rating linear guide	26900 N
Feed constant	12 mm/U
Static basic load rating fixed bearing	7000 N
Reference service life	5000 km
Maintenance interval	Lifetime lubrication
Moving mass for 0 mm stroke	675 g
Additional moving mass per 10 mm stroke	40 g
Product weight	4160 g
Basic weight for 0 mm stroke	2735 g
Additional weight per 10 mm stroke	95 g

Feature	Value
Number of digital logic outputs 24 V DC	2
Number of digital logic inputs	2
Specification logic input	Based on IEC 61131-2, type 1
Working range of logic input	24 V
IO-Link, SIO-Mode support	Yes
Features of logic input	Configurable Not galvanically isolated
IO-Link, Protocol version	Device V 1.1
IO-Link, communication mode	COM3 (230.4 kBaud)
IO-Link, Port class	A
IO-Link, Number of ports	1
IO-Link, Process data length OUT	2 bytes
IO-Link, Process data content OUT	1 bit (move in) 1 bit (Move out) 1 bit (Quit Error) 1 bit (move intermediate)
IO-Link, Process data length IN	2 bytes
IO-Link, Process data content IN	1 bit (state device) 1 bit (State Intermediate) 1 bit (State Move) 1 bit (State in) 1 bit (state out)
IO-Link, Service data IN	32 bit Force 32 bit position 32 bit speed
IO-Link, Min. cycle time	1 ms
IO-Link, Data storage required	500 Byte
Max. cable length	15 m outputs 15 m inputs 20 m with IO-Link® operation
Switching logic for outputs	PNP (positive switching)
Switching logic for inputs	PNP (positive switching)
IO-Link, connection technology	Plug
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded according to EN 61076-2-101
Logic interface, number of pins/wires	8
Logic interface, plug pattern	00992264
Type of mounting	With female thread With centring sleeve With accessories Via cylindrical dowel pin
Note on materials	RoHS compliant
Material guide slide	Bearing steel
Material guide rail	Bearing steel
Material housing	Anodised wrought aluminium alloy
Material yoke plate	Anodised wrought aluminium alloy
Material piston rod	High-alloy stainless steel
Material slide	Anodised wrought aluminium alloy
Material ball screw nut	Bearing steel
Material spindle	Bearing steel