

mini slide unit

EGSS-BS-KF-45-100-10P-ST-M-H1-PLK-AA

Part number: 8083817

FESTO



Data sheet

Feature	Value
Working stroke	100 mm
Size	45
Stroke reserve	0 mm
Reversing backlash	150 µm
Spindle diameter	10 mm
Spindle pitch	10 mm/U
Assembly position	Any
Guide	Recirculating ball bearing guide
Design structure	Electric mini slide With ball screw With integrated drive
Motor type	Stepper motor
Referencing	Fixed stop block positive Fixed stop block negative
Spindle type	Ball screw
Position detection	Motor encoder For proximity sensor
Rotor position sensor	Absolute single turn encoder
Rotary position encoder measuring principle	Magnetic
Protective function	Temperature monitoring
Additional functions	User interface Integrated end-position sensing
Display	LED
Ready status display	LED
Max. acceleration	5 m/s ²
Max. speed	0.25 m/s
Speed "Speed press"	0.01 m/s
Repetition accuracy	±0,015 mm
Digital logic output characteristics	configurable Not electrically isolated
Duty cycle	100 %
Insulation protection class	B
Max. current, digital logic outputs	100 mA
Max. current consumption	3 A
Max. current consumption, logic	300 mA
Nominal voltage DC	24 V
Nominal current	3 A
Parameters configuring interface	IO-Link User interface
Rotor position encoder resolution	16 Bit
Permissible voltage fluctuation	+/- 15 %
Power supply, type of connection	Plug
Power supply, connection technology	M12x1, T-coded to EN 61076-2-111
Power supply, number of pins/wires	4
Authorisation	RCM Mark
KC mark	KC-EMV

Feature	Value
CE mark (see declaration of conformity)	to EU directive for EMC in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC 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 in accordance with FN 942017-5 and EN 60068-2-27
Corrosion resistance classification CRC	0 - No corrosion stress
PWIS conformity	VDMA24364 zone III
Cleanroom class	ISO class 9
Storage temperature	-20 ... 60 °C
Relative air humidity	0 - 90 %
Protection class	IP40
Safety class	III
Ambient temperature	0 ... 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	7,413 N
Linear guide dynamic basic load rating	3,240 N
Ball screw drive dynamic basic load rating	3,200 N
Max. force Fy	1,314 N
Max. force Fz	1,314 N
Fy with theoretical service life of 100 km (from a guide perspective only)	3,240 N
Fz with theoretical service life of 100 km (from a guide perspective only)	3,240 N
Max. torque Mx	8.14 Nm
Max. torque My	7.05 Nm
Max. torque Mz	7.05 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. radial force at drive shaft	340 N
Max. feed force Fx	120 N
Reference value for working load, horizontal	6 kg
Reference value for working load, vertical	6 kg
Ball screw drive statistical basic load rating	5,900 N
Linear guide statistical basic load rating	5,630 N
Feed constant	10 mm/U
Fixed bearing statistical basic load rating	3,966 N
Reference value, running performance	5,000 km
Maintenance interval	Life-time lubrication
Moving mass with 0 mm stroke	212 g
Additional mass factor per 10 mm of stroke	30 g
Product weight	1,867 g
Basic weight for 0 mm stroke	1,238 g
Additional weight per 10 mm stroke	63 g
Number of 24 V DC digital logic outputs	2
Number of digital logic inputs	2
Specification, logic input	Based on IEC 61131-2, type 1
Logic input working range	24 V
IO-Link, SIO mode support	Yes
Logic input characteristics	configurable Not electrically isolated
IO-Link, protocol	Device V 1.1
IO-Link, communication mode	COM3 (230.4 kbd)
IO-Link, port type	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) 1 bit (Move out) 1 bit (Quit Error)

Feature	Value
	1 bit (Move Intermediate)
IO-Link, process data width IN	2 Byte
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 contents IN	32 bit Force 32 bit Position 32 bit Speed
IO-Link, minimum cycle time	1 ms
IO-Link, data memory required	0.5 Kilobyte
Max. line length	15 m outputs 15 m inputs 20 m with IO-Link operation
Switching logic, outputs	PNP (positive-switching)
Input circuit logic	PNP (positive-switching)
IO-Link, connection technology	Plug
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded in accordance with EN 61076-2-101
Logic interface, number of poles/wires	8
Logic interface, connection pattern	00992264
Mounting type	with internal (female) thread with centring sleeve with accessories With cylindrical dowel pin
Materials note	Conforms to RoHS
Material guide slide	Roller bearing steel
Material guide rail	Roller bearing steel
Material housing	Anodised wrought aluminium alloy
Material yoke plate	Anodised wrought aluminium alloy
Material piston rod	High alloy steel, non-corrosive
Material slide	Anodised wrought aluminium alloy
Material spindle nut	Roller bearing steel
Material spindle	Roller bearing steel