

Mini slide unit

EGSS-BS-KF-45-25-10P-ST-M-H1-PLK-AA

FESTO

Part number: 8083814



[PDF](#) General operating condition

Data sheet

Feature	Value
Working stroke	25 mm
Size	45
Stroke reserve	0 mm
Reversing backlash theoretical	150 µm
Spindle diameter	10 mm
Spindle pitch	10 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 ²
Max. speed	0.25 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	3000 mA
Max. current consumption, logic	0.3 A
Nominal voltage DC	24 V
Nominal current	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	7413 N
Dynamic basic load rating linear guide	3240 N
Dynamic basic load rating ball screw	3200 N
Max. force Fy	1314 N
Max. force Fz	1314 N
Fy at theoretical life value of 100 km (only guide consideration)	3240 N
Fz at theoretical life value of 100 km (only guide consideration)	3240 N
Max. moment Mx	8.14 Nm
Max. moment My	7.05 Nm
Max. moment Mz	7.05 Nm
Mx at theoretical life value of 100 km (only guide consideration)	20 Nm
My at theoretical life value of 100 km (only guide consideration)	17 Nm
Mz at theoretical life value of 100 km (only guide consideration)	17 Nm
Max. radial force at drive shaft	340 N
Max. feed force Fx	120 N
Reference value effective load, horizontal	6 kg
Reference value effective load, vertical	6 kg
Static basic load rating ball screw	5900 N
Static basic load rating linear guide	5630 N
Feed constant	10 mm/U
Static basic load rating fixed bearing	3966 N
Reference service life	5000 km
Maintenance interval	Lifetime lubrication
Moving mass for 0 mm stroke	212 g
Additional moving mass per 10 mm stroke	30 g
Product weight	1395 g
Basic weight for 0 mm stroke	1238 g
Additional weight per 10 mm stroke	63 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