

Mini slide unit

EGSS-BS-KF-45-150-10P-ST-M-H1-PLK-AA

FESTO

Part number: 8083819



Data sheet

Feature	Value
Working stroke	150 mm
Size	45
Stroke reserve	0 mm
Reversing backlash	150 µm
Screw diameter	10 mm
Spindle pitch	10 mm/U
Type code	EGSS
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Electrical mini-slide with ball screw drive With integrated drive
Motor type	Stepper motor
Homing	Fixed stop block positive Fixed stop block, negative Reference switch
Spindle type	Ball screw drive
Symbol	00997294
Position sensing	Motor encoder For proximity sensor
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Additional functions	User interface Integrated end-position sensing
Display	LED
Ready status indication	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	3000 mA
DC nominal voltage	24 V
Nominal current	3 A

Feature	Value
Parameterization interface	IO-Link® User interface
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 As per EU RoHS directive
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
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	7413 N
Linear guide dynamic basic load rating	3240 N
Dynamic basic load rating, ball screw drive	3200 N
Max. force Fy	1314 N
Max. force Fz	1314 N
Max. torque Mx	8.14 Nm
Max. torque My	7.05 Nm
Max. torque Mz	7.05 Nm
Max. radial force on actuator shaft	340 N
Max. feed force Fx	120 N
Guide value for payload, horizontal	6 kg
Guide value for payload, vertical	6 kg
Ball screw drive statistical basic load rating	5900 N
Linear guide statistical basic load rating	5630 N
Feed constant	10 mm/U
Statistical fixed bearing load rating	3966 N
Reference value, running performance	5000 km
Maintenance interval	Life-time lubrication
Moving mass at 0 mm stroke	212 g
Additional weight per 10 mm stroke	63 g
Basic weight with 0 mm stroke	1238 g
Product weight	2181 g
Additional moving mass per 10 mm stroke	30 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 Not galvanically isolated
IO-Link®, protocol version	Device V 1.1

Feature	Value
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) 1 bit (move out) 1 bit (quit error)
IO-Link®, process data width IN	2 Byte
IO-Link®, process data content IN	1 bit (state device) 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	500 byte
Max. cable length	15 m outputs 15 m inputs 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 With centering sleeve With accessories With cylindrical pin
Note on materials	Contains paint-wetting impairment substances 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