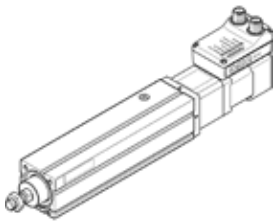
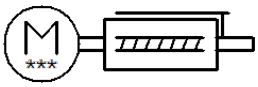
electric cylinder unit
EPCS-BS-60-50-5P-A-ST-M-H1-PLK-AA

Part number: 8118287

FESTO





Data sheet

Feature	Value
Size	60
Stroke	50 mm
Stroke reserve	0 mm
Piston rod thread	M12x1,25
Reversing backlash	100 µm
Spindle diameter	12 mm
Spindle pitch	5 mm/U
Max. angular deflection of piston rod +/-	1 deg
Assembly position	Any
Piston-rod end	Male thread
Motor type	Stepper motor
Design structure	Electric cylinder With ball screw with integrated drive
Spindle type	Ball screw
Protection against torque/guide	with plain-bearing guide
Referencing	Fixed stop block positive Fixed stop block negative Reference switch
Rotor position sensor	Absolute single turn encoder
Rotary position encoder measuring principle	Magnetic
Temperature monitoring	Shutdown at over-temperature Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface Integrated end-position sensing
Display	LED
Ready status display	LED
Max. acceleration	1.5 m/s2
Max. speed	0.09 m/s
Speed "Speed press"	0.01 m/s
Repetition accuracy	±0,02 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	5.3 A
Max. current consumption, logic	0.3 A
Nominal voltage DC	24 V
Nominal current	5.3 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 as per EN 61076-2-111

Feature	Value
Power supply, number of pins/wires	4
Authorization	RCM Mark
KC mark	KC-EMV
CE symbol (see declaration of conformity)	according to EU-EMV guideline 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 % non-condensing
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.
Max. torque Mx	0 Nm
Max. torque My	6.4 Nm
Max. torque Mz	6.4 Nm
Max. radial force at drive shaft	230 N
Max. feed force Fx	900 N
Reference value for working load, horizontal	120 kg
Reference value for working load, vertical	46 kg
Maintenance interval	Life-time lubrication
Moving mass with 0 mm stroke	305 g
Additional mass factor per 10 mm of stroke	6.5 g
Product weight	2,639 g
Basic weight for 0 mm stroke	2,294 g
Additional weight per 10 mm stroke	69 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
Logic input characteristics	configurable Not electrically isolated
IO-Link, SIO mode support	Yes
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	Move in 1 bit Move out 1 bit Quit Error 1 bit Move Intermediate 1 bit
IO-Link, process data width IN	2 Byte
IO-Link, process data content IN	State In 1 bit State Out 1 bit State Move 1 bit State Device 1 bit State Intermediate 1 bit
IO-Link, Service data contents IN	32 bit Force 32 bit Position 32 bit Speed
IO-Link, minimum cycle time	1 ms

Feature	Value
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	NPN (negative switching) PNP (positive-switching)
Input circuit logic	NPN (negative switching) PNP (positive-switching)
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 accessories
Materials note	Conforms to RoHS
Material housing	Smooth-anodised wrought aluminium alloy
Material piston rod	High alloy steel, non-corrosive
Material spindle nut	Steel
Material spindle	Roller bearing steel