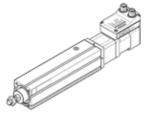
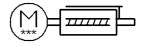
# electric cylinder unit EPCS-BS-45-50-3P-A-ST-M-H1-PLK-AA Part number: 8118275

### **FESTO**



# **Data sheet**

Feature	Value
Size	45
Stroke	50 mm
Stroke reserve	0 mm
Piston rod thread	M10x1,25
Reversing backlash	100 µm
Spindle diameter	10 mm
Spindle pitch	3 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
שכאצוו או ערנעו <del>ע</del>	With ball screw
	with integrated drive
Spindle type	Ball screw
Protection against torque/guide	with plain-bearing guide
Referencing	Fixed stop block positive
Kelerencing	Fixed stop block negative
	Reference switch
Deter position concer	Absolute single turn encoder
Rotor position sensor Rotary position encoder measuring principle	
	Magnetic
Temperature monitoring	Shutdown at over-temperature
Additional functions	Integrated precise CMOS temperature sensor with analogue output User interface
Additional functions	
Display	Integrated end-position sensing
Display	LED LED
Ready status display	
Max. acceleration	1.5 m/s2
Max. speed	0.074 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	В
Max. current, digital logic outputs	100 mA
Max. current consumption	3 A
Max. current consumption, logic	0.3 A
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 as per EN 61076-2-111



## FESTO

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	111
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	2.9 Nm
Max. torque Mz	2.9 Nm
Max. radial force at drive shaft	180 N
Max. feed force Fx	450 N
Reference value for working load, horizontal	60 kg
Reference value for working load, vertical	23 kg
Maintenance interval	Life-time lubrication
Moving mass with 0 mm stroke	179 g
Additional mass factor per 10 mm of stroke	4.9 g
Product weight	1,390 g
Basic weight for 0 mm stroke	1,185 g
Additional weight per 10 mm stroke	41 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	Α
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
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### FESTO

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