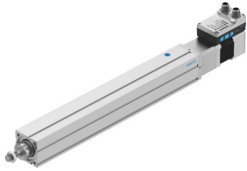


# Electric cylinder unit

## EPCS-BS-45-250-10P-A-ST-M-H1-PLK-AA

FESTO

Part number: 8118285



## Data sheet

Feature	Value
Size	45
Stroke	250 mm
Stroke reserve	0 mm
Piston rod thread	M10x1.25
Spindle diameter	10 mm
Spindle pitch	10 mm/U
Mounting position	optional
Design	Electric cylinder With ball screw drive With integrated drive
Spindle type	Ball screw drive
Protection against torque/guide	With plain-bearing guide
Rotor position sensor	Absolute single-turn encoder
Rotor position sensor, encoder measuring principle	Magnetic
Temperature monitoring	Switch-off for excessive temperature Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface Integrated end-position sensing
Display	LED
Max. acceleration	5 m/s <sup>2</sup>
Max. speed	0.23 m/s
Repetition accuracy	±0.02 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	3 A
Max. current consumption, logic	0.3 A
Nominal voltage DC	24 V
Nominal current	3 A
Parameterisation interface	IO-Link User interface

Feature	Value
Permissible voltage fluctuations	+/- 15%
Power supply, connection type	Plugs
power supply, connection system	M12x1, T-coded according to EN 61076-2-111
Power supply, number of pins/wires	4
Approval	RCM trademark
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
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% Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C...50 °C
Note on ambient temperature	Power must be reduced by 2% per K at ambient temperatures above 30°C.
Max. moment Mx	0 Nm
Max. moment My	2.9 Nm
Max. moment Mz	2.9 Nm
Max. radial force at drive shaft	180 N
Max. feed force Fx	250 N
Reference value effective load, horizontal	40 kg
Reference value effective load, vertical	13 kg
Moving mass for 0 mm stroke	179 g
Additional moving mass per 10 mm stroke	4.9 g
Product weight	2210 g
Basic weight for 0 mm stroke	1185 g
Additional weight per 10 mm stroke	41 g
Number of digital logic outputs 24 V DC	2
Number of digital logic inputs	2
Working range of logic input	24 V
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	Move in 1 bit Move out 1 bit Quit Error 1 bit Move intermediate 1 bit
IO-Link, Process data content IN	State Device 1 bit State In 1 bit State Intermediate 1 bit State Move 1 bit State Out 1 bit
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	0.5 KB

<b>Feature</b>	<b>Value</b>
Switching logic for inputs	NPN (negative switching) PNP (positive switching)
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
Type of mounting	Via female thread With accessories
Note on materials	RoHS-compliant
Material ball screw nut	Steel
Material spindle	Rolled steel