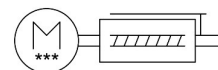
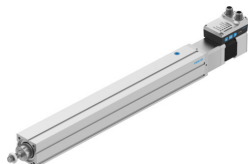


# Electric cylinder unit

## EPCS-BS-45-300-3P-A-ST-M-H1-PLK-AA

Part number: 8118280

**FESTO**



## Data sheet

Feature	Value
Size	45
Stroke	300 mm
Stroke reserve	0 mm
Piston rod thread	M10x1.25
Screw diameter	10 mm
Spindle pitch	3 mm/U
Mounting position	Any
Structural design	Electric actuator with ball screw drive With integrated drive
Spindle type	Ball screw drive
Protection against torsion/guide	With plain-bearing guide
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Temperature monitoring	Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface Integrated end-position sensing
Display	LED
Max. acceleration	1.5 m/s <sup>2</sup>
Max. speed	0.074 m/s
Repetition accuracy	±0.02 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	3 A
Logic max. current consumption	0.3 A
DC nominal voltage	24 V
Nominal current	3 A
Parameterization interface	IO-Link® User interface

Feature	Value
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
Certification	RCM compliance mark
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
LABS (PWIS) conformity	VDMA24364 zone III
Cleanroom class	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	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 on actuator shaft	180 N
Max. feed force Fx	450 N
Guide value for payload, horizontal	60 kg
Guide value for payload, vertical	23 kg
Moving mass at 0 mm stroke	179 g
Additional moving mass per 10 mm stroke	4.9 g
Product weight	2415 g
Basic weight with 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
Work range of logic input	24 V
Characteristics of logic input	Configurable Not galvanically isolated
IO-Link®, protocol version	Device V 1.1
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	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 contents IN	32 bit force 32 bit position 32 bit speed
IO-Link®, minimum cycle time	1 ms
IO-Link®, data memory required	0.5 KB

Feature	Value
Input switching logic	NPN (negative switching) PNP (positive switching)
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
Type of mounting	With internal thread With accessories
Note on materials	RoHS-compliant
Spindle nut material	Steel
Spindle material	Roller bearing steel