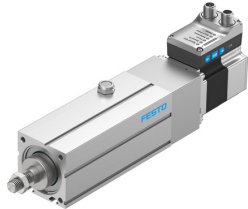


# Electric cylinder unit

## EPCS-BS-60-50-12P-A-ST-M-H1-PLK-AA

FESTO

Part number: 8118296



### Data sheet

Feature	Value
KC characters	KC EMC
Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
Max. cable length	15 m outputs 15 m inputs 20 m for IO-Link® operation
Display	LED
Vibration resistance	Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6
Logic input specification	Based on IEC 61131-2, type 1
Input switching logic	NPN (negative switching) PNP (positive switching)
Ready status indication	LED
Parameterization interface	IO-Link® User interface
Additional functions	User interface Integrated end-position sensing
Characteristics of logic input	Configurable Not galvanically isolated
Switching logic at outputs	NPN (negative switching) PNP (positive switching)
Note on ambient temperature	Above an ambient temperature of 30°C, the power must be reduced by 2% per K.
Power supply, connection pattern	00995989
Logic interface, connection pattern	00992264
Characteristics of digital logic outputs	Configurable Not galvanically isolated
Power supply, connection technology	M12x1, T-coded as per EN 61076-2-111
Power supply, type of connection	Plug
Logic interface, connection technology	M12x1, A-coded as per EN 61076-2-101
Logic interface, connection type	Plug
Max. current of digital logic outputs	100 mA
DC nominal voltage	24 V
Number of digital logic outputs 24 V DC	2
Number of digital logic inputs	2
Logic interface, number of poles/wires	8
Power supply, number of pins/wires	4
Max. current consumption	5300 mA
Work range of logic input	24 V

Feature	Value
Product weight	2639 g
Rotor position sensor resolution	16 bit
Nominal current	5.3 A
IO-Link®, SIO mode support	Yes
IO-Link®, service data contents IN	32 bit force 32 bit position 32 bit speed
IO-Link®, process data content IN	1 bit (state device) 1 bit (state move) 1 bit (state in) 1 bit (state out)
IO-Link®, port class	A
IO-Link®, process data width IN	2 Byte
IO-Link®, process data width OUT	2 Byte
IO-Link®, minimum cycle time	1 ms
IO-Link®, protocol version	Device V 1.1
IO-Link®, number of ports	1
IO-Link®, process data content OUT	1 bit (move in) 1 bit (move out) 1 bit (quit error)
IO-Link®, communication mode	COM3 (230.4 kBd)
IO-Link®, data memory required	500 byte
Size	60
Stroke	50 mm
Stroke reserve	0 mm
Piston rod thread	M12x1.25
Reversing backlash	100 µm
Screw diameter	12 mm
Spindle pitch	12 mm/U
Max. angle of rotation of the piston rod +/-	1 deg
Type code	EPCS
Mounting position	Any
Piston rod end	External thread
Motor type	Stepper motor
Design	Electric actuator with ball screw drive With integrated drive
Spindle type	Ball screw drive
Symbol	00997294
Protection against torsion/guide	With plain-bearing guide
Homing	Fixed stop block positive Fixed stop block, negative Reference switch
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Max. acceleration	5 m/s <sup>2</sup>
Max. speed	0.22 m/s
Repetition accuracy	±0.02 mm
Duty cycle	100%
Insulation protection class	B
Permissible voltage fluctuations	+/- 15 %
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
Corrosion resistance class (CRC)	0 - No corrosion stress
Storage temperature	-20 °C ... 60 °C

<b>Feature</b>	<b>Value</b>
Relative air humidity	0 - 90 % Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C ... 50 °C
Certification	RCM compliance mark
Max. torque Mx	0 Nm
Max. torque My	6.4 Nm
Max. torque Mz	6.4 Nm
Max. radial force on actuator shaft	230 N
Max. feed force Fx	375 N
Guide value for payload, horizontal	56 kg
Guide value for payload, vertical	18 kg
Moving mass at 0 mm stroke	305 g
Additional weight per 10 mm stroke	69 g
Basic weight with 0 mm stroke	2294 g
Additional moving mass per 10 mm stroke	6.5 g
Type of mounting	With internal thread With accessories
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Housing material	Wrought aluminum alloy, smooth-anodized
Piston rod material	High-alloy stainless steel
Spindle nut material	Steel
Spindle material	Roller bearing steel