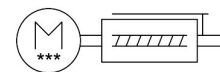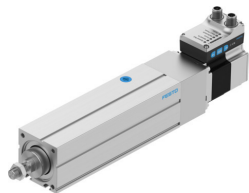# Electric cylinder unit
EPCS-BS-60-100-12P-A-ST-M-H1-PLK-AA

Part number: 8118297

Data sheet

Feature	Value
Size	60
Stroke	100 mm
Stroke reserve	0 mm
Piston rod thread	M12x1.25
Spindle diameter	12 mm
Spindle pitch	12 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/s²
Max. speed	0.22 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	5.3 A
Max. current consumption, logic	0.3 A
Nominal voltage DC	24 V
Nominal current	5.3 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 class	Class 9 according to ISO 14644-1
Storage temperature	-20 ℃...60 ℃
Relative air humidity	0 - 90% Non-condensing
Degree of protection	IP40
Ambient temperature	0 ℃...50 ℃
Note on ambient temperature	Power must be reduced by 2% per K at ambient temperatures above 30℃.
Max. moment Mx	0 Nm
Max. moment My	6.4 Nm
Max. moment Mz	6.4 Nm
Max. radial force at drive shaft	230 N
Max. feed force Fx	375 N
Reference value effective load, horizontal	56 kg
Reference value effective load, vertical	18 kg
Moving mass for 0 mm stroke	305 g
Additional moving mass per 10 mm stroke	6.5 g
Product weight	2984 g
Basic weight for 0 mm stroke	2294 g
Additional weight per 10 mm stroke	69 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

Feature	Value
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 spindle nut	Steel
Material spindle	Rolled steel