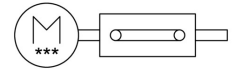


# Electric cylinder unit EPCE-TB-45-50-FL-ST-M-H1-PLK-AA

Part number: 8101542

FESTO



## 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	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	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	3000 mA
Work range of logic input	24 V
Product weight	920 g
Rotor position sensor resolution	16 bit

Feature	Value
Nominal current	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
Protection class	III
IO-Link®, Connection technology	Plug
Maintenance interval	Life-time lubrication
Toothed belt material	Polychloroprene with glass fiber
Drive pinion effective diameter	10.18 mm
Toothed belt elongation	0.31 %
Toothed belt pitch	2 mm
Feed constant	32 mm/U
Size	45
Stroke	50 mm
Stroke reserve	0 mm
Piston rod thread	M6
Type code	EPCE
Mounting position	Any
Piston rod end	External thread
Motor type	Stepper motor
Position sensing	Motor encoder
Design	Electric actuator with toothed belt With integrated drive
Symbol	00997342
Protection against torsion/guide	With plain-bearing guide
Homing	Fixed stop block positive Fixed stop block, negative
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Max. acceleration	9 m/s <sup>2</sup>
Max. speed	0.44 m/s
Repetition accuracy	±0.05 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

Feature	Value
Relative air humidity	0 - 90 %
Degree of protection	IP40
Ambient temperature	0 °C ... 50 °C
Certification	RCM compliance mark
Impact energy in the end positions	0.003 J
Max. torque Mx	0 Nm
Max. torque My	0.4 Nm
Max. torque Mz	0.4 Nm
Max. feed force Fx	85 N
Guide value for payload, horizontal	5 kg
Guide value for payload, vertical	2.5 kg
Reference value, running performance	500 km
Moving mass at 0 mm stroke	83 g
Additional weight per 10 mm stroke	29 g
Basic weight with 0 mm stroke	775 g
Additional moving mass per 10 mm stroke	0.455 g
Type of mounting	With internal thread With accessories
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Cover material	Wrought aluminum alloy, anodized
Housing material	Wrought aluminum alloy, anodized
Piston rod material	High-alloy stainless steel