

Electric cylinder unit EPCE-TB-45-

Part number: 8103354

FESTO



Data sheet

Feature	Value
Drive pinion effective diameter	10.18 mm
Size	45
Stroke	10 mm...50 mm
Stroke reserve	0 mm
Piston rod thread	M6
Toothed belt elongation	0.31 %
Toothed belt pitch	2 mm
Mounting position	Any
Position sensing	Motor encoder
Structural design	Electric cylinder With toothed belt With integrated actuator
Protection against torsion/guide	With plain bearing-guide
Rotor position sensor	Absolute single-turn encoder
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	9 m/s ²
Max. speed	0.44 m/s
Repetition accuracy	±0.05 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	300 mA
DC nominal voltage	24 V
Nominal current	3 A
Parameterization interface	IO-Link®

Feature	Value
	User interface
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
Storage temperature	-20 °C...60 °C
Relative air humidity	0 - 90%
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.
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
Feed constant	32 mm/U
Reference service life	50 km...500 km
Moving mass	95 g...282 g
Moving mass at 0 mm stroke	83 g...199 g
Additional moving mass per 10 mm stroke	4.55 g...16.61 g
Product weight	802 g...1196 g
Basic weight with 0 mm stroke	775 g...1001 g
Additional weight per 10 mm stroke	29 g...42 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®, 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	Speed 32 bit Position 32 bit Force 32 bit
IO-Link®, data memory required	0.5 KB
Input switching logic	NPN (negative switching) PNP (positive switching)
IO-Link®, Connection technology	Plug

Feature	Value
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 through-hole With internal thread With centering sleeve With accessories
Note on materials	RoHS compliant
Toothed belt material	Neoprene with glass fiber