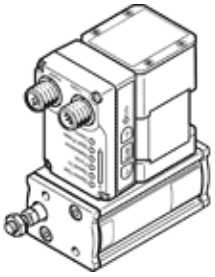
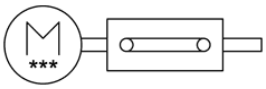
electric cylinder unit
EPCE-TB-60-10-FL-ST-M-H1-PLK-AA

Part number: 8102163

FESTO





Data sheet

Feature	Value
Effective diameter of drive pinion	10.18 mm
Size	60
Stroke	10 mm
Stroke reserve	0 mm
Piston rod thread	M10x1,25
Toothed-belt stretch	0.375 %
Toothed-belt pitch	2 mm
Assembly position	Any
Piston-rod end	Male thread
Motor type	Stepper motor
Position detection	Motor encoder
Design structure	Electric cylinder With toothed belt With integrated drive
Protection against torque/guide	with plain-bearing guide
Referencing	Fixed stop block positive Fixed stop block negative
Rotor position sensor	Absolute single turn encoder
Rotary position encoder measuring principle	Magnetic
Temperature monitoring	Shutdown at over-temperature Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface Integrated end-position sensing
Display	LED
Ready status display	LED
Max. acceleration	9 m/s2
Max. speed	0.6 m/s
Speed "Speed press"	0.02 m/s
Repetition accuracy	±0,05 mm
Digital logic output characteristics	configurable Not electrically 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	300 mA
Nominal voltage DC	24 V
Nominal current	5.3 A
Parameters configuring interface	IO-Link User interface
Rotor position encoder resolution	16 Bit
Permissible voltage fluctuation	+/- 15 %
Power supply, type of connection	Plug
Power supply, connection technology	M12x1, T-coded to EN 61076-2-111
Power supply, number of pins/wires	4
Authorisation	RCM Mark

Feature	Value
KC mark	KC-EMV
CE mark (see declaration of conformity)	to EU directive for EMC in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
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 in accordance with FN 942017-5 and EN 60068-2-27
Corrosion resistance classification CRC	0 - No corrosion stress
PWIS conformity	VDMA24364 zone III
Storage temperature	-20 ... 60 °C
Relative air humidity	0 - 90 %
Protection class	IP40
Safety class	III
Ambient temperature	0 ... 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 end positions	0.016 J
Max. torque Mx	0 Nm
Max. torque My	1 Nm
Max. torque Mz	1 Nm
Max. feed force Fx	150 N
Reference value for working load, horizontal	10 kg
Reference value for working load, vertical	5 kg
Feed constant	32 mm/U
Reference value, running performance	100 km
Maintenance interval	Life-time lubrication
Moving mass	198 g
Moving mass with 0 mm stroke	188 g
Additional mass factor per 10 mm of stroke	9.75 g
Product weight	1,396 g
Basic weight for 0 mm stroke	1,350 g
Additional weight per 10 mm stroke	46 g
Number of 24 V DC digital logic outputs	2
Number of digital logic inputs	2
Specification, logic input	Based on IEC 61131-2, type 1
Logic input working range	24 V
Logic input characteristics	configurable Not electrically isolated
IO-Link, SIO mode support	Yes
IO-Link, protocol	Device V 1.1
IO-Link, communication mode	COM3 (230.4 kbd)
IO-Link, port type	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 width IN	2 Byte
IO-Link, process data content IN	State In 1 bit State Out 1 bit State Move 1 bit State Device 1 bit State Intermediate 1 bit
IO-Link, Service data contents IN	Speed 32 bit Position 32 bit Force 32 bit
IO-Link, minimum cycle time	1 ms
IO-Link, data memory required	0.5 Kilobyte

Feature	Value
Max. line length	15 m outputs 15 m inputs 20 m with IO-Link operation
Switching logic, outputs	PNP (positive-switching)
Input circuit logic	PNP (positive-switching)
IO-Link, connection technology	Plug
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded in accordance with EN 61076-2-101
Logic interface, number of poles/wires	8
Logic interface, connection pattern	00992264
Mounting type	with internal (female) thread with accessories
Materials note	Conforms to RoHS
Material cover	Anodised wrought aluminium alloy
Material housing	Anodised wrought aluminium alloy
Material piston rod	High alloy steel, non-corrosive
Material toothed belt	Polychloroprene with glass fibres