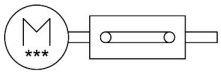
Electric cylinder unit
EPCE-TB-45-30-FL-MF-ST-M-H1-PLK-AA

Part number: 8101545





Data sheet

Feature	Value
Effective diameter of drive pinion	10.18 mm
Size	45
Stroke	30 mm
Stroke reserve	0 mm
Piston rod thread	M6
Toothed-belt stretch	0.31 %
Toothed-belt pitch	2 mm
Mounting position	optional
Position detection	Motor encoder
Design	Electric cylinder With toothed belt With integrated 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	9 m/s²
Max. speed	0.44 m/s
Repetition accuracy	±0.05 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	3 A
Max. current consumption, logic	300 mA
Nominal voltage DC	24 V
Nominal current	3 A

Feature	Value
Parameterisation interface	IO-Link User interface
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
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	Power must be reduced by 2% per K at ambient temperatures above 30°C.
Impact energy in end positions	0.003 J
Max. moment Mx	0 Nm
Max. moment My	0.4 Nm
Max. moment Mz	0.4 Nm
Max. feed force Fx	85 N
Reference value effective load, horizontal	5 kg
Reference value effective load, vertical	2.5 kg
Feed constant	32 mm/U
Reference service life	300 km
Moving mass	101 g
Moving mass for 0 mm stroke	87 g
Additional moving mass per 10 mm stroke	4.55 g
Product weight	902 g
Basic weight for 0 mm stroke	813 g
Additional weight per 10 mm stroke	29 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, 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	Speed 32 bit Position 32 bit Force 32 bit
IO-Link, Data storage required	0.5 KB
Switching logic for inputs	PNP (positive switching)

Feature	Value
IO-Link, connection technology	Plugs
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	With through-hole Via female thread Via centring sleeve With accessories
Note on materials	RoHS-compliant
Material toothed belt	Polychloroprene with glass fibre