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

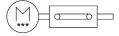
Part number: 8101542



Data sheet

Size45Stroke50 mmStroke reserve0 mmPiston rod threadM6Toothed belt elongation0.31 %Toothed belt pitch2 mmMounting positionAnyPosition sensingMotor encoderStructural designElectric actuator with toothed belt With integrated driveProtection against torsion/guideWith plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensorShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Not sensingDisplayLEDMax, acceleration9 m/s²Max, speed0.44 m/sCharacteristics of digital logic outputs000 mAMax, current consumption3 ALogic max, current consumption3 ALogic max, current consumption3 A VDisplayLor main avoit age	Feature	Value
StrokeSo mmStroke reserve0 mmPiston rod threadM6Toothed belt elongation0.31 %Toothed belt pitch2 mmMounting positionAnyPosition sensingMotor encoderStructural designElectric actuator with toothed belt With integrated driveProtection against torsion/guideWith plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensorAbsolute encoder, single-turnRotor position sensorShutdown in the event of over temperature Integrated driveDisplayLEDMax, acceleration9 m/s²Max, speed0.44 m/sCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax, current of digital logic outputs3.0 mADo mA3.4 VDo mainal voltage24 V	Drive pinion effective diameter	10.18 mm
DistributionDistributionStroke reserve0 mmPiston rod threadM6Toothed belt elongation0.31 %Toothed belt pitch2 mmMouning positionAnyPosition sensingMotor encoderStructural designElectric actuator with toothed belt With plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated and-position sensingDisplayLEDMax. speed0.44 m/sRepetition accuracyc0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100 %Max. current consumption3 ALogic max. current consumption3 ADo mainal voltage24 V	Size	45
Piston rod thread M6 Toothed belt elongation 0.31 % Toothed belt pitch 2 mm Mounting position Any Position sensing Motor encoder Structural design Electric actuator with toothed belt With integrated drive Protection against torsion/guide With plain-bearing guide Rotor position sensor Absolute encoder, single-turn Rotor position sensor measuring principle Magnetic Temperature monitoring Shutdown in the event of over temperature Integrated dreck CMOS temperature sensor with analogue output Additional functions User interface Integrated dreck coll Display LED Max. acceleration 9 m/s ² Max. speed 0.44 m/s Characteristics of digital logic outputs Configurable Not galvanically isolated Duty cycle 100% Insulation protection class B Max. current or sumption 3 A Logic max. current consumption 3 A Duty cycle 300 mA Duty colar digital logic outputs Dorma	Stroke	50 mm
Toothed belt elongation0.31 %Toothed belt pitch2 mmMounting positionAnyPosition sensingMotor encoderStructural designElectric actuator with toothed belt With integrated driveProtection against torsion/guideWith plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringUser interface Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated precise CMOS temperature sensor with analogue outputDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current onsumption3 ALogic max. current consumption24 V	Stroke reserve	0 mm
Toothed belt pitch2 mmMounting positionAnyPosition sensingMotor encoderStructural designElectric actuator with toothed belt With integrated driveProtection against torsion/guideWith plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringShuddown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated grecise CMOS temperature sensor with analogue outputEDMax. speed0.44 m/s0.44 m/sRepetition figital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current consumption3 ALogic max. current consumption3 ADC nominal voltage24 V	Piston rod thread	M6
Mounting positionAnyPosition sensingMotor encoderStructural designElectric actuator with toothed belt With integrated driveProtection against torsion/guideWith plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated precise CMOS temperature sensor with analogue outputDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100 mAInsulation protection classBMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Toothed belt elongation	0.31 %
Position sensingMotor encoderStructural designElectric actuator with toothed belt With integrated driveProtection against torsion/guideWith plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated end-position sensingDisplayLEDMax. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Max. current of digital logic outputs3 ALogic max. current consumption3 ALogic max. current consumption24 V	Toothed belt pitch	2 mm
Structural designElectric actuator with toothed belt With integrated driveProtection against torsion/guideWith plain-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringShuddown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated end-position sensingDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs3 ALogic max. current consumption3 ALogic max. current consumption24 V	Mounting position	Any
with toothed belt With integrated driveProtection against torsion/guideWith plan-bearing guideRotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated end-position sensingDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs3 ALogic max. current consumption300 mADo manal voltage24 V	Position sensing	Motor encoder
Rotor position sensorAbsolute encoder, single-turnRotor position sensor measuring principleMagneticTemperature monitoringShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated end-position sensingDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Structural design	with toothed belt
Rotor position sensor measuring principleMagneticTemperature monitoringShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated end-position sensingDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Protection against torsion/guide	With plain-bearing guide
Temperature monitoringShutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated end-position sensingDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs3 ALogic max. current consumption3 ADC nominal voltage24 V	Rotor position sensor	Absolute encoder, single-turn
Integrated precise CMOS temperature sensor with analogue outputAdditional functionsUser interface Integrated end-position sensingDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs3 ALogic max. current consumption300 mADC nominal voltage24 V	Rotor position sensor measuring principle	Magnetic
Integrated end-position sensingDisplayLEDMax. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Temperature monitoring	
Max. acceleration9 m/s²Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Additional functions	
Max. speed0.44 m/sRepetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Display	LED
Repetition accuracy±0.05 mmCharacteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Max. acceleration	9 m/s ²
Characteristics of digital logic outputsConfigurable Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Max. speed	0.44 m/s
Not galvanically isolatedDuty cycle100%Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Repetition accuracy	±0.05 mm
Insulation protection classBMax. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Characteristics of digital logic outputs	
Max. current of digital logic outputs100 mAMax. current consumption3 ALogic max. current consumption300 mADC nominal voltage24 V	Duty cycle	100%
Max. current consumption 3 A Logic max. current consumption 300 mA DC nominal voltage 24 V	Insulation protection class	В
Logic max. current consumption 300 mA DC nominal voltage 24 V	Max. current of digital logic outputs	100 mA
DC nominal voltage 24 V	Max. current consumption	3 A
	Logic max. current consumption	300 mA
Nominal current 3 A	DC nominal voltage	24 V
	Nominal current	3 A

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Feature	Value
Parameterization interface	IO-Link®
Dermissible veltage fluctuations	User interface +/- 15 %
Permissible voltage fluctuations	
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 °C60 °C
Relative air humidity	0 - 90 %
Degree of protection	IP40
Ambient temperature	0 °C50 °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	500 km
Moving mass	106 g
Moving mass at 0 mm stroke	83 g
Additional moving mass per 10 mm stroke	4.55 g
Product weight	922 g
Basic weight with 0 mm stroke	775 g
Additional weight per 10 mm stroke	
Number of digital logic outputs 24 V DC	29 g 2
Number of digital logic inputs	2
Work range of logic input	24 V Configurable
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®, port class	Α
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 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

Feature	Value
IO-Link®, data memory required	0.5 КВ
Input switching logic	PNP (positive switching)
IO-Link®, Connection technology	Plug
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 internal thread With accessories
Note on materials	RoHS-compliant
Toothed belt material	Polychloroprene with glass fiber