

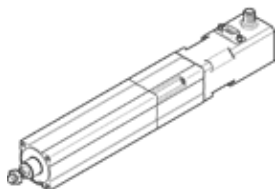
# electric cylinder

## EPCO-25-300-10P-ST-E

Part number: 1470777

FESTO

Mechanical linear drive with piston rod and fixed stepper motor.



### Data sheet

Feature	Value
Size	25
Stroke	300 mm
Stroke reserve	0 mm
Piston rod thread	M8
Reversing backlash	0.1 mm
Stepper angle at full step	1.8 deg
Stepper angle tolerance	±5 %
Spindle diameter	10 mm
Spindle pitch	10 mm/U
Max. angular deflection of piston rod +/-	1.5 deg
Assembly position	Any
Piston-rod end	Male thread
Motor type	Stepper motor
Design structure	Electric cylinder With ball screw
Spindle type	Ball screw
Protection against torque/guide	with plain-bearing guide
Rotor position sensor	Incremental encoder
Rotary position encoder interface	RS422 TTL AB-channel + zero index
Rotary position encoder measuring principle	Optical
Max. acceleration	10 m/s <sup>2</sup>
Max. speed	0.5 m/s
Repetition accuracy	±0,02 mm
Duty cycle	100 %
Insulation protection class	B
Nominal operating voltage DC	24 V
Nominal motor current	3 A
Authorisation	RCM Mark c UL us - Recognized (OL)
CE mark (see declaration of conformity)	to EU directive for EMC
Corrosion resistance classification CRC	1 - Low corrosion stress
Storage temperature	-20 ... 60 °C
Relative air humidity	0 - 85 % non-condensing
Protection class	IP40
Ambient temperature	0 ... 50 °C
Impact energy in end positions	0.0002 J
Max. torque Mx	0 Nm
Max. torque My	1 Nm
Max. torque Mz	1 Nm
Max. feed force Fx	105 N
Reference value for working load, horizontal	20 kg
Reference value for working load, vertical	10 kg
Mass moment of inertia JH per metre of stroke	0.0578 kgcm <sup>2</sup>

Feature	Value
Mass moment of inertia JL per kg of working load	0.0254 kgcm <sup>2</sup>
Mass moment of inertia, JO	0.094 kgcm <sup>2</sup>
Moving mass with 0 mm stroke	145 g
Additional weight per 10 mm stroke	34 g
Basic weight for 0 mm stroke	1,125 g
Additional mass factor per 10 mm of stroke	2.6 g
Electrical connector system	Plug
Mounting type	with internal (female) thread with accessories
Materials note	Contains PWIS substances Conforms to RoHS
Material cover	Wrought Aluminium alloy Smooth anodised
Material housing	Wrought Aluminium alloy Smooth anodised
Material piston rod	High alloy steel, non-corrosive
Material spindle nut	Steel
Material spindle	Roller bearing steel
Material cylinder barrel	Wrought Aluminium alloy Smooth anodised