

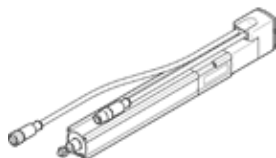
# electric cylinder

## EPCO-16-50-8P-ST-E

Part number: 1476522  
Product to be discontinued

FESTO

Mechanical linear drive with piston rod and fixed stepper motor.  
Type to be discontinued. Available until 2025. See Support Portal for alternative products.



### Data sheet

Feature	Value
Size	16
Stroke	50 mm
Stroke reserve	0 mm
Piston rod thread	M6
Reversing backlash	0.1 mm
Stepper angle at full step	1.8 deg
Stepper angle tolerance	±5 %
Spindle diameter	8 mm
Spindle pitch	8 mm/U
Max. angular deflection of piston rod +/-	2 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	0.3 m/s
Repetition accuracy	±0,02 mm
Duty cycle	100 %
Insulation protection class	B
Nominal operating voltage DC	24 V
Nominal motor current	1.4 A
Authorisation	RCM Mark c UL us - Recognized (OL)
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
Corrosion resistance classification CRC	1 - Low corrosion stress
PWIS conformity	VDMA24364 zone III
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	0.0001 J
Max. torque Mx	0 Nm

Feature	Value
Max. torque My	0.6 Nm
Max. torque Mz	0.6 Nm
Max. feed force Fx	50 N
Reference value for working load, horizontal	8 kg
Reference value for working load, vertical	4 kg
Mass moment of inertia JH per metre of stroke	0.0265 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.0162 kgcm <sup>2</sup>
Mass moment of inertia, JO	0.0229 kgcm <sup>2</sup>
Bending radius, fixed cable installation	≥ 60 mm
Moving mass with 0 mm stroke	70 g
Additional mass factor per 10 mm of stroke	2 g
Basic weight for 0 mm stroke	615 g
Additional weight per 10 mm stroke	17 g
Electrical connector system	Plug
Mounting type	with internal (female) thread with accessories
Materials note	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