

# Electric drive EPCO-16-100-3P-ST-E

Part number: 1476417

FESTO



## Data sheet

Feature	Value
Size	16
Stroke	100 mm
Stroke reserve	0 mm
Piston rod thread	M6
Reversing backlash theoretical	0,1 mm
Stepper angle for complete step	1.8 deg
Stepping angle tolerance	±5%
Spindle diameter	8 mm
Spindle pitch	3 mm/U
Torsional backlash at piston rod +/-	2 deg
Mounting position	optional
Piston-rod end	Male thread
Type of motor	Stepper motor
Design	Electric cylinder With ball screw drive
Spindle type	Ball screw drive
Protection against torque/guide	With plain-bearing guide
Rotor position sensor	Incremental encoder
Rotor position encoder interface	RS422 TTL AB channels + zero index
Rotor position sensor, encoder measuring principle	Optical
Max. acceleration	10 m/s <sup>2</sup>
Max. speed	0.125 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
Approval	RCM trademark c UL us - Recognized (OL)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive

Feature	Value
CE marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Storage temperature	-20 °C...60 °C
Relative air humidity	0 - 85% Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C...50 °C
Impact energy in end positions	0.0001 J
Max. moment Mx	0 Nm
Max. moment My	0.6 Nm
Max. moment Mz	0.6 Nm
Max. feed force Fx	125 N
Reference value effective load, horizontal	24 kg
Reference value effective load, vertical	12 kg
Mass moment of inertia JH per metre of stroke	0.0253 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.0023 kgcm <sup>2</sup>
Mass moment of inertia JO	0.0228 kgcm <sup>2</sup>
Bending radius, fixed cable	60 mm
Moving mass for 0 mm stroke	70 g
Additional moving mass per 10 mm stroke	2 g
Basic weight for 0 mm stroke	615 g
Additional weight per 10 mm stroke	17 g
Electrical connector system	Plug
Type of mounting	Via female thread With accessories
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy Smooth anodised
Material housing	Wrought aluminium alloy Smooth anodised
Material piston rod	High-alloy stainless steel
Material spindle nut	Steel
Material spindle	Rolled steel
Material cylinder barrel	Wrought aluminium alloy Smooth anodised