

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

Part number: 1470777

FESTO



## Data sheet

Feature	Value
Size	25
Stroke	300 mm
Stroke reserve	0 mm
Piston rod thread	M8
Reversing backlash	100 µm
Step angle with full step	1.8 deg
Step angle tolerance	±5%
Screw diameter	10 mm
Spindle pitch	10 mm/U
Max. angle of rotation of the piston rod +/-	1.5 deg
Mounting position	Any
Piston rod end	External thread
Motor type	Stepper motor
Structural design	Electric actuator with ball screw drive
Spindle type	Ball screw drive
Protection against torsion/guide	With plain-bearing guide
Rotor position sensor	Incremental encoder
Rotor position sensor interface	RS422 TTL A/B channels + zero index
Rotor position sensor 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
Motor nominal current	3 A
Certification	RCM compliance mark c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive
Corrosion resistance class (CRC)	1 - Low corrosion stress
Storage temperature	-20 °C ... 60 °C
Relative air humidity	0 - 85 % Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C ... 50 °C

Feature	Value
Impact energy in the end positions	2.0E-4 J
Max. torque Mx	0 Nm
Max. torque My	1 Nm
Max. torque Mz	1 Nm
Max. feed force Fx	105 N
Guide value for payload, horizontal	20 kg
Guide value for payload, vertical	10 kg
Mass moment of inertia JH per meter of stroke	0.0578 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of payload	0.0254 kgcm <sup>2</sup>
Mass moment of inertia JO	0.094 kgcm <sup>2</sup>
Moving mass at 0 mm stroke	145 g
Additional weight per 10 mm stroke	34 g
Basic weight with 0 mm stroke	1125 g
Additional moving mass per 10 mm stroke	2.6 g
Electrical connection technology	Plug
Type of mounting	With internal thread With accessories
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Cover material	Wrought aluminum alloy Smooth anodized
Housing material	Wrought aluminum alloy Smooth anodized
Piston rod material	High-alloy stainless steel
Spindle nut material	Steel
Spindle material	Roller bearing steel
Material of cylinder barrel	Wrought aluminum alloy Smooth anodized