

# Electric cylinder EPCC-BS-25-175-2P-A

Part number: 5428811

FESTO



## Data sheet

Feature	Value
Size	25
Stroke	175 mm
Stroke reserve	0 mm
Piston rod thread	M6
Reversing backlash theoretical	100 µm
Spindle diameter	6 mm
Spindle pitch	2 mm/U
Torsional backlash at piston rod +/-	1 deg
Mounting position	optional
Piston-rod end	Male thread
Type of motor	Stepper motor Servo motor
Position detection	Via proximity switch
Design	Electric cylinder With ball screw drive
Spindle type	Ball screw drive
Protection against torque/guide	With plain-bearing guide
Max. acceleration	5 m/s <sup>2</sup>
Max. rotational speed	4000 rpm
Max. speed	0.083 m/s
Max. homing speed	0.01 m/s
Repetition accuracy	±0.02 mm
Duty cycle	100%
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 9 according to ISO 14644-1
Storage temperature	-20 °C...60 °C
Relative air humidity	0 - 95% Non-condensing

Feature	Value
Degree of protection	IP40
Ambient temperature	0 °C...60 °C
Impact energy in end positions	0.0012 J
Max. drive torque	0.05 Nm
Max. moment Mx	0 Nm
Max. moment My	0.6 Nm
Max. moment Mz	0.6 Nm
Max. radial force at drive shaft	30 N
Max. feed force Fx	75 N
Frictional torque independent of load	0.02 Nm
Reference value effective load, horizontal	12 kg
Reference value effective load, vertical	6 kg
Mass moment of inertia JH per metre of stroke	0.0056 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.001 kgcm <sup>2</sup>
Mass moment of inertia JO	0.0009 kgcm <sup>2</sup>
Maintenance interval	Life-time lubrication
Moving mass for 0 mm stroke	53 g
Additional moving mass per 10 mm stroke	2.6 g
Basic weight for 0 mm stroke	132 g
Additional weight per 10 mm stroke	13 g
Type of mounting	With accessories
Note on materials	RoHS-compliant
Material housing	Wrought aluminium alloy Smooth anodised
Material piston rod	High-alloy stainless steel
Material spindle nut	Steel
Material spindle	Rolled steel