Electric cylinder
EPCC-BS-60-

Part number: 5428914

Data sheet

Feature	Value
Size	60
Stroke	25 mm...500 mm
Stroke reserve	0 mm
Piston rod thread	M12x1.25
Reversing backlash theoretical	100 µm
Spindle diameter	12 mm
Spindle pitch	5 mm/U...12 mm/U
Torsional backlash at piston rod +/-	1 deg
Mounting position	optional
Piston-rod end	Male thread Female 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/s²...15 m/s²
Max. rotational speed	3000 rpm
Max. speed	0.067 m/s...0.6 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	Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The 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

Feature	Value
Relative air humidity	0 - 95% Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C...60 °C
Impact energy in end positions	0.024 J
Max. drive torque	1.2 Nm...2.4 Nm
Max. moment Mx	0 Nm
Max. moment My	6.4 Nm
Max. moment Mz	6.4 Nm
Max. radial force at drive shaft	230 N
Max. feed force Fx	1000 N
Frictional torque independent of load	0.235 Nm...0.325 Nm
Reference value effective load, horizontal	120 kg
Reference value effective load, vertical	60 kg
Mass moment of inertia JH per metre of stroke	0.1195 kgcm²...0.1519 kgcm²
Mass moment of inertia JL per kg of working load	0.0063 kgcm²...0.0365 kgcm²
Mass moment of inertia JO	0.0682 kgcm²...0.0779 kgcm²
Maintenance interval	Life-time lubrication
Moving mass for 0 mm stroke	305 g...888 g
Additional moving mass per 10 mm stroke	6.5 g...24.3 g
Basic weight for 0 mm stroke	1114 g...2728 g
Additional weight per 10 mm stroke	69 g...87 g
Type of mounting	Via female thread 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