

# Electric cylinder EPCC-BS-60-500-5P-A

Part number: 5428900

FESTO



## Data sheet

Feature	Value
Size	60
Stroke	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
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	3000 rpm
Max. speed	0.25 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	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 9 according to ISO 14644-1
Storage temperature	-20 °C...60 °C
Relative air humidity	0 - 95% Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C...60 °C

Feature	Value
Impact energy in end positions	0.024 J
Max. drive torque	1.2 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
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 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.0063 kgcm <sup>2</sup>
Mass moment of inertia JO	0.0682 kgcm <sup>2</sup>
Maintenance interval	Life-time lubrication
Moving mass for 0 mm stroke	305 g
Additional moving mass per 10 mm stroke	6.5 g
Basic weight for 0 mm stroke	1114 g
Additional weight per 10 mm stroke	69 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 ball screw nut	Steel
Material spindle	Rolled steel