

# Electric cylinder EPCC-BS-60-300-12P-A

Part number: 5428910

FESTO



 General operating condition

## Data sheet

Feature	Value
Size	60
Stroke	300 mm
Stroke reserve	0 mm
Piston rod thread	M12x1.25
Reversing backlash theoretical	100 µm
Spindle diameter	12 mm
Spindle pitch	12 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	With ball screw drive
Spindle type	Ball screw drive
Symbol	00991941
Protection against torque/guide	With plain-bearing guide
Max. acceleration	15 m/s <sup>2</sup>
Max. rotational speed	3000 rpm
Max. speed	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	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	Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C ... 60 °C
Impact energy in end positions	0.024 J
Max. drive torque	2.4 Nm
Max. moment Mx	0 Nm
Max. moment My	6.4 Nm
Max. moment Mz	6.4 Nm

Feature	Value
Max. radial force at drive shaft	230 N
Max. feed force Fx	1000 N
Frictional torque independent of load	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	0.1519 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.0365 kgcm <sup>2</sup>
Mass moment of inertia JO	0.0779 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	Smooth anodised
Material piston rod	High-alloy stainless steel
Material ball screw nut	Steel
Material spindle	Rolled steel