

# Electric cylinder ESBF-BS-80-300-5P

Part number: 574105

FESTO



 General operating condition

## Data sheet

Feature	Value
Working stroke	300 mm
Size	80
Stroke	300 mm
Piston rod thread	M20x1.5
Reversing backlash theoretical	30 µm
Spindle diameter	32 mm
Spindle pitch	5 mm/U
Torsional backlash at piston rod +/-	0.5 deg
Based on standard	ISO 15552
Mounting position	Any
Piston-rod end	Male thread
Type of motor	Servo motor
Position detection	Via proximity switch
Design	Electric cylinder with ball screw
Spindle type	Ball screw
Symbol	00991941
Protection against torque/guide	With plain-bearing guide
Max. acceleration	5 m/s <sup>2</sup>
Max. rotational speed	2530 rpm
Max. speed	0.25 m/s
Repetition accuracy	±0.01 mm
Duty cycle	100%
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Storage temperature	-20 °C ... 60 °C
Suitable for use with food	See supplementary material information
Relative air humidity	0 - 95%
Degree of protection	IP40
Ambient temperature	0 °C ... 60 °C
Max. drive torque	11.9 Nm
Max. radial force at drive shaft	1100 N
Max. feed force F <sub>x</sub>	12000 N
Frictional torque independent of load	0.5 Nm
Reference value effective load, horizontal	1200 kg
Reference value effective load, vertical	1200 kg
Mass moment of inertia J <sub>H</sub> per metre of stroke	7.699 kgcm <sup>2</sup>

<b>Feature</b>	<b>Value</b>
Mass moment of inertia JL per kg of working load	0.00633 kgcm <sup>2</sup>
Mass moment of inertia JO	1.5297 kgcm <sup>2</sup>
Maintenance interval	Lifetime lubrication
Moving mass for 0 mm stroke	5300 g
Additional moving mass per 10 mm stroke	103 g
Basic weight for 0 mm stroke	7393 g
Additional weight per 10 mm stroke	155 g
Type of mounting	With female thread Or accessories
Interface code, actuator	D80
Note on materials	RoHS compliant
Material cover	Cast aluminium, coated
Material piston rod	High-alloy stainless steel
Material screws	Galvanised steel
Material ball screw nut	Bearing steel
Material spindle	Bearing steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy