

# Electric cylinder ESBF-BS-100-300-5P

Part number: 574116

FESTO



 General operating condition

## Data sheet

Feature	Value
Working stroke	300 mm
Size	100
Stroke	300 mm
Piston rod thread	M20x1.5
Reversing backlash	30 µm
Screw diameter	40 mm
Spindle pitch	5 mm/U
Max. angle of rotation of the piston rod +/-	0.5 deg
Based on norm	ISO 15552
Mounting position	Any
Piston rod end	External thread
Motor type	Servo motor
Position sensing	For proximity sensor
Structural design	Electric cylinder with ball screw
Spindle type	Ball screw
Symbol	00991941
Protection against torsion/guide	With plain-bearing guide
Max. acceleration	5 m/s <sup>2</sup>
Max. rotational speed	2010 rpm
Max. speed	0.17 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
For use in the food industry	See supplementary material information
Relative air humidity	0 - 95 %
Degree of protection	IP40
Ambient temperature	0 °C ... 60 °C
Max. driving torque	16.9 Nm
Max. radial force on actuator shaft	1100 N
Max. feed force F <sub>x</sub>	17000 N
No-load driving torque	0.7 Nm
Guide value for payload, horizontal	1700 kg
Guide value for payload, vertical	1700 kg
Mass moment of inertia J <sub>H</sub> per meter of stroke	18.978 kgcm <sup>2</sup>

<b>Feature</b>	<b>Value</b>
Mass moment of inertia JL per kg of payload	0.00633 kgcm <sup>2</sup>
Mass moment of inertia JO	4.6963 kgcm <sup>2</sup>
Maintenance interval	Life-time lubrication
Moving mass at 0 mm stroke	8786 g
Additional moving mass per 10 mm stroke	132 g
Basic weight with 0 mm stroke	11123 g
Additional weight per 10 mm stroke	193 g
Type of mounting	With internal thread or accessory
Interface code, actuator	D100
Note on materials	RoHS-compliant
Cover material	Die-cast aluminum, coated
Piston rod material	High-alloy stainless steel
Material of screws	Steel, galvanized
Ball screw nut material	Roller bearing steel
Spindle material	Roller bearing steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized