

# electric cylinder

## ESBF-BS-100-200-40P

Part number: 574123

FESTO

With ball screw, electrically actuated spindle that converts the rotary motion of the motor into linear motion of the piston rod.



## Data sheet

Feature	Value
Size	100
Stroke	200 mm
Piston rod thread	M20x1,5
Reversing backlash	40 µm
Spindle diameter	40 mm
Spindle pitch	40 mm/U
Max. angular deflection of piston rod +/-	0.5 deg
Based on the standard	ISO 15552
Assembly position	Any
Piston-rod end	Male thread
Motor type	Servomotor
Position detection	For proximity sensor
Design structure	Electro-cylinder with ball screw
Spindle type	Ball screw spindle
Protection against torque/guide	with plain-bearing guide
Max. acceleration	25 m/s <sup>2</sup>
Max. speed	1.34 m/s
Repetition accuracy	±0,01 mm
Duty cycle	100 %
Corrosion resistance classification CRC	2 - Moderate corrosion stress
PWIS conformity	VDMA24364 zone III
Storage temperature	-20 ... 60 °C
Food-safe	See Supplementary material information
Relative air humidity	0 - 95 %
Protection class	IP40
Ambient temperature	0 ... 60 °C
Max. drive torque	102.6 Nm
Max. radial force at drive shaft	1,100 N
Max. feed force Fx	14,500 N
No-load driving torque	1 Nm
Reference value for working load, horizontal	1,400 kg
Reference value for working load, vertical	1,400 kg
Mass moment of inertia JH per metre of stroke	20.372 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.40528 kgcm <sup>2</sup>
Mass moment of inertia, JO	6.1704 kgcm <sup>2</sup>
Moving mass with 0 mm stroke	8,786 g
Additional mass factor per 10 mm of stroke	132 g
Basic weight for 0 mm stroke	11,123 g
Additional weight per 10 mm stroke	193 g
Mounting type	with internal (female) thread or accessories
Interface code, actuator	D100
Materials note	Conforms to RoHS

Feature	Value
Material cover	Die-cast aluminium, coated
Material piston rod	High alloy steel, non-corrosive
Material screws	Galvanised steel
Material spindle nut	Roller bearing steel
Material spindle	Roller bearing steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy