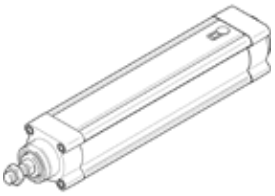
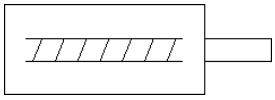
Electro-cylinder
ESBF-BS-50-400-10P

Part number: 8022596
★ Core product range

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	50
Stroke	400 mm
Piston rod thread	M16x1,5
Reversing backlash	30 µm
Spindle diameter	20 mm
Spindle pitch	10 mm/U
Max. angular deflection of piston rod +/-	0.15 deg
Based on the standard	ISO 15552
Assembly position	Any
Piston-rod end	Male thread
Motor type	Stepper motor Servomotor
Position detection	For proximity sensor
Design structure	Electro-cylinder with ball screw
Spindle type	Ball screw actuator
Protection against torque/guide	with plain-bearing guide
Max. acceleration	15 m/s2
Max. speed	0.67 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	9.2 Nm
Max. radial force at drive shaft	300 N
Max. feed force Fx	5,000 N
No-load driving torque	0.3 Nm
Reference value for working load, horizontal	500 kg
Reference value for working load, vertical	500 kg
Mass moment of inertia JH per meter of stroke	1.0426 kgcm2
Mass moment of inertia JL per kg of working load	0.0252 kgcm2
Mass moment of inertia, JO	0.1873 kgcm2
Moving mass with 0 mm stroke	793 g
Additional mass factor per 10 mm of stroke	35 g
Basic weight for 0 mm stroke	1,982 g
Additional weight per 10 mm stroke	65 g
Mounting type	with internal (female) thread or accessories
Interface code, actuator	D50

Feature	Value
Materials note	Conforms to RoHS
Material cover	Smooth anodised wrought aluminium alloy
Material piston rod	High alloy steel, non-corrosive
Material screws	Galvanized steel
Material spindle nut	Roller bearing steel
Material spindle	Roller bearing steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy