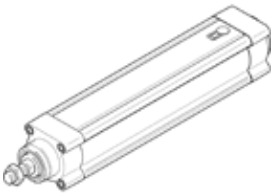
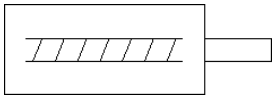
electric cylinder
ESBF-BS-50-200-20P

Part number: 8022598
☆ 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	200 mm
Piston rod thread	M16x1,5
Reversing backlash	40 µm
Spindle diameter	20 mm
Spindle pitch	20 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 spindle
Protection against torque/guide	with plain-bearing guide
Max. acceleration	25 m/s2
Max. speed	1.33 m/s
Repetition accuracy	±0,01 mm
Duty cycle	100 %
Corrosion resistance classification CRC	2 - Moderate corrosion stress
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	16.3 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 metre of stroke	1.1387 kgcm2
Mass moment of inertia JL per kg of working load	0.1013 kgcm2
Mass moment of inertia, JO	0.3289 kgcm2
Moving mass with 0 mm stroke	793 g
Additional weight per 10 mm stroke	65 g
Basic weight for 0 mm stroke	1,982 g
Additional mass factor per 10 mm of stroke	35 g
Mounting type	with internal (female) thread or accessories
Interface code, actuator	D50
Materials note	Contains PWIS substances

Feature	Value
	Conforms to RoHS
Material cover	Wrought Aluminium alloy Smooth anodised
Material piston rod	High alloy steel, non-corrosive
Material screws	Steel Galvanised
Material spindle nut	Roller bearing steel
Material spindle	Roller bearing steel
Material cylinder barrel	Wrought Aluminium alloy Smooth anodised