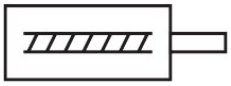
Electric cylinder
ESBF-BS-40-100-10P

Part number: 8022577





Data sheet

Feature	Value
Working stroke	100 mm
Size	40
Stroke	100 mm
Piston rod thread	M12x1.25
Reversing backlash	30 µm
Screw diameter	16 mm
Spindle pitch	10 mm/U
Max. angle of rotation of the piston rod +/-	0.2 deg
Based on norm	ISO 15552
Mounting position	Any
Piston rod end	External thread
Motor type	Stepper motor Servo motor
Position sensing	Via proximity switch
Structural design	Electric cylinder with ball screw
Spindle type	Ball screw
Protection against torsion/guide	With plain bearing-guide
Max. acceleration	15 m/s²
Max. rotational speed	4800 rpm
Max. speed	0.83 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	5.6 Nm
Max. radial force on actuator shaft	130 N
Max. feed force Fx	3000 N

Feature	Value
No-load driving torque	0.2 Nm
Guide value for payload, horizontal	300 kg
Guide value for payload, vertical	300 kg
Mass moment of inertia JH per meter of stroke	0.4804 kgcm²
Mass moment of inertia JL per kg of payload	0.02533 kgcm²
Mass moment of inertia JO	0.0777 kgcm²
Maintenance interval	Lifetime lubrication
Moving mass at 0 mm stroke	467 g
Additional moving mass per 10 mm stroke	26 g
Basic weight with 0 mm stroke	1237 g
Additional weight per 10 mm stroke	47 g
Type of mounting	With internal thread or accessories
Interface code, actuator	D40
Note on materials	RoHS compliant
Cover material	Wrought aluminum alloy, smooth-anodized
Piston rod material	high-alloy stainless steel
Material of screws	Galvanized steel
Ball screw nut material	Bearing steel
Spindle material	Bearing steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized