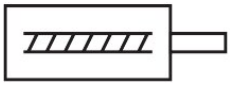
Electric cylinder
ESBF-BS-100-400-40P

Part number: 574125



Data sheet

Feature	Value
Working stroke	400 mm
Size	100
Stroke	400 mm
Piston rod thread	M20x1.5
Reversing backlash theoretical	40 µm
Spindle diameter	40 mm
Spindle pitch	40 mm/U
Torsional backlash at piston rod +/-	0.5 deg
Based on standard	ISO 15552
Mounting position	optional
Piston-rod end	Male thread
Type of motor	Servo motor
Position detection	Via proximity switch
Design	Electric cylinder with ball screw
Spindle type	Ball screw
Protection against torque/guide	With plain-bearing guide
Max. acceleration	25 m/s²
Max. rotational speed	2010 rpm
Max. speed	1.34 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
Suitable for use with food	See supplementary material information
Relative air humidity	0 - 95%
Degree of protection	IP40
Ambient temperature	0 °C...60 °C
Max. drive torque	102.6 Nm
Max. radial force at drive shaft	1100 N
Max. feed force Fx	14500 N

Feature	Value
Frictional torque independent of load	1 Nm
Reference value effective load, horizontal	1400 kg
Reference value effective load, vertical	1400 kg
Mass moment of inertia JH per metre of stroke	20.372 kgcm²
Mass moment of inertia JL per kg of working load	0.40528 kgcm²
Mass moment of inertia JO	6.1704 kgcm²
Maintenance interval	Life-time lubrication
Moving mass for 0 mm stroke	8786 g
Additional moving mass per 10 mm stroke	132 g
Basic weight for 0 mm stroke	11123 g
Additional weight per 10 mm stroke	193 g
Type of mounting	Via female thread Or accessories
Interface code, actuator	D100
Note on materials	RoHS-compliant
Material cover	Cast aluminium, coated
Material piston rod	High-alloy stainless steel
Material screws	Galvanised steel
Material ball screw nut	Rolled steel
Material spindle	Rolled steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy