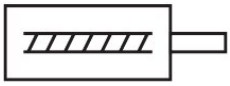
Electric cylinder
ESBF-BS-40-200-10P

Part number: 8022578



General operating condition

Data sheet

Feature	Value
Working stroke	200 mm
Size	40
Stroke	200 mm
Piston rod thread	M12x1.25
Reversing backlash theoretical	30 µm
Spindle diameter	16 mm
Spindle pitch	10 mm/U
Torsional backlash at piston rod +/-	0.2 deg
Based on standard	ISO 15552
Mounting position	optional
Piston-rod end	Male thread
Type of motor	Stepper motor Servo motor
Position detection	Via proximity switch
Design	Electric cylinder with ball screw
Spindle type	Ball screw
Symbol	00991941
Protection against torque/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
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	5.6 Nm
Max. radial force at drive shaft	130 N
Max. feed force Fx	3000 N
Frictional torque independent of load	0.2 Nm
Reference value effective load, horizontal	300 kg
Reference value effective load, vertical	300 kg

Feature	Value
Mass moment of inertia JH per metre of stroke	0.4804 kgcm²
Mass moment of inertia JL per kg of working load	0.02533 kgcm²
Mass moment of inertia JO	0.0777 kgcm²
Maintenance interval	Life-time lubrication
Moving mass for 0 mm stroke	467 g
Additional moving mass per 10 mm stroke	26 g
Basic weight for 0 mm stroke	1237 g
Additional weight per 10 mm stroke	47 g
Type of mounting	Via female thread Or accessories
Interface code, actuator	D40
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy, smooth anodised
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