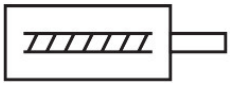
Electric drive
ESBF-LS-50-400-4P

Part number: 8022604



General operating condition

Data sheet

Feature	Value
Working stroke	400 mm
Size	50
Stroke	400 mm
Piston rod thread	M16x1.5
Reversing backlash theoretical	100 µm
Spindle diameter	20 mm
Spindle pitch	4 mm/U
Torsional backlash at piston rod +/-	0.15 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 lead screw spindle
Spindle type	Lead screw
Symbol	00991941
Protection against torque/guide	With plain-bearing guide
Max. acceleration	2.5 m/s²
Max. rotational speed	750 rpm
Max. speed	0.2 m/s
Repetition accuracy	±0.05 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 ... 50 °C
Max. drive torque	4.8 Nm
Max. radial force at drive shaft	300 N
Max. feed force Fx	1600 N
Frictional torque independent of load	0.3 Nm
Reference value effective load, horizontal	160 kg
Reference value effective load, vertical	160 kg

Feature	Value
Mass moment of inertia JH per metre of stroke	1.2382 kgcm²
Mass moment of inertia JL per kg of working load	0.004 kgcm²
Mass moment of inertia JO	0.1407 kgcm²
Moving mass for 0 mm stroke	532 g
Additional moving mass per 10 mm stroke	13 g
Basic weight for 0 mm stroke	1716 g
Additional weight per 10 mm stroke	67 g
Type of mounting	Via female thread Or accessories
Interface code, actuator	D50
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy, smooth anodised
Material piston rod	High-alloy stainless steel
Material screws	Galvanised steel
Material spindle nut	Rolled steel
Material spindle	Rolled steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy