

Electric cylinder EPRF-BS-75-300-10P-F-M1

Part number: 8211893

FESTO



Data sheet

Feature	Value
Size	75
Stroke	300 mm
Stroke reserve	0 mm
Piston rod thread	M10
Reversing backlash	100 µm
Screw diameter	25 mm
Spindle pitch	10 mm/U
Max. angle of rotation of the piston rod +/-	0.5 deg
Mounting position	Any
Piston rod end	Internal thread
Motor type	Servo motor
Position sensing	None
Structural design	Electric cylinder with ball screw
Spindle type	Ball screw
Protection against torsion/guide	With plain bearing-guide
Max. actuator speed	3000 rpm
Max. acceleration	15 m/s ²
Max. speed	500 m/s
Max. homing speed	0.01 m/s
Repetition accuracy	±0.02 mm
Duty cycle	100%
Vibration resistance	Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
Corrosion resistance class (CRC)	4 - Particularly high corrosion stress
LABS (PWIS) conformity	VDMA24364 Zone III
Storage temperature	-20 °C...60 °C
For use in the food industry	See declaration of conformity
Relative air humidity	0 - 95% Non-condensating
Degree of protection	IP69K
Ambient temperature	-10 °C...60 °C

Feature	Value
Impact energy in the end positions	150 mJ
Max. driving torque	13.25 Nm
Max. torque Mx	0 Nm
Max. torque My	31.2 Nm
Max. torque Mz	31.2 Nm
Max. radial force on actuator shaft	700 N
Max. feed force Fx	7500 N
No-load driving torque	0.516 Nm
Guide value for payload, horizontal	600 kg
Guide value for payload, vertical	300 kg
Mass moment of inertia JH per meter of stroke	2.2453 kgcm ²
Mass moment of inertia JL per kg of payload	0.0253 kgcm ²
Mass moment of inertia JO	0.5098 kgcm ²
Reference service life	5000 km
Maintenance interval	Lifetime lubrication
Moving mass at 0 mm stroke	1267 g
Additional moving mass per 10 mm stroke	15.1 g
Basic weight with 0 mm stroke	4881 g
Additional weight per 10 mm stroke	84.5 g
Type of mounting	With internal thread
Note on materials	RoHS compliant
Cover cap material	high-alloy stainless steel
Cover material	high-alloy stainless steel
Seals material	TPE-U(PU)
Material of dynamic seals	TPE-U(PU)
Housing material	high-alloy stainless steel
Piston rod material	high-alloy stainless steel
Ball screw nut material	Steel
Spindle material	Bearing steel
Material of cylinder barrel	high-alloy stainless steel