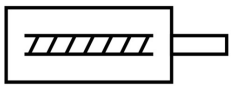
Electric actuator
EPCC-BS-45-50-3P-A

Part number: 5428859





General operating condition

Data sheet

Feature	Value
Size	45
Stroke	50 mm
Stroke reserve	0 mm
Piston rod thread	M10x1.25
Reversing backlash	100 µm
Screw diameter	10 mm
Spindle pitch	3 mm/U
Max. angle of rotation of the piston rod +/-	1 deg
Mounting position	Any
Piston rod end	External thread
Motor type	Stepper motor Servo motor
Position sensing	For proximity sensor
Structural design	Electric actuator with ball screw drive
Spindle type	Ball screw drive
Symbol	00991941
Protection against torsion/guide	With plain-bearing guide
Max. acceleration	5 m/s²
Max. rotational speed	3600 rpm
Max. speed	0.18 m/s
Max. homing speed	0.01 m/s
Repetition accuracy	±0.02 mm
Duty cycle	100%
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 9 according to ISO 14644-1
Storage temperature	-20 °C ... 60 °C
Relative air humidity	0 - 95 % Non-condensing
Degree of protection	IP40
Ambient temperature	0 °C ... 60 °C
Impact energy in the end positions	0.012 J

Feature	Value
Max. driving torque	0.4 Nm
Max. torque Mx	0 Nm
Max. torque My	2.9 Nm
Max. torque Mz	2.9 Nm
Max. radial force on actuator shaft	180 N
Max. feed force Fx	450 N
No-load driving torque	0.08 Nm
Guide value for payload, horizontal	60 kg
Guide value for payload, vertical	30 kg
Mass moment of inertia JH per meter of stroke	0.0503 kgcm²
Mass moment of inertia JL per kg of payload	0.0023 kgcm²
Mass moment of inertia JO	0.0109 kgcm²
Maintenance interval	Life-time lubrication
Moving mass at 0 mm stroke	179 g
Additional moving mass per 10 mm stroke	4.9 g
Basic weight with 0 mm stroke	555 g
Additional weight per 10 mm stroke	41 g
Type of mounting	With internal thread With accessories
Note on materials	RoHS-compliant
Housing material	Wrought aluminum alloy Smooth anodized
Piston rod material	High-alloy stainless steel
Spindle nut material	Steel
Spindle material	Roller bearing steel