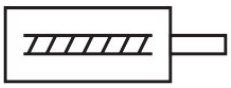
Electric cylinder
EPCC-BS-45-175-3P-A

Part number: 5428864





Data sheet

Feature	Value
Size	45
Stroke	175 mm
Stroke reserve	0 mm
Piston rod thread	M10x1.25
Reversing backlash theoretical	100 µm
Spindle diameter	10 mm
Spindle pitch	3 mm/U
Torsional backlash at piston rod +/-	1 deg
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 drive
Spindle type	Ball screw drive
Protection against torque/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	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	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

Feature	Value
Impact energy in end positions	0.012 J
Max. drive torque	0.4 Nm
Max. moment Mx	0 Nm
Max. moment My	2.9 Nm
Max. moment Mz	2.9 Nm
Max. radial force at drive shaft	180 N
Max. feed force Fx	450 N
Frictional torque independent of load	0.08 Nm
Reference value effective load, horizontal	60 kg
Reference value effective load, vertical	30 kg
Mass moment of inertia JH per metre of stroke	0.0503 kgcm²
Mass moment of inertia JL per kg of working load	0.0023 kgcm²
Mass moment of inertia JO	0.0109 kgcm²
Maintenance interval	Life-time lubrication
Moving mass for 0 mm stroke	179 g
Additional moving mass per 10 mm stroke	4.9 g
Basic weight for 0 mm stroke	555 g
Additional weight per 10 mm stroke	41 g
Type of mounting	Via female thread With accessories
Note on materials	RoHS-compliant
Material housing	Wrought aluminium alloy Smooth anodised
Material piston rod	High-alloy stainless steel
Material ball screw nut	Steel
Material spindle	Rolled steel