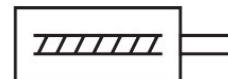


Electric cylinder EPCC-BS-45-50-3P-A

Part number: 5428859

FESTO



Data sheet

| Feature | Value |
|--|--|
| Size | 45 |
| Stroke | 50 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/s ² |
| 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 | Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The 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 |

| Feature | Value |
|--|--|
| Relative air humidity | 0 - 95% Non-condensing |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C...60 °C |
| 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 kgcm ² |
| Mass moment of inertia JL per kg of working load | 0.0023 kgcm ² |
| Mass moment of inertia JO | 0.0109 kgcm ² |
| 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 spindle nut | Steel |
| Material spindle | Rolled steel |