

Electric cylinder EPCC-BS-45-125-3P-A

Part number: 5428862

FESTO



 General operating condition

Data sheet

| Feature | Value |
|---|--|
| Size | 45 |
| Stroke | 125 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 | Via proximity switch |
| Structural design | With ball screw |
| Spindle type | Ball screw |
| Symbol | 00991941 |
| Protection against torsion/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 | 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 | Non-condensating |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C ... 60 °C |
| Impact energy in the end positions | 0.012 J |
| Max. driving torque | 0.4 Nm |
| Max. torque Mx | 0 Nm |
| Max. torque My | 2.9 Nm |
| Max. torque Mz | 2.9 Nm |

| Feature | Value |
|---|--|
| 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 kgcm ² |
| Mass moment of inertia JL per kg of payload | 0.0023 kgcm ² |
| Mass moment of inertia JO | 0.0109 kgcm ² |
| Maintenance interval | Lifetime 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 | Smooth-anodized |
| Piston rod material | high-alloy stainless steel |
| Ball screw nut material | Steel |
| Spindle material | Bearing steel |