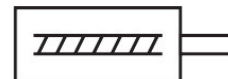


# Electric cylinder EPCC-BS-45-125-3P-A

Part number: 5428862

**FESTO**



## Data sheet

| Feature  | Value  |
|--|--|
| Size   | 45   |
| Stroke   | 125 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<br>Servo motor   |
| Position detection                                 | Via proximity switch   |
| Design   | Electric cylinder<br>With ball screw drive   |
| Spindle type                                       | Ball screw drive   |
| Protection against torque/guide                    | With plain-bearing guide   |
| Max. acceleration                                  | 5 m/s <sup>2</sup>   |
| 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%<br>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 <sup>2</sup>                   |
| Mass moment of inertia JL per kg of working load | 0.0023 kgcm <sup>2</sup>                   |
| Mass moment of inertia JO                        | 0.0109 kgcm <sup>2</sup>                   |
| 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<br>With accessories      |
| Note on materials                                | RoHS-compliant                             |
| Material housing                                 | Wrought aluminium alloy<br>Smooth anodised |
| Material piston rod                              | High-alloy stainless steel                 |
| Material spindle nut                             | Steel                                      |
| Material spindle                                 | Rolled steel                               |