## Electric actuator EPCC-BS-60-125-12P-A

**FESTO** 

Part number: 5428905





## **Data sheet**

| Feature  | Value   |
|--|---|
| Size   | 60  |
| Stroke   | 125 mm  |
| Stroke reserve                                     | 0 mm  |
| Piston rod thread                                  | M12x1.25  |
| Reversing backlash                                 | 100 μm  |
| Screw diameter                                     | 12 mm   |
| Spindle pitch                                      | 12 mm/U   |
| Max. angle of rotation of the piston rod +/-       | 1 deg   |
| Mounting position                                  | Any   |
| Piston rod end                                     | External thread   |
| Motor type   | Stepper motor<br>Servo motor  |
| Position sensing                                   | For proximity sensor  |
| Structural design                                  | Electric actuator with ball screw drive   |
| Spindle type                                       | Ball screw drive  |
| Protection against torsion/guide                   | With plain-bearing guide  |
| Max. acceleration                                  | 15 m/s <sup>2</sup>   |
| Max. rotational speed                              | 3000 rpm  |
| Max. speed   | 0.6 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 Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class                                    | Class 9 according to ISO 14644-1  |
| Storage temperature                                | -20 °C60 °C   |
|  |   |

| Feature                                       | Value                                     |
|---|---|
| Relative air humidity                         | 0 - 95 %<br>Non-condensing                |
| Degree of protection                          | IP40                                      |
| Ambient temperature                           | 0 °C60 °C                                 |
| Impact energy in the end positions            | 0.024 J                                   |
| Max. driving torque                           | 2.4 Nm                                    |
| Max. torque Mx                                | 0 Nm                                      |
| Max. torque My                                | 6.4 Nm                                    |
| Max. torque Mz                                | 6.4 Nm                                    |
| Max. radial force on actuator shaft           | 230 N                                     |
| Max. feed force Fx                            | 1000 N                                    |
| No-load driving torque                        | 0.325 Nm                                  |
| Guide value for payload, horizontal           | 120 kg                                    |
| Guide value for payload, vertical             | 60 kg                                     |
| Mass moment of inertia JH per meter of stroke | 0.1519 kgcm²                              |
| Mass moment of inertia JL per kg of payload   | 0.0365 kgcm²                              |
| Mass moment of inertia JO                     | 0.0779 kgcm²                              |
| Maintenance interval                          | Life-time lubrication                     |
| Moving mass at 0 mm stroke                    | 305 g                                     |
| Additional moving mass per 10 mm stroke       | 6.5 g                                     |
| Basic weight with 0 mm stroke                 | 1114 g                                    |
| Additional weight per 10 mm stroke            | 69 g                                      |
| Type of mounting                              | With internal thread<br>With accessories  |
| Note on materials                             | RoHS-compliant                            |
| Housing material                              | Wrought aluminum alloy<br>Smooth anodized |
| Piston rod material                           | High-alloy stainless steel                |
| Spindle nut material                          | Steel                                     |
| Spindle material                              | Roller bearing steel                      |