

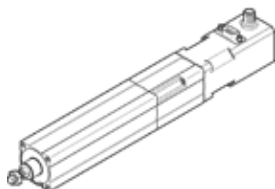
# electric cylinder

## EPCO-25-100-10P-ST-E

Part number: 1470771  
Product to be discontinued

FESTO

Mechanical linear drive with piston rod and fixed stepper motor.  
Type to be discontinued. Available until 2025. See Support Portal for alternative products.



### Data sheet

| Feature                                      | Value   |
|--|---|
| Size   | 25  |
| Stroke                                       | 100 mm  |
| Stroke reserve                               | 0 mm  |
| Piston rod thread                            | M8  |
| Reversing backlash                           | 0.1 mm  |
| Stepper angle at full step                   | 1.8 deg   |
| Stepper angle tolerance                      | ±5 %  |
| Spindle diameter                             | 10 mm   |
| Spindle pitch                                | 10 mm/U   |
| Max. angular deflection of piston rod +/-    | 1.5 deg   |
| Assembly position                            | Any   |
| Piston-rod end                               | Male thread   |
| Motor type                                   | Stepper motor   |
| Design structure                             | Electric cylinder<br>With ball screw                            |
| Spindle type                                 | Ball screw  |
| Protection against torque/guide              | with plain-bearing guide  |
| Rotor position sensor                        | Incremental encoder   |
| Rotary position encoder interface            | RS422 TTL AB-channel + zero index                               |
| Rotary position encoder measuring principle  | Optical   |
| Max. acceleration                            | 10 m/s <sup>2</sup>   |
| Max. speed                                   | 0.5 m/s   |
| Repetition accuracy                          | ±0,02 mm  |
| Duty cycle                                   | 100 %   |
| Insulation protection class                  | B   |
| Nominal operating voltage DC                 | 24 V  |
| Nominal motor current                        | 3 A   |
| Authorisation                                | RCM Mark<br>c UL us - Recognized (OL)                           |
| CE mark (see declaration of conformity)      | to EU directive for EMC<br>in accordance with EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions           |
| Corrosion resistance classification CRC      | 1 - Low corrosion stress  |
| PWIS conformity                              | VDMA24364 zone III  |
| Storage temperature                          | -20 ... 60 °C   |
| Relative air humidity                        | 0 - 85 %<br>non-condensing                                      |
| Protection class                             | IP40  |
| Ambient temperature                          | 0 ... 50 °C   |
| Impact energy in end positions               | 0.0002 J  |
| Max. torque Mx                               | 0 Nm  |

| Feature  | Value   |
|--|---|
| Max. torque My                                   | 1 Nm  |
| Max. torque Mz                                   | 1 Nm  |
| Max. feed force Fx                               | 105 N   |
| Reference value for working load, horizontal     | 20 kg   |
| Reference value for working load, vertical       | 10 kg   |
| Mass moment of inertia JH per metre of stroke    | 0.0578 kgcm <sup>2</sup>                          |
| Mass moment of inertia JL per kg of working load | 0.0254 kgcm <sup>2</sup>                          |
| Mass moment of inertia, JO                       | 0.094 kgcm <sup>2</sup>                           |
| Moving mass with 0 mm stroke                     | 145 g   |
| Additional mass factor per 10 mm of stroke       | 2.6 g   |
| Basic weight for 0 mm stroke                     | 1,125 g   |
| Additional weight per 10 mm stroke               | 34 g  |
| Electrical connector system                      | Plug  |
| Mounting type                                    | with internal (female) thread<br>with accessories |
| Materials note                                   | Conforms to RoHS                                  |
| Material cover                                   | Wrought Aluminium alloy<br>Smooth anodised        |
| Material housing                                 | Wrought Aluminium alloy<br>Smooth anodised        |
| Material piston rod                              | High alloy steel, non-corrosive                   |
| Material spindle nut                             | Steel   |
| Material spindle                                 | Roller bearing steel                              |
| Material cylinder barrel                         | Wrought Aluminium alloy<br>Smooth anodised        |