

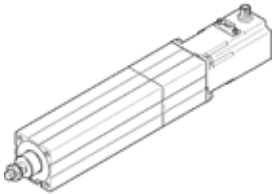
electric cylinder

EPCO-40-50-12.7P-ST-E

Part number: 1472617
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 | 40 |
| Stroke | 50 mm |
| Stroke reserve | 0 mm |
| Piston rod thread | M10x1,25 |
| Reversing backlash | 0.1 mm |
| Stepper angle at full step | 1.8 deg |
| Stepper angle tolerance | ±5 % |
| Spindle diameter | 12.7 mm |
| Spindle pitch | 12.7 mm/U |
| Max. angular deflection of piston rod +/- | 1 deg |
| Assembly position | Any |
| Piston-rod end | Male thread |
| Motor type | Stepper motor |
| Design structure | Electric cylinder 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 ² |
| Max. speed | 0.46 m/s |
| Repetition accuracy | ±0,02 mm |
| Duty cycle | 100 % |
| Insulation protection class | B |
| Nominal operating voltage DC | 24 V |
| Nominal motor current | 4.2 A |
| Authorisation | RCM Mark c UL us - Recognized (OL) |
| CE mark (see declaration of conformity) | to EU directive for EMC in accordance with EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC 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 % non-condensing |
| Protection class | IP40 |
| Ambient temperature | 0 ... 50 °C |
| Impact energy in end positions | 0.0004 J |
| Max. torque Mx | 0 Nm |

| Feature | Value |
|--|---|
| Max. torque My | 3.3 Nm |
| Max. torque Mz | 3.3 Nm |
| Max. feed force Fx | 250 N |
| Reference value for working load, horizontal | 40 kg |
| Reference value for working load, vertical | 20 kg |
| Mass moment of inertia JH per metre of stroke | 0.167 kgcm ² |
| Mass moment of inertia JL per kg of working load | 0.0409 kgcm ² |
| Mass moment of inertia, JO | 0.3375 kgcm ² |
| Moving mass with 0 mm stroke | 415 g |
| Additional mass factor per 10 mm of stroke | 4.9 g |
| Basic weight for 0 mm stroke | 2,585 g |
| Additional weight per 10 mm stroke | 55 g |
| Electrical connector system | Plug |
| Mounting type | with internal (female) thread with accessories |
| Materials note | Conforms to RoHS |
| Material cover | Wrought Aluminium alloy Smooth anodised |
| Material housing | Wrought Aluminium alloy 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 Smooth anodised |