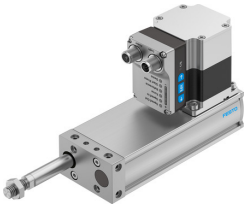
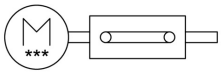
# Electric cylinder unit
# EPCE-TB-60-80-FL-MF-ST-M-H1-PLK-AA

Part number: 8102171






## Data sheet

| Feature | Value |
|---|---|
| Drive pinion effective diameter | 10.18 mm |
| Size | 60 |
| Stroke | 80 mm |
| Stroke reserve | 0 mm |
| Piston rod thread | M10x1.25 |
| Toothed belt elongation | 0.375 % |
| Toothed belt pitch | 2 mm |
| Mounting position | Any |
| Piston rod end | External thread |
| Motor type | Stepper motor |
| Position sensing | Motor encoder |
| Structural design | Electric actuator<br>with toothed belt<br>With integrated drive |
| Symbol | 00997342 |
| Protection against torsion/guide | With plain-bearing guide |
| Homing | Fixed stop block positive<br>Fixed stop block, negative |
| Rotor position sensor | Absolute encoder, single-turn |
| Rotor position sensor measuring principle | Magnetic |
| Additional functions | User interface<br>Integrated end-position sensing |
| Display | LED |
| Ready status indication | LED |
| Max. acceleration | 9 m/s² |
| Max. speed | 0.6 m/s |
| Repetition accuracy | ±0.05 mm |
| Characteristics of digital logic outputs | Configurable<br>Not galvanically isolated |
| Duty cycle | 100% |
| Insulation protection class | B |
| Max. current of digital logic outputs | 100 mA |
| Max. current consumption | 5300 mA |
| DC nominal voltage | 24 V |
| Nominal current | 5.3 A |
| Parameterization interface | IO-Link®<br>User interface |

| Feature | Value |
|---|---|
| Rotor position sensor resolution | 16 bit |
| Permissible voltage fluctuations | +/- 15 % |
| Power supply, type of connection | Plug |
| Power supply, connection technology | M12x1, T-coded as per EN 61076-2-111 |
| Power supply, number of pins/wires | 4 |
| Power supply, connection pattern | 00995989 |
| Certification | RCM compliance mark |
| KC characters | KC EMC |
| CE marking (see declaration of conformity) | As per EU EMC directive<br>As per EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| Vibration resistance | Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6 |
| Shock resistance | Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27 |
| Corrosion resistance class (CRC) | 0 - No corrosion stress |
| LABS (PWIS) conformity | VDMA24364 zone III |
| Storage temperature | -20 °C ... 60 °C |
| Relative air humidity | 0 - 90 % |
| Degree of protection | IP40 |
| Protection class | III |
| Ambient temperature | 0 °C ... 50 °C |
| Note on ambient temperature | Above an ambient temperature of 30°C, the power must be reduced by 2% per K. |
| Impact energy in the end positions | 0.016 J |
| Max. torque Mx | 0 Nm |
| Max. torque My | 1 Nm |
| Max. torque Mz | 1 Nm |
| Max. feed force Fx | 150 N |
| Guide value for payload, horizontal | 10 kg |
| Guide value for payload, vertical | 5 kg |
| Feed constant | 32 mm/U |
| Reference value, running performance | 800 km |
| Maintenance interval | Life-time lubrication |
| Moving mass | 275 g |
| Moving mass at 0 mm stroke | 197 g |
| Additional moving mass per 10 mm stroke | 9.75 g |
| Product weight | 1774 g |
| Basic weight with 0 mm stroke | 1407 g |
| Additional weight per 10 mm stroke | 46 g |
| Number of digital logic outputs 24 V DC | 2 |
| Number of digital logic inputs | 2 |
| Logic input specification | Based on IEC 61131-2, type 1 |
| Work range of logic input | 24 V |
| Characteristics of logic input | Configurable<br>Not galvanically isolated |
| IO-Link®, SIO mode support | Yes |
| IO-Link®, protocol version | Device V 1.1 |
| IO-Link®, communication mode | COM3 (230.4 kBd) |
| IO-Link®, port class | A |
| IO-Link®, number of ports | 1 |
| IO-Link®, process data width OUT | 2 Byte |
| IO-Link®, process data content OUT | 1 bit (move in)<br>1 bit (move out)<br>1 bit (quit error) |

| Feature | Value |
|---|---|
| IO-Link®, process data width IN | 2 Byte |
| IO-Link®, process data content IN | 1 bit (state device)<br>1 bit (state move)<br>1 bit (state in)<br>1 bit (state out) |
| IO-Link®, service data contents IN | 32 bit force<br>32 bit position<br>32 bit speed |
| IO-Link®, minimum cycle time | 1 ms |
| IO-Link®, data memory required | 500 byte |
| Max. cable length | 15 m outputs<br>15 m inputs<br>20 m for IO-Link® operation |
| Switching logic at outputs | PNP (positive switching) |
| Input switching logic | PNP (positive switching) |
| IO-Link®, Connection technology | Plug |
| Logic interface, connection type | Plug |
| Logic interface, connection technology | M12x1, A-coded as per EN 61076-2-101 |
| Logic interface, number of poles/wires | 8 |
| Logic interface, connection pattern | 00992264 |
| Type of mounting | With through-hole<br>With internal thread<br>With centering sleeve<br>With accessories |
| Note on materials | RoHS-compliant |
| Cover material | Wrought aluminum alloy, anodized |
| Housing material | Wrought aluminum alloy, anodized |
| Piston rod material | High-alloy stainless steel |
| Toothed belt material | Polychloroprene with glass fiber |