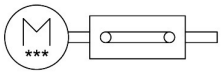
# Electric cylinder unit
# EPCE-TB-45-50-FL-ST-M-H1-PLK-AA

Part number: 8101542




## Data sheet

| Feature | Value |
|---|---|
| Drive pinion effective diameter | 10.18 mm |
| Size | 45 |
| Stroke | 50 mm |
| Stroke reserve | 0 mm |
| Piston rod thread | M6 |
| Toothed belt elongation | 0.31 % |
| Toothed belt pitch | 2 mm |
| Mounting position | Any |
| Position sensing | Motor encoder |
| Structural design | Electric actuator<br>with toothed belt<br>With integrated drive |
| Protection against torsion/guide | With plain-bearing guide |
| Rotor position sensor | Absolute encoder, single-turn |
| Rotor position sensor measuring principle | Magnetic |
| Temperature monitoring | Shutdown in the event of over temperature<br>Integrated precise CMOS temperature sensor with analogue output |
| Additional functions | User interface<br>Integrated end-position sensing |
| Display | LED |
| Max. acceleration | 9 m/s² |
| Max. speed | 0.44 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 | 3 A |
| Logic max. current consumption | 300 mA |
| DC nominal voltage | 24 V |
| Nominal current | 3 A |

| Feature | Value |
|---|---|
| Parameterization interface | IO-Link®<br>User interface |
| 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 |
| Certification | RCM compliance mark |
| CE marking (see declaration of conformity) | As per EU EMC directive<br>As per EU RoHS directive |
| 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 |
| 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 | 0.003 J |
| Max. torque Mx | 0 Nm |
| Max. torque My | 0.4 Nm |
| Max. torque Mz | 0.4 Nm |
| Max. feed force Fx | 85 N |
| Guide value for payload, horizontal | 5 kg |
| Guide value for payload, vertical | 2.5 kg |
| Feed constant | 32 mm/U |
| Reference service life | 500 km |
| Moving mass | 106 g |
| Moving mass at 0 mm stroke | 83 g |
| Additional moving mass per 10 mm stroke | 4.55 g |
| Product weight | 922 g |
| Basic weight with 0 mm stroke | 775 g |
| Additional weight per 10 mm stroke | 29 g |
| Number of digital logic outputs 24 V DC | 2 |
| Number of digital logic inputs | 2 |
| Work range of logic input | 24 V |
| Characteristics of logic input | Configurable<br>Not galvanically isolated |
| 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 | Move in 1 bit<br>Move out 1 bit<br>Quit Error 1 bit<br>Move Intermediate 1 bit |
| IO-Link®, process data content IN | State Device 1 bit<br>State In 1 bit<br>State Intermediate 1 bit<br>State Move 1 bit<br>State Out 1 bit |
| IO-Link®, service data contents IN | Speed 32 bit<br>Position 32 bit<br>Force 32 bit |

| Feature | Value |
|---|---|
| IO-Link®, data memory required | 0.5 KB |
| 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 |
| Type of mounting | With internal thread<br>With accessories |
| Note on materials | RoHS-compliant |
| Toothed belt material | Polychloroprene with glass fiber |