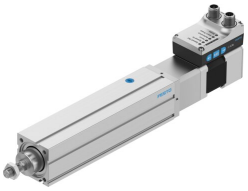
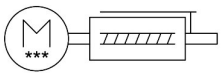
# Electric cylinder unit
# EPCS-BS-45-100-10P-A-ST-M-H1-PLK-AA

Part number: 8118282






## Data sheet

| Feature | Value |
|---|---|
| Size | 45 |
| Stroke | 100 mm |
| Stroke reserve | 0 mm |
| Piston rod thread | M10x1.25 |
| Spindle diameter | 10 mm |
| Spindle pitch | 10 mm/U |
| Mounting position | optional |
| Design | Electric cylinder<br>With ball screw drive<br>With integrated drive |
| Spindle type | Ball screw drive |
| Protection against torque/guide | With plain-bearing guide |
| Rotor position sensor | Absolute single-turn encoder |
| Rotor position sensor, encoder measuring principle | Magnetic |
| Temperature monitoring | Switch-off for excessive temperature<br>Integrated precise CMOS temperature sensor with analogue output |
| Additional functions | User interface<br>Integrated end-position sensing |
| Display | LED |
| Max. acceleration | 5 m/s² |
| Max. speed | 0.23 m/s |
| Repetition accuracy | ±0.02 mm |
| Features of digital logic outputs | Configurable<br>Not galvanically isolated |
| Duty cycle | 100% |
| Insulation protection class | B |
| Max. current digital logic outputs | 100 mA |
| Max. current consumption | 3 A |
| Max. current consumption, logic | 0.3 A |
| Nominal voltage DC | 24 V |
| Nominal current | 3 A |
| Parameterisation interface | IO-Link<br>User interface |

| Feature | Value |
|---|---|
| Permissible voltage fluctuations | +/- 15% |
| Power supply, connection type | Plugs |
| power supply, connection system | M12x1, T-coded according to EN 61076-2-111 |
| Power supply, number of pins/wires | 4 |
| Approval | RCM trademark |
| CE mark (see declaration of conformity) | To EU EMC Directive<br>In accordance with EU RoHS Directive |
| Vibration resistance | Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6 |
| Shock resistance | Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27 |
| Corrosion resistance class CRC | 0 - No corrosion stress |
| LABS (PWIS) conformity | VDMA24364 zone III |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 9 according to ISO 14644-1 |
| Storage temperature | -20 °C...60 °C |
| Relative air humidity | 0 - 90%<br>Non-condensing |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C...50 °C |
| Note on ambient temperature | Power must be reduced by 2% per K at ambient temperatures above 30°C. |
| Max. moment Mx | 0 Nm |
| Max. moment My | 2.9 Nm |
| Max. moment Mz | 2.9 Nm |
| Max. radial force at drive shaft | 180 N |
| Max. feed force Fx | 250 N |
| Reference value effective load, horizontal | 40 kg |
| Reference value effective load, vertical | 13 kg |
| Moving mass for 0 mm stroke | 179 g |
| Additional moving mass per 10 mm stroke | 4.9 g |
| Product weight | 1595 g |
| Basic weight for 0 mm stroke | 1185 g |
| Additional weight per 10 mm stroke | 41 g |
| Number of digital logic outputs 24 V DC | 2 |
| Number of digital logic inputs | 2 |
| Working range of logic input | 24 V |
| Features of logic input | Configurable<br>Not galvanically isolated |
| IO-Link, Protocol version | Device V 1.1 |
| IO-Link, communication mode | COM3 (230.4 kBaud) |
| IO-Link, Port class | A |
| IO-Link, Number of ports | 1 |
| IO-Link, Process data length OUT | 2 bytes |
| 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 IN | 32-bit force<br>32-bit position<br>32-bit speed |
| IO-Link, Min. cycle time | 1 ms |
| IO-Link, Data storage required | 0.5 KB |

| Feature | Value |
|---|---|
| Switching logic for inputs | NPN (negative switching)<br>PNP (positive switching) |
| Logic interface, connection type | Plug |
| Logic interface, connection technology | M12x1, A-coded according to EN 61076-2-101 |
| Logic interface, number of pins/wires | 8 |
| Type of mounting | Via female thread<br>With accessories |
| Note on materials | RoHS-compliant |
| Material ball screw nut | Steel |
| Material spindle | Rolled steel |