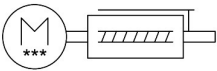
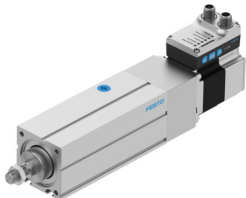


# Electric cylinder unit

## EPCS-BS-60-50-12P-A-ST-M-H1-PLK-AA

Part number: 8118296

FESTO



### Data sheet

| Feature  | Value   |
|--|---|
| Size   | 60  |
| Stroke   | 50 mm   |
| Stroke reserve                                     | 0 mm  |
| Piston rod thread                                  | M12x1.25  |
| Spindle diameter                                   | 12 mm   |
| Spindle pitch                                      | 12 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/s <sup>2</sup>  |
| Max. speed   | 0.22 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                           | 5.3 A   |
| Max. current consumption, logic                    | 0.3 A   |
| Nominal voltage DC                                 | 24 V  |
| Nominal current                                    | 5.3 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 class                            | 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                             | 6.4 Nm  |
| Max. moment Mz                             | 6.4 Nm  |
| Max. radial force at drive shaft           | 230 N   |
| Max. feed force Fx                         | 375 N   |
| Reference value effective load, horizontal | 56 kg   |
| Reference value effective load, vertical   | 18 kg   |
| Moving mass for 0 mm stroke                | 305 g   |
| Additional moving mass per 10 mm stroke    | 6.5 g   |
| Product weight                             | 2639 g  |
| Basic weight for 0 mm stroke               | 2294 g  |
| Additional weight per 10 mm stroke         | 69 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 spindle nut                   | Steel  |
| Material spindle                       | Rolled steel   |