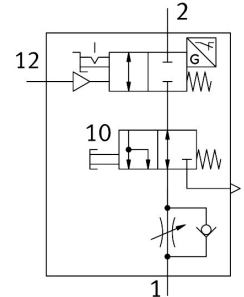


# Shut-off valve VBOC-L2-E-S7-P-M12-G12-E

Part number: 8177446

**FESTO**



## Data sheet

| Feature                                                                                    | Value                                                 |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Valve function                                                                             | 2/2-way, closed, monostable                           |
| Selection of additional function                                                           | Exhaust air one-way flow control function             |
| Pneumatic connection 1                                                                     | G1/2                                                  |
| Pneumatic connection 2                                                                     | G1/2                                                  |
| Actuation type                                                                             | Pneumatic                                             |
| Type of mounting                                                                           | Screw-in<br>With external thread                      |
| Nominal flow rate in flow control direction standardized according to ISO 8778             | 860 l/min                                             |
| Nominal flow rate in non-return direction standardized according to ISO 8778               | 1140 l/min...1240 l/min                               |
| Standard flow rate in flow control direction 0.6->0 MPa (6->0 bar, 87->0 psi) to ISO 8778  | 1430 l/min                                            |
| Standard flow rate in non-return direction at 0.6->0 MPa (6->0 bar, 87->0 psi) to ISO 8778 | 1880 l/min...2100 l/min                               |
| Operating pressure                                                                         | 0.05 MPa...1 MPa<br>0.5 bar...10 bar                  |
| Ambient temperature                                                                        | -5 °C...60 °C                                         |
| Operating medium                                                                           | Compressed air as per ISO 8573-1:2010 [7:4:4]         |
| 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 |
| Mounting position                                                                          | Any                                                   |
| Selection of additional function 2                                                         | Manual exhaust                                        |
| Special features                                                                           | Welding spatter-resistant                             |
| Type of seal on screwed plug                                                               | Sealing ring                                          |
| Manual override                                                                            | Detenting                                             |
| Reset method                                                                               | Mechanical spring                                     |
| Pilot air supply port                                                                      | External                                              |

| Feature                                            | Value                                                                |
|----------------------------------------------------|----------------------------------------------------------------------|
| Manual exhaust function                            | Non-detenting                                                        |
| Measuring principle                                | Inductive                                                            |
| Switching element function                         | NC contact                                                           |
| Rotatability                                       | 360 deg/continuous swiveling not permissible                         |
| Sensor reverse polarity protection                 | For all electrical connections                                       |
| Note on forced dynamization                        | Current information on this issue can be found in Technical Report V |
| Switching position sensing                         | Normal position with sensor                                          |
| Switch-off pressure                                | 0.05 MPa...0.2 MPa                                                   |
| Switch-on pressure                                 | 0.15 MPa...0.4 MPa                                                   |
| Pneumatic off range                                | 0.04 MPa                                                             |
| Pilot pressure MPa                                 | 0.1 MPa...1 MPa                                                      |
| Pilot pressure                                     | 1 bar...10 bar                                                       |
| Pilot pressure psi                                 | 14.5 psi...145 psi                                                   |
| Switching time off                                 | 34 ms                                                                |
| On switching time                                  | 11 ms                                                                |
| Nominal operating voltage DC                       | 24 V                                                                 |
| Switching output                                   | PNP                                                                  |
| Information on operating and pilot media           | Operation with oil lubrication possible (required for further use)   |
| Corrosion resistance class (CRC)                   | 2 - Moderate corrosion stress                                        |
| LABS (PWIS) conformity                             | VDMA24364 Zone III                                                   |
| Suitability for the production of Li-ion batteries | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)   |
| Temperature of medium                              | -5 °C...60 °C                                                        |
| Pilot medium                                       | Compressed air as per ISO 8573-1:2010 [7:4:4]                        |
| Nominal tightening torque                          | 23 Nm                                                                |
| Tolerance for nominal tightening torque            | ±20%                                                                 |
| Permissible actuation moment, adjusting screw      | 2.5 Nm                                                               |
| Product weight                                     | 392 g                                                                |
| DC sensor operating voltage range                  | 10 V...30 V                                                          |
| Sensor short circuit protection                    | Yes                                                                  |
| Sensor idle current                                | 10 mA                                                                |
| Max. output current, sensor                        | 200 mA                                                               |
| Sensor voltage drop                                | 3 V                                                                  |
| Electrical connection 1, function                  | Switching output                                                     |
| Electrical connection 1, connection type           | Cable with plug                                                      |
| Electrical connection 1, connection technology     | M12x1 A-coded as per EN 61076-2-101                                  |
| Electrical connection 1, number of pins/wires      | 4                                                                    |
| Electrical connection 1, occupied pins/wires       | 3                                                                    |
| Cable length                                       | 0.3 m                                                                |
| Pilot air port 12                                  | G1/8                                                                 |
| Note on materials                                  | RoHS compliant                                                       |
| Seals material                                     | HNBR<br>NBR<br>TPE-U(PU)                                             |
| Hollow bolt material                               | Wrought aluminum alloy                                               |
| Material of cable sheath                           | PVC                                                                  |
| Knurled nut material                               | Wrought aluminum alloy                                               |
| Material of adjusting screw                        | high-alloy stainless steel                                           |
| Swivel joint material                              | Wrought aluminum alloy                                               |
| Sensor holder material                             | high-alloy stainless steel                                           |
| Locking nut material                               | high-alloy stainless steel                                           |