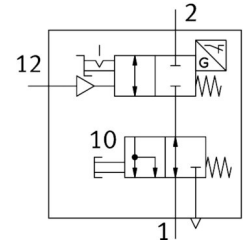


# Shut-off valve VBOC-L2-S7-P-M12-G12-E

Part number: 8181284

**FESTO**



[PDF](#) General operating condition

## Data sheet

| Feature                                                                       | Value                                                                |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Valve function                                                                | 2/2-way, single solenoid, closed                                     |
| Pneumatic connection, port 1                                                  | G1/2                                                                 |
| Pneumatic connection, port 2                                                  | G1/2                                                                 |
| Type of actuation                                                             | Pneumatic                                                            |
| Type of mounting                                                              | Screw-in<br>With male thread                                         |
| Nominal flow rate standardised according to ISO 8778                          | 1470 l/min                                                           |
| Standard flow rate 0.6-10 MPa (6-10 bar, 87-10 psi) in according to ISO 8778  | 2560 l/min                                                           |
| Nominal flow rate 2-1 normalised according to ISO 8778                        | 1560 l/min                                                           |
| Standard flow rate 0.6-10 MPa (6-10 bar, 87-10 psi) 2-1 according to ISO 8778 | 2580 l/min                                                           |
| Operating pressure                                                            | 0.05 MPa ... 1 MPa                                                   |
| Operating pressure                                                            | 0.5 bar ... 10 bar                                                   |
| Ambient temperature                                                           | -5 °C ... 60 °C                                                      |
| Operating medium                                                              | Compressed air to ISO 8573-1:2010 [7:4:4]                            |
| CE mark (see declaration of conformity)                                       | To EU EMC Directive<br>In accordance with EU RoHS Directive          |
| UKCA marking (see declaration of conformity)                                  | To UK RoHS instructions                                              |
| Mounting position                                                             | Any                                                                  |
| Selection of additional function 2                                            | Manual exhausting                                                    |
| Special characteristics                                                       | Resistant to welding spatter                                         |
| Type of seal on screwed plug                                                  | Sealing ring                                                         |
| Manual override                                                               | Detenting                                                            |
| Type of reset                                                                 | Mechanical spring                                                    |
| Pilot air supply                                                              | External                                                             |
| Manual exhaust function                                                       | Non-detenting                                                        |
| Symbol                                                                        | 00997516                                                             |
| Measuring principle                                                           | Inductive                                                            |
| Switching element function                                                    | N/C contact                                                          |
| Rotatability                                                                  | 360°/no continuous swivelling permissible                            |
| Reverse polarity protection sensor                                            | For all electrical connections                                       |
| Note on forced dynamization                                                   | Current information on this topic can be found in Technical Report V |
| Switching position sensing                                                    | Normal position with sensor                                          |

| Feature                                              | Value                                                                                      |
|------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 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                                       | 0.1 MPa ... 1 MPa                                                                          |
| Pilot pressure                                       | 1 bar ... 10 bar                                                                           |
| Pilot pressure                                       | 14.5 psi ... 145 psi                                                                       |
| Switching time off                                   | 34 ms                                                                                      |
| Switching time on                                    | 11 ms                                                                                      |
| Nominal operating voltage DC                         | 24 V                                                                                       |
| Switching output                                     | PNP                                                                                        |
| Note on operating and pilot medium                   | Lubricated operation possible (in which case lubricated operation will always be required) |
| 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)                         |
| Media temperature                                    | -5 °C ... 60 °C                                                                            |
| Pilot medium                                         | Compressed air to ISO 8573-1:2010 [7:4:4]                                                  |
| Nominal torque                                       | 23 Nm                                                                                      |
| Tolerance for nominal tightening torque              | ±20%                                                                                       |
| Product weight                                       | 264 g                                                                                      |
| Operating voltage range, DC sensor                   | 10 V ... 30 V                                                                              |
| Short-circuit strength sensor                        | Yes                                                                                        |
| Idle current sensor                                  | ≤10 mA                                                                                     |
| Max. output current sensor                           | 200 mA                                                                                     |
| Voltage drop sensor                                  | ≤3 V                                                                                       |
| Electrical connection 1, function                    | Switching output                                                                           |
| Electrical connection 1, connection type             | Cable with plug                                                                            |
| Electrical connection 1, connector system            | M12x1, A-coded to EN 61076-2-101                                                           |
| Electrical connection 1, number of connections/cores | 4                                                                                          |
| Electrical connection 1, used connections/cores      | 3                                                                                          |
| Electrical connection 1, connection pattern          | 00991168                                                                                   |
| Cable length                                         | 0.3 m                                                                                      |
| Pilot air port 12                                    | G1/8                                                                                       |
| Note on materials                                    | RoHS compliant                                                                             |
| Material seals                                       | HNBR<br>NBR<br>TPE-U(PU)                                                                   |
| Material hollow bolt                                 | Wrought aluminium alloy                                                                    |
| Material cable sheath                                | PVC                                                                                        |
| Knurled nut material                                 | Wrought aluminium alloy                                                                    |
| Material swivel fitting                              | Wrought aluminium alloy                                                                    |
| Material sensor bracket                              | High-alloy stainless steel                                                                 |
| Locking nut material                                 | High-alloy stainless steel                                                                 |