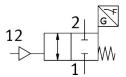
Shut-off valve VBOC-L2-P-M12-G12-E Part number: 8177454

FESTO





Data sheet

Pneumatic connection, port 1 G1/2 Pneumatic connection, port 2 G1/2 Type of actuation Pneumatic Type of mounting Screw-in Via male thread Nominal flow rate standardised according to ISO 8778 1470 I/min Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 2->1 normalised according to ISO 8778 1560 I/min Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 2->1 normalised according to ISO 8778 1560 I/min Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) 2->1 according to ISO 8778 Operating pressure 0.05 MPa1 MPa 0.5 bar10 bar Ambient temperature 0.5 Pc60 Pc Operating medium Cer mark (see declaration of conformity) To EU EMC Directive In accordance with EU ROHS Directive UKCA marking (see declaration of conformity) To UK Instructions for EMC To UK RoHS instructions Mounting position Special characteristics Resistant to welding spatter Special characteristics Resistant to welding sp	Feature	Value
Preumatic connection, port 2 Type of actuation Preumatic Type of mounting Screw-in Via male thread Nominal flow rate standardised according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 2->1 normalised according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 2->1 normalised according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) 2->1 according to ISO 8778 Operating pressure 0.05 MPa1 MPa 0.5 bar10 bar Ambient temperature 5- °C60 °C Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU RoHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK RoHS instructions Mounting position Special characteristics Resistant to welding spatter Type of reset Mechanical spring Type of reset Mechanical spring Pilot air supply External Measuring principle Inductive Switching element function N/O contact Note on forced dynamization Sories on this topic can be found in Technical Report V Switching position sensing Normal position via sensor Switch-off pressure O.05 MPa0.2 MPa	Valve function	2/2-way, closed, monostable
Type of actuation Type of mounting Screw-in Via male thread Nominal flow rate standardised according to ISO 8778 1470 I/min Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 2->1 normalised according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) 2->1 according to ISO 8778 Operating pressure O.0.5 MPa1 MPa O.5 bar10 bar Ambient temperature Sec60 °C Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU ROHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK ROHS instructions Mounting position Special characteristics Resistant to welding spatter Type of seal on screwed plug Sealing ring Weasuring principle Measuring principle Measuring principle Inductive Switching element function No contact Rotatability AGO-In Current information on this topic can be found in Technical Report V Switching position sensing Normal position via sensor Switch-off pressure O.05 MPa0.2 MPa	Pneumatic connection, port 1	G1/2
Screw-in Via male thread Nominal flow rate standardised according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 2.>1 normalised according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) 2->1 according to ISO 8778 Operating pressure 0.05 MPa1 MPa 0.5 bar10 bar Ambient temperature 5-9 °C60 °C Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU RoHS Directive In accordance with EU RoHS Directive In UK RoHS instructions Mounting position Optional Special characteristics Resistant to welding spatter Special characteristics Resistant to welding spatter Special characteristics In gring Type of reset Mechanical spring Hoductive Mesuring principle Inductive Switching element function N/O contact Reverse polarity protection sensor Note on forced dynamization Current information on this topic can be found in Technical Report V Switching position sensing Normal position via sensor O.05 MPa0.2 MPa	Pneumatic connection, port 2	G1/2
Via male thread	Type of actuation	Pneumatic
Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Nominal flow rate 2->1 normalised according to ISO 8778 Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) 2->1 according to ISO 8778 Operating pressure O.05 MPa1 MPa O.5 bar10 bar Ambient temperature Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] To EU EMC Directive In accordance with EU ROHS Directive In accordance with EU ROHS Directive In accordance with EU ROHS Directive In CUK ROHS instructions Mounting position Optional Special characteristics Resistant to welding spatter Sealing ring Type of reset Mechanical spring Pilot air supply Measuring principle Switching element function N/O contact Rota of MPa (6->0 bar, 87->0 psi) in according to ISO 8778 Normal position sensing Normal position sensing Normal position via sensor Switch-off pressure O.05 MPa0 AMPa 1560 I/min 2580 I/	Type of mounting	
Nominal flow rate 2->1 normalised according to ISO 8778 1560 I/min 2580 I/mi	Nominal flow rate standardised according to ISO 8778	1470 l/min
Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) 2->1 according to ISO 8778 Operating pressure O.05 MPa1 MPa O.5 bar10 bar Ambient temperature Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] To EU EMC Directive In accordance with EU RoHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK RoHS instructions Mounting position Special characteristics Resistant to welding spatter Type of seal on screwed plug Sealing ring Pilot air supply External Measuring principle Switching element function N/O contact Rotatability Roe of orced dynamization Switching position sensing Normal position sensor Normal position sensor Normal position in via sensor Switching position sensing Normal position via sensor Switch off pressure	Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) in according to ISO 8778	2560 l/min
Operating pressure O.05 MPa1 MPa O.5 bar10 bar Ambient temperature -5 °C60 °C Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU ROHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK ROHS instructions Mounting position Special characteristics Resistant to welding spatter Type of seal on screwed plug Sealing ring Type of reset Mechanical spring Pilot air supply External Measuring principle Inductive Switching element function N/O contact Rotatability Reverse polarity protection sensor Note on forced dynamization Switching position sensing Normal position via sensor Switch off pressure O.05 MPa0.2 MPa	Nominal flow rate 2->1 normalised according to ISO 8778	1560 l/min
Ambient temperature -5 °C60 °C Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU RoHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK ROHS instructions Mounting position Special characteristics Resistant to welding spatter Type of seal on screwed plug Sealing ring Type of reset Mechanical spring Pilot air supply External Measuring principle Inductive Switching element function N/O contact Rotatability 360°/no continuous swivelling permissible Reverse polarity protection sensor Note on forced dynamization Current information on this topic can be found in Technical Report V Switching persure O.05 MPaO.2 MPa	Standard flow rate 0.6->0 MPa (6->0 bar, 87->0 psi) 2->1 according to ISO 8778	2580 l/min
Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] To EU EMC Directive In accordance with EU ROHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK ROHS instructions Mounting position Special characteristics Resistant to welding spatter Type of seal on screwed plug Sealing ring Type of reset Mechanical spring Pilot air supply External Measuring principle Switching element function N/O contact Rotatability Reverse polarity protection sensor Note on forced dynamization Switching position via sensor Switching position sensing Normal position via sensor Switch-off pressure O.05 MPa0.2 MPa	Operating pressure	
CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU RoHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK RoHS instructions Mounting position Special characteristics Resistant to welding spatter Type of seal on screwed plug Sealing ring Type of reset Mechanical spring Pilot air supply External Measuring principle Inductive Switching element function N/O contact Rotatability Reverse polarity protection sensor Note on forced dynamization Switching position sensing Normal position via sensor Switch-off pressure O.05 MPa0.2 MPa	Ambient temperature	-5 °C60 °C
In accordance with EU RoHS Directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK RoHS instructions Mounting position Special characteristics Resistant to welding spatter Type of seal on screwed plug Type of reset Mechanical spring Pilot air supply External Measuring principle Inductive Switching element function Rotatability Reverse polarity protection sensor Note on forced dynamization Normal position via sensor Switch-off pressure In uk CA MPA Normal position via sensor Normal position via sensor Switch-off pressure	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
To UK RoHS instructions Mounting position optional Special characteristics Resistant to welding spatter Type of seal on screwed plug Sealing ring Type of reset Mechanical spring Pilot air supply External Measuring principle Inductive Switching element function N/O 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 via sensor Switch-off pressure 0.05 MPa0.2 MPa	CE mark (see declaration of conformity)	
Resistant to welding spatter Type of seal on screwed plug Type of reset Mechanical spring Pilot air supply External Measuring principle Switching element function Rotatability Reverse polarity protection sensor Note on forced dynamization Switching position sensing Switch-off pressure Resistant to welding spatter Sealing ring Rechanical spring External Inductive N/O contact 360°/no continuous swivelling permissible For all electrical connections Current information on this topic can be found in Technical Report V Normal position via sensor Switch-off pressure 0.05 MPa0.2 MPa	UKCA marking (see declaration of conformity)	
Type of seal on screwed plug Type of reset Mechanical spring External Measuring principle Switching element function Rotatability Reverse polarity protection sensor Note on forced dynamization Switching position sensing Switch-off pressure Sealing ring Mechanical spring External Inductive N/O contact 360°/no continuous swivelling permissible For all electrical connections Current information on this topic can be found in Technical Report V Switch-off pressure 0.05 MPa0.2 MPa	Mounting position	optional
Type of reset Mechanical spring External Measuring principle Switching element function Rotatability Reverse polarity protection sensor Note on forced dynamization Switching position sensing Switch-off pressure Mechanical spring External Inductive N/O contact 360°/no continuous swivelling permissible For all electrical connections Current information on this topic can be found in Technical Report V Switch-off pressure 0.05 MPa0.2 MPa	Special characteristics	Resistant to welding spatter
Pilot air supply External Measuring principle Switching element function Rotatability Reverse polarity protection sensor Note on forced dynamization Switching position sensing Normal position via sensor Switch-off pressure External Inductive N/O contact 360°/no continuous swivelling permissible For all electrical connections Current information on this topic can be found in Technical Report V Normal position via sensor 0.05 MPa0.2 MPa	Type of seal on screwed plug	Sealing ring
Measuring principle Switching element function N/O 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 via sensor Switch-off pressure 0.05 MPa0.2 MPa	Type of reset	Mechanical spring
Switching element function 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 via sensor Switch-off pressure 0.05 MPa0.2 MPa	Pilot air supply	External
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 via sensor Switch-off pressure 0.05 MPa0.2 MPa	Measuring principle	Inductive
Reverse polarity protection sensor For all electrical connections Current information on this topic can be found in Technical Report V Switching position sensing Normal position via sensor Switch-off pressure 0.05 MPa0.2 MPa	Switching element function	N/O contact
Note on forced dynamization Current information on this topic can be found in Technical Report V Switching position sensing Normal position via sensor Switch-off pressure 0.05 MPa0.2 MPa	Rotatability	360°/no continuous swivelling permissible
Switching position sensing Normal position via sensor Switch-off pressure 0.05 MPa0.2 MPa	Reverse polarity protection sensor	For all electrical connections
Switch-off pressure 0.05 MPa0.2 MPa	Note on forced dynamization	Current information on this topic can be found in Technical Report V
p	Switching position sensing	Normal position via sensor
Switch-on pressure 0.15 MPa0.4 MPa	Switch-off pressure	0.05 MPa0.2 MPa
	Switch-on pressure	0.15 MPa0.4 MPa

Feature	Value
Pneumatic off range	0.04 MPa
Pilot pressure	0.1 MPa1 MPa 1 bar10 bar 14.5 psi145 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	Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Media temperature	-5 °C60 °C
Pilot medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Nominal torque	23 Nm
Tolerance for nominal tightening torque	± 20%
Permissible actuation moment, regulating screw	2 Nm
Product weight	145.5 g
Operating voltage range, DC sensor	10 V30 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
Cable length	0.3 m
Pilot air port 12	G1/8
Note on materials	RoHS-compliant
Material seals	HNBR NBR TPE-U(PU)
Material hollow bolt	Wrought aluminium alloy
Material cable sheath	PVC
Material swivel fitting	Wrought aluminium alloy
Material sensor bracket	High-alloy stainless steel
Locking nut material	High-alloy stainless steel