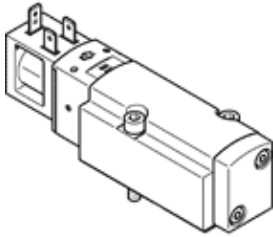


# solenoid valve

## VSVA-BK-M52-MD-D1-1B2

Part number: 8166594

FESTO



## Data sheet

| Feature                                   | Value  |
|---|--|
| Valve function                            | 5/2 monostable   |
| Type of actuation                         | electrical   |
| Width                                     | 38 mm  |
| Valve size                                | 42 mm  |
| Standard nominal flow rate                | 1,200 l/min  |
| Operating pressure MPa                    | 0.3 ... 0.8 MPa  |
| Operating pressure                        | 3 ... 8 bar  |
| Design structure                          | Piston slide with sealing ring   |
| Type of reset                             | mechanical spring  |
| Protection class                          | IP65<br>with plug socket<br>to IEC 60529   |
| Nominal size                              | 6.3 mm   |
| Grid dimension                            | 43 mm  |
| Exhaust-air function                      | throttleable   |
| Sealing principle                         | soft   |
| Assembly position                         | Any  |
| Conforms to standard                      | ISO 5599-1   |
| Manual override                           | detenting<br>Pushing   |
| ISO code                                  | 152  |
| Type of piloting                          | Piloted  |
| Pilot air supply                          | Internal   |
| Flow direction                            | non reversible   |
| Overlap                                   | Underlap   |
| Signal status display                     | with accessories   |
| b value                                   | 0.26   |
| C value                                   | 5.88 l/sbar  |
| Flow rate of valve                        | 1,343 l/min  |
| Flow rate of valve on individual sub-base | 1,342 l/min  |
| Flow rate of pneumatically linked valve   | 1,313 l/min  |
| Switching time off                        | 20.9 ms  |
| Switching time on                         | 19.9 ms  |
| Duty cycle                                | 100 %  |
| Max. positive test pulse with logic 0     | 2,500 µs   |
| Max. negative test pulse with logic 1     | 1,100 µs   |
| Nominal operating voltage DC              | 24 V   |
| Characteristic coil data                  | 24 V DC: 3.3 W   |
| Permissible voltage fluctuation           | +/- 10 %   |
| Operating medium                          | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                                       |
| Note on operating and pilot medium        | Lubricated operation possible (subsequently required for further operation)                    |
| Vibration resistance                      | Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 |
| Shock resistance                          | Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27              |

| Feature                                 | Value  |
|---|--|
| Corrosion resistance classification CRC | 1 - Low corrosion stress   |
| PWIS conformity                         | VDMA24364 zone III   |
| Medium temperature                      | -5 ... 50 °C   |
| Pilot medium                            | Compressed air in accordance with ISO8573-1:2010 [7:4:4]             |
| Ambient temperature                     | -5 ... 50 °C   |
| Max. tightening torque, valve mounting  | 5 Nm   |
| Product weight                          | 324 g  |
| Electrical connection                   | Plug pattern type B to EN 175301-803<br>To industry standard (11 mm) |
| Mounting type                           | On sub-base  |
| Scavenging orifice connection           | Non-ducted   |
| Pneumatic connection, port 1            | Connection plate size 1 as per ISO 5599-1                            |
| Pneumatic connection, port 2            | Connection plate size 1 as per ISO 5599-1                            |
| Pneumatic connection, port 3            | Connection plate size 1 as per ISO 5599-1                            |
| Pneumatic connection, port 4            | Connection plate size 1 as per ISO 5599-1                            |
| Pneumatic connection, port 5            | Connection plate size 1 as per ISO 5599-1                            |
| Materials note                          | Conforms to RoHS   |
| Material seals                          | HNBR<br>NBR  |
| Material housing                        | Wrought Aluminium alloy  |
| Material Piston slide                   | Wrought Aluminium alloy  |
| Material screws                         | Galvanised steel   |