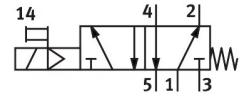
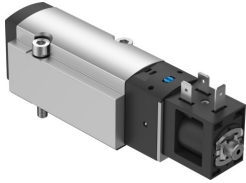


# Solenoid valve

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

Part number: 8166594

FESTO



## Data sheet

| Feature                                             | Value                                        |
|-----------------------------------------------------|----------------------------------------------|
| Valve function                                      | 5/2-way, monostable                          |
| Actuation type                                      | Electrical                                   |
| Width                                               | 38 mm                                        |
| Valve size                                          | 42 mm                                        |
| Normal nominal flow rate (normalized to DIN 1343)   | 1200 l/min                                   |
| Pneumatic working port                              | Sub-base, size 1 according to ISO 5599-1     |
| Operating voltage                                   | 24V DC                                       |
| Operating pressure                                  | 0.3 MPa...0.8 MPa<br>3 bar...8 bar           |
| Structural design                                   | Piston slide with sealing ring               |
| Reset method                                        | Mechanical spring                            |
| Degree of protection                                | IP65<br>With plug socket<br>As per IEC 60529 |
| Nominal width                                       | 6.3 mm                                       |
| Width dimension                                     | 43 mm                                        |
| Exhaust air function                                | Adjustable                                   |
| Sealing principle                                   | Soft                                         |
| Mounting position                                   | Any                                          |
| Conforms to standard                                | ISO 5599-1                                   |
| Manual override                                     | Detenting<br>Non-detenting                   |
| ISO code                                            | 152                                          |
| Type of control                                     | Piloted                                      |
| Pilot air supply port                               | Internal                                     |
| Flow direction                                      | Non-reversible                               |
| Lap                                                 | Negative overlap                             |
| Signal status display                               | With accessories                             |
| b-value                                             | 0.26                                         |
| C value                                             | 5.88 l/sbar                                  |
| Flow rate of pneumatic valve                        | 1343 l/min                                   |
| Flow rate of pneumatic valve on individual sub-base | 1342 l/min                                   |

| Feature                                                                | Value                                                                                |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Optimized flow rate of pneumatic valve pneumatically concatenated flow | 1313 l/min                                                                           |
| Switching time off                                                     | 20.9 ms                                                                              |
| On switching time                                                      | 19.9 ms                                                                              |
| Duty cycle                                                             | 100%                                                                                 |
| Max. positive test pulse with 0 signal                                 | 2500 µs                                                                              |
| Max. negative test pulse on 1 signal                                   | 1100 µs                                                                              |
| Nominal operating voltage DC                                           | 24 V                                                                                 |
| Coil characteristics                                                   | 24 V DC: 3.3 W                                                                       |
| Permissible voltage fluctuations                                       | +/- 10%                                                                              |
| Operating medium                                                       | Compressed air as per ISO 8573-1:2010 [7:4:4]                                        |
| Information on operating and pilot media                               | Operation with oil lubrication possible (required for further use)                   |
| Vibration resistance                                                   | Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 |
| Shock resistance                                                       | Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27                |
| Corrosion resistance class (CRC)                                       | 1 - Low corrosion stress                                                             |
| LABS (PWIS) conformity                                                 | VDMA24364 Zone III                                                                   |
| Temperature of medium                                                  | -5 °C...50 °C                                                                        |
| Pilot medium                                                           | Compressed air as per ISO 8573-1:2010 [7:4:4]                                        |
| Ambient temperature                                                    | -5 °C...50 °C                                                                        |
| Max. tightening torque for valve mounting                              | 5 Nm                                                                                 |
| Product weight                                                         | 324 g                                                                                |
| Electrical connection                                                  | Form B<br>As per industry standard (11 mm)                                           |
| Type of mounting                                                       | On sub-base                                                                          |
| Venting hole connection                                                | Not ducted                                                                           |
| Pneumatic connection 1                                                 | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 2                                                 | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 3                                                 | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 4                                                 | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 5                                                 | Sub-base, size 1 as per ISO 5599-1                                                   |
| Note on materials                                                      | RoHS compliant                                                                       |
| Seals material                                                         | HNBR<br>NBR                                                                          |
| Housing material                                                       | Wrought aluminum alloy                                                               |
| Piston slide material                                                  | Wrought aluminum alloy                                                               |
| Material of screws                                                     | Galvanized steel                                                                     |