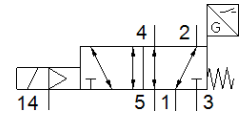
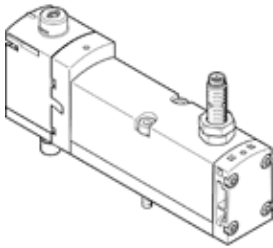


# solenoid valve

## VSVA-B-M52-MZD-A1-1T1L-APP

Part number: 560724

FESTO



## Data sheet

| Feature  | Value   |
|--|---|
| Valve function   | 5/2 monostable  |
| Type of actuation  | electrical  |
| Width  | 26 mm   |
| Standard nominal flow rate                                   | 1,100 l/min   |
| Operating pressure   | -0.9 ... 10 bar   |
| Design structure   | Piston slide  |
| Type of reset  | mechanical spring   |
| Authorisation  | C-Tick<br>CSA (OL)<br>c UL us - Recognized (OL)               |
| KC mark  | KC-EMV  |
| CE mark (see declaration of conformity)                      | to EU directive for EMC                                       |
| Protection class   | IP65<br>NEMA 4  |
| Nominal size   | 9 mm  |
| Exhaust-air function   | throttleable<br>Via throttle plate<br>Via individual sub-base |
| Sealing principle  | soft  |
| Assembly position  | Any   |
| Manual override  | detenting<br>Pushing<br>Covered                               |
| Type of piloting   | Piloted   |
| Pilot air supply   | external<br>Internal  |
| Flow direction   | Any   |
| Measuring principle  | Inductive   |
| Overlap  | Positive overlap  |
| Reverse polarity protection sensor                           | For all electrical connections                                |
| Signal status display  | LED   |
| Switching position sensing                                   | Normal position with sensor                                   |
| Switching status display sensor                              | LED   |
| Pilot pressure   | 3 ... 10 bar  |
| Flow rate of valve   | 1,400 l/min   |
| Flow rate of valve on individual sub-base                    | 1,200 l/min   |
| Optimised flow rate of valve pneumatically concatenated flow | 1,350 l/min   |
| Flow rate of pneumatically linked valve                      | 1,100 l/min   |
| Switching time off   | 54 ms   |
| Switching time on  | 20 ms   |
| Valve - sensor switching time on                             | 60 ms   |
| Valve - sensor switching time off                            | 11 ms   |
| Duty cycle   | 100 %   |
| Max. positive test pulse with logic 0                        | 1,200 µs  |
| Max. negative test pulse with logic 1                        | 1,100 µs  |
| Nominal operating voltage DC                                 | 24 V  |

| Feature                                 | Value  |
|---|--|
| Switch output                           | PNP  |
| Characteristic coil data                | 24 V DC: 1.6 W   |
| Surge strength                          | 2.5 kV   |
| Degree of contamination                 | 3  |
| 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              |
| Corrosion resistance classification CRC | 0 - No corrosion stress  |
| Medium temperature                      | -5 ... 50 °C   |
| Relative air humidity                   | 0 - 90 %   |
| Sound pressure level                    | 85 dB(A)   |
| Ambient temperature                     | -5 ... 50 °C   |
| Max. tightening torque, valve mounting  | 1.8 ... 2.2 Nm   |
| Product weight                          | 264 g  |
| Operating voltage range, DC sensor      | 10 ... 30 V  |
| Short-circuit strength sensor           | Pulsing  |
| Idle current sensor                     | ≤ 10 mA  |
| Max. output current sensor              | 200 mA   |
| Max. switching frequency sensor         | 5,000 Hz   |
| Residual ripple sensor                  | ± 10 %   |
| Voltage drop sensor                     | ≤ 2 V  |
| Electrical connection                   | Plug<br>according to ISO 15407-2<br>4-pin  |
| Sensor connection                       | Plug<br>3-pin<br>M8x1  |
| Mounting type                           | On sub-base  |
| Auxiliary pilot air port 12/14          | Manifold block, size 26 mm acc. to ISO 15407-2   |
| Pilot exhaust port 82/84                | Optional<br>Ducted<br>Non-ducted   |
| Pneumatic connection, port 1            | Manifold block, size 26 mm acc. to ISO 15407-2   |
| Pneumatic connection, port 2            | Manifold block, size 26 mm acc. to ISO 15407-2   |
| Pneumatic connection, port 3            | Manifold block, size 26 mm acc. to ISO 15407-2   |
| Pneumatic connection, port 4            | Manifold block, size 26 mm acc. to ISO 15407-2   |
| Pneumatic connection, port 5            | Manifold block, size 26 mm acc. to ISO 15407-2   |
| Materials note                          | Conforms to RoHS   |
| Material seals                          | FPM<br>NBR   |
| Material housing                        | Aluminium die cast<br>PA   |
| Material screws                         | Galvanised steel   |
| Switching element function              | Normally closed contact  |