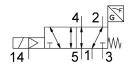
## Air solenoid valve VSVA-B-M52-MZD-A1-1T1L-APX-0.5

**FESTO** 

Part number: 570850





## **Data sheet**

| Feature                                      | Value   |
|--|---|
| Valve function                               | 5/2, monostable   |
| Actuation type                               | Electrical  |
| Width  | 26 mm   |
| Standard nominal flow rate                   | 1100 l/min  |
| Pneumatic working port                       | Sub-base, size 26 mm as per ISO 15407-2<br>G1/4                     |
| Operating voltage                            | 24V DC  |
| Operating pressure                           | -0.09 MPa1 MPa<br>-0.9 bar10 bar                                    |
| Structural design                            | Piston gate valve   |
| Reset method                                 | Mechanical spring   |
| KC characters                                | KC EMC  |
| CE marking (see declaration of conformity)   | As per EU EMC directive   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC  |
| Degree of protection                         | IP65<br>NEMA 4  |
| Nominal width                                | 9 mm  |
| Exhaust air function                         | With flow control option Via throttle plate Via individual sub-base |
| Sealing principle                            | Soft  |
| Mounting position                            | Any   |
| Manual override                              | Detenting<br>Non-detenting<br>Covered                               |
| Type of control                              | Pilot-controlled  |
| Pilot air supply port                        | External<br>Internal  |
| Flow direction                               | Any   |
| Measuring principle                          | Inductive   |
| Lap  | Overlap   |
| Sensor reverse polarity protection           | For all electrical connections                                      |
| Signal status display                        | LED   |
| Switching position sensing                   | Normal position with sensor   |

| Feature   | Value  |
|---|--|
| Sensor switching status indication                                      | LED  |
| Pilot pressure MPa  | 0.3 MPa1 MPa   |
| Pilot pressure  | 3 bar10 bar  |
| Flow rate of pneumatic valve  | 1400 l/min   |
| Flow rate of pneumatic valve on individual sub-base                     | 1200 l/min   |
| Optimized flow rate of pneumatic valve, pneumatically concatenated flow | 1350 l/min   |
| Optimized flow rate of pneumatic valve pneumatically concatenated flow  | 1100 l/min   |
| Switching time off  | 54 ms  |
| On switching time   | 20 ms  |
| Pneumatic valve - sensor ON switching time                              | 60 ms  |
| Pneumatic valve - sensor switching time off                             | 11 ms  |
| Duty cycle  | 100%   |
| Max. positive test pulse with 0 signal                                  | 1200 μs  |
| Max. negative test pulse on 1 signal                                    | 1100 μs  |
| Nominal operating voltage DC  | 24 V   |
| Switching output  | PNP  |
| Coil characteristics  | 24 V DC: 1.6 W   |
| Surge resistance  | 2.5 kV   |
| Contamination level   | 3  |
| 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)  | 0 - No corrosion stress  |
| LABS (PWIS) conformity  | VDMA24364-B1/B2-L  |
| Temperature of medium   | -5 °C50 °C   |
| Relative air humidity   | 0 - 90 %   |
| Noise level   | 85 dB(A)   |
| Ambient temperature   | -5 °C50 °C   |
| Max. tightening torque for valve mounting                               | 1.8 Nm2.2 Nm   |
| Product weight  | 281 g  |
| DC sensor operating voltage range                                       | 10 V30 V   |
| Sensor short circuit protection   | Pulsed   |
| Sensor idle current   | 10 mA  |
| Max. output current, sensor   | 200 mA   |
| Sensor max. switching frequency   | 5000 Hz  |
| Sensor residual ripple  | ± 10 %   |
| Sensor voltage drop   | 2 V  |
| Electrical connection   | 4-pin<br>Plug<br>as per ISO 15407-2  |
| Sensor connection   | Plug Cable 4-pin M12x1 0.5 m   |
| Type of mounting  | On sub-base  |
| Pilot air port 12/14  | Sub-base, size 26 mm as per ISO 15407-2  |
| Pilot exhaust air port 82/84  | Ducted<br>Not ducted<br>Optionally:  |
| Pneumatic connection 1  | Sub-base, size 26 mm as per ISO 15407-2  |
| Pneumatic connection 2  | Sub-base, size 26 mm as per ISO 15407-2  |

| Feature                    | Value                                   |
|----------------------------|---|
| Pneumatic connection 3     | Sub-base, size 26 mm as per ISO 15407-2 |
| Pneumatic connection 4     | Sub-base, size 26 mm as per ISO 15407-2 |
| Pneumatic connection 5     | Sub-base, size 26 mm as per ISO 15407-2 |
| Note on materials          | RoHS-compliant                          |
| Seals material             | FPM<br>NBR                              |
| Housing material           | Die-cast aluminum<br>PA                 |
| Material of screws         | Steel, galvanized                       |
| Switching element function | N/C contact                             |