## Air solenoid valve VSVA-B-M52-MZ-A1-1T1L-APP

**FESTO** 

Part number: 8033073





General operating condition

## **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 pressure  | -0.09 MPa 1 MPa   |
| Operating pressure  | -0.9 bar 10 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   |
| Degree of protection  | IP65<br>NEMA 4  |
| Nominal width   | 9 mm  |
| Exhaust air function  | With flow control option<br>Via throttle plate<br>Via individual sub-base |
| Sealing principle   | Soft  |
| Mounting position   | Any   |
| Manual override   | Covered   |
| Type of control   | Pilot-controlled  |
| Pilot air supply port   | External  |
| Flow direction  | Any   |
| Symbol  | 00997392  |
| Measuring principle   | Inductive   |
| Lap   | Overlap   |
| Sensor reverse polarity protection                                      | For all electrical connections  |
| Signal status display   | LED   |
| Switching position sensing  | Normal position with sensor   |
| Sensor switching status indication                                      | LED   |
| Pilot pressure MPa  | 0.3 MPa 1 MPa   |
| Pilot pressure  | 3 bar 10 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  |

| Feature  | Value  |
|--|--|
| 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 °C 50 °C  |
| Relative air humidity  | 0 - 90 %   |
| Noise level  | 85 dB(A)   |
| Ambient temperature  | -5 °C 50 °C  |
| Max. tightening torque for valve mounting                              | 1.8 Nm 2.2 Nm  |
| Product weight   | 264 g  |
| DC sensor operating voltage range                                      | 10 V 30 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<br>3-pin<br>M8x1  |
| 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  |
| 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  |

| Feature                    | Value             |
|----------------------------|-------------------|
| Material of screws         | Steel, galvanized |
| Switching element function | N/C contact       |