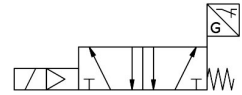
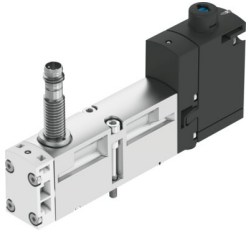


# Air solenoid valve VSVA-B-M52-MZD-A2-1T1L-ANP

Part number: 573203

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                      | Value                                                                     |
|----------------------------------------------|---------------------------------------------------------------------------|
| Valve function                               | 5/2, monostable                                                           |
| Actuation type                               | Electrical                                                                |
| Width                                        | 18 mm                                                                     |
| Standard nominal flow rate                   | 550 l/min                                                                 |
| Pneumatic working port                       | Sub-base, size 18 mm according to ISO 15407-2<br>G1/8                     |
| Operating voltage                            | 24V DC                                                                    |
| 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                                                   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC                                                |
| Degree of protection                         | IP65<br>NEMA 4                                                            |
| Nominal width                                | 5 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                              | Detenting<br>Non-detenting<br>Covered                                     |
| Type of control                              | Pilot-controlled                                                          |
| Pilot air supply port                        | External<br>Internal                                                      |
| Flow direction                               | Non-reversible                                                            |
| 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                                                          |

| Feature                                                                 | Value                                                                                |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Flow rate of pneumatic valve                                            | 750 l/min                                                                            |
| Flow rate of pneumatic valve on individual sub-base                     | 600 l/min                                                                            |
| Optimized flow rate of pneumatic valve, pneumatically concatenated flow | 700 l/min                                                                            |
| Optimized flow rate of pneumatic valve pneumatically concatenated flow  | 550 l/min                                                                            |
| Switching time off                                                      | 38 ms                                                                                |
| On switching time                                                       | 12 ms                                                                                |
| Pneumatic valve - sensor ON switching time                              | 32 ms                                                                                |
| Pneumatic valve - sensor switching time off                             | 9 ms                                                                                 |
| Duty cycle                                                              | 100%                                                                                 |
| Max. positive test pulse with 0 signal                                  | 1500 µs                                                                              |
| Max. negative test pulse on 1 signal                                    | 800 µs                                                                               |
| Nominal operating voltage DC                                            | 24 V                                                                                 |
| Switching output                                                        | NPN                                                                                  |
| 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                               | 0.8 Nm ... 1.2 Nm                                                                    |
| Product weight                                                          | 140 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 18 mm as per ISO 15407-2                                              |
| Pilot exhaust air port 82/84                                            | Ducted<br>Not ducted<br>Optionally:                                                  |
| Pneumatic connection 1                                                  | Sub-base, size 18 mm as per ISO 15407-2                                              |
| Pneumatic connection 2                                                  | Sub-base, size 18 mm as per ISO 15407-2                                              |
| Pneumatic connection 3                                                  | Sub-base, size 18 mm as per ISO 15407-2                                              |
| Pneumatic connection 4                                                  | Sub-base, size 18 mm as per ISO 15407-2                                              |
| Pneumatic connection 5                                                  | Sub-base, size 18 mm as per ISO 15407-2                                              |
| Note on materials                                                       | RoHS-compliant                                                                       |

| Feature                    | Value                   |
|----------------------------|-------------------------|
| Seals material             | FPM<br>NBR              |
| Housing material           | Die-cast aluminum<br>PA |
| Material of screws         | Steel, galvanized       |
| Switching element function | N/C contact             |