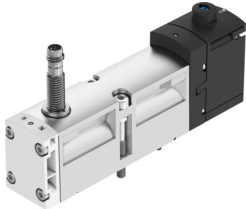


# Air solenoid valve VSVA-B-M52-MZH-A1-1T1L-APP

FESTO

Part number: 8033050



General operating condition

## Data sheet

| Feature                                                                 | Value                                                       |
|-------------------------------------------------------------------------|-------------------------------------------------------------|
| Valve function                                                          | 5/2-way, monostable                                         |
| Actuation type                                                          | Electrical                                                  |
| Width                                                                   | 26 mm                                                       |
| Normal nominal flow rate (normalized to DIN 1343)                       | 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-EMV                                                      |
| 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                                                    | Adjustable<br>Via throttle plate<br>Via individual sub-base |
| Sealing principle                                                       | Soft                                                        |
| Mounting position                                                       | Any                                                         |
| Manual override                                                         | Non-detenting                                               |
| Type of control                                                         | Piloted                                                     |
| Pilot air supply port                                                   | External                                                    |
| Flow direction                                                          | Any                                                         |
| Symbol                                                                  | 00997391                                                    |
| Measuring principle                                                     | Inductive                                                   |
| Lap                                                                     | Positive 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>Alternatively:                                               |
| 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         | Galvanized steel |
| Switching element function | NC contact       |