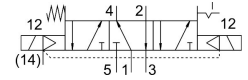


# Air solenoid valve VSVA-B-P53BD-Z-A1-1T1L

Part number: 8039189

**FESTO**



## Data sheet

| Feature                                                                 | Value                                                       |
|-------------------------------------------------------------------------|-------------------------------------------------------------|
| Valve function                                                          | 5/3, connection 4 pressurized, 2 exhausted                  |
| Actuation type                                                          | Electrical                                                  |
| Width                                                                   | 26 mm                                                       |
| Normal nominal flow rate (normalized to DIN 1343)                       | 850 l/min                                                   |
| Pneumatic working port                                                  | Sub-base, size 26 mm according to ISO 15407-1<br>G1/4       |
| Operating voltage                                                       | 24V DC                                                      |
| Operating pressure                                                      | -0.09 MPa...1 MPa<br>-0.9 bar...10 bar                      |
| Structural design                                                       | Piston gate valve                                           |
| Reset method                                                            | Mechanical spring<br>Electrical actuation                   |
| Certification                                                           | CSA (OL)<br>c UL us - recognized (OL)                       |
| 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                                                         | Covered                                                     |
| Type of control                                                         | Piloted                                                     |
| Pilot air supply port                                                   | External                                                    |
| Flow direction                                                          | Non-reversible                                              |
| Lap                                                                     | Negative overlap                                            |
| Signal status display                                                   | LED                                                         |
| Pilot pressure MPa                                                      | 0.3 MPa...1 MPa                                             |
| Pilot pressure                                                          | 3 bar...10 bar                                              |
| Flow rate of pneumatic valve on individual sub-base                     | 900 l/min                                                   |
| Optimized flow rate of pneumatic valve, pneumatically concatenated flow | 950 l/min                                                   |
| Optimized flow rate of pneumatic valve pneumatically concatenated flow  | 850 l/min                                                   |

| Feature                                   | Value                                                                                |
|-------------------------------------------|--------------------------------------------------------------------------------------|
| Asymmetrical switching time off           | 26 ms for control side 12<br>36 ms for control side 14                               |
| Asymmetrical switching time on            | 16 ms for control side 12<br>9 ms for control side 14                                |
| 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                                                                                 |
| 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                            | 301 g                                                                                |
| Electrical connection                     | 4-pin<br>Plug<br>As per ISO 15407-2                                                  |
| Type of mounting                          | On sub-base                                                                          |
| Pilot air port 12/14                      | Sub-base, size 26 mm as per ISO 15407-1                                              |
| 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                                                              |
| Material of screws                        | Galvanized steel                                                                     |