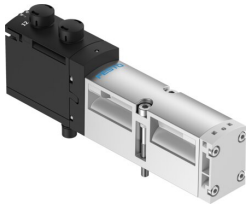
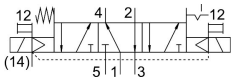
# Air solenoid valve
# VSVA-B-P53BD-ZD-A1-1T1L

Part number: 8031816






## 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 | Detenting<br>Non-detenting |
| 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 |

| Feature | Value |
|---|---|
| Optimized flow rate of pneumatic valve pneumatically concatenated flow | 850 l/min |
| 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 |