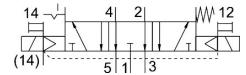


# Solenoid valve

## VSVA-B-P53EP-ZH-A2-1T1L

Part number: 8039191

**FESTO**



## Data sheet

| Feature                                               | Value                                                                     |
|-------------------------------------------------------|---------------------------------------------------------------------------|
| Valve function                                        | 5/3 exhausted                                                             |
| Type of actuation                                     | Electric                                                                  |
| Construction width                                    | 18 mm                                                                     |
| Standard nominal flow rate (standardised to DIN 1343) | 380 l/min                                                                 |
| pneumatic working port                                | Sub-base size 18 mm to ISO 15407-1<br>G1/8                                |
| Operating voltage                                     | 24V DC                                                                    |
| Operating pressure                                    | -0.09 MPa...1 MPa<br>-0.9 bar...10 bar                                    |
| Design                                                | Piston gate valve                                                         |
| Type of reset                                         | Mechanical spring<br>Electrical actuation                                 |
| Degree of protection                                  | IP65<br>NEMA 4                                                            |
| Nominal size                                          | 5 mm                                                                      |
| Exhaust-air function                                  | With flow control option<br>Via throttle plate<br>Via individual sub-base |
| Sealing principle                                     | Soft                                                                      |
| Mounting position                                     | optional                                                                  |
| Manual override                                       | Non-detenting                                                             |
| Type of piloting                                      | Pilot actuated                                                            |
| Pilot air supply                                      | External                                                                  |
| Flow direction                                        | Non-reversible                                                            |
| lap                                                   | Overlap                                                                   |
| Signal status display                                 | LED                                                                       |
| Pilot pressure                                        | 0.3 MPa...1 MPa<br>3 bar...10 bar                                         |
| Flow rate of valve on individual sub-base             | 390 l/min                                                                 |
| Valve flow rate, pneumatically linked, flow optimized | 460 l/min                                                                 |
| Flow rate of pneumatically interlinked valve          | 380 l/min                                                                 |
| Non symmetrical switching time off                    | 30 ms for control side 14                                                 |
| Non symmetrical switching time on                     | 10 ms for control side 12<br>13 ms for control side 14                    |

| Feature                                   | Value                                                                                      |
|-------------------------------------------|--------------------------------------------------------------------------------------------|
| Duty cycle                                | 100%                                                                                       |
| Max. positive test pulse with 0 signal    | 1500 µs                                                                                    |
| Max. negative test pulse with 1 signal    | 800 µs                                                                                     |
| Nominal operating voltage DC              | 24 V                                                                                       |
| Characteristic coil data                  | 24 V DC: 1.6 W                                                                             |
| Immunity to surge                         | 2.5 kV                                                                                     |
| Pollution degree                          | 3                                                                                          |
| Permissible voltage fluctuations          | +/- 10 %                                                                                   |
| Operating medium                          | Compressed air to ISO 8573-1:2010 [7:4:4]                                                  |
| Note on operating and pilot medium        | Lubricated operation possible (in which case lubricated operation will always be required) |
| Vibration resistance                      | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6           |
| Shock resistance                          | Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27                          |
| Corrosion resistance class CRC            | 0 - No corrosion stress                                                                    |
| LABS (PWIS) conformity                    | VDMA24364-B1/B2-L                                                                          |
| Media temperature                         | -5 °C...50 °C                                                                              |
| Relative air humidity                     | 0 - 90%                                                                                    |
| Sound pressure level                      | 85 dB(A)                                                                                   |
| Ambient temperature                       | -5 °C...50 °C                                                                              |
| Max. tightening torque for valve mounting | 0.8 Nm...1.2 Nm                                                                            |
| Product weight                            | 170 g                                                                                      |
| Electrical connection                     | 4-pin<br>Plugs<br>To ISO 15407-2                                                           |
| Type of mounting                          | On sub-base                                                                                |
| Pilot air port 12/14                      | Sub-base size 18 mm to ISO 15407-2                                                         |
| Pilot exhaust port 82/84                  | Ducted<br>Not ducted<br>Either:                                                            |
| Pneumatic connection, port 1              | Sub-base size 18 mm to ISO 15407-2                                                         |
| Pneumatic connection, port 2              | Sub-base size 18 mm to ISO 15407-2                                                         |
| Pneumatic connection, port 3              | Sub-base size 18 mm to ISO 15407-2                                                         |
| Pneumatic connection, port 4              | Sub-base size 18 mm to ISO 15407-2                                                         |
| Pneumatic connection, port 5              | Sub-base size 18 mm to ISO 15407-2                                                         |
| Note on materials                         | RoHS-compliant                                                                             |
| Material seals                            | FPM<br>NBR                                                                                 |
| Material housing                          | Die-cast aluminium<br>PA                                                                   |
| Material screws                           | Galvanised steel                                                                           |