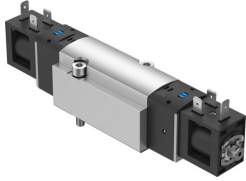


Solenoid valve VSVA-BK-P53E-D-D1-1B2

Part number: 8166595

FESTO



[General operating condition](#)

Data sheet

| Feature | Value |
|--|--|
| Valve function | 5/3, exhausted |
| Actuation type | Electrical |
| Width | 38 mm |
| Valve size | 42 mm |
| Normal nominal flow rate (normalized to DIN 1343) | 1200 l/min |
| Pneumatic working port | Sub-base, size 1 according to ISO 5599-1 |
| Operating voltage | 24V DC |
| Operating pressure | 0.3 MPa ... 0.8 MPa |
| Operating pressure | 3 bar ... 8 bar |
| Structural design | Piston slide with sealing ring |
| Reset method | Mechanical spring |
| Degree of protection | IP65 With plug socket as per IEC 60529 |
| Nominal width | 6.3 mm |
| Width dimension | 43 mm |
| Exhaust air function | With flow control option |
| Sealing principle | Soft |
| Mounting position | Any |
| Conforms to standard | ISO 5599-1 |
| Manual override | Detenting Non-detenting |
| ISO code | 157 |
| Type of control | Pilot-controlled |
| Pilot air supply port | Internal |
| Flow direction | Non-reversible |
| Symbol | 00991082 |
| Lap | Underlap |
| Signal status display | With accessories |
| b-value | 0.26 |
| C value | 5.63 l/sbar |
| Flow rate of pneumatic valve | 1289 l/min |
| Flow rate of pneumatic valve on individual sub-base | 1289 l/min |
| Optimized flow rate of pneumatic valve pneumatically concatenated flow | 1283 l/min |
| Switching time off | 37.4 ms |
| On switching time | 12.4 ms |

| Feature | Value |
|---|--|
| Changeover time | 18.9 ms |
| Duty cycle | 100% |
| Max. positive test pulse with 0 signal | 2500 µs |
| Max. negative test pulse on 1 signal | 1100 µs |
| Nominal operating voltage DC | 24 V |
| Coil characteristics | 24 V DC: 3.3 W |
| 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) | 1 - Low corrosion stress |
| LABS (PWIS) conformity | VDMA24364 zone III |
| Temperature of medium | -5 °C ... 50 °C |
| Pilot medium | Compressed air as per ISO 8573-1:2010 [7:4:4] |
| Ambient temperature | -5 °C ... 50 °C |
| Max. tightening torque for valve mounting | 5 Nm |
| Product weight | 402 g |
| Electrical connection | Form B As per industrial standard (11 mm) |
| Type of mounting | On sub-base |
| Venting hole connection | Not ducted |
| Pneumatic connection 1 | Sub-base, size 1 as per ISO 5599-1 |
| Pneumatic connection 2 | Sub-base, size 1 as per ISO 5599-1 |
| Pneumatic connection 3 | Sub-base, size 1 as per ISO 5599-1 |
| Pneumatic connection 4 | Sub-base, size 1 as per ISO 5599-1 |
| Pneumatic connection 5 | Sub-base, size 1 as per ISO 5599-1 |
| Note on materials | RoHS-compliant |
| Seals material | HNBR NBR |
| Housing material | Wrought aluminum alloy |
| Piston slide material | Wrought aluminum alloy |
| Material of screws | Steel, galvanized |