

Air solenoid valve VSVA-B-P53U-ZH-A2-1R5L

Part number: 546783

FESTO



[General operating condition](#)

Data sheet

| Feature | Value |
|--|---|
| Valve function | 5/3, pressurized |
| Actuation type | Electrical |
| Width | 18 mm |
| Normal nominal flow rate (normalized to DIN 1343) | 450 l/min |
| Pneumatic working port | Sub-base, size 18 mm as per ISO 15407-1 Connecting plate size O2 according to VDMA 24563 |
| Operating voltage | 24V DC |
| Operating pressure | -0.09 MPa ... 1 MPa |
| Operating pressure | -0.9 bar ... 10 bar |
| Structural design | Piston gate valve |
| Reset method | Mechanical spring |
| Certification | C-Tick c UL us - Recognized (OL) |
| CE marking (see declaration of conformity) | As per EU EMC directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| Degree of protection | IP65 |
| Nominal width | 5 mm |
| Exhaust air function | With flow control option |
| Sealing principle | Soft |
| Mounting position | Any |
| Conforms to standard | ISO 15407-1 VDMA 24563 |
| Manual override | Non-detenting |
| Type of control | Pilot-controlled |
| Pilot air supply port | External |
| Flow direction | Reversible |
| Symbol | 00992940 |
| Lap | Overlap |
| Reverse polarity protection | for all electrical connections |
| Additional functions | Safety shut-down |
| Signal status display | LED |
| Pilot pressure MPa | 0.3 MPa ... 0.8 MPa |
| Pilot pressure | 3 bar ... 8 bar |
| Flow rate of pneumatic valve | 650 l/min |
| Flow rate of pneumatic valve on individual sub-base | 500 l/min |
| Optimized flow rate of pneumatic valve pneumatically concatenated flow | 450 l/min |

| Feature | Value |
|--|--|
| Switching time off | 36 ms |
| On switching time | 15 ms |
| DC operating voltage range | 21.6 V ... 26.4 V |
| Duty cycle | 100% |
| Max. positive test pulse with 0 signal | 500 µs |
| Max. negative test pulse on 1 signal | 500 µs |
| Coil characteristics | 24 V DC: low-current phase 1.0 W, high-current phase 2.4 W |
| 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) | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |
| Temperature of medium | -5 °C ... 50 °C |
| Relative air humidity | 0 - 90 % |
| Protection against direct and indirect contact | PELV |
| Ambient temperature | -5 °C ... 50 °C |
| Max. tightening torque for valve mounting | 0.9 Nm ... 1.1 Nm |
| Product weight | 140 g |
| Electrical connection | 3-pin M12x1 Central plug Round design |
| Type of mounting | On sub-base |
| Note on materials | RoHS-compliant |