

# Solenoid valve VSVA-B-P53U-ZH-A2-5C1

Part number: 547163

FESTO



 [General operating condition](#)

## Data sheet

| Feature   | Value  |
|---|--|
| Valve function  | 5/3-way, pressurised   |
| Type of actuation                                     | Electrical   |
| Valve size  | 18 mm  |
| Standard nominal flow rate (standardised to DIN 1343) | 450 l/min  |
| pneumatic working port                                | Sub-base size 18 mm to ISO 15407-1<br>Sub-base size 02 to VDMA 24563<br>G1/8 |
| Operating voltage                                     | 12 V DC  |
| Operating pressure                                    | -0.09 MPa ... 1 MPa  |
| Operating pressure                                    | -0.9 bar ... 10 bar  |
| Design  | Piston gate valve  |
| Type of reset   | Mechanical spring  |
| Degree of protection                                  | IP65<br>NEMA 4   |
| Nominal size  | 5 mm   |
| Exhaust-air function                                  | Can be throttled   |
| Sealing principle                                     | Soft   |
| Mounting position                                     | Any  |
| Conforms to standard                                  | ISO 15407-1<br>VDMA 24563  |
| Manual override                                       | Non-detenting  |
| Type of piloting                                      | Piloted  |
| Pilot air supply                                      | External   |
| Flow direction  | Reversible   |
| Symbol  | 00992940   |
| lap   | Overlap  |
| Signal status display                                 | LED  |
| Pilot pressure  | 0.3 MPa ... 1 MPa  |
| Pilot pressure  | 3 bar ... 10 bar   |
| Flow rate of valve                                    | 650 l/min  |
| Flow rate of valve on individual sub-base             | 500 l/min  |
| Flow rate of pneumatically interlinked valve          | 450 l/min  |
| Switching time off                                    | 30 ms  |
| Switching time on                                     | 18 ms  |
| Switching time reversal                               | 20 ms  |
| Duty cycle  | 100%   |
| Characteristic coil data                              | 12 V DC: 1.8 W   |

| Feature                                   | Value  |
|---|--|
| Permissible voltage fluctuations          | -15% / +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)   |
| Pilot medium                              | Compressed air to ISO 8573-1:2010 [7:4:4]  |
| Ambient temperature                       | -5 °C ... 50 °C  |
| Max. tightening torque for valve mounting | 1 Nm   |
| Product weight                            | 174 g  |
| Electrical connection                     | Type C<br>To DIN EN 175301-803<br>Without PE conductor                                     |
| Type of mounting                          | On sub-base  |
| Auxiliary pilot air port 12               | Sub-base size 18 mm to ISO 15407-1   |
| Auxiliary pilot air port 14               | Sub-base size 18 mm to ISO 15407-1   |
| Pilot exhaust port 82/84                  | Ducted<br>Not ducted as per standard   |
| Pneumatic connection, port 1              | Sub-base size 18 mm to ISO 15407-1   |
| Pneumatic connection, port 2              | Sub-base size 18 mm to ISO 15407-1   |
| Pneumatic connection, port 3              | Sub-base size 18 mm to ISO 15407-1   |
| Pneumatic connection, port 4              | Sub-base size 18 mm to ISO 15407-1   |
| Pneumatic connection, port 5              | Sub-base size 18 mm to ISO 15407-1   |
| Pilot control interface                   | To ISO 15218   |
| Note on materials                         | RoHS compliant   |
| Material seals                            | HNBR<br>NBR  |
| Material housing                          | Die-cast aluminium   |
| Material screws                           | Steel<br>Galvanised  |