

# Solenoid valve VSVA-B-P53U-D-D1-F8

Part number: 8198531

FESTO



 [General operating condition](#)

## Data sheet

| Feature                                               | Value                                       |
|-------------------------------------------------------|---------------------------------------------|
| Valve function                                        | 5/3-way, pressurised                        |
| Type of actuation                                     | Electrical                                  |
| Construction width                                    | 42 mm                                       |
| Nominal flow rate standardised according to ISO 8778  | 1600 l/min                                  |
| pneumatic working port                                | Sub-base size 1 to ISO 5599-1               |
| Operating pressure                                    | 0.3 MPa ... 1 MPa                           |
| Operating pressure                                    | 3 bar ... 10 bar                            |
| Design                                                | Piston gate valve                           |
| Type of reset                                         | Mechanical spring                           |
| Degree of protection                                  | IP65<br>NEMA 4                              |
| Nominal size                                          | 8 mm                                        |
| Grid dimension                                        | 43 mm                                       |
| Exhaust-air function                                  | Can be throttled<br>Via individual sub-base |
| Sealing principle                                     | Soft                                        |
| Mounting position                                     | Any                                         |
| Conforms to standard                                  | ISO 5599-1                                  |
| Manual override                                       | Detenting                                   |
| Type of piloting                                      | Piloted                                     |
| Pilot air supply                                      | Internal                                    |
| Flow direction                                        | Non-reversible                              |
| Symbol                                                | 00991083                                    |
| lap                                                   | Overlap                                     |
| Pilot pressure                                        | 0.3 MPa ... 1 MPa                           |
| Pilot pressure                                        | 3 bar ... 10 bar                            |
| Suitability for vacuum                                | No                                          |
| b value                                               | 0.14                                        |
| C value                                               | 6.799 l/sbar                                |
| Flow rate of valve                                    | 1500 l/min                                  |
| Flow rate of valve on individual sub-base             | 1300 l/min                                  |
| Valve flow rate, pneumatically linked, flow optimized | 1400 l/min                                  |
| Flow rate of pneumatically interlinked valve          | 1200 l/min                                  |
| Max. switching frequency                              | 5 Hz                                        |
| Switching time off                                    | 55 ms                                       |
| Switching time on                                     | 22 ms                                       |

| Feature                                   | Value                                                                                      |
|-------------------------------------------|--------------------------------------------------------------------------------------------|
| Switching time reversal                   | 27 ms                                                                                      |
| Duty cycle                                | 100%                                                                                       |
| 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) |
| LABS (PWIS) conformity                    | VDMA24364-B1/B2-L                                                                          |
| Media temperature                         | -10 °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                       | -10 °C ... 50 °C                                                                           |
| Max. tightening torque for valve mounting | 1 Nm                                                                                       |
| Product weight                            | 405 g                                                                                      |
| Type of mounting                          | On sub-base                                                                                |
| Pilot exhaust port 82                     | M5<br>Not ducted                                                                           |
| Pilot exhaust port 84                     | M5<br>Not ducted                                                                           |
| Pilot air port 12                         | Sub-base size 1 to ISO 5599-1                                                              |
| Pilot air port 14                         | Sub-base size 1 to ISO 5599-1                                                              |
| Pneumatic connection, port 1              | Sub-base size 1 to ISO 5599-1                                                              |
| Pneumatic connection, port 2              | Sub-base size 1 to ISO 5599-1                                                              |
| Pneumatic connection, port 3              | Sub-base size 1 to ISO 5599-1                                                              |
| Pneumatic connection, port 4              | Sub-base size 1 to ISO 5599-1                                                              |
| Pneumatic connection, port 5              | Sub-base size 1 to ISO 5599-1                                                              |
| Pilot control interface                   | To ISO 15218                                                                               |
| Note on materials                         | RoHS compliant                                                                             |
| Material seals                            | NBR                                                                                        |
| Material housing                          | Die-cast aluminium                                                                         |
| Material screws                           | Steel                                                                                      |