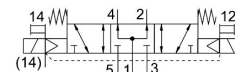


# Solenoid valve

## VSVA-B-P53U-ZH-A2-1R5L

Part number: 546783

FESTO



## Data sheet

| Feature                                               | Value                                                                |
|-------------------------------------------------------|----------------------------------------------------------------------|
| Valve function                                        | 5/3-way, pressurised                                                 |
| Type of actuation                                     | Electric                                                             |
| Construction width                                    | 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 |
| 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                                                    |
| Approval                                              | C-Tick<br>c UL us - Recognized (OL)                                  |
| CE mark (see declaration of conformity)               | To EU EMC Directive                                                  |
| UKCA marking (see declaration of conformity)          | To UK instructions for EMC<br>To UK RoHS instructions                |
| Degree of protection                                  | IP65                                                                 |
| Nominal size                                          | 5 mm                                                                 |
| Exhaust-air function                                  | With flow control option                                             |
| Sealing principle                                     | Soft                                                                 |
| Mounting position                                     | optional                                                             |
| Conforms to standard                                  | ISO 15407-1<br>VDMA 24563                                            |
| Manual override                                       | Non-detenting                                                        |
| Type of piloting                                      | Pilot actuated                                                       |
| Pilot air supply                                      | External                                                             |
| Flow direction                                        | Reversible                                                           |
| lap                                                   | Overlap                                                              |
| Reverse polarity protection                           | For all electrical connections                                       |
| Additional functions                                  | Holding current reduction<br>Safety shut-off                         |
| Signal status display                                 | LED                                                                  |

| Feature                                        | Value                                                                                      |
|------------------------------------------------|--------------------------------------------------------------------------------------------|
| Pilot pressure                                 | 0.3 MPa...0.8 MPa<br>3 bar...8 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                             | 36 ms                                                                                      |
| Switching time on                              | 15 ms                                                                                      |
| Operational voltage range DC                   | 21.6 V...26.4 V                                                                            |
| Duty cycle                                     | 100%                                                                                       |
| Max. positive test pulse with 0 signal         | 500 µs                                                                                     |
| Max. negative test pulse with 1 signal         | 500 µs                                                                                     |
| Characteristic coil data                       | 24 V DC: low-current phase 1.0 W, high-current phase 2.4 W                                 |
| 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                 | 2 - Moderate corrosion stress                                                              |
| LABS (PWIS) conformity                         | VDMA24364-B1/B2-L                                                                          |
| Media temperature                              | -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<br>M12x1<br>Central plug<br>Round design                                             |
| Type of mounting                               | On sub-base                                                                                |
| Note on materials                              | RoHS-compliant                                                                             |