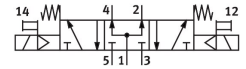


# Air solenoid valve

## VSVA-B-P53U-H-A1-1R2L

Part number: 534541

**FESTO**



## Data sheet

| Feature                                           | Value                                                       |
|---------------------------------------------------|-------------------------------------------------------------|
| Valve function                                    | 5/3-way, pressurized                                        |
| Actuation type                                    | Electrical                                                  |
| Width                                             | 26 mm                                                       |
| Normal nominal flow rate (normalized to DIN 1343) | 1000 l/min                                                  |
| Pneumatic working port                            | Sub-base, size 26 mm according to ISO 15407-1               |
| Operating voltage                                 | 24V DC                                                      |
| Operating pressure                                | 0.3 MPa...0.8 MPa<br>3 bar...8 bar                          |
| Structural design                                 | Piston gate valve                                           |
| Reset method                                      | Mechanical spring                                           |
| Certification                                     | RCM compliance mark<br>c UL us - recognized (OL)            |
| CE marking (see declaration of conformity)        | As per EU EMC directive                                     |
| UKCA marking (see declaration of conformity)      | To UK instructions for EMC<br>To UK RoHS instructions       |
| Degree of protection                              | IP65<br>NEMA 4                                              |
| Nominal width                                     | 9 mm                                                        |
| Width dimension                                   | 27 mm                                                       |
| Exhaust air function                              | Adjustable<br>Via throttle plate<br>Via individual sub-base |
| Sealing principle                                 | Soft                                                        |
| Mounting position                                 | Any                                                         |
| Conforms to standard                              | ISO 15407-1                                                 |
| Manual override                                   | Non-detenting                                               |
| Type of control                                   | Piloted                                                     |
| Pilot air supply port                             | Internal                                                    |
| Flow direction                                    | Non-reversible                                              |
| Lap                                               | Positive overlap                                            |
| Reverse polarity protection                       | for all electrical connections                              |
| Additional functions                              | Holding current reduction<br>Safety shut-off                |

| Feature                                                                | Value                                                                                |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Signal status display                                                  | LED                                                                                  |
| Flow rate of pneumatic valve                                           | 1400 l/min                                                                           |
| Flow rate of pneumatic valve on individual sub-base                    | 1100 l/min                                                                           |
| Optimized flow rate of pneumatic valve pneumatically concatenated flow | 1000 l/min                                                                           |
| Switching time off                                                     | 52 ms                                                                                |
| On switching time                                                      | 20 ms                                                                                |
| Duty cycle                                                             | 100%                                                                                 |
| Max. positive test pulse with 0 signal                                 | 400 µs                                                                               |
| Max. negative test pulse on 1 signal                                   | 100 µs                                                                               |
| Nominal pick-up current per solenoid coil                              | 110 mA up to 20 ms                                                                   |
| Nominal current with current reduction                                 | 30 mA after 20 ms                                                                    |
| Coil characteristics                                                   | 24 V DC: low-current phase 1.0 W, high-current phase 2.4 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)                                       | 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                                                                                 |
| 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                              | 1.8 Nm...2.2 Nm                                                                      |
| Product weight                                                         | 270 g                                                                                |
| Electrical connection                                                  | 4-pin<br>M8x1<br>Central plug<br>Round design                                        |
| Type of mounting                                                       | On sub-base<br>With through-hole and screw                                           |
| Note on materials                                                      | RoHS compliant                                                                       |
| Seals material                                                         | FPM<br>HNBR<br>NBR                                                                   |
| Housing material                                                       | Die-cast aluminum                                                                    |