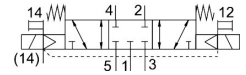
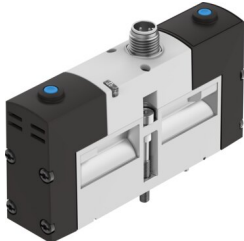


# Air solenoid valve VSVA-B-P53C-ZH-A1-1R5L

Part number: 534549

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                      | Value                                                                     |
|----------------------------------------------|---------------------------------------------------------------------------|
| Valve function                               | 5/3, closed                                                               |
| Actuation type                               | Electrical                                                                |
| Width                                        | 26 mm                                                                     |
| Standard nominal flow rate                   | 1000 l/min                                                                |
| Pneumatic working port                       | Sub-base, size 26 mm according to ISO 15407-1                             |
| Operating voltage                            | 24V DC                                                                    |
| Operating pressure                           | -0.09 MPa ... 1.6 MPa                                                     |
| Operating pressure                           | -0.9 bar ... 16 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                         | With flow control option<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                              | Pilot-controlled                                                          |
| Pilot air supply port                        | External                                                                  |
| Flow direction                               | Any                                                                       |
| Symbol                                       | 00992938                                                                  |
| Lap                                          | Overlap                                                                   |
| Reverse polarity protection                  | for all electrical connections                                            |
| Additional functions                         | Holding current reduction<br>Safety shut-down                             |
| Signal status display                        | LED                                                                       |
| Pilot pressure MPa                           | 0.3 MPa ... 0.8 MPa                                                       |
| Pilot pressure                               | 3 bar ... 8 bar                                                           |

| Feature                                                                | Value                                                                                |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| b-value                                                                | 0.24                                                                                 |
| C value                                                                | 4.35 l/sbar                                                                          |
| 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 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                                                  | 3-pin<br>M12x1<br>Central plug<br>Round design                                       |
| Type of mounting                                                       | With through-hole and screw                                                          |
| Pilot air port 12/14                                                   | Sub-base, size 26 mm as per ISO 15407-1                                              |
| Pilot exhaust air port 82/84                                           | Ducted<br>Not ducted as per standard<br>Optionally:                                  |
| Note on materials                                                      | RoHS-compliant                                                                       |
| Seals material                                                         | FPM<br>HNBR<br>NBR                                                                   |
| Housing material                                                       | Die-cast aluminum                                                                    |