

# solenoid valve

## VSVA-B-P53U-ZD-D1-1T1L

Part number: 543700

FESTO

For valve terminal VTSA.



## Data sheet

| Feature  | Value  |
|--|--|
| Valve function   | 5/3 pressurised  |
| Type of actuation  | electrical   |
| Width  | 42 mm  |
| Standard nominal flow rate                                   | 1,200 l/min  |
| Operating pressure MPa                                       | -0.09 ... 1 MPa  |
| Operating pressure   | -0.9 ... 10 bar  |
| Design structure   | Piston slide   |
| Authorisation  | c UL us - Recognized (OL)  |
| Protection class   | IP65<br>NEMA 4   |
| Exhaust-air function   | throttleable<br>Via throttle plate<br>Via individual sub-base                                  |
| Sealing principle  | soft   |
| Assembly position  | Any  |
| Manual override  | detenting<br>Pushing<br>Covered  |
| Type of piloting   | Piloted  |
| Pilot air supply   | external   |
| Flow direction   | Any  |
| Signal status display  | LED  |
| Pilot pressure MPa   | 0.3 ... 1 MPa  |
| Pilot pressure   | 3 ... 10 bar   |
| Flow rate of valve   | 1,700 l/min  |
| Flow rate of valve on individual sub-base                    | 1,400 l/min  |
| Optimised flow rate of valve pneumatically concatenated flow | 1,690 l/min  |
| Flow rate of pneumatically linked valve                      | 1,200 l/min  |
| Switching time off   | 65 ms  |
| Switching time on  | 22 ms  |
| Max. positive test pulse with logic 0                        | 1,400 µs   |
| Max. negative test pulse with logic 1                        | 900 µs   |
| Nominal breakaway current per solenoid coil                  | 72 mA up to 30 ms  |
| Characteristic coil data                                     | 24 V DC: 1.6 W   |
| Surge strength   | 2.5 kV   |
| Degree of contamination                                      | 3  |
| Permissible voltage fluctuation                              | +/- 10 %   |
| Operating medium   | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                                       |
| Note on operating and pilot medium                           | Lubricated operation possible (subsequently required for further operation)                    |
| Vibration resistance   | Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 |
| Shock resistance   | Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27              |

| <b>Feature</b>                          | <b>Value</b>                                     |
|---|--|
| Corrosion resistance classification CRC | 0 - No corrosion stress                          |
| PWIS conformity                         | VDMA24364-B1/B2-L                                |
| Relative air humidity                   | 0 - 90 %   |
| Ambient temperature                     | -5 ... 50 °C                                     |
| Product weight                          | 456 g  |
| Electrical connection                   | Plug-in<br>as per ISO 5599-2                     |
| Mounting type                           | On sub-base                                      |
| Auxiliary pilot air port 12/14          | Sub-base size 1 to ISO 5599-2                    |
| Pilot exhaust port 82/84                | Optional<br>Not ducted as per standard<br>Ducted |
| Pneumatic connection, port 1            | Sub-base size 1 to ISO 5599-2                    |
| Pneumatic connection, port 2            | Sub-base size 1 to ISO 5599-2                    |
| Pneumatic connection, port 3            | Sub-base size 1 to ISO 5599-2                    |
| Pneumatic connection, port 4            | Sub-base size 1 to ISO 5599-2                    |
| Pneumatic connection, port 5            | Sub-base size 1 to ISO 5599-2                    |
| Materials note                          | Conforms to RoHS                                 |
| Material seals                          | FPM<br>HNBR<br>NBR                               |
| Material housing                        | Aluminium die cast<br>PA                         |
| Material screws                         | Galvanised steel                                 |