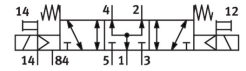
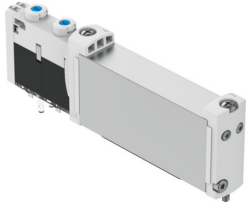


# Solenoid valve VUVG-B14-P53U-ZT-F-1T1L-F1A

Part number: 8141534

**FESTO**



 [General operating condition](#)

## Data sheet

| Feature                                               | Value                                                                                                                                                                                                                          |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Valve function                                        | 5/3-way, pressurised                                                                                                                                                                                                           |
| Type of actuation                                     | Electric                                                                                                                                                                                                                       |
| Valve size                                            | 14 mm                                                                                                                                                                                                                          |
| Standard nominal flow rate (standardised to DIN 1343) | 470 l/min                                                                                                                                                                                                                      |
| pneumatic working port                                | Flange                                                                                                                                                                                                                         |
| Operating voltage                                     | 24V DC                                                                                                                                                                                                                         |
| Operating pressure                                    | -0.09 MPa ... 1 MPa                                                                                                                                                                                                            |
| Operating pressure                                    | -0.9 bar ... 10 bar                                                                                                                                                                                                            |
| Design                                                | Piston gate valve                                                                                                                                                                                                              |
| Type of reset                                         | Mechanical spring                                                                                                                                                                                                              |
| Approval                                              | c UL us - Recognized (OL)                                                                                                                                                                                                      |
| Degree of protection                                  | IP40                                                                                                                                                                                                                           |
| Exhaust-air function                                  | With flow control option                                                                                                                                                                                                       |
| Sealing principle                                     | Soft                                                                                                                                                                                                                           |
| Mounting position                                     | optional                                                                                                                                                                                                                       |
| Manual override                                       | Detenting<br>Non-detenting                                                                                                                                                                                                     |
| Type of piloting                                      | Pilot actuated                                                                                                                                                                                                                 |
| Pilot air supply                                      | External                                                                                                                                                                                                                       |
| Flow direction                                        | Reversible                                                                                                                                                                                                                     |
| Symbol                                                | 00991128                                                                                                                                                                                                                       |
| lap                                                   | Overlap                                                                                                                                                                                                                        |
| Variants                                              | Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. |
| Signal status display                                 | LED                                                                                                                                                                                                                            |
| Pilot pressure                                        | 0.3 MPa ... 0.8 MPa                                                                                                                                                                                                            |
| Pilot pressure                                        | 3 bar ... 8 bar                                                                                                                                                                                                                |
| Max. switching frequency                              | 3 Hz                                                                                                                                                                                                                           |
| Switching time off                                    | 42 ms                                                                                                                                                                                                                          |
| Switching time on                                     | 15 ms                                                                                                                                                                                                                          |
| Switching time reversal                               | 25 ms                                                                                                                                                                                                                          |
| Duty cycle                                            | 100%                                                                                                                                                                                                                           |
| Max. positive test pulse with 0 signal                | 1600 µs                                                                                                                                                                                                                        |
| Max. negative test pulse with 1 signal                | 3000 µs                                                                                                                                                                                                                        |
| Characteristic coil data                              | 22 V DC: 1.0 W                                                                                                                                                                                                                 |

| Feature                                            | Value                                                                                                                                                                                                                 |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Permissible voltage fluctuations                   | +/- 10 %                                                                                                                                                                                                              |
| 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                     | 0 - No corrosion stress                                                                                                                                                                                               |
| LABS (PWIS) conformity                             | VDMA24364 zone III                                                                                                                                                                                                    |
| Suitability for the production of Li-ion batteries | Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class                                    | Class 6 according to ISO 14644-1                                                                                                                                                                                      |
| Media temperature                                  | -5 °C ... 60 °C                                                                                                                                                                                                       |
| Pilot medium                                       | Compressed air to ISO 8573-1:2010 [7:4:4]                                                                                                                                                                             |
| Ambient temperature                                | -5 °C ... 60 °C                                                                                                                                                                                                       |
| Product weight                                     | 95 g                                                                                                                                                                                                                  |
| Electrical connection                              | Via sub-base                                                                                                                                                                                                          |
| Type of mounting                                   | On manifold rail                                                                                                                                                                                                      |
| Note on materials                                  | RoHS-compliant                                                                                                                                                                                                        |
| Material seals                                     | HNBR<br>NBR                                                                                                                                                                                                           |
| Material housing                                   | Wrought aluminium alloy                                                                                                                                                                                               |