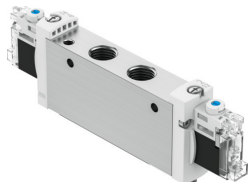


# Solenoid valve

## VUVG-L18-P53E-ZT-G14-1H2L-F1A

Part number: 817 2848

**FESTO**



## Data sheet

| Feature                                | Value  |
|--|--|
| Valve function                         | 5/3, exhausted                                   |
| Actuation type                         | Electrical                                       |
| Valve size                             | 18 mm  |
| Standard nominal flow rate             | 910 l/min  |
| Pneumatic working port                 | G1/4   |
| Operating voltage                      | 24V DC   |
| Operating pressure                     | -0.09 MPa...1 MPa<br>-0.9 bar...10 bar           |
| Structural design                      | Piston gate valve                                |
| Reset method                           | Mechanical spring                                |
| Certification                          | RCM compliance mark<br>c UL us - Recognized (OL) |
| Certificate issuing authority          | UL MH19482                                       |
| Degree of protection                   | IP40   |
| Nominal width                          | 6.5 mm   |
| Exhaust air function                   | With flow control option                         |
| Sealing principle                      | Soft   |
| Mounting position                      | Any  |
| Manual override                        | Detenting<br>Non-detenting<br>Covered            |
| Type of control                        | Pilot-controlled                                 |
| Pilot air supply port                  | External   |
| Lap                                    | Indefinite overlap                               |
| Pilot pressure MPa                     | 0.3 MPa...0.8 MPa                                |
| Pilot pressure                         | 3 bar...8 bar                                    |
| Suitability for vacuum                 | yes  |
| Switching time off                     | 68 ms  |
| On switching time                      | 20 ms  |
| Changeover time                        | 39 ms  |
| Duty cycle                             | 100%   |
| Max. positive test pulse with 0 signal | 700 µs   |

| Feature  | Value   |
|--|---|
| Max. negative test pulse on 1 signal               | 900 µs  |
| Coil characteristics                               | 24 V DC: 0.8 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  |
| Restricted ambient and media temperature           | -5 - 50 °C<br>Without holding power reduction   |
| Shock resistance                                   | Shock test with severity level 2 as per 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 | Product corresponds to Festo's internal product definition for use in battery production: 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 5 according to ISO 14644-1  |
| Storage temperature                                | -20 °C...60 °C  |
| Temperature of medium                              | -5 °C...50 °C   |
| Pilot medium                                       | Compressed air as per ISO 8573-1:2010 [7:4:4]   |
| Ambient temperature                                | -5 °C...50 °C   |
| Product weight                                     | 160 g   |
| Electrical connection                              | 2-pin<br>Connection diagram H, horizontal connection<br>Plug  |
| Type of mounting                                   | On terminal strip<br>With through-hole<br>Optionally:   |
| Pilot air port 12/14                               | M5  |
| Pneumatic connection 1                             | G1/4  |
| Pneumatic connection 2                             | G¼  |
| Pneumatic connection 3                             | G1/4  |
| Pneumatic connection 4                             | G1/4  |
| Pneumatic connection 5                             | G1/4  |
| Note on materials                                  | RoHS-compliant  |
| Seals material                                     | HNBR<br>NBR   |
| Housing material                                   | Wrought aluminum alloy  |
| Material of screws                                 | Steel, coated   |