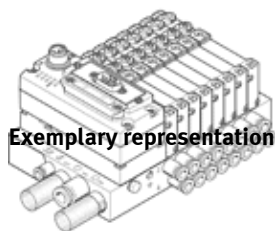


# valve terminal VTUG-F1A

Part number: 8143237

**FESTO**



Exemplary representation

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature  | Value  |
|--|--|
| Electrical connection  | Multi-pin plug<br>I-Port<br>IO-Link<br>AP interface  |
| Electrical I/O system  | No   |
| Operating medium   | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                                       |
| Pilot 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)                    |
| Medium temperature   | -5 ... 60 °C   |
| Ambient temperature  | -5 ... 60 °C   |
| Storage temperature  | -10 ... 60 °C  |
| Protection class   | IP40   |
| Corrosion resistance classification CRC                              | 2 - Moderate corrosion stress  |
| 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              |
| Operating pressure MPa   | -0.09 ... 1 MPa  |
| Operating pressure   | -0.9 ... 10 bar  |
| Pilot pressure MPa   | 0.15 ... 0.8 MPa   |
| Pilot pressure   | 1.5 ... 8 bar  |
| Operating pressure for valve terminal with internal pilot air supply | 0.15 ... 0.8 MPa<br>1.5 ... 8 bar<br>21.75 ... 116 psi   |
| PWIS conformity  | VDMA24364 zone III   |
| RSBP classification to CD-0033                                       | F1a  |
| Cleanroom class  | ISO class 6  |
| CE mark (see declaration of conformity)                              | to EU directive for EMC<br>in accordance with EU RoHS directive                                |
| UKCA marking (see declaration of conformity)                         | To UK instructions for EMC<br>To UK RoHS instructions  |
| Authorisation  | RCM Mark<br>c UL us - Recognized (OL)  |
| Certificate issuing department                                       | UL MH19482   |
| Materials note   | Conforms to RoHS   |
| Material seals   | HNBR<br>NBR  |
| Valve terminal structure   | Fixed-grid   |
| Max. number of valve positions                                       | 24   |
| Max. no. of pressure zones   | 13   |
| Type of actuation  | electrical   |
| Valve function   | 2x3/2 closed, monostable<br>2x3/2 open, monostable   |

| Feature                                     | Value   |
|---|---|
|   | 2x3/2 open/closed, monostable<br>3/2 closed, monostable<br>3/2 open, monostable<br>5/2 bistable<br>5/2 monostable<br>5/3 pressurised<br>5/3 exhausted<br>5/3 closed |
| Design structure                            | Piston slide  |
| Sealing principle                           | soft  |
| Type of piloting                            | Piloted   |
| Valve size                                  | 10 mm<br>14 mm  |
| Pilot air supply                            | external<br>Internal  |
| Max. standard nominal flow rate             | 330 l/min at 10 mm<br>630 l/min at 14 mm  |
| Standard nominal flow rate                  | 130 ... 630 l/min   |
| Suitability for vacuum                      | Yes   |
| Exhaust-air function                        | throttleable  |
| Variants                                    | Recommended for production facilities for the manufacture of lithium-ion batteries  |
| Pneumatic connection, port 1                | G1/8<br>G1/4<br>QS-6<br>QS-8<br>QS-10<br>QS-12  |
| Auxiliary pilot air port 12/14              | M5  |
| Signal status display                       | LED   |
| Nominal operating voltage DC                | 24 V  |
| Permissible voltage fluctuation             | +/- 10 %<br>+/- 25 %  |
| Nominal breakaway current per solenoid coil | 47 mA up to 20 ms   |
| Nominal current with current reduction      | 15.5 mA after 20 ms   |