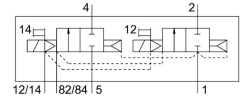
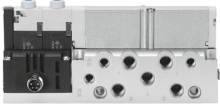


# Air solenoid valve VMPA1-M1H-I-S-M7-PI

Part number: 545231

**FESTO**



## Data sheet

| Feature                                           | Value                                                 |
|---------------------------------------------------|-------------------------------------------------------|
| Valve function                                    | 2x2/2 closed, monostable                              |
| Actuation type                                    | Electrical                                            |
| Valve size                                        | 10 mm                                                 |
| Normal nominal flow rate (normalized to DIN 1343) | 260 l/min                                             |
| Pneumatic working port                            | M7                                                    |
| Operating voltage                                 | 24V DC                                                |
| Operating pressure                                | 0.3 MPa...1 MPa<br>3 bar...10 bar                     |
| Structural design                                 | Piston gate valve                                     |
| Reset method                                      | Pneumatic spring                                      |
| Certification                                     | c UL us - recognized (OL)                             |
| CE marking (see declaration of conformity)        | As per EU EMC directive<br>As per EU RoHS directive   |
| UKCA marking (see declaration of conformity)      | To UK instructions for EMC<br>To UK RoHS instructions |
| Degree of protection                              | IP65<br>As per IEC 60529                              |
| Exhaust air function                              | Adjustable                                            |
| Sealing principle                                 | Soft                                                  |
| Mounting position                                 | Any                                                   |
| Manual override                                   | Detenting<br>Non-detenting                            |
| Type of control                                   | Piloted                                               |
| Pilot air supply port                             | External                                              |
| Flow direction                                    | Non-reversible                                        |
| Lap                                               | Positive overlap                                      |
| Signal status display                             | Yes                                                   |
| Pilot pressure MPa                                | 0.3 MPa...0.8 MPa                                     |
| Pilot pressure                                    | 3 bar...8 bar                                         |
| Suitability for vacuum                            | No                                                    |
| Standard nominal flow rate with QS-6              | 230 l/min                                             |
| Switching time off                                | 20 ms                                                 |
| On switching time                                 | 8 ms                                                  |

| Feature                                   | Value                                                                                |
|-------------------------------------------|--------------------------------------------------------------------------------------|
| Max. positive test pulse with 0 signal    | 400 µs                                                                               |
| Max. negative test pulse on 1 signal      | 200 µs                                                                               |
| Permissible voltage fluctuations          | +/- 25%                                                                              |
| 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)          | 1 - Low corrosion stress                                                             |
| LABS (PWIS) conformity                    | VDMA24364-B1/B2-L                                                                    |
| Storage temperature                       | -20 °C...40 °C                                                                       |
| Temperature of medium                     | -5 °C...50 °C                                                                        |
| Relative air humidity                     | Max. 90% at 40°C                                                                     |
| Ambient temperature                       | -5 °C...50 °C                                                                        |
| Max. tightening torque for valve mounting | 0.25 Nm                                                                              |
| Product weight                            | 143 g                                                                                |
| Electrical connection                     | 4-pin<br>M8x1<br>Plug<br>As per EN 60947-5-2                                         |
| Type of mounting                          | With through-hole                                                                    |
| Pilot air port 12/14                      | M5                                                                                   |
| Pilot exhaust air port 82/84              | M5                                                                                   |
| Pneumatic connection 1                    | M7                                                                                   |
| Pneumatic connection 2                    | M7                                                                                   |
| Pneumatic connection 3                    | M7                                                                                   |
| Pneumatic connection 4                    | M7                                                                                   |
| Pneumatic connection 5                    | M7                                                                                   |
| Note on materials                         | RoHS compliant                                                                       |
| Seals material                            | NBR                                                                                  |
| Housing material                          | Die-cast aluminum                                                                    |