

# Solenoid valve VMPA14-M1HF-HS-PI

Part number: 578821

FESTO



General operating condition

## Data sheet

| Feature   | Value  |
|---|--|
| Valve function  | 2x3/2-way, open/closed, monostable   |
| Type of actuation                                     | Electric   |
| Valve size  | 14 mm  |
| Standard nominal flow rate (standardised to DIN 1343) | 470 l/min ... 520 l/min  |
| Operating voltage                                     | 24V DC   |
| Operating pressure                                    | -0.09 MPa ... 0.8 MPa  |
| Operating pressure                                    | -0.9 bar ... 8 bar   |
| Design  | Piston gate valve  |
| Type of reset   | Mechanical spring  |
| Approval  | c UL us - Recognized (OL)  |
| Degree of protection                                  | IP65<br>To IEC 60529   |
| Sealing principle                                     | Soft   |
| Mounting position                                     | optional   |
| Manual override                                       | Detenting<br>Non-detenting   |
| Type of piloting                                      | Pilot actuated   |
| Flow direction  | Reversible   |
| Symbol  | 00992876   |
| lap   | Overlap  |
| Signal status display                                 | yes  |
| Pilot pressure  | 0.4 MPa ... 0.8 MPa  |
| Pilot pressure  | 4 bar ... 8 bar  |
| Suitability for vacuum                                | yes  |
| Note on standard nominal flow rate                    | MPA-C: 550 l/min<br>MPA-L: 520 l/min<br>MPA-S: 470 l/min                                   |
| Standard nominal flow rate with QS-8                  | 470 l/min ... 550 l/min  |
| Switching time off                                    | 20 ms  |
| Switching time on                                     | 12 ms  |
| Max. positive test pulse with 0 signal                | 400 µs   |
| Max. negative test pulse with 1 signal                | 200 µs   |
| Permissible voltage fluctuations                      | +/- 25%  |
| 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) |

| <b>Feature</b>                            | <b>Value</b>   |
|---|--|
| 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            | 1 - Low corrosion stress   |
| LABS (PWIS) conformity                    | VDMA24364-B1/B2-L  |
| Storage temperature                       | -20 °C ... 40 °C   |
| Suitable for use with food                | See supplementary material information   |
| Media temperature                         | -5 °C ... 50 °C  |
| Relative air humidity                     | Max. 90% at 40°C   |
| Ambient temperature                       | -5 °C ... 60 °C  |
| Max. tightening torque for valve mounting | 0.65 Nm  |
| Product weight                            | 77 g   |
| Type of mounting                          | With through-hole  |
| Note on materials                         | RoHS-compliant   |
| Material seals                            | NBR  |
| Material housing                          | Die-cast aluminium   |