

# Solenoid valve

## MHE4-MS1H-3/2G-QS-8-K

Part number: 525193

FESTO



 General operating condition

## Data sheet

| Feature                                               | Value                                                              |
|-------------------------------------------------------|--------------------------------------------------------------------|
| Valve function                                        | 3/2-way, closed, monostable                                        |
| Type of actuation                                     | Electric                                                           |
| Construction width                                    | 18 mm                                                              |
| Standard nominal flow rate (standardised to DIN 1343) | 400 l/min                                                          |
| pneumatic working port                                | QS-8                                                               |
| Operating voltage                                     | 24V DC                                                             |
| Operating pressure                                    | -0.09 MPa ... 0.8 MPa                                              |
| Operating pressure                                    | -0.9 bar ... 8 bar                                                 |
| Operating pressure                                    | -13.05 psi ... 116 psi                                             |
| Design                                                | Pressure-relieved poppet valve                                     |
| Type of reset                                         | Mechanical spring                                                  |
| Degree of protection                                  | IP65                                                               |
| Approval                                              | RCM trademark<br>c UL us - Recognized (OL)                         |
| CE mark (see declaration of conformity)               | To EU EMC Directive<br>In accordance with EU RoHS Directive        |
| UKCA marking (see declaration of conformity)          | To UK instructions for EMC<br>To UK RoHS instructions              |
| Nominal size                                          | 4 mm                                                               |
| Grid dimension                                        | 24 mm                                                              |
| Note on grid dimension                                | Minimum distance between the valves is 6 mm                        |
| Exhaust-air function                                  | With flow control option                                           |
| Sealing principle                                     | Soft                                                               |
| Mounting position                                     | optional                                                           |
| Manual override                                       | Non-detenting                                                      |
| Type of piloting                                      | Direct                                                             |
| Flow direction                                        | Reversible with restrictions                                       |
| Symbol                                                | 00991308                                                           |
| lap                                                   | Underlap                                                           |
| Reverse polarity protection                           | Bipolar                                                            |
| Additional functions                                  | Spark arresting<br>Holding current reduction<br>Protective circuit |
| Operating pressure, reversible                        | -0.09 MPa ... 0.1 MPa                                              |
| Operating pressure, reversible                        | -0.9 bar ... 1 bar                                                 |
| Operating pressure, reversible                        | -13.05 psi ... 14.5 psi                                            |
| Max. switching frequency                              | 210 Hz                                                             |

| Feature                             | Value                                                                                      |
|-------------------------------------|--------------------------------------------------------------------------------------------|
| Switching time off                  | 3.5 ms                                                                                     |
| Switching time on                   | 3.5 ms                                                                                     |
| Tolerance switching time off        | +10%/-40%                                                                                  |
| Tolerance switching time on         | +10%/-30%                                                                                  |
| Switching time dispersion from 1 Hz | 0.3 ms                                                                                     |
| Duty cycle                          | 100%                                                                                       |
| Characteristic coil data            | 24 V DC: low-current phase 2.125 W, high-current phase 8.5 W                               |
| 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      | 2 - Moderate corrosion stress                                                              |
| LABS (PWIS) conformity              | VDMA24364-B1/B2-L                                                                          |
| Cleanroom class                     | Class 6 according to ISO 14644-1                                                           |
| Media temperature                   | -5 °C ... 60 °C                                                                            |
| Ambient temperature                 | -5 °C ... 60 °C                                                                            |
| Product weight                      | 270 g                                                                                      |
| Electrical connection               | Cable                                                                                      |
| Cable length                        | 2.5 m                                                                                      |
| Type of mounting                    | With through-hole                                                                          |
| Pneumatic connection, port 1        | QS-8                                                                                       |
| Pneumatic connection, port 2        | QS-8                                                                                       |
| Pneumatic connection, port 3        | QS-8                                                                                       |
| Note on materials                   | RoHS-compliant                                                                             |
| Material seals                      | HNBR<br>NBR                                                                                |
| Material housing                    | Die-cast zinc, coated                                                                      |
| Material cable sheath               | PUR                                                                                        |
| Material screws                     | Galvanised steel                                                                           |