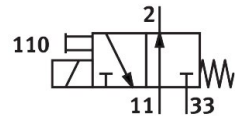


# Air solenoid valve

## MHE3-MS1H-3/20-1/8

Part number: 525167

FESTO



## Data sheet

| Feature                                           | Value                                                              |
|---------------------------------------------------|--------------------------------------------------------------------|
| Valve function                                    | 3/2-way, monostable, open                                          |
| Actuation type                                    | Electrical                                                         |
| Width                                             | 14 mm                                                              |
| Normal nominal flow rate (normalized to DIN 1343) | 200 l/min                                                          |
| Pneumatic working port                            | G1/8                                                               |
| Operating voltage                                 | 24V DC                                                             |
| Operating pressure                                | -0.09 MPa...0.8 MPa<br>-0.9 bar...8 bar<br>-13.05 psi...116 psi    |
| Structural design                                 | Pressure relief poppet valve                                       |
| Reset method                                      | Mechanical spring                                                  |
| Degree of protection                              | IP65                                                               |
| Certification                                     | RCM compliance mark<br>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              |
| Nominal width                                     | 3 mm                                                               |
| Width dimension                                   | 19 mm                                                              |
| Note on grid dimension                            | Minimum distance between the valves is 5 mm                        |
| Exhaust air function                              | Adjustable                                                         |
| Sealing principle                                 | Soft                                                               |
| Mounting position                                 | Any                                                                |
| Manual override                                   | Non-detenting                                                      |
| Type of control                                   | directly                                                           |
| Flow direction                                    | Reversible with restrictions                                       |
| Lap                                               | Negative overlap                                                   |
| Reverse polarity protection                       | Bipolar                                                            |
| Additional functions                              | Spark arresting<br>Holding current reduction<br>Protective circuit |
| Operating pressure, reversible                    | -0.09 MPa...0.1 MPa<br>-0.9 bar...1 bar                            |

| Feature                                                   | Value                                                                                |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------|
|                                                           | -13.05 psi...14.5 psi                                                                |
| Max. switching frequency                                  | 280 Hz                                                                               |
| Switching time off                                        | 2.8 ms                                                                               |
| On switching time                                         | 2.3 ms                                                                               |
| Tolerance for ON switching time                           | +10%/-30%                                                                            |
| Tolerance for switching time off                          | +10%/-50%                                                                            |
| Switching time variation at 1 Hz and above                | 0.2 ms                                                                               |
| Duty cycle                                                | 100%                                                                                 |
| Coil characteristics                                      | 24 V DC: low-current phase 1.6 W, high-current phase 6.5 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                  | Depending on the switching frequency (see diagram)                                   |
| Shock resistance                                          | Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27                |
| Corrosion resistance class (CRC)                          | 2 - Moderate corrosion stress                                                        |
| LABS (PWIS) conformity                                    | VDMA24364-B1/B2-L                                                                    |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 6 according to ISO 14644-1                                                     |
| Temperature of medium                                     | -5 °C...60 °C                                                                        |
| Ambient temperature                                       | -5 °C...60 °C                                                                        |
| Product weight                                            | 120 g                                                                                |
| Electrical connection                                     | 2-pin<br>Plug                                                                        |
| Type of mounting                                          | With through-hole                                                                    |
| Pneumatic connection 11                                   | G1/8                                                                                 |
| Pneumatic connection 2                                    | G1/8                                                                                 |
| Pneumatic connection 33                                   | G1/8                                                                                 |
| Note on materials                                         | RoHS compliant                                                                       |
| Seals material                                            | HNBR<br>NBR                                                                          |
| Housing material                                          | Die-cast zinc, coated                                                                |
| Material of screws                                        | Galvanized steel                                                                     |