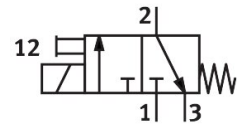


# Solenoid valve MHE2-MS1H-3/2G-M7

Part number: 196131

**FESTO**



## Data sheet

| Feature                                               | Value                                                              |
|-------------------------------------------------------|--------------------------------------------------------------------|
| Valve function                                        | 3/2-way, single solenoid, closed                                   |
| Type of actuation                                     | Electrical                                                         |
| Construction width                                    | 10 mm                                                              |
| Standard nominal flow rate (standardised to DIN 1343) | 100 l/min                                                          |
| pneumatic working port                                | M7                                                                 |
| Operating voltage                                     | 24 V DC                                                            |
| Operating pressure                                    | -0.09 MPa...0.8 MPa<br>-0.9 bar...8 bar<br>-13.05 psi...116 psi    |
| Design                                                | Pressure relief poppet valve                                       |
| Type of reset                                         | Mechanical spring                                                  |
| Degree of protection                                  | IP65                                                               |
| Approval                                              | RCM<br>c UL us - Recognised (Oil)                                  |
| 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                                          | 2 mm                                                               |
| Grid dimension                                        | 14 mm                                                              |
| Note on grid dimension                                | Minimum distance between the valves is 4 mm                        |
| Exhaust-air function                                  | Can be throttled                                                   |
| Sealing principle                                     | Soft                                                               |
| Mounting position                                     | Any                                                                |
| Manual override                                       | Non-detenting                                                      |
| Type of piloting                                      | Direct                                                             |
| Flow direction                                        | Reversible with restrictions                                       |
| 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<br>-0.9 bar...1 bar                            |

| Feature                                                   | Value                                                                                      |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------|
|                                                           | -13.05 psi...14.5 psi                                                                      |
| Max. switching frequency                                  | 330 Hz                                                                                     |
| Switching time off                                        | 2 ms                                                                                       |
| Switching time on                                         | 1.7 ms                                                                                     |
| Tolerance switching time off                              | +10%/-30%                                                                                  |
| Tolerance switching time on                               | +10%/-30%                                                                                  |
| Switching time dispersion from 1 Hz                       | 0.2 ms                                                                                     |
| Duty cycle                                                | 100%                                                                                       |
| Characteristic coil data                                  | 24 V DC: low-current phase 1.25 W, high-current phase 5.0 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           |
| Restrictions for environmental and media temperature      | As a function of switching frequency (see graph)                                           |
| 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 suitability, measured according to ISO 14644-14 | Class 6 according to ISO 14644-1                                                           |
| Media temperature                                         | -5 °C...60 °C                                                                              |
| Ambient temperature                                       | -5 °C...60 °C                                                                              |
| Product weight                                            | 60 g                                                                                       |
| Electrical connection                                     | 2-pin<br>Plug                                                                              |
| Type of mounting                                          | With through-hole                                                                          |
| Pneumatic connection, port 1                              | M7                                                                                         |
| Pneumatic connection, port 2                              | M7                                                                                         |
| Pneumatic connection, port 3                              | M7                                                                                         |
| Note on materials                                         | RoHS compliant                                                                             |
| Material seals                                            | HNBR<br>NBR                                                                                |
| Material housing                                          | Die-cast zinc, coated                                                                      |
| Material screws                                           | Galvanised steel                                                                           |