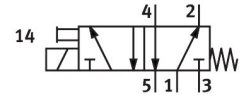
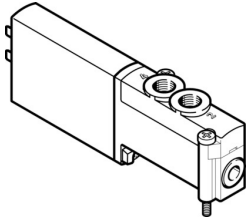


# Air solenoid valve MHP2-MS1H-5/2-M5

Part number: 525105

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                      | Value                                                                |
|----------------------------------------------|----------------------------------------------------------------------|
| Valve function                               | 5/2, monostable                                                      |
| Actuation type                               | Electrical                                                           |
| Width                                        | 10 mm                                                                |
| Standard nominal flow rate                   | 90 l/min                                                             |
| Pneumatic working port                       | M5                                                                   |
| 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                                               |
| Structural design                            | Pressure-relieved 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                                | 2 mm                                                                 |
| Width dimension                              | 14 mm                                                                |
| Note on grid dimension                       | Minimum distance between the valves is 4 mm                          |
| Exhaust air function                         | With flow control option                                             |
| Sealing principle                            | Soft                                                                 |
| Mounting position                            | Any                                                                  |
| Manual override                              | Non-detenting                                                        |
| Type of control                              | Direct                                                               |
| Flow direction                               | Non-reversible                                                       |
| Symbol                                       | 00991129                                                             |
| Lap                                          | Underlap                                                             |
| Reverse polarity protection                  | Bipolar                                                              |
| Additional functions                         | Spark suppression<br>Holding current reduction<br>Protective circuit |
| Max. switching frequency                     | 300 Hz                                                               |
| Switching time off                           | 1.7 ms                                                               |
| On switching time                            | 1.9 ms                                                               |
| Tolerance for switching time off             | +10 %/-30 %                                                          |

| Feature                                     | Value                                                                                |
|---------------------------------------------|--------------------------------------------------------------------------------------|
| Tolerance for ON switching time             | +10%/-30%                                                                            |
| Switching time variation at 1 Hz and above  | 0.2 ms                                                                               |
| Duty cycle                                  | 100%                                                                                 |
| Coil characteristics                        | 24 V DC: low-current phase 1.625 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 class                             | Class 6 according to ISO 14644-1                                                     |
| Temperature of medium                       | -5 °C ... 40 °C                                                                      |
| Ambient temperature                         | -5 °C ... 40 °C                                                                      |
| Max. tightening torque for valve mounting   | 0.4 Nm                                                                               |
| Max. tightening torque of pneumatic fitting | 1.5 Nm                                                                               |
| Product weight                              | 70 g                                                                                 |
| Electrical connection                       | 2-pin<br>Plug                                                                        |
| Type of mounting                            | On PR rail                                                                           |
| Pneumatic connection 1                      | Sub-base                                                                             |
| Pneumatic connection 2                      | M5                                                                                   |
| Pneumatic connection 3                      | Sub-base                                                                             |
| Pneumatic connection 4                      | M5                                                                                   |
| Pneumatic connection 5                      | Sub-base                                                                             |
| Note on materials                           | RoHS-compliant                                                                       |
| Seals material                              | HNBR<br>NBR                                                                          |
| Housing material                            | Die-cast metal, coated                                                               |
| Material of screws                          | Steel, galvanized                                                                    |