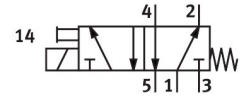


# Air solenoid valve MHA2-MS1H-5/2-2

Part number: 525101

FESTO



 [General operating condition](#)

## Data sheet

| Feature   | Value   |
|---|---|
| Valve function                                    | 5/2-way, monostable                                 |
| Actuation type                                    | Electrical  |
| Width   | 10 mm   |
| Normal nominal flow rate (normalized to DIN 1343) | 90 l/min  |
| Pneumatic working port                            | Sub-base  |
| 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 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 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                              | Adjustable  |
| Sealing principle                                 | Soft  |
| Mounting position                                 | Any   |
| Manual override                                   | Non-detenting                                       |
| Type of control                                   | directly  |
| Flow direction                                    | Non-reversible                                      |
| Symbol  | 00991129  |
| Lap   | Negative overlap                                    |
| Reverse polarity protection                       | Bipolar   |
| Additional functions                              | 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%   |
| Tolerance for ON switching time                   | +10%/-30%   |
| Switching time variation at 1 Hz and above        | 0.2 ms  |

| Feature   | Value  |
|---|--|
| 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 suitability, measured according to ISO 14644-14 | 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   |
| Product weight  | 70 g   |
| Electrical connection                                     | 2-pin<br>Plug  |
| Type of mounting  | On PR manifold rail  |
| Pneumatic connection 1                                    | Sub-base   |
| Pneumatic connection 2                                    | Sub-base   |
| Pneumatic connection 3                                    | Sub-base   |
| Pneumatic connection 4                                    | Sub-base   |
| Pneumatic connection 5                                    | Sub-base   |
| Note on materials   | RoHS compliant   |
| Seals material  | HNBR<br>NBR  |
| Housing material  | Die-cast zinc, coated  |
| Material of screws  | Galvanized steel   |