

# Air solenoid valve MHP3-M1H-3/2G-QS-6

Part number: 525142

FESTO



## Data sheet

| Feature                                           | Value                                                            |
|---------------------------------------------------|------------------------------------------------------------------|
| Valve function                                    | 3/2-way, closed, monostable                                      |
| Actuation type                                    | Electrical                                                       |
| Width                                             | 14 mm                                                            |
| Normal nominal flow rate (normalized to DIN 1343) | 200 l/min                                                        |
| Pneumatic working port                            | QS-6                                                             |
| 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                                     | c UL us - recognized (OL)                                        |
| 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                                                 |
| Operating pressure, reversible                    | -0.09 MPa...0.1 MPa<br>-0.9 bar...1 bar<br>-13.05 psi...14.5 psi |
| Max. switching frequency                          | 130 Hz                                                           |
| Switching time off                                | 4.5 ms                                                           |
| On switching time                                 | 8.3 ms                                                           |
| Duty cycle                                        | 100%                                                             |
| Coil characteristics                              | 24 V DC: 3.7 W                                                   |
| Permissible voltage fluctuations                  | +/- 10%                                                          |

| Feature                                                   | Value                                                                                |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------|
| 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 |
| 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                                                                        |
| Product weight                                            | 120 g                                                                                |
| Electrical connection                                     | 2-pin<br>Plug                                                                        |
| Type of mounting                                          | On PR manifold rail                                                                  |
| Pneumatic connection 1                                    | Sub-base                                                                             |
| Pneumatic connection 2                                    | QS-6                                                                                 |
| Pneumatic connection 3                                    | Sub-base                                                                             |
| Note on materials                                         | RoHS compliant                                                                       |
| Seals material                                            | HNBR<br>NBR                                                                          |
| Housing material                                          | Die-cast zinc, coated                                                                |
| Material of screws                                        | Galvanized steel                                                                     |