

Solenoid valve MHA2-MS1H-3/2G-2

Part number: 196119

FESTO



[General operating condition](#)

Data sheet

| Feature | Value |
|---|---|
| Valve function | 3/2-way, closed, monostable |
| Type of actuation | Electric |
| Construction width | 10 mm |
| Standard nominal flow rate (standardised to DIN 1343) | 100 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 |
| Design | Pressure-relieved poppet valve |
| Type of reset | Mechanical spring |
| Degree of protection | IP65 |
| Approval | RCM trademark c UL us - Recognized (OL) |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | 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 | With flow control option |
| Sealing principle | Soft |
| Mounting position | optional |
| Manual override | Non-detenting |
| Type of piloting | Direct |
| Flow direction | Reversible with restrictions |
| Symbol | 00991308 |
| lap | Underlap |
| Reverse polarity protection | Bipolar |
| Additional functions | Protective circuit |
| Operating pressure, reversible | -0.09 MPa ... 0.1 MPa |
| Operating pressure, reversible | -0.9 bar ... 1 bar |
| Operating pressure, reversible | -13.05 psi ... 14.5 psi |
| Max. switching frequency | 330 Hz |
| Switching time off | 2 ms |
| Switching time on | 1.7 ms |

| Feature | Value |
|---|--|
| 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 ... 40 °C |
| Ambient temperature | -5 °C ... 40 °C |
| Product weight | 60 g |
| Electrical connection | Plugs |
| Type of mounting | On sub-base |
| Pneumatic connection, port 1 | Sub-base |
| Pneumatic connection, port 2 | Sub-base |
| Pneumatic connection, port 3 | Sub-base |
| Note on materials | RoHS-compliant |
| Material seals | HNBR NBR |
| Material housing | Die-cast zinc, coated |
| Material screws | Galvanised steel |