

Air solenoid valve

MHP3-MS1H-3/20-1/8

Part number: 525159

FESTO



[PDF](#) General operating condition

Data sheet

| Feature | Value |
|---|---|
| Valve function | 3/2-way, monostable, open |
| Actuation type | Electrical |
| Width | 14 mm |
| Normal nominal flow rate (normalized to DIN 1343) | 200 l/min |
| Pneumatic working port | G1/8 |
| 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 c UL us - recognized (OL) |
| CE marking (see declaration of conformity) | As per EU EMC directive As per EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| 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 |
| Symbol | 00991322 |
| Lap | Negative overlap |
| 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 | 280 Hz |
| Switching time off | 2.8 ms |
| On switching time | 2.3 ms |

| Feature | Value |
|---|--|
| Tolerance for switching time off | +10%/-50% |
| 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 1.6 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 |
| Product weight | 120 g |
| Electrical connection | 2-pin Plug |
| Type of mounting | On PR manifold rail |
| Pneumatic connection 11 | Sub-base |
| Pneumatic connection 2 | G1/8 |
| Pneumatic connection 33 | Sub-base |
| Note on materials | RoHS compliant |
| Seals material | HNBR NBR |
| Housing material | Die-cast zinc, coated |
| Material of screws | Galvanized steel |