

Air solenoid valve MHP3-MS1H-3/20-1/8

Part number: 525159

FESTO



Data sheet

| Feature | Value |
|--|--|
| Valve function | 3/2, open, monostable |
| Actuation type | Electrical |
| Width | 14 mm |
| Standard nominal flow rate | 200 l/min |
| Pneumatic working port | G1/8 |
| Operating voltage | 24V DC |
| Operating pressure | -0.09 MPa...0.8 MPa -0.9 bar...8 bar |
| Structural design | Pressure-relieved 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 instructions for EMC 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 | With flow control option |
| Sealing principle | Soft |
| Mounting position | Any |
| Manual override | Non-detenting |
| Type of control | Direct |
| Flow direction | Reversible with restrictions |
| Lap | Underlap |
| Reverse polarity protection | Bipolar |
| Additional functions | Spark suppression Holding current reduction Protective circuit |
| Operating pressure, reversible | -0.09 MPa...0.1 MPa -0.9 bar...1 bar -13.05 psi...14.5 psi |

| Feature | Value |
|--|--|
| Max. switching frequency | 280 Hz |
| Switching time off | 2.8 ms |
| On switching time | 2.3 ms |
| 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 class | 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 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 metal, coated |
| Material of screws | Steel, galvanized |