

# Air solenoid valve

## MHP1-M1H-3/20-M3-TC

Part number: 197032

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature   | Value   |
|---|---|
| Valve function                                    | 3/2, open, monostable                         |
| Actuation type                                    | Electrical                                    |
| Width   | 10 mm   |
| Normal nominal flow rate (normalized to DIN 1343) | 10 l/min                                      |
| Pneumatic working port                            | M3  |
| Operating voltage                                 | 24V DC  |
| Operating pressure                                | 0 MPa ... 0.6 MPa                             |
| Operating pressure                                | 0 bar ... 6 bar                               |
| Operating pressure                                | 0 psi ... 87 psi                              |
| Structural design                                 | Poppet valve with return spring               |
| Reset method                                      | Mechanical spring                             |
| Degree of protection                              | IP40  |
| Certification                                     | c UL us - Recognized (OL)                     |
| Certificate issuing authority                     | UL MH19482                                    |
| Nominal width                                     | 0.7 mm  |
| Width dimension                                   | 10 mm   |
| Exhaust air function                              | With flow control option                      |
| Sealing principle                                 | Soft  |
| Mounting position                                 | Any   |
| Manual override                                   | Non-detenting                                 |
| Type of control                                   | Direct  |
| Flow direction                                    | Non-reversible                                |
| Symbol  | 00991322                                      |
| Valve position ID                                 | Label   |
| Lap   | Underlap                                      |
| Note on forced dynamization                       | Switching frequency at least once a week      |
| Max. switching frequency                          | 20 Hz   |
| Switching time off                                | 4 ms  |
| On switching time                                 | 4 ms  |
| Duty cycle  | 100%  |
| Electrical power consumption                      | 1 W   |
| Max. positive test pulse with 0 signal            | 500 µs  |
| Max. negative test pulse on 1 signal              | 400 µs  |
| Coil characteristics                              | 24 V DC: 1.0 W                                |
| Permissible voltage fluctuations                  | +/- 10 %                                      |
| Operating medium                                  | Compressed air as per ISO 8573-1:2010 [7:4:4] |

| Feature                                  | Value  |
|--|--|
| 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-B2-L   |
| Storage temperature                      | -20 °C ... 60 °C   |
| Temperature of medium                    | -5 °C ... 40 °C  |
| Ambient temperature                      | -5 °C ... 40 °C  |
| Product weight                           | 10 g   |
| Electrical connection                    | Plug   |
| Type of mounting                         | On sub-base<br>With through-hole   |
| Pneumatic connection 11                  | Sub-base   |
| Pneumatic connection 2                   | M3   |
| Pneumatic connection 33                  | Sub-base   |
| Note on materials                        | RoHS-compliant   |
| Seals material                           | FPM<br>HNBR<br>NBR   |
| Housing material                         | PPS-reinforced   |