

# Air solenoid valve

## MHP1-M4H-3/20-M3-PI

FESTO

Part number: 197033



[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                                 | 5V 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  |
| Coil characteristics                              | 5 V DC: 1.0 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) |

| Feature                          | Value  |
|----------------------------------|--|
| 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   |