

# Air solenoid valve

## MHP1-M1H-3/2G-M3-PI

Part number: 197017

FESTO



## Data sheet

| Feature                                           | Value                                               |
|---------------------------------------------------|-----------------------------------------------------|
| Valve function                                    | 3/2-way, closed, 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...0.8 MPa<br>0 bar...8 bar<br>0 psi...116 psi |
| Structural design                                 | Poppet valve with spring return                     |
| Reset method                                      | Mechanical spring                                   |
| Degree of protection                              | IP40                                                |
| Certification                                     | c UL us - recognized (OL)                           |
| Certificate issuing authority                     | UL MH19482                                          |
| Nominal width                                     | 0.65 mm                                             |
| Width dimension                                   | 10 mm                                               |
| Exhaust air function                              | Adjustable                                          |
| Sealing principle                                 | Soft                                                |
| Mounting position                                 | Any                                                 |
| Manual override                                   | Non-detenting                                       |
| Type of control                                   | directly                                            |
| Flow direction                                    | Non-reversible                                      |
| Valve position ID                                 | Label                                               |
| Lap                                               | Negative overlap                                    |
| 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                                              |

| Feature                                  | Value                                                                                |
|------------------------------------------|--------------------------------------------------------------------------------------|
| 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]                                        |
| 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 1                   | Sub-base                                                                             |
| Pneumatic connection 2                   | M3                                                                                   |
| Pneumatic connection 3                   | Sub-base                                                                             |
| Note on materials                        | RoHS compliant                                                                       |
| Seals material                           | FPM<br>HNBR<br>NBR                                                                   |
| Housing material                         | PA-reinforced<br>PPS-reinforced                                                      |