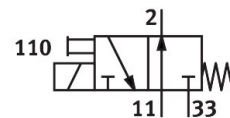


# Solenoid valve

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

Part number: 197035

FESTO



## Data sheet

| Feature                                               | Value                                              |
|-------------------------------------------------------|----------------------------------------------------|
| Valve function                                        | 3/2 open, monostable                               |
| Type of actuation                                     | Electric                                           |
| Construction width                                    | 10 mm                                              |
| Standard nominal flow rate (standardised to DIN 1343) | 10 l/min                                           |
| pneumatic working port                                | M3                                                 |
| Operating voltage                                     | 24V DC                                             |
| Operating pressure                                    | 0 MPa...0.6 MPa<br>0 bar...6 bar<br>0 psi...87 psi |
| Design                                                | Poppet valve with spring return                    |
| Type of reset                                         | Mechanical spring                                  |
| Degree of protection                                  | IP40                                               |
| Approval                                              | c UL us - Recognized (OL)                          |
| Certificate issuing authority                         | UL MH19482                                         |
| Nominal size                                          | 0.7 mm                                             |
| Grid dimension                                        | 10 mm                                              |
| Exhaust-air function                                  | With flow control option                           |
| Sealing principle                                     | Soft                                               |
| Mounting position                                     | optional                                           |
| Manual override                                       | Non-detenting                                      |
| Type of piloting                                      | Direct                                             |
| Flow direction                                        | Non-reversible                                     |
| Valve position code                                   | Label                                              |
| lap                                                   | Underlap                                           |
| Note on forced dynamization                           | Switching frequency min. 1/week                    |
| Max. switching frequency                              | 20 Hz                                              |
| Switching time off                                    | 4 ms                                               |
| Switching time on                                     | 4 ms                                               |
| Duty cycle                                            | 100%                                               |
| Electrical power consumption                          | 1 W                                                |
| Max. positive test pulse with 0 signal                | 500 µs                                             |
| Max. negative test pulse with 1 signal                | 400 µs                                             |

| Feature                            | Value                                                                                      |
|------------------------------------|--------------------------------------------------------------------------------------------|
| Characteristic coil data           | 24 V DC: 1.0 W                                                                             |
| Permissible voltage fluctuations   | +/- 10 %                                                                                   |
| Operating medium                   | Compressed air to ISO 8573-1:2010 [7:4:4]                                                  |
| Note on operating and pilot medium | Lubricated operation possible (in which case lubricated operation will always be required) |
| Vibration resistance               | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6           |
| Shock resistance                   | Shock test with severity level 2 to 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                                                                             |
| Media temperature                  | -5 °C...40 °C                                                                              |
| Ambient temperature                | -5 °C...40 °C                                                                              |
| Product weight                     | 10 g                                                                                       |
| Electrical connection              | Plugs                                                                                      |
| Type of mounting                   | On sub-base<br>With through-hole                                                           |
| Pneumatic connection, port 11      | Sub-base                                                                                   |
| Pneumatic connection, port 2       | M3                                                                                         |
| Pneumatic port 33                  | Sub-base                                                                                   |
| Note on materials                  | RoHS-compliant                                                                             |
| Material seals                     | FPM<br>HNBR<br>NBR                                                                         |
| Material housing                   | PA-reinforced<br>PPS reinforced                                                            |