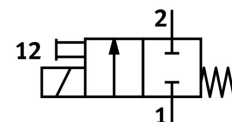


# Solenoid valve

## MHA1-M4H-2/2G-0,9-TC

Part number: 197039

FESTO



 General operating condition

## Data sheet

| Feature                          | Value                                     |
|----------------------------------|-------------------------------------------|
| Valve function                   | 2/2-way, closed, monostable               |
| Type of actuation                | Electric                                  |
| Construction width               | 10 mm                                     |
| Standard nominal flow rate       | 14 l/min                                  |
| pneumatic working port           | Sub-base                                  |
| Operating voltage                | 5V DC                                     |
| Operating pressure               | -0.09 MPa ... 0.2 MPa                     |
| Operating pressure               | -0.9 bar ... 2 bar                        |
| Operating pressure               | -13.05 psi ... 29 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                     | 0.9 mm                                    |
| Grid dimension                   | 10 mm                                     |
| Exhaust-air function             | Without flow control option               |
| Sealing principle                | Soft                                      |
| Mounting position                | optional                                  |
| Manual override                  | Non-detenting                             |
| Type of piloting                 | Direct                                    |
| Flow direction                   | Non-reversible                            |
| Symbol                           | 00991398                                  |
| Valve position code              | Label                                     |
| lap                              | Underlap                                  |
| Note on forced dynamization      | Switching frequency min. 1/week           |
| Suitability for vacuum           | yes                                       |
| Max. switching frequency         | 20 Hz                                     |
| Switching time off               | 5 ms                                      |
| Switching time on                | 4 ms                                      |
| Duty cycle                       | 100%                                      |
| Electrical power consumption     | 1 W                                       |
| Characteristic coil data         | 5 V DC: 1.0 W                             |
| Permissible voltage fluctuations | +/- 10 %                                  |
| Operating medium                 | Compressed air to ISO 8573-1:2010 [7:4:4] |

| Feature                            | Value                                                                                      |
|------------------------------------|--------------------------------------------------------------------------------------------|
| 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 1       | Sub-base                                                                                   |
| Pneumatic connection, port 2       | Sub-base                                                                                   |
| Note on materials                  | RoHS-compliant                                                                             |
| Material seals                     | FPM<br>HNBR<br>NBR                                                                         |
| Material housing                   | PA-reinforced<br>PPS reinforced                                                            |