

# Solenoid valve MHP2-M1H-3/20-M5

Part number: 196142

FESTO



[PDF](#) General operating condition

## 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) | 100 l/min  |
| pneumatic working port                                | M5   |
| Operating voltage                                     | 24V DC   |
| Operating pressure                                    | -0.09 MPa ... 0.8 MPa  |
| Operating pressure                                    | -0.9 bar ... 8 bar   |
| Operating pressure                                    | -13.05 psi ... 116 psi   |
| Design  | Pressure-relieved poppet valve   |
| Type of reset   | Mechanical spring  |
| Degree of protection                                  | IP65   |
| Approval  | c UL us - Recognized (OL)  |
| Nominal size  | 2 mm   |
| Grid dimension  | 14 mm  |
| Note on grid dimension                                | Minimum distance between the valves is 4 mm  |
| Exhaust-air function                                  | With flow control option   |
| Sealing principle                                     | Soft   |
| Mounting position                                     | optional   |
| Manual override                                       | Non-detenting  |
| Type of piloting                                      | Direct   |
| Flow direction  | Reversible with restrictions   |
| Symbol  | 00991322   |
| lap   | Underlap   |
| Operating pressure, reversible                        | -0.09 MPa ... 0.1 MPa  |
| Operating pressure, reversible                        | -0.9 bar ... 1 bar   |
| Operating pressure, reversible                        | -13.05 psi ... 14.5 psi  |
| Max. switching frequency                              | 130 Hz   |
| Switching time off                                    | 3.5 ms   |
| Switching time on                                     | 7 ms   |
| Duty cycle  | 100%   |
| Characteristic coil data                              | 24 V DC: 2.88 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) |

| Feature                        | Value  |
|--------------------------------|--|
| 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-B1/B2-L  |
| Cleanroom class                | Class 6 according to ISO 14644-1   |
| Media temperature              | -5 °C ... 40 °C  |
| Ambient temperature            | -5 °C ... 40 °C  |
| Product weight                 | 60 g   |
| Electrical connection          | 2-pin<br>Plugs   |
| Type of mounting               | On PR rail   |
| Pneumatic connection, port 11  | Sub-base   |
| Pneumatic connection, port 2   | M5   |
| Pneumatic port 33              | Sub-base   |
| Note on materials              | RoHS-compliant   |
| Material seals                 | HNBR<br>NBR  |
| Material housing               | Die-cast zinc, coated  |
| Material screws                | Galvanised steel   |