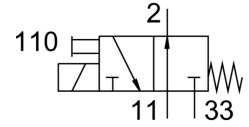


# Air solenoid valve

## MHP1-M5H-3/20-M3-TC

Part number: 197031

FESTO



## Data sheet

| Feature                                  | Value                                                                                |
|------------------------------------------|--------------------------------------------------------------------------------------|
| Valve function                           | 3/2, open, monostable                                                                |
| Actuation type                           | Electrical                                                                           |
| Width                                    | 10 mm                                                                                |
| Standard nominal flow rate               | 10 l/min                                                                             |
| Pneumatic working port                   | M3                                                                                   |
| Operating voltage                        | 12V DC                                                                               |
| Operating pressure                       | 0 bar ... 6 bar                                                                      |
| 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                     | 12 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                |

| Feature                          | Value                                     |
|----------------------------------|-------------------------------------------|
| Corrosion resistance class (CRC) | 2 - Moderate corrosion stress             |
| 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                | Free of copper and PTFE<br>RoHS-compliant |
| Seals material                   | FPM<br>HNBR<br>NBR                        |
| Housing material                 | PA-reinforced<br>PPS-reinforced           |