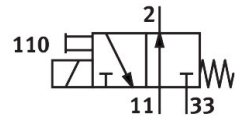


# Solenoid valve

## MHE2-M1H-3/20-QS-4-K

Part number: 196156

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                                | QS-4                                                                                       |
| 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                                  | IP55                                                                                       |
| 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 ... 60 °C                                                                  |
| Ambient temperature            | -5 °C ... 60 °C                                                                  |
| Product weight                 | 60 g                                                                             |
| Electrical connection          | Cable                                                                            |
| Cable length                   | 2.5 m                                                                            |
| Type of mounting               | With through-hole                                                                |
| Pneumatic connection, port 11  | QS-4                                                                             |
| Pneumatic connection, port 2   | QS-4                                                                             |
| Pneumatic port 33              | QS-4                                                                             |
| Note on materials              | RoHS-compliant                                                                   |
| Material seals                 | HNBR<br>NBR                                                                      |
| Material housing               | Die-cast zinc, coated                                                            |
| Material cable sheath          | PUR                                                                              |
| Material screws                | Galvanised steel                                                                 |