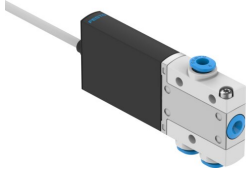


# Solenoid valve

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

Part number: 196156

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) | 100 l/min                                                        |
| pneumatic working port                                | QS-4                                                             |
| Operating voltage                                     | 24V DC                                                           |
| Operating pressure                                    | -0.09 MPa...0.8 MPa<br>-0.9 bar...8 bar<br>-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                                     |
| lap                                                   | Underlap                                                         |
| Operating pressure, reversible                        | -0.09 MPa...0.1 MPa<br>-0.9 bar...1 bar<br>-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 %                                                         |

| Feature                                                   | Value                                                                                      |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 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-B1/B2-L                                                                          |
| Cleanroom suitability, measured according to ISO 14644-14 | 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                                                                           |