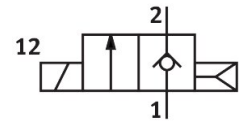
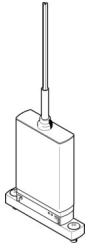


# Air solenoid valve MHJ10-S-2,5-MF

Part number: 565513

**FESTO**



 General operating condition

## Data sheet

| Feature                                               | Value                                                                                                                                                                                 |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Valve function                                        | 2/2, closed, monostable                                                                                                                                                               |
| Actuation type                                        | Electrical                                                                                                                                                                            |
| Width                                                 | 10 mm                                                                                                                                                                                 |
| Standard nominal flow rate                            | 100 l/min                                                                                                                                                                             |
| Pneumatic working port                                | Sub-base                                                                                                                                                                              |
| Operating voltage                                     | 24V DC                                                                                                                                                                                |
| Operating pressure                                    | 0.05 MPa ... 0.6 MPa                                                                                                                                                                  |
| Operating pressure                                    | 0.5 bar ... 6 bar                                                                                                                                                                     |
| Operating pressure                                    | 7.25 psi ... 87 psi                                                                                                                                                                   |
| Structural design                                     | Poppet valve without return spring                                                                                                                                                    |
| Reset method                                          | Pneumatic spring                                                                                                                                                                      |
| Degree of protection                                  | IP55                                                                                                                                                                                  |
| Certification                                         | RCM compliance mark                                                                                                                                                                   |
| CE marking (see declaration of conformity)            | As per EU EMC directive<br>As per EU RoHS directive                                                                                                                                   |
| UKCA marking (see declaration of conformity)          | To UK instructions for EMC<br>To UK RoHS instructions                                                                                                                                 |
| Width dimension                                       | 10.5 mm                                                                                                                                                                               |
| Information on operation                              | Power supply unit must be able to supply at least 1.7 A without voltage drop.<br>Do not operate without flow.<br>For block assembly with flow rate at max. ambient temperature 45 °C. |
| Sealing principle                                     | Hard                                                                                                                                                                                  |
| Mounting position                                     | Any                                                                                                                                                                                   |
| Manual override                                       | None                                                                                                                                                                                  |
| Type of control                                       | Direct                                                                                                                                                                                |
| Flow direction                                        | Non-reversible                                                                                                                                                                        |
| Symbol                                                | 00992259                                                                                                                                                                              |
| Reverse polarity protection                           | for operating voltage                                                                                                                                                                 |
| Additional functions                                  | Spark suppression<br>Holding current reduction with energy recovery<br>Safety shut-down                                                                                               |
| b-value                                               | 0.38                                                                                                                                                                                  |
| C value                                               | 0.4 l/sbar                                                                                                                                                                            |
| Max. switching frequency                              | 1000 Hz                                                                                                                                                                               |
| Switching time on at 4 bar and 24 V in new condition  | 0.8 ms                                                                                                                                                                                |
| Switching time off at 4 bar and 24 V in new condition | 0.4 ms                                                                                                                                                                                |

| Feature                                                 | Value                                                                                                           |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Switching time on at 0.5 bar and 24 V in new condition  | 0.8 ms                                                                                                          |
| Switching time off at 0.5 bar and 24 V in new condition | 0.5 ms                                                                                                          |
| Switching time on at 6 bar and 24 V in new condition    | 0.9 ms                                                                                                          |
| Switching time off at 6 bar and 24 V in new condition   | 0.4 ms                                                                                                          |
| Tolerance for switching time off                        | +15 %/-25 %                                                                                                     |
| Tolerance for ON switching time                         | +/-15 %                                                                                                         |
| DC operating voltage range                              | 21.6 V ... 26.4 V                                                                                               |
| Input resistance                                        | 34 kOhm                                                                                                         |
| Duty cycle                                              | 100%                                                                                                            |
| Coil characteristics                                    | 24 V DC: low-current phase 2.0 W, high-current phase 7.0 W                                                      |
| Trigger signal range DC                                 | 3 V ... 30 V                                                                                                    |
| Note on input current                                   | Linear increase<br>0.09-0.44 mA for a trigger signal of 3-15 V<br>0.44-15.44 mA for a trigger signal of 15-30 V |
| 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 not possible                                                                     |
| Restricted ambient and media temperature                | Depending on the switching frequency (see diagram)                                                              |
| Corrosion resistance class (CRC)                        | 2 - Moderate corrosion stress                                                                                   |
| LABS (PWIS) conformity                                  | VDMA24364-B2-L                                                                                                  |
| Storage temperature                                     | -20 °C ... 50 °C                                                                                                |
| Permissible solenoid surface temperature                | 120 °C                                                                                                          |
| Temperature of medium                                   | -5 °C ... 60 °C                                                                                                 |
| Ambient temperature                                     | -5 °C ... 60 °C                                                                                                 |
| Max. tightening torque for valve mounting               | 0.7 Nm                                                                                                          |
| Product weight                                          | 75 g                                                                                                            |
| Electrical connection                                   | 3-wire<br>Cable                                                                                                 |
| Cable length                                            | 2.5 m                                                                                                           |
| Type of mounting                                        | On sub-base                                                                                                     |
| Pneumatic connection 1                                  | Sub-base                                                                                                        |
| Pneumatic connection 2                                  | Sub-base                                                                                                        |
| Note on materials                                       | RoHS-compliant                                                                                                  |
| Seals material                                          | HNBR                                                                                                            |
| Housing material                                        | PPS-reinforced                                                                                                  |
| Material of cable sheath                                | PUR                                                                                                             |
| Material of screws                                      | Steel                                                                                                           |