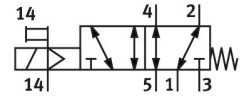


# Solenoid valve

## MDH-5/2-D-1-S-FR-M12D-C

Part number: 540811

FESTO



 General operating condition

## Data sheet

| Feature                                               | Value                                                                                      |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Valve function                                        | 5/2-way, monostable                                                                        |
| Type of actuation                                     | Electric                                                                                   |
| Construction width                                    | 42 mm                                                                                      |
| Standard nominal flow rate (standardised to DIN 1343) | 1200 l/min                                                                                 |
| pneumatic working port                                | Sub-base size 1 to ISO 5599-1<br>G1/4                                                      |
| Operating voltage                                     | 24V DC                                                                                     |
| Operating pressure                                    | -0.9 bar ... 16 bar                                                                        |
| Design                                                | Piston gate valve                                                                          |
| Type of reset                                         | Mechanical spring                                                                          |
| Degree of protection                                  | IP65                                                                                       |
| Nominal size                                          | 8 mm                                                                                       |
| Grid dimension                                        | 43 mm                                                                                      |
| Exhaust-air function                                  | With flow control option                                                                   |
| Sealing principle                                     | Soft                                                                                       |
| Mounting position                                     | optional                                                                                   |
| Conforms to standard                                  | ISO 5599-1                                                                                 |
| Manual override                                       | Non-detenting                                                                              |
| ISO code                                              | 169                                                                                        |
| Type of piloting                                      | Pilot actuated                                                                             |
| Pilot air supply                                      | External                                                                                   |
| Flow direction                                        | Reversible                                                                                 |
| Symbol                                                | 00991190                                                                                   |
| lap                                                   | Overlap                                                                                    |
| Pilot pressure                                        | 3 bar ... 10 bar                                                                           |
| Switching time off                                    | 42 ms                                                                                      |
| Switching time on                                     | 20 ms                                                                                      |
| Duty cycle                                            | 100%                                                                                       |
| Max. positive test pulse with 0 signal                | 3800 µs                                                                                    |
| Max. negative test pulse with 1 signal                | 4900 µs                                                                                    |
| Characteristic coil data                              | 24 V DC: 2.7 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 1 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                |
| LABS (PWIS) conformity       | VDMA24364-B1/B2-L                                                                |
| Media temperature            | -10 °C ... 50 °C                                                                 |
| Sound pressure level         | 85 dB(A)                                                                         |
| Pilot medium                 | Compressed air to ISO 8573-1:2010 [7:4:4]                                        |
| Ambient temperature          | -10 °C ... 50 °C                                                                 |
| Product weight               | 420 g                                                                            |
| Electrical connection        | M12x1                                                                            |
| Type of mounting             | On sub-base<br>With through-hole                                                 |
| Pilot air port 12            | Sub-base                                                                         |
| Pilot air port 14            | Sub-base                                                                         |
| Pneumatic connection, port 1 | Sub-base size 1 to ISO 5599-1                                                    |
| Pneumatic connection, port 2 | Sub-base size 1 to ISO 5599-1                                                    |
| Pneumatic connection, port 3 | Sub-base size 1 to ISO 5599-1                                                    |
| Pneumatic connection, port 4 | Sub-base size 1 to ISO 5599-1                                                    |
| Pneumatic connection, port 5 | Sub-base size 1 to ISO 5599-1                                                    |
| Material seals               | HNBR<br>NBR                                                                      |
| Material housing             | Die-cast aluminium                                                               |