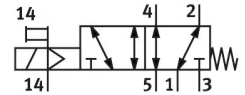


# Air solenoid valve

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

Part number: 540811

**FESTO**



## Data sheet

| Feature                                           | Value                                            |
|---------------------------------------------------|--------------------------------------------------|
| Valve function                                    | 5/2-way, monostable                              |
| Actuation type                                    | Electrical                                       |
| Width                                             | 42 mm                                            |
| Normal nominal flow rate (normalized to DIN 1343) | 1200 l/min                                       |
| Pneumatic working port                            | Sub-base, size 1 according to ISO 5599-1<br>G1/4 |
| Operating voltage                                 | 24V DC                                           |
| Operating pressure                                | -0.9 bar...16 bar                                |
| Structural design                                 | Piston gate valve                                |
| Reset method                                      | Mechanical spring                                |
| Degree of protection                              | IP65                                             |
| Nominal width                                     | 8 mm                                             |
| Width dimension                                   | 43 mm                                            |
| Exhaust air function                              | Adjustable                                       |
| Sealing principle                                 | Soft                                             |
| Mounting position                                 | Any                                              |
| Conforms to standard                              | ISO 5599-1                                       |
| Manual override                                   | Non-detenting                                    |
| ISO code                                          | 169                                              |
| Type of control                                   | Piloted                                          |
| Pilot air supply port                             | External                                         |
| Flow direction                                    | Reversible                                       |
| Lap                                               | Positive overlap                                 |
| Pilot pressure                                    | 3 bar...10 bar                                   |
| Switching time off                                | 42 ms                                            |
| On switching time                                 | 20 ms                                            |
| Duty cycle                                        | 100%                                             |
| Max. positive test pulse with 0 signal            | 3800 µs                                          |
| Max. negative test pulse on 1 signal              | 4900 µs                                          |
| Coil characteristics                              | 24 V DC: 2.7 W                                   |
| Permissible voltage fluctuations                  | +/- 10%                                          |
| Operating medium                                  | Compressed air as per ISO 8573-1:2010 [7:4:4]    |

| Feature                                  | Value                                                                                |
|------------------------------------------|--------------------------------------------------------------------------------------|
| Information on operating and pilot media | Operation with oil lubrication possible (required for further use)                   |
| Vibration resistance                     | Transport application test with severity level 1 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                |
| LABS (PWIS) conformity                   | VDMA24364-B1/B2-L                                                                    |
| Temperature of medium                    | -10 °C...50 °C                                                                       |
| Noise level                              | 85 dB(A)                                                                             |
| Pilot medium                             | Compressed air as per 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 1                   | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 2                   | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 3                   | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 4                   | Sub-base, size 1 as per ISO 5599-1                                                   |
| Pneumatic connection 5                   | Sub-base, size 1 as per ISO 5599-1                                                   |
| Seals material                           | HNBR<br>NBR                                                                          |
| Housing material                         | Die-cast aluminum                                                                    |