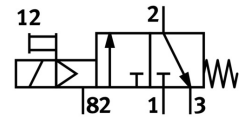
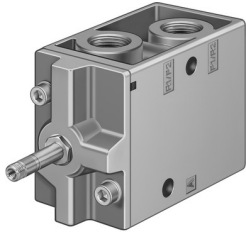


# Solenoid valve MFH-3-1/2-EX

Part number: 535899

FESTO



General operating condition

## Data sheet

| Feature                                           | Value                                         |
|---------------------------------------------------|-----------------------------------------------|
| Valve function                                    | 3/2-way, closed, monostable                   |
| Type of actuation                                 | Electric                                      |
| Construction width                                | 52 mm                                         |
| Standard nominal flow rate                        | 3700 l/min                                    |
| pneumatic working port                            | G1/2                                          |
| Operating voltage                                 | Via solenoid coil, must be ordered separately |
| Operating pressure                                | 0.15 MPa ... 0.8 MPa                          |
| Operating pressure                                | 1.5 bar ... 8 bar                             |
| Design                                            | Poppet seat                                   |
| Type of reset                                     | Mechanical spring                             |
| CE mark (see declaration of conformity)           | To EU Explosion Protection Directive (ATEX)   |
| Explosion protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)                    |
| CE marking (see declaration of conformity)        | To UK EX instructions                         |
| ATEX category gas                                 | II 2G                                         |
| ATEX category dust                                | II 2D                                         |
| Explosion ignition protection type for gas        | Ex h IIC T4 Gb                                |
| Explosion ignition protection type for dust       | Ex h IIIC T130°C Db                           |
| Explosion ambient temperature                     | -5°C ≤ Ta ≤ +40°C                             |
| Degree of protection                              | IP65                                          |
| Nominal size                                      | 14 mm                                         |
| Grid dimension                                    | 69 mm                                         |
| Exhaust-air function                              | With flow control option                      |
| Sealing principle                                 | Soft                                          |
| Mounting position                                 | optional                                      |
| Manual override                                   | Detenting                                     |
| Type of piloting                                  | Pilot actuated                                |
| Flow direction                                    | Non-reversible                                |
| Symbol                                            | 00991041                                      |
| lap                                               | Underlap                                      |
| b value                                           | 0.3                                           |
| Switching time off                                | 90 ms                                         |
| Switching time on                                 | 18 ms                                         |
| Max. positive test pulse with 0 signal            | 2200 μs                                       |
| Max. negative test pulse with 1 signal            | 3700 μs                                       |
| Characteristic coil data                          | See solenoid coil, to be ordered separately   |

| Feature                            | Value                                                                                                 |
|------------------------------------|-------------------------------------------------------------------------------------------------------|
| Explosion protection               | Zone 1 (ATEX)<br>Zone 1 (UKEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 21 (UKEX)<br>Zone 22 (ATEX) |
| 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)            |
| Corrosion resistance class CRC     | 1 - Low corrosion stress                                                                              |
| LABS (PWIS) conformity             | VDMA24364-B1/B2-L                                                                                     |
| Storage temperature                | -20 °C ... 60 °C                                                                                      |
| Media temperature                  | -5 °C ... 40 °C                                                                                       |
| Ambient temperature                | -5 °C ... 40 °C                                                                                       |
| Product weight                     | 1100 g                                                                                                |
| Electrical connection              | Via F coil, to be ordered separately                                                                  |
| Type of mounting                   | Either:<br>On manifold rail<br>With through-hole                                                      |
| Breather connection                | M5                                                                                                    |
| Pilot exhaust port 82              | M5                                                                                                    |
| Pneumatic connection, port 1       | G1/2                                                                                                  |
| Pneumatic connection, port 2       | G1/2                                                                                                  |
| Pneumatic connection, port 3       | G1/2                                                                                                  |
| Note on materials                  | RoHS-compliant                                                                                        |
| Material seals                     | NBR                                                                                                   |
| Material housing                   | Die-cast aluminium                                                                                    |