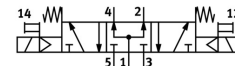


# Solenoid valve MFH-5/3B-D-1-C-EX

Part number: 535981

FESTO



 [General operating condition](#)

## Data sheet

| Feature                                           | Value                                         |
|---------------------------------------------------|-----------------------------------------------|
| Valve function                                    | 5/3-way, pressurised                          |
| Type of actuation                                 | Electric                                      |
| Construction width                                | 42 mm                                         |
| Standard nominal flow rate                        | 1200 l/min                                    |
| pneumatic working port                            | Sub-base size 1 to ISO 5599-1<br>G1/4         |
| Operating voltage                                 | Via solenoid coil, must be ordered separately |
| Operating pressure                                | 0.3 MPa ... 1 MPa                             |
| Operating pressure                                | 3 bar ... 10 bar                              |
| Design                                            | Piston gate valve                             |
| Type of reset                                     | Mechanical spring                             |
| CE mark (see declaration of conformity)           | To EU Explosion Protection Directive (ATEX)   |
| 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 T105°C Db                           |
| Explosion ambient temperature                     | -5°C ≤ Ta ≤ +40°C                             |
| Explosion protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)                    |
| 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                                   | Detenting via accessory<br>Non-detenting      |
| ISO code                                          | 158                                           |
| Type of piloting                                  | Pilot actuated                                |
| Pilot air supply                                  | Internal                                      |
| Flow direction                                    | Non-reversible                                |
| Symbol                                            | 00991083                                      |
| lap                                               | Overlap                                       |
| Switching time off                                | 36 ms                                         |

| Feature                                | Value                                                                                                 |
|----------------------------------------|-------------------------------------------------------------------------------------------------------|
| Switching time on                      | 18 ms                                                                                                 |
| Max. positive test pulse with 0 signal | 2200 µs                                                                                               |
| Max. negative test pulse with 1 signal | 3700 µs                                                                                               |
| 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)            |
| 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                      | -5 °C ... 40 °C                                                                                       |
| Sound pressure level                   | 85 dB(A)                                                                                              |
| Pilot medium                           | Compressed air to ISO 8573-1:2010 [7:4:4]                                                             |
| Ambient temperature                    | -5 °C ... 40 °C                                                                                       |
| Product weight                         | 520 g                                                                                                 |
| Electrical connection                  | Via F coil, to be ordered separately                                                                  |
| Type of mounting                       | On sub-base<br>With through-hole                                                                      |
| Pilot air port 12                      | Sub-base size 1 to ISO 5599-1                                                                         |
| Pilot air port 14                      | Sub-base size 1 to ISO 5599-1                                                                         |
| 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                                                                         |
| Note on materials                      | RoHS-compliant                                                                                        |
| Material seals                         | HNBR<br>NBR                                                                                           |
| Material housing                       | Die-cast aluminium                                                                                    |