

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

Part number: 535983

FESTO



 [General operating condition](#)

## Data sheet

| Feature   | Value   |
|---|---|
| Valve function  | 5/3-way, pressurised                          |
| Type of actuation                                     | Electric                                      |
| Construction width                                    | 65 mm   |
| Standard nominal flow rate (standardised to DIN 1343) | 4000 l/min                                    |
| pneumatic working port                                | Sub-base size 3 to ISO 5599-1<br>G1/2         |
| 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)   |
| UKCA 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  | 14.5 mm                                       |
| Grid dimension  | 71 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  | 358   |
| Type of piloting                                      | Pilot actuated                                |
| Pilot air supply                                      | Internal                                      |
| Flow direction  | Non-reversible                                |
| Symbol  | 00991083                                      |
| lap   | Overlap                                       |
| Suitability for vacuum                                | no  |

| Feature                                | Value   |
|--|---|
| Switching time off                     | 75 ms   |
| Switching time on                      | 36 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                      | -10 °C ... 60 °C  |
| Sound pressure level                   | 85 dB(A)  |
| Ambient temperature                    | -5 °C ... 40 °C   |
| Product weight                         | 1040 g  |
| Electrical connection                  | Via F coil, to be ordered separately  |
| Type of mounting                       | On sub-base<br>Via through-hole and screw   |
| Pilot exhaust port 82                  | M5  |
| Pilot exhaust port 84                  | M5  |
| Pneumatic connection, port 1           | Sub-base size 3 to ISO 5599-1   |
| Pneumatic connection, port 2           | Sub-base size 3 to ISO 5599-1   |
| Pneumatic connection, port 3           | Sub-base size 3 to ISO 5599-1   |
| Pneumatic connection, port 4           | Sub-base size 3 to ISO 5599-1   |
| Pneumatic connection, port 5           | Sub-base size 3 to ISO 5599-1   |
| Note on materials                      | RoHS-compliant  |
| Material seals                         | HNBR<br>NBR   |
| Material housing                       | Die-cast aluminium  |