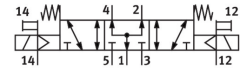


# Solenoid valve MFH-5/3B-D-1-S-C-EX

Part number: 535984

**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 (standardised to DIN 1343) | 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                                    | -0.09 MPa ... 1.6 MPa                         |
| Operating pressure                                    | -0.9 bar ... 16 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                                          | 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                                              | 169                                           |
| Type of piloting                                      | Pilot actuated                                |
| Pilot air supply                                      | External                                      |
| Flow direction                                        | Reversible                                    |
| Symbol                                                | 00991079                                      |
| lap                                                   | Overlap                                       |
| Pilot pressure                                        | 3 bar ... 10 bar                              |

| Feature                                | Value                                                                                                 |
|----------------------------------------|-------------------------------------------------------------------------------------------------------|
| Switching time off                     | 36 ms                                                                                                 |
| 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                                                                                    |