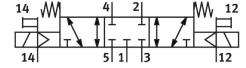


# Air solenoid valve MFH-5/3G-D-1-S-C-EX

Part number: 535972

FESTO



## Data sheet

| Feature   | Value  |
|---|--|
| Valve function                                    | 5/3, closed                                      |
| Actuation type                                    | Electrical                                       |
| Width   | 42 mm  |
| Standard nominal flow rate                        | 1200 l/min                                       |
| Pneumatic working port                            | Sub-base, size 1 according to ISO 5599-1<br>G1/4 |
| Operating voltage                                 | Via solenoid coil, to be ordered separately      |
| Operating pressure                                | -0.09 MPa...1.6 MPa<br>-0.9 bar...16 bar         |
| Structural design                                 | Piston gate valve                                |
| Reset method                                      | Mechanical spring                                |
| CE marking (see declaration of conformity)        | as per EU explosion protection directive (ATEX)  |
| UKCA marking (see declaration of conformity)      | acc. to UK EX instructions                       |
| ATEX category gas                                 | II 2G  |
| ATEX category for dust                            | II 2D  |
| Type of ignition protection for gas               | Ex h IIC T4 Gb                                   |
| Type of (ignition) protection for dust            | Ex h IIIC T105°C Db                              |
| Explosive 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 width                                     | 8 mm   |
| Width dimension                                   | 43 mm  |
| Exhaust air function                              | With flow control option                         |
| Sealing principle                                 | Soft   |
| Mounting position                                 | Any  |
| Conforms to standard                              | ISO 5599-1                                       |
| Manual override                                   | Detenting via accessory<br>Non-detenting         |
| ISO code  | 169  |
| Type of control                                   | Pilot-controlled                                 |
| Pilot air supply port                             | External   |

| Feature                                  | Value   |
|--|---|
| Flow direction                           | Reversible  |
| Lap                                      | Overlap   |
| Pilot pressure                           | 3 bar...10 bar  |
| Switching time off                       | 36 ms   |
| On switching time                        | 18 ms   |
| Max. positive test pulse with 0 signal   | 2200 µs   |
| Max. negative test pulse on 1 signal     | 3700 µs   |
| Explosion prevention and 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 as per ISO 8573-1:2010 [7:4:4]   |
| 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                    | -5 °C...40 °C   |
| Noise level                              | 85 dB(A)  |
| Pilot medium                             | Compressed air as per 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 as per ISO 5599-1  |
| Pilot air port 14                        | Sub-base, size 1 as per ISO 5599-1  |
| 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  |
| Note on materials                        | RoHS-compliant  |
| Seals material                           | HNBR<br>NBR   |
| Housing material                         | Die-cast aluminum   |