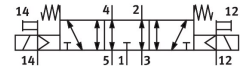


# Air solenoid valve MFH-5/3E-D-2-S-C-EX

Part number: 535979

FESTO



## Data sheet

| Feature                                           | Value                                            |
|---------------------------------------------------|--------------------------------------------------|
| Valve function                                    | 5/3 exhausted                                    |
| Actuation type                                    | Electrical                                       |
| Width                                             | 54 mm                                            |
| Normal nominal flow rate (normalized to DIN 1343) | 2300 l/min                                       |
| Pneumatic working port                            | Sub-base, size 2 according to ISO 5599-1<br>G3/8 |
| 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                                     | 11.5 mm                                          |
| Width dimension                                   | 56 mm                                            |
| Exhaust air function                              | Adjustable                                       |
| Sealing principle                                 | Soft                                             |
| Mounting position                                 | Any                                              |
| Conforms to standard                              | ISO 5599-1                                       |
| Manual override                                   | Detenting via accessory<br>Non-detenting         |
| ISO code                                          | 269                                              |
| Type of control                                   | Piloted                                          |
| Pilot air supply port                             | External                                         |

| Feature                                  | Value                                                                                                 |
|------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Flow direction                           | Reversible                                                                                            |
| Lap                                      | Positive overlap                                                                                      |
| Pilot pressure MPa                       | 0.3 MPa...1 MPa                                                                                       |
| Pilot pressure                           | 3 bar...10 bar                                                                                        |
| Suitability for vacuum                   | Yes                                                                                                   |
| Switching time off                       | 67 ms                                                                                                 |
| On switching time                        | 35 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                    | -10 °C...60 °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                           | 820 g                                                                                                 |
| Electrical connection                    | Via F coil, to be ordered separately                                                                  |
| Type of mounting                         | On sub-base<br>With through-hole and screw                                                            |
| Pilot exhaust air port 82                | M5                                                                                                    |
| Pilot exhaust air port 84                | M5                                                                                                    |
| Pilot air port 12                        | Sub-base, size 2 as per ISO 5599-1                                                                    |
| Pilot air port 14                        | Sub-base, size 2 as per ISO 5599-1                                                                    |
| Pneumatic connection 1                   | Sub-base, size 2 as per ISO 5599-1                                                                    |
| Pneumatic connection 2                   | Sub-base, size 2 as per ISO 5599-1                                                                    |
| Pneumatic connection 3                   | Sub-base, size 2 as per ISO 5599-1                                                                    |
| Pneumatic connection 4                   | Sub-base, size 2 as per ISO 5599-1                                                                    |
| Pneumatic connection 5                   | Sub-base, size 2 as per ISO 5599-1                                                                    |
| Note on materials                        | RoHS compliant                                                                                        |
| Seals material                           | HNBR<br>NBR                                                                                           |
| Housing material                         | Die-cast aluminum                                                                                     |