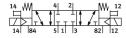
## Air solenoid valve MFH-5/3G-1/4-S-B-EX Part number: 535940

**FESTO** 





## **Data sheet**

| Feature   | Value   |
|---|---|
| Valve function                                    | 5/3, closed                                     |
| Actuation type                                    | Electrical                                      |
| Width   | 32 mm   |
| Standard nominal flow rate                        | 1600 l/min                                      |
| Pneumatic working port                            | G1/4  |
| Operating pressure                                | -0.09 MPa1 MPa<br>-0.9 bar10 bar                |
| Structural design                                 | Piston gate valve                               |
| Reset method                                      | Mechanical spring                               |
| CE marking (see declaration of conformity)        | as per EU explosion protection directive (ATEX) |
| Explosion protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)                      |
| 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 T130°C Db                             |
| Explosive ambient temperature                     | -5°C <= Ta <= +40°C                             |
| Degree of protection                              | IP65  |
| Nominal width                                     | 10 mm   |
| Width dimension                                   | 33 mm   |
| Exhaust air function                              | With flow control option                        |
| Sealing principle                                 | Soft  |
| Mounting position                                 | Any   |
| Manual override                                   | Non-detenting                                   |
| Type of control                                   | Pilot-controlled                                |
| Pilot air supply port                             | External  |
| Flow direction                                    | Reversible                                      |
| Lap   | Overlap   |
| Pilot pressure MPa                                | 0.3 MPa1 MPa                                    |
| Pilot pressure                                    | 3 bar10 bar                                     |
| b-value   | 0.38  |

| Feature                                  | Value  |
|--|--|
| C value                                  | 6.35 l/sbar  |
| Max. switching frequency                 | 3 Hz   |
| Switching time off                       | 36 ms  |
| On switching time                        | 20 ms  |
| Changeover time                          | 30 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) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) 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)                     |
| Corrosion resistance class (CRC)         | 1 - Low corrosion stress   |
| LABS (PWIS) conformity                   | VDMA24364-B1/B2-L  |
| Storage temperature                      | -40 °C60 °C  |
| Temperature of medium                    | -10 °C60 °C  |
| Pilot medium                             | Compressed air as per ISO 8573-1:2010 [7:4:4]  |
| Ambient temperature                      | -5 °C40 °C   |
| Product weight                           | 500 g  |
| Electrical connection                    | Via F coil, to be ordered separately   |
| Type of mounting                         | With through-hole  |
| Pilot exhaust air port 82                | M5   |
| Pilot exhaust air port 84                | M5   |
| Pilot air port 12                        | G1/8   |
| Pilot air port 14                        | G1/8   |
| Pneumatic connection 1                   | G1/4   |
| Pneumatic connection 2                   | G1/4   |
| Pneumatic connection 3                   | G1/4   |
| Pneumatic connection 4                   | G1/4   |
| Pneumatic connection 5                   | G1/4   |
| Note on materials                        | RoHS-compliant   |
| Seals material                           | NBR  |
| Housing material                         | Die-cast aluminum  |