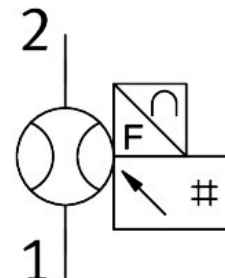


# Flow sensor

## SFAM-90-10000L-M-2SV-M12

Part number: 573349

FESTO



## Data sheet

| Feature                                      | Value                                                       |
|----------------------------------------------|-------------------------------------------------------------|
| Approval                                     | RCM trademark<br>c UL us - Recognized (OL)                  |
| CE mark (see declaration of conformity)      | To EU EMC Directive<br>In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions       |
| Certificate issuing authority                | UL E322346                                                  |
| Note on materials                            | RoHS-compliant                                              |
| Measured variable                            | Volume<br>Volumetric flow rate                              |
| Flow direction                               | Unidirectional<br>From left to right                        |
| Measuring principle                          | Thermal                                                     |
| Measurement method                           | Heat Loss                                                   |
| Start value for flow rate measuring range    | 100 l/min                                                   |
| End value for flow rate measuring range      | 10000 l/min                                                 |
| Operating pressure                           | 1.6 MPa<br>16 bar<br>232 psi                                |
| Overload pressure                            | 2 MPa<br>20 bar<br>290 psi                                  |
| Operating medium                             | Compressed air to ISO 8573-1:2010 [7:4:4]<br>Nitrogen       |
| Media temperature                            | 0 °C...50 °C                                                |
| Ambient temperature                          | 0 °C...50 °C                                                |
| Nominal temperature                          | 23 °C                                                       |
| Accuracy of flow rate                        | ± (3% o.m.v. + 0.3% FS)                                     |
| Repetition accuracy offset in ± %FS          | 0.2 %FS                                                     |
| Repetition accuracy span in ± %FS            | 0.8 %FS                                                     |
| Temperature coefficient span in ± %FS/K      | Typ. 0.1%FS/K                                               |

| Feature                                              | Value                                                       |
|------------------------------------------------------|-------------------------------------------------------------|
| Pressure influence span in $\pm$ %FS/bar             | 0.5 %FS/b.                                                  |
| Switching output                                     | 2 x PNP or 2 x NPN, switchable                              |
| Switching function                                   | Window comparator or threshold value comparator, adjustable |
| Switching element function                           | N/C or N/O contact, switchable                              |
| Max. output current                                  | 100 mA                                                      |
| Analogue output                                      | 0 - 10 V                                                    |
| Flow characteristic curve start value                | 0 l/min                                                     |
| Flow characteristic curve end value                  | 10000 l/min                                                 |
| Output characteristic curve start value              | 0 V                                                         |
| Output characteristic curve end value                | 10 V                                                        |
| Min. load resistance voltage output                  | 10 kOhm                                                     |
| Short circuit current rating                         | yes                                                         |
| Overload protection                                  | Available                                                   |
| Operational voltage range DC                         | 15 V...30 V                                                 |
| Reverse polarity protection                          | For all electrical connections                              |
| Electrical connection 1, connection type             | Plugs                                                       |
| Electrical connection 1, connector system            | M12x1, A-coded to EN 61076-2-101                            |
| Electrical connection 1, number of connections/cores | 5                                                           |
| Electrical connection 1, type of mounting            | Screw-type lock                                             |
| Electrical connection 1, compatible type of mounting | Compatible with rotatable screw-type lock                   |
| Max. cable length                                    | 30 m                                                        |
| Type of mounting                                     | On service unit                                             |
| Mounting position                                    | Horizontal                                                  |
| Pneumatic connection                                 | Manifold module                                             |
| Product weight                                       | 1500 g                                                      |
| Material housing                                     | Die-cast aluminium<br>PA-reinforced                         |
| Display type                                         | Illuminated LCD, multi-colour                               |
| Displayable units                                    | l<br>l/min<br>m <sup>3</sup><br>scf<br>scfm                 |
| Setting options                                      | Teach-in<br>Via display and keys                            |
| Protection against tampering                         | PIN code                                                    |
| Setting range threshold value                        | 1 %...100 %                                                 |
| Setting range hysteresis                             | 0 %...90 %                                                  |
| Degree of protection                                 | IP65                                                        |
| Pressure drop                                        | 100 mbar                                                    |
| Protection class                                     | III                                                         |
| Corrosion resistance class CRC                       | 2 - Moderate corrosion stress                               |
| LABS (PWIS) conformity                               | VDMA24364-B1/B2-L                                           |