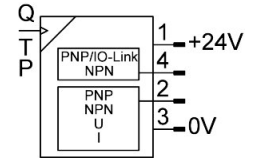
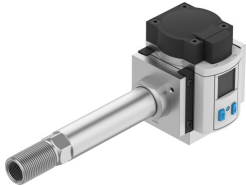


Flow sensor SFAM-62-3000L-TG12-PNLK-PNVBA-M12

Part number: 8181245

FESTO



[PDF](#) General operating condition

Data sheet

| Feature | Value |
|--|--|
| Symbol | 00997525 00997562 |
| Certification | RCM compliance mark |
| CE marking (see declaration of conformity) | As per EU EMC directive As per EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| Note on materials | RoHS-compliant |
| Measured variable | Pressure Mass flow rate Temperature Volume Volumetric flow rate |
| Flow direction | Unidirectional From left to right |
| Measuring principle | Thermal |
| Method of measurement | Heat loss |
| Pressure measuring range initial value | 0 MPa |
| Pressure measuring range initial value | 0 bar |
| Pressure measuring range initial value | 0 psi |
| Pressure measuring range end value | 1.6 MPa |
| Pressure measuring range end value | 16 bar |
| Pressure measuring range end value | 232 psi |
| Flow measuring range start value | 30 l/min |
| Flow measuring range end value | 3000 l/min |
| Temperature measuring range start value | 0 °C |
| Temperature measuring range end value | 100 °C |
| Operating pressure | 1.6 MPa |
| Operating pressure | 16 bar |
| Operating pressure | 232 psi |
| Overload pressure | 2 MPa |
| Overload pressure | 20 bar |
| Overload pressure | 290 psi |
| Operating medium | Argon Compressed air as per ISO 8573-1:2010 [7:4:4] Carbon dioxide Nitrogen |
| Temperature of medium | 0 °C ... 50 °C |
| Ambient temperature | 0 °C ... 50 °C |

| Feature | Value |
|--|---|
| Nominal temperature | 23 °C |
| Accuracy of pressure value in ± %FS | 1.5 %FS |
| Accuracy of flow rate | ± (3% o.m.v. + 0.3% FS) |
| Accuracy of temperature in ± °C | 5 °C |
| Repetition accuracy of pressure value in ± %FS | 0.3 %FS |
| Zero point repetition accuracy in ± %FS | 0.2 %FS |
| Repetition accuracy margin in ± %FS | 0.8 %FS |
| Temperature co-efficient in ± %FS/K | 0.05 %FS/K |
| Temperature co-efficient margin in ± %FS/K | typ. 0. 1%FS/K |
| Pressure influence of margin in ±%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 contact/N/O contact switchable |
| Max. output current | 100 mA |
| Analog output | 0 - 10 V 4 - 20 mA 1 - 5 V |
| Flow characteristic curve, start value | 0 l/min |
| Flow characteristic curve, end value | 3000 l/min |
| Temperature characteristic curve start value | 0 °C |
| Temperature characteristic curve end value | 100 °C |
| Output characteristic curve initial value | 0 V |
| End value output characteristic curve | 10 V |
| Output characteristic curve initial value | 4 mA |
| End value output characteristic curve | 20 mA |
| Max. load resistance of current output | 500 Ohm |
| Min. load resistance of voltage output | 20 kOhm |
| Short-circuit protection | yes |
| Overload protection | Available |
| Protocol | IO-Link® |
| IO-Link, revision ID | V1.1 |
| IO-Link, device profile | Firmware update Function Locator Function Product URI Function Quantity detection Identification and diagnosis Smart Sensor - SSP 4.1.3 |
| IO-Link, transmission rate | COM3 |
| IO-Link®, SIO mode support | Yes |
| IO-Link, port type | Class A |
| IO-Link, process data length output | 0 bit |
| IO-Link, process data length input | 96 bit |
| IO-Link®, process data content IN | Pressure measured value 16 bit MDC Flow rate monitoring 2-bit SSC Flow rate measured value 16-bit MDC Flow rate monitoring 2-bit SSC Temperature measured value 16-bit MDC Temperature monitoring 2-bit SSC Volume / mass pulse 1 bit SSC |
| IO-Link®, service data contents IN | Volume / mass measured value 32-bit Pneumatic energy measurement 32 bit Pneumatic power measurement value 32 bit |
| IO-Link®, minimum cycle time | 1.5 ms |
| IO-Link®, data memory required | 1000 byte |
| DC operating voltage range | 15 V ... 30 V |
| Reverse polarity protection | for all electrical connections |
| Electrical connection 1, connection type | Plug |

| Feature | Value |
|---|---|
| Electrical connection 1, connection technology | M12x1 A-coded as per EN 61076-2-101 |
| Electrical connection 1, number of pins/wires | 5 |
| Electrical connection 1, type of mounting | Screw-type lock |
| Electrical connection 1, type of mounting | Compatible with rotatable screw-type lock |
| Electrical connection for input 1, connection pattern | 00995386 |
| Max. cable length | 30 m |
| Type of mounting | Line installation |
| Mounting position | Any |
| Pneumatic connection | G1/2 |
| Product weight | 600 g |
| Housing material | Die-cast aluminum PA-reinforced |
| Display type | Illuminated LCD, multi-color |
| Displayable unit(s) | MPa bar kPa kg kg/min l l/min m ³ m ³ /h psi scfm scft °C °F |
| Setting options | IO-Link® Teach-in Via display and pushbuttons |
| Protection against tampering | IO-Link® PIN code |
| Setting range threshold value | 0 % ... 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 |