

Flow sensor SFAH-200U-Q6S-PNLK-PNVBA-M8

Part number: 8158421

FESTO



Data sheet

[PDF General operating condition](#)

| Feature | Value |
|--|---|
| Symbol | 00995794 |
| Approval | RCM trademark c UL us listed (OL) |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| Certificate issuing authority | UL E322346 |
| Note on materials | RoHS-compliant |
| Measured variable | Mass flow rate Volumetric flow rate |
| Flow direction | Unidirectional |
| Measuring principle | Thermal |
| Measurement method | Heat transfer |
| Start value for flow rate measuring range | 4 l/min |
| End value for flow rate measuring range | 200 l/min |
| Operating pressure | -0.9 bar ... 10 bar |
| Operating medium | Compressed air to ISO 8573-1:2010 [6:4:4] Nitrogen |
| Media temperature | 0 °C ... 50 °C |
| Ambient temperature | 0 °C ... 50 °C |
| Nominal temperature | 23 °C |
| Accuracy of flow rate | ± (2% o.m.v. + 1% FS) |
| Repetition accuracy offset in ± %FS | 0.2 %FS |
| Repetition accuracy span in ± %FS | 0.8 %FS |
| Temperature coefficient span in ± %FS/K | Typ. 0.15%FS/K |
| Pressure influence span in ± %FS/bar | 1 %FS/b. |
| Switching output | 2 x PNP or 2 x NPN, switchable |
| Switching function | Window comparator Threshold value comparator Auto difference monitoring |
| Switching element function | N/C or N/O contact, switchable |
| Max. output current | 100 mA |
| Analogue output | 0 - 10 V 4 - 20 mA 1 - 5 V |
| Flow characteristic curve start value | 0 l/min |
| Flow characteristic curve end value | 200 l/min |

| Feature | Value |
|--|--|
| Max. load resistance current output | 500 Ohm |
| Min. load resistance voltage output | 20 kOhm |
| Short circuit current rating | yes |
| Overload protection | Available |
| Protocol | IO-Link® |
| IO-Link, Protocol version | Device V 1.1 |
| IO-Link, Profile | Smart sensor profile |
| IO-Link, Function classes | Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel |
| IO-Link, communication mode | COM2 (38.4 kBaud) |
| IO-Link, SIO-Mode support | Yes |
| IO-Link, Port class | A |
| IO-Link, Process data length IN | 3 bytes |
| IO-Link, Process data content IN | 1 bit BDC (volume monitoring) 14 bit PDV (measured flow value) 2 bit BDC (flow monitoring) |
| IO-Link, Service data IN | 32-bit volume/mass measurement |
| IO-Link, Min. cycle time | 4 ms |
| IO-Link, Data storage required | <500 Byte |
| Operational voltage range DC | 22 V ... 26 V |
| No-load supply current | ≤25 mA |
| Reverse polarity protection | For all electrical connections |
| Electrical connection 1, connection type | Plugs |
| Electrical connection 1, connector system | M8x1, A-coded, to EN 61076-2-104 |
| Electrical connection 1, number of connections/cores | 4 |
| Electrical connection 1, type of mounting | Not rotatable |
| Electrical connection 1, compatible type of mounting | Compatible with latching lock Compatible with rotatable screw-type lock |
| Electrical connection 1, connection pattern | 00991171 |
| Type of mounting | With accessories |
| Mounting position | optional |
| Pneumatic connection | For tubing O.D. 6 mm |
| Pneumatic connection, outlet direction | Straight |
| Product weight | 60 g |
| Material housing | PA-reinforced |
| Material in contact with the medium | Silicon Silicon nitride High-alloy stainless steel |
| Display type | Illuminated LCD, multi-colour |
| Displayable units | g g/min l l/min scft scft/h scft/min |
| Setting options | IO-Link® Teach-in Via display and keys |
| Protection against tampering | IO-Link PIN code |
| Degree of protection | IP40 |
| Pressure drop | 56 mbar |
| Protection class | III |
| Corrosion resistance class CRC | 2 - Moderate corrosion stress |

| Feature | Value |
|---|----------------------------------|
| LABS (PWIS) conformity | VDMA24364-B2-L |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 4 according to ISO 14644-1 |
| Pollution degree | 3 |