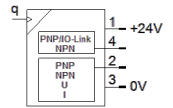
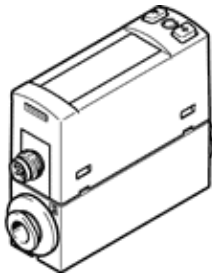


flow sensor SFAH-1U-Q4S-PNLK-PNVBA-M8

Part number: 8058466

FESTO



Data sheet

| Feature | Value |
|--------------------------------------------------|-------------------------------------------------------------------------------|
| Authorisation | RCM Mark c UL us - Listed (OL) |
| CE mark (see declaration of conformity) | to EU directive for EMC in accordance with EU RoHS directive |
| KC mark | KC-EMV |
| Certificate issuing department | UL E322346 |
| Materials note | Conforms to RoHS |
| Measured variable | Mass flow rate Volumetric flow rate |
| Direction of flow | Unidirectional |
| Measuring principle | Thermal |
| Measurement method | Heat Transfer |
| Flow measurement range initial value | 0.02 l/min |
| Flow measurement range final value | 1 l/min |
| Operating pressure | -0.9 ... 10 bar |
| Operating medium | Argon Compressed air in accordance with ISO8573-1:2010 [6:4:4] Nitrogen |
| Medium temperature | 0 ... 50 °C |
| Ambient temperature | 0 ... 50 °C |
| Nominal temperature | 23 °C |
| Accuracy of flow rate | ± (2% o.m.v. + 1% FS) |
| Repetition accuracy zero point in ± %FS | 0.2 %FS |
| Repetition accuracy margin in ± %FS | 0.8 %FS |
| Temperature co-efficient margin in ± %FS/K | typ. 0,15%FS/K |
| Pressure dependency margin in ± %FS/bar | 1 %FS/b. |
| Switch 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 |
| Characteristic curve for flow rate initial value | 0 l/min |
| Characteristic curve for flow rate final value | 1 l/min |
| Max. load resistance, current output | 500 Ohm |
| Min. load resistance, voltage output | 20 kOhm |
| Short circuit strength | Yes |
| Overload withstand capability | Available |
| Protocol | IO-Link |
| IO-Link, protocol | Device V 1.1 |
| IO-Link, profile | Smart sensor profile |
| IO-Link, function classes | Binary Data Channels (BDC) Process Data Variable (PDV) |

| Feature | Value |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| | Identification diagnosis Teach channel |
| IO-Link, communication mode | COM2 (38,4 kBaud) |
| IO-Link, SIO mode support | Yes |
| IO-Link, port type | A |
| IO-Link, process data width IN | 3 Byte |
| IO-Link, process data content IN | 1 bit BDC (volume monitoring) 14 bit PDV (flow measured value) 2 bit BDC (flow monitoring) |
| IO-Link, Service data contents IN | 32-bit volume/mass measured value |
| IO-Link, minimum cycle time | 4 ms |
| IO-Link, data memory required | < 500 Byte |
| Operating voltage range DC | 22 ... 26 V |
| Idle current | <= 25 mA |
| Polarity protected | for all electrical connections |
| Electrical connection 1, connection type | Plug |
| Electrical connection 1, connection technology | M8x1, A-coded to EN 61076-2-104 |
| Electrical connection 1, number of pins/wires | 4 |
| Mounting type | with accessories |
| Assembly position | Any |
| Pneumatic connection | For tubing outside diameter 4 mm |
| Pneumatic connection, outlet direction | Straight |
| Product weight | 60 g |
| Material housing | PA-reinforced |
| Materials in contact with media | Anodised wrought aluminium alloy Epoxy resin NBR PA-reinforced Silicon Silicon nitride High alloy steel, non-corrosive |
| Type of display | Illuminated LCD, multicoloured |
| Unit(s) that can be displayed | g g/min l l/h l/min scft scft/h |
| Setting options | IO-Link Teach-In Via display and buttons |
| Protection against manipulation | IO-Link PIN-Code |
| Protection class | IP40 |
| Pressure drop | < 5 mbar |
| Safety class | III |
| Corrosion resistance classification CRC | 2 - Moderate corrosion stress |