

Product Information

Flowrate Sensor FS222



- High chemical resistance
- Transparent medium necessary, max. viscosity 15 cSt
- 6 measuring ranges 0.1..120 L/min
- Transistor output push-pull
- Process pressure max. 10 bar

Characteristics

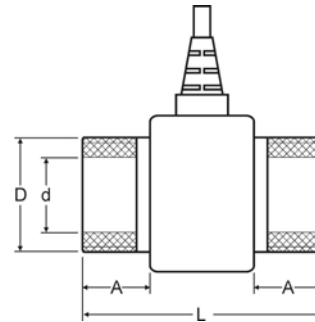
The FS222 is a volumetric turbine flow sensor manufactured in PVDF for high precision flow measurement in 6 different ranges from 0.1 up to 120 L/min. The repeatability is 0.1 % of the measured value. The sensor is chemical resistant and optional provided with a replaceable Cartridge (MR1-3) that minimizes system downtime. The maintenance is efficiently handled by simply removing the inner cartridge assembly. Within a minute the flow meter is completely renewed without technical assistance.

The sensor is not suitable for measurements of liquids with solid parts.

Technical data

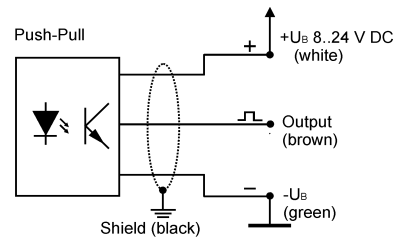
| | |
|-----------------------|---|
| Power supply | |
| Supply voltage | : 8..24 V DC |
| Electrical connection | : signal cable 1 m |
| CE-conformity | : N 55022 Class A & B, EN61000-6 |
| Output | |
| Measurement ranges | : 0.1..120 l/min (see ordering code) measuring ranges 2-6 with built-in filter |
| Impulse | : transistor push/pull |
| Load | : max. 2.2 kΩ |
| Frequency | : 15..1200 Hz depends to the measuring range |
| Accuracy | : 1.5 % |
| Process data | |
| Repeatability | : 0.1 % |
| Medium | : transparent (IR-operating mode) |
| Medium temperature | : -40..+85 °C |
| Process pressure | : max. 10 bar |
| Viscosity | : max. 15 cSt (depending on the MR) |
| Pressure loss | : 0.5 bar at 50 %, 2 bar at 100 % |
| Material | |
| Process | : PVDF |
| Case | : PVDF |

Dimensions



| MR | A | D | d | L |
|----|------|--------|-----|----|
| 1 | 9.5 | 1/4" | 6,5 | 39 |
| 2 | 12.7 | 1/2" | 13 | 47 |
| 3 | 12.7 | 1/2" | 13 | 47 |
| 4 | 18.5 | 3/4" | 17 | 63 |
| 5 | 24.5 | 1 1/4" | 29 | 80 |
| 6 | 24.5 | 1 1/4" | 29 | 80 |

Connection diagram



Ordering code

FS222 - 1. - 2. - 3. - 4.

| 1. Measuring range MR | | | | |
|--------------------------|--|--|-------------------|--------------------|
| | | Range l/min | K-factor pulses/L | Process connection |
| 1 | | 0.1..2 | 36000 | G 1/4" |
| 2 | | 0.3..9 | 8000 | G 1/2" |
| 3 | | 0.5..15 | 3200 | G 1/2" |
| 4 | | 1..30 | 1200 | G 3/4" |
| 5 | | 2.5..75 | 450 | G 1 1/4" |
| 6 | | 4..120 | 225 | G 1 1/4" |
| 2. Material | | | | |
| 4 | | Case and turbine PVDF, other material on request | | |
| 3. Electrical connection | | | | |
| 1 | | connection cable 1 m | | |
| 2 | | connection cable 2 m | | |
| 4. Options | | | | |
| 00 | | without option | | |