Flow sensor F8 400°C

Item no. 76106400/ [Immersion depth]

Description

The calorimetric air flow sensors from SEIKOM Electronic are a precise and reliable instrument for measuring gas flows. The measuring principle is based on the calorimetric method, in which the change in temperature of the sensor element is proportional to the mass of the passing gas volume.

Thanks to the highly accurate measuring method, the sensor enables precise determination of the mass air flow, ensuring optimum control and regulation of industrial processes. The sensor from SEIKOM Electronic offers a robust and reliable solution for a wide range of applications where precise monitoring of the air flow is crucial.

Installation conditions

The flow sensor must be connected to the associated evaluation unit in accordance with the connection diagram. Mixing up the connections will lead to malfunctions and possibly damage.

Only screw in the sensor via the hexagon of the sensor housing. The sensor does not depend on the installation position and can therefore be mounted from all sides. The sensor tip should be as close as possible to the center of the pipe. The through-hole in the shaft of the sensor must be completely inside the casing.

There is a small notch in the metal at the end of the sensor. This marking is intended as a mounting aid and must be positioned in the direction from which the gas flow is coming.

With vertical ducts, the direction of flow should be upwards, especially for small air flows (up to 1 m/s), in order to avoid influences from thermally rising air.

For optimum measurement, the sensor requires at least 5 x D (inner pipe diameter) of the free pipe diameter.

inlet and 3 x D of the outlet to avoid incorrect measurements due to turbulence.

To avoid malfunctions, the sensor cable must be extended with a cross-section of at least 1.5 mm² . The maximum cable length should not exceed 20 m.

The switching point is set via the potentiometer of the associated evaluation unit.

Various options are available for mounting the sensor:

- **Screw the sensor** into the duct or pipe using a PG7 thread (alternative connections G1/2-inch, M16 x 1.5 and M20 x 1.5 possible using a reducer).
- Mounting by means of **mounting flange** (item no. 1244), please observe contact temperature.

Technical data

Media temperature range	-20 ... 400°C
Temperature gradient	20K/min.
Immersion depth approx.	50 mm, 130 mm, 165 mm, 300 mm, 400 mm or 500 mm
Process connection	PG7 (optionally with G1/2-inch reducer (item no. 80399), M 16 x 1.5) (article no. 80403) or M 20 x 1.5 (Ar- item no. 80402))
Sensor material	Stainless steel (V4A)
Compressive strength	10 bar
Protection class	IP50
Associated evaluation unit	NLSW®45-6.1

Electrical data

Connection cable	2.5 m / 3 x 0.25 mm²
Wire colors	black/ brown/ blue

Maintenance instructions

The flow sensor should be cleaned at regular intervals, especially when used in heavily contaminated media. Do not clean the sensor tip with a screwdriver, wire brush or similar, as there is a risk of damage. The following procedure is recommended:

- Dismantle the sensor.
- Carefully soak the sensor in lukewarm soapy water for approx. 10 minutes (depending on the degree of soiling).
- Carefully rinse the sensor with lukewarm water and then leave to dry for at least 24 hours.
- Install the sensor in a dry state.
- Commission the flow monitor and carry out a new adjustment with the evaluation unit if necessary.

Part number flow sensor F8 400°C

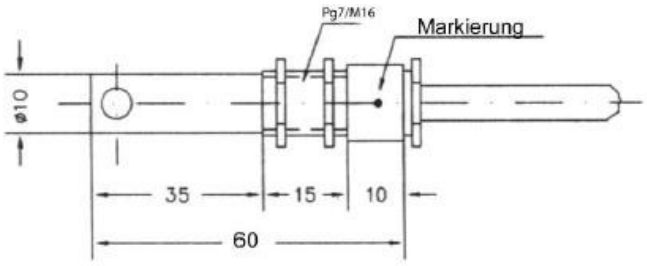
Article no. **76106400/** **50**

Immersion depth

50	50 mm
130	130 mm
165	165 mm
300	300 mm
400	400 mm
500	500 mm

Dimensions

Sensor F8 400°C /50 (exemplary):



Sensor with other immersion depths correspondingly longer.

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