



Flow sensor F4 made from teflon

Article no. 69830/ [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 gas volume flowing past.

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

Installation conditions

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

The sensor is independent of 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 duct.

The sensor must be positioned in the channel so that the flow directly hits the sensor elements in the through hole.

In vertical pipes, 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.

The sensor requires at least 5 x D (pipe inner diameter) of the free inlet and 3 x D of the outlet for optimum measurement to avoid false 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 50 m.

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

Various options are available for mounting the sensor:

- *Recommended:* Screw-in of the sensor by means of **screw-in adapter** (Article no. 80404) to variably determine the immersion depth of the sensor and for easy cleaning of the sensor
- Mounting by means of **mounting flange** (Article no. 79781/12,5)

Technical data

Media temperature range	-20 ... 90°C
Temperature gradient	30K/min.
Immersion depth approx.	60 mm, 115 mm or 145 mm
Process connection	10 mm sensor tube (F4/40) 12 mm sensor tube (F4/115, F4/145)
Sensor material	Teflon
Compressive strength	6 bar
Protection class	IP67
Associated evaluation unit	NLSW®2a NLSW®45-3 NLSW®75-A
Testmark	Type-tested TÜV Nord

Electrical data

Connection line	2.5 m /3 x 0,5 mm ²
Wire colors	black/ brown/ grey (replaces blue from 04-01-2006)

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:

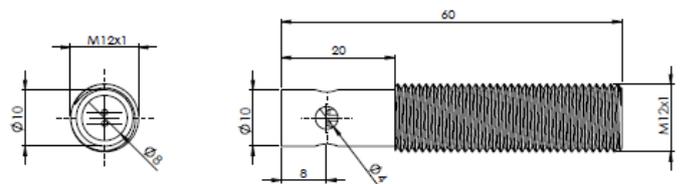
- Disassemble sensor
- Carefully soak the sensor in lukewarm soapy water for approx. 10 min. (depending on the contamination)
- Carefully rinse the sensor with lukewarm water and then allow to dry for at least 24 hours.
- Mount sensor in dry condition
- Start up the flow monitor and, if necessary, carry out a new calibration with the evaluation unit

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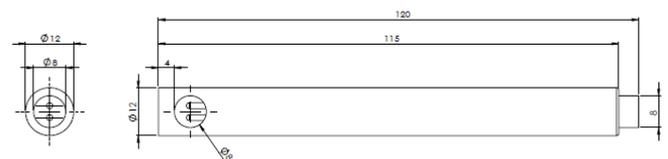
Article no.	69830/	60
Immersion depth	60 mm	115 mm
	115 mm	145 mm
	145 mm	

Dimensions

Sensor F4.2



Sensor F4.3



Sensor F4.4

