



Product description

Thermal flow sensor for the measurement of standard flow velocity independent of pressure and temperature in air and gases.

Due to its small size, (electronic unit is completely integrated in the probe tube) the sensor can be installed quick and easy. The dumb-bell head measures the flow from an angle of 360° vertical and +/-45 ° horizontal. The attached cable has a standard length of 1,5 m with open end sleeves. The sensor is optionally available with a PU – coating on the sensor to protect against aggressive media. The output signal of flow and temperature is an electrical signal 4 ... 20 mA. For special requirements to the accuracy, the sensor can be supplied with high precision adjustment (incl. calibration certificate).

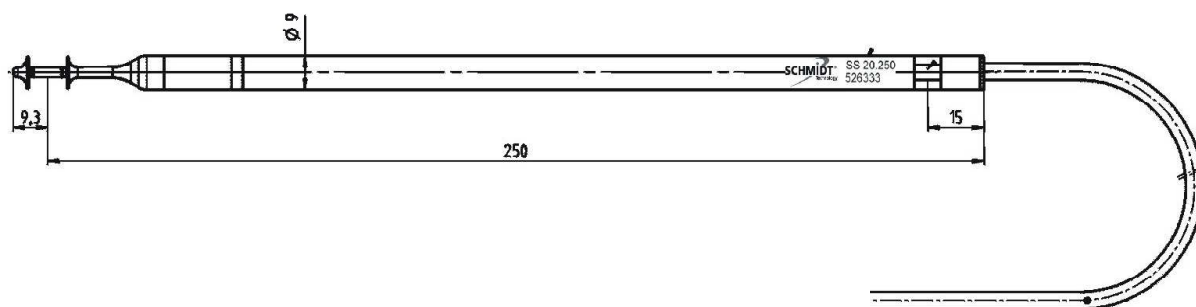
Applications

- Laminarflow-workbench, Laminarflow-booth
- Isolator
- Exhaust systems
- Building technology (Air condition, ventilation)

Product advantages

- Easy and quick installation due to compact design and omnidirectional gas flow
- Flow measurement independent of pressure and temperature
- High precision calibration (option) incl. ISO-calibration certificate

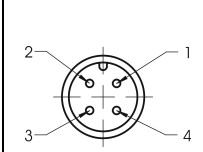
Physical dimensions



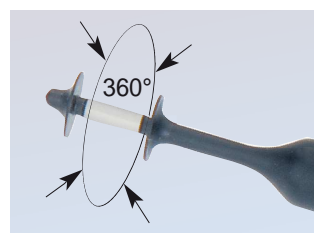
Technical Data

Measurement parameters	Standard flow velocity w_N of air (based on standard conditions of 20 °C and 1.013,25 hPa)
Measuring fluid	Air, nitrogen other gases on request
Measuring range w_N	0 ... 1 m/s
Lower detection w_N	0,06 m/s
Accuracy w_N	
- Standard	± (5 % of m.v. + 0,4 % of f.s.)
- High precision (optional)	± (3 % of m.v. + 0,4 % of f.s.)
Repeatability w_N	± 1,5 % of m.v.
Response time (t_{90}) w_N	3 s (at 0 to 5 m/s transient)
Operating temperature	0 ... +70 °C
Storage temperature	-30 ... +85 °C
Fluid humidity	0 ... 95 % r.h., non-condensing
Operating pressure	Atmospheric
Temperature gradient	2K/min @ 5m/s
Supply Voltage U_B	24 V AC/DC ± 10%
Current consumption	Typ. 60 mA
Analog output	4 ... 20 mA
Electrical connection	Cable, fixed to housing, 4-pole, length 2 m, pigtail
Maximum cable length	100 m max.
Protection class	IP 65
Mounting length	250 mm
Weight	200 g max.

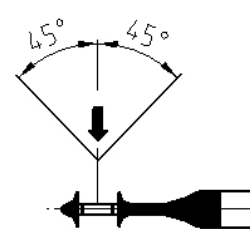
Electric connection

	Pin	Colour	Function
 <p>View on Plug</p>	1	Brown	Power + (24 VDC)
	2	White	Flow (4 .. 20 mA)
	3	Blue	GND
	4	Black	N.C.

Mounting position



Radial flow angle



Tilted flow angle