



FS7.0.1L.195

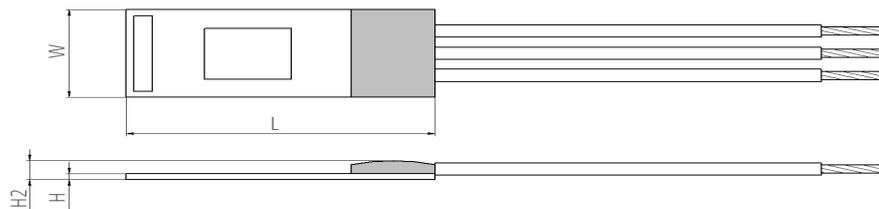
Thermal Mass Flow Sensor

Optimal for various gas flow applications up to 150 °C

Benefits & Characteristics

- Easy adaptation in various applications and housings
- Simple signal processing
- Simple calibration
- Stable platinum technology
- Excellent long-term stability
- Excellent reproducibility
- Symmetrical heater design and heightened sensitivity

Illustration¹⁾



1) For actual size, see dimensions

Technical Data

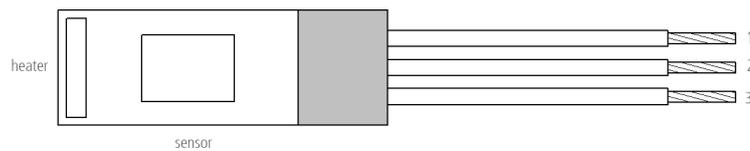
Dimensions (L x W x H / H2 in mm):	6.9 x 2.4 x 0.20 / 0.60
Operating measuring range:	0 m/s to 100 m/s
Response sensitivity:	0.01 m/s
Accuracy:	< 3 % of the measured value (dependent on the electronics and calibration)
Response time t_{63} :	~200 ms (jump from 0 to 10000 sccm)
Operating temperature range:	-20 °C to +150 °C
Temperature sensitivity:	< 0.1 %/K (dependent on the electronics)
Connection:	3 pins, AWG 30/7, stranded wire, insulated with PTFE, 195 mm long
Heater:	$R_H(0\text{ °C}) = 45\ \Omega \pm 1\ \%$
Reference element:	$R_S(0\text{ °C}) = 1200\ \Omega \pm 1\ \%$
Voltage range (nominal):	2 V to 5 V (at $\Delta T = 30\text{ K}$ ($0\text{ m/s} \leq v_{\text{gas}} \leq 100\text{ m/s}$))
Maximum heater voltage:	3 V (at 0 m/s)



Product Photo



Pin Assignment



1	2	3
heater	temperature sensor	GND

Order Information

Description:	Item number:	Former main reference:
FS7.0.1L.195	103705	050.00216

Additional Electronics

Description:	Item number:	Former main reference:
Flow Demo Board FS7 - board without sensor	104017	160.00022
Flow Demo Board FS7 - board with FS7 sensor (with housing)	104018	160.00023

Additional Documents

Application Note:	Document name:
	AFFS7_E



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