Innovative Sensor Technology

physical. chemical. biological.

FS7.A.1L.195

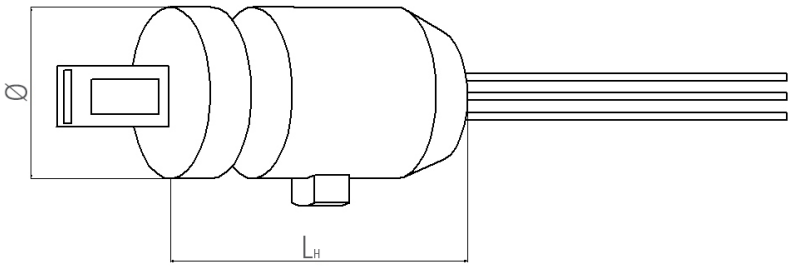
Thermal Mass Flow Sensor

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

Illustration[1)]



1) For actual size, see dimensions

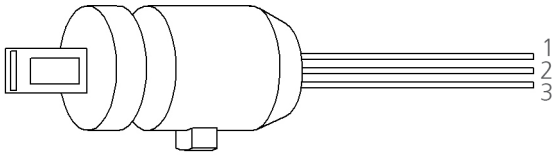
Technical Data

Dimensions (L x W x H / H2 in mm):	Ø 6.0 (±0.1) mm, L_H = 14 (±0.2) mm (complete dimensions in application note)
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 °C) = 45 Ω ±1 %
Reference element:	R_s (0 °C) = 1200 Ω ±1 %
Voltage range (nominal):	2 V to 5 V (at Δ T = 30 K (0 m/s ≤ v_{gas} ≤ 100 m/s)
Maximum heater voltage:	3 V (at 0 m/s)
Construction:	Moulded plastic housing

Product Photo



Pin Assignment



1	2	3
heater	temperature sensor	GND

Order Information

Description:	Item number:	Former main reference:
FS7.A.1L.195	103706	050.00217

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

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Additional Documents

	Document name:
Application Note:	AFFS7_E

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