Innovative Sensor Technology
physical. chemical. biological.

FS7.4W

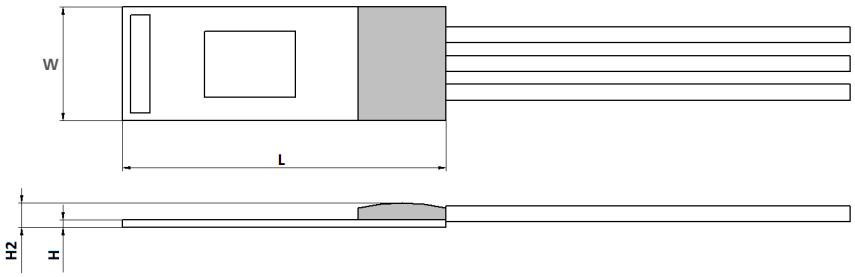
Thermal Mass Flow Sensor

Optimal for various gas flow applications up to 400 °C

Benefits & Characteristics

- Simple signal processing
- Excellent long-term stability
- Simple calibration
- Excellent reproducibility
- Maximum operating temperature range up to 400 °C
- Symmetrical heater design and heightened sensitivity
- Customer-specific sensor available upon request

Illustration[1)]



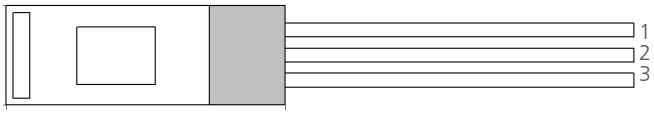
1) For actual size, see dimensions

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 +400 °C
Temperature sensitivity:	< 0.1 %/K (dependent on the electronics)
Connection:*	3 pins, Pt/Ni-wire, ø 0.2 mm, 15 mm
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)

* Customer-specific alternatives available

Pin Assignment



1	2	3
heater	temperature sensor	GND

Order Information - Pt/Ni-wire, ø 0.2 mm, 15 mm

Dimension (L x W x H in mm)	
	FS7.0.4W.015
Order code	104999
Former order code	*350.00218*

Additional Electronics

	Document name:
Module:	DFFS_FSL_Module_E

Additional Documents

	Document name:
Application Note:	AFFS7_E

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