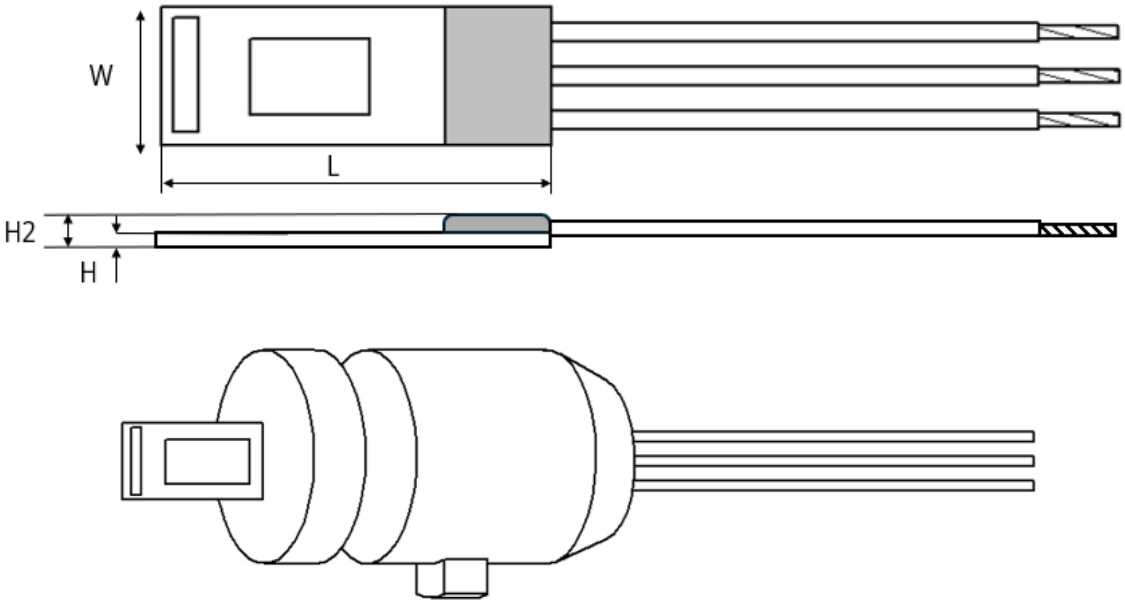
FS7

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 reproducibility
- Excellent long-term stability
- Symmetrical heater design and heightened sensitivity
- Customer-specific sensor available on request

Illustration

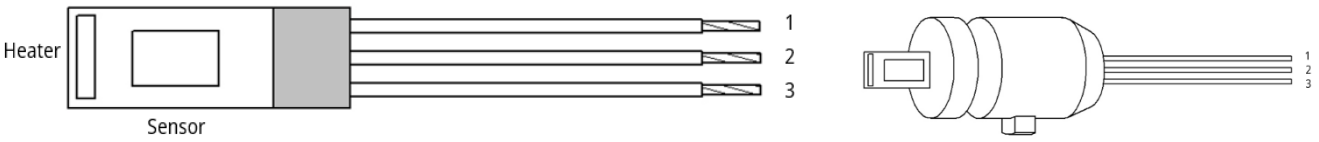


Technical data

Dimensions (L x W x H / H2 in mm):*	6.9 x 2.4 x 0.20 / 0.60 Ø 6.0 (±0.1) mm, LH = 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
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)
Alternative construction:*	Moulded plastic housing

*Customer-specific alternatives available

Pin Assignment



1	3	3
Heater	Temperature Sensor	GND

Order information

Product name	Description	Dimensions L x W x H	Order code
FS7.0.1L.195	Flow sensor with stranded wire AWG 30/7 PTFE insulated	6.9 x 2.4 x 0.2 mm	103705
FS7.A.1L.195	Flow sensor with plastic housing and stranded wire AWG30/7 PTFE insulated	Ø 6.0 (±0.1),mm L = 14 (±0.2) mm	103706

Additional Electronics

	Document name:
Module:	DFFS_FSL_Module_E

Additional Documents

	Document name:
Application Note	AFFS7_E

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