FLOW

TEMPERATURE

HUMIDITY

CONDUCTIVITY

FS5

Thermal Mass Flow Sensor

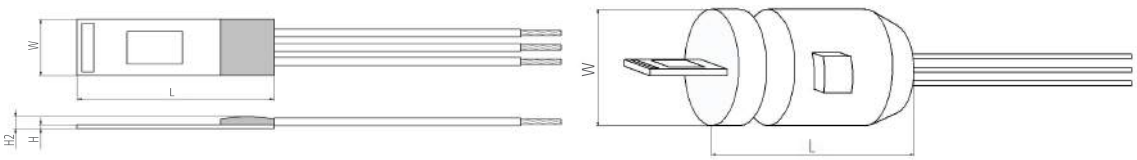
Optimal for various gas flow applications

INNOVATIVE SENSOR TECHNOLOGY

Benefits & Characteristics

- Easy adaptation in various applications and housings
- Simple signal processing
- Simple calibration
- No moving mechanical parts
- Excellent reproducibility
- Excellent long-term stability
- Bare sensor element resists up to +450 °C (customer specific)
- Stable platinum technology
- 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 / Ø 6.0 , L = 14
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}:	< 2 s
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

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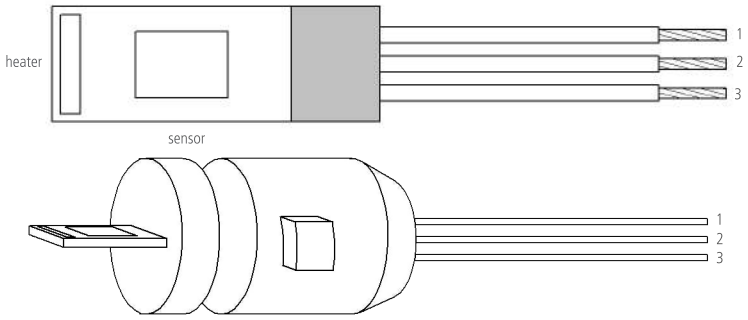
Pin Assignment



1	2	3
heater	temperature sensor	GND

Order Information - 3 pins, stranded wire, AWG 30/7, PTFE insulated

Dimension (L x W x H in mm)	Without plastic housing	With plastic housing
6.9 x 2.4 x 0.20	FS5.0.1L.195	
Order code	050.00127	
Ø 6.0 (±0.1), L = 14 (±0.2)		FS5.A.1L.195
Order code		050.00128

Additional Electronics

	Document name:
Module:	DFFS5_FSL_Module_E

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ISO 9001 RoHS