



FS5

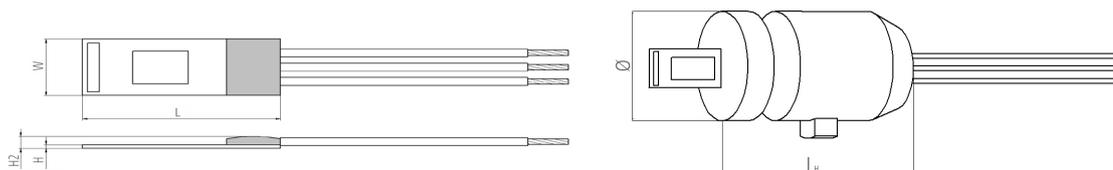
Thermal Mass Flow Sensor

Optimal for various gas flow applications up to 150 °C

Benefits & Characteristics

- Easy adaptation in various applications and housings
- Simple signal processing
- Simple calibration
- No moving mechanical parts
- Excellent reproducibility
- Excellent long-term stability
- Customer-specific sensor available upon request

Illustration¹⁾



1) For actual size, see dimensions

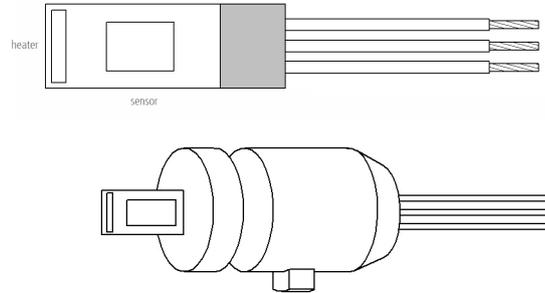
Technical Data

Dimensions (L x W x H / H2 in mm):*	6.9 x 2.4 x 0.20 / 0.60 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 :	~160 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	2	3
heater	temperature sensor	GND

Product photos



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	103661	
Former order code	050.00127	
Ø 6.0 (±0.1) mm, L = 14 (±0.2) mm		FS5.A.1L.195
Order code		103662
Former order code		050.00128

Additional Electronics

	Document name:
Module:	DFFS_FSL_Module_E

Additional Documents

	Document name:
Application Note:	AFFS5_E



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