

FS2

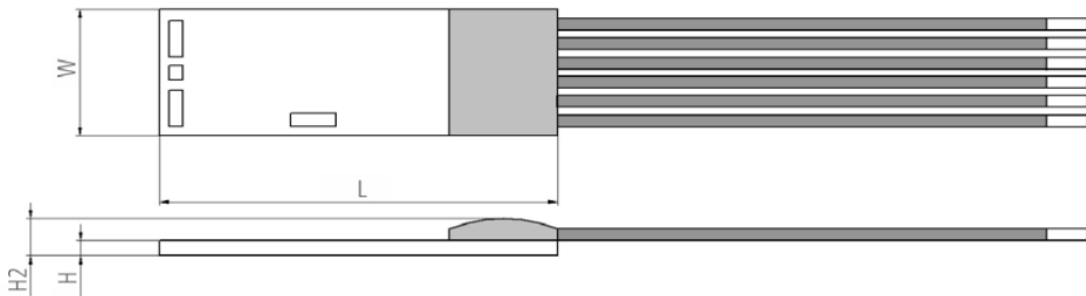
Thermal mass flow sensor Optimal for measuring gas flow direction

Benefits & characteristics

- Detection of flow direction
- Simple signal processing
- Simple calibration
- Stable platinum technology
- No moving mechanical parts
- Excellent reproducibility
- Excellent long-term stability
- Bare sensor element resists up to +450 °C ¹
- Customer-specific sensor available on request



Illustration²



L= Length

W= Width

H= Substrate height

H2= Total height

¹ Customer specific

² For actual size, see dimensions



Technical data



Dimensions (L x W x H / H2 in mm):*	5.0 x 3.5 x 0.20 / 0.60
Operating measuring range:	0 m/s to 1 m/s (half bridge mode) 0 ml/min to 50 ml/min (half bridge mode), tube ID ~1 mm 0 m/s to 100 m/s (CTA mode) 0 l/min to 5 l/min (CTA mode), tube ID ~ 1 mm



Minimum Operating range:	0 ml/min to 2.5 ml/min
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Response sensitivity:	0.001 m/s (50 µl/min)
Accuracy:	< 2 % of the measured value (dependent on the electronics and calibration)



Response time t_{63} :	< 0.5 s
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Operating temperature range:*	-20 °C to +150 °C
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Temperature sensitivity:	< 0.1 %/K (dependent on the electronics)
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Connection:*	Cu-wire, enameled, Ø 0.2 mm
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Heater:*	$R_H(25\text{ °C}) = 34\ \Omega \pm 10\ %$
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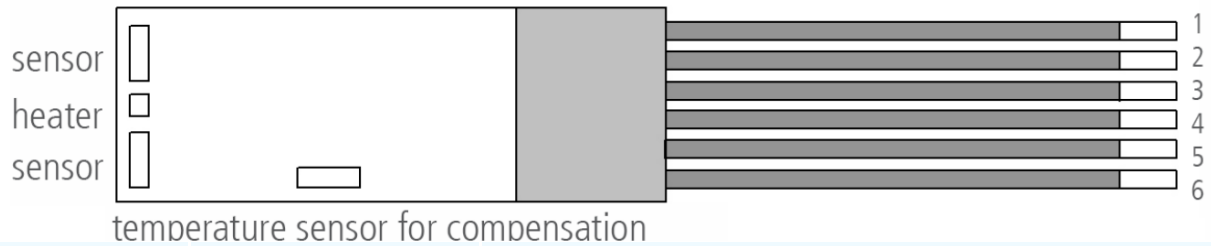
Measuring element:*	$R_{s_i}(25\text{ °C}) = 425\ \Omega \pm 10\ %$
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Reference element:*	$R_R(0\text{ °C}) = 710\ \Omega \pm 10\ %$
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Voltage range (nominal):*	2 V to 5 V (dependent on flow rate)
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*Customer-specific alternatives available

Pin Assignment



1	3	3	4	5	6
GND	Temperature sensor	Heater	Heater	Temperature sensor 2	Temperature sensor for compensation



Order information



Product name	Description	Wire length	Order code
FS2T.0.1E.025	Thermal mass flow sensor	25 mm	103663
FS2T.0.1E.300	Thermal mass flow sensor	300 mm	103742



Additional Electronics



Document name:

Module:

DFFS_FSL_Module_E



Additional Documents



Document name:

Download here:

Application Note

AFFS7_E

www.ist-ag.com/download



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