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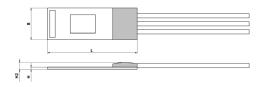
FS7 **Thermal Mass Flow Sensor** Optimal for various gas flow applications up to 150 °C

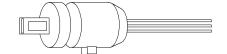
Benefits & Characteristics

- 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
- Customer-specific sensor available upon request

Illustration¹⁾





1) For actual size, see dimensions

Technical Data

Dimensions (L x W x H / H2 in mm):*	$6.9 \times 2.4 \times 0.20 / 0.60$ Ø $6.0 (\pm 0.1)$ mm, $L_H = 14 (\pm 0.2)$ 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:*	$R_{H}(0 \text{ °C}) = 45 \Omega \pm 1 \%$
Reference element:*	$R_s(0 ^{\circ}C) = 1200 \Omega \pm 1 \%$
Voltage range (nominal):*	2 V to 5 V (at Δ T = 30 K (0 m/s \leq $v_{gas} \leq$ 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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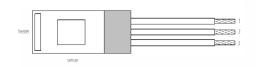


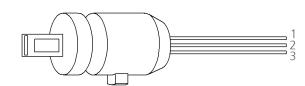






Pin Assignment





1	2	3
heater	temperature sensor	GND

Product images



Order Information - 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	FS7.0.1L.195	
Order code	103705	
Former order code	050.00216	
Ø 6.0 (±0.1) mm, L = 14 (±0.2) mm		FS7.A.1L.195
Order code		103706
Former order code		050.00217
Additional Electronics		
	Document name:	
Module:	DFFS_FSL_Module_E	



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Document name:

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All mechanical dimensions are valid at 25 °C ambient temperature, if not differently indicated • All data except the mechanical dimensions only have information purposes and are not to be understood as assured characteristics • Technical changes without previous announcement as well as mistakes reserved • The information on this data sheet was examined carefully and will be accepted as correct; No liability in case of mistakes • Load with extreme values during a longer period can affect the reliability • The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner • Typing errors and mistakes reserved • Product specifications are subject to change without notice • All rights reserved

Additional Documents

Application Note: