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FS7.A.1L.195



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



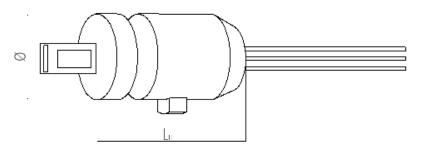




- Easy adaptation in various applications and housings
- Simple signal processing
- Simple calibration
- Stable platinum technology

- Excellent long-term stability
- Excellent reproducibility
- Symmetrical heater design and heightened sensitivity

Illustration¹⁾



1) For actual size, see dimensions

Technical Data

Dimensions (L x W x H / H2 in mm):	\emptyset 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 :	~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, 195 mm long
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 $v_{qas} \leq$ 100 m/s)
Maximum heater voltage:	3 V (at 0 m/s)
Construction:	Moulded plastic housing





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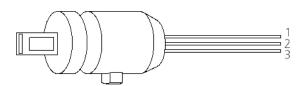








Pin Assignment



1	2	3
heater	temperature sensor	GND

Order Information

Description:	Item number:	Former main reference:
FS7.A.1L.195	103706	050.00217

Additional Electronics

Description:	Item number:	Former main reference:
Flow Demo Board FS7 - board without sensor	104017	160.00022
Flow Demo Board FS7 - board with FS7 sensor (with housing)	104018	160.00023



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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



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Additional Documents

Application Note:

Document name: AFFS7_E



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