



## FS7.A.1L.195

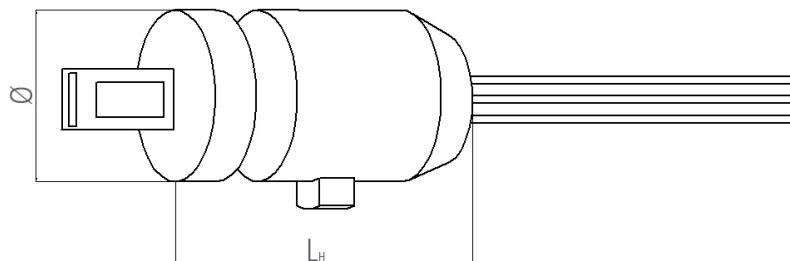
### Thermal Mass Flow Sensor

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

#### Illustration<sup>1)</sup>



1) For actual size, see dimensions

#### Technical Data

Dimensions (L x W x H / H2 in mm):

$\varnothing 6.0 (\pm 0.1)$  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, 195 mm long

Heater:

$R_H(0 \text{ } ^\circ\text{C}) = 45 \Omega \pm 1 \%$

Reference element:

$R_s(0 \text{ } ^\circ\text{C}) = 1200 \Omega \pm 1 \%$

Voltage range (nominal):

2 V to 5 V (at  $\Delta \text{ } T = 30 \text{ K}$  ( $0 \text{ m/s} \leq v_{\text{gas}} \leq 100 \text{ m/s}$ ))

Maximum heater voltage:

3 V (at 0 m/s)

Construction:

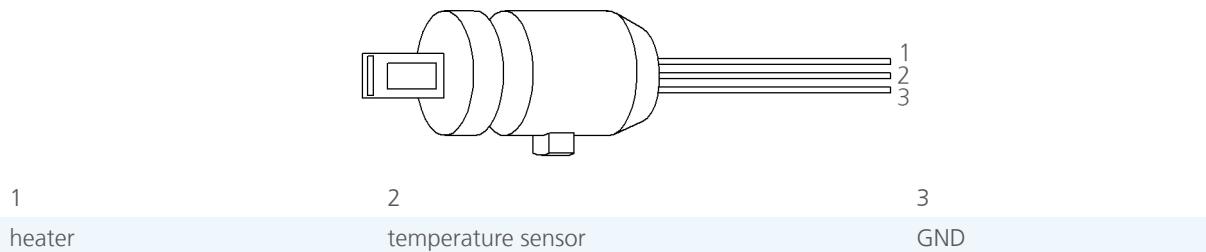
Moulded plastic housing



## Product Photo



## Pin Assignment



## 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



Innovative Sensor Technology iST AG, Stegrütistrasse 14, 9642 Ebnat-Kappel, Switzerland  
Phone: +41 71 992 01 00 | Fax: +41 71 992 01 99 | Email: [info@ist-ag.com](mailto:info@ist-ag.com) | [www.ist-ag.com](http://www.ist-ag.com)

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## Additional Documents

Document name:

Application Note:

AFFS7\_E



Innovative Sensor Technology IST AG, Stegrütistrasse 14, 9642 Ebnat-Kappel, Switzerland  
Phone: +41 71 992 01 00 | Fax: +41 71 992 01 99 | Email: [info@ist-ag.com](mailto:info@ist-ag.com) | [www.ist-ag.com](http://www.ist-ag.com)

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