



# FS2T.0.1E.025

Thermal Mass Flow Sensor Optimal for measuring gas flow and direction

# Benefits & Characteristics

- Detection of flow direction
- Simple signal processing
- Excellent long-term stabilitySimple calibration

Excellent reproducibility

.

.

- Outstanding sensitivity
- Stable platinum technology
- No moving mechanical parts

# Illustration<sup>1)</sup>



Bare sensor element resists up to +450 °C (customer specific)

1) 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 ml/min to 50 ml/min (half bridge mode)	
	0 m/s to 1 m/s (half bridge mode)	
	0 m/s to 100 m/s (CTA mode)	
	0 l/min to 5 l/min (CTA mode)	
Minimum operating range:	0 ml/min to 2.5 ml/min	
Response sensitivity:	0.001 m/s (50 μl/min)	
Accuracy:	< 2 $\%$ of the measured value (dependent on the electronics and calibration)	
Response time t <sub>63</sub> :	< 0.5 s	
Operating temperature range:	-20 °C to +150 °C	
Temperature sensitivity:	< 0.1 %/K (dependent on the electronics)	
Connection:	Cu-wire, enameled, Ø 0.2 mm, 25 mm long	
Heater:*	$R_{_{H}}(25 \text{ °C}) = 34 \Omega \pm 10 \%$	
Measuring element:	$R_{s_i}(25 \text{ °C}) = 425 \Omega \pm 10 \%$	
Reference element:	$R_{R}(25 \text{ °C}) = 710 \Omega \pm 10 \%$	
Voltage range (nominal):	2 V to 5 V (dependent on flow rate)	



physical. chemical. biological.

#### Product Photo



## Pin Assignment



## Order Information

	r main reference:
FS2T.0.1E.025 103663 050.00	0130

#### Additional Documents

	Document name:
Application Note:	AFFS2_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 | www.ist-ag.com

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

FS2T.0.1E.025 | Flow | Thermal Mass Flow Sensor FS2