

Universal Heat Flow Sensors

For Industry, Laboratory and Research

Series F

Features:

- Direct Heat Flux Readout
- Measures Bidirectional Heat Flow
- Sensitivity unaffected by Vacuum
- Self-generating output - requires no Amplifier nor Power Supply or Reference Junction
- Easy to install - stick (glue)

Description:

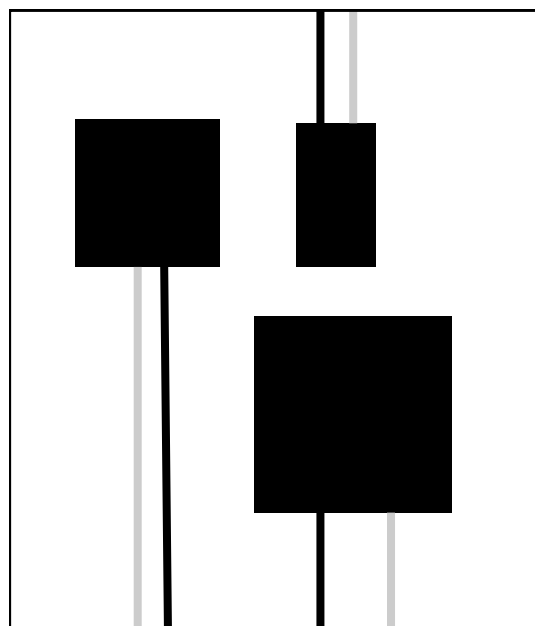
Heat flowing through the Heat Flow Sensor, HFS, causes a slight temperature difference across the device. This temperature gradient is directly proportional to heat flux.

Multiple miniature thermocouple junctions (Thermopile) properly oriented within the transducer generate a millivolt, mV, output, which needs not be amplified to measure heat flux. Hence, the Heat Flow Sensor may be attached to any surface through which it is desired to record heat flux.

The Heat Flow Sensor will not respond to temperature unless an optional Thermocouple is installed too

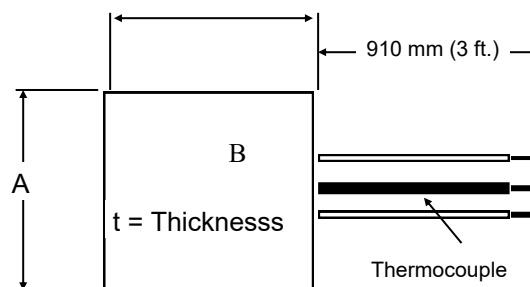
Specifications:

Heat Flux Range:3000 BTU/ft².Hr. or 9,5 kW/m²
 Time Constant: 14 sec
 Temperature Range:-50°C to +150°C (-58°F to +300°F)
 Thermal Conductivity:0,18 BTU/ft.Hr.°F or 0,316 W/m.°K
 Accuracy: ±5%
 Linearity: ±2%
 Calibration: Each unit is supplied with a Sensitivity Constant traceable to NIST.
 Environmental Resistance: Water proof, Impervious to high pressure or vacuum.
 Heat Flux Direction: bidirectional response



Applications:

- Green Roof and Soil
- Insulation evaluation of Roofs, Walls ect.
- Submarines and Vessels
- Biomedical
- Pipes and Ducts
- Refineries and Reactors
- Aero-Space



Order number	Model	Sensitivity		Impedance	Dimensions		
		(BTU/ft ² -Hr)/mV	(W/m ²)/mV		A mm (Inch)	B mm (Inch)	t mm (Inch)
C01-100-100	F-040-4	35	110,3	150	15,8(0,062)	25,4 (1,00)	2,8 (0,11)
C01-100-110	F-020-4	20	63,0	280	25,4 (1,00)	25,4 (1,00)	2,8 (0,11)
C01-100-120	F-010-4	10	31,5	340	35,1 (1,38)	35,1 (1,38)	2,8 (0,11)
C01-100-130	F-005-4	4	12,6	1300	44,5 (1,75)	44,5 (1,75)	2,8 (0,11)
C01-100-140	F-002-4	2	6,3	4200	50,8 (2,00)	50,8 (2,00)	2,8 (0,11)

For custom designs - please call us

Options: A) For integrated Thermocouple T or K Model designation see the price list
 B) For integrated Thermistor (2252 Ohm @ 25°C) model designation see price list
 C) For extra Cable/Lead length see price list

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