

## High Temperature Heat Flux Sensors (Thermal Flow) For Industry, Laboratory and Resarch

Series FCR

## Features:

- Direct Heat Flux Readout
- For Temperatures up to 1000°F or +549°C
- With Thermocouple Option available
- Self-generating output requires no Amplifier nor Power Supply or Reference Junction
- Each unit is supplied with a Sensitivity Constant traceable to NIST

#### **Description:**

These high temperature Heat Flow Sensors are constructed from high temperature materials as ceramics and enclosed for extra ruggedness in a Stainless Steel housing.

They are designed to accurately measure, record and/or control heat flow in adverse environments such as kiln walls, furnace tubes, nuclear generators and the like. In operation, the sensor attached to the surface or be an integral of the wall though which the Heat Flow is to be recorded. Its self generated EMF (millivolts) is directly proportional to the Heat Flow passing through it.

Model with an Integrated Thermocouple Type K are designed to measure both heat flux and temperature.

## **Specifications:**

Sensitivity, nominal:	180 BTU/ft <sup>2</sup> Hr/mV. or 560 (W/m <sup>2</sup> )/mV
Impedance, nominal:	
Heat Flux Range:	5000 BTU/ft <sup>2</sup> Hr. or 15800 W/m <sup>2</sup> °K
Thermal Conductivity:	
Accuracy:	
Calibration:	. Each unit is supplied with a Sensitivity
	Constant traceable to NIST.
Extra Cable length possible for:	
<b>5</b>	TFE and K



# **Applications:**

- Industrial
- High Temperature Insulation evaluation.
- Submarines and Vessels
- Test for Firefighter equipment
- Pipes and Ducts
- Refineries and Reactors
- Aero-Space



	without Thermocouple			with Thermocouple Type "K"		
Model	FCR-200	FCR-200-M	FCR-200-C	FCR-200-K	FCR-200-M-K	FCR-200-C-K
Order number	C01-600-100	C01-600-110	C01-600-120	C01-600-200	C01-600-210	C01-600-220
Cable	Pig Tail	Metal Sleeve	TFE (Teflon)	Pig Tail	Metal Sleeve	TFE (Teflon)
Cable Length	3" (76 mm)	3 ft (1m)	3 ft (1m)	3" (76 mm)	3 ft (1m)	3 ft (1m)
Max Temperature	1000°F (549°C)	1000°F (549°C)	500°F (260°C)	1000°F (549°C)	1000°F (549°C)	500°F (260°C)

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