



Heat Flow Thermal Sensor

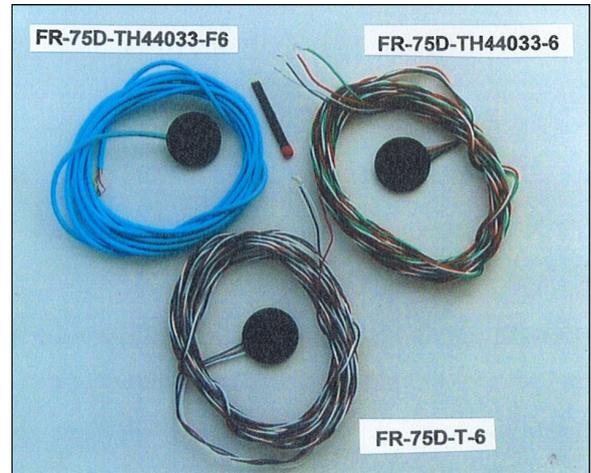
3/4" (19mm) Diameter Disk Version

With optional integrated Themistor or Thermocouple for Biomedical and general Research

Series FR-75-D

Features:

- 3/4" (19mm) Diameter
- Sensitivity, nominal 22 (BTU/ft2 Hr.) or 69 (W/m2)/mV - bipolar
- Temperature Range -22°F to +300°F or -30°C to 150°C
- Water proof, impervious to high pressure and vacuum
- Optional with integrated Thermistor or Thermocouple



Description:

These durable disk Heat Heat Flow Sensor (HFS) generate (emf) millivolts directly proportional to the heat flux passing through it. In addition, the models incorporation a Thermistor or Thermocouple respond at the same time to the temperature. Consequently, The Heat Flux Sensor is equipped to monitor, measure, and/or control simultaneously both heat flux and temperature.

When in operation, the Heat Flux Sensor often integrated into a harness for human beings or directly attached (taped) to human skin. Moreover, the sensor's many fields

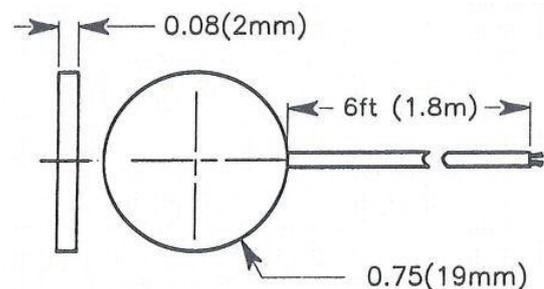
Applications:

- Medical applications like: Anaesthesiology, Hypothermia, protective clothing, Thermophysiology, Life science,
- Measurements of conductive and convective heat loss in swimming Seller sea lions, ect.

Specifications:

Sensitivity, nominal.....22 (BTU/ft2 Hr.) or 69 (W/m2)/mV - bipolar
 Thermal Conductivity..... 0.18 (BTU/ft Hr °F) or 0,31 (W/m °C)
 Calibration Each unit is supplied with a Sensitivity Constant traceable to NIST
 Temperature Range -22°F to +300°F or -30°C to 150°C
 Environment Resistance..... Water proof, impervious to high pressure and vacuum
 Head Flow Sensor Impedance, nominal 240 Ohms
 Heat Flux Range ±3000 (BTU/ft2 Hr) or 10.000 (W/m2)
 Standard Cable Length..... 6 ft (2,8m) Please ask for special cable length

Dimensions:



| Order number | Model | Type Thermocouple or Thermistor | Type of Cable | Cable Color Coding HFS: Black/White |
|-------------------------------------------------------------|-------------------|---------------------------------|---------------------------------------|-------------------------------------|
| C01-500-100 | FR-75D-6 | none | 36 AWG twisted, TFE insulation | Back/White |
| C01-500-110 | FR-75D-T-6 | T (Copper/Constantan) | 24 AWG twisted, TFE insulation | "T" Blue/Red |
| C01-500-120 | FR-75D-K-6 | K (Chromel/ Alumel) | 24 AWG twisted, TFE insulation | "K" Yellow/Red |
| C01-500-130 | FR-75D-TH44033-F6 | 2252 Ohms @25°C | flexible 33 AWG, Kevlar | Red/Yellow |
| C01-500-140 | FR-75D-TH44033-6 | 2252 Ohms @25°C | 36 AWG twisted, TFE insulation | Red/Green |
| Cable Options (Standard cable length is 6 ft / 2,8m) | | | | |
| C01-501-100 | cable | | 1 ft. (0,30m) additional cable length | |