



## HIGH ACCURACY FLEX-DUCT AVERAGE TEMPERATURE SENSOR HATSDF Series

The HATSDF flexible multi-point duct average temperature sensor utilizes several high accuracy sensors spaced at equal distances. The probe is FT6 plenum rated cable and is available in various lengths. All probes are constructed to provide excellent heat transfer and a fast response. It is available with a variety of enclosures.

### SPECIFICATION:

Sensor Type ..... Platinum RTD, 1000  $\Omega$ , 385 Alpha @ 0°C  
 NTC Thermistor, 10,000  $\Omega$  @ 25°C, Type 2 or 3  
 NTC Thermistor, 20,000  $\Omega$  @ 25°C

Temperature Range.. ..... -20 to 60 °C (-4 to 140 °F)  
 Higher Ranges Available Contact Greystone

Accuracy ..... **RTD Class A:**  $\pm 0.15^\circ\text{C}$  @ 0°C  
**RTD 1/3 DIN:**  $\pm 0.1^\circ\text{C}$  @ 0°C  
**RTD 1/10 DIN:**  $\pm 0.03^\circ\text{C}$  @ 0°C  
**NTC Thermistor Type 39 :**  $\pm 0.05^\circ\text{C}$ , 0-70°C  
**NTC Thermistor Type 55 :**  $\pm 0.03^\circ\text{C}$ , 0-70°C  
**NTC Thermistor Type 40/46 :**  $\pm 0.1^\circ\text{C}$ , 0-70°C

Wire Material ..... FT-6 Plenum rated cable

Enclosure ..... Round (E) - Grey ABS - UL94-V0 - IP65 (NEMA 4X)  
 Weatherproof PVC (P) - IP65 (NEMA 4X)

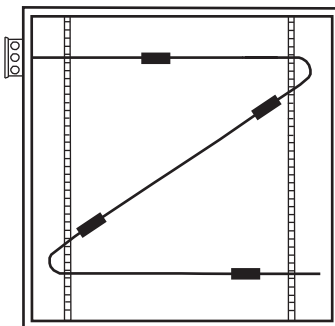
Termination ..... Pigtail 2 or 3 wire

### TYPICAL INSTALLATION:

**For complete installation and wiring details, please refer to the product installation instructions.**

The Flex-duct average probes are installed through a hole in the side of the duct to monitor an average temperature within the duct. Select a probe length that allows for criss-crossing the duct multiple times. Install the probes in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Each enclosure style provides mounting tabs for ease of installation.



Typical Installation



### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

CODE	Product Description
HATSDF	High Accuracy Flex-Duct Average Temperature Sensor

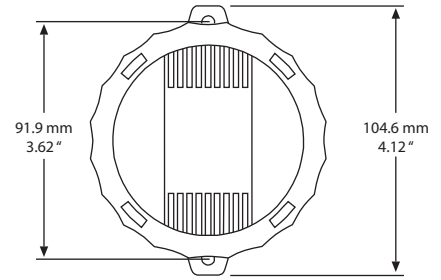
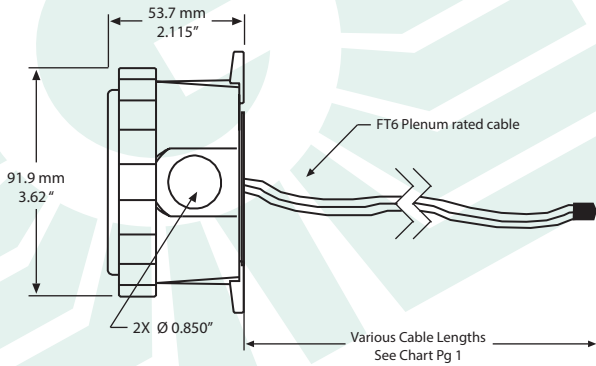
CODE	Enclosure
E	Round ABS, with gasket cover
P	PVC Weatherproof

CODE	Sensor
18	1000 $\Omega$ Platinum, 2 Wire, IEC 751, 385 Alpha, thin film, Class A
48	1000 $\Omega$ Platinum, 2 Wire, IEC 751, 385 Alpha, thin film, 1/3 DIN
22	1000 $\Omega$ Platinum, 2 Wire, IEC 751, 385 Alpha, thin film, 1/10 DIN
41	1000 $\Omega$ Platinum, 3 Wire, IEC 751, 385 Alpha, thin film, Class A
49	1000 $\Omega$ Platinum, 3 Wire, IEC 751, 385 Alpha, thin film, 1/3 DIN
50	1000 $\Omega$ Platinum, 3 Wire, IEC 751, 385 Alpha, thin film, 1/10 DIN
39	10,000 $\Omega$ , Type 2, NTC Thermistor, $\pm 0.05$ C
55	10,000 $\Omega$ , Type 2, NTC Thermistor, $\pm 0.03$ C
40	10,000 $\Omega$ , Type 3, NTC Thermistor, $\pm 0.1$ C
46	20,000 $\Omega$ , NTC Thermistor, $\pm 0.1$ C

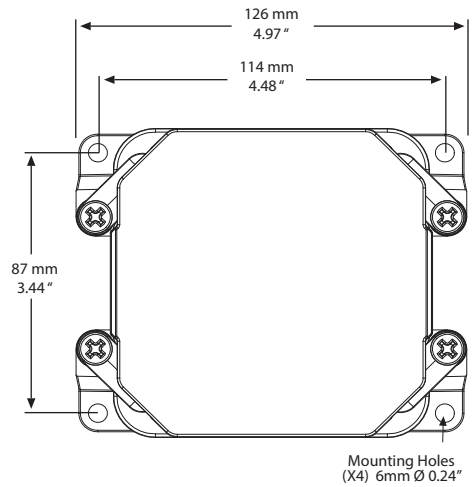
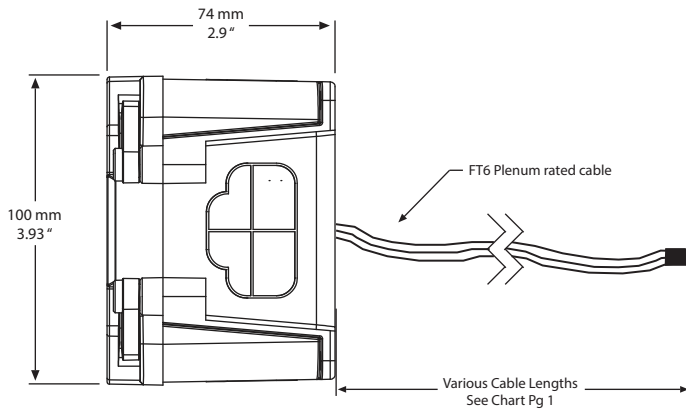
CODE	Probe Length
I	1800 mm (6')
J	3600 mm (12')
K	6100 mm (20')
L	7300 mm (24')

# DIMENSIONS:

## Round ABS Enclosure (E)



## PVC Enclosure (P)



Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.



# GREYSTONE

**ENERGY SYSTEMS INC**

Greystone Energy Systems, Inc.  
150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7  
(506) 853-3057 Fax: (506) 853-6014  
North America: 1-800-561-5611  
e-mail: mail@greystoneenergy.com  
www.greystoneenergy.com

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COMPLIANT



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*We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.*