

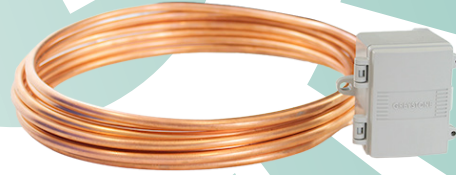


# GREYSTONE

ENERGY SYSTEMS INC

## HIGH ACCURACY DUCT AVERAGE TEMPERATURE SENSOR HATSDC Series

The high accuracy flexible multi-point duct averaging temperature sensor utilizes several precision sensors spaced at equal distances and encapsulated in a 7.94 mm (0.3125") OD, soft copper probe, it is available in various lengths (see ordering chart). All probes provide excellent heat transfer, fast response and resistance to moisture penetration.



### SPECIFICATION:

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

Probe Sensing Range .....  $-20$  to  $60^{\circ}\text{C}$  ( $-4$  to  $140^{\circ}\text{F}$ )  
 Ambient Operating Range...  $-40$  to  $50^{\circ}\text{C}$  ( $-40$  to  $122^{\circ}\text{F}$ )  
 Wire Material..... FT-6 rated Plenum cable, 22 AWG  
 Probe Material..... Soft copper  
 Probe Diameter ..... 7.94 mm (0.315")  
 Standard Lengths..... 1800, 3600, 6100, 7200 mm  
                                   (6', 12', 20', 24')

Enclosure..... ABS - UL94-V0, IP65 (NEMA4X)  
                                   C - includes terminal block  
                                   E - includes thread adapter (1/2" NPT to M16),  
                                   cable gland fitting, and terminal block

Termination..... A - Pigtail, 2 or 3 wire  
                                   C & E - terminal block, 2 or 3 wire

Country of Origin..... Canada

### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
HATSDC	High Accuracy Flexible Copper Duct Average Temperature Sensor

CODE	Enclosure
A	ABS, with hinged & gasketed cover
C	Same as A, with terminal block
E	Same as C, with thread adapter and cable gland fitting

CODE	Sensor
18	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, Class A
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, $\pm 0.05^{\circ}\text{C}$
55	10,000 $\Omega$ , Type 2, NTC Thermistor, $\pm 0.03^{\circ}\text{C}$
40	10,000 $\Omega$ , Type 3, NTC Thermistor, $\pm 0.1^{\circ}\text{C}$
46	20,000 $\Omega$ , NTC Thermistor, $\pm 0.1^{\circ}\text{C}$

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

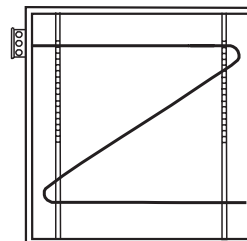
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

### TYPICAL INSTALLATION:

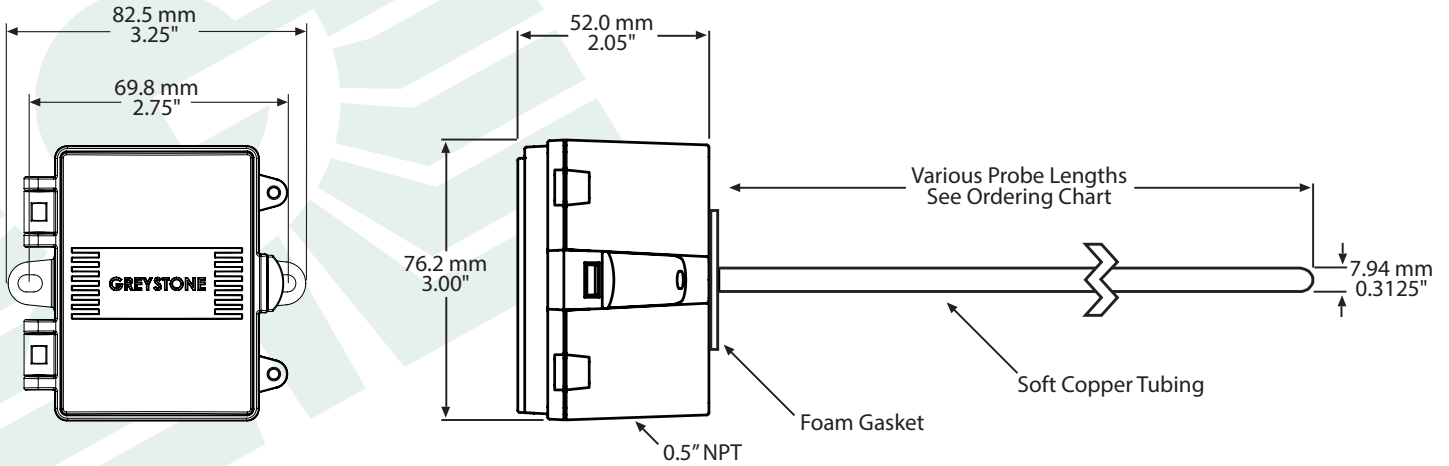
For complete installation and wiring details, please refer to the product installation instructions.

The 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.

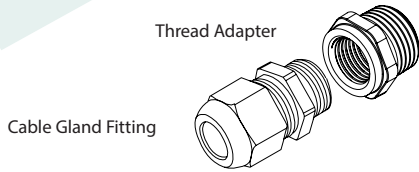
Each enclosure style provides mounting tabs for ease of installation.



**DIMENSIONS:**



Included with E style enclosure



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**RoHS**  
COMPLIANT



*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.*

*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.*

GREYSTONE HAS AN **ISO 9001** REGISTERED QUALITY SYSTEM