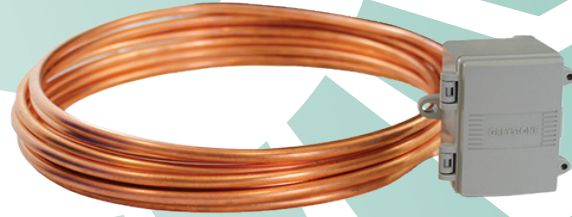




## DUCT AVERAGE TEMPERATURE SENSOR TSDC Series

The 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:

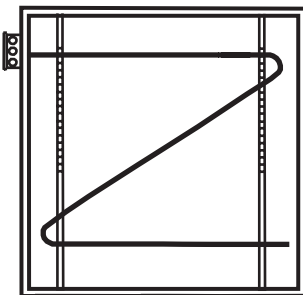
Sensor Type.....Various Thermistors or RTD  
 Sensor Accuracy.....**Thermistors:**  $\pm 0.2^{\circ}\text{C}$  ( $\pm 0.36^{\circ}\text{F}$ ) @  $25^{\circ}\text{C}$  ( $77^{\circ}\text{F}$ )  
**Platinum RTD's:**  $\pm 0.3^{\circ}\text{C}$  ( $\pm 0.54^{\circ}\text{F}$ ) @  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ )  
**Nickel RTD's:**  $\pm 0.4^{\circ}\text{C}$  ( $\pm 0.72^{\circ}\text{F}$ ) @  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ )  
 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.....**A:** ABS - UL94-V0, IP65 (NEMA4X)  
**C:** Same as A, includes terminal block  
**E:** Same as C, includes thread adapter (1/2" NPT to M16), cable gland fitting  
 Termination.....**A:** Pigtail, 2 or 3 wire  
**C & E:** terminal block, 2 or 3 wire  
 Country of Origin.....Canada

### 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.



### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
TSDC	Flexible Copper Duct Average Temperature Sensor

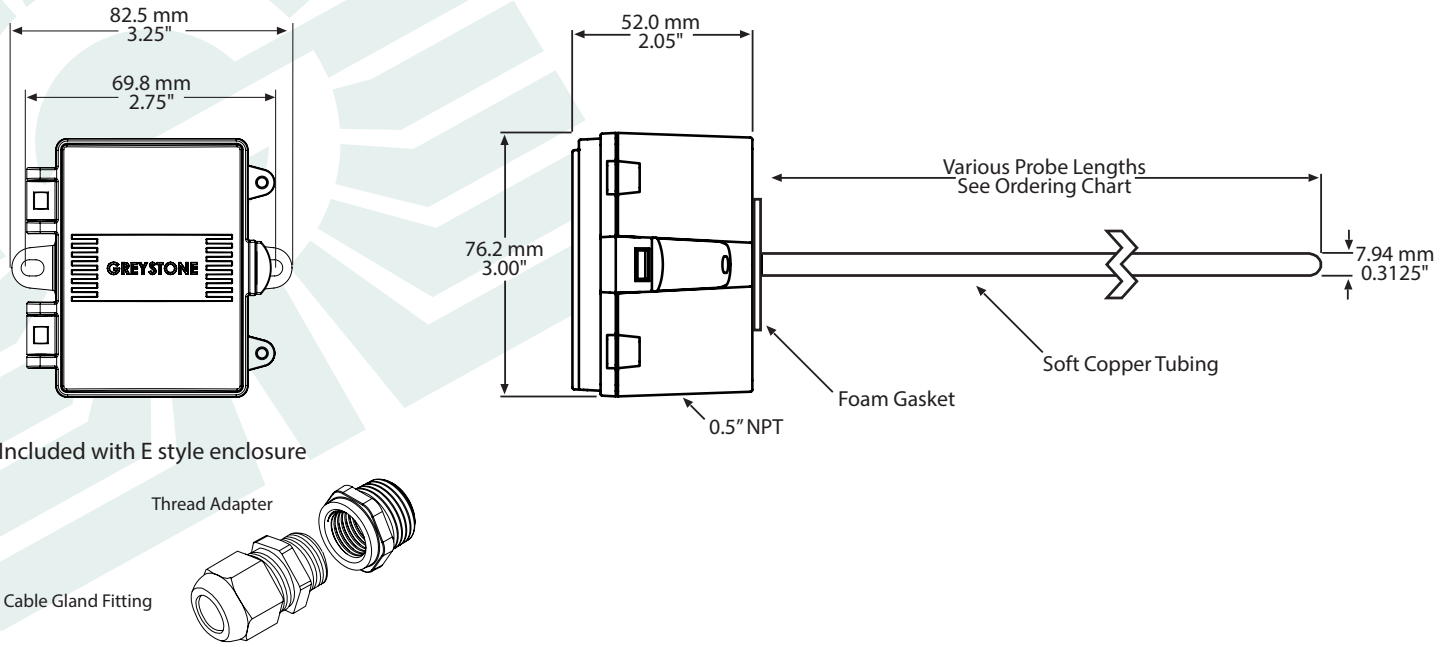
CODE	Enclosure
A	ABS, with hinged & gasketed cover
C	Same as A, with terminal block
E	Same as C, with thread adapter and cable gland fitting

CODE	Sensor
02	100 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 3 wire
05	1801 $\Omega$ NTC Thermistor, $\pm 0.2^{\circ}\text{C}$
06	3000 $\Omega$ , NTC Thermistor, $\pm 0.2^{\circ}\text{C}$
07	10,000 $\Omega$ , Type 3, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$
08	2.252K $\Omega$ , NTC Thermistor, $\pm 0.2^{\circ}\text{C}$
12	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film
13	1000 $\Omega$ Nickel, Class B, DIN 43760
14	10,000 $\Omega$ , Type 3, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ c/w 11K shunt resistor
20	20,000 $\Omega$ , NTC Thermistor, $\pm 0.2^{\circ}\text{C}$
24	10,000 $\Omega$ , Type 2, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$
59	10,000 $\Omega$ @ $25^{\circ}\text{C}$ , $\pm 1\%$ , B = 3435 $\pm 1\%$ (25/85)

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.

**DIMENSIONS:**



**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

**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