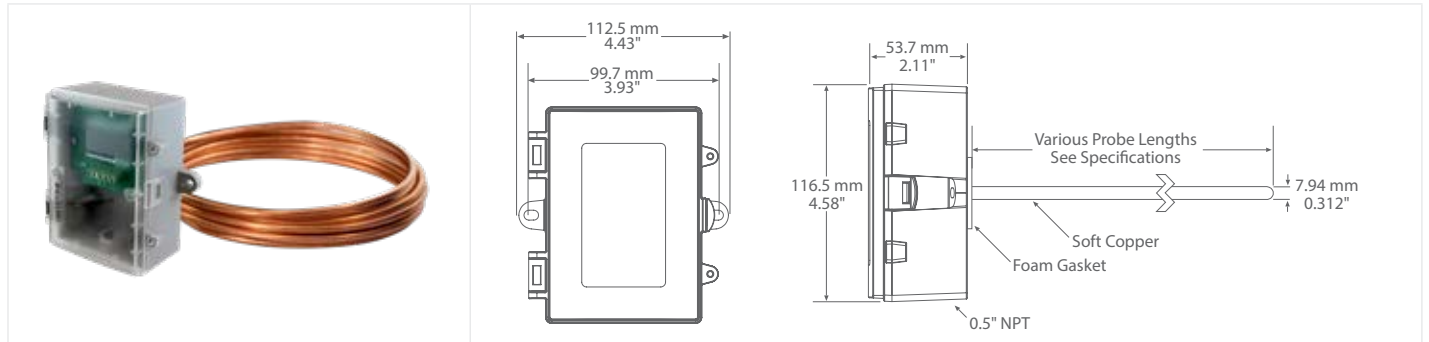




FLEXIBLE COPPER DUCT AVERAGE TEMPERATURE TRANSMITTER WITH LCD



TDDC SERIES

PRODUCT DESCRIPTION

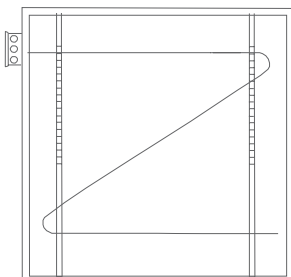
The duct averaging temperature transmitter incorporates numerous precision platinum RTD's encapsulated in a 7.94 mm (0.3125") OD, soft copper probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response for measurement of duct temperatures. A hinged and gasketed Polycarbonate enclosure is included for ease of installation. An LCD is provided in either °C or °F.

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 elements.

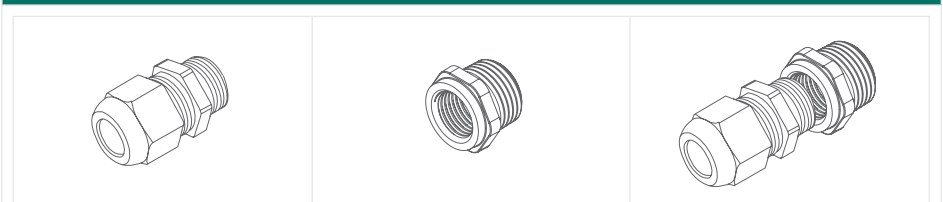
The enclosure provides mounting tabs for ease of installation.



SPECIFICATIONS

SENSOR TYPE	1000 Ω platinum RTD
SENSOR ACCURACY	$\pm 0.3^{\circ}\text{C}$ ($\pm 0.54^{\circ}\text{F}$) @ 0°C (32°F)
PROBE SENSING RANGE	-20 to 60°C (-4 to 140°F)
PROBE DIAMETER	7.94mm (0.312")
PROBE MATERIAL	Soft copper
STANDARD LENGTHS	1800, 3600, 6100, 7300 mm (6', 12', 20', 24')
WIRE MATERIAL	PVC insulated, parallel bonded, 22 AWG
MAXIMUM LOOP CURRENT	20 mA
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured)
TRANSMITTER ACCURACY	$\pm 0.2\%$ of span, including linearity
POWER SUPPLY	15-30 Vdc or 12-28 Vac
CONSUMPTION (MAX)	Current: 20 mA Voltage: 11 mA
MINIMUM LOOP CURRENT	4 mA
MAXIMUM LOOP LOAD	700 Ω
MAXIMUM CURRENT (VOLTAGE)	11 mA
MAXIMUM OUTPUT (VOLTAGE)	10 Vdc
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
INPUT VOLTAGE EFFECT	Negligible over specified operating range
OUTPUT DRIVE @ 24 VDC	Current: 700 Ω max Voltage: 20,000 Ω min
LCD DISPLAY UNITS	$^{\circ}\text{C}$ or $^{\circ}\text{F}$ (factory configured)
DISPLAY RANGE	3 digit Negative to Positive Range (-88 to 88) Positive Range <100 (88.8), >100 (888)
DISPLAY SIZE	38.1mm W x 16.5mm H (1.5" x 0.65")
DIGIT HEIGHT	11.4mm (0.45") plus $^{\circ}\text{C}/^{\circ}\text{F}$ symbol
AMBIENT OPERATING RANGE	0 to 50°C (32 to 122°F), 5 to 95 %RH
ENCLOSURE	B: Grey polycarbonate UL94-V0, IP65 (NEMA 4X) F: Same as B with thread adapter (1/2" NPT to M16) and cable gland fitting
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
COUNTRY OF ORIGIN	Canada

ACCESSORIES - INCLUDED IN F ENCLOSURE OPTION

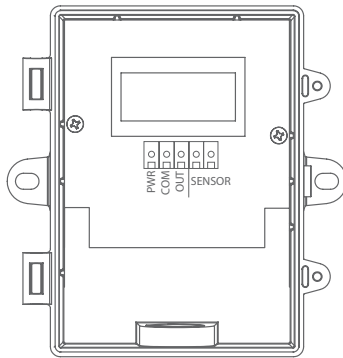


CABLE GLAND FITTING

THREAD ADAPTER 1/2" NPT TO M16



WIRING INFORMATION



TERMINAL

FUNCTION

PWR
COM
OUT

+24 Vdc/ac power supply
Common
Analog Output

SENSOR
SENSOR

Temperature sensor input
Temperature sensor input

ORDERING

PRODUCT	TDDC	Flexible Copper Duct Average Temperature Transmitter with Display
ENCLOSURE	B F	Polycarbonate, with hinged and gasketed cover Same as B, with thread adapter(1/2" NPT to M16) and cable gland fitting
DISPLAY UNITS	C F	Celsius Fahrenheit
SENSOR	12	1000Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, Class B
PROBE LENGTH	I J K L	1800mm (6') 3600mm (12') 6100mm (20') 7300mm (24')
OUTPUT	A D E	4-20 mA, 2 or 3 wire 0-5 Vdc, 3 wire 0-10 Vdc, 3 wire
SCALED RANGE	001 002	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F)

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

PART NUMBER

TDDC