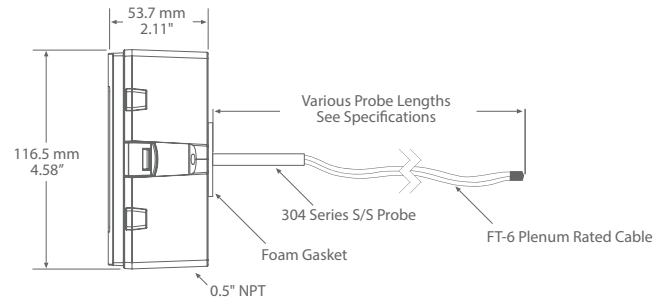
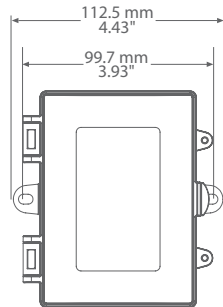




FLEXIBLE CABLE DUCT AVERAGE TEMPERATURE TRANSMITTER WITH LCD



TDDF SERIES

PRODUCT DESCRIPTION

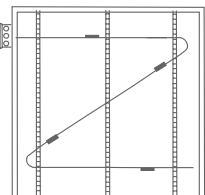
The flex-duct averaging temperature transmitter incorporates numerous precision platinum RTD's encapsulated at equal distances along a FT-6 plenum rated cable and is available in various lengths (see ordering chart). The sensing cable is constructed to provide excellent heat transfer and fast response. 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 provided 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 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. **The cable probe needs to be fastened onto hangers using tube clamps or wire ties and should be secured every 100 cm or 3' maximum to prevent movement of the wire and prevent wear. If sensor is to be used in high velocity or vibration environment use of rigid style duct probe is recommended.**

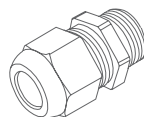
The enclosure provides mounting tabs for ease of installation.



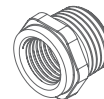
SPECIFICATIONS

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 WIRE MATERIAL	FT-6 plenum rated cable
STANDARD LENGTHS	1800, 3600, 6100, 7300 mm (6', 12', 20', 24')
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
MAXIMUM LOOP CURRENT	20 mA
MINIMUM LOOP CURRENT	4 mA
MAXIMUM LOOP LOAD	700 Ω
MAXIMUM CURRENT (VOLTAGE)	11 mA
MAXIMUM OUTPUT (VOLTAGE)	10 Vdc
INPUT VOLTAGE EFFECT	Negligible over specified operating range
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
OUTPUT DRIVE @ 24 VDC	Current: 700 Ω max Voltage: 20,000 Ω min
RESOLUTION	0.1 $^{\circ}\text{C}/^{\circ}\text{F}$
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

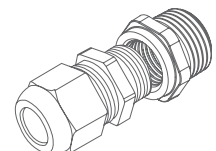
ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION



CABLE GLAND FITTING

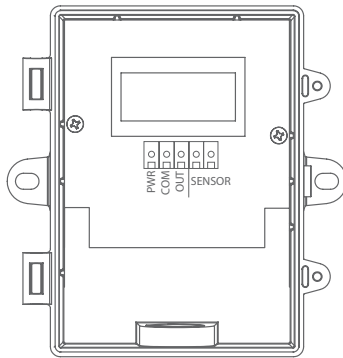


THREAD ADAPTER 1/2" NPT TO M16





WIRING INFORMATION



TERMINAL	FUNCTION
PWR	+24 Vdc/ac power supply
COM	Common
OUT	Analog Output
SENSOR	Temperature sensor input
SENSOR	Temperature sensor input

ORDERING

PRODUCT	TDDF	Flexible Cable Duct Average Temperature Transmitter with Display
ENCLOSURE	B F	Polycarbonate, with hinged and gasketed cover Same as B, with thread adapter 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

TDDF