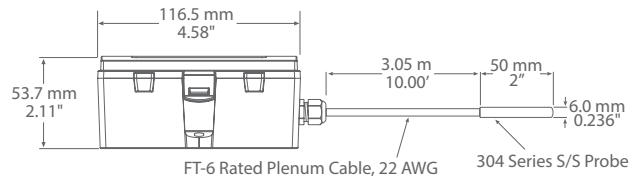
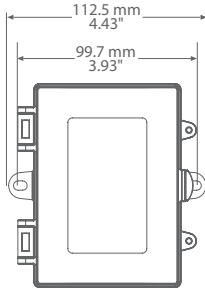




## FLYING LEAD TEMPERATURE TRANSMITTER WITH LCD



### TDFL SERIES

### PRODUCT DESCRIPTION

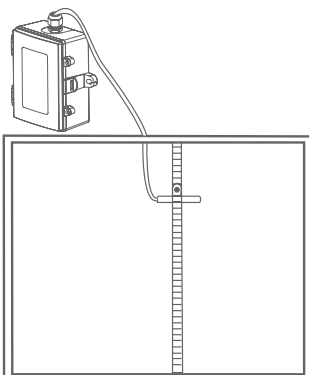
The single point flying lead temperature transmitter incorporates a precision platinum RTD encapsulated in a 50.8 x 6 mm (2" x 0.236") OD, 304 stainless steel probe. The probe provides excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response for measurement of pipe 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.**

A typical application for the flying lead type probes is to monitor a single point temperature within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices. Drill a 3/8 hole in the top of the duct and hang the sensor in the airstream.

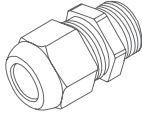

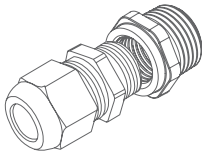
The enclosure provides mounting tabs for ease of installation.



### SPECIFICATIONS

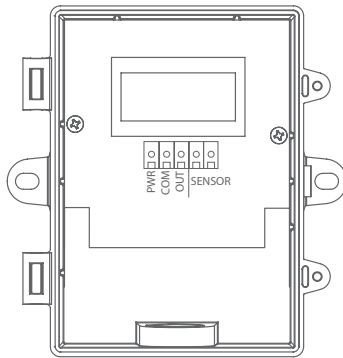
SENSOR TYPE	1000 $\Omega$ platinum RTD
SENSOR ACCURACY	$\pm 0.3^{\circ}\text{C}$ ( $\pm 0.54^{\circ}\text{F}$ ) @ $0^{\circ}\text{C}$ ( $32^{\circ}\text{F}$ )
PROBE SENSING RANGE	$-40$ to $60^{\circ}\text{C}$ ( $-40$ to $140^{\circ}\text{F}$ )
PROBE DIMENSIONS	50mm (2") x 6mm (0.236")
PROBE MATERIAL	304 series stainless steel
WIRE MATERIAL	FT-6 plenum rated cable
WIRE LENGTH	3.05m (10')
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)	<b>Current:</b> 20 mA <b>Voltage:</b> 11 mA
RESOLUTION	$0.1^{\circ}\text{C}/^{\circ}\text{F}$
MAXIMUM LOOP CURRENT	20 mA
MINIMUM LOOP CURRENT	4 mA
MAXIMUM LOOP LOAD	700 $\Omega$
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	<b>Current:</b> 700 $\Omega$ max <b>Voltage:</b> 20,000 $\Omega$ 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 $50^{\circ}\text{C}$ (32 to $122^{\circ}\text{F}$ ), 5 to 95 %RH
ENCLOSURE	<b>B:</b> Grey polycarbonate UL94-V0, IP65 (NEMA 4X) <b>F:</b> 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	<b>TDFL</b>	Flying Lead temperature Transmitter with Display
ENCLOSURE	<b>B</b>	Polycarbonate, with hinged and gasketed cover
	<b>F</b>	Same as B, with thread adapter and cable gland fitting
DISPLAY UNITS	<b>C</b>	Celsius
	<b>F</b>	Fahrenheit
SENSOR	<b>12X</b>	1000Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, Class B
OUTPUT	<b>A</b>	4-20 mA, 2 or 3 wire
	<b>D</b>	0-5 Vdc, 3 wire
	<b>E</b>	0-10 Vdc, 3 wire
SCALED RANGE	<b>001</b>	0 to 35°C (32 to 95°F)
	<b>002</b>	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

TDFL