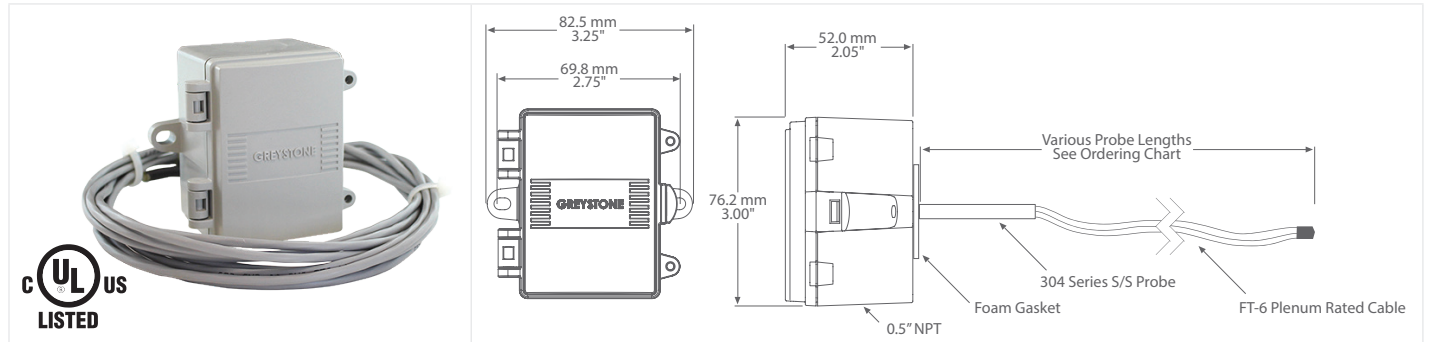




FLEX-DUCT AVERAGE TEMPERATURE TRANSMITTER



TXDF SERIES

PRODUCT DESCRIPTION

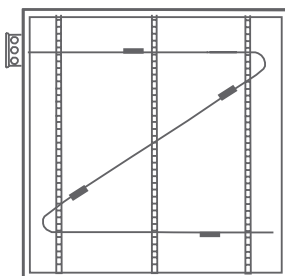
The flexible, multi-point duct averaging mounted temperature transmitter is available with a selection of platinum RTD sensors and a transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response. They are available with various scaled ranges. The sensing cable is constructed to provide excellent heat transfer, fast response time, and is available in several lengths and quantity of sensing elements.

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.



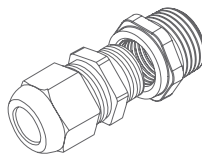
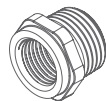
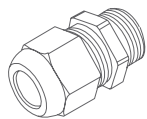
SPECIFICATIONS

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)
WIRE MATERIAL	FT-6 rated plenum cable, 22 AWG
STANDARD LENGTHS	1.8m, 3.6m, 6.1m, 7.3m, 15.2m (6', 12', 20', 24', 50')
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured)
TRANSMITTER ACCURACY	$\pm 0.1\%$ of span, including linearity
OUTPUT DRIVE @ 24 VDC	Current: 600 mA maximum Voltage: 10 K Ω minimum
MAXIMUM OUTPUT (VOLTAGE)	Limited to <5.5 Vdc or 0-5 Vdc, <10.5 for 0-10 Vdc
INPUT VOLTAGE EFFECT	Negligible over specified operating range
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
AMBIENT OPERATING RANGE	-40 to 60°C (-40 to 140°F), 5 to 95 %RH non-condensing
ENCLOSURE	A: ABS, UL94-V0, IP65 (NEMA 4X) E: Same as A, with thread adapter (1/2" NPT to M16), and cable gland fitting
TERMINATION	Screw terminal block (14 to 22 AWG)
PROTECTION CLASS	III
POWER SOURCE UL	0-5 Vdc: 10-35 Vdc or 10-28 Vac SELV (Class 2) 0-10 Vdc: 15-35 Vdc or 15-28 Vac SELV (Class 2) 4-20 mA: 15-35 Vdc (loop-powered) or 22-28 Vac Limited Energy, $<15\text{W}$
CONSUMPTION	Current @ 20 mA Voltage @ 5 mA
EU CONFORMITY	CE
CERTIFICATION	UL 60730 & CSA E60730
UL 2043 / CSA / ULC S142 COMPLIANT	Suitable for Use in Air Handling Spaces in Accordance with Section 300.22, (C) of the National Electrical Code
PURPOSE OF CONTROL	Operating Control
TYPE OF ACTION	Type 1
IMPULSE VOLTAGE	330V
POLLUTION DEGREE	2
COUNTRY OF ORIGIN	Canada

NOTE: This product is factory calibrated and any field adjustment will void the warranty.



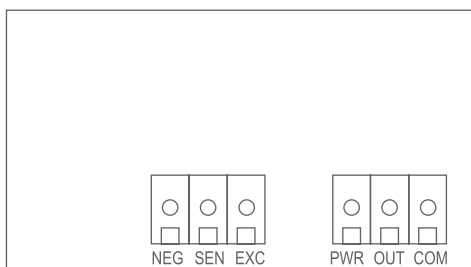
ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



CABLE GLAND FITTING

THREAD ADAPTER 1/2" NPT TO M16

WIRING INFORMATION



TERMINAL

PWR
OUT
COM

NEG
SEN
EXC

FUNCTION

Power Supply
Analog Output
Common

Temperature Sensor Input

ORDERING

PRODUCT	TXDF	Flexible Cable Duct Average Temperature Transmitter
ENCLOSURE	A E	ABS, with hinged and gasketed cover Same as A, with thread adapter and cable gland fitting
SENSOR	12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film
PROBE LENGTH	I J K L Q	1.8m (6') 4-sensors 3.6m (12') 4-sensors 6.1m (20') 4-sensors 7.3m (24') 9-sensors 15.2m (50') 16-sensors
OUTPUT	A D E	4-20 mA 0-5 Vdc 0-10 Vdc
SCALED RANGE	001 002 *	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) Additional ranges available

PART NUMBER

TXDF

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