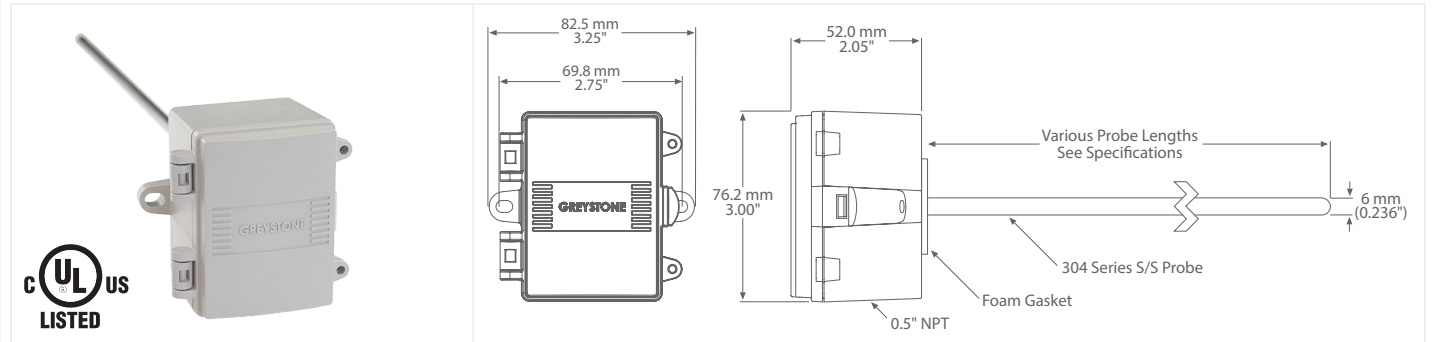




## RIGID DUCT AVERAGE TEMPERATURE TRANSMITTER



### TXDR SERIES

## PRODUCT DESCRIPTION

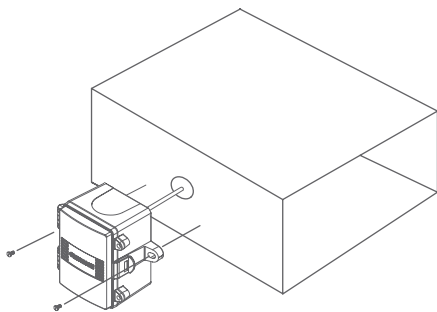
The multi-point rigid duct average temperature transmitter incorporates numerous precision platinum RTD's at equal distances, encapsulated in a 6.00mm (0.236") OD, 304 series stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response, and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is available with various ranges.

## TYPICAL INSTALLATION

**For complete installation and wiring details, please refer to the product installation instructions.**

The rigid duct average type probes are installed in the side of the duct to monitor the average temperature within the duct. Select a probe length that allows the probe to span the duct width. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling, or humidification devices.

The enclosure provides mounting tabs for ease of installation.



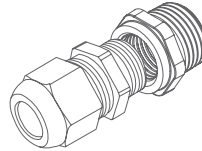
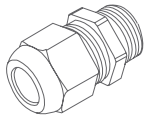
## SPECIFICATIONS

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 $140^{\circ}\text{F}$ )
WIRE MATERIAL	PVC/Kynar, 28 AWG
PROBE MATERIAL	304 series stainless steel
PROBE DIAMETER	6 mm (0.236")
STANDARD LENGTHS	450, 600, 900 mm (18", 24", 36")
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	<b>Current:</b> 600 mA maximum <b>Voltage:</b> 10 K $\Omega$ 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 $60^{\circ}\text{C}$ ( $-40$ to $140^{\circ}\text{F}$ ), 5 to 95 %RH non-condensing
ENCLOSURE	<b>A:</b> ABS, UL94-V0, IP65 (NEMA 4X) <b>E:</b> Same as A, with thread adapter (1/2" NPT to M16), and cable gland fitting
TERMINATION	Screw terminal block (14 to 22 AWG)
APPROVALS	CE
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.



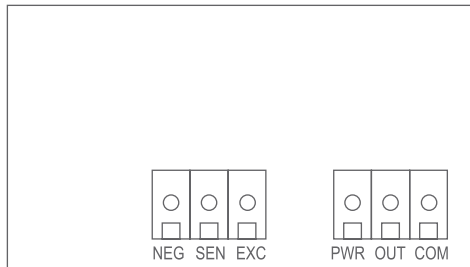
## ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



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	<b>TXDR</b>	Rigid Duct Average Temperature Transmitter
ENCLOSURE	<b>A</b> <b>E</b>	ABS, with hinged and gasketed cover Same as C, with thread adapter and cable gland fitting
SENSOR	<b>12</b>	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film
PROBE LENGTH	<b>F</b> <b>G</b> <b>H</b>	450mm (18") 600mm (24") 900mm (36")
OUTPUT	<b>A</b> <b>D</b> <b>E</b>	4-20 mA 0-5 Vdc 0-10 Vdc
SCALED RANGE	<b>001</b> <b>002</b> <b>006</b> <b>*</b>	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) -50 to 50°C (-58 to 122°F) Custom ranges available

## PART NUMBER

TXDR

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