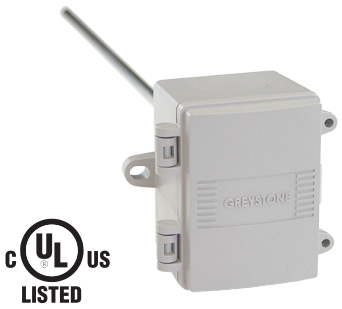
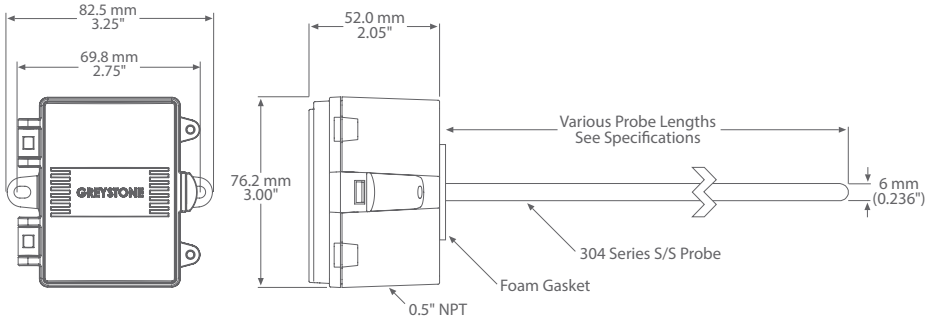
GREYSTONE
ENERGY SYSTEMS INC

RIGID DUCT AVERAGE TEMPERATURE SENSOR





TSDR SERIES

PRODUCT DESCRIPTION

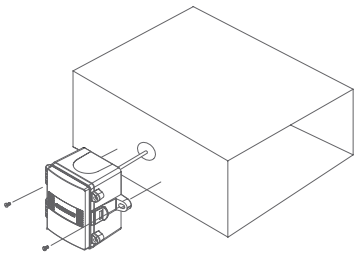
The multi-point rigid duct average temperature sensor utilizes several precision sensors spaced at equal distances and encapsulated in 6mm (0236") OD, 304 series stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resistance to moisture penetration.

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.

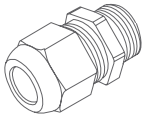
Each enclosure style provides mounting tabs on the outside of the enclosure for ease of installation.



SPECIFICATIONS

SENSOR TYPE	Thermistor or RTD (see ordering chart)
SENSOR ACCURACY	**Thermistors:** ±0.2°C (±0.36°F) @ 25°C (77°F) **Platinum RTD's:** ±0.3°C (±0.54°F) @ 0°C (32°F) **Nickel RTD's:** ±0.4°C (±0.72°F) @ 0°C (32°F)
PROBE SENSING RANGE	-40 to 60°C (-40 to 140°F)
AMBIENT OPERATING RANGE	-40 to 60°C (-40 to 140°F)
WIRE MATERIAL	PVC/Kynar, 28 AWG
STANDARD LENGTHS	450, 600, 900mm (18", 24", 36")
ENCLOSURE	ABS, UL94-V0, IP65 (NEMA 4X) **C:** includes terminal block **E:** same as C, with thread adapter (1/2" NPT to M16), and cable gland fitting
TERMINATION	**A:** pigtail, 2 or 3 wire **C & E:** terminal block, 2 or 3 wire
PROTECTION CLASS	III
POWER SOURCE UL	SELV, Limited Energy (<15W)
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	Temperature Sensor
TYPE OF ACTION	Type 1
IMPULSE VOLTAGE	330V
POLLUTION DEGREE	2
COUNTRY OF ORIGIN	Canada

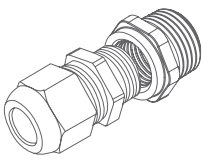
ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



CABLE GLAND FITTING



THREAD ADAPTER 1/2" NPT TO M16



INCLUDED WITH E OPTION

GREYSTONE
ENERGY SYSTEMS INC

ORDERING

PRODUCT	**TSDR**	Rigid Duct Average Temperature Sensor
ENCLOSURE	**A**	ABS, with hinged and gasketed cover
	C	Same as A, with terminal block
	E	Same as C, with thread adapter and cable gland fitting
SENSOR	**02**	100 Ω Platinum, IEC 751, 385 Alpha, thin film
	05	1801 Ω NTC Thermistor, ±0.2°C
	06	3000 Ω NTC Thermistor, ±0.2°C
	07	10,000 Ω Type 3, NTC Thermistor, ±0.2°C
	08	2.252K Ω NTC Thermistor, ±0.2°C
	12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film
	13	1000 Ω Nickel, Class B, DIN 43760
	14	10,000 Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor
	20	20,000 Ω NTC Thermistor, ±0.2°C
	24	10,000 Ω Type 2, NTC Thermistor, ±0.2°C
	59	10,000 Ω, 25°C, ±1%, B = 3435 ±1% (25/85)
PROBE LENGTH	**F**	450mm (18")
	G	600mm (24")
	H	900mm (36")

PART NUMBER

TSDR

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

RoHS COMPLIANT

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