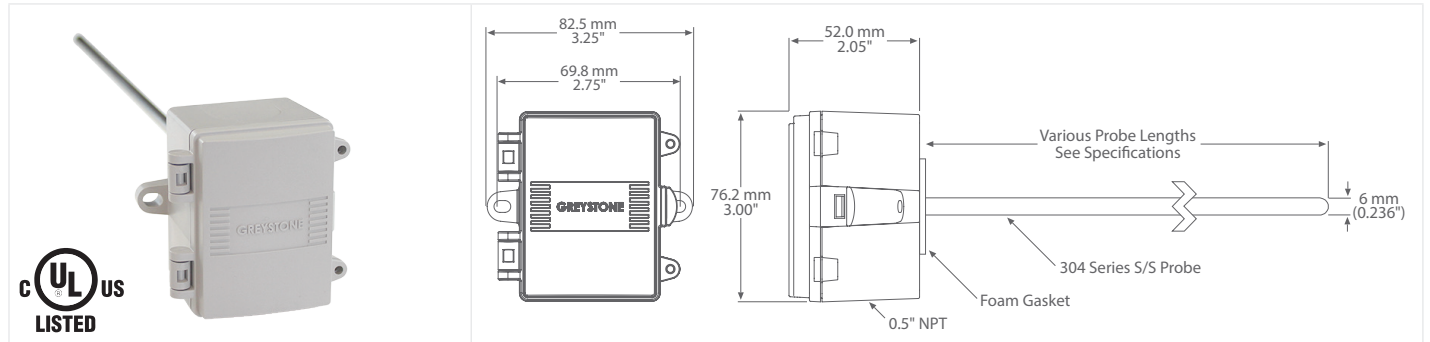




HIGH ACCURACY RIGID DUCT AVERAGE TEMPERATURE SENSOR



HATS DR SERIES

PRODUCT DESCRIPTION

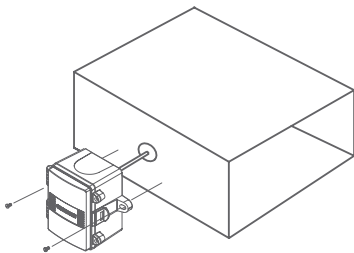
The high accuracy multi-point rigid duct average temperature sensor utilizes several precision sensors spaced at equal distances and encapsulated in 6 mm (0.236") OD, 304 series stainless steel probe and is available in various lengths (see ordering chart). All probes provide excellent heat transfer, 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 an 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

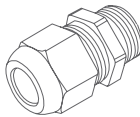

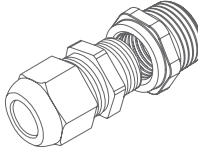
SENSOR TYPE	Various Thermistor or RTD
SENSOR ACCURACY	RTD Class A: $\pm 0.15^{\circ}\text{C}$ ($\pm 0.27^{\circ}\text{F}$) @ 0°C (32°F) RTD 1/3 DIN: $\pm 0.1^{\circ}\text{C}$ ($\pm 0.18^{\circ}\text{F}$) @ 0°C (32°F) RTD 1/10 DIN: $\pm 0.03^{\circ}\text{C}$ ($\pm 0.054^{\circ}\text{F}$) @ 0°C (32°F) NTC Thermistor Type 39: $\pm 0.05^{\circ}\text{C}$ ($\pm 0.09^{\circ}\text{F}$), 0 to 70°C (32 to 158°F) NTC Thermistor Type 55: $\pm 0.03^{\circ}\text{C}$ ($\pm 0.054^{\circ}\text{F}$), 0 to 70°C (32 to 158°F) NTC Thermistor Type 40/46: $\pm 0.1^{\circ}\text{C}$ ($\pm 0.18^{\circ}\text{F}$), 0 to 70°C (32 to 158°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

NOTE: The sensor accuracies listed in the specifications section apply to the sensing element only prior to product assembly and may not be reflected in the complete assembly.

Due to the measurement uncertainty, it is possible, that the true resistance value of the single delivered sensor at 0°C can be out of the defined tolerance class. Profiling each assembly to take into consideration lead wire and the attachment method should be completed.



OPTIONAL ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION

		
CABLE GLAND FITTING	THREAD ADAPTER 1/2" NPT TO M16	

ORDERING

PRODUCT	HATSDR	High Accuracy Rigid Duct Average Temperature Sensor
ENCLOSURE	A C E	ABS, with hinged and gasketed cover Same as A, with terminal block Same as C, with thread adapter and cable gland fitting
SENSOR	18 48 22 39 55 40 46	1000 Ω Platinum, 3 wire, IEC 751, 385 Alpha, thin film, Class A 1000 Ω Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/3 DIN 1000 Ω Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/10 DIN 10,000 Ω Type 2, NTC Thermistor, $\pm 0.05^{\circ}\text{C}$ 10,000 Ω Type 2, NTC Thermistor, $\pm 0.03^{\circ}\text{C}$ 10,000 Ω Type 3, NTC Thermistor, $\pm 0.1^{\circ}\text{C}$ 20,000 Ω NTC Thermistor, $\pm 0.1^{\circ}\text{C}$
PROBE LENGTH	F G H	450mm (18") 600mm (24") 900mm (36")

PART NUMBER

HATSDR

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