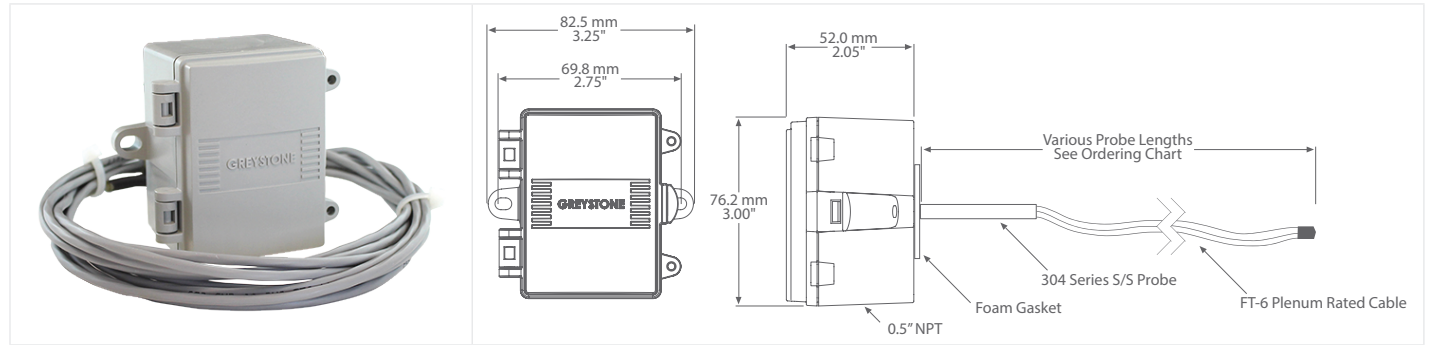




HIGH ACCURACY FLEXIBLE CABLE DUCT AVERAGE TEMPERATURE SENSOR



HATSDF SERIES

PRODUCT DESCRIPTION

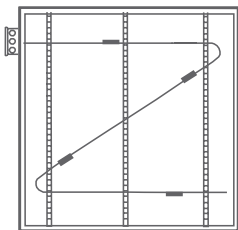
The high accuracy flexible multi-point duct temperature sensor utilizes several precision sensors spaced at equal distances. The probe is FT-6 plenum rated cable and is available in various lengths (see ordering chart). All probes are constructed to provide excellent heat transfer and a fast response.

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

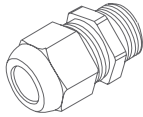
SENSOR TYPE	Various Thermistor or RTD
SENSOR ACCURACY	RTD Class A: $\pm 0.15^{\circ}\text{C}$ ($\pm 0.27^{\circ}\text{F}$) @ 0°C (32°F) RTD 1/3 DIN: $\pm 0.1^{\circ}\text{C}$ ($\pm 0.18^{\circ}\text{F}$) @ 0°C (32°F) RTD 1/10 DIN: $\pm 0.03^{\circ}\text{C}$ ($\pm 0.054^{\circ}\text{F}$) @ 0°C (32°F) 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	-20 to 60°C (-4 to 140°F)
AMBIENT OPERATING RANGE	-40 to 50°C (-40 to 122°F)
WIRE MATERIAL	FT-6 rated plenum cable, 22 AWG
STANDARD LENGTHS	1800, 3600, 6100, 7200mm (6', 12', 20', 24')
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
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.



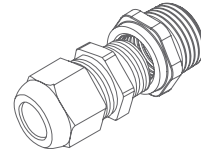
ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



CABLE GLAND FITTING



THREAD ADAPTER 1/2" NPT TO M16



ORDERING

PRODUCT	HATSDF	High Accuracy Flexible Cable 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	18	1000 Ω Platinum, IEC 751, 385 Alpha, thin film, Class A
	48	1000 Ω Platinum, IEC 751, 385 Alpha, thin film, 1/3 DIN
	22	1000 Ω Platinum, IEC 751, 385 Alpha, thin film, 1/10 DIN
	39	10,000 Ω Type 2, NTC Thermistor, ±0.05°C
	55	10,000 Ω Type 2, NTC Thermistor, ±0.03°C
	40	10,000 Ω Type 3, NTC Thermistor, ±0.1°C
PROBE LENGTH	46	20,000 Ω NTC Thermistor, ±0.1°C
	I	1800mm (6')
	J	3600mm (12')
	K	6100mm (20')
	L	7300mm (24')

PART NUMBER

HATSDF

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