

## HIGH ACCURACY FLEXIBLE COPPER DUCT AVERAGE TEMPERATURE TRANSMITTER 82.5 mm 3.25" 69.8 mm 2.75" 76.2 mm 3.00" 76.2 mm 3.30" Foam Gasket HATXDC SERIES

## PRODUCT DESCRIPTION

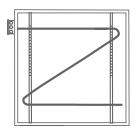
The high accuracy multi point duct average temperature transmitter incorporates numerous precision platinum RTD's at equal distances (DC is continuous) and encapsulated in a 7.94 mm (0.3125") OD, soft copper probe and is available in various lengths (see ordering chart). All probes provide excellent 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 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 enclosure provides mounting tabs for ease of installation.



SPECIFICATIONS				
SENSOR TYPE	1000Ω Platinum, IEC 751, 385 Alpha, thin film			
SENSOR ACCURACY	RTD Class A: ±0.15°C (±0.27°F) @ 0°C (32°F) RTD 1/3 DIN: ±0.1°C (±0.18°F) @ 0°C (32°F) RTD 1/10 DIN: ±0.03°C (±0.054°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			
PROBE MATERIAL	Soft copper			
PROBE DIAMETER	7.94 mm (0.315")			
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	±0.1% of span, including linearity			
MAXIMUM OUTPUT (VOLTAGE)	Limited to <5.5 Vdc for 0-5 Vdc, <10.5 Vdc 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-VO, IP65 (NEMA 4X) E: Same as A, with thread adapter (1/2" NPT to M16), and cable gland fitting			
TERMINATION	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, <15W			
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.





WIRING INFORMATION						
	TERMINAL	FUNCTION				
O O O O O O O O O O O O O O O O O O O	PWR OUT COM NEG SEN EXC	Power Supply Analog Output Common  Temperature Sensor Input				

ORDERING			PART NUMBER
PRODUCT	HATXDC	High Accuracy Flexible Copper Duct Average Temperature Transmitter	HATXDC
ENCLOSURE	A E	ABS, with hinged and gasketed cover Same as A, with thread adapter and cable gland fitting	
SENSOR	18 48 22	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, Class A 1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 1/3 DIN 1000 $\Omega$ Plaintum, IEC 751, 385 Alpha, thin film, 1/10 DIN	
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	

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











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