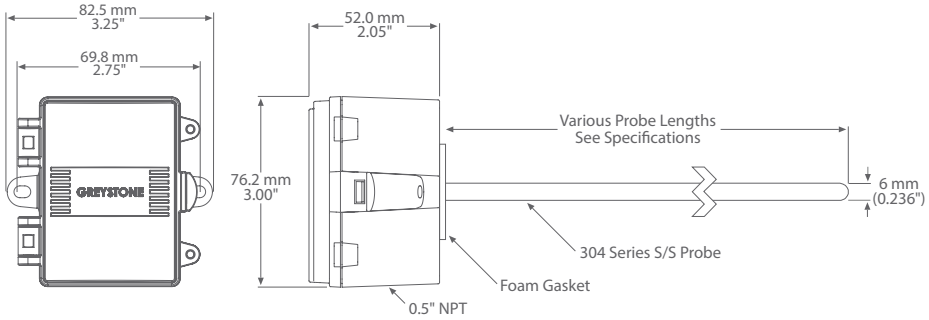
GREYSTONE
ENERGY SYSTEMS INC

HIGH ACCURACY RIGID DUCT AVERAGE TEMPERATURE TRANSMITTER



HATXDR SERIES

PRODUCT DESCRIPTION

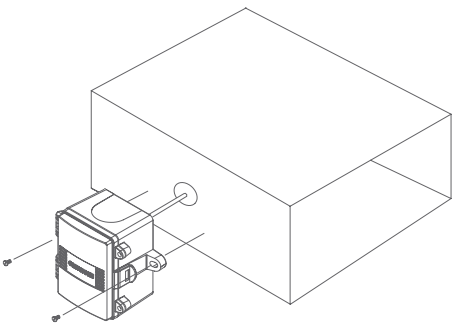
The high accuracy multi point rigid duct average temperature transmitter incorporates numerous precision platinum RTD's at equal distances encapsulated in a 6.00 mm (0.236") OD, 304 series stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response 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	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	-40 to 60°C (-40 to 140°F)
WIRE MATERIAL	PVC/Kynar, 28 AWG
PROBE MATERIAL	304 series stainless steel
PROBE DIAMETER	6 mm (0.236")
STANDARD LENGTHS	450, 600, 900mm (18", 24", 36")
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc or 0-10 Vdc (factory configured)
TRANSMITTER ACCURACY	±0.1% of span, including linearity
OUTPUT DRIVE @ 24 VDC	**Current:** 600Ω maximum **Voltage:** 10 KΩ minimum
POWER SUPPLY	**0-5 Vdc:** 10-35 Vdc or 10-28 Vac **0-10 Vdc:** 15-35 Vdc or 15-28 Vac **4-20 mA:** 15-35 Vdc (Loop-powered) or 22-28 Vac
MAXIMUM OUTPUT (VOLTAGE)	Limited to <5.5 Vdc for 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°C (-40 to 140°F), 5 to 95 %RH non-condensing
ENCLOSURE	**A:** ABS, UL94-V0, IP65 (NEMA 4X) **E:** Same as E, with thread adapter (1/2" NPT to M16), and cable gland fitting
TERMINATION	Screw 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.

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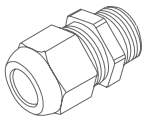
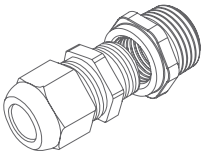
ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION

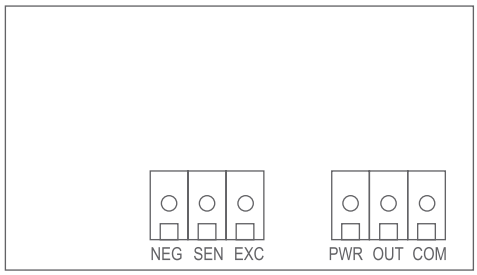


CABLE GLAND FITTING



THREAD ADAPTER 1/2" NPT TO M16

WIRING INFORMATION



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

ORDERING

PRODUCT	**HATXDR**	High Accuracy Rigid Duct Average Temperature Transmitter
ENCLOSURE	**A** **E**	ABS, with hinged and gasketed cover Same as A, with thread adapter and cable gland fitting
SENSOR	**18** **48** **22**	1000 Ω Platinum, IEC 751, 385 Alpha, thin film, Class A 1000 Ω Platinum, IEC 751, 385 Alpha, thin film, 1/3 DIN 1000 Ω Platinum, IEC 751, 385 Alpha, thin film, 1/10 DIN
PROBE LENGTH	**F** **G** **H**	450mm (18") 600mm (24") 900mm (36")
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

PART NUMBER

HATXDR

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

RoHS COMPLIANT

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