

# HIGH ACCURACY RIGID DUCT AVERAGE TEMPERATURE TRANSMITTER HATXDR Series

The HATXDR series multi-point rigid duct average temperature transmitter incorporates numerous high accuracy platinum RTD's at equal distances and encapsulated in a 6.35 mm (0.25") OD, 304 series stainless steel probe. Several probe lengths are available. 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.



### **SPECIFICATION:**

| Sensor                    | .1000 ohm Platinum RTD<br>385 Alpha @ 0°C                          |
|---------------------------|--|
| A                         |  |
| Accuracy                  | RTD 1/3 DIN: ±0.1°C @ 0°C  |
|                           | RTD 1/10 DIN: ±0.10 @ 0 °C   |
| Droba Cancina Danga       |  |
| Probe Sensing Range       |  |
| Wire Material             |  |
| Probe Material            | .304 Series Stainless Steel  |
| Probe Dimension           | .6.35 mm (0.25") Diameter  |
| Output Signal             | .4-20mA current loop, 0-5 Vdc,<br>or 0-10 Vdc (factory configured) |
| Transmitter Accuracy      | .±0.125% of span, including linearity                              |
| 4-20 mA loop power Supply | . 15-35 Vdc or 22-32 Vac   |
| Minimum Current Loop      | .2 mA nominal (occurs with shorted sensor)                         |
| Maximum loop Current      | .22.5 mA nominal (occurs with open sensor)                         |
| Maximum Loop Load         | .>600 ohms   |
| 0-5 Vdc Power Supply      |  |
| 0-10 Vdc Power Supply     | . 15-35 Vdc or 15-32 Vac   |
| Maximum Current (Voltage) | .5 mA nominal  |
| Maximum Output (Voltage)  | .limited to <5.5 Vdc for 0-5 Vdc,<br><10.5 for 0-10 Vdc            |
| Input Voltage Effect      | .Negligible over specified operating range                         |
| RFI rejection             | .Good RFI rejection of normal frequencies                          |
| Protection Circuitry      | .Reverse voltage protected and output limited                      |
|                           | 40 - 85°C (-40 - 185°F), 0-95% RH non-condensing                   |
| Enclosure                 | .(B)-ABS, UL94-5VB, IP65 (NEMA 4X)                                 |
|                           | (C)- PVC, IP65 (NEMA 4X)   |
| Wiring Connections        | .Screw terminal block<br>(14 to 22 AWG)                            |

#### **PART NUMBER SELECTED**

CODE

## **PRODUCT SELECTION INFORMATION:**

Round ABS, with gasket cover

**Enclosure** 

| ı   | MODEL | Product Description                                      |  |
|---|-------|--|--|
| HATXDR High Accuracy Rigid Duct Average Temperature Transmitter |       | High Accuracy Rigid Duct Average Temperature Transmitter |  |

| P | PVC weatherproof |      |  |
|---|------------------|------|--|
|   |                  |      |  |
|   |                  | CODE | Sensor   |
|   |                  | 18   | 1000 $\Omega$ Platinum, 2 wire, IEC 751, 385 Alpha, thin film, Class A |
|   |                  | 48   | 1000 Ω Platinum, 2 wire, IEC 751, 385 Alpha, thin film, 1/3 DIN        |
|   |                  | 22   | 1000 $\Omega$ Platinum, 2 wire IEC 751, 385 Alpha, thin film, 1/10 DIN |
|   |                  | 41   | 1000 Ω Platinum, 3 wire, IEC 751, 385 Alpha, thin film, Class A        |

| CODE | DE Probe Length |  |
|------|-----------------|--|
| F    | 450 mm (18")    |  |
| G    | 600 mm (24")    |  |
| н    | 900 mm (36")    |  |

CODE

1000  $\Omega$  Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/3 DIN 1000  $\Omega$  Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/10 DIN

Output 4-20mA

| D<br>E | 0-5 Vdc<br>0-10 Vdc |  |
|--------|---------------------|--|
|        | CODE                | Scaled Range   |
|        | 1<br>2<br>*         | 0 - 35°C (32 - 95°F)<br>0 - 50°C (32 - 122°F)<br>Custom range, please<br>contact Greystone |

\*CUSTOM SCALED TEMPERATURE RANGE









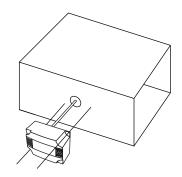
03/18

### **TYPICAL INSTALLATION:**

For complete installation and wiring details, please refer to the product installation instructions.

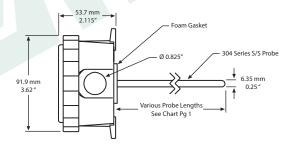
The duct type probes are installed through a hole in the side of the duct to monitor a single point temperature within the duct. Since the probes are tip sensitive, select a probe length that places the sensor well into the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

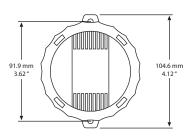
Each enclosure style provides mounting tabs or holes for ease of installation.



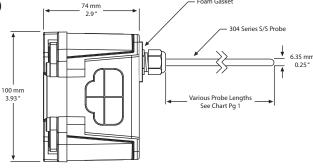
### **DIMENSIONS:**

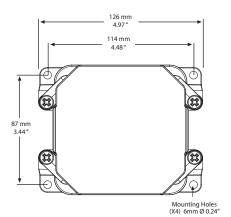
#### **Round ABS Enclosure (E)**





#### **PVC Enclosure (P)**







# GREYSTONE

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