GREYSTONE
ENERGY SYSTEMS INC

DUCT TEMPERATURE TRANSMITTER
TE500B Series

The TE500B single point duct temperature transmitter incorporates a precision platinum RTD encapsulated in a 6.35 mm (0.25") OD, 304 stainless steel 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 provided.

SPECIFICATION:

Sensor	100 ohm Platinum RTD or 1000 ohm Platuinum RTD
Sensor Accuracy	±0.3˚C (±0.54˚F) @ 0˚C (32˚F)
Probe Sensing Range	-20 to 105˚C (-4 to 221˚F)
Wire Material	PVC insulated, parallel bonded (Type 2, 100Ω Plat. uses FT4)
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
Output Signal	4-20mA current loop, 0-5 vdc, or 0-10 Vdc (factory configured)
Transmitter Accuracy	±0.1% 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	10-35 vdc or 10-32 Vac
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, <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
Ambient Operating Range	-40 - 85˚C (-40 - 185˚F), 0-95% RH non-condensing
Enclosure	ABS, UL94-5VB, IP61 (NEMA 2) (E)-ABS, UL94-5VB, IP65 (NEMA 4X) (M)- Gal. Steel, IP50 (NEMA 1) (W)-Cast Aluminum IP64 (NEMA3X) *In order to maintain the published NEMA/IP ratings, properly rated conduit or cable gland adapters must be used.
Wiring Connections	Screw terminal block (14 to 22 AWG)

PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
TE500B	Duct Temperature Transmitter

CODE	**Enclosure** (ABS enclosure is standard)
-	ABS enclosure, standard (no code required, leave blank)
E	Round ABS, w/gasketed cover
M	Metal utility box
W	Aluminum weatherproof box

CODE	Sensor
2	100 Ω Plat. IEC 751, 385 Alpha, thin film
12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film (**Standard**)

CODE	Probe Length
A2	50 mm (2")
B2	100 mm (4")
C2	150 mm (6")
D2	200 mm (8")
E2	300 mm (12")
F2	450 mm (18")

CODE	Output
1A	4-20 mA
1D	0-5 Vdc
1E	0-10 Vdc

CODE	Scaled Range
1	0-35˚C (32-95˚F)
2	0-50˚C (32-122˚F)
3	0-100˚C (32-212˚F)
6	-50-50˚C (-58-122˚F)
*	Custom ranges available

***CUSTOM SCALED TEMPERATURE RANGE**

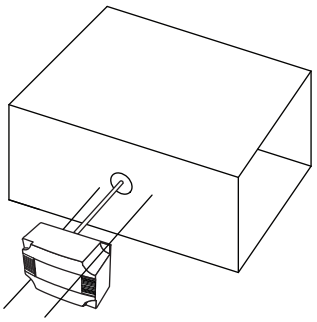
RoHS COMPLIANT

TYPICAL INSTALLATION:

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

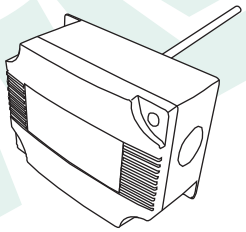
The duct type probes are installed through a hole in the side of the duct to monitor a single point temperature within the duct. Since the probes are tip sensitive, select a probe length that places the sensor well into the duct. Install the probe in a straight section of duct at a suitable distance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

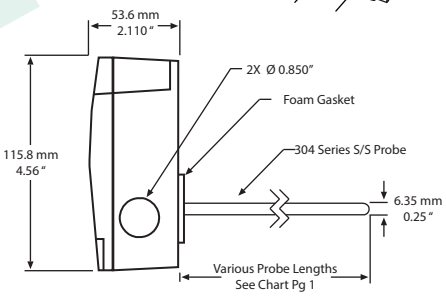
Each enclosure style provides mounting tabs or holes for ease of installation.

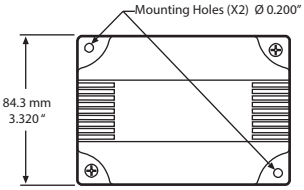


DIMENSIONS:

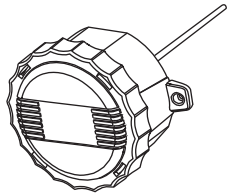
ABS Enclosure

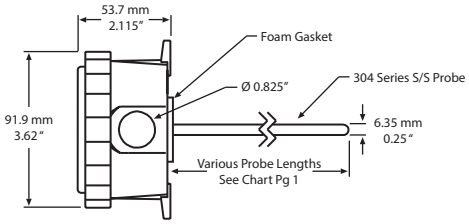


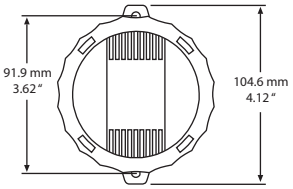




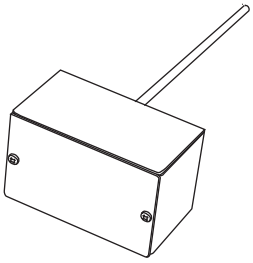
Round ABS Enclosure

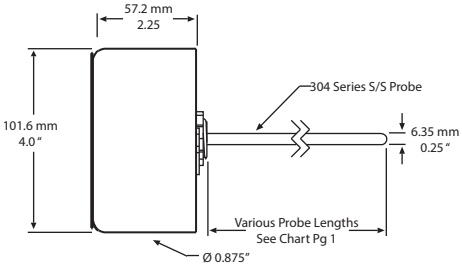


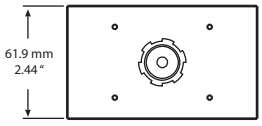




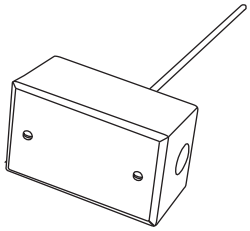
Metal Enclosure

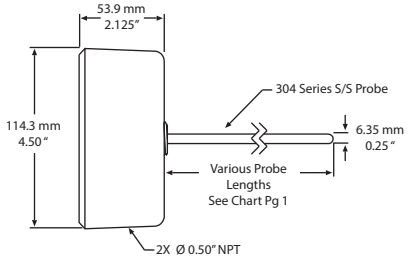


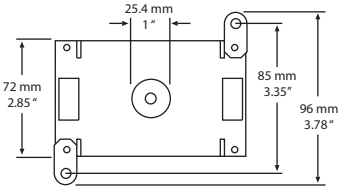




Weatherproof Enclosure







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

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RoHS COMPLIANT

Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems. We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

GREYSTONE HAS AN **ISO 9001** REGISTERED QUALITY SYSTEM

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