



T Series

Temperature Sensors with Linitemp

Product Overview

T Series temperature sensors are available with linitemp output. T Series devices come with several mounting options, including duct, wall, ceiling, outdoor, remote, and immersion. Where applicable, keep all vents clear of dust and debris. All T series devices are warranted for a period of five years.

NOTICE

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- Read and understand the instructions before installing this product.
- Turn off all power supplying equipment before working on it.
- The installer is responsible for conformance to all applicable codes.

No responsibility is assumed by Veris Industries for any consequences arising out of the use of this material.

Product Identification

| | | | |
|-----------|--|---|---|
| TC | Probe Length <input type="checkbox"/> B = 4" (102mm) <input type="checkbox"/> C = 6" (152mm) <input type="checkbox"/> D = 8" (203mm) <input type="checkbox"/> E = 12" (305mm) <input type="checkbox"/> F = 18" (457mm) <input type="checkbox"/> G = 24" (610mm) | Sensor Type <input type="checkbox"/> P = 10mV/°C, Linitemp | Cal Certificate <input type="checkbox"/> 0 = None <input type="checkbox"/> 1 = 1 point Cal validation <input type="checkbox"/> 2 = 2 point Cal validation |
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| TS | TRA | Sensor Type <input type="checkbox"/> P = 10mV/°C, Linitemp | Cal Certificate <input type="checkbox"/> 0 = None <input type="checkbox"/> 1 = 1 point Cal validation <input type="checkbox"/> 2 = 2 point Cal validation |
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| TW | Local Display <input type="checkbox"/> L = LCD <input type="checkbox"/> X = No | Sensor Type <input type="checkbox"/> P = 10mV/°C, Linitemp | Setpoint/Override <input type="checkbox"/> = None | Cal Certificate <input type="checkbox"/> 0 = None <input type="checkbox"/> 1 = 1 point Cal validation <input type="checkbox"/> 2 = 2 point Cal validation |
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| TO | Sensor Type <input type="checkbox"/> P = 10mV/°C, Linitemp | Output <input type="checkbox"/> RØ = Resistive Output | Cal Certificate <input type="checkbox"/> 0 = None <input type="checkbox"/> 1 = 1 point Cal validation <input type="checkbox"/> 2 = 2 point Cal validation |
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Product Identification (cont.)

Options

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|--|--|---|---|---|--|
| <p>TI <input type="checkbox"/></p> <p>Enclosure</p> <p>D = Duct G = Service Entry Body H = Threaded NPT Only W = Water resistant housing</p> | <p>Immersion Probe Length "L"</p> <p><input type="checkbox"/></p> <p>A = 2 1/2" (64mm) B = 4" (102mm) C = 6" (152mm) D = 8" (203mm) E = 12" (305mm)</p> | <p>Thermowell</p> <p><input type="checkbox"/></p> <p>0 = None 1 = Add Thermowell</p> | <p>Sensor Type</p> <p><input type="checkbox"/> P</p> <p>= 10mV/°C, Linitemp</p> | <p>Cal Certificate</p> <p><input type="checkbox"/></p> <p>0 = None 1 = 1 point Cal validation 2 = 2 point Cal validation</p> | <p>Threads</p> <p><input type="checkbox"/></p> <p>Blank = NPT A = BSPT B = DIN 2999</p> |
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Thermowell Sizing

| Probe Length | Thermowell Length |
|-------------------|-------------------|
| A (2 1/2") (64mm) | 1 1/2" (38mm) |
| B (4") (102mm) | 3" (76mm) |
| C (6") (152mm) | 5" (127mm) |
| D (8") (203mm) | 7" (178mm) |
| E (12") (305mm) | 11" (279mm) |

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| <p>TD <input type="checkbox"/></p> <p>Probe Length</p> <p>B = 4" (102mm) C = 6" (152mm) D = 8" (203mm) E = 12" (305mm) F = 18" (457mm) G = 24" (610mm) K = 36" (914mm)</p> | <p>Sensor Type</p> <p><input type="checkbox"/> P</p> <p>= 10mV/°C, Linitemp</p> | <p>Output</p> <p><input type="checkbox"/> R0</p> <p>= Resistive out</p> | <p>Cal Certificate</p> <p><input type="checkbox"/></p> <p>0 = None 1 = 1 point Cal validation 2 = 2 point Cal validation</p> |
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| | | |
|---|---|---|
| <p>TA <input type="checkbox"/></p> <p>Flexible Probe Length</p> <p>M = 6' (1.8 m) H = 12' (3.6 m) J = 24' (7.3 m)</p> | <p>Sensor Type</p> <p><input type="checkbox"/> P</p> <p>= 10mV/°C, Linitemp</p> | <p>Cal Certificate</p> <p><input type="checkbox"/></p> <p>0 = None 1 = 1 point Cal validation 2 = 2 point Cal validation</p> |
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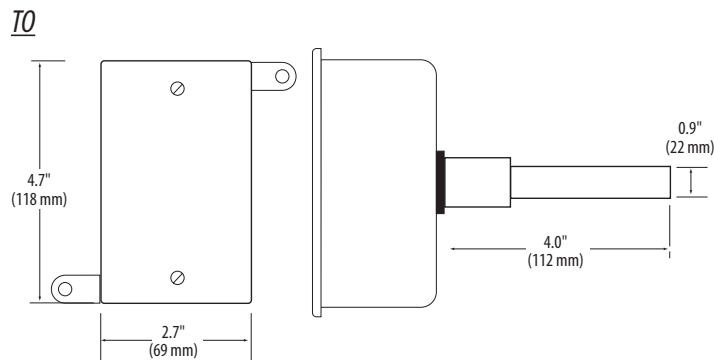
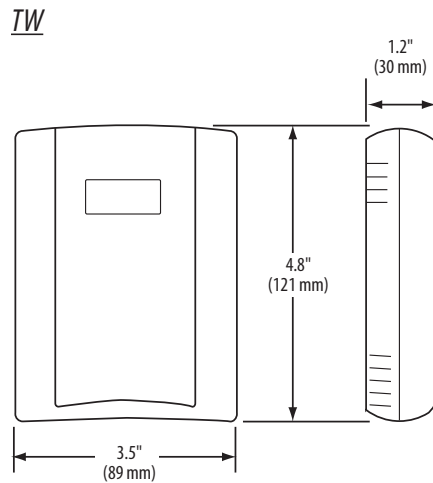
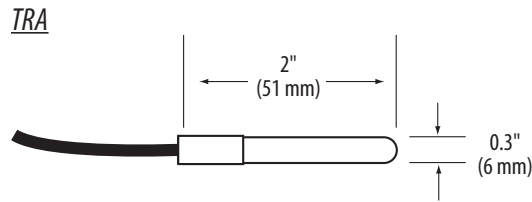
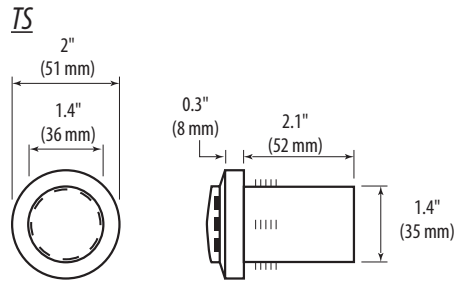
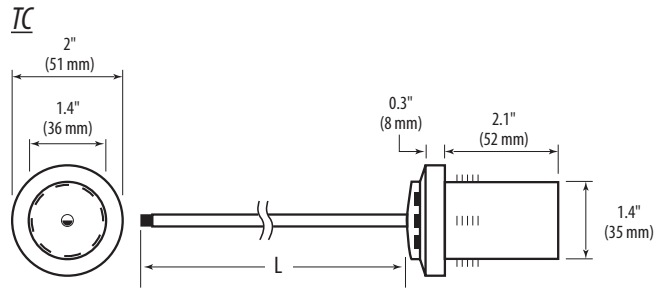
| | | |
|---|---|---|
| <p>TB <input type="checkbox"/></p> <p>Bracket Diameter</p> <p>A = 2 1/2" (6.4 cm) max. D = 8" (20 cm) max. E = 12" (31 cm) max.</p> | <p>Sensor Type</p> <p><input type="checkbox"/> P</p> <p>= 10mV/°C, Linitemp</p> | <p>Cal Certificate</p> <p><input type="checkbox"/></p> <p>0 = None 1 = 1 point Cal validation 2 = 2 point Cal validation</p> |
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Specifications

| | |
|-------------------------------|---|
| Input Power | 5 to 30 VDC |
| Output | 10 mV/°C |
| Operating Temperature | -25° to 105°C (-13° to 221°F) |
| ACCURACY | |
| Calibration Error | 1.5°C typical; 2.5°C max. at 25°C* |
| Error Over Temperature | 1.8°C typical; 3.0°C max. over 0° to 70°C range 2.0°C typical; 3.5°C max. over -25° to 105°C range |

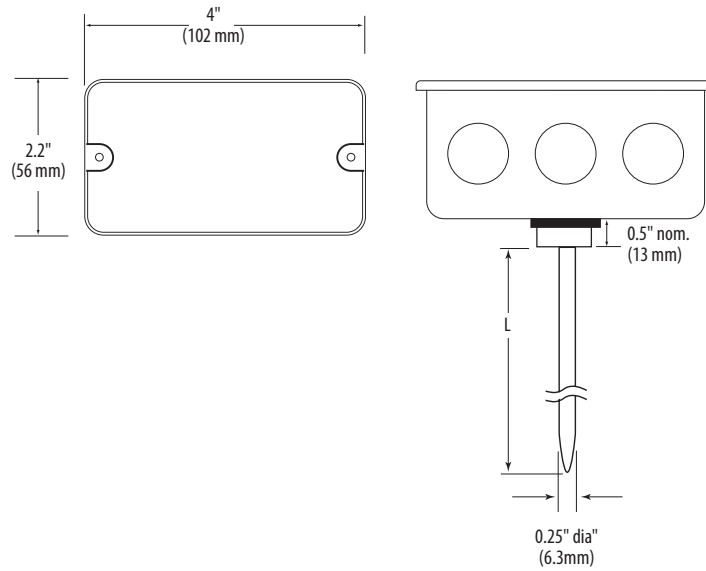
* Room temperature error documented on each unit.

Dimensions

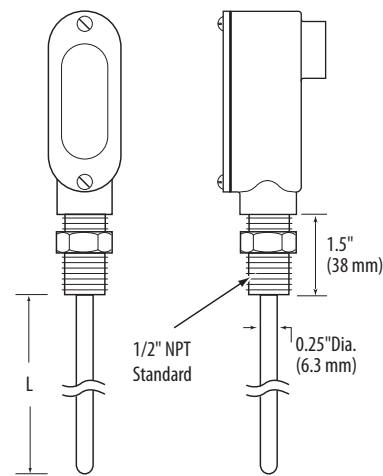


Dimensions (cont.)

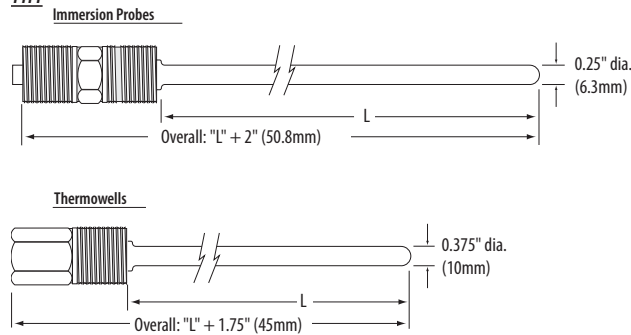
TID



TIG

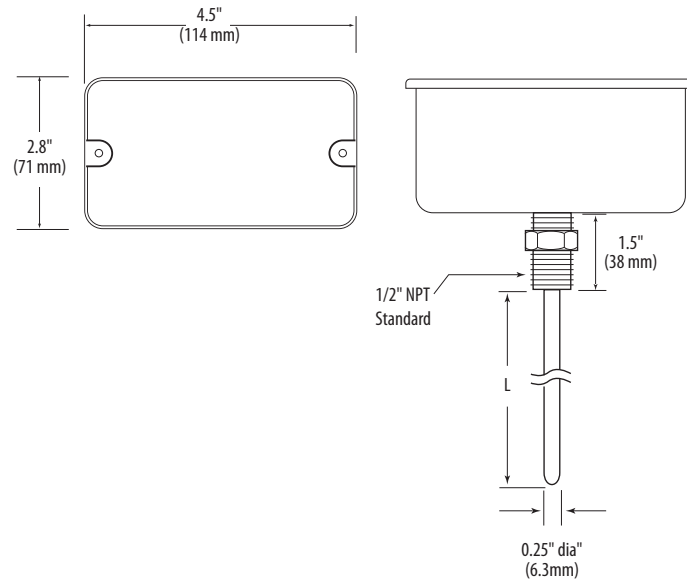


TIH

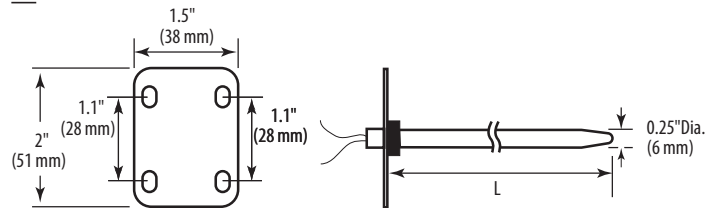


Dimensions (cont.)

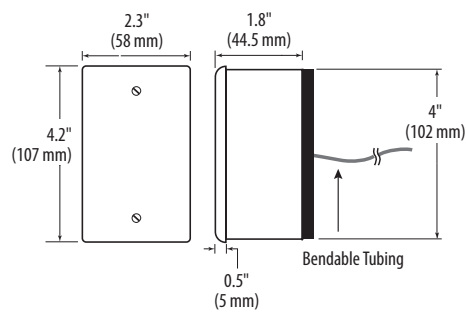
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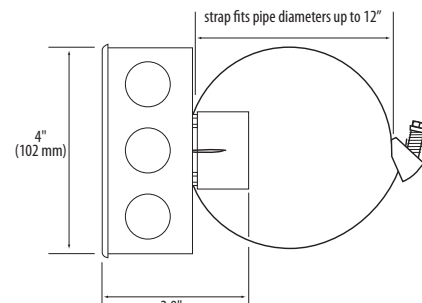
TD



TA



TB



Installation

TC/TS

1. Locate the electrical wiring in the area to be monitored. Press fit the TC/TS housing into the ceiling near this wiring.
2. Drill a mounting hole using a 1 3/8" hole saw (1" conduit, electrical trade).
3. Pull wires through the junction box or receptacle and connect them to the TC or TS device.

TRA

1. Set the stainless steel sensing probe in contact with the area to be monitored. No mounting is necessary.
2. Wire the sensor to the controller.

TW

1. Mount the housing vertically on an interior wall in the area to be monitored, in a location where air circulates freely. Locate unit away from air outlets, corners, exterior walls, windows, and doors.
2. Wire the sensor to the controller.

TO

1. Locate a sheltered outdoor area out of direct sunlight (e.g. under eaves, north side of the building, etc.).
2. Wire the sensor to the controller.
3. The sensor may be suspended from the conduit without damage to the unit. Do not obstruct vent openings.

Tlx

1. Thread the assembly into a pipe fitting.
2. Wire the sensor to the controller.

TD

1. Drill a 3/8" diameter hole for the sensor probe.
2. Insert the probe into the duct.
3. Secure the mounting flange to the outer surface of the duct using self-tapping screws provided.
4. Wire the sensor to the controller.

TA

1. Drill a 1 3/16" diameter hole in the duct for the sensor probe and lug.
2. Affix foam gasket material to the probe side of the junction box.
3. Insert the probe into the duct.
4. Secure the junction box housing to the outer surface of the duct using self-tapping screws (not included).
5. Wire the sensor to the controller.

TB

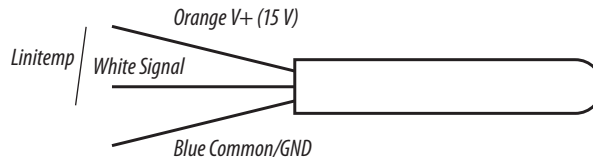
1. Clamp the sensor around the pipe to be monitored. Make sure the copper sensing plate is in contact with the pipe surface.
2. Wire the sensor to the controller.

Wiring

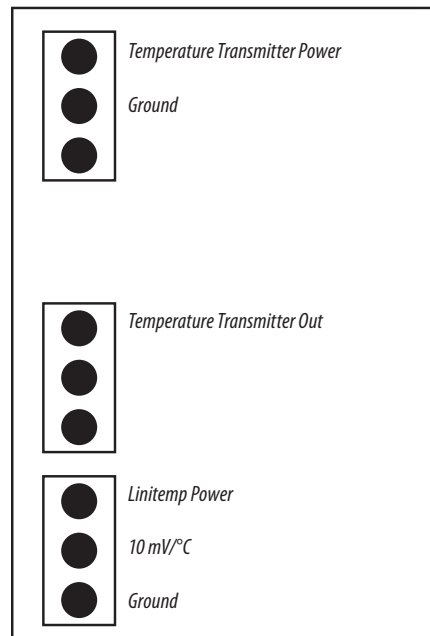
TS/TC



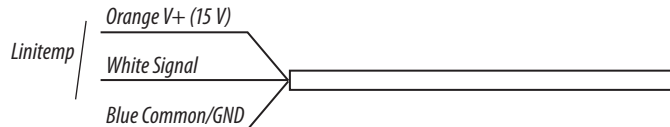
TRA



TW



TO/Tlx/TD/TA



TB

