# TC/TS

*TS*

*TC*

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## *Ceiling Mounted Temperature Sensors*
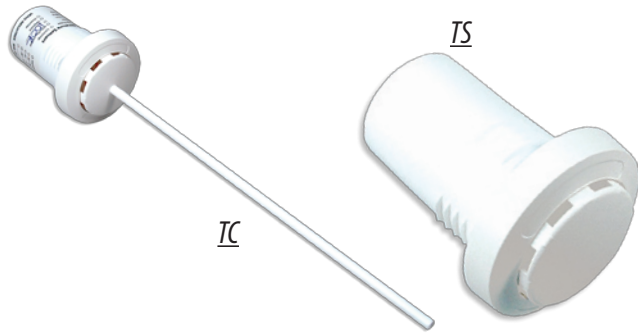
### *Installer's Specifications*

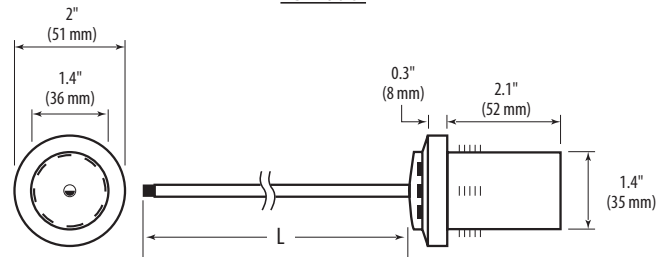| | |
|---|---|
| Wiring | 22AWG; 2-wire:RTD Thermistor, 4-20mA; 3-wire: Voltage output models |
| Housing | White ABS Plastic (For Black, consult factory) |
| *Linitemp:* | |
| Input Power | 5 to 30 VDC |
| Output | 1µA/°C or 10mV/°C |
| Operating Temperature | -25° to 105°C (-13° to 221°F) |
| Accuracy    Calibration Error: | 1.5°C (35°F) typical; 2.5°C (37°F) max. at 25°C (77°F)* |
| Error over Temperature: | 1.8°C typical (35°F); 3.0°C (34°F) max. |
| | over 0° to 70°C (32° to 158°F) range |
| | 2.0°C (35°F) typical, 3.5°C (38°F) max. |
| | over -25° to 105°C (-13° to 221°F) range |

*\*Room temperature error documented on each unit.*

## 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.**
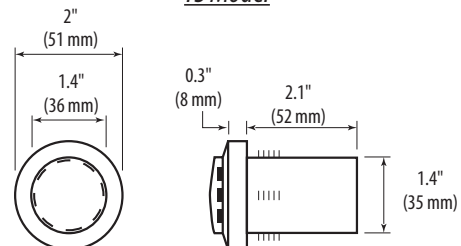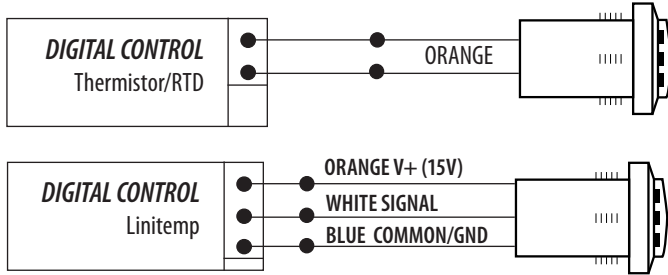
## *QUICK INSTALL*

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. See Wiring section for details.

## *PRODUCT IDENTIFICATION*

**Probe Length   Sensor Type        Cal Certificate**

**TC** ☐         ☐                   ☐

| | | |
|---|---|---|
| B = 4" (102mm) | B = 100R platinum, RTD | 0 = None |
| C = 6" (152mm) | C = 1k platinum, RTD | 1 = 1 point Cal validation |
| D = 8" (203mm) | D = 10k T2, Thermistor | 2 = 2 point Cal validation |
| E = 12" (305mm) | E = 2.2k, Thermistor | |
| F = 18" (457mm) | F = 3k, Thermistor | |
| G = 24" (610mm) | G = 10k CPC, Thermistor | |
| | H = 10k T3, Thermistor | |
| | J = 10k Dale, Thermistor | |
| | K = 10k w/11k shunt,Thermistor | |
| | M = 20k NTC, Thermistor | |
| | N = 1800 ohm, Thermistor | |
| | P = 10mV/°C, Linitemp | |
| | R = 10k US, Thermistor | |
| | S = 10k 3A 221, Thermistor | |
| | T = 100k, Thermistor | |
| | U = 20k "D", Thermistor | |

**Sensor Type        Cal Certificate**

**TS** ☐          ☐

| | |
|---|---|
| B = 100R platinum, RTD | 0 = None |
| C = 1k platinum, RTD | 1 = 1 point Cal validation |
| D = 10k T2, Thermistor | 2 = 2 point Cal validation |
| E = 2.2k, Thermistor | |
| F = 3k, Thermistor | |
| G = 10k CPC, Thermistor | |
| H = 10k T3, Thermistor | |
| J = 10k Dale, Thermistor | |
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| M = 20k NTC, Thermistor | |
| N = 1800 ohm, Thermistor | |
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| R = 10k US, Thermistor | |
| S = 10k 3A 221, Thermistor | |
| T = 100k, Thermistor | |
| U = 20k "D", Thermistor | |

## *DIMENSIONS*

*TC Model*



2" (51 mm)  1.4" (36 mm)  0.3" (8 mm)  2.1" (52 mm)  1.4" (35 mm)  L

*TS Model*



2" (51 mm)  1.4" (36 mm)  0.3" (8 mm)  2.1" (52 mm)  1.4" (35 mm)

## *WIRING*

| DIGITAL CONTROL Thermistor/RTD | ORANGE |
|---|---|

| DIGITAL CONTROL Linitemp | ORANGE V+ (15V) · WHITE SIGNAL · BLUE COMMON/GND |
|---|---|

*NOTE:   All linitemp units are standard 3-wire 10m V/C. For 1µ A/C (2-wire) connect +15V (orange) and (white) signal wire. The (blue) wire is not connected.*

### 3-Wire 10m V/C

**CONTROLLER**

- +15v — ORANGE V+ (15V)
- Analog IN — WHITE (SIGNAL)
- Common — BLUE (COMMON/GND)

**TEMP SENSOR**

### 2-Wire 1µ A/C

**CONTROLLER**

- +15v — ORANGE V+ (15V)
- Analog IN — WHITE (SIGNAL)
- Common — BLUE (NO CONNECT)

**TEMP SENSOR**