



### Description & Features:

- RTD assemblies for accurate industrial and process temperature measurements
- 100  $\Omega$  and 120  $\Omega$  RTD type sensors available, offering wide temperature ranges
- Color coded single, 3-wire elements for simplified installations
- General purpose and Explosion proof enclosures available; in aluminum, cast iron and stainless steel
- Spring loaded, nipple-union-union and welded constructions available
- Simplified terminations with ceramic terminal blocks or analog & networking transmitters available
- All thermocouple assemblies may be selected and engineered with thermowells
- 5 year warranty

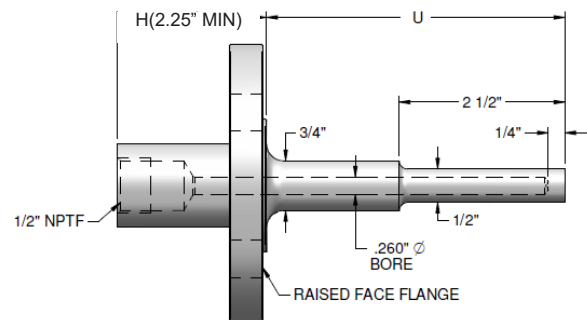
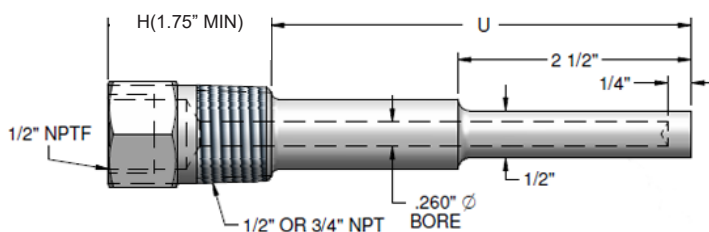
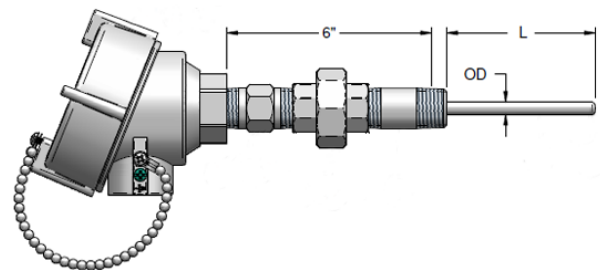
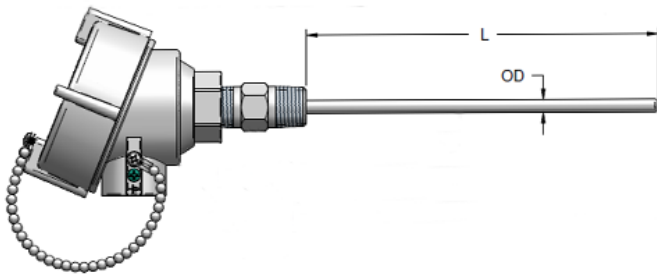
### Applications:

- Used in standard industrial or plant environments including mixing tanks, reactors and turbines
- Designed for hazardous (classified) locations, such as compressor stations, flare stacks, dryers and chemical processes

### Specifications

|                                     |                                                                                                                                                                                        |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sensing Element</b>              | RTD - PT100                                                                                                                                                                            |
| <b>Termination or Output Signal</b> | Flying leads, ceramic terminal block, analog & networking transmitter outputs available                                                                                                |
| <b>Accuracy</b>                     | Class A @ $\pm 0.15^{\circ}\text{C}$ at $0^{\circ}\text{C}/32^{\circ}\text{F}$ or Class AA @ $\pm 0.10^{\circ}\text{C}$ at $0^{\circ}\text{C}/32^{\circ}\text{F}$                      |
| <b>Temperature Range</b>            | 3-wire 100 $\Omega$ RTD @ $-50$ to $288^{\circ}\text{C}$ / $-58$ to $550^{\circ}\text{F}$<br>3-wire 120 $\Omega$ RTD @ $-50$ to $250^{\circ}\text{C}$ / $-58$ to $282^{\circ}\text{F}$ |
| <b>Sheath Material and Diameter</b> | 316SS in 1/8" or 1/4" or 6mm                                                                                                                                                           |
| <b>Extension Material</b>           | Stainless Steel                                                                                                                                                                        |
| <b>Process Connection</b>           | 1/2" NPT male fitting or nipple-union-nipple, welded or spring loaded                                                                                                                  |
| <b>Conduit Connection</b>           | 3/4" NPT female                                                                                                                                                                        |
| <b>Enclosure Rating</b>             | NEMA4 or IP66 - aluminum, cast iron and stainless steel - General purpose or Explosion proof                                                                                           |
| <b>Approvals</b>                    | Transmitter - isolated 4/20mA + HART, Intrinsically Safe<br>Enclosure - FM, CSA, ATEX & IECEx                                                                                          |

### Description and Drawings



NOTE: H + U OVERALL LENGTH (OAL)

**WINTERS INSTRUMENTS**

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**SINGLE RTD WIRING DIAGRAM**      **DUAL RTD WIRING DIAGRAM**

| TER SERIES                                                |                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SENSOR TYPE (RTD)</b>                                  | PT100 3-WIRE RTD, CLASS A @ -50 to 288°C / -58 to 550°F<br>PT100 3-WIRE RTD, CLASS AA @ -50 to 288°C / -58 to 550°F<br>120 Ω 3-WIRE, NICKEL @ -50 to 250°C / -58 to 282°F<br>OTHER, SPECIFY                                                                                                                       |
| <b>ELEMENT CONSTRUCTION</b>                               | SINGLE<br>DUAL<br>OTHER, SPECIFY                                                                                                                                                                                                                                                                                  |
| <b>TUBE DIAMETER</b>                                      | 1/4"<br>1/8"<br>6MM<br>OTHER, SPECIFY                                                                                                                                                                                                                                                                             |
| <b>ATTACHING DEVICE</b><br>(1/2" NPT HEX MALE CONNECTION) | SPRING LOADED (STANDARD)<br>WELDED<br>SPRING LOADED W/ 6" NIPPLE-UNION-NIPPLE<br>OTHER, SPECIFY                                                                                                                                                                                                                   |
| <b>ENCLOSURE</b>                                          | GENERAL PURPOSE ALUMINUM<br>GENERAL PURPOSE CAST IRON<br>EXPLOSION PROOF 316SS (FM, CSA, ATEX, IECEx)<br>EXPLOSION PROOF ALUMINUM (FM, CSA, ATEX, IECEx)<br>BAR ENDS / FLYING LEADS<br>CERAMIC TERMINAL BLOCK<br>OTHER, SPECIFY                                                                                   |
| <b>TERMINATION OR TRANSMITTER</b>                         | CERAMIC TERMINAL BLOCK<br>ISOLATED 4/20MA TRANSMITTER<br>ISOLATED 4/20MA + HART TRANSMITTER, INTRINSICALLY SAFE<br>ISOLATED 4/20MA + HART TRANSMITTER<br>OTHER, SPECIFY                                                                                                                                           |
| <b>THERMOWELL TYPE</b>                                    | FLANGED TAPERED<br>FLANGED STEPPED<br>THREADED TAPERED<br>THREADED STEPPED<br>OTHER, SPECIFY<br>NO THERMOWELL                                                                                                                                                                                                     |
| <b>THERMOWELL/INSERTION LENGTH (U/L)</b>                  | U LENGTH (IN INCHES)<br>SPRING LOADED -> Sensor Length (L) = Overall Length (OAL) - 0.25"<br>WELDED -> Sensor Length (L) = Overall Length (OAL) - 1"<br>NO CONNECTION -> Sensor Length (L) = Overall Length (OAL) + 2"<br>H LENGTH (IN INCHES)<br>MINIMUM H FOR THREADED = 1.75"<br>MINIMUM H FOR FLANGED = 2.25" |
| <b>HEAD LENGTH (H)</b>                                    |                                                                                                                                                                                                                                                                                                                   |
| <b>THERMOWELL AND FLANGE MATERIAL</b>                     | 304SS<br>316SS<br>OTHER, SPECIFY<br>NO THERMOWELL                                                                                                                                                                                                                                                                 |
| <b>SIZE OF PROCESS THREAD OR FLANGE</b>                   | 1/2" NPT<br>3/4" NPT<br>1" FLANGE<br>1 1/2" FLANGE<br>2" FLANGE<br>3" FLANGE<br>OTHER, SPECIFY<br>NO THERMOWELL                                                                                                                                                                                                   |
| <b>PRESSURE RATING OF FLANGE</b>                          | 150#<br>300#<br>600#<br>OTHER, SPECIFY<br>NO FLANGE                                                                                                                                                                                                                                                               |
| <b>OPTIONS, LIST IN ALPHA-NUMERIC ORDER</b>               | STAINLESS STEEL TAG<br>PLASTIC TAG<br>PAPER TAG<br>CALIBRATION CERTIFICATE<br>MTR (THERMOWELL ONLY)<br>OTHER, SPECIFY                                                                                                                                                                                             |

[illegible]