

Model 461 Sanitary RTD

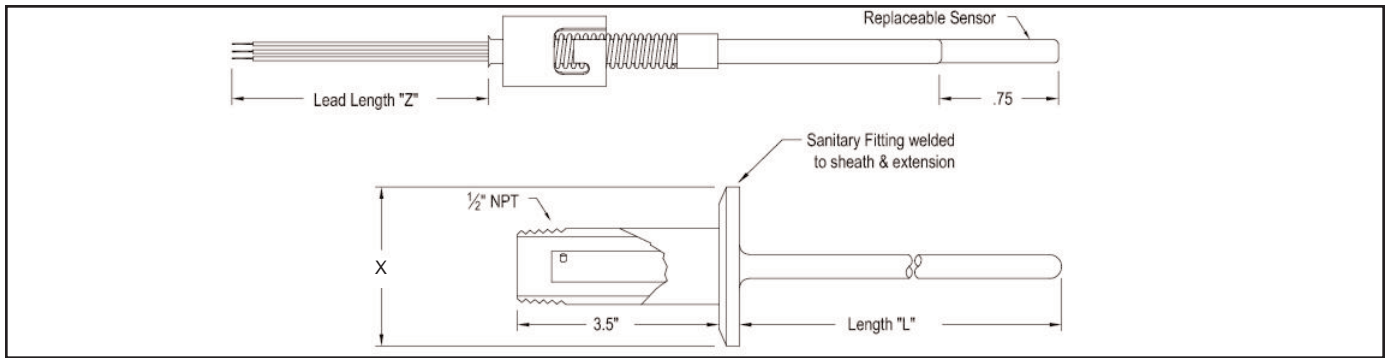
U.S. Patent No: 5,632,557

Incorporates a patented design which facilitates easy replacement of the temperature sensing element without the use of a standard thermowell. In addition, sensor replacement is accomplished without breaking the sanitary seal of the process.

Model 461 combines the fast time response characteristics of a standard immersion sanitary sensor with all the advantages of a thermowell.



- Removable sensing element.
- Eliminates need for a thermowell.
- Low replacement sensor cost.
- Permits sensor removal without loss of sanitary seal.
- No. 4 finish meets 3A standards.



Specifications:

| | | | | |
|--------------------------|--|-----------------------------|------------------------------|------------------------------|
| 1. Base Model | Base Model/Series Number. | | | |
| 2. A. Accuracy: | <i>Standard</i> | Class B (no code) | | |
| | <i>High</i> | Class A (code H) | | |
| | <i>Special</i> | Customer Specified (code S) | | |
| B. TCR: | * Industry Standard is DIN Curve (code 01B), Platinum, 100@ 0°C. Conforms to IEC 751. Temperature Coefficient of Resistance is the temperature vs. resistance characteristics of platinum, used in manufacturing the RTD. Determines the curve of the RTD. | | | |
| C. Ice Point Resistance: | R ₀ - Resistance at 0°C (32°F) | | | |
| 3. Construction: | Code A - 316L SS tube and wire construction, thin film element (.00385055), teflon insulated lead wire. Code C - 316L SS tube and wire construction, wire wound element, fiberglass insulated lead wire. | | | |
| 4. Lead Wires: | 3 - Wire | 4 - Wire | 6 - Wire (Dual 3 - Wire) | 8 - Wire (Dual 4 - Wire) |
| 5. Sheath Diameter: | .250" (1/4") is the industry standard. | | | |
| 6. Sheath Length: | From flange to tip. | | | |
| 7. Sanitary Fitting: | Select type, size and material. | | | |
| 8. Leadwire Length: | Length of wires beyond sheath. | | | |

| Model | Description | | |
|----------|--|--|-------------------|
| 461 | Sanitary RTD | | |
| 1 | Code | R ₀ & Temperature Coefficient | |
| | 01B | 100 ohm Platinum .00385055 TCR 100 ohms @ 0° C - Industry Standard | |
| | 01A | 100 ohm Platinum .003902 TCR 100 ohms @ 0° C | |
| | 10A | 1000 ohm Platinum .003902 TCR 1000 ohms @ 0° C | |
| | 10B | 1000 ohm Platinum .00385055 TCR 1000 ohms @ 0° C | |
| | 12N | 120 ohm Nickel .00672 TCR 120 ohms @ 0° C | |
| | 09C | 10 ohm Copper (9.035) .004274 TCR 10 ohms @ 25° C | |
| | Add Code "H" for higher accuracy Add Code "S" for special accuracy Add Code "M_", ME for matched to element, MT for matched to transmitter, MP for two matched probes. | | |
| | 2 | Code | Temperature Range |
| | | A | 500° F Maximum |
| 3 | Code | Number of Lead Wires | |
| | 2 | 2-Wire (No lead Compensation) | |
| | 3 | 3-Wire (Lead Compensation) | |
| | 4 | 4-Wire (Complete Compensation) | |
| | 6 | Dual 3-Wire (With dual element) | |
| 4 | Code | Sheath Diameter | |
| | C | .250" (1/4") Diameter | |
| 5 | Code | Sheath Length | |
| | XXX.X | Specify length to nearest 0.1" | |
| 6 | Code | Sanitary Fitting and Size | |
| | A | Ladish Tri-Clover | |
| 7 | Cap | Nominal Size "B" = Actual Size (for reference only) | |
| | | 0.5 0.984 | |
| | | 0.75 0.984 | |
| | | 1.0 1.984 | |
| | | 1.5 1.984 | |
| | | 2.0 2.516 | |
| | | 2.5 3.047 | |
| | | 3.0 3.579 | |
| Material | B = 316LSS - Industry Standard | | |
| 8 | Code | Lead Wire Length | |
| | Z006 | 6" Standard with head | |
| | ZXXX | Other - Specify length and type | |

| | | | | | | | | | | | | | | | |
|-----|---|-----|---|---|---|---|---|---|---|-------|---|-------|---|------|---------------------|
| 461 | - | 01B | - | A | - | C | - | 4 | - | 003.5 | - | A2.0B | - | Z006 | Sample Model Number |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Your Model Number |

