

# Model 461 Sanitary RTD

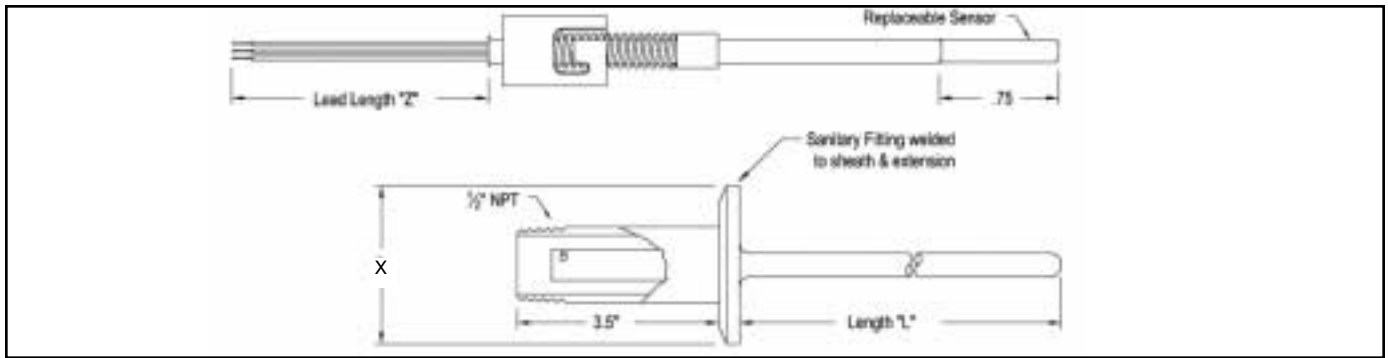
U.S. Patent No: 5,632,557

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:	Standard	Class B (no code)
	High	Class A (code H)
	Special	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 <sub>0</sub> - 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:		
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 <sub>0</sub> & 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
	C   900° 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)
8   Dual 4-Wire (With dual element)	

4	Code   Sheath Diameter
	C   .250" (1/4") Diameter C/N   .250" (1/4") Diameter Sheath/.156" Diameter Tip

5	Code   Sheath Length
	XXX.X   Specify length to nearest 0.1"

6	Code   Sanitary Fitting and Size
	A   Ladish Tri-Clover G   Cherry -Burrell

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
Code	Lead Wire Length
Z006	6" Standard with head
ZXXX	Other - Specify length and type

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461	-	01B	-	A	-	C	-	4	-	003.5	-	A2.0B	-	Z006
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample Model Number  
Your Model Number