

## SLIMLINE SANITARY RTD SENSOR/TRANSMITTER

Reotemp's Slimline Sanitary RTD is a compact sensor/transmitter designed for direct insertion into sanitary tri-clamp systems and applications. The Slimline's 3-A approved 316 stainless steel wetted surfaces are highly polished to reduce the risk of unsanitary conditions.

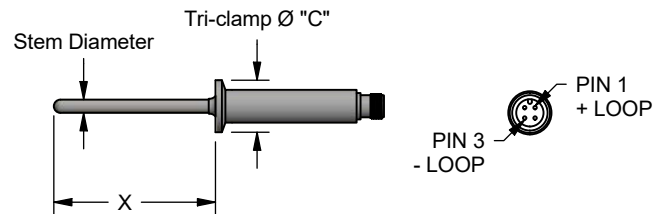


Made in USA

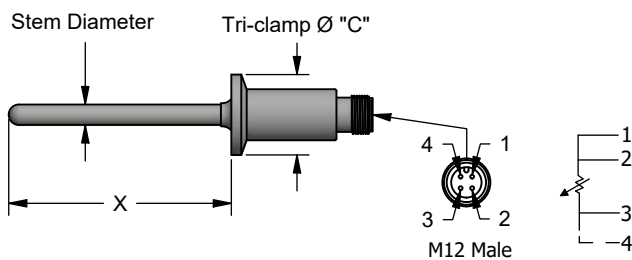


### FEATURES / BENEFITS

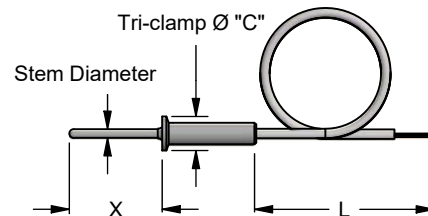
- 3-A Approved 316SS Wetted Surfaces (32 Ra max.)
- Configurable with Optional Transmitter
- 3-A Certificate Provided
- Sanitary Tri-clamp Design
- Fully Sealed for Washdown (IP67)



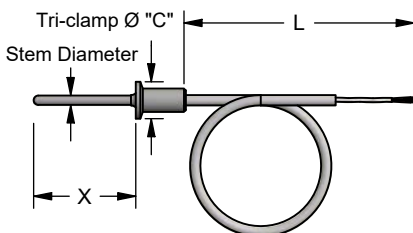
M12 Output with Transmitter



M12 Output without Transmitter



Wire Output with Transmitter



Wire Output without Transmitter

Tri-Clamp Size	Diameter "C"	
	in	mm
3/4"	0.984	25
*1.5"	1.984	50.4
2"	2.516	63.9
2.5"	3.047	77.4
3"	3.579	90.9
4"	4.682	118.9

\*1.5" tri-clamp fits 1.5" and 1" tri-clamp fittings

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## SLIMLINE SANITARY RTD SENSOR/TRANSMITTER

### SENSOR SPECIFICATIONS

Environmental Conditions	
Maximum Process Temperature	-328/400°F
Common Specifications	
Wire Types	Teflon insulated 24 AWG stranded, PVC insulated 24 AWG Stranded, or Teflon insulated 24 AWG Stranded with Aluminum Mylar Shield and Drain Wire
Wetted Material	316 Stainless Steel
Housing Material	316 Stainless Steel
Wetted Finish	Ra 32 Max. / Ra 20 Max.(Optional)
RTD Accuracy	Class A = $\pm (0.15 + 0.002 t )^{\circ}\text{C}$ [-30/200°C] 1/10 B = $\pm (0.03 + 0.0005 t )^{\circ}\text{C}$ [0/50°C] Outside of State Ranges = $\pm (0.3 + 0.005 t )^{\circ}\text{C}$ [-200/200°C]
Input Specifications	
RTD Type	Pt100, Ni100

Observed Authority Requirements	
RoHS	2011/65/EU

### TRANSMITTER SPECIFICATIONS

Environmental Conditions	
Ambient Temperature	-40/185°F
Relative humidity	<95% relative humidity (non-condensing)
Common Specifications	
Supply Voltage	8.0 to 35 VDC
Internal Power Dissipation	25 mW to 0.8 W
Response Time (Programmable)	0.33 to 60s
Voltage Drop	8.0 VDC
Warm-up Time	5 min.
Effect of Supply Voltage Change	< 0.005% of Span / VDC
Accuracy	Better than 0.1% of selected range + RTD Accuracy
EMC Immunity Influence	<±0.5% of Span

Output Specifications	
Updating Time	135 ms
Signal Range	4-20 mA
Min. Signal Range	16 mA
Load (@ current output)	$\leq (V_{\text{supply}} - 8) / 0.023 [\Omega]$
Load Stability	$\leq 0.01\%$ of span /100Ω
Sensor Error Indication	Programmable 3.5 to 23 mA
NAMUR NE43 Upscale/Downscale	23 mA / 3.5 mA
Of Span	= of the presently selected range
Input Specifications	
Cable Resistance Per Wire	10 Ω (max.)
Sensor Current	> 0.2 mA, < 0.4 mA
Effect of Sensor Cable Resistance (3-wire)	< 0.002 Ω/Ω
Sensor Error Detection	Yes
Max. Offset	50% of selected max. value

## SLIMLINE SANITARY RTD SENSOR/TRANSMITTER

**BUILD YOUR SLIMLINE:** Choose options to build a part number. For example: **RSTAS3A025T15WC060TS-TS**

MODEL	RTD ACCURACY	ELEMENT	STEM DIAMETER	STEM LENGTH	PROCESS CONNECTION "C"
<b>RST</b>   RSS = Slimline Sanitary RTD Sensor without Transmitter RST = Slimline Sanitary RTD Sensor with Transmitter	<b>A</b>   A = Class A, 100Ω, 385 Curve(Standard) T= 1/10 B, 100Ω, 385 Curve	<b>S3</b>   Single Element S3 = Single 3-Wire S4 = Single 4-Wire	<b>A</b>   Straight Stems A = 1/4" Diameter F = 3/8" Diameter D = 3/16" Diameter  Reduced Tip Stems B = 3/8" Diameter Reduced to 3/16" Tip C = 1/2" Diameter Reduced to 1/4" Tip	<b>025</b>   025 = 2.5" Stem 030 = 3" Stem 040 = 4" Stem 060 = 6" Stem 090 = 9" Stem 120 = 12" Stem 180 = 18" Stem 240 = 24" Stem 360 = 36" Stem ??? = Length in inches up to 72"	<b>T15</b>   T15 = 1.5" Tri-Clamp T20 = 2" Tri-Clamp T25 = 2.5" Tri-Clamp T30 = 3" Tri-Clamp T40 = 4" Tri-Clamp T75 = 3/4" Tri-Clamp
OUTPUT CONNECTION	WIRE LENGTH (OPTIONAL)	WIRE TYPE (OPTIONAL)	WIRE TERMINATION (OPTIONAL)	OPTIONS	
<b>WC</b>   WC = Wire Cable MP = M12 Plug MF = M12 with Female Connector Only MW = M12 with Female Connector and Wire	<b>060</b>   Specify only when WC or MW outputs are chosen.  ??? = Wire Length in Inches, Example: 072 = 72".	<b>T</b>   Specify only when WC or MW outputs are chosen.  T = Teflon Insulated (Standard for WC Output) P = PVC Insulated (Standard for MW Output) A = Teflon w/ Aluminum Mylar Shield and Drain	<b>S</b>   Specify only when WC or MW outputs are chosen.  S = Stripped (Standard) L = Spade Lugs T = Terminal Pins M = Copper Crimps	<b>-TS</b>   -TS = Stainless Steel Tag -RA = Ra 20 Max Wetted Finish with Certificate -R3 = Calibration Certification, 3 Points (32°F, 100°F, 190°F) -R1 = Calibration Certification, 1 Point (100°F) -C3 = Calibration Certification, 3 Points (Customer Picks) -C1 = Calibration Certification, 1 Point (Customer Picks)  For additional options see page 149.	

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## THERMOCOUPLE & RTD OPTIONS

		Thermocouple	RTD	Digital Thermometers	Handheld Digital
<b>CERTIFICATION OPTIONS</b>					
<b>-R1</b>	1 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓
<b>-R3</b>	3 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓
<b>-C1</b>	1 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓
<b>-C3</b>	3 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓
<b>-CC</b>	Certificate of Conformance	✓	✓	✓	✓
<b>-CS</b>	NIST Calibration Sticker (No Logged Points)	✓	✓	✓	✓
<b>OTHER OPTIONS</b>					
<b>-VB</b>	Hi-Vibration	N/A	✓	✓	✓
<b>-AC</b>	Hi-Accuracy	N/A	✓	N/A	N/A
<b>-PS</b>	Pointed Stem	✓	✓	✓	✓
<b>-TF</b>	Teflon Coating	✓	✓	✓	✓
<b>-SS</b>	316 SS stem	N/A	STD	✓	✓
<b>-NL</b>	No Logo	✓	✓	✓	✓
<b>-HT</b>	Heat Transfer Compound (2 oz)	✓	✓	✓	N/A
<b>-GL</b>	Plain Glass Lens	N/A	N/A	✓	✓
<b>-CL</b>	Custom Logo Dial	N/A	N/A	✓	✓
<b>-BP</b>	Replacement Battery Pack	N/A	N/A	✓	✓
<b>-WD</b>	White Dial	N/A	N/A	✓	✓
<b>-AS</b>	Allows to Fit 1-1/4-18 Industrial Thermowell	✓	✓	✓	N/A
<b>TAG OPTION</b>					
<b>-TS</b>	Stainless Steel Tag (1-10 Characters)			✓	
<b>-TM</b>	Stainless Steel Tag (11-80 Characters)			✓	
<b>-TP</b>	Paper Tag			✓	
✓	Indicates that the option is available with this model.				
N/A	Indicates the option is not available with this model.				
STD	Indicates standard options with no additional cost.				