

Product Selection Guide

Temperature Sensors and Accessories

Thermocouples (Series 100)

-196°C to 1180°C
Special Limits of Error
Type J, K, T, E
Fixed Length, Spring-Loaded, Variable Immersion
Hazardous Location Approvals



RTDs (Series 200/300)

Series 200: -196°C to 500°C / ± 0.13 or $\pm 0.26^\circ\text{C}$ @ 0°C
Series 300: -50°C to 200°C / $\pm 0.26^\circ\text{C}$ @ 0°C
Fixed Length, Spring-Loaded, Variable Immersion
Hazardous Location Approvals



Sanitary Sensors (Series S)

-50°C to 200°C
RTDs: ± 0.13 or $\pm 0.26^\circ\text{C}$ @ 0°C
Thermocouples: Special Limits of Error
3A / ASME BPE Compliant



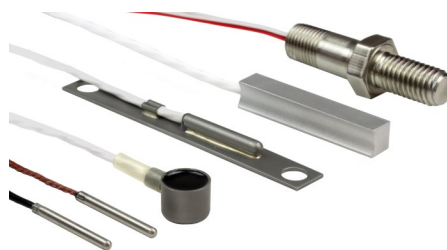
Miniature RTDs (Series A)

-196°C to 200°C / $\pm 0.13^\circ\text{C}$ @ 0°C
-50°C to 200°C / $\pm 0.26^\circ\text{C}$ @ 0°C
0.080, 0.125, 0.188 and 0.250 Inch Diameters
100% Waterproof — Fully Immersible in Liquid



Surface Sensors (Series B)

-50°C to 200°C
RTDs: $\pm 0.26^\circ\text{C}$ @ 0°C
Thermocouples: Special Limits of Error



Air Temp Sensors (Series D)

-46°C to 260°C
 $\pm 0.26^\circ\text{C}$ @ 0°C
Room and Duct Air Measurement
Averaging, Multipoint and Wall Mount



Field Adjustable Length (Series E)

-50°C to 200°C
RTDs: $\pm 0.13^\circ\text{C}$ or $\pm 0.26^\circ\text{C}$ @ 0°C
Thermocouples: Special Limits of Error
Cut-to-Length, Twist-to-Length and Segmented
Spring-Loaded and Variable Immersion
In Stock for Quick Shipment



Autoclave Sensors (SAC/SAL/SAH/SAX)

-50°C to 200°C
 $\pm 0.13^\circ\text{C}$ or $\pm 0.26^\circ\text{C}$ @ 0°C
Standard and Heavy-Duty Chamber and Load Probes
100% Waterproof — Fully Immersible in Liquid



In-Line Non-Intrusive (SNI/SNR/SNS)

-50°C to 200°C
RTDs: $\pm 0.13^\circ\text{C}$ or $\pm 0.26^\circ\text{C}$ @ 0°C
Thermocouples: Special Limits of Error
3A / ASME BPE Compliant



Transmitters and Indicators

Digital Programmable, Analog, In-Line M12
HART and Fieldbus
Loop and Battery Powered
Head and Rail Mount



Thermowells

Threaded/Flanged/Socket Weld/Van Stone/
Heavy Duty Weld-In/Sanitary Elbow (SWE)/
Sanitary Straight (SWT)/Sanitary Ingold (SPA/SPS)

Variety of Materials, Coatings, Certifications and
Custom Designs Available



Quick Connect Sensors

User Friendly 4 pin M12 Connectors
IP67 when Mated
Available on Series 200/300/S
PVC and FEP Cordsets (C01/C02/C03)
In-Line Transmitter Option (T12)



Laboratory Thermometers

-196°C to 500°C
Secondary Reference PRTs and Field Use Models
0.125, 0.188 and 0.250 Inch Diameters
Lengths up to 24"
Connectors Available for Most Readouts



Accredited Calibration Services

-196°C to 500°C
Uncertainties ± 3.4 mK to ± 25 mK
5 Day Turnaround
PRT and System Calibrations



NVLAP Lab Code 200706-0



RTDology® Temperature Training

Free Online Training
Custom Training Topics
Technical Papers
Phone Support
On-site Support



Custom Engineered Solutions

We can assist you in finding or creating the right
product for your specific needs.

Custom Built Solutions
Minor or Major Modifications
In-house Design, Engineering and Manufacturing



Common Applications

**Test and Measurement
Metrology
OEM**

Process Control/Monitoring/Safety

- Sterilization/SIP/CIP/Autoclave
- Pasteurization/Retort
- Refining/Distillation/Condensing/Cooling
- Steam/Feed Water/Cooling Liquid/Effluent
- Annealing/Drying/Oxidizing/Flue Gas
- Bioreactors/Freeze Dryers
- Boilers/Furnaces/Ovens
- Pipes/Tanks/Cylinders/Reactors
- Turbines/Bearings
- Storage—Refrigerator/Freezer/Cryogenic
- Custody Transfer
- Waterproof/Underwater/Cooling Ponds

Measurement Confidence

Burns Engineering has temperature measurement solutions for all your Process, OEM, Test & Measurement and Metrology needs. Since our founding in 1960, product quality, customer service and innovative engineering have been hallmarks of our business.

Your business deserves temperature measurement solutions that you can depend on . . . at Burns, your measurement is our mission.