


**Burns Engineering®** offers a wide variety of customized temperature sensors designed with small diameter sheaths (0.080" to 0.188") and temperature ranges from -196°C to 500°C (-320°F to 932°F). This guide highlights a few of our more common small diameter designs to illustrate what is possible. If you don't see a solution that meets your specific needs contact us and we'll work with you to design one that does.

*Note: Products shown with optional heads, fittings, thermowells, and connectors.*


## Direct Immersion with Connection Head

	<p><b>300A</b>  <b>DIA:</b> 0.125" (3.175mm) or 0.188" (4.763mm)  <b>Range:</b> -50 to 200°C                      Industrial RTD sensor ideal for high vibration applications.</p>
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	<p><b>300B</b>  <b>DIA:</b> 0.125" (3.175mm) or 0.188" (4.763mm)  <b>Range:</b> -50 to 200°C                      Industrial sensor with adjustable immersion.</p>
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## Spring Loaded for Thermowell or Bore Hole

	<p><b>200L</b>  <b>DIA:</b> 0.188" (4.763mm)  <b>Range:</b> -200 to 500°C                      Spring loaded industrial sensor for thermowell applications.</p>
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	<p><b>23407</b>  <b>DIA:</b> 0.125" (3.175mm) probe, 0.188" (4.763mm) thermowell  <b>Range:</b> -50 to 200°C                      M12 connection and custom thermowell.</p>
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## Full Immersion with Cable

	<p><b>SAL</b>  <b>DIA:</b> 0.125" (3.175mm)  <b>RANGE:</b> -40 to 135°C                      Autoclave probe.</p>
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	<p><b>A01</b>  <b>DIA:</b> 0.125" (3.175mm)  <b>Length:</b> 1.25" (31.75mm)  <b>Range:</b> -196 to 200°C                      Waterproof, ideal for cold environments.</p>
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## Sanitary Sensor with Thermowell

	<p><b>S55</b>  <b>DIA:</b> 0.125" (3.175mm) probe, 0.188" (4.763) thermowell  <b>Range:</b> -50 to 200°C                      Sanitary Sensor with no exposed threads.</p>
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	<p><b>S60 and SWT</b>  <b>Thermowell</b>  <b>DIA:</b> 0.188" (4.763)  <b>Range:</b> -50 to 200°C                      0.500" (12.7mm) hygienic ferrule</p>
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Note: Products shown with optional heads, fittings, thermowells, and connectors.

## Sensors with Connectors

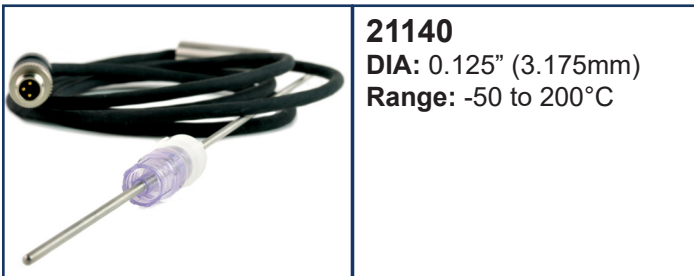


**300G**  
**DIA:** 0.125" (3.175mm) or  
0.188" (4.763mm)  
**Range:** -50 to 200°C



**300P**  
**DIA:** 0.125" (3.175mm) or  
0.188" (4.763mm)  
**Range:** -50 to 200°C  
Shown with LT20  
connector.

## Bioreactor Disposable Bag Temperature Sensor



**21140**  
**DIA:** 0.125" (3.175mm)  
**Range:** -50 to 200°C



**22041**  
**DIA:** 0.083" (2.108mm)  
**Range:** 0 to 50°C  
Bioreactor RTD probe with  
transition fitting.

## Hand-Held or Variable Immersion with Cable



**22669**  
**DIA:** 0.125"  
**Range:** -200 to 500°C  
Single and dual element  
probe



**200G**  
**DIA:** 0.188" (4.763mm)  
**Range:** -200 to 500°C  
Industrial probe for high  
humidity environments.

## Variable Immersion with Armored Extension Cable



**200G**  
**DIA:** 0.188" (3.175mm)  
**Range:** -200 to 500°C  
Industrial RTD probe  
for high humidity  
environments.

## Custom Solutions



**Burns Engineering** offers custom designed solutions and product consultation for difficult applications. Our Application Engineers have the experience and tools to get the right solution for your needs, and with Burns application consulting services and engineering a solution is performed at no charge.

Contact an Engineer today [www.info@burnsengineering.com](http://www.info@burnsengineering.com)