Product Profile High Accuracy A+ RTD

More demanding requirements and improvements in field temperature transmitters has created a need for a more accurate and stable temperature sensor. The A+ 100 ohm platinum RTD fills that need. Developed to meet stringent accuracy requirements in Pharmaceutical and Food and Beverage applications the A+ far exceeds the accuracy and stability of the most common high accuracy RTD (Class A) used in critical applications. For improved loop accuracy a five point NIST traceable calibration report is available. This report provides actual resistance values, which allows the user to input these values into a sensor matching transmitter for improved loop accuracy. The product is available with several different configurations including industry approved sanitary connections. Contact Smart Sensors or a factory authorized representative for application assistance.

Standards Reference:
ASTM E1137-97 (product exceeds accuracy for class A see graph)
IEC 60751 (ITS 90) (product exceeds accuracy for class A see graph)

Product Specifications
Element Type: 100 ohm @ 0 degrees C
Element Material: Platinum
Temp Coefficient: .00385 Ohms/Ohm/degree C
Range: 0-100 degrees C
L: 36" max
OD: 1/4"
Sheath: 316SS
Construction: 4 wire single or dual
Lead Wire: 22 gage stranded silver plated Copper
Accuracy ° F: + or - .25 ° F over the entire range

Part Number for A+ accuracy
1690 - S(single) or D(dual) - Length in inches
Example: 1690-D-30
(High Accuracy RTD, dual 30" sheath length)

Description: The drawing below is a typical RTD used in a thermowell. "L" dimension is determined by the overall length of the thermowell plus the "A" length.

Accuracy Comparison

<table>
<thead>
<tr>
<th>Temp</th>
<th>Grade B ASTM</th>
<th>Class B IEC 60751</th>
<th>A+ Deg C</th>
</tr>
</thead>
<tbody>
<tr>
<td>-50</td>
<td>0.460</td>
<td>0.550</td>
<td>0.055</td>
</tr>
<tr>
<td>0</td>
<td>0.250</td>
<td>0.300</td>
<td>0.030</td>
</tr>
<tr>
<td>100</td>
<td>0.460</td>
<td>0.550</td>
<td>0.055</td>
</tr>
</tbody>
</table>

Temperature Measurement...The Right Way!

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