APPLICATION: THE NO. 10313 UNDERWATER PLATINUM RESISTANCE THERMOMETER IS DESIGNED FOR COMPLETE SUBMERSION UNDER RIVERS, Ponds, Etc. The Ø .25 SHEATH IS PROTECTED BY A PERFORATED GUARD TUBE. THE GUARD TUBE AND COUPLING ARE REMOVABLE. THE 18 AWG NEOPRENE INSULATED CABLE IS COMPLETELY WATERPROOF AND HEAVY DUTY TO WITHSTAND ADVERSE CONDITIONS.

WATERPROOF FITTING (NYLON)

CAUTION: DO NOT TURN OR MOISTURE SEAL MAY BE BROKEN

Ø .25, 316 S.S. RTD SHEATH

(6.0)

Ø .84 GUARD TUBE, SCHED 40 304 S.S. PIPE

GUARD TUBE LENGTH = RTD "L" -.5 INCHES (NOTE: THIS IS A REFERENCE DIMENSION)

STAINLESS STEEL COUPLINGS, Ø 1.0

18 AWG, 3-COND. STRANDED, TYPE SO

'LY' CABLE LENGTH

NOTICE: SEE SHEET #2 FOR ORDERING INFORMATION.

TOLERANCES - UNLESS OTHERWISE SPECIFIED

ALL DIMENSION IN INCHES

FRACTIONS = ±1/16
ONE PLACE .X = ± .050
TWO PLACE .XX = ± .010
THREE PLACE .XXX = ± .005
ALL ANGLES ARE ± 0°30'
SHEATH AND LEAD LENGTHS PER BURNS P/N 17026
UNLESS OTHERWISE NOTED:
ALL SURFACES .125
ALL FINISHES IN MICRON INCHES

DIMENSIONS IN INCHES

REF: 13795-*
18827-*

BURNS ENGINEERING

BURNS #1 CURVE
α = .003982
PLATINUM

BURNS DIN STANDARD CURVE
α = .00385
PLATINUM

SINGLE ELEMENT (3-WIRE)
GREEN = -1 = 100 OHMS ±.1Ω AT 0°C
OR -1P = 100 OHMS ±.05Ω AT 0°C
WHITE BLACK

SINGLE ELEMENT (4-WIRE)
GREEN = -1S = 100 OHMS ±.1Ω AT 0°C
OR -1PB = 100 OHMS ±.05Ω AT 0°C
WHITE BLACK

SINGLE ELEMENT (3-WIRE)
BLACK = -21 = 100 OHMS ±.1Ω AT 0°C
OR -21P = 100 OHMS ±.05Ω AT 0°C
WHITE GREEN

SINGLE ELEMENT (4-WIRE)
BLACK = -21S = 100 OHMS ±.1Ω AT 0°C
OR -21PB = 100 OHMS ±.05Ω AT 0°C
WHITE GREEN

NOTE: SEE SHEET #2 FOR ORDERING INFORMATION.
### Ordering Information:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10313</td>
<td>Heavy Duty Underwater Element, Stainless Steel Sheath, 1/2&quot; NPT Mounting Threads, Platinum Element, ±0.10% Accuracy</td>
</tr>
</tbody>
</table>

#### Element Resistance at 0°C

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>100 Ohms Burns #1 Curve, 0.03902 Ω/°C (3-Wire)</td>
</tr>
<tr>
<td>-1B</td>
<td>100 Ohms Burns #1 Curve, 0.03902 Ω/°C (True 4-Wire)</td>
</tr>
<tr>
<td>-21</td>
<td>100 Ohms DIN Standard Curve, 0.0385 Ω/°C (3-Wire)</td>
</tr>
<tr>
<td>-21B</td>
<td>100 Ohms DIN Standard Curve, 0.0385 Ω/°C (True 4-Wire)</td>
</tr>
</tbody>
</table>

Note: If precision accuracy (±0.05%) at 0°C is required, add the letter 'P', e.g., 21P or 21PB if four wire.

#### RTD "L" Length

<table>
<thead>
<tr>
<th>Code</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>-035</td>
<td>3.5&quot; &quot;L&quot; Length</td>
</tr>
<tr>
<td>-055</td>
<td>5.5&quot; &quot;L&quot; Length</td>
</tr>
<tr>
<td>-085</td>
<td>8.5&quot; &quot;L&quot; Length</td>
</tr>
<tr>
<td>-115</td>
<td>11.5&quot; &quot;L&quot; Length</td>
</tr>
<tr>
<td>-175</td>
<td>17.5&quot; &quot;L&quot; Length</td>
</tr>
<tr>
<td>-235</td>
<td>23.5&quot; &quot;L&quot; Length</td>
</tr>
<tr>
<td>-aaa</td>
<td>Specify &quot;L&quot; length in inches (example: 090 = 9.0&quot;, 240 = 24.0&quot;)</td>
</tr>
</tbody>
</table>

#### 18 AWG S.O. Cable Stranded

- "LY" Specify "LY" Cable Length in Feet (example: 50 = 50 Feet)

<table>
<thead>
<tr>
<th>Code</th>
<th>Length</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10313</td>
<td>-21</td>
<td>-055 -50</td>
</tr>
</tbody>
</table>

Note: For same model less guard tube, change 10313-* to 10821-*.

If dual PRT is required, order part number 15112-*.