SPECIAL SECONDARY (OUTER) TUBE WITH MOUNTING BUSHING

How to build a part number:

To order an Applied Sensor Technologies protection tube, select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Don’t see exactly what you need? Give us a call!

<table>
<thead>
<tr>
<th>STYLE</th>
<th>TUBE DIAMETER</th>
<th>TUBE MATERIAL</th>
<th>INSTRUMENT CONNECTION</th>
<th>PROCESS CONNECTION</th>
<th>BUSHING MATERIAL</th>
<th>OVERALL LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT2</td>
<td>3 – 3/4&quot; O.D.</td>
<td>C</td>
<td>0</td>
<td>2</td>
<td>G</td>
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<td></td>
<td>4 – 7/8&quot; O.D.</td>
<td>S</td>
<td>1</td>
<td>3</td>
<td>W</td>
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<tr>
<td></td>
<td>5 – 1&quot; O.D.</td>
<td>H</td>
<td>2</td>
<td>4</td>
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<td></td>
<td>6 – 1-1/10&quot; O.D.</td>
<td></td>
<td>3</td>
<td>5</td>
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<td></td>
<td>7 – 1-1/4&quot; O.D.</td>
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<td>4</td>
<td>6</td>
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<td></td>
<td>8 – 1-1/2&quot; O.D.</td>
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<td>7</td>
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<td>9 – 1-3/4&quot; O.D.</td>
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<td>6</td>
<td>8</td>
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</tbody>
</table>

**STYLES**

PT2 – Outer protection tube, with bushing, to be used with inner ceramic protection tube (Style CT2 or CT3)

**TUBE MATERIAL**

C – Silicon carbide, oxide bonded
S – Sialon
H – Hexalloy
L – LT1 metal ceramic

**INSTRUMENT CONNECTION**

0 – 1/2” NPT
1 – 3/4” NPT

**PROCESS CONNECTION**

2 – 1” NPT
3 – 1-1/4” NPT
4 – 1-1/2” NPT
5 – 2” NPT

**BUSHING MATERIAL**

G – Carbon steel
W – 316 stainless steel

**OVERALL LENGTH** (in inches)

L# = Specify length of tube including threads (e.g., L24=24” long tube)

**PROCESS THREAD (NPT)**

<table>
<thead>
<tr>
<th>OUTER TUBE O.D.</th>
<th>CODE</th>
<th>2 (1&quot;)</th>
<th>3 (1-1/4&quot;)</th>
<th>4 (1-1/2&quot;)</th>
<th>5 (2&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (3/4&quot;)</td>
<td>H</td>
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<td>4 (7/8&quot;)</td>
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<td>5 (1&quot;)</td>
<td>H</td>
<td>H</td>
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<tr>
<td>6 (1-1/10&quot;)</td>
<td>S</td>
<td>S</td>
<td>S</td>
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<td>7 (1-1/4&quot;)</td>
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<tr>
<td>9 (1-3/4&quot;)</td>
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<td></td>
<td>C</td>
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</tbody>
</table>

Use CT2/CT3 spec sheet to specify inner protection tube, using appropriate O.D. from chart below:

<table>
<thead>
<tr>
<th>OUTER TUBE O.D.</th>
<th>INNER TUBE O.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>.375&quot;</td>
</tr>
<tr>
<td>7/8&quot;</td>
<td>.375&quot;</td>
</tr>
<tr>
<td>1&quot;</td>
<td>.375&quot;</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>.375&quot;</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>.688&quot;</td>
</tr>
<tr>
<td>1-3/4&quot;</td>
<td>.75&quot;</td>
</tr>
</tbody>
</table>

Note: to match inner tube length to outer, inner length (A) = outer tube length (L) + 0.75"

Notes:

1. Not all materials and process thread sizes are compatible with all tubing O.D.’s. Use the chart below as a guide for the possible combinations. For each combination of thread and O.D., available materials are noted – Silicon Carbide (C), Sialon® (S), Hexalloy® (H) and LT1 (L).
2. Applied Sensor Technologies recommends alumina protection tubes when using platinum thermocouples. Mullite, although less expensive when compared to alumina, can contaminate the platinum, causing drift.