SANITARY PROCESS CONNECTION WITH TERMINAL HEAD

How to build a part number:

To order an Applied Sensor Technologies temperature sensor, 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>SENSOR TYPE</th>
<th>ASSEMBLY STYLE</th>
<th>CAP SIZE</th>
<th>CAP STYLE</th>
<th>SHEATH DIAMETER</th>
<th>SHEATH MATERIAL</th>
<th>TEMPERATURE RANGE</th>
<th>SHEATH LENGTH</th>
<th>OPTIONS</th>
</tr>
</thead>
</table>

**SENSOR TYPE** (See page 2-8b for optional elements)

**RTp1** – Platinum; DIN 0.00385; 100 ohm +/- 0.12% @ 0°C; 3-wire construction

(For dual element, add prefix "D"- e.g., DRTP1)

**ASSEMBLY STYLE**

33 – Sheath with sanitary process connection and white polypropylene head; 3/4" NPT conduit connection; ceramic terminal block; maximum termination temperature 104°C (220°F)

**CAP SIZE**

- A – 0.50*
- B – 0.75*
- C – 1.00
- D – 1.50
- E – 2.00
- F – 2.50
- G – 3.00
- H – 4.00

*Available in cap style C only

**CAP STYLE**

- A – 16 A Tri Clamp® cap
- C – 16AMP Tri Clamp® cap

**SHEATH DIAMETER**

- 6 – 3/16 (0.188)
- 7 – 1/4 (0.250)

**SHEATH MATERIAL**

- 3 – 316 stainless steel

**TEMPERATURE RANGE** - Minimum and maximum operating temperatures

- 1 – -45 to 200°C (-50 to 400°F)

**SHEATH LENGTH** (for lengths greater than L=36", consult AST)

- L# – (e.g., L6 = 6 inch sheath)

**OPTIONS** – see page 2-8b

Tri Clamp® is a registered trademark of Alfa-Laval, Inc.
RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

### OPTIONAL ELEMENTS

<table>
<thead>
<tr>
<th>Option Code</th>
<th>Accuracy (at 0°C)</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTP1 (std.)</td>
<td>±0.12%</td>
<td>3-wire</td>
</tr>
<tr>
<td>RTP1A</td>
<td>±0.06%</td>
<td>3-wire</td>
</tr>
<tr>
<td>RTP1AA</td>
<td>±0.01%</td>
<td>3-wire</td>
</tr>
</tbody>
</table>

Notes:
1. For dual element, add prefix "D" (e.g., DRTP1)
2. Additional materials, curves and resistance values are available - see Capabilities brochure.

### HEADS

**Option Code**

- **RTP1**: Stainless steel tag and wire
- **CAL1**: NIST traceable calibration [specify point(s)]
- **CRT1**: Certificate of conformance
- **WC20**: Wiring cable gland for 0.187 - 0.312 diameter cables, for terminal heads with 1/2" NPT conduit connections
- **WC21**: Wiring cable gland for 0.125 - 0.187 diameter cables, for terminal heads with 1/2" NPT conduit connections

### NEMA 4 OR 4X TERMINAL HEAD OPTIONS

<table>
<thead>
<tr>
<th>Head without ground screw</th>
<th>Head with internal ground screw</th>
<th>Process Connection</th>
<th>Conduit Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cast aluminum, screw cover with chain, NEMA 4 (Formerly Style 67)</td>
<td>HD10* HD11*</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Epoxy-coated aluminum, screw cover with chain, NEMA 4X</td>
<td>HD50* HD51*</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>316 stainless steel, screw cover with chain, NEMA 4X</td>
<td>HD40* HD41*</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

### TRANSMITTERS

**TR1**
4-20 mA, 2-wire transmitter, single input, isolated output; specify range, units of measure (e.g., 0-200°C) and head with *.

**TR12**
4-20 mA, 2-wire transmitter, single input, non-isolated output; specify range and units of measure (e.g., 0-200°C) and terminal head with *.

**TR13**
HART®/ 4-20 mA, 2-wire transmitter, single input, isolated output; specify range and units of measure (e.g., 0-200°C) and terminal head with *.

**Notes:** Many non-standard options, including additional sheath diameters and materials, may also be available – consult AST for specific requirements. HART® is a registered trademark of the HART Communication Foundation.