Industrial Thermocouples

Thermo Sensors Industrial thermocouples are widely used in process industry applications. Thermocouples are generally selected by determining the particular conditions under which it must perform. These conditions which have recommended wire and material selections and are grouped in types.

Thermo Sensors thermocouple element types include:

- Type E Chromel-Constantan Thermocouple
- Type J Iron-Constantan Thermocouple
- Type K Chromel-Alumel Thermocouple
- Type N Nicrosil-Nisil Thermocouple
- Type R Platinum-Platinum 13% Rhodium Thermocouple
- Type S Platinum-Platinum 10% Rhodium Thermocouple
- Type B Platinum 6% Rhodium-Platinum 30% Rhodium Thermocouple
- Type T Copper-Constantan Thermocouple

The wire gauge and recommended temperature ranges are of various sizes as well.

Please refer to our order guide to assist in determining your needs. We can also provide technical design assistance and application suggestions. Give us a call.

Tube Skin Thermocouples

Many types of tube skin thermocouples can be specified by using the tables on the preceding pages. Units with expansion loops and special mounting arrangements are illustrated below. Tube Skin/Furnace tube thermocouple configurations vary widely with individual customers. If you have designs other than shown below, please send us your specifications. We are experienced in fabricating all designs currently used by most industries.
### Description

<table>
<thead>
<tr>
<th>Nipple Type (not shown)</th>
<th>Chromel/Alumel</th>
<th>TSA-K-(A)-(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron/Constantan</td>
<td>TSA-J-(A)-(B)</td>
<td></td>
</tr>
</tbody>
</table>

**How to Order:**

Specify "Order Code" desired and replace (A) & (B) with desired dimension in Inches.

**Example:** TSA-K-40-16

### Description

<table>
<thead>
<tr>
<th>Nipple Type</th>
<th>Chromel/Alumel</th>
<th>TSC-K-(Length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron/Constantan</td>
<td>TSC-J-(Length)</td>
<td></td>
</tr>
</tbody>
</table>

**How to Order:**

Specify "Order Code" of assembly desired and replace (Length) with length desired in inches. Important: Length is measured from the bottom of the 1 1/2" NPT bushing to end of pad. Be sure to include sufficient length to field form the "S" bends.

**Example:** TSD-K-120