Insertion RTD probes are used to monitor internal temperatures of meat, fish, poultry, dough, and other food products, both fresh and slightly frozen varieties. Other uses include penetration of soft process materials such as rubber and plastic compounds. The materials of construction are all FDA compliant for use in sanitary applications. The sheaths are made of full hard-drawn 304SS, hypodermic tubing with a sharp needle-point insertion tip. Several varieties of handles, leadwire, and termination configurations are available. All assemblies are 3-wire construction and use a 100 ohm platinum element with a Temperature Coefficient of 0.00385 ºC⁻¹ (Class B) and are rated to 200 ºC [392 ºF] maximum temperature limit.

**Example Order Number:**

```
RBF185MH2 - 06 - T3120 - 4
```

1. **Pt100 (α = 0.00385 85 ºC⁻¹)**
   - 3-Wire RTD Assemblies

<table>
<thead>
<tr>
<th>CODE</th>
<th>NOM. SHEATH DIAMETER (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGLE</td>
<td>DUPLEX</td>
</tr>
</tbody>
</table>

**FIGURE 1**

- LESS HANDLE
  - RBF185LH2: 0.134
  - RBF185LH3: 0.180

**FIGURE 2**

- MOLDED NYLON HANDLE 150 ºC [302 ºF]
  - RBF185MH2: 0.134
  - RBF185MH3: 0.180

**FIGURE 3**

- SABRE HANDLE
  - RBF185SH2: 0.134
  - RBF185SH3: 0.180

**FIGURE 4**

- HEAVY DUTY HANDLE
  - RBF185HD2: 0.134
  - RBF185HD3: 0.180

2. **Sheath 'X' Dimension**
   - Specify "X" length in inches using 2 digits plus any fractional length. Examples: 02 = 2", 02(1/2") = 2.5"
   - 12" max. standard construction length.

4. **Terminations**
   - CODE: DESCRIPTION
   - 2: 2" split leads, 1/4" stripped
   - 3: 2" split leads with spade lugs
   - 4: Standard plug
   - 6: Miniature plug

**Options**

- RB: Rubber boot (2 pin plugs only)
- MC: Mating connector
- CG: Cord grip (1/2" NPT PVC)

3. **Extension Leadwire**
   - CODE: DESCRIPTION | TEMP RATING
   - T3___IN: Fluoropolymer Insulation - stranded conductor | 200 °C [392 °F]
   - T3A___IN: Fluoropolymer Insulation - stranded conductor - flexible armor | 200 °C [392 °F]
   - T3T___IN: Fluoropolymer Insulation - stranded conductor - flexible armor - FEP coated | 200 °C [392 °F]
   - T3P___IN: Fluoropolymer Insulation - stranded conductor - flexible armor - PVC-coated | 105 °C [221 °F]
   - M3___IN: Fluoropolymer Insulation - stranded conductor - stainless steel overbraid - FEP insulation | 200 °C [392 °F]
   - S3___IN: Fluoropolymer Insulation - stranded conductor - silicon rubber jacket | 200 °C [392 °F]

[1] Insert 3 digit "B" dimension in inches.
Insertion thermocouple probes are used to monitor internal temperatures of meat, fish, poultry, dough, and other food products, both fresh and slightly frozen varieties. Other uses include penetration of soft process materials such as rubber and plastic compounds. The materials of construction are all FDA compliant for use in sanitary applications. The sheaths are made of full hard-drawn 304SS hypodermic tubing with a sharp needle-point insertion tip. Several varieties of handles, leadwire, and termination configurations are available. Probes are supplied with grounded hot junctions unless otherwise specified and are rated to 200 °C [392 °F] maximum temperature limit.

**ORDER CODES**

**Example Order Number:**

**1 Thermocouple Type**

<table>
<thead>
<tr>
<th>CODE</th>
<th>NOM. SHEATH DIAMETER (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGLE</td>
<td>J</td>
</tr>
<tr>
<td>DUPLEX</td>
<td>J</td>
</tr>
</tbody>
</table>

**FIGURE 1**

LESS HANDLE

- JLH2G  J  0.134
- JMH3G  JJMH3G  J  0.180

**FIGURE 2**

MOLDED NYLON HANDLE 150 °C [302 °F]

- JMH2G  J  0.134
- JMH3G  JJMH3G  J  0.180

**FIGURE 3**

SABRE HANDLE

- JSH2G  J  0.134
- JSH3G  JJSH3G  J  0.180

**FIGURE 4**

HEAVY-DUTY HANDLE

- JHD2G  J  0.134
- JHD3G  JJHD3G  J  0.180

To specify other calibrations, change first digit to K or T.
To specify ungrounded junctions, change last digit from G to U.

**4 Terminations**

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2&quot; split leads, 1/4&quot; stripped</td>
</tr>
<tr>
<td>3</td>
<td>2&quot; split leads with spade lugs</td>
</tr>
<tr>
<td>4</td>
<td>Standard plug</td>
</tr>
<tr>
<td>6</td>
<td>Miniature plug</td>
</tr>
<tr>
<td>RB</td>
<td>Rubber boot (2 pin plugs only)</td>
</tr>
<tr>
<td>MC</td>
<td>Mating connector</td>
</tr>
<tr>
<td>CG</td>
<td>Cord grip (1/2&quot; NPT PVC)</td>
</tr>
</tbody>
</table>

**3 Extension Leadwire**

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
<th>TEMP RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3</td>
<td>Fluoropolymer Insulation - stranded conductor</td>
<td>200 °C [392 °F]</td>
</tr>
<tr>
<td>T3A</td>
<td>Fluoropolymer Insulation - stranded conductor - flexible armor</td>
<td>200 °C [392 °F]</td>
</tr>
<tr>
<td>T3T</td>
<td>Fluoropolymer Insulation - stranded conductor - flexible armor - FEP coated</td>
<td>200 °C [392 °F]</td>
</tr>
<tr>
<td>T3P</td>
<td>Fluoropolymer Insulation - stranded conductor - flexible armor - PVC-coated</td>
<td>105 °C [221 °F]</td>
</tr>
<tr>
<td>M</td>
<td>Fluoropolymer Insulation - stranded conductor - stainless steel overbraid - FEP insulation</td>
<td>200 °C [392 °F]</td>
</tr>
</tbody>
</table>

[1] Insert 3 digit "B" dimension in inches.
[2] Not available with Type K.

**2 Sheath "X" Dimension**

Specify "X" length in inches using 2 digits.

12" max. standard construction length.