Bimetal Thermometer, Industrial Grade - All Stainless Steel Construction
Type TI.33 - 3” Dial Size, Back Connected

Applications
- A wide range of applications including machine building, vessels, micro-brewing, boilers and water systems/piping
- Heating and air-conditioning technology (HVAC)
- Temperature measurement in harsh and aggressive environments

Product features
- Robust industrial design
- Back connection without external reset
- NEMA 4X (IP 66) weather protection

Specifications

Size
3” (76.2 mm)

Accuracy
± 1.0% full scale value per ASME B40.3 Grade A

Ranges
From -100°F (70°C) to 1000°F (540°C)
From -50°C to 550°C (as single scale)
See table on page 2

Working Range
Steady: full scale value
Short time: 110% of full scale value

Over/Under Range Protection
≤ +500°F (+260°C): Temporary up to 50% of full scale
> +500°F (+260°C): Continuous to 800°F (+427°C)
Intermittent up to 1000°F (+538°C)

Connection
Material: 304 stainless steel
enter back mount (CBM); 1/2” NPT Connection

Stem
Material: 304 stainless steel
Diameter: 1/4” (6.35 mm)
Length: 2½” to 24” (63.5 mm to 609.6 mm)

Measuring Element
Bi-metal helix

Dial
White aluminum, dished, with black markings

Datasheet TI.33 · 6/2015
Optional Extras

- Thermowells
- Special scales and dial markings
- Acrylic and safety glass windows
- Calibration certification traceable to NIST

<table>
<thead>
<tr>
<th>DIAL SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>S (Stem Length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>3&quot; (76.2 mm)</td>
<td>3-5/16&quot; (84.1 mm)</td>
<td>3/4&quot; (19.1 mm)</td>
<td>9/32&quot; (7.1 mm)</td>
</tr>
</tbody>
</table>

Note: Thermowells for temperature instruments are recommended for all process systems where pressure, velocity, or viscous, abrasive and corrosive materials are present individually or in combination. A properly selected thermowell protects the temperature instrument from possible damage resulting from these process variables. Furthermore, a thermowell permits removal of the temperature instrument for replacement, repair or testing without effecting the process media or the system.

Dimensions

Standard versions

<table>
<thead>
<tr>
<th>Fahrenheit Single Scale</th>
<th>Dual Scale F &amp; C</th>
<th>Celsius Single Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>-100/150 F</td>
<td>-100/150 F &amp; -70/70 C</td>
<td>-50/50 C</td>
</tr>
<tr>
<td>-40/120 F</td>
<td>40/120 F &amp; -40/50 C</td>
<td>-20/120 C</td>
</tr>
<tr>
<td>0/140 F</td>
<td>0/140 F &amp; -20/60 C</td>
<td>0/50 C</td>
</tr>
<tr>
<td>0/200 F</td>
<td>0/200 F &amp; -15/90 C</td>
<td>0/100 C</td>
</tr>
<tr>
<td>0/250 F</td>
<td>0/250 F &amp; -20/120 C</td>
<td>0/150 C</td>
</tr>
<tr>
<td>20/240 F</td>
<td>20/240 F &amp; -5/115 C</td>
<td>0/200 C</td>
</tr>
<tr>
<td>25/125 F</td>
<td>25/125 F &amp; -5/50 C</td>
<td>0/250 C</td>
</tr>
<tr>
<td>50/300 F</td>
<td>50/300 F &amp; 10/150 C</td>
<td>0/300 C</td>
</tr>
<tr>
<td>50/400 F</td>
<td>50/400 F &amp; 10/200 C</td>
<td>0/450 C</td>
</tr>
<tr>
<td>50/550 F</td>
<td>50/500 F &amp; 10/260 C</td>
<td>100/550 C</td>
</tr>
<tr>
<td>150/750 F</td>
<td>150/750 F &amp; 65/400 C</td>
<td>0/250 C</td>
</tr>
<tr>
<td>200/1000 F</td>
<td>200/1000 F &amp; 100/540 C</td>
<td>0/450 C</td>
</tr>
</tbody>
</table>

Not recommended for continuous service over 800°F (425°C)

Ordering information

State computer part number (if available) / type number / size / range / connection size and locations / options required. WIKA reserves the right to make changes without prior notice.