Bimetal Thermometer, Industrial Grade - All Stainless Steel Construction
Type TI.53 - 5” 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**
5” (127mm)

**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)
Intermittant up to 1000°F (+538°C)

**Connection**
Material: 304 stainless steel
Center back mount (CBM) - Type TI.53
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

**Case**
Material: 304 stainless steel
Hermetically sealed
Weather protection NEMA 4X (IP 66)

**Pointer**
Black aluminum

**Standard Scales**
Single: Fahrenheit or Celsius
Dual: Fahrenheit (outer) and Celsius (inner)

**Window Gasket**
Neoprene
Silicone for ranges -100°F (-70°C) and ranges > +550°F (+260°C)

**Window**
Flat instrument glass

**Weight**
16 oz. (454 g), not including the stem
Add 1 oz. (28 g) for every 2” (50 mm) of stem length

**Dampening**
Inert gel to minimize pointer oscillation

**Warranty**
Limited one year warranty as stated in WIKA’s Terms & Conditions of Sale

Datasheet TI.53 · 6/2015
Optional Extras

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

### Dimensions

#### Standard versions

**Back Connected Type TI.53**

<table>
<thead>
<tr>
<th>WIKA Type</th>
<th>DIAL SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>S (Stem Length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td>5&quot; (127 mm)</td>
<td>5-1/4&quot; (8133.4 mm)</td>
<td>15/16&quot; (23.8 mm)</td>
<td>5/16&quot; (7.9 mm)</td>
<td>As Specified</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.

**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.

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**STANDARD RANGES**

<table>
<thead>
<tr>
<th>Fahrenheit Single Scale</th>
<th>Dual Scale F &amp; C F Outer, C Inner</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></td>
</tr>
<tr>
<td>200/1000 F</td>
<td>200/1000 F &amp; 100/540 C</td>
<td></td>
</tr>
</tbody>
</table>

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