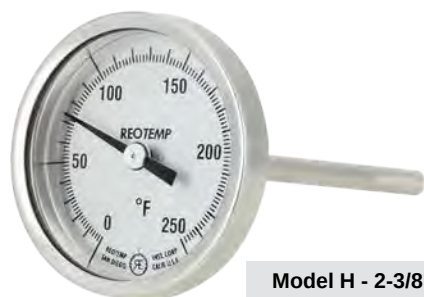
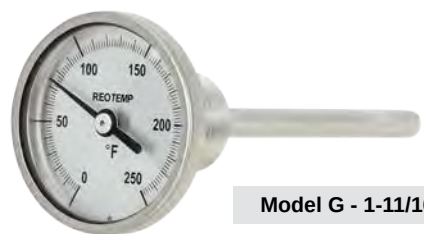
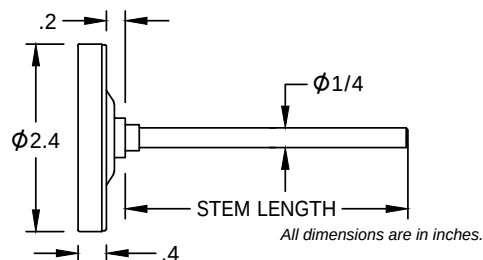


## SMALL DIAL BIMETAL THERMOMETERS

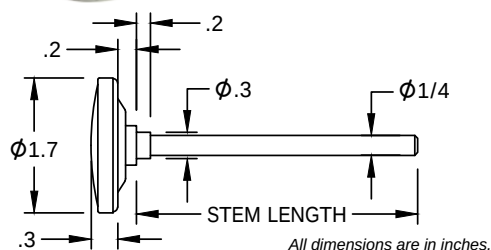
REOTEMP's OEM Thermometers are the perfect choice for equipment with limited space that requires a rugged, dependable, and economical temperature sensor. These thermometers are also available with a wide variety of mounting threads.



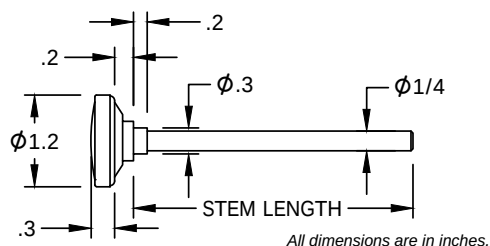
**Model H - 2-3/8" (2.38)**



**Model G - 1-11/16" (1.68)**



**Model Q - 1-5/32" (1.16)**



Accuracy



Custom Logo



Made in the USA



### FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy  $\pm 1\%$  Full Scale. (ASME B40.3)
- Standard External Reset
- One Year Warranty
- Made in the USA
- All-Stainless Steel Construction

### SPECIFICATIONS

|                                             |                                                                                                                                    |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Accuracy</b>                             | $\pm 1\%$ Full Scale (ASME B40.3)                                                                                                  |
| <b>Dial Size</b>                            | 1-5/32" (1.16), 1-11/16" (1.68), 2-3/8" (2.38)                                                                                     |
| <b>Dial Material</b>                        | Black marks on satin matte aluminum finish, or White Dial                                                                          |
| <b>Stem Length</b>                          | 2" to 80"                                                                                                                          |
| <b>Stem Diameter</b>                        | 1/4" or 5/16"                                                                                                                      |
| <b>Head, Bezel, Mounting Bushing, Stems</b> | 300 Series SS, 316SS (Optional)                                                                                                    |
| <b>Operating Conditions</b>                 | Head temperature should not exceed 200°F. Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F. |
| <b>Environmental Protection</b>             | IP67, NEMA 6 Rated                                                                                                                 |
| <b>Lens</b>                                 | Glass (Standard), Acrylic, or Polycarbonate                                                                                        |
| <b>Immersion</b>                            | Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.                       |
| <b>Mounting Connection</b>                  | Plain Bushing (standard), 1/2" NPT, 3/8"-24 NF (straight threaded), 1/4" NPT, 1/8" NPT, 3/8" NPT, Hex Reset Bushing                |
| <b>Temperature Sensing Area</b>             | Last 2" to 4" of the stem                                                                                                          |

## SMALL DIAL BIMETAL THERMOMETERS

**HOW TO ORDER:** Choose options to build a part number. For example: **QQ0251F23-PS**

| MODELS                                                                                                                                                                                                                                                                                                                                                                                 | STEM LENGTH                                                                                                                                                                                                                                                                                                                                                                                                                     | CONNECTION                                                                                                                                                                                                   | TEMPERATURE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | OPTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OEM Models</b><br><b>QQ</b> = Model Q<br>1-5/32" (1.16)<br>Dial<br><b>GG</b> = Model G<br>1-11/16" (1.68)<br>Dial<br><b>HH</b> = Model H<br>2-3/8" (2.38)<br>Dial<br><br><b>Lab &amp; Test Models</b><br><b>QP</b> = Model QP (1<br>5/32" Dial) with<br>5" Stem<br><b>GL</b> = Model GL (1<br>11/16" Dial) with<br>8" Stem<br><b>HL</b> = Model HL (2<br>3/8" Dial) with 8"<br>Stem | <b>025</b> = 2.5"<br><b>040</b> = 4"<br><b>060</b> = 6"<br><b>090</b> = 9"<br><b>120</b> = 12"<br><b>150</b> = 15"<br><b>180</b> = 18"<br><b>240</b> = 24"<br><b>300</b> = 30"<br><b>360</b> = 36"<br><br>Note: Intermediate<br>stem lengths<br>available up to 80".<br><br><b>Millimeter Stem<br/>           Lengths</b><br><b>M????</b> = Use a<br>code beginning in<br>M to specify a mm<br>stem length ex:<br>100mm = M0100 | <b>2</b> = Plain Bushing (std)<br><b>1</b> = 1/2" NPT<br><b>3</b> = 3/8" - 24 NF (straight<br>threaded)<br><b>4</b> = 1/4" NPT<br><b>6</b> = 1/8" NPT<br><b>7</b> = 3/8" NPT<br><b>8</b> = Hex Reset Bushing | <b>Fahrenheit Ranges</b><br><b>F23</b> = -40°F to 160°F<br><b>F55</b> = 25°F to 125°F*<br><b>F43</b> = 0°F to 200°F<br><b>F47</b> = 0°F to 250°F<br><b>F63</b> = 50°F to 300°F<br><b>F67</b> = 50°F to 500°F<br><b>F69</b> = 50°F to 550°F<br><b>F81</b> = 150°F to 750°F<br><b>F85</b> = 200°F to<br>1000°F<br><br><b>Dual Scale Ranges</b><br><b>D23</b> = -40°F to 160°F & -40°C to 70°C<br><b>D55</b> = 25°F to 125°F & -5°C to 50°C*<br><b>D43</b> = 0°F to 200°F & -10°C to 90°C<br><b>D47</b> = 0°F to 250°F & -20°C to 120°C<br><b>D63</b> = 50°F to 300°F & 10°C to 150°C<br><b>D67</b> = 50°F to 500°F & 10°C to 260°C<br><b>D69</b> = 50°F to 550°F & 10°C to 290°C<br><b>D81</b> = 150°F to 750°F & 70°C to 400°C<br><b>D85</b> = 200°F to 1000°F & 100°C to 500°C | <b>Celsius Ranges</b><br><b>C23</b> = -40°C to 70°C<br><b>C55</b> = 0°C to 50°C*<br><b>C43</b> = 0°C to 100°C<br><b>C4</b> = -20°C to 120°C<br><b>C59</b> = 0°C to 150°C<br><b>C67</b> = 0°C to 250°C<br><b>C69</b> = 0°C to 300°C<br><b>C73</b> = 0°C to 400°C<br><b>C85</b> = 100°C to 500°C<br><br><b>General Options (Choose up to 4)</b><br><b>-PS</b> = Pointed Stem<br><b>-SS</b> = 316 Stainless Stem<br><b>-CL</b> = Custom Logo Dial<br><br><b>Window Options (Std. is glass)</b><br><b>-PC</b> = Acrylic Window<br><br><b>Calibration Cert. Options</b><br><b>-R1</b> = One Point Calibration Cert<br>(REOTEMP Chooses Points)<br><b>-R3</b> = Three Point Calibration Cert<br>(REOTEMP Chooses Points)<br><br><i>For Additional Options See Page 139</i><br><br><i>For Thermowells See Pages 160-166</i> |

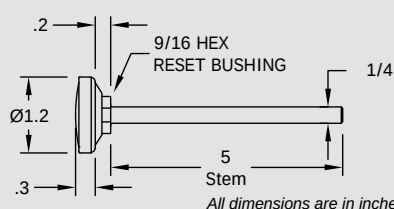
\*Not available in 2.5" stem.

For Additional Ranges See Master Range Code Sheet on Page 141

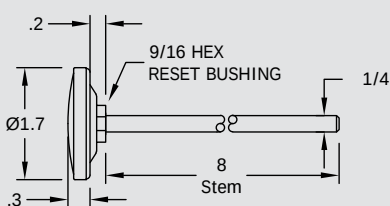
**Note:** Thermowells should be used whenever the stem or bulb would be exposed to pressure, corrosion, velocity, abrasion or shear forces. Thermowells also make it possible to remove the thermometer without losing pressure or the contents of the process.

REOTEMP's Laboratory Thermometers (QP, GL & HL) are ideal for testing and spot checking local temperatures in a variety of critical process or lab applications. Pointed stems are available for insertion in semi-solids such as soil, meat, etc.

Lab Model QP with 1.2" Dial  
(with point - Model QPP)

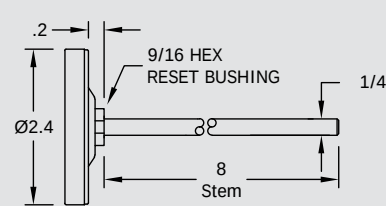


Lab Model GL with 1.7" Dial  
(with point - Model QLP)



All dimensions are in inches.

Lab Model HL with 2.4" Dial  
(with point - Model HLP)



All dimensions are in inches.

# BIMETAL TEMPERATURE RANGE CODE MASTER LIST

| FAHRENHEIT RANGES |          |      |
|-------------------|----------|------|
| Code              | °F Range | Div. |
| F03               | -100/100 | 2    |
| F05               | -100/200 | 2    |
| F07               | -80/120  | 2    |
| F11               | -70/150  | 2    |
| F19               | -50/300  | 5    |
| F21 <sup>†</sup>  | -40/120  | 2    |
| F23               | -40/160  | 2    |
| F25               | -40/180  | 2    |
| F26               | -40/200  | 2    |
| F27 <sup>‡</sup>  | -40/70   | 1    |
| F31 <sup>†</sup>  | -20/120  | 2    |
| F33               | -20/425  | 5    |
| F35 <sup>‡</sup>  | 0/100    | 1    |
| F37 <sup>†</sup>  | 0/140    | 2    |
| F39 <sup>†</sup>  | 0/150    | 1    |
| F43               | 0/200    | 2    |
| F45               | 0/220    | 2    |
| F47               | 0/250    | 2    |
| F49               | 0/300    | 2    |
| F50               | 0/500    | 5    |
| F51               | 0/600    | 10   |
| F53               | 20/240   | 2    |
| F55 <sup>‡</sup>  | 25/125   | 1    |
| F57 <sup>‡</sup>  | 30/130   | 1    |
| F63               | 50/300   | 2    |
| F65               | 50/400   | 5    |
| F67               | 50/500   | 5    |
| F69               | 50/550   | 5    |
| F71               | 50/650   | 10   |
| F73               | 50/750   | 10   |
| F78               | 100/600  | 5    |
| F79               | 100/800  | 10   |
| F81               | 150/750  | 10   |
| F82               | 200/700  | 20   |
| F83               | 200/300  | 2    |
| F84               | 100/900  | 5    |
| F85               | 200/1000 | 10   |
| F89               | 250/600  | 5    |
| F91               | 300/400  | 2    |
| F92               | 0/1200   | 2    |

| CELSIUS RANGES   |          |      |
|------------------|----------|------|
| Code             | °C Range | Div. |
| C01              | -80/220  | 2    |
| C03              | -70/70   | 2    |
| C06              | -70/30   | 1    |
| C07              | -50/50   | 1    |
| C08              | -60/120  | 2    |
| C09 <sup>‡</sup> | -50/0    | 1    |
| C15              | -50/100  | 2    |
| C17              | -50/200  | 2    |
| C19              | -40/160  | 2    |
| C20              | -60/300  | 5    |
| C23              | -40/70   | 1    |
| C24              | -40/350  | 5    |
| C27 <sup>‡</sup> | -30/30   | 1    |
| C31 <sup>‡</sup> | -20/40   | 1    |
| C32              | -20/60   |      |
| C33              | -20/220  | 2    |
| C34              | -20/320  | 5    |
| C35 <sup>‡</sup> | 0/30     | .5   |
| C37 <sup>‡</sup> | 0/60     | 1    |
| C38 <sup>†</sup> | 0/80     |      |
| C43              | 0/100    | 1    |
| C47              | -20/200  | 2    |
| C53              | -10/110  | 1    |
| C55 <sup>‡</sup> | 0/50     | .5   |
| C56              | 0/120    | 1    |
| C59              | 0/150    | 1    |
| C60              | 50/150   |      |
| C61              | 0/160    | 2    |
| C63              | 10/150   | 2    |
| C65              | 0/200    | 2    |
| C67              | 0/250    | 2    |
| C69              | 0/300    | 2    |
| C71              | 0/300    | 5    |
| C73              | 0/400    | 5    |
| C74              | 0/450    | 5    |
| C75              | 0/500    | 5    |
| C79              | 50/450   | 5    |
| C81              | 50/400   | 5    |
| C85              | 100/500  | 5    |
| C87              | 100/550  | 5    |

| DUAL RANGES      |                    |
|------------------|--------------------|
| Code             | °F & °C Range      |
| D01              | -150/400 & 100/200 |
| D03              | -100/100 & -70/40  |
| D07              | -80/120 & -60/50   |
| D15              | -50/210 & -50/100  |
| D19              | -50/300 & -40/160  |
| D23              | -40/160 & -40/70   |
| D37 <sup>†</sup> | 0/140 & -15/60     |
| D39 <sup>†</sup> | 0/150 & -20/65     |
| D41 <sup>†</sup> | 0/160 & -15/70     |
| D43              | 0/200 & -10/90     |
| D45              | 0/220 & -10/100    |
| D47              | 0/250 & -20/120    |
| D49              | 0/300 & -10/150    |
| D53              | 20/240 & -10/115   |
| D55 <sup>‡</sup> | 25/125 & -5/50     |
| D63              | 50/300 & 10/150    |
| D65              | 50/400 & 10/200    |
| D67              | 50/500 & 10/260    |
| D69              | 50/550 & 10/290    |
| D77              | 100/450 & 40/230   |
| D79              | 100/800 & 40/400   |
| D81              | 150/750 & 70/400   |
| D85              | 200/1000 & 100/500 |
| D87              | 200/1000 & 100/550 |

‡ Minimum stem length is 4".

† For 2.5" stem, all bottom connect and all-angle models require adapter P/N AD22S.

## DIAL INDICATING THERMOMETER OPTIONS

| Part #                       | Description                                                   | Industrial<br>AA, RR,<br>CC, CN,<br>BB, SS,<br>XR, XX,<br>YY, YN,<br>VR, VV,<br>LL, MM, JJ | Small Dial<br>OEM<br>QQ, GG, HH | Digital<br>DT,<br>DTR,<br>BT | Dual Mode<br>Thermometer<br>DMT |
|------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------|------------------------------|---------------------------------|
| <b>CASE FILL OPTIONS</b>     |                                                               |                                                                                            |                                 |                              |                                 |
| -SF                          | Silicone Filled Case                                          | ✓                                                                                          | N/A                             | N/A                          | ✓                               |
| <b>LENS OPTIONS</b>          |                                                               |                                                                                            |                                 |                              |                                 |
| -PC                          | Acrylic Window                                                | ✓                                                                                          | ✓                               | N/A                          | ✓                               |
| -PY                          | Polycarbonate Window                                          | ✓                                                                                          | ✓                               | STD                          | ✓                               |
| -TG                          | Tempered Safety Glass Lens                                    | ✓                                                                                          | N/A                             | N/A                          | ✓                               |
| -SG                          | Laminated Safety Glass Lens                                   | ✓                                                                                          | N/A                             | N/A                          | ✓                               |
| -GL                          | Plain Glass                                                   | STD                                                                                        | STD                             | ✓                            | STD                             |
| <b>STEM OPTIONS</b>          |                                                               |                                                                                            |                                 |                              |                                 |
| -PS                          | Pointed Tip                                                   | ✓                                                                                          | ✓                               | ✓                            | N/A                             |
| -SS                          | 316 Stainless Steel Stem                                      | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -F5                          | 5/16" Diameter Stem (Not Available with 316SS Stem)           | ✓                                                                                          | ✓                               | ✓                            | N/A                             |
| -S3                          | 3/8" Diameter Stem                                            | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -TF                          | Teflon Coating (Stem Only)                                    | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| <b>DIAL OPTIONS</b>          |                                                               |                                                                                            |                                 |                              |                                 |
| -CL                          | Custom Logo Dial                                              | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -HV                          | Hi-Vis Dial                                                   | ✓                                                                                          | MQ                              | N/A                          | ✓                               |
| -CB                          | Color Band                                                    | ✓                                                                                          | MQ                              | N/A                          | ✓                               |
| -CP                          | Color Pie                                                     | ✓                                                                                          | MQ                              | N/A                          | ✓                               |
| -WD                          | White Dial (Standard Ranges Only)                             | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -MM                          | Min/Max Pointer                                               | ✓                                                                                          | N/A                             | N/A                          | ✓                               |
| NL                           | No Logo                                                       | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| <b>TAG OPTION</b>            |                                                               |                                                                                            |                                 |                              |                                 |
| -TS                          | Stainless Steel Tag (1-10 Characters)                         | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -TP                          | Paper Tag                                                     | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| <b>CERTIFICATION OPTIONS</b> |                                                               |                                                                                            |                                 |                              |                                 |
| -R1                          | 1pt. Calibration Certification (REOTEMP Chooses the Point)    | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -R3                          | 3 pt. Calibration Certification (REOTEMP Chooses the Points)  | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -C1                          | 1 pt. Calibration Certification (Customer Chooses the Point)  | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -C3                          | 3 pt. Calibration Certification (Customer Chooses the Points) | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -CS                          | NIST Calibration Sticker (No Logged Points)                   | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -CC                          | Certificate of Conformance                                    | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| <b>OTHER</b>                 |                                                               |                                                                                            |                                 |                              |                                 |
| -3H                          | 316 Stainless Steel Head & Bezel                              | ✓                                                                                          | N/A                             | STD                          | ✓                               |
| -HT                          | Heat Transfer Compound                                        | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -CH                          | Spring Handle (T-27)                                          | ✓                                                                                          | ✓                               | ✓                            | N/A                             |
| -AS                          | Allows Bimet to Fit 1-1/4-18 Industrial Thermowell            | ✓                                                                                          | ✓                               | ✓                            | ✓                               |
| -EH                          | Explosion Proof Head                                          | N/A                                                                                        | N/A                             | ✓                            | ✓                               |

✓ Indicates that the option is available with the model.

STD Indicates standard options with no additional cost.

N/A Indicates the option is not available with this model.

MQ Minimum order quantity applies.