

# **BIMETAL THERMOMETERS**



# Dial into a Quality Bimetal Thermometer

Food & Beverage • Pharmaceutical
Compost • Paper & Pulp • Utilities

Military • Waste Water • Gas Refrigeration • Marine • Dairy Petrochemical • Oil • Power Generation

# **Bimetal Dial Thermometers Specifications**

### **Dial Sizes:**

1 1/8", 1 3/4", 2 3/8", 3", 4", 5"

#### **Stem Diameters:**

Between 2" and 80"

#### Stem Diameters:

1/4"(standard), 5/16" and 3/8" available.

## Heads, Bezels, Mounting Bushing, Stems:

All models are 300 series stainless steel

### **Operating Conditions:**

The temperature of the head should not be allowed to exceed 200°F (150°F if silicone filled). Stems should not be exposed to continuous temperatures exceeding 50% over-range, or 800°F.

#### **Hermetic Seal:**

All 3", 4", and 5" models (except DM4) are hermetically sealed per ASME B40.3.

### **Pointed Stems:**

Optional on all models. Excellent for probing asphalt, compost, soil, frozenfoods or other semi-solid materials.

### Dials:

Anodized aluminum. Black markings and numbers with satin matte finish background.

#### Crystals:

Standard: Optically clear strong glass.

Optional: Unbreakable clear plastic, All models (Not recommended for ranges over 500°F).

Optional: "Shatterproof" tempered glass (3", 4" and 5" models).

#### Accuracy:

Models are guaranteed accurate to within plus or minus 1% of the full scale (Grade A per ASME B40.3). Temperature readings are stabilized within 40 seconds.

## Immersion:

For correct temperature measurement, the stem of all models in all ranges must be immersed 2 inches in liquid, and 4 inches in a gas except for 0 to 100°F, 25 to 125°F, and 0 to 50°C which require 3 1/2 inches in liquid and 5 inches in gas.

### **Mounting Connections:**

1/2" NPT (std. on 3", 4" and 5" models), 1/8" NPT, 1/4" NPT, 3/8" NPT, 3/4" NPT, 3/8"-24" NF, Plain or Reset Bushing, 1/2" NPT Union, 1/2" BSPT, BSPP Adapters.





# **Ordering Bimetal Dial Thermometers**

## To order: Fill in the boxes from the table below.

Stem

Length

(Boxes 3, 4 & 5)

025 = 2.5"

040 = 4"

060 = 6"

090 = 9"

120 = 12"

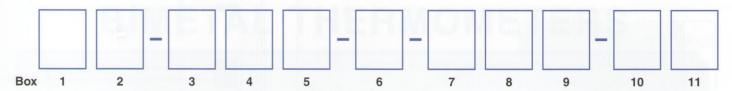
150 = 15"

180 = 18"

240 = 24"

300 = 30"

360 = 36"



## Models (Boxes 1 & 2)

## **Back Connected**

with reset

AA = 3" Dial

CC = 4" Dial

BB = 5" Dial

without reset

RR = 3" Dial

CN = 4" Dial

SS = 5" Dial

#### Adjustable Angle

with reset

LL = 3" Dial

MM = 4" Dial

JJ = 5" Dial

#### **Bottom Connected**

with reset

XR = 3" Dial

YY = 4" Dial

VR = 5" Dial

#### without reset

XX = 3" Dial

YN = 4" Dial

VV = 5" Dial

## Connection

(Box 6)

1 = 1/2" npt

4 = 1/4" npt

5 = 3/4" npt

adapter

7 = 3/8" npt

X = Plain hex bushing (no thread)

B = 1/2" bspt (British Std Pipe Thread)

C = 1-1/2 Tri-Clamp

L = 2" Tri-Clamp

M = 3/4" Tri-Clamp

Additional mountings available upon request

## Temperature Ranges (Boxes 7, 8 & 9)

#### **Fahrenheit**

 $F23 = -40 \text{ to } +160^{\circ}F$  $F55 = +25 \text{ to } +125^{\circ}F$ 

 $F43 = 0 \text{ to } +200^{\circ}F$  $F47 = 0 \text{ to } +250^{\circ}F$ 

 $F63 = +50 \text{ to } +300^{\circ}F$   $F67 = +50 \text{ to } +500^{\circ}F$  $F81 = +150 \text{ to } +750^{\circ}F$ 

F81 = +150 to +750°F F85 = +200 to +1000°F

#### Celsius

 $C23 = -40 \text{ to } +70^{\circ}\text{C}$   $C55 = 0 \text{ to } +50^{\circ}\text{C}$   $C43 = 0 \text{ to } +100^{\circ}\text{C}$  $C47 = -20 \text{ to } +120^{\circ}\text{C}$ 

 $C59 = 0 \text{ to } +150^{\circ}\text{C}$   $C67 = 0 \text{ to } +250^{\circ}\text{C}$  $C81 = 0 \text{ to } +400^{\circ}\text{C}$ 

 $C85 = +100 \text{ to } +500^{\circ}C$ 

### **Dual Ranges**

D23 = -40 to +160°F -40 to +70°C

 $D55 = +25 \text{ to } +125^{\circ}\text{F}$ 0 to +50°C

 $D43 = 0 \text{ to } +250^{\circ}F$ 

-20 to +120°C

D63 = +50 to +300°F +10 to +150°C

 $D67 = +50 \text{ to } +500^{\circ}\text{F}$ 0 to  $+250^{\circ}\text{C}$ 

 $D81 = +150 \text{ to } +750^{\circ}\text{F}$ 

0 to +400°C

D85 = +200 to +1000°F +100 to +500°C

Consult Sales Dept. for additional ranges

# Options (Boxes 10 & 11)

(DOXES TO & TT)

F3 = 3/8" dia Stem

F5 = 5/16" dia Stem

SS = 316 SS Stem

PS = Pointed Stem

PC = Acrylic Window

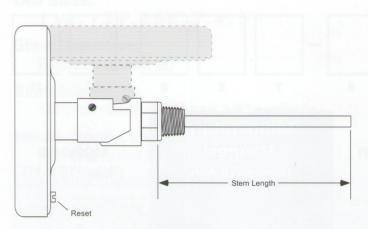
PY = Polycarbonate Window

TG = Tempered Glass Window

SF = Silicone Fill (max temp 550°F)

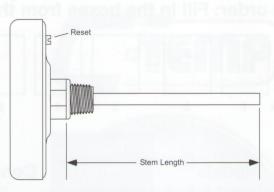
MM= Max/Min Pointer

## **Bimetal Dial Thermometers Illustrated**



## **Adjustable Angle:**

The All-Angle thermometer allows for easy temperature monitoring from any position and features a 360° Case Rotation.

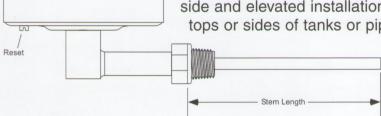


### **Back Connected:**

Our Thermometers are idea for local, eye-level temperature readings in most process applications.

## **Bottom Connected:**

These thermometers are ideal for side and elevated installations on tops or sides of tanks or pipes.



## Standard features on the shown Bimetal Thermometers:

All Stainless Steel Construction, Hermetically Sealed ASME B40.3, Accurate to 1% of Full Scale, Standard External Reset, Silicone Fillable for Vibration

## Other products available at C-Temp

Thermocouples

Resistance Temperature Detectors (RTD)

Thermowells

**Temperature Transmitters** 

Laboratory Hand Held

**Dual Bimetal** (Thermometer and Thermocouple)

Thermocouple Wire and Accessories

Pressure Gauges

Diaphragm Seals

**Pressure Transmitters** 

Pocket Style Bimetals

Sanitary Styles

Gas and Liquid Filled

Surface (magnetic) Mounted

NIST Calibration Available

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