

# Direct Mounted Dial Thermometer

4 1/2" & 6" Cast Aluminum Case • Universal Angle

DIAL THERMOMETERS



V80742 shown

The Trerice **Universal Angle Dial Thermometer** is available in 4 1/2" and 6" dial sizes with a rugged cast aluminum case. After the sensing bulb has been installed, the case may be adjusted 180° front to back, and rotated 360° for maximum readability. This instrument is available with vapor or liquid actuation.

- Optional features available: Please consult the Optional Features Section for details.

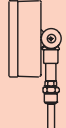
#### Thermowell

- For applications where the process media may be corrosive or contained under pressure, the use of a thermowell is required to prevent damage to the thermometer and facilitate its removal from the process.

(Refer to page 154)

- ▶ 4 1/2", 6" Dial Sizes
- ▶ ± 1 Scale Division Accuracy
- ▶ Cast Aluminum Case
- ▶ Vapor or Liquid Actuated

## Specifications

Models	Dial Sizes	Case Style
80742	4 1/2"	 Universal Angle
80762	6"	

**Movement** Brass

**Case Material**  
Cast Aluminum, black finish

**Window** Clear glass

**Ring** Friction type, stainless steel

**Pointer** Adjustable, black finish

**Dialface** Aluminum, white background with black graduations and markings

**Accuracy** ±1 scale division

#### Approximate Shipping Weight

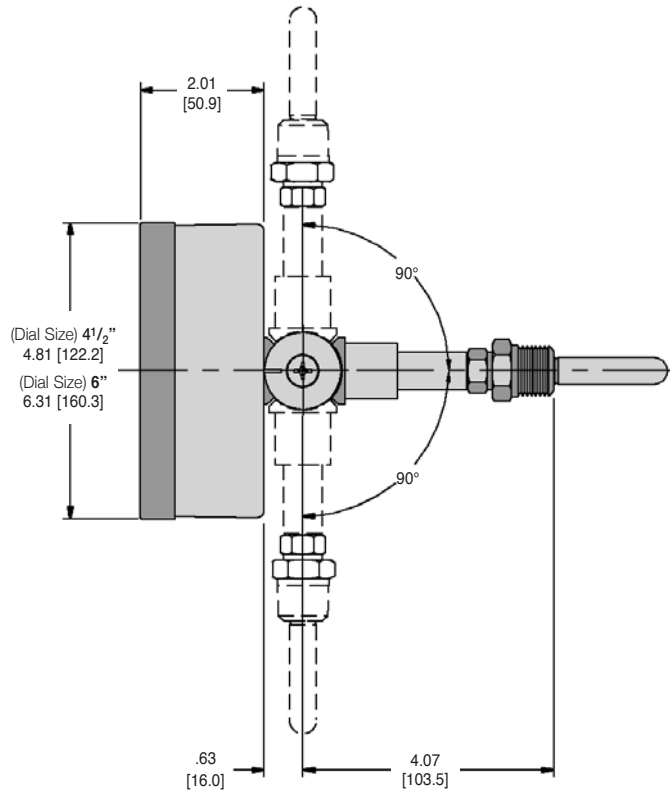
80742: 2.0 lbs [0.91 kg]  
80762: 2.4 lbs [1.09 kg]

## HOW TO ORDER

Sample Order Number: **L 80742 110 B35**

Actuation	Model	Range Code	Thermal System
V Vapor	80742	See Standard Ranges	See Thermal System Selection (pages 112-113)
L Liquid	80762		

All dimensions are nominal. Dimensions in [ ] are in millimeters.



DIAL THERMOMETERS

### Standard Ranges (Dual Scale includes both Fahrenheit & Celsius)

Vapor Actuated				
Fahrenheit Scale Range Code	Fahrenheit Scale Range	Celsius Scale Range Code	Celsius Scale Range	Dual Scale Range Code
030	-40° to 150°F	430	-40° to 65°C	230
040	-20° to 100°F	440	-30° to 40°C	240
050	0° to 100°F	450	-20° to 40°C	250
065	0° to 160°F	465	-20° to 70°C	265
100	30° to 180°F	500	0° to 85°C	300
110	30° to 240°F	510	0° to 115°C	310
120	30° to 300°F	520	0° to 150°C	320
145	100° to 350°F	545	40° to 180°C	345
160	200° to 450°F	560	90° to 230°C	360

Liquid Actuated				
Fahrenheit Scale Range Code	Fahrenheit Scale Range	Celsius Scale Range Code	Celsius Scale Range	Dual Scale Range Code
020	-40° to 120°F	420	-40° to 50°C	220
050	0° to 100°F	450	-20° to 40°C	250
060	0° to 160°F	460	-20° to 70°C	260
100	30° to 180°F	495	0° to 80°C	300
110	30° to 240°F	510	0° to 115°C	310
130	50° to 300°F	530	10° to 150°C	330

# Thermal System Selection

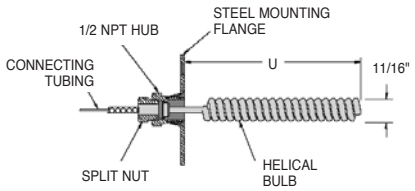
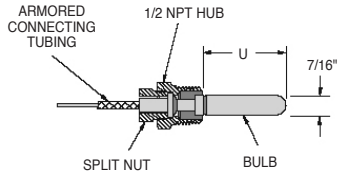
DIAL THERMOMETERS

## Remote Mounted Dial Thermometers

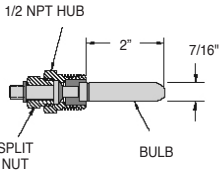
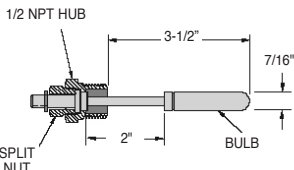
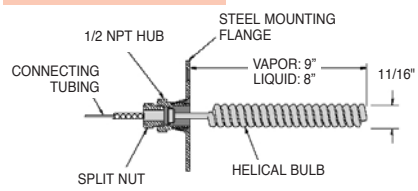
Bulb & Capillary Style	Order Code	Connection Style & Material	Bulb Material	Capillary Tubing Material	Minimum Bulb Insertion Length for Capillary Length (in feet) shown			
					Vapor Actuated			Liquid Act. All Lengths
					up to 10	15-50	over 50	
<b>Union Connection</b> 	B01	Brass, 1/2 NPT	Vapor: Copper Liquid: Brass	Copper with Bronze Braided Armour	2"	3 3/4"	5 5/8"	2"
	B10	Stainless Steel, 1/2 NPT	Stainless Steel	Stainless Steel	2"	3 3/4"	5 5/8"	2"
<b>Adjustable Union Connection</b> 	B02	Brass, 1/2 NPT	Vapor: Copper Liquid: Brass	Copper with Bronze Braided Armour	1 3/4"	3 1/2"	5 1/4"	1 3/4"
	B04	Stainless Steel, 1/2 NPT	Stainless Steel	Stainless Steel	Adjustable up to 24"			
<b>Plain Bulb</b> 	B05	None	Vapor: Copper Liquid: Brass	Copper with Bronze Braided Armour	2"	3 3/4"	5 5/8"	2"
	B06	None	Stainless Steel	Stainless Steel	2"	3 3/4"	5 5/8"	2"
<b>Teflon Covered Bulb</b> 	B08	None	Vapor: Copper Liquid: Brass with Teflon Cover	Bronze Braided Armour with Teflon Cover	15"	15"	15"	2 3/4"
	B07	None	Stainless Steel with Teflon Cover	Stainless Steel with Teflon Cover	15"	15"	15"	2 3/4"
<b>Averaging Bulb</b> 	B11*	Brass, 1/2 NPT	Copper	Copper with Bronze Braided Armour	N/A	N/A	N/A	Approx. 8 Feet
	B12*	Stainless Steel, 1/2 NPT	Stainless Steel	Stainless Steel	N/A	N/A	N/A	Approx. 8 Feet

\* B11 and B12 Averaging Bulbs are not available with vapor actuation.

## Remote Mounted Dial Thermometers (cont'd)

Bulb & Capillary Style	Order Code	Connection Style & Material	Bulb Material	Capillary Tubing Material	Minimum Bulb Insertion Length for Capillary Length (in feet) shown			
					up to 10	Vapor Actuated 15-50	over 50	Liquid Act. All Lengths
<b>Air Sensitive Bulb</b> 	B13	Steel Mounting Flange, Brass Fittings	Copper	Copper with Bronze Braided Armor	9"	9"	11"	8"
<b>Union Connection with Spiral Armour</b> 	B15	Brass, 1/2 NPT	Vapor: Copper Liquid: Brass	Copper with Bronze Braid & SS Spiral Armor	2"	3 3/4"	5 5/8"	2"
	B16	Stainless Steel, 1/2 NPT	Stainless Steel	Stainless Steel with SS Spiral Armor	2"	3 3/4"	5 5/8"	2"

## Direct Mounted Dial Thermometers

Bulb Style	Order Code	Connection Material	Bulb Material	Minimum Bulb Insertion Length	
				Vapor Actuated	Liquid Act.
<b>Union Connection</b> 	B31	Brass, 1/2 NPT	Vapor: Copper Liquid: Brass	2"	2"
	B32	Stainless Steel, 1/2 NPT	Stainless Steel	2"	2"
<b>Union Connection with Bendable Extension</b> 	B33	Brass, 1/2 NPT	Vapor: Copper Liquid: Brass	3 1/2"	3 1/2"
	B34	Stainless Steel, 1/2 NPT	Stainless Steel	3 1/2"	3 1/2"
<b>Air Sensitive Bulb</b> 	B35	Steel Mounting Flange, Brass Fittings	Copper	9"	8"

# Temperature Ranges

## Dial Thermometers

DIAL THERMOMETERS

Trerice offers a variety of temperature ranges to satisfy virtually any application. The following tables list the standard available ranges with figure intervals and minor divisions for Vapor or Liquid actuated dial thermometers.

Vapor actuated dial thermometers have a progressive scale. Maximum readability and stated intervals are in the upper two thirds of the scale. Liquid actuated dial thermometers have a linear scale. Figure intervals are equal throughout the range. Fahrenheit is primary (outside) scale on dual scale ranges.

### Vapor Actuated Ranges with Major and Minor Divisions

Fahrenheit Scale		Celsius Scale		Dual Scale		Fahrenheit		Celsius	
Range Code	Range	Range Code	Range	Range Code	Range	Figure Intervals	Minor Divisions	Figure Intervals	Minor Divisions
030	-40° to 150°F	430	-40° to 65°C	230	-40° to 150°F & -40° to 65°C	20°	2°	10°	1°
040	-20° to 100°F	440	-30° to 40°C	240	-20° to 100°F & -30° to 40°C	10°	2°	5°	1°
050	0° to 100°F	450	-20° to 40°C	250	0° to 100°F & -20° to 40°C	10°	1°	10°	1°
065	0° to 160°F	465	-20° to 70°C	265	0° to 160°F & -20° to 70°C	20°	2°	10°	1°
100	30° to 180°F	500	0° to 85°C	300	30° to 180°F & 0° to 85°C	20°	2°	10°	1°
110	30° to 240°F	510	0° to 115°C	310	30° to 240°F & 0° to 115°C	20°	2°	10°	1°
120	30° to 300°F	520	0° to 150°C	320	30° to 300°F & 0° to 150°C	20°	2°	10°	1°
145	100° to 350°F	545	40° to 180°C	345	100° to 350°F & 40° to 180°C	30°	2°	10°	1°
160	200° to 450°F	560	90° to 230°C	360	200° to 450°F & 90° to 230°C	30°	2°	10°	2°

Vapor actuated dial thermometers have a progressive scale. Maximum readability and stated intervals are in the upper two thirds of the scale.

### Liquid Actuated Ranges with Major and Minor Divisions

Fahrenheit Scale		Celsius Scale		Dual Scale		Fahrenheit		Celsius	
Range Code	Range	Range Code	Range	Range Code	Range	Figure Intervals	Minor Divisions	Figure Intervals	Minor Division
020	-40° to 120°F	420	-40° to 50°C	220	-40° to 120°F & -40° to 50°C	20°	2°	10°	1°
050	0° to 100°F	450	-20° to 40°C	250	0° to 100°F & -20° to 40°C	10°	1°	10°	0.5°
060	0° to 160°F	460	-20° to 70°C	260	0° to 160°F & -20° to 70°C	20°	2°	10°	1°
100	30° to 180°F	495	0° to 80°C	300	30° to 180°F & 0° to 85°C	20°	2°	10°	1°
110	30° to 240°F	510	0° to 115°C	310	30° to 240°F & 0° to 115°C	20°	2°	10°	1°
130	50° to 300°F	530	10° to 150°C	330	50° to 300°F & 10° to 150°C	50°	5°	20°	2°

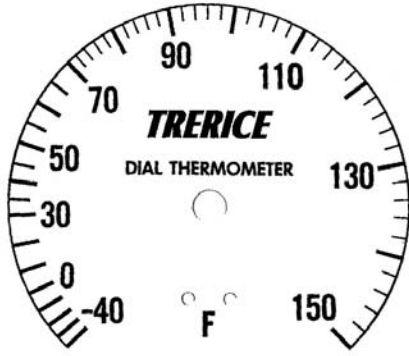
Liquid actuated dial thermometers have a linear scale. Figure intervals are equal throughout the range.

### Vapor and Liquid Actuated Dial Faces

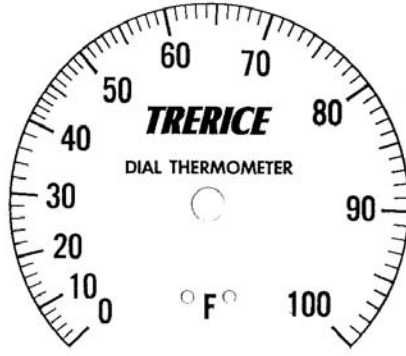
The physical principles of vapor actuation require that the dialface for vapor dial thermometers be printed with a non-linear progressively graduated temperature scale. Liquid actuated dial thermometers are furnished with linear dialfaces. Please see the Thermal System Selection section of our online catalog for sample vapor and liquid actuated dialfaces.

# Temperature Ranges

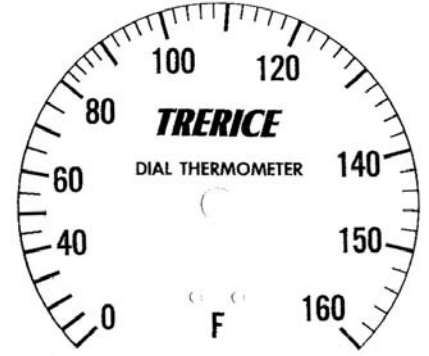
Sample Vapor Actuated Dials (others available)



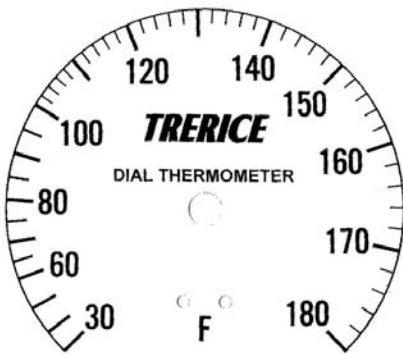
-40° to 150°F



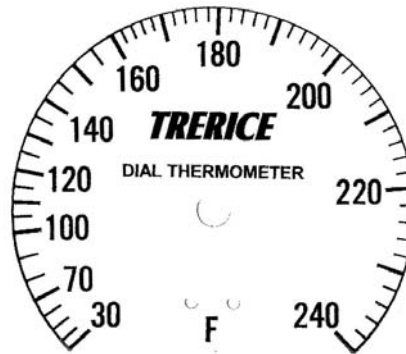
0° to 100°F



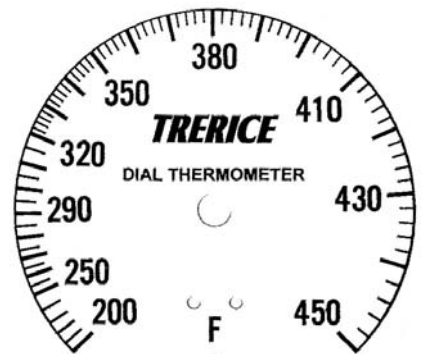
0° to 160°F



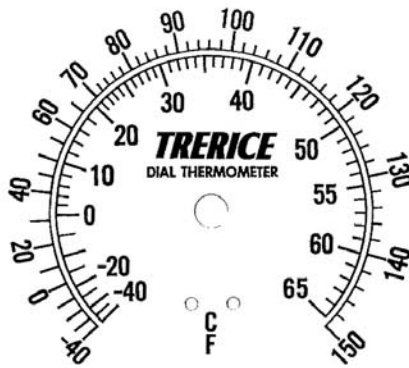
-30° to 180°F



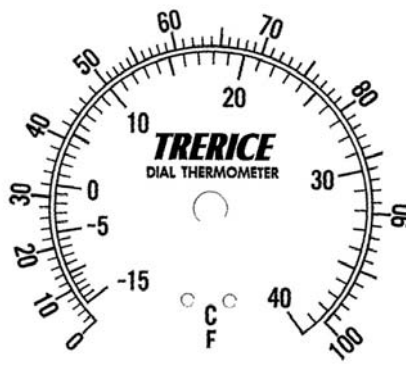
30° to 240°F



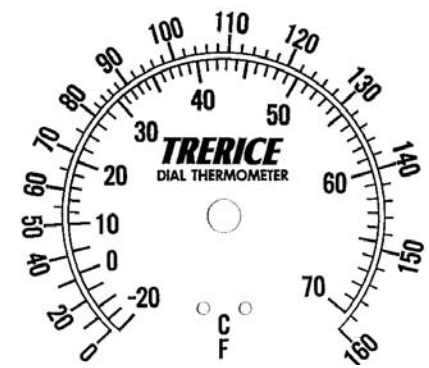
200° to 450°F



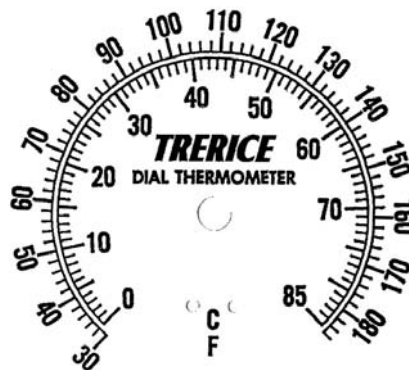
-40° to 150°F/C



0° to 100°F/C



0° to 160°F/C



30° to 180°F/C



30° to 240°F/C



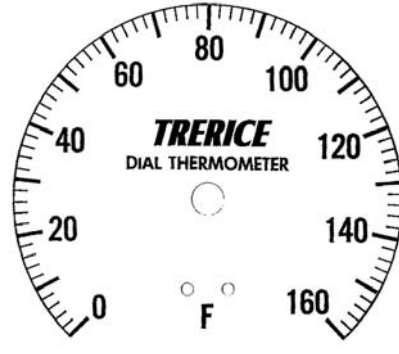
200° to 450°F/C

# Temperature Ranges

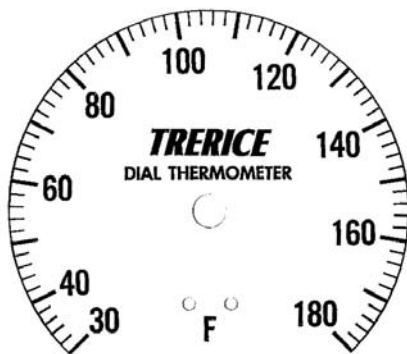
Sample Liquid Actuated Dials (others available)



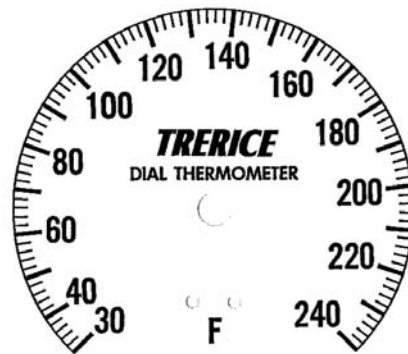
0° to 100°F



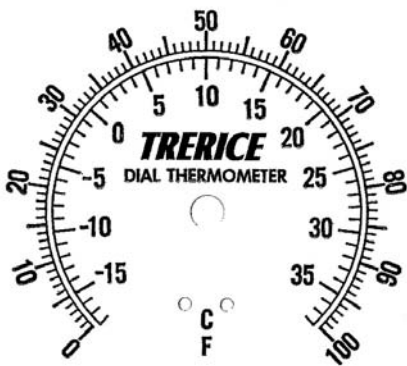
0° to 160°F



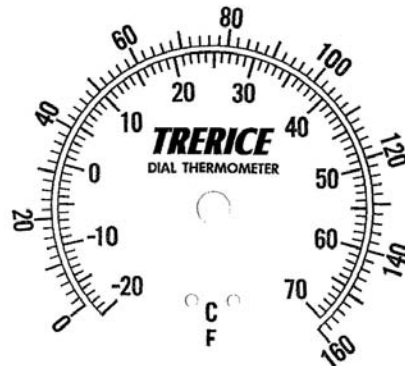
0° to 180°F



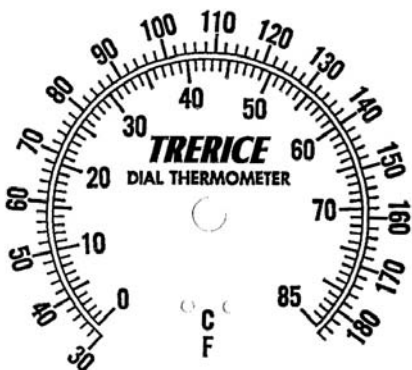
30° to 240°F



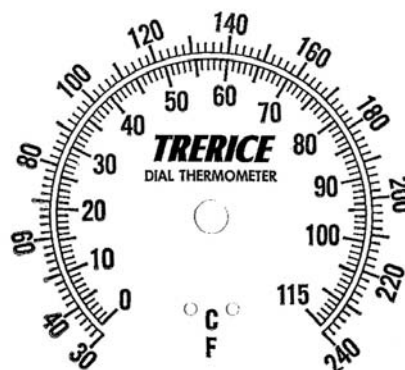
0° to 100°F/C



30° to 160°F/C



0° to 180°F/C



30° to 240°F/C