

Direct Mounted Dial Thermometer

3 1/2" Stainless Steel Case & 4 1/2" Cast Aluminum Case • Adjustable Angle

DIAL THERMOMETERS



V80445 shown

The Trerice **Adjustable Angle Dial Thermometer** is intended for use within the construction and HVAC industries. Once the sensing bulb has been installed, the angle of the dial-face may be adjusted forward and backward to provide maximum readability. This instrument is available in 3 1/2" and 4 1/2" dial sizes with a flangeless, stainless steel or cast aluminum case.

- 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)

- ▶ 3 1/2", 4 1/2" Dial Sizes
- ▶ ± 1 Scale Division Accuracy
- ▶ Stainless Steel or Cast Aluminum Case
- ▶ Vapor or Liquid Actuated

Specifications

Models	Dial Sizes	Case Styles
80030	3 1/2"	Adjustable Angle
80445	4 1/2"	Adjustable Angle (Vapor Only)

Case Material

- 80030:** Stainless steel
- 80445:** Cast aluminum, black finish

Window

- 80030:** Acrylic, snap-in with Nitrile O-ring seal
- 80445:** Clear glass

Ring

- 80030:** None
- 80445:** Friction-type, stainless steel

Pointer

Adjustable, black finish

Dialface

Aluminum, white background with black graduations and markings

Accuracy

±1 scale division

Approximate Shipping Weight

- 80030: 1.3 lbs [0.59 kg]
- 80445: 1.4 lbs [0.64 kg]

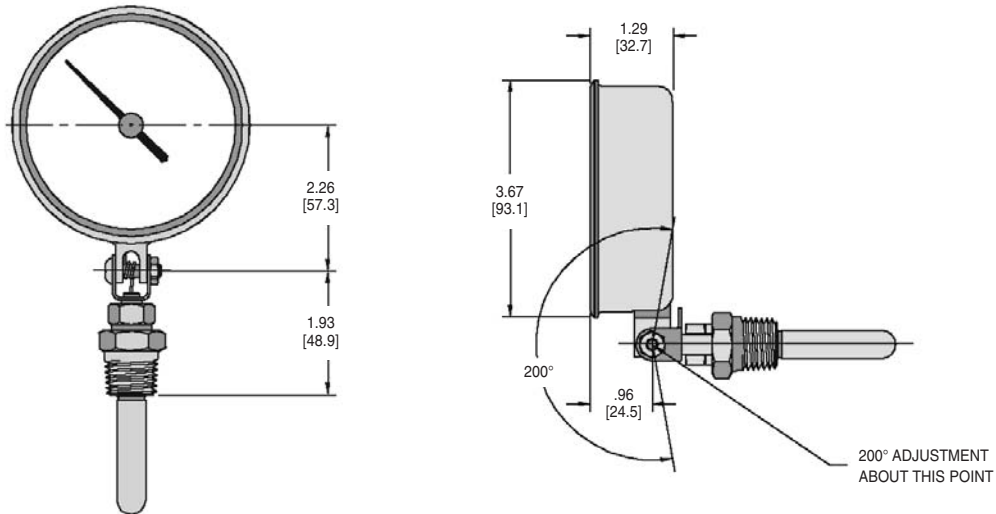
HOW TO ORDER

Sample Order Number: **V 80445 110 B31**

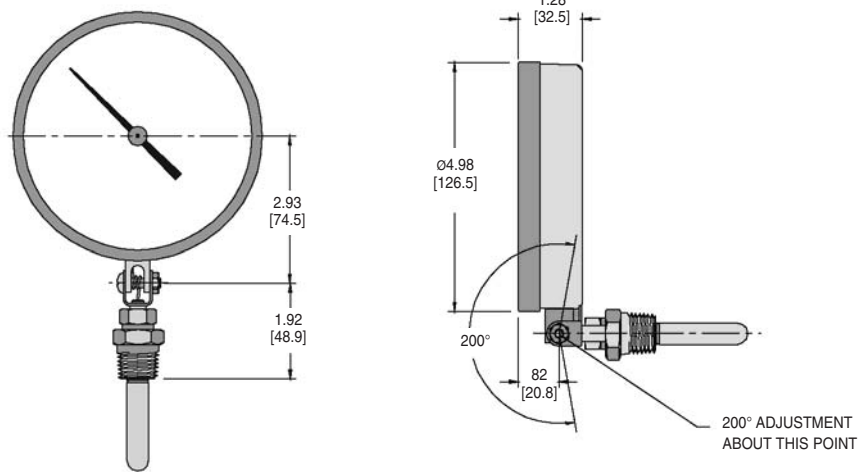
Actuation	Model	Specific Range	Thermal System
V Vapor	80030	See Standard Ranges	See Thermal System Selection (pages 112-113)
L Liquid	80445 (vapor only)		

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

80030



80445



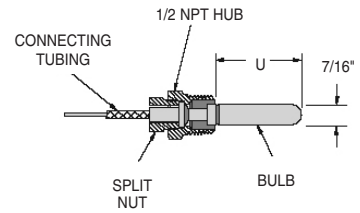
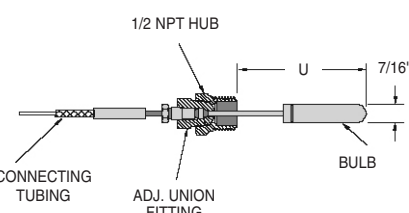
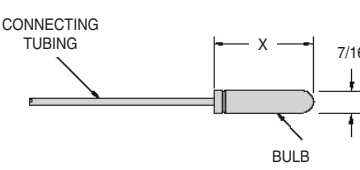
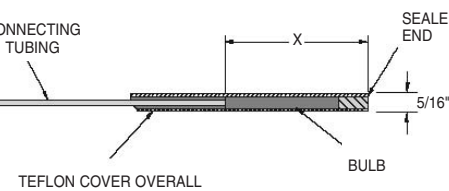
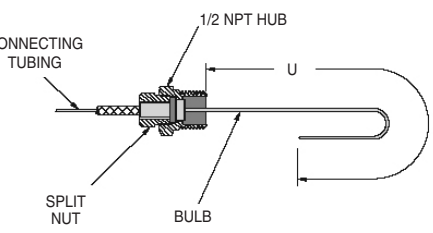
Standard Ranges (Dual Scale includes both Fahrenheit & Celsius)

Vapor Actuated					Liquid Actuated				
Fahrenheit Scale Range Code	Fahrenheit Scale Range	Celsius Scale Range Code	Celsius Scale Range	Dual Scale Range Code	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	020	-40° to 120°F	420	-40° to 50°C	220
040	-20° to 100°F	440	-30° to 40°C	240	050	0° to 100°F	450	-20° to 40°C	250
050	0° to 100°F	450	-20° to 40°C	250	060	0° to 160°F	460	-20° to 70°C	260
065	0° to 160°F	465	-20° to 70°C	265	100	30° to 180°F	495	0° to 80°C	300
100	30° to 180°F	500	0° to 85°C	300	110	30° to 240°F	510	0° to 115°C	310
110	30° to 240°F	510	0° to 115°C	310	130	50° to 300°F	530	10° to 150°C	330
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					

Thermal System Selection

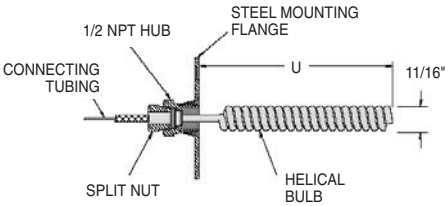
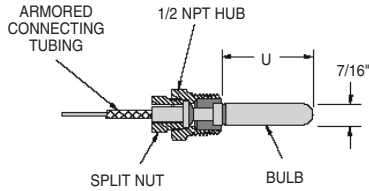
DIAL THERMOMETERS

Remote Mounted Dial Thermometers

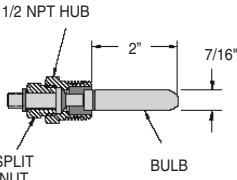
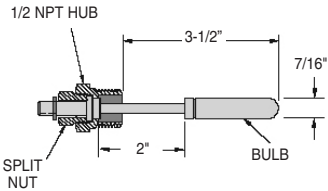
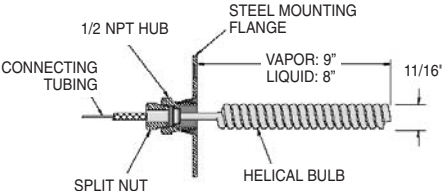
Bulb & Capillary Style	Order Code	Connection Style & Material	Bulb Material	Capillary Tubing Material	Minimum Bulb Insertion Length for Capillary Length (in feet) shown			
					Vapor Actuated up to 10	15-50	over 50	Liquid Act. All Lengths
Union Connection 	B01	Brass, 1/2 NPT	Vapor: Copper Liquid: Brass	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"
Adjustable Union Connection 	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	1 3/4"	3 1/2"	5 1/4"	1 3/4"
Plain Bulb 	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"
Teflon Covered Bulb 	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"
Averaging Bulb 	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
Air Sensitive Bulb 	B13	Steel Mounting Flange, Brass Fittings	Copper	Copper with Bronze Braided Armor	9"	9"	11"	8"
Union Connection with Spiral Armour 	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.
Union Connection 	B31	Brass, 1/2 NPT	Vapor: Copper Liquid: Brass	2"	2"
	B32	Stainless Steel, 1/2 NPT	Stainless Steel	2"	2"
Union Connection with Bendable Extension 	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"
Air Sensitive Bulb 	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.