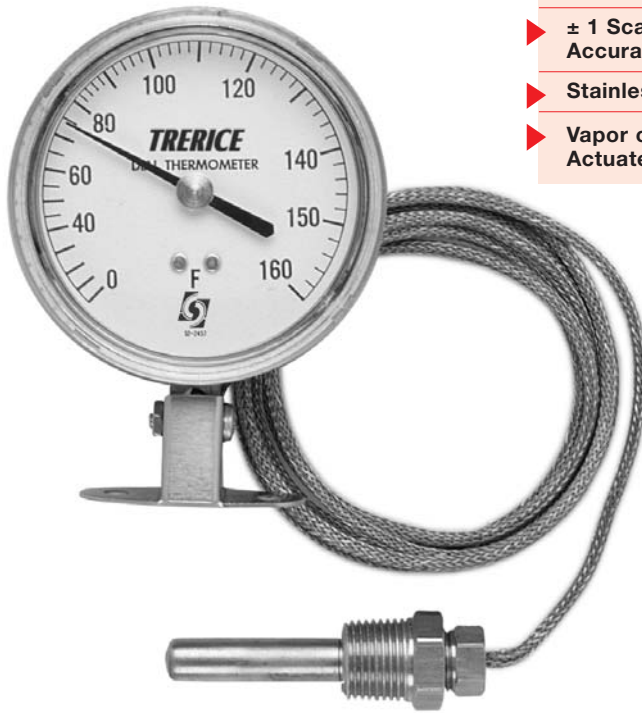


# Remote Mounted Dial Thermometer

## 3 1/2" Stainless Steel Case

DIAL THERMOMETERS



V80025 shown

- ▶ 3 1/2" Dial Size
- ▶ ± 1 Scale Division Accuracy
- ▶ Stainless Steel Case
- ▶ Vapor or Liquid Actuated

The Trerice **Remote Mounted Dial Thermometer** is used extensively in the building and construction industry and is the preferred temperature instrument for OEMs worldwide. The stainless steel case is available in many styles for panel and surface mounting. This instrument has a 3 1/2" dial size and is available with either vapor or liquid actuation.



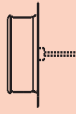
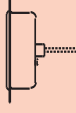

- Optional features available: Please consult the Optional Features Section for details.

#### 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)

### Specifications

| Models | Dial Size | Case Styles  |
|--------|-----------|--|
| 80025  | 3 1/2"    |  <b>Adjustable Angle,</b> with mounting bracket           |
| 80035  | 3 1/2"    |  <b>Surface Mounted,</b> back flanged, with bottom outlet |
| 80036  | 3 1/2"    |  <b>Surface Mounted,</b> back flanged with back outlet    |
| 80040  | 3 1/2"    |  <b>Flush Mounted,</b> front flanged, with back outlet    |
| 80041  | 3 1/2"    |  <b>Flush Mounted,</b> u-clamp with back outlet          |

#### Case Material

Stainless Steel

#### Window

Acrylic, snap-in with Nitrile O-ring seal

#### Pointer

Adjustable, black finish

#### Dialface

Aluminum, white background with black graduations and markings

#### Accuracy

±1 scale division

#### Approximate Shipping Weight

1.3 lbs [0.59 kg]

### HOW TO ORDER

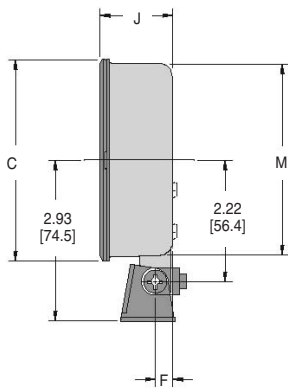
Sample Order Number: **V 80035 110 B01 05**

| Actuation | Model | Range Code          | Thermal System                        | Capillary Length* |
|-----------|-------|---------------------|---------------------------------------|-------------------|
| V Vapor   | 80025 | See Standard Ranges | See Thermal Selection (pages 112-113) | 05 5 Feet         |
| L Liquid  | 80035 |                     |                                       | 10 10 Feet        |
|           | 80036 |                     |                                       | 15 15 Feet        |
|           | 80040 |                     |                                       | 20 20 Feet        |
|           | 80041 |                     |                                       |                   |

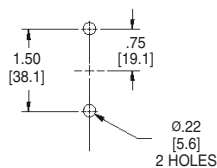
\* Other Capillary lengths available: Specify in feet. Vapor: 100 Feet Max  
Liquid: 20 Feet Max

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

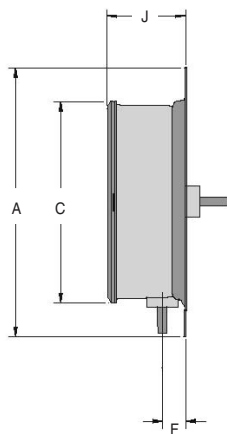
**80025 Adjustable Angle with mounting bracket**



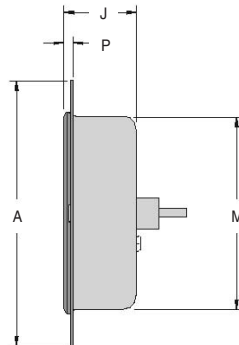
Mounting Dimensions for 80025



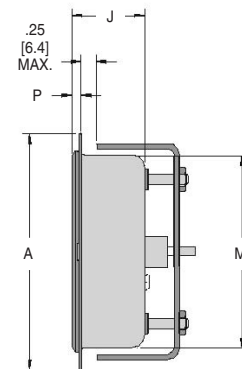
**80035 & 80036 Surface Mounted back flanged**



**80040 Flush Mounted front flanged**

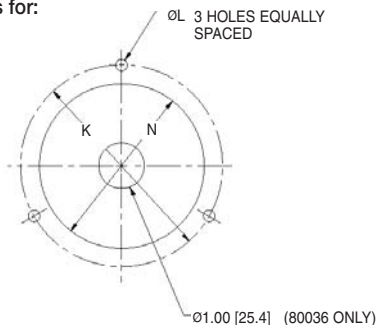


**80041 Flush Mounted U-clamp**



Drilling Dimensions for:

- 80035
- 80036
- 80040
- 80041



| Model | A            | C           | F           | J           | K            | L          | M           | N           | P          |
|-------|--------------|-------------|-------------|-------------|--------------|------------|-------------|-------------|------------|
| 80025 | N/A          | 3.67 [93.2] | 0.32 [8.2]  | 1.33 [33.9] | N/A          | N/A        | 3.51 [89.2] | N/A         | N/A        |
| 80035 | 4.91 [124.7] | 3.67 [93.2] | 0.43 [11.0] | 1.44 [36.6] | 4.50 [114.3] | 0.25 [6.4] | N/A         | N/A         | N/A        |
| 80036 | 4.91 [124.7] | 3.67 [93.2] | N/A         | 1.44 [36.6] | 4.50 [114.3] | 0.25 [6.4] | N/A         | N/A         | N/A        |
| 80040 | 4.84 [122.9] | N/A         | N/A         | 1.33 [33.6] | 4.44 [112.8] | 0.25 [6.4] | 3.51 [89.2] | 3.62 [92.0] | 0.17 [4.3] |
| 80041 | 4.31 [109.5] | N/A         | N/A         | 1.33 [33.8] | N/A          | N/A        | 3.51 [89.2] | 3.62 [92.0] | 0.17 [4.3] |

**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                   |

DIAL THERMOMETERS

# Thermal System Selection

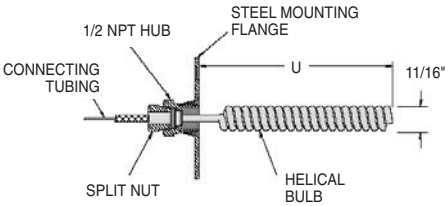
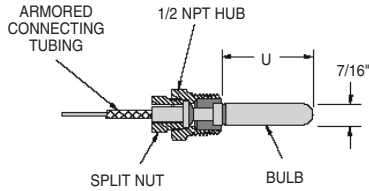
DIAL THERMOMETERS

## Remote Mounted Dial Thermometers

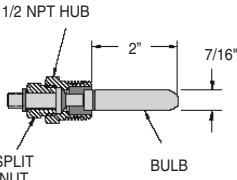
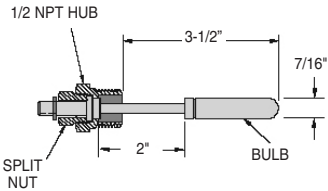
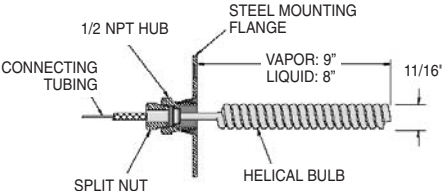
| Bulb & Capillary Style                 | Order Code | Connection Style & Material | Bulb Material                                    | Capillary Tubing Material               | Minimum Bulb Insertion Length for Capillary Length (in feet) shown |       |         |                         |
|--|------------|-----------------------------|--|---|--|-------|---------|-------------------------|
|  |            |                             |  |   | Vapor Actuated up to 10  | 15-50 | over 50 | Liquid Act. All Lengths |
| <b>Union Connection</b><br>            | B01        | Brass, 1/2 NPT              | Vapor: Copper<br>Liquid: Brass                   | Copper with Bronze Braided Armour       | 2"   | 33/4" | 5 5/8"  | 2"                      |
|  | B10        | Stainless Steel, 1/2 NPT    | Stainless Steel                                  | Stainless Steel                         | 2"   | 33/4" | 55/8"   | 2"                      |
| <b>Adjustable Union Connection</b><br> | B02        | Brass, 1/2 NPT              | Vapor: Copper<br>Liquid: Brass                   | Copper with Bronze Braided Armour       | 13/4"  | 31/2" | 51/4"   | 13/4"                   |
|  | B04        | Stainless Steel, 1/2 NPT    | Stainless Steel                                  | Stainless Steel                         | 13/4"  | 31/2" | 51/4"   | 13/4"                   |
| <b>Plain Bulb</b><br>                  | B05        | None                        | Vapor: Copper<br>Liquid: Brass                   | Copper with Bronze Braided Armour       | 2"   | 33/4" | 55/8"   | 2"                      |
|  | B06        | None                        | Stainless Steel                                  | Stainless Steel                         | 2"   | 33/4" | 55/8"   | 2"                      |
| <b>Teflon Covered Bulb</b><br>         | B08        | None                        | Vapor: Copper<br>Liquid: Brass with Teflon Cover | Bronze Braided Armour with Teflon Cover | 15"  | 15"   | 15"     | 23/4"                   |
|  | B07        | None                        | Stainless Steel with Teflon Cover                | Stainless Steel with Teflon Cover       | 15"  | 15"   | 15"     | 23/4"                   |
| <b>Averaging Bulb</b><br>              | 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><br>                   | B13        | Steel Mounting Flange, Brass Fittings | Copper                         | Copper with Bronze Braided Armor           | 9"   | 9"                   | 11"     | 8"                      |
| <b>Union Connection with Spiral Armour</b><br> | B15        | Brass, 1/2 NPT                        | Vapor: Copper<br>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><br>                         | B31        | Brass, 1/2 NPT                        | Vapor: Copper<br>Liquid: Brass | 2"                            | 2"          |
|  | B32        | Stainless Steel, 1/2 NPT              | Stainless Steel                | 2"                            | 2"          |
| <b>Union Connection with Bendable Extension</b><br> | B33        | Brass, 1/2 NPT                        | Vapor: Copper<br>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><br>                       | 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.