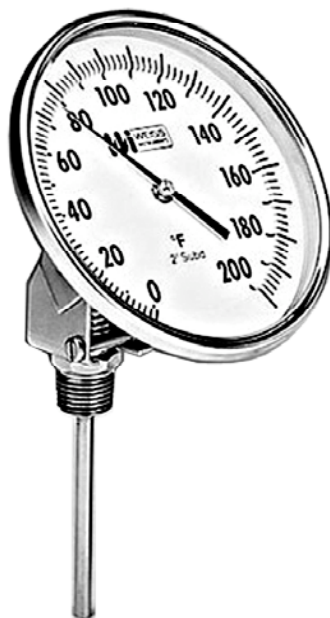




INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS

5" VARI-ANGLE® BIMETAL DIAL THERMOMETER - 5VBM



Warning:

All bimetal thermometers should be selected considering the media and the ambient operating conditions. Improper application can be detrimental to the thermometer, cause failure and possibly personal injury or property damage. Inaccuracies resulting from improper setting of the external adjustment by the user may cause personal injury or property damage. Consult ANSI B40.3 for guidance in selection and use of bimetal thermometers.

Temperature Ranges

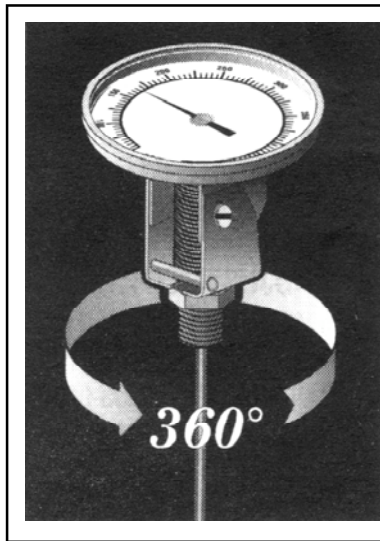
Standard Fahrenheit and Celsius ranges have been established to encompass all normal temperature measurement requirements. A bimetal thermometer can be used at an operating temperature anywhere throughout its dial range. Provision should be made for extreme temperature conditions. No bimetal thermometer should be exposed continuously to process temperatures over 800°F (425°C).

Operating Conditions

The temperature of the case should be no more than 200°F (95°C); Liquid filled 150°F (65°C). Temperatures beyond this value may cause discoloration of the dial or result in increased pressure inside the casing which could ultimately lead to the failure of the window.

Thermowells

Thermowells must be used on any application where the stem of the bimetal thermometer may be exposed to pressure, corrosive fluids or high velocity. Additionally, use of a thermowell permits instrument interchange or calibration check without disturbing or closing down the process.



POSITIONING THE STEM:

Loosen all four screws in clevis assembly. Grasp and rotate clevis assembly until dial face can be tilted in direction required. Clevis should move free and independent of flexible bellows and thermometer face. Once clevis is in desired position, tighten the two long clevis screws. Dial face angle can be adjusted by holding stem and bending face to desired angle. Once at desired angle tighten small clevis screws to lock into place. *To assure long life of Vari-angle thermometer instrument should be adjusted only when needed during installation or removal of thermometer.*

GENERAL: When removing thermometer from the packing box, handle it by the case assembly or the fitting. Do not handle thermometer by the stem. Do not bend stem – this will cause misalignment of the internal parts, resulting in permanent damage.

INSTALLATION OF THERMOMETER: Mount thermometer so that at least two inches of the free end of the stem will be subjected to the average temperature. DO not expose the stem to a temperature in excess of the maximum dial reading.

Thermowells must be used whenever Weiss Bimetal Thermometer is installed on a pressurized application or where pressure, high velocity or corrosive media are present.

To use with a thermowell, install onto the apparatus first. You may then coat the last two inches of the thermometer stem with a heat-conducting compound suitable for the measured temperature range. Insert the thermometer stem into the thermowell. To tighten thermometer, use an open-end wrench on the hexagonal head of the threaded connection. Turn head until reasonably tight. Tighten still further until the scale is in the desired position for reading. NOTE: Do not tighten by turning the thermometer case. Install thermometer so that the maximum case temperature is kept below 200°F (93°C) at all times.

UNION LOCK NUT: To mount the thermometer with this option, the connector is threaded to a less than full-tight engagement into the thermowell or bushing. Position the thermometer to the desired orientation and tighten the union lock nut against the bushing or thermowell.

MAINTENANCE: Aside from occasional calibration, little or no maintenance is required. Some materials may harden and build up an insulating layer on the stem. Remove thermometer from the apparatus periodically and clean the stem. This will restore the thermometer's sensitivity.

ADJUSTMENT: On thermometers fitted with an external adjustment. Use a small wrench, small screwdriver or a coin to turn the slotted hexagon "RESET" adjustment in the back of the case until the pointer indicates the proper temperature on the dial. The proper dial setting must be derived from calibration bath or a dry-block calibration operating at a known temperature.

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