OPERATING & MAINTENANCE INSTRUCTIONS
INSTALLATION AND CALIBRATION PROCEDURE

TEC ALL STAINLESS STEEL BIMETAL THERMOMETER MODELS BL3, BL5, BA3 & BA5

Check the installation to be sure to have the correct thermometer.
Always handle the thermometer by the case or by the clevis and not by the stem.
For correct temperature readings, the stem should be immersed a minimum of 50mm in liquids and 100mm in air or gases.
Mounting is by ⅜” NPT threads at the bottom of the clevis. DO NOT TIGHTEN BY TWISTING THE CASE, Use 7/8” OPEN END SPANNER.

The Thermometer can be adjusted to any desired position as explained in the section “ANGLE POSITION ADJUSTMENT”. However it is necessary to tighten the thermometer into the mounting threads or well until the dial is in a convenient position for reading after angle adjustment.
The thermometer stem is pressure tight and will be satisfactory for most industrial applications. Thermowells are recommended on pressure application so that the thermometer may be removed safely and without interrupting the continuity of service. This is further protection from erosion, vibration or corrosion.
Accuracy of the thermometer is not affected by temporary swings of pointer beyond the end of the scale caused by abnormal operating conditions.
Safe operating limits:
25% over-range on ranges up to 300°C
10% over-range for short period on ranges above 300°C

FRONT ASSEMBLY:
CAUTION: Do not remove or replace front assembly if the atmosphere has a high humidity, as it will seal in moisture which might cause trouble.

REMOVAL: To remove the front assembly secure the thermometer in a vise, using a strap wrench, turn the bezel ring counterclockwise until tabs are free and it may be lifted off.

REPLACEMENT: Before putting on the front assembly, inspect the gasket. Replace it if it damaged. Secure the thermometer in the vise. Using strap wrench rotate the bezel ring clockwise until tabs lock into place.

CALIBRATION CHECK AND ADJUSTMENT:
TEC Bimetal thermometers are supplied fully calibrated within 1% of the scale span (10/90%). Should recalibration become necessary follow the procedure outlined below.
Select any convenient point somewhere in the middle of the dial range for which an accurate temperature standard is available.
Immerse the thermometer stem (2”minimum) and standard into an agitated liquid bath and check the reading against the standard. A single point check (mid scale) is usually sufficient to determine the accuracy of the thermometer.
If necessary an adjustment may be made by means of “RESET” at back of the case. Turning the RESET, will rotate dial face with respect to the pointer.

ANGLE POSITION ADJUSTMENT (Models BA3 & BA5)
Thermometer MUST be returned to the standard (STRAIGHT) position before rotating clevis assembly. Loosen screws as required.
Rotate clevis assembly until dial face can be tilted in the direction required.
Grasp the case and bend the clevis assembly to required angle. Tighten screws as required.

Figure #1

Figure #2

SD 030

SD 029