

# VAPOR ACTUATED DIAL THERMOMETERS

## Installation, Operation & Maintenance Instructions

### Installation & Operation

1. Wherever possible (except for air-temperature measurement applications), a Miljoco Vapor Actuated Dial Thermometer should be installed in a thermowell to help protect the bulb against fluid erosion, corrosion or other hazards. **NEVER** install the bulb directly into a pressurized application. The thermowell should first be primed with a heat transfer medium, such as oil, graphite or paste, to provide optimal accuracy and response time.
2. All Miljoco thermometers are factory-calibrated to the stated accuracy. However, the instrument may be subjected to mishandling during transportation, therefore accuracy should always be verified against a known standard before installation. The thermometer should be installed at a location as free from vibration as possible in order to avoid the potential excessive wear of the internal mechanisms.
3. When choosing an installation location, always ensure that the sensing bulb and case are installed at a similar height to maintain the designed accuracy of the thermometer. If the sensing bulb must be mounted at a different height than the case (especially over long capillary runs), please advise the factory when ordering. The sensing bulb should always be completely immersed into the measured media to ensure accurate readings.

### Maintenance

Generally, a properly installed thermometer should require no mechanical maintenance. If there is a clear indication of erroneous readings or mechanical malfunction, the unit should be removed and forwarded for inspection by a professional instrument service technician.

### Resetting the Pointer

All Miljoco Vapor Actuated Dial thermometers are factory-calibrated before shipment to be accurate within  $\pm$  one scale division. However, the instrument may be subjected to mishandling during transportation, therefore accuracy should always be verified against a known standard before installation. To verify accuracy, follow the steps outline below:

1. Remove the lens to expose the pointer by unthreading counterclockwise (threaded lens) or by carefully prying (press-in lens) the lens away from the case using the molded slots.
2. Check the accuracy by inserting the sensing bulb into an agitated bath of melting ice and water (32°F, 0°C @ sea level) or boiling water (212°F, 100°C @ sea level).



**If the temperature reads high...**

*Fig. A*

Stabilize the pointer by placing a finger next to the left side of the wide end. Insert a screwdriver into the slot in the pointer hub and carefully turn the hub clockwise until the desired setting is reached.



**If the temperature reads low...**

*Fig. B*

Stabilize the pointer by placing a finger next to the right side of the wide end. Insert a screwdriver into the slot in the pointer hub and carefully turn the hub counter-clockwise until the desired setting is reached.

