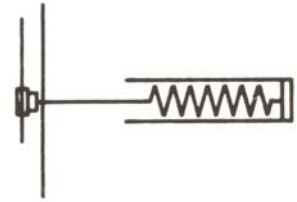


TECHNICAL INFORMATION OF THERMOMETER

BIMETAL THERMOMETERS

Temperature measurement is made by means of a bimetal system inside the thermometric sensor. The bimetal consists of two inseparably joined metal strips. Either metal features a thermal expansion coefficient that differs from the other. This causes the strip to attain a particular curve that is proportional to its temperature.

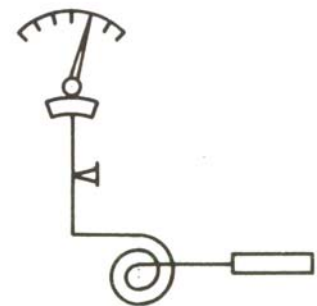
The actual bimetal system consists of a bimetal strip that is either helically or spirally wound, as the size of the sensor and the temperature to be measured demands. Any temperature variation influences the bimetal in such away as to rotate an axis attached. This rotation is indicated by means of a pointer on a dial scale.



REMOTE READING (liquid / gas-in metal) THERMOMETERS

The thermometric system consists of thermometric sensor bulb, transmitting capillary and case containing a bourdon tube element. The system is pressure-filled with a suitable liquid agent or pressurized inert gas. Any temperature variation will affect the internal pressure of the system. This pressure variation is measured by the bourdon tube system and indicated on a dial scale in terms of temperature units.

Variations of the ambient temperature are compensated for by means of a bimetal device inside the case.



GLASS THERMOMETERS

A glass capillary with bulb contains a suitable liquid in such a way, that the level of the liquid column is proportional to the temperature applied. Either the glass capillary or a surrounding metal body bears a straight scale graduated in units of temperature.

