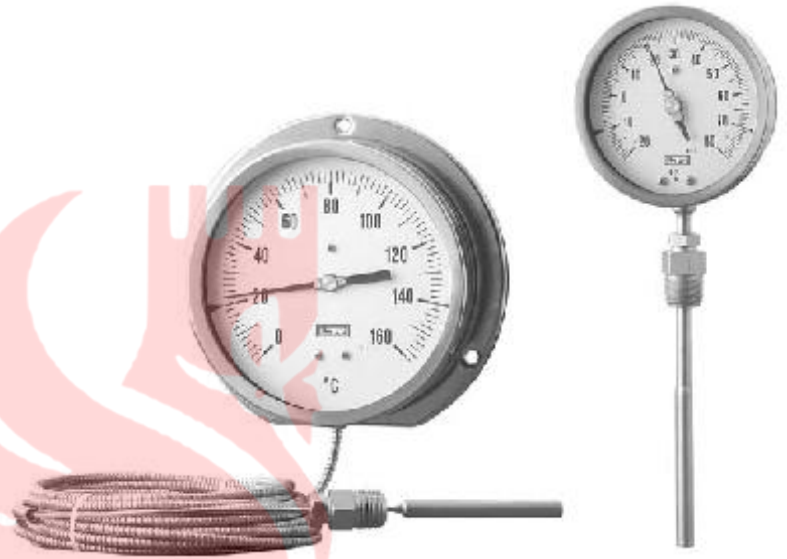


Inert Gas filled Thermometers

all stainless steel construction

Type 06.TG8 - DS 100-150

06.TG8



These instruments are designed for use in food, beverage, pharmaceutical, cryogenics, chemical and petrochemical processing industries, and in conventional and nuclear power plants. They are built to resist the most severe operating conditions created by the ambient environment and the process medium. An Argonarc welded case/bulb and capillary strengthens the whole construction. A leak tight fit is ensured if the instrument is filled with a dampening fluid to prevent damage due to vibration.

Functional and constructive characteristics.

Measuring range: the scale range has been marked by two "▼" stamped on the dial. They represent the temperature span recommended for the use of instruments as per DIN 16203.

Accuracy: $\pm 1,0\%$ of full scale range.

Ambient temperature: $-25\dots+65\text{ }^{\circ}\text{C}$.

Working pressure: 25 bar (without thermowell).

Over temperature limit: 25% of full scale range for temperature $-400\text{ }^{\circ}\text{C}$; max $600\text{ }^{\circ}\text{C}$.

Protection degree: IP 55 as per IEC 529.

Operation principles: inert gas filled expansion system.

Process connection: AISI 316 st.st..

Bulb: AISI 316 st.st. $\varnothing 11,5-9,5-8\text{ mm}$.

Capillary: AISI 304 st.st. $\varnothing 2,5\text{ mm}$.

Elastic element: AISI 304 st.st. spiral shaped.

Welding: AISI 316 TIG.

Case: AISI 304 st.st.

Ring: AISI 304 st.st., bayonet lock.

Window: glass, 4 mm thick.

Movement: stainless steel.

Dial: aluminium, white with black markings.

Special dials: ranges different from standards, or custom artwork, available on request.

Pointer: micrometer adjustable.

Gasket: in EPDM.

Internal compensation device: by a bimetallic linkage.

ENVIRONMENTALLY FRIENDLY

The inert gas used by LEITENBERGER (nitrogen or helium) does not create any danger for the measuring process or atmosphere, in the unlikely event of failure. This is the positive answer of LEITENBERGER to the pollution question, replacing previously used dangerous and toxic filling medium such as mercury, toluene, ethylene, freon which greatly contaminate the environment. Our environmentally friendly instruments are very reliable and compared with previous types give a better performance. They measure temperatures within a range of -200° to $+600^{\circ}\text{C}$ with a fast reading response and high accuracy.

OPERATION PRINCIPLES

Changes in the measured temperature create a change of pressure within the measuring system. The bourdon tube which is connected to the movement reacts to the change in pressure and its displacement is transmitted to the pointer via the movement. Ambient temperature changes which may affect the instrument accuracy are automatically compensated by a bimetallic link mounted inside the case.