

GAS EXPANSION THERMOMETER

PEK372



Application Area

- General process instrumentation in the chemical and petrochemical industries, oil and gas industries, power generation and water/wastewater industries
- Temperature measurement in harsh and aggressive environments
- Suitable for applications with high vibrations

Special features

- Nominal sizes 100 mm
- Dial for precise readings (minimize parallax reading errors)
- Customized dial printing
- Robust, hermetically sealed case
- Silicone filled for reduction of pointer flutter on high vibration application and provides improved response times

Introduction

A gas expansion thermometer is made of a cylindrical bulb filled with inert gas & uses the volume expansion of gases at temperature changes. Gas pressure changes inside the bulb due to temperature changes, are sensed by a bourdon tube, which, connected to an amplifying device will give the pointer, movement proportional to the temperature.

The physical properties used will enable linear readings on the dial from the origin to full scale. When the reading is remote from the sensing point, a capillary is then used for transmission between the bulb and the thermometer head. Capillary armoring is common practice in industrial environments.

Case, capillary, stem and process connection are made from stainless steel. Various insertion lengths and process connections are available to match the requirements of each measuring location optimally.

We are able to offer all types with Thermowells.

Specification

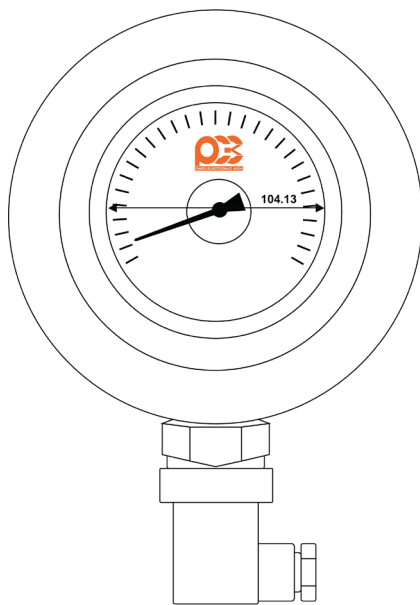
Size	100mm (4")
Stem Diameter	10mm, 14mm
Stem Material	316 Stainless Steel
Standard Stem Lengths	100mm
Capillary Length	Up to 6m
Well Connection	1/2" NPT
Case Material	304 Stainless Steel
Window	3mm Glass
Dial	White Aluminum with black markings
Pointer	Black Aluminum
Environmental Rating	IP65
Scale	Single Scale Or °C or °F
Accuracy Class	CL:1.5 - 1.5% of FSD, CL:2.0 - 2.0% of FSD

Standard Temperature Ranges

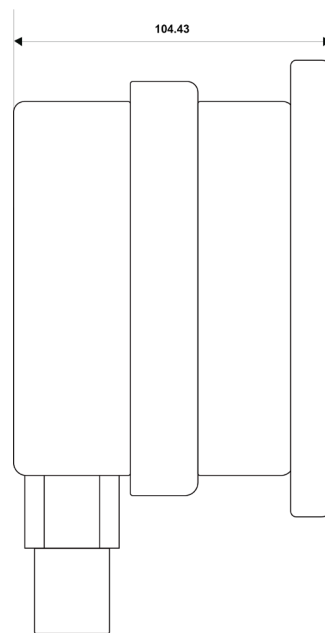
-40/+60, 0/100, 0/150, 0/200, 0/300, 0/400

Other ranges including higher temperatures ranges available on request.

Dimensions



Front View



Left View

Ordering information

For ordering please fill following table :

CODE	Nominal Diameter (mm)	Material		Filling fluid	Capillary Length	Thread size	Temperature range	Mechanical Protection	Ambient Temperature	Remark
		Case Material	Wetted Material							
										-

For Example:

CODE	Nominal Diameter (mm)	Material		Filling fluid	Capillary Length	Thread size	Temperature range	Mechanical Protection	Ambient Temperature	Remark
		Case Material	Wetted Material							
PEK372	100	SS304	SS316	NO	2 m	1/2 NPT	0-100 °C	IP65	25°C	-