

ANALOG PIRANI VACUUM GAUGE: model-M-90



Unique vacuum solutions pirani gauges have very wide range of applications where the vacuum measurement needs to be carried between 0.5 mbar to 0.001 mbar.

Working principle:

The sensor tube of the pirani gauge head consists of a high temperature co-efficient resistance filament. The filament is heated with a constant voltage supply. The variation in pressure in vacuum line causes changes concentration of gas molecules present , in turn the variation in the thermal conductivity of the gas.

Hence the heat loss of the electrically heated filament varies with respect to the pressure.

This filament is constructed as an arm of the wheat stone bridge. A slight change in system pressure brings larger change in filament resistivity resulting in an imbalance of the bridge.

this bridge imbalance current is a measure of pressure which is properly conditioned and displayed on the analog meter.

TECHNICAL SPECIFICATIONS:

Particulars	Details
Unit of measurement	m.bar
Sensor model	
Pressure range	0.5 to 0.001 mbar
Display	Continous single scale meter display with selector switch for GH selection.
Number of gauge heads	Standard Two (optional single gauge head)
Power input	220V AC, 50 Hz
Operating temp.	15 to 45 deg C
Analog output	0 to 200mV DC
Calibration	Factory set
Gauge head mounting	Orbitary (preferably vertical)
Gauge head cable	Standard 2 mtrs, extra length on request
Dimention	179mm X 98mm X 98mm
Cut out size	92 mm X 92 mm
End connection of gauge head	KF-10

UNIQUE VACUUM SOLUTIONS

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