

ANNEXURE - 1

Specifications for Compact Full Range Vacuum Gauge Heads

Quantity : 4 nos.

1)	Pressure measurement range	1000 mbar (Atmosphere) to 1×10^{-9} mbar
2)	Type of Gauge	Pirani Sensor with Cold cathode gauge
3)	Measurement Accuracy in the range 10^{-8} to 10^2 mbar	$\pm 15\%$ or better
4)	Repeatability in the range 10^{-8} to 10^2 mbar	$\pm 5\%$
5)	Filament (Pirani)	Tungsten
6)	Filament (Cold cathode)	Molybdenum
7)	Feedthrough material	Al_2O_3 , Glass
8)	Seal	FPM Elastomer or OFHC Copper
9)	Magnetic Field	< 2 Gauss at the Flange
10)	Inlet Flange Size	DN 40 CF-F
11)	Flange Material	Stainless steel
12)	Output signal: Minimum load	10 k Ohms
13)	Output signal: Pressure range	1.8 - 8.6 V
14)	Output signal: Sensor error above	9.5 V
15)	Output signal: Sensor error below	0.5 V
16)	Maximum Pressure	10 bar
17)	Control Unit Compatibility	TPG 256
18)	Sensor Cable	Suitable to connect Vacuum Gauge Head to TPG 256 Electronic Control unit to be provided
19)	Sensor cable length	3 meters
20)	Sensor Power consumption max.	2 Watts
21)	Sensor Voltage	15-30 Volts DC
22)	Bake-out temperature	150°C
23)	Operating Temperature Range	5 to 55 °C
24)	Storage Temperature Range	-40 to 65 °C
25)	Volume	20 cm ³ (Approx)
26)	General	1) User Manual and Gauge maintenance manual should be supplied along with 2) Vendor shall provide a compliance statement for the above mentioned parameters