

## **Temperature Gauge Technical Specification:**

### **Common specifications for all items:**

Capillary and Contact Type Temperature Gauge having the following specification:

- a) Make : Mass, Ashcroft, Wika, General Instrument, Micro Process Controls, Millennium Instruments, Care Process, Akvalo, Waree, H-Guru, Odin, Osmadial, Altop, Gluck, Forbes Marshall, AN Instruments or GSECL Approved vendor.
- b) Range: 0 to 150 Deg C, Dial Size: 150 mm, Capillary length: 7.5 Meter.
- c) Case and bezel: Weather proof aluminum case with bezel/SS Snap Action type.
- d) Protection: Weather proof and confirming to IP 65 or better.
- e) Process Connection: 1/2 inch BSP (M), Adjustable throughout the bulb length.
- f) Entry / Mounting: Bottom Entry, Surface Mounting type
- g) Bulb / Stem Length: 270 mm,
- h) Bulb / Stem Dia: **as per Item wise specification.**
- i) Bulb / Stem Material: SS 316
- j) Capillary Material : SS Capillary Covered with S.S flexible armoring
- k) Movement Material: SS 304,Contact: 02 (Two) no. of normally open contacts (without relay)
- l) Contact Rating: 30W at 220VDC,Contact Action: To be closed on rising of temperature
- m) Contact Setting: Manually throughout the range span independently adjustable
- n) Accuracy: +/- 1.0% FSD.

### **Item wise additional specifications:**

#### **Sr. no-1:**

- a) Bulb / Stem Dia: **6.0 mm**

#### **Sr. no-2:**

- a) Bulb / Stem Dia: **8.0 mm**

#### **Sr. no-3:**

- a) Bulb / Stem Dia: **10.0 mm**

## **Pressure Gauge Technical Specification:**

### **General Specifications:**

- 1. Make: GSECL Approved vendors / any make supplied to GSECL units / NTPC / SEBs / Power Plant Units
- 2. Type: Direct reading
- 3. Mounting: Local
- 4. Entry position: Bottom
- 5. Dial: Aluminum white background & black numerals
- 6. Case material: Die cast Aluminum
- 7. Enclosure Protection: Weather proof to IP 68
- 8. Window: Shatter proof toughened Glass
- 9. Sensing Element: Bourdon
- 10. Sensing element material: SS316

11. Movement material: SS 304
12. Wetted parts: SS316
13. Accuracy: +/-1% of FSD
14. Repeatability: +/-1% of FSD
15. Over range protection: 150 % of Span
16. Zero & Span adjustment: To be provided
17. Pointer type: Micrometer screw for zero adjustment
18. Blowout Protection: To be provided
19. Joints: Argon Arc welded

**Item wise additional specification**

**1. CHLORINATION PLANT DIAPHRAGM SEAL TYPE PRESSURE GAUGE, Range: - 0 to 25 kg/cm<sup>2</sup>**

- Range: 0 to 25 kg/cm<sup>2</sup>
- Dial size: 150mm
- Process Connection: ½" NPT (M)
- Service: Liquid & Gas Chlorine
- Diaphragm Seal:
  - 1) Diaphragm seal connection: 1/2" NPT (MXF)
  - 2) Upper housing material: SS304
  - 3) Diaphragm material: SS316+PTFE
  - 4) Lower housing material: SS 316 +PTFE
  - 5) Filling liquid: Silicon oil

**2. BURDON WITH DIAPHRAGM SEAL PRESSURE GAUGE, RANGE: 0-6KG/CM<sup>2</sup>, DIAL: 150MM, ENTRY: BOTTOM, CONNECTION: 1/2" NPT (M), SEALING MEDIUM: SILICONE OIL.**

- Range: 0 to 6 kg/cm<sup>2</sup>
- Dial Size: 150 mm
- Process Connection: ½" NPT (M)
- Service: Liquid & Gas Chlorine
- Diaphragm Seal:
  - 6) Diaphragm seal connection: 1/2" NPT (MXF)
  - 7) Upper housing material: SS304
  - 8) Diaphragm material: SS316+PTFE
  - 9) Lower housing material: SS 316 +PTFE
  - 10) Filling liquid: Silicon oil

**3. VACCUUM GAUGE, RANGE : -760MM TO 0 MMHG, DIAL SIZE : 6", CONNECTION : 1/2" NPT (M), ACCURACY : +/-1% FSD**

- Range: -760 MMHG to 0 MMGH
- Dial Size: 150mm
- Process Connection: ½" NPT (M)
- Service: Liquid & Gas Chlorine
- Diaphragm Seal:
  - 11) Diaphragm seal connection: 1/2" NPT (MXF)
  - 12) Upper housing material: SS304
  - 13) Diaphragm material: SS316+PTFE
  - 14) Lower housing material: SS 316 +PTFE
  - 15) Filling liquid: Silicon oil

**4. PRESSURE GAUGE DIAPHRAGM, RANGE: 0 to 500 MMWC, DIAL: 100MM, ENTRY: BOTTOM, CONNECTION: 1/2" NPT (M).**

- Range: -0 MMWC to 500 MMWC
- Dial Size: 100mm
- Process Connection: ½" NPT (M)
- Service: Liquid & Gas Chlorine
- Sensing element: Diaphragm
- Upper housing material: SS304
- Diaphragm material: SS316+PTFE
- Lower housing material: SS 316 +PTFE
- Filling fluid: Silicon oil
- Accuracy: +/- 2% of FSD
- Snubber: To be provided
- Snubber material: SS316
- Snubber connection: ½" NPT (MXF)

**5. BURDON WITH DIAPHRAGM SEAL PRESSURE GAUGE,RANGE:0-4KG/CM2,DIAL:150MM,ENTRY:BOTTOM, CONNECTION: 1/2" NPT (M),SEALING MEDIUM: SILICONE OIL.**

- Range: 0 to 4 kg/cm<sup>2</sup>
- Dial Size: 150 mm
- Process Connection: ½" NPT (M)
- Service: Liquid & Gas Chlorine
- Diaphragm Seal:
  - 16) Diaphragm seal connection: 1/2" NPT (MXF)
  - 17) Upper housing material: SS304
  - 18) Diaphragm material: SS316+PTFE
  - 19) Lower housing material: SS 316 +PTFE

Filling liquid: Silicon oil

**6. PRESSURE GAUGE RANGE 0- 6 KG/ CM SQ. DIAL 150 MM END CONNECTION 1/2 INCH NPT (M) MOUNTING BOTTAM ENTRY.**

- Range: 0 to 6 kg/cm<sup>2</sup>
- Dial Size: 150 mm
- Process Connection: ½" NPT (M)

**7. PRESSURE GAUGE,SS BOURDEN TYPE, 0-10KG/CM<sup>2</sup>,1/2" NPT (M) CONNECTION, BOTTOM ENTRY,100MM DIAL SIZE.**

- Range: 0 to 10 kg/cm<sup>2</sup>
- Dial Size: 100 mm
- Process Connection: ½" NPT (M)

**8. PRESSURE GAUGE RANGE 0-16 KG/CM<sup>2</sup> SIZE 100 MM**

- Range: 0 to 16 kg/cm<sup>2</sup>
- Dial Size: 100 mm
- Process Connection: 1/4" NPT (M)