

SECTION 22 05 19
METERS AND GAGES FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 DESCRIPTION

This section describes the requirements for pressure gages and thermometers.

1.2 RELATED WORK

Section 22 05 11, COMMON WORK RESULTS FOR PLUMBING.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, and SAMPLES.
- B. Manufacturer's Literature and Data:
Pressure Gages and Thermometers:
 - 1. Catalog cuts showing design, construction, dimensions of gages and accessories.
 - 2. Accuracy.
 - 3. Pressure and temperature limitations of gages and accessories.
 - 4. List of scale ranges to be provided.

1.4 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American National Standards Institute (ANSI):
American Society of Mechanical Engineers (ASME): (Copyrighted Society)
B40.1-05.....Gauges-Pressure Indicating Dial Type-Elastic

PART 2 - PRODUCTS

2.1 PRESSURE GAGES - PIPE MOUNTED

- A. General: Pressure Gage locations are indicated on the drawings.
- B. Construction:
 - 1. ANSI B40.1, stainless steel case 114 mm (4-1/2 inches) diameter, bottom connected, identity labeled.
 - 2. Range: 0 psi gauge and select top end range so operating pressure is in the middle of the gauge.
 - 3. Case/Dial: Stainless steel back with glass case. The dial face shall be non-reflective aluminum with permanently etched scale markings graduated in psi.
 - 4. Form: Bourdon tube style, dial type, glycerin filled.

5. The accuracy shall be plus or minus 1 percent of middle half of scale range.

2.2 THERMOMETERS - PIPE MOUNTED

- A. General: Thermometer locations are indicated on the drawings.
- B. Construction:
 1. Industrial type, 3" minimum dial, identity labeled.
 2. Range: 0 to 250F.
 3. Case/Dial: Stainless steel back with glass face.
 4. Form: Bimetal, dial type, with hermetically sealed case to prevent fogging.
 5. Accuracy: Plus or minus 1 percent of scale range.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Direct mounted Pressure Gages and Thermometers shall be installed in piping tees with gage located on pipe at the most readable position.
- B. Ball Valves shall be installed in piping for each Pressure Gage and Thermometer; provide snubber on Pressure Gages.
- C. Pressure Gages and Thermometers shall be installed where indicated on the drawings.

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