SECTION 22 05 19
METERS AND GAGES FOR PLUMBING PIPING

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Thermometers.
2. Gages.
3. Test plugs.

PART 2 - PRODUCTS

2.01 METAL-CASE, LIQUID-IN-GLASS THERMOMETERS

A. Case: Die-cast aluminum 7 inches long.

B. Tube: Red or blue reading, organic-liquid filled, with magnifying lens.

2.02 PLASTIC-CASE, LIQUID-IN-GLASS THERMOMETERS

A. Case: Plastic, 7 inches long.

B. Tube: Red or blue reading, mercury or organic-liquid filled, with magnifying lens.

2.03 DIRECT-MOUNTING, VAPOR-ACTUATED DIAL THERMOMETERS

A. Case: Dry type, drawn steel or cast aluminum, 4-1/2-inch diameter.

B. Element: Bourdon tube or other type of pressure element.

2.04 REMOTE-MOUNTING, VAPOR-ACTUATED DIAL THERMOMETERS

A. Case: Case: Dry type, drawn steel or cast aluminum, 4-1/2-inch diameter with holes for panel mounting.

B. Element: Bourdon tube or other type of pressure element.

2.05 BIMETALLIC-ACTUATED DIAL THERMOMETERS

A. Description: Direct-mounting, bimetallic-actuated dial thermometers complying with ASME B40.3.

2.06 THERMOWELLS

A. Description: Pressure-tight, socket-type metal fitting made for insertion into piping and of type, diameter, and length required to hold thermometer.

2.07 PRESSURE GAGES

A. Direct-Mounting, Dial-Type Pressure Gages: Indicating-dial type complying with ASME B40.100.

B. Remote-Mounting, Dial-Type Pressure Gages: ASME B40.100, indicating-dial type.

C. Pressure-Gage Fittings:
1. Valves: NPS 1/4 brass or stainless-steel needle type.
2. Snubbers: ASME B40.5, NPS 1/4 brass bushing with corrosion-resistant, porous-metal disc of material suitable for system fluid and working pressure.

2.08 TEST PLUGS

A. Description: Corrosion-resistant brass or stainless-steel body with core inserts and gasketed and threaded cap, with extended stem for units to be installed in insulated piping.

B. Minimum Pressure and Temperature Rating: 500 psig at 200 deg F

PART 3 - EXECUTION

3.01 THERMOMETER APPLICATIONS

A. Install liquid-in-glass thermometers in the outlet of each domestic, hot-water storage tank.

B. Install dry -case-type, vapor actuated dial thermometers at suction and discharge of each pump.

3.02 GAGE APPLICATIONS

A. Install dry-case-type pressure gages for discharge of each pressure-reducing valve.

B. Install dry case-type pressure gages at suction and discharge of each pump.

END OF SECTION 22 05 19