

TYPICAL SPECIFICATIONS

BALANCING VALVES

½" (DN15) – 12" (DN300)

1.0 **General** - Furnish and install, as shown on the drawings and/or schedules, Oventrop balancing valves, to ensure the accurate balancing of all flows in the hydronic heating and cooling systems. Water balancing shall meet the specified flows with a maximum tolerance of +/- 10%. Upon completion, the balancing shall be documented in a report, which shall be submitted to the engineer for approval.

2.0 Balancing Valve Characteristics

2.1 All balancing valves shall be of the "Y" pattern globe style design. All balancing valves must offer a minimum of seven (7) full rotations of the handwheel for positioning accuracy of +/- 1%.

2.2 All balancing valves shall have documented measuring accuracy of +/- 7% within the normal setting range of the valve.

2.3 All balancing valves shall have integral self-sealing ports for measuring differential pressure and fluid temperature using standard pressure and temperature test probes. Test ports shall be located in-line with the handwheel, on the same end of the valve and shall be removable to function as integral drain ports.

2.4 All balancing valves must offer 100% positive, leak-proof shutoff against the same fluid temperature and pressure ratings as the body. Minimum body ratings are 232 psi (PN16) at 300 degrees F (150 C).

2.5 All balancing valves must include a hidden memory stop to ensure return to the balanced position after shutoff. An enclosed anti-tamper lock feature shall prevent handwheel repositioning after setting.

2.6 All balancing valves ½" (DN15) through 12" (DN300) shall have digital/vernier adjustment for precise readout.

2.7 All balancing valves shall be manufactured by the company complying with international quality standard ISO 9001.

2.8 (Option) All balancing valves in sizes ½" (DN15) through 8" (DN200) shall be capable of being enclosed within factory contoured insulations with ASTM flame spread of 25 or less and a rating of E-84. Insulation "R" value shall be 4.5.

2.9 (Option) A valved hose bib fitting shall be available for installation on all ½" (DN15) through 12" (DN300) sizes. The hose bib fitting shall be capable of being placed on either side of the valve plug to accommodate draining and filling of horizontal or vertical coils.

3.0 **Material Characteristics** - All balancing valves in sizes ½" (DN15) through 2" (DN50) shall have bronze bodies and shall have either solder or NPT threaded connections to match the piping system. Valve bodies in sizes 2 ½" (DN65) through 12" (DN300) shall be manufactured from cast iron equivalent to ASME/ANSI B16.5 and shall be flanged to 125 lb. standards. All wetted brass parts shall be alloyed to resist dezincification. No dielectric fittings shall be required for installation.

4.0 **Valve Sizing** - All balancing valves shall be sized to perform in a normal operation range between 25% and 100% of the full open position, at a minimum differential pressure between 1 to 3 ft. WG.

5.0 **Manufacturer** - Oventrop Corporation.

6.0 **Warranty** - Valves shall be free from material and workmanship defects for a period of 5 years from date of installation or from 5 1/2 years from date of shipment, whichever comes first.

Oventrop reserves the right to make revisions to its products, their specifications, this bulletin, and related information without notice.

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