GENERAL SPECIFICATIONS

Model 120-2 Rate of Flow Control Valve & Pressure Reducing Valve

1.1 General

The rate of flow/pressure reducing control valve shall function to reduce a higher upstream pressure to a constant, lower downstream pressure while limiting the flow to a predetermined rate. The rate of flow/pressure reducing control valve shall be a <size> Model 120-2, <globe pattern, angle pattern>, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

1.2 Design

The rate of flow/pressure reducing control valve shall be a single-seated, line pressure operated, diaphragm actuated, pilot controlled globe valve. The valve shall seal by means of a corrosion-resistant seat and a resilient, rectangular seat disc. These, and other parts, shall be replaceable without removing the valve from the line. The stem of the main valve shall be guided top and bottom by integral bushings. Alignment of the body, bonnet and diaphragm assembly shall be by precision dowel pins. The diaphragm shall not be used as a seating surface, nor shall the pistons be used as an operating means. The orifice plate shall be integrally-installed in the valve inlet flange. The pilot system shall be furnished complete and installed on the main valve. It shall include a needle valve speed control, Y-strainer and isolation ball valves. The rate of flow/pressure reducing control valve shall be operationally and hydrostatically tested prior to shipment.

1.3 Materials of Construction

The main valve body and bonnet shall be ductile iron per ASTM A536, Grade 65-45-12. End connections shall be <ANSI B16.42 Class 150# flange > <ANSI B16.42 Class 300# flange>, <ANSI B1.20.1 threaded> <grooved ends>. All ferrous surfaces shall be coated with a minimum of 4 mils of an NSF-61 approved epoxy. The main valve seat ring shall be bronze. Elastomers (diaphragms, resilient seats and O-rings) shall be Buna-N. The control pilots shall be bronze. The opening speed control and isolation ball valves shall be brass, and control line tubing shall be copper. The orifice plate shall be stainless steel.

1.4 Operating Conditions

The rate of flow/pressure reducing control valve shall be suitable for controlling the downstream pressure to **<X>** psi, with inlet pressures ranging from **<X** to **X>** psi, and limiting the flow rate to **<X>** gpm.