GENERAL SPECIFICATIONS

Model 8105 Modulating Float Valve (Typically 8" and larger)

1.1 General

The modulating float valve shall be installed on the inlet line to the tank and shall modulate to hold a constant level in the tank, thus balancing inflow and outflow levels. The modulating float valve shall include a simple two-way, adjustable, air-gap type float pilot to be installed in the tank and be connected to the main valve by a single, customer-installed sense line. The modulating float valve shall be a <size> Model 8105, <globe pattern, angle pattern>, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

1.2 Design

The modulating float 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 pilot system shall include a speed control, Y-strainer and isolation ball valves. The float pilot shall be furnished separately for remote mounting in the tank. The modulating float 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 float pilot shall be bronze, with stainless steel internals. The 5" spherical float shall be stainless steel, as shall the float rods and linkage. The isolation ball valves shall be brass, and control line tubing shall be copper.

1.4 Operating Conditions

The modulating float valve shall be suitable for a maximum flow rate of **<X>** gpm at inlet pressures ranging from **<X** to **X>** psi.