

# GENERAL SPECIFICATIONS

## *Model 94-3 Check Valve with Opening & Closing Speed Control*

### **1.1 General**

The check valve will be installed on the discharge of the booster pump. It will open when upstream pressure exceeds downstream pressure, and close tightly to prevent backflow when downstream pressure exceeds upstream pressure. The opening and closing speeds of the valve shall be independently adjustable. The valve shall include a visual indicator assembly. The check valve shall be a <size> Model 94-3, <globe pattern, angle pattern>, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

### **1.2 Design**

The check 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 be furnished complete and installed on the main valve. It shall include opening and closing speed controls, a Y-strainer and isolation ball valves. The check 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 speed controls and isolation ball valves shall be brass, and control line tubing shall be copper.

### **1.4 Operating Conditions**

The check valve shall be suitable for a maximum inlet pressure of <X> psi and a maximum forward flow rate of <X> gpm.