Automatic Control Valves

Diaphragm Control Valves

Automatic Control Valves that function off in-line pressure sensing have been used in varying forms for almost one hundred years.

The two main types of control valves are the diaphragm valve and the piston valve. The diaphragm valve is simpler in operation and contains fewer moving parts, making it easier and less costly to maintain. The same basic diaphragm valve (in either body style) can be manufactured to perform a wide variety of operations. The valve body will remain the same, with changes only to the auxiliary piping. A major advantage to this arrangement is that a valve that is performing one operation can be reconfigured to perform a completely different function without ever removing it from the system.

Some of the uses of Automatic Control Valves are:

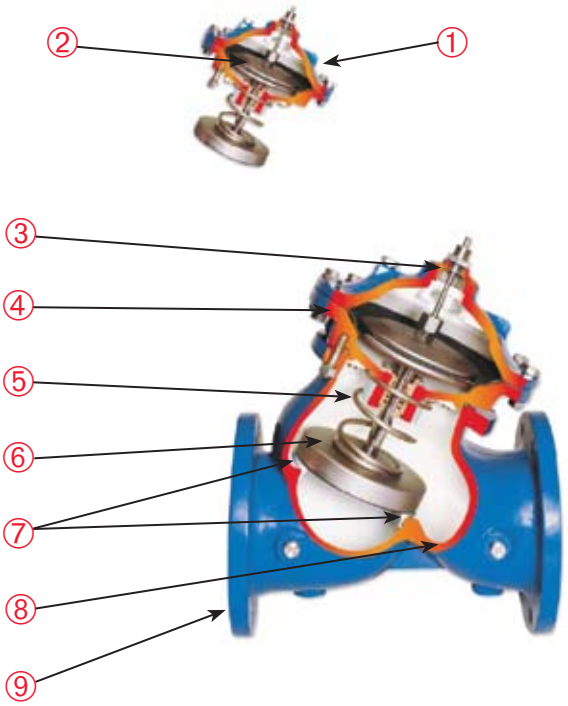
1. **Tank Altitude Control**
   - Single or double acting
   - With opening and/or closing speed control
2. **Booster Pump Control**
   - With or without lift check
   - With opening/closing speed control
3. **Pressure Reducing/Sustaining**
   - Maintain minimum upstream pressure
   - Limit downstream pressure
   - With or without check
4. **Pressure Relief/Surge Control**
   - With solenoid control, if required
5. **Float**
   - With or without remote float mounting

NOTE: Control valves performing other operations are available. Please contact your local Team EJP sales office for information or assistance in specifying or ordering a valve to meet your needs.

Series 700 Product Features:

1. **Double-Chambered Actuator**
   - Actuator assembly can be removed as one integral unit. Simple on-site conversion to single-chambered
   - Same valve body accepts both actuators (Diaphragm and Piston)
2. **Diaphragm Assembly**
   - The flexible, unshaped, nylon-reinforced diaphragm is supported over the majority of its surface.
   - Diaphragm load is limited to only the stretching forces applied to the active area.
3. **Cover Plug**

   Enables on-site retrofit of:
   - Indicator [4A]: For visual valve position indication
   - Limit Switch: For signaling valve position.
   - Position Transmitter: For analog transmission of valve position.



4. **Inherent Separation Partition**
   - The inherent separation includes the bearing [5A], which provides complete central guiding for the valve moving assembly.
   - The separation partition separates the lower control chamber from the flow in both the single-chambered, and the double-chambered configurations.
5. **Spring**
   - Required for single-chambered configurations. Superfluous for double-chambered configurations (unless check feature is required).
6. **Seal Disc Assembly**
   - Self-aligning, seal disk assembly provides balanced, free movement and a resilient seal for perfect, drip-tight sealing.
   - It enables using several variations of seals and plugs for a wide range of applications and working conditions.
7. **Seat**
   - Stainless steel, raised, replaceable in-line and on-site.
8. **Wide Body ("Y" or Angle pattern)**
   - Hydro-dynamically designed for efficient flow with minimal pressure loss and excellent resistance to cavitation. Full bore, valve port area clear of obstructions; no ribs or stem guides. Increases capacity by 25% over standard globe valves.
9. **End Connections**
   - Conforms to pressure ratings and standards of: ISO, ANSI, JIS, BS, and others.