The Model 115-26 has an extremely wide range of applications: anywhere it is necessary to open and close a valve electrically and reverse flow must be prevented. Typical examples include:

- Process control
- Irrigation systems
- Petroleum loading terminals
- Storage tank level control
- Automated wash systems
- Automated fountains
- Dust control

SERIES FEATURES

- Electrically operated solenoid allows valve to open or close
- Can be maintained without removal from the line
- Adjustable response speed
- Factory tested and can be pre-set to your requirements
- Check feature closes valve on pressure reversal

OPERATION

A two-way solenoid, when closed, causes the main valve to close. Opening the solenoid opens the valve. The pilot system is equipped with a needle valve that allows the opening and closing speed of the valve to be adjusted.

The solenoid can be supplied normally closed (energize to open) or normally open (energize to close).

If downstream pressure becomes greater than upstream pressure, the valve will fully close to prevent reverse flow.

COMPONENTS

The Model 115-26 consists of the following components, arranged as shown on the schematic diagram:

1. Model 65 Basic Control Valve
2. Model 451 Two-way Solenoid Pilot
3. Model 126 Ejector
4. Model 141-2 Needle Valve (adjustable response speed)
5. Model 141-1 Check Valve
6. Model 159 Y-strainer
7. Model 141-4 Isolation Ball Valves
8. Model 155 Visual Indicator (Optional)

RECOMMENDED INSTALLATION

- Install the valve with adequate space above and around the valve to facilitate servicing. Refer to the Dimension table.
- Valve should be installed with the bonnet (cover) at the top, particularly 8” and larger valves, and any valve with a limit switch.
- Shut-off valves should be installed upstream and downstream of the control valve. These are used to isolate the valve during startup and maintenance.
- Wire the valve solenoid via conduit appropriate to the application.

SIZING

Definitive sizing information can be found in the OCV Catalog, Series 115 section and Engineering section Performance Charts. Consult the factory for assistance and a copy of the OCV ValveMaster sizing program.

MAX. PRESSURE

The pressures listed here are maximum pressures at 100°F. Also, working pressures of solenoids vary greatly; consult factory on application of OCV Model 115-26 valves when pressures exceed those stated in chart.

<table>
<thead>
<tr>
<th>END CONNECTIONS</th>
<th>DUCTILE IRON</th>
<th>STEEL/STN STL</th>
<th>LOW-LEAD BRONZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threaded</td>
<td>300 psi</td>
<td>300 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>Grooved</td>
<td>300 psi</td>
<td>300 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>150# Flanged</td>
<td>250 psi</td>
<td>285 psi</td>
<td>225 psi</td>
</tr>
<tr>
<td>300# Flanged</td>
<td>300 psi</td>
<td>300 psi</td>
<td>300 psi</td>
</tr>
</tbody>
</table>
**SIZES GLOBE/ANGLE**

- Screwed Ends: 1 1/4" - 3" (globe); 1 1/2" - 4" (angle)
- Grooved Ends: 1 1/4" - 2 1/2" (globe); 1 1/2" - 4 1/2" (angle)

**FLUID OPERATING TEMPERATURE RANGE**

(Valve Elastomers)

- EPDM: 32°F - 230°F*

**MATERIALS**

Consult factory for others.

- **Body/Bonnet:** Ductile Iron (epoxy coated), Carbon Steel (epoxy coated), Stainless Steel, low-lead Bronze
- **Seat Ring:** low-lead Bronze, Stainless Steel
- **Stem:** Stainless Steel, Monel
- **Diaphragm:** EPDM*
- **Seat Disc:** EPDM*
- **Tubing & Fittings:** Copper/Brass, Stainless Steel
- **Solenoid:**
- **Enclosure:** Weatherproof NEMA 4X / Explosion Proof NEMA 4X, 6P, 7, 9
- **Body:** Brass, Stainless Steel
- **Voltages:** 24, 120, 240, 480 VAC / 12, 24 VDC

*Others available upon request.

**OPERATING CONDITIONS**

The solenoid shut-off and check valve shall be suitable for pressures of <X> psi at flow rates up to <X> gpm.

**ACCEPTABLE PRODUCTS**

The solenoid shut-off and check valve shall be a <size> Model 115-26, <globe pattern, angle pattern>, with <150# flanged, 300# flanged, threaded, grooved> end connections, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

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**SPECIFICATIONS** (Typical Water Application)

The solenoid shut-off and check valve shall open and close via discrete electrical signals. The valve shall be equipped with a two-way solenoid valve that will allow the valve to open when <energized, deenergized>. If downstream pressure becomes greater than upstream pressure, the valve will close fully to prevent reverse flow.

**DESIGN**

The solenoid shut-off and 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 pistons be used as an operating means. The pilot system shall be furnished complete and installed on the main valve. It shall include a needle valve, Y-strainer, solenoid valve, pilot check valves, and isolation ball valves. The solenoid shut-off and check valve shall be operationally and hydrostatically tested prior to shipment.

**MATERIALS OF CONSTRUCTION**

The main valve body and bonnet shall be ductile iron per ASTM A536, Grade 65-45-12. All ferrous surfaces shall be coated with 4 mils of epoxy. The main valve seat ring shall be low-lead Bronze. Elastomers (diaphragms, resilient seats and O-rings) shall be EPDM. The needle valve and isolation ball valves shall be brass, and control line tubing shall be copper. The solenoid shall have a brass body, weatherproof enclosure and be suitable for operation on <voltage>.

**U.S. DIMENSIONS - INCHES**

<table>
<thead>
<tr>
<th>U.S. Dimensions</th>
<th>Inches</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>2 1/2</td>
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<td>3</td>
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</tbody>
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**How to order your Model 115-26 valve**

**When ordering please provide:**

- Fluid to be controlled - Model Number - Size
- Globe or Angle - End Connection - Body Material
- Trim Material - Solenoid Voltage - Energize to Open or Close Valve - Solenoid enclosure Weatherproof or Explosion Proof - Special Requirements / Installation requirements

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- **website:** www.controlvalves.com