The Series 110 Differential Control Valve is designed to accurately control the pressure difference between any two points. It is especially suitable where the application permits some leakage without over-pressure, and where a constant pressure drop at the valve is called for. It is also designed to control the pressure differential to a limit and maintain both points at different differential pressure constants, thus assuring pump is at optimum point on its curve.

The Series 110 valve is also available in a variety of sizes and pressures to assure the proper selection. It is designed for use in systems where the valve is subject to pressures up to 5000 psi, or where the valve is subject to temperatures up to 200 F. It is constructed to meet the requirements of the ASME Boiler and Pressure Vessel Code and is fabricated to the ASME SA213 and SA216 standards.

The valve is equipped with a pilot assembly that controls the opening of the valve. The pilot assembly is adjustable from 0 to 100 psi and is used to set the pressure drop at the valve. The pilot assembly is also used to set the differential pressure at the valve. The valve is designed to operate automatically or manually, depending on the application. It is also designed to be easily maintained without removing the valve from the piping system. The valve is provided with alignment pins for proper installation and is factory-tested.

Filter/Bypass Control

When the valve is closed, the bypass line is open and allows the fluid to flow through the bypass line. This is done to prevent any backflow into the system when the valve is closed. When the valve is opened, the bypass line is closed and the fluid flows through the valve. This is done to prevent any fluid from bypassing the valve and going around it.

Pump Differential Control

When the pump is started or stopped, the valve will automatically adjust the pressure drop at the valve to the desired setting. This is done to prevent any surge or pressure spikes in the system when the pump is started or stopped.

Series Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Valve Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Specifications

<table>
<thead>
<tr>
<th>Model 110 shown</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIESFEATURES</td>
</tr>
<tr>
<td>DIMENSIONS</td>
</tr>
<tr>
<td>VALVEFEATURES</td>
</tr>
<tr>
<td>FILTERBYPASS CONTROL</td>
</tr>
<tr>
<td>PUMPDIFFERENTIALCONTROL</td>
</tr>
</tbody>
</table>

The Series 110 Differential Control Valve is designed to accurately control the pressure difference between any two points. It is especially suitable where the application permits some leakage without over-pressure, and where a constant pressure drop at the valve is called for. It is also designed to control the pressure differential to a limit and maintain both points at different differential pressure constants, thus assuring pump is at optimum point on its curve.

The Series 110 valve is also available in a variety of sizes and pressures to assure the proper selection. It is designed for use in systems where the valve is subject to pressures up to 5000 psi, or where the valve is subject to temperatures up to 200 F. It is constructed to meet the requirements of the ASME Boiler and Pressure Vessel Code and is fabricated to the ASME SA213 and SA216 standards.

The valve is equipped with a pilot assembly that controls the opening of the valve. The pilot assembly is adjustable from 0 to 100 psi and is used to set the pressure drop at the valve. The pilot assembly is also used to set the differential pressure at the valve. The valve is designed to operate automatically or manually, depending on the application. It is also designed to be easily maintained without removing the valve from the piping system. The valve is provided with alignment pins for proper installation and is factory-tested.

Filter/Bypass Control

When the valve is closed, the bypass line is open and allows the fluid to flow through the bypass line. This is done to prevent any backflow into the system when the valve is closed. When the valve is opened, the bypass line is closed and the fluid flows through the valve. This is done to prevent any fluid from bypassing the valve and going around it.

Pump Differential Control

When the pump is started or stopped, the valve will automatically adjust the pressure drop at the valve to the desired setting. This is done to prevent any surge or pressure spikes in the system when the pump is started or stopped.

Series Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Valve Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Specifications

<table>
<thead>
<tr>
<th>Model 110 shown</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIESFEATURES</td>
</tr>
<tr>
<td>DIMENSIONS</td>
</tr>
<tr>
<td>VALVEFEATURES</td>
</tr>
<tr>
<td>FILTERBYPASS CONTROL</td>
</tr>
<tr>
<td>PUMPDIFFERENTIALCONTROL</td>
</tr>
</tbody>
</table>

The Series 110 Differential Control Valve is designed to accurately control the pressure difference between any two points. It is especially suitable where the application permits some leakage without over-pressure, and where a constant pressure drop at the valve is called for. It is also designed to control the pressure differential to a limit and maintain both points at different differential pressure constants, thus assuring pump is at optimum point on its curve.

The Series 110 valve is also available in a variety of sizes and pressures to assure the proper selection. It is designed for use in systems where the valve is subject to pressures up to 5000 psi, or where the valve is subject to temperatures up to 200 F. It is constructed to meet the requirements of the ASME Boiler and Pressure Vessel Code and is fabricated to the ASME SA213 and SA216 standards.

The valve is equipped with a pilot assembly that controls the opening of the valve. The pilot assembly is adjustable from 0 to 100 psi and is used to set the pressure drop at the valve. The pilot assembly is also used to set the differential pressure at the valve. The valve is designed to operate automatically or manually, depending on the application. It is also designed to be easily maintained without removing the valve from the piping system. The valve is provided with alignment pins for proper installation and is factory-tested.

Filter/Bypass Control

When the valve is closed, the bypass line is open and allows the fluid to flow through the bypass line. This is done to prevent any backflow into the system when the valve is closed. When the valve is opened, the bypass line is closed and the fluid flows through the valve. This is done to prevent any fluid from bypassing the valve and going around it.

Pump Differential Control

When the pump is started or stopped, the valve will automatically adjust the pressure drop at the valve to the desired setting. This is done to prevent any surge or pressure spikes in the system when the pump is started or stopped.

Series Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Valve Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Specifications

<table>
<thead>
<tr>
<th>Model 110 shown</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIESFEATURES</td>
</tr>
<tr>
<td>DIMENSIONS</td>
</tr>
<tr>
<td>VALVEFEATURES</td>
</tr>
<tr>
<td>FILTERBYPASS CONTROL</td>
</tr>
<tr>
<td>PUMPDIFFERENTIALCONTROL</td>
</tr>
</tbody>
</table>

The Series 110 Differential Control Valve is designed to accurately control the pressure difference between any two points. It is especially suitable where the application permits some leakage without over-pressure, and where a constant pressure drop at the valve is called for. It is also designed to control the pressure differential to a limit and maintain both points at different differential pressure constants, thus assuring pump is at optimum point on its curve.

The Series 110 valve is also available in a variety of sizes and pressures to assure the proper selection. It is designed for use in systems where the valve is subject to pressures up to 5000 psi, or where the valve is subject to temperatures up to 200 F. It is constructed to meet the requirements of the ASME Boiler and Pressure Vessel Code and is fabricated to the ASME SA213 and SA216 standards.

The valve is equipped with a pilot assembly that controls the opening of the valve. The pilot assembly is adjustable from 0 to 100 psi and is used to set the pressure drop at the valve. The pilot assembly is also used to set the differential pressure at the valve. The valve is designed to operate automatically or manually, depending on the application. It is also designed to be easily maintained without removing the valve from the piping system. The valve is provided with alignment pins for proper installation and is factory-tested.

Filter/Bypass Control

When the valve is closed, the bypass line is open and allows the fluid to flow through the bypass line. This is done to prevent any backflow into the system when the valve is closed. When the valve is opened, the bypass line is closed and the fluid flows through the valve. This is done to prevent any fluid from bypassing the valve and going around it.

Pump Differential Control

When the pump is started or stopped, the valve will automatically adjust the pressure drop at the valve to the desired setting. This is done to prevent any surge or pressure spikes in the system when the pump is started or stopped.

Series Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Valve Features

- Operates automatically or manually
- Heavy-duty, nylon-reinforced
- Rectangular-shaped, soft
- Diaphragm assembly
- Guide pin assembly
- Replaceable seat ring
- Alignment pins assure proper position after maintenance
- Valves are factory tested
- Valves are serial numbered and equipped with a factory test report

Specifications

<table>
<thead>
<tr>
<th>Model 110 shown</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIESFEATURES</td>
</tr>
<tr>
<td>DIMENSIONS</td>
</tr>
<tr>
<td>VALVEFEATURES</td>
</tr>
<tr>
<td>FILTERBYPASS CONTROL</td>
</tr>
<tr>
<td>PUMPDIFFERENTIALCONTROL</td>
</tr>
</tbody>
</table>
Differential Control Valve Series 110

VALVE OPERATION

The OCV Model 110 is a pressure-compensated pilot valve that maintains a constant differential pressure between two points in a system. It provides the proper pressure to the diaphragm chamber of the main valve, allowing the main valve to open or close depending on the position of the differential pilot. It maintains a constant differential pressure between two points in a system. Valve opens on increased differential.

FLOW RATE

The OCV Model 110 is a two-way, normally closed pilot valve that senses the valve opening/closing speed of the main valve, depending on the position of the differential pilot. It maintains a constant differential pressure between two points in a system. Valve opens on increased differential.

PILOT 110

- Simple, single adjustment of differential set point.
- All parts replaceable while mounted on the valve.
- Accurate sensing of high and low pressure.
- Normally closed, pressure differential to open.
- Multiple spring ranges.
- Bronze or stainless steel construction.
- Large area diaphragm for quick, precise control.
- Rubber-to-metal seat provides positive closure until required to open.

TOLL FREE 1.888.628.8258

email: sales@controlvalves.com

Global performance. Personal touch.

SIZING CONSIDERATIONS

SIZING DIFFERENTIAL CONTROL VALVES

Because the Model 110 typically controls the differential pressure, that particular parameter of the sizing equation is already defined. All that remains is to ensure the valve's size is large enough to handle the required flow within proper velocity limits.

\[
C_v = \frac{Q}{\sqrt{dp}}
\]

where:

- \( C_v \) = valve coefficient
- \( Q \) = Maximum flow rate, gpm
- \( dp \) = Differential pressure, psig

From the chart above, pick the smallest valve that has a \( C_v \) at least equal to the value calculated and where the velocity does not exceed 25 ft/sec.

### SIZE

<table>
<thead>
<tr>
<th>CV</th>
<th>GPM</th>
<th>CV</th>
<th>GPM</th>
<th>FLOW MP</th>
<th>25FT/SEC (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>200</td>
<td>1.1</td>
<td>400</td>
<td>400</td>
<td>1350</td>
</tr>
<tr>
<td>1½</td>
<td>100</td>
<td>1.8</td>
<td>300</td>
<td>300</td>
<td>1150</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>3.0</td>
<td>150</td>
<td>150</td>
<td>750</td>
</tr>
<tr>
<td>2½</td>
<td>20</td>
<td>4.7</td>
<td>87</td>
<td>87</td>
<td>370</td>
</tr>
<tr>
<td>2</td>
<td>30</td>
<td>4.7</td>
<td>87</td>
<td>87</td>
<td>370</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>8.7</td>
<td>43</td>
<td>43</td>
<td>180</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>27.0</td>
<td>16</td>
<td>16</td>
<td>65</td>
</tr>
</tbody>
</table>

### PRESSURE

Differential Control

- Valves open on increased pressure differential.

Check Valve

- X
- X
- X

Closer value on pressure reversal.

Biased Shutoff

- X
- X

Opens or closes valve electrically.

ABOUT YOUR VALVE

OCV Control Valves was founded more than 60 years ago with a quality and reliability. From modest beginnings, the company has grown to be a global leader in a field that is constantly evolving. Despite the challenges of today’s market, OCV maintains its commitment to quality. OCV Control Valves is a worldwide supplier, but more importantly the opportunity to afford the personal touch necessary to be each of our customers' best partner. (918)627.1942

Global performance. Personal touch.

</body></html>
**Differential Control Valve Series 110**

**OCV Control Valves.**

**VALVE OPERATION**

**The OCV MODEL 110**

1. **Model 110 Basic Control Valve:** A hydraulically-actuated, diaphragm-actuated globe or angle valve that closes with an alundum-on-alundum seal.
2. **Model 1356 Differential Pilot:** A two-way, normally closed pilot valve that senses differential pressure across the main valve. The pilot opens on increased pressure above its set point, allowing the main valve to open.
3. **Model 155 Visual Indicator (optional):** Maintains a constant differential pressure between two points in a system. Valve opens on increased differential.
4. **Model 159 Y-Strainer (standard on water service valves):** The strainer protects the spring load. An increase in differential above the set point makes the pilot open.
5. **Model 157 Pilot:** A simple "no flow" bungy with a fixed orifice in its position. Determines the spring pressure in the diaphragm chamber of the main valve, depending on the position of the differential pilot.
6. **Model 161-L Fluid Valve that controls the opening/closing speed of the main valve.
7. **Model 132 1/2"-2" diaphragm (intermediate vane stem valve):** The interior protects the pilot from high solids concentrations in the die fluid.
8. **Model 141-Ball Valves (valved on water service valves, optional on test service valves):** Useful for testing the system for maintenance or troubleshooting.
9. **Model 150 (standard indicates optional):**

**PILOT 1356**

- Accurate sensing of high and low pressure.
- Precise, accurate, pressure-differential to open.
- Single, single adjustment of differential set point.
- All parts replaceable while mounted on the valve.

**ROUGHING IN**

- Rubber-to-metal seat provides positive closure until required to open.
- High area-diameter for acute, precise control.
- Rubber or stainless steel construction.
- Multiple spring ranges.

**Differential Control Valve Series 110**

**SIZE CONSIDERATIONS**

**SIZING CONTINUOUS CONTROL VALVES**

Because the Model 110 typically controls the differential pressure, that particular parameter of the sizing equation is already defined. All that remains is to ensure the valve's size large enough to handle the required flow within proper velocity limits.

\[ Q = \frac{C_v \cdot dp}{\sqrt{sg \cdot g \cdot g}} \]

where:  
- \( Q \): maximum flow rate, gpm
- \( C_v \): valve coefficient
- \( dp \): differential pressure, psig
- \( sg \): liquid specific gravity (water = 1.0)

**TOLL FREE 1.888.628.8258**

**TOLL FREE 1.888.628.8258**

**Global performance. Personal touch.**

**SIZING DIFFERENTIAL CONTROL VALVES**

The OCV Model 110 includes the Model 1356 Differential Pilot, a two-way, normally closed pilot valve that senses differential pressure across the main valve. The Model 1356 can be supplied with multiple spring ranges, allowing the main valve to open on a proportionate amount.

**ABOUT YOUR VALVE**

**Differential Control Valves**

OCV Control Valves was founded more than 60 years ago with a vision and commitment to quality. Every OCV Valve is manufactured at the company’s state-of-the-art manufacturing facility, ensuring a consistent product that meets and exceeds industry standards around the world, including ISO 9001 certification. In fact, OCV Valves can be found in nearly every country around the world from fire protection systems in Malaysia to aircraft fueling systems in Africa and from oil refineries in Russia to water supply systems in the USA and Canada. You will also find our valves in irrigation systems in Europe, South America and the Middle East.

**About OCV Valves**

The original foundation on which the company was built allows our team of professionals to not only provide the service required to be a worldwide supplier, but more importantly the opportunity to afford the personal touch necessary to be each of our customer’s best partner. Simply stated, we take pride in all that we do.

**Check Individual models for availability.**

**TOLL FREE 1.888.628.8258**

**Global performance. Personal touch.**
Differential Control Valve Series 110

VALVE OPERATION

The OCV MODEL 110

1) Model 65 Basic Control Valve, a hydraulically-operated, diaphragm-actuated valve or an orifice valve that closes with an elastomeric-seal seat.

2) Model 65D-Differential Pilot, a two-way, normally closed pilot valve that senses differential pressure between two points. The pilot opens or closes depending on the pressure differential across its diaphragm.

3) Model 126 Ejector, a simple "tee" fitting with a fixed orifice in its upstream port. Depending on the position of the differential pilot, depending on the pressure in the diaphragm chamber of the main valve, the inlet pressure will control the opening/closing of the main valve.

4) Model 159 Y-Strainer (standard on water service valves), the strainer protects the pilot system from solids (components in the fuel line).

5) Model 141-4 Ball Valves (standard on water service valves, optional on fuel service valves), useful for isolating the pilot system for maintenance or troubleshooting.

6) Model 155 Visual Indicator (optional), maintains a constant differential pressure between two points in a system. Valve opens on increased differential.

7) Model 159 Y-Strainer (optional on fuel service valves), useful for isolating the pilot system for maintenance or troubleshooting.

From the chart below, pick the smallest valve that has a Cv at least equal to the value calculated and where the velocity does not exceed 25 ft/sec.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>CV</th>
<th>CV</th>
<th>FLOW @ 25 FT/SEC (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>30</td>
<td>115</td>
</tr>
<tr>
<td>2</td>
<td>65</td>
<td>65</td>
<td>260</td>
</tr>
<tr>
<td>3</td>
<td>120</td>
<td>160</td>
<td>570</td>
</tr>
<tr>
<td>4</td>
<td>200</td>
<td>270</td>
<td>1000</td>
</tr>
<tr>
<td>5</td>
<td>450</td>
<td>550</td>
<td>2250</td>
</tr>
<tr>
<td>6</td>
<td>900</td>
<td>1200</td>
<td>4500</td>
</tr>
<tr>
<td>8</td>
<td>1940</td>
<td>2400</td>
<td>8700</td>
</tr>
<tr>
<td>12</td>
<td>2400</td>
<td>3130</td>
<td>12000</td>
</tr>
</tbody>
</table>

*Note: All valves are not created equal. OCV Control Valves proves that day in and day out. Being ISO 9001 certified means we are committed to a quality assurance program. Our policy is to supply each customer with consistent worldwide supplier, but more importantly the opportunity to afford the personal touch necessary to be each of our customers' best partner. Simply stated, we take pride in all that we do.*

**ABOUT YOUR VALVE**

OCV Control Valves was founded more than 60 years ago with a quality and commitment to excellence. From modest beginnings, the company grew to be a global leader in a full range of flow control systems. In fact, OCV Valves can be found in valve capacity in nearly every country around the world from the USA and Canada to Europe, South America and the Middle East.

The original foundation on which the company was built allows our team of professionals to not only provide the service required to be a worldwide supplier, but to also be the top choice for service required to be a worldwide supplier, but more importantly the opportunity to afford the personal touch necessary to be each of our customers' best partner. Simply stated, we take pride in all that we do.

*All valves are not created equal. OCV Control Valves proves that day in and day out. We stand behind our valves and are ready to serve your needs.*

**CONTACT**

TOLL FREE 1.888.628.8258

Global performance. Personal touch.
The Series 110 Differential Control Valve is designed to accurately control the pressure difference between any two points. In some systems this means the valve remains closed until pressure differential commands its opening. It is a pilot-operated, modulating type valve which controls pressure accurately and consistently at the desired setting.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Style</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Seat Material</td>
<td>Elastic rubber, reinforced with stainless steel</td>
</tr>
<tr>
<td>Valves</td>
<td>Rectangular-shaped, soft seat seal provides drip-tight Class VI closure</td>
</tr>
<tr>
<td>Diaphragm Assembly</td>
<td>Guided top and bottom</td>
</tr>
<tr>
<td>Throttling Seat Retainer</td>
<td>For flow and pressure stability</td>
</tr>
<tr>
<td>Easy Maintenance</td>
<td>Without removal from the line</td>
</tr>
<tr>
<td>Replaceable Seat Ring</td>
<td></td>
</tr>
<tr>
<td>Alignment Pins</td>
<td>Assure proper reassembly after maintenance</td>
</tr>
<tr>
<td>Valves</td>
<td>Factory tested</td>
</tr>
<tr>
<td>Valves</td>
<td>Serial numbered and registered to facilitate replacement parts and factory support</td>
</tr>
</tbody>
</table>

### SERIES FEATURES

- Open-increasing differential
- High quality seatless ball valve or nozzle connection
- Multiple seat options can accommodate range of control settings (see pilot features)

### DIMENSIONS

#### U.S. Dimensions: Nominal

<table>
<thead>
<tr>
<th>Dimension</th>
<th>110</th>
<th>114</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12.50</td>
<td>12.50</td>
</tr>
<tr>
<td>B</td>
<td>13.00</td>
<td>13.00</td>
</tr>
<tr>
<td>C</td>
<td>13.50</td>
<td>13.50</td>
</tr>
<tr>
<td>D</td>
<td>14.00</td>
<td>14.00</td>
</tr>
<tr>
<td>E</td>
<td>14.50</td>
<td>14.50</td>
</tr>
<tr>
<td>F</td>
<td>15.00</td>
<td>15.00</td>
</tr>
</tbody>
</table>

### VALVE FEATURES

- Opens on increasing differential
- Dual pilot sense lines can be valve or remote connected
- Differential is adjustable over complete range of control springs (see pilot features)

### FILTER BYPASS CONTROL

In a filtered liquid application where loss of flow cannot be tolerated, the model 110 allows flow should the filter become clogged.

### PUMP DIFFERENTIAL CONTROL

Installed on the discharge side of a pump, the valve senses high pressure at pump discharge (valve inlet) and low pressure at the pump suction. Valves modulate to hold differential pressure constant, thus assuring pump is at optimum point on its curve.

### HOW TO ORDER YOUR VALVE

When ordering please provide:

- Valve size
- Trim material
- Adjustment range
- Mounting configuration
- Special needs or installation requirements

### MODEL 110 SHOWN

Model 110 shown

### CONTACT INFORMATION

TOLL FREE 1-888-628-8258

**Valves 11/4" through 24" are certified to NASS/ANSI 372."**

**Valves 4" through 24" are also certified to NASS/ANSI 61...**
The Series 110 Differential Control Valve is designed to accurately control the pressure difference between any two points. It is especially suited for systems where leaks at one end of a valve (or pump) are unacceptable. It features a pilot, modulating type valve which controls pressure accurately and consistently at the desired setting.

**SERIES FEATURES**
- Operates automatically at full capacity.
- Receives signal pressure from a variety of sources.
- Reduces the need for valve trimming and adjustment.

**FILTER BYPASS CONTROL**
In a filtered liquid application where flow cannot be tolerated, the model 110 always flows when the filter becomes clogged.

**PUMP DIFFERENTIAL CONTROL**
Installed on the discharge side of a pump, the valve senses high pressure at the pump discharge (valve inlet) and low pressure at the pump suction. This maintains the pump at the optimum point on its curve.

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Pressure</th>
<th>Max. Temperature</th>
<th>Min. Size</th>
<th>Max. Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 110</td>
<td>1000 psi</td>
<td>300°F</td>
<td>1&quot;</td>
<td>4&quot;</td>
</tr>
</tbody>
</table>

For assistance calculating the OCV control valve design, please consider the following applications to determine if the valve is needed. In the first position, close position is the most common used by designers and engineers. In this position, the valve controls flow and pressure accurately in the system. In the second position, the valve is used to close the valve off. The valve can be used as a two position or a three position valve. The valve can be used in a variety of applications, from simple systems to complex systems.

**REPRESENTATIVE SERIES**
- Differential Control Valve Series 110
- Valve Selection, Design, and Application
- Valve Selection, Design, and Application
- Valve Selection, Design, and Application
- Valve Selection, Design, and Application

**CONTACTS**
- Phone: 1-888-628-8258
- Email: sales@controlvalves.com
- Website: www.controlvalves.com

Global performance. Personal touch.