



OCV 110

AIR DIFFERENTIAL CONTROL VALVE

Item code: OCV110

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.

- 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).

METER DIFFERENTIAL PRESSURE CONTROL:

Installed on the discharge side of a meter, the valve senses high pressure at meter discharge (valve inlet) and low pressure at the meter suction. Valve modulates to hold differential pressure constant, thus assuring meter is provided with a constant pressure for accurate measurement. **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.

VALVE FEATURES:

- Operates automatically off line pressure.
- Heavy-duty, nylon-reinforced diaphragm.
- Rectangular-shaped, soft seat seal provides drip-tight Class VI closure.
- Diaphragm assembly guided top and bottom.
- Throttling seat retainer for flow and pressure stability.
- Easily maintained without removal from the line.
- Replaceable seat ring.
- Alignment pins assure proper reassembly after maintenance.
- Valves are factory tested.
- Valves are serial numbered and registered to facilitate replacement parts and factory support.

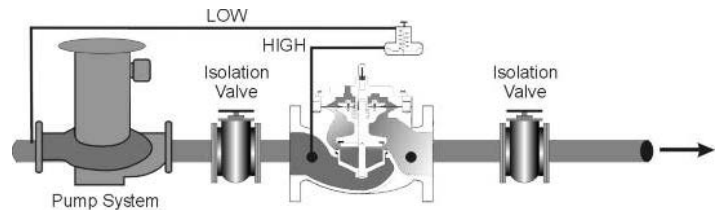
SIZE OPTIONS (mm):

32 (1.25"), 40 (1.5"), 50 (2"), 65 (2.5"), 80 (3"), 100 (4"), 150 (6"), 200 (8"), 250 (10"), 300 (12"), 350 (14"), 400 (16"), 450 (18"), 500 (20"), 600 (14")



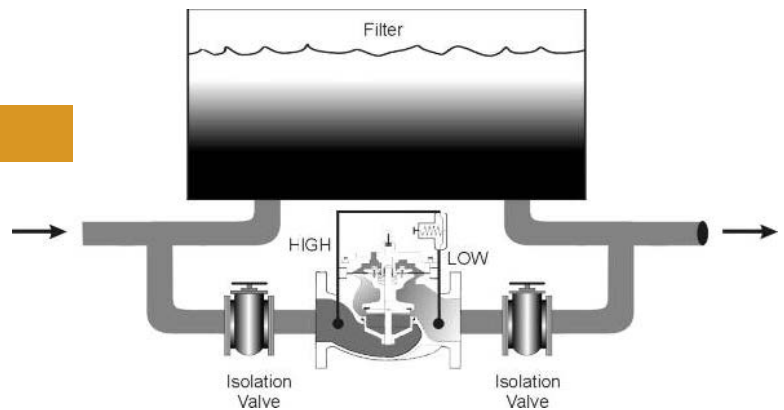
PUMP DIFFERENTIAL CONTROL:

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. Valve modulates to hold differential pressure constant, thus assuring pump is at optimum point on its curve.



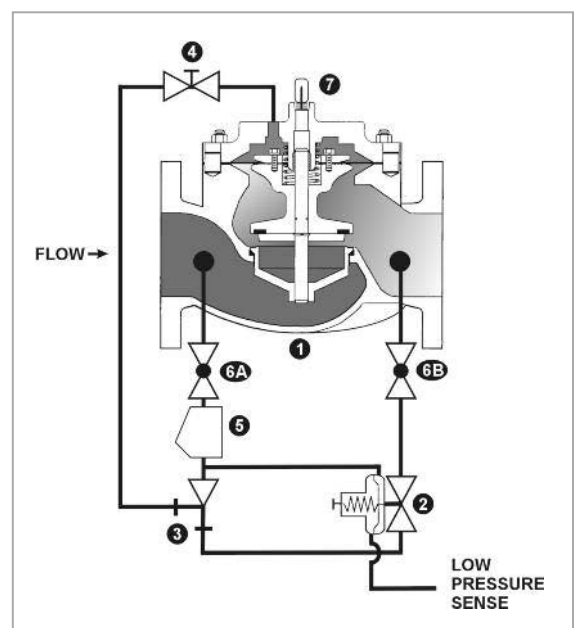
FILTER BYPASS CONTROL:

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



VALVE OPERATION:

- Maintains a constant differential pressure between two points in a system.
 - Valve opens on increased differential.
1. Model 65 Basic Control Valve, a hydraulically-operated, diaphragm-actuated globe or angle valve that closes with an elastomer-on-metal seal.
 2. Model 1356 Differential Pilot, a two-way, normally closed pilot valve that senses differential pressure across its diaphragm and balances it against an adjustable spring load. An increase in differential above the set point makes the pilot open.
 3. Model 126 Ejector, a simple "tee" fitting with a fixed orifice in its upstream port. It provides the proper pressure to the diaphragm chamber of the main valve, depending on the position of the differential pilot.
 4. Model 141-2 Needle Valve that controls the opening/closing speed of the main valve.
 5. Model 159 Y-Strainer (standard on water service valves), the strainer protects the pilot system from solid contaminants in the line fluid.
 6. 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.
 7. Model 155 Visual Indicator (optional).



PETRO INDUSTRIAL



petroind.com



PILOT 1356:

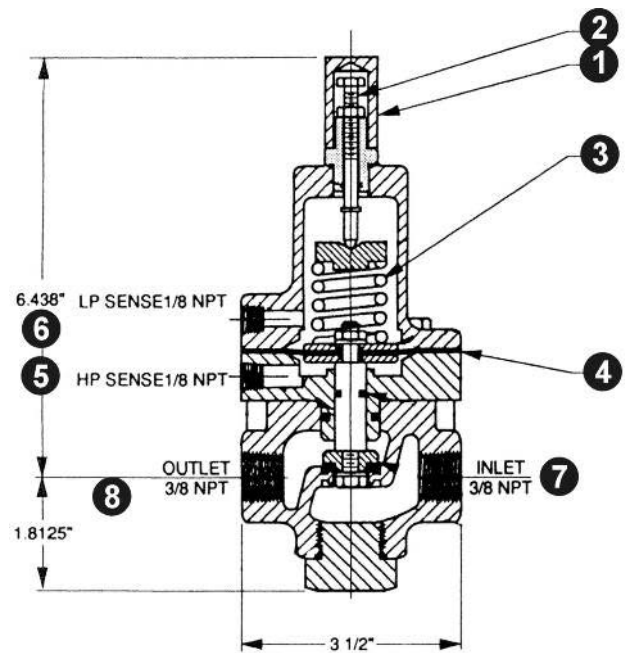
The Model 1356 Differential Pressure Pilot controls the amount of pressure in the upper chamber of the main valve (hence, the degree of opening or closing of the main valve). The pilot senses high pressure under its diaphragm and low pressure above its diaphragm. As the differential increases above the setting of the spring (adjustable), the pilot opens, decreasing the pressure in the main valve diaphragm chamber, allowing the main valve to open a proportionate amount.

Sense line locations.

High pressure sensing is typically at the main valve inlet.
Low pressure can be sensed at the valve outlet or at a field installed remote location.

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

- | | |
|--------------------|------------------------|
| 1. Cap | 5. High Pressure Sense |
| 2. Adjusting Screw | 6. Low Pressure Sense |
| 3. Spring | 7. Inlet |
| 4. Diaphragm | 8. Outlet |



Pilot Materials

- Bronze ASTM B584-C89836
- Stainless Steel

Spring Ranges

- 5-30, 20-80, 65-180 psi

APPROVALS:

Being ISO 9001 certified means we are committed to a quality assurance program. Our policy is to supply each customer with consistent quality products and ensure that the process is right every time. Our valves meet and exceed industry standards around the world, including approvals by:

