ACV Schematic

LEAD FREE*

S115-43 (Globe)

Pressure Reducing and Sustaining Control Valve with Downstream Surge Control Feature

Features

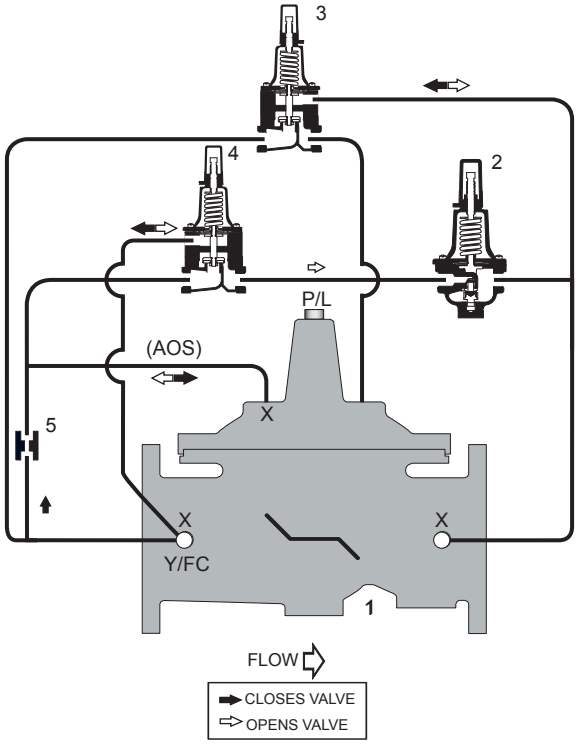
- Throttles to reduce high upstream pressure to constant lower downstream pressure
- Throttles to maintain minimum upstream pressure
- Closes quickly when downstream pressure exceeds surge setpoint
- Ideal for use when high capacity on-off equipment is installed downstream
- Reducing, Sustaining and Surge Control setpoints are separately adjustable

Standard Components

1 - Main Valve (S100 - Single Chamber)
2 - Pressure Reducing Control
3 - Downstream Surge Control
4 - Pressure Sustaining Control
5 - Fixed Orifice
X - Isolation Cocks

Options and Accessories

- O FC - Flo-Clean Strainer
- O Y - Y-Strainer (Replaces Flo-Clean)
- O ACS - Adjustable Closing Speed (Replaces Fixed Orifice)
- O AOS - Adjustable Opening Speed
- O P – Position Indicator
- O L – Limit Switch



Operation

The ACV Combination Pressure Reducing and Sustaining Control Valve with Downstream Surge Control Feature is designed to automatically reduce a fluctuating higher upstream pressure to a constant lower downstream pressure regardless of varying flow rates, throttles to sustain a minimum upstream pressure, and will quickly modulate toward a closed position if downstream pressure suddenly becomes greater than the desired regulated setpoint. The quick closing action prevents possible damaging high inlet pressure from passing through the valve to downstream piping. Pressure Reducing action is controlled by a normally open, pressure reducing pilot designed to: 1) Open (allowing fluid out of the main valve cover chamber) when downstream pressure is below the adjustable setpoint, and 2) Close (allowing fluid to fill the main valve cover chamber) when downstream pressure is above the adjustable setpoint. A decrease in downstream pressure causes the valve to modulate toward an open position, raising downstream pressure. An increase in downstream pressure causes the valve to modulate toward a closed position, lowering downstream pressure.

The normally closed sustaining pilot remains open when upstream pressure is above the adjustable setpoint, and modulates toward a closed position if upstream pressure falls below the setpoint. As the sustaining pilot closes, fluid is directed into the main valve cover chamber, allowing the valve to modulate toward a closed position, raising upstream pressure. Normal pressure reducing operation resumes when upstream pressure is above the sustaining pilot setpoint, and downstream pressure is below the reducing pilot setpoint.

If downstream pressure suddenly becomes greater than the desired regulated setpoint, the normally closed surge control pilot opens and rapidly admits higher inlet pressure into the valve cover, increasing rate of valve closure. Normal pressure reducing operation resumes when downstream pressure decreases below the desired regulated setpoint.

***The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.**

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

USA: Tel: (713) 943-0688 • Fax: (713) 944-9445 • Watts.com
Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca
Latin America: Tel: (52) 81-1001-8600 • Fax: (52) 81-8000-7091 • Watts.com