ACV Schematic

LEAD FREE*

S114-2 (Globe) Rate-of-Flow Control Valve with Pressure Reducing Feature

Features

- Throttles to maintain constant rate-of-flow
- Throttles to reduce high upstream pressure to constant lower
- downstream pressure
- Adjustable Closing Speed
- Orifice Plate Assembly is remote mounted (field installed)
- Rate-of-Flow and Reducing setpoints are separately adjustable

Standard Components

- 1 Main Valve (S100 Single Chamber)
- 2 Rate-of-Flow Control
- 3 Pressure Reducing Control Remote Sense
- 4 Adjustable Closing Speed
- 5 Orifice Plate Assembly
- X Isolation Cocks

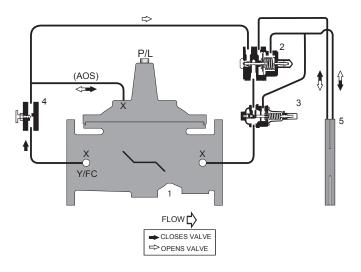
Options and Accessories

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

Operation

The ACV Rate-of-Flow Control Valve with Pressure Reducing Feature is designed to automatically limit flow rate to a constant, adjustable, maximum, and reduce a fluctuating higher upstream pressure to a constant lower downstream pressure. In most applications, the Pressure Reducing function will be secondary to the primary Flow Control Function.

The flow control action of the valve is controlled by a normally open, differential control pilot designed to: 1) Open (allowing fluid out of the main valve cover chamber) when the differential pressure across the orifice plate is below it's adjustable set point, and, 2) Close (allowing fluid to fill the main valve cover chamber) when the differential pressure across the orifice plate is above it's adjustable set point. A decrease in differential pressure causes the valve to modulate towards an open position, increasing flow rate. An increase in differential pressure causes the valve to modulate towards a closed position, decreasing flow rate.



The pressure reducing action of the valve 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 Orifice Plate Assembly should be installed three to five pipe diameters downstream of the Rate-of- Flow Valve, and field connected with 3/s" minimum copper tubing in accordance with factory piping schematic. Please specify desired flow rate prior to ordering.

*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.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

