

ACV Schematic

LEAD FREE*

LFF116 (Globe)

Pressure Relief, Sustaining or Backpressure Control Valve

Features

- Opens when upstream pressure is above setpoint
- Closes when upstream pressure is below setpoint
- Adjustable Closing Speed
- When installed on branch of tee, acts as Pressure Relief Valve
- When installed between two pressure zones, acts as Pressure Sustaining Valve
- When installed on discharge of a pump, acts as Backpressure Control Valve
- Setpoint is adjustable
- Utilizes advanced ArmorTek® coating technology to resist corrosion of internals

Standard Components

- 1 – Main Valve (Single Chamber)
- 2 – Relief / Sustaining Control
- 3 – Adjustable Closing Speed
- X – Isolation Cocks
- Y – Y-Strainer

Options and Accessories

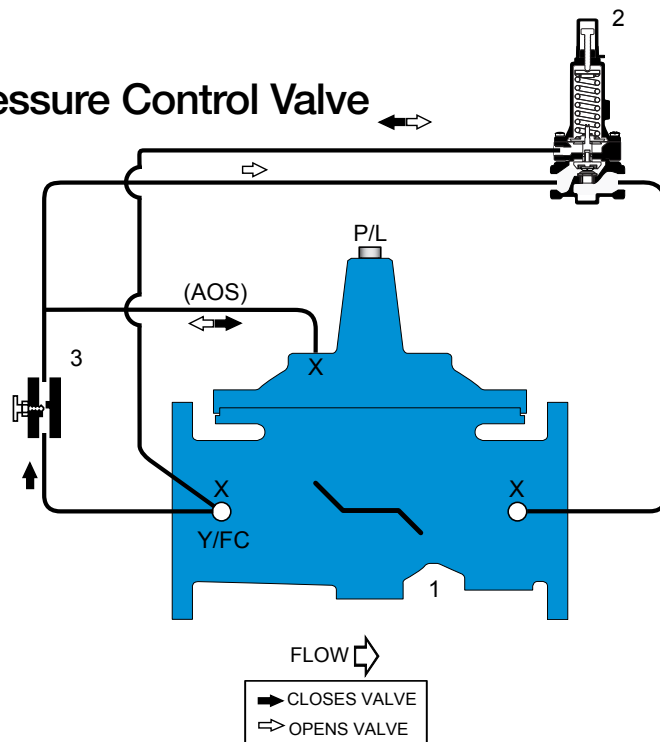
- FC Flo-Clean Strainer
- AOS Adjustable Opening Speed
- P Position Indicator
- L Limit Switch

Operation

Our ACV Pressure Relief, Sustaining or Backpressure Control Valve is designed to permitting flow when upstream pressure is above the adjustable setpoint of the control pilot, and throttle toward closed when upstream pressure falls below the adjustable setpoint. It is controlled by a normally closed control pilot designed to: 1) Open (allowing fluid out of the main valve cover chamber) when upstream pressure is above the adjustable setpoint, and, 2) Close (allowing fluid to fill the main valve cover chamber) when upstream pressure is below the adjustable setpoint. An increase in upstream pressure causes the valve to modulate toward an open position. A decrease in upstream pressure causes the valve to modulate toward a closed position.

When the valve is installed “off the main line” on the branch of a tee, it serves as a Pressure Relief Control Valve. The valve is normally closed, and quickly opens when upstream pressure exceeds the pilot setting, relieving pressure, commonly discharging to a storage reservoir, pump suction, or atmosphere. When upstream pressure is lowered below the pilot setting, the valve closes at a controlled, adjustable rate.

When the valve is located “in line” connecting two distribution zones, the valve acts as a Pressure Sustaining Control Valve. When pressure in the upstream zone falls below the pilot setting, the valve modulates toward a closed position, sustaining pressure in the upstream zone. The valve will close, if necessary, until upstream pressure is above



the pilot setting. The valve should be specified to include the optional opening speed control and position indicator when used for Pressure Sustaining applications.

When the valve is installed “in line” on the discharge of a pump, it acts as Backpressure Control Valve. When pump discharge pressure falls below the pilot setting, the valve modulates toward a closed position, increasing backpressure against the pump. The valve should be specified to include the optional opening speed control when used for Backpressure applications.

***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.

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