



# PRESSURE REDUCING VALVE with HYDRAULIC CHECK FEATURE

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## Stainless Series

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S115-3 or S6115-3 (Globe)  
S1115-3 or S61115-3 (Angle)

### Operation

The Watts ACV Combination Pressure Reducing and Check Valve is designed to automatically reduce a fluctuating higher upstream pressure to a constant lower downstream pressure, and close drip-tight when downstream pressure becomes greater than upstream pressure.

It 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.

If downstream pressure becomes greater than upstream pressure, downstream pressure is admitted to the main valve cover chamber, closing the valve and preventing reversal of flow. Normal pressure reducing operation resumes when upstream pressure exceeds downstream pressure.

### Installation Guidelines

- Prior to installation, flush line to remove debris.
- Install valve horizontally "in line" (cover facing UP), so flow arrow matches flow through the line. Avoid installing valves 6" and larger vertically. Consult factory **prior** to ordering if installation is other than described.
- Install inlet and outlet isolation valves. **NOTE:** When using butterfly valves, insure disc does not contact control valve. Damage or improper valve seating may occur.
- Provide adequate clearance for valve servicing and maintenance.
- Install pressure gauges to monitor valve inlet and outlet pressure.
- If installation is subjected to very low flow or potentially static conditions, it is recommended a pressure relief valve (1/2" minimum) be installed downstream of the Pressure Reducing Valve for additional system protection.

### Other Watts ACV Pressure Reducing Control Valves

S115 / S6115	Pressure Reducing Valve
S115-2 / S6115-2	Pressure Reducing and Sustaining Valve
S115-4 / S6115-4	Pressure Reducing Valve with Solenoid (On-Off) Feature
S115-7 / S6115-7	Pressure Reducing Valve with Downstream Surge Control Feature
S115-11 / S6115-11	Pressure Reducing and Sustaining Valve with Hydraulic Check Feature
S115-43 / S1115-43	Pressure Reducing and Sustaining Valve with Surge Control Feature
S115-58 / S6115-58	Pressure Reducing Valve with Return Flow Feature
S115-74 / S6115-74	Pressure Reducing Valve with Low Flow By-Pass