
Classic Series

F118-3 (Globe)

F1118-3 (Angle)

Operation

The Watts ACV Non-Surge Check Valve is designed to control pipeline surges caused by flow reversal by slowly opening and closing at separate adjustable rates. The valve opens when upstream pressure is greater than downstream pressure. When upstream pressure is greater than downstream pressure, the Adjustable Opening Speed Control allows fluid out of the main valve cover chamber, providing a controlled rate of opening. When a pressure reversal occurs and downstream pressure becomes higher than upstream pressure, the Adjustable Closing Speed Control allows the higher downstream pressure to enter the main valve cover chamber, providing a controlled rate of closure.

NOTE: A maximum pipeline velocity of six feet-per-second is recommended when installing this type of check valve. When pipeline velocities exceed six FPS, consideration should be given to adding a Watts ACV Model F116 Pressure Relief Valve or Model F116-52 Combination Surge Anticipator and Pressure Relief Valve to the system.

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.

Other Watts ACV Control Valves

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| F116 / F1116 | Pressure Relief Valve |
| F116-52 / F1116-52 | Surge Anticipator and Pressure Relief Valve |
| F118-4 / F1118-4 | Non-Surge Check Valve (6" & larger) |
| M513-5 / F1513-5 | Pump Control Valve |
| M513-AK / F1513-AK | Pump Control Valve with High Capacity Pilot System |
| M513-6 / F1513-6 | Deep Well Pump Control Valve |
| M513-14 / F1513-14 | Deep Well Pump Control Valve with Pressure Relief Feature |
| F113-21 / F1113-21 | Pump Control Valve |