



SOLENOID CONTROL VALVE with HYDRAULIC CHECK FEATURE (6" and Larger)

01/05

Classic Series

F113-32 (Globe)
F1113-32 (Angle)

Operation

The Watts ACV Solenoid On-Off Control Valve with Hydraulic Check Feature is designed to open fully or close drip-tight as commanded by the 3-Way Solenoid Pilot, and close drip-tight when downstream pressure becomes greater than upstream pressure. The Solenoid Pilot directs upstream pressure into and out of the cover chamber of the 3-way Accelerator Pilot. When the cover of the Accelerator Pilot is pressurized, the main valve cover chamber is vented downstream (dry drain) or to atmosphere (wet drain), causing the valve to open fully. When the cover of the Accelerator Pilot is de-pressurized, the main valve cover chamber is connected to upstream pressure, causing the valve to close drip tight. Valve opening and closing speeds are separately adjustable. Engaging the Solenoid Manual operator simulates power to the solenoid, manually controlling the main valve. Disengaging the Solenoid Manual operator returns the valve to electrical on-off service.

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 On-Off operation resumes when upstream pressure exceeds downstream pressure.

Specify voltage and MAIN VALVE actuation (energize to open or close), and "wet" or "dry" drain PRIOR to ordering.

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.
- Provide adequate drain for cover chamber discharge if "wet drain" option is selected. Consult "Valve Cover Capacity" chart on appropriate main valve Engineering Bulletin.
- Connect Solenoid Pilot to appropriate power source in compliance with local electrical codes.

Other Watts ACV Solenoid Control Valves

F113-12 / F1113-12	Solenoid (On-Off) Valve (4" & smaller)
F113-6 / F1113-6	Solenoid (On-Off) Valve (6" & larger)
F113-25 / F1113-25	Solenoid (On-Off) Valve with Hydraulic Check Feature (4" & smaller)
F113-40 / F1113-40	Electronic Control Valve (for Electronic Positioning)