



MODULATING FLOAT VALVE with PRESSURE SUSTAINING FEATURE

01/06

970 Series

—Model— **979-20**
679-20

Operation

The AMES Model 979-20 / 679-20 Modulating Float Control Valve with Pressure Sustaining Feature is designed to automatically maintain a constant liquid level in a tank or reservoir. It is controlled by a remote mounted Modulating Float Pilot designed to: 1) Modulate Open (allowing fluid out of the main valve cover chamber) when reservoir level decreases, and, 2) Modulate Closed (allowing fluid to fill the main valve cover chamber) when reservoir level increases. A decrease in reservoir level causes the valve to modulate towards an open position, allowing reservoir level to increase. An increase in reservoir level causes the valve to modulate towards a closed position, allowing reservoir level to decrease.

The normally closed sustaining pilot remains open when upstream pressure is above the adjustable setpoint, and modulates toward a closed position if upstream pressure falls below the setpoint. As the sustaining pilot closes, fluid is directed into the main valve cover chamber, allowing the valve to modulate toward a closed position, raising upstream pressure. Normal level control operation resumes when upstream pressure is above the sustaining pilot setpoint.

If desired, the modulating action of the valve can be “reversed” by inverting or “reversing” the action of the Modulating Float Pilot. The Modulating Float Control is remotely mounted from the valve, and field connected with 3/8” minimum copper tubing in accordance with factory piping schematic.

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 gauge to monitor valve inlet pressure.
- Connect Modulating Float Control to main valve using 3/8” diameter minimum copper tubing (field installed) in accordance with factory piping schematic.
- Modulating Float Control should be mounted in a field installed “stilling well” for protection against surface turbulence and interference.

Other AMES Float Control Valves

972 / 672	On-Off Float Control Valve (4” & smaller)
972-19 / 672-19	On-Off Float Control Valve (6” & larger)
972-20 / 672-20	On-Off Float Control Valve with Pressure Sustaining Feature
979 / 679	Modulating Float Control Valve
979-15 / 679-15	Modulating Float Control Valve with Solenoid (On-Off) Feature