



ELECTRONIC CONTROL VALVE (for Electric Valve Positioning)

01/06

930 Series

—Model— **933**
633

Operation

The AMES Model 933 / 633 Electronic Control Valve is designed to be electrically positioned to control flow, pressure, level or temperature for water applications. It is a throttling valve controlled by two 2-way solenoids installed in the pilot control system, one connecting the valve cover chamber with upstream pressure and the other connecting the main valve cover chamber downstream. By alternately energizing the solenoids, line pressure is admitted to or relieved from the cover chamber of the main valve, allowing the valve to be “positioned” to maintain a desired value.

The valve is normally interfaced with SCADA systems or a Programmable Logic Controller that compares a Process Variable (PV) to a desired setpoint, and energizes the solenoid pilots to throttle the valve open or closed until the PV reaches the desired setpoint.

Rate of valve operation is controlled by separate adjustable Opening and Closing Speed Controls that control the rate fluid and pressure are admitted to or relieved from the main valve cover chamber.

The valve is constructed with two “normally closed” solenoids allowing the valve to “hold last position” upon power failure. The valve may also be configured to open fully or close drip tight upon power failure if desired.

Specify valve to “hold last position”, “open fully” or “close drip tight” upon power failure 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.
- Connect Solenoid Pilots to appropriate power source in compliance with local electrical codes.

Other AMES Solenoid Control Valves

930 / 630	Solenoid (On-Off) Valve (4” & smaller)
930-01 / 630-01	Solenoid (On-Off) Valve with Hydraulic Check Feature (4” & smaller)
930-19 / 630-19	Solenoid (On-Off) Valve (6” & larger)
930-01-19 / 630-01-19	Solenoid (On-Off) Valve with Hydraulic Check Feature (6” & larger)