## ACV Schematic

# LEAD FREE\*

# LFM113-40 (Globe) Electronic Control Valve (for Electric Valve Positioning)

#### Features

- Designed to operate with SCADA telemetry systems
- Valve throttles open or closed by intermittently energizing Solenoid
- (2) or (3)Adjustable Opening and Closing Speed
- Adjustable Opening and Closing Speed
  Optional Electronic Controller provides level adjustment
- Optional Electronic Controller provides local adjustment and control
- Solenoid Bypass valves allow manual operation

#### Standard Components

- 1 Main Valve (M100 Single Chamber)
- 2 2-Way Solenoid (closing)
- 3 2-Way Solenoid (opening)
- 4 Adjustable Closing Speed
- 5 Adjustable Opening Speed
- SB Solenoid Bypass
- X Isolation Cocks

### **Options and Accessories**

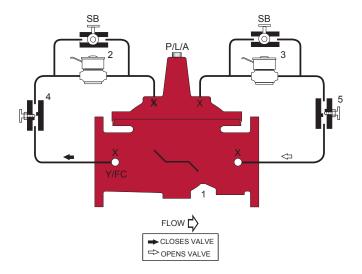
- O FC Flo-Clean Strainer
- O Y Y-Strainer (Replaces Flo-Clean)
- O P Position Indicator
- O L Limit Switch
- O A Analog Position Transmitter

#### Operation

The ACV 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 by using one "normally closed" and one "normally open" solenoids.

Specify valve to "hold last position", "open fully" or "close drip tight" upon power failure prior to ordering.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

#### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

