

Prevent costly water damage caused by broken pipes, leaking or broken hoses from washing machines, ice makers, toilets, water heaters, etc.

The ELK-WSV3 is a new and improved model of our highly popular electric water shutoff valve. It is designed for residential and light commercial domestic water applications. The WSV3 features a 12VDC high torque on/off actuator motor as well as a manual control handle for power outages. It features a multi-colored LED status indicator. From the time of activation the WSV3 can shut off the main water supply to a building in just under 1 second.

The ELK-WSV3 features a 1" full bore stainless steel ball valve with commercial grade seats and seals. This valve does not restrict water flow and is safe for drinking water. The motorized actuator has a permanently lubricated gear drive with sufficient torque to open or close the valve under high pressure or after long periods of inactivity.

The ELK-WSV3 can be operated via a SPDT (single pole, double throw) relay triggered from virtually any security or automation controller. It can also be operated using a simple SPDT latching push button.

NOTICE: This valve is not designed, intended, or rated for use in any fire sprinkler or fire alarm application.



Features

- Valve control mechanism does not incorporate built-in water flow sensing/detection
- Integrates to Security or Automation Controller (e.g. E27 Alarm Engine or M1 Gold)
- Can be Integrated with a Manual Latching Push Button or Wireless Receiver & Wireless Latching Push Button
- Manual emergency override control handle for use during power outages
- Rapid Action - Opening or Closing
- Multi-color LED Status Indicator
- Wiring Harness Included
- Two (2) Year Warranty
- MADE IN USA

Specifications

- Full Port, 2-way Ball Valve
- Stainless Steel Grade 316
- Safe for Drinking Water
- 1" NPT female threaded pipe connections
- Min./Max. Temperature Rating: 32° / 125° F
- Requires a 12 Volts DC Power Supply
- Operating Current Draw: 3.2 A
- Nominal Current Draw: 50mA
- Actuating Speed: < 1 seconds
- Enclosure Rating: IP68M Per ISO 20653
- Connections: 18 gauge, 4 conductor cord
- Overall Dimensions: 7.5" x 5.2" x 3.3"

LED Indicator States

Color	Indicator State	Status
Red	Blinking	Traveling to Closed Position
Red	Solid	Currently Closed
Green	Blinking	Traveling to Open Position
Green	Solid	Currently Open
Yellow	Blinking	Failure/Manual Override*

*Note: The manual emergency override control handle is intended for use when power has been disconnected from the valve. If the manual emergency override control handle is used when the valve is powered, the yellow LED will blink and the valve will no longer respond when trigger voltage is applied to or removed from the Valve Open (White) wire. The valve must be reset by removing power from the Power In (Red) wire, or by using the manual emergency override control handle to return the valve the appropriate position.

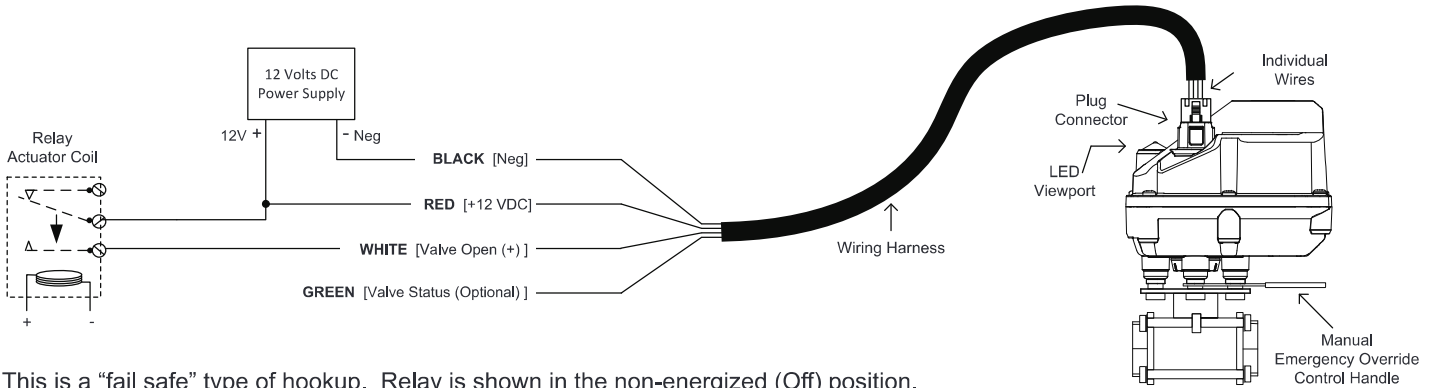
Installation

IMPORTANT: Observe all state and local regulations. Hire or consult a licensed plumbing professional if required. Although the ELK-WSV3 has a manual emergency override control handle, in some cases it may be difficult to turn. It is intended only for emergency use only and is not intended to replace a standard manual valve. We recommend the ELK-WSV3 be installed after any existing manual shutoff (i.e. between the water fixtures and the manual valve) as an added benefit for maintenance or servicing. Do not remove the cover of the actuator unit. There are no user serviceable components inside.

Be certain that all necessary fittings and tools are available. Check the existing pipe material (plastic, copper, galvanized, etc), pipe diameter, and any special requirements that may be needed due to location of proposed mounting.

- Step 1. Manually shut off the main water supply at the water meter and/or manual shutoff valve.
- Step 2. Locate the building internal manual shut off valve (if present). This will generally be located very close to where the main water pipe enters the building. Turn this valve OFF just in case the outside valve fails to hold back the water supply.
- Step 3. Install the ELK-WSV3 into the main water line using appropriate fittings and materials.
- Step 4. Connect the ELK-WSV3 to the 12 VDC electric controlling device per the following diagram.

On/Off Toggle Switch or Automated Relay



This is a "fail safe" type of hookup. Relay is shown in the non-energized (Off) position. When the Relay is energized (turned On) the Valve Open wire will be supplied power, opening the valve. Should the Relay coil fail or its input power from the controller turns off, the Relay contacts will return to the Off position, removing power from the Valve Open wire and the valve will close, provided the Input Power Supply is still working.

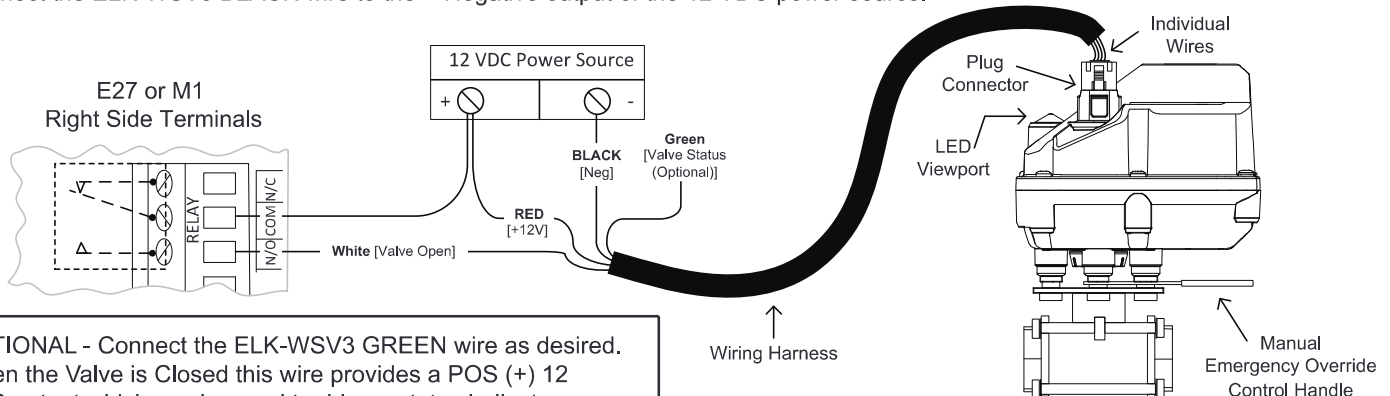
- A 12 VDC, 4.0 Amp min. power source is recommended for powering the ELK-WSV3. Normal operating current draw is generally between 3.2 Amps, but the valve can draw more power (up to 11 Amps) for a short duration if the valve sits idle (unmoved) for a long time. This allows minerals to build up on the valve face, thus requiring more torque from the actuator and more current draw. Maximum current draw of the actuator under the worst case condition is 11 Amps. One way to help minimize or clear mineral buildup on the valve face is to periodically auto-cycle it once a week, month, etc.
- Install a four (4) conductor, 18 gauge minimum cable between the Valve and the electric control device. Splice the four (4) wires (RED, BLACK, GREEN, WHITE) coming from the Valve to the four (4) conductors that go to the controlling device. Use Gel filled "B" connector splicers and/or a junction box to protect the integrity of the splices. Insulate GREEN wire if not used.

Connecting the ELK-WSV3 to Main Board Relay the E27 Alarm Engine or M1 Control

Connect the ELK-WSV3 RED wire to the +12V terminal of the 12 VDC power source.

Connect the ELK-WSV3 WHITE wire to the N/O (normally open) terminal of Relay Output. When this Relay is On (energized) the +12 VDC will be connected through this wire, causing the valve to Open. When this Relay is Off (not energized) the valve will Close.

Connect the ELK-WSV3 BLACK wire to the - Negative output of the 12 VDC power source.



OPTIONAL - Connect the ELK-WSV3 GREEN wire as desired. When the Valve is Closed this wire provides a POS (+) 12 VDC output which can be used to drive a status indicator or automation zone input as needed. Insulate this wire if not used.