Water Shutoff Valve

ELK-WSV2

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

The ELK-WSV2 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 WSV2 features a 12VDC high torque on/off actuator motor as well as a manual control handle for power outages. From the time of activation the WSV2 can shut off the main water supply to a building in just under 2 seconds.

The ELK-WSV2 features a 1" full bore stainless steel ball valve with commercial grade seats and seals. This valve does not restrict water flow and meets the NSF and NEMA approvals of state and municipal water authorities. 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-WSV2 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 Emergency push "Easy" button.

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

Features

- Rapid Opening / Closing Action
- Indoor Outdoor Use
- Provides Remote Shut off of Domestic Water Supply
- Manual control handle
- Integrates with a Security or Automation Control (e.g. Elk-M1G or M1EZ8)
- Can be Integrated with a Simple "Easy" Button
- Can be Integrated with a Wireless Receiver and Wireless Pushbutton
- Simple 12 VDC, Four (4) Conductor Hookup
- Valve Direction/Water Flow Indication
- Unit is sealed to withstand low pressure submersion for short durations Not intended for under water use
- Two (2) Year Warranty
- MADE IN USA



Specifications

- Full Port, 2-way Ball Valve
- Stainless Steel Grade 316
- NSF 61 Approved for Drinking Water
- 1" NPT threaded pipe connections
- Max. Pressure Rating: 600 PSI
- Min./Max. Temperature Rating: 32° / 125° F
- Max. Flow Rating: 68 GPM
- Requires a 12 Volts DC Power Supply
- Nominal Current Draw: 800 mA to 1.5 Amp
- Actuating Speed: < 2 seconds
- NEMA 6P & 7D Enclosure
- Torque: 1.25 in. lbs.
- Connections: 18 gauge, 4 conductor cord
- Overall Dimensions: 7.75" H, 4.5" W, 4" D



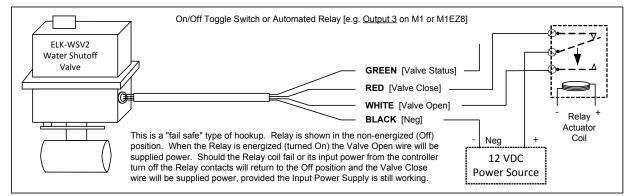
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Installation

IMPORTANT: Observe all state and local regulations. Hire or consult a licensed plumbing professional if required. The ELK-WSV2 Valve can be used indoor or outdoor, however it should always be located within an enclosure or behind a cover that will protect if from physical damage or tamper. Although it does have a manual override shutoff handle, we still recommend it 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 servicable 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-WSV2 into the main water line using appropriate fittings and materials.
- Step 4. Connect the ELK-WSV2 to the 12 VDC electric controlling device per the following diagram.



- A 12 VDC, 2.0 Amp min. power source is recommended for powering the ELK-WSV2. Nominal current draw is generally between 800ma and 1.5 Amps, but the valve can draw more power (up to 4.0 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 4.0 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.

Connecting the ELK-WSV2 to Relay OUT3 of the ELK-M1G or EZ8 Control:

Connect the ELK-WSV2 RED wire to the N/C (normally closed) terminal of Relay OUT3. When this Relay is Off (not energized) the 12 Vdc + Pos will be connected through this wire, causing the valve to Close if it was open.

Connect the ELK-WSV2 WHITE wire to the N/O (normally open) terminal of Relay OUT3. When this Relay is On (energized) the 12 Vdc + Pos will be connected through this wire, causing the valve to Open if it was closed

Connect the ELK-WSV BLACK wire to the - Negative output of the 12 Vdc Power Supply.

OPTIONAL - Connect the ELK-WSV2 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.

