

# **Instruction Manual**

(Manual No.7456)

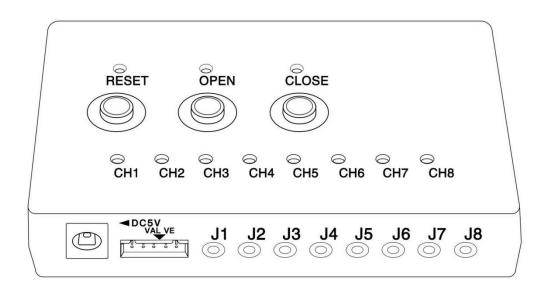
U.S. Solid Leak Detector Valve



Preventing water leaks is crucial for maintaining the integrity of a pipeline, and a water leakage detection system can play a vital role in this regard. U.S. Solid offers an innovative solution by leveraging its comprehensive range of electric ball valves to create a water leak detection system of its own. With this advanced system, you can safeguard your entire pipeline and minimize the risk of leaks.

## **Components**

## 1. Controller



Reset: Shut off the alarm and make the leak detector valve back to working mode

Open: Open the motorized ball valve Close: Close the motorized ball valve CH1-CH8: Signal indicator of sensors J1-J8: Ports to connect sensors

Valve: Interface to connect the motorized ball valve

DC 5V: Interface to connect power adapter

## 2. Motorized Ball Valve

The motorized ball valve is controlled by the "open" and "close" button on the controller.

In the working mode, once one of the sensors detect a leakage, the motorized ball valve will close automatically.

#### 3. Sensors



The sensors are used to detect the leakage. Once leakage is detected, the controller will alarm.

## 4. Power Adapter

Connect the controller to the power, supply the power to the whole system.

## Operation

- 1. Install the motorized valve on the pipeline;
- 2. Put the controller of leakage detector system in an appropriate position to avoid direct contact with water or in a humid environment;
- 3. Place the sensors in places where there need to monitor for leakage;
- 4. Connect the motorized ball valve, sensors and power adapter with the controller;
- 5. Connect the adapter to power, the leak detector system starts to self-inspection;
- 6. Press the "OPEN" on the controller, the valve will open automatically, meanwhile the water leakage detection valve is in working mode;
- 7. When a water leak is detected, the alarm will sounds immediately and the valve will closes automatically.
- 8. After manually removing the leakage point and cleaning up the water, press the RESET button to release the alarm. Then press the OPEN button, the valve opens, and the alarm returns to the normal working state
- 9. After the leak is cleaned up, press "RESET" to cancel the alarm sound. Then press "OPEN" to reopen the valve, and the leakage detector system return to normal working state.

## **Cautions**

- The fluid must be kept clean and free of dust and particles
- The system must be free from electromagnetic interference

# **Specifications**

Output Power	< 5 W
Working Pressure	< 1.0 MPa
Medium Temperature	0-90°C(32-194°F)
IP Rating	IP 65
Alarm Startup Time	1 s
Valve Close Startup Time	1 s
Working Voltage	5V DC
Open/Close Time	< 5 s
Lifetime	> 50000 Times

# **Packing list**

- 1 x Controller
- 1 x Motorized Ball Valve
- 3 x Sensors (6 Meters Line)
- 1 x Power Adapter
- 1 x Manual

## Contact

Feel free to visit our website: www.ussolid.com You can email us at service@ussolid.com You can call one of our friendly customer service representative at +1(800) 209-4177