



# RS-080

- BY -

**RD**  
RELiance  
DETECTION TECHNOLOGIES



**Ball valve shown. Systems with 2-1/2" to 4" valves feature butterfly valve design.**

---

## **Plumbing Leak Detection & Automatic Water Main Shut-Off System**

Congratulations on your purchase of a FloodMaster RS-080 plumbing leak detection system from Reliance Detection Technologies. This product is designed to automatically shut off the water main if a leak is detected.

To ensure proper installation and to maximize the performance of your RS-080 water leak detection system, please read this manual thoroughly before installing or operating the system.

**CAUTION: DO NOT PLACE FINGERS OR ANYTHING INSIDE THE VALVE PORTS. DOING SO CAN RESULT IN THE LOSS OF FINGER AND/OR DAMAGE TO THE VALVE.**

**NOTE: This installation and operating manual contains important information about the operation of the RS-080 system. If this system is being installed for use by a different user, please be sure a copy of this manual is left with the system for future reference.**

**www.RelianceDetection.com**

**Toll-Free: 888-771-4929**

---

### **RS-080 System Components (included in kit):**

- |                                                                                    |                                      |
|------------------------------------------------------------------------------------|--------------------------------------|
| 1 – Receiver box                                                                   | 1 – Power supply with 12' lead wire  |
| 1 – Full port lead-free shut-off valve (NSF/ANSI 61 and 372) and actuator assembly | 1 – Water sensor with 8' lead wire   |
|                                                                                    | 1 – Metal plate for sensor placement |

**NOTE: RDT recommends that installations be completed by a licensed plumber to ensure that all local code requirements are followed.**

## **INSTALLATION INSTRUCTIONS**

1. Turn off the water supply to the building or plumbing subsection.
2. Cut the water line after the water shut-off valve.
3. Install the valve using best plumbing practices, in adherence to all local plumbing codes.

*Note: Butterfly valves require appropriate mounting flange and hardware (not included).*

*Recommended flange: 316/316L SS forged, threaded NPT-F, 150 lb. ANSI raised-face flange (raised surface on the back).*

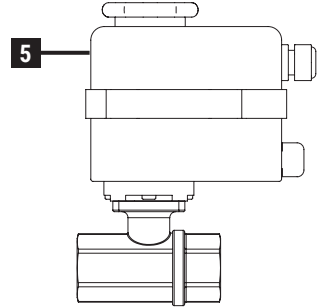
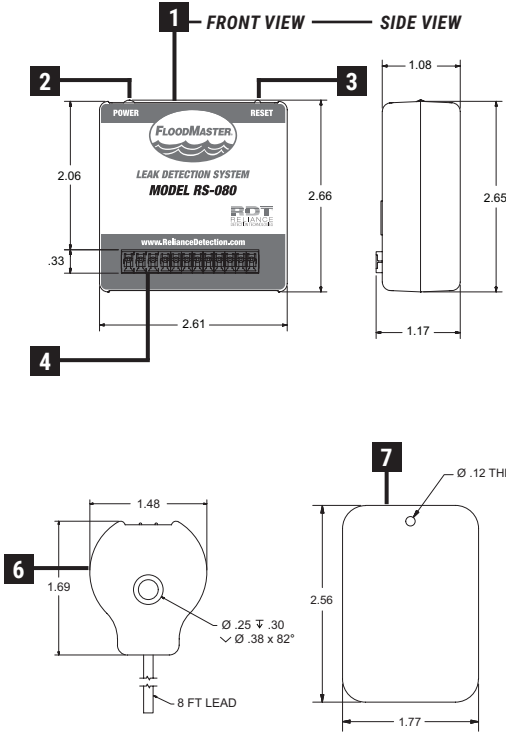
Valve Size	NPT Dimension	Flange OD	316 SS, 5/8-11 Bolts (Qty.)	316 SS Flat Washers (Qty.)	316 SS Nut 5/8-11 (Qty.)	316 SS Split Lock Washer (Qty.)
2-1/2"	2-1/2"	7"	4	8	4	4
3"	3"	7-1/2"	4	8	4	4
4"	4"	9"	8	16	8	8

4. Open water supply and inspect for leaks.
5. The receiver connector comes prewired with basic connections to the power supply, sensor and electric valve actuator. Using an appropriate screwdriver, make any additional desired electrical connections for output contacts or additional sensors per Figure 1.  
*(Note: additional sensors can be connected to either 6 & 7 or 8 & 9, as wiring space allows.)* Then snap the terminal wiring block into the receiver housing at the mating slot provided.
6. Attach the electrical connector on the valve to the mating connector on the receiver box.
7. Place the sensor(s) where leaking water is most likely to first accumulate (such as the base of a washing machine, hot water heater, under sink, etc.). The sensor is magnetic and can be installed horizontally or vertically in conjunction with the metal plate – see Figure 2. We recommend laying a bead of silicone on the floor encircling the protected area.
  - Clean the desired location area to ensure the surface is clean for optimum plate adhesion.
  - Peel the backing off the metal plate to reveal the adhesive and stick in place.
  - Place the sensor on the plate as close as possible to the floor, allowing the magnets to secure it in place.

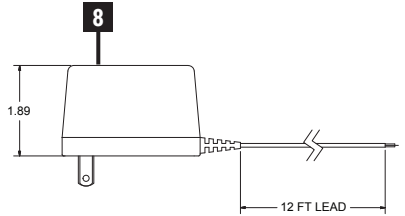
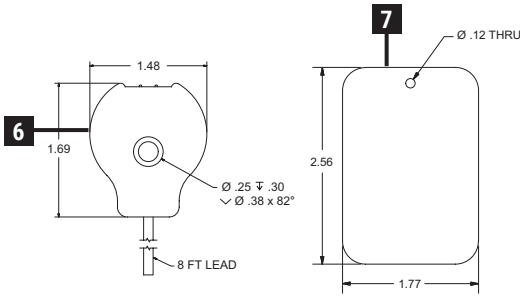
*Note: The sensor features a through-hole that can be used to screw it onto a surface if a more permanent installation is desired or necessary.*
8. Mount the receiver box to the wall at least 6" off the ground.
9. **DO NOT PUT FINGER INSIDE THE VALVE PORTS.** Plug the transformer into a 120V AC outlet. The green "Power" indicator light will turn on.
10. **Function Test the system as follows**, repeating the steps for each sensor on the system:
  - Place the sensor on a wet paper towel. The audible alarm will sound and the valve will rotate to the closed position.
  - Remove the sensor from the paper towel, dry the contact points, and place it back in the desired location on the metal plate.
  - Open the water faucet and inspect for water flow. There should be no water flow.
  - Press and release the "Reset" button on the receiver to open the valve and begin the flow of water again.
  - Inspect faucet for water flow.

# RS-080 WATER MAIN KIT

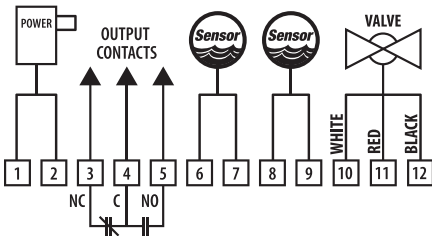
1. Receiver box
2. Power LED
3. Reset button
4. Wiring terminal block mating slot
5. Shut-off valve/actuator
6. Water sensor
7. Metal plate
8. Power transformer



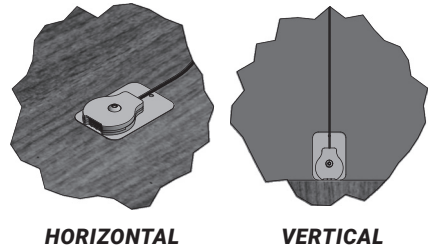
Ball valve shown; see technical data submittal sheets for valve and actuator dimensions.



**FIGURE 1 –  
WIRING DIAGRAM**



**FIGURE 2 –  
SENSOR INSTALLATION OPTIONS**



## **OPTIONAL FEATURES AND CONNECTIONS:**

See Figure 1 inside manual for wiring diagram.

**Additional Water Sensors** – For applications where a wider area of leak detection coverage is desired, additional sensors can be added to the system. Wire additional sensors to terminal strip pins 6 & 7 or 8 & 9. Additional sensors are sold separately; custom wire lengths available.

**Security Panel Connection** – Use for applications where connection to a home security system or control panel is desired. This dry contact relay signal can be wired per your application requirements as follows:

Normally Closed Circuit – Terminal Pins 3 & 4

Normally Open Circuit – Terminal Pins 4 & 5

## **OPERATION & SYSTEM RESET**

In the event the system activates, locate the source of the leak, remove the sensor from the water and dry the metal contacts. Correct the problem causing the leak and replace the sensor in the desired leak detection location.

## **MAINTENANCE**

Exercise (press and release) the “Reset” button on the receiver box annually to ensure correct operation and to maintain product warranty status.

## **EMERGENCY MANUAL VALVE OPERATION**

Switch the actuator to manual mode (MAN) and use the wheel on the top of the actuator to adjust the valve to the desired position. Return the valve to the original position prior to switching the actuator back to “Auto” mode when the system returns to normal operation.



**Warning: For use with water only. Do not install on gas line. Never install this device on a fire protection or fire suppression system. For indoor use only.**

***NEED INSTALLATION OR SETUP ASSISTANCE?***

***Call toll-free: 888-771-4929***

***[www.RelianceDetection.com/support/RS-080](http://www.RelianceDetection.com/support/RS-080)***

**RDT**<sup>™</sup>  
RELIANCE  
DETECTION TECHNOLOGIES

203-488-2684 or 888-771-4929

[info@RelianceDetection.com](mailto:info@RelianceDetection.com)

[www.RelianceDetection.com](http://www.RelianceDetection.com)

27 Business Park Drive, Branford, CT 06405

*All specifications subject to change without notice.*

© Copyright 2020 Reliance Detection Technologies, LLC – A Madison Company

ECN # 11386, 07/2020, MF071, RevJ