



RS-090-E

- BY -

RDT
RELIANCE
DETECTION TECHNOLOGIES



Washing Machine Leak Detection & Automatic Water Shut-Off Outlet Box System

Congratulations on your purchase of a Reliance Detection RS-090-E washing machine leak detection system. This product is designed to automatically shut off the water supply to the washing machine if a water leak is detected. To ensure proper installation and to maximize the performance of your RS-090-E water leak detection system, please read this manual thoroughly before installing or operating the system.

PLEASE READ CAREFULLY BEFORE PROCEEDING:

If a leak is detected, the RS-090-E will shut off the water going to the washing machine. This will stop the continuous flow of water from the water supply valves, but all or some of the water that is already in the washing machine and hoses may still leak out onto the floor.

Complies with ASME A112.18/CSA B125.1-2012; NSF 372.

NOTE: The RS-090-E can be installed on existing or new washing machine installations. Follow all applicable Federal, State and Local codes for installation. Valve(s) must be under appropriate water pressure for performance testing.

www.RelianceDetection.com

Toll-Free: 888-771-4929

RS-090-E System Components (included in kit):

- | | |
|-----------------------------------------|-----------------------------------------|
| 1 – Leak detection receiver | 1 – Outlet box with mounting straps (4) |
| 1 – Water sensor with 8' lead wire | 1 – Outlet box trim plate |
| 1 – Metal plate for sensor placement | 2 – Water hammer arrestors |
| 1 – Power transformer with 7' lead wire | |

IMPORTANT! For new construction/job site testing:

Valve(s) must be under appropriate **water pressure** for performance testing. Water pressure not to exceed **80 PSI**. The unit requires equalized **water pressure** in the leak detection assembly in order to properly seat the valve upon closure. Do not cap appliance feeds during valve testing, as it may interfere with water equalization. Do not test valve performance with air pressure. Testing the valve with air pressure may cause the valve to not properly seat/leak and could damage the valve.

Note: While the valve will begin to close immediately, an initial burst of water will pass through the appliance feeds. Consider placing a small bucket or similar container under the appliance feeds when testing. Once the valve seats, all water flow will stop.

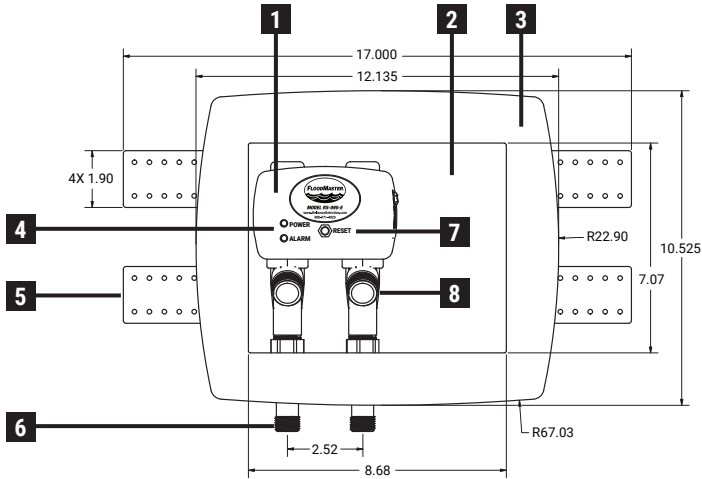
INSTALLATION INSTRUCTIONS

1. Turn off the hot and cold water valves to the washing machine. For existing installations, disconnect washing machine hoses from existing water feeds, marking hoses as "hot" or "cold." Disconnect water supply lines from existing valves.
2. Determine the desired new valve and drain locations.
3. Mark and cut wall to fit the RS-090-E outlet box (as necessary).
4. Secure the outlet box to the studs using provided mounting straps (4).
5. Using appropriate plumbing techniques, attach the supply lines to the water supply connection lines (1/2" NPT standard; also accepts 1/2" copper pipe). Confirm that the locknuts on the water supply connection lines are hand tight and flush to the outlet box.
6. Plug the power transformer into the leak detection receiver (30V AC) and plug into 120V AC wall outlet. Observe green "Power" LED turn on.
7. Plug water sensor adapter into "Sensor" jack on the leak detection receiver.
8. Place water sensor in proximity to washing machine, in the area where a leak is most likely to accumulate. (Note: The water sensor may be located underneath the washing machine as desired or necessary.) The sensor is magnetic and can be installed horizontally or vertically in conjunction with the metal plate – see Figure 1.
 - 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.
9. Connect washing machine hoses to the appliance feeds of the leak detection receiver.
10. Open the water supply line and check for leaks.
11. Slide drain hose into drain opening of the outlet box and secure in place.
12. **Perform this Function Test before installing the trim plate:**
 - Place the water sensor on a wet paper towel.
 - The alarm LED should light up, the audible alarm should sound and water flow should stop.
 - Wait 30 seconds and turn on the washing machine; no water should flow in.
 - Remove the sensor from the paper towel. Return it to the area of desired leak detection.
 - Press and release the reset button on the receiver to begin the flow of water to the washing machine again. Wait 30 seconds and confirm water flow is back on.
13. Fit trim plate around the inside edge of the outlet box and put pressure on the plate until it fits "flush" against the wall. The trim plate can accommodate up to 5/8" gypsum, with 1" of cover all around the rough opening.

RS-090-E WASHING MACHINE KIT

1. Leak detection receiver
2. Outlet box
3. Trim plate
4. Power and alarm LEDs
5. Mounting straps (4)
6. Water supply connections
7. Reset button
8. Appliance feeds
9. Drain opening
10. Sensor and power jacks
11. Locknuts
12. Water sensor
13. Metal plate
14. Power transformer



OUTLET BOX: BOTTOM VIEW FRONT VIEW SIDE VIEW

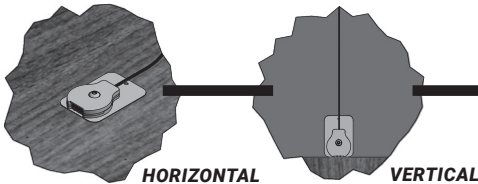
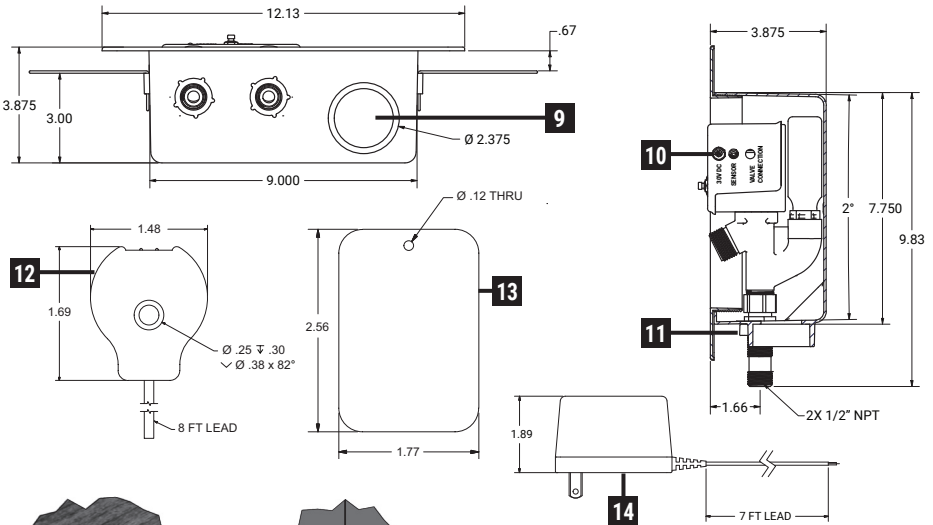


FIGURE 1
SENSOR INSTALLATION OPTIONS

MAINTENANCE

Test the system annually per the function test (install step 12) to ensure correct operation and to maintain product warranty status.

EMERGENCY OPERATION

Disconnect power to the unit to close the valves in the event of an emergency.

NOTE: This installation and operating manual contains important information about the operation of the RS-090-E 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.



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. This system requires a 120V AC wall outlet within 6 feet of the system. The RS-090-E will be installed directly onto your existing water supply valves. If you are not sure how to install the RS-090-E onto your existing water lines, we recommend that you contact a licensed plumber.

NEED INSTALLATION OR SETUP ASSISTANCE?

Call toll-free: 888-771-4929

www.RelianceDetection.com/support/RS-090-E



203-488-2684 or 888-771-4929

info@RelianceDetection.com

www.RelianceDetection.com

27 Business Park Drive, Branford, CT 06405

All specifications subject to change without notice.

© Copyright 2021 Reliance Detection Technologies, LLC – A Madison Company

ECN # 12075, 04/2021, MF173, RevG