



*All leaks start with **A SINGLE DROP OF WATER...***

Undetected leaks can turn into **a total catastrophe.**

**IS YOUR BUILDING PROTECTED?**

**RDT provides comprehensive solutions  
for indoor plumbing leak detection  
and water damage mitigation.**



**Product Catalog and Specification Guide**

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

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

# Frustrated When Looking for a Leak Detection Solution?



***Discuss your  
application  
with the  
experts  
at RDT!***

***Ask us about our new CEU credit course on  
plumbing leak detection!***



***Plumbing leak detection and water damage mitigation  
solutions for every space and budget.***

- **Wireless, app-based systems for full-facility protection**
- **Solutions for plenum spaces**
- **Monitor individual appliances**



Find us in

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# CATALOG INDEX

## PLUMBING LEAK DETECTION & WATER DAMAGE MITIGATION SYSTEMS

Reliance Detection Technologies™ delivers the most innovative and extensive selection of indoor plumbing leak detection and water damage mitigation systems in the industry, with solutions for every type of commercial, industrial and residential building – and budget – including the popular FloodMaster® line of products.

Page	Model No.	Installation	Valve Sizes	Power	Output Signal?	Audible Alarm?	Temperature Sensing?	Sensor Type
4	RSC-900-x	Water Mains – Full Facility Protection, App-Based Notifications	1/2", 3/4", 1", 1-1/4" (Optional)	120V AC	Push notification to app	Yes	Yes	Wireless
8	MK6 Series	Plenum-Rated Kits	1/2", 3/4", 1", 1-1/4"	Step-down transformer	Dry Contacts – NO/C/NC	Yes	No	Wired
10	RS-080-x	Water Mains – Localized Protection	3/4", 1", 1-1/4", 1-1/2", 2" – Ball Valve	120V AC	Dry Contacts – NO/C/NC	Yes	No	Wired
12			2-1/2", 3", 4" – Butterfly Valve					
14	RS-090-E	Washing Machines	Dual-Port 1/2"	120V AC	No	Yes	No	Wired
16	RS-092-x	Hose-Fed Appliances (Dishwashers, ice makers, RO systems, beverage machines, etc.)	1/2" to 3/8" fittings	120V AC or step-down transformer	Dry Contacts – NO/C/NC	Yes	No	Wired
18	RS-094-x	Water Heaters, Water Tanks, etc.	1/2", 3/4", 1", 1-1/4"	120V AC	Dry Contacts – NO/C/NC	Yes	No	Wired
20	RS-095	Sump Pumps, Clean Rooms, etc.	No Valve	9V Battery	No	Yes	No	Wired
22	RS-096-x		No Valve	120V AC	Dry Contacts – NO/C/NC	Yes	No	Wired
24	RS-097-x	HVAC / Condensate Pans	No Valve	120V AC	Dry Contacts – NO/C/NC	Yes	No	Wired (elevated 1/2")

## ACCESSORIES & ADD-ONS

Page	Model No.	Description	For Use With
6	RSC-900-W-001	Wireless Water Flood Sensors	RSC-900
6	RSC-RSC-900-W-175	Wireless Rope-Style Water Sensor Kit	RSC-900
6	RSC-900-X-200	Wireless Signal Repeater	RSC-900
6	RSC-900-W-310-x	Wireless Actuator & Valve	RSC-900
7	RSC-900 CMS	Cloud-Based Central Monitoring Station	RSC-900
26	RSA-100-xxx, RSA-150-xxx	Wired Sensors – Standard and Elevated	RS-080, RS-092, RS-094, RS-096, RS-097
26	RSA-175-810	Wired Sensing Rope Kit	RS-080, RS-092, RS-094, RS-096, RS-097
26	RSA-600-003	Auto Dialer	RS-080, RS-092, RS-094, RS-096, RS-097
26	RSA-400-xxx	Cable Adder	RS-080
26	RSA-600-001	Electrical Plug Interrupter	RS-094

**For complete installation/operation documentation, plus answers to Frequently Asked Questions, please visit [RelianceDetection.com/support/](http://RelianceDetection.com/support/).**

# TECHNICAL SUBMITTAL DATA SHEET

## Wireless, App-Based Plumbing Leak Detection & Optional Automatic Water Main Shut-Off System

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RSC-900

#### TYPICAL INSTALLATIONS INCLUDE:

- Common-risk housing – condos and apartments
- Commercial office suites
- New and retrofit construction
- Vacation homes and other unattended properties

#### HIGHLY RECOMMENDED FOR:

- Multi-unit residential complexes
- Commercial office buildings
- Medical and assisted living facilities
- Any facility with a history of insurance claims for water damage

#### FEATURES:

- Mobile app provides automatic notifications and remote user interface, including manual valve shut-off
- Addressable sensors with high/low temperature alerts
- Full port valve sizes 1/2" to 1-1/4" dia.
- Supports multiple actuators for both hot and cold water lines
- IP68-rated actuator for indoor/outdoor use
- Available without shut-off valve/actuator for applications where you do not wish to interrupt the water flow
- Operates via wireless system network; does not use local Wi-Fi
- Cloud-based Central Monitoring Station access is available for commercial multi-unit applications (see pg. 7)
- Hub supports up to 29 total wireless devices



#### APPLICATION CONSIDERATIONS:

The RSC-900 is a complete wireless, app-based system for managing indoor plumbing leaks, protecting properties and reducing financial losses. If the sensor detects a leak, it signals the valve to shut off and sends its location, alarm type and valve status back to the hub. The hub sends notifications to the user via the app. Fault notifications and status check-ins are communicated through the app from any Internet-enabled device. The system is also available without a shut-off valve and actuator for applications where interrupting the water flow is either not required or not desirable.

#### INSTALLATION OVERVIEW:

**Hub:** Install within 5' of the Internet router and a 120V AC wall outlet.

**Actuator(s):** Install within 200' of the hub\*, on the main water feed line to the protected area. Multiple actuators can be installed where both hot and cold feed line control is required.

**Water Flood Sensors:** Install within 200' of the hub\*, in areas where water from a leak is most likely to first accumulate.

\* Repeater(s) may be used to extend range between hub and accessory (+200' max.).

**App:** Free download available for iOS or Android smart phones at the App Store or Google Play. Required for initial system installation and set-up.

**Central Monitoring:** Optional cloud-based central monitoring allows multiple system viewing from one screen. See pg. 7 for details.





# RSC-900 TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
1/2"	RSC-900-AW-1/2	811475030078
3/4"	RSC-900-AW-3/4	811475030085
1"	RSC-900-AW-1	811475030092
1-1/4"	RSC-900-AW-1-1/4	811475030108
None	RSC-900-W	811475030177

## OPERATING SPECIFICATIONS:

See charts at right for further detail.

### Valve

Pressure Rating ..... 600 WOG - 150 WSP

Max. Temperature ..... 366°F

### Actuator

Max. Pressure ..... 80 PSI

### Sensor

Audible Alarm ..... 83 dB

## MATERIALS:

### Valve

Body ..... Low-lead brass

End Connection ... Low-lead brass

Stem ..... Low-lead brass

Ball ..... Low-lead brass  
(tea coated)

Ball Seats ..... PTFE

O-Rings ..... FKM (Viton®)

## CABLE LENGTHS:

Hub Power Cord .. 5'

Ethernet Cable ..... 4'

## APPROVALS:

### RSC-900 Wireless System FCC & Industry Canada Info

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Certifications:	FCC	IC
Flood Sensor	2AFOICLMFLD10	20798-CLMFLD10
Hub	2AFOICLMCTRL10	20798-CLMCTRL10
Actuator	2AFOICLMASOU20	20798-CLMASOU20

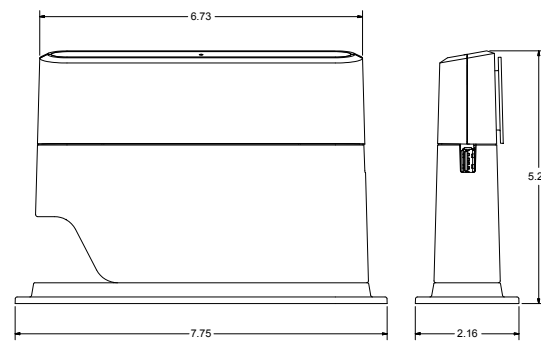
Communication Hub: IP Rating IEC60529

Valve/Actuator: IP Rating IEC60529; IP68; ANSI 61/372 (Valve)

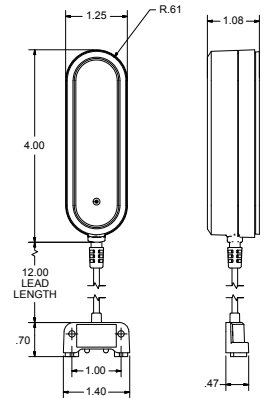
MA Board of Registration of Plumbers Approval – Code # P1-1018-40 (System)

## DIMENSIONS & WEIGHTS:

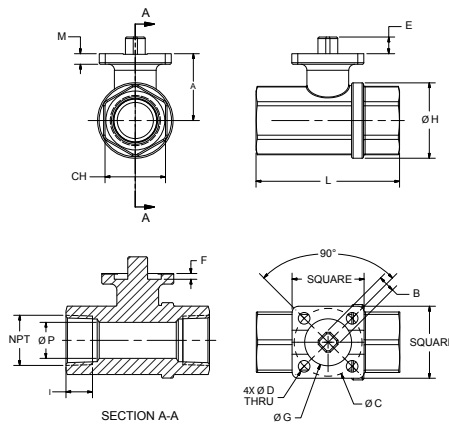
### Communications Hub



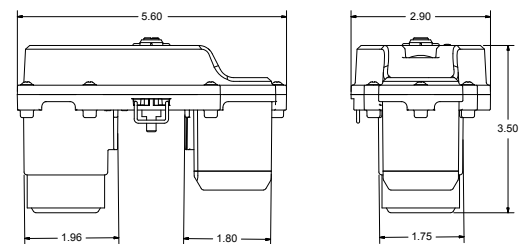
### Wireless Sensor



### Shut-Off Valve



### Wireless Actuator



### RSC-900 Shut-Off Valve Specifications

Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	1.93	0.75	3.54	1.61	0.24	0.95	49.71	580	0.75	53.10
1-1/4"	1.50	1.93	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	2.30	0.84	4.02	1.97	0.24	1.18	102.88	580	1.05	53.10

(IN-LBS) TORQUE VALVES ARE MEASURED IN LABORATORY TESTS UNDER THE FOLLOWING CONDITIONS: TEMPERATURE: 68°F; PRESSURE: 0 PSI; FLUID: PURIFIED WATER.

### RSC-900 Wireless Component Specifications

Component	Weight*	Power Supply	Backup Battery	Primary Radio Frequency	Operating Temperature	Communication	Signal Range	Addressable?
Communication Hub	6 oz (170 gm)	External Adapter Input 110-240V AC	(2) AA batteries	915 MHz	-4°F to 122°F (-20°C to 50°C)	Wi-Fi, Ethernet	200'	Yes
Wireless Actuator (IP68)	13 oz (369 gm)	(4) CR123A batteries 2-year life	N/A	915 MHz	-4°F to 122°F (-20°C to 50°C)	Wireless RF	200'	Yes
Wireless Sensor	2 oz (57 gm)	(2) AAA batteries 2-year life	N/A	915 MHz	-4°F to 122°F (-20°C to 50°C)	Wireless RF	200'	Yes

\* Weight without accessories attached.

## AVAILABLE ACCESSORIES (see pg. 6):

- Extra Wireless Water Flood Sensors (RSC-900-W-001)
- Wireless Rope-Style Water Sensor Kit (RSC-900-W-175)
- Wireless Signal Repeater (RSC-900-X-200) – Max. 2 per system
- Extra Wireless Actuator & Valve (RSC-900-W-310-X)

RDT recommends that RSC-900-AW installations be completed by a licensed plumber to ensure that all local code requirements are followed.



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Branford, CT 06405

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info@RelianceDetection.com  
**www.RelianceDetection.com**

## RSC-900

### Wireless System Accessories

***A maximum of 29 wireless devices can be added to each system/hub.***

- Easy QR code scanning to add accessories to your existing system.
- Onboard LED indicators for low battery and lost communication, with push notifications to the RSC-900 app.
- Device name, location and photo can be stored in the app so there's no guessing when an event occurs.



#### Wireless Water Flood Sensors

Purchase as many wireless water flood sensors (RSC-900-W-001) as needed to accommodate your leak and low/high temperature detection requirements. Wireless signal range is 200' between sensor and hub.

- Powered by (2) AAA batteries (included).
- Factory preset low/high temperature (36°F / 122°F) (2°C / 50°C), with push notification to the app.
- "Find Me" feature starts the sensor chiming so you can easily locate it.

P/N	UPC
RSC-900-W-001	811475030023

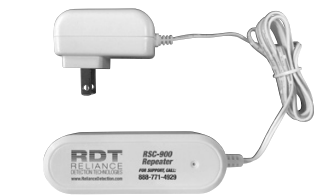


#### Wireless Rope-Style Water Sensor Kit

This rope-style wireless sensor is ideal for hard-to-reach locations; discreet sensing in areas where aesthetics are key; or applications where perimeter coverage is preferable to a single point of contact.

- Powered by (2) AAA batteries (included).
- Kit includes one 10' rope; snap-fit additional lengths (RSA-175-010) for up to 100' of coverage.

P/N	UPC
RSC-900-W-175	811475030153



#### Wireless Signal Repeater

Use the RSC-900-X-200 wireless signal repeater to increase range or improve the signal performance between RSC-900 wireless devices and the hub. Up to 2 repeaters can be added to each system/hub to triangulate a nearby device or to simply extend the signal range – up to an additional 200' between any wireless device and the hub.

- Powered by a 120V AC wall wart with battery back-up (2 AAA batteries – included).

P/N	UPC
RSC-900-X-200	811475030030



#### Wireless Actuator & Valve

Purchase as many wireless actuator assemblies (RSC-900-W-310) as needed to accommodate your water supply shut-off requirements. This is a great option for installations requiring control of both hot and cold water feed lines. Wireless signal range is 200' between the actuator and hub.

- Wireless actuator powered by (4) CR123A batteries (included).
- Full port, lead-free valves in 1/2", 3/4", 1", and 1-1/4" sizes.
- Easy pushbutton or key to manually open/close the valve.
- Suitable for exterior installations (IP68).

Valve	P/N	UPC
1/2"	RSC-900-W-310-1/2	811475030122
3/4"	RSC-900-W-310-3/4	811475030146
1"	RSC-900-W-310-1	811475030115
1-1/4"	RSC-900-W-310-1-1/4	811475030139

# TECHNICAL SUBMITTAL DATA SHEET

## Cloud-Based Plumbing Leak Detection System

### Central Monitoring & Management Platform

Job Name: \_\_\_\_\_  
 Engineer: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Contractor P.O.: \_\_\_\_\_

Job Location: \_\_\_\_\_  
 Engineer Approval: \_\_\_\_\_  
 Contractor Approval: \_\_\_\_\_  
 Representative: \_\_\_\_\_

## RSC-900 CMS

### TYPICAL INSTALLATIONS INCLUDE:

- Common-risk housing – condos and apartments
- Commercial properties and office suites
- Vacation homes and other unattended properties

### HIGHLY RECOMMENDED FOR:

- Commercial property managers and building owners
- Remote service providers

### FEATURES:

- Cloud-based system to monitor the status of multiple RSC-900 wireless, app-based leak detection (and optional water shut-off) systems from a single screen
- Monitor system status any time, anywhere, from any large-screen device\*
- Capture historical status reporting and event handling data for potential “insurtech”-type discounts
- Flexible reporting tools – sort historical data by system, status, type, date range, etc.
- Allows for multiple users (“operators”) and permission levels

\* Requires use of Chrome browser.

	Offline	<div><div></div><div></div><div></div></div>	SYSTEM 123	23/08/2018	16:43:01					
	Check	<div><div></div><div></div><div></div></div>	SYSTEM 124	21/08/2018	16:49:01					
	Status	Device Type	Serial Number	Signal	Temperature	Battery	Date	Time	Command	Info
		Controller	0000000000000001		30°C/86.0°F	100	21/08/2018	16:48:52		<div></div>
OK		Flood Sensor	0000000000000001	<div></div>	34°C/93.2°F	100	21/08/2018	15:50:39	<div>Disable</div>	<div></div>
OK		Flood Sensor	0000000000000001	<div></div>	27°C/80.6°F	100	21/08/2018	16:41:44	<div>Stable</div>	<div></div>
Open		Water Shut-Off Unit	0000000000000001	<div></div>	27°C/80.6°F	96	21/08/2018	16:52:10	<div>Close</div>	<div></div>
OK		Flood Sensor	0000000000000001	<div></div>	31°C/87.8°F	100	21/08/2018	16:46:50	<div>Disable</div>	<div></div>
OK		Flood Sensor	0000000000000001	<div></div>	33°C/91.4°F	100	21/08/2018	16:31:06	<div>Stable</div>	<div></div>
OK		Flood Sensor	0000000000000001	<div></div>	33°C/91.4°F	100	21/08/2018	16:37:06	<div>Disable</div>	<div></div>
OK		Flood Sensor	0000000000000001	<div></div>	32°C/89.6°F	100	21/08/2018	16:47:07	<div>Disable</div>	<div></div>
Offline		Flood Sensor	0000000000000001	<div></div>	0°C/32°F	0	18/08/2018	15:02:24		
OK		Flood Sensor	0000000000000001	<div></div>	29°C/84.2°F	100	21/08/2018	16:41:23	<div>Disable</div>	<div></div>
	OK	<div><div></div><div></div><div></div></div>	SYSTEM 125	21/08/2018	16:49:47					<div></div>
	OK	<div><div></div><div></div><div></div></div>	SYSTEM 126	21/08/2018	16:49:51					<div></div>
	OK	<div><div></div><div></div><div></div></div>	SYSTEM 127	21/08/2018	16:49:42				<div></div>	<div></div>

View current status and historical data for an unlimited number of RSC-900 systems at a glance.

System ID	All	Serial	All	Record Type	Event	Event Type	All	Date From	Date To	Apply	Reset	Hide Filters
Change	System ID	Date	Time									
Status changed from Offline to OK	SYSTEM 123	21/08/2018	16:57:18									
Status changed from OK to Offline	SYSTEM 124	21/08/2018	16:56:52									
Status changed from Offline to OK	SYSTEM 125	21/08/2018	16:56:04									
Status changed from OK to Offline	SYSTEM 126	21/08/2018	16:55:58									
Status changed from Offline to OK	SYSTEM 127	21/08/2018	16:54:53									
Status changed from OK to Offline	SYSTEM 128	21/08/2018	16:54:22									
Status changed from Offline to OK	SYSTEM 129	21/08/2018	16:54:11									
Status changed from OK to Offline	SYSTEM 130	21/08/2018	16:53:46									
Status changed from Offline to OK	SYSTEM 131	21/08/2018	16:53:19									
Status changed from Offline to OK	SYSTEM 132	21/08/2018	16:53:18									
Status changed from OK to Offline	SYSTEM 133	21/08/2018	16:53:00									
Status changed from Offline to OK	SYSTEM 134	21/08/2018	16:52:57									
Status changed from Offline to OK	SYSTEM 135	21/08/2018	16:52:49									
Status changed from OK to Offline	SYSTEM 136	21/08/2018	16:52:10									
Status changed from Offline to OK	SYSTEM 137	21/08/2018	16:52:05									
Status changed from Offline to OK	SYSTEM 138	21/08/2018	16:51:59									
Status changed from OK to Offline	SYSTEM 139	21/08/2018	16:51:55									
Status changed from OK to Offline	SYSTEM 140	21/08/2018	16:51:56									
Status changed from OK to Offline	SYSTEM 141	21/08/2018	16:51:28									
Status changed from OK to Offline	SYSTEM 142	21/08/2018	16:50:29									

Full history of events, user responses, and status reports – logged and stored in the cloud.

### RSC-900 App vs. Central Monitoring Station

	Check System Status	Receive Alerts	Remote Manual Control	Set User Permissions	View Multiple Accounts on One Screen	Record Event Handling	Event Handling Logs	Generate Status Reports
App	Yes	Yes	Yes	Yes	No	No	No	No
CMS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



# TECHNICAL SUBMITTAL DATA SHEET

## Plenum-Rated Water Leak Detection Kits

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MK6 SERIES

#### TYPICAL INSTALLATIONS INCLUDE:

- Plenum-mounted water heaters and water tanks (RS-094-MK6)
- Applications requiring valve installation up in the plenum, with power and leak detection sensing in the work space below (RS-080-MK6) – such as under break room sinks
- Simple water leak detection in a plenum space (RS-096-MK6)
- Plenum HVAC/water chiller condensate pans, for overflow detection (RS-097-MK6)

#### HIGHLY RECOMMENDED FOR:

- Commercial and municipal facilities
- Multi-residential complexes

#### KIT FEATURES:

- Plenum-rated wires for the water sensor, power supply and valve cable connections (as applicable)
- Step-down transformer (120, 208, 240 VAC to 24 VAC) with mounting plate in lieu of standard wall wart
- Pre-wired with basic connections to the power transformer and the sensor
- An audible alarm for quick identification of the problem
- All valves are suitable for potable water installations
- Dry contacts (NO/C/NC) to tie into existing building automation and security systems



Plenum-Rated Wires,  
Step-Down Transformer  
& Wall Mounting Plate

#### APPLICATION CONSIDERATIONS:

In commercial buildings, water supply lines and water-fed appliances such as water tanks and chillers are often located in plenum spaces. Because they are hidden from view, these are especially susceptible to the damage caused by an undetected water leak.

Local fire, safety and electrical codes have strict guidelines for installation of electrical devices in plenum spaces, typically requiring that all devices be hard-wired directly to their power source and that special-grade "plenum-rated" wires be used. These special requirements typically require a field retrofit to code, resulting in added time and expense.

RDT makes it easy and convenient to work within these challenging spaces with its plenum-rated FloodMaster MK6 series kits. These kits are also ideal for any application which requires hardwiring to a power source, such as for leak detection under sinks in break rooms.



# MK6 SERIES TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

RS-094-MK6 Water Heater/Tank Kits		
Valve Size	P/N	UPC
1/2"	RS-094-1/2-MK6	857640005960
3/4"	RS-094-3/4-MK6	857640005724
1"	RS-094-1-MK6	857640005977
1-1/4"	RS-094-1-1/4-MK6	857640005984
RS-080-MK6 Water Main Kits		
Valve Size	P/N	UPC
3/4"	RS-080-3/4-MK6	857640005861
1"	RS-080-1-MK6	857640005878
1-1/4"	RS-080-1-1/4-MK6	857640005885
1-1/2"	RS-080-1-1/2-MK6	857640005892
2"	RS-080-2-MK6	857640005908
2-1/2"	RS-080-2-1/2-MK6	857640005915
3"	RS-080-3-MK6	857640005922
4"	RS-080-4-MK6	857640005939
RS-096-MK6 Water Alarm Kits		
Valve Size	P/N	UPC
N/A	RS-096-MK6	857640005946
RS-097-MK6 HVAC Alarm Kits		
Valve Size	P/N	UPC
N/A	RS-097-MK6	857640005953

## PLENUM-RATED COMPONENT SPECIFICATIONS:

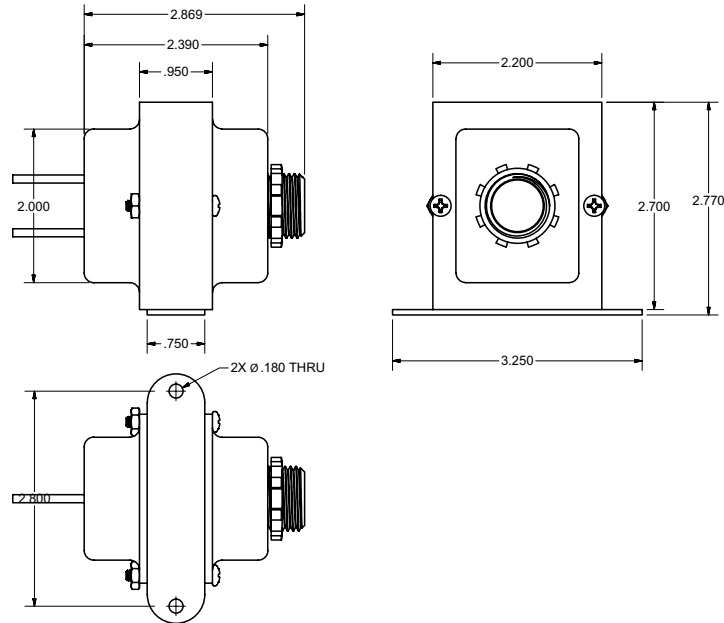
### Step-Down Transformer

Voltage ..... 120, 208 or 240V AC  
to 24V AC

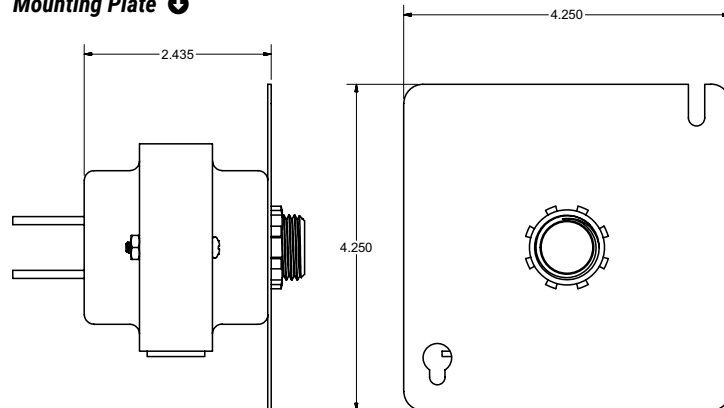
Transformer Cable.....12'

## PLENUM-RATED COMPONENT DIMENSIONS & WEIGHTS:

### Step-Down Transformer



### Mounting Plate



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



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info@RelianceDetection.com  
**www.RelianceDetection.com**



# TECHNICAL SUBMITTAL DATA SHEET

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

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-080 with 3/4" to 2" Ball Valve

#### TYPICAL INSTALLATIONS INCLUDE:

- Common-risk housing – condos and apartments
- Commercial break rooms
- New and retrofit construction
- Mechanical rooms

#### HIGHLY RECOMMENDED FOR:

- Multi-residential complexes
- Commercial office buildings
- Any facility with a history of insurance claims for water damage

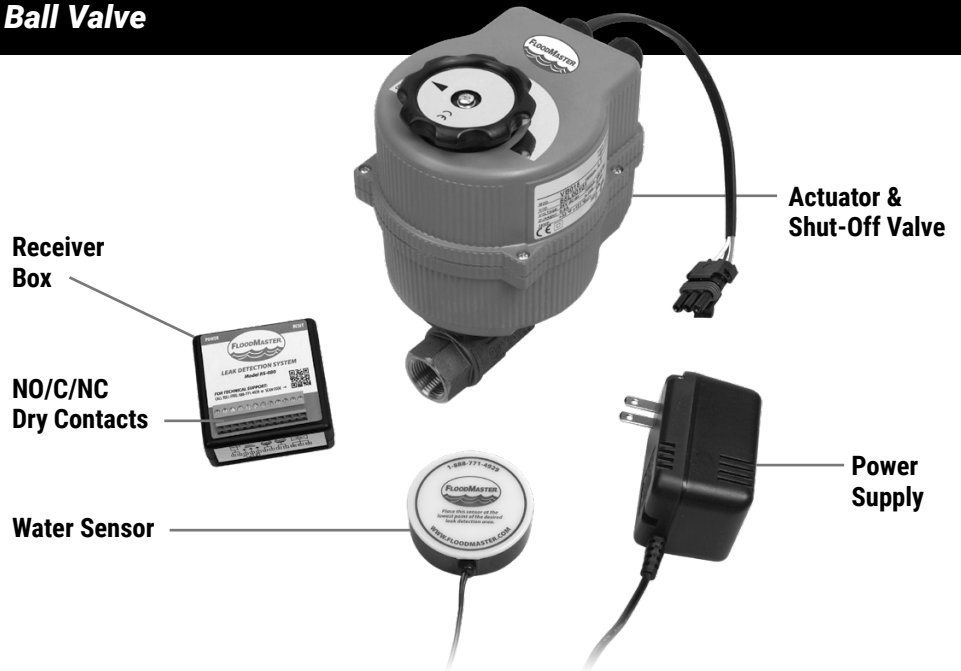
#### FEATURES:

- Full-port valves available from 3/4" to 2" dia.; systems with butterfly valves also available from 2-1/2" to 4" dia.
- Reusable and testable
- Easy reset button
- Plugs into a standard 120V AC outlet
- Audible alarm (83 dB)
- Supports multiple water sensors for a wider area of leak detection
- N/O and N/C dry contacts
- Factory pre-wired

#### MODIFIED KIT CONFIGURATIONS:

##### RS-080-MK6 Plenum-Rated Kit –

Features plenum-rated wires and step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of standard wall wart. Ideal for any application that requires a valve installation on a supply line up in the plenum, with power and leak detection sensing in the work space below.



#### APPLICATION CONSIDERATIONS:

The RS-080 is designed for localized leak detection (one room, one floor, etc.). When a leak is detected, the unit will sound an alarm and automatically shut off the main water supply line, preventing extensive water damage.

#### INSTALLATION OVERVIEW:

The full-port shut-off valve installs on the main water supply line. The receiver box plugs into a standard 120V AC wall outlet. A sensor is placed in an area where water from a leak is likely to accumulate. Up to 5 additional sensors can be added for a wider area of leak detection. Components come pre-wired.

Optional Cable Adder between the receiver and valve assembly allows the receiver to be located up to 100' from the valve (available in standard 10', 25', 50' and 100' lengths). Ideal for situations where the valve is located in hard to reach locations such as in risers, ceilings, crawl spaces, etc.

The system can be performance tested anytime; it is resettable via reset button on the receiver box. Optional dry contact connections (NO/C/NC) are available for fault notification to existing security panel or BMS.

Emergency manual operation of the valve is accomplished by turning the knob on the top of the actuator. In the event of a power failure, the valve will remain in position (either open or closed).

# RS-080 with 3/4" to 2" Ball Valve TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
3/4"	RS-080-3/4	857640005281
1"	RS-080-1	857640005298
1-1/4"	RS-080-1-1/4	857640005304
1-1/2"	RS-080-1-1/2	857640005311
2"	RS-080-2	857640005328

## OPERATING SPECIFICATIONS:

### Ball Valve

Pressure Rating ..... 600 WOG - 150 WSP

Max. Temperature.....366°F

### Electric Actuator

Voltage ..... 24V AC

Absorbed Current ..... 1.0 A

Absorbed Power ..... 24V A

Frequency ..... 50/60 Hz

Working Temp. .... -4° to 131°F

### Receiver Box

Audible Alarm ..... 83 dB

## MATERIALS:

### Ball Valve

Body ..... Low-lead brass

End Connection ... Low-lead brass

Stem ..... Low-lead brass

Ball ..... Low-lead brass  
(tea coated)

Ball Seats ..... PTFE

O-Rings ..... FKM (Viton®)

## CABLE LENGTHS:

Power Cord ..... 12'

Sensor Cable ..... 8' (custom lengths avail.)

Valve Cable ..... 8' (adder lengths avail.)

## APPROVALS:

NSF/ANSI 61 and 372 approved valve.

MA Board of Registration of Plumbers

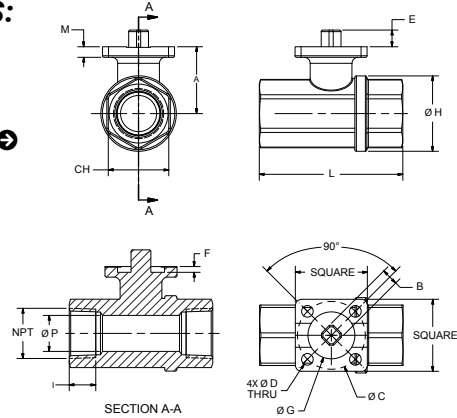
Approval – Code # P3-0818-66.



UL classified actuator.

## DIMENSIONS & WEIGHTS:

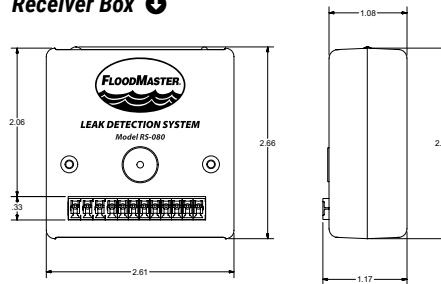
### Shut-Off Ball Valve (3/4" to 2")



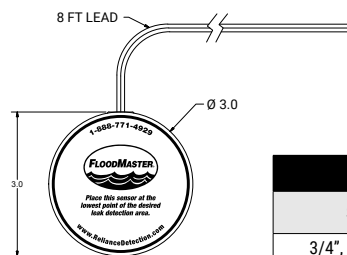
RS-080 Shut-Off Ball Valve Specifications: 3/4" through 2"																	
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40
1"	1.50	1.79	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	1.93	0.75	3.54	1.61	0.24	0.95	49.71	580	0.75
1-1/4"	1.50	1.93	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	2.30	0.84	4.02	1.97	0.24	1.18	102.88	580	1.05
1-1/2"	1.97	2.52	0.43	1.97 (ISO F05)	0.28	0.43	0.12	1.38	2.87	0.84	4.49	2.17	1.39	1.50	265.88	580	1.73
2"	1.97	2.88	0.43	1.97 (ISO F05)	0.28	0.43	0.12	1.38	3.60	1.01	5.43	2.76	0.31	1.98	306.34	580	2.98

(IN-LBS) TORQUE VALVES ARE MEASURED IN LABORATORY TESTS UNDER THE FOLLOWING CONDITIONS: TEMPERATURE: 68°F; PRESSURE: 0 PSI; FLUID: PURIFIED WATER.

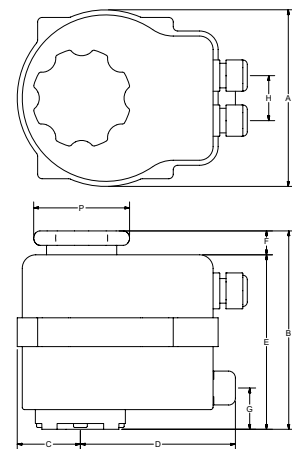
### Receiver Box



### Water Sensor



### Actuator



RS-080 Electric Actuator Specifications											
Size	Drilling ISO 5211	A	B	C	D	E	F	G	H	I	P
3/4", 1", 1-1/4"	F03-F05	4.84	5.57	1.67	4.74	4.96	0.61	4.06	1.26	0.55	2.68
1-1/2", 2"	F03-F05	6.18	7.40	2.38	5.12	5.75	1.65	1.30	1.42	0.47	2.68

## AVAILABLE ACCESSORIES (see pg. 26):

- **Wired Sensor Pucks** – Up to 5 additional sensors can be wired to a single RS-080 receiver box for a wider area of leak detection.
- **Sensing Rope Kit** – Ideal for use with low tanks, or for room perimeter and sub-floor leak detection applications.
- **Auto Dialer** – Receive automatic alerts whenever the RS-080 identifies a fault condition.
- **Cable Adder** – Allows for positioning of the RS-080 receiver up to 100' further away from the valve.

RD T recommends that installations be completed by a licensed plumber to ensure that all local code requirements are followed.



**Reliance Detection Technologies, LLC**  
27 Business Park Drive  
Branford, CT 06405

203-488-2684 or 888-771-4929  
info@RelianceDetection.com  
**www.RelianceDetection.com**



# TECHNICAL SUBMITTAL DATA SHEET

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

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-080 with 2-1/2" to 4" Butterfly Valve

#### TYPICAL INSTALLATIONS INCLUDE:

- Common-risk housing – condos and apartments
- Commercial break rooms
- New and retrofit construction
- Mechanical rooms

#### HIGHLY RECOMMENDED FOR:

- Multi-residential complexes
- Commercial office buildings
- Any facility with a history of insurance claims for water damage

#### FEATURES:

- Butterfly valves available from 2-1/2" to 4" dia.; systems with ball valves also available from 3/4" to 2" dia.
- Reusable and testable
- Easy reset button
- Plugs into a standard 120V AC outlet
- Audible alarm (83 dB)
- Supports multiple water sensors for a wider area of leak detection
- N/O and N/C dry contacts
- Factory pre-wired

#### MODIFIED KIT CONFIGURATIONS:

##### RS-080-MK6 Plenum-Rated Kit –

Features plenum-rated wires and step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of standard wall wart. Ideal for any application that requires a valve installation on a supply line up in the plenum, with power and leak detection sensing in the work space below.

Receiver Box

NO/C/NC Dry Contacts

Power Supply

Water Sensor

Actuator & Shut-Off Valve

#### APPLICATION CONSIDERATIONS:

The RS-080 is designed for localized leak detection (one room, one floor, etc.). When a leak is detected, the unit will sound an alarm and automatically shut off the main water supply line, preventing extensive water damage.

#### INSTALLATION OVERVIEW:

The full-port shut-off valve installs on the main water supply line. The receiver box plugs into a standard 120V AC wall outlet. A sensor is placed in an area where water from a leak is likely to accumulate. Up to 5 additional sensors can be added for a wider area of leak detection. Components come pre-wired.

Optional Cable Adder between the receiver and valve assembly allows the receiver to be located up to 100' from the valve (available in standard 10', 25', 50' and 100' lengths). Ideal for situations where the valve is located in hard to reach locations such as in risers, ceilings, crawl spaces, etc.

The system can be performance tested anytime; it is resettable via reset button on the receiver box. Optional dry contact connections (NO/C/NC) are available for fault notification to existing security panel or BMS.

Emergency manual operation of the valve is accomplished by turning the knob on the top of the actuator. In the event of a power failure, the valve will remain in position (either open or closed).



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www.RelianceDetection.com

# RS-080 with 2-1/2" to 4" Butterfly Valve TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
2-1/2"	RS-080-2-1/2	857640005786
3"	RS-080-3	857640005793
4"	RS-080-4	857640005809

## OPERATING SPECIFICATIONS:

### Butterfly Valve

Pressure Rating .....250 PSI

Max. Temperature.....250°F

### Electric Actuator

Voltage .....24V AC

Absorbed Current .....1.0 A

Absorbed Power .....24V A

Frequency .....50/60 Hz

Working Temp. ....-4° to 131°F

### Receiver Box

Audible Alarm .....83 dB

## MATERIALS:

### Butterfly Valve

Body .....Ductile Iron

Seat.....EPDM (-30° to 250°F)  
Lug Style

Disc.....Nylon-Coated  
Ductile Iron

Shafts.....416 Stainless Steel

Locating Pin.....Carbon Steel

Bushing .....PTFE

O-Ring.....EPDM

Mounting .....Direct Mount\* (see note under Dimensions)

## CABLE LENGTHS:

Power Cord .....12'

Sensor Cable.....8' (custom lengths avail.)


Valve Cable .....8' (adder lengths avail.)

## APPROVALS:

NSF/ANSI 61 and 372 approved valve.

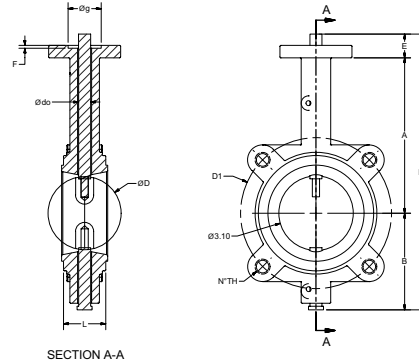
MA Board of Registration of Plumbers

Approval – Code # P3-0818-66.

 UL classified actuator.

## DIMENSIONS & WEIGHTS:

### Shut-Off Butterfly Valve (2-1/2" to 4")

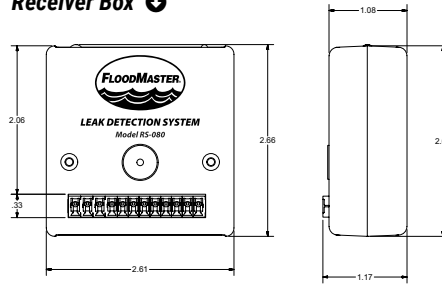


\* Note: Butterfly valves require appropriate mounting flange and hardware (not included). Please see install manual for details.

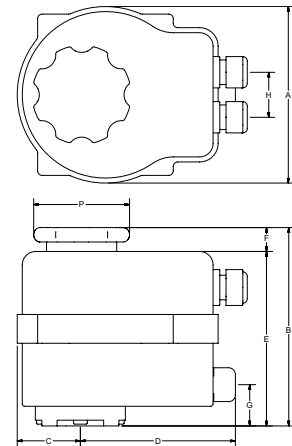
Recommended flange:  
316/316L SS forged,  
threaded NPT-F,  
150 lb. ANSI raised-face flange (raised surface on the back).

RS-080 Shut-Off Butterfly Valve Specifications: 2-1/2" through 4"																					
Size	C ISO	B1	A	B2	L	D	E	H	R	D0	K	Z-d	g	F	D1	N-TH	LBS	Seat Torque		CV (GPM @ 1 PSI)	
																		100 PSI	200 PSI	50% OP	100% OP
2-1/2"	F05	9mm	6.89	3.50	1.76	2.54	0.47	15.04	10.63	0.50	3.03	4-0.28	1.38	0.12	5.49	4-5/8"-11	9.3	134	167	65	220
3"	F05	9mm	7.13	3.74	1.78	3.10	0.47	15.51	10.63	0.50	3.03	4-0.28	1.38	0.12	6.00	4-5/8"-11	10.4	205	223	70	300
4"	F07	11mm	7.87	4.49	2.05	4.09	0.63	17.00	10.63	0.62	3.54	4-0.35	2.17	0.12	7.50	8-5/8"-11	19.8	339	386	140	605

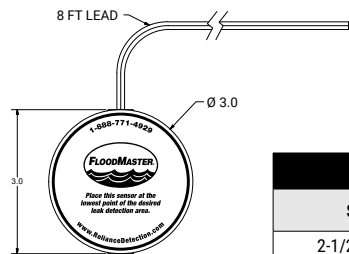
### Receiver Box



### Actuator



### Water Sensor



## RS-080 Electric Actuator Specifications

Size	Drilling ISO 5211	A	B	C	D	E	F	G	H	I	P
2-1/2", 3", 4"	F03-F05	6.18	7.40	2.38	5.12	5.75	1.65	1.30	1.42	0.47	2.68

## AVAILABLE ACCESSORIES (see pg. 26):

- **Wired Sensor Pucks** – Up to 5 additional sensors can be wired to a single RS-080 receiver box for a wider area of leak detection.
- **Sensing Rope Kit** – Ideal for use with low tanks, or for room perimeter and sub-floor leak detection applications.
- **Auto Dialer** – Receive automatic alerts whenever the RS-080 identifies a fault condition.
- **Cable Adder** – Allows for positioning of the RS-080 receiver up to 100' further away from the valve.

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



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**www.RelianceDetection.com**



# TECHNICAL SUBMITTAL DATA SHEET

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

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-090-E

#### TYPICAL INSTALLATIONS INCLUDE:

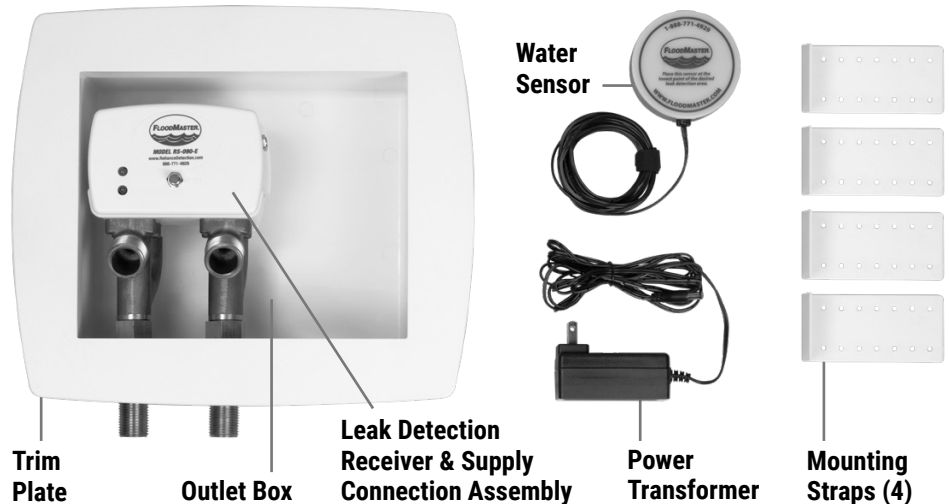
- Single-family homes
- Condos
- Commercial apartment buildings
- Assisted living facilities

#### HIGHLY RECOMMENDED FOR:

- Applications where washing machine is located above the ground floor, where water from a leak will easily spread to lower floors
- Any washer hook-up that lacks a manual shut-off valve
- Facilities with a history of insurance claims for water damage
- Structures with high-end amenities

#### FEATURES:

- Plugs into a standard 120V AC outlet
- Water sensor with 8' lead wire
- Outlet box with (4) mounting straps and trim plate
- Integrated water hammer arrestors for hot and cold water lines
- Easy reset button; system is reusable
- Plugs into a standard 120V AC outlet
- Leak LED and audible alarm (86 dB)
- Factory pre-wired
- Insurance discount may be available upon installation



#### APPLICATION CONSIDERATIONS:

**Did you know** – Water from a burst washing machine hose can produce approx. 6 gallons of water a minute. That's 650 gallons (2.5 tons!) of water in an hour.

The RS-090-E is suitable for installation on new construction, facility upgrades, tenant build-outs and retrofit projects. Care should be taken to ensure necessary rough opening space for outlet box (7.75" X 9" X 3.75"), along with hot and cold feed line positioning/spacing (2.52" on center). Also requires 120V AC power outlet within 6' of the leak detection receiver.

#### INSTALLATION OVERVIEW:

The system features an outlet box with built-in leak detection receiver for simultaneous hot and cold water automatic shut-off when a leak is detected. The kit also includes pre-installed water hammer arrestors on both the hot and cold water lines. The leak detection receiver is powered by a standard 120V AC wall outlet. Outlet box is secured to studs using supplied mounting straps. Water supply lines and appliance hoses connect at the appropriate points to the leak detection receiver, and the mechanical water shut-off device resides in between. Place leak detection water sensor on the floor next to or under the washer and plug the unit into the wall outlet. Finish installation by mounting supplied trim plate and securing drain hose in the provided 2-3/8" ID opening.

Emergency manual operation of the water shut-off valves is accomplished by disconnecting power to the unit. In the event of a power failure, the valves will fail closed (water off).

RDT recommends that installations be completed by a licensed plumber to ensure that all local codes requirements are followed.



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info@RelianceDetection.com  
www.RelianceDetection.com



# RS-090-E TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
Dual-port 1/2"	RS-090-E	811475030160

## OPERATING SPECIFICATIONS:

### Fittings

Supply Lines.....1/2" NPT brass  
 Feed Lines .....3/4" NPT brass  
 Max. Water Temp. ....120°F  
 Max. Water Pressure.....Tested to 80 PSI

### Receiver Box / Actuator

Transformer .....120V AC  
 Voltage .....30V AC  
 Working Temp. ....0° to 100°F  
 Audible Alarm .....86 dB

### Water Hammer Arrestors

Hot & Cold Lines..... To ASSE 1010 requirements

## MATERIALS:

### Fittings

Body ..... Brass  
 End Connection ..... Brass  
 Complies with ASME A112.18/CSA B125.1-2012; NSF 372.

### Leak Detection Receiver & Water Sensor

Body ..... High-performance engineered polymer

### Outlet Box & Mounting Material

Body ..... Fire-rated PVC  
 Meets UL94 Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances (materials only).

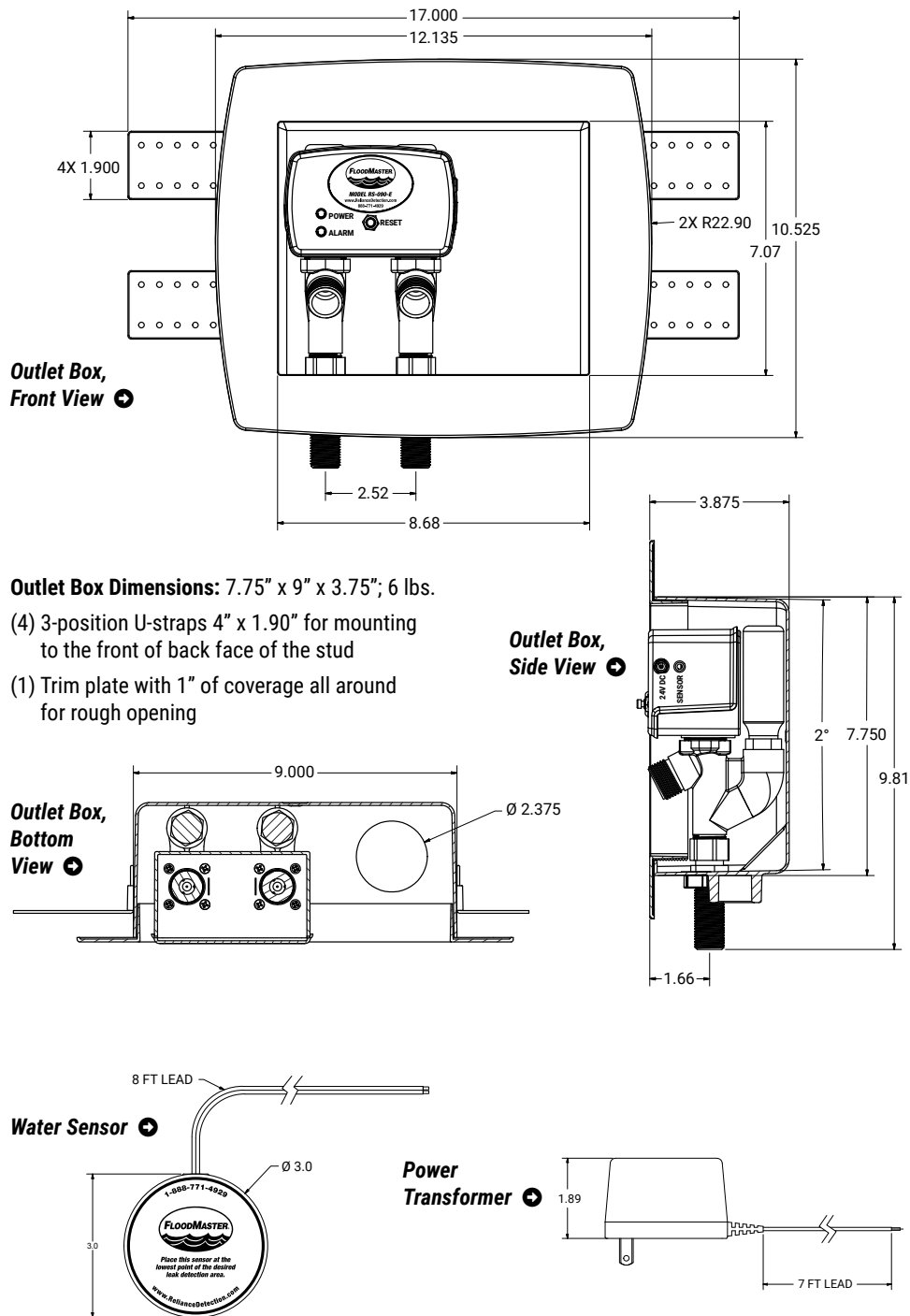
## CABLE LENGTHS:

Power Cord ..... 7'  
 Sensor Cable..... 8'

## OTHER APPROVALS:

MA Board of Registration of Plumbers  
 Approval – Code # P1-1118-206.

## DIMENSIONS & WEIGHTS:



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

**Warning:** For use with water only. Do not install on gas line. For indoor use only. This system requires a 120V AC wall outlet within 6 feet of the system.



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 Branford, CT 06405

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 info@RelianceDetection.com  
 www.RelianceDetection.com



# TECHNICAL SUBMITTAL DATA SHEET

## Hose-Fed Appliance Leak Detection & Automatic Shut-Off System

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-092

#### TYPICAL INSTALLATIONS INCLUDE:

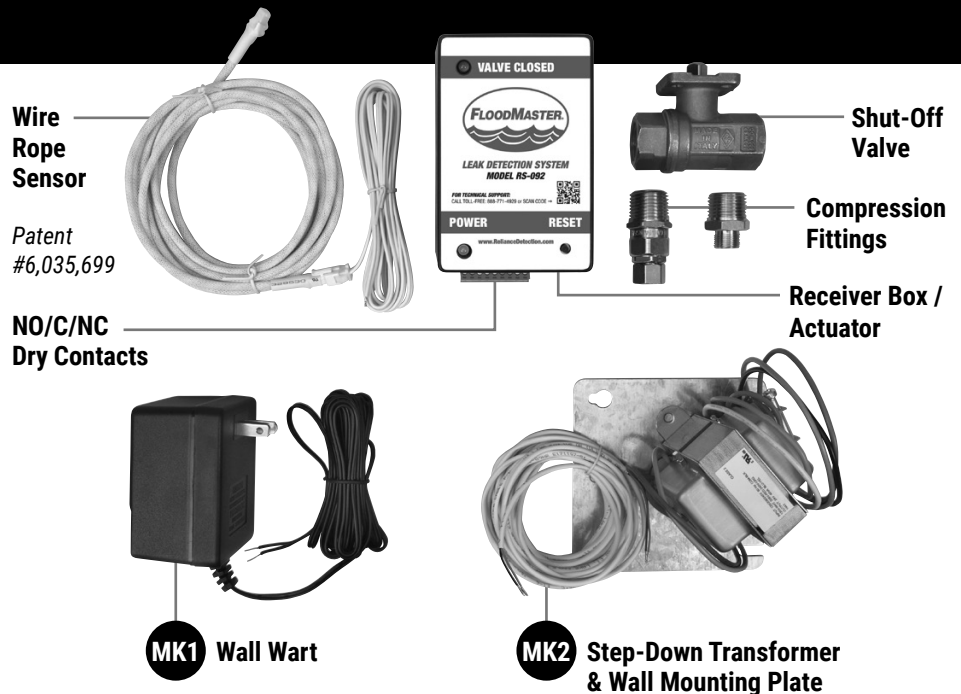
- Dishwashers, ice makers, and beverage dispensers
- Commercial break rooms
- Residential water treatment and reverse osmosis (RO) systems
- Restaurants and food courts
- Common-risk housing – condos and apartments
- New and retrofit construction

#### HIGHLY RECOMMENDED FOR:

- Commercial office buildings
- Multi-residential complexes
- Academic, institutional and industrial facilities
- Any facility with a history of insurance claims for water damage

#### FEATURES:

- 1/2" full port valve
- Fittings: (1) 3/8" x 1/2" male compression and (1) 3/8" x 1/2" female compression
- Choice of standard wall wart or step-down transformer to power the unit
- Reusable and testable
- Easy reset button
- Snap-fit actuator allows for manual operation of the valve
- Audible alarm (83 dB)
- N/O and N/C dry contacts
- Factory pre-wired



#### APPLICATION CONSIDERATIONS:

Hose-fed appliance failures can happen at any time, often without warning and hidden from view. These leaks can cause substantial flooding and property damage if allowed to run for more than even just a few minutes' time. The RS-092 system is designed to minimize water damage when these leaks occur.

#### INSTALLATION OVERVIEW:

The RS-092 full port valve installs on the hard pipe feed water line between the manual shut-off and the hose line, using the provided 1/2" NPT x 3/8" fittings. Lay the wire rope sensor under the appliance or around the area where water from a leak is most likely to accumulate. When the sensor detects leaking water, an alarm will sound and the valve will automatically shut off the feed water intake to prevent catastrophic water damage.

The RS-092 is available in two electrical supply configurations: standard 120V AC wall wart (MK1) or 120, 208 or 240V AC to 24V AC step-down transformer (MK2). Components come pre-wired. The system can be performance tested anytime; it is resettable via reset button on actuator. Optional dry contact connections (NO/C/NC) are available for fault notification to existing security panel or BMS.

Emergency manual operation of the valve is accomplished by removing the snap-fit actuator and manually changing the valve to open or closed. In the event of a power failure, the valve will remain in position (either open or closed).

# RS-092 TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
1/2"	RS-092-1/2-MK1	857640005847
1/2"	RS-092-1/2-MK2	857640005854

## POWER SUPPLY:

MK1..... 120V AC Wall Wart

MK2..... 120, 208 or 240V AC to 24V AC  
Step-Down Transformer

## OPERATING SPECIFICATIONS:

### Valve

Pressure Rating.....600 WOG - 150 WSP

Max. Temperature.....366°F

Max. Pressure.....Tested to 80 PSI

### Receiver Box / Actuator

Transformer.....120V AC

Voltage.....24V AC

Absorbed Current.....0.6 A

Absorbed Power.....15V A

Frequency.....50/60 Hz

Working Temp.....0° to 100°F

Square Drive.....0.43

Audible Alarm.....83 dB

## MATERIALS:

### Valve

Body.....Low-lead brass

End Connection...Low-lead brass

Stem.....Low-lead brass

Ball.....Low-lead brass  
(tea coated)

Ball Seats.....PTFE

O-Rings.....FKM (Viton®)

## CABLE LENGTHS:

Power Cord.....12'

Sensor Cable.....6' lead wire with 10' of  
sensing cable (extension  
lengths are available)

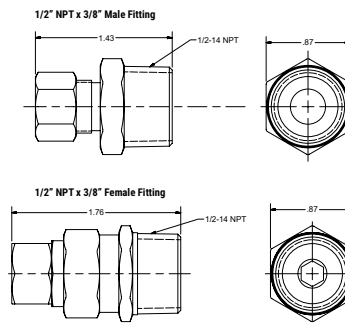
## APPROVALS:

NSF/ANSI 61 and 372 approved valve.

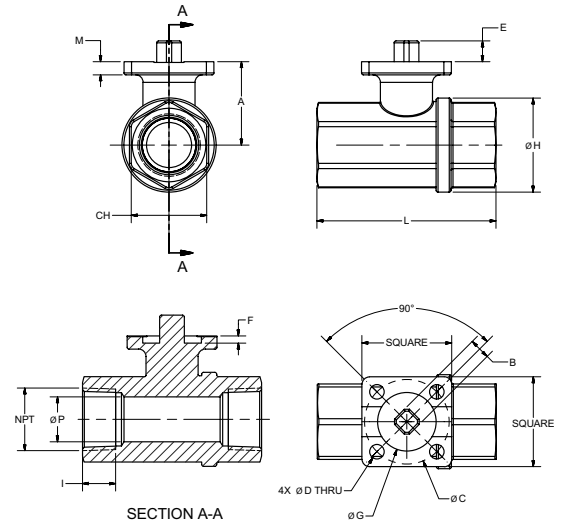
MA Board of Registration of Plumbers  
Approval – Code # P1-0617-575.

## DIMENSIONS & WEIGHTS:

### Compression Fittings



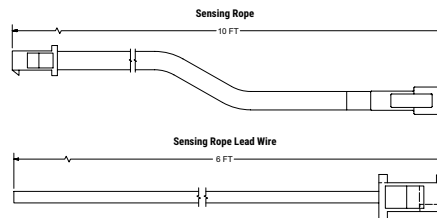
### Shut-Off Valve



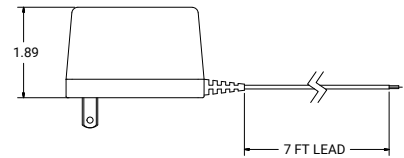
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10

(IN-LBS) TORQUE VALVES ARE MEASURED IN LABORATORY TESTS UNDER THE FOLLOWING CONDITIONS: TEMPERATURE: 68°F; PRESSURE: 0 PSI; FLUID: PURIFIED WATER.

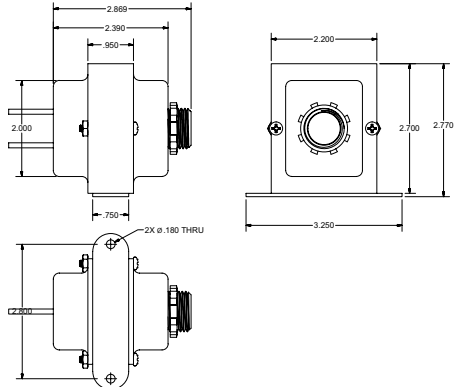
### Wire Rope Sensor



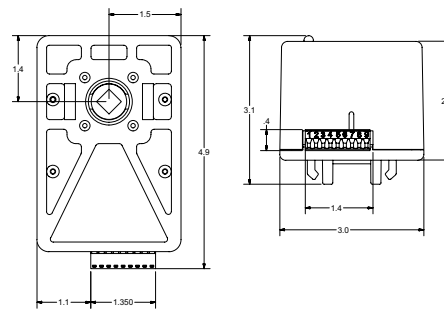
### MK1 Wall Wart



### MK2 Step-Down Transformer



### Receiver Box / Actuator

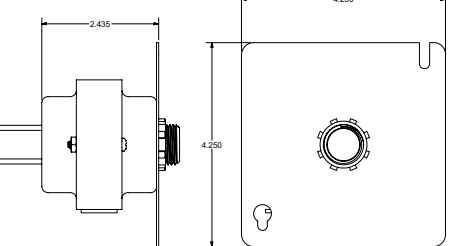


## AVAILABLE ACCESSORIES:

(see pg. 26)

- **Wired Sensor Pucks & Sensing Ropes** – Up to 5 additional sensors can be wired to a single RS-092 receiver box.
- **Auto Dialer** – Receive automatic alerts whenever the RS-092 identifies a fault condition.

### MK2 Mounting Plate



RD T recommends that installations be completed by a licensed plumber to ensure that all local code requirements are followed.



**Reliance Detection Technologies, LLC**  
27 Business Park Drive  
Branford, CT 06405

203-488-2684 or 888-771-4929  
info@RelianceDetection.com  
**www.RelianceDetection.com**



# TECHNICAL SUBMITTAL DATA SHEET

## Water Tank Leak Detection & Automatic Shut-Off System

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-094

#### TYPICAL INSTALLATIONS INCLUDE:

- Common-risk housing – condos and apartments
- Commercial break rooms
- New and retrofit construction
- Vacation homes and other unattended properties

#### HIGHLY RECOMMENDED FOR:

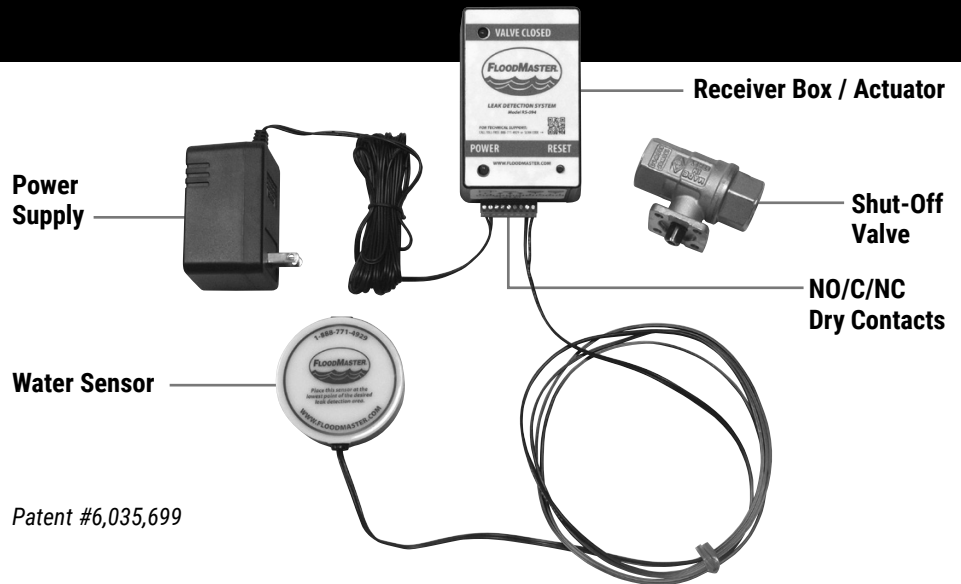
- Multi-residential complexes
- Commercial office buildings
- Any facility with a history of insurance claims for water damage

#### FEATURES:

- Full port valve sizes 1/2" to 1-1/4" dia.
- Reusable and testable; easy reset button
- Snap-fit actuator allows for manual operation of the valve
- Reliable, gear-driven valve – less susceptible to failure from build-up than spring-driven valves
- Plugs into a standard 120V AC outlet
- Audible alarm (83 dB)
- N/O and N/C dry contacts
- Factory pre-wired

#### MODIFIED KIT CONFIGURATIONS:

- RS-094-MK6 for Plenum Spaces
- RS-094-MK1 with Rope Sensor for Low-Profile Tanks
- RS-094-MK4 with Electrical Plug Interrupter
- RS-094-MK5 Kit with Gas Flow Interrupter
- RS-094-MK7 Kit with Gas Interface Cable



#### APPLICATION CONSIDERATIONS:

The RS-094 system is designed to prevent damage caused by an undetected plumbing leak from a water tank. The full port valve installs on the cold water inlet line to the water heater, and the snap-fit actuator attaches directly to the valve mounting pad. A puck-shaped leak detection sensor fits nicely in the pan or on the floor under the tank, typically under the pressure relief valve or in a similar area where water from a leak is likely to accumulate. This water sensor features a 1/16" stand-off to allow for air circulation and eliminate false alarms caused by humidity from the floor.

#### INSTALLATION OVERVIEW:

The RS-094 features an integrated receiver box and actuator that install directly onto the shut-off valve for tidy system installation, even if the water tank is not located near a wall. The system plugs into a standard 120V AC wall outlet. Components come pre-wired.

The system can be performance tested anytime; it is resettable via reset button on actuator. Suitable for new construction or retrofit, gas-powered or electric tanks, conventional or tankless systems. Dry contact connections (NO/C/NC) are included for fault notification to an existing security panel or BMS.

Emergency manual operation of the valve is accomplished by removing the snap-fit actuator and manually changing the valve to open or closed. In the event of a power failure, the valve will remain in position (either open or closed).

# RS-094 TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
1/2"	RS-094-1/2	857640005373
3/4"	RS-094-3/4	857640005380
1"	RS-094-1	857640005397
1-1/4"	RS-094-1-1/4	857640005403

## OPERATING SPECIFICATIONS:

### Valve

Pressure Rating ..... 600 WOG - 150 WSP

Max. Temperature ..... 366°F

Max. Pressure ..... Tested to 80 PSI

### Receiver Box / Actuator

Transformer ..... 120V AC

Voltage ..... 24V AC

Absorbed Current ..... 0.6 A

Absorbed Power ..... 15V A

Frequency ..... 50/60 Hz

Working Temp. .... 0° to 100°F

Square Drive ..... 0.43

Audible Alarm ..... 83 dB

## MATERIALS:

### Valve

Body ..... Low-lead brass

End Connection ... Low-lead brass

Stem ..... Low-lead brass

Ball ..... Low-lead brass  
(tea coated)

Ball Seats ..... PTFE

O-Rings ..... FKM (Viton®)

### Receiver Box / Actuator & Sensor

Body ..... High-performance  
engineered polymer

## CABLE LENGTHS:

Power Cord ..... 12'

Sensor Cable ..... 8' (custom lengths avail.)

## APPROVALS:

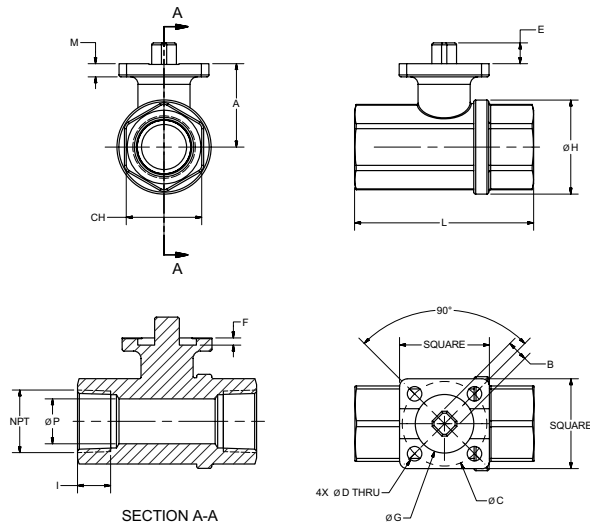
NSF/ANSI 61 and 372 approved valve.

MA Board of Registration of Plumbers

Approval – Code # P1-0515-489.

## DIMENSIONS & WEIGHTS:

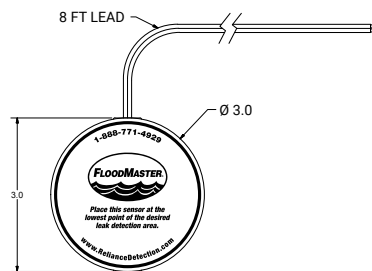
### Shut-Off Valve



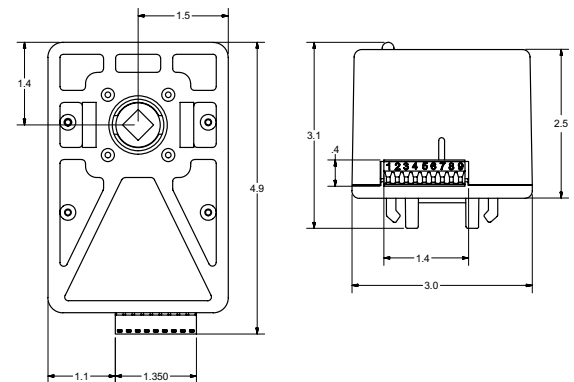
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	1.93	0.75	3.54	1.61	0.24	0.95	49.71	580	0.75	53.10
1-1/4"	1.50	1.93	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	2.30	0.84	4.02	1.97	0.24	1.18	102.88	580	1.05	53.10

(IN-LBS) TORQUE VALVES ARE MEASURED IN LABORATORY TESTS UNDER THE FOLLOWING CONDITIONS: TEMPERATURE: 68°F; PRESSURE: 0 PSI; FLUID: PURIFIED WATER.

### Water Sensor



### Receiver Box / Actuator



## AVAILABLE ACCESSORIES (see pg. 26):

- **Wired Sensor Pucks** – Up to 5 additional sensors can be wired to a single RS-094 receiver box for a wider area of leak detection.
- **Sensing Rope Kit** – Ideal for use with low tanks, or for room perimeter and sub-floor leak detection applications.
- **Auto Dialer** – A convenient, low-cost add-on to send and receive automatic alerts whenever your FloodMaster system identifies a fault condition.
- **Electrical Plug Interrupter** – Power control relay for conventional plug-in Power-Vent gas water heaters that automatically turns off the electricity to the appliance when a leak is detected.

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



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**www.RelianceDetection.com**



# TECHNICAL SUBMITTAL DATA SHEET

## Battery-Powered Water Leak Detection & Alarm System

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-095

#### TYPICAL INSTALLATIONS INCLUDE:

- Drains and pipes that are prone to leaking or freezing
- Water-fed appliances such as dishwashers, washing machines and water heaters
- Sump pumps
- Tubs
- Table-top containers and beakers
- Sinks

#### HIGHLY RECOMMENDED FOR:

- Commercial buildings
- Basements
- Above/near data processing rooms
- Medical facilities and labs
- Any facility with a history of insurance claims for water damage

#### FEATURES:

- Completely self-contained and portable
- Powered by a single 9-volt battery
- Reusable and testable
- Easy reset button
- Loud audible alarm (110 dB)
- A plug-in leak alarm that can accommodate multiple sensors and interface with a security system is also available (model RS-096)

#### ORDERING INFORMATION:

Valve Size	P/N	UPC
N/A	RS-095	857640005410

**Unit Dimensions:**  
4-1/8" High x  
3" Wide x  
1-1/2" Deep

**Water  
Sensor**



**Alarm Box**

**Battery  
Compartment**

**Sensor Cable  
(6', extendable  
to 100')**

#### APPLICATION CONSIDERATIONS:

The RS-095 self-contained, battery-powered alarm system is designed to detect and notify you of leaks and overflows from water-fed appliances, plumbing fixtures and tanks/containers. When the integrated water sensor comes in contact with just 1/32" of any non-flammable conductive liquid (such as water), an alarm sounds.

This fully transportable sensor can be repositioned as your need for an early leak detection alarm changes. The integrated sensor has a 6' wire so it can be extended into a sump pit or mounted on a wall and stretched to another location. Splice up to 100' of speaker wire into the line to extend the sensor's reach even further.

#### INSTALLATION OVERVIEW:

The receiver box is powered by a single 9V battery (not included). The sensor is located on the bottom of the alarm box. The alarm can be placed directly on the floor with the sensor compartment closed, or the sensor compartment can be opened and the sensor wires extended to reach a sump pit or another remote location where water is likely to accumulate. The system can be performance tested anytime.



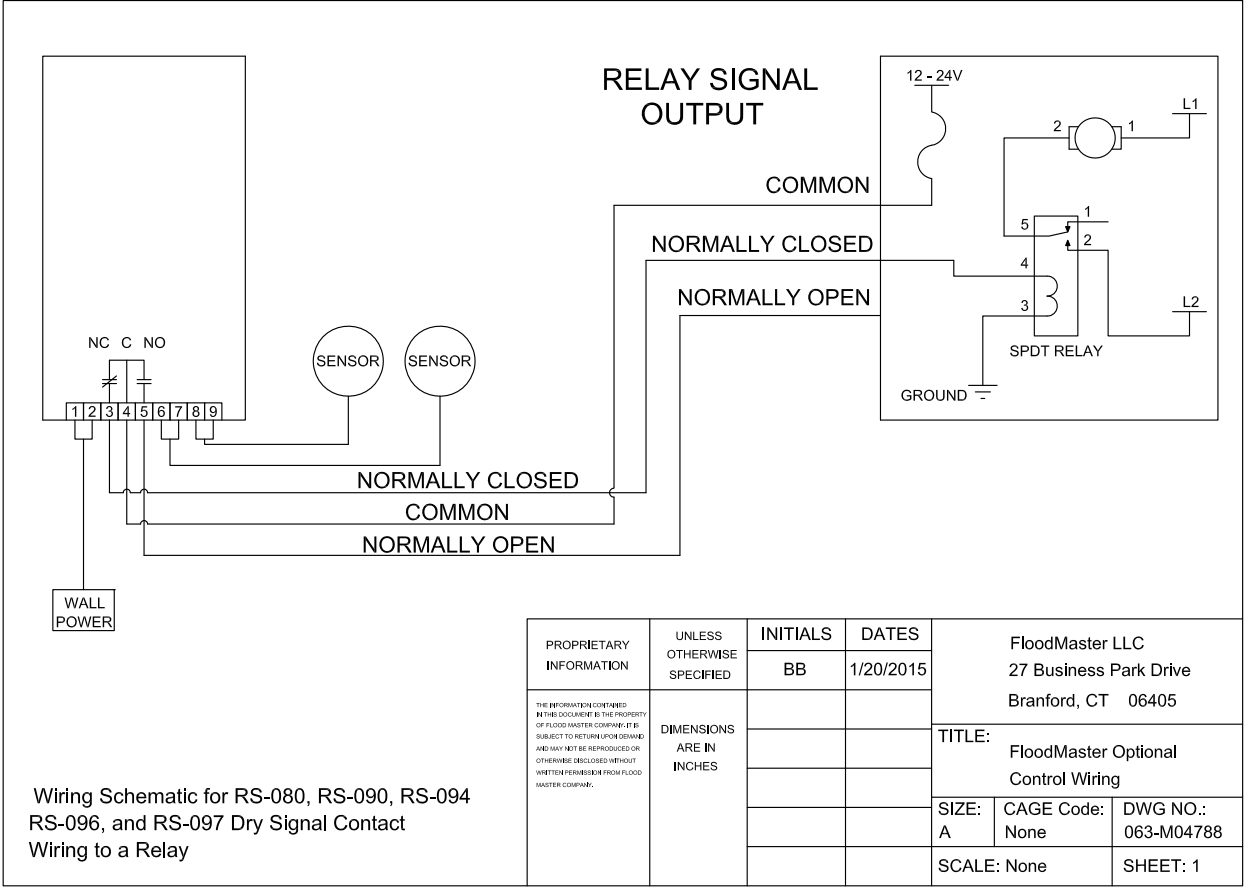
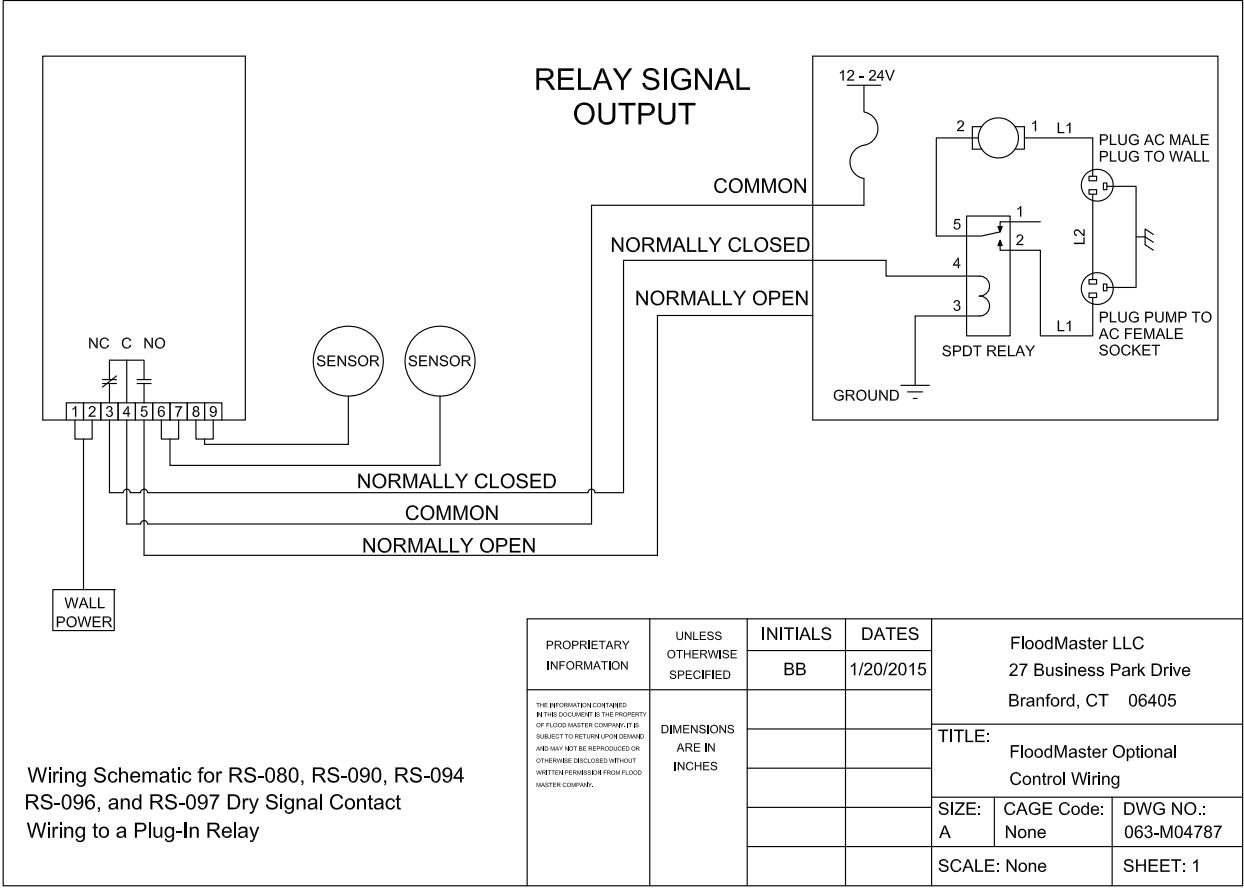
**Reliance Detection Technologies, LLC**  
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Branford, CT 06405

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info@RelianceDetection.com  
**www.RelianceDetection.com**





# ELECTRICAL WIRING SCHEMATICS





# TECHNICAL SUBMITTAL DATA SHEET

## Water Leak Detection & Alarm System

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-096

#### TYPICAL INSTALLATIONS INCLUDE:

- Drains and pipes that are prone to leaking or freezing
- Water-fed appliances such as dishwashers, washing machines and water heaters
- Sump pumps
- Tubs
- Table-top containers and beakers
- Sinks

#### HIGHLY RECOMMENDED FOR:

- Commercial buildings
- Basements
- Above/near data processing rooms
- Medical facilities and labs
- Any facility with a history of insurance claims for water damage

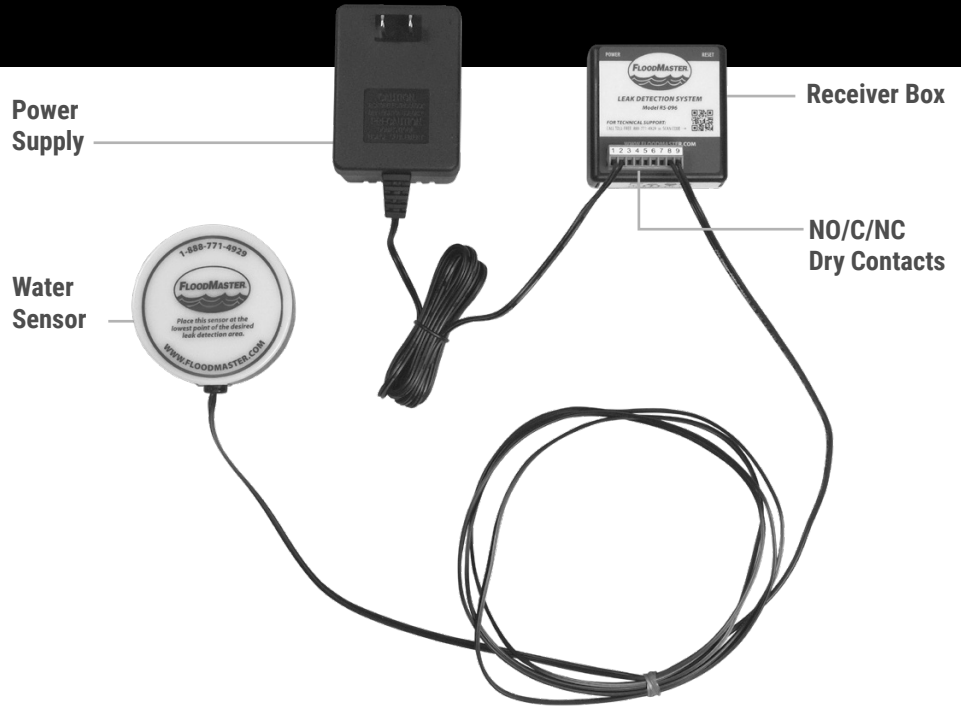
#### FEATURES:

- Reusable and testable
- Easy reset button
- Plugs into a standard 120V AC outlet
- Audible alarm (83 dB)
- N/O and N/C dry contacts
- Factory pre-wired

#### MODIFIED KIT CONFIGURATIONS:

##### RS-096-MK6 Plenum-Rated Kit –

Features plenum-rated wires and step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of standard wall wart. Please see the RS-096-MK6 installation manual for detailed installation instructions.



#### APPLICATION CONSIDERATIONS:

The RS-096 alarm system is designed to detect and notify you of leaks from water-fed appliances, plumbing fixtures and tanks/containers. When the water sensor comes in contact with just 1/16" of any non-flammable conductive liquid (such as water), an alarm sounds. Optional dry contact connections (NO/C/NC) can also be used for fault notification to existing security panel or BMS.

#### INSTALLATION OVERVIEW:

The receiver box plugs into a standard 120V AC wall outlet. A sensor is placed in an area where water is likely to accumulate. Up to 5 additional sensors can be added for a wider area of leak detection. Components come pre-wired.

The system can be performance tested anytime; it is resettable via reset button on the receiver box.

# RS-096 TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
N/A	RS-096	85764000342

## OPERATING SPECIFICATIONS:

### Receiver Box

Transformer ..... 120V AC  
 Voltage ..... 24V AC  
 Absorbed Current ..... 0.6 A  
 Absorbed Power ..... 15V A  
 Frequency ..... 50/60 Hz  
 Working Temp. .... 0° to 100°F  
 Square Drive ..... 0.43  
 Audible Alarm ..... 83 dB

## MATERIALS:

### Receiver Box & Sensor

Body ..... High-performance  
 engineered polymer

## CABLE LENGTHS:

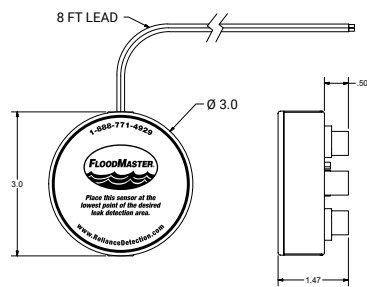
Power Cord ..... 12'  
 Sensor Cable ..... 8' (custom lengths avail.)

## APPROVALS:

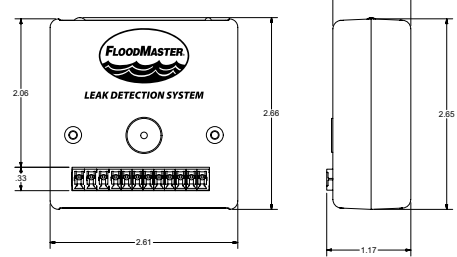
MA Board of Registration of Plumbers  
 Approval – Code # P3-0818-66.

## DIMENSIONS & WEIGHTS:

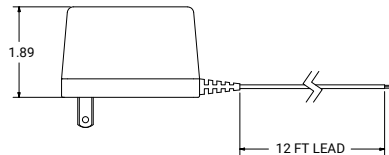
### Water Sensor



### Receiver Box



### Power Supply – 24V AC Wall Wart



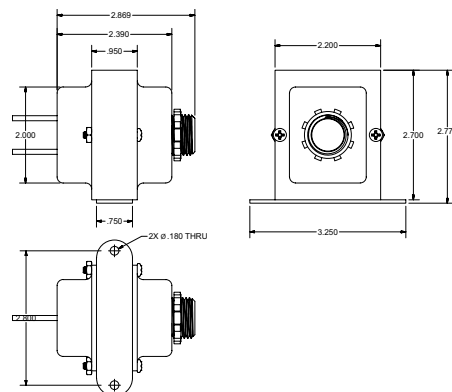
## AVAILABLE ACCESSORIES (see pg. 26):

- **Wired Sensor Pucks** – Up to 5 additional sensors can be wired to a single receiver box for multi-unit monitoring, with 8', 25', 50' and 100' cable lengths available. P/N RSA-100-008; -025; -050; -100
- **Sensing Rope Kit** – Ideal for use with low tanks, or for room perimeter and sub-floor leak detection applications. P/N RSA-175-810
- **Auto Dialer** – Receive automatic phone alerts whenever the system identifies a fault condition. P/N RSA-600-003

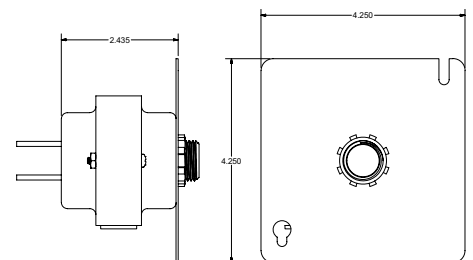
## RS-096-MK6 MODIFIED KIT:

Modified kit RS-096-MK6 includes plenum-rated wires and a step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of the standard plug-in wall wart.

### Step-Down Transformer



### Mounting Plate



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



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 Branford, CT 06405

203-488-2684 or 888-771-4929  
 info@RelianceDetection.com  
**www.RelianceDetection.com**



# TECHNICAL SUBMITTAL DATA SHEET

## HVAC/Air Conditioner Condensate Pan Overflow Alarm

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### MODEL RS-097

#### TYPICAL INSTALLATIONS INCLUDE:

- Air conditioners and HVAC systems
- Water chillers (roof-top or inside the structure)

#### HIGHLY RECOMMENDED FOR:

- Multi-residential complexes
- Commercial office buildings
- Any facility with a history of insurance claims for water damage

#### FEATURES:

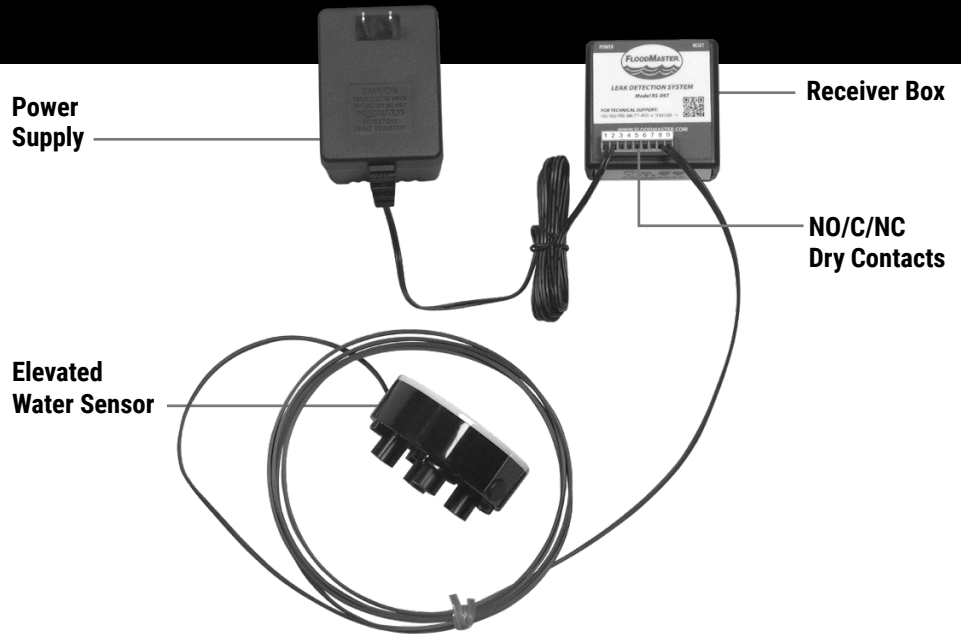
- Reusable and testable
- Easy reset button
- Plugs into a standard 120V AC outlet
- Audible alarm (83 dB)
- N/O and N/C dry contacts
- Factory pre-wired

#### MODIFIED KIT

##### CONFIGURATIONS:

##### RS-097-MK6 Plenum-Rated Kit –

Features plenum-rated wires and step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of standard wall wart. Ideal for monitoring HVAC equipment and chillers installed in hidden plenum spaces. Please see the RS-097-MK6 installation manual for detailed installation instructions.



#### APPLICATION CONSIDERATIONS:

The RS-097 system is designed to prevent water damage caused by overflowing air conditioning, HVAC, HVACR and water chiller condensate pans. This unit features an elevated (1/2") water sensor which will allow for a normal amount of water in the pan and only activate in a near-overflow situation. When too much water accumulates in the pan, an alarm sounds. An optional signal wire can be wired through an appropriate relay (not included) to turn off the HVAC unit when the alarm is activated to prevent further accumulation.

#### INSTALLATION OVERVIEW:

The receiver box plugs into a standard 120V AC wall outlet. A sensor is placed in the condensate pan or another area where water is likely to accumulate. Up to 5 additional sensors can be added for a wider area of leak detection. Components come pre-wired.

The system can be performance tested anytime; it is resettable via reset button on the receiver box. Optional dry contact connections (NO/C/NC) can also be used for fault notification to existing security panel or BMS.

# RS-097 TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve Size	P/N	UPC
N/A	RS-097	857640005359

## OPERATING SPECIFICATIONS:

### Receiver Box

Transformer ..... 120V AC  
 Voltage ..... 24V AC  
 Absorbed Current ..... 0.6 A  
 Absorbed Power ..... 15V A  
 Frequency ..... 50/60 Hz  
 Working Temp. .... 0° to 100°F  
 Square Drive ..... 0.43  
 Audible Alarm ..... 83 dB

## MATERIALS:

### Receiver Box & Sensor

Body ..... High-performance  
 engineered polymer

## CABLE LENGTHS:

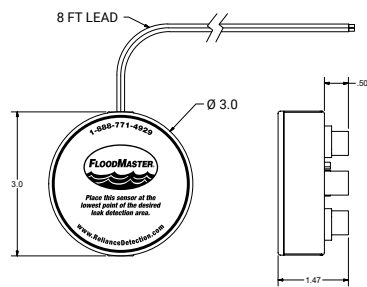
Power Cord ..... 12'  
 Sensor Cable ..... 8' (custom lengths avail.)

## APPROVALS:

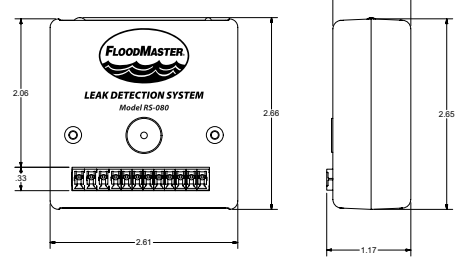
MA Board of Registration of Plumbers  
 Approval – Code # P3-0818-66.

## DIMENSIONS & WEIGHTS:

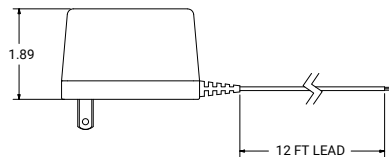
### Water Sensor



### Receiver Box



### Power Supply – 24V AC Wall Wart



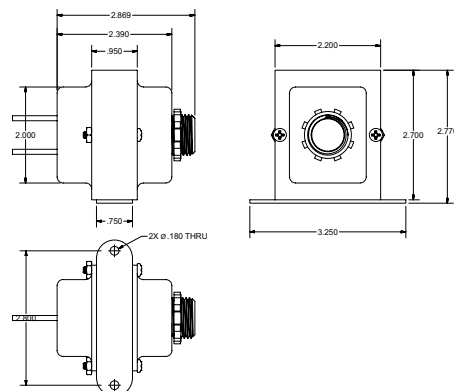
## AVAILABLE ACCESSORIES (see pg. 26):

- **Wired Sensor Pucks** – Up to 5 additional elevated sensors can be wired to a single RS-097 receiver box for multi-unit monitoring, with 8', 25', 50' and 100' cable lengths available. P/N RSA-150-008; -025; -050; -100.
- **Auto Dialer** – Receive automatic phone alerts whenever the RS-097 system identifies a fault condition. P/N RSA-600-003

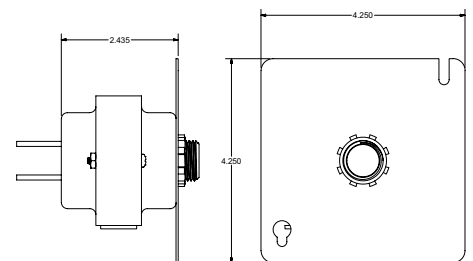
## RS-097-MK6 MODIFIED KIT:

Modified kit RS-097-MK6 includes plenum-rated wires and a step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of the standard plug-in wall wart.

### Step-Down Transformer



### Mounting Plate



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



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**www.RelianceDetection.com**



# FloodMaster® RS-0xx

## Wired Leak Detection System Accessories



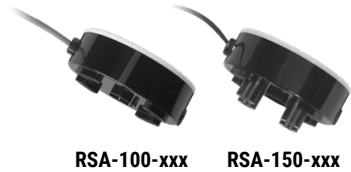
### Wired Water Sensor Pucks

Additional wired sensors are compatible with most RS-0xx series units. Standard sensors feature a 1/16" stand-off to allow for air circulation and eliminate false alarms caused by humidity from the floor.

1/2" elevated sensors are available to detect when an overflow is imminent in HVAC/air conditioner condensate pans, etc.

Up to 5 additional sensors can be paired with an existing receiver box. Units ship with flying leads.

**Note:** RSA-100-xxx and RSA-150-xxx pucks manufactured after February 2019 have plenum-rated wire. Plenum wire is white or grey.



RSA-100-xxx RSA-150-xxx



### Sensing Rope Accessory Kit

This rope-style water sensor can be used in place of traditional sensors to provide a wider area of leak detection, or to monitor low tanks, room perimeters, sub-floors, etc.

This highly absorbent water sensing rope is constructed from two twisted metal conductor wires that are insulated from one another and surrounded by a polyethylene mesh braid jacket. The ends are male/female quick-disconnect snap connectors for easy installation and removal. Up to 100 feet of sensor rope (10 lengths) may be connected to a single receiver box.

### Standard Wired Sensors (RSA-100-xxx)

Cable Length	P/N	UPC
8'	RSA-100-008	857640005366
25'	RSA-100-025	857640005472
50'	RSA-100-050	857640005489
100'	RSA-100-100	857640005496

### 1/2" Elevated Wired Sensors (RSA-150-xxx)

Cable Length	P/N	UPC
8'	RSA-150-008	857640005366
25'	RSA-150-025	857640005472
50'	RSA-150-050	857640005489
100'	RSA-150-100	857640005496

### Sensing Rope

Description	P/N	UPC
10' Sensing Rope Kit	RSA-175-810	857640005557
Add-On 10' Rope Length	RSA-175-010	857640005540

### RSA-175-810 kit includes:

- (1) Lead Wire (6')
- (1) Sensing Rope (10')
- (2) Hold Down Accessories



### Auto Dialer

A convenient, low-cost add-on to send and receive automatic phone alerts whenever your system identifies a fault condition. Triggers calls with a recorded message to up to nine telephone numbers.

*Requires a dedicated analog phone line.*

P/N	UPC
RSA-600-003	857640005670



### Cable Adder

Cable extension that allows for easy remote mounting of the RS-080 receiver box further away from the valve.

Length	P/N	UPC
10'	RSA-400-010	857640005595
25'	RSA-400-025	857640005601
50'	RSA-400-050	857640005618
100'	RSA-400-100	857640005625



### Electrical Plug Interrupter

This power control relay for conventional plug-in Power-Vent gas water heaters automatically turns off the electricity to the appliance when a leak is detected by an RS-094 system.

*Certified to CAN/CSA-C22.2 No. 61010-1-12: Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory use – Part 1: General Requirements.*

P/N	UPC
RSA-600-001	857640005656



**Reliance Detection Technologies, LLC** [RelianceDetection.com](http://RelianceDetection.com) **888-771-4929**

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# OUR HISTORY



**Sensing Solutions since 1959**



At Madison Company, we support our customers' efforts by employing our capabilities, experience, and application know-how to provide the best solutions. We strive to be a preferred global source for sensors and control technology. We follow through with fast time to market, reliable quality and delivery, and outstanding service.

Our success in providing value to our customers builds a company that benefits customers, employees, suppliers, and our community. Ultimately, our mission is to benefit people's lives now and in the future.

Madison Company was founded in 1959 in Madison, CT, starting out as a job shop with many products. Over time, Madison's focus changed to the manufacture of liquid level switches and sensors, expanding its product and technology portfolio to meet the needs of the marketplace. In 1985, the company moved to Branford, CT, as it developed its North American and international presence. Madison Company has been on a steady growth pattern, doubling sales every 5 years since 1976.

**“ We have always tried to develop relationships of trust and cooperation with our customers. Many of them look upon us as a long-term partner and an extension of their product development teams. ”**

*– Steve Schickler, President & Owner, Madison Company/RDT*



In 2009, Madison introduced the FloodMaster® line of products, which provide dependable flood control systems for water heaters, washing machines, HVAC condensate systems and water tanks.

In an effort to address the ever-increasing demand for technologically advanced monitoring and detection capabilities, in 2015 Madison founded Reliance Detection Technologies, LLC (RDT). RDT's mission is to meet those increasing market demands by drawing on the depth and breadth of Madison's 55+ years of engineered sensor design and application experience. RDT's latest success is the state-of-the-art RSC-900 wireless, app-based leak detection and optional automatic water shut-off system.

The traditional FloodMaster leak detection products – combined with the feature-rich, multipurpose wireless technology offered by RDT – uniquely position the organization to offer sole sourcing to meet the detection application needs of every space and budget.

RDT's products are proudly made in the USA and ship directly from our Branford, Connecticut location.





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