



Resource Guide

Product Specifications and Technical Submittal Sheets

www.RelianceDetection.com

Toll-Free: 888-771-4929

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Model No.	Product	Application	Valve Sizes	Power	Plenum Rated
RS-070	System	Washing machine leak detection and automatic shut-off.	Dual 3/4"	120V AC	
RS-074-3/4	System	Water heater leak detection and automatic shut-off with self-cleaning valve.	3/4"	3V battery	
RS-080-x – Ball Valve	System	Heavy-duty water main leak detection and automatic shut-off.	3/4", 1", 1-1/4", 1-1/2", 2"	120V AC	
RS-080-x – Butterfly Valve		Water main leak detection and automatic shut-off system, with oversized valve.	2-1/2", 3", 4"		
RS-080-x-MK6 – Ball Valve	System	Heavy-duty water main leak detection and automatic shut-off.	3/4", 1", 1-1/4", 1-1/2", 2"	Step-down transformer	•
RS-080-x-MK6 – Butterfly Valve		Water main leak detection and automatic shut-off system, with oversized valve.	2-1/2", 3", 4"		
RS-090-E	System	Washing machine leak detection and automatic shut-off with integrated outlet box.	Dual-Port 1/2"	120V AC	
RS-092-x	System	Hose-fed appliance leak detection and automatic shut-off.	1/2" to 3/8" fittings	120V AC or step-down transformer	
RS-094-x	System	Water heater, water tank leak detection and automatic shut-off.	1/2", 3/4", 1", 1-1/4"	120V AC	
RS-094-x-MK6	System	Water heater, water tank leak detection and automatic shut-off.	1/2", 3/4", 1", 1-1/4"	Step-down transformer	•
RS-095	System	Water leak alarm system.	n/a	9V battery	
RS-096	System	Water leak alarm system.	n/a	120V AC	
RS-096-MK6	System	Water leak alarm system.	n/a	Step-down transformer	•
RSA-101-x	Accessory	Wired water sensor for RS-0xx series units.	n/a	n/a	•
RSA-175-810	Accessory	Wired sensing rope for RS-0xx series units.	n/a	n/a	
RSA-400-x	Accessory	Cable extension for RS-080.	n/a	n/a	
RSA-600-003	Accessory	Auto Dialer Phone Alert System for RS-0xx series units.	n/a	12V DC	
RSC-900-AW-x	System	Wireless, point-of-contact water sensors and automatic shut-off valve.	1/2", 3/4", 1", 1-1/4"	120V AC with battery backup	
RSC-900-F-1	System	Wireless, flow sensor, automatic shut-off valve, and app-based notifications.	1"	120V AC with battery backup	
RSC-900-F-310-1	Accessory	Wireless, flow sensor, valve, and actuator.	1"	120V AC with battery backup	
RSC-900-W	System	Wireless, point-of-contact water sensor. App-based.	n/a	120V AC with battery backup	
RSC-900-W-001	Accessory	Wireless water, temperature sensor.	n/a	(2) AAA batteries	
RSC-900-W-175	Accessory	Wireless rope-style water sensor.	1/2", 3/4", 1", 1-1/4"	(2) AAA batteries	
RSC-900-W-310-x	Accessory	Wireless actuator and valve.	n/a	(4) CR123A batteries	
RSC-900-X-200	Accessory	Wireless signal repeater.	n/a	120V AC with battery backup	
RSC-900 CMS	Accessory	Central monitoring station.	n/a	n/a	

RS-070

Washing Machine Leak Detection & Automatic Shut-Off Kit

Senses leaks and shuts down the water supply to protect against extensive water damage

Washing machine leaks and burst hoses can quickly overcome floor drains and catch pans, causing thousands of dollars in water damage in a short amount of time. The threat is compounded when units are located on upper floors and in apartment buildings.

The RS-070 is an easy-to-install leak detection solution for existing washing machine hookups.

- Quick, easy installation* – no plumber or electrician required.
- Sounds an alarm and shuts off both the hot and cold water supply when a leak is detected.
- System is reusable – fix the problem and reset for continued protection.
- Installation may make you eligible for an insurance discount. Contact your provider for details.
- Model **RS-090-E** is also available for new construction and finished laundry rooms, featuring an integrated outlet box and water hammer arrestors.

* The center points of the existing hot and cold valves need to be more than 1-1/2" apart.



P/N	UPC
RS-070	811475030931

RS-070 kit includes:

- (2) 3/4" leak prevention valve units for hot and cold water shut off
- (1) Control/alarm box
- (1) Magnetized water sensor disc with 8' lead wire
- (1) Metal plate for sensor placement
- (1) 120V AC power plug with 12' lead wire
- Installation instructions

TECHNICAL SUBMITTAL DATA SHEET

Battery-Operated Water Heater Leak Detection & Automatic Water Shut-Off System

Job Name:	Job Location:
Engineer:	Engineer Approval:
Contractor:	Contractor Approval:
Contractor P.O.:	Representative:

MODEL RS-074-3/4

Typical Installation:

- Water heaters and tanks

Highly Recommended for:

- Single-family homes
- Apartments and condos
- Commercial buildings

Features:

- Completely self-contained
- Battery powered – will continue to operate during power outages
- Reusable and testable
- Audible alarm
- Top handle for easy reset and manual valve shut-off
- Twice monthly automatic valve self-cleaning cycle
- Low battery alert
- Two-year limited warranty

Specifications:

- 3/4" NPT full port, lead-free valve
- Battery operating voltage: 3V
- Cable standard: ISO9001
- Operating Temperature: 32° to 122°F

Approvals:

- NSF/ANSI 372 certified, lead-free valve – meets U.S. EPA Safe Drinking Water Standards
- MA Board of Registration of Plumbers Approval Code # P1-0522-216

Ordering Information:

Valve Size	P/N	UPC
3/4"	RS-074-3/4	811475030795



Unit Dimensions:

5.5" long x 2.95" wide x 4.33" high

Weight: 26.1 oz.

Application Considerations:

The RS-074-3/4 is a self-contained, battery-powered system designed to protect against damage from leaking water heaters. The shut-off valve closes automatically when the sensor detects leaking water to prevent catastrophic water damage.

Installation Overview:

The shut-off unit is powered by a pair of CR123 lithium batteries (included) rated for a 4-year life – no plug or outlet is required. The unit features a 3/4" shut-off valve installed in any orientation on the cold water pipe feeding the water heater. The attached water sensor features a 10-foot lead wire for easy placement at the tank's base in the pan or on the floor near the tank. It should be installed vertically with the wire lead running back up to the control unit.

The system can be performance tested anytime.

The RS-074-3/4 can be installed on existing or new water heater installations. RDT recommends that installations be completed by a licensed plumber to ensure that all local code requirements are followed.

Higher-end plug-in systems are also available with multiple valve sizes, dry contacts, plenum-rated components, and more (RS-094 series).



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 magnetic sensor is placed in an area where water from a leak is likely to accumulate, mounted either horizontally or vertically using the included metal plate. Components come prewired.

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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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.)

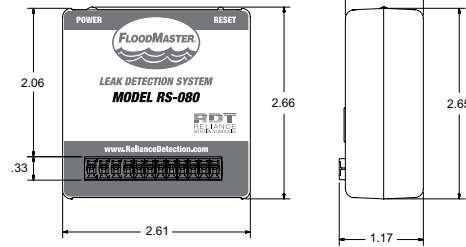
APPROVALS:

NSF/ANSI 61 and 372 approved valve.
 MA Board of Registration of Plumbers
 Approval – Code # P3-0818-66.

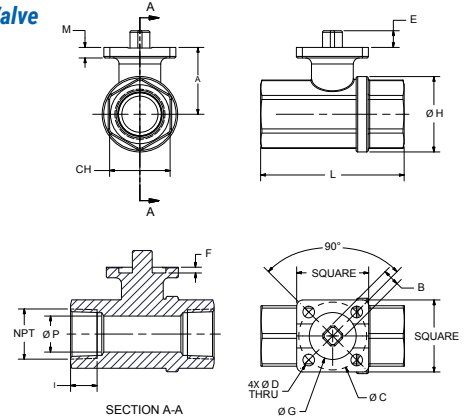
 UL classified actuator.

DIMENSIONS:

Receiver Box



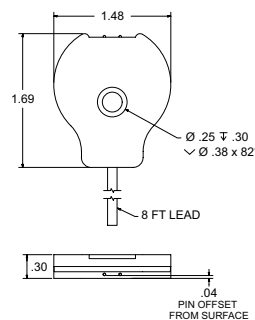
Shut-Off Ball Valve (3/4" to 2")



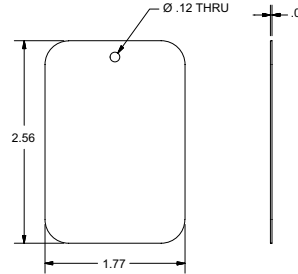
RS-080 Shut-Off Ball Valve Specifications: 3/4" through 2"																			
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS	
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10	
1"	1.50	1.79	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	1.93	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	
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	150.46	
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	150.46	

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

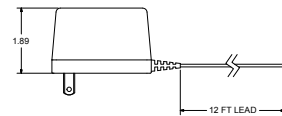
Water Sensor



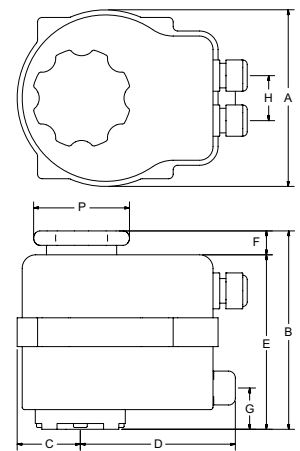
Metal Plate



Power Supply (24V AC Wall Wart)



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:

- **Wired Water Sensors** – 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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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.

Power Supply



Receiver Box



NO/C/NC Dry Contacts

Water Sensor



Metal Plate



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 magnetic sensor is placed in an area where water from a leak is likely to accumulate, mounted either horizontally or vertically using the included metal plate. 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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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.)

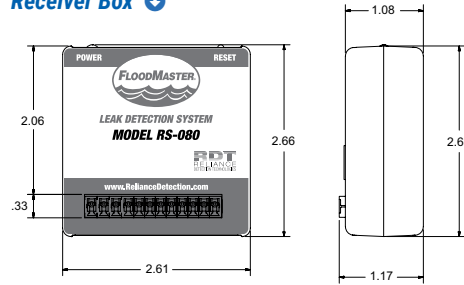
APPROVALS:

NSF/ANSI 61 and 372 approved valve.
 MA Board of Registration of Plumbers
 Approval – Code # P3-0818-66.

 UL classified actuator.

DIMENSIONS & WEIGHTS:

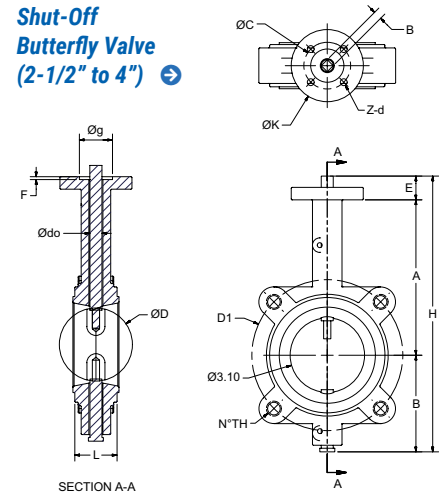
Receiver Box



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).

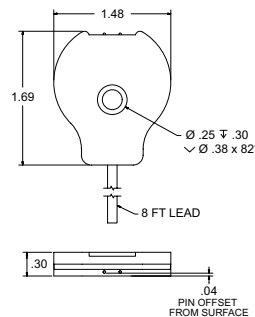
Shut-Off Butterfly Valve (2-1/2" to 4")



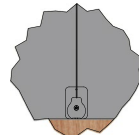
RS-080 Shut-Off Butterfly Valve Specifications: 2-1/2" through 4"

Size	C ISO	B1	A	B2	L	D	E	H	R	DO	K	Z-d	g	F	D1	N-TH	LBS	Seat Torque			
																		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

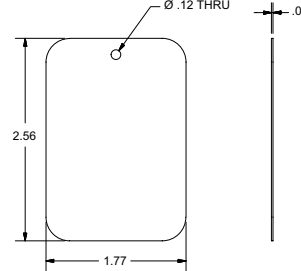
Water Sensor



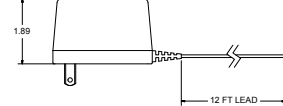
HORIZONTAL
 INSTALL OPTIONS
 VERTICAL



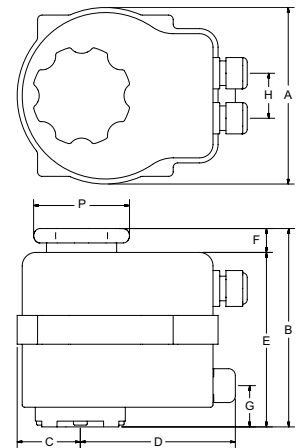
Metal Plate



Power Supply (24V AC Wall Wart)



Actuator



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:

- **Wired Water Sensors** – 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 receiver box up to 100' further 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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TECHNICAL SUBMITTAL DATA SHEET

Plenum-Rated 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-MK6 with 3/4" to 2" Ball Valve

TYPICAL INSTALLATIONS INCLUDE:

- Applications requiring a valve installation in the plenum, with power and leak detection sensing in the work space below (such as commercial break rooms)
- Plenum-mounted water heaters requiring an oversized shut-off valve
- Installations requiring hard-wiring for electrical code

HIGHLY RECOMMENDED FOR:

- Multi-residential complexes
- Commercial office buildings

FEATURES:

- Full-port valves available from 3/4" to 2" dia.; systems with butterfly valves also available from 2-1/2" to 4" dia.
- Plenum-rated wires for the water sensor, power supply and valve cable connections (as applicable)
- Step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of standard wall wart
- Reusable and testable; easy reset button
- Audible alarm (83 dB)
- Supports multiple water sensors for a wider area of leak detection
- N/O and N/C dry contacts
- Pre-wired with basic connections to the power transformer and the sensor



APPLICATION CONSIDERATIONS:

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 often 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.

The RS-080-MK6 is designed for localized leak detection (one room, one floor, etc.) with a valve located in a plenum space. 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 is powered by a hard-wired step-down transformer (120, 208, 240V AC to 24V AC). A magnetic sensor is placed in an area where water from a leak is likely to accumulate, mounted either horizontally or vertically using the included metal plate. Components come prewired.

Optional Cable Adder between the receiver and valve assembly allows the receiver to be located up to 100' from a valve located in a hard-to-reach location.

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.

RS-080-MK6 with 3/4" to 2" Ball Valve TECHNICAL SUBMITTAL DATA SHEET

ORDERING INFORMATION:

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

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

Step-Down Transformer

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

MATERIALS:

Ball Valve

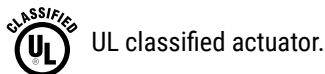
Body Low-lead brass
 End Connection ... Low-lead brass
 Stem Low-lead brass
 Ball Low-lead brass
 (tea coated)
 Ball Seats PTFE
 O-Rings FKM (Viton®)

CABLE LENGTHS:

Transformer Cable 12'
 Sensor Cable 8' (custom lengths avail.)
 Valve Cable 12'

APPROVALS:

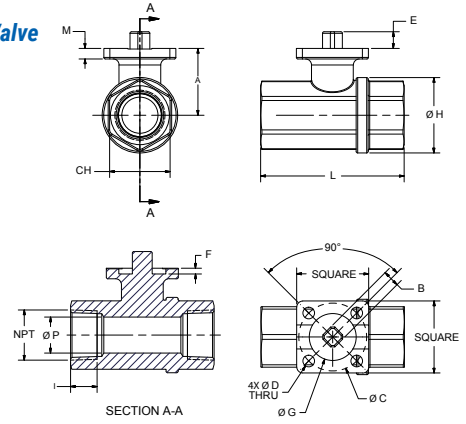
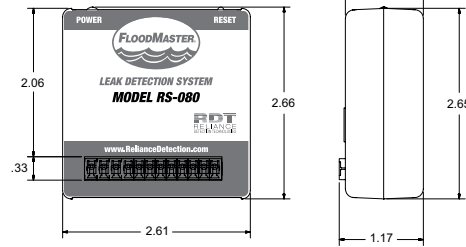
NSF/ANSI 61 and 372 approved valve.
 MA Board of Registration of Plumbers
 Approval – Code # P3-0818-66.



DIMENSIONS:

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

Receiver Box

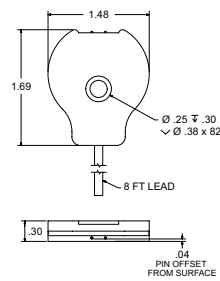


RS-080-MK6 Shut-Off Ball Valve Specifications: 3/4" through 2"

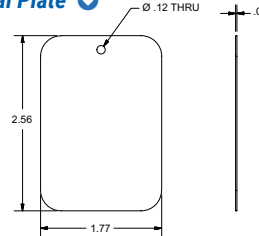
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	1.93	0.75	3.54	1.61	0.24	0.95	49.71	580	0.75	53.10
1-1/4"	1.50	1.93	0.35	1.42 (ISO F03)	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
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	150.46
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	150.46

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

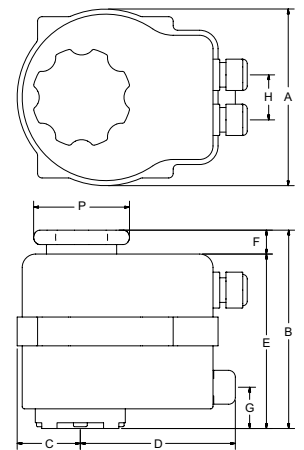
Water Sensor



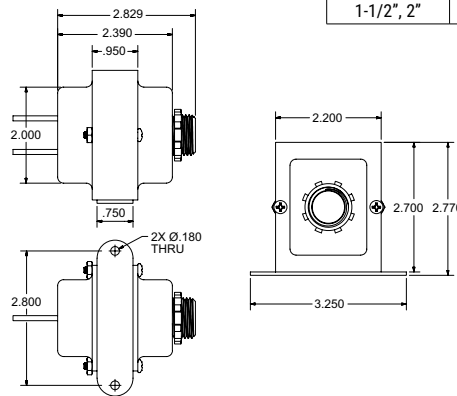
Metal Plate



Actuator



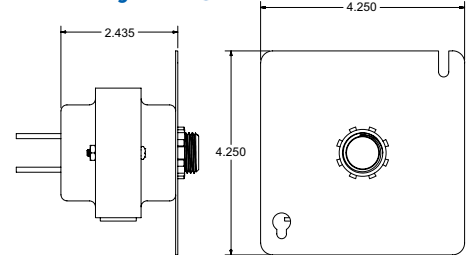
Step-Down Transformer



RS-080-MK6 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

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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 27 Business Park Drive
 Branford, CT 06405

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 info@RelianceDetection.com
www.RelianceDetection.com



TECHNICAL SUBMITTAL DATA SHEET

Leak Detection & Automatic Water Main Shut-Off System

Job Name:

Engineer:

Contractor:

Contractor P.O.:

Job Location:

Engineer Approval:

Contractor Approval:

Representative:

MODEL RS-080-MK6 with 2-1/2" to 4" Butterfly Valve

TYPICAL INSTALLATIONS INCLUDE:

- Applications requiring a valve installation in the plenum, with power and leak detection sensing in the work space below (such as commercial break rooms)
- Plenum-mounted water heaters requiring an oversized shut-off valve
- Installations requiring hard-wiring for electrical code

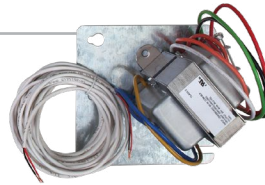
HIGHLY RECOMMENDED FOR:

- Multi-residential complexes
- Commercial office buildings

FEATURES:

- Butterfly valves available from 2-1/2" to 4" dia.; systems with ball valves also available from 3/4" to 2" dia.
- Plenum-rated wires for the water sensor, power supply and valve cable connections (as applicable)
- Step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of standard wall wart
- Reusable and testable; easy reset button
- Audible alarm (83 dB)
- Supports multiple water sensors for a wider area of leak detection
- N/O and N/C dry contacts
- Pre-wired with basic connections to the power transformer and the sensor

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



Receiver Box



NO/C/NC Dry Contacts

Water Sensor



Metal Plate



APPLICATION CONSIDERATIONS:

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 often 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.

The RS-080-MK6 is designed for localized leak detection (one room, one floor, etc.) with a valve located in a plenum space. 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 is powered by a hard-wired step-down transformer (120, 208, 240V AC to 24V AC). A magnetic sensor is placed in an area where water from a leak is likely to accumulate, mounted either horizontally or vertically using the included metal plate. Components come prewired. Optional Cable Adder between the receiver and valve assembly allows the receiver to be located up to 100' from a valve located in a hard-to-reach location.

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.

RS-080-MK6 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-MK6	857640005915
3"	RS-080-3-MK6	857640005922
4"	RS-080-4-MK6	857640005939

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

Step-Down Transformer

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

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:

Transformer Cable 12'
 Sensor Cable 8' (custom lengths avail.)
 Valve Cable 12'

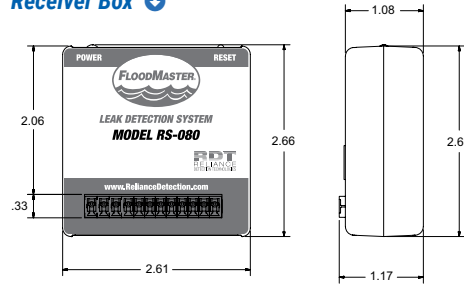
APPROVALS:

NSF/ANSI 61 and 372 approved valve.
 MA Board of Registration of Plumbers
 Approval – Code # P3-0818-66.

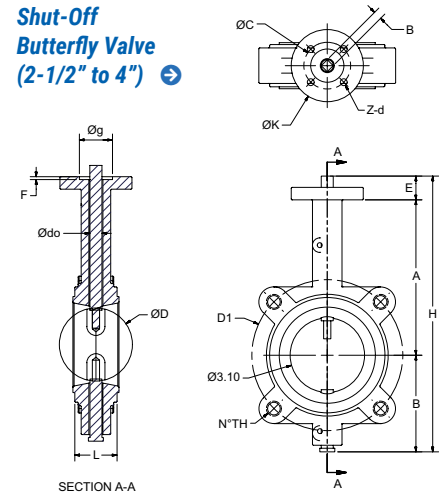
 UL classified actuator.

DIMENSIONS & WEIGHTS:

Receiver Box



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



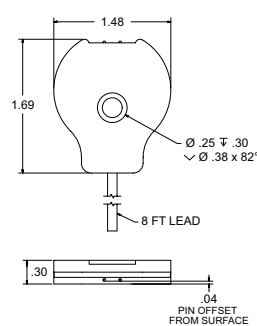
Note: Butterfly valves require appropriate mounting flange and hardware (not included). Please see install manual for details.

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

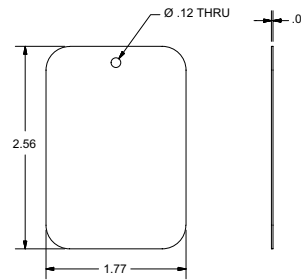
RS-080-MK6 Shut-Off Butterfly Valve Specifications: 2-1/2" through 4"

Size	C ISO	B1	A	B2	L	D	E	H	R	DO	K	Z-d	g	F	D1	N-TH	LBS	Seat Torque			CV (GPM @ 1 PSI)	
																		100 PSI	200 PSI	50% OP	100% OP	50% 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	

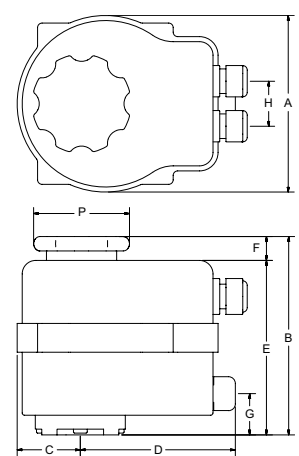
Water Sensor



Metal Plate



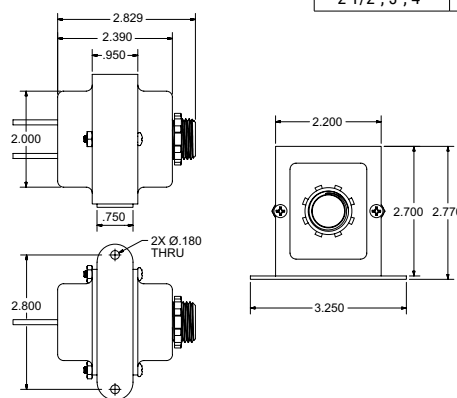
Actuator



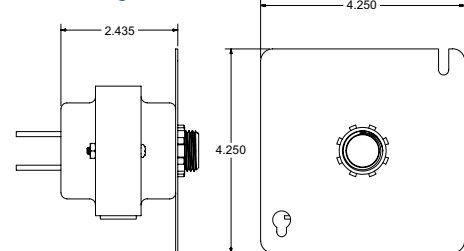
RS-080-MK6 Electric Actuator Specifications

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

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



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:

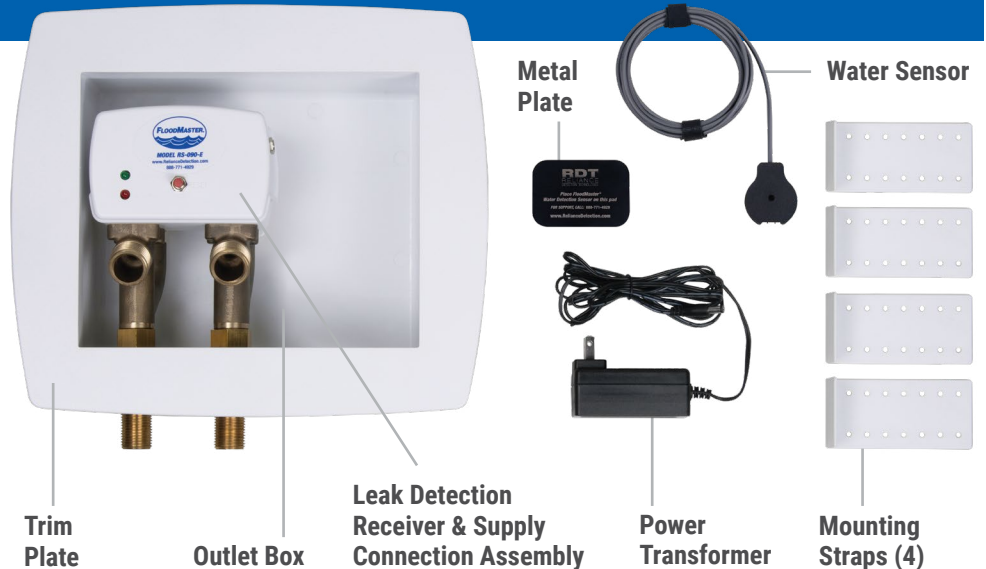
- Single-family homes
- Condos
- Commercial apartment buildings
- Assisted living facilities

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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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 (also accepts 1/2" copper pipe)
 Feed Lines 3/4"-11.5 GHT
 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).

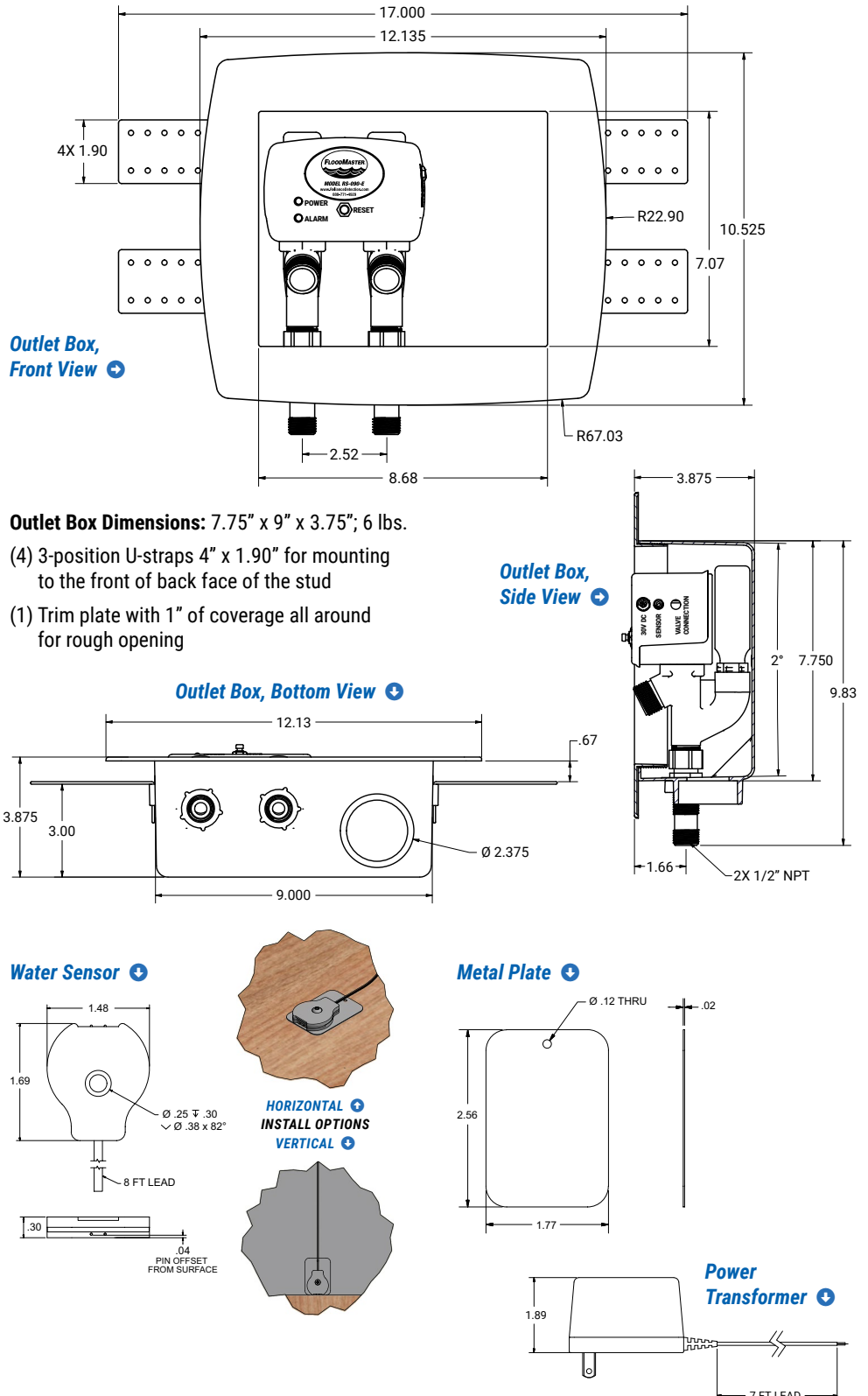
CABLE LENGTHS:

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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 info@RelianceDetection.com
www.Reliandetection.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).



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

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)

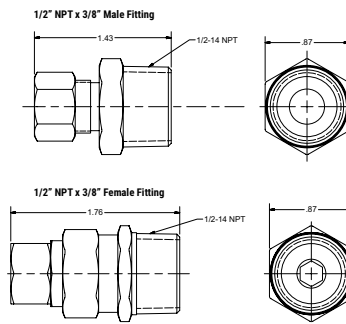
APPROVALS:

NSF/ANSI 61 and 372 approved valve.

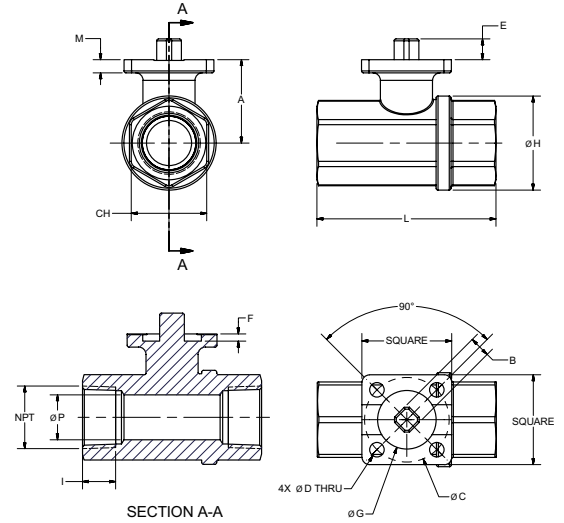
MA Board of Registration of Plumbers
Approval – Code # P1-0617-575.

DIMENSIONS & WEIGHTS:

Compression Fittings



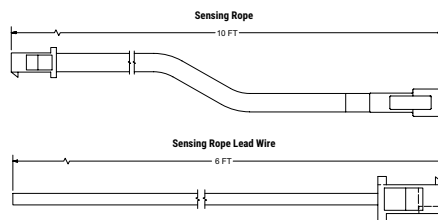
Shut-Off Valve



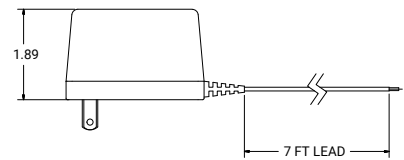
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10

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

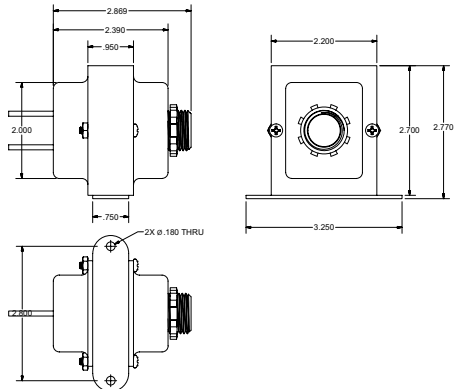
Wire Rope Sensor



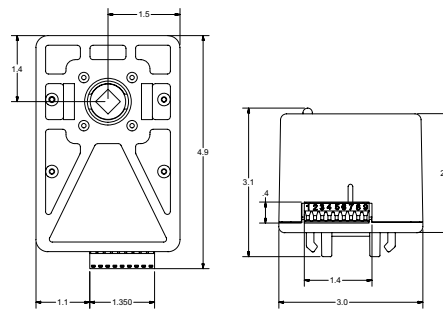
MK1 Wall Wart



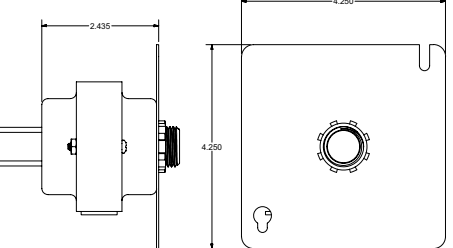
MK2 Step-Down Transformer



Receiver Box / Actuator



MK2 Mounting Plate



AVAILABLE ACCESSORIES:

- **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.

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

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-MK5 Kit with Gas Flow Interrupter*
- RS-094-MK7 Kit with Gas Interface Cable*



Patent #6,035,699

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 magnetic 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. It can be installed securely horizontally or vertically on the included metal plate. 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-MK5 and RS-094-MK7 kits are only available with a 3/4" valve.



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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.)

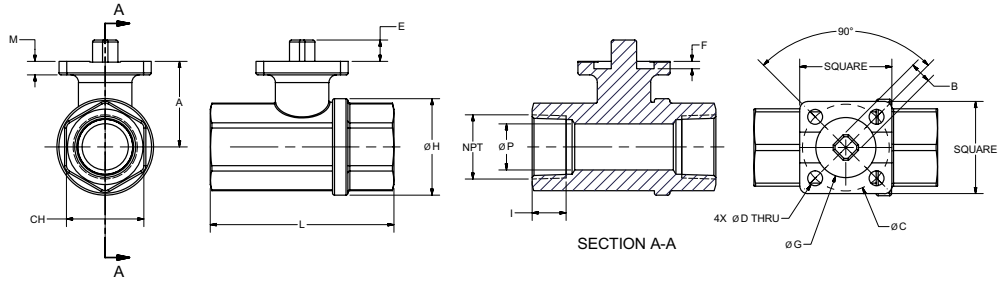
APPROVALS:

NSF/ANSI 61 and 372 approved valve.

MA Board of Registration of Plumbers

Approval – Code # P1-0515-489.

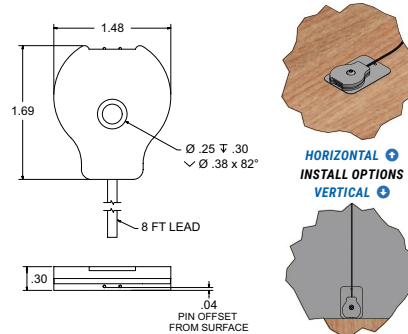
DIMENSIONS: Shut-Off Valve



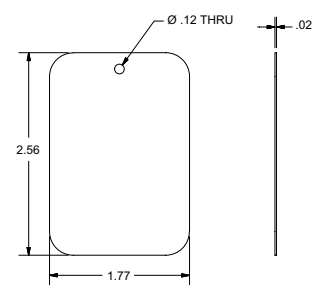
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)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

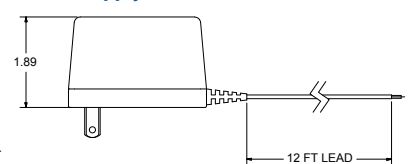
Water Sensor



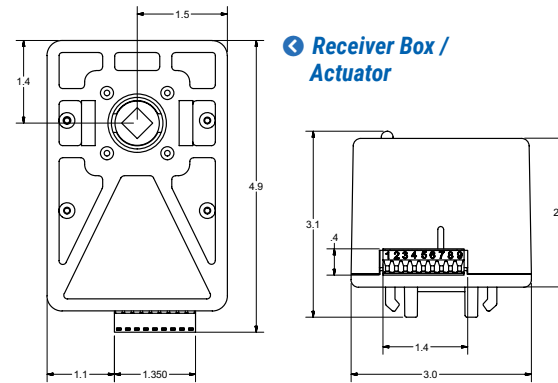
Metal Plate



Power Supply – 24V AC Wall Wart



Receiver Box / Actuator



AVAILABLE ACCESSORIES:

- **Wired Water Sensors** – 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** – Receive automatic alerts whenever the RS-094 identifies a fault condition.

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



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27 Business Park Drive
Branford, CT 06405

203-488-2684 or 888-771-4929
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TECHNICAL SUBMITTAL DATA SHEET

Plenum-Rated Water Tank Leak Detection & Automatic Shut-Off System

Job Name:

Engineer:

Contractor:

Contractor P.O.:

Job Location:

Engineer Approval:

Contractor Approval:

Representative:

MODEL RS-094-MK6

TYPICAL INSTALLATIONS INCLUDE:

- Plenum-mounted water heaters and water tanks
- Installations requiring hard-wiring for electrical code

HIGHLY RECOMMENDED FOR:

- Commercial and municipal facilities
- Multi-residential complexes

FEATURES:

- Full port valve sizes 1/2" to 1-1/4" dia.
- 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
- 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
- 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

Metal Plate

Patent #6,035,699

APPLICATION CONSIDERATIONS:

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 often 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.

The RS-094-MK6 system is designed to prevent damage caused by an undetected plumbing leak from a plenum-mounted water heater or tank. The full port valve installs on the cold water inlet line to the tank, and the snap-fit actuator attaches directly to the valve mounting pad. A magnetic 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. It can be installed securely horizontally or vertically on the included metal plate. 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-MK6 features an integrated receiver box and actuator that install directly onto the shut-off valve for tidy system installation. The system is hard-wired through a step-down transformer (120, 208, 240 VAC to 24 VAC). 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. Dry contact connections (NO/C/NC) are included for fault notification to an existing security panel or BMS.



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RS-094-MK6 TECHNICAL SUBMITTAL DATA SHEET

ORDERING INFORMATION:

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

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

Step-Down Transformer

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

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-perf. engineered polymer

CABLE LENGTHS:

Transformer Cable 12'

Sensor Cable 8' (custom lengths avail.)

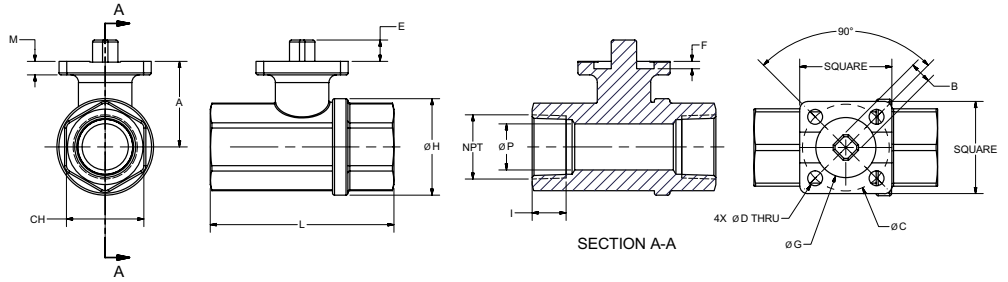
APPROVALS:

NSF/ANSI 61 and 372 approved valve.

MA Board of Registration of Plumbers

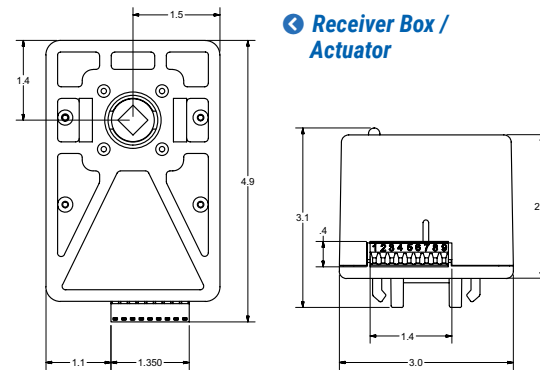
Approval – Code # P1-0515-489.

DIMENSIONS: Shut-Off Valve



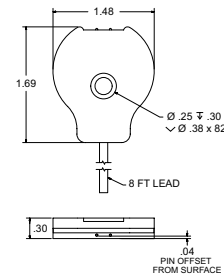
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)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

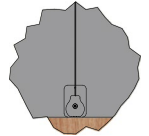


Receiver Box / Actuator

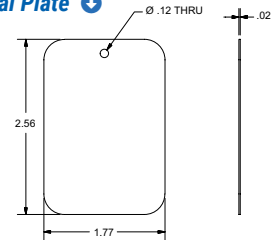
Water Sensor



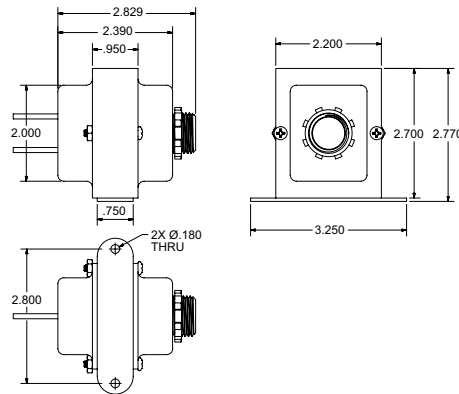
HORIZONTAL
INSTALL OPTIONS
VERTICAL



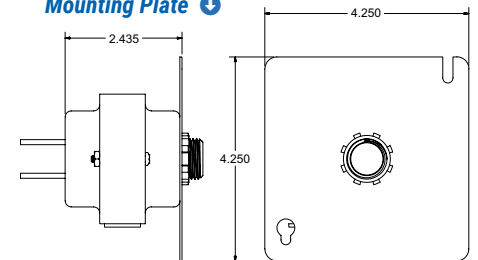
Metal Plate



Step-Down Transformer



Mounting Plate



AVAILABLE ACCESSORIES:

- **Wired Water Sensors** – Additional sensors can be wired to a single receiver box for a wider area of leak detection.

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



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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.



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TECHNICAL SUBMITTAL DATA SHEET

Water Leak Detection / HVAC & AC Condensate Pan Overflow Alarm

Job Name:

Engineer:

Contractor:

Contractor P.O.:

Job Location:

Engineer Approval:

Contractor Approval:

Representative:

MODEL RS-096

TYPICAL INSTALLATIONS INCLUDE:

- Air conditioners and HVAC systems
- Water chillers (rooftop or inside the structure)
- Drains and pipes that are prone to leaking or freezing
- Water-fed appliances such as dishwashers, washing machines and water heaters
- Sump pumps, tubs and sinks

HIGHLY RECOMMENDED FOR:

- Commercial office buildings
- Multi-residential complexes
- Above/near data processing rooms
- Medical facilities and labs
- Facilities with a history of insurance claims for water damage

FEATURES:

- Reusable and testable
- Adjustable sensor height and orientation
- N/O and N/C dry contacts
- Audible alarm (83 dB)
- Plugs into a standard 120V AC outlet
- Factory prewired

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 system is designed to detect and notify you of leaks from water-fed appliances, plumbing fixtures and tanks/containers. It can also be used to prevent water damage caused by overflowing air conditioning, HVAC, HAVCR and water chiller condensate pans.

A peel-and-stick metal plate allows for leak detection sensor installation anywhere – horizontally or vertically – and embedded magnets ensure that the sensor remains in position. Install the sensor flush to the floor for immediate alarm or at the desired overflow alarm level. When it comes in contact with any non-flammable conductive liquid, an alarm sounds.

Optional dry contacts (NO/C/NC) can be used for fault notification to an existing security panel or BMS. The system can also be wired through an appropriate relay (not included) to turn off the HVAC unit to prevent further water accumulation in the pan.

INSTALLATION OVERVIEW:

The receiver box plugs into a standard 120V AC wall outlet. The water sensor is placed in an area where water is likely to accumulate. Additional sensors can be added for a wider area of leak detection. Components come prewired.

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



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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
 Audible Alarm 83 dB

MATERIALS:

Receiver Box & Sensor

Body High-performance
 engineered polymer

CABLE LENGTHS:

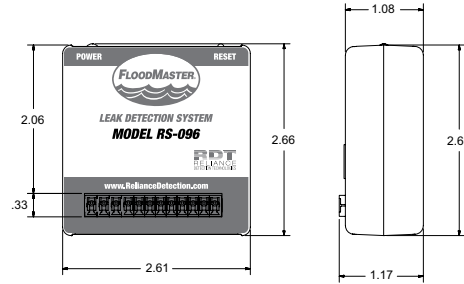
Power Cord 12'
 Sensor Cable 8' (custom lengths avail.)

APPROVALS:

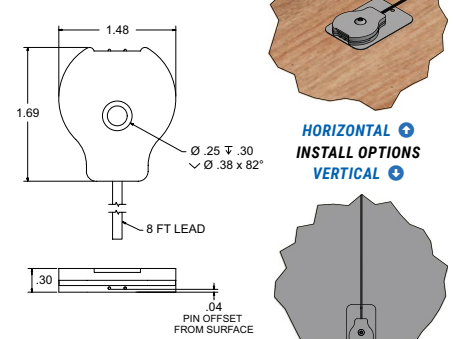
MA Board of Registration of Plumbers
 Approval – Code # P3-0818-66.

DIMENSIONS:

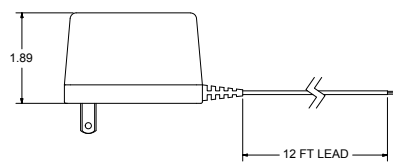
Receiver Box



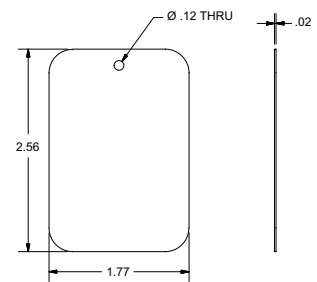
Water Sensor



Power Supply – 24V AC Wall Wart



Metal Plate



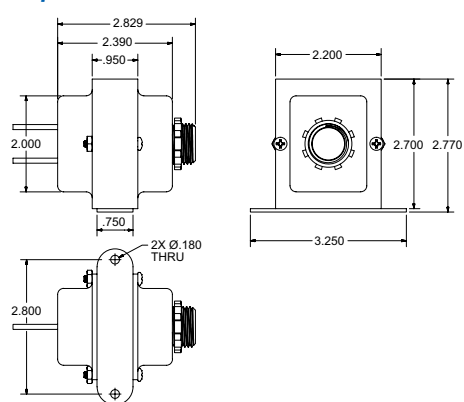
AVAILABLE ACCESSORIES:

- **Wired Water Sensors** – 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-101-008; -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

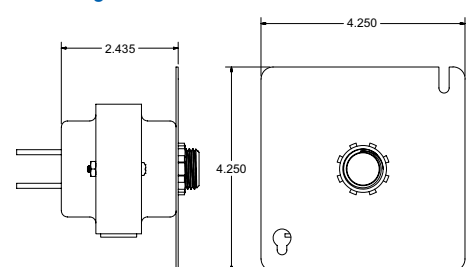
RS-096-MK6 MODIFIED KIT:

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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TECHNICAL SUBMITTAL DATA SHEET

Plenum-Rated Water Leak Detection / HVAC & AC Condensate Pan Overflow Alarm

Job Name:	Job Location:
Engineer:	Engineer Approval:
Contractor:	Contractor Approval:
Contractor P.O.:	Representative:

MODEL RS-096-MK6

TYPICAL INSTALLATIONS INCLUDE:

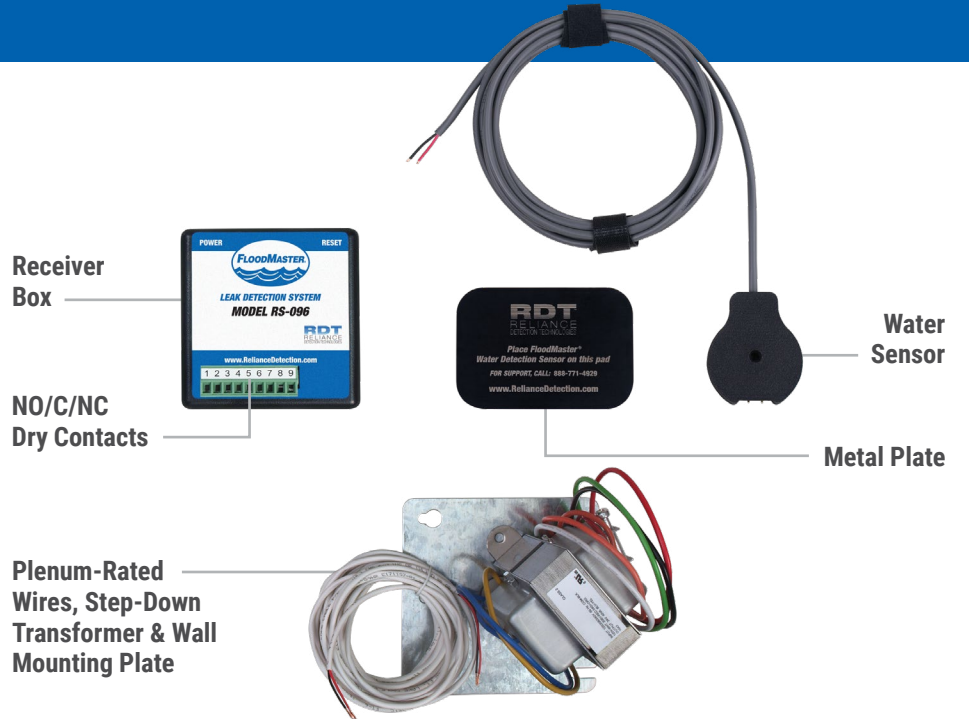
- Simple water leak detection in a plenum space, including plenum HVAC/water chiller condensate pans for overflow detection

HIGHLY RECOMMENDED FOR:

- Commercial office buildings
- Multi-residential complexes
- Above/near data processing rooms
- Medical facilities and labs
- Facilities with a history of insurance claims for water damage

FEATURES:

- Plenum-rated wires for the water sensor and power supply
- Step-down transformer (120, 208, 240V AC to 24V AC) with mounting plate in lieu of standard wall wart
- Reusable and testable; easy reset button
- Adjustable sensor height and orientation
- Dry contacts (NO/C/NC) to tie into existing building automation and security systems
- Audible alarm (83 dB)
- Pre-wired with basic connections to the power transformer and the sensor



APPLICATION CONSIDERATIONS:

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 often 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.

The RS-096-MK6 system is designed to detect and notify you of leaks from water-fed appliances, pipes, plumbing fixtures, and tanks/containers located in a plenum space. It can also be used to prevent water damage caused by overflowing air conditioning, HVAC, HAVCR and water chiller condensate pans.

INSTALLATION OVERVIEW:

The system is hard-wired through a step-down transformer (120, 208, 240V AC to 24V AC). The water sensor is placed in an area where water is likely to accumulate, either horizontally or vertically. Install the sensor flush to the floor for immediate alarm or at the desired overflow alarm level. Additional sensors can be added for a wider area of leak detection. The system can be performance tested anytime. It is resettable via reset button on the receiver box.



RS-096-MK6 TECHNICAL SUBMITTAL DATA SHEET

ORDERING INFORMATION:

Valve Size	P/N	UPC
N/A	RS-096	857640005946

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
 Audible Alarm 83 dB

Step-Down Transformer

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

MATERIALS:

Receiver Box & Sensor

Body High-performance engineered polymer

CABLE LENGTHS:

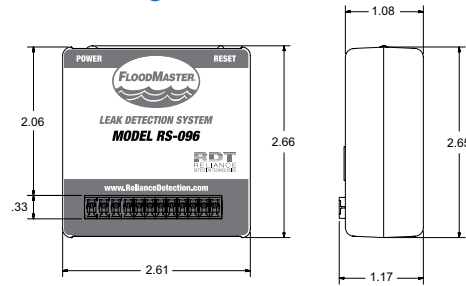
Transformer Cable 12'
 Sensor Cable 8' (custom lengths avail.)

APPROVALS:

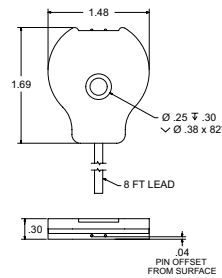
MA Board of Registration of Plumbers
 Approval – Code # P3-0818-66.

DIMENSIONS:

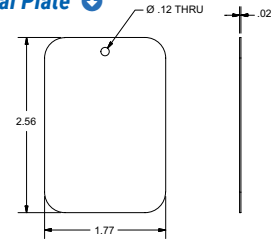
Receiver Box



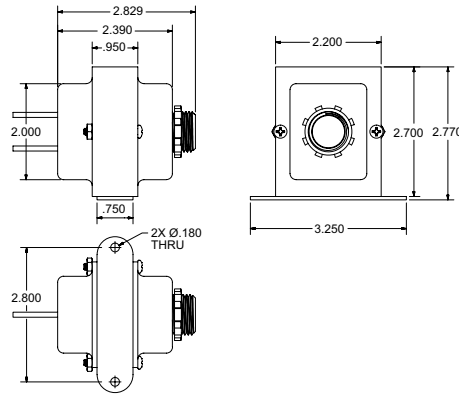
Water Sensor



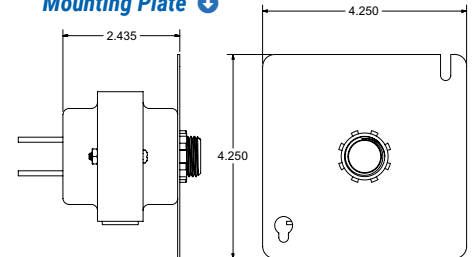
Metal Plate



Step-Down Transformer



Mounting Plate



AVAILABLE ACCESSORIES:

- **Wired Water Sensors** – Additional sensors can be wired to a single receiver box for a wider range of leak detection, with 8', 25', 50' and 100' plenum-rated cable lengths available.

P/N RSA-101-008; -025; -050; -100

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



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 27 Business Park Drive
 Branford, CT 06405

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

Job Name:

Job Location:

Engineer:

Engineer Approval:

Contractor:

Contractor Approval:

Contractor P.O.:

Representative:

MODEL RSC-900-AW

TYPICAL INSTALLATIONS INCLUDE:

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

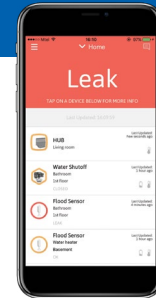
HIGHLY RECOMMENDED FOR:

- 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
- App supports creation of multiple "Zones" to monitor/control designated areas or plumbing subsections within a single system
- Hub supports up to 64 total wireless devices; max. 4 wireless signal repeaters

Communications Hub
(Ethernet model shown)



RSC-900
Mobile App

Wireless
Actuator



Shut-Off Valve



Wireless
Water Sensors



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 (order model RSC-900-W).

INSTALLATION OVERVIEW:

Hub: Choose between Wi-Fi or Ethernet connectivity.

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. Great for commercial multi-unit applications. Contact RDT for additional information – 888-771-4929 or info@reliancedetection.com.



Hub and sensors are for interior use only. Actuator is IP68 rated for indoor or outdoor use. Do not install any components inside a metal cabinet.

RSC-900-AW TECHNICAL SUBMITTAL DATA SHEET

ORDERING INFORMATION:

Valve	Hub	P/N	UPC
1/2"	Eth.	RSC-900-AW-1/2	811475030078
1/2"	WiFi	RSC-900-AW-WIFI-1/2	811475030276
3/4"	Eth.	RSC-900-AW-3/4	811475030085
3/4"	WiFi	RSC-900-AW-WIFI-3/4	811475030283
1"	Eth.	RSC-900-AW-1	811475030092
1"	WiFi	RSC-900-AW-WIFI-1	811475030269
1-1/4"	Eth.	RSC-900-AW-1-1/4	811475030108
1-1/4"	WiFi	RSC-900-AW-WIFI-1-1/4	811475030290
None	Eth.	RSC-900-W	811475030177
None	WiFi	RSC-900-W-WIFI	811475030252

OPERATING SPECIFICATIONS:

See charts at right for further detail.

Valve

Pressure Rating600 WOG - 150 WSP

Max. Temperature.....366°F

Actuator

Max. Pressure80 PSI

Sensor

Audible AlarmYes

MATERIALS:

Valve

Body, Stem, End Connection.... Low-lead brass

End Connection 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' (Ethernet hub models)

APPROVALS:

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

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.

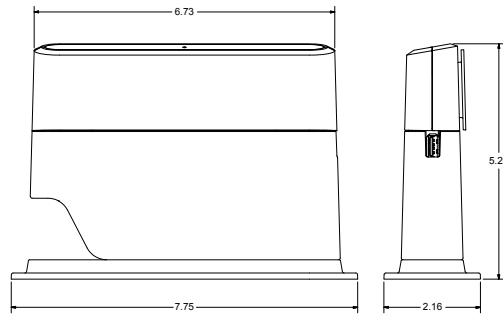
Communication Hub: IP Rating IEC60529

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

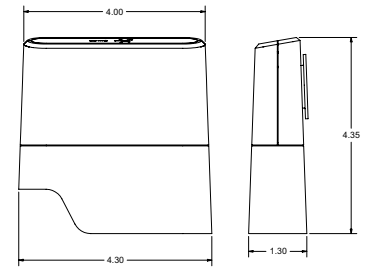
MA Board of Registration of Plumbers Approval -
Code # P1-1018-40 (System)

DIMENSIONS & WEIGHTS:

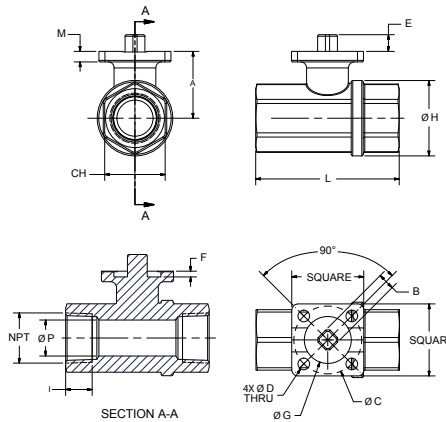
Communications Hub (Ethernet) ⬇



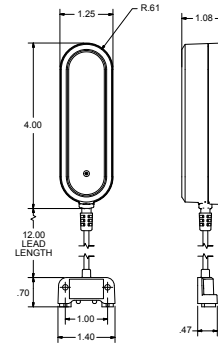
Communications Hub (Wi-Fi) ⬇



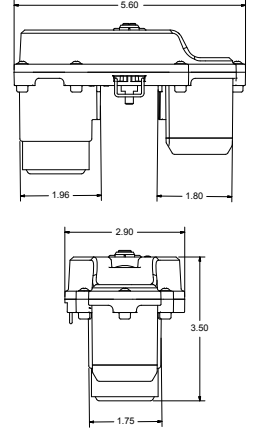
Shut-Off Valve ⬇



Wireless Sensor ⬇



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 or 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. Hub weight is model dependent.

AVAILABLE ACCESSORIES:

- 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. 4 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.



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

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info@RelianceDetection.com
www.RelianceDetection.com

Wireless, App-Based Flow Monitoring & Automatic Water Shut-Off System

Job Name:

Job Location:

Engineer:

Engineer Approval:

Contractor:

Contractor Approval:

Contractor P.O.:

Representative:

MODEL RSC-900-F

TYPICAL INSTALLATIONS INCLUDE:

- Common-risk housing – condos and apartments
- Commercial office suites
- New and retrofit construction
- Vacation homes and 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
- Automatic water shut-off (optional)
- 1" self-cleaning full port valve
- Supports multiple flow actuator assemblies (i.e. both hot and cold water lines)
- IP68-rated actuator for indoor/outdoor use
- Operates via wireless system network
- App supports creation of multiple "Zones" to monitor/control designated areas or plumbing subsections within a single system
- Point-of-contact wireless water sensors can be added to system
- Hub supports up to 64 total wireless devices; max. 4 wireless signal repeaters
- Optional cloud-based Central Monitoring for multiple system viewing from one screen – great for commercial multi-unit applications

Communications Hub
(Ethernet model shown)



Flow-Enabled Actuator



1" Shut-Off Valve



RSC-900
Mobile App

Water Flow
Sensor



APPLICATION CONSIDERATIONS:

The RSC-900 Flow is a complete wireless, app-based system for monitoring indoor plumbing flow rates on 1" lines and alerting when abnormal usage is detected. Ideal system for those looking to mitigate water damage from an undetected leak, or to simply promote water conservation. Excessive water usage triggers can include a plumbing leak, a dripping faucet or a malfunctioning toilet flap. Select from pre-set flow rates (Low, Medium or High) or set custom flow levels. When abnormal flow is detected, the system will send a push notification to the app, including device location, alarm type and valve status. Water consumption usage by individual sensor is captured and charted within the app – view water consumption trends at the Daily, Weekly or Monthly* level. The flow sensor connects to a standard 1" valve body and communicates with the wireless network through the flow-enabled actuator. The 1" shut-off valve can be programmed via the app to turn off the water flow automatically in the event excessive usage is detected. All fault notifications and status check-ins are communicated through the app from any Internet-enable device. This system also supports point-of-contact water sensors where redundancy is required.

** This device is not intended to replace water meters. It is a tool to manage and reduce unnecessary water consumption.*

INSTALLATION OVERVIEW:

Hub: Choose between Wi-Fi or Ethernet connectivity.

Flow-Enabled Actuator & 1" Valve Body Assembly: Install the 1" valve within 200' of the hub**, on the desired water feed line. Mount the flow-enabled actuator to the valve mounting pad.

Flow Sensor: Install upstream of the 1" valve body and flow actuator. Connect the flow sensor to the actuator with provided cable.

** 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.

Job Name:

Job Location:

Engineer:

Engineer Approval:

Contractor:

Contractor Approval:

Contractor P.O.:

Representative:

MODEL RSC-900-W

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

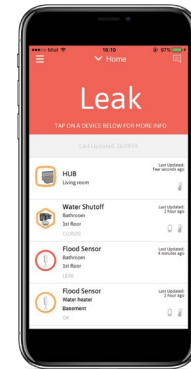
FEATURES:

- Mobile app provides automatic notifications and remote user interface
- Addressable sensors with high/low temperature alerts
- Operates via wireless system network
- App supports creation of multiple "Zones" to monitor/control designated areas or plumbing subsections within a single system
- Cloud-based Central Monitoring Station access is available for commercial multi-unit applications
- Hub supports up to 64 total wireless devices; max. 4 wireless signal repeaters
- System is scalable – add an automatic shut-off valve and actuator at any time

Communications Hub
 (Ethernet model shown)



Wireless Water Sensors



RSC-900 Mobile App

APPLICATION CONSIDERATIONS:

The RSC-900-W 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 sends its location and the alarm type 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 with a shut-off valve and actuator for applications where interrupting the water flow is either required or desirable.

INSTALLATION OVERVIEW:

Hub: Choose between Wi-Fi or Ethernet connectivity.

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. Contact RDT for additional information – 888-771-4929 or info@reliancedetection.com.



Hub and sensors are for interior use only.
 Do not install any components inside a metal cabinet.

RSC-900-W TECHNICAL SUBMITTAL DATA SHEET

ORDERING INFORMATION:

Valve	Hub	P/N	UPC
None	Eth.	RSC-900-W	811475030177
None	WiFi	RSC-900-W-WIFI	811475030252

OPERATING SPECIFICATIONS:

See charts at right for further detail.

Sensor

Audible Alarm Yes

CABLE LENGTHS:

Hub Power Cord .. 5'

Ethernet Cable..... 4' (Ethernet hub models)

APPROVALS:

RSC-900 Wireless System FCC & Industry Canada Info

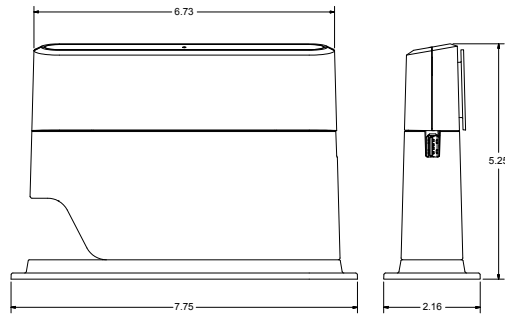
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

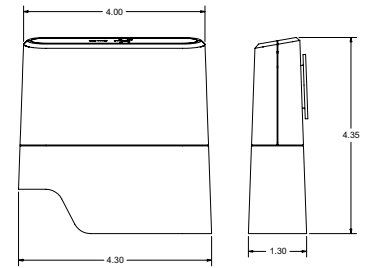
Communication Hub: IP Rating IEC60529

DIMENSIONS & WEIGHTS:

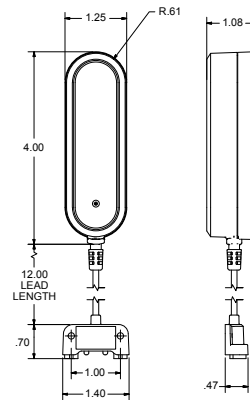
Communications Hub (Ethernet) ⬇



Communications Hub (Wi-Fi) ⬇



Wireless Sensor ⬇



RSC-900-W 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 or Ethernet	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. Hub weight is model dependent.

AVAILABLE ACCESSORIES:

- 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. 4 per system
- Wireless Actuator & Valve (RSC-900-W-310-X)



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Job Name:	Job Location:
Engineer:	Engineer Approval:
Contractor:	Contractor Approval:
Contractor P.O.:	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.

Status	Device Type	Serial Number	Signal	Temperature	Battery	Date	Time	Command	Info
Offline	Controller	00030000000001		30°C/86.0°F	100	21/08/2018	16:48:52		
OK	Flood Sensor	00030000000001		30°C/86.0°F	100	21/08/2018	15:50:39	Disable	
OK	Flood Sensor	00030000000001		27°C/80.6°F	100	21/08/2018	16:41:44	Disable	
Open	Water ShutOff Unit	00070000000001		27°C/80.6°F	90	21/08/2018	16:12:40	Close	
OK	Flood Sensor	00030000000001		32°C/87.8°F	100	21/08/2018	16:46:50	Disable	
OK	Flood Sensor	00030000000001		33°C/91.4°F	100	21/08/2018	16:31:06	Disable	
OK	Flood Sensor	00030000000001		33°C/91.4°F	100	21/08/2018	16:37:06	Disable	
OK	Flood Sensor	00030000000001		32°C/89.6°F	100	21/08/2018	16:47:07	Disable	
Offline	Flood Sensor	00030000000001		0°C/32°F	0	18/08/2018	15:02:24		
OK	Flood Sensor	00030000000001		29°C/84.2°F	100	21/08/2018	16:41:23	Disable	

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

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	16:53:16
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	16:51:56
Status changed from Offline to OK	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	16:50:39

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



FloodMaster® RS-0xx

Wired Leak Detection System Accessories



Wired Water Sensors

Additional wired sensors are compatible with most FloodMaster RS-0xx series units. Up to 5 additional sensors can be paired with an existing receiver box. Units have plenum-rated wire and ship with flying leads.

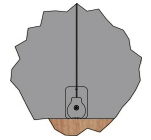
The sensor features a 1/16" stand-off to allow for air circulation and eliminate false alarms caused by humidity from the floor. The detection level is the same in either vertical or horizontal sensor orientation to the floor – making it ideal for tight or hard-to-reach spaces.

The sensor housing has embedded magnets which adhere to the provided metal plate or another metal surface in the desired installation location. It also provides a through-hole that allows the sensor to be screwed in place for a more tamper-resistant installation.

Cable Length	P/N	UPC
8'	RSA-101-008	811475030214
25'	RSA-101-025	811475030221
50'	RSA-101-050	811475030238
100'	RSA-101-100	811475030245



Horizontal
Install options
Vertical



Sensing Rope

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 insulated from one another and surrounded by a polyethylene mesh braid jacket. For easy installation and removal, the ends are male/ female quick-disconnect snap connectors. Up to 100 feet of sensor rope (10 lengths) may be connected to a single receiver box.

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. Trigger 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 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



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www.RelianceDetection.com

RSC-900 Series Wireless System Accessories

A maximum of 64 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.
- 200' wireless signal range between the accessory and hub.



Wireless Water Flood Sensors

Purchase as many sensors as needed to accommodate your leak and temperature monitoring requirements.

- 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 quickly locate it.

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



Wireless Water Sensing Rope

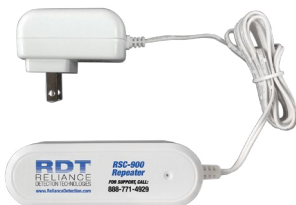
Use this rope-style wireless sensor for hard-to-reach locations (under a fridge or dishwasher); discreet sensing in areas where aesthetics is essential; or applications where perimeter coverage is preferable to a single point of contact.

- Powered by (2) AAA batteries (included).
- Onboard temperature monitoring, with push notification to the app.
- Kit includes one 10' rope; snap-fit additional lengths (RSA-175-010) for up to 100' of coverage.
- "Find Me" feature starts the sensor chiming so you can quickly locate it.

Description	P/N	UPC
10' Sensing Rope Kit	RSC-900-W-175	811475030153
Add-On 10' Rope Length	RSA-175-010	857640005540

RSC-900-W-175 kit includes:

- (1) Sensing Rope (10')
- (2) Hold Down Accessories
- (2) AAA batteries



Wireless Signal Repeater

Use a repeater to increase range or improve the signal performance between RSC-900 wireless devices and the hub. Up to 4 repeaters can be added to each system/hub to triangulate a nearby device or to 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

RSC-900 Series Wireless System Accessories

A maximum of 64 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.
- 200' wireless signal range between the accessory and hub.



Wireless Actuator & Shut-Off Valve

Purchase as many actuator assemblies 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 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



Wireless Actuator, Flow Sensor & Shut-Off Valve

This is a great option for situations where individual monitoring is desired on multiple water feeds within one building – such as monitoring flow to a particular unit, apartment, building floor or section. May also be used for monitoring side-by-side hot and cold feed lines.

- Flow sensor aids water conservation efforts by pinpointing locations with abnormal water usage.
- Use preset Low, Medium and High flow settings, or customize to meet your needs.
- Wireless actuator powered by (4) CR123A batteries (included).
- Full port, lead-free 1" valve.
- Suitable for exterior installations (IP68).

Valve	P/N	UPC
1"	RSC-900-F-310-1	811475030764



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