



# 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.
- Re-useable and testable
- Easy reset button
- Snap-fit actuator allows for manual operation of the valve
- Plugs into a standard 120V AC outlet
- Audible alarm (83 dB)
- N/O and N/C dry contacts
- Factory pre-wired



#### APPLICATION CONSIDERATIONS:

The RS-094 system is designed to prevent damage caused by 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 leak detection sensor is placed 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.

#### INSTALLATION OVERVIEW:

The RS-094 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. 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).

*Note: Modified kits are available for low-profile tanks (MK1), tanks installed in the plenum (MK6), and tanks requiring power vent shut-off (MK4).*

# RS-094 TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

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

## OPERATING SPECIFICATIONS:

### Valve

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

Max. Temperature ..... 366°F

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

### Receiver Box / Actuator

Transformer ..... 120V AC

Voltage ..... 24V AC

Absorbed Current ..... 0.6 A

Absorbed Power ..... 15V A

Frequency ..... 50/60 Hz

Working Temp. .... 0° to 100°F

Square Drive ..... 0.43

Audible Alarm ..... 83 dB

## MATERIALS:

### Valve

Body ..... Low-lead brass

End Connection ... Low-lead brass

Stem ..... Low-lead brass

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

Ball Seats ..... PTFE

O-Rings ..... FKM (Viton®)

### Receiver Box / Actuator & Sensor

Body ..... High-performance engineered polymer

## CABLE LENGTHS:

Power Cord ..... 12'

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

## APPROVALS:

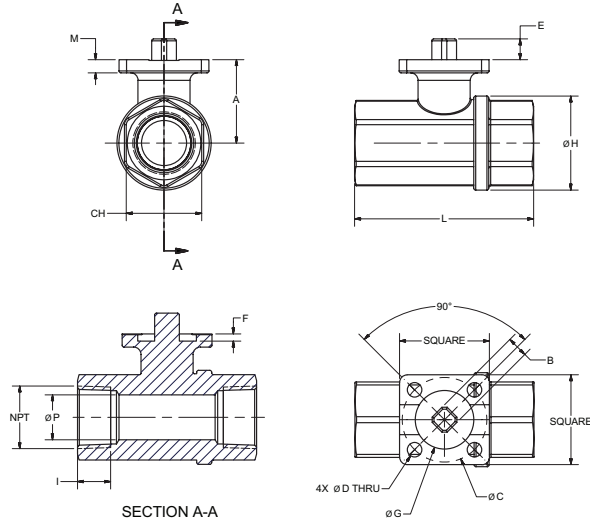
NSF/ANSI 61 and 372 approved valve.

MA Board of Registration of Plumbers

Approval – Code # P1-0515-489.

## DIMENSIONS & WEIGHTS:

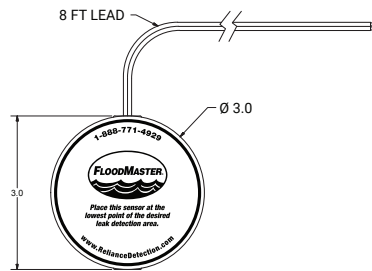
### Shut-Off Valve



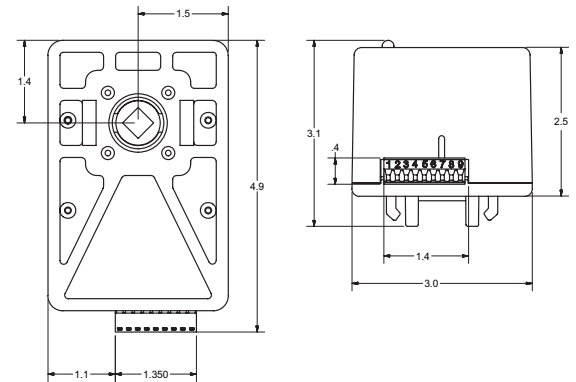
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)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

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

### Water Sensor



### Receiver Box / Actuator



## AVAILABLE ACCESSORIES:

- **Modified Standard Kits** – Modified kits are available for specific applications: Low-Profile Tanks (< 3/4" clearance – MK1), Power Vent and Gas Flow Shut-Off (MK4, MK5, MK7) and Plenum Spaces (MK6).
- **Wired Sensor Pucks** – Up to 5 additional sensors can be wired to a single RS-094 receiver box for a wider area of leak detection.
- **Sensing Rope Kit** – Ideal for use with low tanks, or for room perimeter and sub-floor leak detection applications.
- **Auto Dialer** – A convenient, low-cost add-on to send and receive automatic alerts whenever your FloodMaster system identifies a fault condition.

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



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