

Technical Submittal Data Sheet Plenum-Rated 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-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



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.

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	on Low-lead brass
Stem	Low-lead brass
Ball	Low-lead brass (tea coated)
Ball Seats	PTFE
0-Rings	FKM (Viton®)

Receiver Box / Actuator & Sensor

Body High-perf. engineered polymer

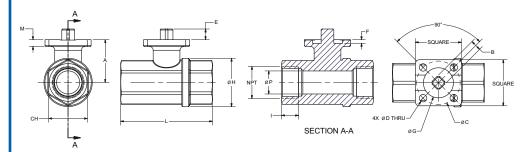
CABLE LENGTHS:

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

APPROVALS:

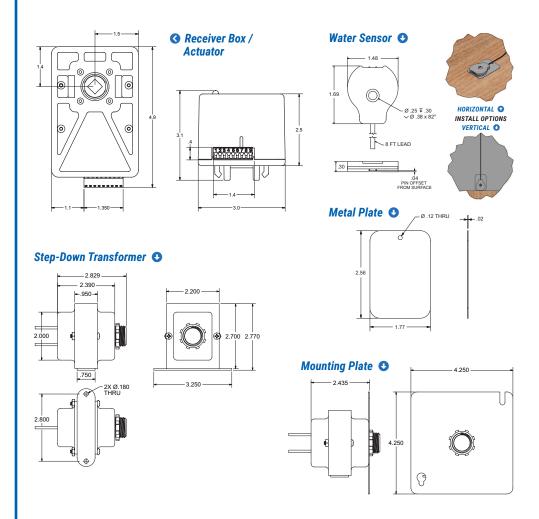
NSF/ANSI 61 and 372 approved valve. MA Board of Registration of Plumbers Approval – Code # P1-0515-489.

DIMENSIONS: Shut-Off Valve •



	Size	Square	Α	В	С	D	E	F	G	Н	1	L	CH	M	Р	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
ĺ	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.



AVAILABLE ACCESSORIES:

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

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

MadisonWater

Install Confidence."

MadisonWater 27 Business Park Drive Branford, CT 06405 madison-water.com 203-488-2684 info@madison-water.com