



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

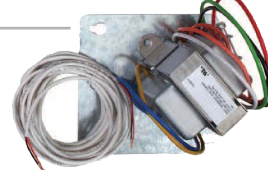
FEATURES:

- 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

Receiver Box

NO/C/NC Dry Contacts

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



Actuator & Shut-Off Valve



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.

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:

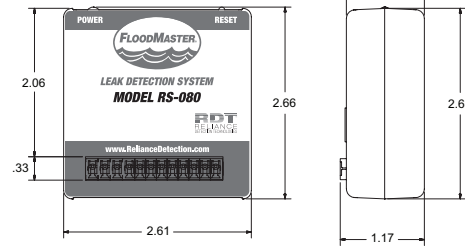
NSF/ANSI 61 and 372 approved valve.

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

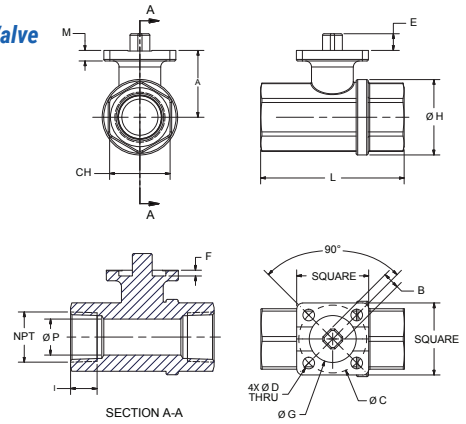
 UL classified actuator.

DIMENSIONS:

Receiver Box



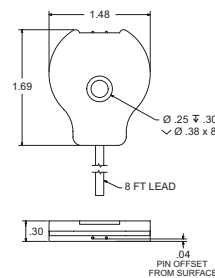
Shut-Off Ball Valve (3/4" to 2")



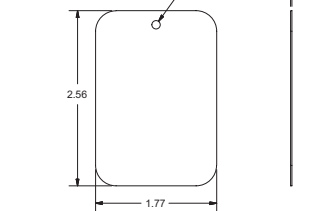
RS-080-MK6 Shut-Off Ball Valve Specifications: 3/4" through 2"																		
Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	1.93	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.

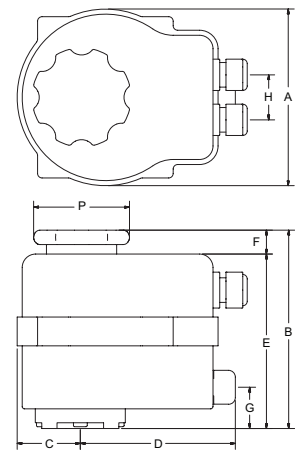
Water Sensor



Metal Plate

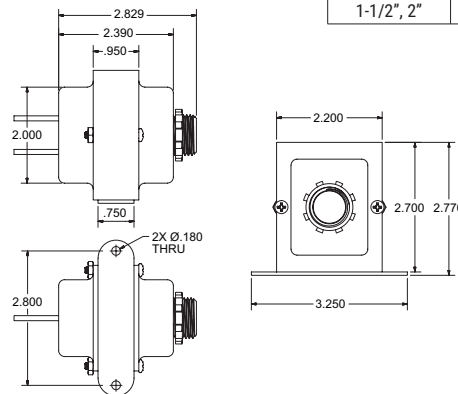


Actuator

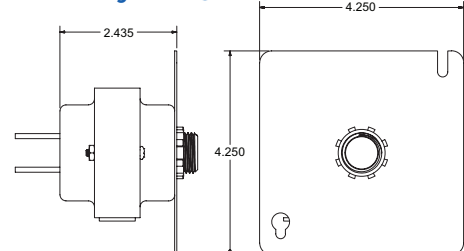


RS-080-MK6 Electric Actuator Specifications											
Size	Drilling ISO 5211	A	B	C	D	E	F	G	H	I	P
3/4", 1", 1-1/4"	F03-F05	4.84	5.57	1.67	4.74	4.96	0.61	4.06	1.26	0.55	2.68
1-1/2", 2"	F03-F05	6.18	7.40	2.38	5.12	5.75	1.65	1.30	1.42	0.47	2.68

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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