

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series 009

Reduced Pressure Zone Assemblies

1/4" – 2"

⚠ WARNING

It is illegal to use this product in any plumbing system providing water for human consumption, such as drinking or dishwashing, in the United States. Before installing standard material product, consult your local water authority, building and plumbing codes.

Series 009 Reduced Pressure Zone assemblies are designed to protect potable water supplies in accordance with national plumbing codes and water authority requirements. Specifically, the series protects drinking water supplies from dangerous cross-connections in accordance with national plumbing codes and water authority requirements for non-potable service applications such as irrigation, fireline, or industrial processing.

The series features two in-line, independent check valves, captured springs, and replaceable check seats with an intermediate relief valve. Its compact modular design facilitates maintenance and assembly access. Sizes 1/4" to 1" shutoffs have tee handles.

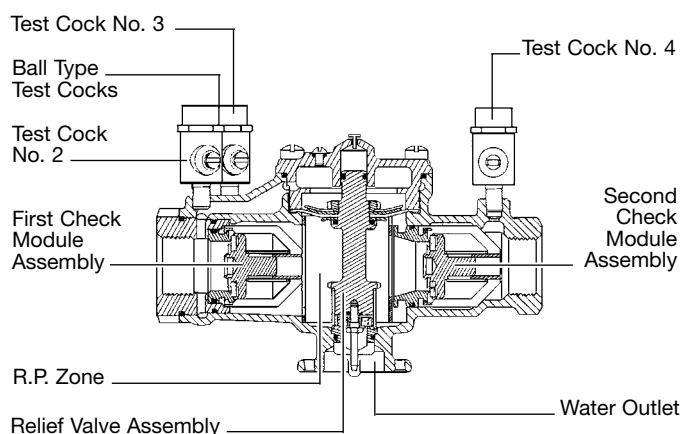
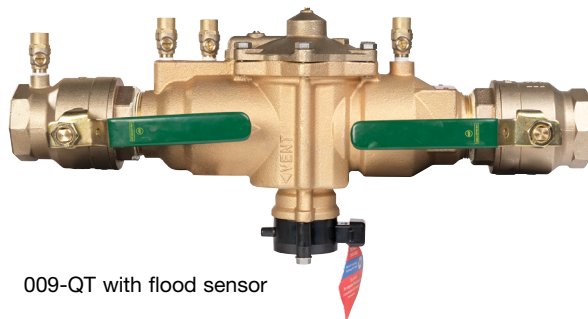
Series 009 assemblies of sizes 1/2" to 2" include a flood sensor to detect excessive water discharges from the relief valve. The sensor is installed on the assembly exterior and does not alter assembly functions or certifications. The sensor relays a signal that triggers notification to facility who can take corrective action, thus avoiding the possibility of ruinous flooding and costly damage.

NOTICE

An add-on connection kit is required to activate the flood sensor. Without the connection kit, the sensor is a passive component that has no communication with any other device. (For more information, download RP/IS-009.)

Features

- Single access cover and modular check construction for ease of maintenance
- Top entry to all internals for immediate accessibility
- Captured springs for safe maintenance
- Internal relief valve for reduced installation clearances
- Replaceable seats for economical repair
- Bronze body construction for durability (1/4" – 2")
- Ball valve test cocks — screwdriver slotted (1/4" – 2")
- Large body passages provides low pressure drop
- Compact, space saving design
- No special tools required for servicing
- Sensor on the relief valve for flood detection (1/2" – 2")



NOTICE

Use of the flood sensor does not replace the need to comply with all required instructions, codes, and regulations related to installation, operation, and maintenance of this product, including the need to provide proper drainage in the event of a discharge.

Watts is not responsible for the failure of alerts due to connectivity issues, power outages, or improper installation.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Inquire with governing authorities for local installation requirements.

Specification

A Reduced Pressure Zone assembly shall be installed at each potential health hazard location to prevent backflow due to backsiphonage and/or backpressure. The assembly shall consist of an internal pressure differential relief valve located in a zone between two positive seating check modules with captured springs and silicone seat discs. Seats and seat discs shall be replaceable in both check modules and the relief valve. There shall be no threads or screws in the waterway exposed to line fluids. Service of all internal components shall be through a single access bronze cover secured with stainless steel bolts. The assembly shall also include two resilient seated isolation valves, four resilient seated test cocks, and an air gap drain fitting. The assembly shall meet the requirements of USC; ASSE Std. 1013; AWWA Std. C511-92; CSA B64.4. Shall be a Watts® Series 009, and shall include a sensor on the relief valve for flood detection.

Model/Option

Prefix:

U – Union connections (For more information download ES-U009 at watts.com.)

Suffix:

AQT – Elbow fittings for 360° rotation (3/4" – 2")
FS – Flood detection sensor (1/2" – 2")
HC – 2 1/2" Inlet/outlet fire hydrant fitting (2")
LF – Without shutoff valves
PC – Internal polymer coating
QT – Quarter-turn ball valves
S – Bronze strainer
SH – Stainless steel ball valve handles

Materials

Bronze body construction, silicone rubber disc material in the first and second check plus the relief valve. Replaceable polymer check seats for first and second checks. Removable relief valve seats. Stainless steel cover bolts.

Standardly furnished with NPT body connections. For optional bronze union inlet and outlet connections, specify prefix U (1/2" – 2"). Series 009QT furnished with quarter turn, full port, resilient seated, bronze ball valve shutoffs.

Pressure / Temperature

Suitable for supply pressure up to 175 psi (12.1 bar)

Water temperature: 33°F – 180°F (0.5°C – 75°C)

Standards

USC

ASSE No. 1013

AWWA C511-92

CSA B64.4

IAPMO File No. 1563

Approvals



ASSE, AWWA, CSA, IAPMO

Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California

UL Classified 3/4" – 2"

(LF models only except 009M3LF)

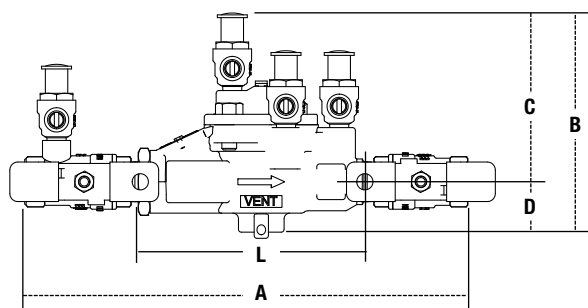
Insulated Enclosure

The WattsBox insulated enclosure is available for Series 009. For more information download ES-WB at watts.com.

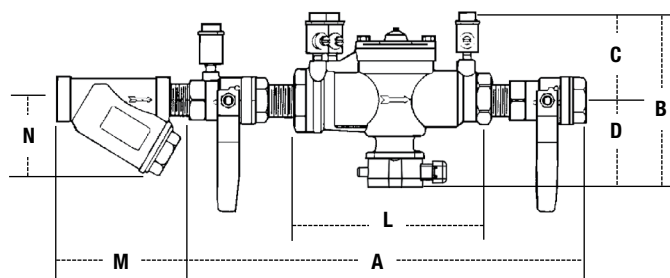
Dimensions — Weight

Call customer service if you need assistance with technical details.

1/4" – 3/8"



1/2" – 2"



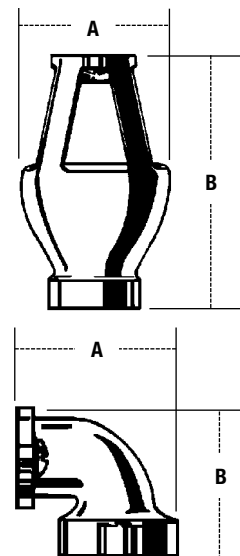
MODEL	DIMENSIONS (APPROX.)										STRAINER DIMENSIONS				WEIGHT	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg
1/4	10	250	4 5/8	117	3 3/8	86	1 1/4	32	5 1/2	140					5	2
3/8	10	250	4 5/8	117	3 3/8	86	1 1/4	32	5 1/2	140					5	2
1/2	10	250	5 7/8	149	3 3/8	86	2 1/2	64	5 1/2	140	2 3/4	70	2 1/4	57	5	2
3/4	10 3/4	273	6 1/4	159	3 1/2	89	2 3/4	70	6 3/4	171	3 3/16	81	2 3/4	70	6	3
1	14 1/2	368	6 1/4	159	3	76	3 3/4	83	9 1/2	241	3 3/4	95	3	76	12	5
1 1/4	17 3/8	441	6 3/4	169	3 1/2	89	3 3/4	83	11 3/8	289	4 7/16	113	3 1/2	89	15	6
1 1/2	17 7/8	454	6 3/4	169	3 1/2	89	3 3/4	83	11 1/8	283	4 7/8	124	4	102	16	7
2	21 3/8	543	8 3/4	222	4 1/2	114	4 1/4	108	13 1/2	343	5 15/16	151	5	127	30	13

Suffix HC – Fire Hydrant Fittings dimension 'A' = 25"

Air Gaps and Elbows

MODEL	SIZE	DRAIN OUTLET		DIMENSIONS				WEIGHT	
	For 909, 009, and 993			A		B			
		in.	mm	in.	mm	in.	mm	lb	kg
909AGA	1/4"–1/2" 009,	1/2	13	2 3/8	60	3 1/8	79	0.625	0.28
	3/4" 009M2/M3								
909AGC	3/4"–1" 009/909,	1	25	3 1/4	83	4 7/8	124	1.5	0.68
	1"–1 1/2" 009M2								
909AGF	1 1/4"–2" 009M1,	2	51	4 3/8	111	6 3/4	171	3.25	1.47
	1 1/4"–3" 009/909,								
	2" 009M2, 4"–6" 993								
909AGK	4"–6" 909,	3	76	6 3/8	162	9 5/8	244	6.25	2.83
	8"–10" 909M1								
909AGM	8"–10" 909	4	102	7 3/8	187	11 1/4	286	15.5	7.03
909ELA	1/4"–1/2" 009, 3/4" 009M2/M3	–	–	–	–	–	–	–	–
909ELC	3/4"–1" 009/909	–	–	2 3/8	60	2 3/8	60	0.38	0.17
909ELF*	1 1/4"–2" 009M1,	–	–	3 3/8	92	3 5/8	92	2	0.91
	1 1/4"–2" 009/909,								
	2" 009M2, 4"–6" 993								
909ELH*	2 1/2"–3" 009/909	–	–	–	–	–	–	–	–
Vertical									

* Epoxy coated



Capacity

Performance as established by an independent testing laboratory.

The asterisk (*) indicates typical maximum system flow rate (7.5 ft/s, 2.3 m/s).

