## **Engineering Specification**

Job Location -

Engineer -

Approval -



# **Series SS009** Stainless Steel Reduced Pressure Zone Assemblies

#### <sup>1</sup>/<sub>2</sub>" – 1"

Series SS009 Stainless Steel Reduced Pressure Zone assemblies provide protection of the potable water supply in accordance with national plumbing codes and water authority requirements. Series SS009 can be used in a variety of health hazard installations whenever the downstream liquid is of a composition which may damage bronze material or it is desirable to eliminate trace elements of lead and copper. Typical applications are industrial or plant use, medical/diagnostic equipment, reverse osmosis systems, carbonated beverage machines, breweries/distillers, paper and pulp industry, chemical plants, and aggressive atmospheres. Series SS009 features two in-line independent check valves, captured springs, replaceable check seats, corrosion resistant internal parts, and a hydraulically operated differential pressure relief valve. All sizes are constructed with NPT body connections and are standardly furnished with vandal resistant Test Cocks. Series SS009 is furnished with 316 stainless steel, full port, investment cast, and guarter-turn ball valve shutoffs with 304 stainless steel tee handles.

Series SS009 includes 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 personnel 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

- Investment Cast 316 Stainless Steel Assembly for corrosion resistance
- All wetted valve components (test cocks, ball valve shutoffs, pipe nipples) made from Lead Free\* stainless steel or plastic
- Bolted on, top entry single access cover for ease of maintenance
- Modular check construction featuring non reversible checks with captured springs for simplified servicing
- Top-mounted, vandal-resistant test cocks with access for testing
- True line sized check modules open further for dirt and debris to pass through the valve, reducing fouling problems
- Check and relief valve seat replaceable without special tools
- Internal relief valve for right and left hand installations
- Sensor on the relief valve for flood detection

Contractor -

Approval —

Contractor's P.O. No. -----

Representative ------





#### 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 or power issues.

#### 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.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



<sup>\*</sup>The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

### Specification

A Reduced Pressure Zone assembly shall be installed at each noted 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 independently operating 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, without the use of special tools. 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 cover secured with stainless steel bolts. The assembly shall include two resilient seated isolation valves, four top mounted vandal resistant test cocks with dust covers, a protective stainless steel wye strainer with a 20 mesh screen, and an air gap fitting. The assembly shall consist of an Investment Cast 316 stainless steel body and cover with Series 300 stainless steel test cocks, 316 stainless steel ball valve shutoffs with PTFE seat blowout proof 304 stainless steel stems, and 304 stainless steel tee handles. The assembly shall meet the requirements of ASSE Standard 1013, AWWA Standard C511. Assembly shall be a Watts Series SS009 and shall include a sensor on the relief valve for flood detection.

### Materials

Body: 316 stainless steel Disc and Relief Valve: Silicone rubber Check Seats: Replaceable polymer Relief Valve Seat: Removable relief valve seats Cover Bolts: Stainless steel

### Model/Option

FS - Flood detection sensor

QT - Quarter-turn ball valves

S - Stainless steel strainer

NOTE: The installation of a drain line is recommended. When installing a drain line, an air gap is necessary. (For more information download ES-AG/EL/TC at watts.com.)

### Dimensions - Weight

Call customer service if you need assistance with technical details.



MODEL	SIZE	DIMENSIONS (APPROX.)															WEIGHT	
		A		В		C		L		М		N		Width				
	in.	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	lb	kg	
SS009M3QT	1/2	10	250	51/8	149	33%	86	51⁄2	140	-	-	-	_	5	127	4.50	2.0	
SS009M3QT	3⁄4	10¾	273	61⁄4	159	31/2	89	6¾	171	-	-	-	-	61⁄4	159	5.75	2.6	
SS009QT	1	16¾	425	61⁄4	159	3	76	91/2	241	-	-	-	-	81/4	210	12.25	5.6	
SS009M3QT-S	1/2	10	250	71/4	182	33%	86	51/2	140	<b>3</b> <sup>13</sup> ⁄16	97	25%	67	5	127	7.25	3.3	
SS009M3QT-S	3⁄4	10¾	273	<b>7</b> ½	191	31/2	89	6¾	171	43/8	111	<b>3</b> <sup>3</sup> ⁄16	81	61⁄4	159	9.25	4.2	
SS009QT-S	1	16¾	425	<b>8</b> <sup>1</sup> / <sub>2</sub>	216	3	76	<b>9</b> ½	241	5 <sup>3</sup> /16	132	33/4	95	8 <sup>1</sup> /4	210	17.00	7.7	

### Pressure - Temperature

Temperature Range: 33°F – 180°F (0.5°C – 82°C) continuous Maximum Working Pressure: 175 psi (12.1 bar)

#### Standards

USC Manual 9th Edition AWWA C511-92

#### Approvals



ASSE, AWWA, USC CSA –  $\frac{1}{2}$ " and  $\frac{3}{4}$ " horizontal

#### **Insulated Enclosure**

The WattsBox insulated enclosure is available for Series SS009. For more information download ES-WB at watts.com.

### Capacity

Performance as established by an independent testing laboratory. The asterisk (\*) indicates the typical maximum system flow rate (7.5 ft/s).



