### **Engineering Specification**

lob Name	Contractor
lob Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

## **LEAD FREE**\*

## Series 994

## Reduced Pressure Zone Assemblies

Sizes: 21/2" - 10"

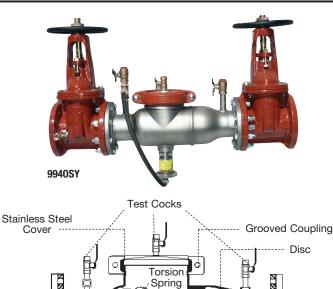
Series 994 Reduced Pressure Zone Assemblies are designed to provide protection of the potable water supply in accordance with national codes. This series can be used where approved by the local authority having jurisdiction on health hazard cross-connections. Series 994 features a short lay length, lightweight stainless steel body, corrosion resistant stainless steel relief valve, and patented torsion spring check valves.

#### **Features**

- Stainless steel construction provides long term corrosion resistance and maximum strength
- Stainless steel body is half the weight of competitive designs reducing installation & shipping costs
- Short end-to-end dimensions makes retrofit easy
- Bottom mounted relief valve reduces clearance requirements when installed against an outside wall
- Torsion spring check valves provides maximum flow at low pressure drop
- Thermoplastic & stainless steel check valves for trouble-free operation
- · No special tools required for servicing
- · Compact construction allows for smaller enclosures
- Stainless steel relief valve features a balanced rolling diaphragm to eliminate sliding seals and lower maintenance costs

### Specifications

A Reduced Pressure Zone Assembly shall be installed at each cross-connection to prevent backsiphonage and backpressure of hazardous materials into the potable water supply. The assembly shall consist of a pressure differential relief valve located in a zone between two positive seating check valves. The main valve body shall be manufactured from 300 Series stainless steel for corrosion resistance. The check valves shall be of thermoplastic construction with stainless steel hinge pins, cam arm, and cam bearing. The check valve shall utilize a single torsion spring design to minimize pressure drop through the assembly. The check valves shall be modular and shall seal to the main valve body by the use of an O-ring. There shall be no brass or bronze parts used within the check assembly or relief valve. The use of seat screws to retain the check valve seat is prohibited. All internal parts shall be accessible through a single cover on the valve assembly securely held in place by a two-bolt grooved coupling. The differential relief valve shall be of stainless steel construction and shall utilize a rolling diaphragm and no sliding seals. The relief valve shall be bottom mounted and supplied with a steel reinforced sensing hose. The assembly shall include two resilient seated shutoff valves & four ball type test cocks. The assembly shall be a Watts Series 994.



#### Models Suffix:

NRS – non-rising stem resilient seated gate valves

Replaceable Seat ----

OSY – UL/FM outside stem & yoke resilient seated gate valves

\*\*OSY FxG – flanged inlet gate connection and grooved outlet gate connection \*\*OSY GxF – grooved inlet gate connection and flanged outlet gate connection

Laser Cut/Polished Cam Arm

Stainless Steel

Relief Valve

\*\*OSY GxG – grooved inlet gate connection and grooved outlet gate connection

LF – without shutoff valves

S – cast iron strainer

Available with grooved NRS gate valves - consult factory\*\*
Post indicator plate and operating nut available - consult factory\*\*
\*\*Consult factory for dimensions

**Note:** The installation of a drain line is recommended. When installing a drain line, a 994AGK-P air gap is necessary. See ES-AG/EL/TC for additional information.

# Now Available WattsBox Insulated Enclosures.

For more information, send for literature ES-WB.

IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS

\*The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.



#### **Materials**

All internal metal parts: 300 Series stainless steel Main valve body: 300 Series stainless steel

Check assembly: Noryl®

Flange dimension in accordance with AWWA Class D

#### Pressure – Temperature

Temperature Range: 33°F - 110°F (0.5°C - 43°C) continuous

Maximum Working Pressure: 175psi (12.1 bar)

**Capacity** \*Typical maximum flow rate (7.5 feet/sec.) \*\*UL rated flow

#### **Standards**

AWWA C511-92, CSA B64.5, UL Classified

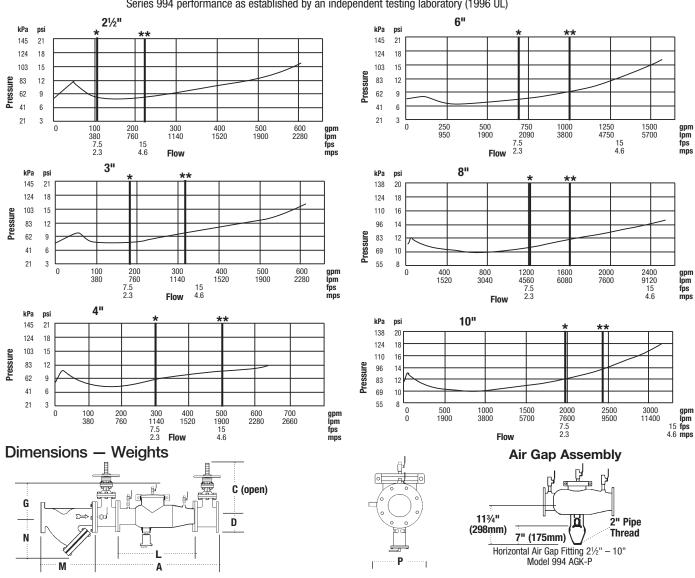
## **Approvals**





Approved by the Foundation for Cross Connection Control & Hydraulic Research at the University of Southern California Sizes 21/2" - 6"

Series 994 performance as established by an independent testing laboratory (1996 UL)



SIZE	DIMENSIONS								WEIGHT														
	А		C (OSY)		C (NRS)			D		G		L		M		N		Р		w/Gates		w/o Gates	
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.	
<b>2</b> ½	37	940	163/8	416	93/8	238	10½	267	10	254	22	559	10	254	61/2	165	7	178	148	67	60	27	
3	38	965	187/8	479	101/4	260	101/2	267	10	254	22	559	101//8	257	7	178	71/2	191	226	103	62	28	
4	40	1016	223/4	578	<b>12</b> <sup>3</sup> / <sub>16</sub>	310	101/2	267	10	250	22	559	121/8	308	81/4	210	9	229	235	107	65	30	
6	481/2	1232	301/8	765	16	406	111/2	292	15	381	271/2	699	181/2	470	13½	343	11	279	380	172	110	50	
8	521/2	1334	373/4	959	19 <sup>15</sup> / <sub>16</sub>	506	121/2	318	15	381	291/2	749	21%	549	15½	394	13½	343	571	259	179	81	
10	553/4	1416	453/4	1162	2313/16	605	121/2	318	15	381	291/2	749	26	660	181/2	470	16	406	773	351	189	86	

Noryl® is a registered trademark of SABIC Innovative Plastics™.



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