# Series 4000SS

## **Reduced Pressure Zone Assemblies**

Sizes: 2<sup>1</sup>/<sub>2</sub>" - 10" (65 - 250mm)



#### 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
- Cam-check assembly provides maximum flow at low pressure drop
- 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

### **Available Models**

#### Suffix:

- NRS non-rising stem resilient seated gate valves
- OSY UL/FM outside stem and 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
- \*\*OSY GxG grooved inlet gate connection and grooved outlet gate connection LG – less gates

Available with grooved NRS gate valves - consult factory\*\*

Post indicator plate and operating nut available – consult factory  $^{\star\star}$ 

\*\*Consult factory for dimensions

#### NOTICE

The installation of a drain line is recommended. When installing a drain line, an air gap is necessary. The 4000SS should be installed with a minimum clearance of 12" between lowest point of the assembly and the floor drain or grade.

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



Series 4000SS 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 4000SS features short lay length, lightweight stainless steel body, corrosive resistant stainless steel relief valve, and patented cam-check assembly.

# 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 series 4000SS features Lead Free\* construction to comply with Lead Free\* installation requirements. The assembly shall consist of a pressure differential relief valve located in a zone between two positive seating cam-check assemblies. The main valve body shall be manufactured from 300 Series stainless steel for corrosion resistance. The cam-check assembly shall be of thermoplastic construction with stainless steel hinge pins, cam arm, and cam bearing. The cam-check assembly shall utilize a single torsion spring design to minimize pressure drop through the assembly. The cam-check assembly 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 an Ames Company Series 4000SS.

Standards

AWWA C511-92



B64.5

1013



Sizes 21/2" - 10", OSY OSY only

only

#### NOTICE

When installing a drain line on Series 4000SS backflow preventer, use air gap. See Literature ES-A-AG/EL/TC for additional information.

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

Ames product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Technical Service. Ames 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 Ames products previously or subsequently sold.

# 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

# Capacity

Series 4000SS performance as established by an independent testing laboratory (1996 UL). UL certified flow characteristics.

Documented flow characteristics (including shutoff valves).

\*UL Rated

#### \*\*UL Tested 1900 3800 1500 gpm 5700 lpm 950 2850 4750 0 21/2" (65mm) Flow Rate kPa psi 8" (200mm) kPa psi **son** 124 18 **son** 103 15 **ennssed** 12 62 9 41 6 Pressure Loss 110 16 600 gpm 2280 lpm 2400 gpm Flow Rate 9120 lpm 3" (80mm) Flow Rate kPa psi 10" (250mm) kPa psi 124 18 Pressure Loss 124 18 Pressure Loss 83 600 gpm 2280 lpm 3000 gpm Õ 11400 lpm Flow Rate Flow Rate 4" (100mm) kPa psi 145 21 1.0 C (open) Pressure Loss Ď 380 760 1140 1520 1900 2280 700 gpm 2660 lpm Flow Rate ----- L -----**Dimensions – Weights** ----- A Note: Strainer sold separately SIZE NET WEIGHT DIMENSION

Pressure — Temperature

Maximum Working Pressure: 175psi (12.1 bar)

Pressure Loss 

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

6" (150mm)

		A		C (0SY)		C(NRS)		D		F		L		w/Gates		w/o Gates	
in.	тт	in.	тт	in.	тт	in.	тт	in	тт	in.	тт	in.	тт	lb.	kg.	lb.	kg.
<b>2</b> <sup>1</sup> / <sub>2</sub>	65	37	940	16¾	416	<b>9</b> <sup>3</sup> / <sub>8</sub>	238	10½	267	7	178	22	559	148	67	60	27
3	80	38	965	181/8	479	10 <sup>1</sup> /4	260	10½	267	7½	191	22	559	226	103	62	28
4	100	40	1016	<b>22</b> <sup>3</sup> ⁄4	578	12 <sup>3</sup> /16	310	10½	267	9	229	22	559	235	107	65	30
6	150	<b>48</b> ½	1232	30 <sup>1</sup> /8	765	16	406	<b>11</b> ½	292	11	279	<b>27</b> <sup>1</sup> / <sub>2</sub>	699	380	172	110	50
8	200	52½	1334	<b>37</b> ¾	959	<b>19</b> <sup>15</sup> / <sub>16</sub>	506	12½	318	13½	343	<b>29</b> <sup>1</sup> / <sub>2</sub>	749	571	259	179	81
10	250	55½	1410	<b>45</b> <sup>3</sup> ⁄ <sub>4</sub>	1162	23 <sup>13</sup> /16	605	12½	318	16	406	<b>29</b> <sup>1</sup> / <sub>2</sub>	749	773	351	189	86
															~		



Noryl<sup>®</sup> is a registered trademark of General Electric Company



NOTICE

Inquire with governing authorities for local installation requirements

A Watts Water Technologies Company

USA: Backflow Tel: (978) 689-6066 • Fax: (978) 975-8350 • AmesFireWater.com USA: Control Valves Tel: (713) 943-0688 • Fax: (713) 944-9445 • AmesFireWater.com Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • AmesFireWater.ca Latin America: Tel: (52) 81-1001-8600 • Fax: (52) 81-8000-7091 • AmesFireWater.com