

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Series 400SS

Reduced Pressure Zone Assemblies

Sizes: 2½" – 12"

Series 400SS 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 400SS features short lay length, lightweight stainless steel body, corrosive resistant stainless steel relief valve, and patented cam-check assembly.

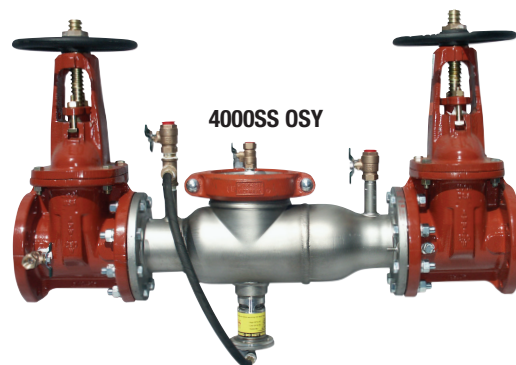
Features

- 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

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 400SS 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 Fire & Waterworks Series 400SS.

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



Standards

AWWA C511-92

Approvals



1013



B64.5



Sizes 2½" – 10",
OSY only



OSY only

NOTICE

When installing a drain line on Series 400SS backflow preventer, use air gap.

See Literature ES-A-AG/EL/TC for additional information.

For 12" assembly approvals consult factory.

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**

**Consult factory for dimensions

NOTICE

The installation of a drain line is recommended. When installing a drain line, an air gap is necessary. The 400SS 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.

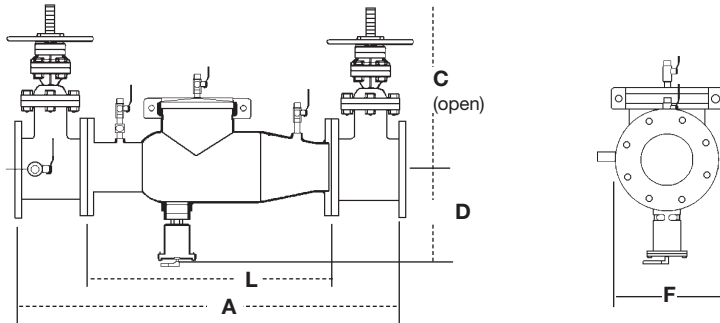


Materials

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)
 Maximum Working Pressure: 175 psi (12.1 bar)



Dimensions – Weights

Note: Strainer sold separately

SIZE	DIMENSIONS								NET WEIGHT							
	A		C (OSY)		C (NRS)		D		F		L		w/Gates		w/o Gates	
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb.	kg.	lb.	kg.
2½	37	940	16¾	416	9¾	238	10½	267	7	178	22	559	148	67	60	27
3	38	965	18⅞	479	10¼	260	10½	267	7½	191	22	559	226	103	62	28
4	40	1016	22¾	578	12¾	310	10½	267	9	229	22	559	235	107	65	30
6	48½	1232	30⅞	765	16	406	11½	292	11	279	27½	699	380	172	110	50
8	52½	1334	37¾	959	19¹⁵⁄₁₆	506	12½	318	13½	343	29½	749	571	259	179	81
10	55¾	1416	45¾	1162	23¹³⁄₁₆	605	12½	318	16	406	29½	749	773	351	189	86
12	57½	1461	53⅞	1349	26¾	679	12½	318	19	483	29½	749	1043	474	219	100

Noryl® is a registered trademark of General Electric Company

NOTICE

Inquire with governing authorities for local installation requirements

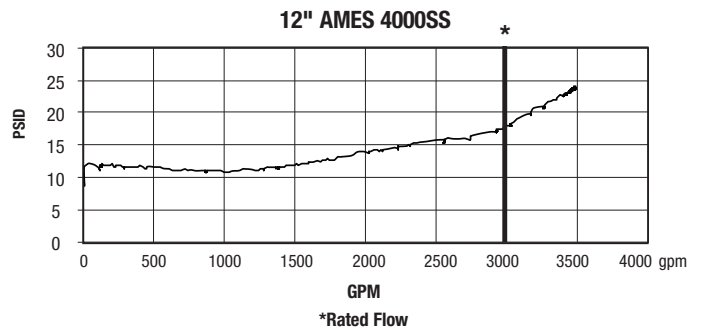
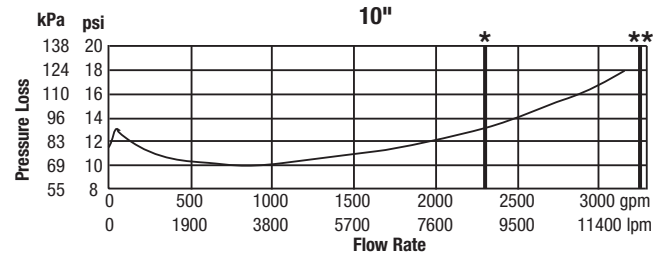
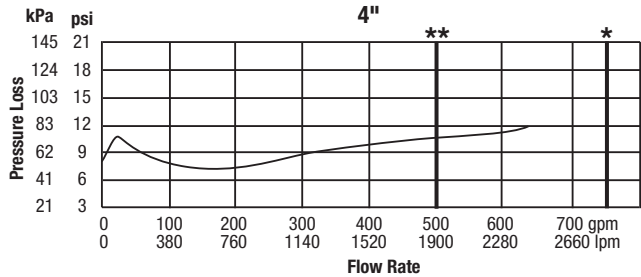
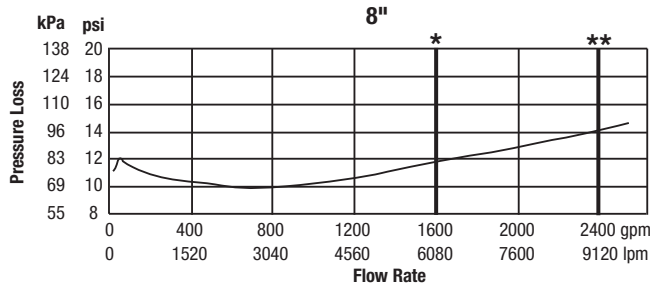
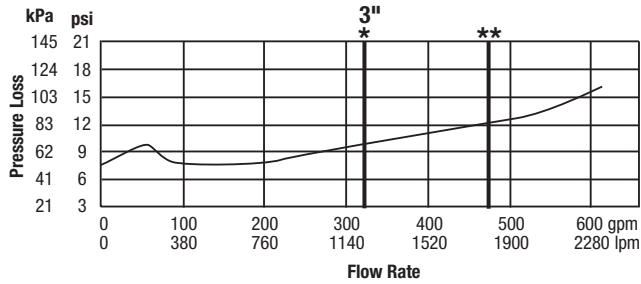
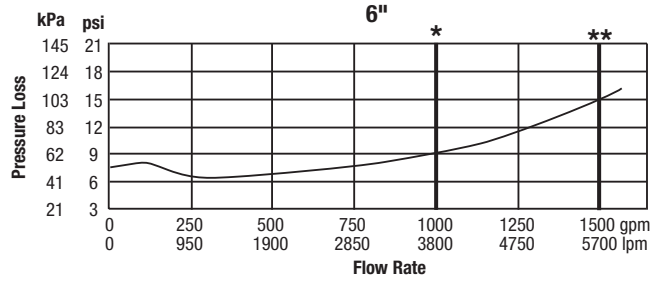
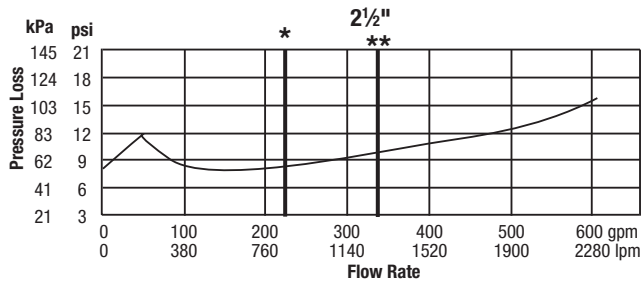
Capacity

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



A WATTS Brand

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
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