

## Engineering Specification

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series 5000SS

## Reduced Pressure Detector Assembly

2½" – 6"

### ⚠ 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 5000SS 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. Used in health hazard applications.

Series 5000SS 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 for corrective action, thus limiting flooding and costly damage.

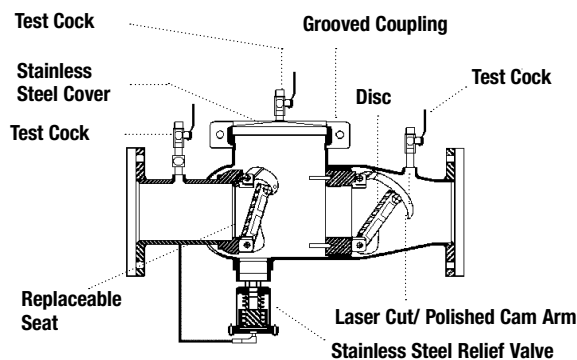
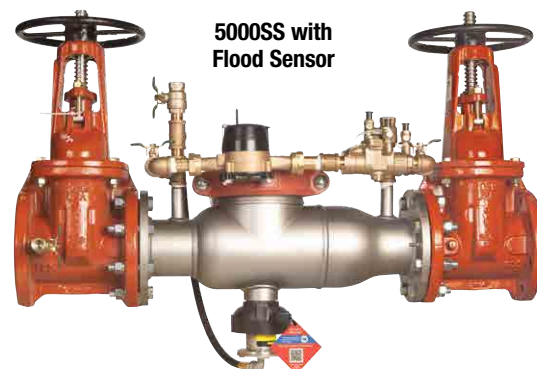
### NOTICE

An add-on connection kit is required to activate the flood sensor. Without the connection kit, the flood sensor is a passive component that does not communicate with any other device. (A retrofit sensor connection kit is also available for existing installations. For more information, download RP/IS-A-4000SS/5000SS.)

### Features

- Stainless steel construction provides long term corrosion resistance and maximum strength
- Stainless steel body is lightweight reducing installation and shipping costs
- Short end-to-end dimensions makes retrofit easy
- Bottom-mounted relief valve reduces clearance requirements when installed against an outside wall
- Cam-check valves 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
- Detects underground leaks and unauthorized water use
- GPM or CFM meter available
- Sensor on relief valve for flood detection
- Flood alert feature activated with add-on sensor connection kit, compatible with BMS and cellular network communication

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.



### NOTICE

Use of the flood sensor does not replicate 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.



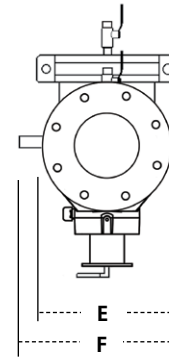
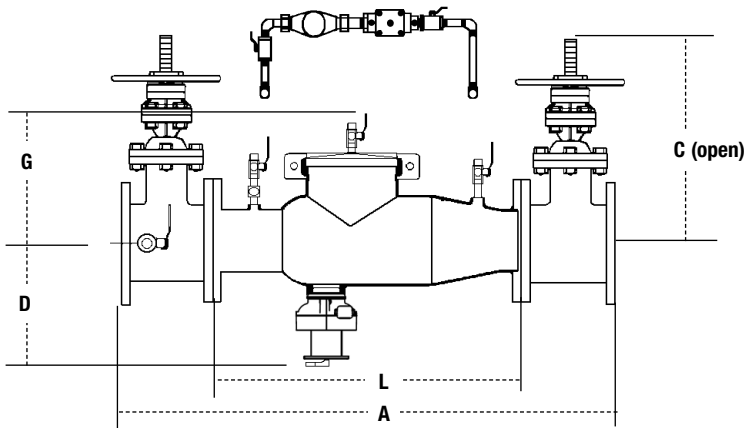
## Specification

A Reduced Pressure Detector 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 cam-check valves. The main valve body shall be manufactured from 300 Series stainless steel for corrosion resistance. The cam-check valves shall be of thermoplastic construction with stainless steel hinge pins, cam arm, and cam bearing. The cam-check valve shall utilize a single torsion spring design to minimize pressure drop through the assembly. The cam-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 cam-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 shutoff valves and four ball type test cocks and a hydraulically balanced by-pass line. The bypass line shall include a meter, small diameter reduced pressure zone assembly and isolation valves. The bypass reduced pressure assembly shall have a single bolted on cover and top mounted test cocks. The assembly shall be an Ames Fire & Waterworks Series 5000SS, and shall include a sensor on the relief valve for flood detection.

## 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

## Dimensions — Weights



SIZE	DIMENSIONS														WEIGHTS			
	A		C (OSY)		D		E		F		G		L		with Gate		without Gates	
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg	lb	kg
2½	37	940	16¾	416	10½	267	12½	318	7	178	10	254	22	559	170	77	61	28
3	38	965	18¾	479	10½	267	13	330	7½	191	10	254	22	559	205	93	65	29
4	40	1016	22¾	578	10½	267	14½	368	9	229	10	254	22	559	270	122	67	30
6	48½	1232	30¾	765	11½	292	15½	394	11	279	11½	292	27½	699	405	184	105	48

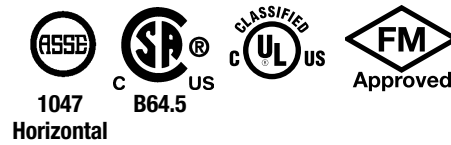
Noryl® is a registered trademark of SHPP Global Technologies B.V.

- \*\*Options for the gate valve:
- Consult factory for dimensions.
  - Available with grooved NRS gate valves; consult factory.
  - Post indicator plate and operating nut available; consult factory.

## Standards

AWWA C511-92

## Approvals



## Model/Option

- FS — Sensor on the relief valve for flood detection
- LG — Less gates
- OSY — UL Classified and FM Approved 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
- ¾" Bypass Line:
  - CFM — Cubic feet per minute meter
  - GPM — Gallons per minute meter
  - LM — Less meter

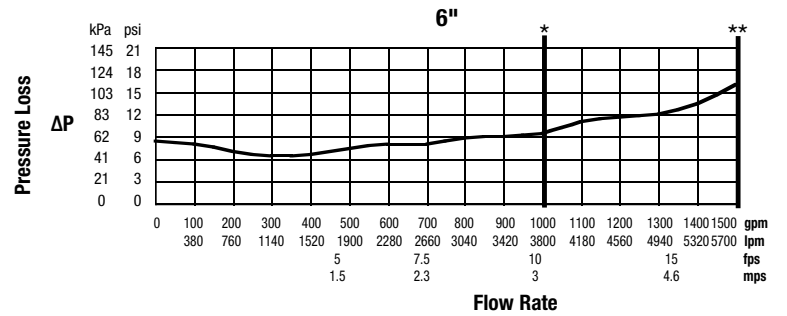
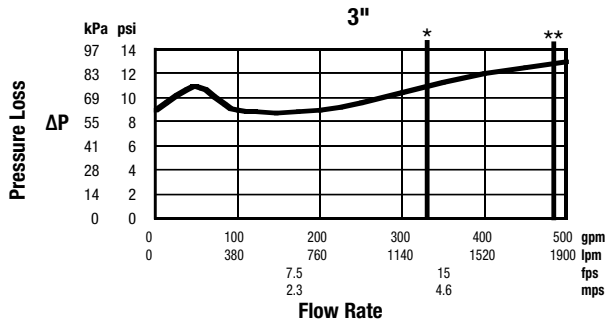
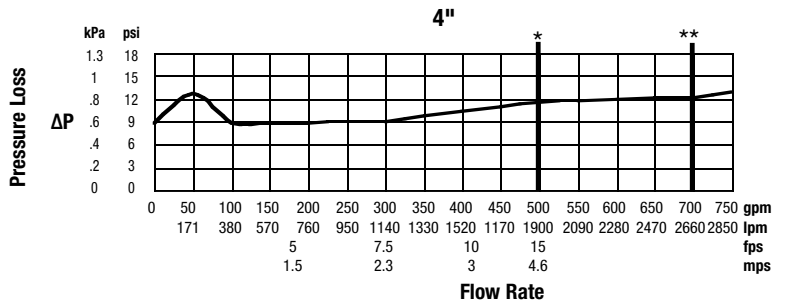
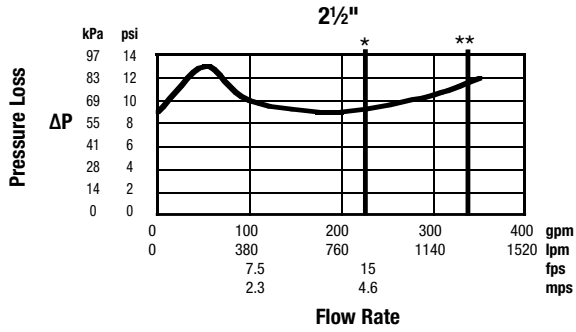
## Pressure — Temperature

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

Maximum Working Pressure: 175 psi (12.1 bar)

# Capacity

\*UL Rated \*\*UL Tested



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