

## For Health Hazard Applications

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Series 957, 957N, 957Z

### Reduced Pressure Zone Assemblies

Sizes: 2½" – 10" (65 – 250 mm)

Series 957, 957N, 957Z Reduced Pressure Zone Assemblies provide protection to the potable water system from contamination in accordance with national plumbing codes. Series 957, 957N, 957Z are normally used in health hazard applications for protection against backsiphonage or backpressure.

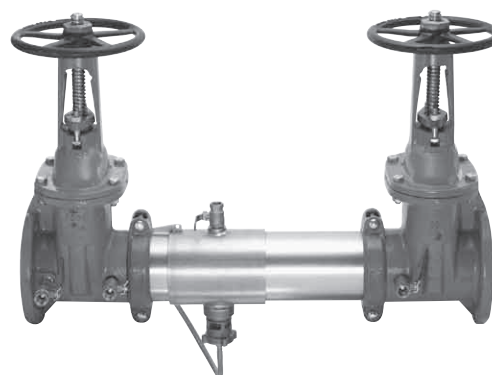
#### Features

- 2½", 3" and 4" (65, 80 and 100mm) sizes available with quarter-turn ball valve shutoffs
- Replaceable check disc rubber
- Extremely compact design
- 70% Lighter than traditional designs
- 304 (Schedule 40) stainless steel housing & sleeve
- Groove fittings allow integral pipeline adjustment
- Patented torsion spring checks provide lowest pressure loss
- Unmatched ease of serviceability
- Bottom mounted cast stainless steel relief valve
- Available with grooved butterfly valve shutoffs

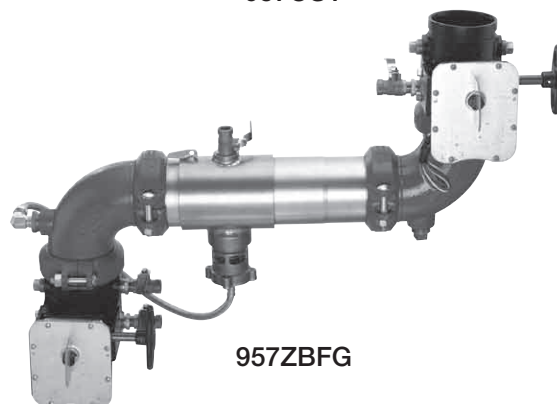
#### Specifications

The Reduced Pressure Zone Assembly shall consist of two independent torsion spring check modules, a differential pressure relief valve located between and below the two modules, two drip tight shutoff valves, and required torsion spring check modules and relief valve shall be contained with a sleeve accessible single housing constructed from 304 (Schedule 40) stainless steel pipe with groove end connections. Torsion spring checks shall have replaceable elastomer discs and in operation produce drip tight closure against the reverse flow of liquid caused by backpressure or backsiphonage. Assembly shall be a Watts Regulator Company Series 957, 957N, 957Z.

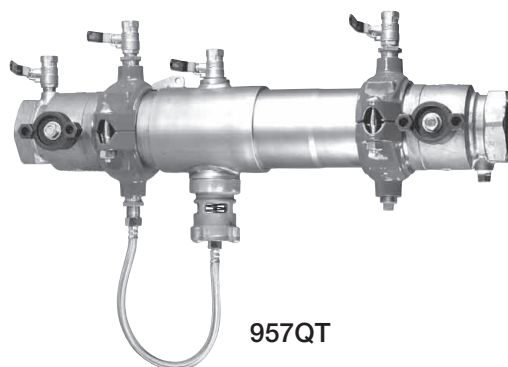
\*The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.



957OSY



957ZBFG



957QT

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.

# WATTS®

## Available Models

Suffix:

- NRS – non-rising stem, resilient seated gate valves
- OSY – UL/FM outside stem and yoke resilient seated gate valves
- BFG – UL/FM grooved gear operated butterfly valves with tamper switch
- QT – 2½" - 4" (65 - 100mm) quarter-turn ball 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

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

Post indicator plate and operating nut available - consult factory\*\*

\*\*Consult factory for dimensions

**Note:** When installing a drain line on Series 957 backflow preventers, use 957AG air gaps. See ES-AG/EL/TC for additional information.

## Materials

Housing & Sleeve: 304 (Schedule 40) Stainless Steel

Elastomers: EPDM, Silicone and Buna-N

Torsion Spring Checks: Noryl®, Stainless Steel

Check Discs: Reversible Silicone or EPDM

Test Cocks: Bronze Body Nickel Plated

Pins & Fasteners: 300 Series Stainless Steel

Springs: Stainless Steel

## Pressure – Temperature

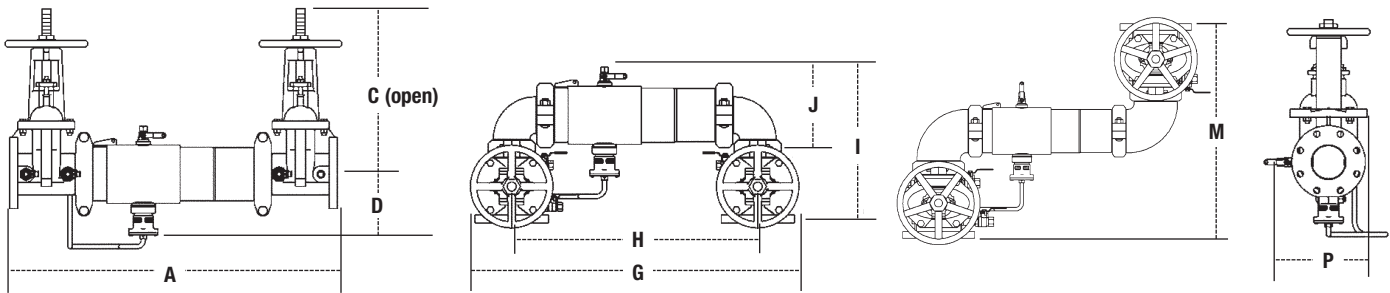
Temperature Range: 33°F – 140°F (0.5°C – 60°C)

Maximum Working Pressure: 175psi (12.1 bar)

## Approvals



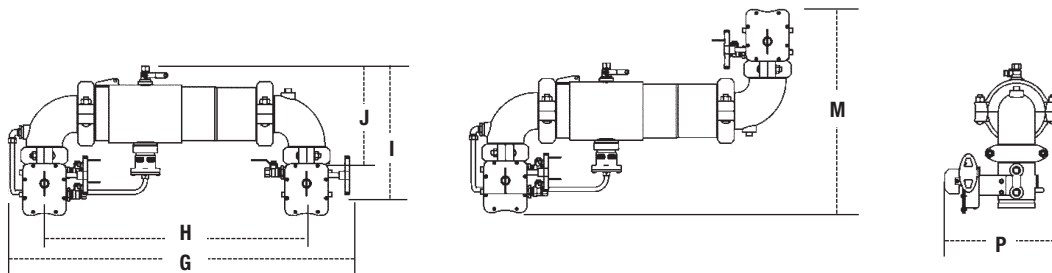
## Dimensions – Weight



957

SIZE (DN)		DIMENSIONS										WEIGHT																	
in.	mm	A	C (OSY)	C (NRS)	D	G	H	I	J	M	P	957NRS	957OSY	957N NRS	957N OSY														
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.												
2½	65	31	787	16⅞	416	9⅞	238	6½	165	29⅞	738	22	559	15½	393	8⅜	223	21⅞	548	9⅞	234	118	54	128	58	126	57	136	62
3	80	31⅞	805	18⅞	479	10¼	260	6⅞	170	30¼	768	22¾	578	17⅞	435	9⅜	233	23⅞	587	10½	267	134	61	148	67	147	67	161	73
4	100	33⅞	856	22¾	578	12⅜	310	7	178	33	838	24	610	18½	470	9⅞	252	26½	673	11⅜	284	164	74	164	74	187	85	187	85
6	150	43½	1105	30⅞	765	16	406	8½	216	44¾	1137	33¾	857	23¾	589	13¼	332	32¾	832	15	381	276	125	298	135	317	144	339	154
8	200	50	1270	37¾	959	19⅞	506	9⅞	246	54⅞	1375	40⅞	1032	27⅞	697	15⅞	399	37⅞	943	17⅜	437	441	200	483	219	516	234	558	253
10	250	57½	1460	45¾	1162	23⅞	605	11⅞	285	66	1676	50	1270	32½	826	17⅞	440	46⅞	1178	20	508	723	328	783	355	893	405	950	431

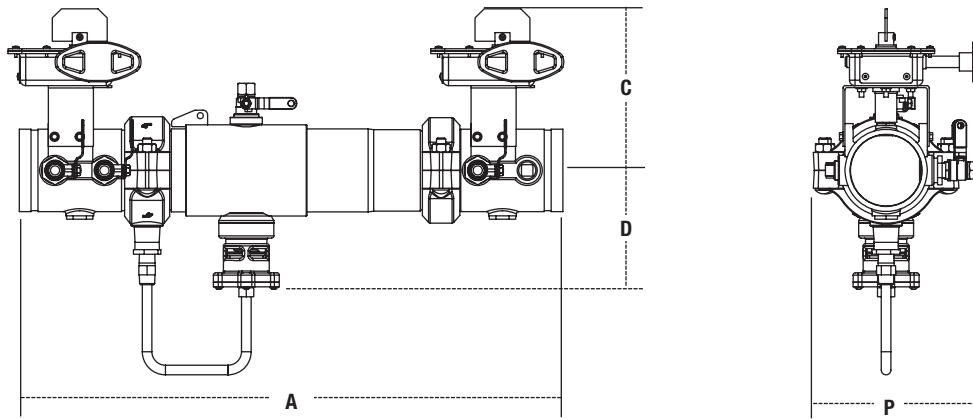
957BFG



SIZE (DN)		DIMENSIONS				WEIGHT									
in.	mm	G	H	I	J	M	P	957N/957Z							
		in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.				
2½	65	32½	826	23½	597	15½	394	9½	241	21⅞	555	11⅞	300	67	30
3	80	34	864	24½	622	16⅞	414	10⅞	256	23⅞	587	12⅞	308	70	32
4	100	35⅞	905	26	660	17⅞	437	10⅞	279	24⅞	634	12⅞	321	87	39
6	150	46½	1181	35⅞	908	20½	521	13½	343	28¼	718	15	382	160	73

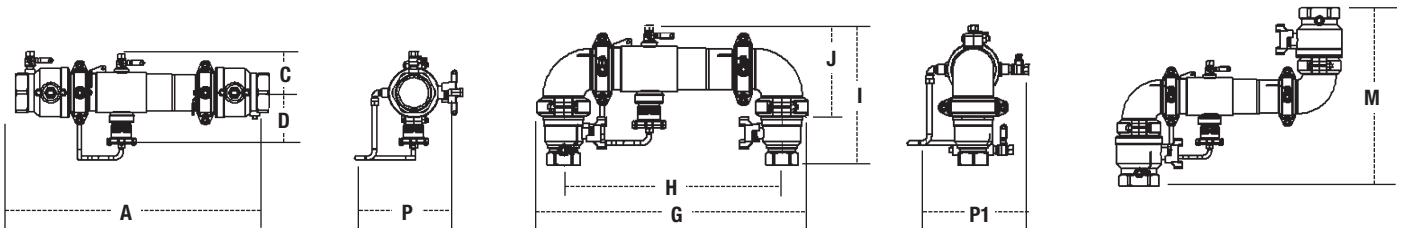
Noryl® is a registered trademark of SABIC Innovative Plastics™.

## Dimensions — Weight continued



### 957 BFG with gates

SIZE (DN)		DIMENSIONS				WEIGHT					
		A		C		D		P			
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
4	100	29 <sup>11</sup> / <sub>16</sub>	754	7 <sup>3</sup> / <sub>4</sub>	197	6 <sup>3</sup> / <sub>8</sub>	162	9 <sup>1</sup> / <sub>2</sub>	241	66	30
6	150	37 <sup>3</sup> / <sub>4</sub>	959	9 <sup>11</sup> / <sub>16</sub>	246	7 <sup>7</sup> / <sub>16</sub>	189	14 <sup>1</sup> / <sub>4</sub>	362	122	55



### 957QT

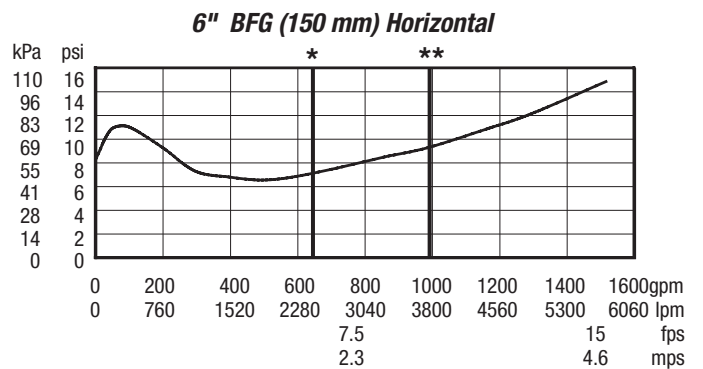
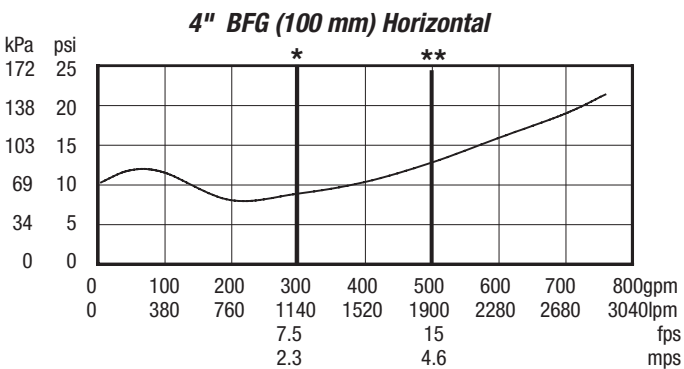
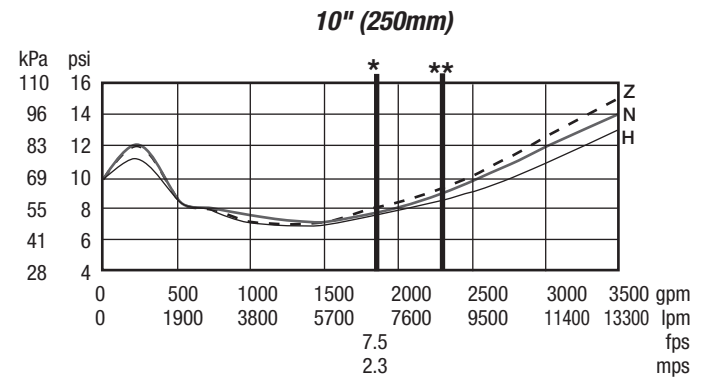
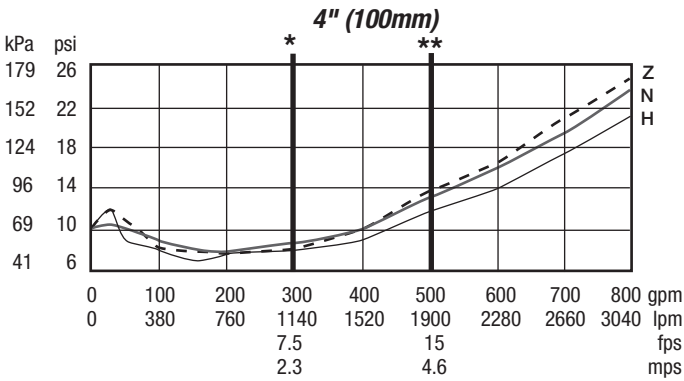
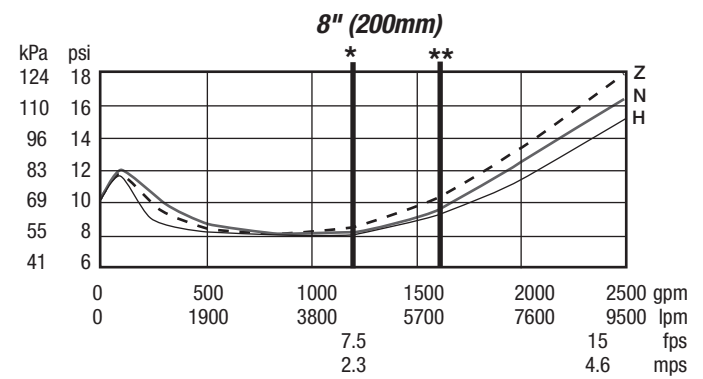
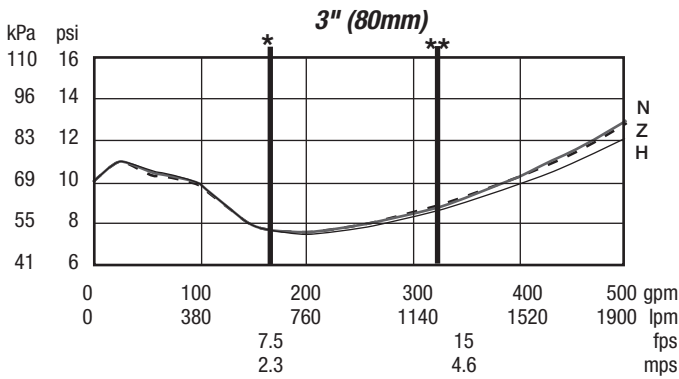
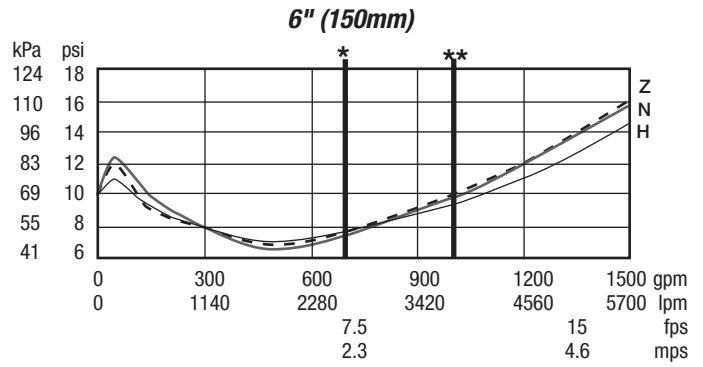
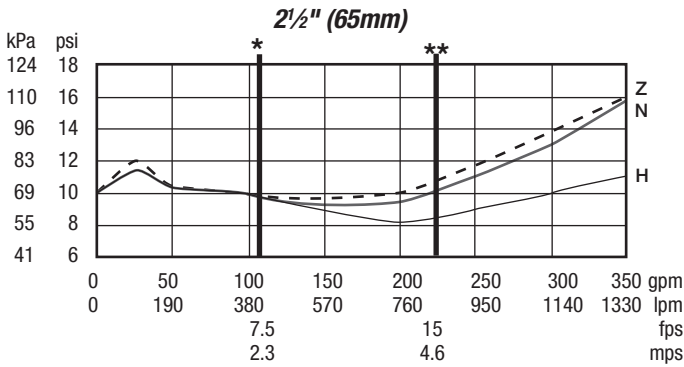
SIZE (DN)		DIMENSIONS										WEIGHT													
		A		C		D		G		H		I		J		M		P		P1		QT		QTN	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.
2 1/2	65	27 <sup>7</sup> / <sub>8</sub>	709	4 <sup>7</sup> / <sub>8</sub>	124	6 <sup>7</sup> / <sub>8</sub>	175	30 <sup>1</sup> / <sub>4</sub>	768	24 <sup>1</sup> / <sub>2</sub>	622	16 1/16	407	11 <sup>3</sup> / <sub>8</sub>	289	19 <sup>7</sup> / <sub>8</sub>	505	11 <sup>5</sup> / <sub>16</sub>	287	11 <sup>5</sup> / <sub>16</sub>	287	46	21	57	26
3	80	28 <sup>7</sup> / <sub>8</sub>	734	4 <sup>7</sup> / <sub>8</sub>	124	6 <sup>7</sup> / <sub>8</sub>	175	30 <sup>1</sup> / <sub>4</sub>	768	24 <sup>1</sup> / <sub>2</sub>	622	16 <sup>9</sup> / <sub>16</sub>	420	11 <sup>3</sup> / <sub>8</sub>	289	20 <sup>7</sup> / <sub>8</sub>	531	11 <sup>5</sup> / <sub>16</sub>	287	11 <sup>5</sup> / <sub>16</sub>	287	56	25	67	30
4	100	32 <sup>3</sup> / <sub>8</sub>	823	4 <sup>7</sup> / <sub>8</sub>	124	6 <sup>7</sup> / <sub>8</sub>	175	30 <sup>1</sup> / <sub>4</sub>	768	24 <sup>1</sup> / <sub>2</sub>	622	18 <sup>5</sup> / <sub>16</sub>	465	11 <sup>3</sup> / <sub>8</sub>	289	24 <sup>3</sup> / <sub>8</sub>	619	11 <sup>5</sup> / <sub>16</sub>	287	11 <sup>5</sup> / <sub>16</sub>	287	76	34	87	39

# Capacity

Series 957, 957N, 957Z flow curves as tested by Underwriters Laboratory per UL 1469, 1996.  
Flow characteristics collected using butterfly shutoff valves

\* = Rated flow \*\* = UL Rated flow

— Horizontal — N-Pattern - - - - - Z-Pattern



A Watts Water Technologies Company



USA: 815 Chestnut St., No. Andover, MA 01845-6098; www.watts.com

Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca