Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

LEAD FREE*

Series LF957RPDA, LF957NRPDA, LF957ZRPDA

Reduced Pressure Detector Assemblies

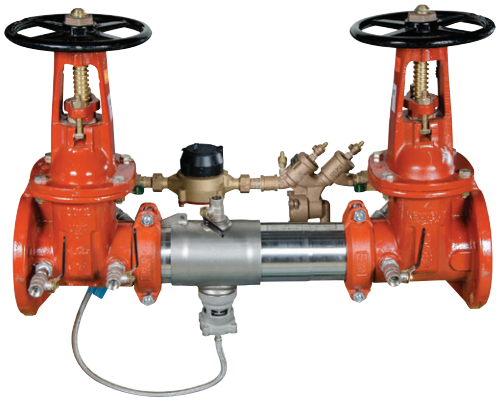
Sizes: 2½" – 10"

Series LF957RPDA, LF957NRPDA, LF957ZRPDA Reduced Pressure Detector Assemblies provide protection to the potable water system from contamination in accordance with national plumbing codes. The LF957RPDA, LF957NRPDA, LF957ZRPDA are normally used in health hazard applications to protect against backsiphonage and backpressure. The Watts LF957RPDA, LF957NRPDA, LF957ZRPDA are used to monitor unauthorized use of water from the fire protection system. They feature Lead Free* construction to comply with Lead Free* installation requirements.

Features

- Lead Free* construction
- Extremely compact design
- 70% lighter than traditional designs
- 304 (Schedule 40) stainless steel housing & sleeve
- Groove fittings allow integral pipeline adjustment
- Patented torsion spring check provides lowest pressure loss
- Unmatched ease of serviceability
- Replaceable check disc rubber
- Available with grooved butterfly valve shutoffs
- Bottom mounted cast stainless steel relief valve
- Metered bypass to detect leakage or theft of water from the fire sprinkler system

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



LF957RPDA-OSY

Specifications

The Lead Free* Reduced Pressure Detector 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 within a sleeve accessible single housing constructed from 304 (Sch 40) stainless steel pipe with groove end connections. Torsion spring checks shall have reversible elastomer discs and in operation produce drip tight closure against reverse flow caused by backpressure or backsiphonage. The Lead Free* Reduced Pressure Detector Assemblies shall comply with state codes and standards, where applicable, requiring reduced lead content. The bypass assembly consists of a meter registering either gallon or cubic measurements, a double check assembly and required test cocks. Assembly shall be Watts Series LF957RPDA, LF957NRPDA, LF957ZRPDA.

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.

WATTS®

Available Models

Suffix:

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

BFG – UL/FM grooved gear operated butterfly valves with tamper switch

*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

Dimensions — Weight

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: Lead Free Silicon Copper Alloy Body Nickel Plated (Only Center TC)
Pins & Fasteners: 300 Series Stainless Steel
Springs: Stainless Steel

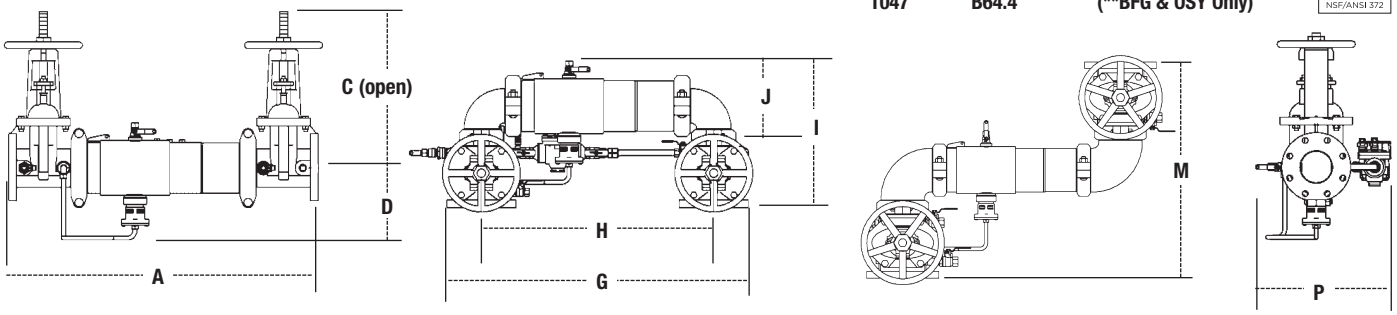
Pressure — Temperature

Temperature Range: 33°F – 110°F (0.5°C – 43°C)
Maximum Working Pressure: 175psi (12.1 bar)

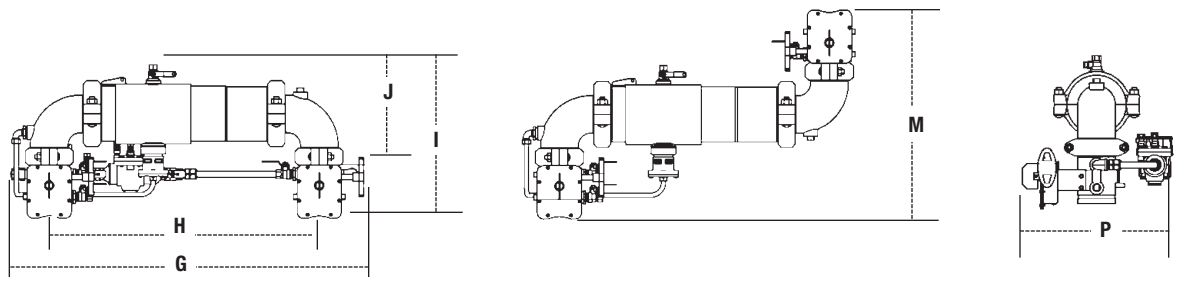
Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC)
  (Excluding 6", 8", and 10" 'N' and 'Z' Pattern)
- AWWA C511-97

1047 B64.4 (**BFG & OSY Only)



SIZE	DIMENSIONS																		WEIGHT			
	A		C (OSY)		D		G		H		I		J		M		P		957RPDA		957NRPDA	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*	*lbs.*	*kgs.*
2½	30¾	781	16⅜	416	6½	165	29 1/16	738	21½	546	15½	393	8 13/16	223	21¼	540	13 3/16	335	142	64	150	68
3	31¾	806	18⅞	479	6 11/16	170	30¼	768	22¼	565	17⅛	435	9 3/16	233	23	584	14½	368	162	73	175	79
4	33¾	857	22¾	578	7	178	33	838	23½	597	18½	470	9 15/16	252	26¼	667	15 3/16	386	178	81	201	91
6	43½	1105	30⅛	765	8½	216	44¾	1137	33¼	845	23 3/16	589	13 1/16	332	32¼	819	19	483	312	142	353	160
8	49¾	1264	37¾	959	9 11/16	246	54⅛	1375	40⅛	1019	27 7/16	697	15 11/16	399	36⅞	937	21 3/16	538	497	225	572	259
10	57¾	1467	45¾	1162	11 3/16	285	66	1676	49½	1257	32½	826	17 5/16	440	44½	1124	24	610	797	362	964	437



LF957NRPDABFG, LF957ZRPDABFG

SIZE	DIMENSIONS												WEIGHT	
	G		H		I		J		M		P		957RPDABFG	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*
2½	32½	826	23	584	15½	394	9½	241	19 3/14	502	15 13/16	402	81	37
3	34	864	24	610	16 5/16	414	10 1/16	256	21¼	540	16⅛	410	84	38
4	35⅝	905	25½	648	17 3/16	437	10 15/16	279	23½	597	16⅝	422	101	46
6	46½	1181	35¼	895	20½	521	13½	343	27¼	692	19	483	174	79

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

Capacity

Series LF957RPDA, LF957NRPDA, LF957ZRPDA flow curves as tested by Underwriters Laboratory.
(Excluding 6" Z Pattern configuration)

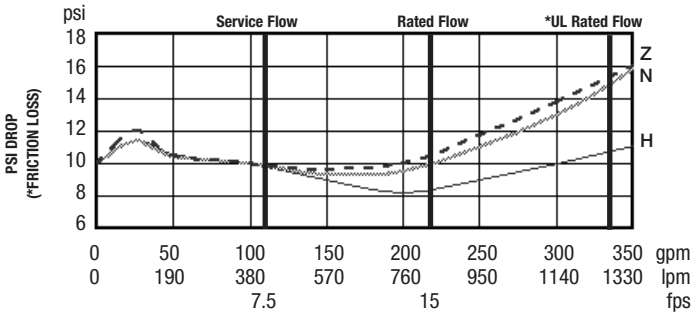
Flow characteristics collected using butterfly shutoff valves

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

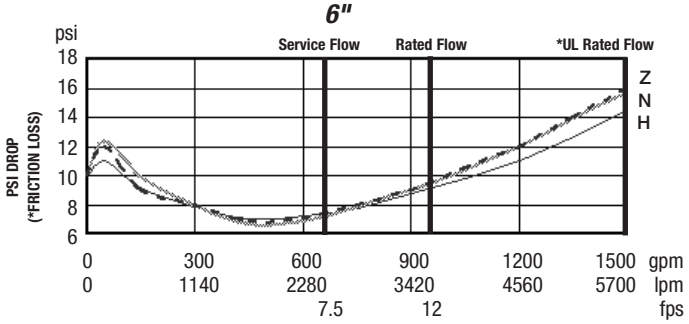
Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends that the maximum water velocity in services be not more than 10fps.

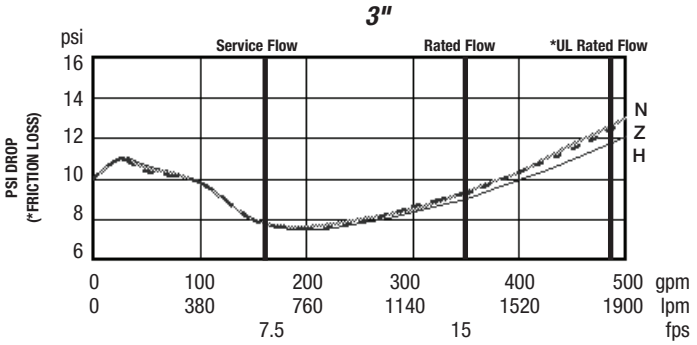
2½"



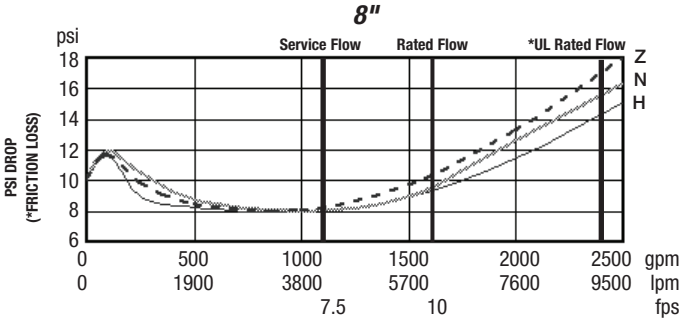
6"



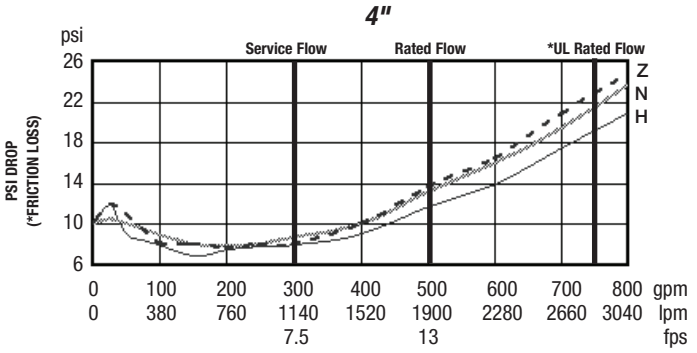
3"



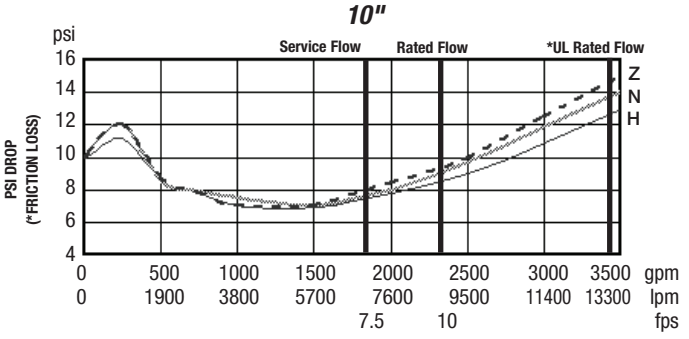
8"



4"



10"



NOTICE

Inquire with governing authorities for local installation requirements

USA: Tel: (978) 689-6066 • Fax: (978) 975-8350 • Watts.com
Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca
Latin America: Tel: (52) 81-1001-8600 • Watts.com