



## Specification

A Reduced Pressure Zone Assembly shall be installed at each potential health hazard location to prevent backflow due to backsiphonage and/or backpressure. The assembly shall consist of an internal pressure differential relief valve located in a zone between two positive seating check modules with captured springs and silicone seat discs. Seats and seat discs shall be replaceable in both check modules and the relief valve. There shall be no threads or screws in the waterway exposed to line fluids. Service of all internal components shall be through a single access cover secured with stainless steel bolts. Body and shutoffs shall be constructed using Lead Free\* cast copper silicon alloy materials. Lead Free\* reduced pressure zone assembly shall comply with state codes and standards, where applicable, requiring reduced lead content.

The assembly shall also include two resilient seated isolation valves, four resilient seated test cocks, and an air gap drain fitting. The valve body shall utilize a coating system with built-in electrochemical corrosion inhibitor and microbial inhibitor.† The assembly shall meet the requirements of USC; ASSE Std. 1013; AWWA Std. C511; CSA B64.4. Shall be a Watts Series LF009, and shall include an integrated sensor for flood detection on sizes 1/2" to 3".

## Materials

### 1/4" – 2"

Lead Free\* cast copper silicon alloy body construction, silicone rubber disc material in the first and second check plus the relief valve. Replaceable polymer check seats for first and second checks. Removable relief valve seats. Stainless steel cover bolts. Standardly furnished with NPT body connections. Model LF009QT furnished with quarter-turn, full port, resilient seated, Lead Free\* cast copper silicon alloy body ball valve shutoffs.

### 2 1/2" – 3"

- FDA-approved epoxy-coated cast iron unibody with plastic seats
- Relief valve with stainless steel seat and trim
- Lead Free\* cast copper silicon alloy body ball valve test cocks

## Model/Option

### 1/4" – 2"

#### Prefix:

U – Union connections

#### Suffix:

FS – Integrated sensor for flood detection (1/2" – 2")

LF – Without shutoff valves

PC – Internal polymer coating

Press\*\* – Press inlet x press outlet (1/2" – 2")

QT – Quarter-turn ball valves

S – Strainer

### 2 1/2" – 3"

#### Suffix:

FS – Integrated sensor for flood detection

LF – Without shutoff valves

NRS – Non-rising stem resilient seated gate valves

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

S-FDA – FDA epoxy coated strainer

NOTE: The installation of a drain line is recommended. When installing a drain line, an air gap is necessary. (For more information download ES-AG/EL/TC at watts.com.)

## Pressure – Temperature

### 1/4" – 2"

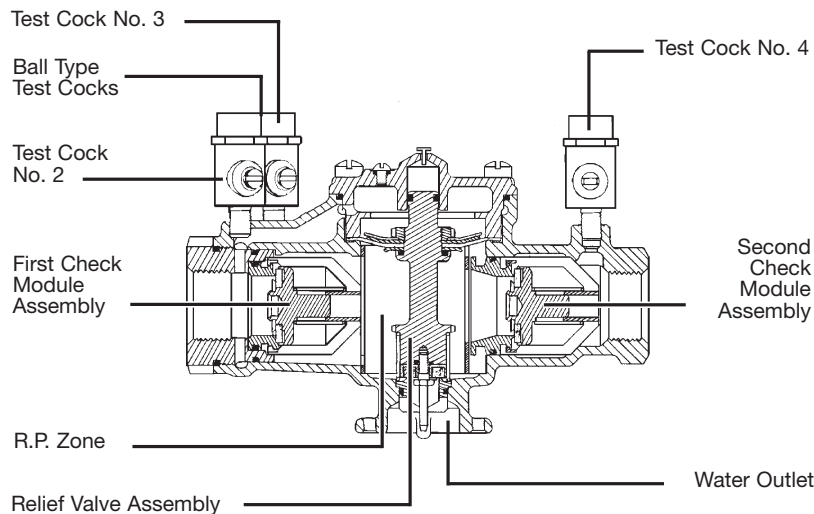
Suitable for supply pressure up to 175 psi (12.1 bar)

Water temperature: 33°F – 180°F (0.5° – 82°C)

### 2 1/2" – 3"

Suitable for supply pressures up to 175 psi (12.1 bar)

Water temperature: 110°F (43°C) continuous; 140°F (60°C) intermittent



\*\* Viega ProPress® connections are optional factory-installed fitting on each end of the approved/certified assembly.

## Standards

USC  
 ASSE No. 1013  
 AWWA C511  
 CSA B64.4  
 IAPMO File No. 1563

## Approvals



ASSE, AWWA, CSA, IAPMO

Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California

Approval models NRS, OSY, PC, QT

UL Classified

2½" – 3" with OSY gate valves

¾" – 2" without shutoff valves (-LF), except LF009M3LF

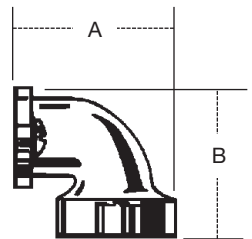
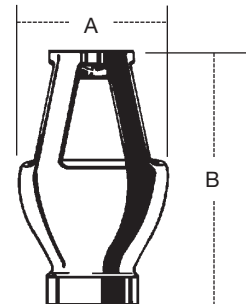
## Insulated Enclosure

The WattsBox insulated enclosure is available for Series LF009/LF009-FS. For more information download ES-WB at watts.com.

## Air Gaps and Elbows

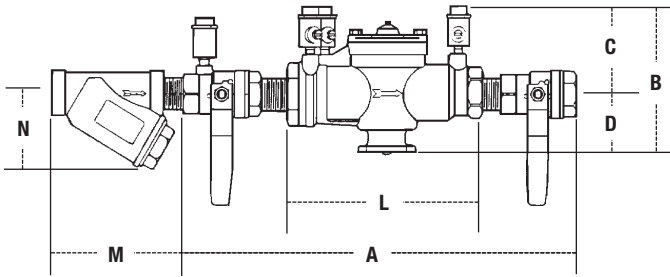
MODEL	DRAIN OUTLET	DIMENSIONS				WEIGHT			
		<i>in.</i>	<i>mm</i>	A		B		<i>lb</i>	<i>kg</i>
				<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>		
909AGA	For 909, 009, and 993 sizes ¼"-½" 009, ¾" 009M2/M3	½	13	2¾	60	3⅞	79	0.625	0.28
909AGC	¾"-1" 009/909, 1"-1½" 009M2	1	25	3¼	83	4⅞	124	1.5	0.68
909AGF	1¼"-2" 009M1, 1¼"-3" 009/909, 2" 009M2, 4"-6" 993	2	51	4¾	111	6¼	171	3.25	1.47
909AGK	4"-6" 909, 8"-10" 909M1	3	76	6¾	162	9¾	244	6.25	2.83
909AGM	8"-10" 909	4	102	7¾	187	11¼	286	15.5	7.03
909ELA	¼"-½" 009, ¾" 009M2/M3	-	-	-	-	-	-	-	-
909ELC	¾"-1" 009/909	-	-	2¾	60	2¾	60	0.38	0.17
909ELF*	1¼"-2" 009M1, 1¼"-2" 009/909, 2" 009M2, 4"-6" 993	-	-	3¾	92	3¾	92	2	0.91
909ELH* Vertical	2½"-3" 009/909	-	-	-	-	-	-	-	-

\*Epoxy coated

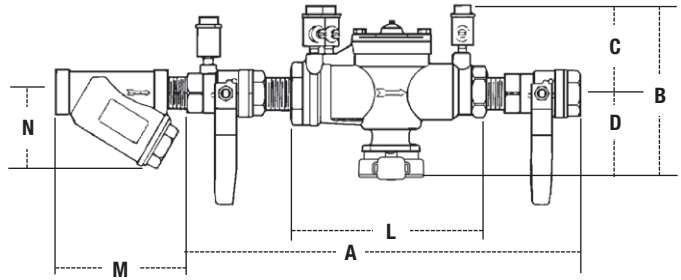


## Dimensions – Weight

1/4" – 3/8"

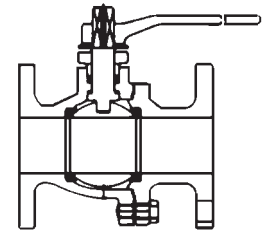
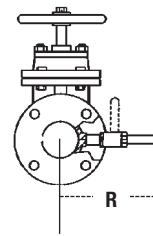
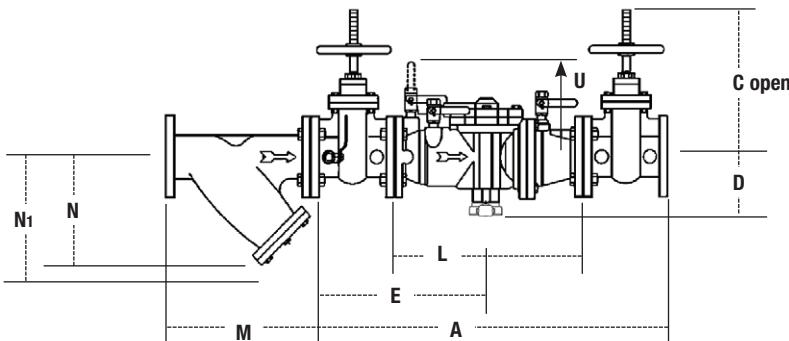


1/2" – 2"



SIZE		DIMENSIONS (APPROX.)										WEIGHT					
in.	mm	A		B		C		D		L		M		N		lb	kg
1/4	25.4	10	250	4 7/8	117	3 3/4	86	1 1/4	32	5 1/2	140	2 3/8	60	2 1/2	64	5	2
3/8	31.8	10	250	4 7/8	117	3 3/4	86	1 1/4	32	5 1/2	140	2 3/8	60	2 1/2	64	5	2
1/2	38.1	10	250	5 7/8	149	3 3/4	86	2 1/2	64	5 1/2	140	2 3/4	70	2 1/4	57	5	2
3/4	47.6	10 3/4	273	6 1/4	159	3 1/2	89	2 3/4	70	6 3/4	171	3 3/16	81	2 3/4	70	6	3
1	50.8	14 1/2	368	6 1/4	159	3	76	3 1/4	83	9 1/2	241	3 3/4	95	3	76	12	5
1 1/4	57.1	17 3/8	441	6 3/4	169	3 1/2	89	3 1/4	83	11 3/8	289	4 7/16	113	3 1/2	89	15	6
1 1/2	63.5	17 3/8	454	6 3/4	169	3 1/2	89	3 1/4	83	11 3/8	283	4 7/8	124	4	102	16	7
2	76.2	21 3/8	543	8 3/4	222	4 1/2	114	4 1/4	108	13 1/2	343	5 5/16	151	5	127	30	13

2 1/2" – 3"



Watts G-4000 Series  
QT – Ball Valves

STRAINER SIZE		DIMENSIONS (APPROX.)						WEIGHT	
in.	mm	M		N		N <sub>1</sub> †		lb	kg
2 1/2	65	10	254	6 1/2	165	9 3/4	248	28	12.7
3	80	10 1/8	257	7	178	10	254	34	15.4

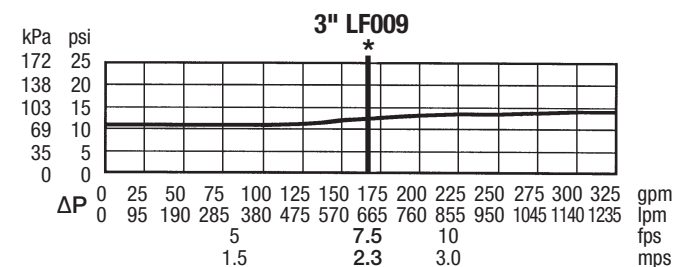
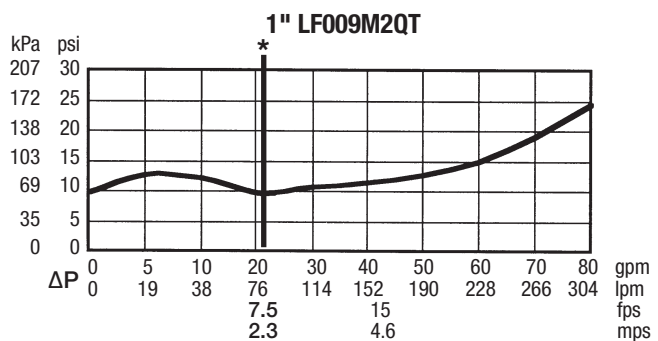
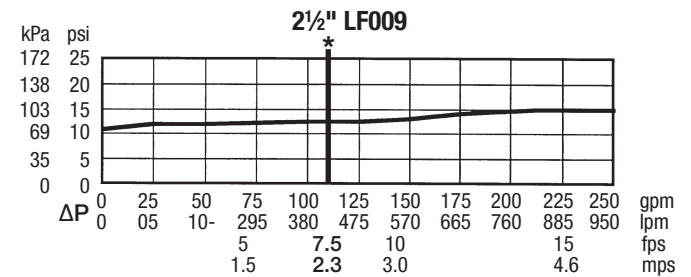
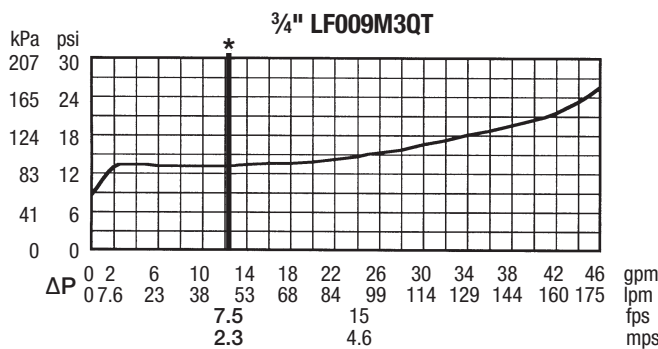
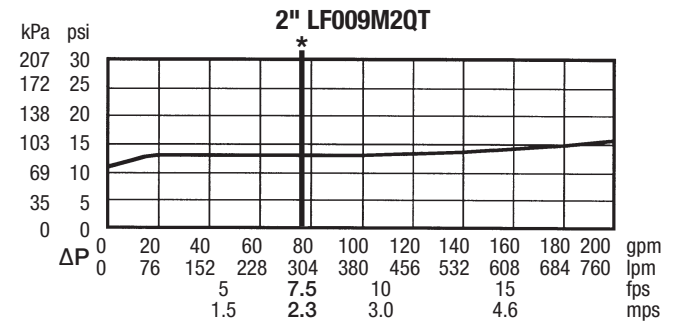
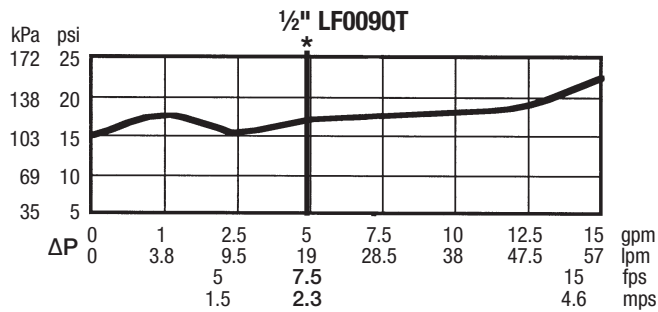
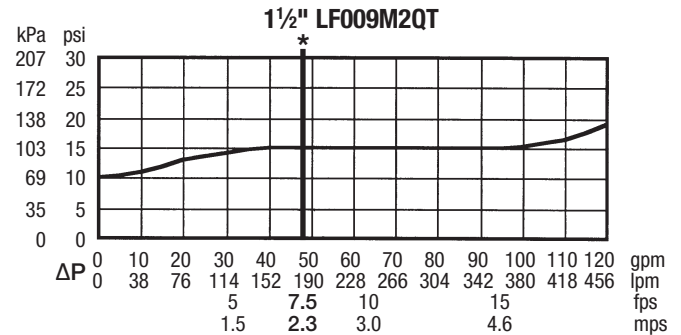
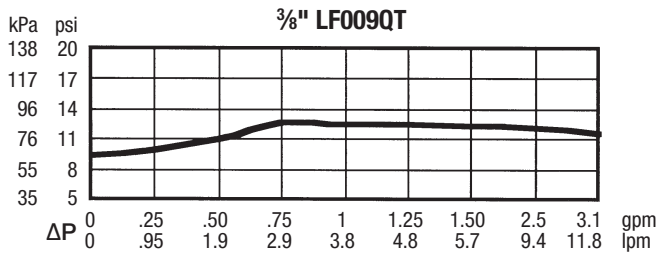
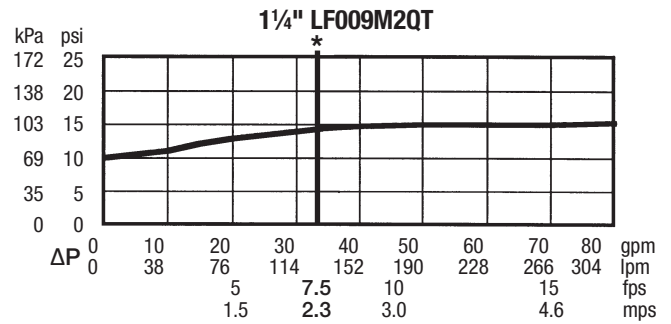
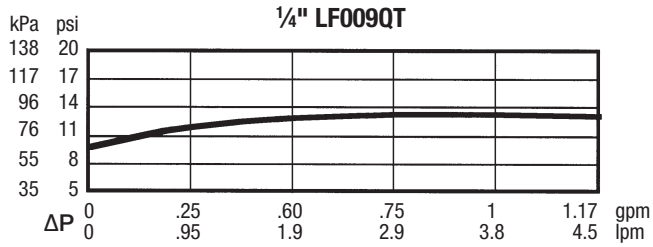
†Clearance for servicing

MODEL	SIZE	DIMENSIONS (APPROX.)										WEIGHT					
		A		C		D		E		L		R		U		lb	kg
LF009LF	2 1/2	—	—	—	—	5 5/8	143	—	—	18 1/8	460	—	—	10 5/8	270	76	34.5
LF0090SY	2 1/2	33 3/4	845	15 7/8	403	5 5/8	143	16 3/8	416	18 1/8	460	7 3/4	197	10 5/8	270	166	75.3
LF009NRS	2 1/2	33 3/4	845	11 3/8	289	5 5/8	143	16 3/8	416	18 1/8	460	7 3/4	197	10 5/8	270	161	73.0
LF009LF	3	—	—	—	—	5 5/8	143	—	—	18 1/8	460	—	—	10 5/8	270	76	34.5
LF0090SY	3	34 1/4	870	18 1/2	470	5 5/8	143	16 3/8	422	18 1/8	460	8 3/4	222	10 5/8	270	198	89.8
LF009NRS	3	34 1/4	870	12 3/4	324	5 5/8	143	16 3/8	422	18 1/8	460	8 3/4	222	10 5/8	270	191	86.6

# Capacity

Performance as established by an independent testing laboratory.

The asterisk (\*) indicates the typical maximum system flow rate (7.5 ft/sec, 2.3 m/sec).



USA: T: (978) 689-6066 • Watts.com

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