

For Health Hazard Applications

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

LEAD FREE*

Series LF009 Reduced Pressure Zone Assemblies

Sizes: 1/4" – 3" (8 – 80mm)

Series LF009 Reduced Pressure Zone Assemblies are designed to protect potable water supplies in accordance with national plumbing codes and water authority requirements. This series can be used in a variety of installations, including the prevention of health hazard cross-connections in piping systems or for containment at the service line entrance. The LF009 features Lead Free* construction to comply with Lead Free* installation requirements.

This series features two in-line, independent check valves, captured springs and replaceable check seats with an intermediate relief valve. Its compact modular design facilitates easy maintenance and assembly access. Sizes 1/4" – 1" (8 – 25mm) shutoffs have tee handles.

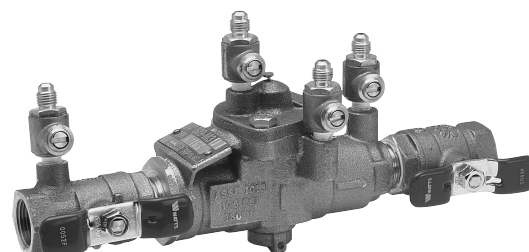
Features

- Single access cover and modular check construction for ease of maintenance
- Top entry - all internals immediately accessible
- Captured springs for safe maintenance
- Internal relief valve for reduced installation clearances
- Replaceable seats for economical repair
- Lead Free* bronze body construction for durability 1/4" – 2" (8 – 50mm)
- Fused epoxy coated cast iron body 2 1/2" and 3" (65 and 80mm)
- Ball valve test cocks — screwdriver slotted 1/4" – 2" (8 – 50mm)
- Large body passages provides low pressure drop
- Compact, space saving design
- No special tools required for servicing

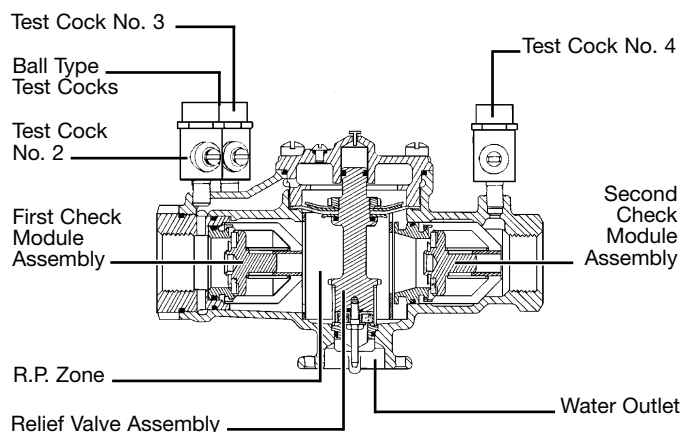
Specifications

A Reduced Pressure Zone Assembly shall be installed at each potential health hazard location to prevent backflow due to back-siphonage 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* bronze 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 assembly shall meet the requirements of: USC Manual 8th Edition†; ASSE Std. 1013; AWWA Std. C511; CSA B64.4. Shall be a Watts Series LF009.



1/2" (15mm) LF009QT



Now Available
WattsBox Insulated Enclosures.
 For more information, send for literature ES-WB.

**IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES
 FOR LOCAL INSTALLATION REQUIREMENTS**

†Does not indicate approval status. Refer to Page 2 for approved sizes & models.

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

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.

Available Models: 1/4" – 2" (8 – 50mm)

Suffix:

- QT – quarter-turn ball valves
 LF – without shutoff valves

Available Models: 2 1/2" – 3" (65 – 80mm)

Suffix:

- NRS – non-rising stem resilient seated gate valves
 OSY – UL/FM outside stem and yoke resilient seated gate valves

Note: The installation of a drain line is recommended. When installing a drain line, an air gap is necessary (see ES-AG).

Materials: 1/4" – 2" (8 – 50mm)

Lead Free bronze 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 stainless steel relief valve seat. Stainless steel cover bolts.

Standardly furnished with NPT body connections.

Model LF009QT furnished with quarter-turn, full port, resilient seated, bronze ball valve shutoffs.

Materials: 2 1/2" and 3" (65 – 80mm)

- (FDA approved) Epoxy coated cast iron unibody with plastic seats
- Relief valve with stainless steel seat and trim
- Lead Free bronze body ball valve test cocks

Pressure / Temperature

Series LF009 1/4" – 2" (8 – 50mm) Suitable for supply pressure up to 175psi (12 bar). Water temperature: 33°F – 180°F (0.5° – 75°C).

Sizes 2 1/2" and 3" (65 and 80mm) are suitable for supply pressures up to 175psi (12.1 bar) and water temperature at 110°F (43°C) continuous, 140°F (60°C) intermittent.

Standards

- USC Manual 8th Edition†
 ASSE No. 1013
 AWWA C511-92
 CSA B64.4
 IAPMO File No. 1563.

†Does not indicate approval status. See below for approved models.



Approvals

ASSE, AWWA, CSA, IAPMO

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

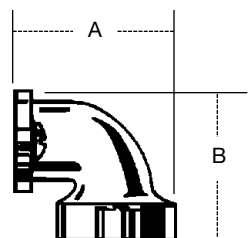
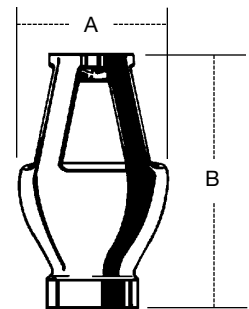
Approval models QT, AQT, PC, NRS, OSY.

UL Classified

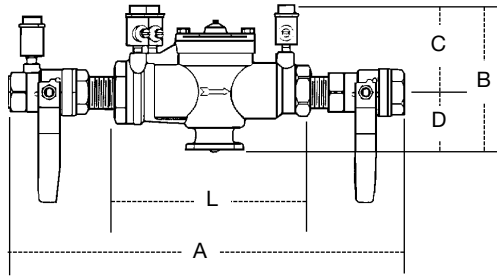
2 1/2" and 3" (65 and 80mm) with OSY gate valves.

Air Gaps and Elbows

MODEL	For Series LF909, LF009 and 993 sizes	DRAIN OUTLET		DIMENSIONS				WEIGHT	
		in.	mm	A in.	A mm	B in.	B mm	lbs.	kgs.
909AG-A	1/4"-1/2" LF009, 3/4" LF009M2/M3	1/2	13	2 3/8	60	3 1/8	79	.625	.28
909AG-C	3/4"-1" LF009/909, 1"-1 1/2" LF009M2	1	25	3 1/4	83	4 7/8	124	1.50	.68
909AG-F	1 1/4"-2" LF009M1, 1 1/4"-3" LF009/909, 2" LF009M2, 4"-6" 993	2	51	4 3/8	111	6 3/4	171	3.25	1.47
909AG-K	4"-6" LF909, 8"-10" LF909M1	3	76	6 3/8	162	9 5/8	243	6.25	2.83
909AG-M	8"-10" LF909	4	102	7 3/8	187	11 1/4	394	15.50	7.03
909EL-A	1/4"-1/2" LF009, 3/4" LF009M2/M3	-	-	-	-	-	-	-	-
909EL-C	3/4"-1" LF009/909	-	-	2 3/8	60	2 3/8	60	.38	.17
* 909EL-F	1 1/4"-2" LF009M1, 1 1/4"-2" LF009/909, 2" LF009M2, 4"-6" 993	-	-	3 5/8	92	3 5/8	92	2	.91
* 909EL-H Vertical	2 1/2"-3" LF009/909	-	-	-	-	-	-	-	-



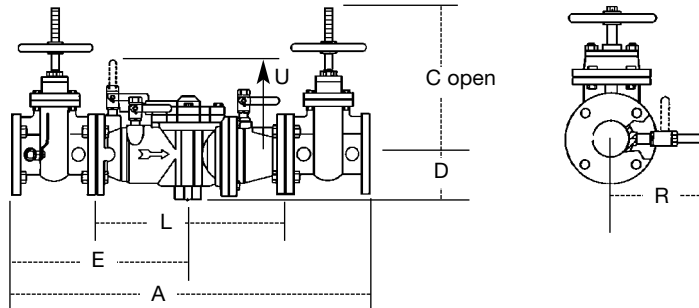
Dimensions and Weight: 1/4" – 2" (8 – 50mm) LF009



LF009 1/4" – 2"

SIZE (DN)		DIMENSIONS (APPROX.)										WEIGHT	
in.	mm	A		B		C		D		L		lbs.	kg.s
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
1/4	8	10	250	4 5/8	117	3 3/8	86	1 1/4	32	5 1/2	140	5	2
3/8	10	10	250	4 5/8	117	3 3/8	86	1 1/4	32	5 1/2	140	5	2
1/2	15	10	250	4 5/8	117	3 3/8	86	1 1/4	32	5 1/2	140	5	2
3/4	20	10 3/4	273	5	127	3 1/2	89	1 1/2	38	6 3/4	171	6	3
1	25	16 3/4	425	5 1/2	140	3	76	2 1/2	64	9 1/2	241	12	5
1 1/4	32	17 3/8	441	6	150	3 1/2	89	2 1/2	64	11 3/8	289	15	6
1 1/2	40	17 7/8	454	6	150	3 1/2	89	2 1/2	64	11 1/8	283	16	7
2	50	21 3/8	543	7 3/4	197	4 1/2	114	3 1/4	83	13 1/2	343	30	13

Dimensions and Weight: 2 1/2" and 3" (65 and 80mm) LF009

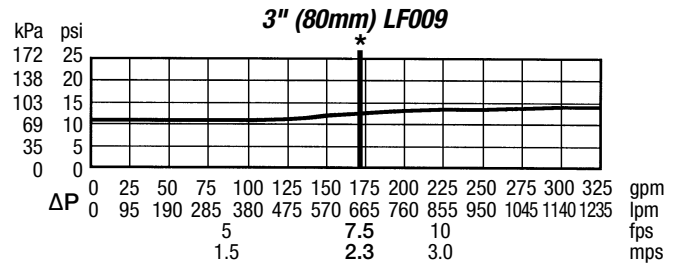
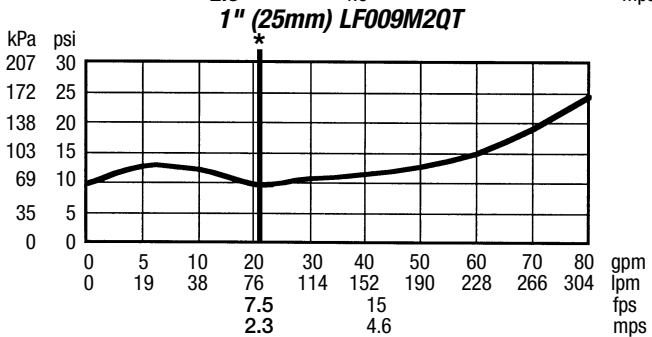
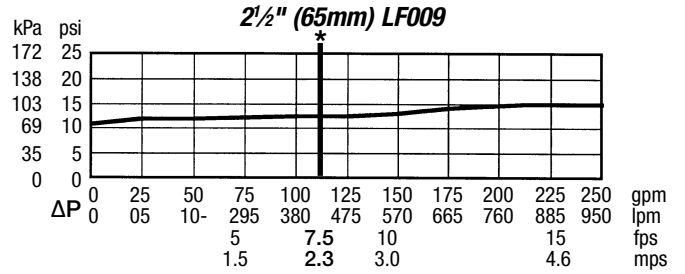
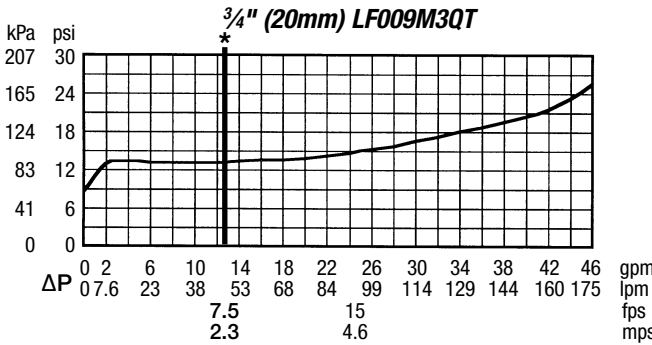
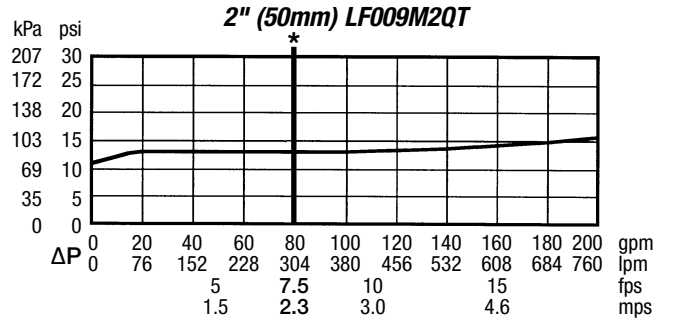
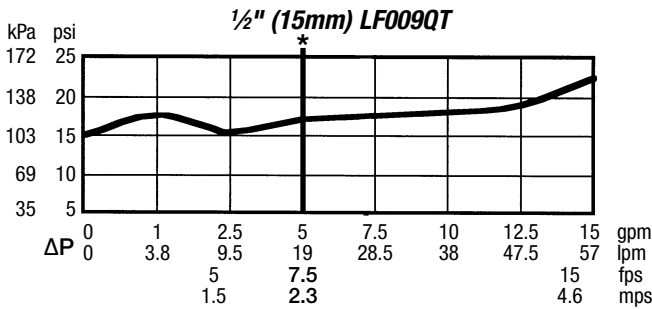
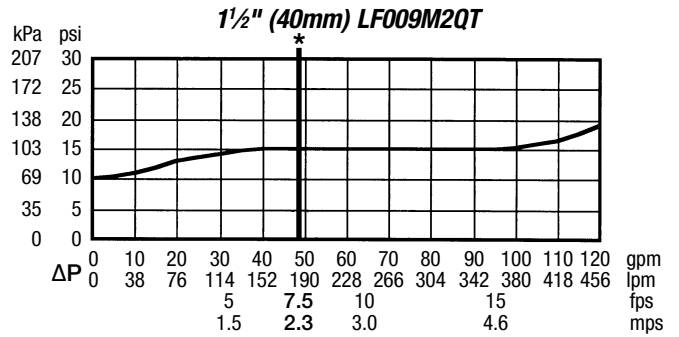
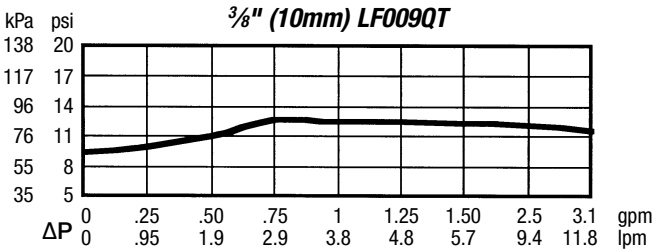
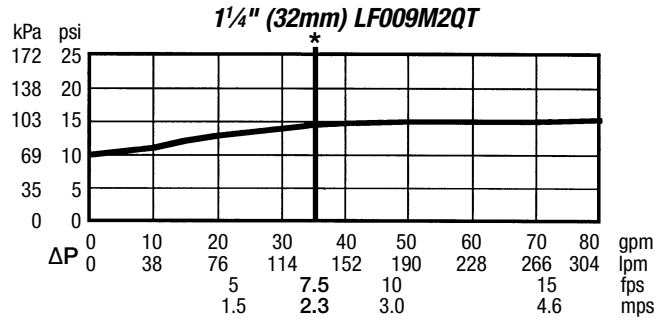
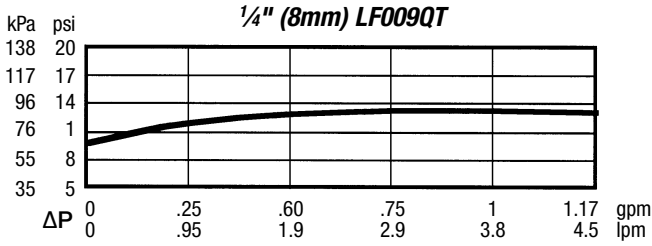


MODEL	SIZE DN		DIMENSIONS (APPROX.)										WEIGHT						
	in.	mm	A		C		D		E		L		R		U		lbs.	kg.s	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
LF009LF	2 1/2	65	—	—	—	—	4 1/2	114	—	—	18 1/8	460	—	—	10 5/8	270	76	34.5	
LF009OSY	2 1/2	65	33 1/4	845	15 7/8	403	4 1/2	114	16 3/8	416	18 1/8	460	7 3/4	197	10 5/8	270	166	75.3	
LF009NRS	2 1/2	65	33 1/4	845	11 3/8	289	4 1/2	114	16 3/8	416	18 1/8	460	7 3/4	197	10 5/8	270	161	73.0	
LF009LF	3	80	—	—	—	—	4 1/2	114	—	—	18 1/8	460	—	—	10 5/8	270	76	34.5	
LF009OSY	3	80	34 1/4	870	18 1/2	470	4 1/2	114	16 5/8	422	18 1/8	460	8 3/4	222	10 5/8	270	198	89.8	
LF009NRS	3	80	34 1/4	870	12 3/4	324	4 1/2	114	16 5/8	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.

*Typical maximum system flow rate (7.5 feet/sec., 2.3 meters/sec.)



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