Kingston Water Department
PO Box 1537 City of Kingston, N.Y. 12402

Instructions for the Submission of Backflow Prevention Plans

1. A site plan sketch must be provided that shows:
   a. Utilities
   b. Property lines (approximate)

   The sketch must show the approximate length of the service line from the main to the meter, the relative location of the meter and the backflow device as well as any laterals off of the main service line in the vicinity of the meter.

2. The plans for the device being installed. These plans must be stamped by either a Professional Engineer, licensed in NYS or an Architect registered in NYS. If the installation is 2 inches or less, the KWD has a set of generic plans that are suitable for use with most typical installations.

3. The application (DOH-347) must be completed and signed by the owner. The KWD will complete the following items on the application: 11, 13, and 14. All other boxes on the application should be completed before the application is submitted to the KWD for review.

4. The application fee of $100 must accompany submission. This fee will cover the initial review of the submission by the Department as well the review of a single re-submission, should that be required. If further submissions are required beyond that, an additional fee of $50 will be required for each review thereafter.

Number of sets required:

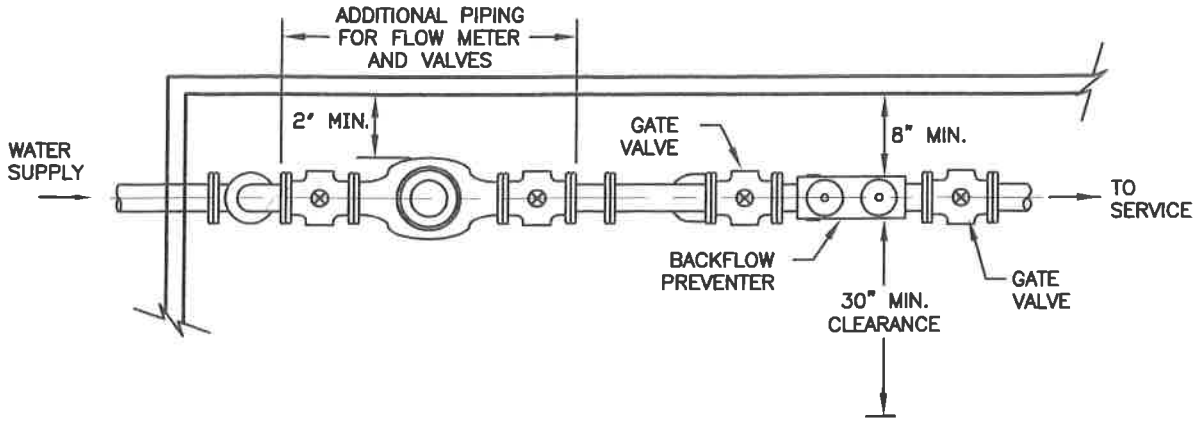
- 3 sets

Office: 111 Jansen Avenue (845) 331-0175 FAX (845) 340- 9209
E-MAIL: water@ci.kingston.ny.us

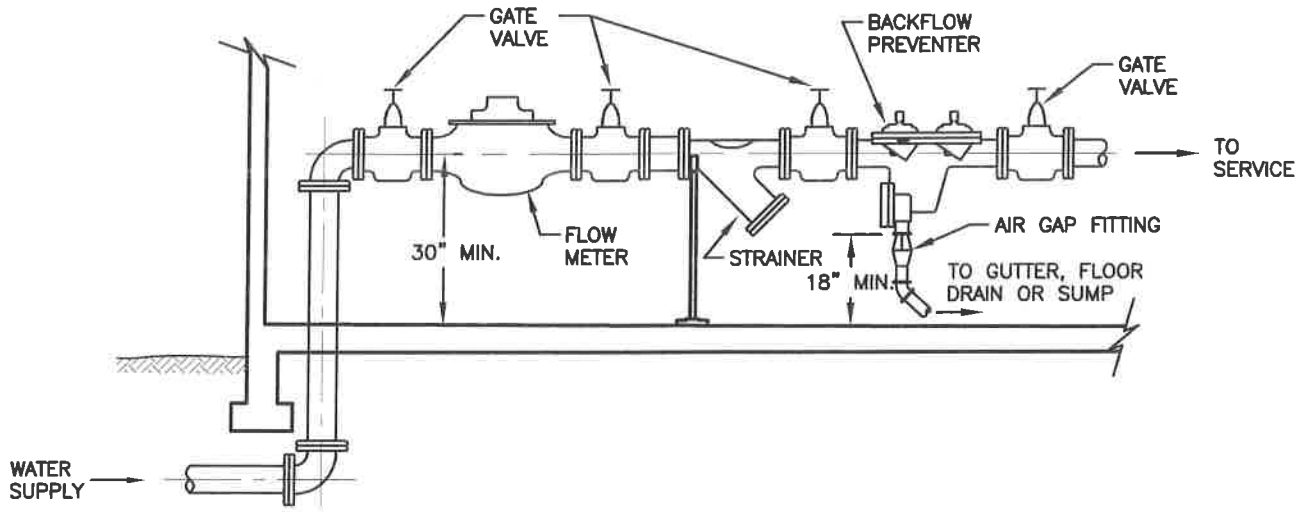
Additional Information for Owners:

- Once the plans are reviewed, and approved by the Water Department, they will be forwarded to the Ulster County Health Department (UCHD) for their review.
- If acceptable, the UCHD will issue a Certificate of Approval
- Once the Certificate of Approval has been received, the customer may proceed with the installation of the backflow device. All work must be done by a master plumber licensed by the City of Kingston. If the customer chooses to proceed with the installation before the UCHD issues the Certificate of Approval, the customer does so at his/her own risk and is liable for any changes that the UCHD may require.
- Within 45 days of the installation, the initial test on the device must be performed. This test will be performed by the Water Department at no charge to the customer and may be scheduled by calling the Water Department at 331-0175.
- 10 NYCRR Section 5-1.31 stipulates that all devices must be tested annually by a Certified Backflow Tester. A copy of the inspection and test must be forwarded to the Kingston Water Department for this requirement to be satisfied.
- As a courtesy, the KWD will notify the owner of the need to have the annual test performed on the device during the month preceding the test date. If the work is not performed by the required date, a $50.00 fine will be assessed. A 2nd notice will be issued informing the owner that the test is past due and that they have 15 days to have the work completed or face termination of service. If the work is still not performed on the date of the termination, a second $50 fine will be assessed and the service terminated.
- If you have questions regarding the application, please call the Water Department at 331-0175.

Office: 111 Jansen Avenue (845) 331-0175 FAX (845) 340- 9209
E-MAIL: water@ci.kingston.ny.us



PLAN



ELEVATION

ABOVE GROUND INSTALLATION IN BUILDING

(SHOWN WITH FLOW METER)

NOTES:
1. SEE GENERAL NOTES.
2. PROVIDE PIPE SUPPORTS AS REQUIRE

KINGSTON WATER DEPARTMENT

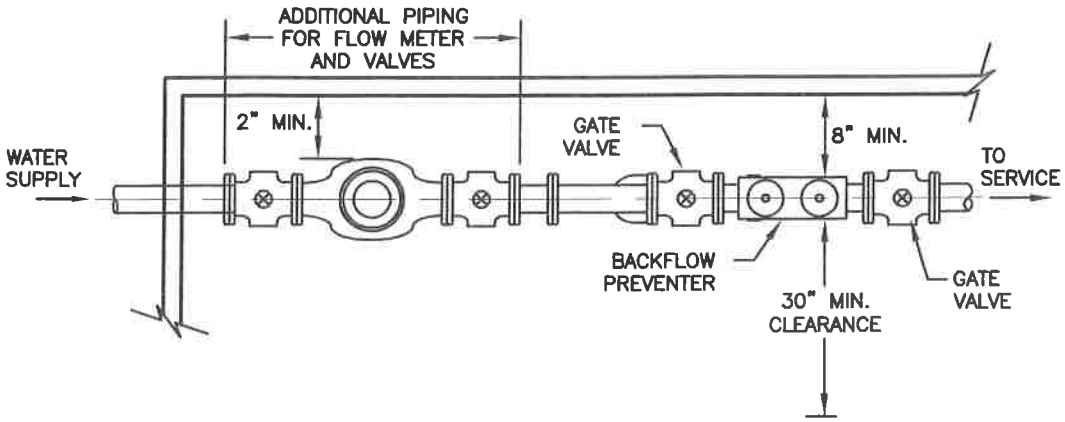
PLANS AND SPECIFICATIONS
FOR THE INSTALLATION OF REDUCED PRESSURE TYPE
BACKFLOW PREVENTERS
(FOR SERVICES 2" OR LESS)

CITY OF KINGSTON ULSTER COUNTY NEW YORK

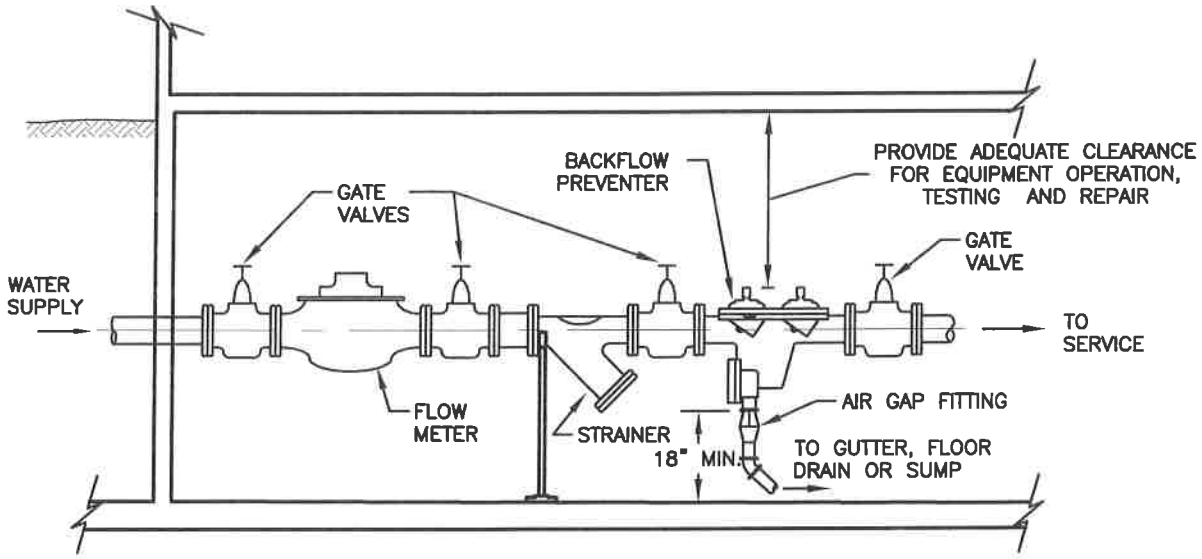
DATE	REVISION RECORD

BRINNIER & LARIOS, P.C.
ENGINEERS & LAND SURVEYORS
67 MAIDEN LANE KINGSTON, N.Y.

SCALE	DATE		SHEET NO.
Not To Scale	APR. 2014		1 OF 1
	DWG WFP	CHK JDD	



PLAN



ELEVATION

HORIZONTAL INSTALLATION IN BASEMENT

(SHOWN WITH FLOW METER)

NOTES:
1. SEE GENERAL NOTES.
2. PROVIDE PIPE SUPPORTS AS REQUIRED.

KINGSTON WATER DEPARTMENT

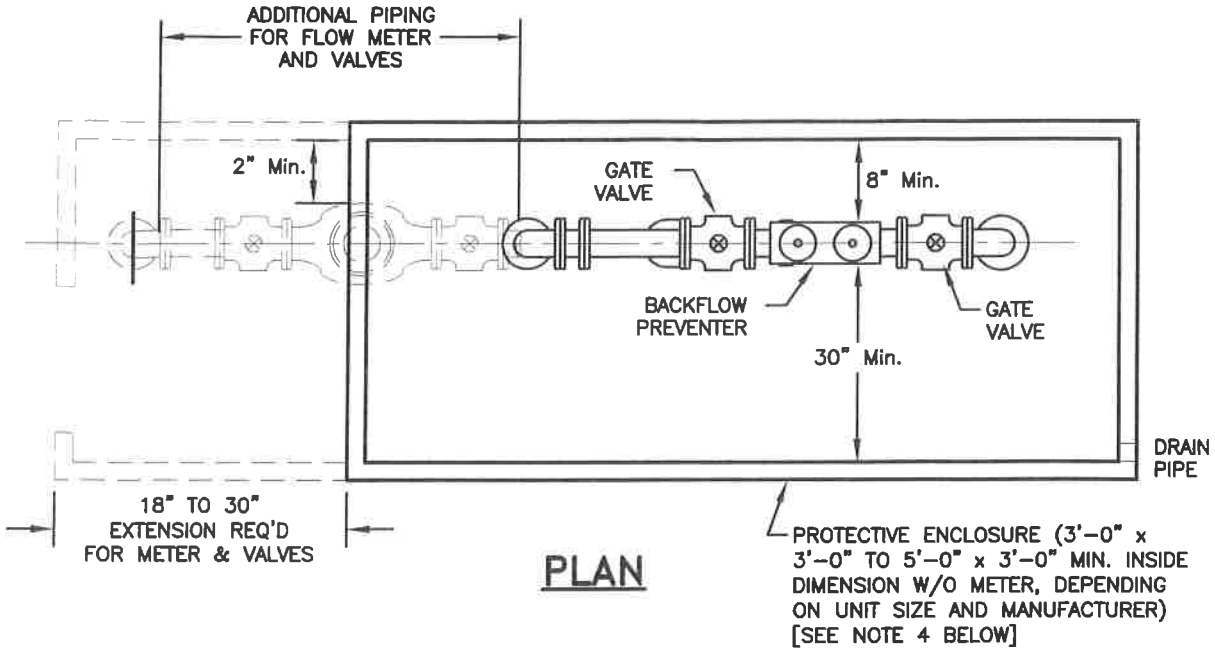
PLANS AND SPECIFICATIONS
FOR THE INSTALLATION OF REDUCED PRESSURE TYPE
BACKFLOW PREVENTERS
(FOR SERVICES 2" OR LESS)

CITY OF KINGSTON ULSTER COUNTY NEW YORK

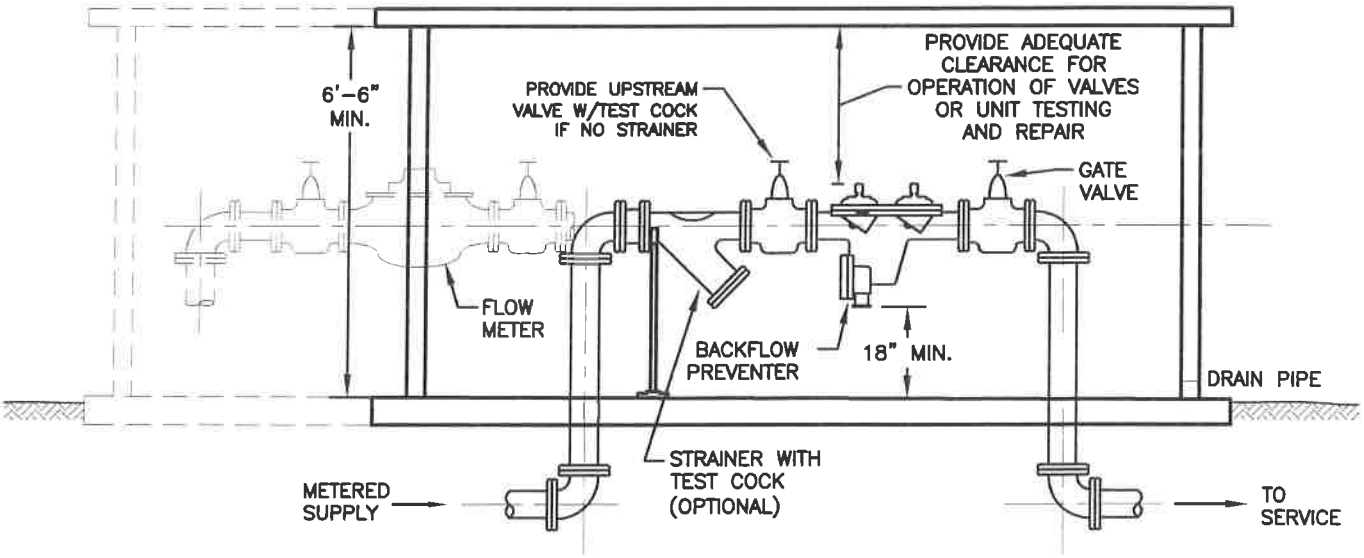
DATE	REVISION RECORD

BRINNIER & LARIOS, P.C.
ENGINEERS & LAND SURVEYORS
67 MAIDEN LANE KINGSTON, N.Y.

SCALE	DATE		SHEET NO.
Not To Scale	APR. 2014		1 OF 1
	DWG WFP	CHK JDD	



PLAN



ELEVATION

ABOVE GROUND INSTALLATION

(SHOWN WITH AND WITHOUT FLOW METER)

NOTES:
1. SEE GENERAL NOTES.
2. PROVIDE PIPE SUPPORTS AS REQUIRED.
3. PROVIDE HEATING & LIGHTING FOR ENCLOSURE.
4. BACKFLOW PREVENTER MAY BE INSTALLED IN BUILDING OR IN PROTECTIVE ENCLOSURE.

KINGSTON WATER DEPARTMENT

PLANS AND SPECIFICATIONS
FOR THE INSTALLATION OF REDUCED PRESSURE TYPE BACKFLOW PREVENTERS
(FOR SERVICES 2" OR LESS)

CITY OF KINGSTON ULSTER COUNTY NEW YORK

DATE	REVISION RECORD

BRINNIER & LARIOS, P.C.
ENGINEERS & LAND SURVEYORS
67 MAIDEN LANE KINGSTON, N.Y.

SCALE	DATE		SHEET NO.
Not To Scale	APR. 2014		1 OF 1
	DWG WFP	CHK JDD	

For Health Hazard Applications

Job Name Example
Job Location 111 Jansen Ave
Engineer
Approval

Contractor Mr. Plumber, Licensed
Approval
Contractor's P.O. No. 12345
Representative

LEAD FREE*

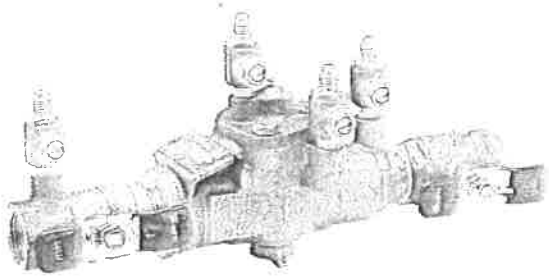
Series LF009

Reduced Pressure Zone Assemblies

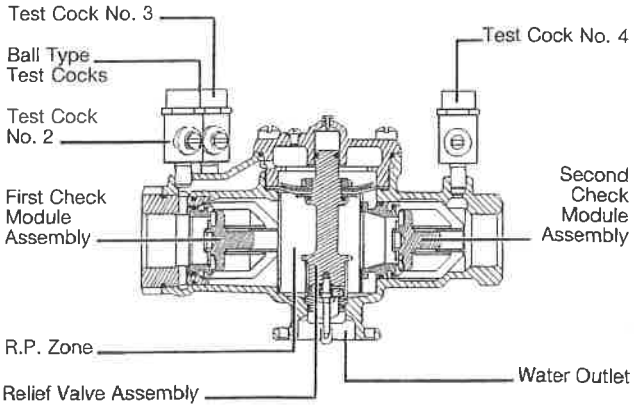
Sizes: ¼" – 3" (8 – 80mm)

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 ¼" – 1" (8 – 25mm) shutoffs have tee handles.



LF009



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* cast copper silicon alloy body construction for durability ¼" – 2" (8 – 50mm)
- Fused epoxy coated cast iron body 2½" and 3" (65 and 80mm)
- Ball valve test cocks — screwdriver slotted ¼" – 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 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 assembly shall meet the requirements of: USC; ASSE Std. 1013; AWWA Std. C511; CSA B64.4. Shall be a Watts Series LF009.

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

NOTICE

Inquire with governing authorities for local installation requirements

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.

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

WATTS®

Available Models: ¼" – 2" (8 – 50mm)

Suffix:

QT – quarter-turn ball valves
S – strainer
LF – without shutoff valves
PC – internal polymer coating

Prefix:

U – union connections

Available Models: 2½" – 3" (65 – 80mm)

Suffix:

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
QT-FDA – FDA epoxy coated quarter-turn ball valves
LF – without shutoff valves

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

Materials: ¼" – 2" (8 – 50mm)

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 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, Lead Free* cast copper silicon alloy body ball valve shutoffs.

Materials: 2½" and 3" (65 – 80mm)

- (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

Pressure / Temperature

Sizes ¼" – 2" (6 – 50mm) Suitable for supply pressure up to 175psi (12 bar). Water temperature: 33°F – 180°F (0.5° – 75°C).

Sizes 2½" 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
ASSE No. 1013
AWWA C511
CSA B64.4
IAPMO File No. 1563.

Approvals

ASSE, AWWA, CSA, IAPMC

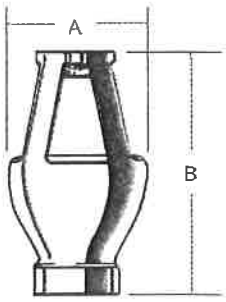
Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

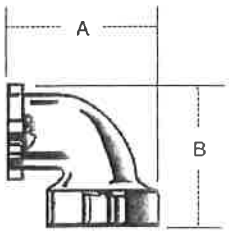
Approval models QT, FC, NRS, OSY.

UL Classified
2½" and 3" (65 and 80mm) with OSY gate valves.
¾" - 2" (20-50mm) without shutoff valves (-LF) (except LF009M3LF)

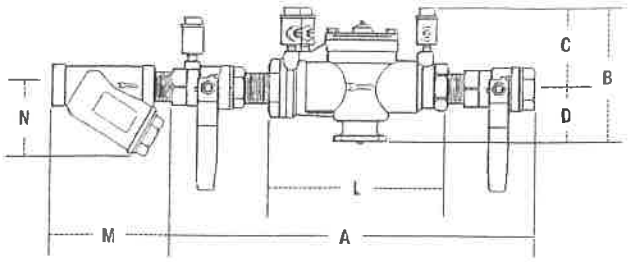
Air Gaps and Elbows

MODEL	DRAIN OUTLET for 909, 009 and 993 sizes			DIMENSIONS A		DIMENSIONS B		WEIGHT	
		in.	mm	in.	mm	in.	mm	lbs.	kgs.
909AGA	¼"–½" 009, ¾" 009M2/M3	½	13	2⅜	60	3⅛	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	4⅜	111	6¾	171	3.25	1.47
909AGK	4"–6" 909, 8"–10" 909M1	3	76	6⅜	162	9⅝	244	6.25	2.83
909AGM	8"–10" 909	4	102	7⅜	187	11¼	286	15.5	7.03
909ELA	¼"–½" 009, ¾" 009M2/M3	–	–	–	–	–	–	–	–
909ELC	¾"–1" 009/909	–	–	2⅜	60	2⅜	60	0.38	0.17
* 909ELF	1¼"–2" 009M1, 1¼"–2" 009/909, 2" 009M2, 4"–6" 993	–	–	3⅝	92	3⅝	92	2	0.91
* 909ELH Vertical	2½"–3" 009/909	–	–	–	–	–	–	–	–





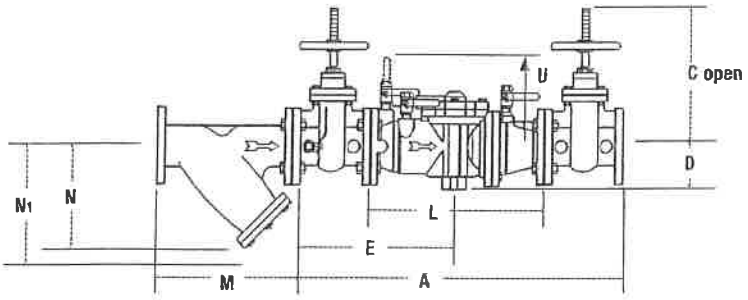
Dimensions and Weight: ¼" – 2" (8 – 50mm) LF009

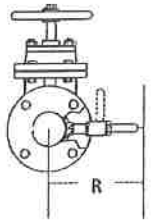


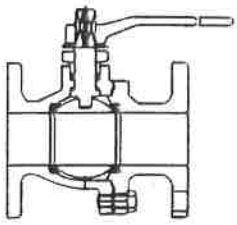
LF009 ¼" – 2"

SIZE (DN)		DIMENSIONS (APPROX.)														WEIGHT	
		A		B		C		D		L		M		N			
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
¼	8	10	250	4⅝	117	3⅜	86	1¼	32	5½	140	2⅜	60	2½	64	5	2
⅜	10	10	250	4⅝	117	3⅜	86	1¼	32	5½	140	2⅜	60	2½	64	5	2
½	15	10	250	4⅝	117	3⅜	86	1¼	32	5½	140	2¾	70	2¼	57	5	2
¾	20	10¾	273	5	127	3½	89	1½	38	6¾	171	3³⁄₁₆	81	2¾	70	6	3
1	25	14½	368	5½	140	3	76	2½	64	9½	241	3¾	95	3	76	12	5
1¼	32	17⅜	441	6	150	3½	89	2½	64	11⅜	289	4⅜₆	113	3½	89	15	6
1½	40	17⅞	454	6	150	3½	89	2½	64	11⅛	283	4⅞	124	4	102	16	7
2	50	21⅜	543	7¾	197	4½	114	3¼	83	13½	343	5¹⁵⁄₁₆	151	5	127	30	13

Dimensions and Weight: 2½" and 3" (65 and 80mm) LF009







Watts G-4000 Series
QT – Ball Valves

STRAINER SIZE		DIMENSIONS (APPROX.)						WEIGHT	
		M		N		N1†			
in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
2½	65	10	254	6½	165	9¾	248	28	12.7
3	80	10⅛	257	7	178	10	254	34	15.4

†Clearance for servicing

MODEL	SIZE DN		DIMENSIONS (APPRDX.)														WEIGHT	
			A		C		D		E		L		R		U			
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
LF009LF	2½	65	—	—	—	—	4½	114	—	—	18⅛	460	—	—	10⅝	270	76	34.5
LF009DSY	2½	65	33¼	845	15⅞	403	4½	114	16⅜	416	18⅛	460	7¾	197	10⅝	270	166	75.3
LF009NRS	2½	65	33¼	845	11⅜	289	4½	114	16⅜	416	18⅛	460	7¾	197	10⅝	270	161	73.0
LF009QTFDA	2½	65	33¼	845	6	152	4½	114	16⅜	416	18⅛	460	7¾	197	10⅝	270	150	68.0
LF009LF	3	80	—	—	—	—	4½	114	—	—	18⅛	460	—	—	10⅝	270	76	34.5
LF009DSY	3	80	34¼	870	18½	470	4½	114	16⅝	422	18⅛	460	8¾	222	10⅝	270	198	89.8
LF009NRS	3	80	34¼	870	12¾	324	4½	114	16⅝	422	18⅛	460	8¾	222	10⅝	270	191	86.6
LF009QTFDA	3	80	34¼	870	7	178	4½	114	16⅝	422	18⅛	460	8¾	222	10⅝	270	158	71.7

Do not write in highlighted boxes; KWD use only

NEW YORK STATE DEPARTMENT OF HEALTH
Bureau of Public Water Supply Protection

Application for Approval of Backflow Prevention Devices

PRINT OR TYPE ALL ENTRIES EXCEPT SIGNATURES
Please completed items 1 through 12a + Block and Lot Numbers

Block #	Lot #	FOR DEPARTMENT USE ONLY Log No.

1. Name of Facility	2. City, Village, Town	3. County

4. Location of Facility (Street)	City	state	zip

4a. Phone Numbers	5. Contact Person

5. Approx. Location of Device(s)	6. Mfg. Model #	Size of Device(s)

# of Fire Services	# of Domestic Services	# of Combined Services	Total # of Services	Total # of Buildings

7. Name of Owner	Title	Phone Number	8. Nature of works
			☐ Initial Device Installation ☐ Replace Existing Device

Full Mailing Address
Address (street) _____
City _____ state _____ zip _____

Owner's Signature _____ Date ____/____/____ (M D Y)

8a.
☐ New Service
☐ Existing Service

8b.
☐ New Building
☐ Existing Building
☐ Major Renovations

9. Name of Design Engineer or Architect

Dennis M. Larios, P.E
KWD Pre-approve Plans

Address (Street) 67 Maiden Lane
City Kingston
State NY Zip 12401

Signature

Original Ink signature and seal required on all copies

10. NYS License # 058747

☒ PE ☐ RA ☐ Other

10a. Telephone Number(s)

Date 04 / ____ / 2014 (M D Y)

11. Water System Pressure (psi) at Point of Connection	12. Estimate Installation Cost	12a. Estimate Design Cost
Max _____ Avg _____ Min _____		

13. Degree of Hazard

☒ X Hazardous
☐ Aesthetically Objectionable

List of processes or reasons that lead to degree of hazard checked:

14. Public water supply name Kingston Water Department

Mailing Address
PO Box 1537 (street)
Kingston (City) NY (state) 12401 (zip)

Telephone No. (845 331-0175

Name of supplier's designate representative

Title
Superintendent

Signature _____ ____/____/____ (M D Y)

Note: All applicants must be accompanied by plans, specifications and an engineer's report describing the project in detail. The project must first be submitted to the water supplier, who will forward it to the local public health engineer. This form must be prepared in quadruplicate with four copies of all plans, specifications and descriptive literature.

DOH-347 (5/91)