For Health Hazard Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

Series LFU009-FS Reduced Pressure Zone Assemblies

Size: 1/2" – 2"

Series LFU009-FS Reduced Pressure Zone Assemblies are designed to protect potable water supplies in accordance with national plumbing codes and water authority requirements. The swivel feature allows a variety of installations, including the prevention of health hazard crossconnections in piping systems or containment at the service line entrance.

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 ½" to 1" shutoffs have tee handles. The LFU009-FS features Lead Free* construction to comply with Lead Free* installation requirements.

This series contains an integrated flood sensor to detect excessive water discharges from the relief valve. When activated through an addon sensor connection kit, the flood sensor relays a signal that triggers notification to qualified service personnel who can take corrective action, thus avoiding the possibility of ruinous flooding and costly damage. The add-on sensor connection kit is available for both building management systems, or BMS, and cellular communication. (For more information, refer to *Installation, Maintenance, and Repair Manual, Series 009-FS and LF009-FS*.)

Features

- Single access cover and modular check construction for ease of maintenance
- Top entry to all internals for immediate accessibility
- Captured springs for safe maintenance
- Internal relief valve for reduced installation clearances
- Replaceable seats for economical repair
- Cast copper silicon alloy body construction for durability
- Ball valve test cocks screwdriver slotted
- Large body passages provides low pressure drop
- Compact, space saving design
- No special tools required for servicing
- Integrated sensor for flood detection

NOTICE

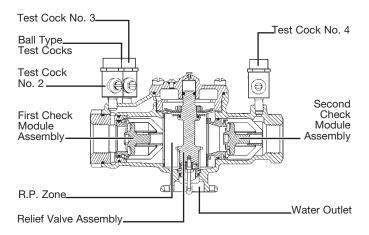
Inquire with governing authorities for local installation requirements.

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.



LFU009M2-QT-S-FS



Specification

A Reduced Pressure Zone Assembly shall be installed at each potential health hazard location to prevent backflow due to backsiphonage and/ or backpressure. Lead Free* reduced pressure zone assemblies shall be constructed using Lead Free* materials. Lead Free assemblies shall comply with state codes and standards, where applicable, requiring reduced lead content. 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. 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 LFU009.

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.



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

[†]Does not indicate approval status. See page 2 for approval sizes and models.

Available Models

Prefix:

U – Union connections

Suffix:

QT – Quarter-turn ball valves

S – Bronze strainer

SH - Stainless steel ball valve handles

NOTICE

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.)

Materials

Body: Lead Free* cast copper silicon alloy

Discs: Silicone rubber

Check Seats: Replaceable polymer

Relief Valve Seat: Removable relief valve seats

Cover Bolts: Stainless steel

Standardly furnished with NPT body connections.

Insulated Enclosure

The WattsBox insulated enclosure is available for Series LFU009-FS. For more information download ES-WB at watts.com.

Pressure - Temperature

Maximum Working Pressure: 175 psi (12 bar) Temperature Range: 33°F – 180°F (0.5°C – 82°C)

Standards

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

Approvals

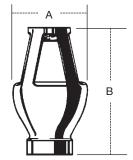


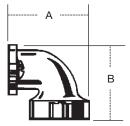
ASSE, AWWA, CSA, IAPMO

Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California Approved models AQT, PC, QT UL Classified (Models with LF suffixes)

Air Gaps and Elbows

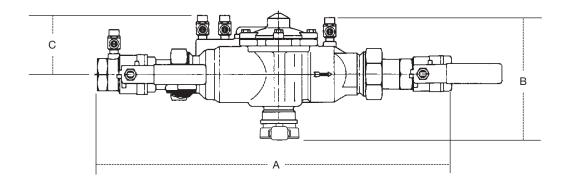
MODEL	IDEL DRAIN OUTLET					DIMENSIONS			
	For LF909, LFU009	1	1		A		В		
	and LF993 sizes								
		in.	тт	in.	тт	in.	тт	lb	kg
909AGA	1⁄4"—1⁄2" 009,	1⁄2	13	23/8	60	31//8	79	.625	.3
	³ ⁄4" LF009M2/M3								
909AGC	³ ⁄4"–1" LF009/909,	1	25	31/4	83	47⁄8	124	1.50	.7
	1"-1 ¹ /2" LF009M2								
909AGF	1 ¹ / ₄ "–2" LF009M1,	2	51	43/8	111	6¾	171	3.25	1.5
	1 ¹ ⁄4"–3" LF009/909,								
	2" LF009M2, 4"-6" LF993								
909AGK	4"-6" LF909,	3	76	63%	162	95/8	243	6.25	2.8
	8"-10" LF909M1								
909AGM	8"-10" LF909	4	102	7¾	187	11 ¹ ⁄ ₄	286	15.50	7.0
909ELA	¹ / ₄ "- ¹ / ₂ " LF009, ³ / ₄ " LF009M2/M3	-	-	-	-	-	-	-	-
909ELC	³ / ₄ "-1" LF009/909	_	-	2 ³ /8	60	2 ³ /8	60	.38	.2
909ELF*	1 ¹ /4"-2" LF009M1,	-	-	35/8	92	35/8	92	2	.9
	1 ¹ / ₄ "-2" LF009/909,								
	2" LF009M2, 4"-6" LF993								
909ELH*	2 ¹ / ₂ "-3" LF009/909	_	_	_	_	_	_	_	_
Vertical									





*Epoxy coated

[†]Does not indicate approval status.

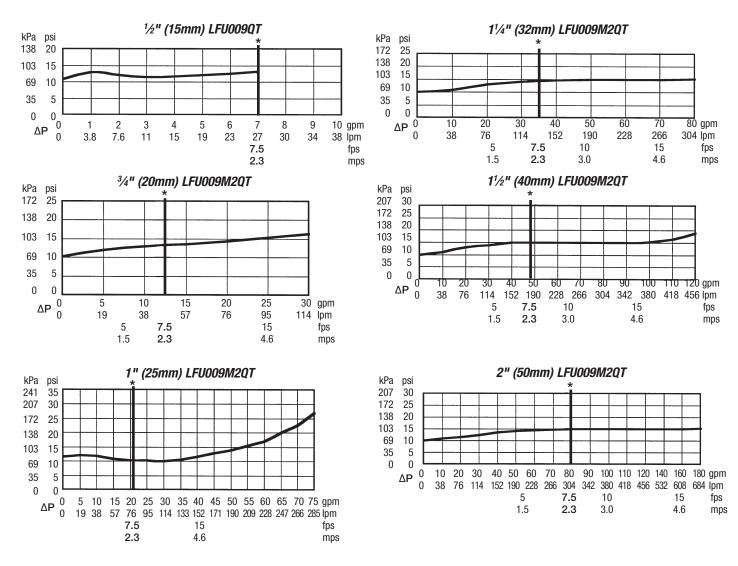


LFU009QT

MODEL	SIZE	(DN)		WEIGHT						
			A		В		(C		
	in.	тт	in.	тт	in.	тт	in.	тт	lb	kg
LFU009QT	1/2	15	12 ¹³ /16	326	51/8	149	3 ⁷ /16	87	5.5	2.5
LFU009M2QT	3/4	20	13 ³ /4	349	61/4	159	3 ³ ⁄4	95	6	2.7
LFU009M2QT	1	25	173/8	441	6¼	159	31/8	79	12.75	5.8
LFU009M2QT	1 ¹ / ₄	32	24 ¹ /2	622	8 ¹ / ₂	216	4	100	26.5	12.0
LFU009M2QT	1 ¹ / ₂	40	25 ¹ /2	648	8 ¹ / ₂	216	4 ¹ / ₄	108	28.75	13.0
LFU009M2QT	2	50	273//8	695	8 ³ ⁄4	222	4 ¹ / ₄	108	32.75	14.9

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).