Engineering Specification

Job Name _____ Contractor _____

Job Location _____ Approval _____

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

Approval _____ Representative _____

LEAD FREE*

Series LFU009

Reduced Pressure Zone Assemblies

½" – 2"

Series LFU009 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 cross-connections 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 maintenance and assembly access. Sizes 1⁄2" to 1" shutoffs have tee handles. The series also features Lead Free* construction to comply with Lead Free* installation requirements.

Series LFU009 includes a flood sensor to detect excessive water discharges from the relief valve. The sensor is installed on the assembly exterior and does not alter assembly functions or certifications. The sensor relays a signal that triggers notification to facility who can take corrective action, thus avoiding the possibility of ruinous flooding and costly damage.

NOTICE

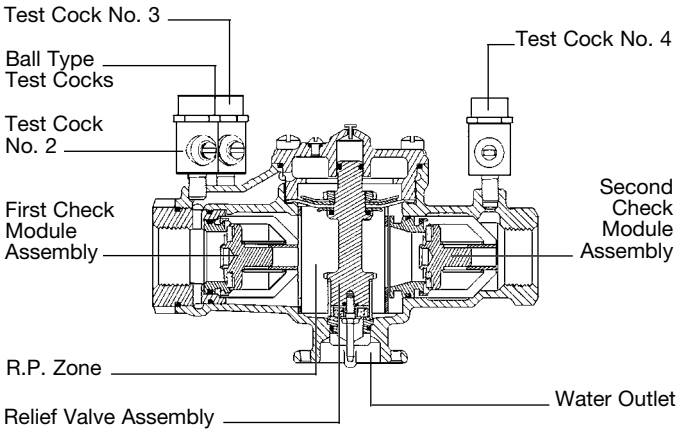
An add-on connection kit is required to activate the flood sensor. Without the connection kit, the sensor is a passive component that has no communication with any other device. (For more information, download RP/IS-009.)

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
- Sensor on the relief valve for flood detection

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

LFU009M2-QT-S-FS



NOTICE

Use of the flood sensor does not replace the need to comply with all required instructions, codes, and regulations related to installation, operation, and maintenance of this product, including the need to provide proper drainage in the event of a discharge.

Watts is not responsible for the failure of alerts due to connectivity or power issues.

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.

Inquire with governing authorities for local installation requirements.

WATTS®

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 and shall include a sensor on the relief valve for flood detection.

Model/Option

Prefix:

U – Union connections

Suffix:

FS – Flood detection sensor

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. 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

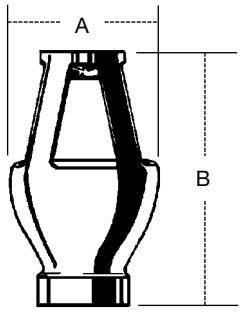
UL Classified (Models with LF suffixes)

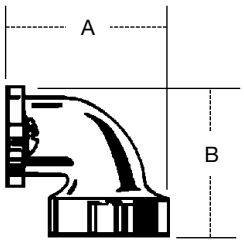
Air Gaps and Elbows

Call customer service if you need assistance with technical details.

MODEL	DRAIN OUTLET			DIMENSIONS				WEIGHT	
	For LF909, LFU009 and LF993 sizes			A		B			
		in.	*mm*	*in.*	*mm*	*in.*	*mm*	*lb*	*kg*
909AGA	¼"–½" 009, ¾" LF009M2/M3	1⁄2	13	23⁄8	60	31⁄8	79	.625	.3
909AGC	¾"–1" LF009/909, 1"–1½" LF009M2	1	25	31⁄4	83	47⁄8	124	1.50	.7
909AGF	1¼"–2" LF009M1, 1¼"–3" LF009/909, 2" LF009M2, 4"–6" LF993	2	51	43⁄8	111	63⁄4	171	3.25	1.5
909AGK	4"–6" LF909, 8"–10" LF909M1	3	76	63⁄8	162	95⁄8	243	6.25	2.8
909AGM	8"–10" LF909	4	102	73⁄8	187	111⁄4	286	15.50	7.0
909ELA	¼"–½" LF009, ¾" LF009M2/M3	–	–	–	–	–	–	–	–
909ELC	¾"–1" LF009/909	–	–	23⁄8	60	23⁄8	60	.38	.2
909ELF*	1¼"-2" LF009M1, 1¼"–2" LF009/909, 2" LF009M2, 4"–6" LF993	–	–	35⁄8	92	35⁄8	92	2	.9
909ELH* Vertical	2½"–3" LF009/909	–	–	–	–	–	–	–	–

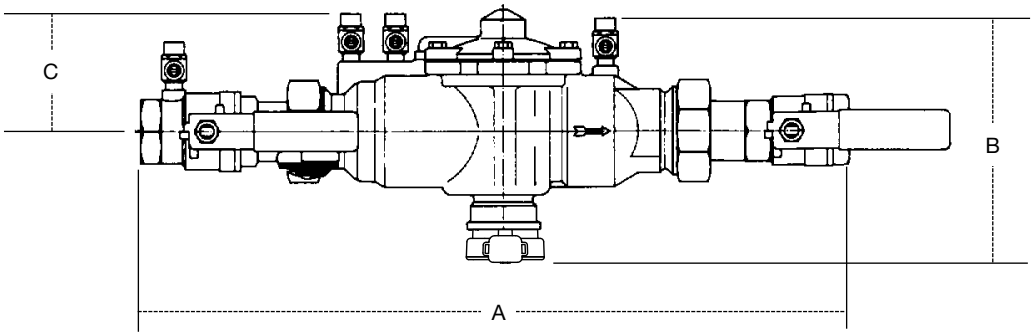
*Epoxy coated





†Does not indicate approval status.

Dimensions and Weights



LFU009QT

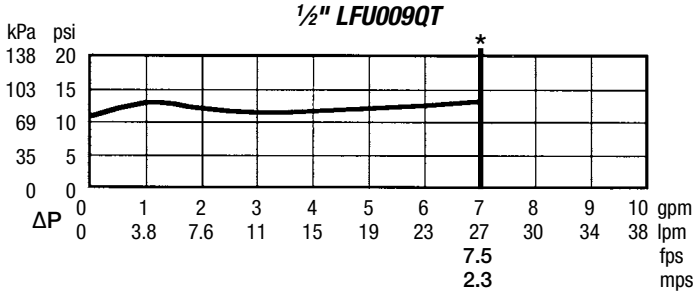
MODEL	SIZE (DN)		DIMENSIONS						WEIGHT	
			A		B		C			
	in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lb*	*kg*
LFU009QT	½	15	12 13/16	326	5 7/8	149	3 7/16	87	5.5	2.5
LFU009M2QT	¾	20	13 3/4	349	6 1/4	159	3 3/4	95	6	2.7
LFU009M2QT	1	25	17 3/8	441	6 1/4	159	3 1/8	79	12.75	5.8
LFU009M2QT	1 1/4	32	24 1/2	622	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	27 3/8	695	8 3/4	222	4 1/4	108	32.75	14.9

Capacity

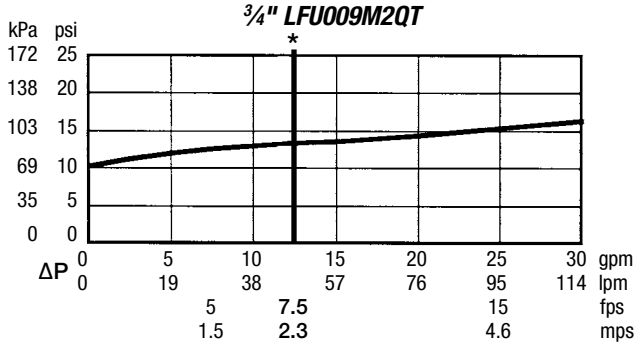
Performance as established by an independent testing laboratory.

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

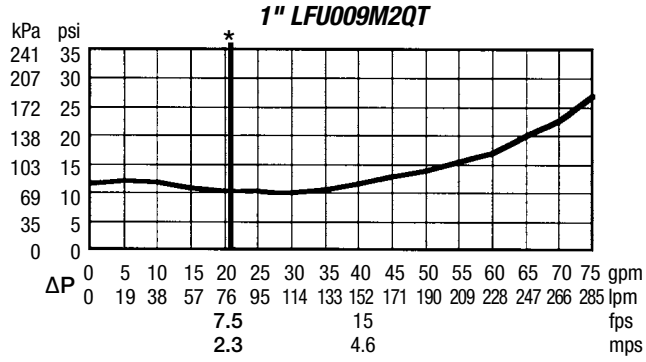
½" LFU009QT



¾" LFU009M2QT



1" LFU009M2QT



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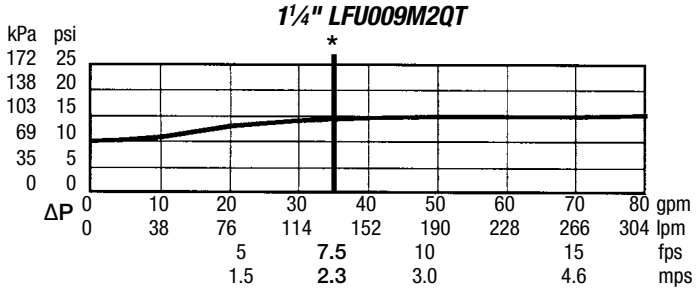
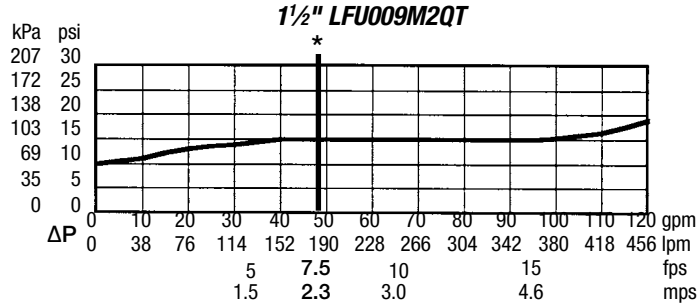
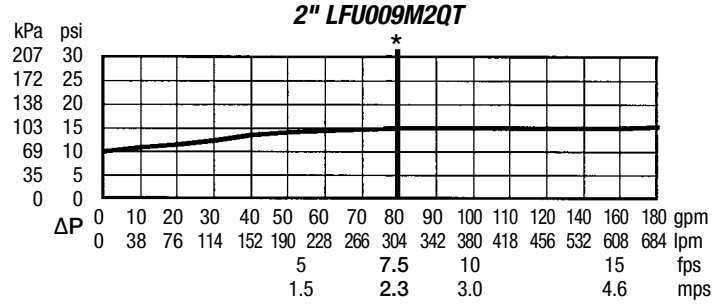


1½" LFU009M2QT



2" LFU009M2QT



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