For Health Hazard Applications

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

Series U009-FS

Reduced Pressure Zone Assemblies

Size: 1/2" - 2"

Series U009-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 cross-connections in piping systems or containment at the service line entrance.

Features include 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.

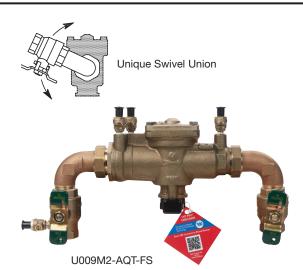
The series also includes an integrated flood sensor to detect excessive water discharges from the relief valve. When activated through an add-on sensor connection kit, the flood sensor relays a signal that triggers notification to qualified service personnel who can take corrective action, thus avoiding 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.)

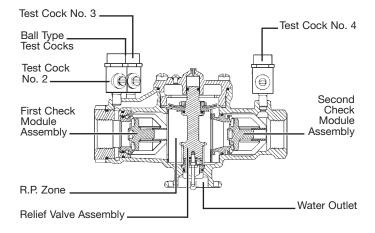
Features

- Unique swivel union
- 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
- Bronze 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

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.





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. 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 U009.

^{*}Does not indicate approval status. See page 2 for approved sizes and models.



Available Models

Prefix:

U - Union connections

Suffix:

AQT – Elbow fittings for 360° rotation ($\frac{3}{4}$ " – 2")

LF – Without shutoff valves
PC – Internal polymer coating
QT – Quarter-turn ball valves

S – Bronze strainer

SH - Stainless steel ball valve handles

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.)

Materials

Body: Bronze

Discs: Silicone rubber

Check Seats: Replaceable polymer

Relief Valve Seat: Removable stainless steel

Cover Bolts: Stainless steel

Insulated Enclosure

The WattsBox insulated enclosure is available for Series U009-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 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)

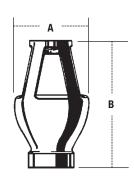
NOTICE

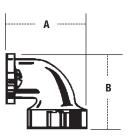
Inquire with governing authorities for local installation requirements.

Air Gaps and Elbows

MODEL	DRAIN OUTLET			DIMEN	ISIONS		WEIGHT		
	for 909, U009	А			В				
	and 993 sizes								
		in.	mm	in.	mm	in.	mm	lb	kg
909AGA	1/4"-1/2" 009,	1/2	13	23//8	60	31//8	79	.625	.3
	3/4" 009M2/M3								
909AGC	³ / ₄ "-1" 009/909,	1	25	31/4	83	47/8	124	1.50	.7
	1"-1½" 009M2								
909AGF	11/4"-2" 009M1,	2	51	43/8	111	63/4	171	3.25	1.5
	11/4"-3" 009/909,								
	2" 009M2, 4"-6" 993								
909AGK	4"-6" 909,	3	76	63/8	162	95/8	243	6.25	2.8
	8"-10" 909M1								
909AGM	8"-10" 909	4	102	73//8	187	1111/4	286	15.50	7.0
909ELA	1/4"-1/2" 009, 3/4" 009M2/M3	_	_	_	_	-	_	_	_
909ELC	3/4"-1" 009/909	-	_	23/8	60	23/8	60	.38	.2
909ELF*	1½"-2" 009M1,	_	_	35/8	92	35//8	92	2	.9
	11/4"-2" 009/909,								
	2" 009M2, 4"-6" 993								
909ELH*	21/2"-3" 009/909	_	_	_	_	_	_	_	_
Vertical									

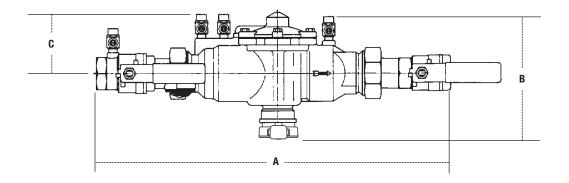






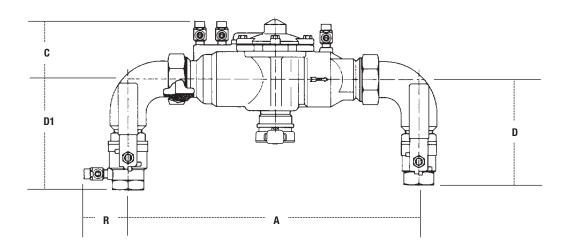
[†]Does not indicate approval status.

Dimensions and Weights



U009QT

MODEL	SIZE	(DN)	DIMENSIONS							WEIGHT	
			Α		В		С				
	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg	
U009QT	1/2	15	12 ¹³ / ₁₆	326	57//8	149	37/16	87	5.5	2.5	
U009M2QT	3/4	20	13¾	349	61/4	159	3¾	95	6	2.7	
U009M2QT	1	25	17%	441	61/4	159	31//8	79	12.75	5.8	
U009M2QT	11/4	32	241/2	622	81/2	216	4	100	26.5	12.0	
U009M2QT	11/2	40	25½	648	81/2	216	41/4	108	28.75	13.0	
U009M2QT	2	50	27%	695	83/4	222	41/4	108	32.75	14.9	

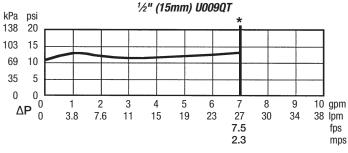


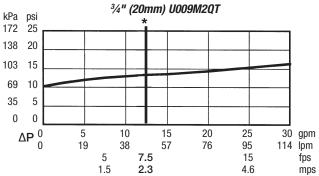
U009AQT

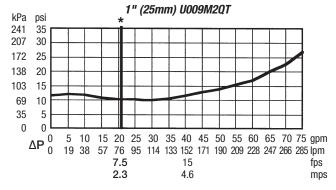
MODEL	SIZE	(DN)	DIMENSIONS								WEIGHT			
			Α		С		D		D1		R			
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg
U009AQT	3/4	20	13½	333	31//8	79	45/8	117	43/4	121	23/8	60	12.50	5.7
U009M2AQT	1	25	13½	333	31//8	79	51//8	130	53/16	132	23/8	60	13.88	6.3
U009M2AQT	1½	40	153/8	390	41/4	108	73/4	197	73/4	197	31/4	83	39.25	17.8
U009M2AQT	2	50	191/4	489	41/4	108	8%	213	83/8	213	31/4	83	39.25	17.8

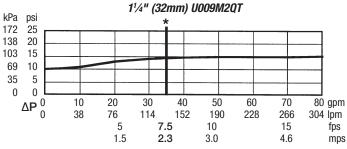
Capacity

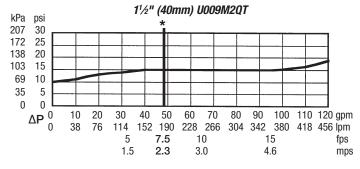
Performance as established by an independent testing laboratory.











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

