

1-800-336-6530 WATTS® REGULATOR

Series 009

Reduced Pressure Zone Assemblies

Sizes: 1/4" - 3" (8 - 80mm)

Series 009 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.

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.

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
- Bronze body construction for durability 1/4" 2" (8 50mm)
- Fused epoxy coated cast iron body 21/2" 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 bronze 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 Regulator Co. Series 009.

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

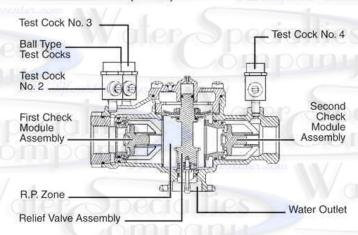
Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



1/2" (15mm) 009QT



2" (50mm) 009M2QTHC



IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS



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

Suffix:

QT - quarter-turn ball valves

S - bronze strainer

LF - without shutoff valves

AQT - elbow fittings for 360° rotation

3/4" - 2" (20 - 50mm) only

PC - internal Polymer Coating

LH - locking handle ball valves (open position)

SH - stainless steel ball valve handles

HC - 21/2" inlet/outlet fire hydrant fitting (2" valve)

Prefix:

C – clean and check strainer 3/4" – 1" (20 – 25mm) only

U - union connections (see ES-U009)

Available Models: 21/2" - 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 valve shutoffs

LF - without shutoff valves

S - cast iron strainer

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)

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. For optional bronze union inlet and outlet connections, specify prefix U (½" – 2"(15 – 50mm)). Series 009QT furnished with quarter turn, full port, resilient seated, bronze ball valve shutoffs.

Materials: 21/2" and 3" (65 - 80mm)

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

Pressure / Temperature

Series 009 $^{1}/_{4}$ " - 2" (8 - 50mm) Suitable for supply pressure up to 175psi (12 bar). Water temperature: $33^{\circ}F - 180^{\circ}F$ (0.5°C - 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 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 3/4" - 2" (20 - 50mm)

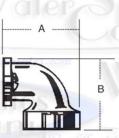
(LF models only except 009M3LF)

21/2" and 3" (65 and 80mm) with OSY gate valves.

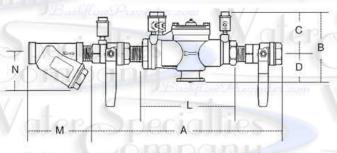
Air Gaps and Elbows

MODEL	. 10	DRAIN	OUTLET	W	DIME	WEIGHT			
aler	for 909, 009 and 993 sizes	162		A		В		on	nr
	ompan	in.	mm	in.	mm	in.	mm	lbs.	kgs.
909AG-A	1/4"-1/2" 009, 3/4" 009M2/M3	1/2	13	23/8	60	31/8	79	.625	.28
909AG-C	3/4"-1" 009/909, 1"-11/2" 009M2	1	25	31/4	83	47/8	124	1.50	.68
909AG-F	1½"-2" 009M1, 1½"-3" 009/909, 2" 009M2, 4"-6" 993	2	51	43/8	111	63/4	171 (/Low)	3.25	1.47
909AG-K	4"-6" 909, 8"-10" 909M1	3	76	63/8	162	95/8	243	6.25	2.83
909AG-M	8"-10" 909	4	102	73/8	187	111/4	394	15.50	7.03
909EL-A	1/4"-1/2" 009, 3/4" 009M2/M3	-	-	7	J4(100	1134	-
909EL-C	3/4"-1" 009/909,	-	-	23/8	60	23/8	60	.38	.17
* 909EL-F	1½"-2" 009M1, 1½"-2" 009/909, 2" 009M2, 4"-6" 993	Ac <u>u</u> re	nter.ci	35/8	92	35/8	92 P	2	.91
* 909EL-H Vertical	2½"-3" 009/909	1-(38)-) =	-	- (-	5m





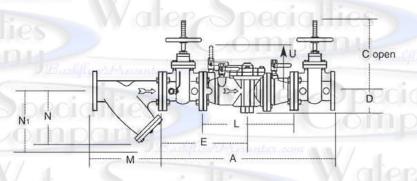
Dimensions and Weight: 1/4" - 2" (8 - 50mm) 009

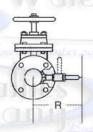


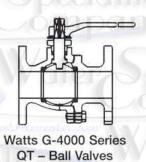
Suffix HC – Fire Hydrant Fittings dimension 'A' = 25" (637mm) 009 $^{1}/_{4}$ " – 2"

SIZE (DN)				for	DIMENSIONS (APPROX.)									STRAINER DIMENSIONS				
06	-	1		I CI	В		С	TIII N	0	1		1	N	10	N	D(11	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg.s	
1/4	8	10	250	45/8	117	33/8	86	11/4	32	51/2	140	23/8	60	21/2	64	5	2	
3/8	10	10	250	45/8	117	33/8	86	11/4	32	51/2	140	23/8	60	21/2	64	5	2	
1/2	15	10	250	45/8	117	33/8	- 86	11/4	32	51/2	140	23/4	70	21/4	57	5	2	
3/4	20	103/4	273	5	127	31/2	89	11/2	38	63/4	171	33/16	81	23/4	70	6	3	
1	25	141/2	368	51/2	140	3	76	21/2	64	91/2	241	33/4	95	3	76	12	5	
11/4	32	173/8	441	6	150	31/2	89	21/2	64	113/8	289	47/16	113	31/2	89	15	6	
11/2	40	177/8	454	6	150	31/2	89	21/2	64	111/8	283	47/8	124	4	102	16	7	
2	50	213/8	543	73/4	197	41/2	114	31/4	83	131/2	343	515/16	151	5	127	30	13	

Dimensions and Weight: 21/2" and 3" (65 and 80mm) 009







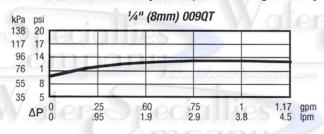
NER SIZE		WEIGHT							
	N	M		N	1	ht			
mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	
65	10	254	61/2	165	93/4	248	28	12.7	
80	101/8	257	7	178	10	254	34	15.4	
	mm 65	mm in. 65 10	mm in. mm 65 10 254	mm in. mm in. 65 10 254 6½	M N N In. mm In. mm 65 10 254 6½ 165	mm in. mm in. mm in. 165 10 254 6½ 165 9¾	M N N+T mm in. mm in. mm 65 10 254 6½ 165 9¾ 248	mm in. mm in. mm in. mm in. mm lbs. 65 10 254 6½ 165 9¾ 248 28	

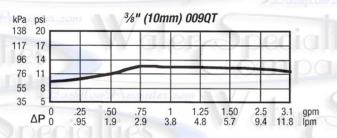
†Clearance for servicing

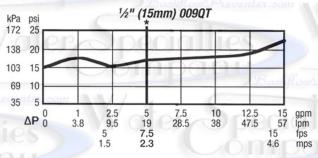
MODEL	SIZE	SIZE DN DIMENSIONS (APPROX.)															WEIGHT	
	androu -		1	1	(X/	ut.	D	E		- 1			R	U		00	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
009LF	21/2	65	140	_	_	-	41/2	114	_	_	181/8	460	-	1=0	105/8	270	76	34.5
0090SY	21/2	65	331/4	845	157/8	403	41/2	114	163/8	416	181/8	460	73/4	197	105/8	270	166	75.3
009NRS	21/2	65	331/4	845	113/8	289	41/2	114	163/8	416	181/8	460	73/4	197	105/8	270	161	73.0
009QT	21/2	65	331/4	845	6	152	41/2	114	163/8	416	181/8	460	73/4	197	105/8	270	150	68.0
009LF	3	80	-			-	41/2	114	1-1		181/8	460		:	105/8	270	76	34.5
0090SY	3	80	341/4	870	181/2	470	41/2	114	16 1/8	422	181/8	460	83/4	222	105/8	270	198	89.8
009NRS	3	80	341/4	870	123/4	324	41/2	114	165/8	422	181/8	460	83/4	222	105/8	270	191	86.6
009QT	3	80	341/4	870	7	178	41/2	114	165/8	422	181/8	460	83/4	222	105/8	270	158	71.7

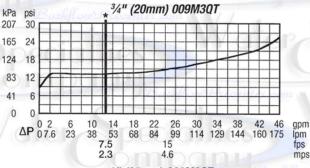
Capacity

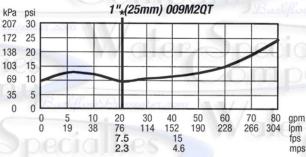
Performance as established by an independent testing laboratory.



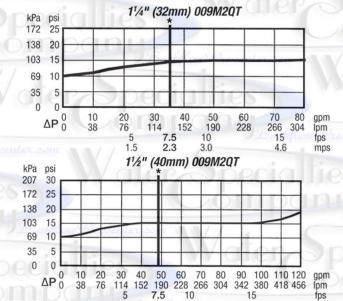


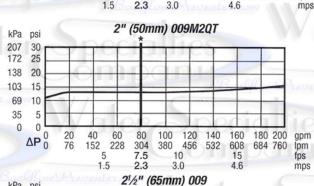






*Typical maximum system flow rate (7.5 feet/sec., 2.3 meters/sec.)





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