



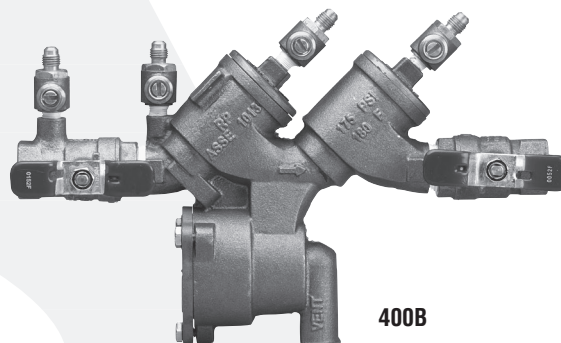
Series 400B

Reduced Pressure Zone Assemblies

Sizes: 3/4" – 2" (20 – 50mm)

Features

- Separate access covers for the check valves and relief valve for ease of maintenance
- Top entry-all check internals easily accessible
- All rubber elastomers of chloramine resistant material
- Check valve poppet assemblies are fully guided by innovative plastic seat guide
- Replaceable push-in check valve and relief valve seat eliminates threads from the water way
- EZ twist relief valve cover-quarter turn locking joint captures the spring load during repair to facilitate disassembly
- Innovative check valve plastic cover bushing provides trouble free guiding of the check valve poppet
- Bottom mounted relief valve provides reduced installation clearances
- Compact, space saving design
- No special tools required for servicing
- Top mounted test cocks for ease in testing and reduced installation clearances
- Standardly furnished with NPT body connections



400B

Series 400B 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 or for containment at the service line entrance.

This series features two poppet style check valves, replaceable check seats, with an intermediate relief valve. Its compact modular design facilitates easy maintenance and assembly access. Sizes 3/4" – 1" (20 – 25mm) shutoffs have tee handles.

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 a pressure differential relief valve located in a zone between two positive seating check valves. Seats and seat discs shall be replaceable in both check valves and the relief valve without the use of special tools. Service of all internal check valve components shall be through top mounted access covers threaded to the main valve body. The check valve poppet assembly shall be guided via the use of a corrosion resistant plastic guide. The check valve and relief valve seats shall be push-in type. The relief valve cover shall be secured with stainless steel bolts and shall utilize a quarter-turn locking joint to capture the spring load of the relief valve. The relief valve shall have an internal sensing line to sense the inlet water supply. All rubber elastomers shall be of chloramine resistant material. The assembly shall also include two resilient seated isolation valves, four top-mounted resilient seated test cocks and an air gap drain fitting. The assembly shall be an Ames Company Series 400B.

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

Available Models

Suffix:

- B – quarter-turn ball valves
- S – bronze strainer
- LBV – less ball valve
- A – elbow fitting for 360° rotation
- Z – inlet & outlet flow up
- PC – polymer coated
- LH – locking handle ball valves (open position)
- C&T – cap & tether test cocks
- FP – slow close ball valves

Prefix:

- U – union connections

Pressure — Temperature

Temperature Range: 33°F – 180°F (3°C – 82°C)

Maximum Working Pressure: 175psi (12.06 bar)

Approvals



Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.
(for sizes 3/4" – 2")

Materials

Body: Bronze

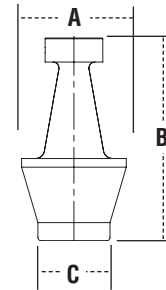
Discs: Silicone rubber

Check Seats: Replaceable polymer

Cover Bolts: Stainless steel

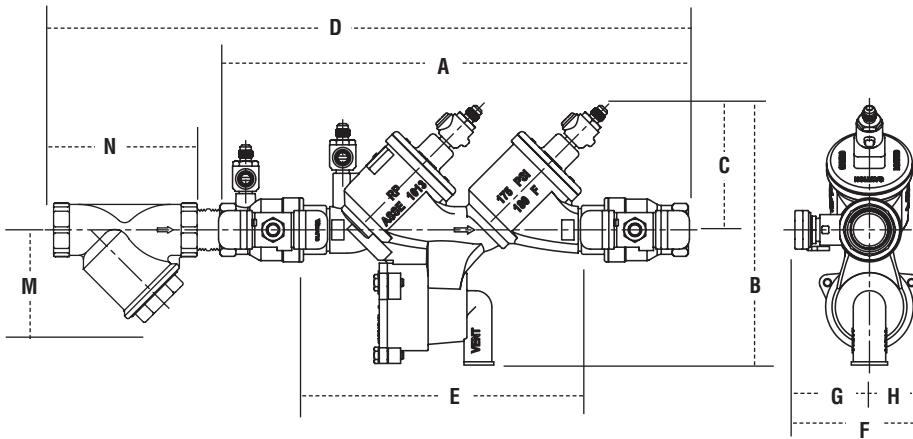
IMPORTANT: Inquire with governing authorities for local installation requirements.

Air Gaps



AIR GAP MODEL	SIZES	DIMENSIONS						WEIGHT	
		A		B		C		lbs.	kg.
		in.	mm	in.	mm	in.	mm		
400B-AGC	3/4" & 1"	2 3/8	60	3 1/8	79	1/2	13	.63	.28
400B-AGF	1 1/4" – 2"	4 3/8	111	8 7/16	214	3	76	4.26	1.93

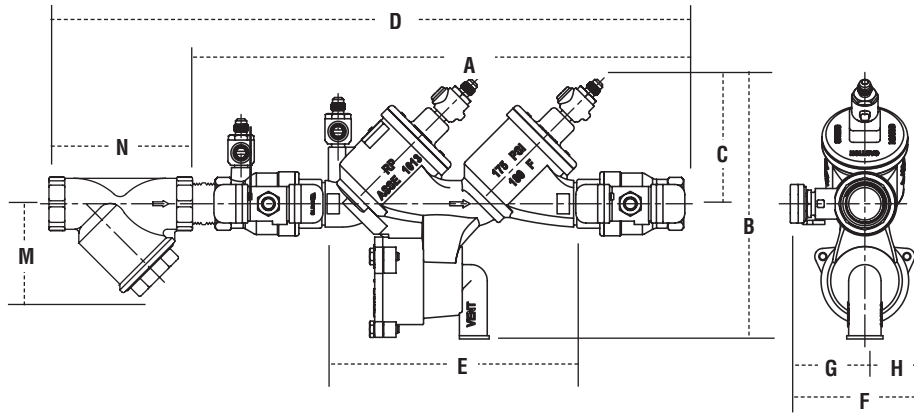
Dimensions and Weights



400B, 400B-S

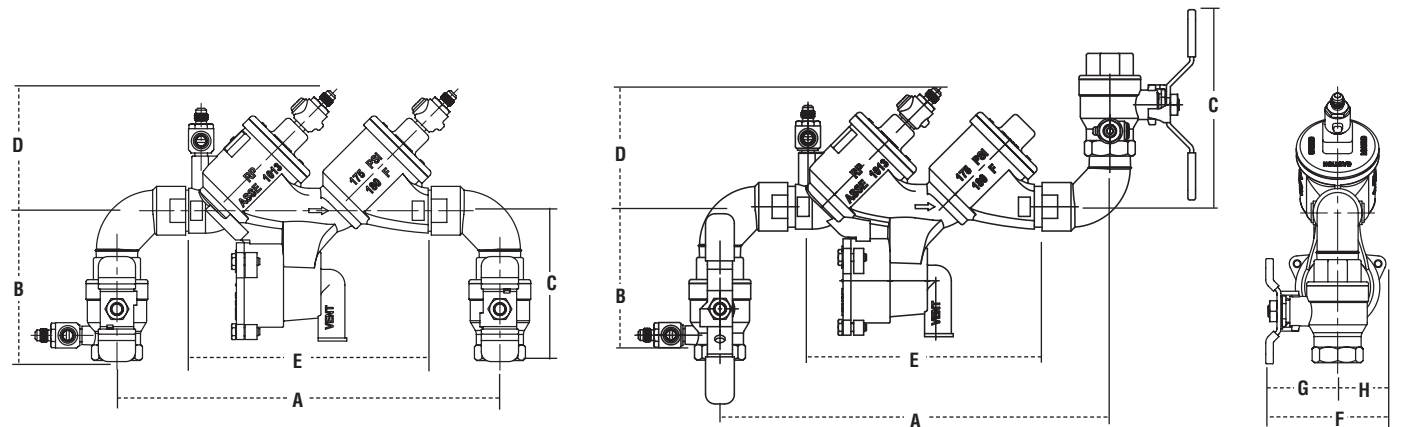
SIZE (DN)	DIMENSIONS										STRAINER DIMENSIONS		WEIGHT												
	A		B		C		D		E (LF)		F		G		H		M		N		400B		400B-S		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg.	lbs.	kg.	
3/4	20	12 1/8	307	7 7/16	188	3 1/2	88	15 1/2	393	7 11/16	195	3 5/8	92	2 1/16	52	1 9/16	40	1 5/8	41	3 3/16	81	8.3	3.7	10.0	4.5
1	25	14 1/2	368	8	202	3 7/8	98	19 3/16	487	9 3/16	233	4	102	2 7/16	62	1 9/16	40	2 1/8	54	3 3/4	95	11.8	5.4	13.8	6.3
1 1/4	32	18 1/8	461	11 7/16	290	5 1/8	129	23 1/4	591	11 11/16	297	5 1/8	130	2 5/8	67	2 1/2	64	2 1/2	64	4 7/16	113	22.3	10.1	26.3	11.9
1 1/2	40	18 3/4	476	11 7/16	290	5 1/8	129	25 1/16	637	11 11/16	297	5 5/8	143	3 1/8	79	2 1/2	64	3	76	4 7/8	124	28.3	12.8	32.0	14.5
2	50	21 1/16	535	12 1/16	307	5 5/8	142	28 13/16	732	13 3/8	340	5 15/16	151	3 7/16	87	2 1/2	64	3 9/16	90	5 15/16	151	37.3	16.9	45.0	20.4

Dimensions and Weights



U400B, U400B-S

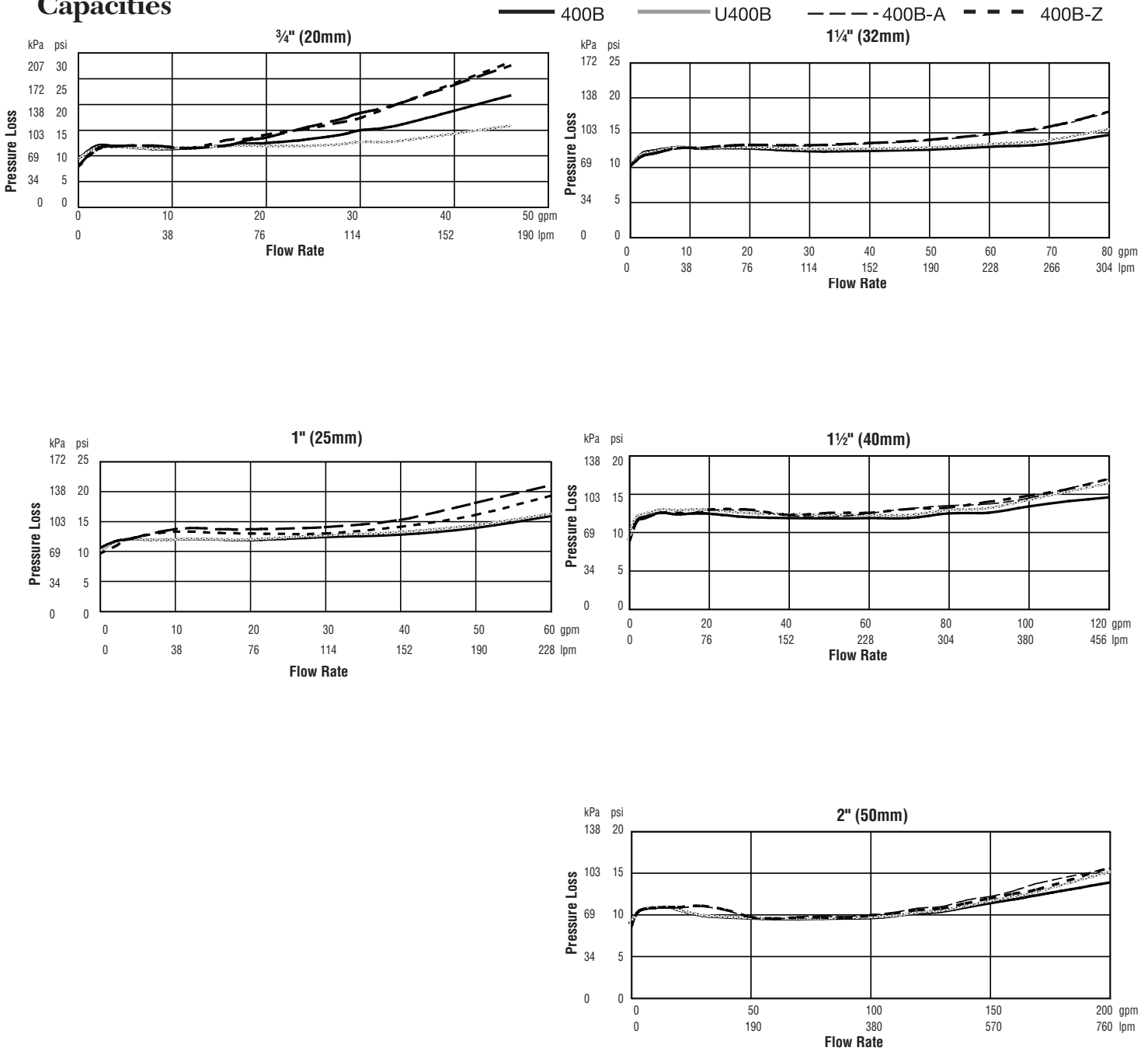
SIZE (DN)		DIMENSIONS								STRAINER DIMENSIONS				WEIGHT											
in.	mm	A		B		C		D		E (LF)		F		G		H		M		N		U400B	U400B-S		
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.
3/4	20	16 ¹⁵ / ₁₆	430	8 ¹ / ₁₆	204	3 ⁷ / ₈	98	20 ⁵ / ₁₆	515	11 ¹ / ₂	292	3 ⁵ / ₈	92	2 ¹ / ₁₆	52	1 ⁹ / ₁₆	40	1 ⁵ / ₈	41	3 ³ / ₁₆	81	13.4	6.1	15.1	6.9
1	25	17 ¹ / ₈	435	8 ¹ / ₁₆	204	3 ⁷ / ₈	98	21 ¹³ / ₁₆	554	11 ³ / ₄	297	4	102	2 ⁷ / ₁₆	62	1 ⁹ / ₁₆	40	2 ¹ / ₈	54	3 ³ / ₄	95	13.3	6.0	15.3	6.9
1 ¹ / ₄	32	20 ¹⁵ / ₁₆	532	11 ⁷ / ₁₆	290	5 ¹ / ₈	129	26 ¹ / ₁₆	662	15 ³ / ₈	390	5 ¹ / ₈	130	2 ⁵ / ₈	67	2 ¹ / ₂	64	2 ¹ / ₂	64	4 ⁷ / ₁₆	113	25.9	11.8	29.9	13.6
1 ¹ / ₂	40	21 ⁹ / ₁₆	547	11 ⁷ / ₁₆	290	5 ¹ / ₈	129	27 ⁷ / ₈	708	15 ³ / ₈	390	5 ⁵ / ₈	143	3 ¹ / ₈	79	2 ¹ / ₂	64	3	76	4 ⁷ / ₈	124	31.9	14.5	35.6	16.2
2	50	24 ¹⁵ / ₁₆	633	12 ¹ / ₁₆	307	5 ⁵ / ₈	142	32 ¹¹ / ₁₆	830	16 ³ / ₄	425	5 ¹⁵ / ₁₆	151	3 ⁷ / ₁₆	87	2 ¹ / ₂	64	3 ⁹ / ₁₆	90	5 ¹⁵ / ₁₆	151	41.6	18.9	49.3	22.4



400B-A, 400B-Z

SIZE (DN)		DIMENSIONS								STRAINER DIMENSIONS				WEIGHT					
in.	mm	A		B		C		D		E (LF)		F		G		H		lbs.	kgs.
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
3/4	20	10 ³ / ₈	263	3 ¹⁵ / ₁₆	100	3 ¹⁵ / ₁₆	100	3 ¹ / ₂	88	7 ¹¹ / ₁₆	195	3 ⁵ / ₈	92	2 ¹ / ₁₆	52	1 ⁹ / ₁₆	40	9.3	4.2
1	25	12 ¹ / ₄	311	4 ¹³ / ₁₆	122	4 ¹³ / ₁₆	122	3 ⁷ / ₈	98	9 ³ / ₁₆	233	4	102	2 ⁷ / ₁₆	62	1 ⁹ / ₁₆	40	13.3	6.0
1 ¹ / ₄	32	16 ¹ / ₁₆	407	5 ⁷ / ₈	149	5 ⁷ / ₈	149	5 ¹ / ₈	129	11 ¹¹ / ₁₆	297	5 ¹ / ₈	130	2 ⁵ / ₈	67	2 ¹ / ₂	64	24.0	10.9
1 ¹ / ₂	40	16 ⁵ / ₈	421	6 ¹ / ₂	164	6 ¹ / ₂	164	5 ¹ / ₈	129	11 ¹¹ / ₁₆	297	5 ⁵ / ₈	143	3 ¹ / ₈	79	2 ¹ / ₂	64	30.5	13.8
2	50	17 ⁵ / ₁₆	440	6 ⁵ / ₈	168	6 ⁹ / ₁₆	166	5 ⁵ / ₈	142	13 ³ / ₈	340	5 ¹⁵ / ₁₆	151	3 ⁷ / ₁₆	87	2 ¹ / ₂	64	40.6	18.4

Capacities



A Watts Water Technologies Company

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Control Valves- 18550 Hansen Road • Houston, TX 77075 • T: 713-943-0688 • F: 713-944-9445

Canada: 5435 North Service Rd. • Burlington, ONT. L7L 5H7 • T: 905-332-4090 • F: 905-332-7068

