

WELL-X-TROL[®] ASME WATER SYSTEM TANKS

ASME Water Tanks for
Commercial & Industrial
Applications



WELL-X-TROL[®]
ASME WX Series by AMTROL[®]

WELL-X-TROL® ASME: The Professionals Choice

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The AMTROL Advantage

- AMTROL — A world-leading provider of advanced water system solutions supplies a complete line of quality-engineered, cost efficient, heating and water systems that you can count on.
- ISO 9001-2000 Certified.
- With over 50 years experience, AMTROL sets the standard for service, reliability, innovation, design and manufacture of water system equipment.
- Fully qualified technical staff available to help ensure solid solutions for your water and heating needs.

A Wide Range of Applications

WELL-X-TROL® ASME water tanks continue to set industry standards for quality and reliability and have been performance-proven in a variety of applications ranging from municipal well systems or pressure boosting stations to sprinkler systems at your local golf course. A few examples are listed below:



- In a municipal well system or pressure boosting station, WELL-X-TROL®s are used to control sequential start of the main pumps. At the same time, it reduces surge and provides the jockey pump with guaranteed minimum run times during the peak demand periods.
- High-pressure booster applications in high-rise buildings, irrigation systems and community wells are ideally suited for the WELL-X-TROL® 400 Series. The 450 Series can be used on pressure regulation stations to provide dampening during periodic high peak loading.
- Many times, two model WELL-X-TROL®s can be used together on the same system. For example, on a golf course sprinkler system, a larger 450 Series protects and assures proper pump operation while a smaller 400 Series protects “dead end” lines from hammer and surge.

AMTROL ASME WELL-X-TROL® Benefits....

- Pump protection
 - Reduces surge
 - Dampens pressure spikes
 - Offers a point of pressure control
 - Provides minimum run-time
- Provides rapid system response and adequate protection at the end of long pipe runs.
- *Controls system shock and pressure fluctuations when your system utilizes:
 - Back flow preventors
 - Check valves
 - Solenoid
 - Mixing and meter valves
 - Pumps and other system controls

**Caution: Do not use for shock with flow velocities greater than 10 FPS (3.04 MPS).*



WELL-X-TROL® ASME Commercial/Industrial Water System Tanks

Features

- Designed, constructed and tested per ASME Code Section VIII, Division 1 standards.
- Most robust heavy-duty butyl bladder with 0.100" (2.54 mm) minimum thickness (WX-440-C/WX-450-C Series).
- Replaceable bladder design (WX-440-C/WX-450-C Series).
- Diaphragm and bladder NSF/ANSI 61 approved.
- Pre-pressurized, sealed-in air charge.
- Corrosion resistant virgin polypropylene liner (WX-400-C Series).

Superior Performance with AMTROL's Heavy-Duty Butyl Bladder

Bladder Cross-Section Comparison



AMTROL



Brand "X"



Brand "Y"

THICKER IS BETTER!

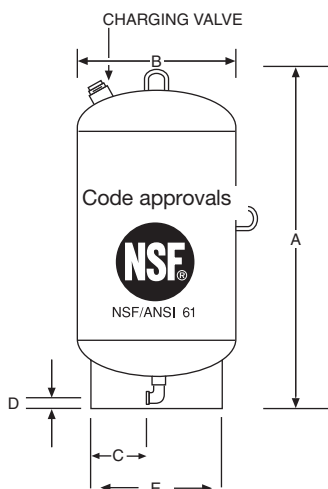
Maximum Operating Conditions

Working Pressure:	125 psig (8.8 bar)
	150 psig (10.5 bar)
	175 psig (12.3 bar)
	250 psig (17.6 bar)
Operating Temperature:	WX-400-C Series 200°F (93°C)
	WX-440-C/450-C Series 240°F (115°C)

Materials of Construction

Description	WX-400-C Series Standard Construction	WX-440-C/WX-450-C Series Standard Construction
Shell	Steel	Steel
Diaphragm	Heavy-Duty Butyl/EPDM NSF/ANSI 61	-
Bladder	-	Heavy-Duty Butyl NSF/ANSI 61
Liner	Polypropylene	-
Coating	Red Oxide Primer	Red Oxide Primer
System Connection	Malleable Iron (NPT)	Malleable Iron (NPTF)

WX-400-C Series (ASME)

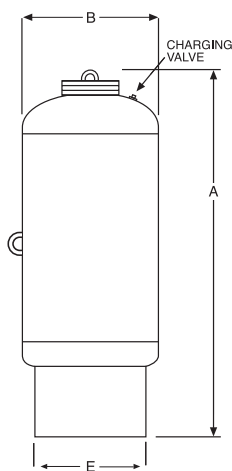


Model No.	Tank Vol.		Max. Accept.		A Height		B Diameter		C Conn.		D Inset		E Stand		Sys. Conn.
	Lit.	Gal.	Lit.	Gal.	mm	ins.	mm	ins.	mm	ins.	mm	ins.	mm	ins.	
WX-401-C	68	18	42.75	11¼	794	31¼	413	16¼	124	4⅞	38	1½	324	12¾	1
WX-402-C	95	25	42.75	11¼	1010	39¼	413	16¼	124	4⅞	38	1½	324	12¾	1
WX-403-C	129	34	42.75	11¼	1251	49¼	413	16¼	124	4⅞	38	1½	324	12¾	1
WX-404-C	258	68	129.20	34	1209	47⅝	610	24	159	6¼	41	1⅝	406	16	1¼
WX-405-C	341	90	129.20	34	1505	59¼	610	24	159	6¼	41	1⅝	406	16	1¼
WX-406-C	417	110	129.20	34	1778	70	610	24	159	6¼	41	1⅝	406	16	1¼
WX-407-C	500	132	174.80	46	1470	57⅞	762	30	254	10	44	1¾	610	24	1¼

All dimensions are approximate.

WELL-X-TROL® ASME Commercial/Industrial Water System Tanks

WX-440-C/460-C Series (ASME) 125 PSIG Working Pressure



Model No.	Tank Vol.		0 PSIG Acc. Vol.	Max. Recomm. Acc.Vol.		A Height		B Diameter		Sys. Conn.	C Conn. Inset	D Conn. Ctr.Line	E Stand Dia.	Ship Wt.	
	Lit.	Gal		Lit.	Gal	mm	ins.	mm	ins.					kg	lbs.
WX-447-C	200	53	53	129	34	1150	45 ¹ / ₄	610	24	2	2	3 ³ / ₄	19	120	263
WX-448-C	300	80	80	197	52	1502	59 ¹ / ₈	610	24	2	2	3 ³ / ₄	19	143	315
WX-449-C	400	106	106	261	69	1857	73 ¹ / ₈	610	24	2	2	3 ³ / ₄	19	145	319
WX-450-C	500	132	132	322	85	2200	86 ⁵ / ₈	610	24	2	2	3 ³ / ₄	19	159	351
WX-451-C	600	158	158	386	102	1867	73 ¹ / ₄	762	30	2	3 ¹ / ₂	5 ¹ / ₂	24	224	493
WX-452-C	800	211	211	519	137	2312	91	762	30	2	3 ¹ / ₂	5 ¹ / ₂	24	273	602
WX-453-C	1000	264	264	647	171	2184	86	914	36	3	4 ¹ / ₂	7	30	307	676
WX-454-C	1200	317	317	780	206	2489	98	914	36	3	4 ¹ / ₂	7	30	346	762
WX-455-C	1400	370	370	908	240	2804	110 ³ / ₈	914	36	3	4 ¹ / ₂	7	30	382	843
WX-456-C	1600	422	422	1037	274	2080	81 ⁷ / ₈	1220	48	3	7 ¹ / ₂	7 ⁷ / ₈	42	523	1154
WX-457-C	2000	528	528	1298	343	2470	97 ¹ / ₄	1220	48	3	7 ¹ / ₂	7 ⁷ / ₈	42	604	1331
WX-458-C	2498	660	660	1624	429	2134	84	1524	60	4	8	6	54	658	1450
WX-459-C	2998	792	792	1949	515	2438	96	1524	60	4	8	6	54	984	2169
WX-460-C	3501	925	925	2275	601	2718	107	1524	60	4	8	6	54	1043	2300
WX-461-C	3997	1056	1056	2596	686	2972	117	1524	60	4	8	6	54	1197	2638
WX-462-C	4996	1320	1320	3247	858	2743	108	1829	72	4	8	6	60	1588	3500
WX-463-C	7494	1980	1980	4871	1287	3556	140	1829	72	4	8	6	60	1860	4100

Maximum Operating Conditions

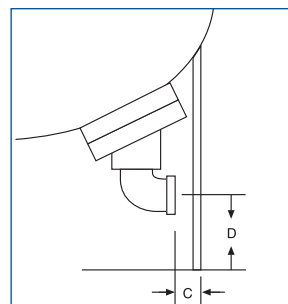
Operating Temperature	240° F (115° C)
Working Pressure	125 PSIG (8.8 bar)

Specifications

Description	Standard Construction
Shell	Steel
Bladder	Heavy Duty Butyl NSF/ANSI 61
Bladder Thickness	.100 Ins. Minimum
System Connection	Malleable Iron (NPTF)
Coating	Red Oxide Primer
Factory Precharge	25 PSIG (1.8 bar)

Constructed per ASME Code Section VIII, Division 1.
All dimensions and weights are approximate.

- For higher pressures please contact factory.
- Note: Allow 18" (460mm) minimum clearance.
- All dimensions are approximate.



WELL-X-TROL® ASME Commercial/Industrial Water System Tanks

Well-X-Trol Bottom Connection Bladder Series

The WELL-X-TROL WX Series vessels incorporate seamless bladder construction and contoured bladder design that ensures repeatable and predictable long-life expectancy. The WX partial acceptance bladder is designed to gently unfold to accept expansion fluids without stretching the bladder and causing undo stress. Made of heavy-duty butyl material they are designed and built to provide reliability, durability, and dependability you can count on.

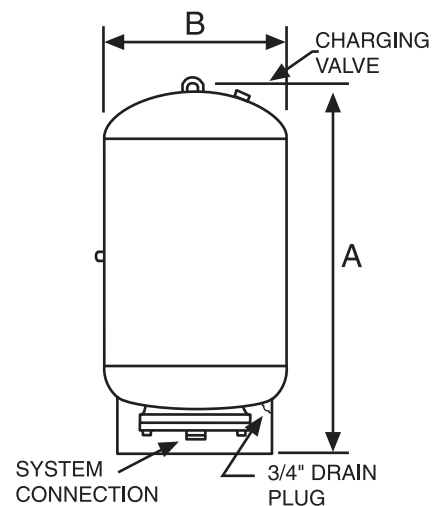
- Designed and constructed per ASME Section VIII, Division 1 standards
- Replaceable bladder design
- Stainless Steel system connection
- Available with optional seismic restraints and site glass

Maximum Operating Conditions

Maximum Working Pressure: 125 psig (8.8 bar)

Operating Temperature: 240°F (115°C)

*Model No.	Tank Volume		Accept Volume		A Height		B Diameter		Sys. Conn. ¹		Ship Weight	
	Lit.	Gal.	Lit.	Gal.	mm	ins.	mm	ins.	mm	ins.	kg	lbs.
WX-35-CL(L)	35	10	35	10	948	37 ¹ / ₁₆	254	10	32	1 ¹ / ₄	32	69
WX-50-CL(L)	50	13	40	11	941	37 ¹ / ₁₆	305	12	32	1 ¹ / ₄	35	76
WX-85-CL(L)	85	22	40	11	872	34 ⁵ / ₁₆	406	16	32	1 ¹ / ₄	42	92
WX-100-CL(L)	100	26	40	11	991	39	406	16	32	1 ¹ / ₄	45	98
WX-130-CL(L)	130	34	100	27	881	34 ¹ / ₁₆	508	20	38	1 ¹ / ₂	62	136
WX-165-CL(L)	165	44	100	27	1008	39 ¹ / ₁₆	508	20	38	1 ¹ / ₂	67	146
WX-200-CL(L)	200	53	100	27	1039	40 ⁷ / ₈	610	24	38	1 ¹ / ₂	91	198
WX-300-CL(L)	300	80	100	27	1423	56	610	24	38	1 ¹ / ₂	108	236
WX-400-CL(L)	400	106	200	53	1743	68 ⁵ / ₈	610	24	50	2	129	282
WX-500-CL(L)	500	132	200	53	2096	82 ¹ / ₂	610	24	50	2	144	316
WX-600-CL(L)	600	158	200	53	1702	67	762	30	50	2	206	450



¹System connection is NPTF

All dimensions and weights are approximate.

*Model No.: "CL" in code indicates ASME vessel. "L" in code indicates Non-ASME vessel.

WELL-X-TROL® ASME Commercial/Industrial Water System Tanks

“Typical Specification Water Systems ASME Vessels”

WX-400-C Series (Diaphragm type) & WX-440-C/WX-450-C (Bladder type)

The water system shall include a WELL-X-TROL®, diaphragm type/ bladder type pre-pressurized storage tank Model No. WX - _____ -C. Dimensions shall be as indicated on the drawings.

The storage tank shall be welded steel, constructed, tested and stamped in accordance with Section VIII, Division 1 of the ASME Code for a working pressure of (125 psig/8.8 bar) (150 psig/10.5 bar) (175 psig/12.3 bar) (250 psig/17.6 bar) (_____) and air pre-charged.

Use following paragraph for diaphragm type tank:

Each tank will have a heavy-duty butyl/EPDM diaphragm with code approvals NSF/ANSI 61. Each tank shall have a polypropylene liner.

Use following paragraph for bladder type tank:

Each tank will have a heavy-duty butyl bladder with code approvals NSF/ANSI 61. The bladder shall have a minimum thickness of 0.100 inches (2.54mm).

The tank shall be supported by steel legs or a base (integral ring mount) for a vertical installation. The vessel(s) shall be painted with one shop coat of red oxide primer.

The manufacturer shall be AMTROL Inc. The manufacturer shall have at least five years experience in the fabrication of diaphragm/bladder type ASME tanks.

*Refer to installation manual for warranty information or visit our website at www.amtrol.com



www.amtrol.com

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