



# THERMXTROL®

Commercial Thermal Expansion Tanks



3

Years

188

AntiLegionella™



Antimicrobial.



Turbulator.



DeepDrawn.



# THERMXTROL®

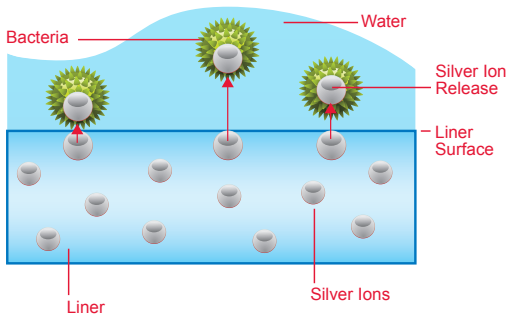
Amtrol thermal expansion tanks are engineered to control pressure build-up in closed, potable water systems. Available in diaphragm, full acceptance and partial acceptance bladder designs, all Therm-X-Trol expansion tanks are made at our ISO 9001:2015 certified facility. ASME tanks meet Section VIII, Division 1 Standards and have an industry leading 3-year warranty.

## Deep Drawn Construction

- Deep drawing doubles dome strength.
- Requires half the welds vs. head & shell.
- Integral diaphragm design features a unique hoop ring and groove configuration that securely locks together the diaphragm, liner and domes.
- Small footprint fits tight mechanical rooms.
- End-mounted charging valve for easy air adjustments on in-line models.

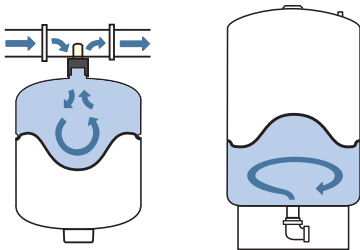
## Patented Anti-Legionella Liner

- Safe, Silver-Ion technology targets active microorganisms to neutralize bacteria on contact.
- Compound is molded into the liner.
- Protection lasts the life of the tank.



## Patented Fresh Water Turbulator®

- Agitates incoming water to remove debris.
- Helps extend the life of the tank.
- Eliminates stagnant water in VFD Systems.

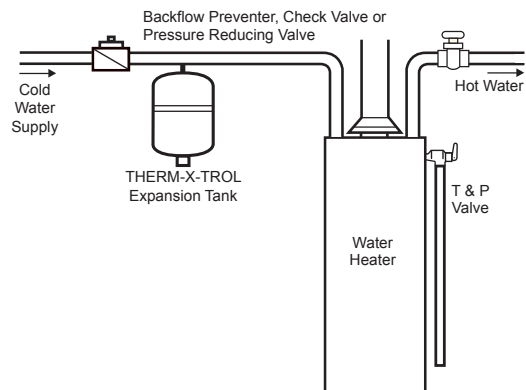


**188**  
AntiLegionella. Antimicrobial. Turbulator.

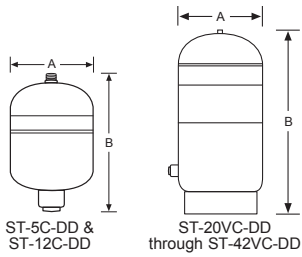
- Patented Fresh Water Turbulator®
- High-Grade Stainless Steel Connector
- Deep Drawn Steel Domes
- Patented Anti-Legionella Liner
- Grooved Diaphragm Hoop Ring for a permanent seal
- Butyl Diaphragm for extra long life
- Diaphragm meets NSF/ANSI 61 standards; NAF compliant
- Small Footprint Fits Tight Mechanical Rooms



## Typical Installation



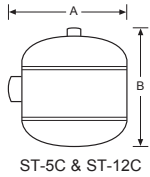
# ASME Thermal Expansion Tanks



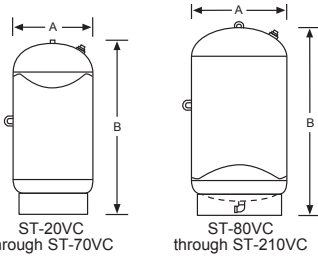
## ASME Deep Drawn Diaphragm Series Specifications

Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Conn. <sup>1</sup> (Inches)	Shipping Weight (lbs.) Max. Working Pressure			
						150 PSI	175 PSI	250 PSI	300 PSI
ST-5C-DD	2.0	0.9	8	14	3/4 NPTM	10	12	-	-
ST-12C-DD	6.4	3.2	12	18	3/4 NPTM	17	19	-	-
ST-20VC-DD	8.6	3.2	12	22	3/4 NPTM	36	38	-	-
ST-30VC-DD	16.6	11.3	15	25	3/4 NPTM	48	-	-	-
ST-42VC-DD	23.2	11.3	15	33	3/4 NPTM	68	-	-	-

<sup>1</sup>Stainless Steel System Connection. Maximum Operating Temperature: 200°F. Factory Pre-charge: 55 PSIG.



ST-5C & ST-12C



ST-20VC through ST-70VC  
ST-80VC through ST-210VC

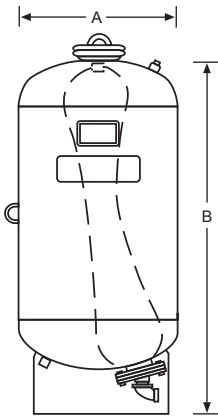
Anti- Legionella Liner & Fresh Water Turbulator featured in all diaphragm tank models.

## ASME Head & Shell Diaphragm Series Specifications

Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Conn. <sup>1</sup> (Inches)	Shipping Weight (lbs.) Max. Working Pressure			
						150 PSI	175 PSI	250 PSI	300 PSI
ST-5C	2.1	0.9	10	10	3/4 NPTF	-	-	25	30
ST-12C	6.4	3.2	12	14	3/4 NPTF	-	-	42	50
ST-20VC	8.0	3.2	12	19	3/4 NPTF	-	-	50	62
ST-30VC	14.0	9.0	16	19	3/4 NPTF	-	64	96	108
ST-42VC	18.0	11.0	16	24	3/4 NPTF	-	75	101	112
ST-60VC	25.0	11.0	16	32	3/4 NPTF	85	113	125	139
ST-70VC	34.0	11.0	16	45	3/4 NPTF	99	122	136	151
ST-80VC	53.0	35.0	24	37	1 1/4 NPTF	224	296	305	340
ST-120VC	68.0	35.0	24	44	1 1/4 NPTF	266	340	375	400
ST-180VC	77.0	35.0	24	49	1 1/4 NPTF	285	360	380	420
ST-210VC	90.0	35.0	24	57	1 1/4 NPTF	319	380	405	440

<sup>1</sup>Stainless Steel System Connection. Maximum Operating Temperature: 200°F. Factory Pre-charge: 55 PSIG.

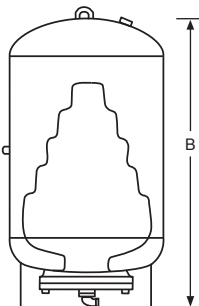
## ASME Full Acceptance Bladder Series Specifications



Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Conn. <sup>1</sup> NPTF (Inches)	Shipping Weight (lbs.) Max. Working Pressure				
						125 PSI	150 PSI	175 PSI	250 PSI	300 PSI
ST-447C	53	53	24	45	2	236	262	290	370	425
ST-448C	80	80	24	59	2	274	340	430	492	540
ST-449C	106	106	24	73	2	320	360	450	510	560
ST-450C	132	132	24	87	2	354	400	460	570	632
ST-451C	158	158	30	73	2	494	587	680	815	895
ST-452C	211	211	30	91	2	593	625	699	1,005	1,107
ST-453C	264	264	36	86	3	667	760	845	1,100	1,205
ST-454C	317	317	36	98	3	762	850	960	1,265	1,400
ST-455C	370	370	36	110	3	842	935	1,065	1,350	1,490
ST-456C	422	422	48	82	3	1,152	1,423	1,650	1,660	1,830
ST-457C	528	528	48	97	3	1,335	1,505	1,875	2,230	2,455

<sup>1</sup>Bronze System Connection. Maximum Operating Temperature: 240°F. Factory Pre-charge: 25 PSIG.

## ASME Partial Acceptance Bladder Series Specifications



Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Conn. <sup>1</sup> NPTF (Inches)	Shipping Weight (lbs.) Max. Working Pressure
						150 PSI
ST-35CL	10	10	10	37	1	76
ST-50CL	13	11	12	37	1	78
ST-85CL	22	11	16	35	1	95
ST-100CL	26	11	16	39	1	102
ST-130CL	34	27	20	35	1	134
ST-165CL	44	27	20	40	1	153
ST-200CL	53	27	24	41	1	205
ST-300CL	80	27	24	56	1	254
ST-400CL	106	53	24	69	1	308
ST-500CL	132	53	24	83	1	352
ST-600CL	158	53	30	67	1	442

<sup>1</sup>Stainless Steel System Connection. Maximum Operating Temperature: 240°F. Factory Pre-charge: 25 PSIG.

Visit [amtrol.com](http://amtrol.com) for sizing information.





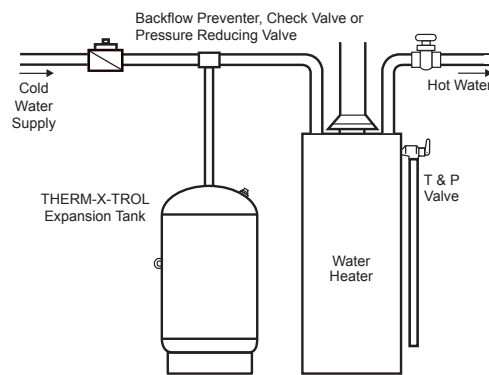
# Head & Shell Construction Tanks



## Diaphragm Models ST-60VC through ST-210VC

- Head and shell design with internal diaphragm tank(s).
- Anti-Legionella liner neutralizes bacteria on contact.
- Tested to JIS Z 2801 for reduction of Legionella, staphylococcus and E. coli.
- Follows ASHRAE 188 Anti-Legionella guidelines.
- Diaphragm meets NSF/ANSI 61 standards; NAF compliant.

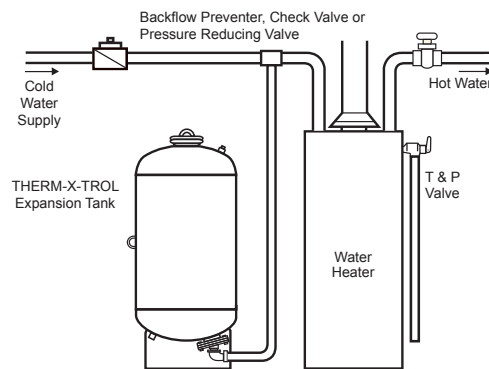
### Typical Installation



## Bladder Models ST-440/450 & ST-CL/L Series

- Industry's thickest butyl bladder.
- Replaceable bladder avoids costly tank replacement.
- Full and partial acceptance models available.
- Full acceptance bladder meets NSF/ANSI 61 standards; NAF compliant.

### Typical Installation



1400 Division Road, West Warwick, RI 02893 USA  
T: 800.426.8765 www.amtrol.com

