

Application

Designed for installation on hot water systems to protect against thermal expansion. All WTTA tanks are ASME fixed bladder type for commercial and industrial applications. When system pressure increases due to thermal expansion, water enters the tank's bladder which expands into the pre-charge air chamber, keeping system pressure below the relief valve setting. Conforms to all lead-free requirements and acceptable for use on drinking water systems.



Standards Compliance

- ASME Section VIII

Materials

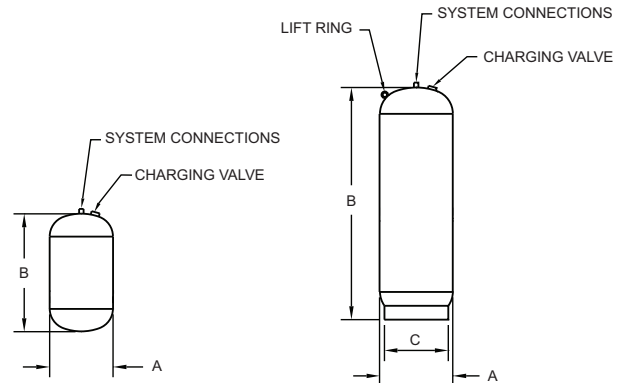
Outer shell	Carbon Steel
System Connection	Stainless Steel
Bladder	Butyl Rubber (FDA approved)

Accessories

- NR3XL - water pressure reducing valve
- TP1100A - temperature & pressure relief valve
- P1000AXL - pressure relief valve
- P3000CI - pressure relief valve
- P3000BR - pressure relief valve
- 375XL - reduced pressure backflow preventer

Features

Maximum working water pressure:	150PSI
Maximum working water temperature	240°F
End connections	Threaded NPT ANSI B1.20.1 40 PSI
Factory Pre-charge (adjustable)	40 PSI



MODELS
WTTA-5 thru WTTA-12

MODELS
WTTA-20 thru WTTA-210

Dimensions & Weights (do not include pkg.)

TANK SPECIFICATIONS									
MODEL NUMBER	MAXIMUM WORKING PRESSURE	TOTAL VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	FACTORY PRE-CHARGE (PSI)	DIMENSIONS (INCHES)				
					"A" DIA.	"B" HEIGHT	"C" DIA.	SYSTEM CONN.	WEIGHT (LBS)
WTTA-5	150 PSIG	3.5	2.3	40	10	14	-	3/4" FNPT	22
WTTA-12	150 PSIG	5	3.3	40	12	14	-	3/4" FNPT	28
WTTA-20	150 PSIG	8	5.3	40	12	20	10	3/4" FNPT	34
WTTA-30	150 PSIG	15	10.0	40	16	24	14	1" FNPT	64
WTTA-42	150 PSIG	22	14.5	40	16	31	14	1" FNPT	88
WTTA-60	150 PSIG	26	17.5	40	16	34	14	1" FNPT	93
WTTA-80	150 PSIG	35	23.5	40	16	45	14	1" FNPT	109
WTTA-100	150 PSIG	45	30.0	40	20	39	18	1" FNPT	148
WTTA-125	150 PSIG	60	40.0	40	20	50	18	1" FNPT	175
WTTA-160	150 PSIG	70	47	40	24	47	22	1 1/2" FNPT	259
WTTA-180	150 PSIG	80	53	40	24	50	22	1 1/2" FNPT	268
WTTA-210	150 PSIG	90	60	40	24	53	22	1 1/2" FNPT	283

Sizing Chart

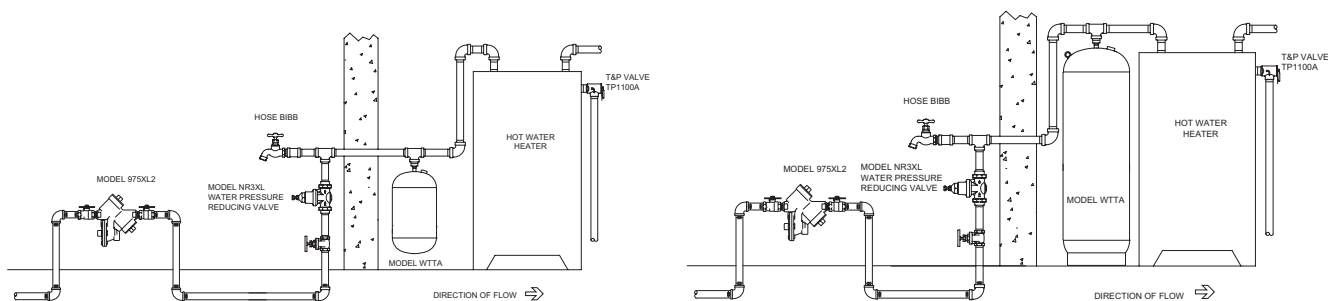
SUPPLY PRESSURE (PSIG)	TOTAL WATER HEATED (U.S. GAL)										
	20	30	40	50	60	80	100	120	150	175	200
40	WTTA-5	5	5	5	5	5	5	5	12	12	12
50	5	5	5	5	5	5	5	5	12	12	20
55	5	5	5	5	5	5	5	5	12	12	20
60	5	5	5	5	5	5	5	12	12	20	20
70	5	5	5	5	5	5	5	12	20	20	20
80	5	5	5	5	5	5	12	12	20	20	30
90	5	5	5	5	5	12	12	20	20	30	30
100	5	5	5	5	12	20	20	20	30	30	30
110	5	5	12	12	20	20	30	30	30	42	42

SUPPLY PRESSURE (PSIG)	TOTAL WATER HEATED (U.S. GAL)										
	240	260	280	300	350	400	450	500	600	800	1000
40	20	20	20	20	30	30	30	30	30	42	60
50	20	20	20	20	30	30	30	30	42	42	80
55	20	20	20	30	30	30	30	30	42	60	80
60	20	20	30	30	30	30	30	30	42	60	80
70	30	30	30	30	30	30	42	42	42	80	80
80	30	30	30	30	30	42	42	42	60	80	100
90	30	30	30	30	42	42	60	60	80	100	125
100	42	42	42	42	60	60	80	80	100	125	160
110	42	60	60	80	80	100	100	100	125	180	WTTA-210

Tank pressurized to match water inlet pressure.
 Sizing for heating from 40°F to 140°F
 Maximum pressure 135 psi

Typical Installation

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted at least 18" from the cold water inlet to the heater. NOTE: Pre-charge should be adjusted to match incoming water pressure after installation (adjust pre-charge with no water pressure in tank).



Specifications

The Water Thermal Expansion Tank shall be constructed in accordance with Section VIII of the ASME Boiler and Pressure Vessel Code. The outer shell shall be carbon steel. The bladder shall be FDA approved butyl rubber and prevent water from contact with shell interior. The assembly shall have a top NPT stainless steel system connection and a 0.301"-32 charging valve connection (standard tire valve) to facilitate the on-site charging of the tank to meet system requirements. The Water Thermal Expansion Tank shall be a ZURN WILKINS Model WTTE.