ThermoWave™ SERIES

FEATURES

- High grade butyl diaphragm
- Virgin polypropylene liner
- Two part polyurethane, epoxy primed paint finish
- Patented stainless steel water connection
- Leak free, o-ring sealed air valve cap
- Comprehensive testing
- Maintenance free

ThermoWave™ expansion tanks are specially designed for use in potable water heating applications.

Many homes and buildings have potable water heating systems to provide hot water for washing, cooking, showering, etc. As the water is heated it also expands. This expansion leads to increased system pressure and can cause serious damage. In most systems a relief valve is installed to vent the expanded water volume and prevent the system from exceeding maximum operating pressure. Unfortunately this creates wasted energy as hot water is vented and additional water must be filled and heated again. In order to safely accommodate the natural expansion of water without venting from a relief valve, a ThermoWave™ expansion tank is used. ThermoWave™ expansion tanks conserve water and energy while safely maintaining system operating pressures. They do so by temporarily absorbing the expanded water volume instead of allowing it to be vented out of a relief valve. And because ThermoWave™ expansion tanks use water chambers constructed from high grade butyl diaphragms and virgin polypropylene liners they ensure your potable water remains clean and safe.

ThermoWave™ expansion tanks are quality tested at several stages on the production line to ensure the structural integrity of every tank.

ThermoWave™ expansion tanks represent the best value for the investment and are the best quality expansion tanks available today.

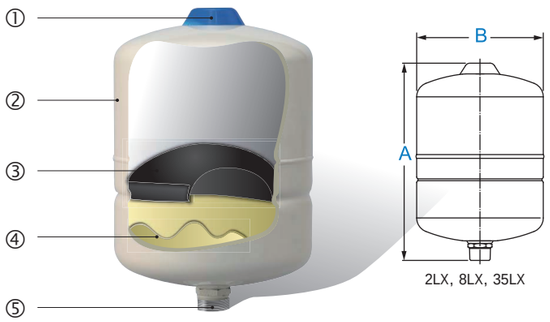
SPECIFICATIONS

ThermoWave™ Series Models

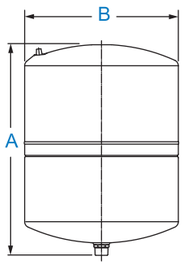
Model Numbers	Nominal Volume		Shipping (box) Volume		Shipping (box) Weight		Dimensions A		Dimensions B		Dimensions C	
	liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches
Inline Models												
TWB-2LX*	2	0.5	0.055	1.94	12.80	28.22	20.6	8.1	12.6	5.0		
TWB-4LX	4	1.1	0.0075	0.26	1.64	3.62	25.33	10.16	16.20	6.40		
TWB-8LX	8	2.1	0.014	0.49	2.26	4.98	31.00	12.20	20.20	7.95		
TWB-12LX	12	3.2	0.023	0.81	3.08	6.79	36.40	14.33	23.00	9.06		
TWB-18LX	18	4.8	0.029	1.02	3.92	8.64	36.40	14.33	27.90	11.20		
TWB-24LX	24	6	0.042	1.48	4.90	10.80	44.40	17.48	29.00	11.42		
TWB-35LX	35	9.2	0.058	2.05	6.93	15.28	47.80	18.90	31.80	12.52		
Horizontal Models												
TWB-20LH	20	5.3	0.042	1.48	5.20	11.46	44.40	17.48	27.70	10.91	14.50	5.71
TWB-24LH	24	6	0.047	1.66	5.90	13.01	44.40	17.48	30.60	12.05	16.10	6.40
TWB-35LH	35	9.2	0.058	2.05	6.90	15.21	47.80	18.81	33.80	13.31	17.90	7.05
TWB-60LH	60	14	0.08	2.83	11.50	25.35	52.70	20.74	40.90	16.10	21.50	8.46
Vertical Models w/ base												
TWB-60LV	60	14	0.08	2.83	11.28	24.87	62.00	24.41	38.90	15.31	16.00	6.30

System Connection: 3/4" BSP
Maximum Working Pressure: 10 bar / 150 psi
Factory pre-charge: 1.9 bar / 28 psi
Maximum Working Temperature: 90°C / 194°F
* TWB-2LX: 12 pcs/ box

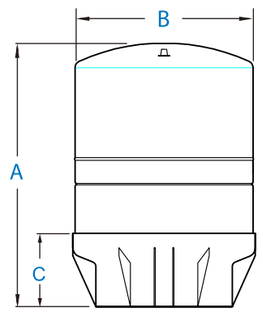
Note: Minor dimensional variation may occur



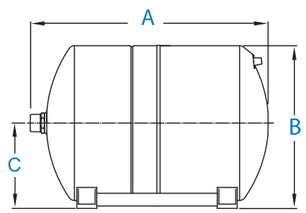
2LX, 8LX, 35LX



12LX, 18LX, 24LX



60V



20LH - 60LH

① Leak-free O-ring sealed air valve cap
② Two-part polyurethane epoxy primed paint finish
③ High grade butyl diaphragm
④ Virgin Polypropylene Liner
⑤ Patented stainless steel water connection

ISO:9001 CE ACS Approved WRAS APPROVED PRODUCT

HeatWave™ SERIES

FEATURES

- High grade butyl diaphragm
- Two part polyurethane, epoxy primed paint finish
- Leak free, o-ring sealed air valve cap
- Comprehensive testing
- ISO:9001, GOST, CE/PED approved

HeatWave™ tanks are the quality solution for hydronic expansion. HeatWave™ tanks are built to the same stringent standards as the PressureWave™ and Challenger™ tanks.

With an incorporated hex nut system connection, HeatWave™ tanks are easy to install. Its air chamber sealed with a brass air valve and o-ring sealed air cap will provide many years of leak free and service free life. Its two part polyurethane, epoxy primed paint finish will withstand the harshest indoor and outdoor climates throughout the world. HeatWave™ tanks are quality tested at several stages on the production line to insure the structural integrity of every tank.

The HeatWave™ expansion tank is designed to be either supported by the system piping, the wall mounting bracket (inline models) or freestanding (vertical models w/ base).

The expansion tank, pipes and your connections if installed incorrectly could leak water. Install the expansion tank in a location where any water leak will not cause damage. The manufacturer is not responsible for any water damage in connection with this expansion tank.

SPECIFICATIONS

HeatWave™ Series Models

Model Numbers	Nominal Volume		Shipping (box) Volume		Shipping (box) Weight		Dimensions					
							A		B		C	
	liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches
Inline Models												
HWB-2LX*	2	0.5	0.055	1.94	12.39	27.31	20.55	8.09	12.60	4.96		
HWB-4LX	4	1.1	0.01	0.35	1.62	3.57	26.05	10.26	16.2	6.38		
HWB-8LX	8	2.1	0.016	0.57	2.00	4.41	30.95	12.18	20.20	7.95		
HWB-12LX	12	3.2	0.023	0.81	2.70	5.95	36.40	14.33	23.00	9.06		
HWB-18LX	18	4.8	0.029	1.02	3.40	7.50	36.40	14.45	27.90	11.20		
HWB-24LX	24	6	0.042	1.48	4.30	9.48	44.40	17.48	29.00	11.42		
HWB-35LX	35	9.2	0.058	2.05	6.66	14.68	47.80	18.82	31.80	12.50		
Vetical Models w/ base												
HWB-60LV	60	14	0.102	3.60	10.26	22.62	57.60	22.68	38.90	15.31	16.00	6.30
HWB-80LV	80	20	0.134	4.73	14.02	30.91	77.10	30.35	38.90	15.31	16.00	6.30
HWB-100LV	100	26.4	0.168	5.93	18.77	41.38	80.40	31.65	43.00	16.90	12.90	5.08
HWB-130LV	130	34.3	0.21	7.41	26.70	58.86	107.40	42.28	43.00	16.90	12.90	5.08
HWB-150LV	150	40	0.28	9.89	33.30	73.41	92.80	36.54	53.00	20.87	13.85	5.45

Factory pre-charge: HWB-2LX - HWB-24LX 0.7 bar/ 10 psi ; HWB-35LX 1 bar/15 psi ;
HWB-60LV-HWB-150LV 1.5 bar/ 22 psi

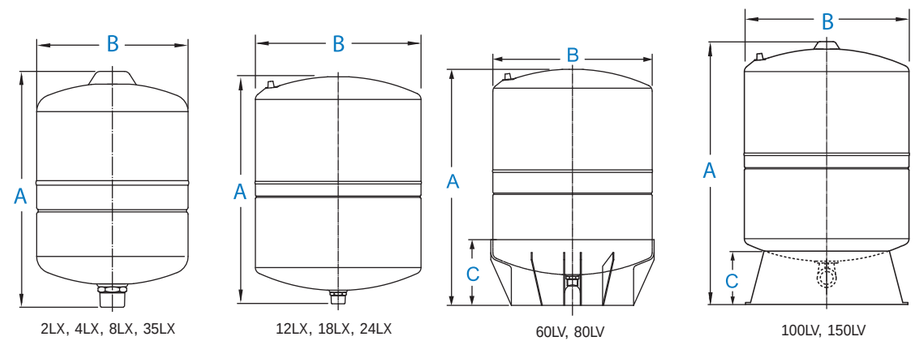
Note: Minor dimensional variation may occur

Maximum Working Temperature: 99°C / 210°F

Maximum working pressure 6 bar / 87 psi

System Connection: HWB-2LX – HWB-80LV chromed carbon steel 3/4" BSP inline ; HWB-100LV – HWB-150LV stainless steel 1" BSP Elbow

* HWB-2LX: 12 pcs / box



HeatWave tanks are restricted for use in closed loop non potable hot water systems only.
Corrosion inhibitors such as propylene glycol can be used in mixture concentrations up to 50%.
Ethylene glycols should be avoided at all cost.

ISO:9001 CE

SolarWave™ SERIES

FEATURES

- ○ High temperature butyl diaphragm
- ○ High expansion volume factor
- ○ Two part polyurethane, epoxy primed paint finish
- ○ Leak free o-ring sealed air valve cap
- ○ Comprehensive testing
- ○ No maintenance

If you are looking for the proven performance of a GWS tank, SolarWave™ expansion tanks are the quality solution for your solar system. SolarWave™ expansion tanks are designed to control the expansion and contraction of solar thermal transfer fluids in solar heating Systems. The SolarWave™ Series is intended for use on the solar liquid loop of indirect thermal transfer systems.

SolarWave™tanks are built to the same stringent standards as PressureWave™ and Challenger™ tanks. They meet the demands of solar collector systems for both thermal expansion and contraction in order to maintain safe and efficient operating pressures within the solar liquid system.

A properly sized SolarWave™ tank will eliminate the need for recharging the system after periods of no use or in cases of extreme temperature buildup. It will eliminate relief valve release of system liquid and maintain minimum operating pressures throughout the system.

SolarWave™ Series expansion tanks have a large acceptance volume making them ideal for expansion and contraction control of solar collector systems which operate under a wide range of pressure and temperature.

SolarWave™ tanks are quality tested at several stages on the production line to insure the structural integrity of every tank.
SolarWave™ tanks represent the best value for the investment and are the best quality solar expansion vessels available today.

SPECIFICATIONS

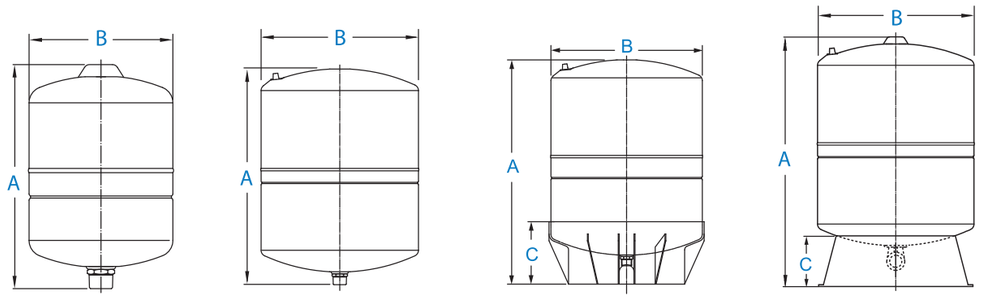
SolarWave™ Series Models

Model Numbers	Nominal Volume		Shipping (box) Volume		Shipping (box) Weight		Dimensions					
							A		B		C	
	liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches
SWB-2LX*	2	0.53	0.055	1.94	12.39	27.31	20.55	8.09	12.60	4.96		
SWB-8LX	8	2.1	0.016	0.57	2.17	4.78	30.95	12.19	20.20	7.95		
SWB-12LX	12	3.2	0.023	0.81	2.87	6.33	36.40	14.33	23.00	9.06		
SWB-18LX	18	4.8	0.029	1.02	3.80	8.38	36.40	14.33	27.90	10.98		
SWB-24LX	24	6	0.042	1.48	5.04	11.11	44.40	17.48	29.00	11.42		
SWB-35LX	35	9.2	0.058	2.05	6.64	14.64	47.80	18.82	31.80	12.50		
SWB-60LV	60	14	0.102	3.60	10.80	23.81	57.60	22.68	38.90	15.31	16.00	6.30
SWB-80LV	80	20	0.134	4.73	14.02	41.38	77.10	30.35	38.90	15.31	16.00	6.30
SWB-100LV	100	26.4	0.168	5.93	18.77	41.38	80.40	31.65	43.00	16.90	12.90	5.08
SWB-130LV	130	34.3	0.21	7.41	26.78	59.04	107.40	42.28	43.00	16.90	12.90	5.08
SWB-150LV	150	40	0.21	7.41	34.97	77.10	93.80	36.93	53.00	20.87	12.90	5.08

Maximum system temperature: 130°C / 266°F
Maximum working pressure: 10 bar / 150 psi
System connection: SWB-2LX – SWB-80LV stainless steel 3/4" BSP inline ; SWB-100LV – SWB-150LV stainless steel 1" BSP Elbow
Factory pre-charge: 1.9 bar / 28 psi
* SWB-2LX and SWN-2LX: 12 pcs/ box

Note: Minor dimensional variation may occur

Above 150 liter use Challenger™ Series tanks



2LX, 8LX, 35LX | 12LX, 18LX, 24LX | 60LV, 80LV | 100LV, 150LV

If the temperature of the solar system has the potential to rise above the evaporation point of the solar liquid a condenser chamber or coil is required between the solar collector and SolarWave™ Series expansion tank in order to control the maximum fluid temperature at the SolarWave™ tank.

SolarWave tanks are restricted for use in closed loop indirect solar hot water systems only.
Corrosion inhibitors such as propylene glycol can be used in mixture concentrations up to 50%.
Ethylene glycols should be avoided at all cost.

ISO:9001 CE