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# globalwater solutions ltd.

World's Highest Quality **Pressure Tank** 



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# **GLOBAL WATER SOLUTIONS LTD.** OFFERS A COMPREHENSIVE AND WIDE RANGE OF PRESSURE VESSELS

for heating, thermal, pressure booster, water hammer, reverse osmosis and water well applications.



Warehouses
GWS Offices
GWS Manufacturing Facilities
Contract Manufacturing

GLOBAL WATER SOLUTIONS LTD. products are available in 100 countries worldwide covering Central and South America, Europe, The Middle East, Africa, Australia, New Zealand and Asia. GWS is a member of the Swan Group.

# GLOBAL WATER SOLUTIONS LTD.'S

unique product offering includes both its patent protected CAD-2 diaphragm tanks as well as its line of single diaphragm tanks with a patented water connection and now also a series with replaceable tiered membrane design. This combination provides GLOBAL WATER SOLUTIONS LTD. customers with flexibility in selecting products for specific applications. All our products undergo a series of tests to insure the excellent quality. Beyond that, we offer our customers an extensive warranty.



approvals from WRAS, NSF, PED, ACS and other country specific approvals.



GLOBAL WATER SOLUTIONS LTD. is also on the forefront of international regulatory issues with

# **Product Applications**

Our wide product range offers a full-line of pressure vessels for different applications, pressure vessels in sizes from 0.16-10,000 liters and in 10, 16 and 25 bar pressure ratings are available to accommodate all your requirements.

○ PressureWave<sup>™</sup>, Challenger<sup>™</sup>, SuperFlow<sup>™</sup> & C2Lite<sup>™</sup>, FlowThru<sup>™</sup> Series Booster systems, water well systems, sprinklers, HVAC, thermal expansion, irrigation systems, water

hammer arresting.

- **HeatWave™ Series** Hydronic expansion, boiler systems.
- **SolarWave<sup>™</sup> Series** Closed loop solar systems, solar hot water expansion.
- O ThermoWave<sup>™</sup> Series

Potable Water Heating Applications.

- **Ultra(Max)<sup>™</sup> Series** High pressure applications (16 and 25 bar).
- O M-Inox<sup>™</sup> Series Stainless steel tanks ideally suited for special demands and environments.
- **HydroGuard™ Series** Water hammer arresting, plumbing applications.

# **Energy Saving Solutions**

### Oversize your pressure tank and get the following benefits:

- Substantially reduce electric power consumption by reducing small draw off pump starts, i.e., evaporative coolers, toilet flushes, leaks, drip irrigation, etc.
- O Extend pump life by dramatically reducing wear on moving parts
- O Protect against heat expansion damage to pump bodies
- Reduce noise from unnecessary pump starts
- O Eliminate motor burn outs and low flow cycling
- O Eliminate pump body failures due to water hammer

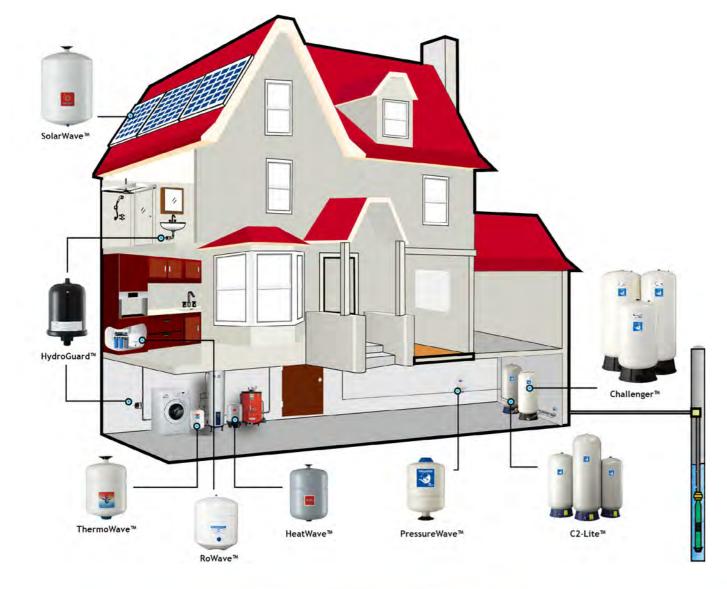


### Minimize your environmental footprint.



All this with a tank that...

... requires NO maintenance (does not require regular air charge checks) and ... has the longest warranty for guaranteed reliability.



# **PressureWave<sup>™</sup> SERIES** SPECIFICATIONS PressureWave<sup>™</sup> Series Models



# **FEATURES**

○ Single diaphragm design

- NSF Standard 61, CE/PED, WRAS, ACS, ISO:9001 approved
- Patented stainless steel water connection
- Virgin polypropylene liner

- Two part polyurethane, epoxy primed paint finish
- Leak free, o-ring sealed air valve cap
- Comprehensive testing
- No maintenance

PressureWave<sup>™</sup> tanks are ideally suited for a wide range of applications, including booster systems, thermal expansion, irrigation systems, and hydraulic hammer arresting.

The PressureWave<sup>™</sup> Series is constructed of a virgin polypropylene liner combined with an FDA approved high grade butyl diaphragm. This is held against the wall of the tank with a steel clench ring. The brass air valve, sealed by a threaded o-ring valve cap, prevents air leaks. Water enters the tank through a patented stainless steel water connection. The diaphragm and liner are both reinforced in specific wear areas for longer life. All internal parts including the air valve are rounded to prevent piercing of the diaphragm in extreme conditions. The water connection uniquely provides a dual water/air seal ensuring a complete leak free and maintenance free pressure vessel.

On the exterior the almond colored two-part polyurethane paint finish over an epoxy undercoating provides hundreds of hours of UV and salt spray protection.

PressureWave<sup>™</sup> tanks are quality tested at several stages on the production line to insure the structural integrity of every tank.

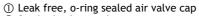
PressureWave<sup>™</sup> tanks represent the best value for the investment and are the best guality pressure vessels available today.

BSP	NPT		inal	Ship (bo		Shippin	g (box)			Dime	nsions		
		Voll	ıme	Volu	ime	We	ight		4		В		С
		liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inche
Inline Mo	dels												
PWB-2LX*	PWN-2LX*	2	0.5	0.06	2.12	13.60	29.98	20.90	8.23	12.60	4.96		
PWB-4LX	PWN-4LX	4	1.1	0.01	0.35	1.74	3.84	26.10	10.28	16.20	6.38		
PWB-8LX	PWN-8LX	8	2.1	0.014	0.49	2.47	5.45	31.56	12.32	20.20	7.95		
PWB-12LX	PWN-12LX	12	3.2	0.023	0.81	3.21	7.08	36.70	14.45	23.00	9.06		
PWB-18LX	PWN-18LX	18	4.8	0.03	1.06	4.07	8.97	36.70	14.45	27.90	10.98		
PWB-24LX	PWN-24LX	24	6.3	0.042	1.48	5.52	12.17	44.70	17.60	29.00	11.42		
PWB-35LX	PWN-35LX	35	9.3	0.056	1.98	7.28	16.05	48.10	18.90	31.80	12.52		
Horizonta	al Models												
PWB-8LH	PWN-8LH	8	2.1	0.013	0.46	2.46	5.42	31.30	12.32	23.20	9.13	11.60	4.57
PWB-12LH	PWN-12LH	12	3.2	0.024	0.85	3.56	7.84	36.70	14.45	26.00	10.24	13.25	5.12
PWB-20LH	PWN-20LH	20	5.3	0.04	1.41	4.99	11.00	44.70	17.60	29.20	11.57	14.50	5.79
PWB-24LH	PWN-24LH	24	6.3	0.047	1.65	6.00	13.23	44.70	17.60	32.10	12.64	16.10	6.34
PWB-35LH	PWN-35LH	35	9.3	0.061	2.15	7.80	17.20	48.10	18.94	35.30	13.90	17.90	7.05
PWB-60LH	PWN-60LH	60	15.9	0.09	3.18	11.51	25.37	53.00	20.87	42.40	16.69	21.50	8.46
PWB-80LH	PWN-80LH	80	21.1	0.13	4.59	16.22	35.76	72.60	28.58	42.40	16.69	21.50	8.46
PWB-100LH	PWN-100LH	100	26.4	0.16	5.65	19.84	43.74	72.00	28.35	47.50	18.70	24.50	9.65
Vertical M	Nodels w/ ba	ase											
PWB-35LV	PWN-35LV	35	9.3	0.063	2.22	7.70	16.98	55.50	21.85	31.80	12.52	12.00	4.72
PWB-60LV	PWN-60LV	60	15.9	0.098	3.46	11.28	24.87	62.00	24.41	38.90	15.31	12.70	5.00
PWB-80LV	PWN-80LV	80	21.1	0.13	4.59	16.24	35.80	81.50	32.09	38.90	15.31	12.70	5.00
PWB-100LV	PWN-100LV	100	26.4	0.16	5.65	19.72	43.47	80.40	31.65	43.00	16.93	12.90	5.08
PWB-130LV	PWN-130LV	130	34.3	0.21	7.42	26.65	58.75	107.40	42.28	43.00	16.93	12.90	5.08
PWB-150LV	PWN-150LV	150	40.0	0.28	9.89	34.63	76.30	93.80	36.38	53.00	20.87	13.85	5.45

Standard System Connection: 1

All connections are stainless steel unless stated otherwise. Tank precharge: 1.9 bar / 28 psi Maximum Working Pressure: 10 bar / 150 psi Maximum Working Temperature: 90°C / 194°F Available in 16 and 25 bar as Max<sup>™</sup> and UltraMax<sup>™</sup> Series Available in smaller sizes as HvdroGuard<sup>™</sup> Series \* PWB-2LX and PWN-2LX: 12 pcs/ box





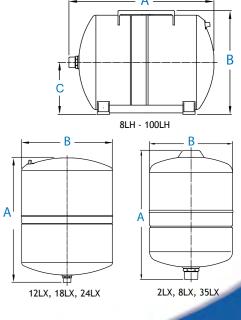
② Single diaphragm design

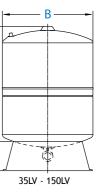
- ③ Two part polyurethane, epoxy primed paint finish
- ④ Nylon Plastic Pump Stand
- (5) Virgin polypropylene liner
- 6 Patented stainless steel water connection
- ⑦ Plastic Tank Feet





Note: Minor dimensional variation may occur





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PressureWave<sup>™</sup> 6

# HydroGuard<sup>™</sup> SERIES SPECIFICATIONS



NPT	BSP	Connection	Norr Volu	ninal		ping ox)	Pieces	Ship (bo	ping ox)		Dimer	sions	
			VOIL	ime	Volu	ume	per box	Wei	ight	ļ	<b>\</b>	E	3
			liter	gal	m³	ft³		kg	lbs	cm	inches	cm	inches
HGNSA-0.16LX	HGNSA-0.16LX	1/2" SS	0.16	0.04	0.05	1.67	24	8.32	18.34	11.30	4.45	8.50	3.40
HGBSC-0.3LX	HGBSC-0.3LX	1/2" Noryl	0.3	0.08	0.05	1.67	40	16.58	36.55	10.35	4.07	9.70	3.80
HGBSC-0.5LX	HGBSC-0.5LX	1/2" Noryl	0.5	0.13	0.06	1.97	24	15.71	34.63	13.50	5.31	10.50	4.13
HGBSD-0.6LX	HGBSD-0.6LX	1/2" Noryl	0.6	0.16	0.04	1.24	20	11.68	25.75	15.85	6.24	8.90	3.50
HGPSO-1LX	HGPSO-1LX	1/2" Nylon	1	0.26	0.05	1.67	15	12.15	26.79	14.35	5.65	12.78	5.03
HGPSR-1LX	HGPSR-1LX	1/2" SS	1	0.26	0.07	2.42	20	18.42	40.61	14.35	5.65	12.78	5.03
HGPSO-2LX	HGPSO-2LX	3/4" Nylon	2	0.5	0.07	2.42	12	15.87	34.99	15.83	6.23	16.30	6.41
HGBPA-2LX	HGNPA-2LX	1" BSP/NPT	2	0.5	0.06	1.97	12	13.62	30.03	20.80	8.19	12.60	5.00
HGBPA-4LX	HGNPA-4LX	1" BSP/NPT	4	1.1	0.01	0.28	1	1.83	4.03	26.10	10.28	16.20	6.40

Note: Variation available, ask your sales person Maximum Working Pressure: 10 bar / 150 psi

Maximum Working Temperature: 90°C / 194°F

# **FEATURES**

Single diaphragm design

- $\bigcirc$  Patented stainless steel or Noryl water connection
- $\bigcirc$  Two part polyurethane, epoxy primed paint finish
- Leak free, o-ring sealed air valve cap
- Comprehensive testing
- No maintenance

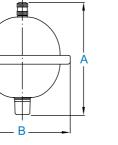
HydroGuard<sup>™</sup> shock arrestors are specially designed for use in hydraulic hammer arresting applications.

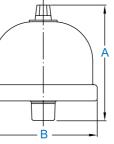
HydroGuard<sup>™</sup> shock arrestors are built to reduce or eliminate hydraulic shock, otherwise known as water hammer. They do this by absorbing pressure surges within water or other fluids that are suddenly stopped or forced in other directions by fast closing valves. HydroGuard<sup>™</sup> shock arrestors are best used at the point of shock and should be installed as close to the valve or piping where the shock originates from.

HydroGuard<sup>™</sup> shock arrestors are designed with the latest diaphragm technology. A high grade butyl diaphragm is sealed inside the vessel creating a barrier between fluid and air chambers. The air chamber acts as a cushion which compresses when system pressure suddenly increases or surges as a result of hydraulic shock.

HydroGuard<sup>™</sup> shock arrestors are quality tested at several stages along the production line in ensure the structural integrity of every tank.

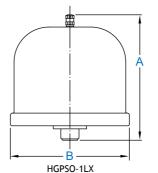
HydroGuard<sup>™</sup> shock arrestors represent the best value for the investment and are the best quality shock arrestors available today.

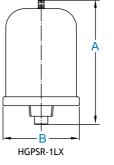




HGNSA-0.16LX



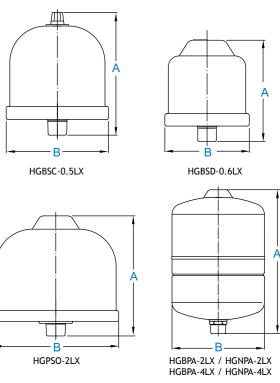








# HydroGuard<sup>™</sup> Series Models



# **All-Weather**<sup>™</sup> SERIES





# **SPECIFICATIONS** All-Weather<sup>™</sup> Series Models

BSPT	NPT	Connection	Nom Volu		Ship (bo	ping ox)		ping ox)		Dimer	sions	
			VOIL	ime	Volu	ıme	We	ight		4	E	3
New Part Number	New Part Number	BSP / NPT	liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches
Inline Models	5											
AWB-18LX	AWN-18LX	1"	18	4.8	0.03	1.18	5.23	11.53	42.5	16.7	27.6	10.9
AWB-24LX	AWN-24LX	1"	24	6.3	0.04	1.52	6.11	13.47	45.4	17.9	30.1	11.9

Tank precharge: 1.9 bar / 28 psi

Maximum Working Pressure: 10 bar / 150 psi

Maximum Working Temperature: 90°C / 194°F



## **FEATURES**

- Rugged Polypropylene outer shell
- 10 bar pressure rating
- Single diaphragm design
- Comprehensive testing

- Virgin Polypropylene liner
- $\bigcirc$  Patented stainless steel water connection
- Leak free O-Ring sealed air valve
- Maintenance free

The GWS All-Weather Pressure Tank is constructed with a high grade steel tank encased in a rugged polypropylene outer shell. The patented PLASTEEL shell creates an impenetrable layer of protection that shields against the harshest of elements. Wind, rain, sleet or sun are no match for the All-Weather Pressure Tank, making it the perfect solution for marine and mining applications, as well as harsh environmental conditions. With the highest quality and all Major Global Approvals, the GWS All-Weather Pressure Tank represents the greatest innovation in pressure tank technology today.

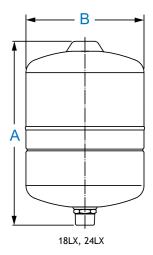
 Polypropylene shell ② Internal steel dome

- ③ Virgin polypropylene liner
- ④ High grade butyl diaphram
- (5) Patened stainless steel water connection





Note: Minor dimensional variation may occur



### All-Weather<sup>™</sup> 10

# M-Inox<sup>™</sup> SERIES SPECIFICATIONS M-Inox<sup>™</sup> Series Models









BSP	NPT	Connec- tion	Nom Volu		Ship (bo	• •		ping ox)			Dimen	sions		
		CION	YOIL	ine	Volu	ıme	Wei	ight	1	4	E	3	C	
		BSP / NPT	liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches
Inline M	odels													
MIB-8LX	MIN-8LX	1"	8	2.1	0.014	0.49	2.35	5.18	31.50	12.40	20.20	7.95		
MIB-18LX	MIN-18LX	1"	18	4.8	0.03	1.06	4.26	9.39	38.40	15.12	27.90	11.20		
MIB-24LX	MIN-24LX	1"	24	6.3	0.042	1.48	5.32	11.73	46.75	18.40	29.00	11.42		
Horizont	al Models													
MIB-18LH	MIN-18LH	1"	18	4.8	0.048	1.70	4.70	10.36	38.40	15.12	30.90	12.17	15.50	6.10

Tank precharge: 1.9 bar / 28 psi

Maximum Working Pressure: 10 bar / 150 psi Maximum Working Temperature: 90°C / 194°F



## **FEATURES**

- High Grade Stainless Steel Tank construction
- Single diaphragm design
- NSF Standard 61, CE/PED, WRAS, ACS, ISO:9001 approved
- Patented stainless steel water connection

- Virgin polypropylene liner
- Leak free, o-ring sealed air valve cap
- Comprehensive testing
- No maintenance

M-Inox<sup>™</sup> stainless steel tanks are ideally suited for special demands and environments.

The M-Inox<sup>™</sup> Series is constructed of a virgin polypropylene liner combined with an FDA approved high grade butyl diaphragm. This is held against the wall of the tank with a steel clench ring. The brass air valve, sealed by a threaded o-ring valve cap, prevents air leaks. Water enters the tank through a patented stainless steel water connection. The diaphragm and liner are both reinforced in specific wear areas for longer life. All internal parts including the air valve are rounded to prevent piercing of the diaphragm in extreme conditions. The water connection uniquely provides a dual water/air seal ensuring a complete leak free and maintenance free pressure vessel.

M-Inox<sup>™</sup> tanks are quality tested at several stages on the production line to insure the structural integrity of every tank.

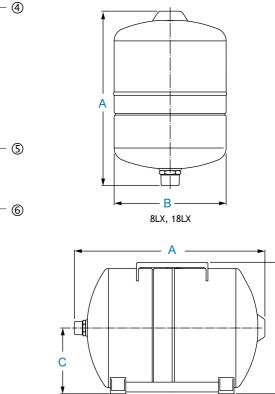
M-Inox<sup>™</sup> tanks represent the best value for the investment and are the best quality stainless steel pressure vessels available today.

 Stainless Steel Tank (2) Water Chamber (3) Patened Stainless Steel Water Connection (4) Leak-Free O-ring Sealed Air Valve Cap (5) High Grade Butyl Diaphram G Virgin Polypropylene Liner

# ISO:9001 CE ACS Approved



Note: Minor dimensional variation may occur



18LH

# Max<sup>™</sup> & UltraMax<sup>™</sup> SERIES SPECIFICATIONS Max<sup>™</sup> Series Models (16 bar)







1

3

(4)

 $(\overline{5})$ 

BSP	NPT	Connec- tion		ninal Jme	Ship (bo			ping ox)			Dimer	nsions		
		LIOIT	VOII	lille	Volu	ıme	We	ight	ļ	A Contraction of the second se	E	3	(	:
		BSP / NPT	liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches
Inline Mo	odels													
MXB-2LX*	MXN-2LX*	1"	2	0.5	0.06	2.12	13.51	29.78	20.90	8.23	12.60	4.96		
MXB-8LX	MXN-8LX	1"	8	2.1	0.014	0.49	2.96	6.53	31.30	12.32	20.20	7.95		
MXB-12LX	MXN-12LX	1"	12	3.2	0.023	0.81	3.20	7.05	36.81	14.49	23.00	9.06		
MXB-18LX	MXN-18LX	1"	18	4.7	0.03	1.06	4.85	10.69	36.81	14.49	27.90	10.98		
MXB-24LX	MXN-24LX	1"	24	6.3	0.042	1.48	6.27	13.82	44.70	17.60	29.00	11.42		
MXB-35LX	MXN-35LX	1"	35	9.2	0.06	1.95	8.73	19.25	48.10	18.90	31.80	12.52		
Vertical I	Nodels w/ b	oase												
MXB-60LV	MXN-60LV	1"	60	15.8	0.098	3.46	14.84	32.72	62.00	24.41	39.00	15.35	12.70	5.00
MXB-80LV	MXN-80LV	1"	80	21.0	0.13	4.59	20.32	44.80	81.50	32.09	39.00	15.35	12.70	5.00
MXB-100LV	MXN-100LV	1"	100	26.3	0.16	5.65	26.30	57.98	80.40	31.65	43.10	16.97	12.90	5.08

\* Volume and weight for MXB-2LX and MXN-2LX mentioned for a box with 12 pieces. All connections are made of stainless steel. Tank precharge: 4.0 bar / 58 psi Maximum working pressure: 16 bar / 232 psi. Maximum working temperature: 90°C / 194°F



- Suitable for many high-pressure applications
- Super thick steel construction
- Patented stainless steel water connection
- Virgin polypropylene liner
- $\odot$  Two part polyurethane, epoxy primed paint finish

# **SPECIFICATIONS**

- Leak free, o-ring sealed air valve cap
- Comprehensive testing
- No maintenance
- Single diaphragm design
- Available in 16 bar and 25 bar maximum pressure

### UltraMax<sup>™</sup> Series Models (25 bar)

BSP	NPT	Connection	Nor	ninal Jme	Ship (bo	ping ox)		ping ox)			Dimer	nsions		
			VOII	lille	Volu	ıme	Wei	ight		4		В	(	Ê
			liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches
Inline A	Aodels													
UMB-8LX	UMN-8LX	1"	8	2.1	0.014	0.49	3.16	6.97	31.30	12.32	20.30	7.99		
UMB-24LX	UMN-24LX	1"	24	6.3	0.042	1.48	8.04	17.72	44.70	17.60	29.30	11.54		
Vertical	Models w/	base												
UMB-100LV	UMN-100LV	1"	100	26.3	0.16	5.69	36.81	81.15	81.3	32.24	43.5	17.13	12.9	5.08
All connection	s are made of sta	ainless steel. Tank	precharge	e: 4.0 bar	/ 58 psi					Note: Mi	nor dime	nsional va	riation n	nay occur

Maximum working pressure: 25 bar / 362 psi. Maximum working temperature: 90°C / 194°F

GLOBAL WATER SOLUTIONS LTD.



2

2LX, 8LX, 35LX

① Leak free, o-ring sealed air valve cap

② Single diaphragm design

③ Two part polyurethane, epoxy primed paint finish

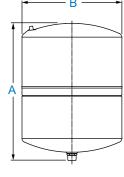
④ Virgin polypropylene liner

(5) Patented stainless steel water connection

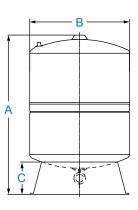


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# **Challenger**<sup>™</sup> SERIES SPECIFICATIONS





# **FEATURES**

- Patented CAD-2 diaphragm technology
- NSF Standard 61, CE/PED, WRAS, ACS, ISO-9001, Gost, Evrazes approved
- Stainless steel water connection
- Condensation reducing design

- Two part polyurethane, epoxy primed paint finish
- Leak free air valve cap sealed with closed cell foam
- Comprehensive testing
- No maintenance

Challenger™ tanks are ideally suited for a wide range of applications, including booster systems, thermal expansion, heating expansion, irrigation systems, and hydraulic hammer arresting.

### Water Chamber, Patented Controlled Action Design:

Efficient and cost effective, Challenger<sup>™</sup> tanks are designed with a patented controlled action CAD-2 diaphragm assembly. It features a chlorine resistant 100% butyl diaphragm with a precision molded copolymer polypropylene liner for superior air and water separation. The CAD-2 diaphragm assembly is clenched together with a positive lock internal clench ring which contains drawdown water in a pre-charged air atmosphere, thus providing separation between the diaphragm and tank wall. This "air buffer" design means few problems with condensation. Constructed with an FDA approved high grade butyl, the diaphragm assembly seals water in a true non-corrosive chamber.

On the exterior, the almond colored two part polyurethane paint finish over an epoxy undercoating provides hundreds of hours of UV and salt spray protection.

The air chamber is sealed with a fixed o-ring and closed cell foam and will provide many years of leak free and service free life. Challenger<sup>™</sup> tanks are quality tested at several stages on the production line to insure the structural integrity of every tank. Challenger<sup>™</sup> tanks are the best steel pressure vessels in the market today and represent the best value for the investment.

BSP	NPT	Nom			ping ox)	Ship	ping ox)				Dimer	nsions			
551		Volu	ıme	N	ume	Wei	· · · · ·	ļ	۱.	E	3	(		[	D
		liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches	cm	inches
GCB-60LV	GCN-15GV	60	15	0.10	3.65	12.25	27.0	57.27	22.55	40.68	16.02	4.80	1.89	36.93	14.54
GCB-80LV	GCN-20GV	80	20	0.13	4.74	15.20	33.5	75.27	29.60	40.68	16.02	4.80	1.89	36.93	14.54
GCB-100LV	GCN-25GV	100	25	0.16	5.68	18.10	40.0	89.68	35.31	40.68	16.02	4.80	1.89	36.93	14.54
GCB-130LV	GCN-35GV	130	35	0.20	7.08	22.50	49.5	110.94	43.68	40.75	16.02	4.80	1.89	36.93	14.54
GCB-200LV	GCN-50GV	200	50	0.31	10.88	34.25	75.5	105.56	41.56	53.29	21.03	5.68	2.23	44.63	17.57
GCB-250LV	GCN-60GV	250	60	0.37	13.18	39.24	86.5	122.75	48.33	53.37	21.03	5.68	2.23	44.63	17.57
GCB-300LV	GCN-80GV	300	80	0.46	16.25	47.17	104.0	151.27	59.56	53.37	21.03	5.38	2.23	44.63	17.57
GCB-325LV	GCN-85GV	325	85	0.46	16.25	48.40	106.7	116.68	45.94	66.21	26.07	6.43	2.53	54.23	21.35
GCB-450LV	GCN-120GV	450	120	0.74	26.14	69.85	154.0	155.07	61.05	66.06	26.01	6.43	2.53	54.23	21.35

System Connection:

Models GCB-60LV - GCB-130LV: 1" BSP stainless steel elbow Models GCB-200LV - GCB-500LV: 1 1/4" BSP stainless steel elbow Models GCN-15GV - GCN-35GV: 1" NPT stainless steel elbow Models GCN-50GV - GCN-133GV: 1 1/4" NPT stainless steel elbow



- (1) Leak-Free, O-ring sealed air valve cap
- ② Two-part polyurethane / epoxy primed paint finish
- ③ Patented CAD-2 diaphragm design
- ④ Stainless steel water connection
- ⑤ Condensation reducing design

6 Virgin Polypropylene Liner



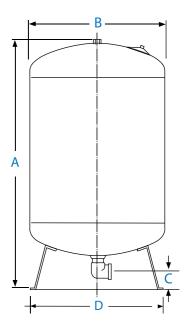


### **Challenger™ Series Models**

Note: Minor dimensional variation may occur

Please refer to tank packaging for correct factory set pre-charge information. Maximum working temperature 90°C / 194°F

Maximum working pressure: GCB- 10 bar / 150 psi ; GCN- 8.6bar / 125psi



# **C** Lite CAD<sup>™</sup> SERIES SPECIFICATIONS C2-Lite CAD<sup>™</sup> Series Models

C2-Lite CAD"



# **FEATURES**

- Patented CAD-2 diaphragm technology
- Unique 3 piece construction
- Reinforced Plastic Connection
- Durable continuous strand fiberglass sealed with epoxy resin
- NSF Standard 61, CE/PED, WRAS, ACS, ISO:9001 approved
- Rugged copolymer polypropylene base
- Quality brass air stem with o-ring seal
- No sweat design
- Comprehensive testing
- No maintenance

If you are looking for the proven performance of a GWS steel tank in a lightweight composite design, C2-Lite CAD™ series is the answer. Efficient and cost effective, C2-Lite CAD™ tanks are designed with the patented controlled action diaphragm design of GWS Challenger<sup>™</sup> tanks. Unlike other composite tanks that hide tired old bag technology in a plastic shell, the patented CAD-2 diaphragm design is stronger and will not crease and wear out. It features a chlorine resistant 100% butyl diaphragm with a precision molded copolymer polypropylene liner for superior air and water separation. This patented design allows each size tank to have a properly sized water chamber matched to the drawdown performance of that tank. C2-Lite CAD<sup>™</sup> tanks are easy to install, weather resistant and engineered to withstand even extreme environmental conditions. When it comes to performance and durability, the GWS C2-Lite CAD<sup>™</sup> design cannot be beat.

C2-Lite CAD<sup>™</sup> tanks are quality tested at several stages on the production line to insure the structural integrity of every tank. C2-Lite CAD<sup>™</sup> tanks represent the best value for the investment and are the best quality composite vessels available today.

BSP	NTP	Nom			ping ox)	Ship (bo					Dimer	nsions			
001		Volu	ıme		ume	Wei	· ·	ļ	4		3	(	2	[	D
		liter	gal	m³	ft³	kg	lbs	cm	inches	cm	inches	cm	inches	cm	inches
C2B-60LV	C2N-15GV	60	15	0.13	4.44	8.62	19.0	65.01	25.59	4.50	1.75	42.13	16.60	23.88	9.40
C2B-80LV	C2N-20GV	80	20	0.16	5.79	10.89	24.0	86.50	34.06	4.50	1.75	42.13	16.60	23.88	9.40
C2B-100LV	C2N-25GV	100	25	0.19	6.66	12.70	28.0	98.03	38.59	4.50	1.75	42.13	16.60	23.88	9.40
C2B-130LV	C2N-35GV	130	35	0.23	8.26	15.42	34.0	124.15	48.88	4.50	1.75	42.13	16.60	23.88	9.40
C2B-200LV	C2N-50GV	200	50	0.35	12.24	20.19	44.5	109.91	43.27	5.70	2.25	54.60	21.50	30.23	11.90
C2B-250LV	C2N-65GV	250	65	0.41	14.50	24.95	55.0	135.47	53.33	5.70	2.25	54.60	21.50	30.23	11.90
C2B-300LV	C2N-80GV	300	80	0.52	18.23	28.12	62.0	164.43	64.74	5.70	2.25	54.60	21.50	30.23	11.90
C2B-350LV	C2N-90GV	350	90	0.59	20.66	33.11	73.0	144.84	57.02	5.70	2.25	61.77	24.30	34.04	13.40
C2B-450LV	C2N-120GV	450	120	0.74	26.06	36.29	80.0	183.16	72.11	5.70	2.25	61.77	24.30	34.04	13.40

Max. Working Pressure 8.6 bar / 125 psi

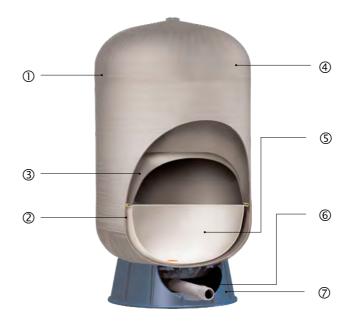
Max. Working Temperature 49°C / 120°F

Connection C2B-60LV - C2B-130LV 1" BSP

C2B-200LV-C2B-450LV 1 1/4" BSP

C2N-15GV - C2N-35GV 1" NPT C2N-50GV - C2N-120GV 1 1/4" NPT

Please refer to tank packaging for correct factory set pre-charge information.



① Precision injection molded domes

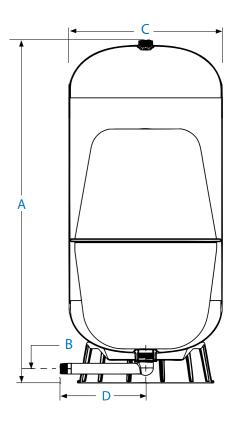
② High-tech spin welding process

③ Patented CAD-2 controlled action diaphragm design

- ④ Durable continuous strand fiberglass sealed with epoxy resin
- (5) Virgin Polypropylene Liner

6 Reinforced Plastic Connection









# **FlowThru<sup>™</sup>** SERIES







# **FEATURES**

- Patented Flow-Thru Technology for freshest water
- Available in Composite and Steel
- Patented CAD-2 diaphragm technology
- No stagnation

- Patented Watervane, total recirculation of the water
- Leak free air valve cap sealed with closed cell foam
- Comprehensive testing
- No maintenance

Global Water Solutions now guarantees the freshest water quality possible with the revolutionary Flow-Thru<sup>™</sup> Series design, available in both composite and steel models. All Flow- Thru<sup>™</sup> tanks feature GWS's exlusive patented Flow-Thru<sup>™</sup> technology which assures that your system will provide the freshest water quality possible by simply eliminating stagnation!

The Flow-Thru<sup>™</sup> connection diverts system water into, and more importantly out of the tank while the pump is running. This constant flushing action assures that the water in the tank remains as fresh as possible and eliminates the possibility of stagnant water during normal system operation.

Both our steel and composite Flow-Thru<sup>™</sup> tanks incorporate our proven patented controlled action diaphragm (CAD-2). CAD-2's steel clench ring regulates movement and prevents the diaphragm from rubbing against the tank wall.

Flow-Thru<sup>™</sup> is also the ideal solution for constant pressure water system installers seeking to store water without the risk of stagnation.

Flow-Thru<sup>™</sup> tanks are quality tested at several stages on the production line to insure the structural integrity of every tank. Flow-Thru<sup>m</sup> tanks represent the best value for the investment and are the best quality Flow-Thru<sup>m</sup> vessels available today.

**SPECIFICATIONS** 

NPT

GFU-80LV

GFU-170LV

GFU-325LV

CFN-15GV

CFN-20GV

CFN-40GV

CFN-50GV

BSP

GFU-80LV

GFU-170LV

GFU-325LV

CFB-60LV

CFB-80LV

CFB-150LV

CFB-200LV

**Composite Models** 

System Connection: 1 1/4" BSP / NPT

Max. Working Pressure 8.6 bar / 125 psi

**Steel Models** 

Nominal

Volume

gal

20

45

85

15

20

40

50

liter

80

170

325

60

80

150

200

Max. Working Temperature 90°C / 194°F°F (steel) ; 49°C / 120°F (composite) Please refer to tank packaging for correct factory set pre-charge information.





Shippin	g (box)		Dimer	nsions	
Wei	ight	A	<b>\</b>	E	3
kg	lbs	cm	inches	cm	inches
15.20	33.5	73.56	28.96	40.69	16.02
29.26	64.5	94.33	37.14	52.96	20.85
53.52	118.0	114.94	44.25	66.03	26.00
8.60	19.0	65.00	25.60	42.13	16.59
10.90	24.0	86.51	34.06	42.13	16.59
15.90	35.0	77.44	30.49	61.77	24.32
20.20	44.5	109.91	43.27	54.56	21.48

## FlowThru<sup>™</sup> Series Models

Shipping (box)

Volume

m³ ft³

0.13

0.29

0.54

0.13

0.16

0.32

0.34

4.74

10.14

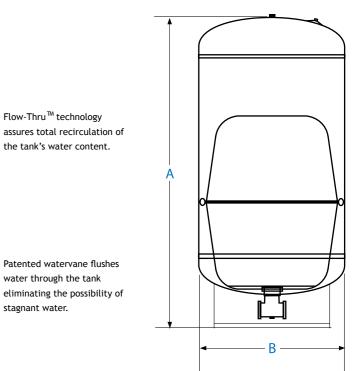
18.93

4.44

5.53

11.45

11.95



# **SuperFlow<sup>™</sup>** SERIES SPECIFICATIONS





## **FEATURES**

- 8 to 10,000 liters for sizes not covered by PressureWave<sup>™</sup> and Challenger™ Series
- Built-in pressure gauge (Models SF100-SF10,000)
- ISO : 9001, CE approved

- $\bigcirc$  10, 16 and 25 bar pressure rating
- Almond RAL 1013

Global Water Solutions' SuperFlow<sup>™</sup> tanks are ideally suited for applications where high-pressure ratings are required. These applications include booster systems, heating expansion and hammer arresting in high-rise and multistory buildings such as hotels, hospitals or business centres.

SuperFlow™ tanks range from 8 to 10,000 litres and are available in 10, 16 and 25 bar pressure ratings which makes GWS one of the most comprehensive suppliers globally. The interchangeable membrane design of the tanks allows you to replace the membrane whenever required, and the built-in pressure gauge, starting at tanks of 100 litres size, makes the system-pressure control as easy as possible.

SuperFlow<sup>™</sup> Series vessels are quality checked at several stages during the production and given regular maintenance, we recommend pre-charge check every 3 month, these vessels represent the best value for the investment and are designed to serve your needs for years to come.

				34	регги		serie	5 110	uc i.
	odel Numbe	rs	Connection	Nominal	Sh	ip Weig	ht	Dimer	sions
			Connection	Volume	10 bar	16 bar	25 bar	Α	В
Inline 10 bar	Inline 16 bar	Inline 25 bar	inches	liters	kg	kg	kg	cm	cm
N/A*	N/A*	SUB-12LX	1"	12	N/A	N/A	9	22	38
N/A*	N/A*	SUB-19LX	1"	19	N/A	N/A	11	28	43
N/A*	N/A*	SUB-35LX	1"	35	N/A		22	38	47
Vertical 10 bar	Vertical 16 bar	Vertical 25 bar	inches	liters	kg	kg	kg	cm	cm
N/A*	N/A*	SUB-50LV	1"	50	N/A	N/A	30	38	75
N/A*	N/A*	SUB-60LV	1"	60	N/A	N/A	33	38	81
N/A*	SMB-80LV	SUB-80LV	1"	80	N/A	26	46	43	96
N/A*	SMB-100LV	SUB-100LV	1"	100	N/A	28	51	46	99
N/A*	SMB-150LV	SUB-150LV	1"	150	N/A	50	85	50	110
N/A**	SMB-200LV	SUB-200LV	11/4"	200	N/A	68	112	59	112
N/A**	SMB-300LV	SUB-300LV	11/4"	300	N/A	79	130	64	123
N/A**	SMB-500LV	SUB-500LV	11/4"	500	N/A	115	202	75	155
SFB-750LV	SMB-750LV	SUB-750LV	2"	750	110	220	328	75	195
SFB-850LV	SMB-850LV	SUB-850LV	2"	850	145	235	344	80	195
SFB-1000LV	SMB-1000LV	SUB-1000LV	2"	1000	165	250	368	80	218
SFB-1500LV	SMB-1500LV	SUB-1500LV	2"	1500	250	375	495	96	238
SFB-2000LV	SMB-2000LV	SUB-2000LV	2"	2000	370	520	745	110	252
SFB-3000LV	SMB-3000LV	SUB-3000LV	2 1/2"	3000	550	780	910	120	280
SFB-4000LV	SMB-4000LV	SUB-4000LV	3"	4000	730	980	1290	145	310
SFB-5000LV	SMB-5000LV	SUB-5000LV	3"	5000	840	1140	1472	145	372
SFB-10000LV	SMB-10000LV	SUB-10000LV	4"	10000	1920	2500	2980	160	575
Horizontal 10 bar	Horizontal 16 bar	Horizontal 25 bar	inches	liters	kg	kg	kg	cm	cm
N/A*	N/A*	SUB-24LH	1"	24	N/A	N/A	13.5	47	28
N/A*	N/A*	SUB-50LH	1"	50	N/A	N/A	30	62	38
N/A*	N/A*	SUB-60LH	1"	60	N/A	N/A	33	67	38
N/A*	SMB-80LH	SUB-80LH	1"	80	N/A	26	46	72	43
N/A*	SMB-100LH	SUB-100LH	1"	100	N/A	28	51	80	46

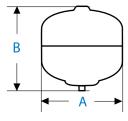
### Interchangable membranes

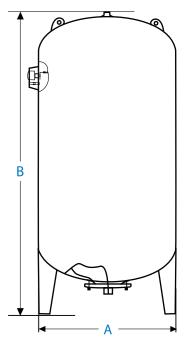
EPDM for SF12-SF2000, Butyl for SF3000 - SF10000, working temperature -5  $^\circ$ C / 23  $^\circ$ F to 90  $^\circ$ C / 194  $^\circ$ F Tank precharge: 4.0 bar / 58 psi

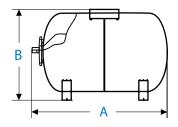
\*Use PressureWave<sup>™</sup>, Max<sup>™</sup> or UltraMax<sup>™</sup> Series tanks \*\* Use Challenger<sup>™</sup> Series tanks

ISO:9001 CE 🕻

### SuperFlow<sup>™</sup> Series Models







# **ThermoWave<sup>™</sup>** SERIES SPECIFICATIONS

○ Leak free, o-ring sealed air valve cap

Comprehensive testing

○ Maintenance free





# **FEATURES**

- High grade butyl diaphragm
- Virgin polypropylene liner
- Two part polyurethane, epoxy primed paint finish
- Patented stainless steel water connection

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

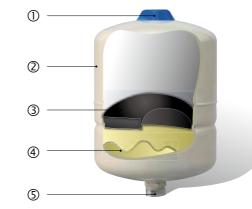
Many homes and buildings have potable water heating systems to provide hot water for washing, cooking, showering, etc. As the water is heated it also expands. This expansion leads to increased system pressure and can cause serious damage. In most systems a relief valve is installed to vent the expanded 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<sup>™</sup> 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<sup>™</sup> expansion tanks use water chambers constructed from high grade butyl diaphragms and virgin polypropylene liners they ensure your potable water remains clean and safe.

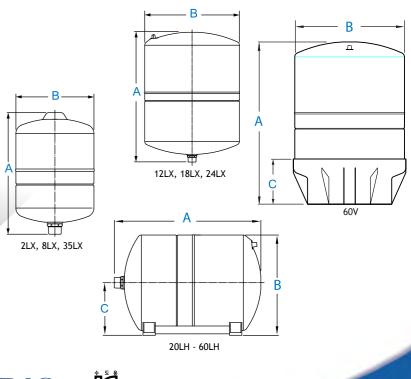
ThermoWave<sup>™</sup> expansion tanks are quality tested at several stages on the production line to ensure the structural integrity of every tank.

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

Model Numbers	Nom		Shippin	g (box)	Shippin	ig (box)			Dime	nsions		
	Volu	ime	Volu	ime	We	ight		4		В		С
	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 Mo	dels											
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 Mode	ls w/ ba	ase										
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





- (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



## ThermoWave™ Series Models

# **HeatWave**<sup>™</sup> series

HeatWave



# **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<sup>™</sup> tanks are the quality solution for hydronic expansion. HeatWave<sup>™</sup> tanks are built to the same stringent standards as the PressureWave<sup>™</sup> and Challenger<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> Series Models

Aodel Numbers	Nom		Shippin	g (box)	Shippin	ıg (box)			Dimer	nsions		
	Volu	ime	Volu	ıme	Wei	ight	ļ	λ.	E	3	(	2
	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 Model	s w/ bas	ie 👘										
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

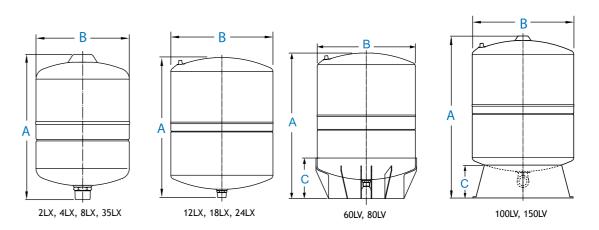
Factory pre-charge: HWB-2LX - HWB-24LX 0.7 bar/ 10 psi ; HWB-35LX 1 bar/15 psi ;

HWB-60LV-HWB-150LV 1.5 bar/ 22 psi

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





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Note: Minor dimensional variation may occur

HeatWave<sup>™</sup> 26

# **SolarWave<sup>™</sup> SERIES SPECIFICATIONS** SolarWave<sup>™</sup> Series Models



# **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<sup>™</sup> expansion tanks are designed to control the expansion and contraction of solar thermal transfer fluids in solar heating Systems. The SolarWave<sup>™</sup> Series is intended for use on the solar liquid loop of indirect thermal transfer systems.

SolarWave<sup>M</sup>tanks are built to the same stringent standards as PressureWave<sup>M</sup> and Challenger<sup>M</sup> 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<sup>™</sup> 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<sup>™</sup> 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.

Model Numbers	Nominal Volume		Shipping (box) Volume		Shipping (box) Weight		Dimensions					
Model Numbers							А		В		С	
	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

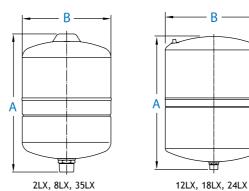
Maximum system temperature: 130°C / 266°F

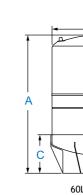
Maximum working pressure: 10 bar / 150 psi

Factory pre-charge: 1.9 bar / 28 psi

\* SWB-2LX and SWN-2LX: 12 pcs/ box

### Above 150 liter use Challenger<sup>™</sup> Series tanks





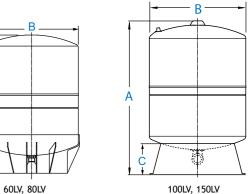


If the temperature of the solar system has the potential to rise above the evaporation point of the solar liquid a condenser chamber or coil is required between the solar collector and SolarWave<sup>™</sup> Series expansion tank in order to control the maximum fluid temperature at the SolarWave<sup>™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



Note: Minor dimensional variation may occur

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



# PumpWave<sup>™</sup> SERIES

# Accessories

# **Pump Wave**







3 Way Brass Connector 1" MFF NPT

A3WYC-BSP

A3WYC-NPT



5 Way Brass Connector 1" MFF NPT

3 Way Connector 5 Way Connector A5WYC-BSP 5 Way Brass Connector 1" MFF BSP 3 Way Brass Connector 1" MFF BSP 1/4" MF

A5WYC-NPT

1/4" MF

# **FEATURES**

- Starting pressure adjustable from 1 to 2.5 bar
- LED Indicators: Power On, Pump On/Pump Off, Dry Run Control, Reset
- O Relay for direct command of motor up to 1.5 kW 220 V AC 50/60 Hz

The PumpWave<sup>™</sup> Series is an electronic autoclave pump control, which eliminates frequent small drawoff pump starts due to leaks and low flow pumping applications. PumpWave<sup>™</sup> combines an internal water reservoir with an electronic control that allows for complete automatic management of most electric pumps. The process is simple. PumpWave™ draws water from the internal water reservoir until the adjustable START pressure is reached, then PumpWave™ switches the electronic pump on and allows it to run until there is no longer any flow within the system. PumpWave™ assures a constant flow and provides guaranteed protection against pump dry run. PumpWave<sup>™</sup> simplifies pump installation as it doubles as a sturdy pump stand suitable for most electric pumps, saving space and assembly time.

PumpWave<sup>™</sup> threads directly onto the 1" water connection of any GWS horizontal tank for full pump control with the right pressure tank.

Madal	Weight	Max. Pressure	Connection	Dimensions		
Model	(kg)	(bar)	Connection	Height	Width	
PUW Electronic	2.0	10	1" GAS	22 cm	15 cm	

The PumpWave<sup>™</sup> can also be purchased together with the PressureWave Series Horizontal tanks.

- PumpWave™ electronic is suitable for single-phase motors up to 1.5 kW

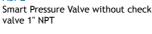
- PumpWave<sup>™</sup> must be installed with an electric pump with a minimum operating pressure
- of at least 1 bar above the programmed START pressure

- Maximum Capacity: 100 L/min



### Smart Pressure Valve

ASP1 Smart Pressure Valve with check valve 1" NPT ASP2



### **Pressure Switches**

APSW2F

Pressure Switch with 1/4" Female Connection 1.4-2.8 bar (20/40 psi)

### APSW3F

Pressure Switch with 1/4" Female Connection 2.1-3.4 bar (30/50 psi)



### **Stainless Steel Flex** Connector

A70MFC-BSP 700mm M/F SS Flex Connector 1" BSP

A70MFC-NPT 700mm M/F SS Flex Connector 1" NPT A80MFC-BSP

800mm M/F SS Flex Connector 1" BSP

A80MFC-NPT 800mm M/F SS Flex Connector 1" NPT

A100MFC-BSP 1000mm M/F SS Flex Connector 1" BSP

A100MFC-NPT 1000mm M/F SS Flex Connector 1" NPT



### Stainless Steel Flex Connector w/ Elbow

A70MFEC-E 700mm M/F SS Flex Elbow Connector 1" BSP

A70MFFC-NPT 700mm M/F SS Flex Elbow Connector 1" NPT

A80MFEC-BSP 800mm M/F SS Flex Elbow Connector 1" BSP

A80MFFC-NPT 800mm M/F SS Flex Elbow Connector 1" NPT

A100MFEC-BSP 1000mm M/F SS Flex Elbow Connector 1" BSP

A100MFEC-NPT 1000mm M/F SS Flex Elbow Connector 1" NPT



### **Pressure Gauges**

A2PG 2" Pressure Gauge 0-7 bar (100 psi) 1/4" male A25PG 2.5" Pressure Gauge 0-10 bar (145 psi) 1/4" male



**Universal Bracket** 

**BR UNIVERSAL** Stainless belt with mounting bracket.

<sup>-</sup> Factory START pressure at 1.8 bar