

## **ABOUT**

Global Water Solutions USA LLC (GWS USA) is an affiliated company of Global Water Solutions (GWS), one of the world's largest pressure tank and water treatment component manufacturers. Headquartered in Bradenton, Florida, GWS USA was founded to distribute and supply high-quality, affordable products to North America, Central America, Mexico, and the Caribbean.

GWS USA's pressure tank range includes a full line of pressure vessels for different applications. They are available in sizes from 0.5 - 119 gal (2 - 450 L) to accommodate all your requirements.

GWS USA's unique product offering includes its line of single diaphragm tanks with a patented water connection and now includes a pressure tank series with a replaceable, intricate tiered membrane design and a higher maximum pressure rating than most. GWS offers customers flexibility in selecting products for a variety of applications. All of our products undergo a series of rigorous tests to insure excellent quality. Beyond that, we offer our customers extensive warranties and superior customer support.

GWS has built a global reputation for creating comprehensive and durable solutions to help address the increasing demand for safe and abundant drinking water. The company continues to expand its operations and product range to meet customer needs worldwide.





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## **Product Applications**

#### **PressureWave**<sup>™</sup>

PressureWave™ tanks are designed for a wide range of applications, including well water systems, irrigation systems including VFD systems, booster systems and water hammer arresting.

## **PumpWave**<sup>™</sup>

Our superior quality pump controller's applications include pressure boosting for residential or small commericial spaces, pump control for gardening, and dry run protection.

#### **Water Treatment Products**

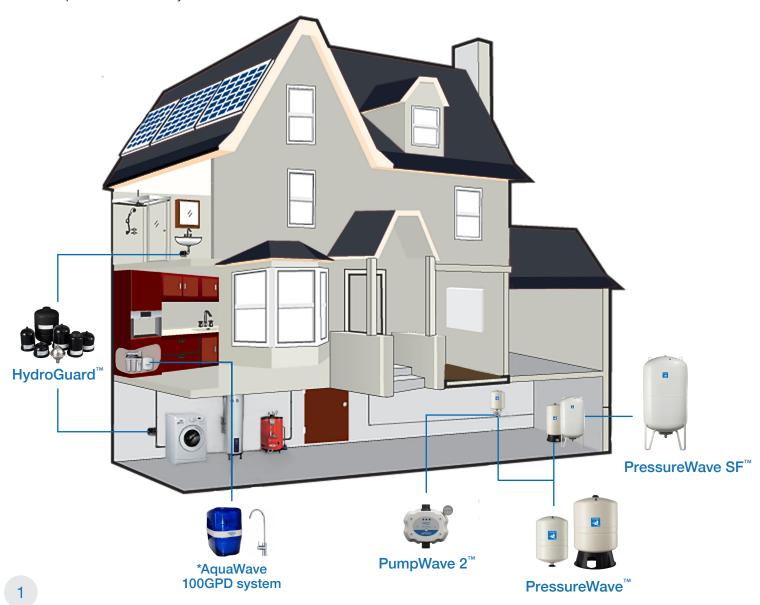
\*Water treatment products are also available, such as our reverse osmosis (RO) systems and our RO storage tanks. Visit www.gwsusa.com for more info or contact a sales representative today!

#### PressureWave SF<sup>™</sup>

GWS USA's PressureWave SF™ series tanks are perfectly suited for applications where higher volumes of water storage are required. These include well water systems, irrigation systems and water hammer arresting in residential and light commercial applications.

## $HydroGuard^{TM}$

Shock arrestor tanks suitable for booster systems, plumbing installations, commercial bathrooms and sinks, and solenoid valve protection.



# **Energy Saving Solutions**







### Upgrade your pressure tank size and gain the following benefits:

- Substantially reduce electric power consumption by reducing small draw off pump starts, i.e., toilet flushes, washing machine fill ups, leaks, drip irrigation, etc.
- Extend pump life by dramatically reducing wear on moving parts
- Protect against overheating damage to pump system
- Reduce disruptive noise from unnecessary pump starts
- Eliminate pump motor burn outs and low-flow cycling
- Eliminate water hammer damage to your system's pump



# Pump Applications PressureWave





#### **Features**

- Maintenance-Free
- Contaminant-Free Water Chamber
- Patented Stainless Steel Water Connection
- Leak-Resistant Air Valve
- Durable Rust-Resistant Exterior
- Robust Corrosion-Free Tank Base
- Extensive Application Ability with 150 psi Maximum Working Pressure
- Comprehensive Testing On Every Tank
- NSF/ANSI 61 and NSF/ANSI 372 Certified
- CE/PED, WRAS, ACS, ISO:9001 Approved
- 5-Year Warranty

PressureWave<sup>™</sup> tanks are designed for a wide range of applications, including well water systems, irrigation systems including VFD systems, booster systems and water hammer arresting. In these applications the PressureWave<sup>™</sup> series maintains contaminant-free pressurized water storage. The PressureWave<sup>™</sup> series water storage vessel is constructed of a pure polypropylene liner combined with an FDA approved butyl diaphragm, contributing to the contaminant-free water storage environment. This FDA approved diaphragm is securely attached to the interior wall of the tank with a steel clench ring, and the diaphragm and liner are both reinforced in specific wear areas for longer life. Water enters the tank through a patented stainless steel water connection, eliminating contamination and corrosion. This water connection provides a dual water/air seal, ensuring a complete leak-free and maintenance-free pressure vessel. The brass air valve is precision constructed, withstanding high pressures and temperatures and is resistant to corrosion. All internal parts including the air valve are rounded to prevent piercing of the diaphragm in extreme conditions.

To provide enhanced exterior protection from UV rays and salt spray damage, our almond colored exterior finish is a two-part polyurethane paint over an epoxy undercoating. PressureWave<sup>™</sup> tanks are quality tested at several stages on the production line to ensure the structural integrity, performance and certification compliance of every tank. PressureWave<sup>™</sup> tanks represent excellence, the best value for the investment and are the highest quality pressure vessels available worldwide!



### **Horizontal Model**



## **Inline Model**



### **Vertical Model**



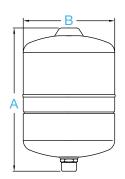
- (1) FDA Approved Chlorobutyl Diaphragm
- 2 100% Virgin Polypropylene Liner
- 3 Robust Exterior Paint Finish
- 4 Polypropylene Pump Stand

- 5 Patented Stainless Steel Water Connection
- (6) Leak-Free Air Valve Cap
- 7 Corrosion-Free Tank Feet With Mounting Holes
- 8 Stabilizing Base With Mounting Holes

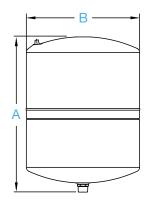
# **Pump Applications PressureWave**<sup>TM</sup>



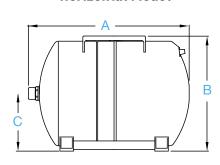
#### Inline Model



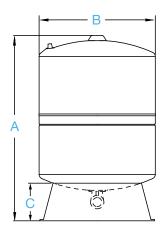
#### **Inline Model**



#### **Horizontal Model**



#### **Vertical Model**



## **Specifications**

Materials

Carbon Steel Tank Exterior Polyurethane & Epoxy Paint Finish 100% Chlorobutyl Diaphragm Pure Polypropylene Liner

Volume	0.5 - 40 gal   2 - 150 L
Connection	Standard 1" NPT
Maximum working pressure	150 psi   10 bar
Maximum operating temperature	194°F   90°C
Factory pre-charge	38 psi   2.6 bar

Note: Minor dimensional variations may occur. All connections are stainless steel unless stated otherwise.













Model		ninal					Gross Dimensions						
Wiodei	Vol	ume	We	ight	We	ight		Ą	В		(	Ç	
	gal	liter	lb	kg	lb	kg	in	cm	in	cm	in	cm	
Inline Models													
PWN-US-2LX	0.50	2	2.29	1.04	2.49	1.13	8.23	20.90	4.96	12.60			
PWN-US-3LX	0.8	3	2.91	1.32	3.28	1.49	9.57	24.30	5.51	14.30			
PWN-US-4LX	1.1	4	3.28	1.49	3.83	1.74	10.28	26.10	6.38	16.20			
PWN-US-6LX	1.6	6	3.79	1.72	4.40	2.00	11.42	29.00	6.69	17.80			
PWN-US-8LX	2.1	8	4.69	2.13	5.46	2.48	12.32	31.56	7.95	20.20			
PWN-US-12LX	3.2	12	6.01	2.73	7.07	3.21	14.45	36.70	9.06	23.00			
PWN-US-18LX	4.8	18	7.91	3.59	8.97	4.07	14.45	36.70	10.98	27.90			
PWN-US-24LX	6.3	24	10.40	4.72	11.92	5.41	17.60	44.70	11.42	29.00			
PWN-US-35LX	9.3	35	14.15	6.42	15.87	7.20	18.90	48.10	12.52	31.80			
Horizontal Models													
PWN-US-8LH	2.1	8	5.46	2.48	6.30	2.86	12.32	31.30	9.13	23.20	4.57	11.60	
PWN-US-12LH	3.2	12	6.79	3.08	7.84	3.56	14.45	36.70	10.24	26.00	5.12	13.25	
PWN-US-20LH	5.3	20	9.56	4.34	11.00	4.99	17.60	44.70	11.57	29.20	5.79	14.50	
PWN-US-24LH	6.3	24	11.59	5.26	13.22	6.00	17.60	44.70	12.64	32.10	6.34	16.10	
PWN-US-35LH	9.3	35	15.23	6.91	17.54	7.96	18.94	48.10	13.90	35.30	7.05	17.90	
PWN-US-60LH	15.9	60	22.77	10.33	25.37	11.51	20.87	53.00	16.69	42.40	8.46	21.50	
PWN-US-80LH	21.1	80	31.83	14.44	35.69	16.19	28.58	72.60	16.69	42.40	8.46	21.50	
PWN-US-100LH	26.4	100	38.62	17.52	43.71	19.83	28.35	72.00	18.70	47.50	9.65	24.50	
Vertical Models													
PWN-US-35LV	9.3	35	15.07	6.84	16.97	7.70	2185	55.50	12.52	31.80	4.72	12.00	
PWN-US-60LV	15.9	60	22.95	10.41	24.86	11.28	24.41	62.00	15.31	38.90	5.00	12.70	
PWN-US-80LV	21.1	80	32.18	14.60	35.80	16.24	32.09	81.50	15.31	38.90	5.00	12.70	
PWN-US-100LV	26.4	100	38.66	17.54	39.50	19.72	31.65	80.40	16.93	43.00	5.08	12.90	
PWN-US-130LV	34.3	130	52.77	23.94	58.92	26.73	42.28	107.40	16.93	43.00	5.08	12.90	
PWN-US-150LV	39.6	150	66.75	30.28	76.27	34.60	36.38	93.80	20.87	53.00	5.45	13.85	

# **High Volume**

# PressureWave SF<sup>™</sup>







#### **Features**

- ISO: 9001 Approved
- NSF Listed EPDM Membrane
- Pressure Rating 150 PSI | 10 Bar
- Operating Temperature Range 14-194°F
- 53-119 Gal For Sizes Not Covered By PressureWave™
- Suitable For High-Volume Applications
- Comprehensive Testing On All Tanks
- Contaminant-Free Water Chamber
- Stainless Steel Water Connection
- Leak-Resistant Air Valve
- Durable Rust-Resistant Exterior

GWS USA's PressureWave SF<sup>TM</sup> tanks are perfectly suited for applications where higher volumes of water storage are required. These include well water systems, irrigation systems and water hammer arresting in residential and light commercial applications. PressureWave SF<sup>TM</sup> series range from 53-119 gallon volumes with a max working pressure rating of 150 psi (10 bar). All PressureWave SF<sup>TM</sup> tanks are pre-charged to 38 psi\* allowing for greater water capacity between pump cycles for enhanced system life, also utilizes less space than a standard conventional tank. Pre-charge can be field adjusted to suit various applications. Our PressureWave SF<sup>TM</sup> tanks feature an intricate, NSF listed interchangeable membrane, providing a contaminant and corrosion free water storage chamber that allows for replacement if required. This durable and intricate membrane design and its fully secured installation structure, prevents the membrane (water chamber) from failing, as seen in our competitor's "bladder" designed tanks.

Our membrane's secured design installation prevents inconsistent and uneven contraction and expansion of the membrane during the operations of water storage and usage, providing maximum life, durability and high performance. Water enters the membrane through a stainless-steel water connection, supporting the prevention of contaminants and corrosion resistance in the water storage chamber. This water connection provides a dual water/air seal, ensuring a complete leak-free pressure vessel. PressureWave SF<sup>TM</sup> tank's brass air valve is exceptionally durable, withstanding high pressures, high temperatures and is resistant to corrosion. All internal parts, including the air valve, are rounded to prevent piercing of the membrane in extreme conditions. To provide enhanced exterior protection from UV ray and salt spray damage, our almond colored exterior finish is a two-part powder coated polyurethane paint finish over an epoxy undercoating.

PressureWave SF<sup>TM</sup> series high-volume pressure tanks are rigorously quality tested at several stages during the manufacturing process and given regular maintenance to ensure structural integrity, performance and certification compliance of every tank. These vessels represent the best value for the investment and are designed to serve your needs for years to come, which makes us the most comprehensive pressure tank supplier in the market!

\*On the PressureWave SF™ series tank we recommend a pre-charge maintenance check every six (6) months

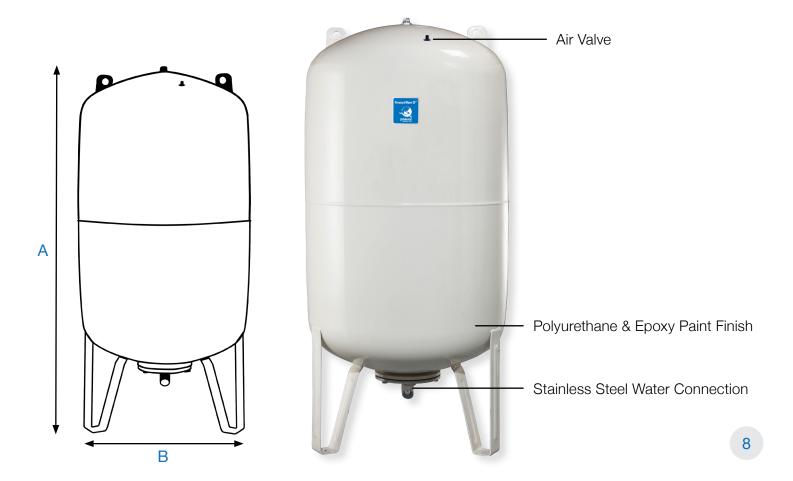






Model	Connection	nnection Nominal Volume			et	Dimensions				
				Weight		1	4	В		
		gal	liter	lb	kg	in	cm	in	cm	
SFN-US-200LV	1 1/4" NPT	53	200	85.8	39	48.03	122	23.23	59	
SFN-US-325LV	1 1/4" NPT	86	325	99	45	52.36	133	25.20	64	
SFN-US-450LV	1 1/4" NPT	119	450	151.8	69	64.96	165	29.53	75	

Note: Minor dimensional variation may occur. Maximum working pressure: 150 psi | 10 bar. Operating temperature: 14-194°F | -10-90°C. Tank precharge: 38 psi | 2.6 bar. Interchangable membranes - contact a sales representative for more information.



Electronic Pump Controllers
PumpWave

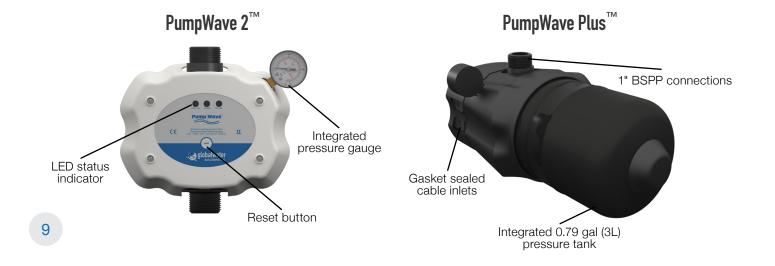




#### **Features**

- Eliminates Frequent Small Drawoff Pump Starts
- Assures Constant Flow
- Protects Against Pump Dry Run
- Starting Pressure Adjustable From 1 to 2.5 Bar
- LED Status Indicators: Power On, Pump On/Off, And Dry Run Control
- Can Reduce The Need For Larger Tank

The PumpWave™ series is a range of electronic pump controllers ideally suited for domestic water supply in and around the home. PumpWave™ offers complete automatic management of most electric pumps up to 1HP. Both the PumpWave Plus™ and PumpWave 2™ offer efficient pump management, protect against pump dry running and eliminate frequent small draw-off pump starts due to leaks and low flow pumping applications. It allows the pump to run continuously when water demand is over 0.5 gpm and eliminates the pressure variation typically seen with traditional pressure switch systems. Unlike other electronic pump controllers, the PumpWave™ incorporates a small pressure tank which allows it to prevent short cycling of pumps, thereby extending pump life and saving energy. The process is simple. The PumpWave™ device draws water from the (integrated) pressure tank until the adjustable start or cut-in pressure is achieved, at which point the pump is switched on and allowed to run until there is no longer any flow within the system.

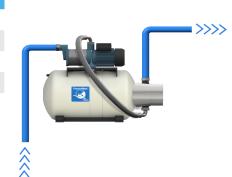




## PumpWave $2^{TM}$

For those looking for a customizable system, look no further. The PumpWave  $2^{\text{TM}}$  is a standalone pump controller that can be installed in combination with a range of inline and horizontal tanks.

Horizontal	Inline
PWN-US-8LH	PWN-US-2LX
PWN-US-12LH	PWN-US-3LX
PWN-US-20LH	PWN-US-4LX
PWN-US-24LH	PWN-US-8LX
PWN-US-35LH	
PWN-US-60LH	
PWN-US-80LH	
PWN-US-100LH	



## $\textbf{PumpWave} \ \textbf{Plus}^{^{\text{\tiny TM}}}$

PumpWave Plus<sup>™</sup> is a compact solution that combines a pump controller with an integrated 0.79 gallon (3L) pressure tank. It is ideal for applications where space is limited. The PumpWave Plus<sup>™</sup> is easy to install as you simply connect it to the pump and the system is ready to go. The PumpWave Plus<sup>™</sup> assures a constant flow and provides guaranteed pump dry run protection. Contact a sales representative for more information.

- All-in-one compact system
- Comes with integrated 0.79 gallon (3L) pressure tank



## **Specifications**

	PWP-110B & PWS-110B	PWP-220B & PWS-220B		
Supply Voltage	110 V AC	220-240 V AC		
Supply Voltage	110 V AC	220-240 V AO		
Frequency	60 Hz	50/60 Hz		
Maximum operating power	0.74 kW (1hp) 10(8)A	1.47 kW (2hp) 10(8)A		
Connection	1" BSPP (comp	atible with NPT)		
Protection level	IP 55			
Maximum pressure	116 ps	i   8 bar		
Maximum flow rate	26.4 gal/min   100 L/min			
Minimum flow rate	0.4 gal/min   1.5 L/min			
Maximum water temperature	95°F   35°C			
Ambient temperature	32-104°F   0-40°C			
Factory reset cut-in pressure	29 psi   2 bar			

# Hydraulic Shock Arrestors HydroGuard





#### **Features**

- Maintenance-Free
- FDA Approved Chlorobutyl Diaphragm Design
- Patented Stainless Steel or Noryl<sup>®</sup> Water Connection
- Exterior Polyurethane & Epoxy-Primed Paint Finish
- Leak-Free, O-Ring Sealed Air Valve Cap
- Comprehensive Testing On Every Arrestor

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

They 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>M</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 shock arrestors are quality tested at several stages along the production line to ensure overall structural integrity.

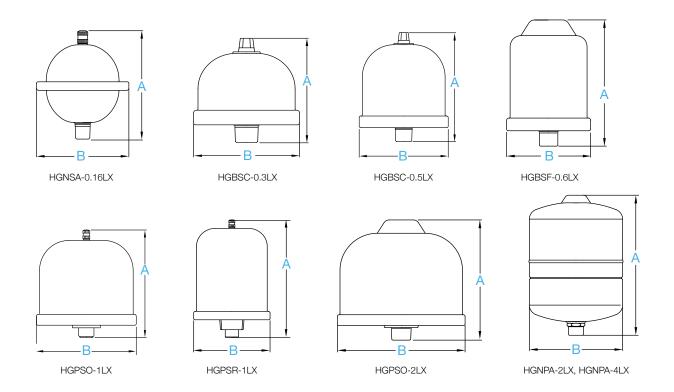
HydroGuard<sup>™</sup> shock arrestors represent the best value for your investment, and are the highest quality shock arrestors available in the market!





Model	Model Connection		Nominal		Net		Gross		Dimensions			
		Vol	Volume		Weight		Weight		Α		3	
		gal	liter	lb	kg	lb	kg	in	cm	in	cm	
HGNSA-0.16LX	1/2" SS	0.04	0.16	0.66	0.30	0.72	0.33	4.44	11.30	3.34	8.50	
HGBSC-0.3LX	1/2" Noryl®	0.08	0.30	0.79	0.36	0.85	0.39	4.05	10.30	3.81	9.70	
HGBSC-0.5LX	1/2" Noryl®	0.13	0.50	0.81	0.37	0.88	0.40	5.31	13.50	4.44	11.30	
HGBSF-0.6LX	1/2" Noryl®	0.16	0.60	1.14	0.52	1.25	0.57	6.41	16.30	3.81	9.70	
HGPSO-1LX	1/2" Noryl®	0.26	1.00	1.49	0.68	1.69	0.77	5.62	14.30	5.35	13.60	
HGPSR-1LX	1/2" Noryl®	0.26	1.00	1.76	0.80	1.94	0.88	7.75	19.70	4.72	12.00	
HGPSO-2LX	3/4" Noryl®	0.52	2.00	2.68	1.22	2.91	1.32	6.22	15.80	6.69	17.00	
HGNPA-2LX	1" Noryl®	0.52	2.00	2.29	1.04	2.49	1.13	8.22	20.90	4.96	12.60	
HGNPA-4LX	1" Noryl®	1.05	4.00	3.28	1.49	3.83	1.74	10.27	26.10	6.37	16.20	

Note: Minor dimensional variation may occur. Maximum working pressure: 150 psi | 10 bar. Maximum operating temperature: 194°F | 90°C. Factory pre-charge: 15 or 58 psi | 1 or 4 bar.



# Pressure Tank **Accessories**





3-Way Connector

A3WYC-NPT
3-way brass connector
1" MFF NPT



5-Way Connector

**A5WYC-NPT** 5-way brass connector 1" MFF NPT



**Pressure Gauges** 

A2PG 2" pressure gauge with 1/4" male connection, 100 psi

#### A25PG

2.5" pressure gauge with 1/4" male connection, 145 psi



#### **Pressure Switches**

#### APSW2F

Pressure switch with 1/4" female connection, 20.3-40.6 psi

#### APSW3F

Pressure switch with 1/4" female connection, 30.5-49.3 psi



#### Stainless Steel Flex Connector

A70MFC-NPT 700mm MF SS flex connector, 1" NPT

#### A80MFC-NPT

800mm in MF SS flex connector, 1" NPT

#### A100MFC-NPT

1000mm in MF SS flex connector, 1" NPT



#### Stainless Steel Flex Connector with Elbow

#### A70MFEC-NPT

700mm MF SS flex elbow connector, 1" NPT

#### A80MFEC-NPT

800mm MF SS flex elbow connector, 1" NPT

#### A100MFEC-NPT

1000mm MF SS flex elbow connector, 1" NPT



#### **Universal Bracket**

#### **BR UNIVERSAL**

Stainless belt with mounting bracket



### **Pump Stands**

#### Nylon Plastic Pump Stands

Compatible with horizontal PressureWave™ series tanks



# Notes

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# Where Water Gets Better



Have questions or need assistance?
Contact us today



