

# PVH W potable water

expansion vessels  
horizontal range



altecnic

# PVH W potable water expansion vessels - horizontal



## Introduction

Altecnic offer a complete range of expansion vessels to meet the requirements of most heating systems and for use with potable water.

The expansion vessels are manufactured to meet the requirements of PED 97/23/EC Directive.

Nitrogen improves the life of the expansion vessel by reducing internal corrosion and prevents the loss of pre-charge pressure.

Nitrogen permeates through rubber slower than oxygen, is far less reactive to steel and does not degrade rubber prolonging the life of the membrane.

## Design

Horizontal vessel with mounting plate for auxillary equipment.

Manufactured in carbon steel with a multi part welded construction.

Replaceable bladder except for 25 litre vessel.

Pre-pressurised air chamber with synthetic rubber compound bladder.

The internal surfaces of the vessel in contact with the water are coated against corrosion.

External surfaces have a blue durable powder coated finish.

Suitable for temperatures up to 70°C, resistant to ethylene or propylene glycol mixtures and has low gas permeability.

Altecnic expansion vessels are all tested according to the Pressure Systems Directive.

## How It Works

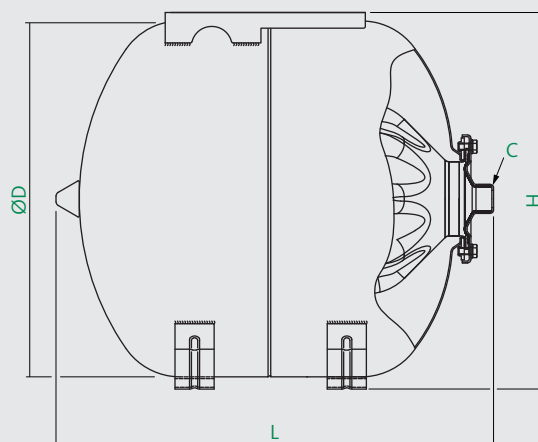
In a closed hot water circuit, the water cannot be compressed so any increase in volume, created by an increase in temperature, has to be accommodated by an expansion vessel.

When water is cold, the pre-charge pressure forces the bladder to collapse until the pump is started when the bladder starts to inflate.

As the temperature in the system increases, with the associated increase in pressure and volume, the expanded water enters the bladder creating additional volume and lowering the pressure.

When the temperature decreases, the pre-charge pressure forces the water from the bladder and back into the main water circuit.

## Dimensions



Ref No	Capacity litres	ØD mm	L mm	H mm	C Connection	Weight kg
PVH25W	25	280	520	293	G¾B	5.5
PVH50W	50	409	503	433	G1B	15
PVH80W	80	480	595	504	G1B	18
PVH100W	100	480	705	504	G1B	21

## Technical Specification

Max. working pressure:	10 bar
Max. operating temperature:	70°C
Factory pre-charge:	2.0 bar - nitrogen
System water connection thread - male:	BS EN ISO 228
Replaceable bladder:	50 to 100 litre sizes

CE marked

WRAS approved product

## Materials

Component	Material
Shell	Carbon steel
Connections	Stainless steel
Bladder	Butyl elastomer
Coating	Powder epoxy

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Registered in England No: 2095101

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AL 110 03-09-20

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