

# potable water

expansion vessels  
horizontal range



**WRAS**  
APPROVED  
PRODUCT

altecnic

# potable water expansion vessels - horizontal range



## 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 and BS EN 13831:2007 'Closed expansion vessels with built in diaphragm for installation in water'.

## Design

Horizontal vessel with mounting plate for auxillary equipment.

Manufactured in carbon steel with a two or three part weld construction.

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.

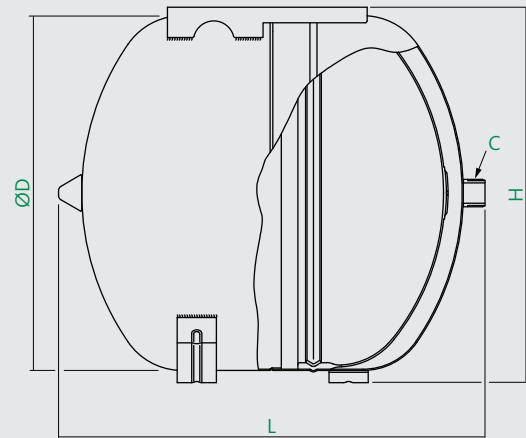
As the temperature in the system increases, with the associated increase in pressure and volume, the expanded water enters the bladder creating additional volume and lowering the pressure.

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

## Materials

Component	Material
Shell	Carbon steel
Connections	Carbon steel
Bladder	Synthetic rubber compound
Coating	Powder epoxy

## Dimensions



Product Code	Capacity litres	ØD mm	L mm	H mm	C Connection	Weight kg
PVH25W	25	280	484	294	G1	5.5
PVH50W	50	409	492	433	G1	15
PVH80W	80	480	562	504	G1	18
PVH100W	100	480	667	504	G1	21

## Technical Specification

Max. working pressure:	10 bar
Max. operating temperature:	70°C
Factory air pre-charge:	2.0 bar - nitrogen
System water connection thread - male:	BE EN ISO 228

CE marked

WRAS approved product

## E & O.E

Altecnic Ltd Mustang Drive, Stafford, Staffordshire ST16 1GW

T: +44 (0)1785 218200 E: sales@altecnic.co.uk

Registered in England No: 2095101

altecnic.co.uk

AL 110 19-09-12