



PVH W

horizontal potable water expansion vessels 25 to 100 litre

SD 049 02-09-2020

Introduction

Altecnic offer a complete range of expansion vessels for use with potable water.

Expansion vessels for heating systems 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'.

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 welded construction.

Pre-pressurised air chamber with synthetic rubber compound membrane.

Replaceable membrane except for the 25 litre vessel.

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 flow 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 Equipment Directive.

How It Works

In a closed hot water circuit 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 diaphragm against the tank towards the inlet.

As the temperature increases, the expanded water volume pushes against the diaphragm creating additional volume for the water to enter.

When the temperature decreases, the pre-charge pressure forces the water from the tank and back into the main heating system.

This maintains a constant pressure within the heating system helping to reduce energy consumption.

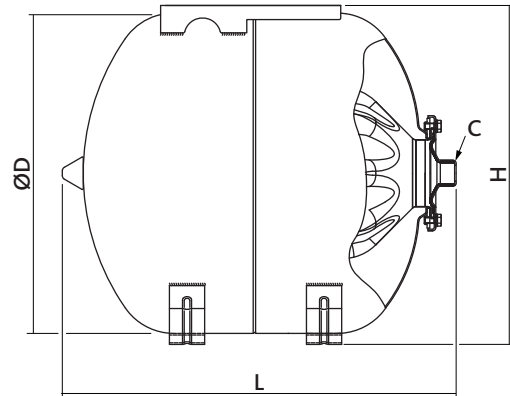
Component

Shell
Connections
Membrane
Coating

Material

Carbon Steel
Carbon Steel
Butyl elastomer
Powder Epoxy

Dimensions



Ref No	Capacity	ØD	L	H	C	Wt
	litre	mm	mm	mm	Connection	kg
PVH25W	25	280	520	293	G¾	5.5
PVH50W	50	409	503	433	G1	15
PVH80W	80	480	595	504	G1	18
PVH100W	100	480	705	504	G1	21

Technical Specification

Max. working pressure:	10 bar
Test pressure:	1.5 x max working pressure
Max. vessel operating temperature:	70° C
Factory pre-charge:	2.0 bar - nitrogen
Water connection thread:	BS EN ISO 228
Replaceable membrane:	50 to 100 litre
CE marked	

© Patents & Design Altecnic 2020

Altecnic Ltd retains all rights (including patents, designs and copyrights, trademarks and any other intellectual property rights) in relation to all information provided on or via the website, brochures or any other documents, including all texts, graphics and logos, contained on the website, in brochures or in any other documents published in the name of or on behalf of Altecnic Ltd in any form, without prior written consent of Altecnic Ltd.

Altecnic Ltd Mustang Drive, Stafford, Staffordshire ST16 1GW T: +44 (0)1785 218200 E: sales@altecnic.co.uk altecnic.co.uk

Registered in England No: 2095101 E & O.E © Altecnic Limited. 2020 ALTECNIC™