



HVW

heating expansion vessels 200 to 800 litres

SD 045 27-08-2020

Introduction

Altecnic offer a complete range of expansion vessels to meet the requirements of most heating or cooling systems.

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

The vessel is fabricated by welding the various sections together which results in a very reliable structure .

Non-replaceable diaphragm.

Epoxy coated in grey.

Supplied complete with feet

Suitable for flow temperatures up to 120°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 heating system 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

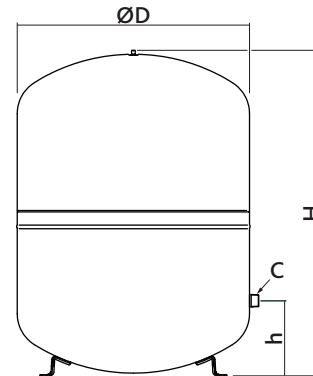
Component	Material
Shell	Carbon Steel
Connections	Carbon Steel
Diaphragm	Synthetic rubber
Coating	Powder Epoxy

Technical Specification

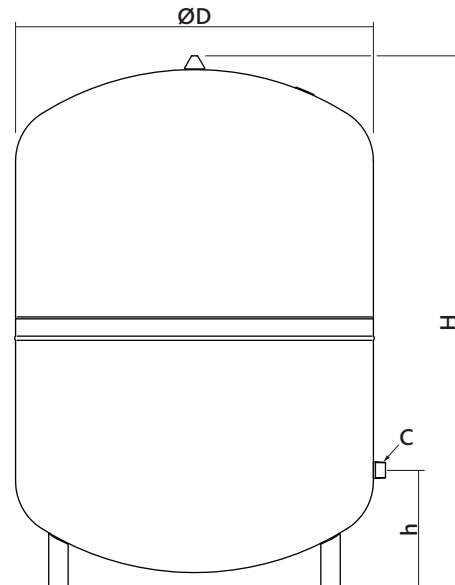
Max. working pressure:	6 bar
Test pressure:	1.5 x max working pressure
Max. vessel operating temperature:	70° C
Factory pre-charge:	1.5 bar - nitrogen

CE marked

Dimensions



200 and 250 litres



300 to 800 litres

Ref No	Capacity	ØD	H	h	C	Weight
	litre	mm	mm	mm	Connection	kg
HV200W	200	634	760	205	R1	37
HV250W	250	634	890	205	R1	45
HV300W	300	634	1090	235	R1	52
HV400W	400	740	1090	245	R1	65
HV500W	500	740	1290	245	R1	79
HV600W	600	740	1530	245	R1	85
HV800W	800	740	1995	245	R1	103

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