

# heating

expansion vessels  
8 to 140 litres



**altecnic**  
CALEFFI group

# HV heating expansion vessels - 8 to 140 litres



## 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'.

## Design

The two halves of the vessel and the diaphragm are retained by a crimped collar to give a pressure tight seal on all sizes.

Non-replaceable diaphragm.

Epoxy coated in grey.

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

## Technical Specification

Max. working pressure	8 to 35 litres	3 bar
	50 to 140 litres	6 bar
Test pressure	1.5 x max working pressure	
Max. vessel operating temperature	70° C	
Factory pre-charge	1.5 bar - nitrogen	

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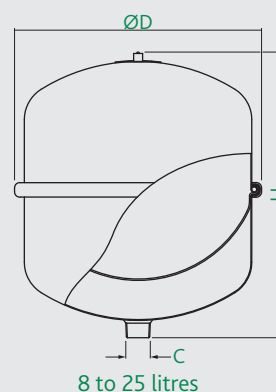
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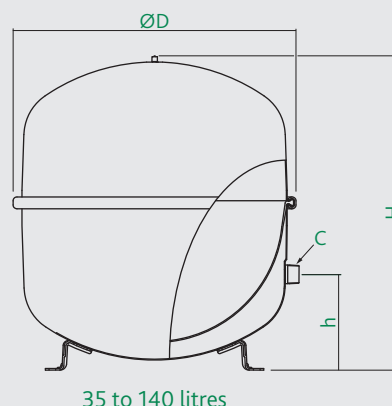
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## Dimensions



8 to 25 litres

Product Code	Capacity	ØD	H	C	Weight
	litres	mm	mm	Connection	kg
HV8C	8	206	305	R $\frac{3}{4}$	1.7
HV12C	12	272	313	R $\frac{3}{4}$	2.2
HV18C	18	308	381	R $\frac{3}{4}$	2.9
HV25C	25	308	481	R $\frac{3}{4}$	3.6



35 to 140 litres

Product Code	Capacity	ØD	H	h	C	Weight
	litres	mm	mm	mm	Connection	kg
HV35C	35	376	465	130	R $\frac{3}{4}$	5.0
HV50C	50	441	487	175	R $\frac{3}{4}$	7.5
HV80C	80	512	558	172	R1	9.9
HV100C	100	512	669	172	R1	11.2
HV140C	140	512	890	172	R1	14.5

CE marked

Accessories - Vessels 8 to 25 litres

Wall bracket with retaining strap - RS MB

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