HV C

heating expansion vessels 35 to 140 litres

SD 044 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 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.

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.

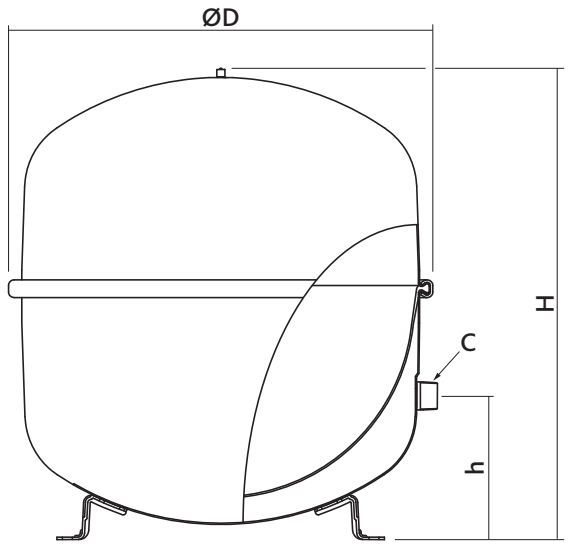
This maintains a constant pressure within the heating system helping to reduce energy consumption.

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

Technical Specification

Max. working pressure:	6 bar
except 35 litre	3 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



Ref No	Capacity	ØD	H	h	C	Weight
	litre	mm	mm	mm	Connection	kg
HV35C	35	376	465	235	R¾	5.7
HV50C	50	441	495	315	R¾	7.5
HV80C	80	512	570	365	R1	9.9
HV100C	100	512	680	485	R1	11.2
HV140C	140	512	895	485	R1	14.5

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