

HV F OEM heating

expansion vessels



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Introduction

The Altecnic OEM round flat heating expansion vessels are designed to meet the needs of boiler and heat interface unit manufacturers.

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 vessels are fabricated by clamping the two sections together using a crimped collar which results in a very reliable structure suitable for internal pressures up to 3 bar.

Non-replaceable diaphragm.

The tanks are designed with no corners to trap sediment.

Epoxy coated in red - RAL 3013.

Suitable for temperatures up to 90°C, resistant to ethylene or propylene glycol mixtures.

The air side has an air charging valve of the kind used on tyres, protected by a large plastic cap

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.

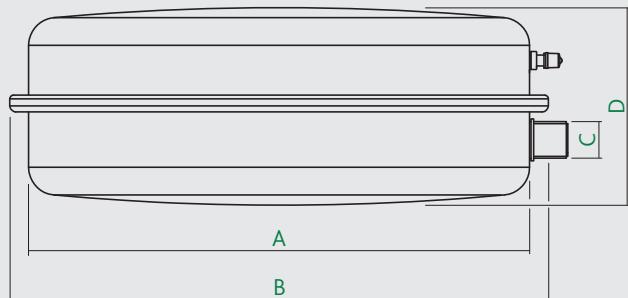
When water is cold, the pre-charge pressure presses the diaphragm against the tank.

As the temperature in the system increases, with the associated increase in pressure and volume, the expanded water pushes against the diaphragm and water enters the vessel, providing additional volume.

When the temperature decreases, the pre-charge pressure forces the water back into the main heating circuit, maintaining a constant pressure helping to reduce energy consumption.

Dimensions

Round flat expansion vessels



Prod Code	Capacity	ØA	ØB	H	C
	litres	mm	mm	mm	Connection
HV8F	8	292	342	115	G1½B
HV10F	10	292	342	140	G¾B
HV12F	12	292	342	169	G¾B

Materials

Component	Material
Shell	Carbon steel
Connections	Carbon steel
Diaphragm	Rubber - EPDM
Coating	Powder epoxy

Technical Specification

Max. working pressure:	3 bar
Test Pressure:	1.5 bar
Max. operating temperature:	90°C
Factory pre-charge:	1 to 1.5 bar - nitrogen

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