# PV2RS stainless steel

expansion vessel







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## Introduction

Altecnic offer a complete range of expansion vessels to meet the requirements of most heating systems and for use with potable water.

Altecnic's range of expansion vessels for heating systems are manufactured to meet the requirements of PED Directive 2014/68/EU and BS EN 13831:2007 'Closed expansion vessels with built in diaphragm for installation in water'.

## Design

Manufactured in 304 stainless steel

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

Non-replaceable diaphragm.

Pre-pressurised air chamber with synthetic rubber compound bladder.

Suitable for temperatures up to 85°C, resistant to ethylene or propylene glycol mixtures and has low gas permeability.

Suitable for use on potable water.

These expansion vessels are suitable for use in coastal environments and with brackish water due to their stainless steel construction.

Altecnic expansion vessels are all tested according to the Pressure Systems Directive.

Supplied with a compression end complying with BS EN 1252-2 for use with R250 (half hard) copper tube.

#### 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 forces the bladder to collapse until the pump is started when the bladder starts to inflate.

As the temperature in the system increases, with the associated increase in pressure and volume, the expanded water enters the bladder creating additional volume and lowering the pressure.

When the temperature decreases, the pre-charge pressure forces the water from the bladder and back into the main water circuit.

Product Code	Volume	Connection
PV2RS	2 litre	15mm Compression

Altecnic Ltd Mustang Drive, Stafford, Staffordshire ST16 1GW T: +44 (0)1785 218200 E: sales@altecnic.co.uk Registered in England No: 2095101

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# Dimensions



Prod Code	ØA	В	øс	ØD	kg
PV2RS	15.2	229	120	135	

#### **Construction Details**

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Component	Material		Grade
lody	Stainless steel		AISI 304
nlet connection	Stainless steel		AISI 304
Compression nut	Brass		
Dlive	Brass		
1embrane	WRAS approved	elastomer	
echnical Data			
Medium:		water	
Max. working pressure:		10 bar	
Max. system temperature:		85°C	
Pre-charge pressure:			
PED:		2014/68	/EU

#### Installation

The expansion vessel must be installed in a vertical orientation and the length of any connecting pipework should be kept to a minimum.

The expansion vessel should be physically supported and restrained due to the compression connection.

# Service and Maintenance

WRAS approved products

Altecnic recommend that the air pressure is checked annually and adjusted if necessary.

This can be done using an air pressure gauge and foot pump.

