

potable water

mini expansion vessels



WRAS
APPROVED
PRODUCT

altecnic

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Introduction

Altecnic offer a complete range of mini expansion vessels for use with potable water in domestic hot and cold water systems.

The expansion vessels are manufactured to meet the requirements of PED 97/23/EC Directive and BS EN 13831:2007 'Closed expansion vessels with built in bladder for installation in water'.

Design

Manufactured in Noryl plastic or stainless steel

Pre-pressurised air chamber with synthetic rubber compound bladder.

The internal surface of the vessels in contact with the water are resistant to corrosion, thus maintaining water quality

External surfaces are black or a natural finish for stainless steel.

Suitable for temperatures up to 90°C, resistant to ethylene or propylene glycol mixtures and has low gas permeability.

Altecnic mini 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 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.

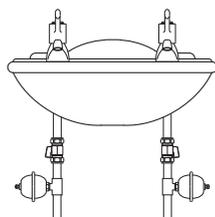
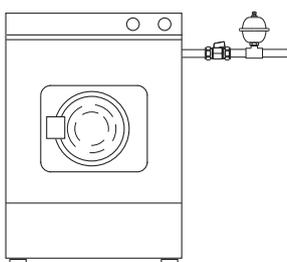
When the temperature decreases, the pre-charge pressure forces the water from the bladder and back into the main water circuit.

Service and Maintenance

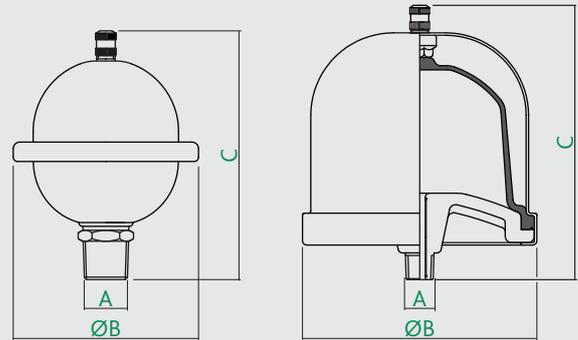
Altecnic recommend that the air pressure is checked annually and adjusted if necessary.

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

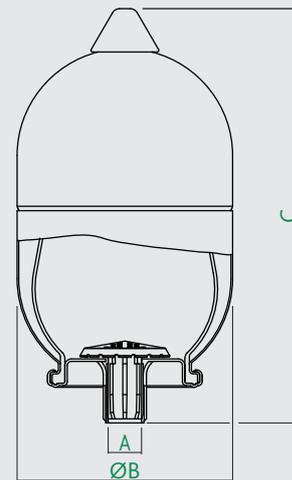
Typical Applications



Dimensions



Prod Code	Litres	A	B	C	kg
PV016C	0.16	R½	85	112	0.34
PV05C	0.5	G½B	113	135	0.6
PV1C	1.0	G½B	120	197	0.9



Prod Code	Litres	A	B	C	kg
PV2W	2.0	G¾	132	260	1.0

Construction Details

Component

Body and inlet connection - 0.16 & 2 litre:

Body and inlet connection:

Membrane:

Material

Stainless steel

Noryl polymer

Chlorobutyl

Technical Data

Max. working pressure:	10 bar	
Max. system temperature:	90°C	
	2 litre	70°C
Pre-charge pressure:	0.16 litre	3.5 bar
	0.5 litre	1 bar
	1.0 litre	1.9 bar
	2.0 litre	4 bar - nitrogen

WRAS approved products

E & O.E

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