PVA G flow through

potable water
expansion vessels

NITROGEN FILLED VESSELS

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Introduction

Flow through expansion vessels prevent the build-up of potentially harmful bacteria in potable water by reducing stagnation within the vessel.

The innovative design encourages flushing through the vessel, greatly reducing the opportunity for clusters to form.

NOTE: using the optional Flowjet valve is recommended.

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.

Design

Manufactured in carbon steel with a weld construction.

Pre-pressurised air chamber with synthetic rubber compound bladder.

The internal surfaces of the vessel in contact with the water are coated against corrosion.

External surfaces have a green durable powder coated epoxy finish.

Suitable for temperatures up to 70˚C, resistant to ethylene or propylene glycol mixtures and has low gas permeability.

Supplied with duo connection for sizes 600 to 1000 litres.

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

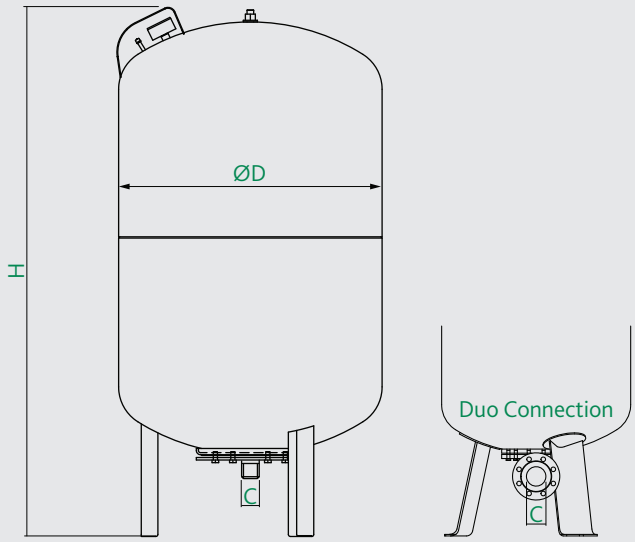
As the temperature in the system increases, with the associated increase in pressure and volume, the expanded water enters the bladder creating additional volume and lowering the pressure.

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

Technical Specification

Max. working pressure:	10 bar
Max. operating temperature:	70˚C
Factory air pre-charge:	4.0 bar - nitrogen
Non Replaceable bladder	
System water connection thread:	1¼" female parallel to BS EN 10266
System water flanged connection:	PN16 to BS EN 1092-1

Dimensions



Ref No	Capacity	ØD	H	C	Weight
	litres	mm	mm	Connection	kg
PVA60G	60	409	760	G1¼	15
PVA80G	80	480	750	G1¼	17
PVA100G	100	480	834	G1¼	19.2
PVA200G	200	634	973	G1¼	37
PVA300G	300	634	1273	G1¼	64
PVA400G	400	740	1245	G1¼	74
PVA500G	500	740	1495	G1¼	72
PVA600G	600	740	1860	DN50	168
PVA800G	800	740	2324	DN50	208
PVA1000G	1000	740	2804	DN50	264

Anti-legionella

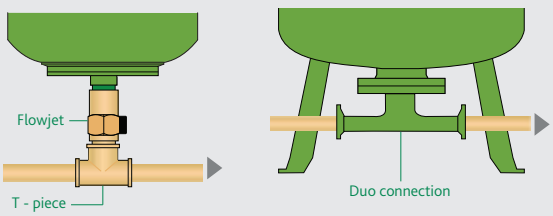
When fitted with the PVACC Flowjet valve the vessel is anti-legionella.

The PVACC Flowjet valves are supplied as an optional component.

Flowjet Valve

The Flowjet valve enable 4 functions to be performed easily.

- Continuous water flow through the bladder helping to maintain the quality of the potable water by minimising stagnation.
- Isolation should the expansion vessel need to be removed
- Drain facility
- Bypass



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