VF D

potable expansion vessels c/w integral bracket

SD 050 03-09-2020

Introduction

Altecnic offer a complete range of expansion vessels to meet the requirements of potable water applications and 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 vessels are fabricated by welding the two sections together which results in a very reliable structure suitable for internal pressures up to 10 bar.

The tanks are designed with no corners to trap sediment.

Complete with suspension bracket for wall or cabinet mounting.

Non-replaceable diaphragm.

Stainless steel connection.

Durable epoxy coating in blue.

Suitable for flow temperatures up to 70˚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 hot water 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.

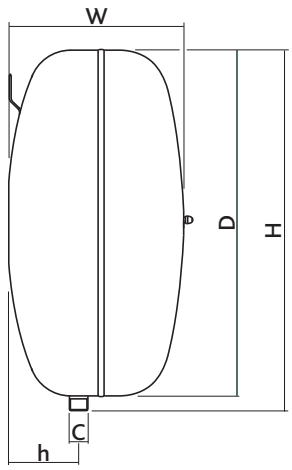
As the temperature increases, the expanded water volume pushes against the diaphragm creating additional volume for the water to enter.

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	Rubber - butyl
Coating	Powder Epoxy

Dimensions



Ref No	Cap	ØD	H	W	h	C	Wt
	litre	mm	mm	mm	mm	Connection	kg
VF8D	8	280	300	163	52	G½	3.8
VF12D	12	354	375	168	64	G½	5.2
VF18D	18	354	375	222	76	G¾	5.6
VF25D	25	409	430	239	93	G¾	8.2
VF35D	35	480	500	240	97	G¾	13.0
VF50D	50	480	500	318	125	G¾	15.4
HV80D	80	634	654	325	135	G¾	22.4

Technical Specification

Max. working pressure:	10 bar
Test pressure:	1.5 x max working pressure
Max. vessel operating temperature:	70˚ C
Factory pre-charge:	4.0 bar - nitrogen
CE marked	

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