

# VF potable

expansion vessels  
8 to 80 litres



**altecnic**  
Caleffi group

# VF potable expansion vessels - 8 to 80 litres



## Introduction

Altecnic offer a complete range of expansion vessels to meet the requirements of potable water applications and cooling systems.

Expansion vessels for potable water systems are manufactured to meet the requirements for pressure vessels 2014/108/EC Directive

## Design

The two halves of the vessel are welded together to give a pressure tight seal.

Bracket for wall or cabinet mounting.

Non-replaceable diaphragm.

Stainless steel connection.

Durable epoxy coated in blue.

Suitable for flow temperatures up to 120°C, resistant to ethylene or propylene glycol mixtures and has low gas permeability.

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

## How It Works

In a closed 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 system helping to reduce energy consumption.

## Materials

### Component

Shell

Connection

Diaphragm

Coating

### Material

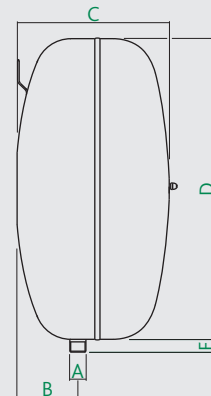
Carbon Steel

Stainless Steel

Synthetic rubber compound

Powder Epoxy

## Dimensions



| Code  | Capacity<br>litres | A<br>mm | B<br>mm | C<br>mm | ØD<br>mm | E<br>mm | Weight<br>kg |
|-------|--------------------|---------|---------|---------|----------|---------|--------------|
| VF8D  | 8                  | R½      | 52      | 163     | 280      | 20      | 3.8          |
| VF12D | 12                 | R½      | 64      | 168     | 354      | 21      | 5.2          |
| VF18D | 18                 | R¾      | 76      | 222     | 354      | 21      | 5.7          |
| VF25D | 25                 | R¾      | 93      | 239     | 409      | 21      | 8.3          |
| VF35D | 35                 | R¾      | 97      | 240     | 480      | 20      | 13.0         |
| VF50D | 50                 | R¾      | 125     | 318     | 480      | 20      | 15.4         |
| VF80D | 80                 | R¾      | 135     | 325     | 634      | 21      | 22.4         |

## Technical Specification

Max. working pressure 10 bar

Max. flow operating temperature 120°C

Max. vessel operating temperature 70°C

Factory air pre-charge 4 bar - nitrogen

CE marked

## PVA34L Shut-Off - Drain Valve

The 18 to 80 litre expansion vessels can be used with the PVA34L shut-off - drain valve with a protected shut-open facility to protect against inadvertent closure.



## E & O.E

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