

Intermediate Vessels



altecnic

Intermediate Vessels

Introduction

Altecnic intermediate vessels are manufactured to meet the requirements of the Directive and Regulations listed and are suitable for heating and solar systems.

Complies with:

- PED 2014/68/EU
- Pressure Equipment (Safety) Regulations 2016: Great Britain
- Pressure Equipment (Safety) Regulations 2016: Northern Ireland

Design

Vessel are fabricated by welding the various sections together resulting in a very reliable structure, suitable for internal pressures up to 10 bar.

Intermediate vessels do not contain a diaphragm but act a buffer.

External surfaces have a red durable powder coated finish.

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



How It Works

An expansion vessel must ensure the heating/solar system can work safely, particularly during periods when hot water is not being drawn off.

During this period modern solar collectors may reach temperatures up to 200°C and consequently the fluid within the system can either evaporate or reach levels that can damage all the components within the solar energy system over time.

In the event that the bladder within the expansion vessel could be subjected to continuous temperatures above 100°C, the vessel must be protected by an additional vessel (VDI 6002 directive).

Application

Intermediate vessels should be installed in closed solar or heating systems containing water treated to prevent corrosion.

If the return temperature in solar installation exceeds 100°C or in a heating system exceeds 70°C an intermediate vessel should be installed.

The intermediate vessel should be installed between the heat/cooling source and the expansion vessel.

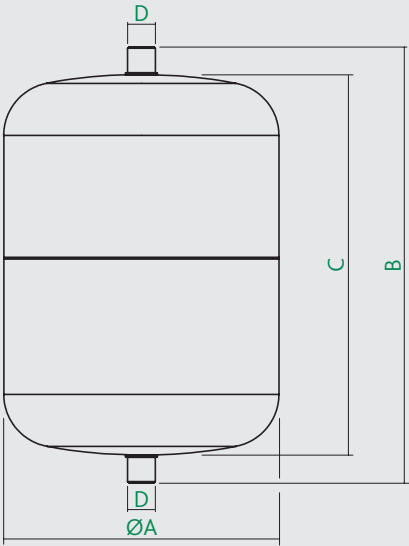
The function of the vessel is to avoid premature ageing of the diaphragm in the expansion vessel caused by water entering the diaphragm at too high a temperature.

The intermediate vessel hold a quantity of water which is allowed to cool and it is this cooled water which enters the expansion vessel.

Materials

Component	Material
Shell:	Carbon steel
Connections:	Carbon steel zinc plated
Coating:	Powder epoxy

Dimensions

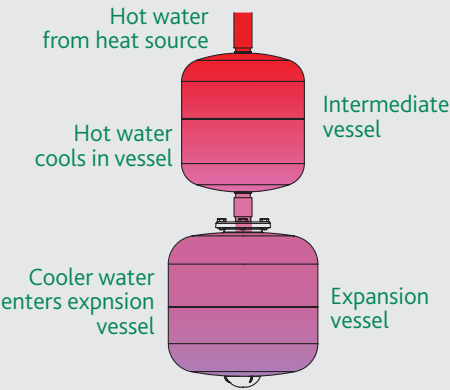


Ref No	Vol litres	ØA	B	C	D	Wt kg
111-5001	8	220	302	249	G¾	1.64
111-5002	12	260	309	256	G¾	2.06
111-5003	18	260	412	359	G¾	2.65
111-5004	24	260	508	455	G¾	3.21

Technical Specification

Max. working pressure:	10 bar
Test pressure:	14.3 bar
Working temperature range:	-10 to 110°C
System water connection thread:	BS EN ISO 228

Typical Application



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