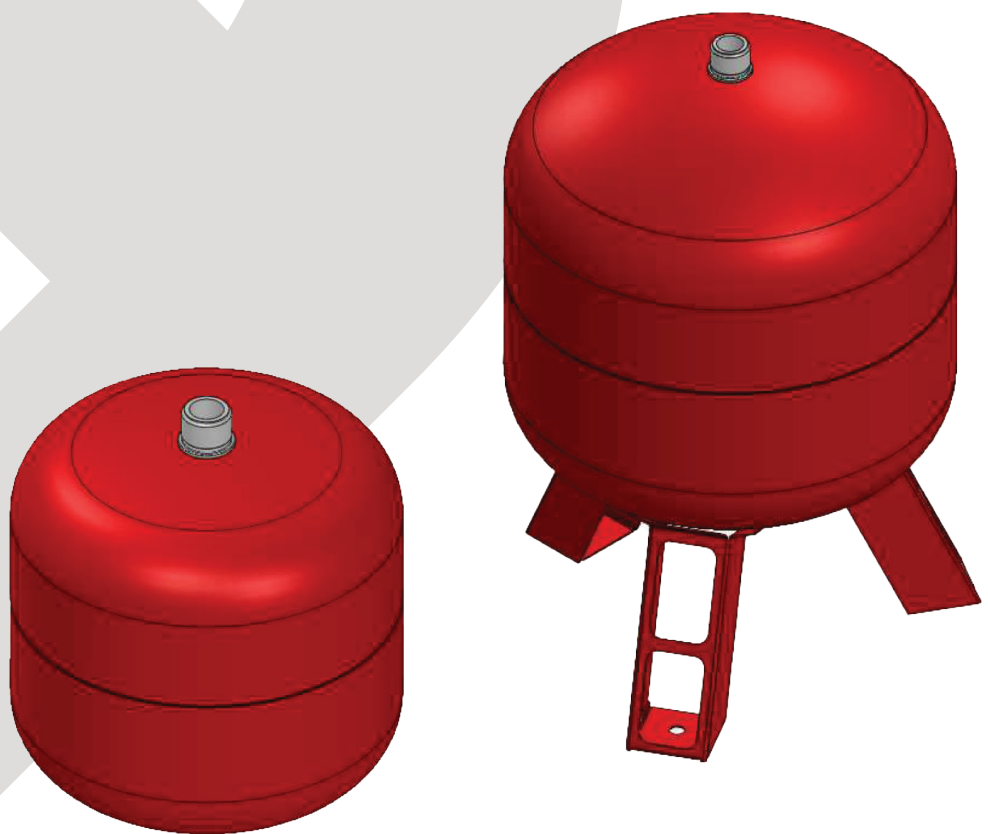


111-50

intermediate pressure vessels



altecnic

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111-50 intermediate pressure vessels

Introduction

The Altecnic 111-50 intermediate vessels are manufactured to meet the requirements of the Directive and Regulations listed and are suitable for heating and solar systems.

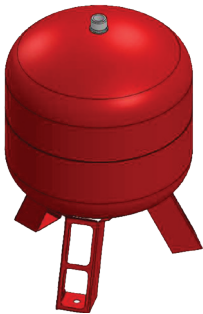
Complies with:

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

Design

The vessels 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. The 35 and 50 litre vessels have legs for floor mounting.

External surfaces have a red durable powder coated finish. Altecnic intermediate vessels are all tested according to the Pressure Systems Directive.



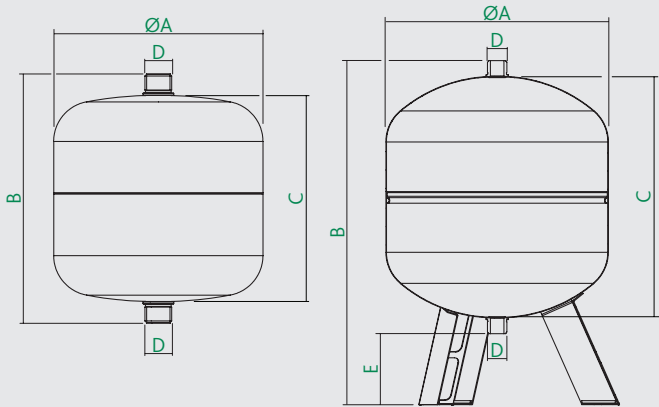
How It Works

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

Dimensions



Ref No	Vol	ØA	B	C	D	E
111-5011	8 ltr	220	303	249	G1	-
111-5012	12 ltr	260	310	256	G1	-
111-5005	35 ltr	380	588	412.5	G1	121.5
111-5006	50 ltr	380	729	548	G1	128

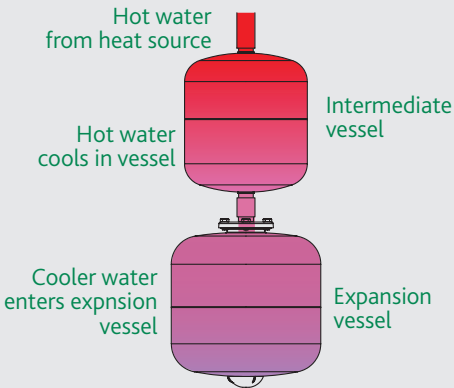
Technical Specification

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

Materials

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

Typical Application



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