

PV

intermediate pressure vessels



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# PV intermediate pressure 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 vessel.

Epoxy coated externally in grey.

35 to 350 litre sizes have legs and are floor standing.

Intermediate vessels are tested according to the Pressure Systems Directive.

## How It Works

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

The water in the system can reaches 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 energy system over time.

In the event that the diaphragm within the expansion vessel could be subjected to temperatures above 110°C, an intermediate vessel (VDI 6002 directive) must be provided to protect the diaphragm.

## 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.

## Technical Specification

Maximum operating temperature:	110°C
Maximum operating pressure:	10 bar
Flange connection:	PN16
Durable epoxy coating	

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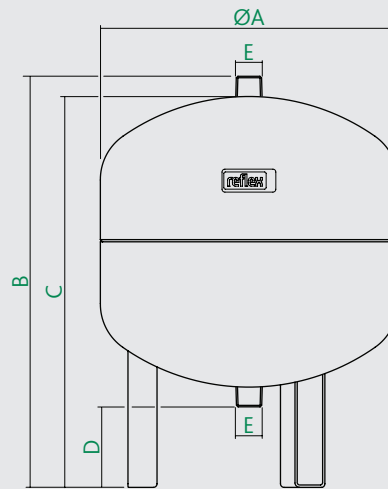
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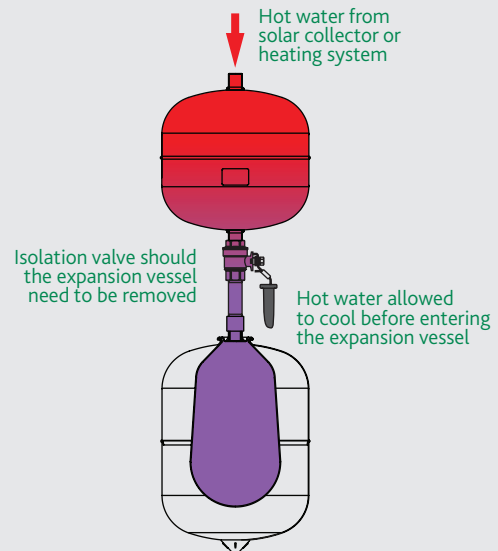
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## Dimensions



Ref No	Vol litres	A	B	C	D	E	Wt kg
PV6I	6	206	244	222	22	R¾	2.00
PV12I	12	280	244	263	22	R¾	3.3
PV20I	20	280	360	338	25	R¾	4.3
PV40I	40	409	562	538	113	R1	9.75
PV60I	60	409	737	707	192	R1	12.4
PV200I	200	634	901	740	142	DN40	35.3
PV300I	300	634	1224	1140	142	DN40	48.0
PV350I	350	634	1341	1180	142	DN40	51.0

## Typical Application



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