

569

intermediate pressure vessels



altecnic

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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

The Altecnic 569 intermediate vessels (buffer tanks) are primarily designed for use with domestic or small commercial heat pumps. They have two main functions as a hydraulic separator or buffer tank. The hydraulic separator makes the heat pump flow rates and terminal flow rates unconnected.

The buffer function reduces the heat pump on/off switching.

Design

Vessels are of steel construction with an external paint finish and are suitable for internal pressures up to 4 bar.

The vessels are designed for wall mounting and as supplied with two mounting brackets.

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

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

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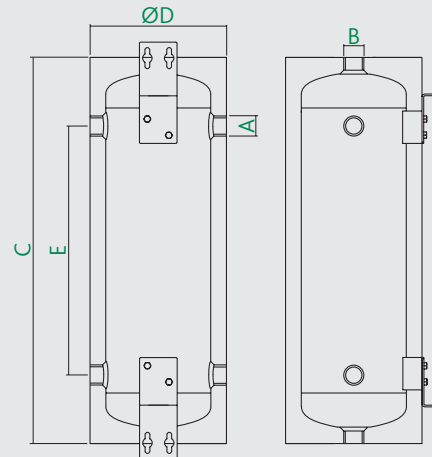
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ALTECNIC™

Dimensions



Ref No	Vol litres	A	B	C	D	E	Wt kg
569008	8.3	1"	1"	382	260	126	6.5
569012	12.4	1"	1"	526	254	270	7.5
569025	25	1¼"	1"	790	290	520	11
569050	51	1¼"	1"	1008	343	600	16
569080	81	1¼"	1¼"	745	450	400	18
569100	95	1¼"	1¼"	870	450	525	24

Technical Specification

Maximum operating temperature:	-10 to 95°C
Maximum operating pressure:	4 bar
Threads:	BS EN ISO 227
Cylinder material:	Steel
External coating:	Grey PVC
Insulation:	High thermal insulation with ecological polyurethane hard foam

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