

BV C 6 bar buffer tank

with hard foam insulation
for heating systems



altecnic

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Introduction

Altecnic buffer tanks are manufactured to meet the requirements of the Directive and Regulations listed and are suitable for heating systems.

Complies with:

PED 2014/68/EU

Pressure Equipment (Safety) Regulations 2016: Great Britain

Pressure Equipment (Safety) Regulations 2016: Northern Ireland

Altecnic buffer tanks are primarily designed for use in closed commercial heating systems.

Design

The buffer tank is of steel construction, uncoated internally with external corrosion protection and are suitable for internal pressures up to 6 bar.

The buffer tank is supplied pre-insulated for heating applications.

Buffer tank does not contain a diaphragm and is floor standing.

The buffer tank has 8 flow connection points and 5 connections for instrumentation such as thermometers and pressure gauges.

The buffer tank also have a connection for an electric immersion heater (not supplied as standard)

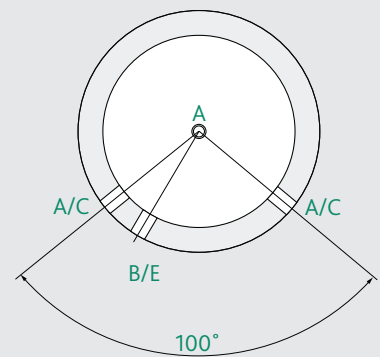
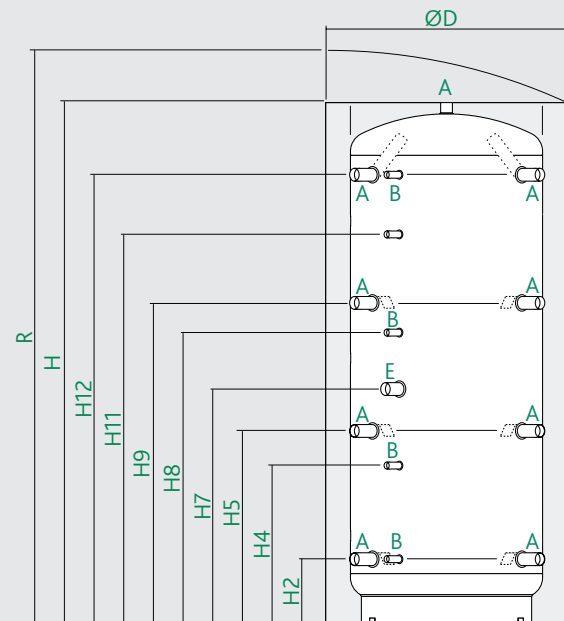
The buffer tank is tested according to the Pressure Systems Directive.

Expansion Vessel and High Temperatures

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

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

Dimensions



	Connection	Thread
A	Heating delivery from heat source	G1½
B	Connection for instrumentation	G½
C	Heating return to heat source	G1½
E	Connection from electric immersion heater	G1½

Ref No	Vol. lt	D	H	H2	H4	H5	H7	H8	H9	H11	H12	R	ErP
BV500C	478	750	1620	247	533	629	841	930	1011	1231	1343	1790	C

R = the tilt height

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Application

The buffer tank act like a thermal store to hold a quantity of hot water when not required by the heating system.

This allows the heat source to be smaller or switched off for longer periods thus saving energy and makes the system more energy efficient.

The buffer tank should be installed between the heat source and the expansion vessel of the heating system.

Technical Specification

Operating pressure:	6 bar
Operating temperature:	99°C
Colour:	Grey PVC external lining
Insulation type:	Ecological polyurethane hard foam

Thermal Insulation

Thermal efficiency of the buffer tank is optimised with special insulations, that are an essential component for every hot water storage system keeping the temperature stable with low heat loss. Insulation reduces temperature losses with the related energy savings.

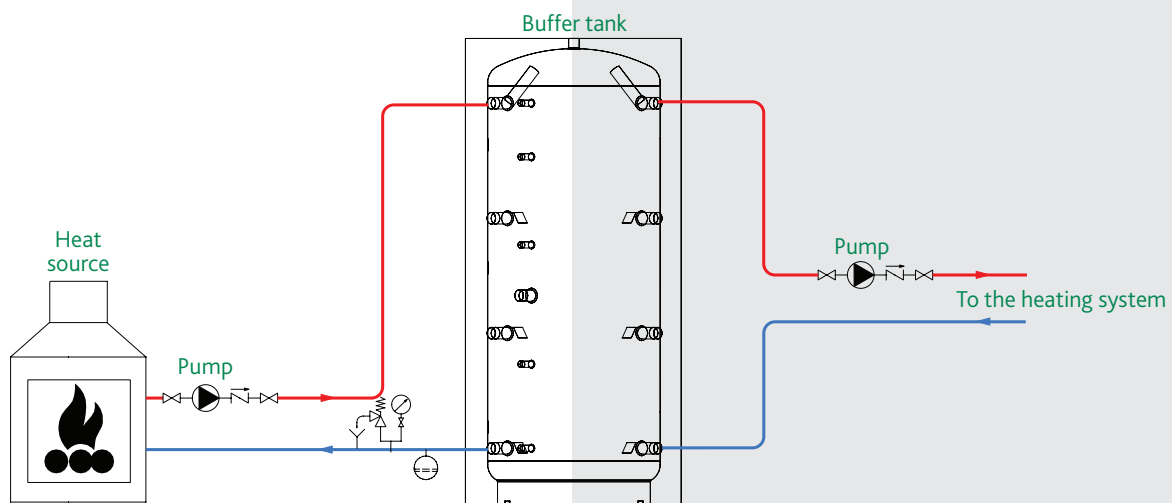
Rigid Expanded Polyurethane

In heating systems the use of expanded polyurethane as thermal insulation is widespread, since it has excellent insulating properties. Altecnic buffer tank has thermal insulation formed from rigid polyurethane foam applied directly onto the body of the tank, whose surface is treated with a special release agent to facilitate its removal at the end of the life of the buffer tank.

The insulating layer has a high insulating capacity and high polymer density.



Typical Application



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