

# BV E 6 bar buffer tanks

with removable soft fleece  
insulation for heating  
systems



**altecnic**

# BV E 6 bar buffer tanks with removable soft fleece insulation



## Introduction

Altecnic 6 bar 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 tanks are of steel construction, uncoated internally with external corrosion protection and are suitable for internal pressures up to 6 bar.

The buffer tanks are supplied with removable soft fleece insulation for heating applications.

Buffer tanks do not contain a diaphragm and are floor standing.

The buffer tanks have 8 flow connection points and 5 connections for instrumentation such as thermometers and pressure gauges and the BV3000F and BV5000F have supporting feet and a drain connection.

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

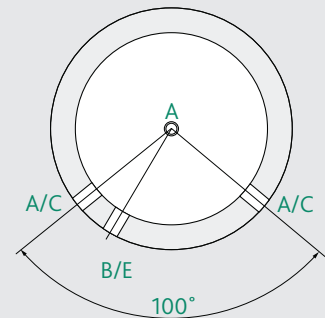
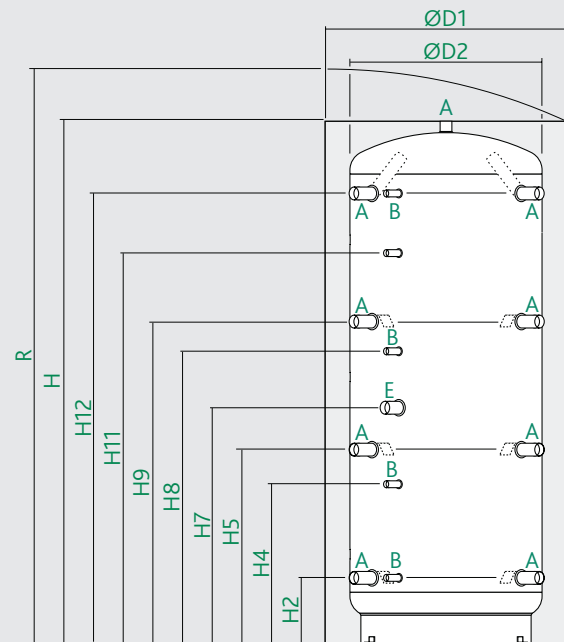
Buffer tanks are tested according to the Pressure Systems Directive.

## Expansion Vessel and High Temperatures

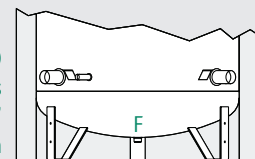
An expansion vessel must ensure the heating system can work safely, particularly during periods when hot water is not being circulated.

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



Support feet for 3000 and 5000 ltr models  
Drain connection 'F' at the bottom



	Connection - 800 to 2000 ltrs	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	D1	D2	H	H2	H4	H5	H7	H8	H9	H11	H12	R	ErP
BV800E	805	1010	790	1840	265	584	690	823	988	1115	1332	1541	2075	C
BV1000E	946	1010	790	2130	265	656	787	998	1188	1309	1588	1831	2340	C
BV1500E	1454	1210	950	2250	313	736	845	1061	1286	1377	1653	1909	2510	C
BV2000E	1973	1360	1100	2320	347	770	879	1060	1300	1411	1687	1943	2665	C
BV3000E	2915	1450	1250	2814	556	1017	1071	1693	1879	1786	2140	2402	3170	
BV5000E	4985	1800	1600	2929	586	1017	1101	1691	1889	1816	2159	2432	3445	

R = the tilt height

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	Connection - 3000 & 5000 ltrs	Thread
A	Heating delivery from heat source	G2
B	Connection for instrumentation	G½
C	Heating return to heat source	G2
E	Connection from electric immersion heater	G2
F	Drain connection for 3000 ltr model Drain connection for 5000 ltr model	G1 G2

## Application

Buffer tanks act like a thermal store to hold a quantity of hot water when not required by the heating system.

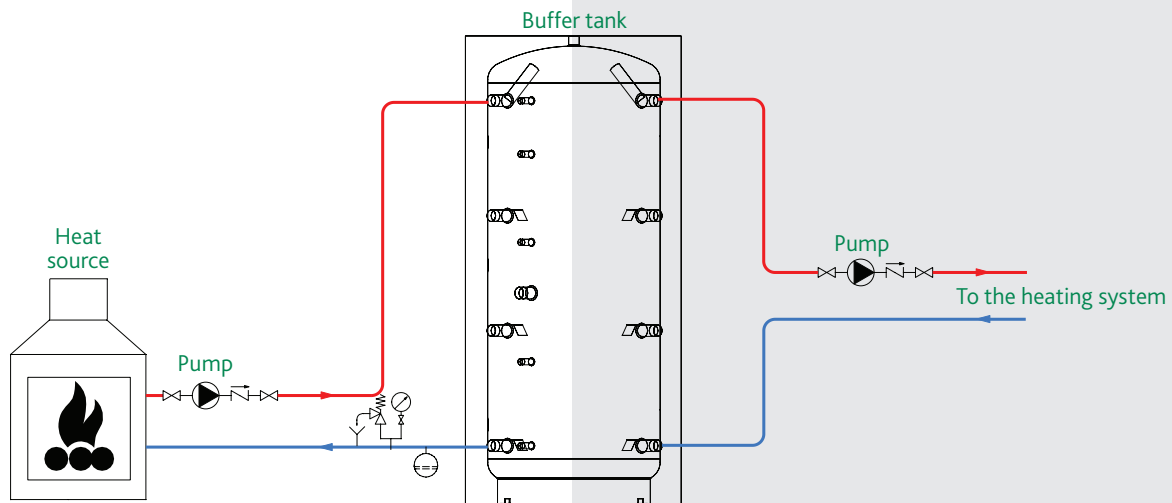
This allows the heat source to be smaller or switched off for longer periods thus saving energy and makes the system more energy efficient.

The buffer tanks 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:	Polyester fleece
Thermal conductivity - k:	0.039
Fire resistance complying with BS EN 13501:	B-s2d0

## Typical Application



## Thermal Insulation

Thermal efficiency of buffer tanks 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.

## Polyester Fleece

Polyester fleece as low thermal conductivity and has excellent thermal insulating properties.

Polyester fleece is stable at high temperatures, it is flexible, durable, non-toxic, resistant to some chemicals, it does not degrade and is hygienic.

High insulating capacity with a thermal conductivity k of 0.039 W/mk and a fire resistance of B-s2d0, according to BS EN 13501.



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