### **WARNINGS**

- ⚠ The appliance may be used by children aged 3 and older and persons with physical, sensory or mental disabilities or lacking experience or knowledge, if they are under supervision or taught about safe use of the appliance and if they are aware of the potential dangers. Children aged from 3 to 8 years are only allowed to operate the tap connected to the appliance.
- Children should not play with the device.
- ▲ Cleaning and user maintenance shall not be performed by children without supervision.
- ▲ Installation should be carried out in accordance with the valid regulations and according to the instructions of the manufacturer and by qualified staff.
- ▲ In a closed-circuit, pressurised system, it is obligatory to install a safety valve with a maximum nominal pressure indicated in the technical data, preventing the pressure in the tank from exceeding the nominal pressure by more than 0.1 MPa (1 bar).
- The outlet of the safety valve should be installed facing downwards and in a non-freezing area.
- ▲ To ensure proper functioning of the safety valve, the user should perform regular controls to remove limescale and make sure the safety valve is not blocked.
- ▲ Do not install a stop valve between the buffer tank and the safety valve, because it will impair the pressure protection of the buffer tank!
- A buffer tank that is connected to the heating system increases the volume, which has a

- significant impact on the size of the expansion tank, which is obligatory and the volume of which must be properly calculated by a professional.
- ▲ If the system has to be switched off, please drain any water from the buffer tank to prevent freezing.
- ▲ If you are planning to build in an electric heating package, the safety of operation is guaranteed only if an original heating package is installed.
- ▲ Please do not try to fix any defects of the buffer tank on your own. Call the nearest authorised service provider.



Our products incorporate components that are both environmentally safe and harmless to health, so they can be disassembled as easily as possible and recycled once they reach their final life stage.

Recycling of materials reduces the quantity of waste and the need for production of raw materials (e.g. metals) which requires a substantial amount of energy and causes release of harmful substances. Recycling procedures reduce the consumption of natural resources, as the waste parts made of plastic and metal can be returned to various production processes. For more information on waste disposal, please visit your waste collection centre or the store where the product was purchased.

# Dear customer, thank you for purchasing our product. PRIOR TO THE INSTALLATION AND USING THE BUFFER TANK FOR THE FIRST TIME, PLEASE READ THESE INSTRUCTIONS CAREFULLY.

This buffer tank has been manufactured in compliance with the relevant standards and tested by the relevant authorities. Its basic technical characteristics are indicated on the label located on the protective cover.

The buffer tank must be installed and connected by a qualified professional. Interventions within the tank may only be done by an authorised service provider. The buffer tank was specially developed for the storage of hot or cold water for heating within the limit temperatures and pressure, in accordance with the data indicated in the "Technical Properties" chapter. Using the appliance in any other way would be inappropriate and dangerous. **NOT SUITABLE FOR POTABLE WATER**.

#### STORAGE AND TRANSPORT

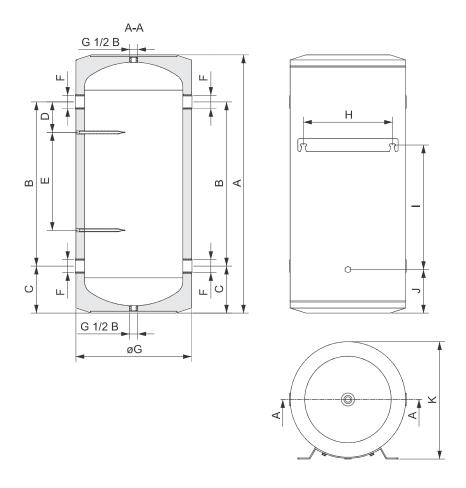
The buffer tank must be stored in a dry and clean space. Exposure to the elements may damage the appliance.

## **DIMENSIONS**

#### **WALL-MOUNTED VERSION**

	Α	В	С	D	E	F	G	Н		J	K
	[mm]	[mm]	[mm]	[mm]	[mm]	["]	[mm]	[mm]	[mm]	[mm]	[mm]
ZV25S	610	305	153	79	1	G3/4 *	334	270	190	268	355
ZV50S	1080	776	153	79	618	G3/4 *	334	270	710	217	355
ZV50	560	200	180	1	1	G1 1/4 *	454	350	200	166	461
ZV100	1005	645	180	125	1	G1 1/4 *	454	350	495	166	461

<sup>\*</sup> internal thread

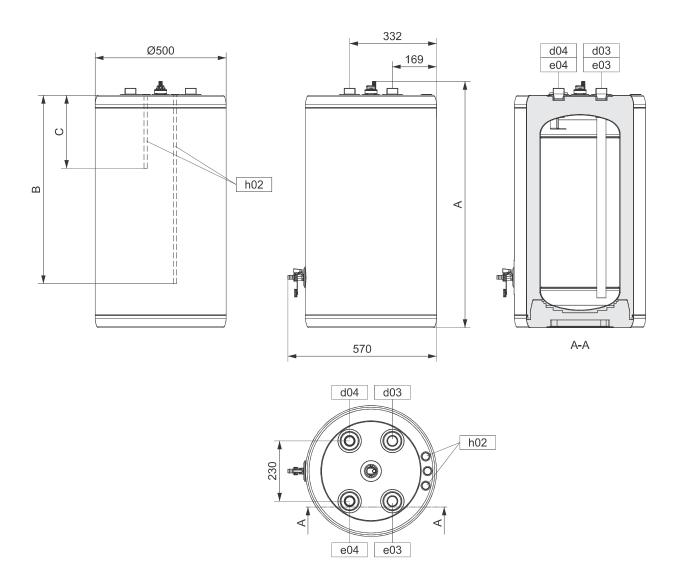


Connection and installation dimensions of the wall-mounted version of the buffer tank

### **FLOOR-STANDING VERSION**

	A [mm]	B [mm]	C [mm]	d03 ["]	d04 ["]	e03 ["]	e04 ["]	h02 [mm]
ZV100FS	940	719	279	G1 1/4 **	G1 1/4 **	G1 1/4 **	G1 1/4 **	9
ZV150FS	1314	1090	279	G1 1/4 <sup>~</sup>	G1 1/4 ~	G1 1/4 <sup>~~</sup>	G1 1/4 <sup>~</sup>	9

<sup>\*\*</sup> external thread



Connection and installation dimensions of the floor-standing version of the buffer tank

#### INSTALLATION

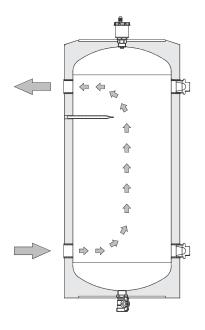
Place the buffer tank in a dry space free from freezing conditions. If possible, it should be placed near other heating sources. The appliance must be installed by a properly qualified person in accordance with the instructions and local regulations. The buffer tank may be used in heating and cooling systems. The primary purpose of the buffer tank is storage of superfluous energy, but it can also be used as a hydraulic switch in heating or cooling systems.

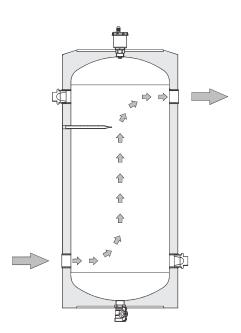
The buffer tank was designed, manufactured and tested for the storage of hot or cold water within the scope of the limit temperatures and pressure, indicated in the chapter "Technical Characteristics of the Appliance". Using the appliance in any other way would be inappropriate and dangerous.

Make sure to leave enough space around the buffer tank for undisturbed regular and irregular maintenance interventions (access to sensors and connections, cleaning, deaeration etc.).

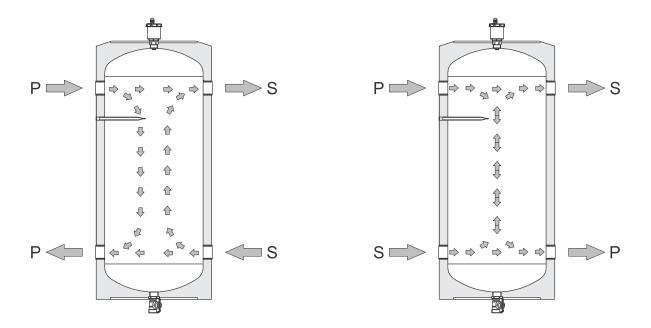
It is recommended to install a magnetic and mechanical debris filter in order to ensure long-lasting functioning of the system.

#### SERIES CONNECTION





#### PARALLEL CONNECTION



P ... Primary circuit S ... Secondary circuit

# FILLING AND STARTING UP YOUR BUFFER TANK FOR THE FIRST TIME

The first filling and start-up must be performed by a properly qualified person. Before filling the buffer tank with water, the pipes and the tank must be rinsed to remove any debris and impurities. Upon start-up, pressure test must be performed and the sealing of joints must be checked. If the tank will be used in a cooling system, make sure the water temperature is always above freezing point. To prevent corrosion in the system, it is recommended to treat the water properly.

## **MAINTENANCE**

The exterior of the buffer tank should be cleaned with a soft cloth and mild liquid detergents. Do not use detergents that contain abrasives. Regular maintenance interventions include the inspection of the expansion vessel, safety valves and other valves, although they are not part of the appliance.

## **TECHNICAL CHARACTERISTICS**

Туре		ZV25S	ZV50S	ZV50	ZV100			
Energy efficiency class 1)		С	С	С	С			
Standing loss S 2)	W	34.8 48.0		46.0	68.0			
Volume for storage	ı	25.4	49.5	50.9	102.0			
Connection dimensions								
Height	mm	613	1084	570	1010			
Diameter	mm	334	334	454	454			
Heating water inlet		G 3/4	G 3/4	G1 1/4	G1 1/4			
Heating water outlet		G 3/4	G 3/4	G1 1/4	G1 1/4			
Net/gross/ weight with water	kg	15/17/ 40	29/31/ 80	16.5/18.5/ 67.5	32/34/ 134			
Technical properties								
Maximum allowable operating pressure	MPa (bar)	1.0 (10)						
Maximum water temperature	°C	95						
Non-enamelled sheet metal		+	+	+	+			
Average insulation thickness	mm	37	37	33	33			
Accessories								
Deaerator with valve G 1/2		+	+	+	+			
Inlet ball valve G 1/2		+	+	+	+			
Plug G1 1/4-Zn		-	=	+	+			
Transport data								
Packaging dimensions	mm	375x415x 745	375x415x 1215	480x490x 650	480x490x 1100			

<sup>&</sup>lt;sup>1)</sup> Commission Regulation EU 812/2013 <sup>2)</sup> Tested according to EN 12897:2006 or EN 60379:2005

Туре		ZV100FS	ZV150FS				
Energy efficiency class 1)		С	С				
Standing loss S 2)	W	53.3	62.1				
Volume for storage	ı	94.7	146.2				
Connection dimensions							
Height	mm	940	1314				
Diameter	mm	500	500				
Heating water inlet		G1 1/4	G1 1/4				
Heating water outlet		G1 1/4	G1 1/4				
Net/gross/ weight with water	kg	31/33/ 126	42/46/ 188				
Technical properties							
Maximum allowable operating pressure	MPa (bar)	1.0 (10)					
Maximum water temperature	°C	95					
Non-enamelled sheet metal		+	+				
Average insulation thickness	mm	40	40				
Accessories							
Deaerator with valve G 1/2		+	+				
Inlet ball valve G 1/2		+	+				
Plug G1 1/4-Zn		+	+				
Transport data							
Packaging dimensions	mm	600x600x1050	600x600x1420				

<sup>&</sup>lt;sup>1)</sup> Commission Regulation EU 812/2013 <sup>2)</sup> Tested according to EN 12897:2006 or EN 60379:2005