

HORIZONTAL DOUBLE COIL HOT WATER TANK

CAPACITIES AVAILABLE: 80, 100, 120, 140, 160, 200, 250, 300

PRODUCT ID: WCWPozWiszEPGCWEZ



1. PRODUCT DESCRIPTION

Horizontal double coil hot water tank with coil is a device designed to heat water and keep it warm. Thanks to the thermal insulation – polyurethane foam (cell-closed), water keeps warm up to 72 hours from the heating moment*. The tank fulfills its role in both open and closed heating systems, it has no limitations for the type of heating source, as the tank is cooperating well with any of the heating solution. The advantage of the product is the use of an additional heating shell inside the tank, which is making the water heating process much faster and considerably lowering the heating losses. In addition, the coil used allows you to connect a separate power source to create a hybrid heating model.

* Laboratory conditions

The product designed only to work in horizontal position only.

THE TANK DOES NOT REQUIRE MAGNESIUM ANODE

2. CONSTRUCTION:

Tank body - made of black steel. The steel thickness presented below is dedicated to a given product capacity.

CAPACITY [L]	Lower and upper bottom	Tank body
	steel sheet thickness [mm]	steel sheet thickness [mm]
80	4	3
100	4	3
120	4	3
140	4	3
160	4	3
180	4	3
200	4	3
250	4	3
300	4	3

The internal anti-corrosion layer - the tank is covered EPIDIAN - food grade epoxy resin atested by National Institute of Public Health NIH - National Research Institute.

The externam thermal insulation - it is made of cloased polyurethane foam PUR of about 5,5 centimeters thickness being the integral part of the tank. The external values of the buffer are enhanced by ecological leather, which can be removed when needed.

In the bottom of the horizontal tank there is a connection to a 5/4" electric heater, a 1/2" circulation connection and an *input for a temperature sensor (*applies only to tanks with a capacity of 200L, 250L, 300L). The supply and return to the central heating system is 1", while the supply and return to domestic hot water is 3/4". The entrance and exit of the 5/4" coil is located in the bottom (external thread). The tank can be installed anywhere thanks to the design and layout of the couplers. The power supply can be the return and the return can be the power supply. This applies to both the central heating boiler water connection as well as hot domestic water connection. The advantage of each tank is the hole for the electric heater located in the middle of the bottom. This type of solution provides comfort of use in a situation where the

heat source, e.g. the furnace is extinguished - it allows to obtain hot water in a short period of time.

3. INSTALATION SAFETY

The proces of instalation must be prepared by an installer with appropriate qualifications and in compliance with Occupational Health and Safety Rules. Before starting the installation, please read this user manual. The product should be installed in accordance with the intended use recommended by the Manufacturer. The installation cost is the responsibility of the Buyer/User. The manufacturer is not responsible for device defects resulting from incorrect installation of the tank or by a person who does not have installation qualifications.

Installing the tank in places exposed to: low temperaturę/ freezing, high temperaturę/ steam/ explosion and other substances that accelerate corrosion or oxidation (e.g. chlorine, ammonia) is prohibited, and its effects release the Manufacturer from liability for the tank.

If the tank is installed in a non-standard place, the surface of which is exposed to rapid destruction in contact with water, the User is obliged to appropriately protect the surface against possible secondary damage. IT IS PROHIBITED TO USE THE TANK WITHOUT AN OPERATING SAFETY VALVE - regular inspection of the valve is recommended. You must also not prevent dripping from the safety valve (do not seal the valve, but specify the cause and replace it with a functional valve if necessary).

If the tank is installed in a closed heating system, an expansion vessel with a capacity of not less than 5% of the tank capacity should be installed, while if the tank is installed in an open system, the so-called expansion tank with a capacity of not less than 5% of the heater capacity should be installed.

The manufacturer reserves the right to make any modifications to the product.

4. INSTALATION

The tank should be placed on a durable surface in a horizontal position (the only permissible form). It is necessary to install the tank in such a place that the user has easy access to the safety valve in the event of a failure of the device, the heat source or the safety valve itself. The distance from the tank cover to the ceiling should not be less than 30 cm. Do not interfere with the connections, e.g. by bending them. In accordance with Journal of Law 2015 point: 1422 each connector must be insulated. The appropriate water intake for the buffer is the water supply network, the water quality must meet the standards of Council Directive 98/83/EC of November 3, 1998. ref. Quality of water intended for human consumption and the corresponding

legislation of the Republic of Poland (Journal of Laws of 2017, item 2294). There is a risk of discoloration of the water or a foreign odor if the device is connected to its own water intake, for which the Manufacturer is not responsible.

The installation begins with filling the tank with domestic water by opening the valve at the water supply and opening it (completely until it is vented, i.e. until the water flows out in a continuous stream) at the water outlet from the tank. Once the tank is filled with water, close the valve and make sure that all connections are tight – tighten if necessary. The installer is obliged to install a safety valve. The tank works on the principle of gravity, consequently the inlet of the heated heating medium to the double coil tank must be located higher than the boiler outlet.

It is important to use a dialectical connector that does not conduct electricity at the junction between the cold and hot water connectors of the tank and the installation cables. This solution eliminates contact of iron with copper, thus extending the life of the tank and preventing electrolysis (a phenomenon that is particularly active in water with an acidic pH (level <7)).

A horizontal double coil hot water tank can be powered by any source of heat source in the heating system, e.g. boiler/ furnace, solar system, heat pump, fireplace.

The permissible temperature for the operation of the tank is a maximum of 70 degrees Celsius, the maximum working pressure of the tank is 0.6 MPa.

If the User decides to install an electric heater, it must be connected through a socket with a grounding pin and must be protected by a residual current circuit breaker. The device works properly when the entire heating installation has been properly constructed and secured.

5. USER MANUAL

Important! You must not use the tank without filling it with water and without properly working safety valve.

The device maintenance process must be carried out in accordance with current Occupational Health and Safety rules.

After installing the tank but before using it, rinse the tank by filling the tank with water, heating it to a temperature of 50 degrees Celsius, and then releasing the water through the tap at the furthest point in the installation, and then repeating the process one more time.

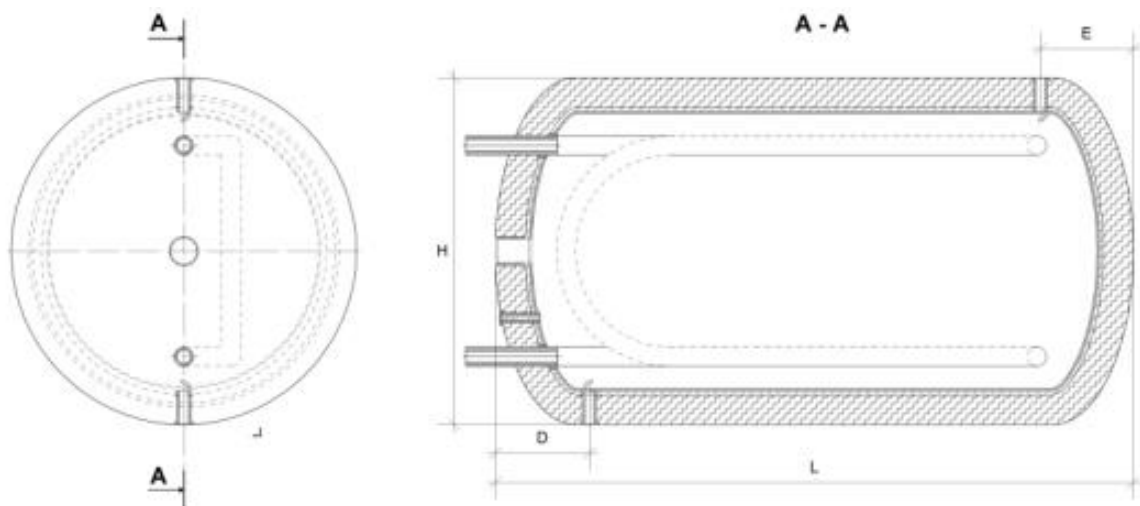
Once a month, you should heat the tank - heat water to 70 degrees Celsius to remove bacteria which may occur.

If an undesirable factor occurs – e.g. the risk of freezing water inside the tank, in this case water from the tank should be immediately removed. The appearance of fire in the close contact with the tank may cause it to burn.

In case of steam appearance at the hot water outlet, immediately open the water outlet/faucet and check the temperature of the heat source - reduce or turn off the heat source. If the device is connected to the electrical network, remove the plug from the power socket and find the cause of excessive temperature with the manufacturer of the heat source. The above situation may result in loss of health or life.

ATTENTION! The tank requires a flow of utility water of at least 20% of its capacity for 24 hours of operation. Precipitation of sediments and discoloration of water caused by lack of tank operation, the so-called the temporary stagnation of the hot water circuit is not subject to complaint.

TECHNICAL DRAWING:



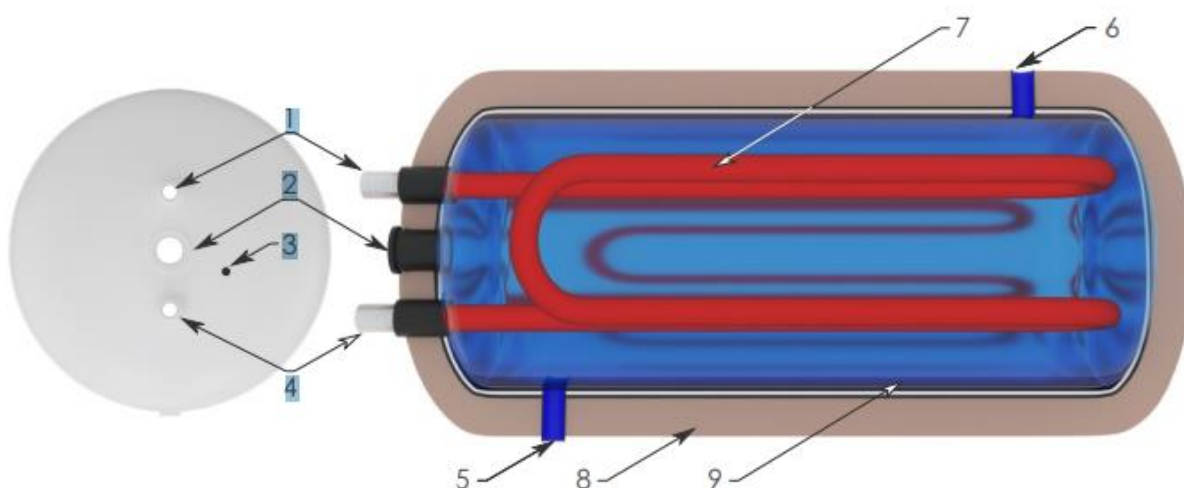
SYMBOL	CAPACITY	DIAMETER [H]	LENGHT [L]	DIAM. [D]	DIAM. [E]
WCWPozWiszePGC2WEZ80	80 L	470 mm	800 mm	280 mm	280 mm
WCWPozWiszePGC2WEZ100	100 L	470 mm	960 mm	270 mm	270 mm
WCWPozWiszePGC2WEZ120	120 L	470 mm	1112 mm	290 mm	260 mm
WCWPozWiszePGC2WEZ140	140 L	470 mm	1200 mm	280 mm	280 mm
WCWPozWiszePGC2WEZ200	200 L	630 mm	1200 mm	220 mm	310 mm
WCWPozWiszePGC2WEZ250	250 L	630 mm	1500 mm	230 mm	310 mm
WCWPozWiszePGC2WEZ300	300 L	630 mm	1700 mm	240 mm	300 mm

TECHNICAL DATA ref. REGULATIONS

Technical Parameters		Unit measure	WCWPozWiszePGC2WEZ 80L	WCWPozWiszePGC2WEZ 100L	WCWPozWiszePGC2WEZ 120L	WCWPozWiszePGC2WEZ 140L	WCWPozWiszePGC2WEZ 200L	WCWPozWiszePGC2WEZ 250L	WCWPozWiszePGC2WEZ 300L
EPIDIAN - food grade epoxy resin- Anti-corrosion coating									
THERMAL INSULATION - Closed polyurethane foam PUR									
Nominal capacity	[L]		80	100	120	140	200	250	300
Actual capacity	[L]		98	112	127	141	241	299	355
Energy accumulated in the tank. Assumptions for the temperatures: domestic water 42°C; set in the tank 70°C; at the point of consumption 8°C		[L]	179	205	232	258	439	546	647
Efficiency	[L/h]		245	265	320	365	530	662	795
Exchanger power	[kW]		9,7	10,6	12,8	13,6	14,0	14,4	15,3
Hot water demand	[m3/h]		0,8	0,9	1,0	1,1	1,8	2,2	2,7
Coil surface	[m2]		0,6	0,6	0,6	0,6	0,6	0,6	1,2
Weight	[kg]								
Water tank maximum working temperature and pressure		[°C / Bar]	70°C / 6 Bar						
Downtime loss (S) in watt [W] for storage capacity (V) in liters [L]		[W]	25	26	27	28	34	36	39
Heat losses depending on the capacity (V)		[kWh/24h]	0,61	0,63	0,66	0,68	0,81	0,87	0,93
 Energy class			A+	A+	A+	A+	A	A	A
Dimentions									
Length	H		800	960	1112	1200	1200	1500	1700
Diameter	L	[mm]	ø470	ø470	ø470	ø470	ø630	ø630	ø630
	M		280	280	280	280	280	280	280

*The manufacturer reserves the right to the technical modificaions/improvements in the product.

SCHEMA - HORIZONTAL DOUBLE COIL HOT WATER TANK



LEGEND

1. SUPPLY (CENTRAL HEATING) 5/4"
2. ELECTRIC HEATER WITH THERMOSTAT 5/4"
3. CIRCULATION 1/2"
4. WATER RETURN (CENTRAL HEATING) 5/4"
5. DOMESTIC WATER SUPPLY 3/4
6. DOMESTIC WATER INTAKE 3/4
7. COIL
8. POLYURETHANE FOAM
THERMAL INSULATION
9. ANTI - CORROSION LAYER