

can be flexibly customised to meet individual needs, our manufacturing

process is prompt and the installation of units is easy.











**TEHTY SUOMESSA** 

MADE IN FINLAND

# An accumulator tank for every need

Akvaterm accumulator tanks are some of the most well-known units on the Finnish market: our product range has just the right alternative for every need. In addition to standard models, we also offer customisable accumulators, whose features can be tailored to suit individual needs.

### Standard and fully customisable accumulators

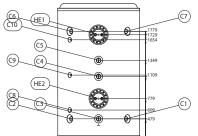
In addition to standard accumulators, Akvaterm accumulators can also be fully customised. Customers can choose the desired material, volume, outer dimensions, couplings, coils, baffle plates and insulation. Our sales representatives will help you find the most suitable accumulator for your needs.

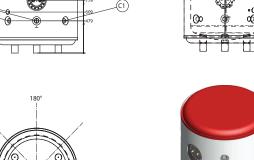
## Finnish production plant - high volume

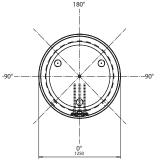
Founded in Kokkola in 1993, Akvaterm merged with Kaukora Oy in 2017. As a result of the merger, the manufacturing process has access to the higher capacity of a larger factory and state-of-the-art production methods, without giving up the benefits and market position of customisable accumulators. Manufacturing was kept in Finland and sales are carried out in several different languages.

## Design tool helps with customisation and sales

The electronic design tool can be used to quickly transform the customer's graph paper drawing into a production-ready design for manufacturing the customer's accumulator.









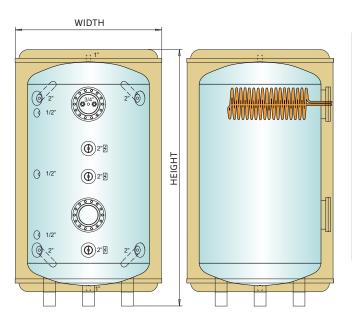
## **AKVA EK**

AKVA EK hot water accumulators are available in volumes of 300-10,000 litres. Pressure rating: 3 bar 100 mm seamless polyurethane insulation and metal sheathing. Insulation is also available with detachable side sections.

Normally included as a standard, an LK coil for heating domestic water is installed in the upper hatch. A domestic water preheating coil, solar coil or other charging coil can be installed in the lower section. The accumulator is fitted with 2" couplings for electric immersion heaters and guide pipes to ensure proper heat stratification. The couplings are installed close to the surface of the accumulator to facilitate installation. Accumulators can be shortened or raised and fitted with levelling plates, electric immersion heaters, sleeve couplings, various hatches or coils. For more information, just ask one of our sales representatives!

### **Technical specifications**

Ideal for use alongside, for example, oil, wood or pelletfired boilers. Also suitable as a buffer accumulator for a heat pump. The accumulator can also be fitted with electric immersion heaters, which produce heat if the external heating source fails.





Couplings	Qty	Size	Add. info
Network/boiler	4	2"	Typ. 2" for over 200-litres
Thermometer/ thermostat	3	1/2"	
Electric immersion heater	3	2"	
Domestic water coil	2	3/4"	Upper section of the accumulator. Often a second coil in the lower hatch for preheating domestic water or for solar power.
Drain connection	1	1"	
Air bleeder connection	1	1"	

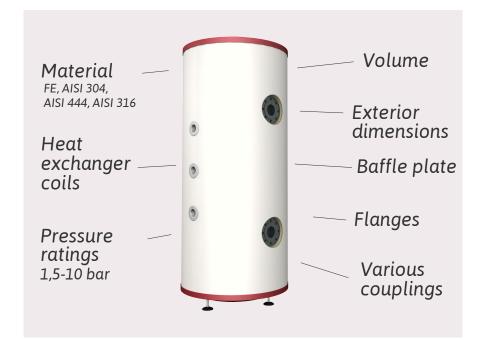
The AKVA EK is typically fitted with an LK S coil in the upper hatch. There is a wide variety of coil options available for the heating of domestic water or supplying the accumulator with thermal energy. Adaptable components: electric immersion heaters, coils, double coils, baffle plates, special couplings, etc.

Name	Width [mm]	Height [mm]	Weight [kg]	Volume [l]	PN [bar]	Insulation [mm]	Heat ret. loss [W]	Energy rating	HVAC no.
AKVA EK 300*	710	2000/2060**	140	284,0	3	100	66,0	В	5235100
AKVA EK 500*	800	2000/2060**	170	450,0	3	100	74,0	В	5235054
AKVA EK 750*	950	2080/2140**	210	749,2	3	100	94,0	В	5235056
AKVA EK 1000*	1050	2100/2210**	240	958,4	3	100	106,0	В	5235058
AKVA EK 1500*	1250	2130/2240**	300	1486,4	3	100	128,0	С	5235060
AKVA EK 2000*	1400	2190/2300**	350	1972,4	3	100	145,0	С	5235062
AKVA EK 2500*	1500	2250/2360**	380		3	100			5235101
AKVA EK 3000	1600	2280/2390**	420		3	100			5235064
AKVA EK 4000	1800	2350/2450**	500		3	100			5235102
AKVA EK 5000	2000	2500/2600**	630		3	100			5235103
AKVA EK 6000	2150	2500/2600**	780		3	100			
AKVA EK 7500	2150	3000/3100**	940		3	100			
AKVA EK 10000	2150	3800/3900**	1140		3	100			

<sup>\*)</sup> All products are manufactured in accordance with the Ecodesign Directive (Commission Regulation (EU) No 814/2013) and the products subject to it are CE marked. \*\* Min./max.

## **AKVA PRO**







## **Fully customisable**

AKVA PRO tanks can be fully customised to precisely meet the customer's specifications.

## **Technical specifications**

AKVA PRO tanks can be used as cold storage tanks, equalising tanks, in heat recovery systems or even storage for raw ingredients. We manufacture and equip each tank to meet the customer's specific needs.





## Coils and electric immersion heaters

### Coils

Akvaterm manufactures coils for heating domestic water and charging accumulators. Our product line also offers an extensive range of coils that can be customised to meet each customer's specifications.

### **Electric immersion heaters**

Akvaterm's product line has a wide range of electric immersion heaters and regulators. Electric immersion heaters up to 10 kW are made of Incoloy, which offers superior properties to standard acid-resistant steel. Electric immersion heater packages include a regulator (thermostat) overheating cutout and raised collar.



Finned copper coils						
Model	Coil diam. [mm]	Install length [mm]	Coup- ling size	Rec. flow rate [l/mm]	Mom. max. flow rate [l/min]	Code
LK XS	Ø 180	460	G ¾"	20-27	40	P05787
LK S Short	Ø 180	450	G ¾"	20-27	40	P05856
LK S	Ø 180	620	G ¾"	20-27	40	P05788
LK S+	Ø 180	750	G ¾"	20-27	40	P05995
LK M	Ø 180	600	G 1"	40-54	81	P05793
LK L	Ø 180	800	G 1"	40-54	81	P05857
LK XL	Ø 300	650	G 1 ½"	61-81	121	P05789
LK XXL	Ø 300	750	G 1 ½"	81-108	162	P05858
LK 3XL	Ø 300	900	G 2"	101-135	202	P05859
LK 4XL	Ø 300	1200	G 2"	121-162	242	P05860
LK 5XL	Ø 300	1300	G 2"	141-188	283	P05861
LK 6XL	Ø 300	1400	G 2"	162-215	323	P05862
LK 7XL	Ø 300	1500	G 2"	182-242	363	P05863

### Standard domestic water coils:

Material: Finned copper Pressure rating: 10 bar Coils LK XS - LK L suitable for installation in 200 mm hatches. Larger coils (300 mm) are to be installed in the main hatch. Coils available with or without flanges. We also manufacture domestic water coils to measure.

## We manufacture and supply special coils -Contact our sales staff for further details:

- solar coils
- double coils (solar and domestic water In the same hatch)
- hot gas coils

## Electric immersion heaters include:

- electric immersion heater with a screw coup-
- CU 4 thermostats and overheating cutout
- raised collar

In addition to standard packages, Akvaterm supplies different types of regulators, switch housings and heating elements.

Contact our sales staff for further details.

Short finned copper coils						
Model	Coil diam. [mm]	Install length [mm]	Coup- ling size	Rec. flow rate [l/mm]	Mom. max. flow rate [l/min]	Code
LKE S	Ø 180	450	G 1"	40-54	81	P05833
LKE M	Ø 300	600	G 1 ½"	61-81	121	P05842
LKE L	Ø 300	600	G 1 ½"	81-108	162	P05864
LKE XL	Ø 300	620	G 2"	101-135	202	P05865
LKE XXL	Ø 300	700	G 2"	121-162	242	P05866
LKE 3XL	Ø 300	800	G 2"	141-188	283	P05867

Electr	Electric immersion heaters				
Out- put [KW]	Length [mm]	Material	Coup- ling size	HVAC no.	
3	300	Incoloy 825	G 2"	5235198	
4.5	390	Incoloy 825	G 2"	5235199	
6	464	Incoloy 825	G 2"	5235200	
9	470	Incoloy 825	G 2"	5235202	
10	680	Incoloy 825	G 2"	5235203	
12*	525	Hst/Incoloy 825	G 2 ½"	-	
15*	660	Hst/Incoloy 825	G 2 ½"	-	

<sup>\*) 12</sup> and 15 kW heaters are supplied with a switch housing (no thermostat).

## **AKVA GEO**

AKVA GEO is especially well suited to heating systems with a heat pump. AKVA GEO accumulators come standard with two high-performance domestic water coils, which can be connected to domestic water preheating and heating.

AKVA GEO is highly adaptable and can be used with all types of heating sources.

## **Technical specifications**

Upright model. Various boiler solutions, heat pump solutions, electrical. Nearly all possible heating sources and combinations of them.

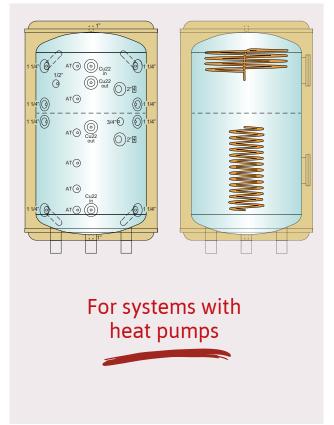
The accumulator can also be fitted with electric immersion heaters, which produce heat if the external heating source fails.

Name	HVAC no.	EN Class
AKVA GEO 300*	5235224	В
AKVA GEO 500*	5235225	В
AKVA GEO 750*	5235226	В
AKVA GEO 1000*	5235227	В
AKVA GEO 1500*	5235228	C
AKVA GEO 2000*	5235229	С

HVAC no.
5235230
5235231
5235232
5235233

Dimensions: See the AKVA EK table.

<sup>\*)</sup> All products are manufactured in accordance with the Ecodesign Directive (Commission Regulation (EU) No 814/2013) and the products subject to it are CE marked.



## **AKVA GEO SOLAR**

AKVA GEO SOLAR is especially well suited to heating systems using a heat pump and solar power. AKVA GEO SOLAR accumulators come standard with two high-performance domestic water coils, which can be connected to domestic water preheating and heating. The lower section of the accumulator is also fitted with a solar coil. AKVA GEO SOLAR is highly adaptable and can be used with all types of heating sources.

## **Technical specifications**

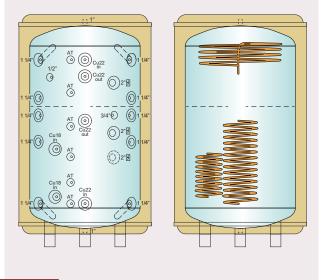
Upright model. Various boiler solutions, heat pump solutions, solar, electrical. Nearly all possible heating sources and combinations of them.

The accumulator can also be fitted with electric immersion heaters, which produce heat if the external heating source fails.



Name	HVAC no.
AKVA GEO SOLAR 2500	5235240
AKVA GEO SOLAR 3000	5235241
AKVA GEO SOLAR 4000	5235242
AKVA GEO SOLAR 5000	5235243

Dimensions: See the AKVA EK table.

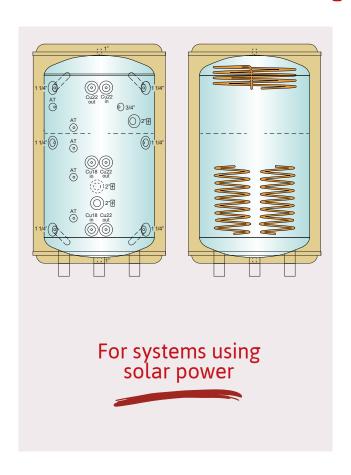






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## **AKVA SOLAR**



The high-performance AKVA SOLAR hybrid accumulator is designed for systems in which one of the heating sources is solar power. AKVA SOLAR accumulators have two coils for the preheating and heating of domestic water as well as a high-performance solar coil for thermal fluid from solar collectors.

### **Technical specifications**

Various boiler solutions, heat pump solutions, solar, electrical. Nearly all possible heating sources and combinations of them. The accumulator can also be fitted with electric immersion heaters, which produce heat if the external heating source fails.

Name	HVAC no.	EN Class
AKVA SOLAR 300*	5235204	В
AKVA SOLAR 500*	5235205	В
AKVA SOLAR 750*	5235206	В
AKVA SOLAR 1000*	5235207	В
AKVA SOLAR 1500*	5235208	С
AKVA SOLAR 2000*	5235209	С

Name	HVAC no.
AKVA SOLAR 2500	5235210
AKVA SOLAR 3000	5235211
AKVA SOLAR 4000	5235212
AKVA SOLAR 5000	5235213
Dimensions	

Dimensions: See the AKVA EK table.

## **AKVA NERO**

Akvaterm's NERO accumulator line was developed to meet increasingly strict environmental energy-efficiency standards. High-quality, seamless polyurethane insulation and solutions that further enhance energy efficiency ensure outstanding insulation capacity. AKVA NERO accumulators are equipped with an extremely high-performance LK MAX domestic water coil, which is made of finned copper and fitted along the entire length of the accumulator. The heat transfer surface area of the coil is twice that of a typical domestic water coil, thus maximising the output of domestic hot water. Also available fitted with a solar coil.

## **Technical specifications**

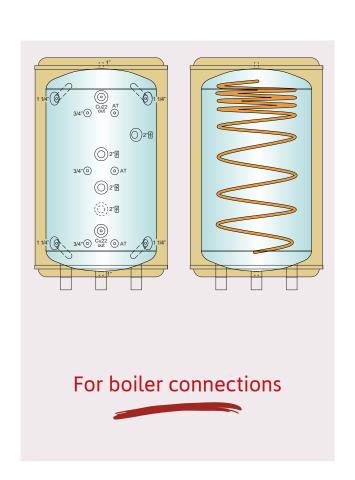
AKVA NERO is ideal for use alongside, for example, oil, wood or pellet-fired boilers. The accumulator can also be fitted with electric immersion heaters, which produce heat if the external heating source fails.

Name	HVAC no.	EN Class
AKVA NERO 300*	5235169	В
AKVA NERO 500*	5235170	В
AKVA NERO 750*	5235171	В
AKVA NERO 1000*	5235172	В
AKVA NERO 1500*	5235173	С
AKVA NERO 2000*	5235174	С

Name	HVAC no.
AKVA NERO 2500	5235175
AKVA NERO 3000	5235176
AKVA NERO 4000	5235177
AKVA NERO 5000	5235178

Dimensions: See the AKVA EK table.

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Jäspi hybrid accumulators have been awarded the Key Flag Symbol, which is a guarantee that a product is made in Finland



## JÄSPI HYBRID ACCUMULATORS

## Suitable for use with all types of energy sources

Jäspi hybrid accumulators are designed to work with all types of energy sources.

The accumulators are fitted with enough couplings to allow simultaneous connection to multiple different heating sources.

The exterior dimensions are designed so that the accumulators will fit through door openings and in utility rooms.

### **Precision design**

The two domestic water coils and standard solar coil ensure that there will always be plenty of hot water.

High-quality moulded insulation and insulation materials ensure extremely low thermal loss.

Next-generation couplings make installation easy. All couplings are conveniently placed on the front of the unit.

An internal baffle plate divides the accumulator into two sections, thus ensuring good heat stratification and, in turn, optimal operation with heat pumps.

The accumulator can also be used as single water volume.

	GTV Hybrid 500
Height [mm]	1830
Width [mm]	670
Depth [mm] *	680
Volume [l]	437
Weight [kg]	230
PN [bar]	3
Heat ret. loss [W]	111
Energy rating	С
HVAC no.	5236214

	Ovali Hybrid 1000	Ovali Hybrid 2000
Height [mm]	1730	2010
Width [mm]	1260	2020
Depth [mm] *	780*	780*
Volume [l]	985	2000
Weight [kg]	350	510
PN [bar]	3	3
Heat ret. loss [W]	148	
Energy rating	С	
HVAC no.	5236183	5236185

\* + Coil couplings



Several units can be connected in parallel.



The 2" elbow couplings also facilitate connection in residential properties.

For all types of energy

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