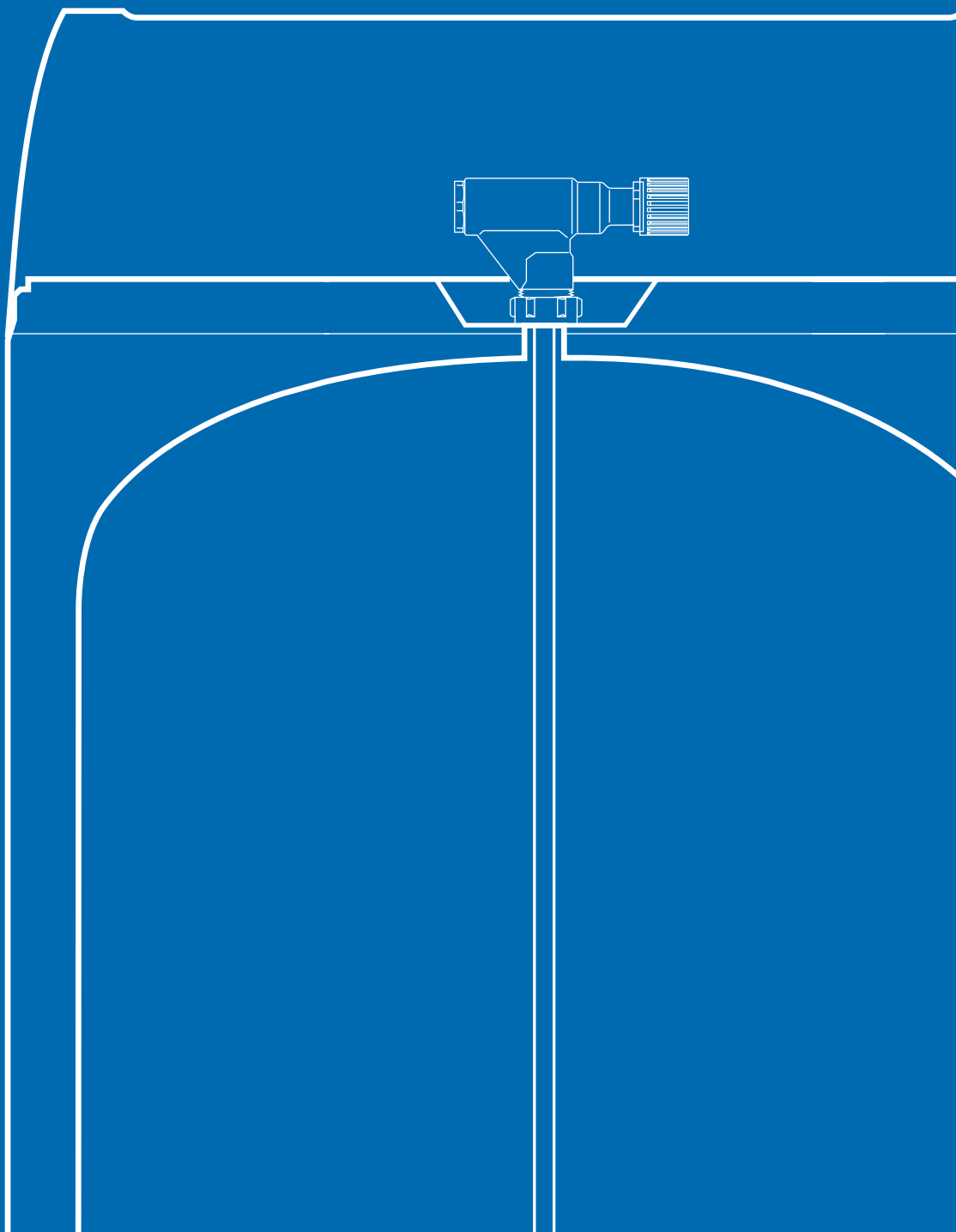


OSO

EXPORT

Water heaters

Introducing the Saga 2.0 series



KEY ADVANTAGES



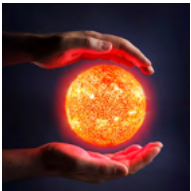
CLASS LEADING QUALITY

Manufactured in Norway by the family business
OSO Hotwater since 1932



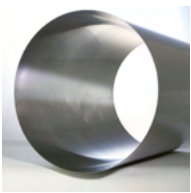
MORE HOT WATER

More hot water than other brands due to smart
solutions



UNIQUE INSULATION

The best insulated water heater on the market
saves more than 3 000 kWh during its lifespan



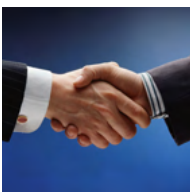
STRONGER

OSO withstands more with EVERLAST™ steel
and ULTRAWELD™ technology.



TOUGHER

Maximum durability in hard water with
INCOTEC™ heating elements



5 YEAR WARRANTY

The 5 year warranty* on the pressure tank provides
peace of mind and unbeatable lifetime economy



ENVIRONMENTALLY FRIENDLY

Big resource savings and minimal environmental
impact with a 25 year lifespan



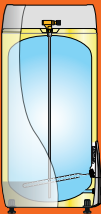
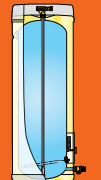
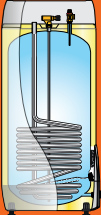
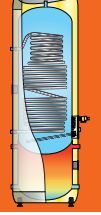
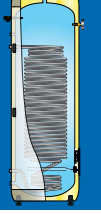
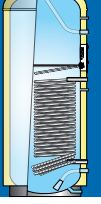
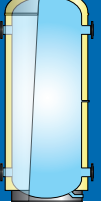
CERTIFIED

ISO 9001 / 14001 / 45001 / 3834-2 certified

*conditions apply

Subject to changes without notice

CONTENTS

DOMESTIC - DIRECT		SAGA 2.0	SAGA 2.0 STANDARD - S ₂	8	8
			SAGA 2.0 SUPERCHARGED - S ₂ S.....	9	
			SAGA 2.0 XPRESS - S ₂ X.....	10	
			SAGA 2.0 INDUSTRIAL - S ₂ I.....	11	
DOMESTIC - DIRECT		WALLY NANO	WALLY - W.....	12	12
			NANO - N.....	13	
DOMESTIC - INDIRECT		SAGA 2.0 DELTA	SAGA 2.0 COIL - S ₂ C.....	16	16
			DELTA GEOCOIL - DGC.....	18	
			DELTA TWINCOIL - DTC.....	20	
DOMESTIC - INDIRECT		OPTIMA	OPTIMA GEOCOIL - OGC.....	22	22
			OPTIMA TWINCOIL - OTC.....	24	
COMMERCIAL - DIRECT		ACCU	ACCU - A.....	26	26
			ACCU STANDARD - AS.....	27	
			ACCU GEOCOIL - AGC.....	28	
COMMERCIAL - DIRECT		MAXI CHARGE MAXI	PRODUCT SELECTOR - COMMERCIAL.....	30	30
			MAXI CHARGE - SMART CONTROL.....	32	
			MAXI - M.....	34	
			MAXI STANDARD - MS.....	35	
			MAXI XPRESS - MX.....	36	
COMMERCIAL - INDIRECT		MAXI COIL MAXI GEOCOIL	MAXI COIL - MC.....	37	37
			MAXI GEOCOIL - MGC.....	38	
COMMERCIAL - INDIRECT		MAXI ACCU INFORMATION	MAXI ACCU GEOCOIL - MAGC.....	39	39
			MAXI ACCU COOL - MA.....	40	
			MAXI ACCU HEAT - MA.....	41	
			OEM MANUFACTURING BY OSO.....	42	
			IMPORTANT FACTS ABOUT CORROSION.....	46	
			WARRANTY CONDITIONS.....	47	

WHAT WE OFFER

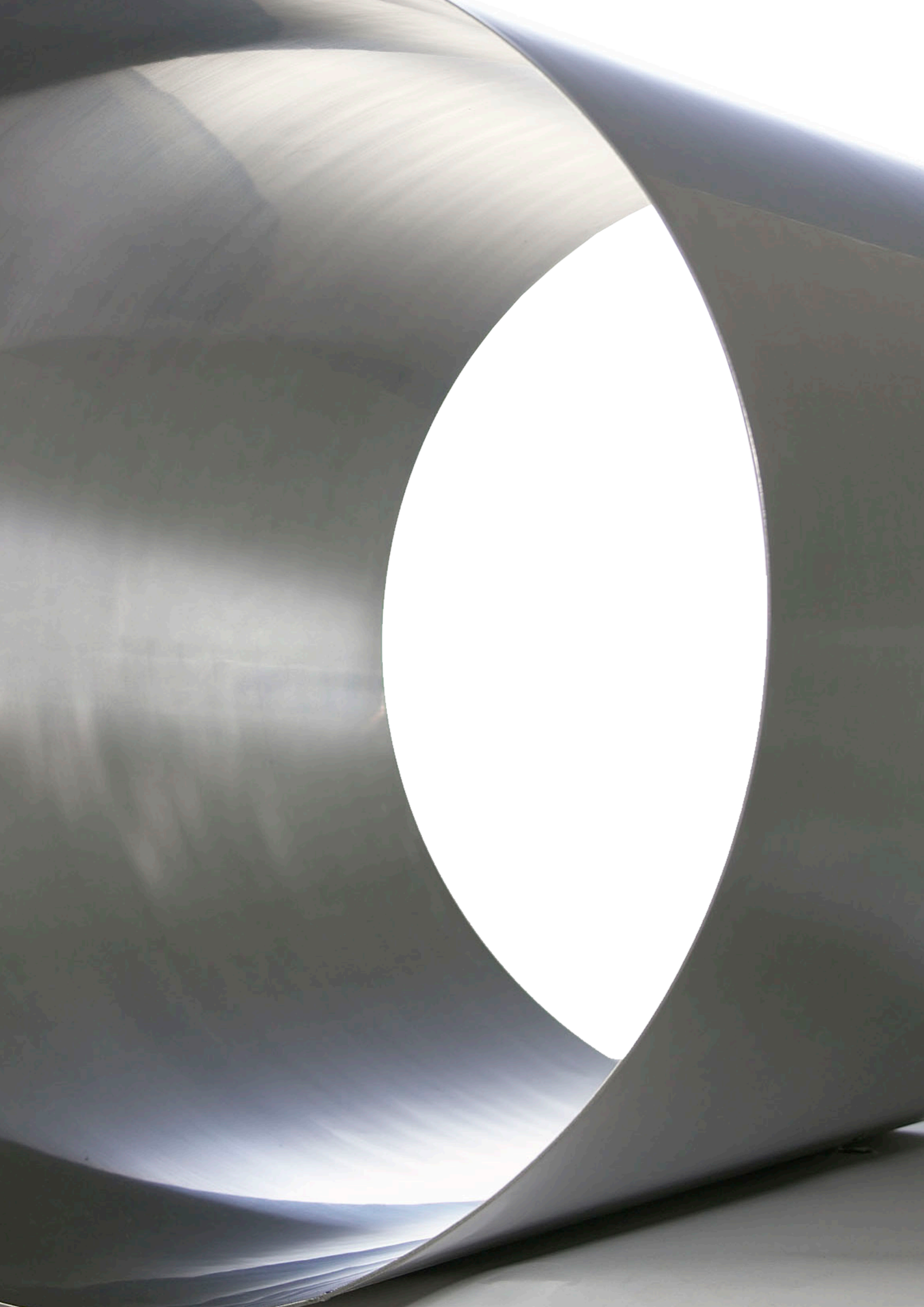
QUALITY

For more than 50 years we have perfected the stainless steel water heater. The ideal combination of premium materials, automated manufacturing and intelligent solutions makes our products last longer.

EFFICIENCY

We design for minimum heat loss and maximum energy efficiency, without compromise, making your heating system cost-efficient.

THE WATER HEATING COMPANY



OSO introduces SAGA 2.0



& SUPERCHARGED

SAGA 2.0

BEST INSULATION

20% reduced heat loss saves approx. 3 000 kWh during the lifespan

TIMELESS DESIGN

With all valves and connections hidden the Saga 2.0 fits in all environments

SMART READY

OSO CHARGE smartcontrol can easily be retrofitted

SUPERCHARGED

MAXIMIZE SAVINGS

Heating when energy prices are at their lowest significantly reduces costs

COMFORT

Learning your consumption pattern to maximize savings and guarantee Hot Water

SOLAR READY

Serves as a thermal battery in combination with solar panels

SEE THE PRODUCTS [→](#)

SAGA 2.0 STANDARD - S₂

Unbeatable performance



SAGA 2.0 STANDARD - S₂ - is greatly improved in 2024 and reduces heat loss by as much as 20% compared to earlier models. SAGA is found in over half of Norwegian homes and is suitable for most families' hot water needs. STANDARD has the option of retrofitting OSO CHARGE™ smart control, which automatically heats the water when the electricity price is lowest. STANDARD is our most cost-effective series and the natural first choice of home builders.

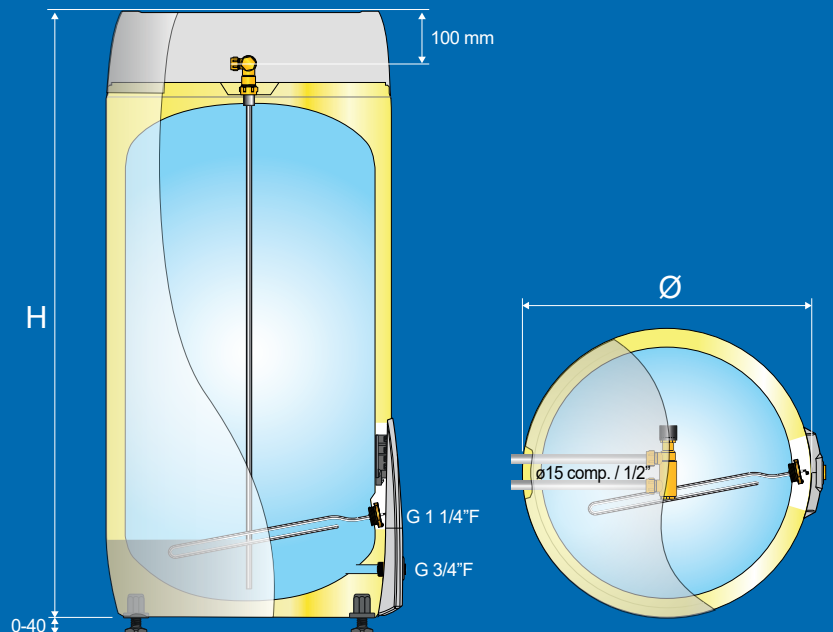
SAGA has been Norway's best-selling boiler for several decades. Modern design hides all pipes and connections. SAGA is easy to install with all pipe connections on top and fits directly as a replacement for OSO water heaters from 1980 to today. The mixing valve lowers the outgoing water temperature and prevents risk of scalding. SAGA has the lowest heat loss on the market, in combination with a high storage temperature for unbeatable performance and more usable hot water.

WHY SAGA STANDARD?

- Saves approx. 3 000 kWh throughout its lifespan
- SMART ready - OSO CHARGE can be retrofitted
- Higher storage temperature provides more hot water

KEY COMPONENTS

- Thermostat: Adjustable 60 - 90°C
- Mixing valve: Adjustable 40 - 85°C
- Safety valve: 9 bar / G 3/4" F overflow
- Mains cable: 3 m.
- Heating element: G 1 1/4" M / limescale resistant
- Appliance feet: Adjustable 0 - 40 mm.



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11011656	S ₂ 150 - 2 kW/1x230V	Ø595x1110	3.0	28	0.41	143	267	2 766	48	75	37	C	L
11011657	S ₂ 200 - 2.8 kW/1x230V	Ø595x1310	3.5	34	0.48	194	342	4 412	55	75	38	C	XL
11011658	S ₂ 300 - 2.8 kW/1x230V	Ø595x1780	5.5	48	0.64	281	490	4 532	76	75	38	D	XL

SAGA 2.0 SUPERCHARGED - S₂S

Fully integrated OSO CHARGE™ smartcontrol



SAGA 2.0 SUPERCHARGED (S₂S) – the most innovative home appliance available on the market, featuring the fully integrated OSO CHARGE™ R3 Smart control system. SUPERCHARGED intelligently learns your hot water usage patterns and optimizes heating during off-peak electricity hours, potentially saving an average family up to €300 annually.

Equipped with advanced sensor technology, it offers complete oversight of capacity and consumption. With the OSO inCHARGE app, you can effortlessly manage your water heater, including features like sleep mode. Additionally, SUPERCHARGED is designed for seamless integration with solar energy systems, enhancing its efficiency and sustainability.

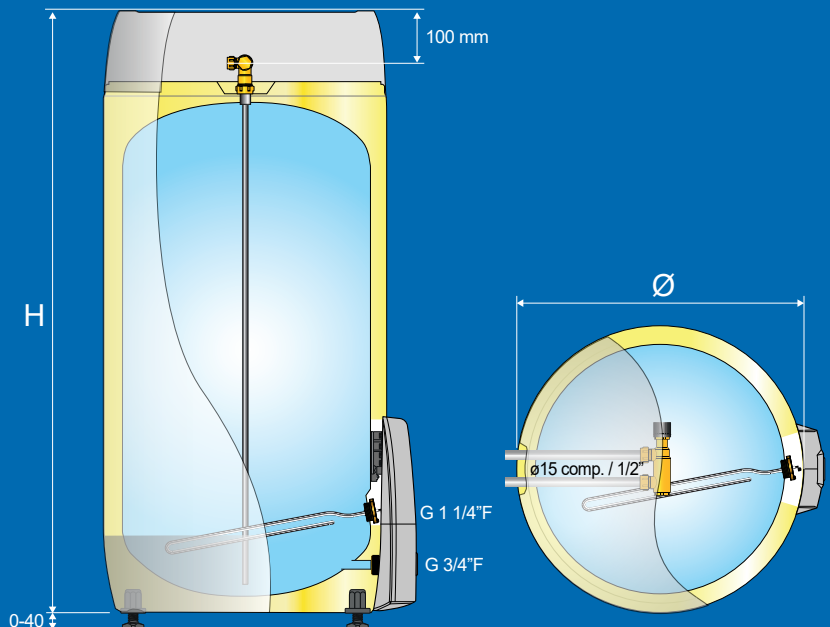
SAGA has been Norway's best-selling boiler for several decades. Modern design hides all pipes and connections. SAGA is easy to install with all pipe connections on top and fits directly as a replacement for OSO water heaters from 1980 to today. The mixing valve lowers the outgoing water temperature and prevents risk of scalding. SAGA has the lowest heat loss on the market, in combination with a high storage temperature for unbeatable performance and more usable hot water.

WHY SAGA SUPERCHARGED?

- Fully integrated CHARGE™ smartcontrol creates big savings on energy bills
- Save up to €300 annually with price optimisation
- Save another 3 000 kWh during the lifespan due to market leading insulation (200 L)

KEY COMPONENTS

Smartcontrol:	OSO CHARGE™ R3
Thermostat:	Adjustable 60-90°C
Mixing valve:	Adjustable 40-75°C
Safety valve:	9 bar, G 3/4" F
Mains cable:	3 m.
Heating element:	G 1.1/4" M / limescale resistant
Appliance feet:	Adjustable 0 – 40 mm.



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11013038	S ₂ S 200 - 2.8kW/1x230V	Ø595x1310	3.5	36	0.48	194	342	4 172	55	Smart	40	C	XL
11011647	S ₂ S 300 - 2.8kW/1x230V	Ø595x1780	5.5	45	0.64	281	490	4 158	68	Smart	40	C	XL

SAGA 2.0 XPRESS - S₂X

Hot water 3 x faster



SAGA 2.0 XPRESS—S₂X – is suitable for larger hot water needs when there is limited space for installation. XPRESS provides hot water 3 × faster than STANDARD, without using more electricity. The upper and lower heating elements alternate between heating the water, and significantly reduce the heating time. XPRESS has the option of retrofitting OSO CHARGE™ smart control, which automatically heats the water when the electricity price is lowest.

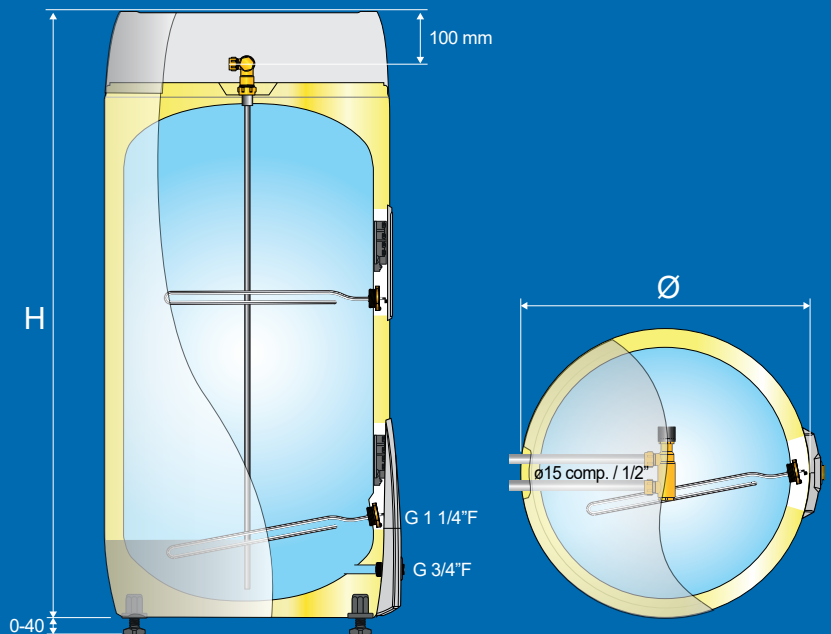
SAGA has been Norway's best-selling boiler for several decades. Modern design hides all pipes and connections. SAGA is easy to install with all pipe connections on top and fits directly as a replacement for OSO water heaters from 1980 to today. The mixing valve lowers the outgoing water temperature and prevents risk of scalding. SAGA has the lowest heat loss on the market, in combination with a high storage temperature for unbeatable performance and more usable hot water.

WHY SAGA XPRESS?

- XPRESS delivers hot water 3 x faster than STANDARD
- Saves approx. 3 000 kWh throughout its lifespan
- SMART ready - OSO CHARGE can be retrofitted
- Higher storage temperature provides more hot water

KEY COMPONENTS

- Thermostat: Adjustable 60 - 90 °C
- Mixing valve: Adjustable 40 - 85 °C
- Safety valve: 9 bar / G 3/4" F overflow
- Mains cable: 3 m.
- Heating element: G 1 1/4" M / limescale resistant
- Appliance feet: Adjustable 0 - 40 mm.



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11011664	S ₂ X 150 - 2+(2) kW / 1x230V	Ø595x1110	3.5	35	0.41	143	261	4 525	54	75	37	D	XL
11011665	S ₂ X 200 - 2.8+(2.8) kW / 1x230V	Ø595x1310	4.5	39	0.48	194	346	4 501	62	75	37	D	XL
11011666	S ₂ X 300 - 2.8+(2.8) kW / 1x230V	Ø595x1780	6.5	52	0.64	281	454	4 478	72	75	37	D	XL

SAGA 2.0 INDUSTRIAL - S₂I

For harsh working environments



SAGA 2.0 INDUSTRIAL—S₂I – withstands 3x more aggressive water and harsh production environments, and is suited for agriculture application. The metallic grey outer casing gives the boiler a modern look, and is classified C5 corrosion-resistant in accordance with ISO 9223. INDUSTRIAL also has anti-corrosion treatment which enables the boiler to withstand very aggressive water. The product also has an extra ½” connection for hot water circulation as well as a G3/4” connection providing unmixed hot water where desired.

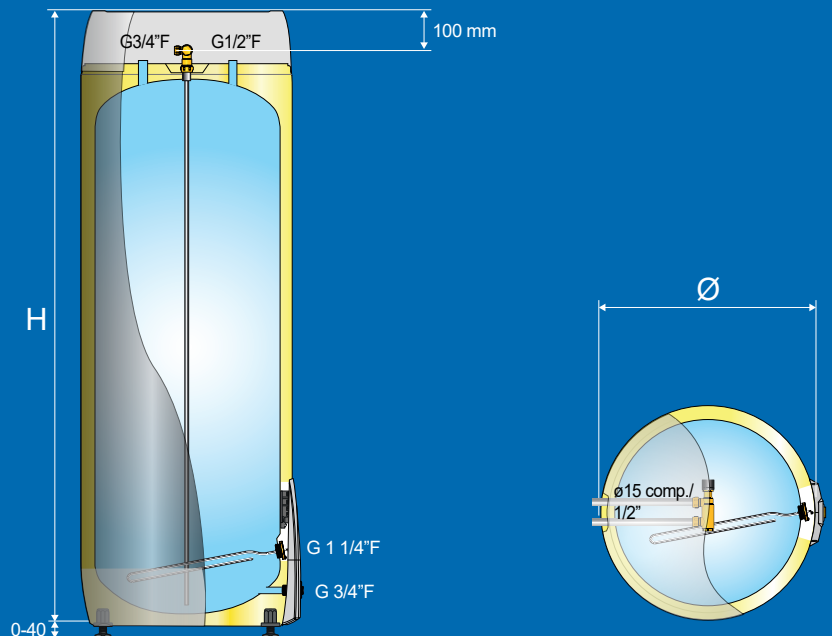
SAGA has been Norway's best-selling boiler for several decades. Modern design hides all pipes and connections. SAGA is easy to install with all pipe connections on top and fits directly as a replacement for OSO water heaters from 1980 to today. The mixing valve lowers the outgoing water temperature and prevents risk of scalding. SAGA has the lowest heat loss on the market, in combination with a high storage temperature for unbeatable performance and more usable hot water.

WHY SAGA INDUSTRIAL?

- Saves approx. 3 000 kWh throughout its lifespan
- Withstands 3 × more aggressive environment, internally and externally

KEY COMPONENTS

- Thermostat: Adjustable 60 - 90 °C
- Mixing valve: Adjustable 40 - 85 °C
- Safety valve: 9 bar / G ¾”F overflow
- Mains cable: 3 m. with schuko plug
- Heating element: G 1¼”M / limescale resistant
- Appliance feet: Adjustable 0 - 40 mm.



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11011667	S ₂ I 300 - 3 kW - 3x400V / 3 kW - 1x230V	Ø595x1780	5.5	48	0.64	281	489	4 532	76	75	38	D	XL

WALLY - W

Wall-mounted with all connections underneath



WALLY - W – has all pipe connections elegantly hidden underneath, and a slim diameter makes it especially suitable for hanging on the wall. WALLY can also be placed on the floor thanks to its unique design. WALLY can be placed close to the ceiling and save floor space with the wall bracket. Capacity can be increased by raising the temperature in the water heater to 75°C, by using the externally adjustable thermostat. Outgoing temperature will be approx. 10 °C lower than the thermostat setting due to the patented and integrated mixing function. Practical flex hoses for easy installation included. The supplied safety valve must be mounted on the cold water inlet.

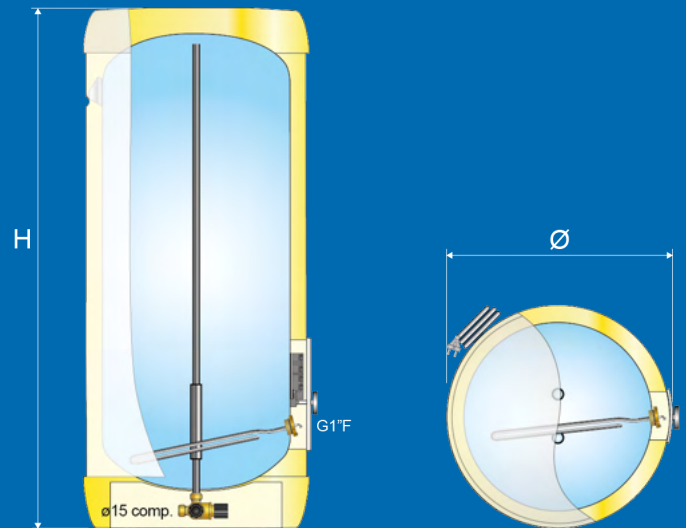
WALLY has a stylish design resembling the SAGA series, which hides all pipes and connections. The patented mixing function lowers the outgoing water temperature and reduces the risk of scalding. WALLY features low heat loss with 40 mm. PUR insulation, in combination with class-leading storage temperature for unbeatable performance and more hot water.

WHY WALLY?

- Save approx. 250 kWh / year vs. glass wool insulated products
- Save floor space with a slim diameter and all connections below
- Wall bracket included

KEY COMPONENTS

Thermostat:	Adjustable 50 - 75 °C
Mixing function:	10 °C less than thermostat
Safety valve:	9 bar / G 1/2" M overflow
Power cable:	2.5 m. with schuko plug
Heating element:	G 1" M / limescale resistant
Wall bracket:	Corrosion resistant



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11003156	W 30 - 2 kW/1x230V	Ø434x542	1.0	11	0.11	30	52	539	-	70	34	C	S
11003157	W 50 - 2 kW/1x230V	Ø434x705	1.5	16	0.16	45	84	1 384	-	70	37	C	M
11003158	W 80 - 2 kW/1x230V	Ø434x1025	2.0	21	0.21	80	113	1 411	-	60	36	C	M
11003159	W 100 - 2 kW/1x230V	Ø434x1245	2.0	26	0.26	100	141	2 653	-	60	39	C	L

NANO - N

Fits everywhere



NANO - N - is perfect as a point-of-use water heater in case of extensive pipe runs, or for small hot water needs in bathrooms, cabins and dormitories. The tapping capacity is 7 liters of 40 °C hot water - more than enough for hand washing, small dishes or the like. NANO features a 3 kW heating element and is ready for use again in just 12 minutes after discharge. Capacity per hour is 75 L 40 °C hot water. NANO is only slightly larger than an A4 sheet, and is mounted upright (20 % higher capacity) or horizontally at the point-of-use.



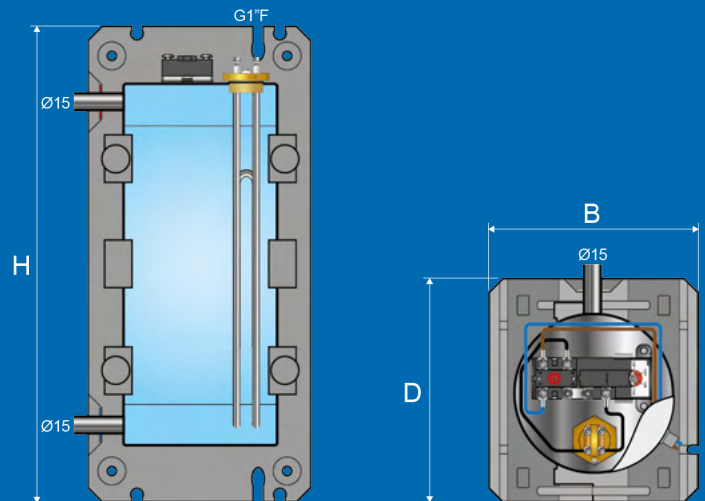
NANO is our smallest hot water series and is suitable as a point-of-use water heater. The series is constructed of 316 stainless steel, and NANO withstands most water qualities and can be mounted anywhere. Practical and space-saving design.

WHY NANO?

- Perfect as a point-of-use water heater
- Capacity 75 L 40 °C / hour, ready for use in 12 min.
- The size of an A4 sheet and fits anywhere

KEY COMPONENTS

- Thermostat: Adjustable 40 - 70 °C
- Safety valve: 9 bar / G 1/2" M overflow
- Power cable: 2.5 m. with schuko plug
- Heating element: G 1" M / limescale resistant
- Wall bracket: Corrosion resistant



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11003120	N 5 - 3 kW/1x230V	200x234x500	0.5	8	0.03	6	7	525	13	60	35	A	XXS

WATER HEATERS FOR HEAT PUMPS

All over Europe there is a change in how we heat our homes and our water. This is primarily driven by the change from fossil fuel to renewable energy sources, and high focus to reduce climate emissions. Energy crisis and increased energy costs are also a strong contributor to the fast shift across Europe. Many homes today have heat pumps already installed, or will choose this as part of their solution to heat their home in the near future. Connecting your heat pump to an indirect water heater cylinder, can be very beneficial as it can provide a more efficient and cost-effective way to heat water.

OSO Hotwater has developed a number of products that are special designed for efficient production of hot water in combination with renewable energy sources. Most of our indirect products are specialised for heat pumps and some are developed for multiple heating sources, like solar heating or bio.

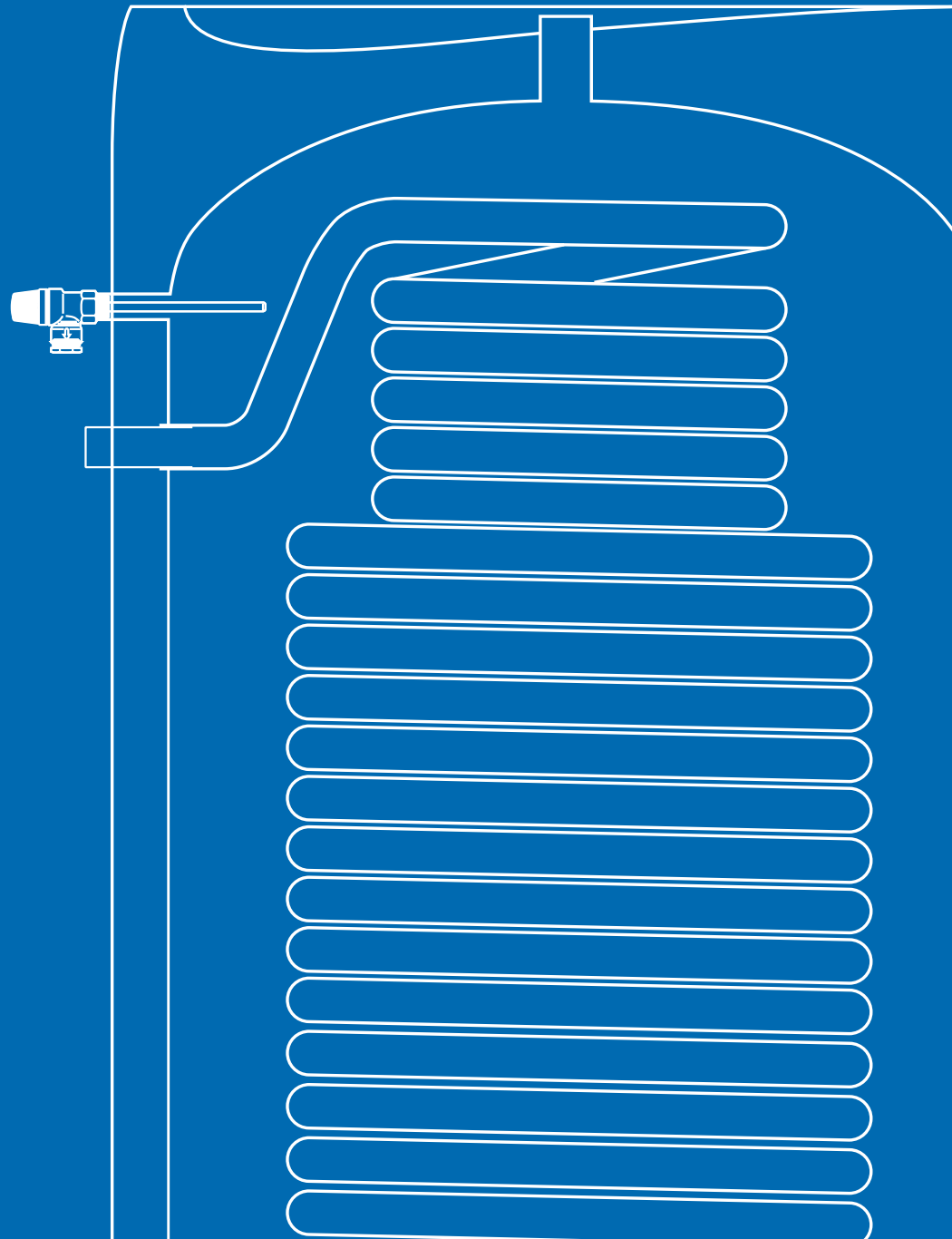
Cylinders from OSO Hotwater are all insulated with world leading insulation, specifically invented for hot water cylinders. Our welding technique is unrivalled when it comes to welding stainless steel cylinders.

The focus for OSO Hotwater has always been to produce as energy efficient and environmentally friendly as possible and at the same time deliver high quality water heater with a modern and appealing design.

OSO
HOTWATER

Indirect water heaters

for heat pumps, solar etc.



SAGA 2.0 COIL - S₂C

Custom made for boilers



5
YEAR
STAINLESS
WARRANTY

SAGA COIL—S₂C is designed for high temperature energy sources such as gas, bio-boiler or district heating up to 30 kW due to the integrated, efficient tube coil. SAGA COIL has a large capacity as it can handle significant added power, and hot water will always be available. SAGA COIL is supplied with a sensor pocket, pressure and temperature safety valve and separate drain valve. The electric heating element can be used for summer operation or as back-up. SAGA COIL should be chosen for high temperature energy sources.

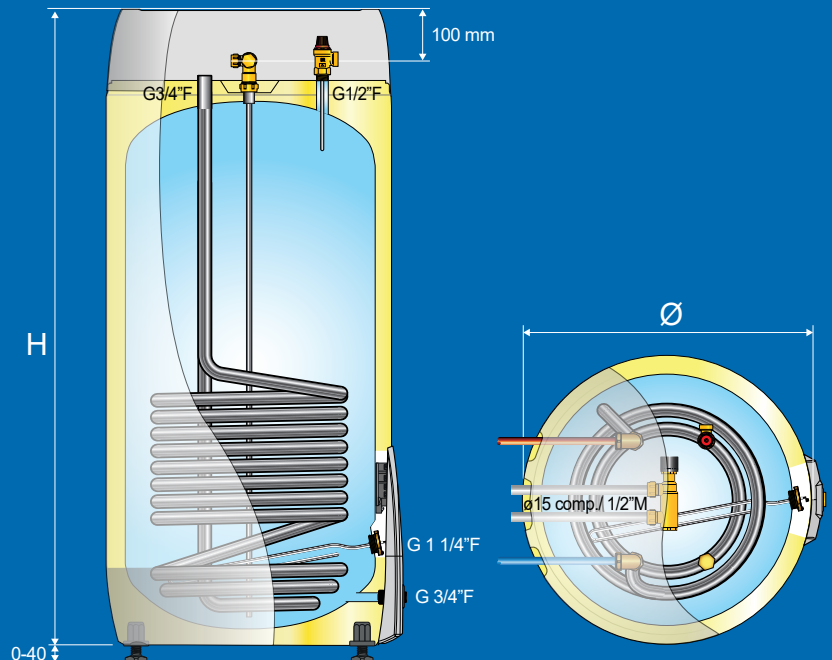
SAGA has been Norway's best-selling boiler for several decades. Modern design hides all pipes and connections. SAGA is easy to install with all pipe connections on top and fits directly as a replacement for OSO water heaters from 1980 to today. The mixing valve lowers the outgoing water temperature and prevents risk of scalding. SAGA has the lowest heat loss on the market, in combination with a high storage temperature for unbeatable performance and more usable hot water.

WHY SAGA COIL?

- Integrated heat exchanger for boilers ≤ 30kW
- Electric operation in the summer or as back-up
- Save approx. 3,000 kWh added. lifetime with market leading insulation (200 L)

KEY COMPONENTS

- Thermostat: Adjustable 50 - 75°C
- Mixing valve: Adjustable 40 - 70°C
- Safety valve: 9 bar / 90°C / G ½" F overflow
- Drain valve: 10 mm. hose coupling
- Mains cable: 3 m.
- Heating element: G 1¼" M / limescale resistant
- Appliance feet: Adjustable 0 - 40 mm.

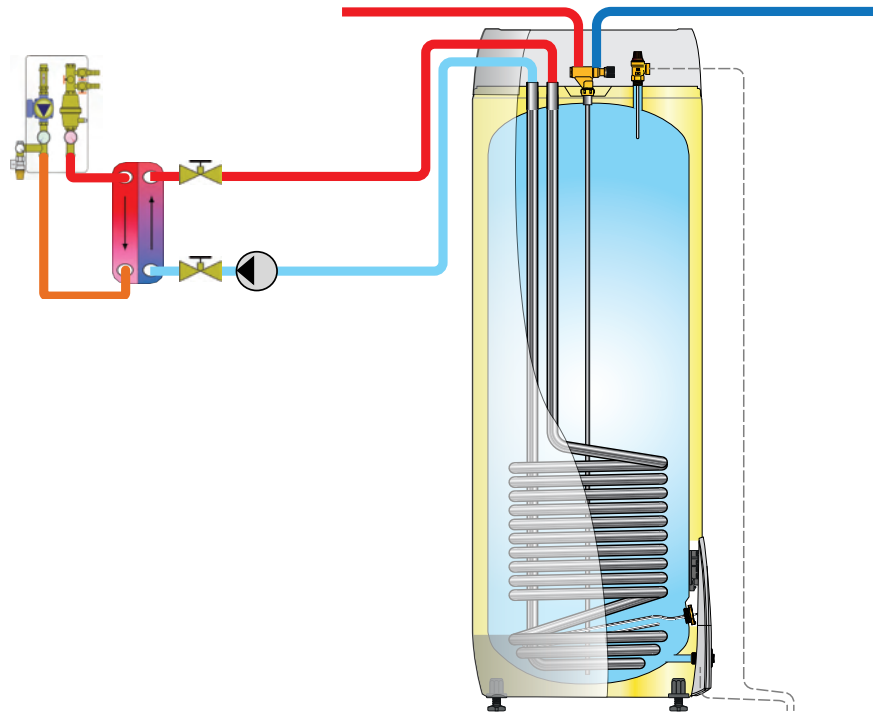


TECHNICAL DATA

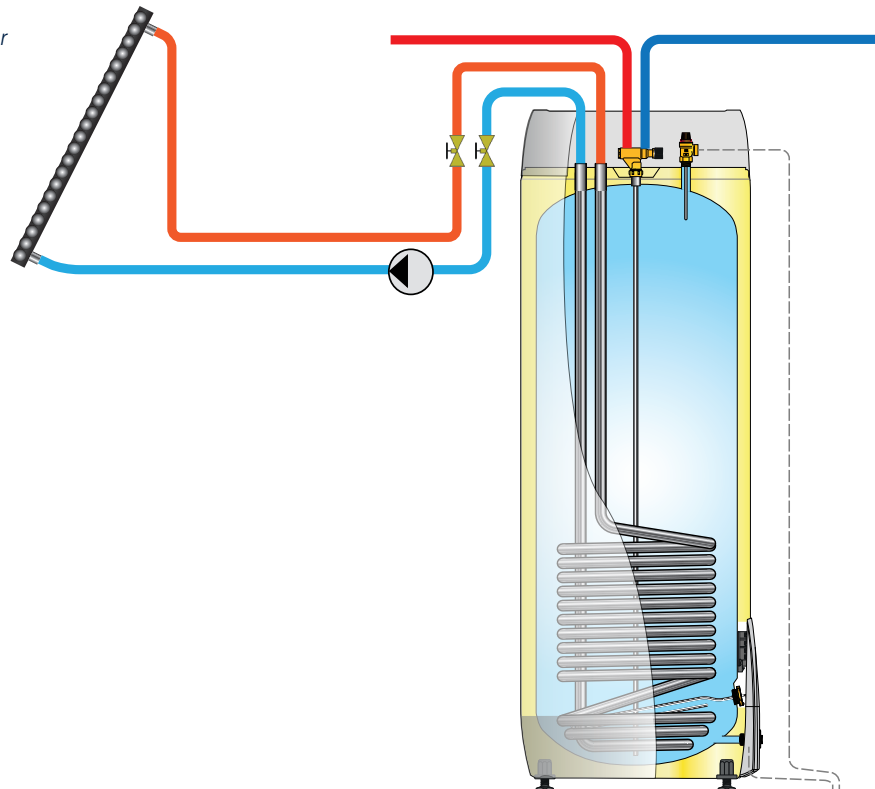
OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11011653	S ₂ C 150 - 2.8 kW / 1x230V + HX 0.8m ²	Ø595x1110	3.5	36	0.41	147	260	-	47	70	-	B	-
11011654	S ₂ C 210 - 2.8 kW / 1x230V + HX 1.0m ²	Ø595x1375	4.5	51	0.50	197	340	-	57	70	-	B	-
11011655	S ₂ C 300 - 2.8 kW / 1x230V + HX 1.1m ²	Ø595x1780	5.5	57	0.64	274	490	-	68	70	-	C	-

SAGA 2.0 COIL - S₂C - SYSTEM SCHEMATIC

Saga Coil S₂C 300 with district heating



Saga Coil S₂C 300 with solar collector



PRESSURE DROP TABLE (mbar)

OSO No.	Product name	Coil surface m ²	540 L/h 0.15L/s	900 L/h 0.25 L/s	1800 L/h 0.50 L/s	2700 L/h 0.75 L/s	3600 L/h 1.00L/s	4500 L/h 1.25 L/s	5400 L/h 1.50 L/s	kv-value m ³ /hour
11011653	S ₂ C 150	0.8	26	65	220	457	775	1160	1620	4.15
11011654	S ₂ C 210	1.0	35	82	283	586	1000	1520	2130	3.60
11011655	S ₂ C 300	1.1	37	91	284	590	1015	1530	2140	3.59

DELTA GEOCOIL - DGC

Custom designed for heat pumps up to 18 kW



DELTA GEOCOIL – DGC – is specifically designed for highly efficient hot water production for all types of heat pumps up to 18 kW (200 L = 15 kW / 300 L = 18 kW), thanks to the large heating surface (2.6 – 3.1m²) of the tube heat exchanger. DELTA GEOCOIL features an electric heating element at the bottom of the tank for maximum protection against legionella (must be controlled externally). The heater can also be used as a backup for the heat pump when needed, which provides maximum operational reliability.

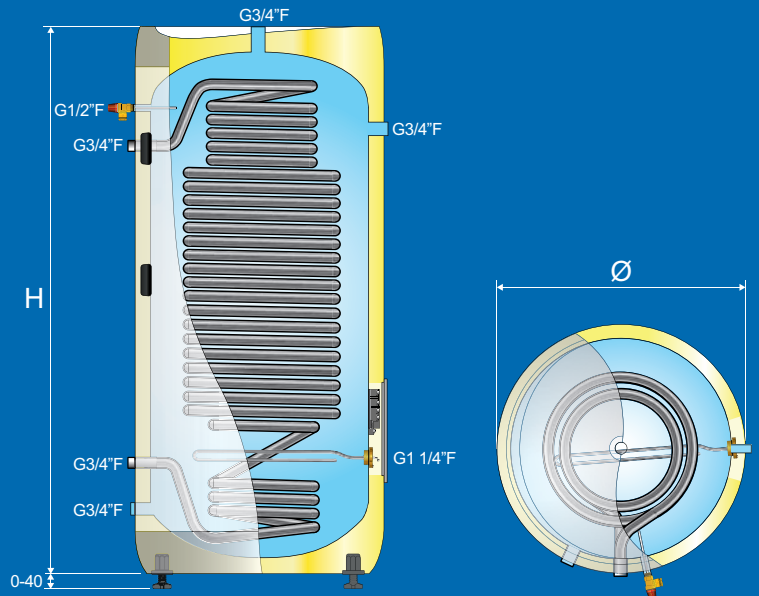
DELTA is our most energy-efficient water heater series, and minimizes heat loss with best-in-class PUR insulation, vacuum panels and functional design. DELTA has been developed with a number of smart technical solutions especially suitable for alternative energy sources such as heat pumps or solar collectors. DELTA also features unique corrosion protection technology.

WHY DELTA GEOCOIL?

- Save approx. 650 kWh / year vs. glass wool insulated products
- Integrated heat exchanger for heat pump ≤ 18 kW
- Unique corrosion resistance features

KEY COMPONENTS

- Thermostat: Adjustable 50 - 75°C
- Safety valve: 9 bar / 90 °C / G ½" M overflow
- Heating element: G 1¼" M / limescale resistant
- Sensor pockets: 2 pcs. for 6/8 mm. sensor
- Appliance feet: Adjustable 0 - 40 mm.

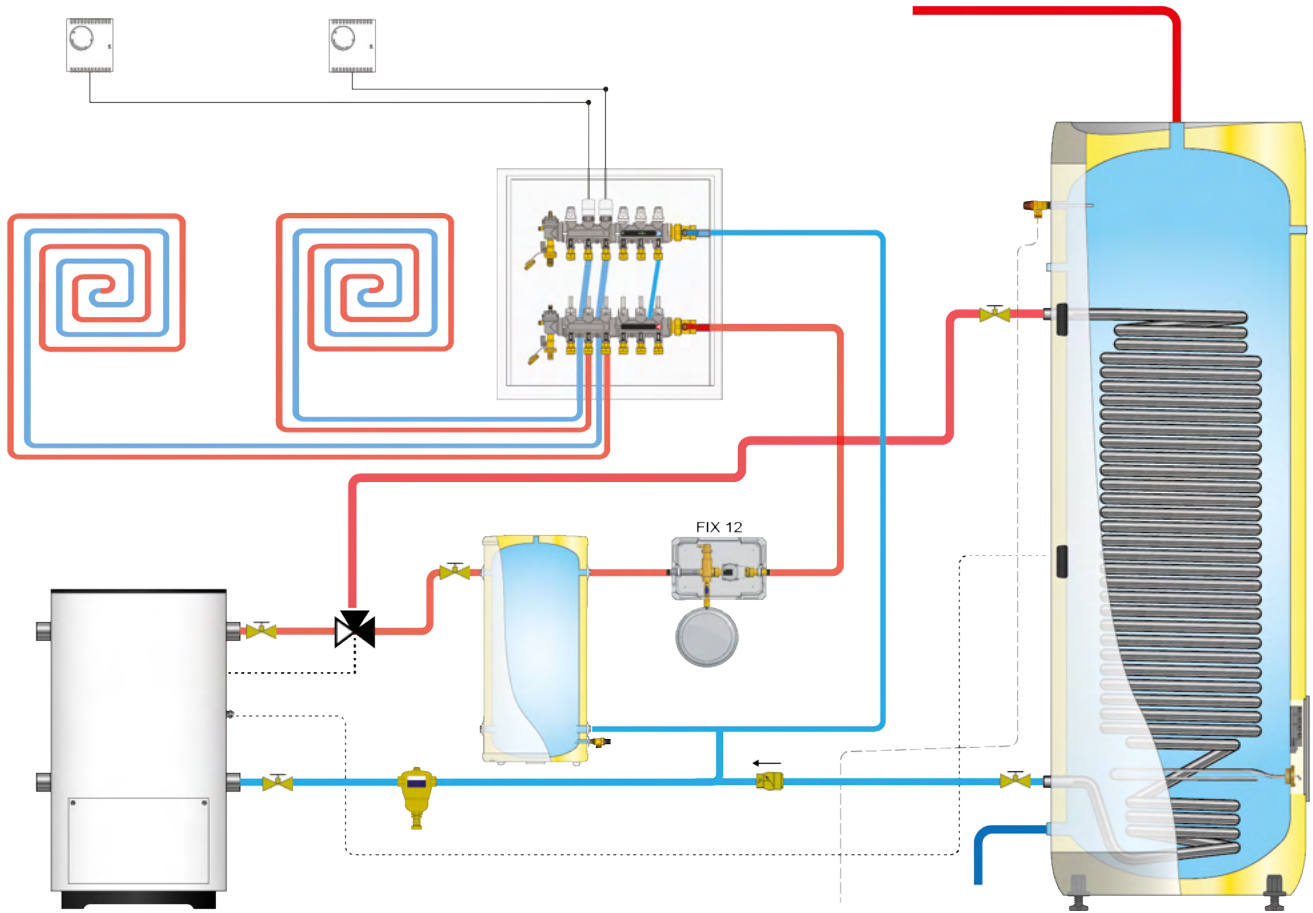


TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11003138	DGC 200 - 2.8 kW/1x230V + HX 2.6m ²	Ø595x1270	-	53	0.48	191	-	-	58.0	70	-	B	-
11003139	DGC 250 - 2.8 kW/1x230V + HX 2.6m ²	Ø595x1540	-	73	0.57	245	-	-	62.0	70	-	B	-
11003141	DGC 300 - 2.8 kW/1x230V + HX 3.1m ²	Ø595x1750	-	85	0.64	282	-	-	68.5	70	-	B	-

DELTA GEOCOIL - DGC - SYSTEM SCHEMATIC

Delta Geocoil DGC 300 with heat pump, FIX 12 and underfloor heating



PRESSURE DROP TABLE (mbar)

OSO No.	Product name	Coil surface m ²	540 L/h 0.15L/s	900 L/h 0.25 L/s	1800 L/h 0.50 L/s	2700 L/h 0.75 L/s	3600 L/h 1.00L/s	4500 L/h 1.25 L/s	5400 L/h 1.50 L/s	kv-value m ³ /hour
11003138	DGC 200	2.6	40	109	415	824	1440	2150	3050	3.0
11003139	DGC 250	2.6	40	109	415	824	1440	2150	3050	3.0
11003141	DGC 300	3.1	51	117	440	890	1550	2330	3340	2.9

DELTA TWINCOIL - DTC

Ultimate energy flexibility



5
YEAR
STAINLESS
WARRANTY

DELTA TWINCOIL – DTC – is extremely flexible and can utilize several energy sources for maximum efficient hot water production. DELTA TWINCOIL fits most combinations of renewable energy sources (solar $\leq 12\text{m}^2$ / heat pump ≤ 5 kW) in combination with high temperature heat source (gas or bio-fuel boiler up to 25 kW.) The electric heating element can be used as backup heater, additional heating for added capacity, or legionella protection (controlled externally).

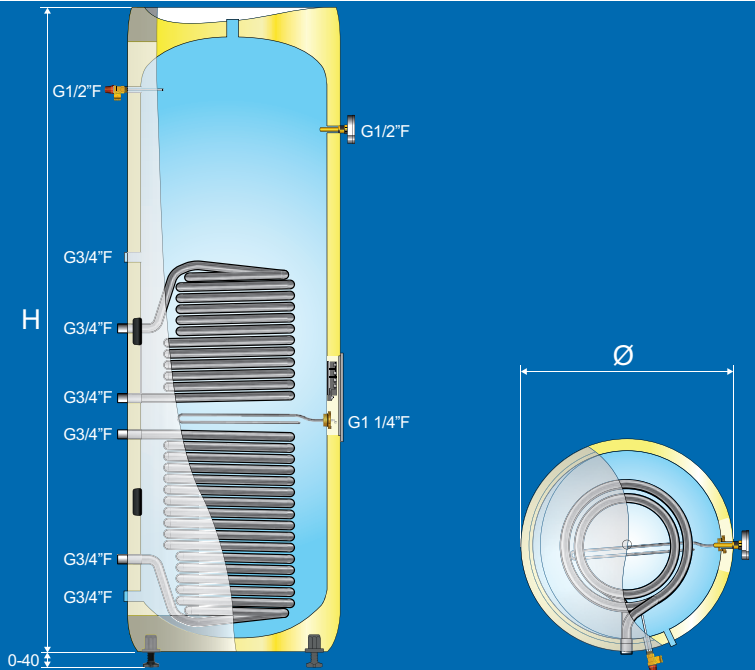
DELTA is our most energy-efficient water heater series, and minimises heat loss with best-in-class PUR insulation and functional design. DELTA has been developed with a number of smart technical solutions especially suitable for alternative energy sources such as heat pumps or solar collectors. DELTA also features unique corrosion protection technology.

WHY DELTA TWINCOIL?

- Save approx. 650 kWh / year vs. glass wool insulated products
- Two integrated heat exchangers for maximum flexibility
- Unique corrosion resistance features

KEY COMPONENTS

- Thermostat: Adjustable 50 - 75°C
- Safety valve: 9 bar / 90°C / G 1/2" M overflow
- Heating element: G 1 1/4" M / limescale resistant
- Thermometer: Disc thermometer, 0 - 100°C
- Sensor pockets: 2 pcs. for 6/8 mm. feel
- Appliance feet: Adjustable 0 - 40 mm.

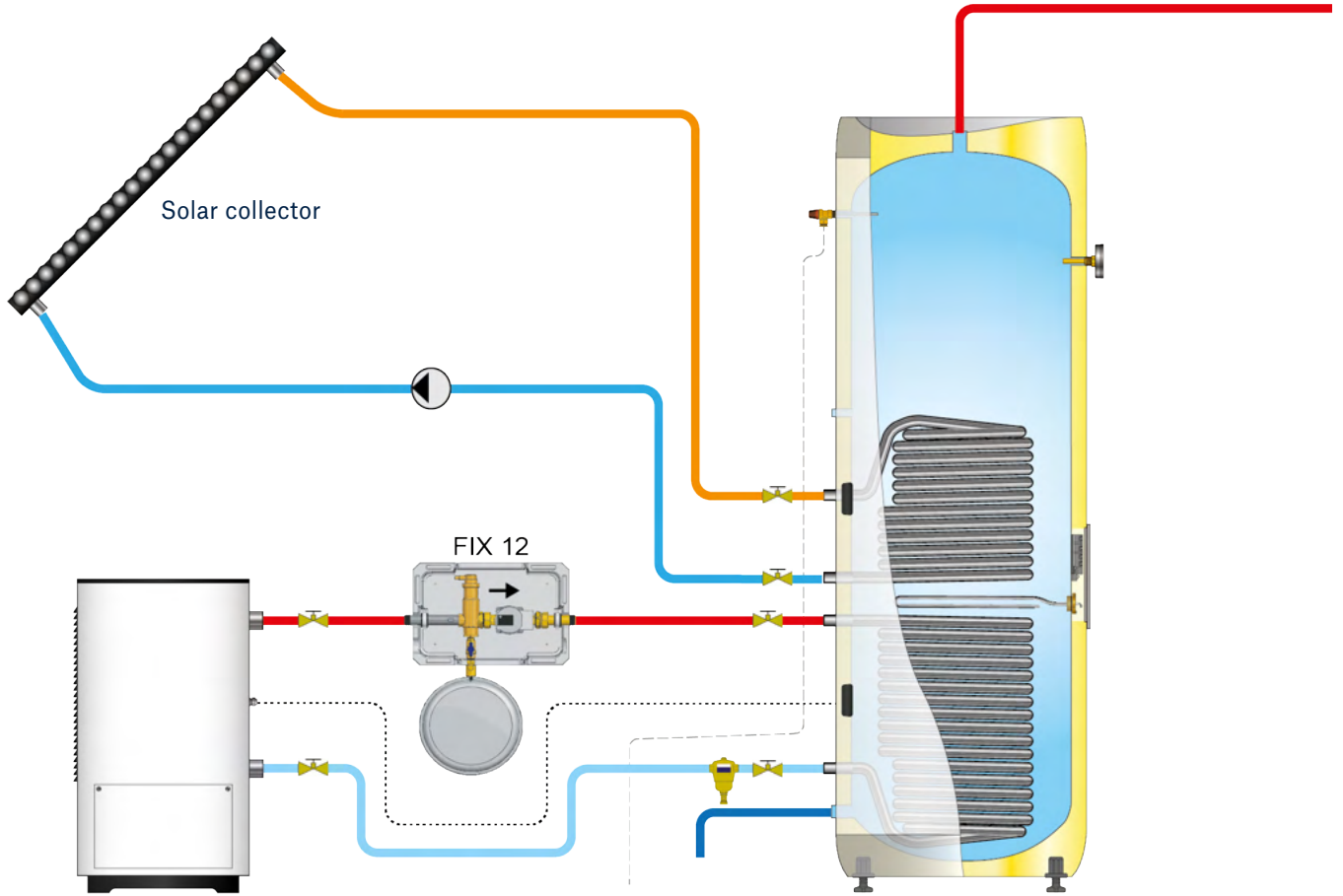


TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11003143	DTC 300 - 2.8kW/1x230V + HX 1.4m ² + 0.8m ²	Ø595x1750	-	64	0.64	280	-	-	68	70	-	B	-

DELTA TWINCOIL - DTC - SYSTEM SCHEMATIC

Delta Twincoil DTC with with external heat source, FIX 12 and solar collector



PRESSURE DROP TABLE (mbar)

OSO No.	Product name	Coil surface m ²	540 L/h 0.15L/s	900 L/h 0.25L/s	1800 L/h 0.50 L/s	2700 L/h 0.75 L/s	3 600 L/h 1.00L/s	4 500 L/h 1.25 L/s	5 400 L/h 1.50 L/s	kv-value m ³ /hour
11003143	DTC 300	0.8 (upper)	24	62	212	420	721	1 079	1 500	4.0
11003143	DTC 300	1.4 (lower)	43	104	370	724	1 265	1 880	2 630	3.2

OPTIMA GEOCOIL - OGC

Tank-in-tank unit with domestic hot water and buffer tank integrated



OPTIMA GEOCOIL - OGC - features high efficiency and fast recovery times, and covers the hot water demand for at least 5 people as well as heating demand in homes up to 400m² in a single unit. OPTIMA COIL is suitable for heat pumps up to 12 kW, by way of the stainless steel tube heat exchanger with a large surface area of 1.8m² in the DHW tank. OPTIMA GEOCOIL also features an electric heating element at the bottom of the DHW tank for maximum protection against legionella (must be controlled externally). The heater can also be used as a backup for the heat pump. The buffer tank in stainless steel is 62 L, perfect for heat pumps of this size.

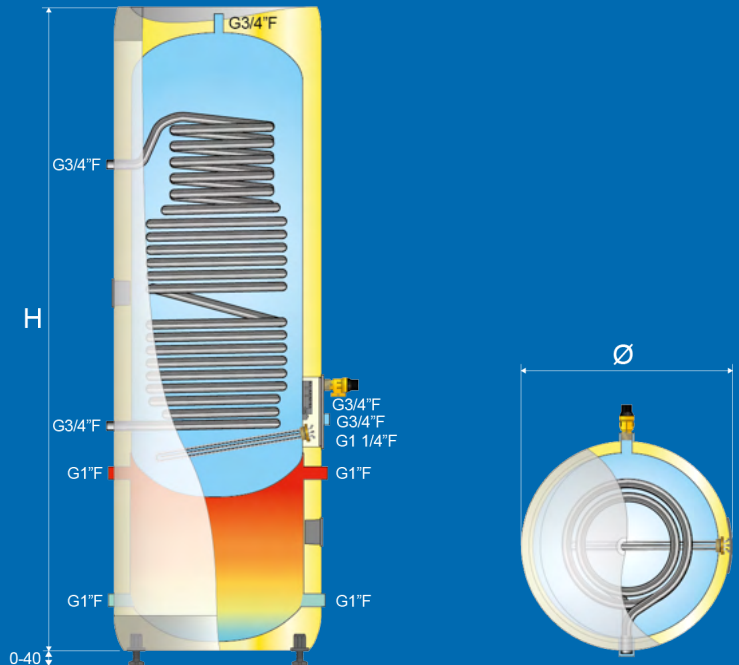
OPTIMA is the market's most advanced and energy efficient tank-in-tank products, with class-leading PUR insulation and patented solutions to increase hot water production from heat pumps. The OPTIMA series integrates both a stainless steel buffer tank and heat exchangers in one unit, and takes up minimal space.

WHY OPTIMA GEOCOIL?

- Save approx. 650 kWh / year vs. glass wool insulated products
- Integrated heat exchanger for heat pump ≤ 12 kW
- Integrated stainless buffer tank saves floor space

KEY COMPONENTS

- | | |
|------------------|----------------------------------|
| Thermostat DHW: | Adjustable 60-90°C |
| Safety valve VV: | 9 bar, G 3/4" F overflow |
| Heating element: | G 1 1/4" M / limescale resistant |
| Sensor pockets: | 2 pcs. for 6 - 8 mm. sensor |
| Appliance feet: | Adjustable 0 - 40 mm. |

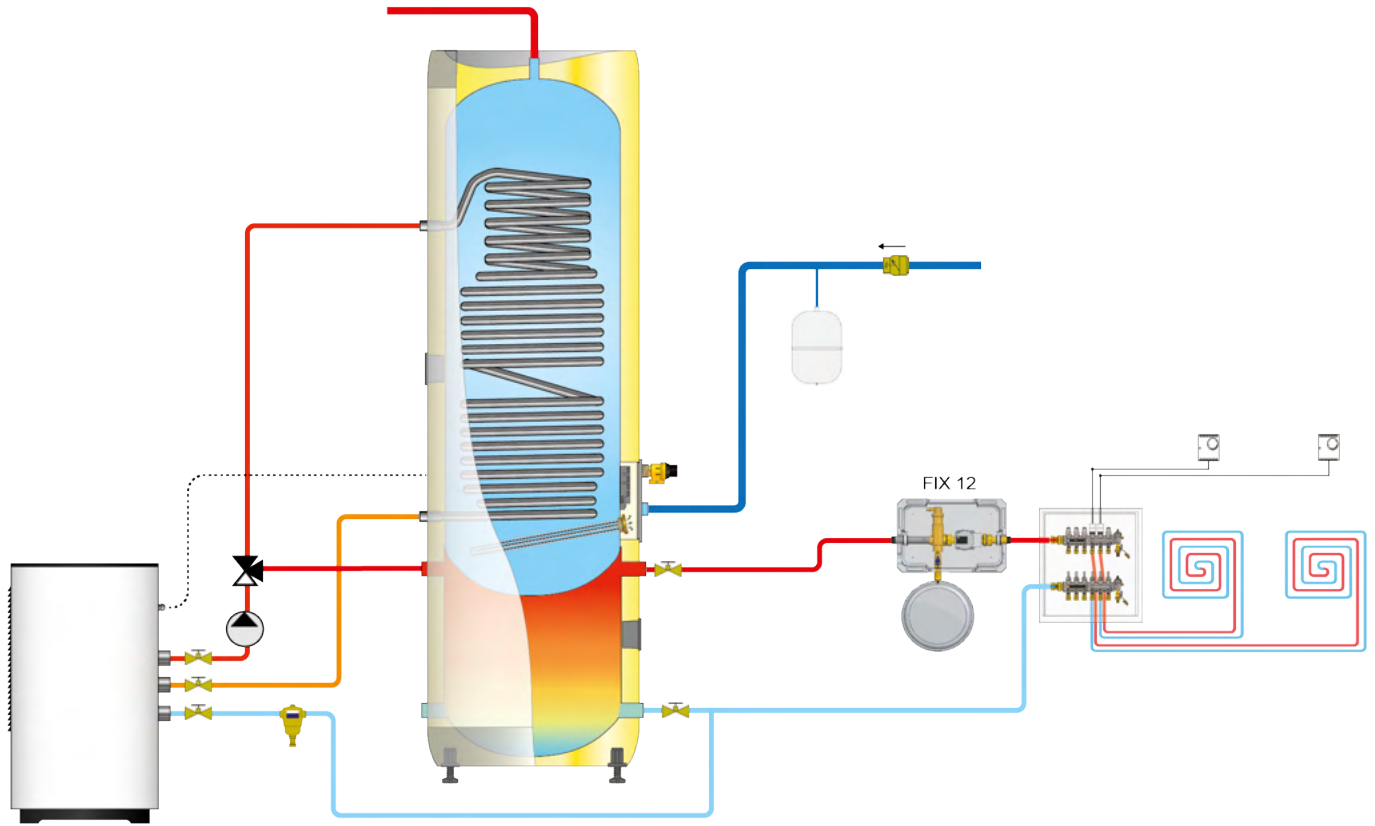


TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009417	OGC 300 - 3 kW/1x230V+HX1.8m ²	Ø595x1760	-	68	0.64	233/62	375	-	54	75	-	B	-

OPTIMA GEOCOIL - OGC - SYSTEM SCHEMATIC

Optima Geocoil with underfloor heating, heat pump and FIX 12



PRESSURE DROP TABLE (mbar)

OSO No.	Product name	Coil surface m ²	540 L/h 0.15L/s	900 L/h 0.25 L/s	1800 L/h 0.50 L/s	2700 L/h 0.75 L/s	3 600 L/h 1.00L/s	4 500 L/h 1.25 L/s	5 400 L/h 1.50 L/s	kv-value m ³ /hour
11009417	OGC 300	1.8	50	135	455	930	1 580	2 350	3 350	2.8

OPTIMA TWINCOIL - OTC

Tank-in-tank unit with DHW and buffer tank integrated for multiple energy sources



OPTIMA TWINCOIL – OTC – features high efficiency and fast recovery times, and covers the hot water demand for at least 6 people as well as heating requirements in homes up to 400m² in a single unit. OPTIMA TWINCOIL is suitable for heat pumps up to 15 kW, by way of the stainless steel tube heat exchanger with a large surface area of 2.6m² in the DHW tank. The stainless buffer tank of 85 L can be connected to ≤ 12m² solar collectors using a second tube heat exchanger (0.7m²). The 9 kW electric heater in the buffer tank provides full energy flexibility as well as back-up. OPTIMA TWINCOIL also features an electric heating element in the DHW tank for legionella protection (controlled externally). The heater can also be used as DHW backup for the heat pump.

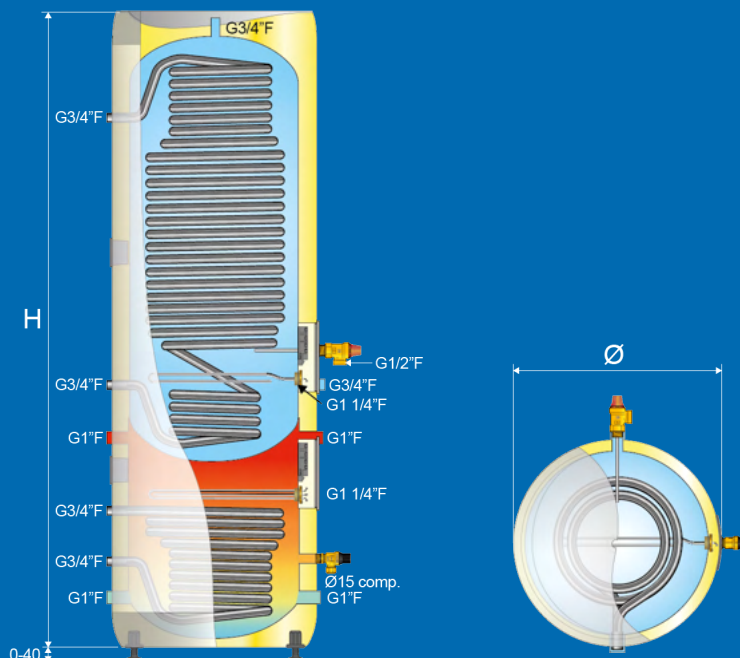
OPTIMA is the market's most advanced and energy efficient tank-in-tank products, with class-leading PUR insulation and patented solutions to increase hot water production from heat pumps. The OPTIMA series integrates both a stainless steel buffer tank and heat exchangers in one unit, and takes up minimal space.

WHY OPTIMA TWINCOIL?

- Save approx. 650 kWh / year vs. glass wool insulated products
- Integrated heat exchangers for HP ≤ 15 kW / solar ≤ 12m²
- Integrated stainless buffer tank of 85 L

KEY COMPONENTS

Thermostat DHW/Buffer:	Adjustable 60-90°C + 30-60°C
Security VV/Buffer:	9 bar/90°C, G ½”M + 3 bar, G ½”M
Heating elements:	G 1¼”M / limescale resistant
Sensor pockets:	2 pcs. for 6 - 8 mm. sensor
Appliance feet:	Adjustable 0 - 40 mm.

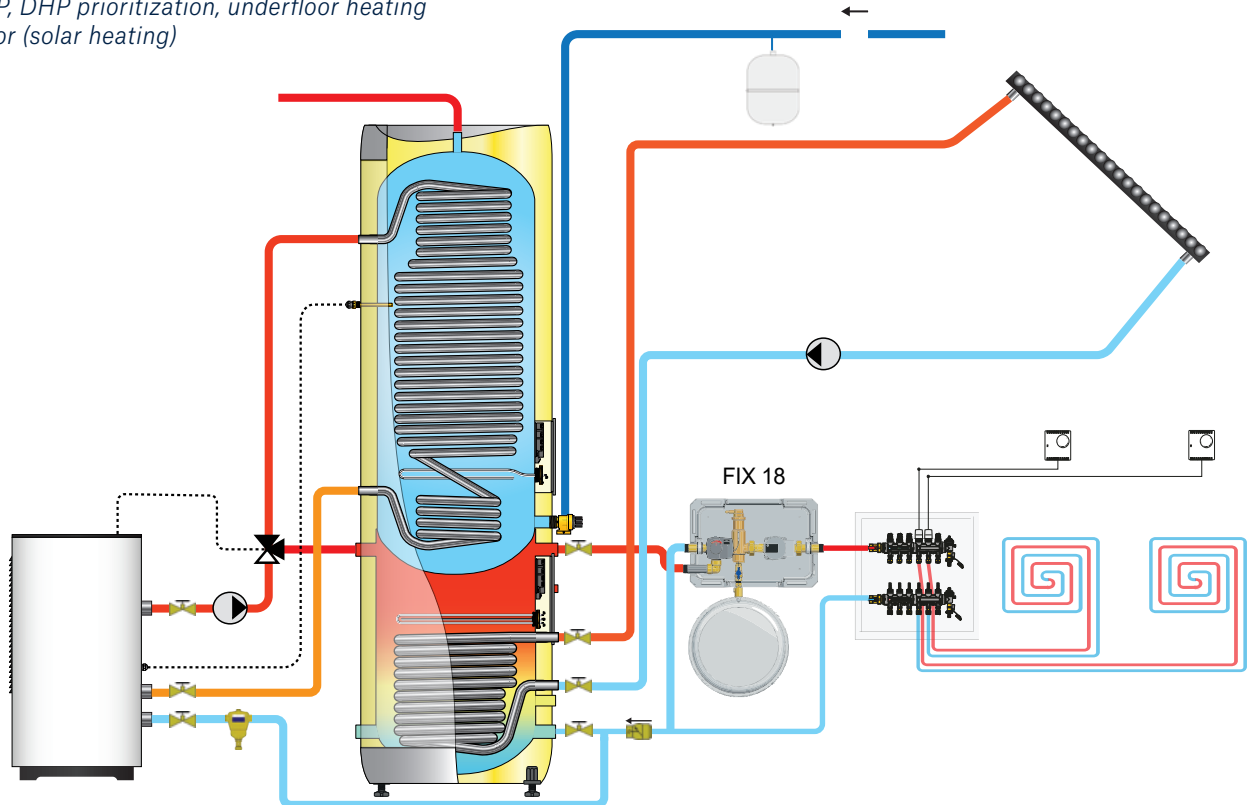


TECHNICAL DATA

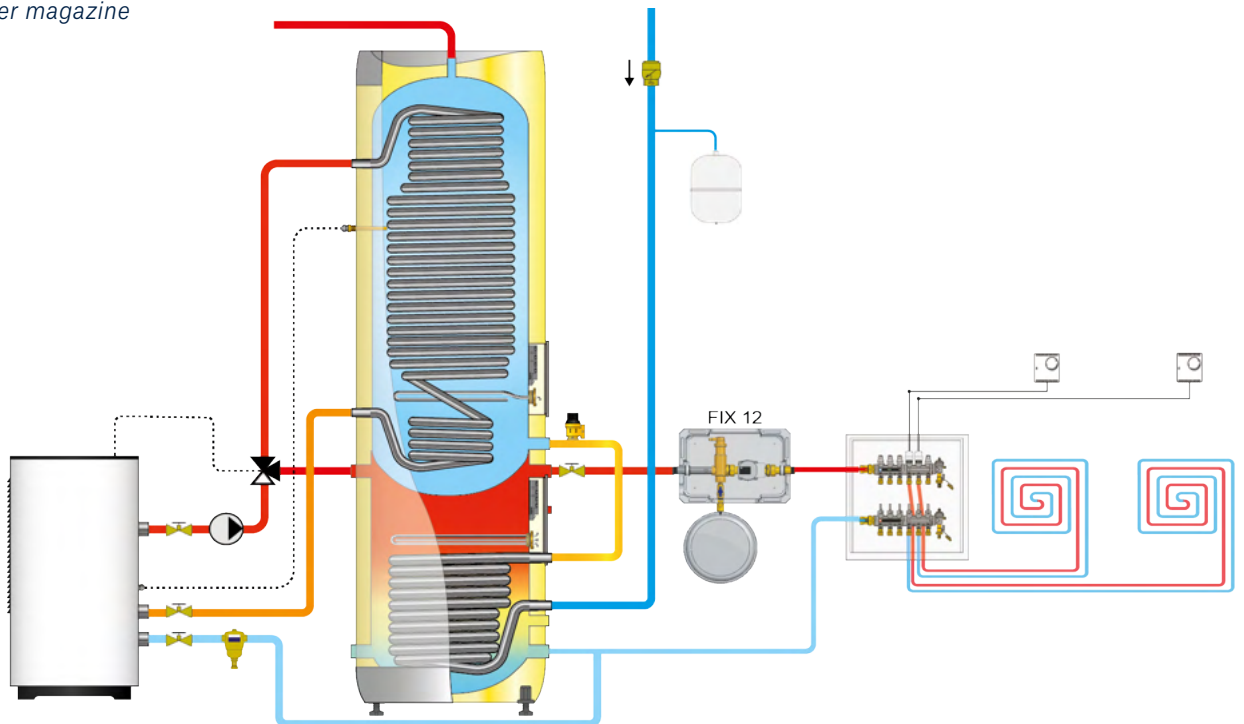
OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009418	OTC 300 - 3+9kW/1/3x230V+HX 2.6+0.7m ²	Ø595x1760	-	71	0.64	200/85	335	-	49	75	-	B	-

OPTIMA TWINCOIL - OTC - SYSTEM SCHEMATIC

OTC 300 with HP, DHP prioritization, underfloor heating and solar collector (solar heating)



OTC 300 with HP, DHW prioritization, underfloor heating and tap water preheating in the coil in the lower magazine



PRESSURE DROP TABLE (mbar)

OSO No.	Product name	Coil surface m ²	540 L/h 0.15L/s	900 L/h 0.25 L/s	1800 L/h 0.50 L/s	2700 L/h 0.75 L/s	3600 L/h 1.00L/s	4500 L/h 1.25 L/s	5400 L/h 1.50 L/s	kv-value m ³ /hour
11009418	OTC 300	2.6 (upper)	24	53	188	375	650	975	1370	4.6
11009418	OTC 300	0.7 (lower)	40	109	415	824	1440	2150	3050	3.0

ACCU - A

Buffer tank for heat pumps



ACCU – A – is designed as a buffer tank for heat pumps or solar collectors. ACCU features dual sets of flow/return connections, which provide flexible connection and installation options, in addition to a separate G1½”F connection for air vents and a drain connection. ACCU ensures that the energy source has optimal operating conditions and provides a stable temperature for the system.

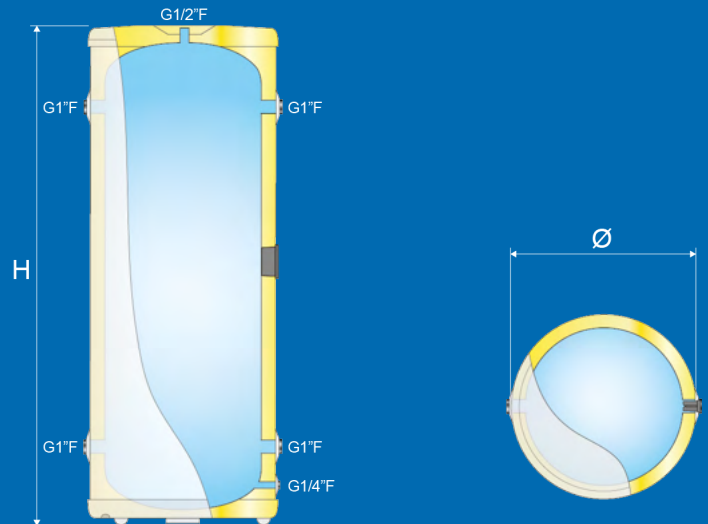
ACCU is a series of highly energy-efficient, PUR insulated buffer tanks for heating systems. ACCU is in stainless steel design which ensures a trouble-free system vs. buffer tanks in mild steel. ACCU features a modern design and fits perfectly in any heating system.

WHY ACCU?

- Stainless steel buffer tank for heating system
- Provides optimal operating conditions for heat pumps

KEY COMPONENTS

- Sensor pockets: 1 pc. for 6-8 mm. sensor
- Wall bracket: Corrosion resistant



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009165	A 60	Ø434x741	-	18	0.18	57	-	-	44	-	-	C	-
11003162	A 100	Ø434x1168	-	28	0.27	100	-	-	55	-	-	B	-
11009745	A 200	Ø595x1265	-	39	0.48	199	-	-	46	-	-	B	-

ACCU STANDARD - AS

Buffer tank with electric heaters



ACCU STANDARD – AS – is designed as a buffer tank for heat pumps or solar collectors. ACCU STANDARD features dual sets of flow/return connections, which provide flexible connection and installation options, in addition to a separate G1/2" F connection for air vents and a drain connection. ACCU STANDARD has electrical heating elements factory fitted, which provides the option for additional heating and operational security in the event of any operational issues with the energy source. ACCU ensures that the energy source has optimal operating conditions and provides a stable temperature for the system.

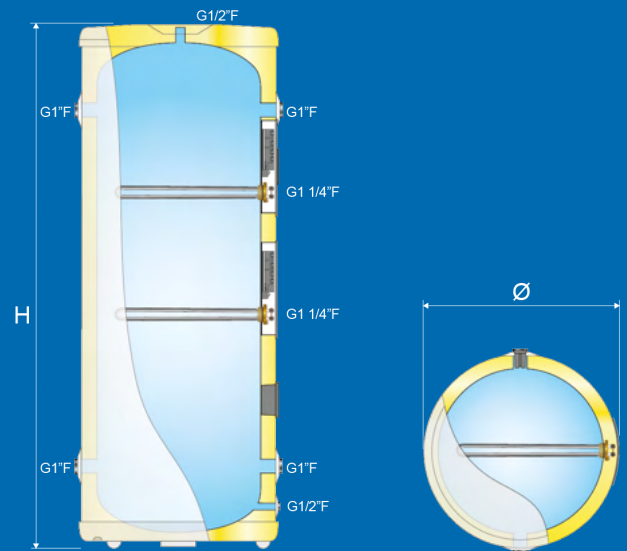
ACCU is a series of highly energy-efficient, PUR insulated buffer tanks for heating systems. ACCU is in stainless steel design which ensures a trouble-free system vs. buffer tanks in mild steel. ACCU features a modern design and fits perfectly in any heating system.

WHY ACCU STANDARD?

- Stainless steel buffer tank for heating system
- Provides optimal operating conditions for heat pumps
- Electric supplementary heating and / or backup for heating system

KEY COMPONENTS

- Thermostat: Adjustable 30-60°C
- Safety valve: 3 bar / G 1/2" M overflow
- Heating element: G 1.1/4" M / limescale resistant
- Sensor pockets: 2 pcs. for 6-8 mm. feel
- Wall bracket: Corrosion resistant



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11003163	AS 100 - 5.6 kW (2.8 + 2.8)/1x230V	Ø434x1168	-	30	0.26	100	-	-	57	-	-	C	-

ACCU GEOCOIL - AGC

Buffer tank with preheating and electrical elements



ACCU GEOCOIL – AS – is designed as a buffer tank for heat pump systems. ACCU GEOCOIL features an integrated tube heat exchanger with a large surface area of 3.1m² for pre-heating domestic hot water. AGC also comes standard with dual sets of flow/return connections, which provide flexible connection and installation options, in addition to a separate G1/2" F connection for air vents and a drain connection. ACCU GEOCOIL also has electrical heating elements factory fitted, which provides the option for additional heating and operational security in the event of any operational issues with the energy source. ACCU ensures that the energy source has optimal operating conditions and provides a stable temperature for the system.

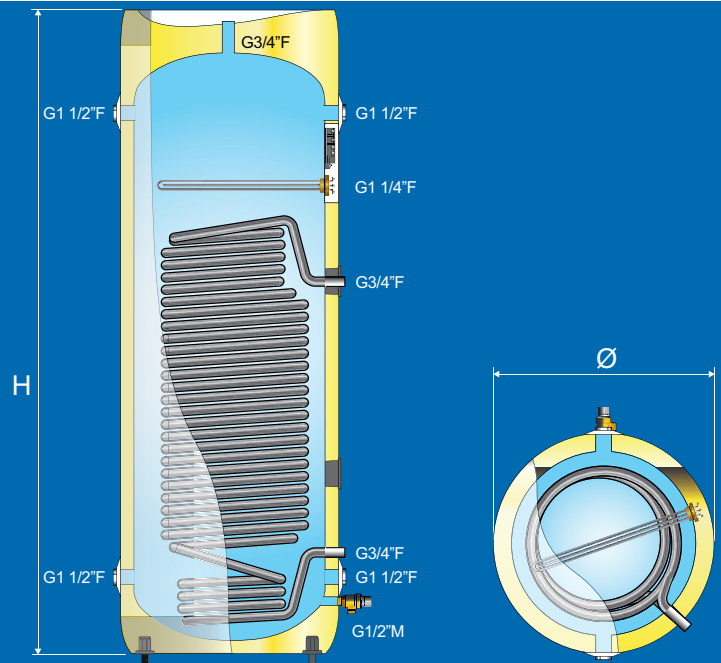
ACCU is a series of highly energy-efficient, PUR insulated buffer tanks for heating systems. ACCU is in stainless steel design which ensures a trouble-free system vs. buffer tanks in mild steel. ACCU features a modern design and fits perfectly in any heating system.

WHY ACCU GEOCOIL?

- Provides optimal operating conditions for heat pumps
- Large preheating capacity of hot water increases COP
- Electric supplementary heating and / or backup for heating system

KEY COMPONENTS

- Thermostat: Adjustable 30-60°C
- Safety valve: 3 bar / G 1/2" M overflow
- Heating element: G 1.1/4" M / limescale resistant
- Sensor pockets: 2 pcs. for 6-8 mm. sensor

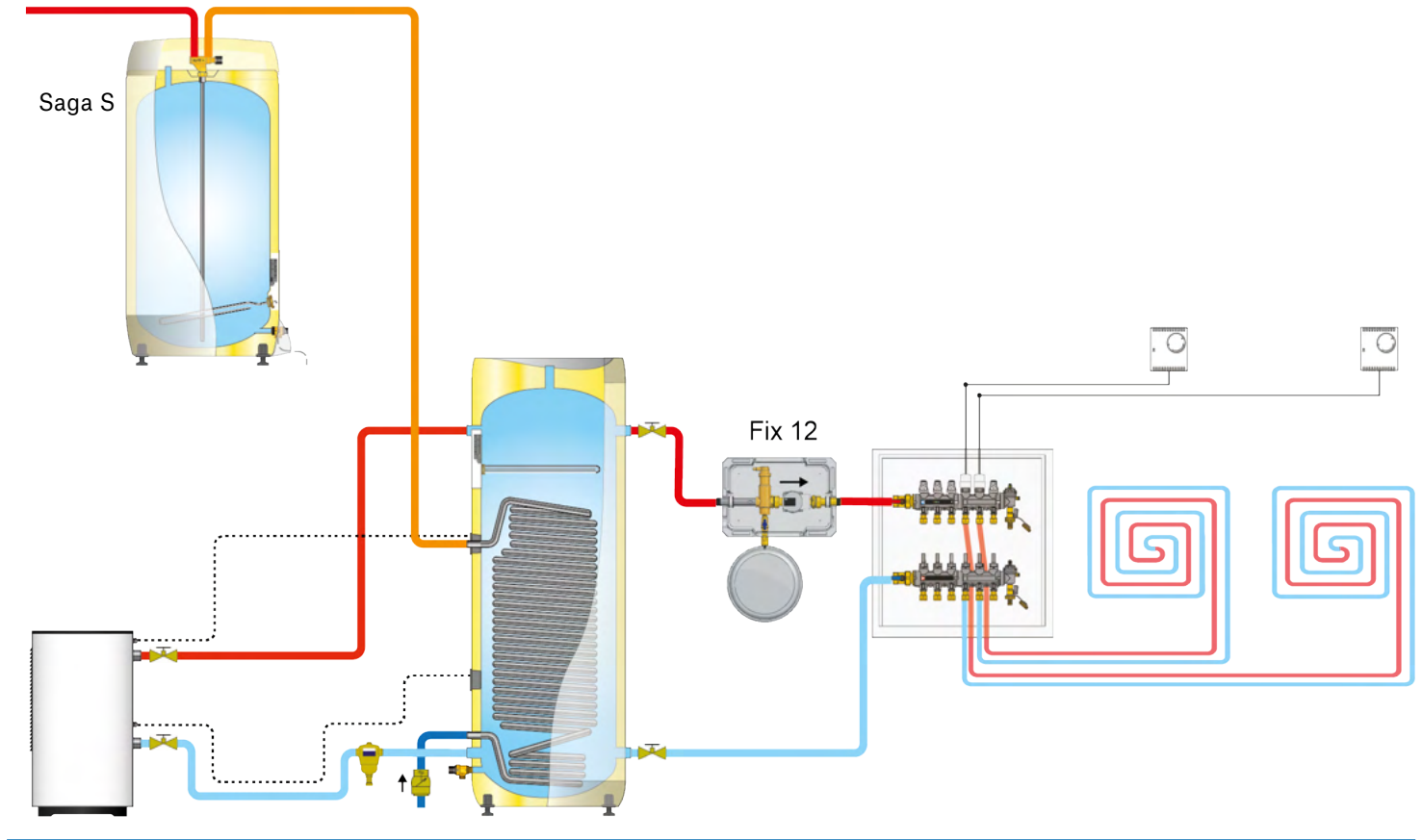


TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009867	AGC 300 - 9 kW/3 × 230 V + HX 2.6m ²	Ø595x1750	-	65	0.64	296	-	-	68	45	-	B	-

ACCU GEOCOIL - AGC - SYSTEM SCHEMATIC

Accu Geocoil AGC with HP and Saga S afterheater



PRESSURE DROP TABLE (mbar)

OSO No.	Product name	Coil surface m ²	540 L/h 0.15L/s	900 L/h 0.25 L/s	1800 L/h 0.50 L/s	2700 L/h 0.75 L/s	3600 L/h 1.00L/s	4500 L/h 1.25 L/s	5400 L/h 1.50 L/s	kv-value m ³ /hour
11009867	AGC 300	2.6	40	109	415	824	1440	2150	3050	2.55

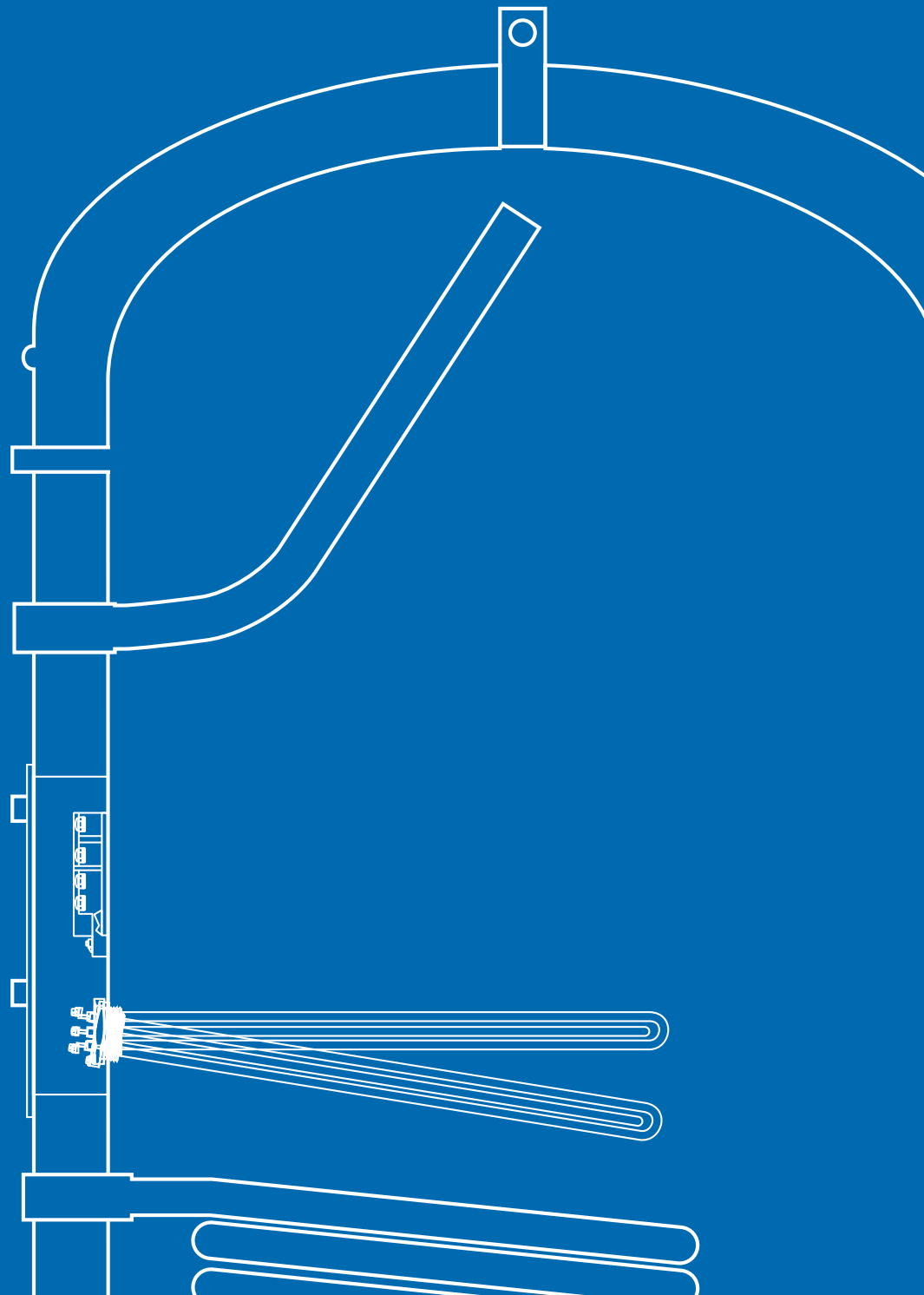
PRODUCT SELECTOR - COMMERCIAL

THE TABLE SHOWS STANDARD OSO MAXI PRODUCTS. THE MAXI SERIES CAN ALSO BE SPECIFIED TO CUSTOMER SPEC.

SUITABLE FOR NO. OF PERSONS DIAMETER:		5 - 6 Ø580	7 - 8 Ø580	CALCULATE Ø780	CALCULATE Ø1000	CALCULATE Ø1300	CALCULATE Ø1500	CALCULATE Ø1700	CALCULATE Ø1990	CALCULATE Ø2200
CAPACITY IS CALCULATED FOR DWELLINGS WITH SHOWERS. IF BATHTUBS, THE NUMBER OF PEOPLE COVERED MUST BE REDUCED BY 1.	PRODUCT CODE									
		PRODUCT SERIES	300	400	600	1000	2000	3000	5000	10000
MAXI	M		11009866	11003358	11003353	11003354	11003206	11003207	11003208	On demand
MAXI STANDARD	MS	11011537	11011538	11009827	11009897	11003213	11003214	11003216	On demand	On demand
MAXI XPRESS	MX		On demand	11009847	11009905	On demand	On demand	On demand	On demand	On demand
MAXI COIL	MC		On demand	11009864	11009915	On demand	On demand	On demand	On demand	On demand
MAXI GEOCOIL	MGC		11011539	11009918	11009922	On demand	On demand	On demand	On demand	On demand
MAXI ACCU GEOCOIL	MAGC		On demand	11003229	11003237	On demand	On demand	On demand	On demand	On demand
MAXI ACCU HEAT	MA		On demand	11003351	11003345	11003198	11003199	11003200	11003201	On demand
MAXI ACCU COOL	MA		On demand	11003344	11003338	11003189	11003190	11003191	11003192	On demand

SYMBOL	PRODUCT CODE	AREA OF USE			HEATING METHOD				FUNKTIONS			
		DOMESTIC HOT WATER	SPACE HEATING	ACCUMULATION	SOLAR READY/ELECTRIC/ UNMIXED HOT WATER	DIRECT ELECTRIC	HEAT PUMP / LOW TEMP.	BOILER / HIGH TEMP.	ELECTRIC BACKUP	PREHEATING (EL./COIL)	REHEATING (TOP LOAD)	HOT WATER CIRCULATION
<input checked="" type="checkbox"/> RECOMMENDED / INCLUDED												
<input type="checkbox"/> POSSIBLE												
<input type="checkbox"/> NOT POSSIBLE / NOT INCLUDED												
MAXI	M	X	-	O	X	-	O	X	-	-	-	X
MAXI STANDARD	MS	X	-	O	X	X	O	-	X	O	X	X
MAXI XPRESS	MX	X	-	O	X	X	O	-	X	O	X	X
MAXI COIL	MC	X	-	O	X	O	O	X	X	-	-	X
MAXI GEOCOIL	MGC	X	-	O	X	O	X	O	X	X	X	X
MAXI ACCU GEOCOIL	MAGC	O	O	X	X	-	X	O	-	X	-	O
MAXI ACCU HEAT	MA	-	O	X	O	-	X	X	-	-	-	-
MAXI ACCU COOL	MA	-	-	X	-	-	-	-	-	-	-	-

Commercial water heaters & accumulators



MAXI CHARGE R3

Smart control for use with OSO commercial water heaters



MAXI CHARGE R3 has been developed to enable optimization of power consumption in OSO industrial boilers:

PRICE OPTIMIZATION

Automatic price optimization against the national time of use tariffs. Heating when the electricity price is low and avoiding peak load tariffs.

AI - MACHINE LEARNING

Adapts to facility consumption using machine learning and historical data.

SOLAR MODE

Store excess solar energy as hot water to enhance efficiency and cut costs.

SECURITY

Several layers of security, both in hardware and software. Both legionella protection and frost protection are built in.

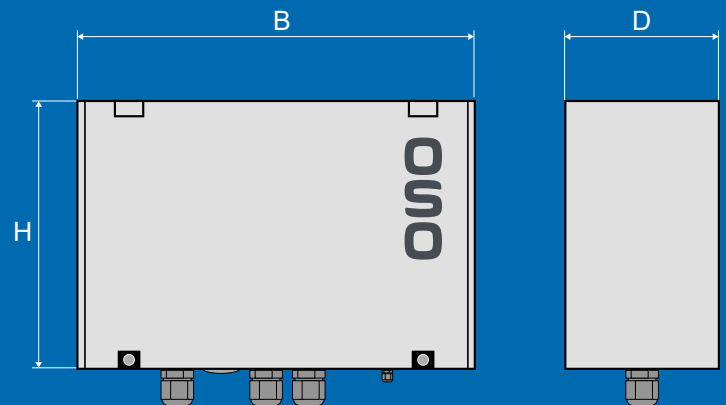
MAXI CHARGE can provide significant savings on electricity consumption for water heating, and can be retrofitted to older OSO MAXI industrial water heaters.

WHY MAXI CHARGE?

- Significant savings on electricity consumption for water heating
- Very cost-effective in larger boiler plants
- Prepared for optimization of solar systems
- Can be retrofitted to older OSO MAXI, see table on next page
- Full control over power consumption with the OSO InCharge app

KEY COMPONENTS

Electrical installation: 2x25A, 3x25A, 1x40A or 2x40A, 230/400V
 Communication: WiFi 2.4 and 5 GHz, IEEE 802.11 b/g/n
 Configuration: Bluetooth 4.3
 Standards: IEC 60730 and EN 60335
 Degree of protection: IP 66
 Interface: OSO inCharge App / Open cloud-based API
 Integrated eSim (4G/LTE)



TECHNICAL DATA

OSO no.	Product name	Dimension - mm. BxHxD	Product description
11012318	MAXI CHARGE R3 (2x7,5kW) - 2x25A,230V/400V with temp.sensor	615x415x230	Smart control with electrical cabinet
11012319	MAXI CHARGE R3 (3x9kW) - 3x25A,230V/400V with temp.sensor	615x415x230	Smart control with electrical cabinet
11012320	MAXI CHARGE R3 (1x15kW) - 1x40A,230V/400V with temp.sensor	615x415x230	Smart control with electrical cabinet
11012321	MAXI CHARGE R3 (2x15kW) - 2x40A,230V/400V with temp.sensor	615x415x230	Smart control with electrical cabinet
11012322	MAXI CHARGE Temp. sensor kit / 3xDS18B20	340x227x50	Temp. sensor

MAXI CHARGE SMART CONTROL

Full control with the OSO InCharge app



The OSO InCharge app provides full control:

- Overview of consumption over the last year
- Available capacity and temperature in the boiler
- Supports parallel and serial connected systems.

The OSO InCharge app can be easily downloaded to your smartphone from Apple AppStore or Google Play.



OSO inCharge



Features also accessible through our web interface



MAXI CHARGE READY PRODUCTS

OSO product	Volume	Manufactured from - date
Maxi Standard - MS	600 - 1000 l.	26/9 - 2017 >
Maxi Xpress - MX	600 - 1000 l.	26/9 - 2017 >
Maxi 17RE	600 - 1000 l.	1/1 - 2010 >
Maxi 17RED	600 - 1000 l.	1/1 - 2010 >

MAXI - M

Stainless steel heat accumulator tank for Turbo system



MAXI — M is ideal for heat accumulation in commercial installations, for instance from other models in the MAXI series (MS/MX/MC/MGC), or directly from an external energy source by way of plate heat exchangers (not included.) Installation kits for cold water inlet with shut-off valve, hot water outlet with mixing valve, plate heat exchanger with pumps (TURBOSYSTEM) and piping for connecting multiple units has been custom-made to fit directly on the MAXI series.

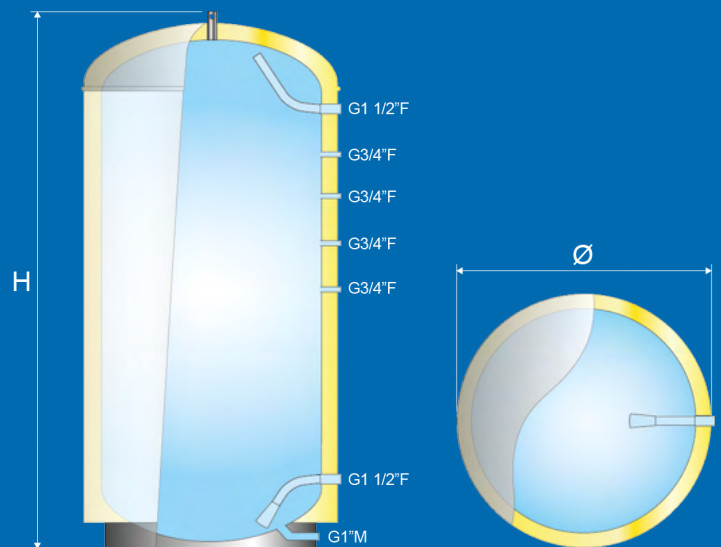
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

WHY MAXI?

- Accumulators provides optimal working conditions system
- Flexible choice of energy source with TURBO SYSTEM (add-on)
- 10 bar design pressure and class-leading corrosion resistance
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

- Mixing valve: See separate commercial add-ons
 Safety valve: SV 9 bar — ¾" to drain
 Flow/return conn.: 2 x G 1½"F
 Other conn.: 4 x G ¾"F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009866	M 400	Ø595x2180	-	78	0.81	376	-	-	89	-	-	C	-
11003358	M 600	Ø800x2030	-	97	1.96	570	-	-	-	-	-	-	-
11003353	M 1000	Ø1000x2120	-	176	3.07	885	-	-	-	-	-	-	-
11003354	M 2000	Ø1290x2450	-	-	-	2 020	-	-	-	-	-	-	-

MAXI STANDARD - MS

Commercial direct electric hot water cylinder



MAXI STANDARD — MS — is suitable for most commercial domestic hot water demands, and is heated either with the integrated electric INCOTEC immersion heaters, or via an external energy source and plate heat exchanger. The effect of the electric immersion heaters can be set from 2x7.5 kW, 400V+N 3-phase, and is thermostat controlled 50–75°C with separate safety thermostats. Contactors are not required and the support cable is connected directly to the electric central. Installation kits for cold water inlet with shut-off valve, hot water outlet with mixing valve, plate heat exchanger with pumps (TURBO SYSTEM) and piping for connecting multiple units has been custom-made to fit directly on the MAXI series.

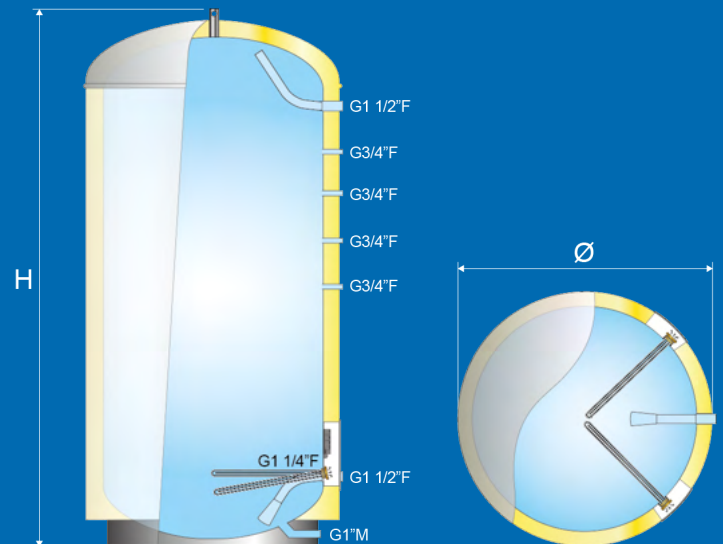
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

WHY MAXI STANDARD?

- Extreme operational durability with el. heaters w/o contactors
- Flexible choice of energy source with TURBOSYSTEM (add-on)
- 10 bar design pressure and class-leading corrosion resistance
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

Mixing valve:	See separate commercial add-ons
Thermostat:	Justerbar 50–75°C—Preset 75°C
Safety valve:	PT 10 bar/90°C, G ¾" M
Flow/return conn.:	2 x G 1½" F
Other conn.:	4 x G ¾" F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11011538	MS 400 - 2x7.5 kW/3x230V	Ø595x2172	-	79	0.81	372	771	-	90	75	-	C	-
11009827	MS 600 - 2x7.5 kW/3x400V	Ø800x2030	-	105	-	570	-	-	-	75	-	-	-
11009897	MS 1000 - 2x7.5 kW/3x400V	Ø1000x2120	-	180	-	885	-	-	-	75	-	-	-
11003362	MS 2000 - 30 kW/3x400V	Ø1290x2450	-	-	-	2 020	-	-	-	75	-	-	-

MAXI XPRESS - MX

High electric power for faster heating



MAXI XPRESS—MX has greater electrical power than MS, and is heated either with the help of three integrated electrical junction boxes (3x9kW) or via OSO TURBO SYSTEM. The effect of the electric immersion heaters can be set from 3–27 kW, 400V 3-phase, are thermostatically controlled 50–75°C, and electric supply cables are connected directly to each electrical central. The electrical centrals are separated to avoid that all the power is switched on at the same time, this reduces the power factor with less hot water demand. An upper power central of 9kW will cover moderate consumption, while the lower power centrals are only switched on in stages when large hot water needs are required. Safety valve is included and is dimensioned according to EN 1490.

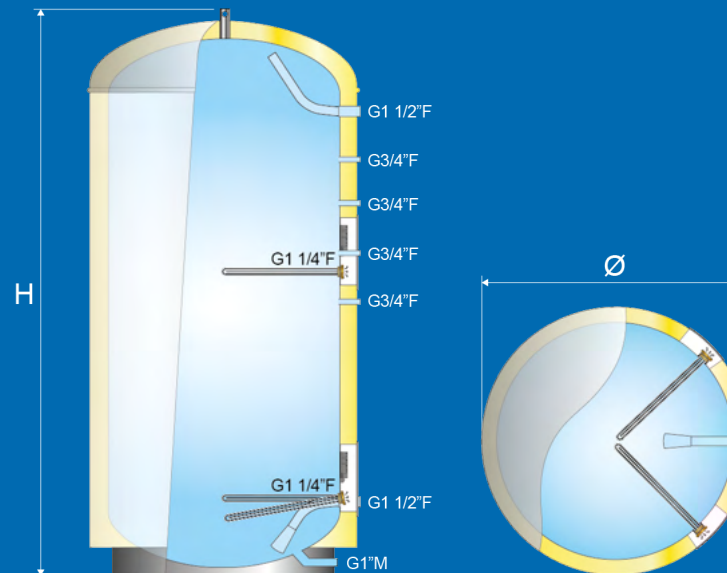
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

WHY MAXI XPRESS?

- Cost-effective installation with extreme operational reliability
- Flexible choice of energy source with TURBO SYSTEM (optional)
- 10 bar pressure class and market-leading corrosion resistance
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

Thermostat:	Adjustable 50–75°C
Safety valve:	PT 10 bar/90°C, G ¾" M
Mixing valve:	Separate additional equip.
low/return conn.:	2 x G 1½" F
Other conn.:	4 x G ¾" F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009847	MX 600 - 3x9kW/3x400V	Ø800x2030	-	106	-	570	-	-	-	75	-	-	-
11009905	MX 1000 - 3x9kW/3x400V	Ø1000x2120	-	184	-	885	-	-	-	75	-	-	-

MAXI COIL - MC

Water heater with unbeatable energy flexibility



MAXI COIL—MC is ideal for electric operation in summer/boiler operation in winter, and is a good alternative to the TURBO system for smaller hot water needs. MAXI COIL has an integrated tube heat exchanger of 1.0m², and a capacity of up to 30kW from external high temperature energy source. The effect of the electric immersion heaters can be set from 2x7.5 kW, 400V+N 3-phase, and is thermostat controlled 50–75°C with separate safety thermostats. Contactors are not required and the support cable is connected directly to each electric central. Installation kits for cold water inlet with shut-off valve, hot water outlet with mixing valve, plate heat exchanger with pumps (TURBO SYSTEM) and piping for connecting multiple units has been custom-made to fit directly on the MAXI series.

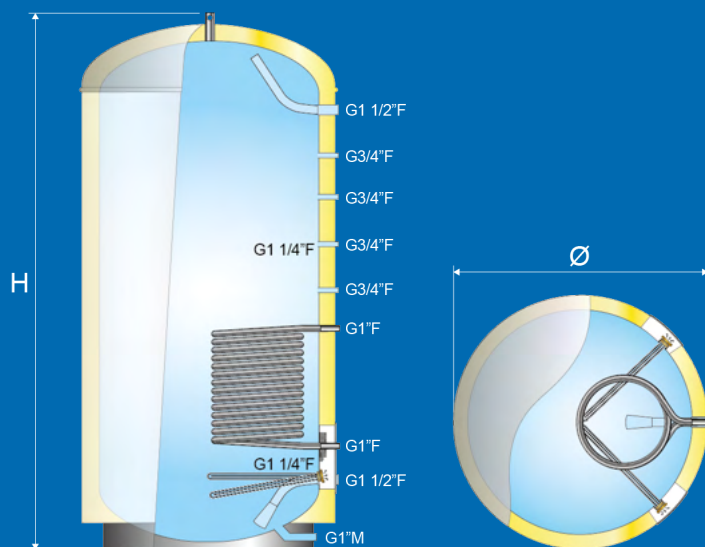
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

WHY MAXI COIL?

- Energy flexibility for summer / winter operation, or as back-up
- Extreme operational durability with el. heaters w/o contactors
- 10 bar design pressure and class-leading corrosion resistance
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

- Mixing valve: See separate commercial add-ons
- Thermostat: Adjustable 50–75 °C—Preset 75 °C
- Safety valve: TP 10 bar/90 °C—¾" to drain
- Flow/return conn.: 2 x G 1½"F
- Coil conn.: G 1"F
- Other conn.: 4 x G ¾"F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009864	MC 600 - 2x 7.5 kW/3x400V+HX 1.0m ²	Ø800x2030	-	114	-	568	-	-	-	75	-	-	-
11009915	MC 1000 - 2x7.5kW/3x400V+HX 1.0m ²	Ø1000x2120	-	189	-	877	-	-	-	75	-	-	-

MAXI GEOCOIL - MGC

Custom designed for heat pumps up to 70 kW



MAXI GEOCOIL — MGC — is custom-made for maximum hot water production from heat pumps up to 70 kW (400 L = 25 kW / 600 L = 60 kW / 1 000 L = 70 kW), with the extremely large tube heat exchanger (400L = 3.1m² / 600L = 4.6m² / 1000L = 7.0m²). The units are also suitable for solar collectors up to 40m². MAXI GEOCOIL features electric heating elements as booster raising the temperature above the heat exchanger to further increase capacity. The booster heaters also provides maximum safety vs. bacterial growth or if there are any operational problems with the energy source. The effect of the electric immersion heaters can be set from 2x7.5 kW, 400V 3-phase, and is thermostat controlled 50–75°C.

Installation kits for cold water inlet with shut-off valve and hot water outlet with mixing valve has been custom-made to fit directly on the MAXI series.

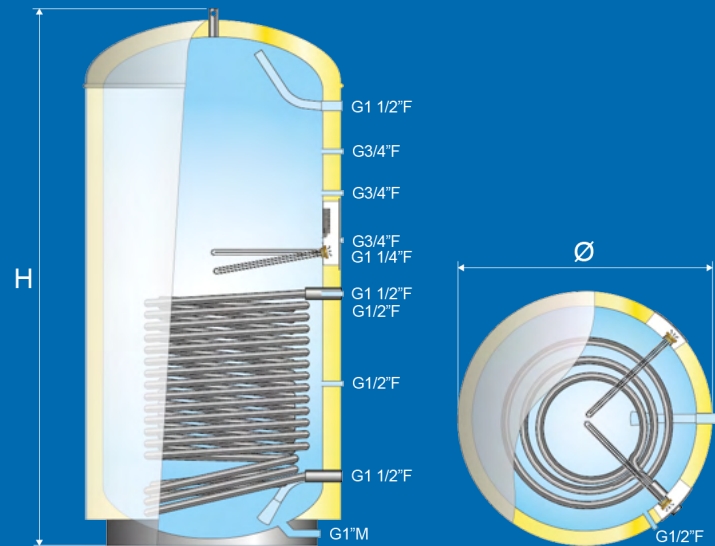
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

WHY MAXI GEOCOIL?

- Highly efficient DHW production from heat pumps up to 70 kW
- Extreme operational safety with electric heater as booster / back-up
- 10 bar design pressure and class-leading corrosion resistance
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

Mixing valve:	See separate commercial add-ons
Thermostat:	Adjustable 50–75°C—Preset 75°C
Safety valve:	TP 10 bar/90°C— ³ / ₄ " to drain
Flow/return conn.:	2 x G 1½"F
Coil conn.:	2 x G ³ / ₄ "F (400 L)/G 1"F (600–1 000 L)
Other conn.:	4 x G ³ / ₄ "F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11011539	MGC 400 - 9 kW/3x230V + HX 3.1m ²	Ø595x2172	-	95	0.81	362	-	-	96	75	-	C	-
11009918	MGC 600 - 2x7.5 kW/3x400V + HX 4.6m ²	Ø800x2030	-	136	-	543	-	-	-	75	-	-	-
11009922	MGC 1 000 - 2x7.5 kW/3x400V + HX 7.0m ²	Ø1000x2120	-	225	-	865	-	-	-	75	-	-	-

MAXI ACCU GEOCOIL - MAGC

Accumulator tank with preheating of domestic hot water



MAXI ACCU GEOCOIL - MAGC - is specially designed as a heat accumulator tank for heat pumps or solar collectors, with preheating of domestic hot water by using the large tube heat exchanger (4.0m²). MAXI ACCU GEOCOIL can also be connected to a heat pump with domestic hot water prioritization up to 40 kW, or to solar collectors with a plate heat exchanger in between. With preheating of the domestic hot water, MAXI ACCU GEOCOIL ensures improved operating conditions for the heat pump, higher domestic hot water capacity and stable temperature of the system. The tube heat exchanger preheats the cold water and lowers the return temperature of the heat pump or solar collectors significantly, thereby increasing the efficiency (COP).

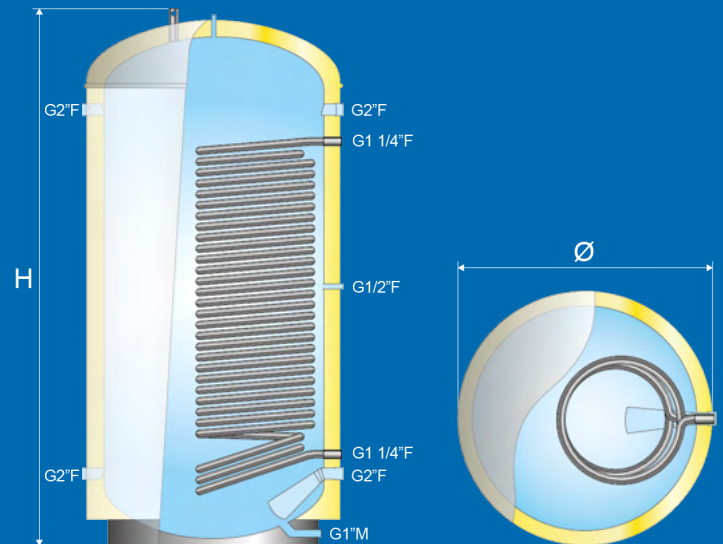
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

WHY MAXI ACCU GEOCOIL?

- Accumulator tank for heat pumps or solar collectors
- Large preheating capacity of domestic hot water provides better COP
- 10 bar pressure class and market-leading corrosion resistance
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

- Mixing valve: See separate commercial add-ons
 Safety valve: TP 10 bar/90°C - 3/4" overflow to drain
 Flow/return conn.: 2 x G 1" F
 Other connections: 4 x G 2" F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11003229	MAGC 600 - HX 4.0m ²	Ø800x2030	-	131	1.96	544	-	-	-	-	-	-	-
11003237	MAGC 1 000 - HX 4.0m ²	Ø1000x2100	-	223	3.07	870	-	-	175	-	-	E	-

MAXI ACCU - MA HEAT

Accumulator tank for heating applications



MAXI ACCU HEAT – MA – is the ideal accumulator tank for storage of hot water from heat pump / solar collectors, ensuring optimal working conditions for the energy source and providing stable temperature to the system. MAXI ACCU features dual sets of flow/return connections (400L = G2" F / 600L = DN80 / 1 000L = DN 100), which provide flexible connection and installation options, in addition to a separate G $\frac{3}{4}$ " F connection for air vents, G1" M drain connection as well as 3 x G $\frac{1}{2}$ " F sensor connection.

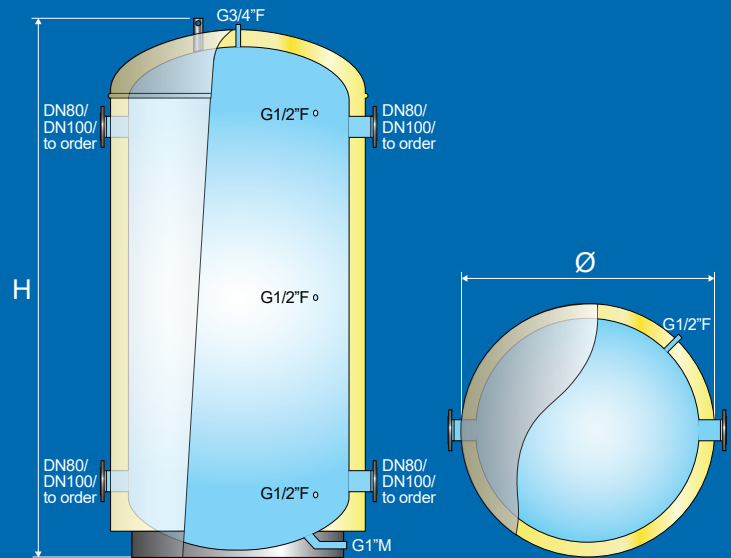
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

HVORFOR MAXI ACCU HEAT?

- Superior energy-efficiency
- Provides a stable hot water temperature for the system
- 6 bar design pressure
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

- 600 L.: 2 x DN80 PN10
- 1000 L.: 2 x DN100 PN10
- Other connections: 3 x G $\frac{1}{2}$ " F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009866	MA 400 HEAT/COOL	Ø595x2180	-	78	0.81	376	-	-	89	-	-	C	-
11003351	MA 600 HEAT	Ø800x1900	-	98	-	550	-	-	119	-	-	C	-
11003345	MA 1 000 HEAT	Ø1000x2100	-	178	-	885	-	-	140	-	-	C	-
11003347	MA 2 000 HEAT	Ø1290x2450	-	-	-	2 020	-	-	-	-	-	-	-

MAXI ACCU - MA COOL

Accumulator tank for cooling applications



MAXI ACCU COOL – MA – is the ideal accumulator tank for storage of cold water from room climate systems with cooling machines where the cold water tank provides the necessary buffer volume for the system. The excess heat from the cooling machinery can provide virtually free hot water, if an accumulator tank as a preheater is installed, for example MAGC. MAXI ACCU COOL features 19 mm. closed cell foam insulation to prevent condensation from forming on the cold tank surface. Thanks to its low thermal conductivity and high resistance to water vapour diffusion, closed cell foam insulation ensures high energy savings for the system. MAXI ACCU features dual sets of flow/return connections (400L = G2" F / 600L = DN80 / 1 000L = DN 100), which provide flexible connection and installation options, in addition to a separate G $\frac{3}{4}$ " F connection for air vents, G1" M drain connection as well as 3 x G $\frac{1}{2}$ " F sensor connection.

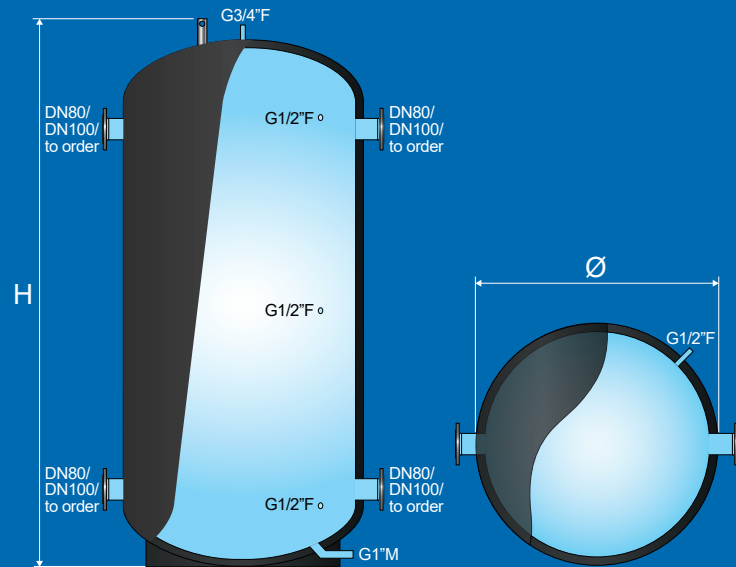
The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

WHY MAXI ACCU COOL?

- Superior energy-efficiency
- Provides a stable hot water temperature for the system
- 6 bar design pressure
- Capacities up to 15 000 litres on demand

KEY COMPONENTS

- 600 L.: 2 x DN80 PN10
 1000 L.: 2 x DN100 PN10
 Other conn.: 3 x G $\frac{1}{2}$ " F



TECHNICAL DATA

OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m ³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP
11009866	MA 400 COOL/HEAT	Ø595x2180	-	78	0.81	376	-	-	89	-	-	C	-
11003344	MA 600 COOL	Ø800x2030	-	98	-	570	-	-	-	-	-	-	-
11003338	MA 1 000 COOL	Ø1000x2120	-	178	-	885	-	-	-	-	-	-	-
11003340	MA 2 000 COOL	Ø1290x2450	-	-	-	2 020	-	-	-	-	-	-	-

Proud supplier of custom OEM stainless steel tanks and class-leading insulated products to some of the best known heating brands worldwide.

Industrial OEM solutions

Stainless steel OEM tanks

We offer a full range of OEM stainless steel tanks, with or without insulation and outer casing. Suitable for most heat pump systems, both for stand-alone and integrated solutions. An early stage partnership with OSO will provide great possibilities for optimizing design and efficiency.

We provide tank solutions with class-leading quality and cost efficiency for OEM customers based on our automated manufacturing. For market specific products, we can contribute with our own experience together with the customer to achieve the best result. Our smooth-pipe (no limescale build up) stainless heating coils up to 3,1 m² will perfectly fit any heat pump system up to 18 kW. Customer specified connections and design together with a wide range of heating coil options are available. Unique experience with high grade stainless steel enables us to meet any customer requirement.

Manufactured in accordance with

- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ISO 3834-2 (Welding)
- ISO 45001 (Health & Safety)

Extensive experience with third party certification processes.



Get to know
OSO OEM

OSO

HOTWATER



50 YEARS OF ENVIRONMENTAL AWARENESS

The 2nd generation Braathen running OSO was an environmentalist at heart, and created what would become “Scandinavia’s most environmentally friendly company” (The SCANVAC award). After 50 years of continuous efforts for the environment, the Norwegian government awarded OSO the “Glass Bear” trophy for its work. Our goal remains the same — to have as little impact on Mother Nature as possible.





OSO
HOT WATER

WE REDUCE

ENERGY USAGE

The need for energy for an ever-growing population is one of the biggest challenges facing the world today. As a manufacturer of high-quality water heaters, we work on several fronts to reduce energy consumption in both businesses and private individuals. All our products are developed with the lowest possible energy consumption in mind.

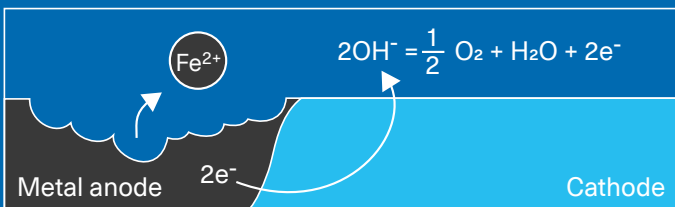
IMPORTANT FACTS ABOUT CORROSION

1. TDS / CONDUCTIVITY

The term TDS describes all solids (usually mineral salts) that are dissolved in water. The TDS and the electrical conductivity are in a close connection. The more salts are dissolved in the water, the higher is the value of the electric conductivity. The majority of solids are dissolved ions.

Conductivity is a measure of water's capability to pass electrical current. This ability is directly related to the concentration of ions in the water (also known as electrolytes.) The more ions that are present, the higher the conductivity of water. Likewise, the fewer ions that are in the water, the less conductive it is.

TDS and electrical conductivity (EC) are in a close connection. TDS, in mg/L, is in fresh water systems approximately 65 %* of specific conductivity** in $\mu\text{S} / \text{cm}$ (microsiemens).



* The exact conversion value between TDS and EC depends on the chemical composition of the water, specifically pH, bicarbonate and TDS.

** Specific conductance is a conductivity measurement made at or corrected to 25° C. If a measurement is made at a different temperature and corrected to 25° C, then the temperature coefficient must be considered.

Each electrolyte contributes differently to the conductivity (resistivity) of the water:

Cl- Chloride	2,14 $\mu\Omega/\text{cm}$ per mg/L
SO4 Sulphate	1,54 $\mu\Omega/\text{cm}$ per mg/L
NO3 Nitrate	1,15 $\mu\Omega/\text{cm}$ per mg/L
HCO3 Bicarbonate	0,72 $\mu\Omega/\text{cm}$ per mg/L

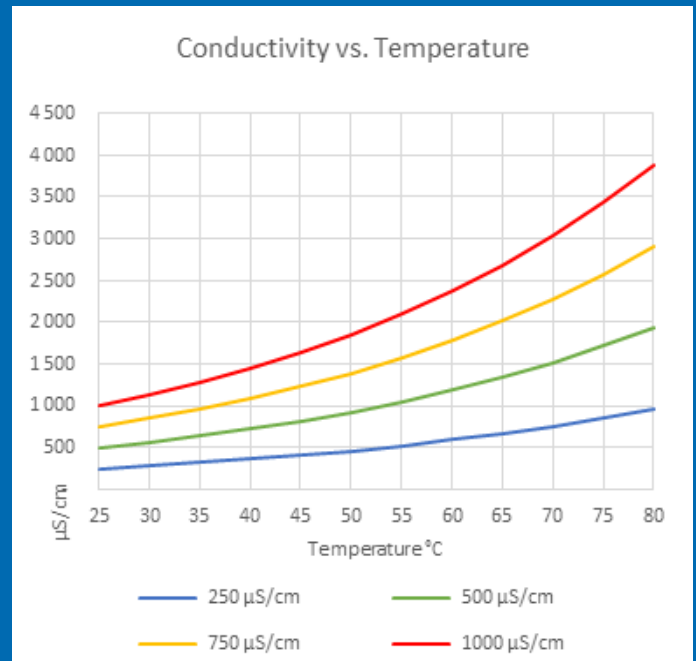
There is much evidence to suggest that in addition to its effect on conductivity (see below), chloride ions specifically accelerate pitting in ferrous metals, particularly stainless steels.

The conductivity of the water determines how swiftly the ions can exchange. The higher the conductivity, the faster the exchange of ions. In pitting corrosion, the pit will assemble ferrite (iron) and function as the anode vs. the stainless steel around the pit which will be the cathode. This occurs due to the difference in electric potential between the anode and the cathode, even between small areas on the same metal sheet.

2. TEMPERATURE

Temperature increases the conductivity of water due mainly to higher concentrations of the highly conducting H^+ and

OH^- ions. (So-called dissociation)



The water temperature affects the electric conductivity so that its value doubles pr. 10°C. For a water heater, this creates a particularly aggressive environment due to elevated temperatures.

3. O₂ CONCENTRATION

The passive layer on the stainless steel requires presence of oxygen to be able to self-repair and re-form chromium oxides (see part one). Hence, stainless steel exposed to environments with a low oxygen content and reduced water flow will exhibit much reduced corrosion resistance than normal.

Hardness class	°dH
Very soft water	0 - 2,1
Soft water	2,1 - 4,9
Medium hard water	4,9 - 9,8
Hard water	9,8 - 21
Very hard water	> 21

In an environment where there is low oxygen content in addition to presence of chlorides that will attack the stainless steel, the passive layer will be broken down at a faster rate than it is able to self-repair and re-form the damaged passive layer caused by the chlorides.

The water temperature affects the oxygen content in the water (dissolved oxygen). The higher the temperature, the lower the amount of dissolved oxygen. For a water heater this means a reduced level of dissolved oxygen and a particularly aggressive environment due to the elevated temperatures.

WARRANTY CONDITIONS

1. Scope

OSO Hotwater AS ("OSO") warrants for 2 years from the date of purchase, that the Product will: i) conform to OSO specification, ii) be free from defects in materials and workmanship, subject to conditions below. All components carry a 2-year warranty.

The warranty is voluntarily extended by OSO to 5 years for the stainless steel inner tank. This extended warranty only applies to Products purchased by a consumer, that has been installed for private use and that has been distributed by OSO or by a distributor where the Products have been originally sold by OSO.

The extended warranty does not apply to Products purchased by commercial entities or for Products that have been installed for commercial use. These shall be subject only to the mandatory provisions of the law. The conditions and limitations set out below shall apply.

2. Coverage

If a defect arises and a valid claim is received within the statutory warranty period, at its option and to the extent permitted by law, OSO shall either; i) repair the defect, or; ii) replace the product with a product that is identical or similar in function, or; iii) refund the purchase price.

If a defect arises and a valid claim is received after the statutory warranty period has expired, but within the extended warranty period, OSO will supply a product that is identical or similar in function. OSO will in such cases not cover any other associated costs.

Any exchanged Product or component will become the legal property of OSO. Any valid claim or service does not extend the original warranty. The replacement Product or part does not carry a new warranty.

3. Conditions

The Product is manufactured to suit most public water supplies. However, there are certain water chemistries (outlined below) that can have a detrimental effect on the Product and its life expectancy. If there are uncertainties regarding water quality, the local water supply authority can supply the necessary data.

The warranty applies only if the conditions set out below are met in full:

- The Product has been installed by a professional installer, in accordance with the instructions in the installation manual and all relevant Codes of Practice and Regulations in force at the time of installation.
- The Product has not been modified in any way, tampered with or subjected to misuse and no factory fitted parts have been removed for unauthorized repair or replacement.
- The Product has only been connected to a domestic mains water supply in compliance with the European Drinking Water Directive EN 98/83 EC, or latest version.
- The water should not be aggressive, i.e. the water

chemistry shall comply with the following:

- Chloride < 250 mg / L
- Electrical conductivity (EC) @25°C < 750 uS / cm
- Saturation index (LSI) @80°C > - 1.0 / < 0.8
- pH level > 6.0 / < 9.5

- The immersion heater has not been exposed to hardness levels exceeding 10°dH (180 ppm CaCO₃). A water softener is recommended in such cases.
- Any disinfection has been carried out without affecting the Product in any way. The Product shall be isolated from any system chlorination.
- The Product has been in regular use from the date of installation. If the Product is not intended to be used for 60 days or more, it must be drained.
- Service and/or repair shall be done according to the installation manual and all relevant codes of practice. Any replacement parts used shall be original OSO spare parts.
- Any third-party costs associated with any claim has been authorized in advance by OSO in writing.
- The purchase invoice and/or installation invoice, a water sample as well as the defective product is made available to OSO upon request.

Failure to follow these instructions and conditions may result in product failure, and water escaping from the Product.

4. Limitations

The warranty does not cover:

- Any fault or costs arising from incorrect installation, incorrect application, lack of regular maintenance in accordance with the installation manual, neglect, accidental or malicious damage, misuse, any alteration, tampering or repair carried out by a non-professional, any fault arising from the tampering with or removal of any factory fitted safety components or measures.
- Any consequential damage or any indirect loss caused by any failure or malfunction of the Product.
- Any pipework or any equipment connected to the Product.
- The effects of frost, lightning, voltage variation, lack of water, dry boiling, excess pressure or chlorination procedures.
- The effects of stagnant (de-aerated) water if the Product has been left unused for more than 60 days consecutively.
- Damage caused during transportation. Buyer shall give the carrier notice of such damage.
- Costs arising if the Product is not immediately accessible for servicing.

THESE WARRANTIES DO NOT AFFECT THE BUYER'S STATUTORY RIGHTS.

OSO

World class hot water cylinders since 1932