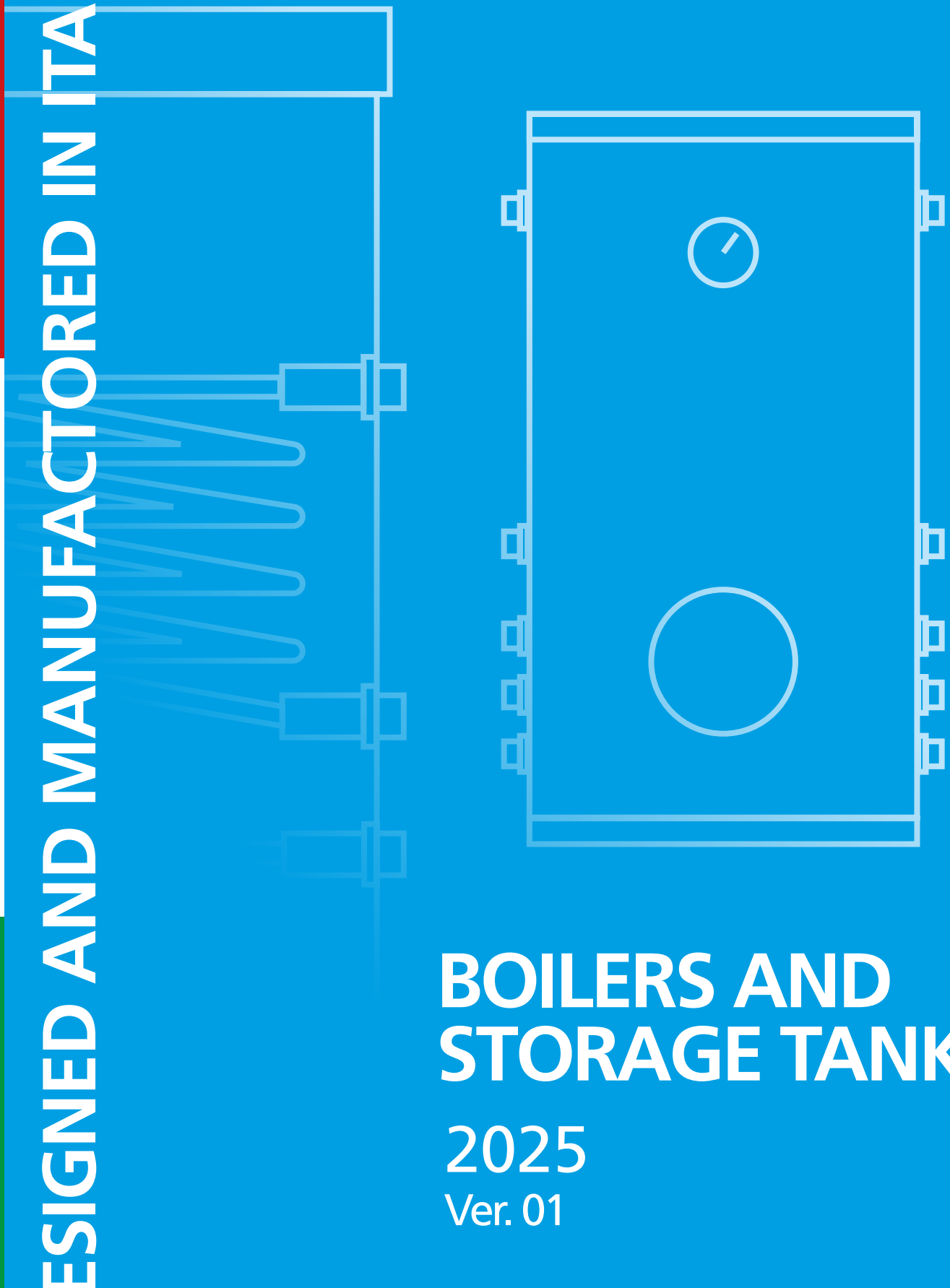
PLEION
The Sun is our Life!

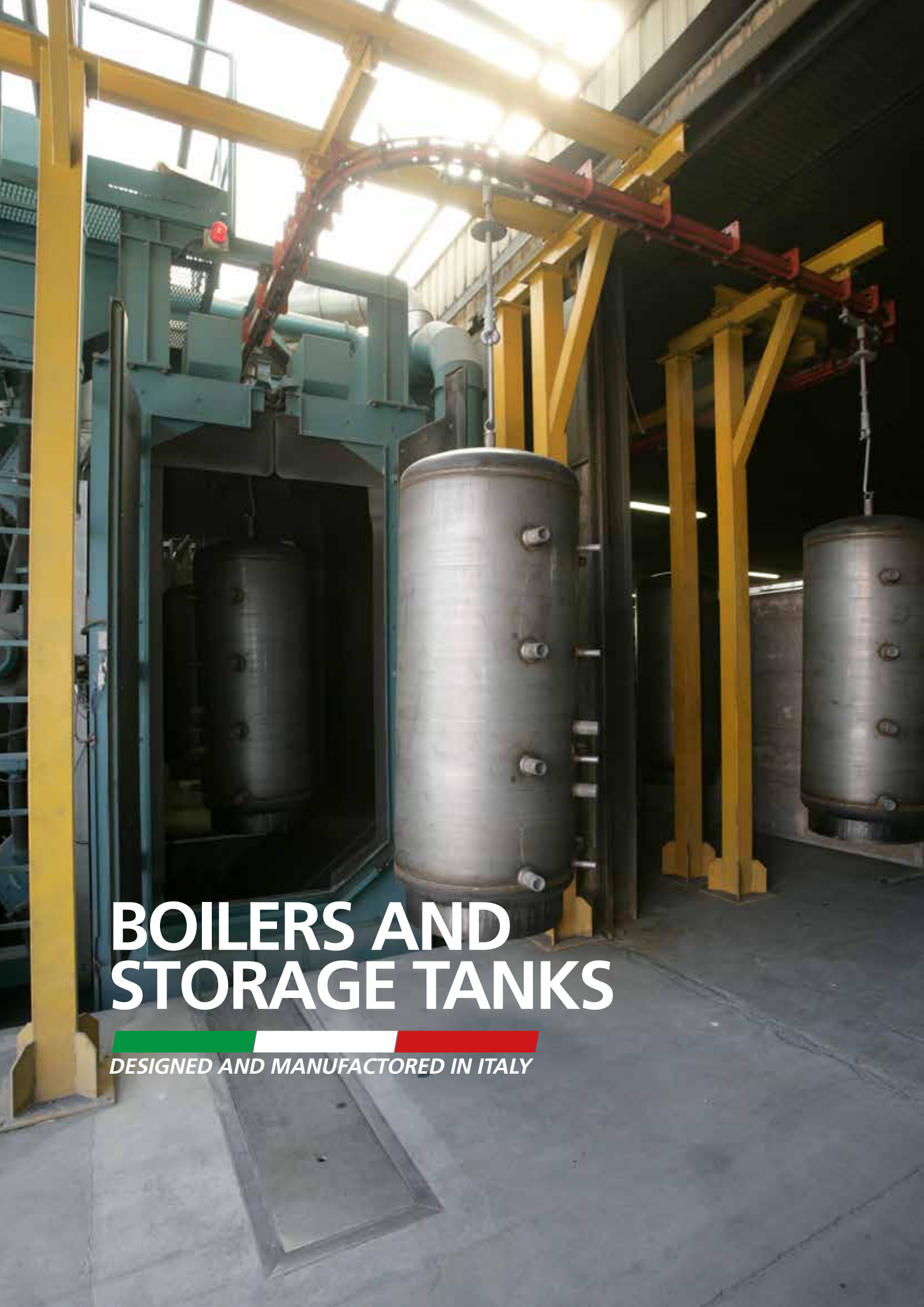
DESIGNED AND MANUFACTORED IN ITALY



BOILERS AND STORAGE TANKS

2025
Ver. 01

www.pleion.it



BOILERS AND STORAGE TANKS

DESIGNED AND MANUFACTORED IN ITALY

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HiPerformance Range	16
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Accessories	120



Why choose PLEION.

We are doing our part to make our present cleaner and more comfortable, as well as the future of our children.

PLEION-fully satisfies all the requests and needs of people who, like you, think about the present while looking to the future, aware that the use of renewable energies is the path to take.

PLEION-is a reference point for Italian Thermal Solar, and offers innovative solar solutions, a service of excellence and a widespread presence throughout Italy.

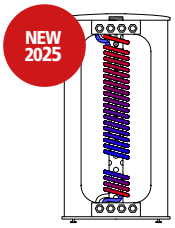
For this reason, we have decided to invest in research and development and to establish a solid manufacturing reality, developing a range of products and systems that make the best use of the infinite energy of the sun, combining efficiency, innovation and savings.

QUICK SELECTION GUIDE

		SERVICE			ENERGY SOURCE				
		DHW ONLY	DHW + TECHNICAL	TECHNICAL ONLY	SOLAR	BOILER	HEAT PUMP	BIOMASS	SEASONAL USE[2]
HI-PERFOMANCE	SPAZIO	-	●	-	●	●	●	●	-
	SPAZIO PRO	-	●	-	●	●	●	●	-
	THERMA	-	●	-	●	●	●	-	●
	ULTRAFRESH 401	-	●	-	●	●	●	●	-
	ULTRAPR 401	-	-	●	●	●	●	●	-
	ULTRADUO 401	-	●	-	●	●	●	●	-
	ULTRAHR 401	-	●	-	●	●	●	●	-
	BOOSTER60	-	-	●	-	●	●	●	●
	ECO COMPACT	●	-	-	●	●[1]	-	-	-
	ECO COMPACT HPS	●	-	-	●	●	●	-	-
	ECO FRESH	-	●	-	●	●[1]	-	●[1]	-
	ECO COMPACT DUO	-	●	-	●	●[1]	-	●[1]	-
	BPU	-	●	-	●	●[1]	●	-	-
	JET	●	-	-	SOLAR ONLY	-	-	-	-
HI-COMPETITION	BR ZN	●	-	-	●[1]	●[1]	-	-	-
	BR	●	-	-	●[1]	●[1]	-	-	-
	BRR ZN	●	-	-	●	●[1]	-	-	-
	BRR	●	-	-	●	●[1]	-	-	-
	BWP ZN	●	-	-	-	●	●	-	-
	BWP	●	-	-	-	●	●	-	-
	BWPS ZN	●	-	-	●	●	●	-	-
	BWPS	●	-	-	●	●	●	-	-
	P	-	-	●	-	●	●	●	-
	PS ZN	-	-	●	-	●	●	●	●
	PS	-	-	●	-	●	●	●	●
	PR	-	-	●	●	●	●	●	-
	PRR	-	-	●	●	●	●	●	-
	HR	-	●	-	●	●	-	●	-
	HRR	-	●	-	●	●	-	●	-

[1] As an alternative to other energy sources
[2] During periods when cold water is accumulated, heat energy sources must be turned off and vice versa.

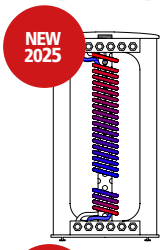
BOILERS AND STORAGE TANKS *HI-PERFORMANCE*



SPAZIO * See page 18

SOLAR STORAGE TANK-DHW AND HEATING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

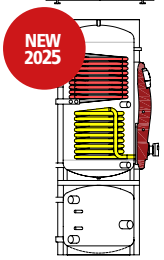
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030406310	310	1 SOLAR + 1 DHW	A+	3-4
1030406440	440	1 SOLAR + 1 DHW	A	4-5
1030406800	800	1 SOLAR + 1 DHW	A	6-8



SPAZIO PRO * See page 18

SOLAR STORAGE TANK-DHW AND HEATING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

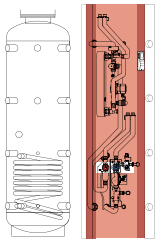
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030407310	310	1 SOLAR + 1 DHW	A+	3-4
1030407440	440	1 SOLAR + 1 DHW	A	4-5
1030407800	800	1 SOLAR + 1 DHW	A	6-8



THERMA 430 * See page 22

COMBINED SYSTEM-DHW ANd HEATING AND COOLING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

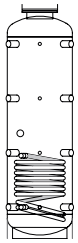
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010704002	430	1 SOLAR + 1 PDC	B	2-4



ULTRAFRESH 401 * See page 26

SOLAR STORAGE TANK-DHW AND HEATING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

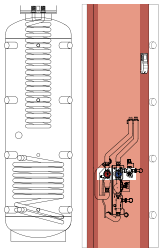
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3034004010	401	1 SOLAR + 1 EXTERNAL DHW	C	1-5



ULTRAPR 401 * See page 26

SOLAR STORAGE TANK-DHW AND HEATING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

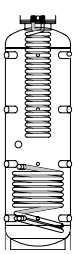
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3031004010	401	1 SOLAR or BOILER	C	1-5



ULTRADUO 401 * See page 30

SOLAR STORAGE TANK-DHW AND HEATING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3033004010	401	1 SOLAR + 1 DHW	C	1-5

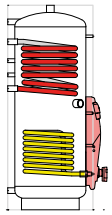


ULTRAHR 401 * See page 30

SOLAR STORAGE TANK-DHW AND HEATING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3032004010	401	1 SOLAR + 1 DHW	C	1-5

BOILERS AND STORAGE TANKS *HI-PERFORMANCE*

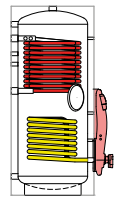


ECO COMPACT * See page 34

INTEGRATED SOLAR STATION

SOLAR BOILER-DHW FOR BOILER

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030302111	200	1 Solar + 1 Boiler	C	1-3
1030303131	300	1 Solar + 1 Boiler	C	3-5
1030305141	500	1 Solar + 1 Boiler	C	5-7

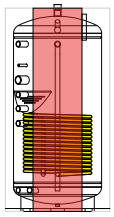


ECO COMPACT HPS * See page 38

INTEGRATED SOLAR STATION

SOLAR BOILER-DHW FOR HEAT PUMPS

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010303021	300	1 SOLAR + 1 Heat Pump	C	3-5
3010305021	500	1 SOLAR + 1 Heat Pump	C	5-7

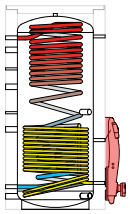


ECO FRESH * See page 42

INTEGRATED SOLAR STATION · INSTANTANEOUS DHW 20 l/min

SOLAR STORAGE TANK-DHW AND HEATING INTEGRATION-FOR BOILER AND/OR HEAT PUMP

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030403511	350	1 SOLAR + 1 PLATE DHW	B	1-5

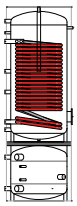


ECO COMPACT DUO * See page 46

INTEGRATED SOLAR STATION

SOLAR STORAGE TANK-PIPE IN TANK DHW AND HEATING INTEGRATION-FOR BOILER

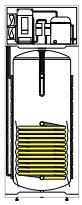
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030406061	600	1 SOLAR + 1 DHW	C	2-6
1030408051	800	1 SOLAR + 1 DHW	B	4-8
1030410081	1000	1 SOLAR + 1 DHW	B	6-12



BPU * See page 50

BOILER-DHW + BUFFER STORAGE FOR HEAT PUMP WITH POSSIBLE SOLAR INTEGRATION

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010703001	300	SINGLE COIL	C	2-3
3010705001	500	SINGLE COIL	C	4-5

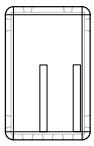


JET * See page 54

DOMESTIC HOT WATER HEAT PUMP BOILER

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010030024	300 S	1 SOLAR	**A+/XL**	4-7

INERTIAL MODULE FOR HEAT PUMPS

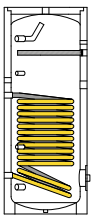


BOOSTER60 * See page 60

INERTIAL MODULE FOR HEAT PUMPS

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010802002	BOOSTER60	-	-	-
3010802003	BOOSTER 60 (conf. 10pz)	-	-	-
3010802004	BOOSTER 60 (conf. 20pz)	-	-	-

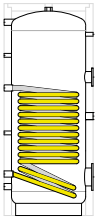
BOILERS AND STORAGE TANKS *HI-COMPETITION*



BR-ZN * See page 66

SOLAR BOILER

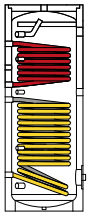
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030301511	150	1 Boiler or Solar	B	1-3
1030302151	200	1 Boiler or Solar	B	3-5
1030303221	300	1 Boiler or Solar	B	4-7
1030305211	500	1 Boiler or Solar	C	6-10
1030308012	800	1 Boiler or Solar	C	8-14
1030301001	1000	1 Boiler or Solar	C	12-18



BR * See page 70

SOLAR BOILER

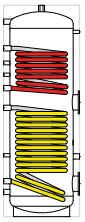
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030315071	1500	1 Boiler or Solar	C	15-22
1030320081	2000	1 Boiler or Solar	C	20-30
1030330111	3000	1 Boiler or Solar	C	30-40



BRR-ZN * See page 74

SOLAR BOILER-FOR BOILER

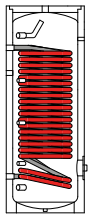
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030302141	200	1 Solar + 1 Boiler	B	1-3
1030303211	300	1 Solar + 1 Boiler	B	3-5
1030305201	500	1 Solar + 1 Boiler	C	5-7
1030308002	800	1 Solar + 1 Boiler	C	6-10
1030315012	1000	1 Solar + 1 Boiler	C	10-12



BRR * See page 78

SOLAR BOILER-FOR BOILER

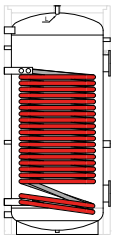
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030315001	1500	1 Solar + 1 Boiler	C	12-16
1030320001	2000	1 Solar + 1 Boiler	C	15-20
1030405054	3000	1 Solar + 1 Boiler	C	20-32



BWP-ZN * See page 82

BOILER-FOR HEAT PUMPS

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010305043	200	1 Heat pump	C	1-3
3010302042	300	1 Heat pump	C	3-5
3010305041	500	1 Heat pump	C	5-7
3010305045	800	1 Heat pump	C	7-9
3010305046	1000	1 Heat pump	C	9-12

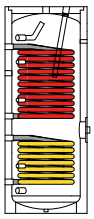


BWP * See page 86

BOILER-FOR HEAT PUMPS

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010310005	1500	1 Heat pump	C	-
3010310006	2000	1 Heat pump	C	-
3010310007	3000	1 Heat pump	-	-

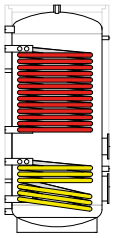
BOILERS AND STORAGE TANKS *HI-COMPETITION*



BWPS-ZN * See page 90

BOILER-FOR HEAT PUMPS

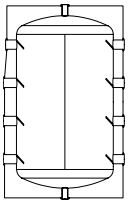
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010303041	300	1 Solar + 1 Heat Pump	C	3-5
3010303051	500	1 Solar + 1 Heat Pump	C	5-7
3010303081	800	1 Solar + 1 Heat Pump	C	7-9
3010303091	1000	1 Solar + 1 Heat Pump	C	9-12



BWPS * See page 94

BOILER-FOR HEAT PUMPS

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010415002	1500	1 SOLAR + 1 Heat Pump	C	-
3010420002	2000	1 SOLAR + 1 Heat Pump	C	-
3010420003	3000	1 SOLAR + 1 Heat Pump	-	-

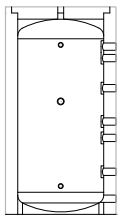


PS ZN * See page 98

BUFFER TANK (WITHOUT HEAT EXCHANGERS)

PS (hot and cold)

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010600025	25	-	B	-
3010600050	50	-	B	-
3010600080	80	-	B	-
3010600100	100	-	B	-
3010600120	120	-	B	-

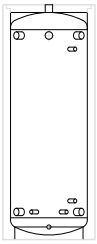


PS * See page 100

BUFFER TANK (WITHOUT HEAT EXCHANGERS)

PS (hot and cold)

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
3010600501	50	-	B	-
3010601001	100	-	B	-
3010602001	200	-	B	-
3010603001	300	-	C	-
3010605001	500	-	C	-



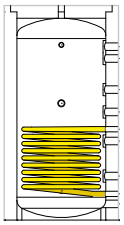
P * See page 100

BUFFER TANK (WITHOUT HEAT EXCHANGERS)

P (hot only)

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030305091	500	-	C	-
1030308071	800	-	C	-
1030310071	1000	-	C	-
1030315021	1500	-	C	-
1030320091	2000	-	C	-
1030325001	2500	-	-	-
1030330011	3000	-	-	-
1030340001	4000	-	-	-
1030350001	5000	-	-	-

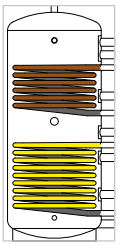
BOILERS AND STORAGE TANKS *HI-COMPETITION*



PR * See page 104

BUFFER TANK WITH ONE HEAT EXCHANGER

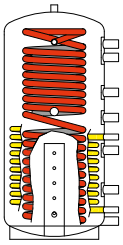
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030305031	500	1 Boiler or Solar	C	-
1030308011	800	1 Boiler or Solar	C	-
1030310011	1000	1 Boiler or Solar	C	-
1030315011	1500	1 Boiler or Solar	C	-
1030320101	2000	1 Boiler or Solar	C	-
1030325011	2500	1 Boiler or Solar	-	-
1030330001	3000	1 Boiler or Solar	-	-
1030340011	4000	1 Boiler or Solar	-	-
1030350011	5000	1 Boiler or Solar	-	-



PRR * See page 108

BUFFER TANK WITH TWO INTERNAL HEAT EXCHANGERS

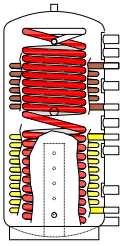
CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030308171	800	1 Solar + 1 Boiler	C	2-6
1030410111	1000	1 Solar + 1 Boiler	C	3-8
1030315161	1500	1 Solar + 1 Boiler	C	4-10
1030320171	2000	1 Solar + 1 Boiler	C	5-12



HR * See page 112

BUFFER TANK WITH SOLAR HEAT EXCHANGER AND PIPE IN TANK DHW

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030405031	500	1 SOLAR + 1 DHW	C	1-4
1030408101	800	1 SOLAR + 1 DHW	C	2-6
1030410141	1000	1 SOLAR + 1 DHW	C	3-8
1030415091	1500	1 SOLAR + 1 DHW	C	4-10
1030420071	2000	1 SOLAR + 1 DHW	C	5-12



HRR * See page 116

BUFFER TANK WITH SOLAR HEAT EXCHANGER, PIPE IN TANK DHW + 1 HEAT EXCHANGER

CODE	SIZE	HEAT EXCHANGERS	Energy Class	PEOPLE
1030405051	500	1 Sol. + 1 DHW + 1 caldaia	C	1-3
1030408131	800	1 Sol. + 1 DHW + 1 caldaia	C	2-6
1030410171	1000	1 Sol. + 1 DHW + 1 caldaia	C	3-8
1030410181	1500	1 Sol. + 1 DHW + 1 caldaia	C	4-10
1030410191	2000	1 Sol. + 1 DHW + 1 caldaia	C	5-12

DHW + HEATING
WITH HEAT PUMP
AND SOLAR THERMAL

SPAZIO

THE ONLY ONE IN CLASS A+

- All connections on the front
- SPACE-SAVING square shape
- Innovative PEX tank

SPACE-SAVING INSTALLATION

Innovative design that combines a SQUARE structure for maximum stability, compactness and ease of installation.



A+

THE ONLY ONE IN CLASS A+

310-liter size in class A+
440 and 800-liter sizes in class A

3 SIZES
310 liters
440 liters
800 liters



ALL CONNECTIONS IN THE RIGHT PLACE

Save space and time for a tidy and functional installation.

WARRANTY
10 YEARS



THE PEX TANK THAT KNOWS NO CORROSION!

Cross-linked polyethylene reinforced with lightweight fiberglass, no welding, no corrosion, extremely high resistance over time.

INOX

ONLY HIGH QUALITY MATERIALS

Diffuser, heat exchangers and all components in stainless steel.

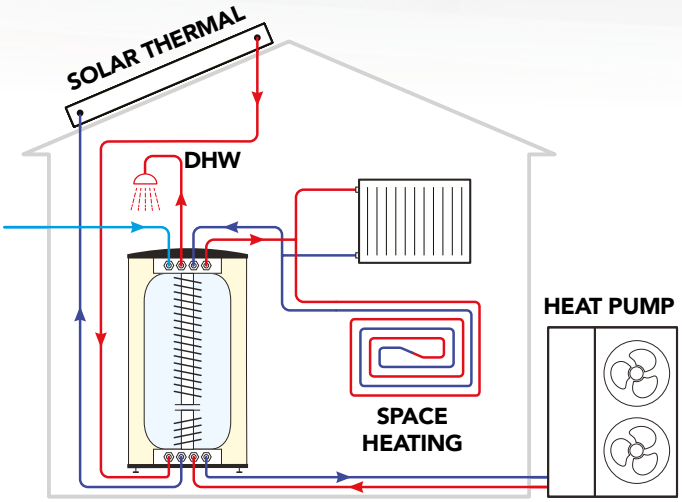


2 VERSIONS
3 SIZES

FOR MAXIMUM APPLICATION VERSATILITY.

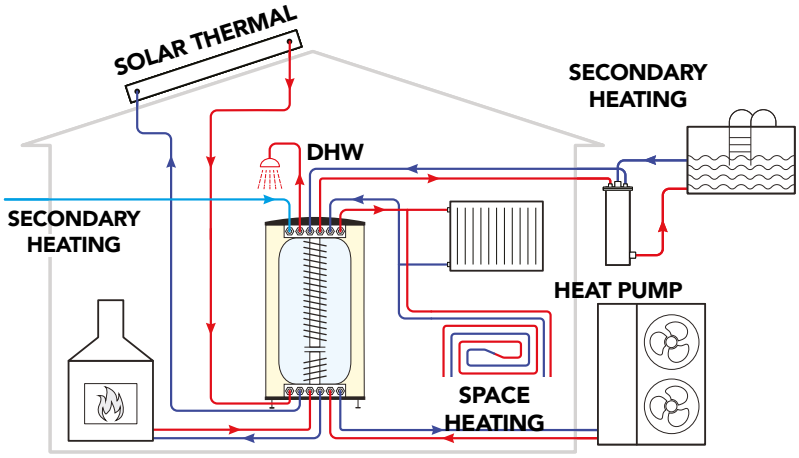
SPAZIO

2 INPUTS: *Solar thermal and heat pump*
2 OUTPUTS: *DHW and space heating*



SPAZIO PRO

3 INPUTS: *Solar thermal, heat pump and boiler/biomass*
3 OUTPUTS: *DHW and space heating with 2 circuits*



DHW + HEATING AND COOLING
WITH HEAT PUMP
AND SOLAR THERMAL

THERMA 4.5 (0)

COMBINED WATER HEATER
DHW, HEATING AND COOLING

430-liter storage that includes both a 330-liter DHW water heater and a 100-liter hot/cold buffer tank.

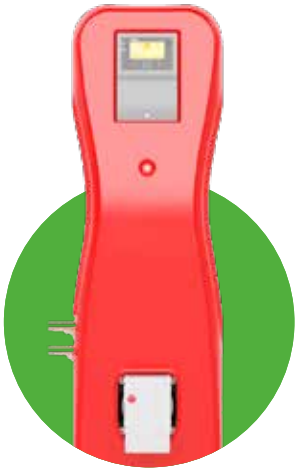


VITRIFIED DHW WATER HEATER DOUBLE COIL

330-liter water heater for domestic hot water storage. OVERSIZED UPPER HEAT EXCHANGER with double coil for perfect matching with heat pumps and LOWER HEAT EXCHANGER for solar thermal systems.

HOT/COLD BUFFER TANK

100-liter buffer tank for technical system water, hot/cold, for space heating and cooling.



INTEGRATED SOLAR STATION AND WI-FI CONTROL UNIT

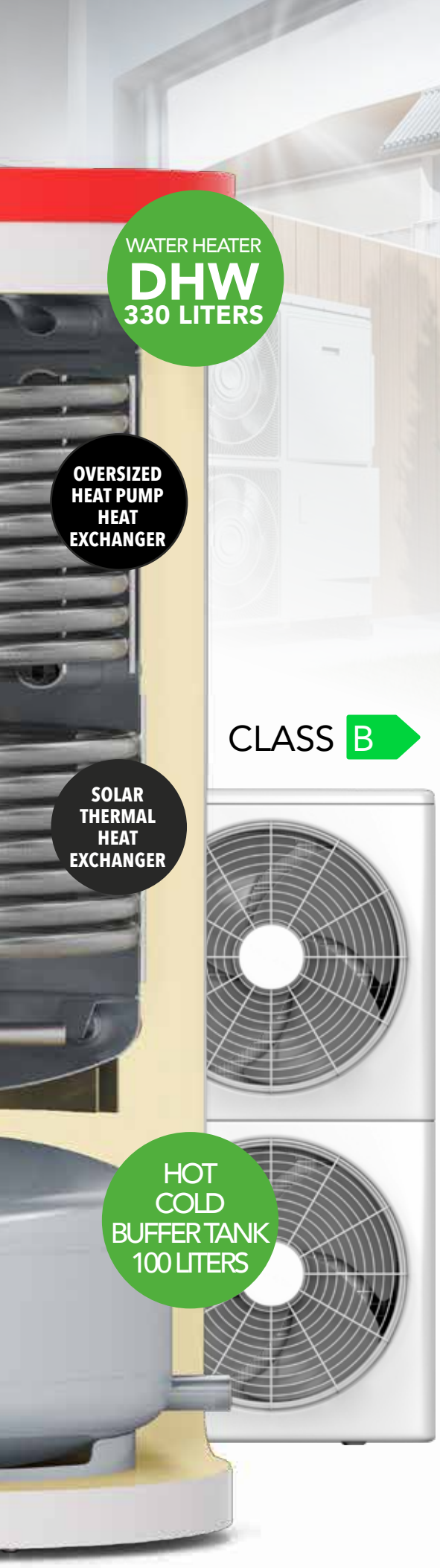
Solar station with electronic circulator positioned in the lower part for reduced heat loss. Innovative WI-FI control unit for remote monitoring.



5YEARS WARRANTY



PLEION
The Sun is our Life!

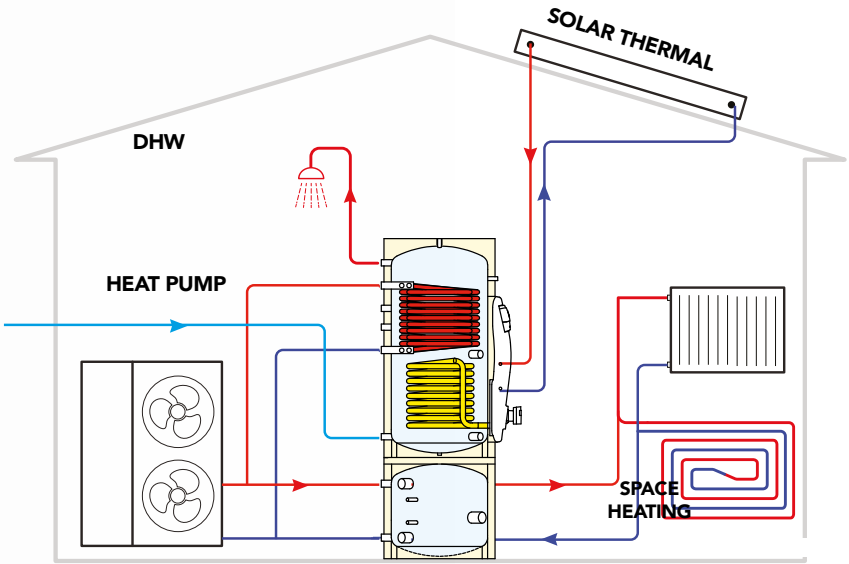


CLASS B

WITH THERMA AND A HEAT PUMP. SOLVE ALL YOUR NEEDS DHW, HEATING AND COOLING

CLASS B

2 INPUTS: *Solar thermal + heat pump*
2 OUTPUTS: *DHW + space heating and cooling*



ULTRA

ULTRAFRESH
ULTRADUO
ULTRAHR
ULTRAPR

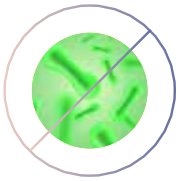
401



THE MOST ADVANCED RANGE OF SOLAR STORAGE TANKS

PLEION
The Sun is our Life!

- **IMPROVED HYGIENE:** there is no risk of bacteria proliferation, such as Legionella, which can cause respiratory diseases.
- **SOLAR INTEGRATION:** for domestic hot water and space heating; the accumulated heat can be effectively directed both to domestic hot water production and to space heating, especially in low-temperature radiant systems.
- **GREATER COMFORT:** hot water is immediately available, without waiting times.
- **OPTIMAL PAIRING WITH HEAT PUMPS:** which can directly heat the technical water contained in the buffer tank, always operating at high efficiency.
- **PLUG & PLAY-ULTRAFRESH AND ULTRADUO:** have the solar station and the domestic hot water heat exchanger and the solar control unit pre-installed on board and pre-wired, reducing installation time and eliminating any possibility of error.



INSTANTANEOUS DOMESTIC HOT WATER

20 l/min*

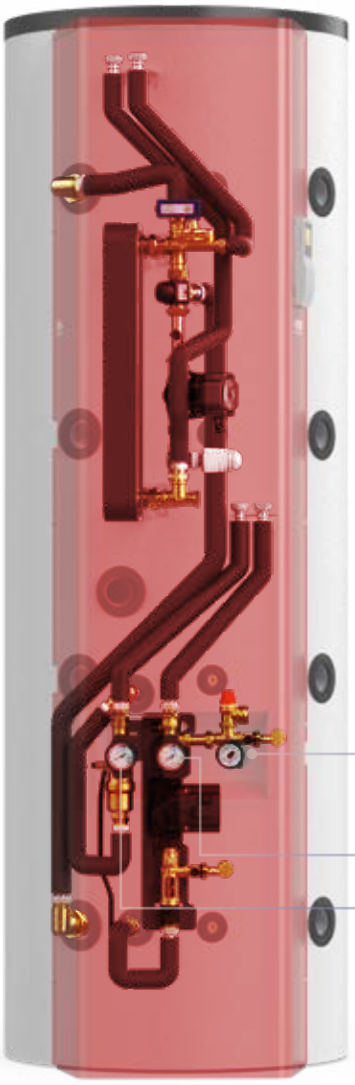
*ULTRAFRESH 401 DHW 10/42°C STORAGE 55°

HOT WATER IMMEDIATELY



INSTANTANEOUS DHW MODULE ULTRAFRESH 401
(plate type) for domestic hot water production with large heat exchange surface, complete with all components necessary for the correct operation and management of the system, such as primary circulator, flow switch and thermostatic regulation valve.





POWER
EFFICIENCY
ENERGY
SAVING
DESIGNED BY PLEION

COMPACT SOLAR STATION ULTRAFRESH/ DUO 401
(double line) with electronic circulator, complete with: air separator with manual vent, safety group, manual air vent on the circulator volute, non-return valve, filling and draining valves.
Solar return thermometer
Solar flow thermometer
Solar system pressure gauge.

Solar return thermometer

Solar flow thermometer

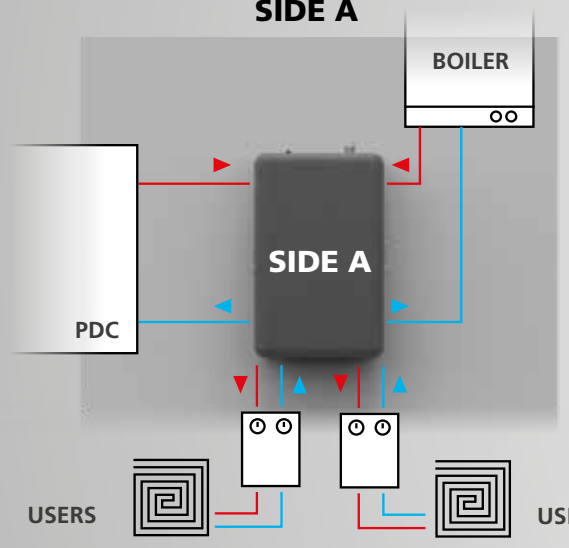
Solar system pressure gauge

BOOSTER60

THE WALL-MOUNTED INERTIAL MODULE THAT TURBOCHARGES YOUR HEAT PUMP

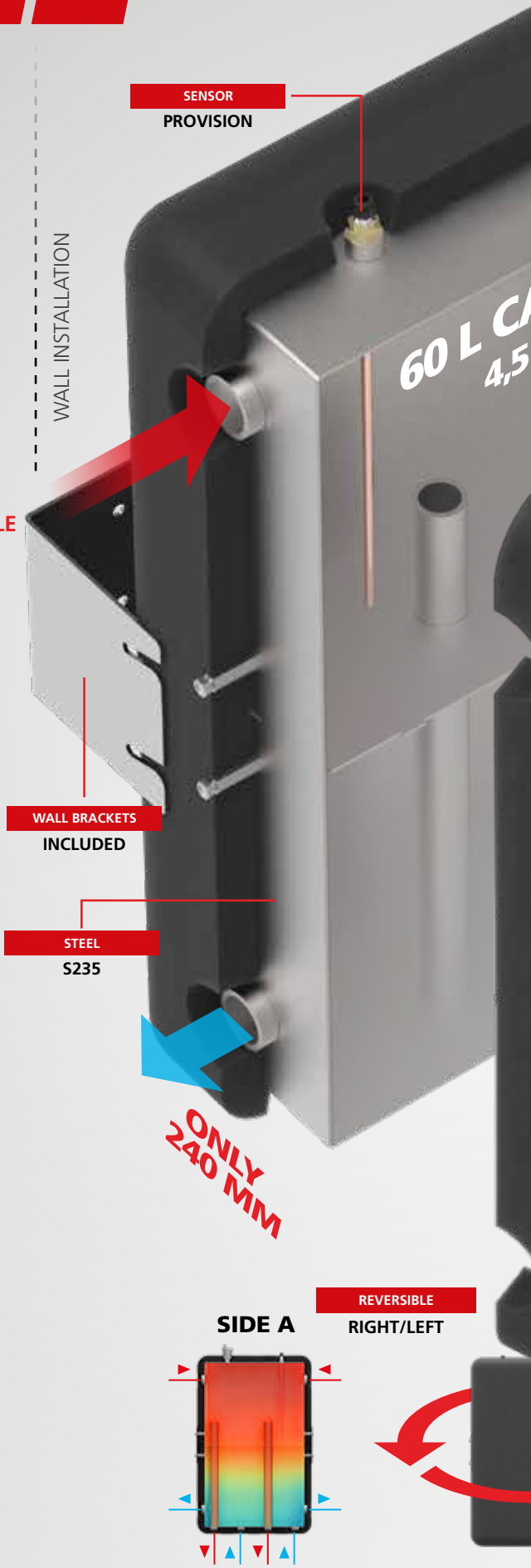
Booster60 ultra-compact is installed in series between the heat pump and the heating/cooling distribution system, allowing to optimize the operation of the heat pump, improving its efficiency, decreasing the number of ignition cycles and extending its useful life.

STANDARD CONFIGURATION
SIDE A



QUICK AND FLEXIBLE INSTALLATION

Booster60 is easy to connect, its reduced dimensions and lightness make it extremely manageable.



YOUR HEAT PUMP LASTS LONGER WITH BOOSTER!

Booster60 optimizes the heat pump operation by minimizing ON/OFF cycles. Booster60 allows the heat pump to work for time intervals that are long enough to reduce the number of start-up and shutdown cycles; at the same time, the thermal energy accumulated in the tank temporarily meets the distribution system requirements while the machine is not operating.

GUARANTEES THE HYDRAULIC SEPARATION OF FLOWS BETWEEN HEAT PUMP AND DISTRIBUTION SYSTEM

Booster60 allows the heat pump side circuit and the system side circuit to be independent from each other, optimizing the operation of the circulation pumps and thus allowing the heat pump to work efficiently. Its internal design has been developed to perform the functions of hydraulic separator and distribution manifold for 2 system zones.



DEFROSTING IN AIR/WATER HEAT PUMPS WITHOUT DECREASING THE COMFORT INSIDE THE BUILDING

Booster60 can be used in both heating and cooling systems. In the latter case, the installation of Booster60 helps maintain comfort (especially with fan coils) even during the evaporator defrosting cycles of most air/water heat pumps.

AN EFFICIENCY BOOSTER!

The diameter of the hydraulic inlet/outlet connections (max 4.5 m³/h) ensures the maintenance of thermal stratification in the storage tank; the position of the connections themselves is designed so that the heat pump and the distribution system operate with maximum efficiency as conditions vary; the insulation of Booster60 minimizes heat loss and is also suitable for summer use, therefore in the cooling phase (management of condensation that forms on the external surface); the 60-liter volume is adequate for use in most domestic configurations.

SPACE-SAVING SOLUTION, EASY AND QUICK TO INSTALL

The SLIM DESIGN of Booster60 allows you to insert it in any system context, the wall mounting bracket and its 180° reversibility guarantee greater flexibility and practicality of installation.

FULLY ACCESSORIZED

Automatic air vent valve and temperature probe pocket included.

ADVANTAGES

- *Super compact 240x520x860 mm*
- *60 liters of available capacity*
- *Completely insulated*
- *Suitable for hot/cold solutions (EPP λ 0.034 W/mk. 30g/l thickness 35 mm)*
- *Reduced pressure drops with flow rate up to 4.5 m³/h*
- *Versatile: Air separator + Hydraulic separator/distribution manifold (2 zones)*
- *Reversible installation (right/left)*
- *Probe pocket and automatic vent valve included in the supply*
- *Easy wall installation using special support brackets*

SERIES

HI-PERFORMANCE

An innovative choice with excellent performance for both DHW and HEATING/COOLING INTEGRATION

HI-PERFORMANCE is a range of water heaters with innovative design, customizable and with unique features, equipped with electronic control unit and modulating circulator that guarantee efficient energy management. Using a latest-generation high-efficiency pump and an intelligent control system, energy consumption is programmed and constantly monitored.



STORAGE TANKS AND WATER HEATERS SERIES

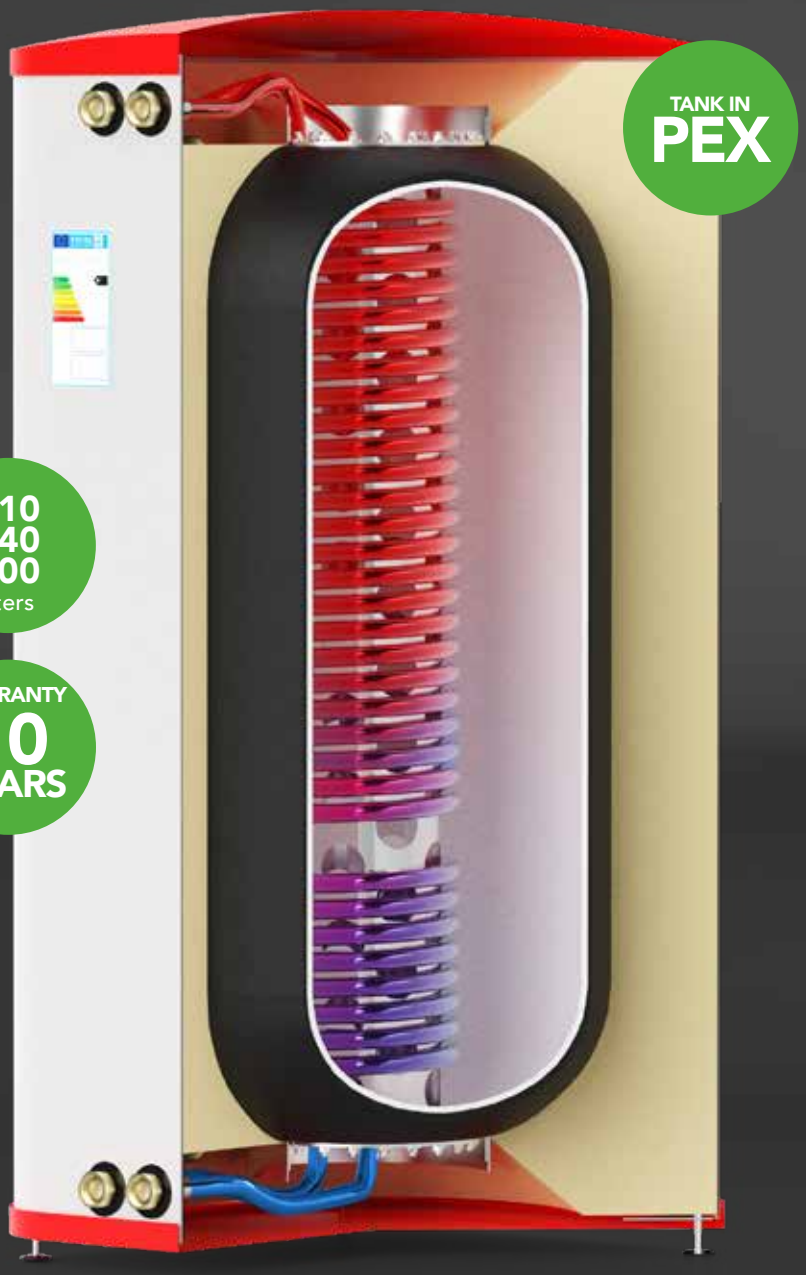
SERIE **HI-PERFORMANCE**

PLEION
The Sun is our Life!

SPAZIO AND SPAZIO PRO PRO STORAGE TANKS

THE ONLY ONE IN
CLASS A+

SPAZIO SPAZIO PRO



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 10 YEARS

APPLICATIONS

HI-PERFORMANCE

SOLAR STORAGE FOR DHW AND HEATING INTEGRATION
FOR BOILER AND/OR HEAT PUMP

Solar storage tank with DHW production, pipe-in-tank, in composite material. Class A and A+.

PLEION INNOVATION **SPAZIO AND SPAZIO PRO –** Range of solar storage tanks with rapid internal heat exchanger for domestic hot water. SPAZIO and SPAZIO PRO are unique for their tank made of composite material, polymer and fiberglass without welds and free from corrosion, while the internal parts (solar exchanger, DHW exchanger and stratifier) are in stainless steel. Energy class A+ for the 310-liter size, and class A for larger sizes, placing this range of storage tanks at the top of the industry. The square base design, with all hydraulic connections on the same side, allows for a particularly orderly and compact installation. SPAZIO and SPAZIO PRO are particularly suitable for use with heat pumps, thanks to the high-surface DHW exchanger, which provides excellent performance even with storage temperatures of 55°C.

The PRO version features 6+6 connections (instead of 4+4 in the basic version) allowing connection of 2 heat generators, in addition to the solar source, and 2 heating circuits.

SPAZIO/SPAZIO PRO-Two fixed heat exchangers, one for solar and one for instantaneous DHW, class A and A+, optimal with heat pumps.

		FULLY HEATED TANK[1]					
		Initial production with heat generator off [liters]					
SIZE	USEFUL VOL.	Portata di spillamento					
		DHW Temperature 38°C-tank 60°C			DHW Temperature 43°C-tank 60°C		
310	290	400	350	300	240	210	180
440	413	420	390	360	280	250	220
800	773	780	710	640	440	420	400

		MAXIMUM EXCHANGEABLE POWER[2]		
SIZE	USEFUL VOL.	Dt = 5 °C	Dt = 15 °C	Dt = 25 °C
	[liters]	[kW]	[kW]	[kW]
310	290	4.2	12	21
440	413	6.3	18	31.5
800	773	6.3	18	31.5

Tf = Flow temperature from heat generator (inlet to heat exchanger)
Tr = Return temperature to heat generator (outlet from heat exchanger)
TDHW = Domestic hot water temperature
TCWS = Cold water supply temperature
Ts = Tank temperature

1. Data referring to temperature conditions TDHW = 45°C; TCWS = 10°C; Ts = 60°C
2. Data referring to temperature conditions Dt = Tf-Ts

	SPAZIO			SPAZIO PRO		
	310	440	800	310	440	800
Energy Class	A+	A	A	A+	A	A
CODE	1030406310	1030406440	1030406800	1030407310	1030407440	1030407800

TECHNICAL DATA

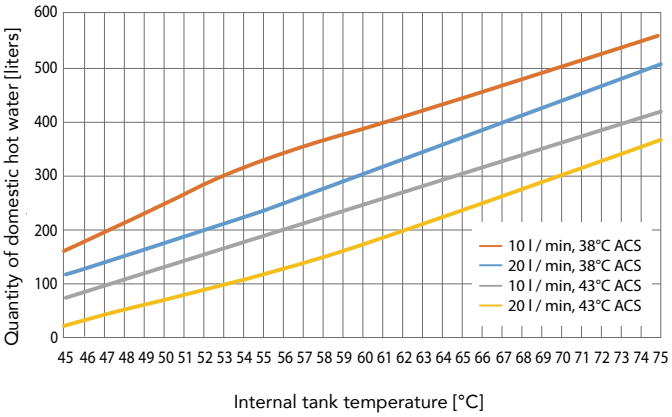
ERP SPAZIO and SPAZIO PRO	u.m.	310	440	800
Useful Volume	[l]	290	440	800
Heat Losses	[W]	31	49	69
Heat Loss	[kWh/24h]	-	-	-
Energy Efficiency Class	[-]	A+	A	A

PRESSURES SPAZIO AND SPAZIO PRO	u.m.	310	440	800
MAX Solar Heat Exchanger	[bar]	10	10	10
MAX DHW Heat Exchanger	[bar]	10	10	10
MAX Tank	[bar]	6	6	6

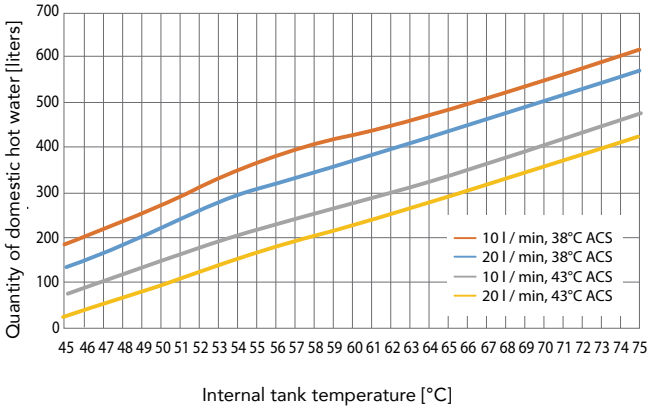
TEMPERATURE	u.m.	310	440	800
MAX Solar Heat Exchanger	[°C]	90	90	90
MAX DHW Heat Exchanger	[°C]	90	90	90
MAX Tank	[°C]	90	90	90

DHW Heat Exchanger Pressure Losses

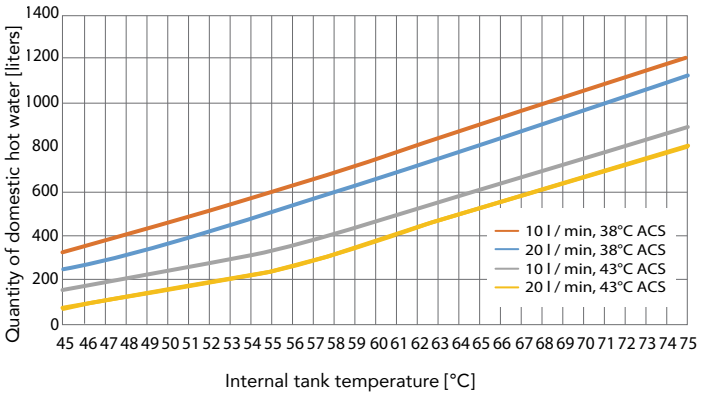
SPAZIO and SPAZIO PRO-310 liters



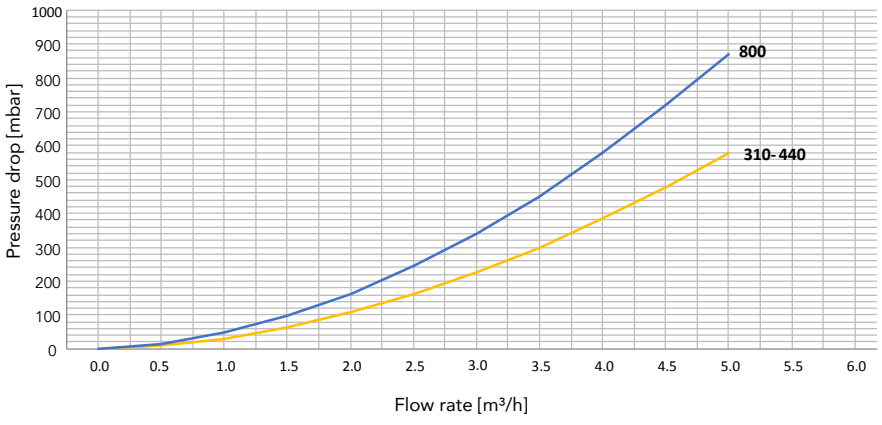
SPAZIO and SPAZIO PRO-440 liters



SPAZIO and SPAZIO PRO-800 liters



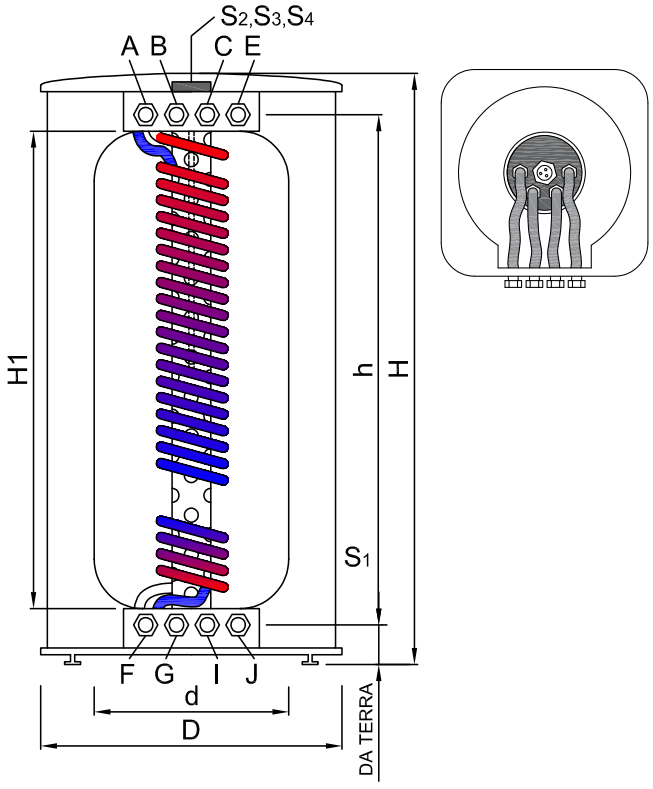
PRESSURE DROP LOWER HEAT EXCHANGER



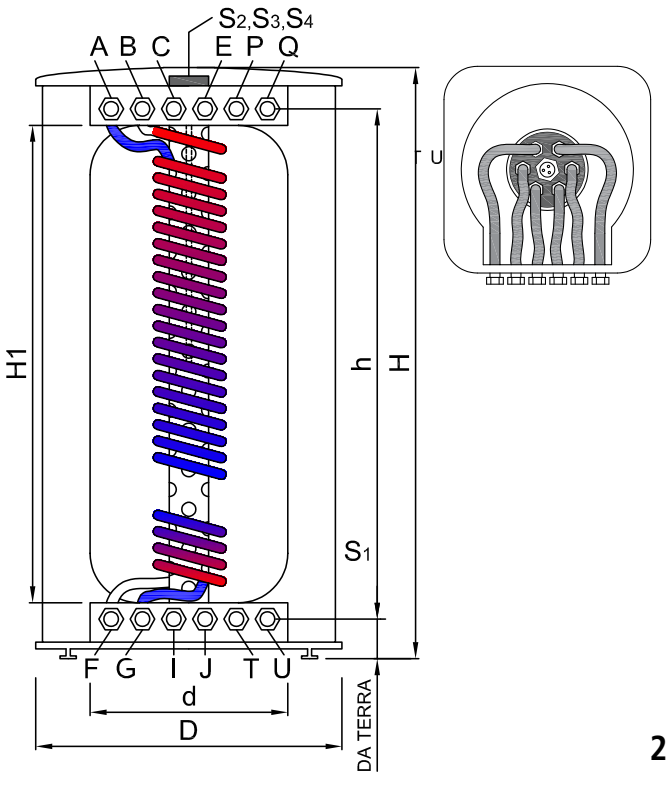
SIZE SPAZIO and SPAZIO PRO	u.m.	310	440	800
Solar heat exchanger content	[l]	5.0	8.0	8.0
Domestic water heat exchanger content (stainless steel)	[l]	17.0	22.0	22.0
Solar heat exchanger surface	[m2]	1.50	1.43	1.43
Domestic water heat exchanger surface (stainless steel)	[m2]	5.0	6.8	6.8
Empty weight	[Kg]	104	130	160
Tilt height	[mm]	1730	2130	2220
H-Total storage tank height	[mm]	1570	2000	2000
D-Overall width with insulation	[mm]	725	725	960
Average insulation thickness	[mm]	50	50	50

		SPAZIO				SPAZIO PRO			
SIZE	u.m	310	440	800	-	310	440	800	-
A-COLD DOMESTIC WATER INLET	[mm]	1470	1900		1" 1/4	1470	1900		1" 1/4
B-HOT DOMESTIC WATER OUTLET	[mm]	1470	1900		1" 1/4	1470	1900		1" 1/4
C-SLEEVE INLET FROM ROOM HEATING	[mm]	1470	1900		1" 1/4	1470	1900		1" 1/4
d-INTERNAL DIAMETER OF STORAGE TANK WITHOUT INSULATION	[mm]	620		890	-	620		890	-
D-OVERALL WIDTH WITH INSULATION	[mm]	725		960	-	725		960	-
E-SLEEVE OUTLET TO ROOM HEATING	[mm]	1470	1900		1" 1/4	1470	1900		1" 1/4
F-HOT INLET SOLAR COIL (FROM PANEL)	[mm]	150			1" 1/4	150			1" 1/4
G-COLD OUTLET SOLAR COIL (TO PANEL)	[mm]	150			1" 1/4	150			1" 1/4
h-SLEEVE CENTER DISTANCE	[mm]	1320	1750		-	1320	1750		-
H-TOTAL STORAGE TANK HEIGHT	[mm]	1570	2000		-	1570	2000		-
H^1-INTERNAL STORAGE TANK HEIGHT	[mm]	1300	1730		-	1300	1730		-
I-SLEEVE-HOT INLET FROM HEAT GENERATOR	[mm]	150			1" 1/4	150			1" 1/4
J-SLEEVE-COLD OUTLET TO HEAT GENERATOR	[mm]	150			1" 1/4	150			1" 1/4
P-SLEEVE-INLET FROM ROOM HEATING	[mm]	-	-	-	-	1470	1900		1" 1/4
Q-SLEEVE-OUTLET TO ROOM HEATING	[mm]	-	-	-	-	1470	1900		1" 1/4
T-SLEEVE-HOT INLET FROM HEAT PUMP	[mm]	-	-	-	-	150			1" 1/4
U-SLEEVE-COLD OUTLET TO HEAT PUMP	[mm]	-	-	-	-	150			1" 1/4
S1-SOLAR PROBE-WELL LENGTH	[mm]	1110	1550		-	1110	1550		-
S2-DOMESTIC WATER PROBE-WELL LENGTH	[mm]	600	900		-	600	900		-
S3-HEAT GENERATOR PROBE-WELL LENGTH	[mm]	140			-	140			-
S4-HEAT GENERATOR PROBE-WELL LENGTH	[mm]	140			-	140			-

Technical diagram SPAZIO



Technical diagram SPAZIO PRO



THERMA STORAGE

CLASS B

THERMA 4.3(0)



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-PERFORMANCE

SOLAR STORAGE FOR DHW AND HEATING/COOLING INTEGRATION FOR BOILER AND/OR HEAT PUMP

Combined solar tank with pre-mounted station and control unit, for combination with hot-cold heat pump. Class B

PLEION INNOVATION **THERMA-**the optimal combination for heat pump systems. A single product that integrates buffer and solar tank: in the upper part a 330-liter tank with double coil, where the lower coil is dedicated to the solar source, and the upper one with 2.75 m² of exchange surface for the heat pump. This tank is internally coated with vitrified enamel according to DIN 4753, making it suitable for contact with domestic water. The solar station and the management control unit are pre-mounted on board, facilitating installation and limiting the overall dimensions of the system. In the lower part, below the tank, there is a 100-liter capacity buffer tank with 4 connections, suitable for working with both hot and chilled water, constituting a volume of technical water that improves the regularity of heat pump operation on the air conditioning system.

Combination of double coil tank for solar+heat pump and buffer for hot/chilled water. Non-removable rigid polyurethane insulation, covered in PVC.

				MAXIMUM POWER[1]*				VALUES ACCORDING TO DIN 4708 STANDARD[2]*				CONTINUOUS WITHDRAWAL IN 60 MINUTES[4]*
UPPER	SIZE	USEFUL VOLUME DHW ONLY [L]	TECHNICAL SIDE VOLUME	Tm= 55 °C		Tm= 60 °C		NL	PEAK withdrawal in 10 minutes[3]*		Next draw-off after tank charging time 30 min[3]*	Tm = 55°C
				[kW]	[l/h]	[kW]	[l/h]		[liters]	[l/min]	[liters]	[l/min]	
	430	330	100	11.5	285.0	33	810	3.0	285	28.5	135	16.0	585

NOTE:
The lower coil of the tank can be connected exclusively to the solar field.

SOLAR	SIZE						
		X-RAY 10R	X-RAY15R	X-RAY18R	X-RAY21R	KSF P26	UNIKO P21	KSF D25
	430	4	2	2	2	3	4	3

1* Data referring to temperature conditions TDHW=45°C; TCWS=10°C.
2* Data referring to temperature conditions TDHW=45°C; TCWS=10°C; Tm=70°C; Ts=TCWS + 55°C.
3* Data referring to the NL coefficient
4* Data calculated at maximum power with Ts=55°C; TCWS=10°C; TDHW=45°C
5* The value is indicative and variable depending on the system usage conditions

Tm = Flow temperature from heat generator (inlet to heat exchanger)
Ts = Tank temperature
TDHW = Domestic hot water temperature
TCWS = Cold water supply temperature

	THERMA
Energy Class	**B**
CODE	3010704002

TECHNICAL DATA

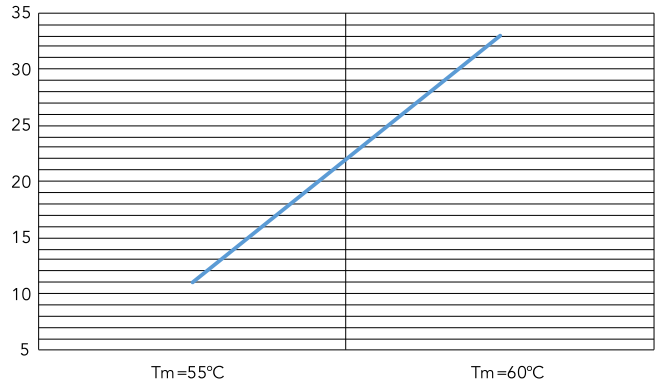
ERP	u.m.	THERMA-430 LITERS
Useful Volume	[l]	430
Technical Volume	[l]	100
DHW Volume	[l]	330
Thermal Conductivity	[W/mk]	0.024
Heat Losses	[W]	-
Heat Loss	[kWh/24h]	1.8
Energy Efficiency Class	[-]	B

PRESSURES	u.m.	THERMA-430 LITERS
MAX Solar Heat Exchanger	[bar]	10
MAX Upper Heat Exchanger	[bar]	10
MAX Tank	[bar]	6

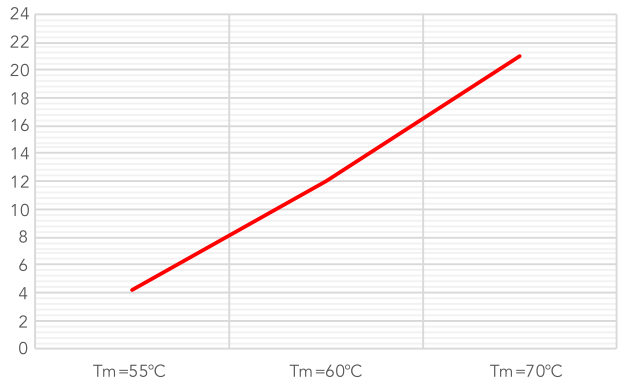
TEMPERATURE	u.m.	THERMA-430 LITERS
MAX Solar Heat Exchanger	[°C]	95
MAX Upper Heat Exchanger	[°C]	95
MAX Tank	[°C]	95

MEASUREMENTS	u.m.	THERMA-430 LITERS
Solar heat exchanger content	[l]	9.0
Heat pump heat exchanger content	[l]	22.0
Solar heat exchanger surface	[m2]	1.1
Heat pump heat exchanger surface	[m2]	2,75
Empty weight	[Kg]	165
Tilt height	[mm]	2090
H-Total height	[mm]	1930
D-Diameter with insulation	[mm]	760
d-Diameter without insulation	[mm]	-
Insulation thickness	[mm]	80

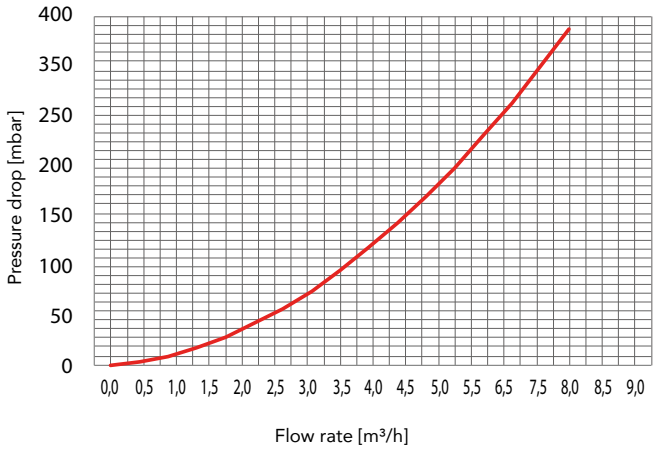
Heat Pump Exchanger Power



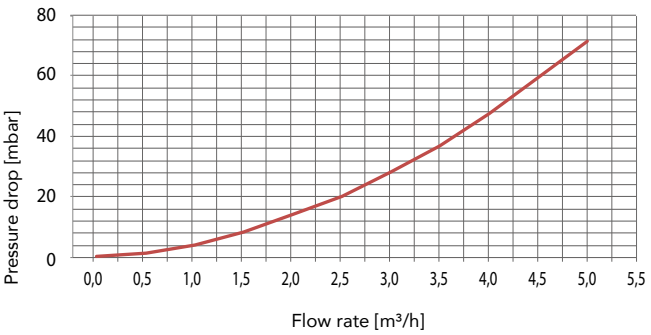
Auxiliary Exchanger Power



Pressure drop heat pump exchanger

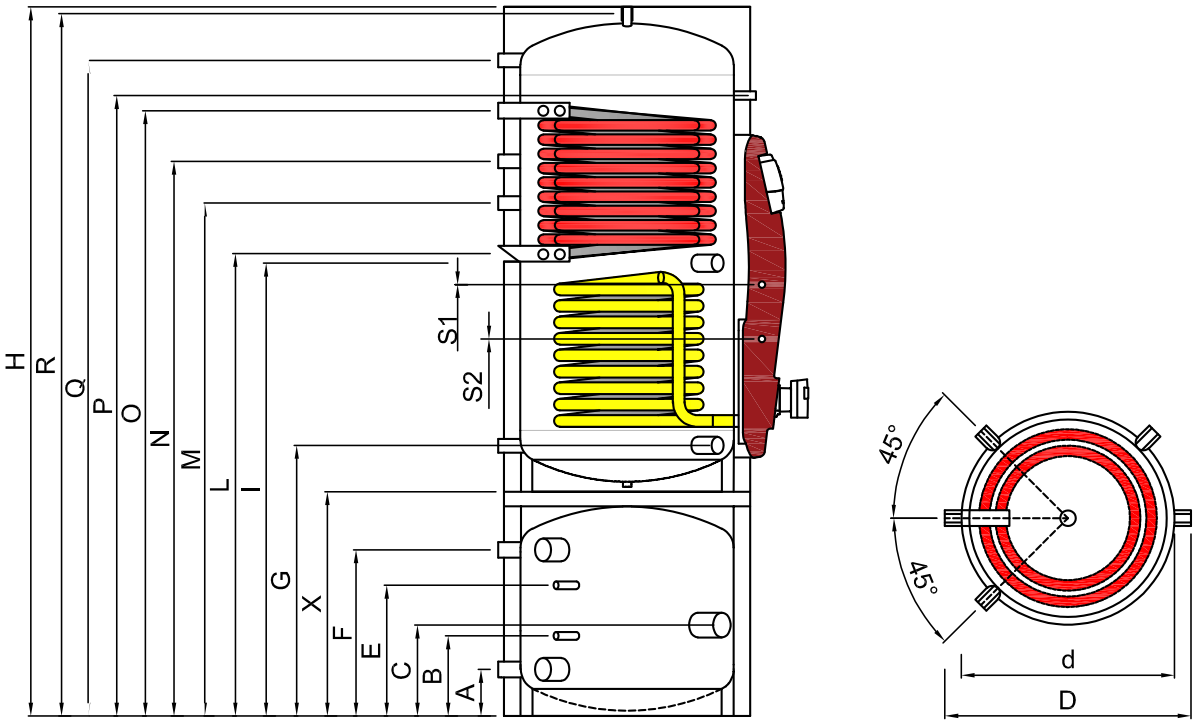


Pressure drop auxiliary solar exchanger



SIZE	u.m	THERMA 430	
H-HEIGHT WITH INSULATION	[mm]	1930	
D-DIAMETER WITH INSULATION	[mm]	760	
A-2X SLEEVES SYSTEM SIDE	[mm]	170	1" 1/4
B-PROBE WELL	[mm]	240	⊘17
C-ELECTRICAL HEATER IN SLEEVE	[mm]	250	1" 1/2
E-PROBE WELL	[mm]	350	⊘17
F-2X SLEEVES SYSTEM SIDE	[mm]	420	1" 1/4
G-COLD DOMESTIC WATER INLET	[mm]	655	1" 1/4
I-ELECTRICAL HEATER IN SLEEVE	[mm]	1110	1" 1/2
L-COLD OUTLET HEAT PUMP EXCHANGER	[mm]	1140	1" 1/4
M-RECIRCULATION CONNECTION	[mm]	1310	1/2"
N-PROBE WELL	[mm]	1480	1/2"
O-HOT INLET HEAT PUMP EXCHANGER	[mm]	1655	1" 1/4
P-THERMOMETER	[mm]	1655	⊘17
Q-HOT DOMESTIC WATER OUTLET	[mm]	1745	1" 1/4
R-MAGNESIUM ANODE	[mm]	1900	1" 1/4
S1-SOLAR EXCHANGER OUTLET (COLD) EXTERNAL TO COVER	[mm]	-	⊘18
S2-SOLAR EXCHANGER INLET (HOT) EXTERNAL TO COVER	[mm]	-	⊘18
X-STORAGE TANK CHANGE HEIGHT	[mm]	540	

Technical diagram THERMA



CONSTRUCTION MATERIAL
The tank is made of S235 JR steel according to REGULATIONS.
UPPER VOLUME
Internally vitrified, double coating, in accordance with DIN 7353 standard
INSULATION
Insulation with rigid polyurethane directly injected, free from chlorofluorocarbons CFC, self-extinguishing and non-removable for all sizes.

STORAGE TANKS ULTRAFRESH 401 AND ULTRAPR 401





INSTANTANEOUS DHW 20 L/MIN

INTEGRATED SOLAR STATION

TECHNICAL WATER

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-PERFORMANCE

SOLAR STORAGE FOR DOMESTIC HOT WATER
AND HEATING INTEGRATION FOR BOILER AND/OR HEAT PUMP

The most advanced range of solar storage tanks. Instantaneous domestic hot water 20 l/min. All in one!

PLEION INNOVATION **ULTRA PR 401 –** Inertial storage tank with 401 liter capacity made of 235 JR carbon steel, insulated with rigid, self-extinguishing, non-removable polyurethane foam. Equipped with an internal coil heat exchanger for solar thermal systems. The contained diameter of only 650 mm facilitates passage even through narrow doors and positioning in the technical room, while its height development promotes temperature stratification and solar efficiency.

ULTRAFRESH 401 – In addition to the excellent characteristics of ULTRA PR 401, it includes completely pre-installed and pre-wired components on the tank itself: a dual-pipe solar station complete with safety valve, flow meter and degasser, the instantaneous domestic hot water heating module with a brazed plate heat exchanger in stainless steel with large exchange surface, and the PB404 solar control unit.

INITIAL PERFORMANCE DATA (WITH GENERATOR OFF)							
PARTIALLY LOADED STORAGE							
THERMOSTATIC REGULATION 2-WAY VALVE	STORAGE TEMPERATURE	DHW Production					
		DHW flow rate [l/min]	avg. temp.	DHW flow rate [l/min]	avg. temp.	DHW flow rate [l/min]	avg. temp.
		10		15		20	
[°C]	[°C]	[liters]	[°C]	[liters]	[°C]	[liters]	[°C]
45	55	233	45	258	44	294	41
	60	260	45	300	45	326	41
	70	319	45	351	45	396	42
	80	386	45	423	45	475	43
50	55	213	50	242	49	294	41
	60	239	50	270	50	325	41
	70	294	51	329	50	396	42
	80	355	51	399	50	478	43
FULLY LOADED STORAGE							
45	55	342	45	378	45	430	43
	60	368	45	396	45	453	43
	70	458	45	515	45	569	44
	80	565	45	620	45	701	45
50	55	313	50	354	50	414	43
	60	351	50	395	50	460	43
	70	430	51	483	50	553	44
	80	521	51	584	50	677	45

CONTINUOUS PERFORMANCE DATA (WITH GENERATOR ON)													
Thermostatic regulation 2-way valve	DHW Temperature												DT 20-7,5
	7,5 [l/min]	P	10,0 [l/min]	P	12,5 [l/min]	P	15,0 [l/min]	P	17,5 [l/min]	P	20,0 [l/min]	P	
[C°]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]
45	49,2	18,8	47,5	23,9	46,0	28,5	44,5	32,5	43,0	36,0	41,0	8,0	
50	52,3	20,5	50,4	26,0	49,0	31,5	47,0	35,0	44,2	37,5	42,0	10,2	

- TACS = domestic hot water temperature = 15 [°C]
- TAFS = domestic cold water temperature (mains water) = 40 [°C]
- P = generator power

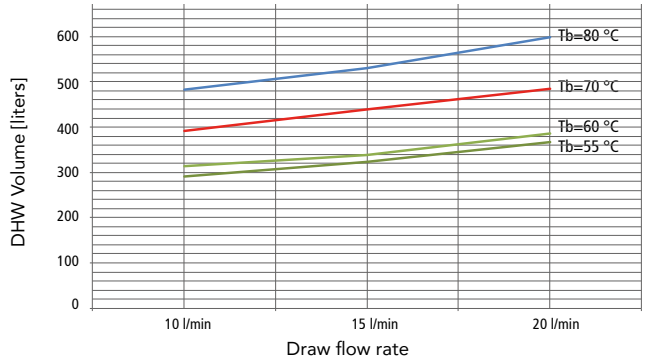
SOLAR	SIZE	MAXIMUM NUMBER OF SOLAR COLLECTORS INSTALLABLE*				
		STORAGE	X-RAY 10	X-RAY 15	UNIKO-P21	KSF-P26
	401	ULTRAFRESH	3	2	4	3
	401	ULTRAPR	3	2	4	3

	ULTRAFRESH 401	ULTRAPR 401
Energy Class	C	C
CODE	3034004010	3031004010

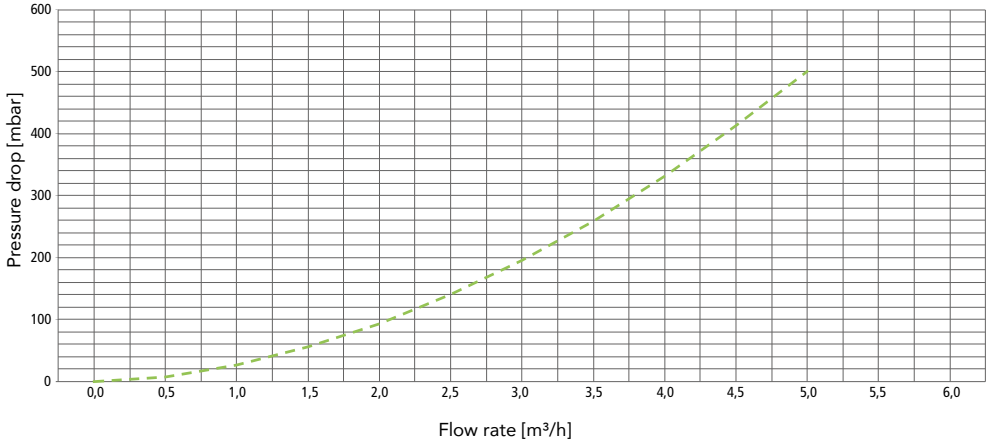
ULTRAFRESH 401 AND ULTRAPR 401 STORAGE TANK-TECHNICAL DATA

CONNECTIONS	u.m.	ULTRAFRESH 401	ULTRAPR 401
Storage tank content	[l]	401	
Minimum flow rate for flow switch activation	[l/min	2,5 +/- 0,5	-
Solar heat exchanger surface	[m²]	1,5	
Maximum DHW flow rate	[l/min]	20	-
Mixing valve adjustment range	[°C]	20-70	-
Solar heat exchanger content	[l[	15	
Empty weight	[kg]	115	95
Max solar exchanger pressure	[bar]	10	20
Max storage tank pressure	[bar]	3	
Max operating temperature	[°C]	95	95
Insulation thickness-non-removable	[mm]	50	
Tilt height	[mm]	2100	
Diameter with insulation	[mm]	650	
H-maximum storage tank height	[mm]	1980	
λ-thermal conductivity	[W/mk]	0,024	

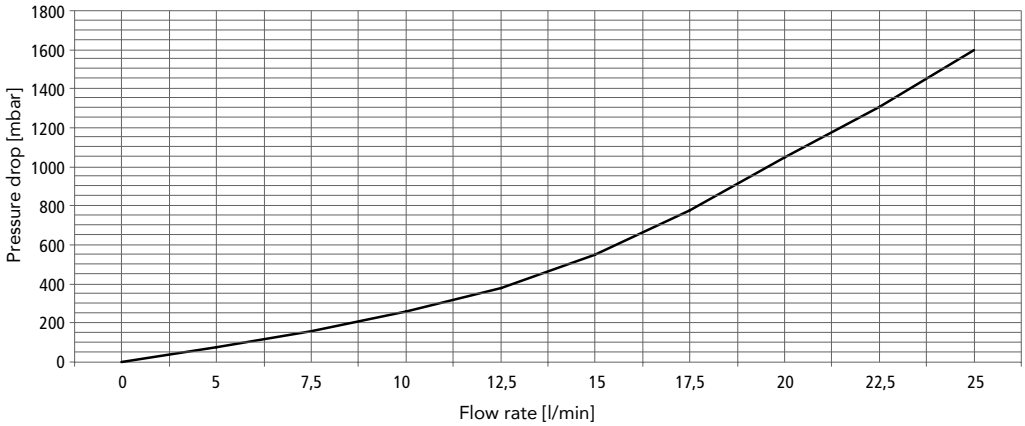
INITIAL PERFORMANCE DATA FOR ULTRAFRESH 401 (with generator off) and fully charged storage tank



Lower Heat Exchanger Pressure Drops



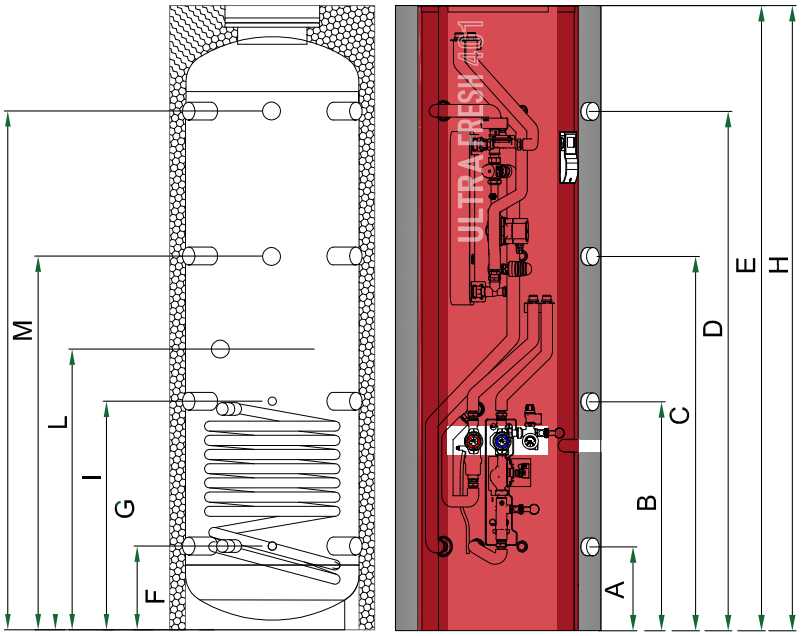
DHW Heat Exchanger Pressure Drops

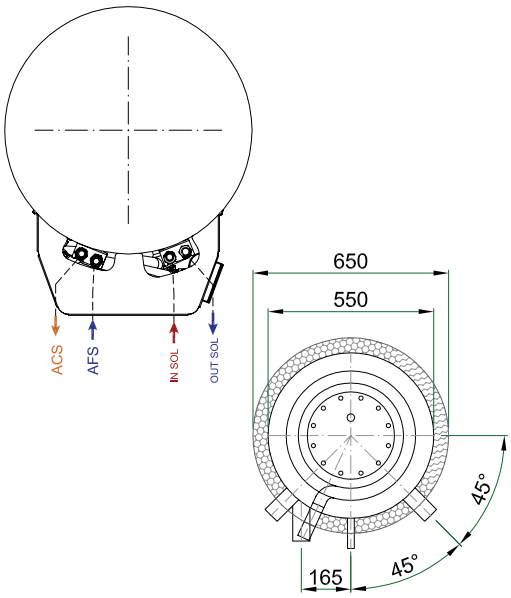


ULTRAFRESH 401			
A-SLEEVE with jet breaker	[mm]	265	1" 1/2
B-SLEEVE with jet breaker	[mm]	725	1" 1/2
C-SLEEVE with jet breaker	[mm]	1185	1" 1/2
D-SLEEVE with jet breaker	[mm]	1645	1" 1/2
E-DOMESTIC WATER INLET/OUTLET HEIGHT	[mm]	1980	3/4"
H-SOLAR MODULE INLET/OUTLET HEIGHT	[mm]	1980	3/4"
F-SENSOR POCKET (UNDER COVER)	[mm]	265	1/2"
G-SENSOR POCKET (UNDER COVER)	[mm]	725	1/2"
I-ELECTRIC HEATER (UNDER COVER)	[mm]	890	1" 1/2
L-SENSOR POCKET (UNDER COVER)	[mm]	1185	1/2"
M-SENSOR POCKET (UNDER COVER)	[mm]	1645	1/2"

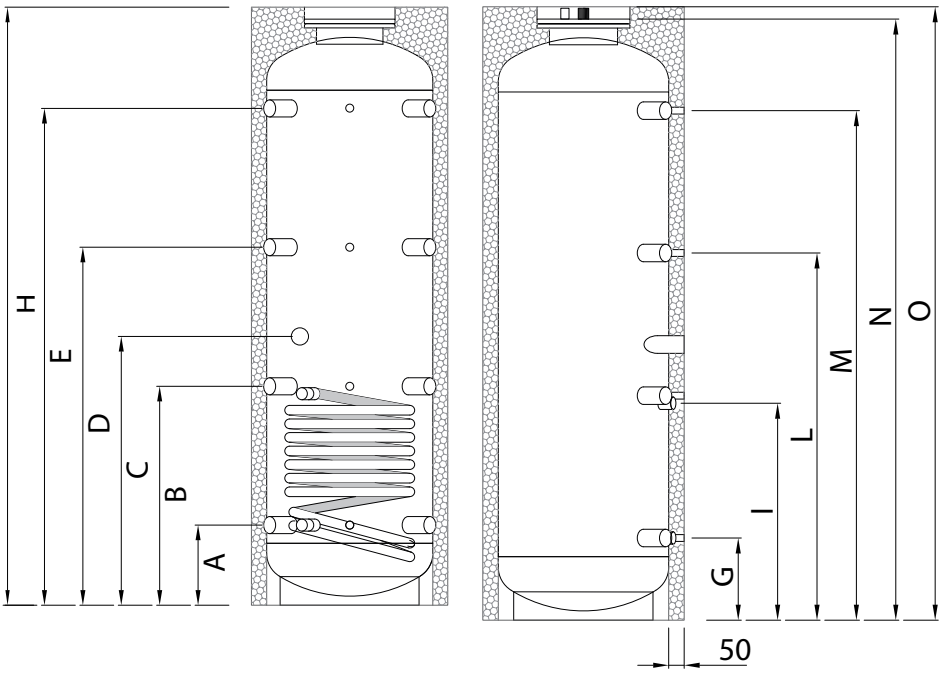
ULTRAPR 401			
A-SLEEVES with jet breaker	[mm]	265	1"1/2
B-SLEEVES with jet breaker	[mm]	725	1"1/2
C-ELECTRIC HEATER SLEEVE	[mm]	890	1"1/2
D-SLEEVES with jet breaker	[mm]	1185	1"1/2
E-SLEEVES with jet breaker	[mm]	1645	1"1/2
G-SOLAR HEAT EXCHANGER COLD OUTLET	[mm]	265	1"
I-SOLAR HEAT EXCHANGER HOT INLET	[mm]	700	1"
L-SENSOR POCKET	[mm]	1185	1/2"
M-SENSOR POCKET	[mm]	1645	1/2"
N-FLANGE HEIGHT Ø300 / Ø220	[mm]	1925	
O-STORAGE TANK HEIGHT WITH INSULATION	[mm]	1980	

Technical Schema ULTRAFRESH 401

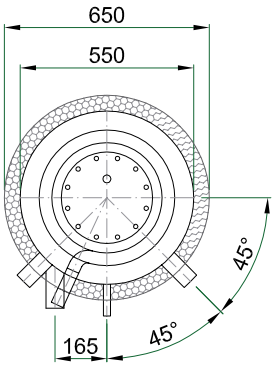




Technical Schema ULTRAPR 401*



*Without cover and on-board solar station



STORAGE TANKS ULTRADUO 401 AND ULTRAHR 401



INSTANTANEOUS DHW 20 L/MIN

INTEGRATED SOLAR STATION

TECHNICAL WATER

Le immagini sono inserite a scopo illustrativo. I prodotti possono essere modificati in base alla disponibilità.

WARRANTY

WARRANTY **5** YEARS

APPLICATIONS

HI-PERFORMANCE

SOLAR STORAGE FOR DOMESTIC HOT WATER
AND HEATING INTEGRATION FOR BOILER AND/OR HEAT PUMP

The most advanced range of solar storage tanks. Instantaneous domestic hot water 20 l/min. All in one!

PLEION INNOVATION **ULTRAHR 401-**Inertial storage tank with 401 liter capacity made of 235 JR carbon steel, insulated with rigid, self-extinguishing, non-removable polyurethane foam. Equipped with a fixed internal coil heat exchanger for solar thermal systems, and a removable instantaneous copper heat exchanger for domestic hot water, inserted in the upper flange. The high exchange surface of the DHW coil, concentrated in the upper half of the tank, ensures high domestic hot water flow even when only part of the tank is at temperature. The contained diameter of only 650 mm facilitates passage even through narrow doors and positioning in the technical room, while its height development promotes temperature stratification and solar efficiency.

ULTRADUO 401 In addition to the excellent characteristics of ULTRA HR 401, it includes completely pre-installed and pre-wired components on the tank itself: a dual-pipe solar station complete with safety valve, flow meter and degasser, and the PB404 solar control unit.

			FULLY HEATED STORAGE[1]			STORAGE HEATED ONLY IN THE UPPER SECTION[1]				
			Initial production with heat generator off [liters]			Initial production with heat generator off [liters]			Values according to DIN 4708[2] standard	
SOLAR		USEFUL VOL [L]	Draw rate			Draw rate			PEAK withdrawal in 10 minutes[3]	
	MODEL	[l]	10 l/min	15 l/min	20 l/min	10 l/min	15 l/min	20 l/min	[liters]	[l/min]
	ULTRADUO	401	301	257	226	231	208	185	190	19,0
	ULTRAHR	401	301	257	226	231	208	185	190	19,0

			MAXIMUM EXCHANGEABLE POWER[4]		
LOWER	MODEL	USEFUL VOL [l]	Dt = 5 °C	Dt = 15 °C	Dt = 25 °C
			[kW]		
	ULTRAHR	497	8,0	22,8	40,0

Tm = Supply temperature of the heat generator (at the exchanger inlet). Tb = Storage tank temperature TACS = Domestic hot water temperature TAFS = Domestic cold water temperature

1. Data referring to temperature conditions TACS= 45°C; TAFS= 10°C; Tb = 65°C
2. Data referring to temperature conditions TACS= 45°C; TAFS= 10°C; Tm= 70°C; Tb= TAFS + 50°C; 3. data referring to NL coefficient

Tm = Supply temperature of the heat generator (at the exchanger inlet). Tr = Return temperature of the heat generator (at the exchanger outlet). Tb = Storage tank temperature 4. Data referring to temperature conditions Dt = Tm-Tb

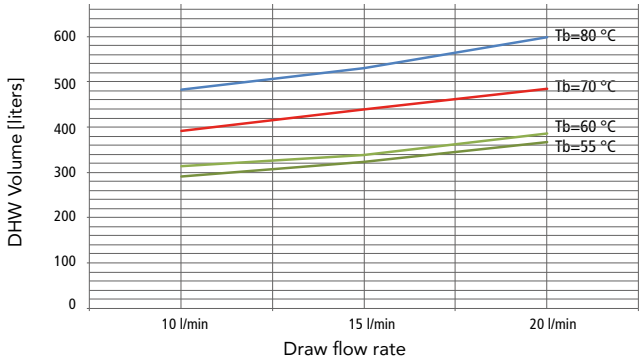
SOLAR	SIZE	MAXIMUM NUMBER OF INSTALLABLE SOLAR COLLECTORS*				
		PANEL	X-RAY 10	X-RAY 15	UNIKO21	KSF26
	401	ULTRADUO	3	2	4	3
	401	ULTRAHR	3	2	4	3

	ULTRADUO 401	ULTRAHR 401
Energy Class	C	C
CODE	3033004010	3032004010

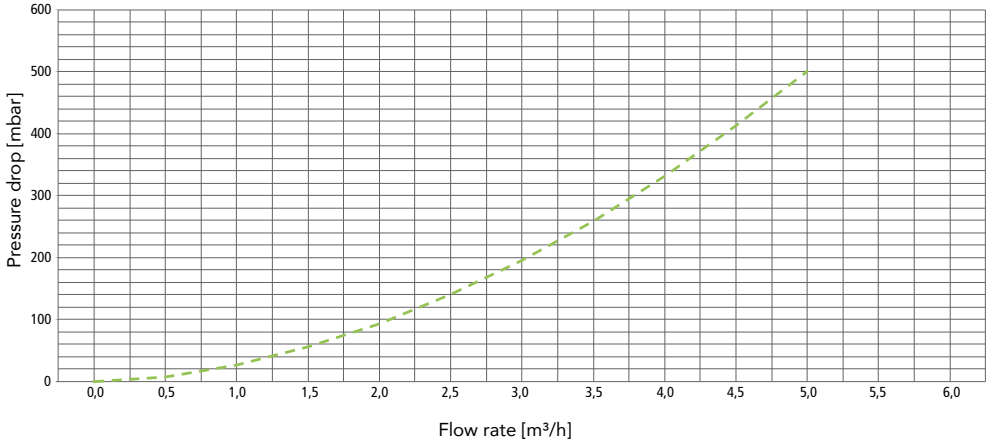
ULTRADUO 401 AND ULTRAHR 401 STORAGE TANKS-TECHNICAL DATA

CONNECTIONS	u.m.	ULTRADUO 401	ULTRAHR 401
Storage tank content	[l]	401	
Solar heat exchanger surface	[m²]	- 1,5	
Maximum domestic hot water flow rate	[l/min]	20	20
Solar heat exchanger content	[l[	15	
Empty weight	[kg]	100	97
Max solar heat exchanger pressure	[bar]	10	10
Max storage tank pressure	[bar]	3	
Max operating temperature	[°C]	95	95
Insulation thickness-non-removable	[mm]	50	
Tilt height	[mm]	2100	
Diameter with insulation	[mm]	650	
H-maximum storage tank height	[mm]	1980	
λ-thermal conductivity	[W/mk]	0,024	

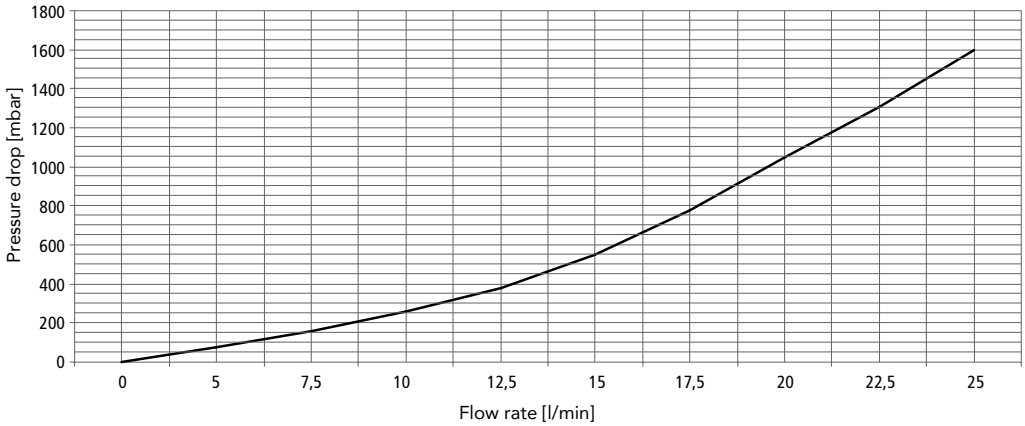
INITIAL PERFORMANCE DATA ULTRADUO 401 (with generator off) and fully charged storage tank



Lower Heat Exchanger Pressure Drops



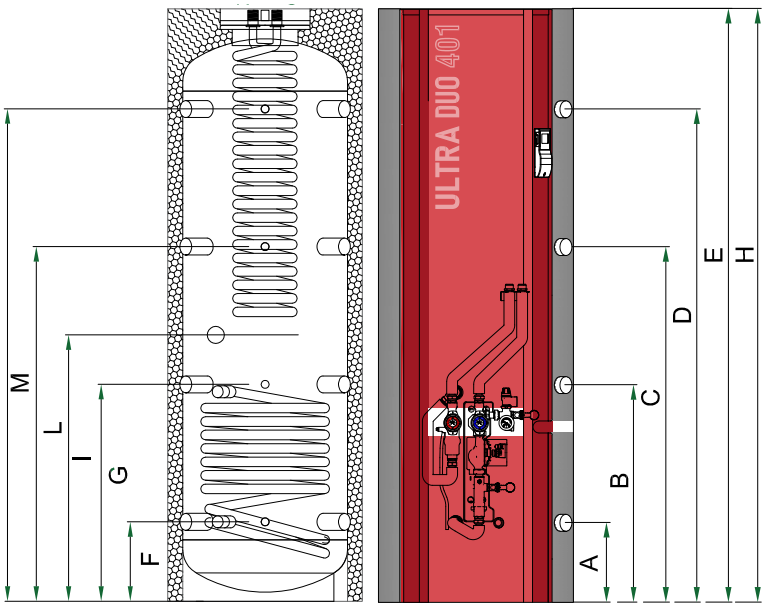
DHW Heat Exchanger Pressure Drops

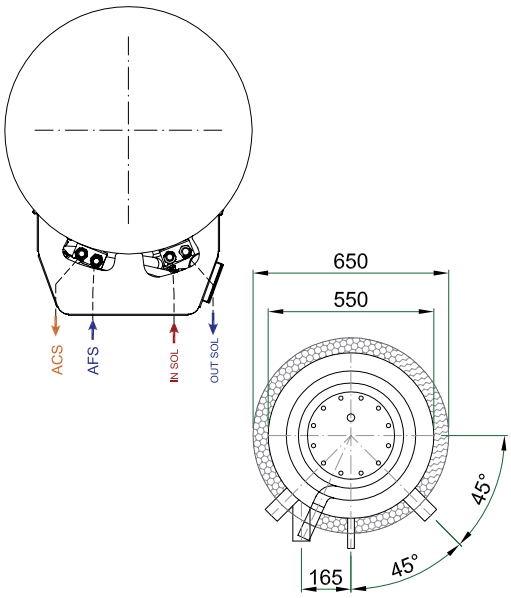


ULTRADUO 401			
A-SLEEVE with jet breaker	[mm]	265	1" 1/2
B-SLEEVE with jet breaker	[mm]	725	1" 1/2
C-SLEEVE with jet breaker	[mm]	1185	1" 1/2
D-SLEEVE with jet breaker	[mm]	1645	1" 1/2
E-DOMESTIC WATER INLET/OUTLET HEIGHT	[mm]	1980	3/4"
H-SOLAR MODULE INLET/OUTLET HEIGHT	[mm]	1980	3/4"
F-SENSOR POCKET (UNDER COVER)	[mm]	265	1/2"
G-SENSOR POCKET (UNDER COVER)	[mm]	725	1/2"
I-ELECTRIC HEATER (UNDER COVER)	[mm]	890	1" 1/2
L-SENSOR POCKET (UNDER COVER)	[mm]	1185	1/2"
M-SENSOR POCKET (UNDER COVER)	[mm]	1645	1/2"

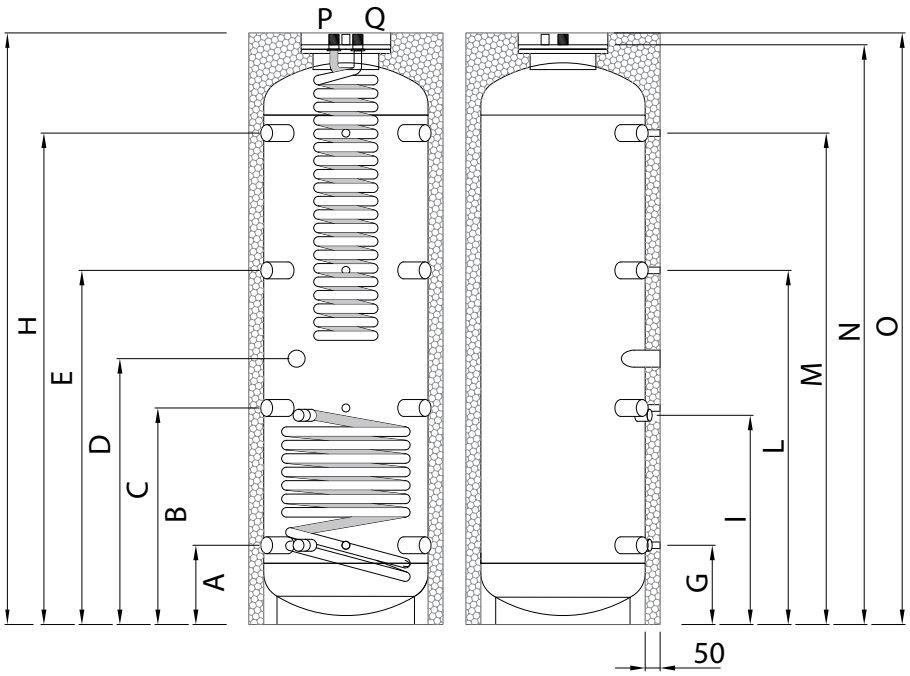
ULTRAHR 401			
A-SLEEVES with jet breaker	[mm]	265	1"1/2
B-SLEEVES with jet breaker	[mm]	725	1"1/2
C-ELECTRIC HEATER SLEEVE	[mm]	890	1"1/2
D-SLEEVES with jet breaker	[mm]	1185	1"1/2
E-SLEEVES with jet breaker	[mm]	1645	1"1/2
G-SOLAR HEAT EXCHANGER COLD OUTLET	[mm]	265	1"
I-SOLAR HEAT EXCHANGER HOT INLET	[mm]	700	1"
L-SENSOR POCKET	[mm]	1185	1/2"
M-SENSOR POCKET	[mm]	1645	1/2"
N-FLANGE HEIGHT Ø300 / Ø220	[mm]	1925	
O-STORAGE TANK HEIGHT WITH INSULATION	[mm]	1980	
P-DOMESTIC COLD WATER INLET	[mm]	1980	1"
Q-DOMESTIC HOT WATER OUTLET	[mm]	1980	1"

Technical diagram ULTRADUO 401

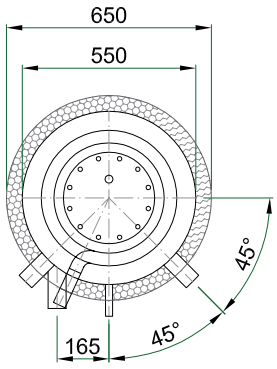




Technical diagram ULTRAHR 401*



*Without cover and on-board solar station



ECO COMPACT STORAGE TANK

INTEGRATED SOLAR STATION

ErP READY
APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS



WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

INTEGRATED SOLAR STATION

HI-PERFORMANCE SOLAR DHW STORAGE TANK-FOR BOILER

The ideal storage tank for DHW production from the sun, simple and cost-effective!

ECO COMPACT-A new generation of compact solar storage tanks, with integrated solar station and pre-wired electronic control unit, for domestic hot water production. Easy to install, ECO COMPACT storage tanks are equipped with a high-efficiency electronic circulator. Suitable for domestic use because internally vitrified in a furnace at 850°C in accordance with DIN 4753. Compliant with Directive 2009/125/EC for eco-design and Directive 2010/30/EU for energy labeling that came into force on September 26, 2015. Meeting the minimum threshold limits in class C, imposed by the same Directives starting from September 26, 2017.

ECO COMPACT

Two fixed heat exchangers, electric heater connection on central sleeve, insulation in rigid polyurethane foam and non-removable with external white PVC finish.

			CONTINUOUS PRODUCTION[1]						VALUES ACCORDING TO DIN 4708[2] STANDARD					CONTINUOUS WITHDRAWAL IN 60 MINUTES[4]
	SIZE	USEFUL VOL [l]	Tm= 50 °C		Tm= 60 °C		Tm= 70 °C		NL	PEAK withdrawal in 10 minutes[3]		Subsequent withdrawal after 30 min tank charging time[3]		Tm= 70 °C
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]		[liters]	[l/min]	[liters]	[l/min]	[liters]
UPPER	200	224	3,4	83	9,6	236	16,8	413	1,8	186	18,6	66	17,3	528
	300	285	4,2	103	12,0	295	21,0	516	2,2	204	20,4	81	18,5	667
	500	496	5,9	145	16,8	413	29,4	722	4,8	291	29,1	177	24,6	988

NOTE: The lower coil of the ECO COMPACT storage tank can be connected exclusively to the solar field.

	SIZE	MAXIMUM NUMBER OF INSTALLABLE SOLAR COLLECTORS[3]				
		X-RAY 10	X-RAY 15	UNIKO21	KSF26	ECLIPSE 2
SOLAR	200	2	1	2	2	3
	300	2	2	2	2	4
	500	3	3	3	3	6

Tm = Heat generator flow temperature (entering the heat exchanger) Tb = Storage tank temperature TACS = Domestic hot water temperature TAFS = Domestic cold water temperature

1. Data referring to temperature conditions TACS= 45°C; TAFS= 10°C
2. Data referring to temperature conditions ACS= 45°C; TAFS= 10°C; Tm= 70°C; Tb= TAFS + 50°C
3. Data referring to NL coefficient
4. Data calculated at maximum power with Tb= 60°C; TAFS= 10°C; TACS= 45°C
5. The value is indicative and variable depending on the plant usage conditions

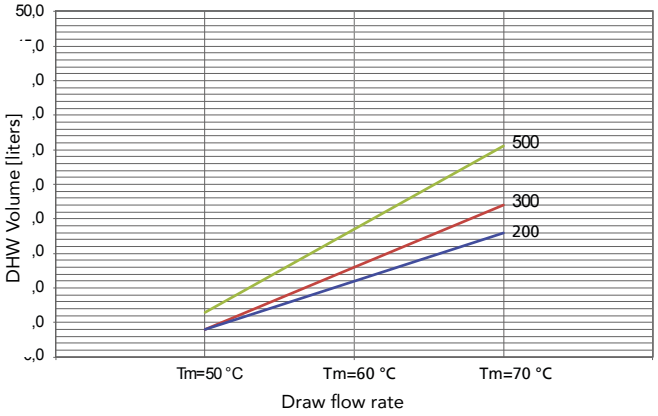
	ECO COMPACT 200	ECO COMPACT 300	ECO COMPACT 500
Energy Class	**C**	**C**	**C**
CODE	**1030302111**	**1030303131**	**1030305141**

ECO COMPACT STORAGE TANK-TECHNICAL DATA

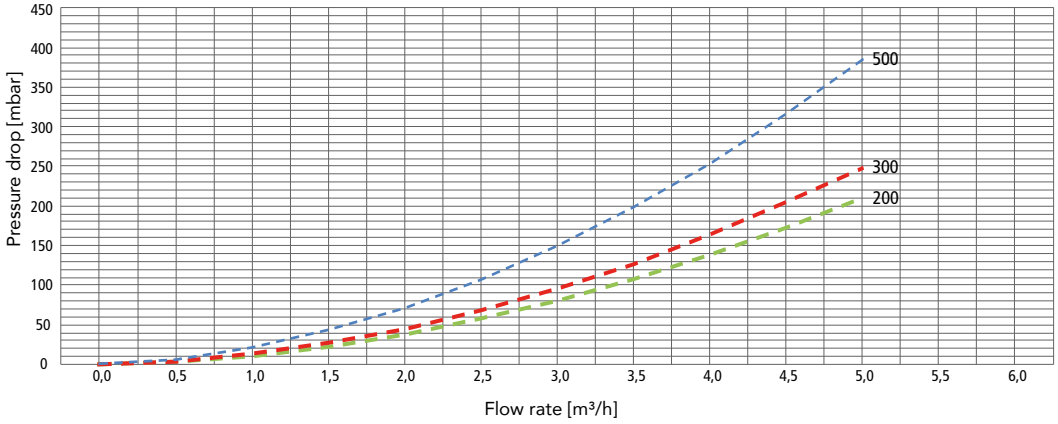
ERP	u.m.	ECO COMPACT 200	ECO COMPACT 300	ECO COMPACT 500
Useful Volume	[l]	224	285	496
Heat Loss	[W]	68	80	107
Heat Loss	[kWh/24h]	1,60	1,90	2,60
Energy Efficiency Class	[-]	C	C	C

PRESSURES	u.m.	ECO COMPACT 200	ECO COMPACT 300	ECO COMPACT 500
MAX Solar Heat Exchanger	[bar]	10	10	10
MAX Upper Heat Exchanger	[bar]	10	10	10
MAX Storage Tank	[bar]	6	6	6
TEMPERATURE	u.m.	ECO COMPACT 200	ECO COMPACT 300	ECO COMPACT 500
MAX Solar Heat Exchanger	[°C]	95	95	95
MAX Upper Heat Exchanger	[°C]	95	95	95
MAX Storage Tank	[°C]	95	95	95

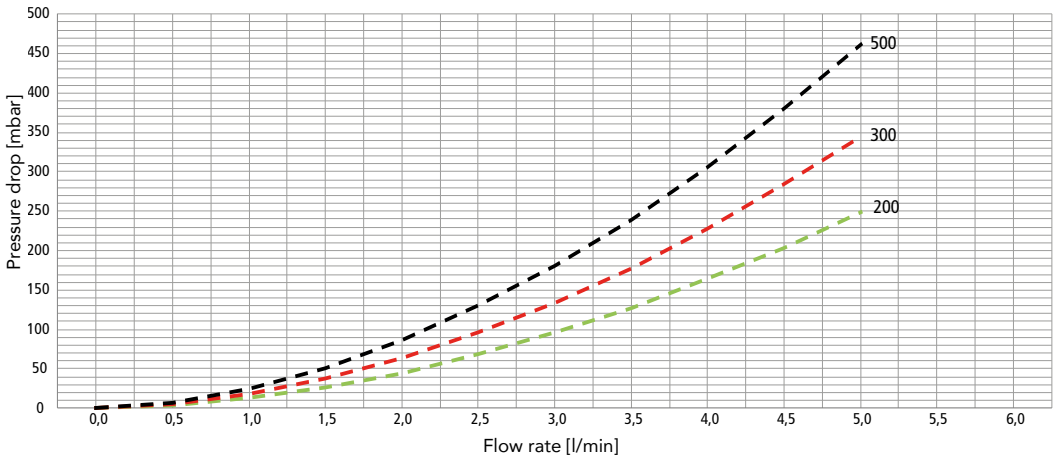
Upper Heat Exchanger Power



Lower Heat Exchanger Pressure Drops



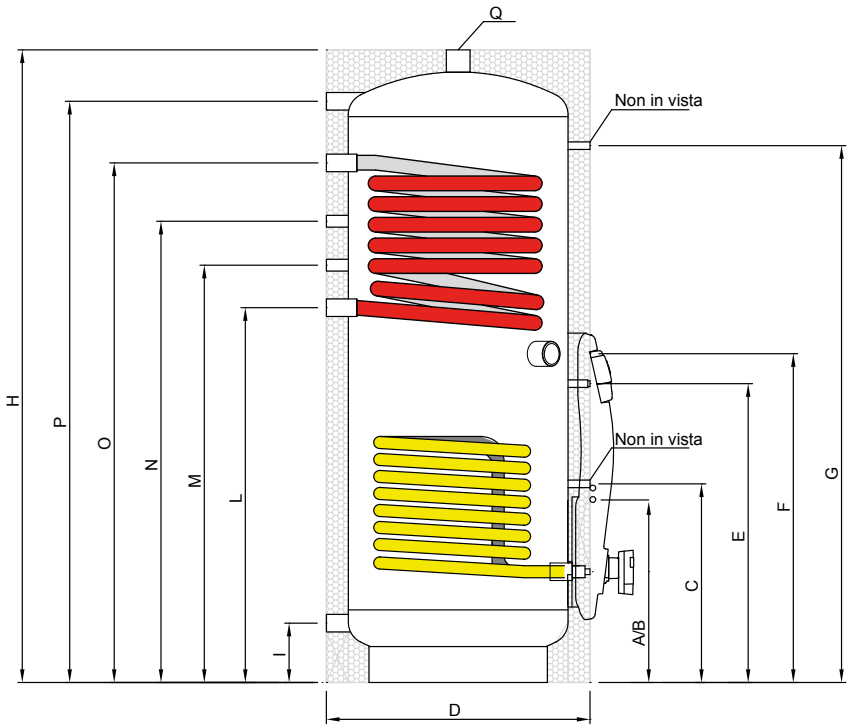
DHW Heat Exchanger Pressure Drops

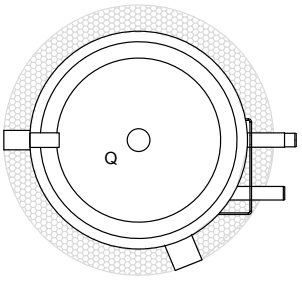


SIZE	u.m.	ECO COMPACT 200	ECO COMPACT 300	ECO COMPACT 500
Solar heat exchanger content	[l]	6,4	7,2	10,4
Auxiliary heat exchanger content	[l]	5	5,7	8,5
Solar heat exchanger surface	[m^2]	1	1,2	1,6
Auxiliary heat exchanger surface	[m^2]	0,8	1	1,4
Empty weight	[Kg]	94	124	190
Tilt height with insulation	[mm]	1485	1780	1900
H-Total height	[mm]	1350	1670	1740
D-Diameter with insulation	[mm]	610	610	760
d-Diameter without insulation	[mm]	-	-	-
Insulation thickness	[mm]	50	50	50

CONNECTIONS	u.m.	ECO COMPACT 200		ECO COMPACT 300		ECO COMPACT 500	
A-Solar heat exch. outlet (cold side) outside cover	[mm]	400	ø 18	430	ø 18	410	ø 18
B-Solar heat exch. inlet (hot side) outside cover	[mm]	360	ø 18	390	ø 18	370	ø 18
C-Solar sensor pocket	[mm]	452	ø 17	452	ø 17	477	ø 17
E-Cover fixing screw	[mm]	680	-	680	-	705	-
F-Electric heater sleeve (ESH)	[mm]	730	1" 1/2"	900	1" 1/2"	900	1" 1/2"
G-Sensor pocket (factory wired)	[mm]	1122	ø 17	1422	ø 17	1490	ø 17
H-Height with insulation	[mm]	1350		1670		1740	
Tilt height	[mm]	1485		1780		1900	
I-DCW inlet	[mm]	135	1"	135	1"	145	1"
L-Upper heat exch. outlet	[mm]	790	1"	1030	1"	1050	1"
M-Sensor pocket	[mm]	900	1/2"	1150	1/2"	1170	1/2"
N-DHW recirculation	[mm]	1000	1/2"	1250	1/2"	1270	1/2"
O-Upper heat exch. inlet	[mm]	1105	1"	1390	1"	1455	1"
P-Side DHW outlet	[mm]	1230	1"	1523	1"	1570	1"
Q-Magnesium anode (l= 700 mm)	[mm]	1320	1" 1/4	1670	1" 1/4	1740	1" 1/4

Construction Material
The storage tank is made of S 235 JR steel. Internally vitrified, double coat, in compliance with DIN 7353 standard.
Insulation
Insul**ated with** directly injected rigid polyurethane, chlorofluorocarbon (CFC) free, self-extinguishing and non-removable for all sizes.





ECO COMPACT HPS STORAGE TANK



INTEGRATED SOLAR STATION

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Images are for illustrative purposes only. Products may be modified depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

INTEGRATED SOLAR STATION

HI-PERFORMANCE SOLAR DHW STORAGE TANK - FOR HEAT PUMPS

High thermal output in combination with Heat Pumps with OVERSIZE heat exchanger!

ECO COMPACT HPS-The HPS series tanks are designed with a high coil having a surface 2.7 times larger than similar tanks for boilers and are perfect for being combined with heat pumps that require a larger exchange surface compared to traditional tanks. Ideal for use in a hybrid solar system but also for connecting the tank to heat pumps with high output. With integrated solar station, solar control unit, and pre-wired high-efficiency circulator. Suitable for domestic use because internally vitrified in a furnace at 850°C in accordance with DIN 4753. Compliant with Directive 2009/125/EC for eco-design and Directive 2010/30/EU for energy labeling that came into force on September 26, 2015. Meeting the minimum threshold limits in class C, imposed by the same Directives starting from September 26, 2017.

ECO COMPACT HPS

Two fixed heat exchangers (one with double parallel coil OVERSIZE), electric heater connection on central flange, insulation in rigid polyurethane foam and non-removable with external white PVC finish.

			CONTINUOUS PRODUCTION[1]				VALUES ACCORDING TO DIN 4708[2] STANDARD					CONTINUOUS WITHDRAWAL IN 60 MINUTES[4]
UPPER	SIZE	USEFUL VOL	Tm= 55 °C		Tm= 60 °C		NL	PEAK withdrawal in 10 minutes[3]		Subsequent withdrawal after 30 min tank charging time[3]		Tm= 55 °C
		[l]	[kW]	[l/h]	[kW]	[l/h]		[liters]	[l/min]	[liters]	[l/min]	[liters]
	300	285	10,5	260	30,0	740	1,4	167	16,7	51	16,0	451
	500	496	16,0	392	45,6	1120	3,8	260	26,0	140	22,4	642

NOTE: The lower coil of the ECO COMPACT BWPS storage tank can be connected exclusively to the solar field.

SOLAR	SIZE	MAXIMUM NUMBER OF INSTALLABLE SOLAR COLLECTORS[3]				
		X-RAY 10	X-RAY 15	UNIKO21	KSF26	ECLIPSE 2
	300	2	2	2	2	4
	500	3	3	3	3	6

Tm = Heat generator flow temperature (entering the heat exchanger) Tb = Storage tank temperature TACS = Domestic hot water temperature TAFS = Domestic cold water temperature

1. Data referring to temperature conditions TACS= 45°C; TAFS= 10°C
2. Data referring to temperature conditions T ACS= 45°C; TAFS= 10°C; Tm= 60°C; Tb= TAFS + 40°C
3. Data referring to NL coefficient
4. Data calculated at power corresponding to Tm= 55°C and with Tm= Tb= 55°C; TAFS= 10°C; TACS= 45°C
5. The value is indicative and variable depending on the plant usage conditions

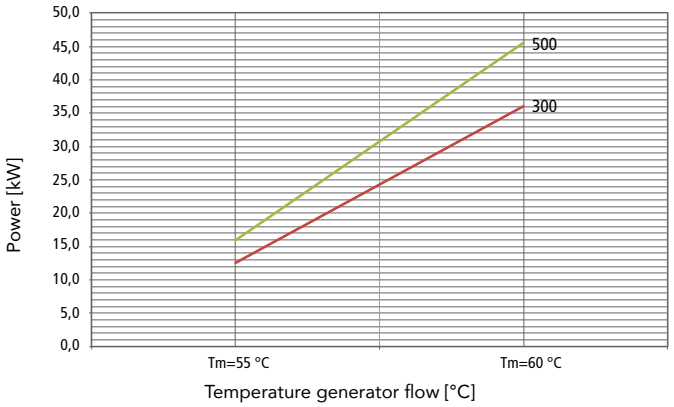
	ECO COMPACT HPS 300	ECO COMPACT HPS 500
Energy Class	**C**	**C**
CODE	**3010303021**	**3010305021**

ECO COMPACT HPS STORAGE TANK-TECHNICAL DATA

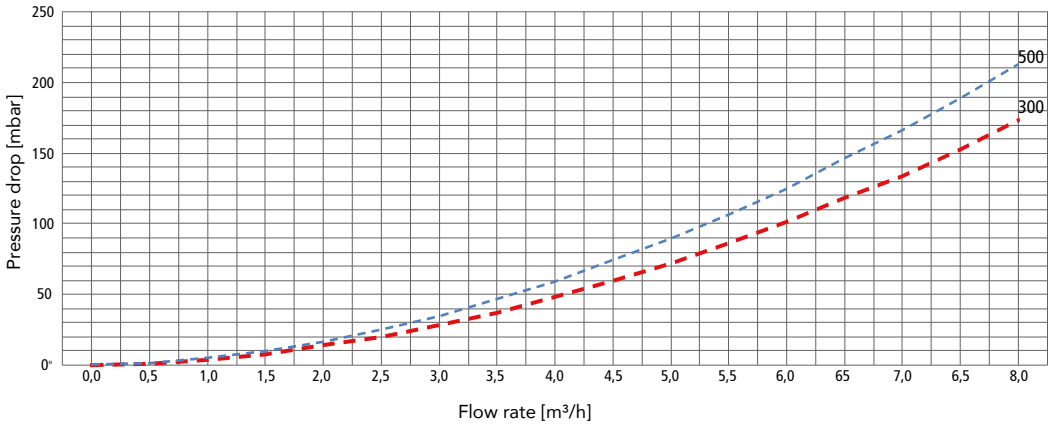
ERP	u.m.	ECO COMPACT HPS 300	ECO COMPACT HPS 500
Useful Volume	[l]	285	496
Heat Loss	[W]	84	111
Heat Loss	[kWh/24h]	1,80	2,40
Energy Efficiency Class	[-]	C	C

PRESSURES	u.m.	ECO COMPACT HPS 300	ECO COMPACT HPS 500
MAX Solar Heat Exchanger	[bar]	10	10
MAX Upper Heat Exchanger	[bar]	10	10
MAX Storage Tank	[bar]	6	6
TEMPERATURE	u.m.	ECO COMPACT HPS 300	ECO COMPACT HPS 500
MAX Solar Heat Exchanger	[°C]	95	95
MAX Upper Heat Exchanger	[°C]	95	95
MAX Storage Tank	[°C]	95	95

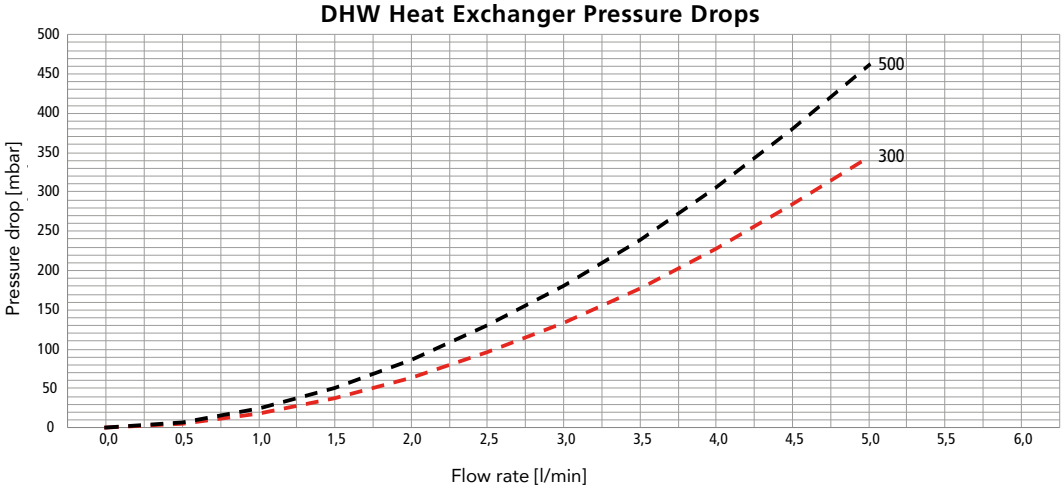
Upper Heat Exchanger Power



Lower Heat Exchanger Pressure Drops



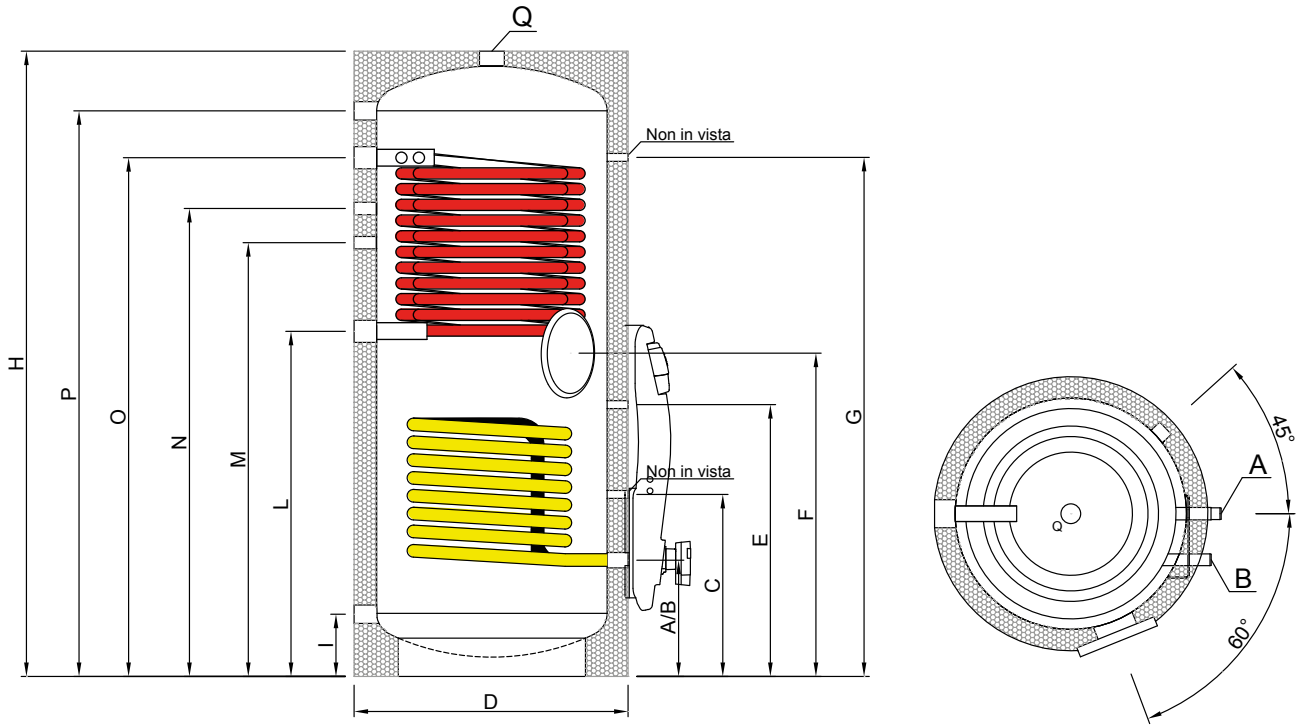
DHW Heat Exchanger Pressure Drops



DIMENSIONS	u.m.	ECO COMPACT HPS 300	ECO COMPACT HPS 500
Solar heat exchanger content	[l]	7,2	10,4
Heat pump heat exchanger content	[l]	15,0	24,7
Solar heat exchanger surface	[m^2]	1,2	1,6
Heat pump heat exchanger surface	[m^2]	2,5	3,8
Empty weight	[Kg]	126	192
Tilt height with insulation	[mm]	1780	1900
H-Total height	[mm]	1670	1740
D-Diameter with insulation	[mm]	610	760
d-Diameter without insulation	[mm]	-	-
Insulation thickness	[mm]	50	50

CONNECTIONS	u.m.	ECO COMPACT HPS 300		ECO COMPACT HPS 500	
A-Solar heat exch. outlet (cold side) outside cover	[mm]	410	ø 18	430	ø 18
B-Solar heat exch. inlet (hot side) outside cover	[mm]	370	ø 18	390	ø 18
C-Solar sensor pocket	[mm]	452	ø 17	477	ø 17
E-Cover fixing screw	[mm]	680	-	705	-
F-Electric heater flange (RDU)	[mm]	775 -Ø 180/120		800 -Ø 180/120	
G-Sensor pocket (factory wired)	[mm]	1422	ø 17	1490	ø 17
H-Height with insulation	[mm]	1670		1740	
I-DCW inlet	[mm]	135	1"	145	1"
L-Upper heat exch. outlet	[mm]	845	1"	860	1"
M-Sensor pocket	[mm]	1150	1/2"	1170	1/2"
N-DHW recirculation	[mm]	1250	1/2"	1270	1/2"
O-Upper heat exch. inlet	[mm]	1430	1"	1470	1"
P-Side DHW outlet	[mm]	1523	1"	1740	1"
Q-Magnesium anode (l= 700 mm)	[mm]	1670	1" 1/4	1740	1" 1/4

Construction material
The storage tank is made of S 235 JR steel. Internally vitrified, double layer, in accordance with DIN 7353 standard.
Insulation
Insulated with rigid polyurethane directly injected, free from chlorofluorocarbons (CFCs), self-extinguishing and non-removable for all sizes.



ECO FRESH STORAGE TANK

PLEION INNOVATION

100% Anti-legionella
Ideal for DHW and integration with underfloor heating systems.



INTEGRATED SOLAR STATION

INSTANTANEOUS DHW 20 l/min

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

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WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

INTEGRATED SOLAR STATION

INSTANTANEOUS DHW 20 l/min

HI-PERFORMANCE

SOLAR DHW STORAGE AND HEATING INTEGRATION
FOR BOILER AND/OR HEAT PUMP

20 l/min of pure comfort and energy savings. All in one.

PLEION INNOVATION **ECO FRESH-**An innovative generation of compact solar storage tanks with integrated solar station, domestic hot water production module with 20 l/min capacity, new pre-wired PLEION PB404 electronic control unit, easy to install and equipped with a high-efficiency electronic circulator. Compliant with Directive 2009/125/EC for eco-design requirements and Directive 2010/30/EU for energy labeling, effective from September 26, 2015. Suitable for the minimum threshold limits in class C, imposed by the same Directives starting from September 26, 2017.

INITIAL PERFORMANCE DATA (WITH GENERATOR OFF)							
PARTIALLY LOADED TANK							
THERMOSTATIC VALVE 2-WAY REGULATION	TEMPERATURE TANK	DHW Production					
		DHW flow [l/min]	avg. temp.	DHW flow [l/min]	avg. temp.	DHW flow [l/min]	avg. temp.
		10		15		20	
[°C]	[°C]	[liters]	[°C]	[liters]	[°C]	[liters]	[°C]
45	55	199	47	220	44	251	40
	60	222	48	256	45	278	41
	70	272	49	299	46	338	42
	80	329	49	361	46	408	42
50	55	182	49	206	45	241	41
	60	204	50	230	46	267	42
	70	251	51	281	47	326	43
	80	303	51	340	47	394	43
FULLY LOADED TANK							
45	55	292	47	322	44	367	40
	60	314	48	338	45	386	41
	70	391	49	439	46	485	42
	80	482	49	529	46	598	42
50	55	267	49	302	45	353	41
	60	299	50	337	46	392	42
	70	367	51	412	47	477	43
	80	444	51	498	47	577	43

CONTINUOUS PERFORMANCE DATA (WITH GENERATOR ON)														
THERMOSTATIC VALVE 2-WAY REGULATION:	TEMPERATURE tank ≥ di:	DHW Temperature												DT 20-7,5
		7,5 [l/min]	P	10,0 [l/min]	P	12,5 [l/min]	P	15,0 [l/min]	P	17,5 [l/min]	P	20,0 [l/min]	P	
[C°]	[C°]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]	[kW]	[C°]
45	≥ 55	49,0	18,7	47,5	23,9	46,0	28,5	44,5	32,5	43,0	36,0	41,0	38,2	8,0
50		52,2	20,5	50,4	26,0	48,5	30,8	46,4	34,6	44,2	37,5	42,0	39,7	10,2

- TDHW = domestic hot water temperature = 15 [°C]
- TCWI = cold water inlet temperature (mains water) = 40 [°C]
- P = generator power

NOTE: Il serpentino inferiore del tank ECO FRESH può essere collegato esclusivamente al campo SOLAR.

SOLAR	SIZE	MAXIMUM NUMBER OF SOLAR COLLECTORS INSTALLABLE*				
		X-RAY 10	X-RAY 15	UNIKO21	KSF26	ECLIPSE 2
	350	3	2	3	3	6

	ECO FRESH 350
Energy Class	**B**
CODE	**1030403511**

* The value is indicative and variable depending on the system usage conditions

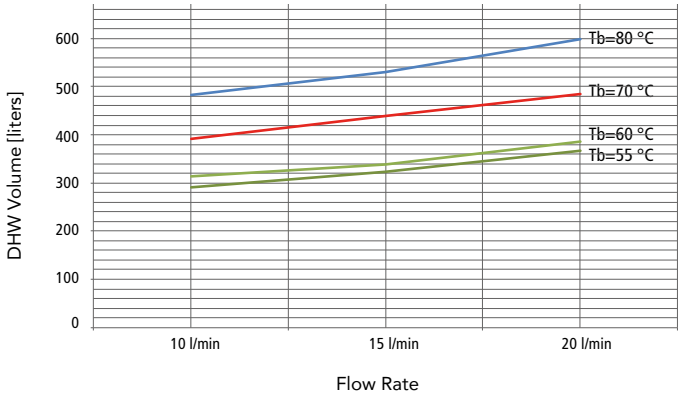
ECO FRESH STORAGE-TECHNICAL DATA

ERP	u.m.	ECO FRESH 350
Useful Volume	[l]	342
Heat Loss	[W]	70
Heat Loss	[kWh/24h]	1,68
Energy Efficiency Class	[-]	B

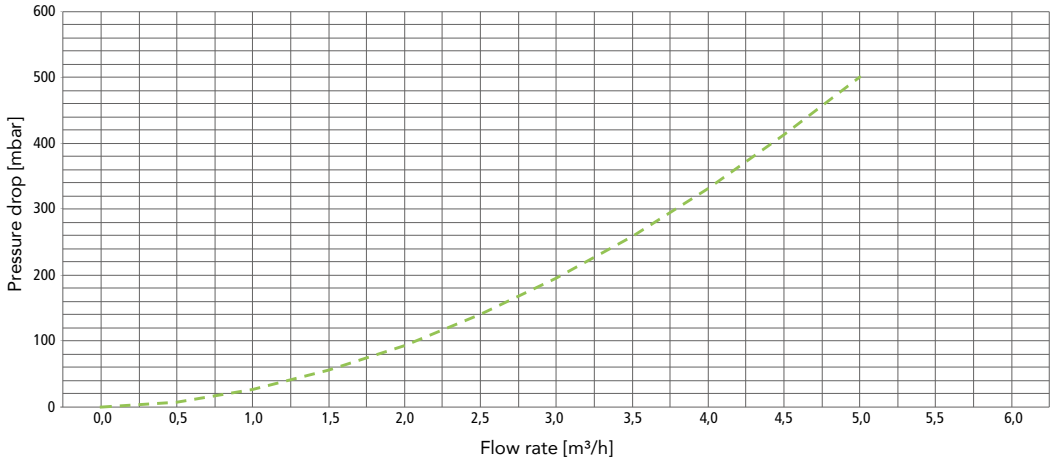
PRESSURES	u.m.	ECO FRESH 350
MAX Solar Heat Exchanger	[bar]	10
MAX Storage Tank	[bar]	3
TEMPERATURE	u.m.	ECO FRESH 350
MAX Solar Heat Exchanger	[°C]	95
MAX Storage Tank	[°C]	95

INITIAL PERFORMANCE DATA (WITH GENERATOR OFF) and FULLY LOADED TANK

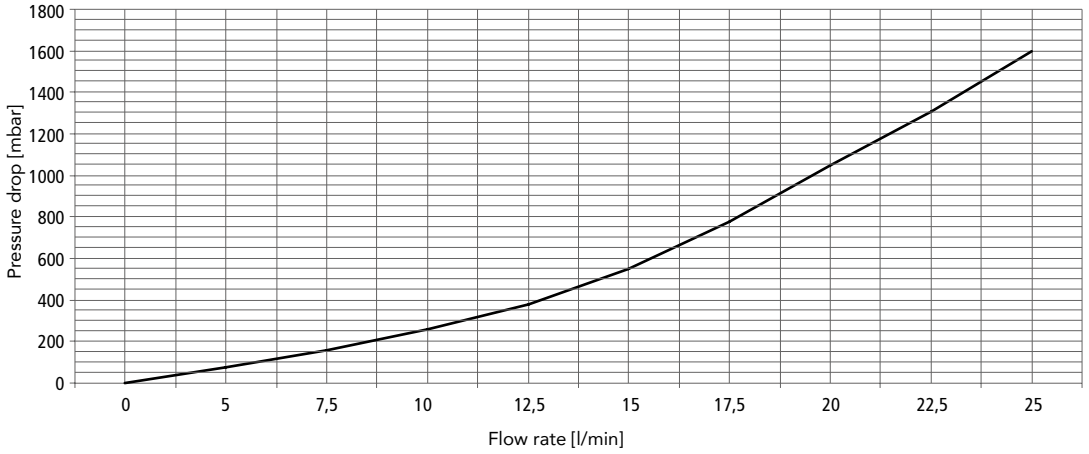
Thermostatic 2-way valve regulation 45°C



Lower Heat Exchanger Pressure Losses



DHW Heat Exchanger Pressure Losses

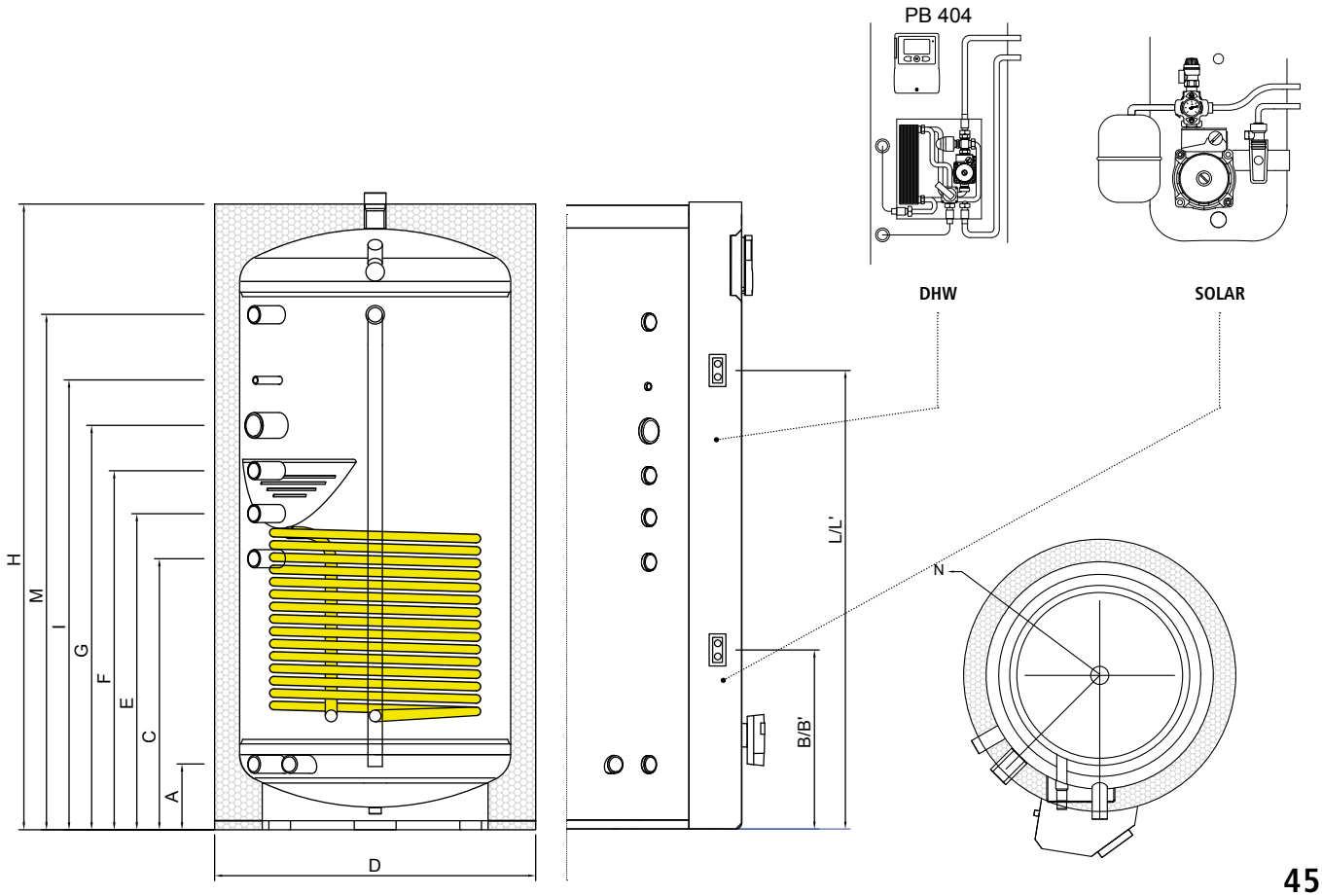


DIMENSIONS	u.m.	ECO FRESH 350
Solar heat exchanger content	[l]	9,4
Solar heat exchanger surface	[m^2]	1,5
Empty weight	[Kg]	155
Tilt height with insulation	[mm]	1650
H-Total height	[mm]	1410
D-Diameter with insulation	[mm]	760
d-Diameter without insulation	[mm]	-
Insulation thickness	[mm]	80

Connection	u.m.	ECO FRESH 350	
A-Lower system return socket	[mm]	145	1"
B-Solar heat exchanger inlet (hot side)-outside the cover	[mm]	385	Ø18
B'-Solar heat exchanger outlet (cold side)-outside the cover	[mm]	425	Ø18
C-Boiler return socket	[mm]	600	1"
D-Diameter with insulation	[mm]	760	
E-Heating system flow socket	[mm]	700	1"
F-Boiler flow socket-space heating side	[mm]	795	1"
G-Socket for electric heater (ESH)	[mm]	895	1"1/2
H-Height with insulation	[mm]	1410	
I-Boiler sensor pocket	[mm]	995	1/2"
L-Domestic water inlet-outside the cover	[mm]	1180	3/4"
L'-Domestic water outlet-outside the cover	[mm]	1280	3/4"
M-Boiler flow socket-DHW side (AT)	[mm]	1145	1"
N-Upper tank socket	[mm]	1410	1"1/4

Construction Material
The tank is constructed in S 235 JR steel according to DIN 4753 standard.
Domestic Hot Water production with external plate heat exchanger in stainless steel.

Insulation
Fully insulated with rigid polyurethane foam directly applied, chlorofluorocarbon-free (CFC), self-extinguishing, NON-removable.



ECO COMPACT DUO STORAGE



INTEGRATED SOLAR STATION

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

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WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

INTEGRATED SOLAR STATION

HI-PERFORMANCE

SOLAR DHW PIPE IN TANK STORAGE
AND HEATING INTEGRATION-FOR BOILER

Solar storage finally takes center stage in your heating system.

ECO COMPACT DUO-Suitable for space heating integration and domestic hot water production for domestic and residential structures. The Eco Compact Duo storage has been designed with a special solar heat exchanger to maximize the efficiency of the solar field and to have maximum integration with radiant heating systems. Integrated solar station, solar controller and pre-wired high-efficiency solar circulator. Compliant with Directive 2009/125/EC for eco-design requirements and Directive 2010/30/EU for energy labeling, effective from September 26, 2015. Suitable for the minimum threshold limits in class C, imposed by the same Directives starting from September 26, 2017.

ECO COMPACT DUO

Two fixed heat exchangers, including a corrugated V4A stainless steel coil for DHW production, provision for electric heater on central sleeve, rigid polyurethane foam insulation that can be removed, with external white PVC finish.

			FULLY HEATED STORAGE[1]			STORAGE HEATED ONLY IN THE UPPER SECTION[1]						
			Initial production with heat generator off [liters]			Initial production with heat generator off [liters]			Values according to DIN 4708[2] standard			
		USEFUL VOL	Flow rate			Flow rate			NL		PEAK withdrawal in 10 minutes[3]	
DHW	SIZE	[l]	10 l/min	15 l/min	20 l/min	10 l/min	15 l/min	20 l/min			[liters]	[l/min]
	600	551	373	319	281	260	234	209	3,0	(29 kW)	232	23,2
	800	853	573	519	456	382	322	275	3,8	(30 kW)	260	26
	1000	926	637	600	536	402	331	281	4,0	(33 kW)	267	26,7

NOTE: The lower coil of the ECO COMPACT DUO storage can be connected exclusively to the solar field.

		MAXIMUM NUMBER OF SOLAR COLLECTORS INSTALLABLE[4]				
SOLAR	SIZE	X-RAY 10	X-RAY 15	UNIKO21	KSF26	ECLIPSE 2
	600	4	3	4	4	6
	800	5	4	5	5	8
	1000	6	5	6	6	10

Tm = Heat generator flow temperature (entering the heat exchanger).
Tb = Tank temperature
TDHW = Domestic hot water temperature
TCWI = Cold water inlet temperature

1. Data referred to temperature conditions TDHW= 45°C ; TCWI= 10°C ; Tb = 65°C
2. Data referred to temperature conditions TDHW= 45°C; TCWI= 10°C; Tm= 70°C; Tb= TCWI + 50°C;
3. Data referred to the NL coefficient
4. The value is indicative and variable depending on the system usage conditions

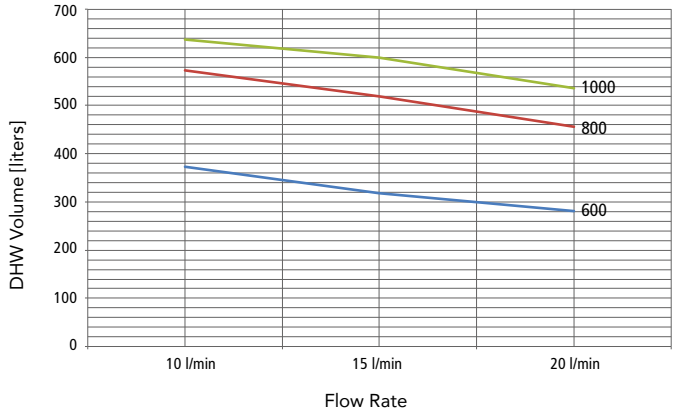
	ECO COMPACT DUO 600	ECO COMPACT DUO 800	ECO COMPACT DUO 1000
Energy Class	**C**	**B**	**B**
CODE	**1030406061**	**1030408051**	**1030410081**

ECO COMPACT DUO STORAGE-TECHNICAL DATA

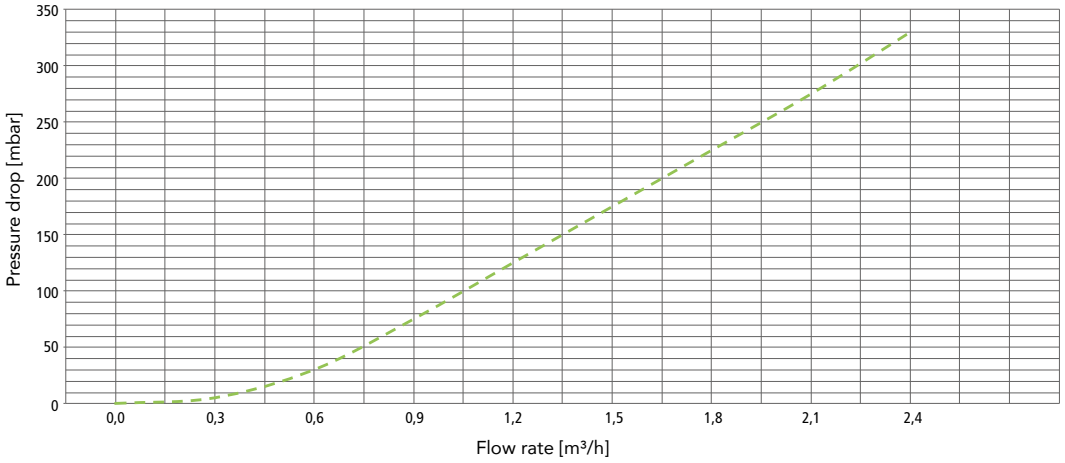
ERP	u.m.	ECO COMPACT DUO 600	ECO COMPACT DUO 800	ECO COMPACT DUO 1000
Useful Volume	[l]	551	853	926
Heat Loss	[W]	108	133	142
Heat Loss	[kWh/24h]	2,60	3,20	3,40
Energy Efficiency Class	[-]	C	B	B

PRESSURES	u.m.	ECO COMPACT DUO 600	ECO COMPACT DUO 800	ECO COMPACT DUO 1000
MAX Solar Heat Exchanger	[bar]	10	10	10
MAX Upper Heat Exchanger	[bar]	6	6	6
MAX Storage Tank	[bar]	3	3	3
TEMPERATURE	u.m.	ECO COMPACT DUO 600	ECO COMPACT DUO 800	ECO COMPACT DUO 1000
MAX Solar Heat Exchanger	[°C]	95	95	95
MAX Heat Exchanger sanitario	[°C]	95	95	95
MAX Storage Tank	[°C]	95	95	95

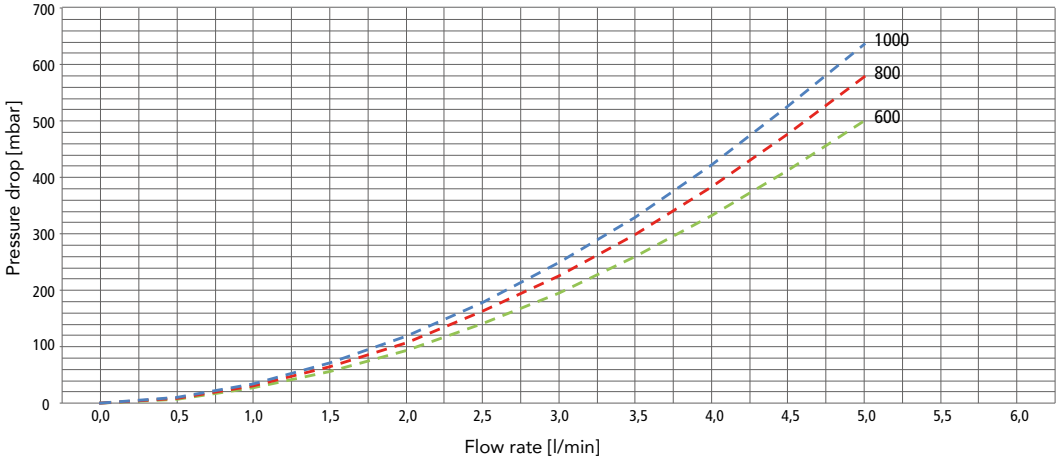
DHW Production with heat generator off and fully heated storage



DHW Heat Exchanger Pressure Losses-Valid for all sizes



Lower Heat Exchanger Pressure Losses

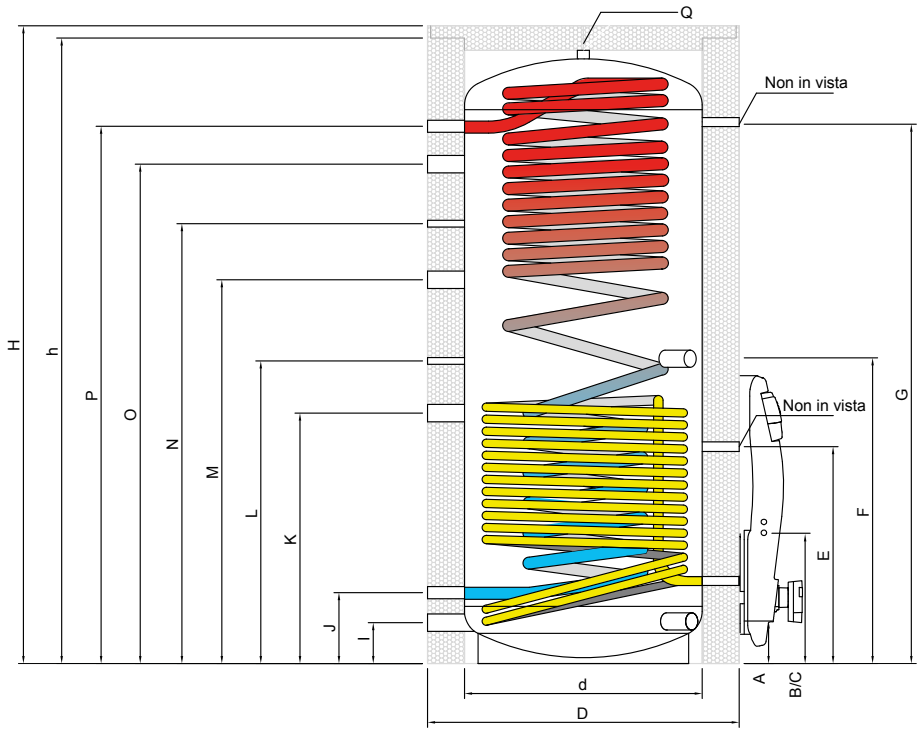


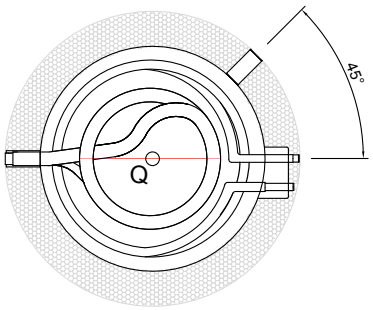
SIZE	u.m.	ECO COMPACT DUO 600	ECO COMPACT DUO 800	ECO COMPACT DUO 1000
Solar heat exchanger content	[l]	12,1	15,3	17,9
DHW heat exchanger content (stainless steel)	[l]	28,0	28,0	28,0
Solar heat exchanger surface	[m^2]	1,9	2,5	3,0
DHW heat exchanger surface (stainless steel)	[m^2]	5,5	5,5	5,5
Empty weight	[Kg]	168	180	201
Tilt height with cover and without rear cap	[mm]	1975	2175	2310
Tilt height with cover and with insulation	[mm]	1815	1930	1070
D-Diameter with insulation	[mm]	810	970	970
d-Diameter without insulation	[mm]	650	790	790
Insulation thickness	[mm]	70	70	70

Connection	u.m.	ECO COMPACT DUO 600		ECO COMPACT DUO 800		ECO COMPACT DUO 1000	
A-Lower sleeve for elect. heater (ESH)	[mm]	130	1"1/2	140	1"1/2	140	1"1/2
B-Solar heat exchanger outlet (cold side)-outside the cover	[mm]	410	ø 18	430	ø 18	430	ø 18
C-Solar heat exchanger inlet (hot side)-outside the cover	[mm]	370	ø 18	390	ø 18	390	ø 18
E-Screw for fixing cover	[mm]	688	ø 17	708	ø 17	708	ø 17
F-Upper sleeve for elect. heater (ESH)	[mm]	960	1"1/2	900	1"1/2	1020	1"1/2
G-Thermometer pocket	[mm]	1540	ø 17	1640	ø 17	1790	ø 17
h-Height without insulation	[mm]	1780		1880		2015	
H-Height with insulation	[mm]	1850		1975		2125	
I-Sleeve	[mm]	130	1"1/2	150	1"1/2	140	1"1/2
J-Cold water inlet	[mm]	240	1"	240	1"	240	1"
K-Sleeve	[mm]	740	1"1/2	740	1"1/2	830	1"1/2
L-Sensor pocket	[mm]	890	1/2"	890	1/2"	990	1/2"
M-Sleeve	[mm]	1040	1"1/2	1040	1"1/2	1290	1"1/2
N-DHW sensor pocket	[mm]	1220	1/2"	1320	1/2"	1470	1/2"
O-Sleeve	[mm]	1440	1"1/2	1540	1"1/2	1690	1"1/2
P-DHW outlet	[mm]	1540	1"	1640	1"	1790	1"
Q-Upper sleeve	[mm]	1850	1"	1975	1"	2030	1"

Construction Material
The tank is constructed in S 235 JR steel according to DIN 4753 standard. Equipped with a corrugated V4A stainless steel coil for Domestic Hot Water production.

Insulation
Fully insulated with removable rigid polyurethane foam caps, chlorofluorocarbon-free (CFC), self-extinguishing.





BPU TANK



OVERSIZE HEAT EXCHANGER

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-PERFORMANCE

DHW TANK + BUFFER TANK FOR HEAT PUMP
WITH POSSIBLE SOLAR INTEGRATION

High thermal output with heat pump for DHW and system technical water, with double volume all in a single tank.

Single OVERSIZE coil + extractable solar heat exchanger.

BPU – Range of tanks with separate double volume, suitable for DHW production in the upper tank and for space heating/cooling in the lower volume. Equipped with a single fixed internal coil in the upper tank for energy transfer with heat pump. The lower tank is suitable for containing hot and cold technical water, thus adapted for summer air conditioning. The internal coil, positioned in the lower part of the upper tank, is designed to have maximum exchange efficiency with low-temperature flow heat pump collectors. Suitable for domestic use because internally vitrified in a furnace at 850°C in compliance with DIN 4753. Possibility of inserting an external flange heat exchanger for energy transfer with solar field. Compliant with Directive 2009/125/EC, in terms of eco-design, and with Directive 2010/30/EU, in terms of energy labeling, which came into force on September 26, 2015, and suitable for the minimum threshold limits in class C, which the same Directives impose from September 26, 2017.

BPU

One fixed heat exchanger in the upper tank, provision for electric heater or possible solar tube bundle heat exchanger. Lower buffer tank for technical water containment, non-removable insulation directly foamed with white PVC external finish.

			CONTINUOUS PRODUCTION[1]				VALUES ACCORDING TO STANDARD DIN 4708[2]				CONTINUOUS DRAW IN 60 MINUTES[4]
	SIZE	USEFUL VOL.	Tm= 55 °C		Tm= 60 °C		NL	PEAK withdrawal in 10 minutes[3]		Subsequent withdrawal after 30 min tank charging time[5]		Tm = 55°C
			[kW]	[l/h]	[kW]	[l/h]		[liters]	[l/min]	[liters]	[l/min]	
UPPER	300	205 (DHW only)	12,6	310	36,0	884	2,2	204	20,4	81	18,5	561
	500	371 (DHW only)	18,5	454	52,8	1297	6,0	326	32,6	221	27	865

NOTE: The auxiliary lower coil of the BPU tank, to be ordered separately, can be connected exclusively with a solar field.

	SIZE	MAXIMUM NUMBER OF INSTALLABLE SOLAR COLLECTORS[3]				
		X-RAY 10	X-RAY 15	UNIKO21	KSF26	ECLIPSE 2
SOLAR	300	2	1	2	2	3
	500	2	1	2	2	4

	BPU 300	BPU 500
Energy Class	**C**	**C**
CODE	**3010703001**	**3010705001**
AUXILIARY SOLAR HEAT EXCHANGER TO BE INSERTED IN FLANGE (DHW TANK)		
CODE	**1090000184**	

1. Data referring to temperature conditions TDHW = 45°C; TCWI = 10°C; Tb = 58°C
2. Data referring to temperature conditions TDHW = 45°C; TCWI = 10°C; Tm = 58°C; Tb = TCWI + 40°C
3. Data referring to the NL coefficient
4. Data calculated at power with Tm= 55°C and with Tb=60°C; TCWI=10°C; TDHW=45°C
5. The value is indicative and variable depending on the system's usage conditions

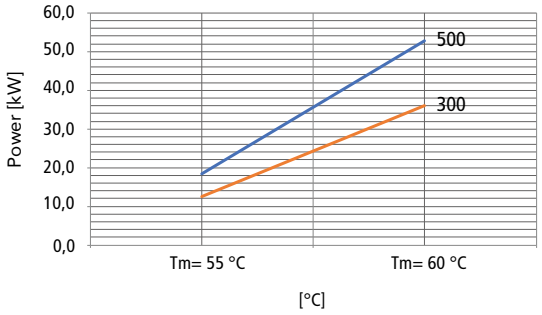
Tm = Heat generator flow temperature (inlet to the heat exchanger)
Tr = Heat generator return temperature (outlet from the heat exchanger)
TDHW = Domestic hot water temperature
TCWI = Cold water inlet temperature
Tb = Tank temperature

BPU TANK-TECHNICAL DATA

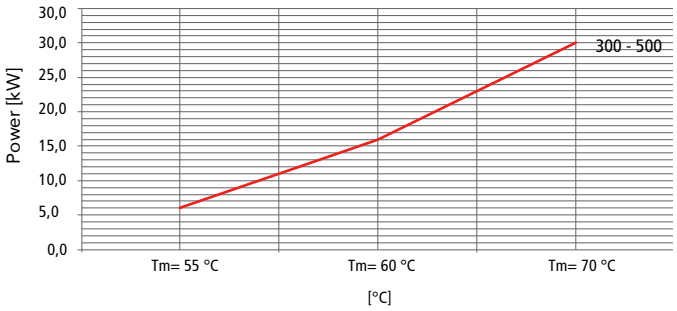
ERP	u.m.	BPU 300	BPU 500
Useful Volume	[l]	295	525
Volume Tecnico	[l]	71	127
Volume Sanitario	[l]	205	371
Heat Loss	[W]	91	108
Heat Loss	[kWh/24h]	2,20	2,60
Energy Efficiency Class	[-]	C	C

PRESSURES	u.m.	BPU 300	BPU 500
MAX Solar Heat Exchanger	[bar]	10	10
MAX Storage Tank	[bar]	3	3
TEMPERATURE	**u.m.**	**BPU 300**	**BPU 500**
MAX Solar Heat Exchanger	[°C]	95	95
MAX Storage Tank	[°C]	95	95

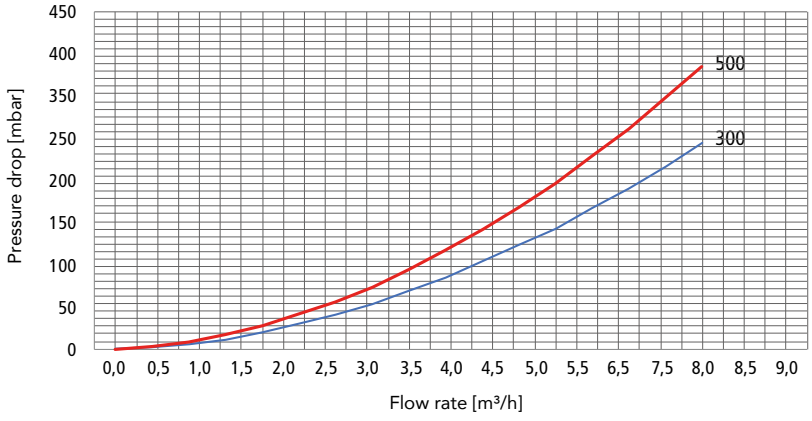
Heat Pump Heat Exchanger Power



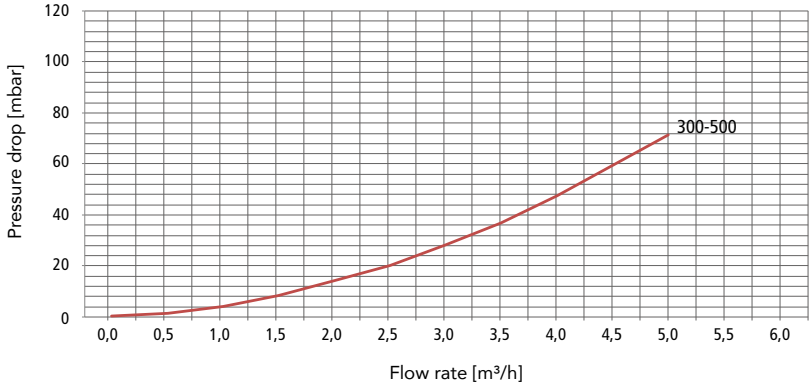
Auxiliary Solar Heat Exchanger Power



Heat Pump Heat Exchanger Pressure Losses

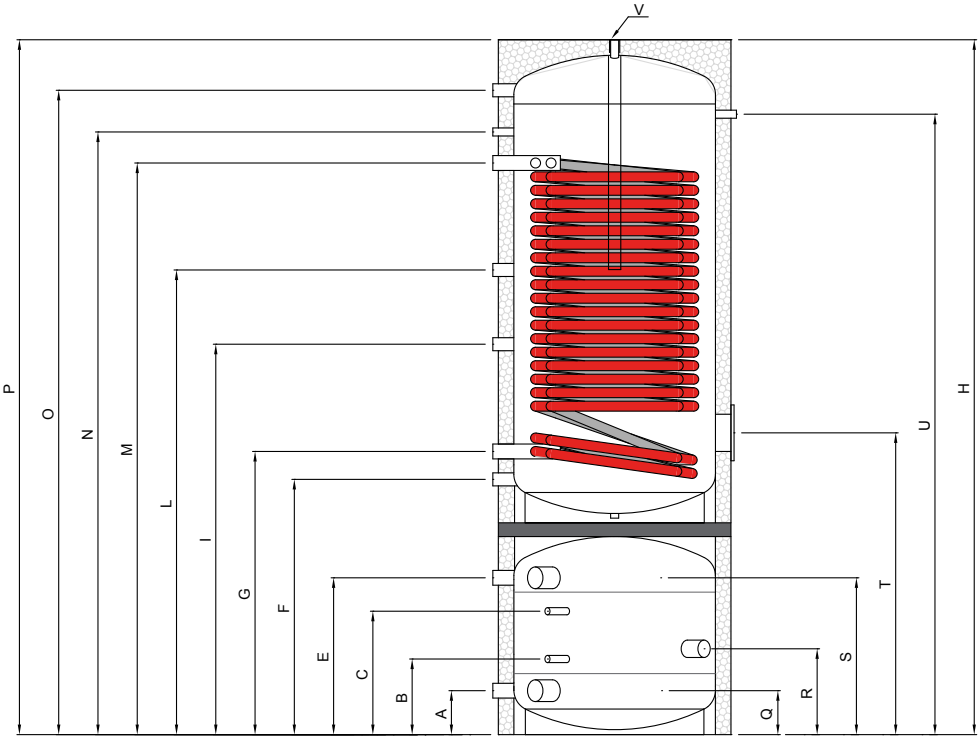


Auxiliary Solar Heat Exchanger Pressure Losses



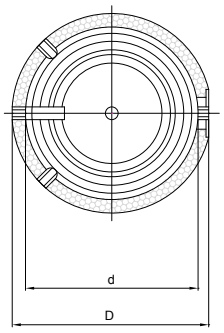
SIZE	u.m.	BPU 300	BPU 500
Heat pump heat exchanger content	[l]	19,0	27,0
Auxiliary solar heat exchanger content	[l]	-	-
Heat pump heat exchanger surface	[m^2]	3,0	4,4
Auxiliary solar heat exchanger surface	[m^2]	1,5	1,5
Empty weight	[Kg]	102	156
Tilt height	[mm]	1950	2150
H-Total height	[mm]	1840	2000
D-Diameter with insulation	[mm]	610	760
d-Diameter without insulation	[mm]	-	-
Insulation thickness	[mm]	55	55

CONNECTIONS	u.m.	BPU 300		BPU 500	
A-System side sleeve	[mm]	115	1"1/4	140	1"1/4
B-Sensor pocket	[mm]	190	1/2"	215	1/2"
C-Sensor pocket	[mm]	340	1/2"	325	1/2"
D-Diameter with insulation	[mm]	610		760	
E-System side sleeve	[mm]	415	1"1/4	400	1"1/4
F-Cold water inlet	[mm]	625	1"1/4	645	1"1/4
G-Cold outlet heat pump heat exchanger	[mm]	720	1"1/4	755	1"1/4
H-Height with insulation	[mm]	1840		2000	
I-Lower sensor pocket	[mm]	980	1/2"	1000	1/2"
L-Upper sensor pocket	[mm]	1180	1/2"	1300	1/2"
M-Hot inlet heat pump heat exchanger	[mm]	1400	1"1/4	1505	1"1/4
N-Recirculation sleeve	[mm]	1490	1/2"	1650	1/2"
O-Hot water outlet	[mm]	1700	1"1/4	1750	1"1/4
P-Height without insulation	[mm]	1840		1900	
Q-Heat pump side sleeve	[mm]	115	1"1/4	140	1"1/4
R-Electric heater in sleeve (ESH)	[mm]	215	1"1/2	240	1"1/2
S-Heat pump side sleeve	[mm]	415	1"1/4	400	1"1/4
T-Electric heater in flange / SOLAR HEAT EXCHANGER (RDU)	[mm]	775	Ø 180/120	810	Ø 180/120
U-Thermometer	[mm]	1630	1"1/2	1750	1"1/2
V-Magnesium anode	[mm]	1840	1"1/4	1900	1"1/4



Construction Material
The DHW tank is constructed in S 235 JR steel, internally vitrified, double layer, according to DIN 4753 standard.
The technical tank is constructed in S 235 JR steel according to DIN 4753 standard.

Insulation
Fully insulated with rigid polyurethane foam directly applied, chlorofluorocarbon-free (CFC), self-extinguishing and NON-removable



JET HEAT PUMP

MAXIMUM QUALITY AND TECHNOLOGY



Images are for illustrative purposes only. Products may be modified depending on availability.

WARRANTY

WARRANTY 2 YEARS

APPLICATIONS

HI-PERFORMANCE DOMESTIC HOT WATER TANK WITH HEAT PUMP

Technologically advanced heat pump with high performance and quiet operation. With solar coil.

JET-AIR/WATER high-temperature heat pump for the production of domestic hot water, with a 300-liter tank. The JET 300S heat pumps, thanks to the thermal energy of the air, allow maximum energy efficiency while protecting the environment; higher performance is enabled by the dedicated heat exchanger, which also combines solar energy. The advanced technology they feature, ease of installation, and quiet operation complete the advantages of JET heat pumps.

INNOVATIVE CONDENSER

The JET condenser completely wraps around the tank, allowing a better energy exchange compared to competitors.

INTELLIGENT PHOTOVOLTAIC AND SOLAR CONTROL

JET heat pumps are SG READY (Smart Grid Ready), and therefore able to communicate with the photovoltaic system, significantly increasing self-consumption. With the solar thermal system active, it's possible to completely deactivate the heat pump and maximize the integration of solar thermal energy.

ELECTRIC ANODE

JET abandons the concept of the magnesium anode; it is therefore equipped with an electric anode that ensures minimal maintenance.

65°C SETTING

With JET heat pumps, you have the possibility to set a temperature of 65°C even without the aid of the electric heater.

CONTINUOUS PRODUCTION SENSOR CONTROL

JET heat pumps, thanks to an integrated sensor in the tank communicating with the practical front display, allow instant calculation of the total liters usable at a temperature of 40°C.

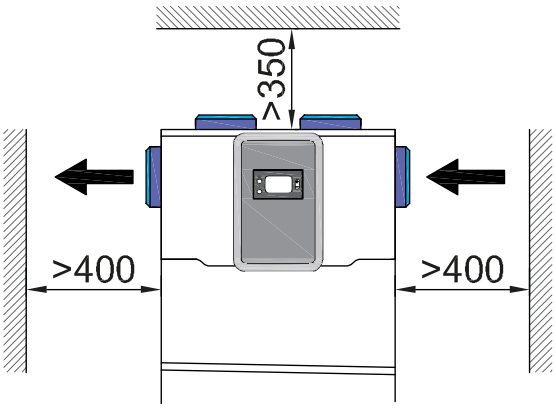
	JET 300 S
Energy Class	A+/XL
CODE	3010030024

***To use vertical air ducts, the AIR DEVIATION SET is mandatory-Code 1030902912**

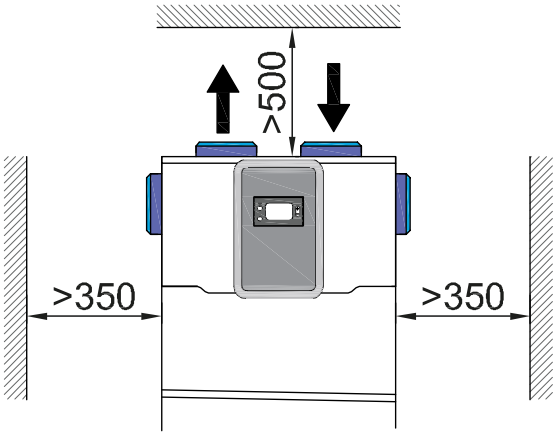
JET HEAT PUMP TANK-TECHNICAL DATA

PERFORMANCE DATA	u.m.	JET 300 S
Energy efficiency class/load profile	-	A+/XL
Max. quantity of water usable at 40°C (EN 16147-internal air)	[l]	381
Heating time (EN 16147-internal air)	[h]	9,83
COP (EN 16147-A20)	-	3,67
COP (EN 16147-A7)	-	2,99
Allowable pressure	[bar]	6
Max. allowable tank temperature	[°C]	70
Max. allowable solar heat exchanger temperature	[°C]	90
Sound power (without air ducts)	[dBA]	45
Air flow	[m3/h]	350
Electrical power supply	[V]/[Hz]	230/50
Electrical power absorbed only heat pump	[kW]	0,65
Electrical power absorbed h.p. + electric heater	[kW]	2,15
Refrigerant fluid	-	R134A
Environmental operating limits in heat pump	[°C]	da -8 a +42
Minimum installation room volume (without ducting)	[m3]	13

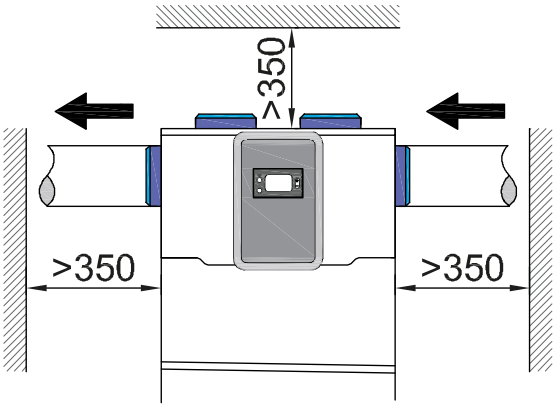
MINIMUM DISTANCES TO BE OBSERVED FOR CORRECT INSTALLATION OF THE JET HEAT PUMP TANK

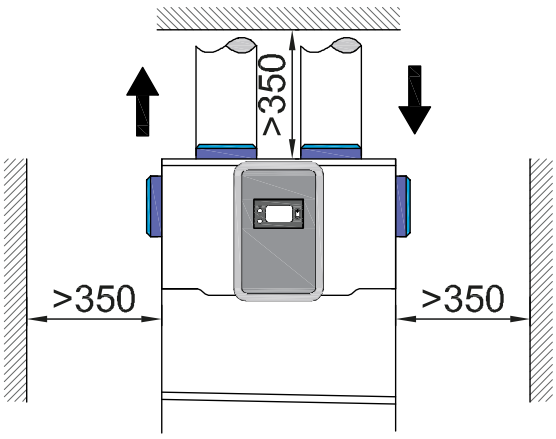


Minimum Room Size: 13 m³

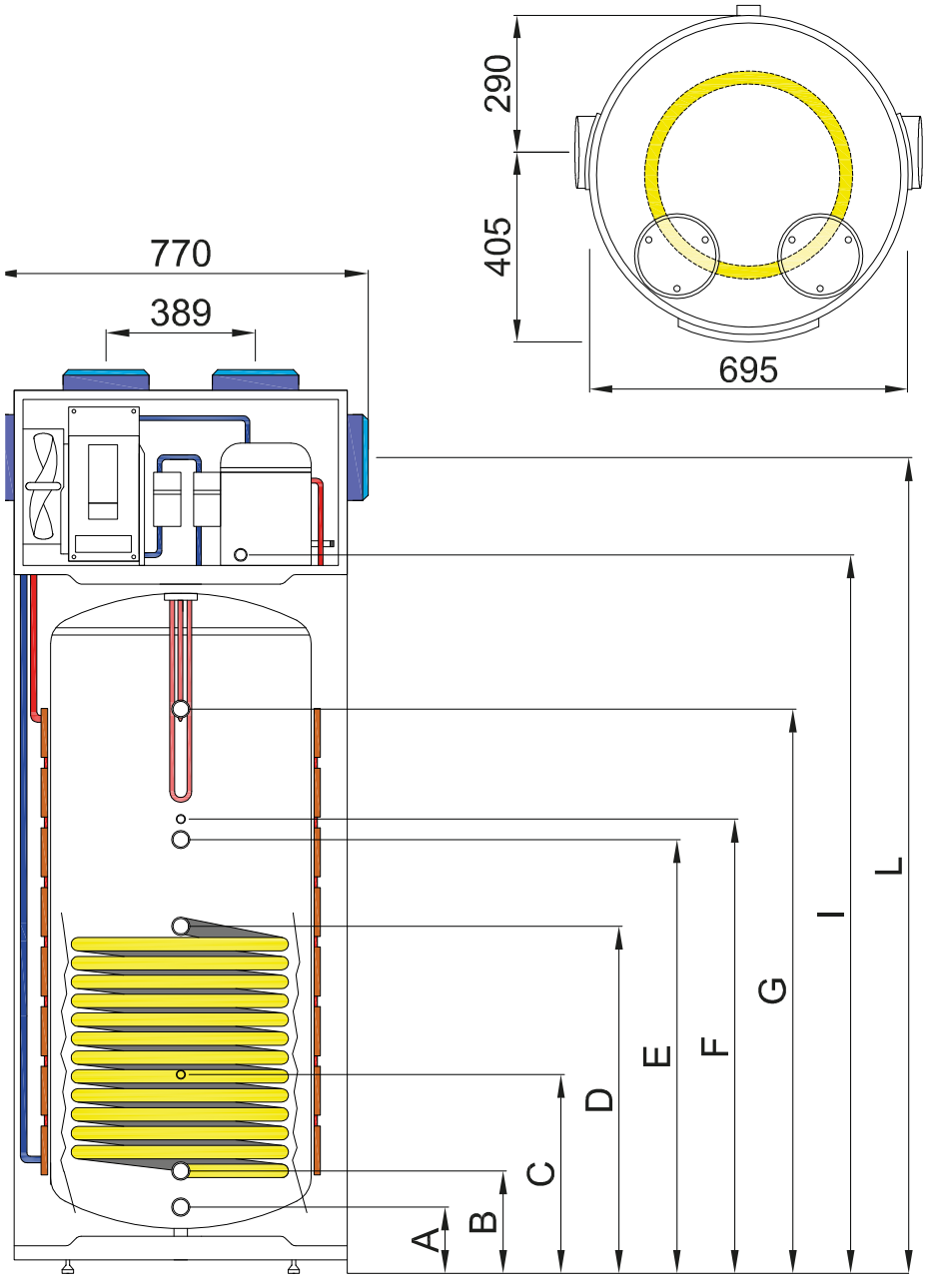


Minimum Room Size: 13 m³





DIMENSIONAL DATA	u.m.	JET 300 S
Domestic hot water content	[l]	291
Empty weight	[kg]	156
Solar heat exchanger content	[l]	10
Solar heat exchanger surface	[m2]	1,3
Insulation thickness	[mm]	50
A-Cold domestic water inlet	[mm]	237/1"
B-Solar heat exchanger outlet	[mm]	340/1"
C-Sensor pocket	[mm]	xxx/½"
D-Solar heat exchanger inlet	[mm]	750/1"
E-Domestic water recirculation	[mm]	926/½"
F-Sensor pocket	[mm]	xxx/½"
G-Hot domestic water outlet	[mm]	1248/1"
H-Total height	[mm]	1916
Tilt height	[mm]	2034
I-Condensate drain	[mm]	1523/¾"
L-Air ducts	[mm]	1760/DN200



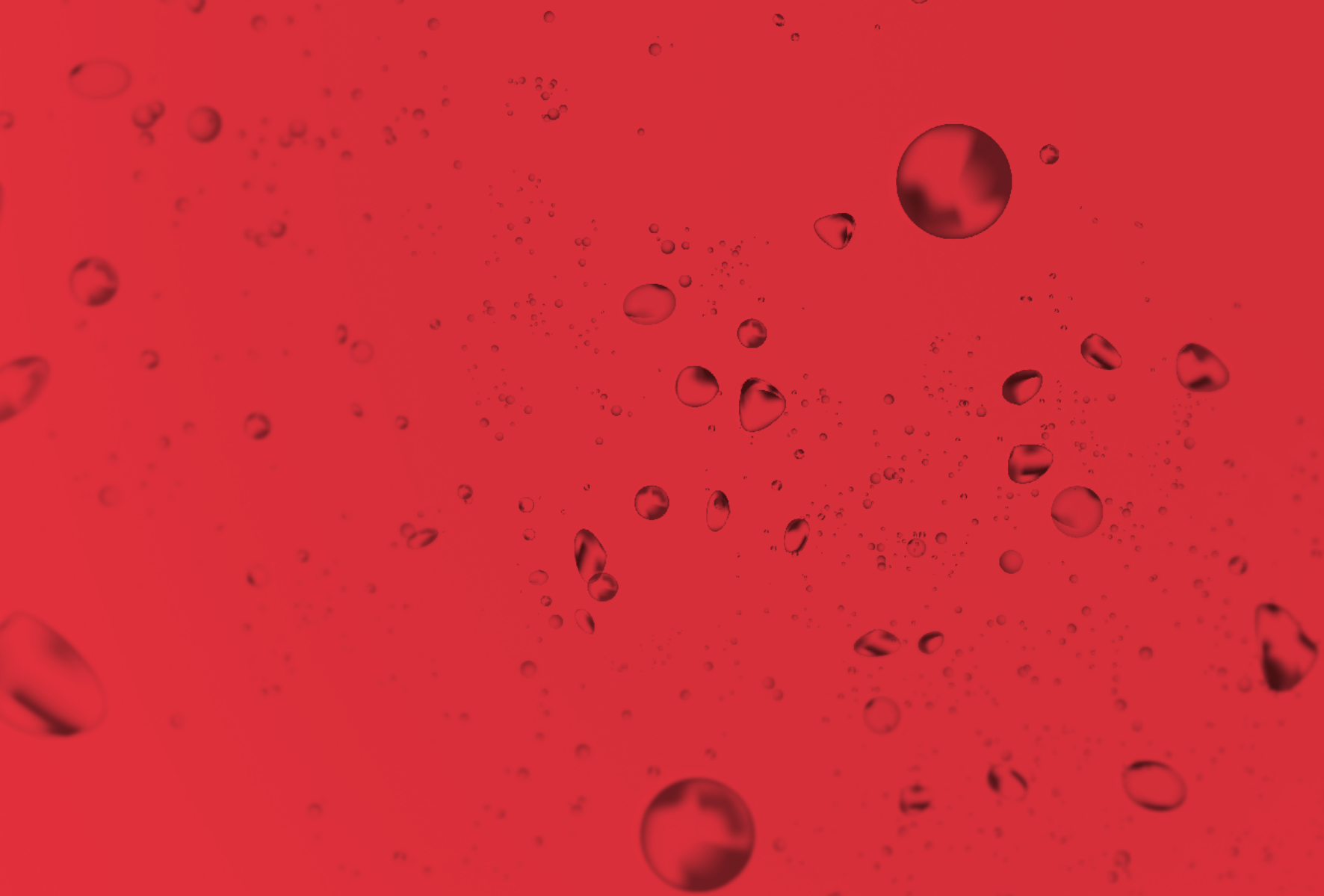
SERIES

INERTIAL MODULE FOR HEAT PUMPS

Dual function, hydraulic separator and 2-zone distribution manifold

Inertial module that plays a fundamental role within a heat pump thermal plant.





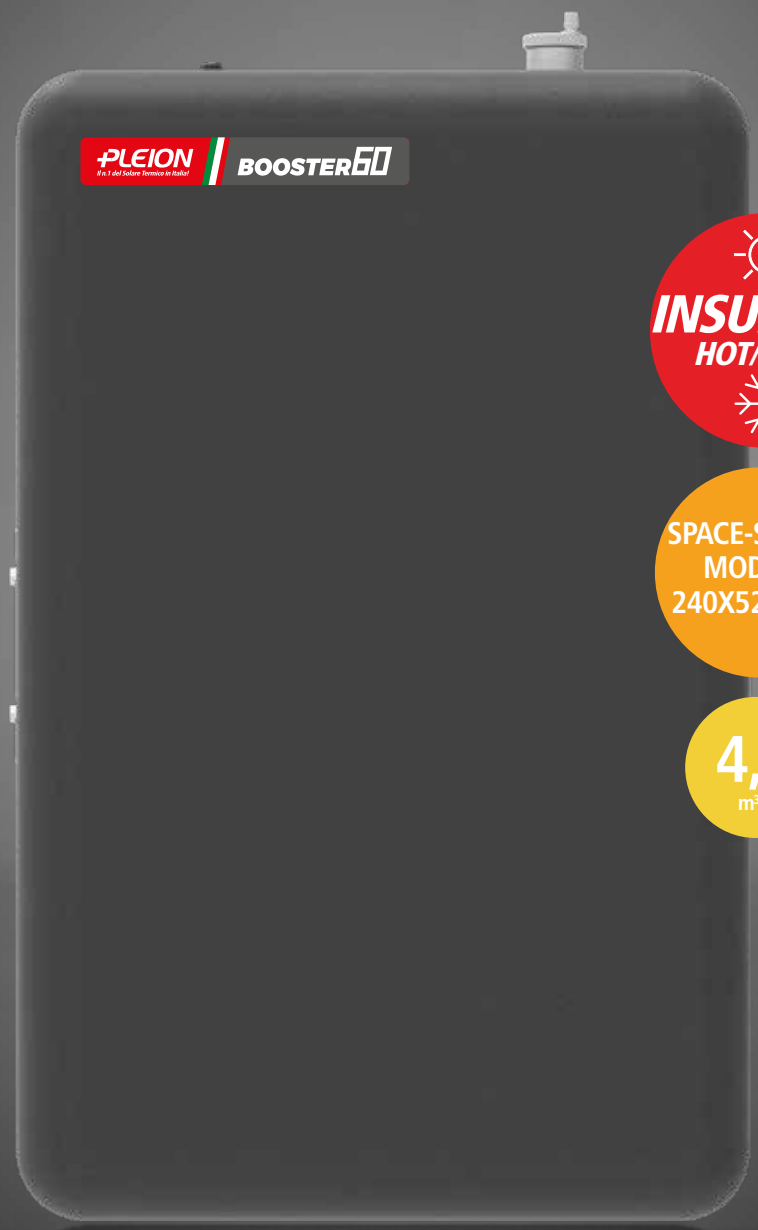
STORAGE TANKS AND
HOT WATER TANKS

INERTIAL MODULE

PLEION
The Sun is our Life!

INERTIAL MODULE FOR HEAT PUMPS

BOOSTER60



INSULATED HOT/COLD

SPACE-SAVING MODULE 240X520X860

4,5 m³/h

Images are for illustrative purposes only. Products may be modified depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

INERTIAL MODULE WALL-MOUNTED INERTIAL MODULE FOR HEAT PUMP

BOOSTER 60 is a new module that can perform the functions of hydraulic separator and distribution manifold for 2 zones.

BOOSTER 60-Booster60 is an inertial module that plays a fundamental role within a heat pump thermal plant. It is an ultra-compact container to be installed in series between the heat pump and the heating/cooling distribution system. Booster60 allows saving the energy produced and reusing it later when the heating system is not operating, clearly saving on the heating/cooling costs of the building itself.

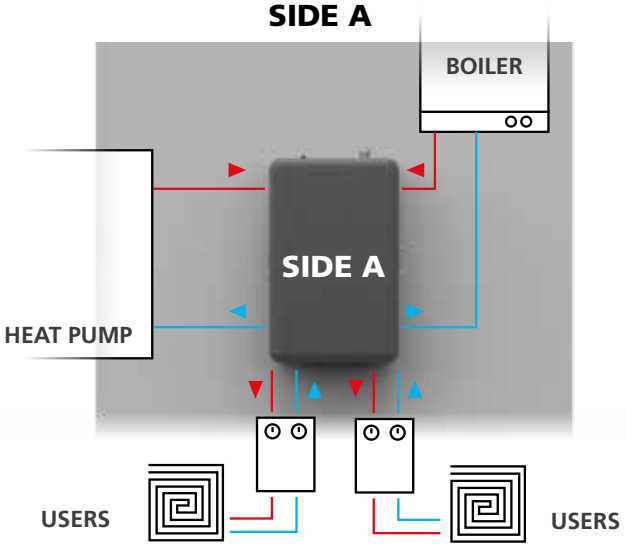
PROVIDES THERMAL INERTIA TO THE SYSTEM INCREASING THE EFFICIENCY AND LIFESPAN OF THE HEAT PUMP. The life and performance of a Heat Pump are influenced by the number of on and off cycles. Booster60 optimizes the operation of the heat pump by minimizing ON/OFF cycles. Booster60 allows the Heat Pump to work for time intervals long enough to reduce the number of on and off cycles; at the same time, the accumulated thermal energy temporarily meets the demands of the distribution system while the machine is not working. E**NSURES HYDRAULIC SEPARATION OF FLOWS BETWEEN HEAT PUMP AND DISTRIBUTION SYSTEM.** Booster60 allows the heat pump circuit and the system circuit to be independent from each other, optimizing the work of the circulation pumps and thus allowing the heat pump to work efficiently. Its internal design has been studied to perform the functions of hydraulic separator and distribution manifold for 2 system zones. **ALLOWS TO MANAGE DEFROSTING IN AIR/WATER HEAT PUMPS WITHOUT DECREASING COMFORT INSIDE THE BUILDING**. Booster60 can be used in both heating and cooling systems. In the latter case, the installation of Booster60 avoids the danger of a comfort drop (especially with fan coils) during the evaporator defrosting cycles of most air/water heat pumps.

BENEFITS

- Reduced machine wear
- Optimization of thermal energy management
- Optimized operating cycles
- Customized solution
- Reduction of compressor starts
- Heat pumps operating at full capacity
- Improved system performance

SPACE-SAVING SOLUTION
Super compact 240x526x826 mm with wall installation

TANDARD CONFIGURATION
SIDE A



	BOOSTER 60	BOOSTER 60-Conf. 10Pz	BOOSTER 60-Conf. 20Pz
CODE	3010802002	3010802003	3010802004

BOOSTER 60

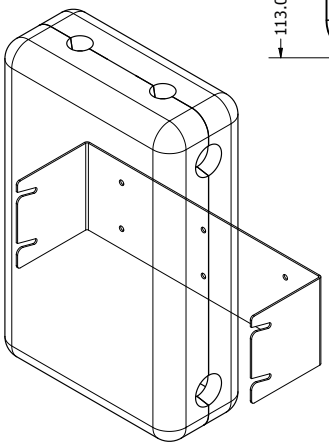
ERP	u.m.	BOOSTER 60
Useful Volume	[l]	60

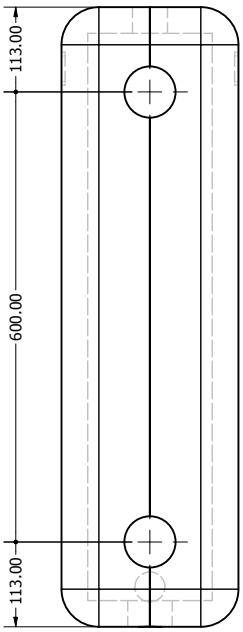
PRESSURES	u.m.	BOOSTER 60
Maximum operating pressure	[bar]	3
TEMPERATURE	u.m.	BOOSTER 60
MAX Storage	[°C]	100°C

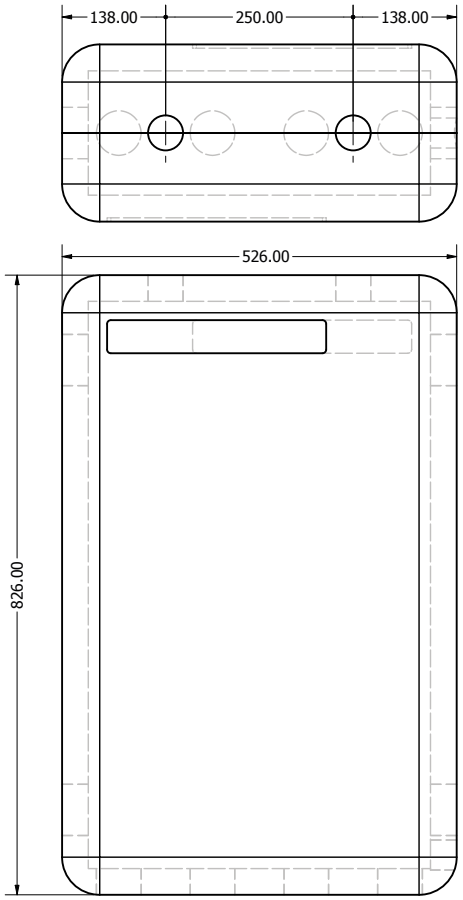
4 x 1" connections for radiant system pump groups

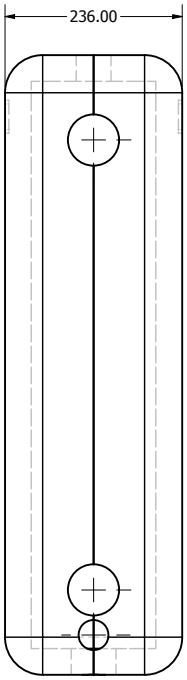


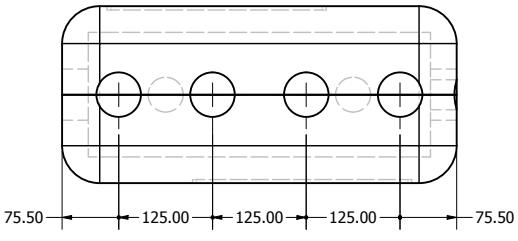




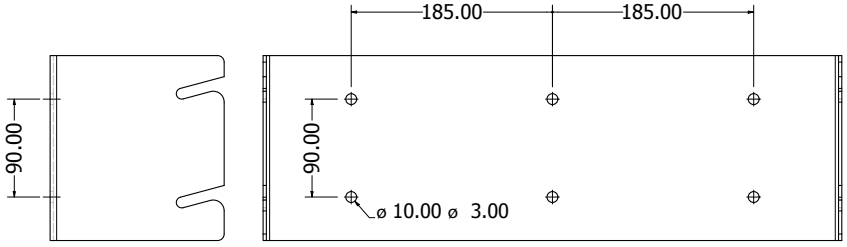


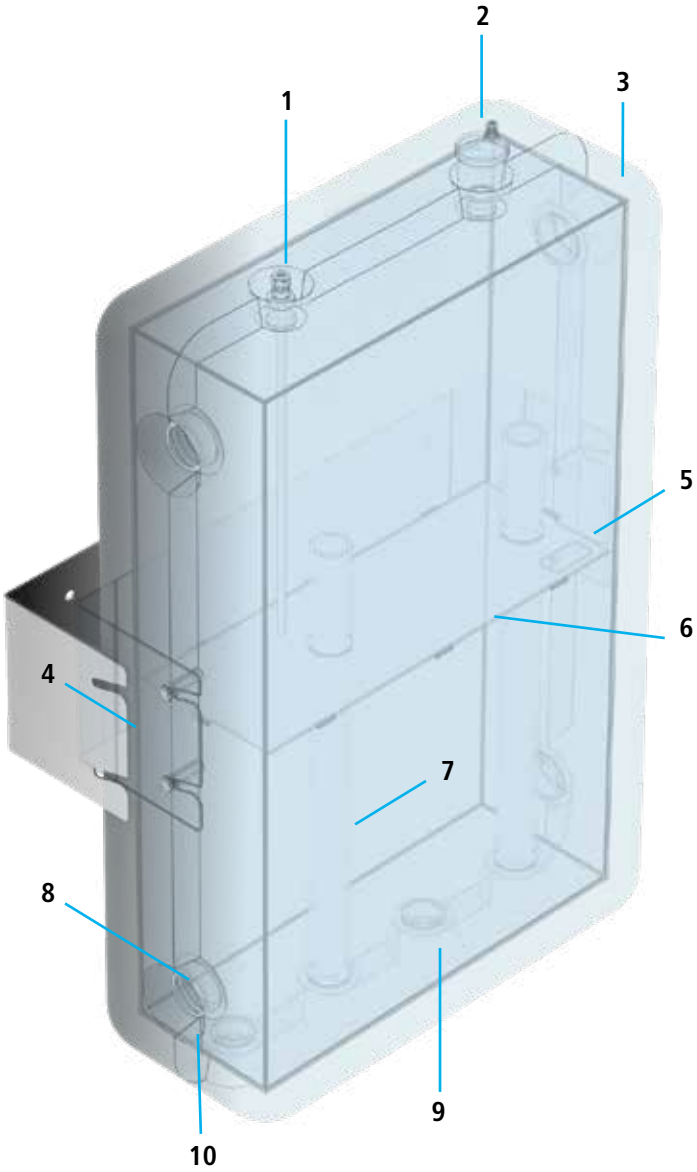






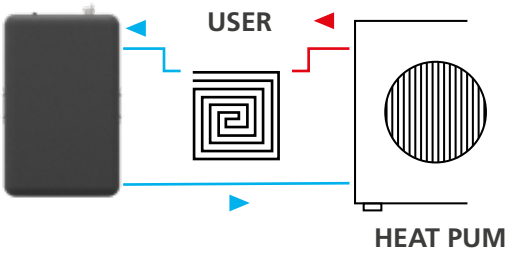
DIMENSIONS	u.m.	BOOSTER 60
H-Total height	[mm]	826
L-Total width	[mm]	526
S-Thickness	[mm]	240
Empty weight	[Kg]	30

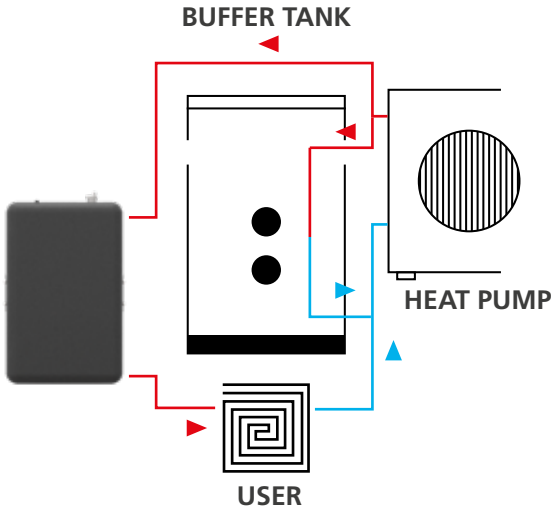


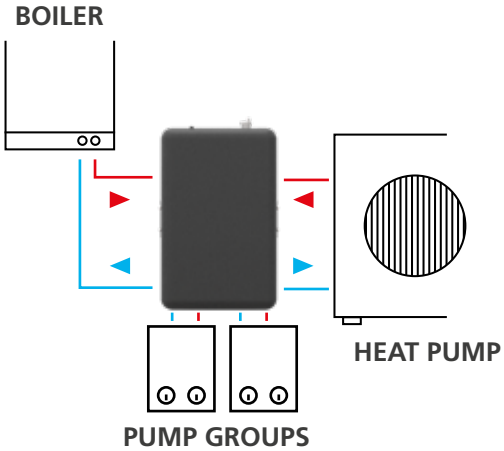


COMPONENTS AND CONNECTIONS	
1	Temperature sensor pocket ½" F
2	Automatic air vent valve
3	EPP insulation λ 0.034 W/mK, 30g/l, 35 mm thickness
4	Wall brackets for wall installation
5	Communication between chambers
6	Separation septum between chambers
7	Internal draw tubes
8	4 x 1"¼ F connections for primary sources
9	4 x 1" F connections for pump groups for radiant system
10	1 x ½" M connection for drain

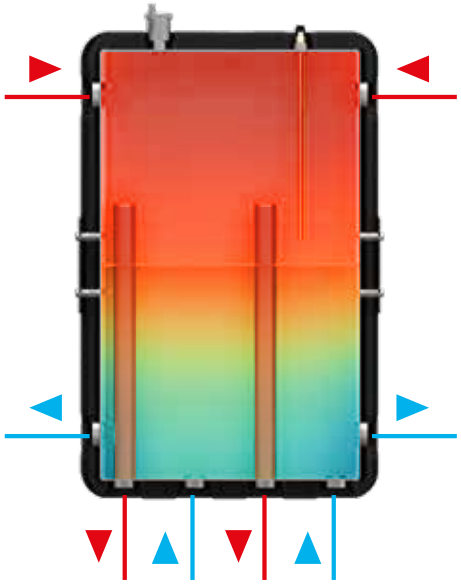
APPLICATION EXAMPLES WITH HEAT PUMP







STRATIFICATION



SERIES

HI-COMPETITION

An innovative choice excellent performance for both DHW and HEATING INTEGRATION.

The HI-COMPETITION range offers reliable tanks, always available in stock, with one of the most competitive quality/price ratios on the market and a complete range to satisfy any consumption need.





STORAGE TANKS
AND HOT WATER TANKS

HI-COMPETITION

PLEION
The Sun is our Life!

BR-ZN HOT WATER TANK



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

Hot water tank for DHW, multipurpose and versatile with internal vitrification. Single coil.

BR-ZN-Range of single coil hot water tanks for storing hot water for domestic uses. Designed to have maximum efficiency, with the heat exchanger positioned in the lower part and draw-offs for domestic use in the upper part. Suitable for domestic use with internal titanium enameling, according to DIN 4753-3 and anodic protection (DIN 4753-6). The wide range satisfies any consumption requirement making it suitable for use in residential, condominium, and hotel systems. The use of premium materials and meticulous workmanship in every detail allows for a high-quality product even at affordable prices. Compliant with directives in terms of eco-design and the directive in terms of energy labeling.

BR-ZN

One fixed heat exchanger, provision for electric heater on sleeve or central flange, rigid polyurethane insulation or directly foamed depending on size with external PVC finish

			CONTINUOUS PRODUCTION[1]					
	SIZE	USEFUL VOL [l]	Tm=50 °C		Tm=60 °C		Tm=70 °C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
LOWER	150	155	3.4	146	10.2	439	17.9	768
	200	191	3.8	163	11.4	490	20.0	858
	300	289	5.9	255	17.8	764	31.1	1336
	500	452	8.2	354	24.7	1063	43.3	1860
	800	776	11	463	32	1388	56	2429

Tm = Heat generator flow temperature (inlet to the heat exchanger).
Tb = Tank temperature
TDHW = Domestic hot water temperature
TCWI = Cold water inlet temperature
Tr = Heat generator return temperature = Tm-15°C.

1. Data referring to temperature conditions TDHW= 45°C; TCWI= 10°C.

	BR-ZN 150	BR-ZN 200	BR-ZN 300	BR-ZN 500	BR-ZN 800	BR-ZN 1000
Energy Class	**B**	**B**	**B**	**C**	**C**	**C**
CODE*	**1030301511**	**1030302151**	**1030303221**	**1030305211**	**1030308012**	**1030301001**

***For BR-ZN 1500 and BR-ZN 2000 (models not in catalog) please refer to Pleion technical office**

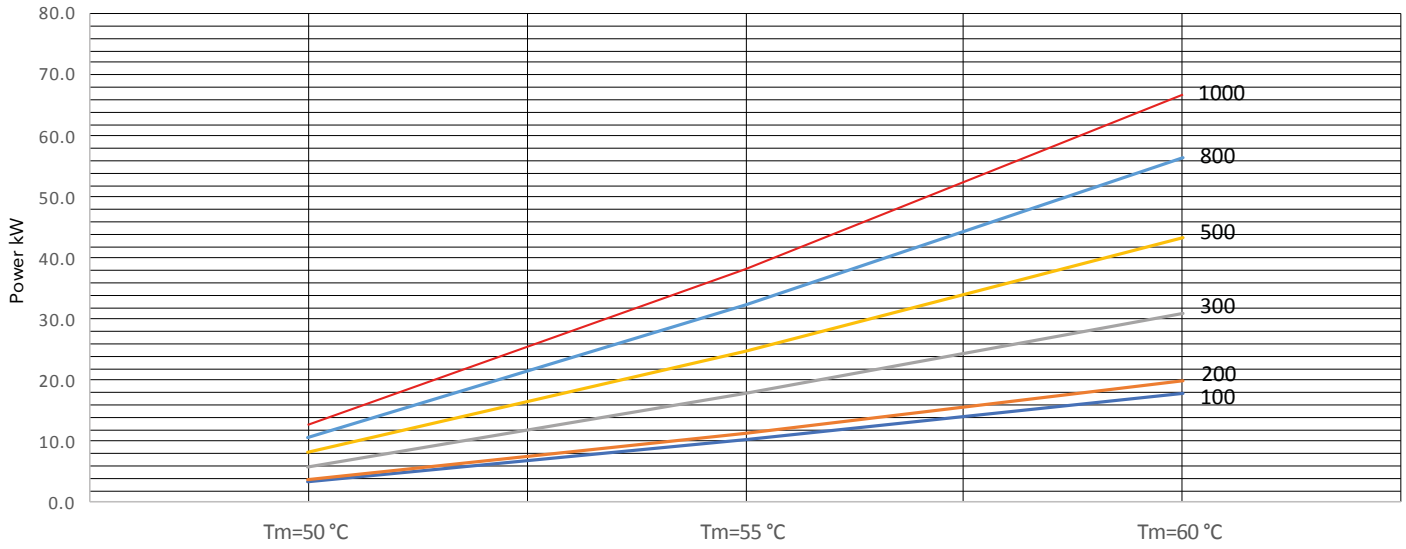
BR-ZN HOT WATER TANK-TECHNICAL DATA

ERP*	u.m.	BR-ZN 150	BR-ZN 200	BR-ZN 300	BR-ZN 500	BR-ZN 800	BR-ZN 1000
Useful Volume	[l]	155	191	289	452	776	968
Heat Loss	[W]	73	81	90	99	101	117
Heat Loss	[kWh/24h]	1.4	1.5	1.7	2.5	3.2	3.5
Energy Efficiency Class	[-]	B	B	B	C	C	C

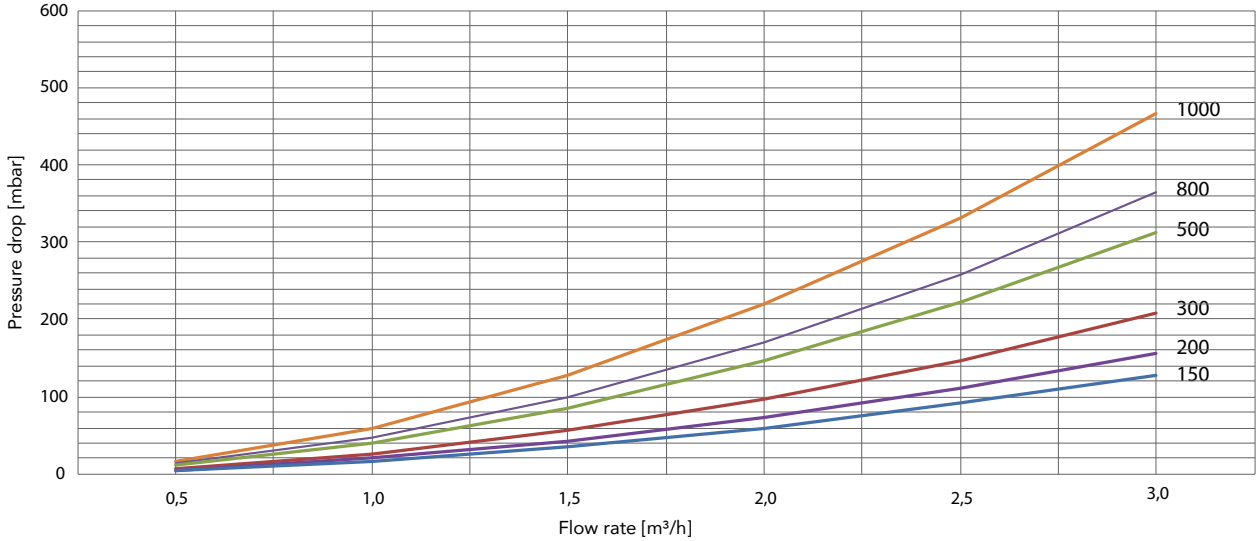
PRESSURES*	u.m.	BR-ZN 150	BR-ZN 200	BR-ZN 300	BR-ZN 500	BR-ZN 800	BR-ZN 1000
MAX Heat Exchanger	[bar]	6	6	6	6	6	6
MAX Tank	[bar]	10	10	10	10	10	10
TEMPERATURE	u.m.	BR-ZN 150	BR-ZN 200	BR-ZN 300	BR-ZN 500	BR-ZN 800	BR-ZN 1000
MAX Heat Exchanger	[°C]	95	95	95	95	95	95
MAX Tank	[°C]	95	95	95	95	95	95

***For BR-ZN 1500 and BR-ZN 2000 (models not in catalog) please refer to Pleion technical office**

Lower Heat Exchanger Power



Lower Heat Exchanger Pressure Losses



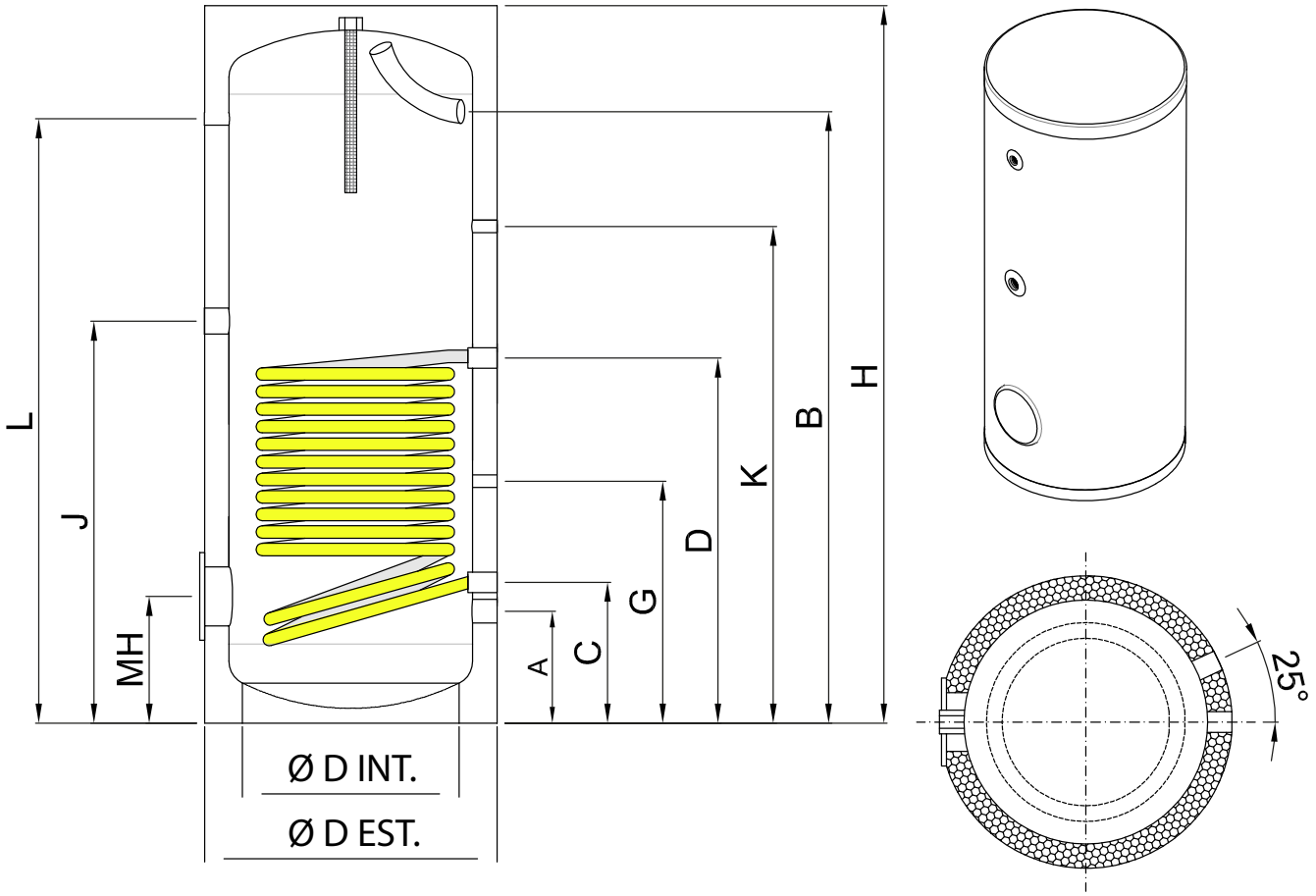
DIMENSIONS*	u.m.	BR-ZN 150	BR-ZN 200	BR-ZN 300	BR-ZN 500	BR-ZN 800	BR-ZN 1000
Heat exchanger surface	[m²]	0.85	0.95	1.48	2.06	2.69	3.18
Heat exchanger content	[lt]	5	6	9	12	23	26
Empty weight	[Kg]	68	78	109	147	223	264
Tilt height	[mm]	-	-	-	-	-	-
H-Total height	[mm]	1035	1230	1760	1900	1770	2100
Ø D EST.	[mm]	600	600	600	700	990	990
Ø D INT.	[mm]	500	500	500	600	850	850
Insulation thickness	[mm]	50	50	50	50	70	70

CONNECTIONS*	u.m.	BR-ZN 150		BR-ZN 200		BR-ZN 300		BR-ZN 500		BR-ZN 800		BR-ZN 1000	
A-Cold domestic water inlet	[mm]	242	1"	242	1"	242	1"	238	1"	331	1" 1/2	331	1" 1/2
B-Hot domestic water outlet	[mm]	787	1"	982	1"	1512	1"	1658	1"	1372	1" 1/2	1727	1" 1/2
MH-Lower flange	[mm]	287	Ø 180	287	Ø 180	287	Ø 180	283	Ø 180	459	Ø 300	459	Ø 300
C-Lower heat exchanger outlet	[mm]	242	1"	242	1"	242	1"	238	1"	331	1" 1/2	331	1" 1/2
D-Lower heat exchanger inlet	[mm]	602	1"	647	1"	872	1"	913	1"	936	1" 1/2	1046	1" 1/2
G-Sensor pocket 1	[mm]	422	1/2"	445	1/2"	557	1/2"	576	1/2"	634	1/2"	689	1/2"
J-Electric heater in sleeve	[mm]	652	1" 1/2	694	1" 1/2	1012	1" 1/2	993	1" 1/2	994	1" 1/2	1154	1" 1/2
K-Domestic water recirculation	[mm]	605	3/4"	735	3/4"	1088	3/4"	1184	3/4"	1025	3/4"	1262	3/4"
L-Thermometer	[mm]	787	1/2"	982	1/2"	1512	1/2"	1658	1/2"	1372	1/2"	1727	1/2"

***For BR-ZN 1500 and BR-ZN 2000 (models not in catalog) please refer to Pleion technical office**

Note: -- not present in the size under examination

Construction Material
The tank is constructed in S235JR steel and internally vitrified according to DIN 4753-3 reference standard.
Insulation
Sizes from 150 to 500 liters-High efficiency insulation, with rigid PU, 50 mm thickness. NON-removable insulation. External PVC covering. Sizes from 800 to 1000 liters-High efficiency insulation, with soft PU, 70 mm thickness. Removable insulation



BR HOT WATER TANK



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-COMPETITION DHW STORAGE TANK-FOR BOILER

Large vitrified storage tank. Single coil.

BR-range of single coil storage tanks for domestic hot water storage. Designed for maximum efficiency, with the heat exchanger positioned in the lower section and domestic hot water extraction in the upper section. Suitable for domestic use as the interior is vitrified in an 850°C furnace in compliance with DIN 4753. The wide range satisfies any consumption requirement, making it suitable for use in residential buildings, condominiums, hotels, campsites, etc. Compliant with Directive 2009/125/EC for ecodesign requirements and Directive 2010/30/EU for energy labeling, which came into force on September 26, 2015. Meeting the minimum threshold limits in energy class C, imposed by the same Directives starting from September 26, 2017.

BR

One fixed heat exchanger, prepared for electric heating element on sleeve or central flange, insulation in rigid polyurethane or directly foamed in relation to the size with external white PVC finish.

			CONTINUOUS PRODUCTION[1]					
	SIZE	USEFUL VOL [l]	Tm=50 °C		Tm=60 °C		Tm=70 °C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
LOWER	1500	1450	13	559	40	1720	70	3010
	2000	1912	18	774	52	2236	92	3956
	3000	2900	22	946	63	2709	111	4773

Tm = Supply temperature from heat generator (at heat exchanger inlet).
1. Data referring to temperature conditions TDHW= 45°C ; TCWS= 10°C.

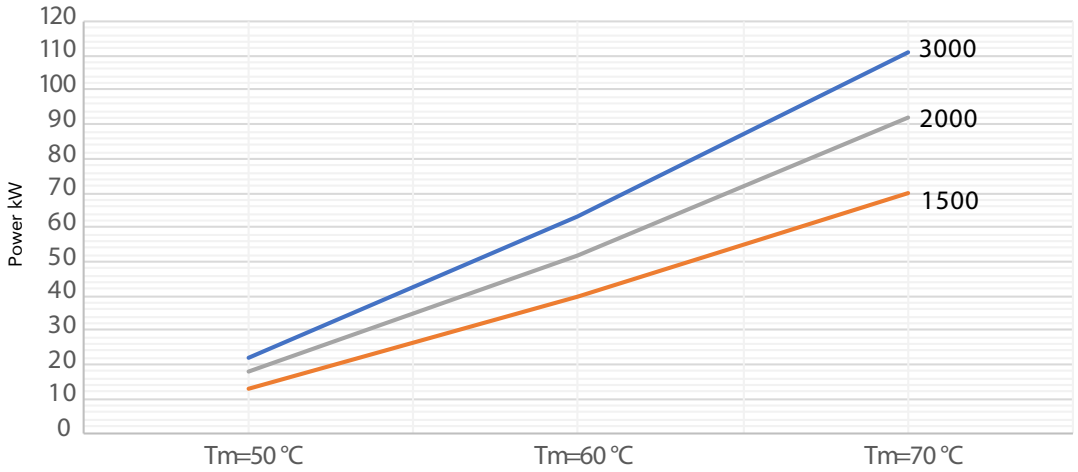
	BR 1500	BR 2000	BR 3000
Energy Class	**C**	**C**	**C**
CODE	**1030315071**	**1030320081**	1030330111

BR HOT WATER TANK-TECHNICAL DATA

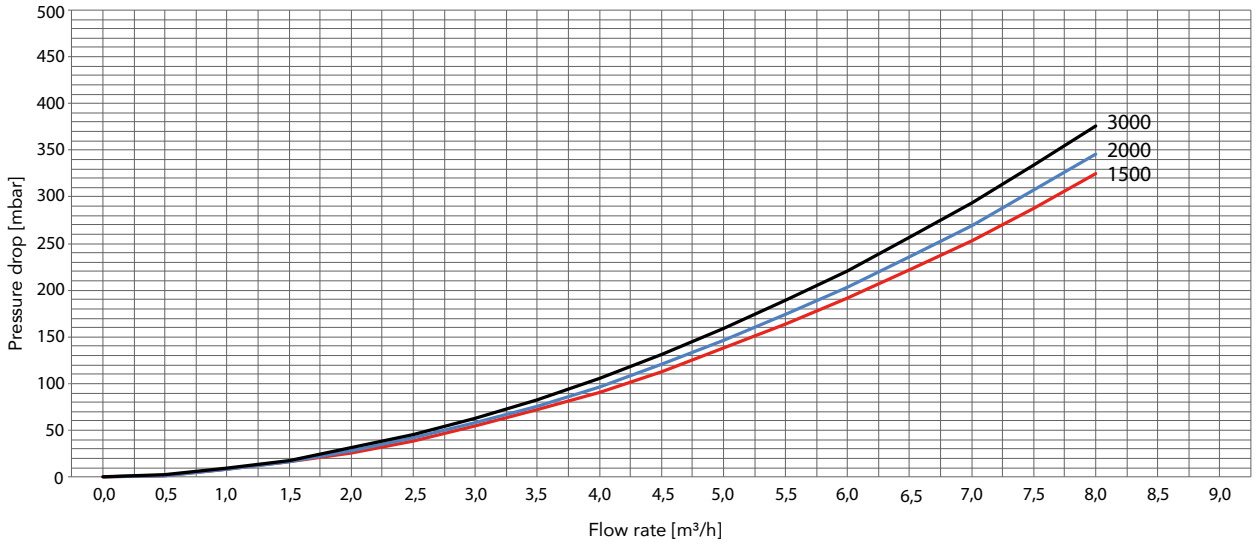
ERP	u.m.	BR 1500	BR 2000	BR 3000
Useful Volume	[l]	1450	1912	2900
Heat Loss	[W]	163	183	-
Heat Loss	[kWh/24h]	3.9	4.4	-
Energy Efficiency Class	[-]	C	C	C

PRESSURES	u.m.	BR 1500	BR 2000	BR 3000
MAX Heat Exchanger	[bar]	6	6	6
MAX Tank	[bar]	10	10	10
TEMPERATURE	u.m.	BR 1500	BR 2000	BR 3000
MAX Heat Exchanger	[°C]	95	95	95
MAX Tank	[°C]	95	95	95

Lower Heat Exchanger Power



Lower Heat Exchanger Pressure Drop

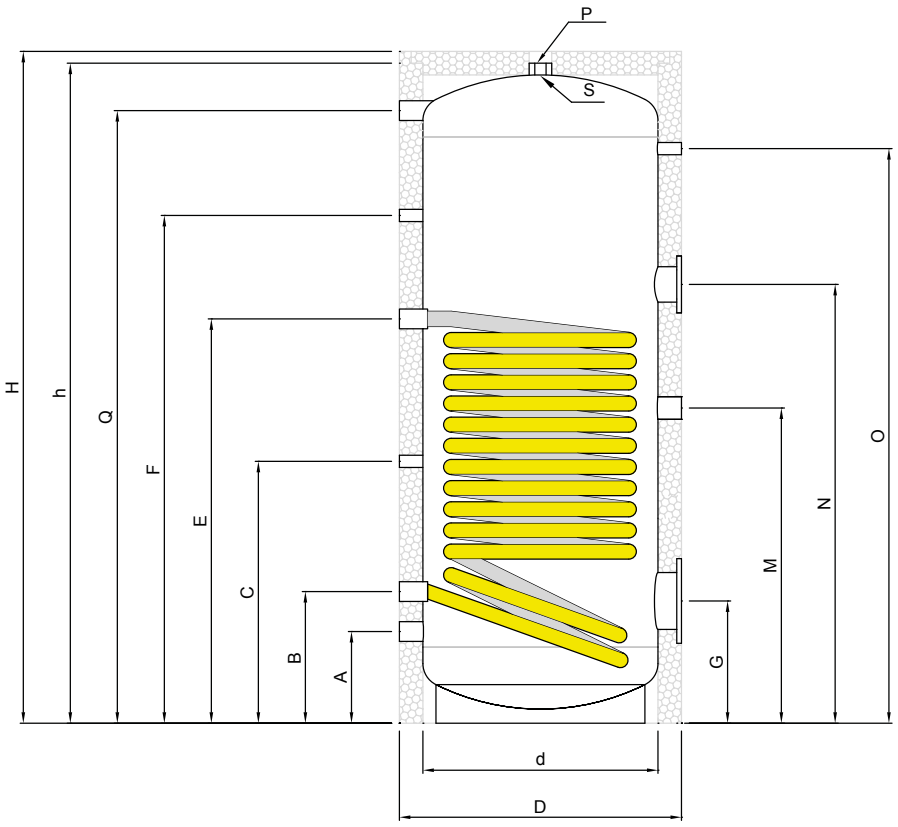


DIMENSIONS	u.m.	BR 1500	BR 2000	BR 3000
Heat exchanger surface	[m²]	3.3	4.4	5.3
Heat exchanger content	[lt]	28	38	45
Empty weight	[Kg]	420	510	-
Tilting height	[mm]	2240	2430	2810
H-Total height	[mm]	2240	2420	2800
D-Diameter with insulation	[mm]	1250	1350	1500
d-Diameter without insulation	[mm]	1000	1100	1250
Insulation thickness	[mm]	110	110	110

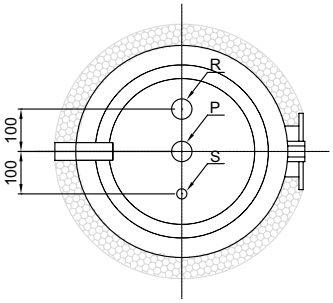
CONNECTIONS	u.m.	BR 1500		BR 2000		BR 3000	
A-Cold water inlet	[mm]	280	2"	290	2"	340	2"
B-Heat exchanger outlet cold side	[mm]	390	1"1/4	400	1"1/4	450	1"1/4
C-Sensor pocket	[mm]	620	1/2"	640	1/2"	885	1/2"
E-Heat exchanger inlet hot side	[mm]	1050	1"1/4	1170	1"1/4	1400	1"1/4
F-DHW recirculation	[mm]	1600	1"	1750	1"	1900	1"
G-Lower inspection flange (RDU)	[mm]	500	Ø290	520	Ø290	570	Ø290
H-Height with insulation	[mm]	2240		2420		2800	
h-Height without insulation	[mm]	2170		2350		2730	
M-Lower magnesium anode	[mm]	830	1"1/4	840	1"1/4	885	1"1/4
N-Upper inspection flange (RDU)	[mm]	1230	Ø180	1400	Ø180	1500	Ø180
O-Thermometer pocket	[mm]	1790	1/2"	1960	1/2"	2270	1/2"
P-Upper DHW outlet	[mm]	2170	1"1/4	2350	1"1/4	2730	1"1/4
Q-Side DHW outlet	[mm]	1890	2"	2060	2"	2390	2"
R-Upper magnesium anode	[mm]	2170	1"1/4	2350	1"1/4	2730	1"1/4

Note: [-] not present in the size being examined

Construction material
The storage tank is made of S235JR steel and internally vitrified according to DIN 4753-3 reference standard.
Insulation
High-efficiency insulation, with EPS, 110 mm thickness. Removable insulation. External PVC coating.



* Sleeve/connection not present in all tank sizes, please refer to the table above.



BRR-ZN HOT WATER TANK



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-COMPETITION SOLAR DHW STORAGE TANK-FOR BOILER

DHW storage tank, multi-purpose and versatile with internal vitrification. Double coil.

BRR-ZN-Range of double coil storage tanks for domestic hot water storage.

BRR-ZN-Designed for maximum efficiency, with solar heat exchanger positioned in the lower section and a second heat exchanger for boiler in the upper section. Suitable for domestic use with internal titanium enamel coating, according to DIN 4753-3 and anodic protection (DIN 4753-6). The wide range satisfies any consumption requirement, making it suitable for use in residential buildings, condominiums, and hotels. The use of premium materials and meticulous attention to detail allows for a high-quality product even at competitive prices. Compliant with directives for ecodesign and energy labeling.

BRR-ZN

2 fixed heat exchangers, prepared for electric heating element on sleeve or central flange, insulation in rigid polyurethane foam up to size 500 included, or in soft removable fleece, with external PVC finish.

			CONTINUOUS PRODUCTION[1]					
	SIZE	USEFUL VOL [l]	Tm=50 °C		Tm=60 °C		Tm=70 °C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
UPPER	200	187	2.5	107	7.4	320	13.0	560
	300	283	3.4	146	10.2	439	17.9	768
	500	443	3.8	165	11.5	495	20.2	867
	800	763	5.8	251	17.5	753	30.7	1318
	1000	952	6.0	256	17.9	769	31.3	1345

			CONTINUOUS PRODUCTION[1]					
	SIZE	USEFUL VOL [l]	Tm=50 °C		Tm=60 °C		Tm=70 °C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
LOWER	200	187	3.4	146	10.2	439	17.9	768
	300	283	5.1	218	15.2	655	26.7	1147
	500	443	8.2	354	24.7	1063	43.3	1860
	800	763	9.8	421	29.4	1264	51.5	2212
	1000	952	12.7	547	38.2	1641	66.8	2872

Tm = Supply temperature from heat generator (at heat exchanger inlet) Tr = Return temperature to generator = Tm-15°C Tb = Storage tank temperature TDHW = Domestic hot water temperature TCWS = Cold water supply temperature

1. Data referring to temperature conditions TDHW = 45°C; TCWS = 10°C

	BRR-ZN 200	BRR-ZN 300	BRR-ZN 500	BRR-ZN 800	BRR-ZN 1000
Energy Class	**B**	**B**	**C**	**C**	**C**
CODE*	**1030302141**	**1030303211**	**1030305201**	**1030308002**	**1030315012**

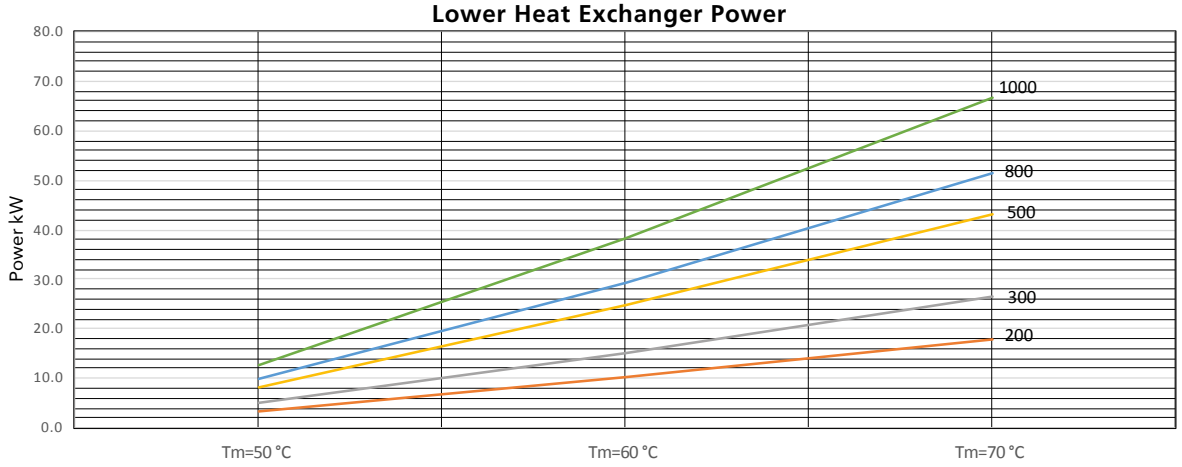
***For BRR-ZN 150 (model not in catalog) please contact Pleion technical office**

BRR-ZN HOT WATER TANK-TECHNICAL DATA

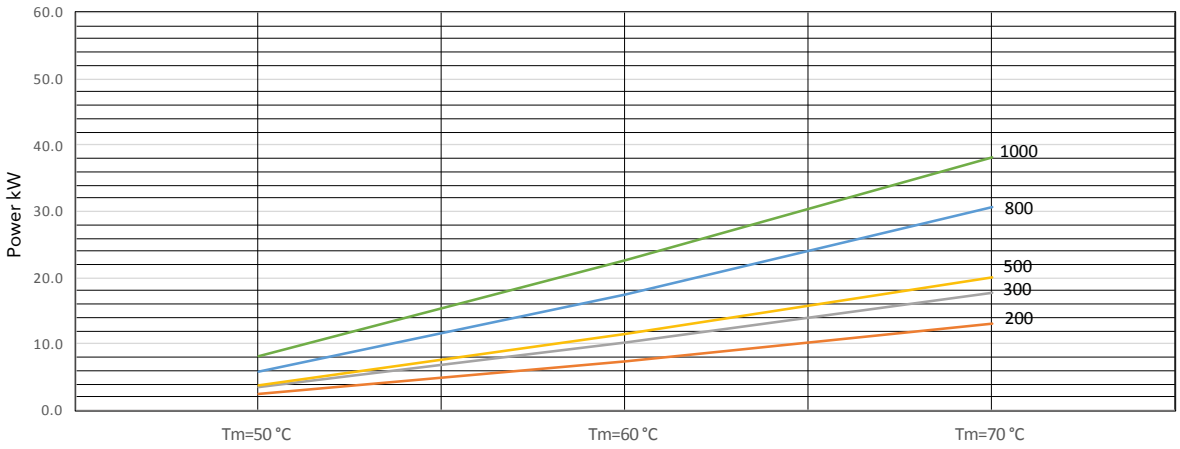
ERP	u.m.	BRR-ZN 200	BRR-ZN 300	BRR-ZN 500	BRR-ZN 800	BRR-ZN 1000
Useful Volume	[l]	187	283	443	763	952
Heat Loss	[W]	81	90	99	101	117
Heat Loss	[kWh/24h]	1.5	1.7	2.5	3.2	3.5
Energy Efficiency Class	[-]	B	B	C	C	C

PRESSURES	u.m.	BRR-ZN 200	BRR-ZN 300	BRR-ZN 500	BRR-ZN 800	BRR-ZN 1000
MAX Solar Heat Exchanger	[bar]	6	6	6	6	6
MAX Upper Heat Exchanger	[bar]	10	10	10	10	10
MAX Storage Tank	[bar]	200	300	500	800	1000
TEMPERATURE	u.m.	BRR-ZN 200	BRR-ZN 300	BRR-ZN 500	BRR-ZN 800	BRR-ZN 1000
MAX Solar Heat Exchanger	[°C]	95	95	95	95	95
MAX Upper Heat Exchanger	[°C]	110	110	110	110	110
MAX Storage Tank	[°C]	95	95	95	95	95

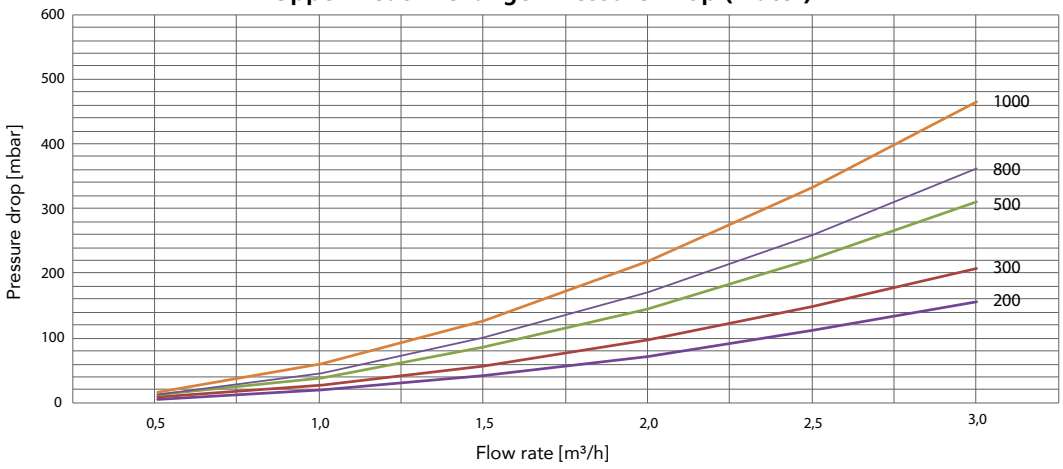
Lower Heat Exchanger Power



Upper Heat Exchanger Power



Upper Heat Exchanger Pressure Drop (water)



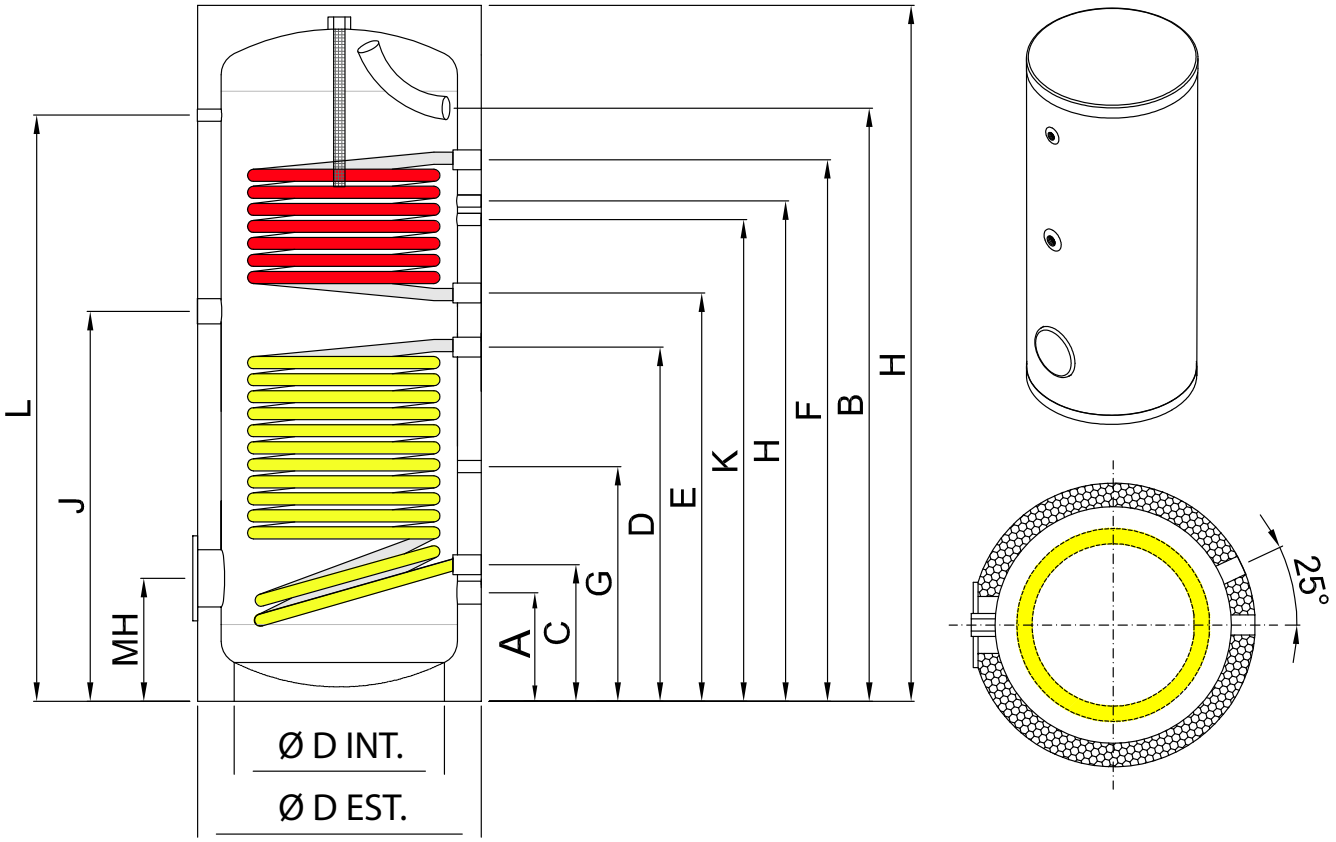
DIMENSIONS*	u.m.	BRR-ZN 200	BRR-ZN 300	BRR-ZN 500	BRR-ZN 800	BRR-ZN 1000
Lower heat exchanger surface	[m²]	0.85	1.27	2.06	2.45	3.18
Lower heat exchanger content	[lt]	5	8	10	13	20
Upper heat exchanger surface	[m²]	0.62	0.85	0.96	1.46	1.49
Upper heat exchanger content	[lt]	4	5	6	12	13
Empty weight	[Kg]	88	121	166	248	289
Tilting height	[mm]	-	-	-	-	-
H-Total height	[mm]	1230	1760	1900	1770	2100
Ø D EST.	[mm]	600	600	700	990	990
Ø D INT.	[mm]	500	500	600	850	850
Insulation thickness	[mm]	50	50	50	70	70

CONNECTIONS*	u.m.	BRR-ZN 200		BRR-ZN 300		BRR-ZN 500		BRR-ZN 800		BRR-ZN 1000	
A-Cold water inlet	[mm]	242	1"	242	1"	238	1"	331	1" 1/2	331	1" 1/2
B-Hot water outlet	[mm]	982	1"	1512	1"	1658	1"	1372	1" 1/2	1727	1" 1/2
MH-Lower flange	[mm]	287	Ø 180	287	Ø 180	283	Ø 180	459	Ø 300	459	Ø 300
C-Lower heat exchanger outlet	[mm]	242	1"	242	1"	238	1"	331	1" 1/2	331	1" 1/2
D-Lower heat exchanger inlet	[mm]	602	1"	782	1"	913	1"	881	1" 1/2	1046	1" 1/2
E-Upper heat exchanger outlet	[mm]	712	1"	942	1"	1073	1"	1025	1" 1/2	1262	1" 1/2
F-Upper heat exchanger inlet	[mm]	982	1"	1302	1"	1338	1"	1375	1" 1/2	1612	1" 1/2
G-Sensor pocket 1	[mm]	422	1/2"	512	1/2"	576	1/2"	606	1/2"	689	1/2"
H-Sensor pocket 1	[mm]	847	1/2"	1122	1/2"	1231	1/2"	1200	1/2"	1437	1/2"
J-Electric heater sleeve	[mm]	657	1" 1/2	862	1" 1/2	993	1" 1/2	953	1" 1/2	1154	1" 1/2
K-DHW recirculation	[mm]	735	3/4"	1088	3/4"	1184	3/4"	1025	3/4"	1262	3/4"
L-Thermometer	[mm]	982	1/2"	1512	1/2"	1658	1/2"	1372	1/2"	1727	1/2"

***For BRR-ZN 150 (model not in catalog) please contact Pleion technical office**

Note: [-] not present in the size being examined

Construction material
The storage tank is made of S235JR steel and internally vitrified according to DIN 4753-3 reference standard.
Insulation
Sizes from 200 to 500 liters-High-efficiency insulation, with rigid PU, 50 mm thickness. NON-removable insulation. External PVC coating.
Sizes from 800 to 1000 liters-High-efficiency insulation, with soft PU, 70 mm thickness. Removable insulation.





Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

Large vitrified storage tank. Double coil.

BRR-Range of storage tanks with double internal coil for domestic hot water storage. Designed for maximum efficiency, with solar heat exchanger positioned in the lower section and a second heat exchanger positioned in the upper section. The energy captured by the solar collectors is transferred to the domestic water contained in the storage tank through the specific solar heat exchanger. Suitable for domestic use as the interior is vitrified in an 850°C furnace in compliance with DIN 4753. The wide range satisfies any consumption requirement, making it suitable for use in residential buildings, condominiums, hotels, campsites, etc. Compliant with Directive 2009/125/EC for ecodesign requirements and Directive 2010/30/EU for energy labeling, which came into force on September 26, 2015. Meeting the minimum threshold limits in energy class C, imposed by the same Directives starting from September 26, 2017.

BRR

Two fixed heat exchangers, prepared for electric heating element on sleeve or central flange, insulation in rigid polyurethane or directly foamed in relation to the size with external white PVC finish.

			CONTINUOUS PRODUCTION[1]					
	SIZE	USEFUL VOL [l]	Tm=50 °C		Tm=60 °C		Tm=70 °C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
UPPER	1500	1450	10	430	31	1333	54	2322
	2000	1912	12	516	36	1548	63	2709
	3000	2900	12	516	36	1548	63	2709

			CONTINUOUS PRODUCTION[1]					
	SIZE	USEFUL VOL [l]	Tm=50 °C		Tm=60 °C		Tm=70 °C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
LOWER	1500	1450	13	559	40	1720	70	3010
	2000	1912	18	774	52	2236	92	3956
	3000	2900	22	946	63	2709	111	4773

Tm = Supply temperature from heat generator (at heat exchanger inlet).

1. Data referring to temperature conditions TDHW= 45°C ; TCWS= 10°C.

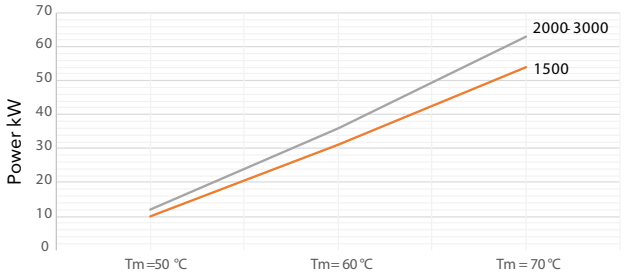
	BRR 1500	BRR 2000	BRR 3000
Energy Class	**C**	**C**	**C**
CODE	1030315001	1030320001	1030405054

BRR HOT WATER TANK-TECHNICAL DATA

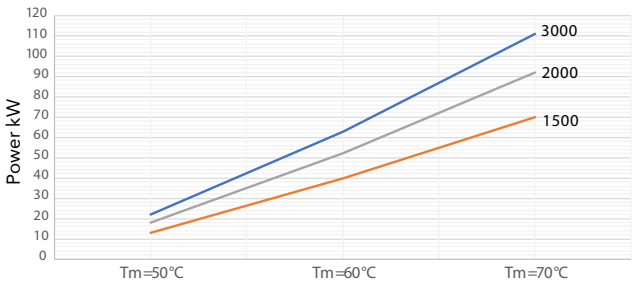
ERP	u.m.	BRR 1500	BRR 2000	BRR 3000
Useful Volume	[l]	1450	1912	2900
Heat Loss	[W]	163	183	-
Heat loss	[kWh/24h]	3.9	4.4	-
Energy Efficiency Class	[-]	C	C	-

PRESSURES	u.m.	BRR 1500	BRR 2000	BRR 3000
MAX Heat Exchanger	[bar]	6	6	6
MAX Storage Tank	[bar]	10	10	10
TEMPERATURE	**u.m.**	**BRR 1500**	**BRR 2000**	**BRR 3000**
MAX Heat Exchanger	[°C]	95	95	95
MAX Storage Tank	[°C]	95	95	95

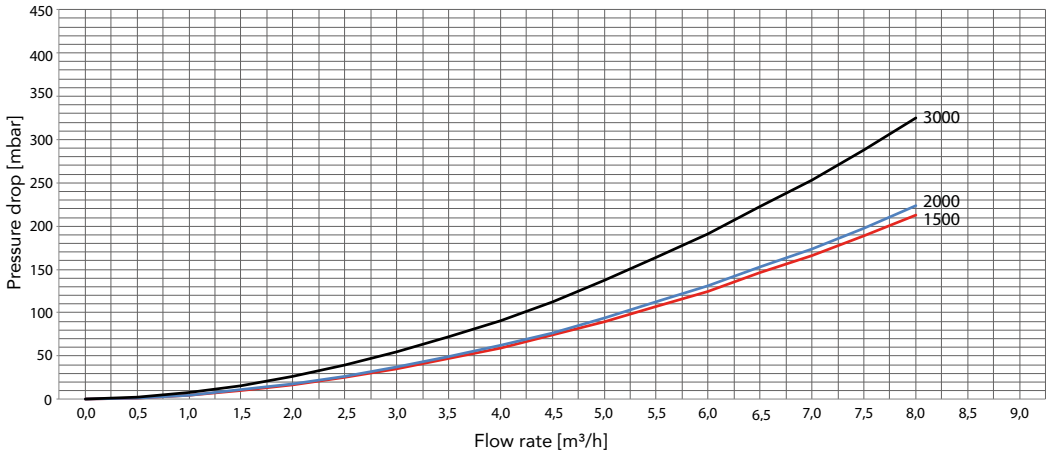
Upper Heat Exchanger Power



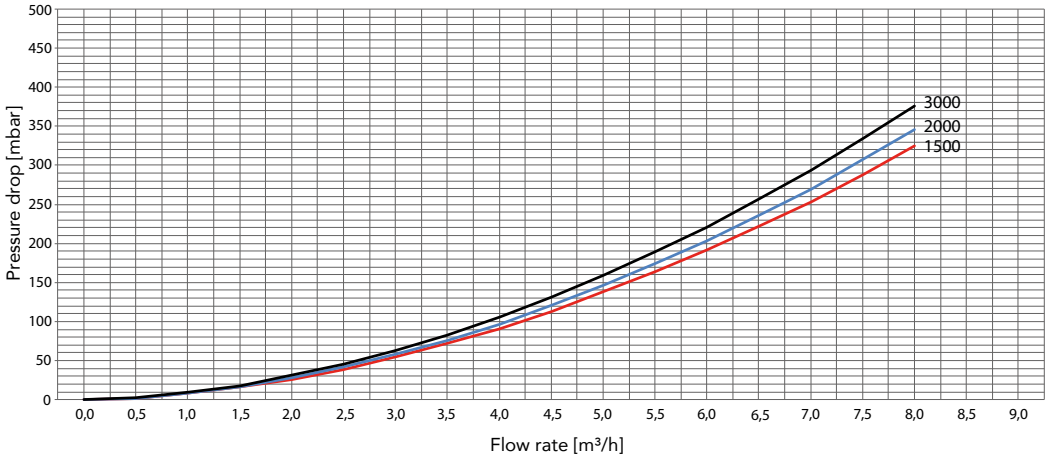
Lower Heat Exchanger Power



Upper Heat Exchanger Pressure Drop



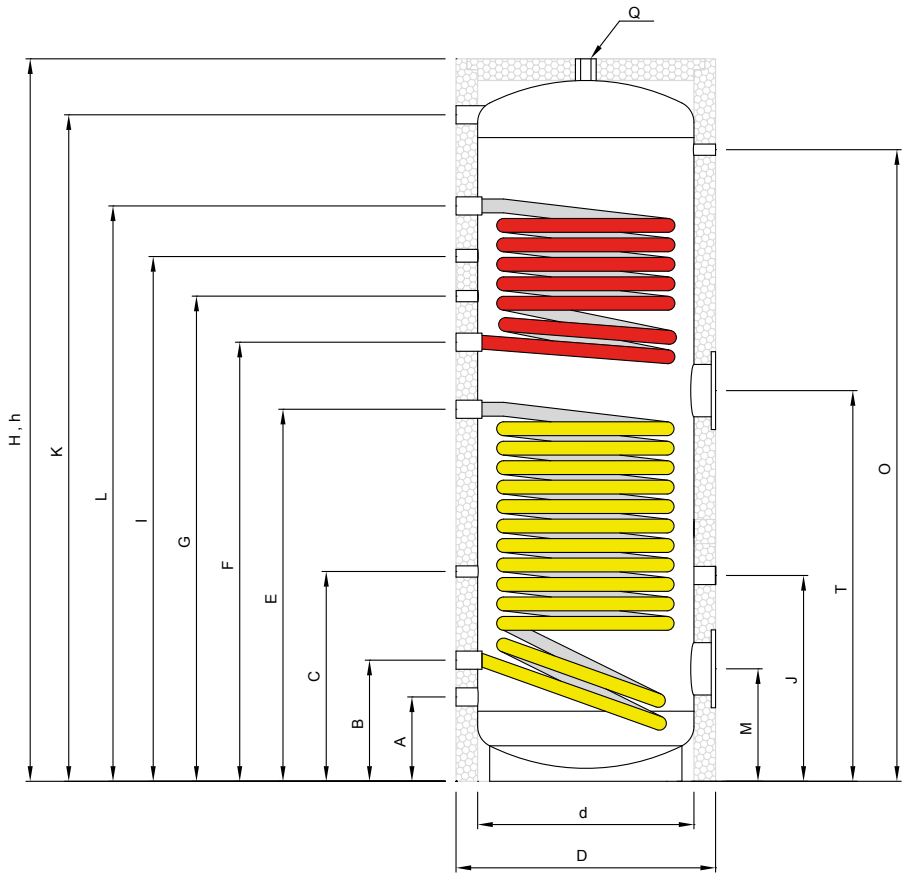
Lower Heat Exchanger Pressure Losses



SIZE	u.m.	BRR 1500	BRR 2000	BRR 3000
Lower heat exchanger surface	[m²]	3.3	4.4	5.3
Upper heat exchanger surface	[m²]	2.6	3.0	3.0
Lower heat exchanger content	[lt]	28	38	45
Upper heat exchanger content	[lt]	22	25	25
Empty weight	[Kg]	460	550	-
Tilting height	[mm]	2240	2430	2810
H-Total height	[mm]	2240	2420	2800
D-Diameter with insulation	[mm]	1250	1350	1500
d-Diameter without insulation	[mm]	1000	1100	1250
Insulation thickness	[mm]	110	110	110

CONNECTIONS	u.m.	BRR 1500		BRR 2000		BRR 3000	
A-Cold water inlet	[mm]	280	2"	290	2"	340	2"
B-Solar heat exchanger outlet cold side	[mm]	390	1"1/4	400	1"1/4	450	1"1/4
C-Sensor pocket	[mm]	620	1/2"	640	1/2"	885	1/2"
E-Solar heat exchanger inlet hot side	[mm]	1050	1"1/4	1170	1"1/4	1400	1"1/4
F-Boiler heat exchanger outlet cold side	[mm]	1310	1"1/4	1480	1"1/4	1620	1"1/4
G-DHW recirculation	[mm]	1600	1"	1750	1"	1900	1"
H-Height with insulation	[mm]	2240		2420		2800	
h-Height without insulation	[mm]	2170		2350		2730	
I-Sensor pocket	[mm]	1460	1/2"	1610	1/2"	1760	1/2"
L-Boiler heat exchanger inlet hot side	[mm]	1750	1"1/4	1920	1"1/4	2060	1"1/4
M-Lower inspection flange (RDU)	[mm]	500	Ø290	520	Ø290	570	Ø290
T-Upper inspection flange (RDU)	[mm]	1230	Ø180	1400	Ø180	1500	Ø180
O-Thermometer pocket	[mm]	1790	1/2"	1960	1/2"	2270	1/2"
Q-Upper DHW outlet	[mm]	2170	1"1/4	2350	1"1/4	2730	1"1/4
K-Side DHW outlet	[mm]	1890	2"	2060	2"	2390	2"
J-Lower magnesium anode	[mm]	830	1"1/4	840	1"1/4	885	1"1/4
R-Upper magnesium anode	[mm]	2170	1"1/4	2350	1"1/4	2730	1"1/4

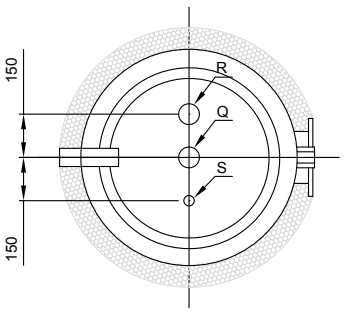
Note: [-] not present in the size being examined



Construction material
The storage tank is made of S235JR steel. Internally vitrified, double coating, in compliance with DIN 7353 standard.

Insulation
Insulated with rigid polyurethane directly injected, chlorofluorocarbon-free (CFC), self-extinguishing and non-removable for sizes up to 500 liters included (tilting height is intended with insulation).
Fully insulated with rigid polyurethane cap mattress, chlorofluorocarbon-free (CFC), self-extinguishing and removable for sizes from 800 liters included (tilting height is intended without insulation).

* Sleeve/connection not present in all tank sizes, please refer to the table above.



BWP-ZN HEAT PUMP STORAGE TANK



OVERSIZE HEAT EXCHANGER

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

DHW storage tank, specifically designed for heat pumps with large surface coil.
Single Coil

BWP-ZN-Storage tanks for domestic hot water, equipped with an internal fixed coil heat exchanger with an enlarged surface that makes it optimal for pairing with a heat pump. Suitable for domestic water use thanks to the internal titanium enamel coating compliant with DIN 4753-3 and anodic protection (DIN 4753-6). Suitable for use in residential, condominium, and hotel systems. The use of premium materials and meticulous attention to detail allows for a high-quality product even at competitive prices. Compliant with directives for ecodesign and energy labeling.

BWP-ZN

One solar heat exchanger and one with a large surface for heat pumps; prepared for electric heating element on central flange, insulation in rigid polyurethane with external PVC finish.

		CONTINUOUS PRODUCTION[1]					
SIZE	USEFUL VOL [l]	Tm = 50°C		Tm = 55°C		Tm = 60°C	
		[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
200	181	4.0	172	10.0	430	31.0	1333
300	276	6.0	258	15.0	645	45.0	1935
500	429	9.0	387	24.0	1032	72.0	3096
800	750	11	473	27	1161	78	3354
1000	933	14	602	34	1462	98	4214

1. Data referring to temperature conditions TDHW = 45°C ; TCWS = 10°C Tm = Supply temperature from heat generator (at heat exchanger inlet) Tr = Return temperature to generator = Tm-8°C TDHW = Domestic hot water temperature TCWS = Cold water supply temperature

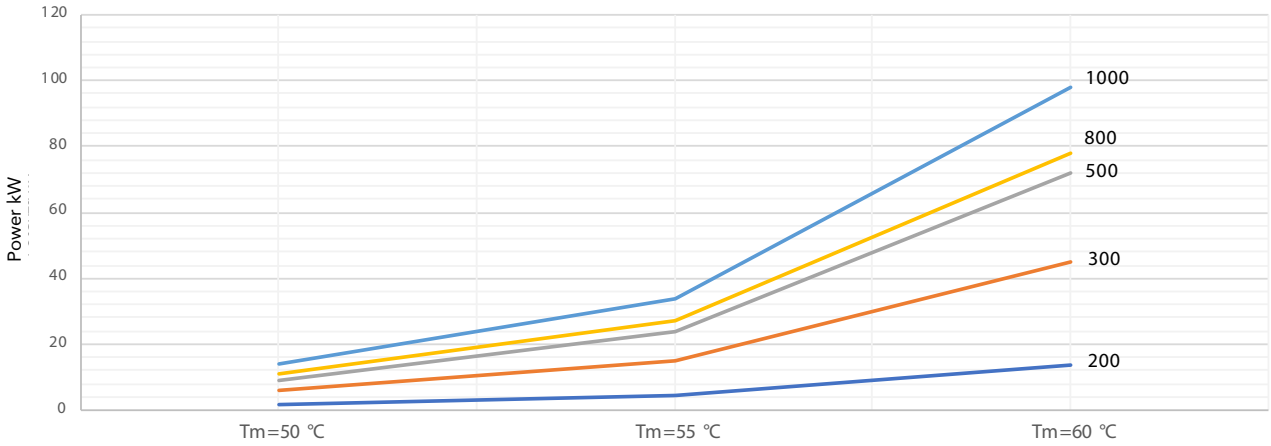
	BWP-ZN 200	BWP-ZN 300	BWP-ZN 500	BWP-ZN 800	BWP-ZN 1000
Energy Class	**C**	**C**	**C**	**C**	**C**
CODE	**3010305043**	**3010302042**	**3010305041**	**3010305045**	**3010305046**

BWP-ZN HOT WATER TANK-TECHNICAL DATA

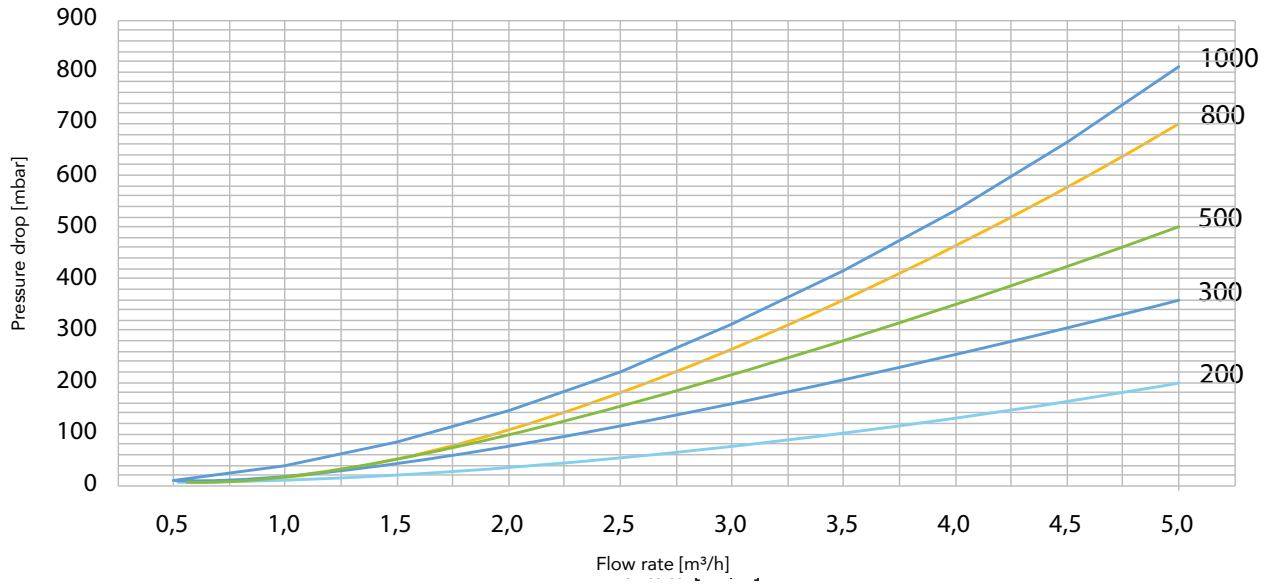
ERP	u.m.	BWP-ZN 200	BWP-ZN 300	BWP-ZN 500	BWP-ZN 800	BWP-ZN 1000
Useful Volume	[l]	181	276	429	750	933
Heat Loss	[W]	81	90	105	130	172
Heat Loss	[kWh/24h]	1.5	1.7	2.5	3.2	3.5
Energy Efficiency Class	[-]	B	B	C	C	C

PRESSURES	u.m.	BWP-ZN 200	BWP-ZN 300	BWP-ZN 500	BWP-ZN 800	BWP-ZN 1000
MAX Heat Exchanger	[bar]	6	6	6	6	6
MAX Storage Tank	[bar]	10	10	10	8	8
TEMPERATURE	**u.m.**	**BWP-ZN 200**	**BWP-ZN 300**	**BWP-ZN 500**	**BWP-ZN 800**	**BWP-ZN 1000**
MAX Heat Exchanger	[°C]	95	95	95	95	95
MAX Storage Tank	[°C]	95	95	95	95	95

Lower Heat Exchanger Power



Coil Pressure Drop (mixture with 35% glycol)

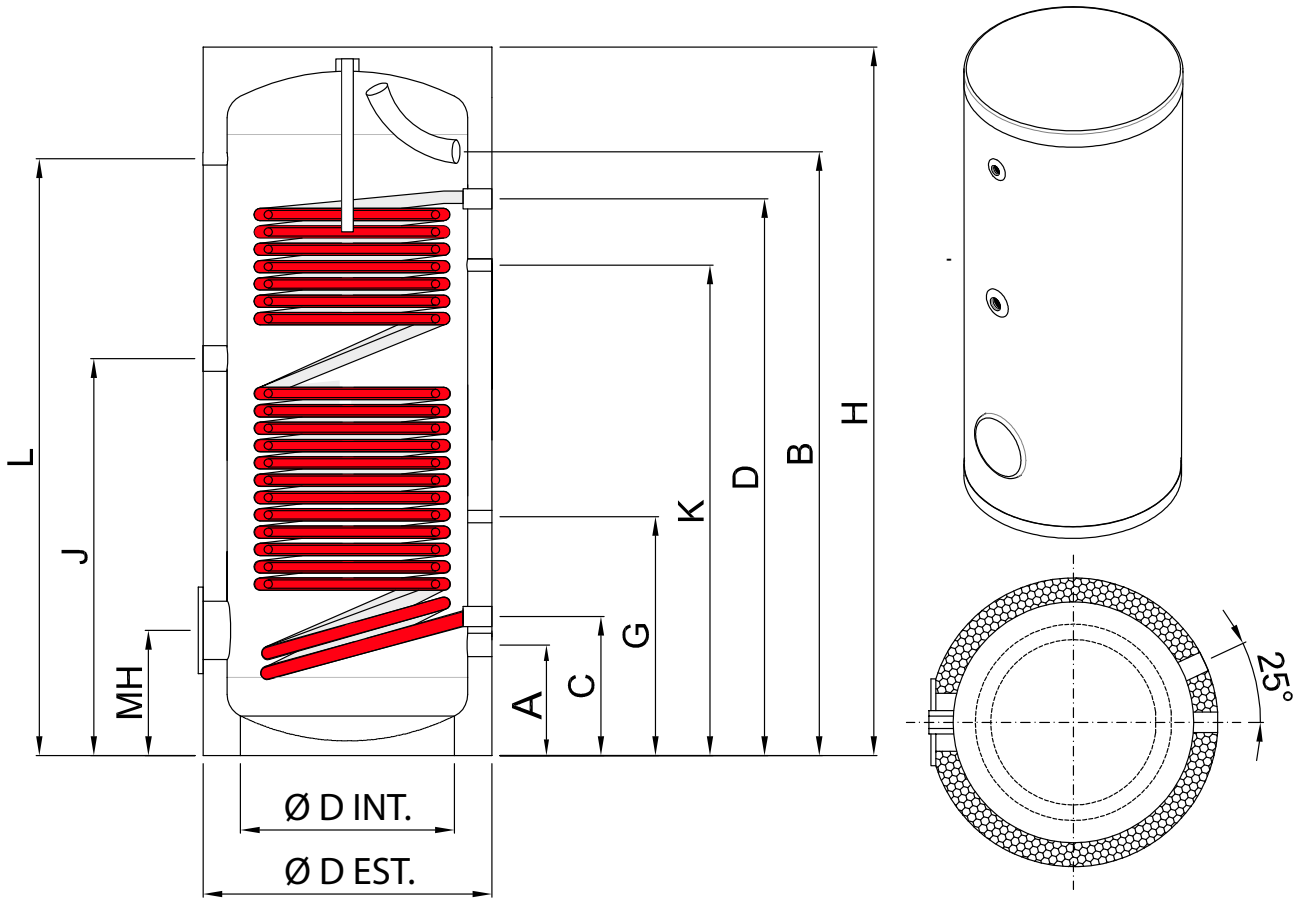


SIZE	u.m.	BWP-ZN 200	BWP-ZN 300	BWP-ZN 500	BWP-ZN 800	BWP-ZN 1000
Heat exchanger surface	[m²]	2.62	3.77	6.00	6.55	8.2
Heat exchanger content	[lt]	13	18	29	43	54
Empty weight	[Kg]	105	151	211	277	342
Tilting height	[mm]	-	-	-	-	-
H-Total height	[mm]	1230	1760	1900	1770	2100
D-Diameter with insulation	[mm]	600	600	700	990	990
d-Diameter without insulation	[mm]	500	500	600	850	850
Insulation thickness	[mm]	50	50	50	70	70

CONNECTIONS	u.m.	BWP-ZN 200		BWP-ZN 300		BWP-ZN 500		BWP-ZN 800		BWP-ZN 1000	
A-Cold water inlet	[mm]	242	1"	242	1"	238	1"	331	1" 1/2	331	1" 1/2
B-Hot water outlet	[mm]	982	1"	1512	1"	1658	1"	1372	1" 1/2	1727	1" 1/2
MH-Lower flange	[mm]	287	Ø 180	287	Ø 180	283	Ø 180	459	Ø 300	459	Ø 300
C-Lower heat exchanger outlet	[mm]	242	1"	242	1"	238	1"	331	1" 1/2	331	1" 1/2
D-Lower heat exchanger inlet	[mm]	982	1"	1222	1"	1488	1"	1206	1" 1/2	1361	1" 1/2
G-Sensor pocket 1	[mm]	612	1/2"	732	1/2"	863	1/2"	769	1/2"	846	1/2"
J-Electric heater sleeve	[mm]	694	1" 1/2	1012	1" 1/2	993	1" 1/2	994	1" 1/2	1154	1" 1/2
K-DHW recirculation	[mm]	735	3/4"	1088	3/4"	1184	3/4"	1025	3/4"	1262	3/4"
L-Thermometer	[mm]	982	1/2"	1512	1/2"	1658	1/2"	1372	1/2"	1727	1/2"

Note: [-] not present in the size being examined

Construction material
The storage tank is made of S235JR steel. Internally vitrified, double coating, in compliance with DIN 7353 standard.
Insulation
High-efficiency insulation, with rigid PU, 50 mm thickness. NON-removable insulation. External PVC coating up to 500 liters. High-efficiency insulation, with soft EPS, 70 mm thickness. Removable insulation. External PVC coating for 800 and 1000 liter sizes.



BWP HEAT PUMP STORAGE TANK



OVERSIZE HEAT EXCHANGER

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-COMPETITION DHW STORAGE TANK - FOR HEAT PUMPS

High thermal output in combination with Heat Pumps with OVERSIZED heat exchanger!

BWP-this range of storage tanks is equipped with a large surface double parallel coil heat exchanger, specifically designed for use with heat pumps. Suitable for domestic use as the interior is vitrified in an 850°C furnace in compliance with DIN 4753. The wide range satisfies any consumption requirement, making it suitable for use in residential buildings, condominiums, hotels, campsites, etc. Compliant with Directive 2009/125/EC for ecodesign requirements and Directive 2010/30/EU for energy labeling, which came into force on September 26, 2015. Meeting the minimum threshold limits in energy class C, imposed by the same Directives starting from September 26, 2017.

BWP-One fixed heat exchanger, prepared for electric heating element on flange, rigid foam insulation non-removable for sizes up to 600l, with external white PVC finish.

		CONTINUOUS PRODUCTION[1]			
SIZE	USEFUL VOL [l]	Tm= 55 °C		Tm= 60 °C	
		[kW]	[l/h]	[kW]	[l/h]
1500	1450	36	1548	100	4300
2000	1915	40	1720	115	4945
3000	3000 liter size only by special order. For information, please contact Pleion technical office				

Tm = Supply temperature from heat generator (at heat exchanger inlet).
1. Data referring to temperature conditions TDHW= 45°C ; TCWS= 10°C.

	BWP 1500	BWP 2000	BWP 3000
Energy Class	**C**	**C**	**C**
CODE	3010310005	3010310006	3010310007

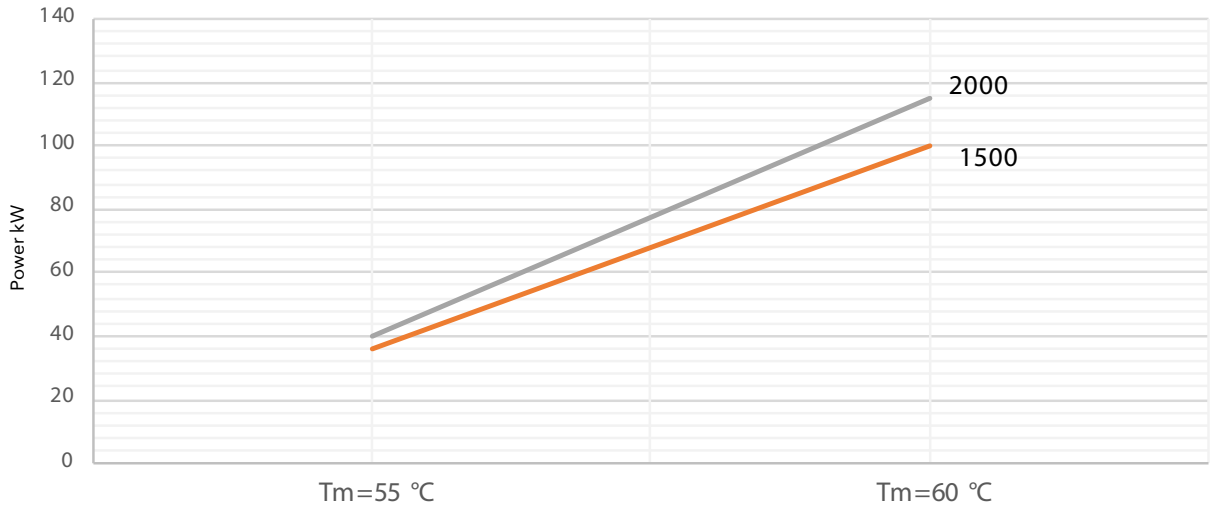
BWP HOT WATER TANK-TECHNICAL DATA

ERP	u.m.	BWP 1500	BWP 2000
Useful Volume	[l]	1415	1915
Heat Loss	[W]	163	183
Heat Loss	[kWh/24h]	3.9	4.4
Energy Efficiency Class	[-]	C	C

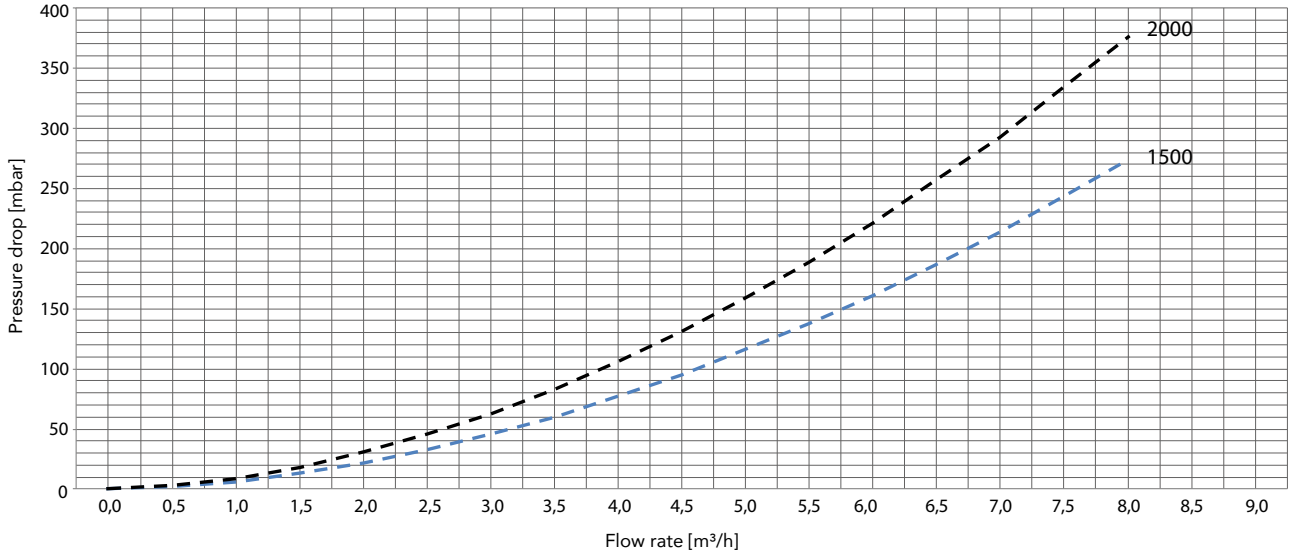
PRESSURES	u.m.	BWP 1500	BWP 2000
MAX Heat Exchanger	[bar]	6	6
MAX Storage Tank	[bar]	10	10
TEMPERATURE	u.m.	BWP 1500	BWP 2000
MAX Heat Exchanger	[°C]	95	95
MAX Storage Tank	[°C]	95	95

3000 liter size only by special order. For information, please contact Pleion technical office

Lower Heat Exchanger Power



Lower Heat Exchanger Pressure Losses



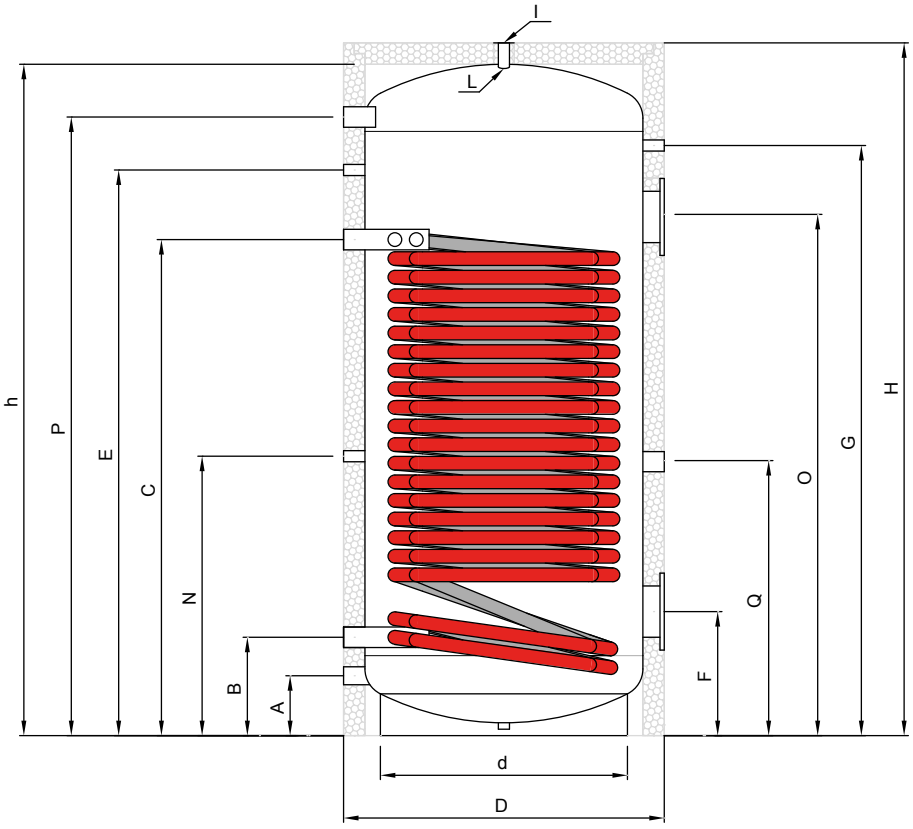
DIMENSIONS*	u.m.	BWP 1500	BWP 2000
Heat exchanger surface	[m²]	8.6	9.8
Heat exchanger content	[lt]	73	83
Empty weight	[Kg]	520	550
Tilting height	[mm]	2240	2430
H-Total height	[mm]	2240	2420
D-Diameter with insulation	[mm]	1250	1350
d-Diameter without insulation	[mm]	1000	1100
Insulation thickness	[mm]	110	110

CONNECTIONS*	u.m.	BWP 1500		BWP 2000	
A-Cold water inlet	[mm]	280	2"	290	2"
B-Heat exchanger outlet cold side	[mm]	390	1"1/4	400	1"1/4
C-Heat exchanger inlet hot side	[mm]	1340	1"1/4	1350	1"1/4
E-DHW recirculation	[mm]	1600	1"	1750	1"
F-Lower inspection flange (RDU)	[mm]	500	Ø290	520	Ø290
G-Thermometer pocket	[mm]	1790	1/2"	1960	1/2"
H-Height with insulation	[mm]	2240		2420	
h-Height without insulation	[mm]	2170		2350	
I-Upper magnesium anode	[mm]	2170	1"1/4	2350	1"1/4
N-Sensor pocket	[mm]	825	1/2"	835	1/2"
O-Upper inspection flange (RDU)	[mm]	1445	Ø180	1450	Ø180
L-Upper DHW outlet	[mm]	2170	1"1/4	2350	1"1/4
Q-Lower magnesium anode	[mm]	825	1"1/4	835	1"1/4
P-Side DHW outlet	[mm]	1890	2"	2060	2"

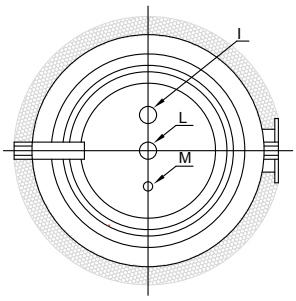
3000 liter size only by special order. For information, please contact Pleion technical office

Note: [-] not present in the size being examined

Construction material
The storage tank is made of S235JR steel. Internally vitrified, double coating, in compliance with DIN 7353 standard.
Insulation
High-efficiency insulation, with EPS, 110 mm thickness. Removable insulation. External PVC coating.



* Sleeve/connection not present in all tank sizes, please refer to the table above.



BWPS-ZN HEAT PUMP STORAGE TANK



OVERSIZE HEAT EXCHANGER

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-COMPETITION SOLAR DHW STORAGE TANK - FOR HEAT PUMPS

DHW storage tank specifically designed for heat pump systems with large surface upper coil. Double Coil.

BWPS-ZN- Storage tanks for domestic hot water, equipped with a lower internal heat exchanger for solar, and an upper coil with increased surface area specifically designed for pairing with a heat pump. Suitable for domestic water use thanks to the internal titanium enamel coating compliant with DIN 4753-3 and anodic protection (DIN 4753-6). Suitable for use in residential, condominium, and hotel systems. The use of premium materials and meticulous attention to detail allows for a high-quality product even at competitive prices. Compliant with directives for ecodesign and energy labeling.

BWPS-ZN

2 fixed heat exchangers, prepared for electric heating element on sleeve or central flange, insulation in rigid polyurethane foam up to size 500 included, or in soft removable fleece, with external PVC finish.

			CONTINUOUS PRODUCTION[1]					
	SIZE	USEFUL VOL [l]	Tm = 50°C		Tm = 55°C		Tm = 60°C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
UPPER	300	272	4.7	202	12.5	538	37.0	1591
	500	431	6.0	258	16.8	722	50.0	2150
	800	746	6.8	292	18.0	774	55.0	2365
	1000	919	9.3	400	25.0	1075	64.0	2752
	SIZE	USEFUL VOL [l]	Tm = 50°C		Tm = 55°C		Tm = 60°C	
			[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]
LOWER	300	272	1.7	73	4.5	194	13.7	589
	500	431	2.3	99	6.0	258	18.0	774
	800	746	3.7	159	9.7	417	30.0	1290
	1000	919	5.5	237	15.0	645	40.2	1729

1. Data referring to temperature conditions TDHW = 45°C ;
TCWS = 10°C Tm = Supply temperature from heat generator (at heat exchanger inlet) Tr = Return temperature to generator = Tm - 8°C TDHW = Domestic hot water temperature TCWS = Cold water supply temperature

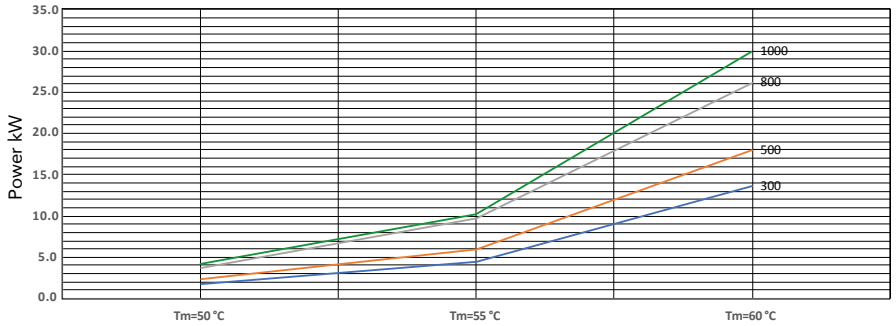
	BWPS-ZN 300	BWPS-ZN 500	BWPS-ZN 800	BWPS-ZN 1000
Energy Class	**C**	**C**	**C**	**C**
CODE	**3010303041**	**3010303051**	**3010303081**	**3010303091**

BWPS-ZN HOT WATER TANK-TECHNICAL DATA

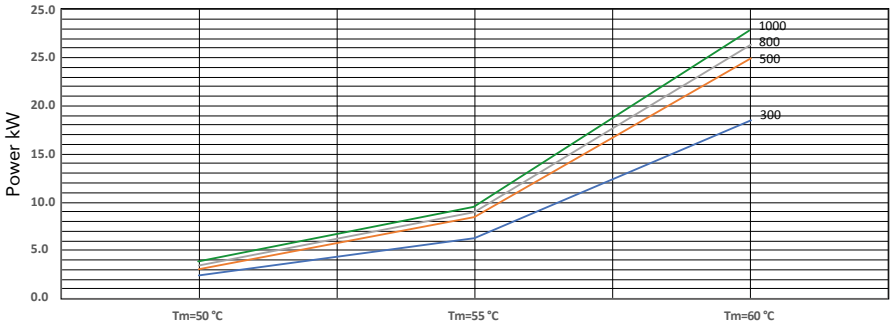
ERP	u.m.	BWPS-ZN 300	BWPS-ZN 500	BWPS-ZN 800	BWPS-ZN 1000
Useful Volume	[l]	272	431	746	919
Heat Loss	[W]	90	100	130	160
Heat Loss	[kWh/24h]	1.7	2.5	3.2	3.5
Energy Efficiency Class	[-]	B	C	C	C

PRESSURES	u.m.	BWPS-ZN 300	BWPS-ZN 500	BWPS-ZN 800	BWPS-ZN 1000
MAX Solar Heat Exchanger	[bar]	6	6	6	6
MAX Upper Heat Exchanger	[bar]	6	6	6	6
MAX Storage Tank	[bar]	10	10	10	10
TEMPERATURE	**u.m.**	**BWPS-ZN 300**	**BWPS-ZN 500**	**BWPS-ZN 800**	**BWPS-ZN 1000**
MAX Solar Heat Exchanger	[°C]	95	95	95	95
MAX Upper Heat Exchanger	[°C]	95	95	95	95
MAX Storage Tank	[°C]	95	95	95	95

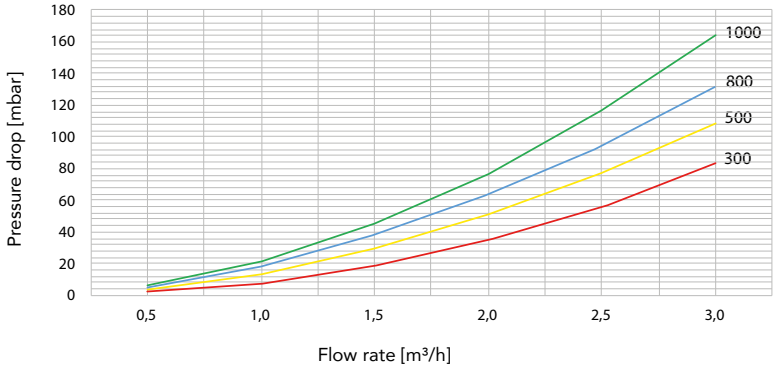
Lower Heat Exchanger Power



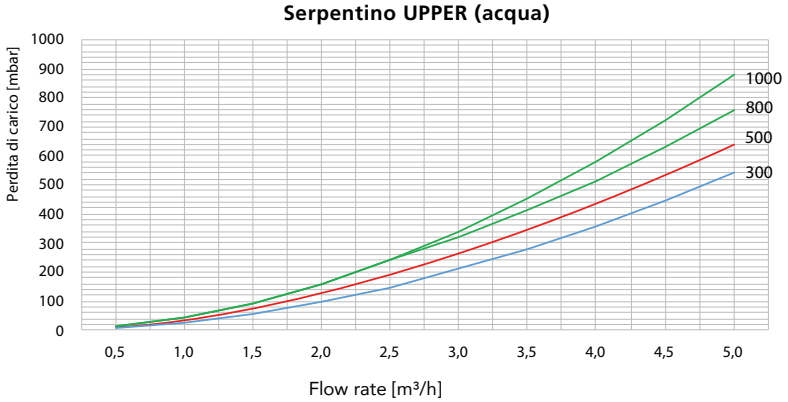
Upper Heat Exchanger Power



Serpentino inferiore (miscela con 35% glicole)



Serpentino UPPER (acqua)

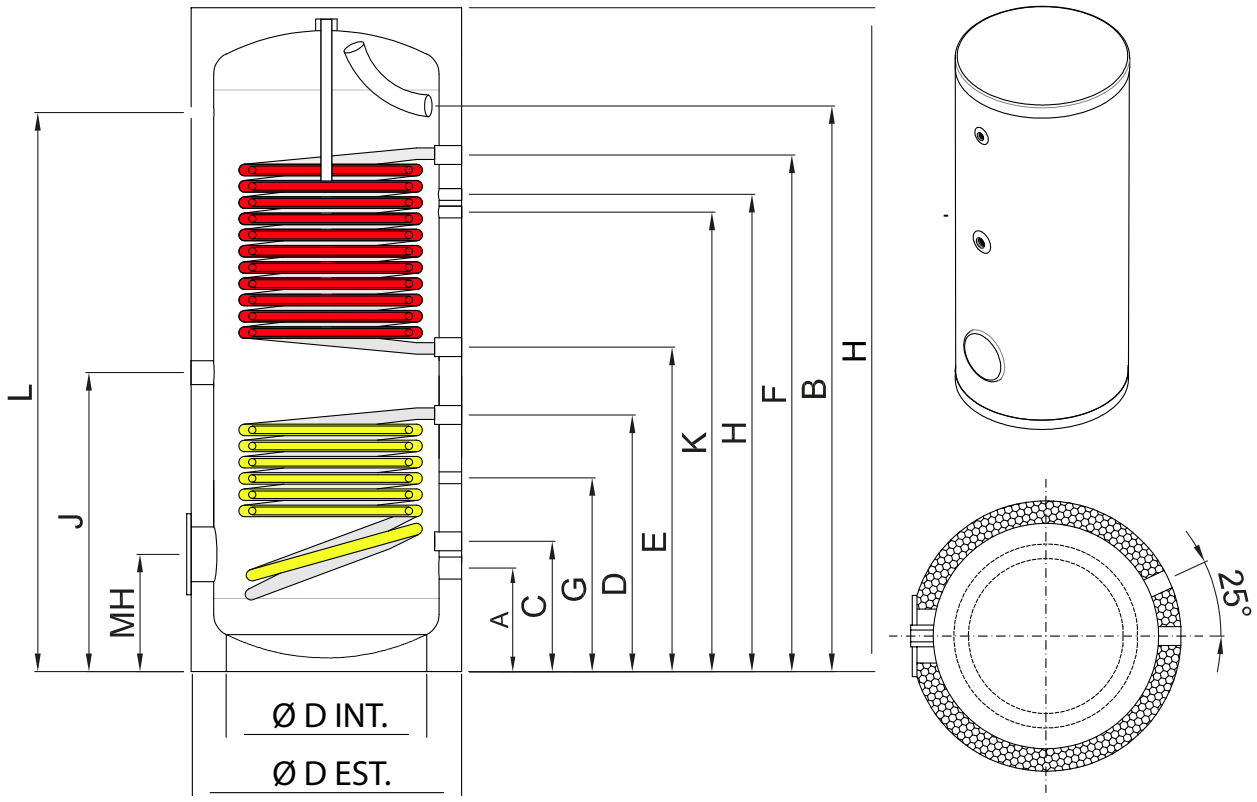


DIMENSIONS	u.m.	BWPS-ZN 300	BWPS-ZN 500	BWPS-ZN 800	BWPS-ZN 1000
Lower heat exchanger surface	[m²]	1.14	1.51	2.44	3.66
Lower heat exchanger content	[lt]	6	7	16	24
Upper heat exchanger surface	[m²]	3.12	4.21	4.54	6.18
Upper heat exchanger content	[lt]	15	21	30	40
Empty weight	[Kg]	164	212	294	346
Tilting height	[mm]	-	-	-	-
H-Total height	[mm]	1760	1900	1770	2100
Ø D EST.	[mm]	600	700	990	990
Ø D INT.	[mm]	500	600	850	850
Insulation thickness	[mm]	50	50	70	70

CONNECTIONS	u.m.	BWPS-ZN 300		BWPS-ZN 500		BWPS-ZN 800		BWPS-ZN 1000	
A-Cold water inlet	[mm]	242	1"	238	1"	331	1" 1/2	311	1" 1/2
B-Hot water outlet	[mm]	1512	1"	1658	1"	1372	1" 1/2	1727	1" 1/2
MH-Lower flange	[mm]	287	Ø 180	283	Ø 180	459	Ø 300	459	Ø 300
C-Lower heat exchanger outlet	[mm]	242	1"	238	1"	331	1" 1/2	331	1" 1/2
D-Lower heat exchanger inlet	[mm]	582	1"	608	1"	661	1" 1/2	661	1" 1/2
E-Upper heat exchanger outlet	[mm]	742	1"	738	1"	802	1" 1/2	802	1" 1/2
F-Upper heat exchanger inlet	[mm]	1492	1"	1658	1"	1372	1" 1/2	1372	1" 1/2
G-Sensor pocket 1	[mm]	412	1/2"	423	1/2"	496	1/2"	496	1/2"
H-Sensor pocket 1	[mm]	1117	1/2"	1198	1/2"	1087	1/2"	1087	1/2"
J-Electric heater sleeve	[mm]	662	1" 1/2	673	1" 1/2	732	1" 1/2	732	1" 1/2
K-DHW recirculation	[mm]	1088	3/4"	1184	3/4"	1025	3/4"	1025	3/4"
L-Thermometer	[mm]	1512	1/2"	1658	1/2"	1372	1/2"	1372	1/2"

Note: - not present in the size being examined

Construction material
The storage tank is made of S235JR steel. Internally vitrified, double coating, in compliance with DIN 7353 standard.
Insulation
Sizes 300 and 500 liters - High-efficiency insulation, with rigid PU, 50 mm thickness. NON-removable insulation. External PVC coating.
Sizes 800 and 1000 liters - High-efficiency insulation, with soft PU, 70 mm thickness. Removable insulation.



BWPS HEAT PUMP STORAGE TANK



OVERSIZE HEAT EXCHANGER

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-COMPETITION SOLAR DHW STORAGE TANK - FOR HEAT PUMPS

High thermal output in combination with Heat Pumps with OVERSIZED heat exchanger!

BWPS-Range of storage tanks for domestic hot water production, equipped with double coil, of which the upper one has a large surface area, double parallel coil, low pressure drops, specifically designed for integration with heat pumps. The lower heat exchanger has been specially developed to maximize the solar yield of collectors. Suitable for domestic use as the interior is vitrified in an 850°C furnace in compliance with DIN 4753. The wide range satisfies any consumption requirement, making it suitable for use in residential buildings, condominiums, hotels, campsites, etc. Compliant with Directive 2009/125/EC for ecodesign requirements and Directive 2010/30/EU for energy labeling, which came into force on September 26, 2015. Meeting the minimum threshold limits in energy class C, imposed by the same Directives starting from September 26, 2017.

BWPS

BWPS Two fixed heat exchangers (one of which is a double parallel coil OVERSIZED), prepared for electric heating element on flange, non-removable insulation directly foamed for sizes up to 600 liters, external white PVC finish..

			CONTINUOUS PRODUCTION[1]			
	SIZE	USEFUL VOL [l]	Tm=55°C		Tm=60°C	
			[kW]	[l/h]	[kW]	[l/h]
UPPER	1500	1415	28	1204	81	3483
	2000	1915	35	1505	100	4300
	3000	3000 liter size only by special order. For information, please contact Pleion technical office				

			CONTINUOUS PRODUCTION[1]			
	SIZE	USEFUL VOL [l]	Tm=55°C		Tm=60°C	
			[kW]	[l/h]	[kW]	[l/h]
LOWER	1500	1415	15	645	42	1806
	2000	1915	18	774	54	2322
	3000	3000 liter size only by special order. For information, please contact Pleion technical office				

Tm = Supply temperature from heat generator (at heat exchanger inlet).
1. Data referring to temperature conditions TDHW= 45°C ; TCWS= 10°C.

	BWPS 1500	BWPS 2000	BWPS 3000
Energy Class	**C**	**C**	**C**
CODE	3010415002	3010420002	3010420003

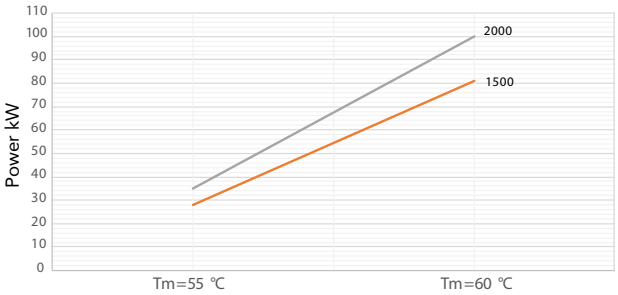
BWPS HOT WATER TANK-TECHNICAL DATA

ERP	u.m.	BWPS 1500	BWPS 2000
Useful Volume	[l]	1415	1915
Heat Loss	[W]	163	183
Heat Loss	[kWh/24h]	3.9	4.4
Energy Efficiency Class	[-]	C	C

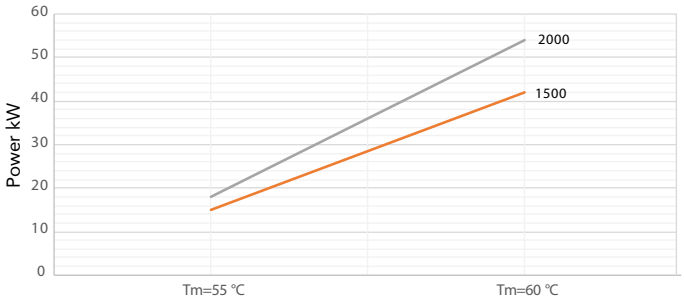
PRESSURES	u.m.	BWPS 1500	BWPS 2000
MAX Heat Exchanger	[bar]	6	6
MAX Storage Tank	[bar]	10	10
TEMPERATURE	**u.m.**	**BWPS 1500**	**BWPS 2000**
MAX Heat Exchanger	[°C]	95	95
MAX Storage Tank	[°C]	95	95

3000 liter size only by special order. For information, please contact Pleion technical office

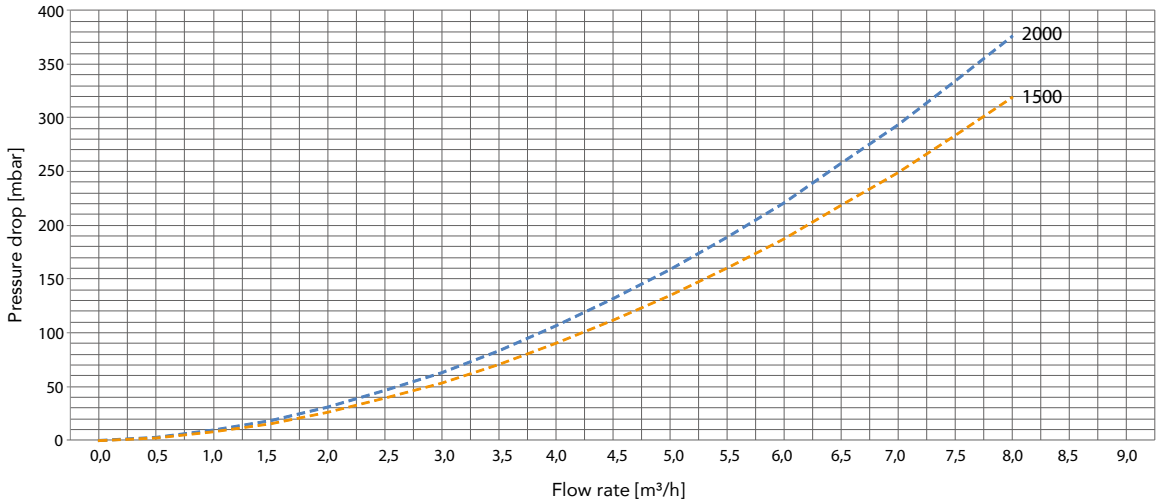
Upper Heat Exchanger Power



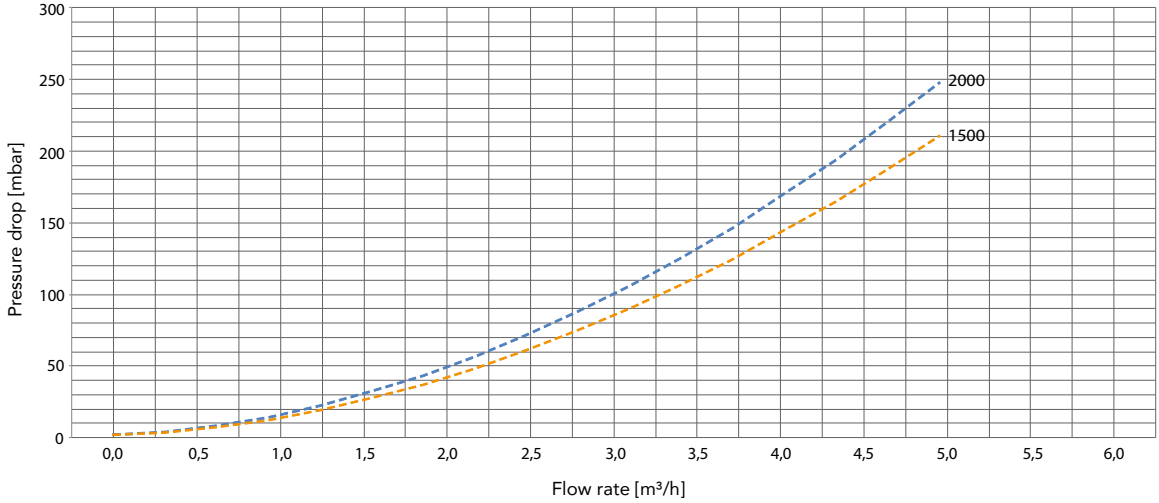
Lower Heat Exchanger Power



Upper Heat Exchanger Pressure Drop



Lower Heat Exchanger Pressure Losses



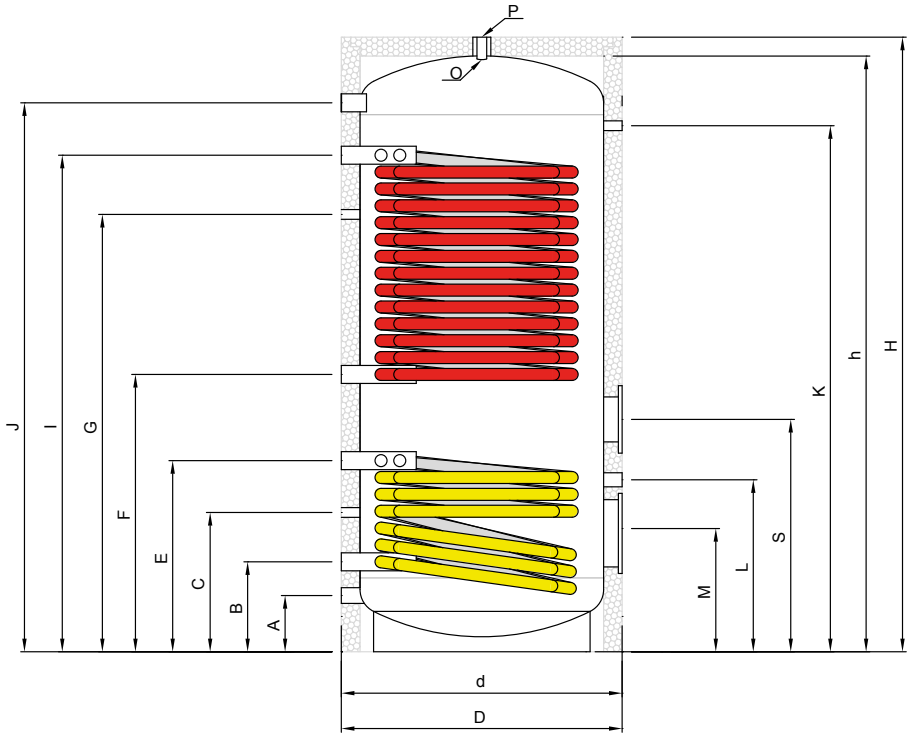
DIMENSIONS*	u.m.	BWPS 1500	BWPS 2000
Lower heat exchanger surface	[m²]	3.5	4.5
Upper heat exchanger surface	[m²]	6.8	8.4
Lower heat exchanger content	[lt]	29	39
Upper heat exchanger content	[lt]	58	72
Empty weight	[Kg]	550	580
Tilting height	[mm]	2240	2430
H-Total height	[mm]	2240	2420
D-Diameter with insulation	[mm]	1250	1350
d-Diameter without insulation	[mm]	1000	1100
Insulation thickness	[mm]	110	110

CONNECTIONS*	u.m.	BWPS 1500		BWPS 2000	
A-Cold water inlet	[mm]	280	2"	290	2"
B-Solar heat exchanger outlet cold side	[mm]	390	1"1/4	400	1"1/4
C-Sensor pocket SOLAR	[mm]	620	1/2"	640	1/2"
E-Solar heat exchanger inlet hot side	[mm]	860	1"1/4	940	1"1/4
F-Heat pump heat exchanger outlet cold side	[mm]	1080	1"1/4	1220	1"1/4
G-DHW recirculation	[mm]	1600	1"	1750	1"
H-Height with insulation	[mm]	2240		2420	
h-Height without insulation	[mm]	2170		2350	
I-Heat pump heat exchanger inlet hot side	[mm]	1750	1"1/4	1920	1"1/4
J-Side DHW outlet.	[mm]	1890	2"	2060	2"
L-Lower magnesium anode	[mm]	740	1"1/4	770	1"1/4
M-Lower inspection flange (RDU)	[mm]	500	Ø290	520	Ø290
N-Sensor pocket	[mm]	1460	1/2"	1610	1/2"
O-Upper magnesium anode	[mm]	2170	1"1/4	2350	1"1/4
P-Upper DHW outlet	[mm]	2170	1"1/4	2350	1"1/4
S-Upper inspection flange (RDU)	[mm]	1000	Ø180	1150	Ø180

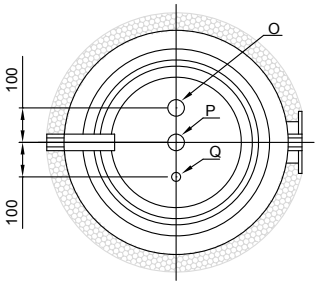
3000 liter size only by special order. For information, please contact Pleion technical office

Note: [-] not present in the size being examined

Construction material
The storage tank is made of S235JR steel. Internally vitrified, double coating, in compliance with DIN 7353 stan**dard.Insulation**
High efficiency insulation, with EPS, 110 mm thickness. Removable insulation. External PVC covering.



* Sleeve/connection not present in all tank sizes, please refer to the table above.



PS ZN PUFFER



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

Buffer tanks for technical hot and cold water.

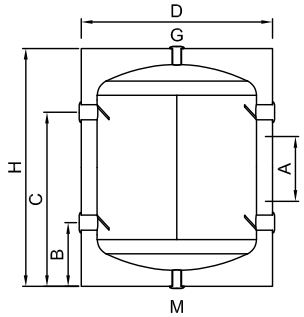
PS ZN-Range of buffer tanks, without internal coils, with 2, 3 or 4 pairs of hydraulic connections, plus drain and vent. Available sizes from 25 to 120 liters. Made of S235JR steel, with non-removable insulation. Suitable for floor installation or wall-mounted. Hot-cold buffer tanks, without coils.

PS ZN BUFFER TANKS - TECHNICAL DATA

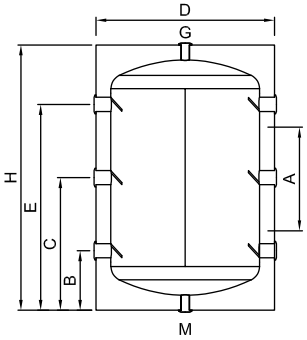
ERP	u.m.	PS ZN 25		PS ZN 40		PS ZN 50		PS ZN 80		PS ZN 100		PS ZN 200	
TANK CONTENT	[l]	25		40		50		80		100		120	
TEMPERATURE LOSS DT 45K	[KW]	30		34		38		45		51		58	
PRESSURES	u.m.	PS ZN 25		PS ZN 40		PS ZN 50		PS ZN 80		PS ZN 100		PS ZN 200	
TEST PRESSURE	[bar]	4,5											
MAXIMUM USAGE PRESSURE	[bar]	3											
TEMPERATURE	u.m.	PS ZN 25		PS ZN 40		PS ZN 50		PS ZN 80		PS ZN 100		PS ZN 200	
MAXIMUM USAGE TEMPERATURE	[°C]	95											
MEASUREMENTS	u.m.	PS ZN 25		PS ZN 40		PS ZN 50		PS ZN 80		PS ZN 100		PS ZN 200	
EMPTY WEIGHT	[Kg]	11		12		15		20		22		24	
H - Total height	[mm]	455		555		755		827		967		1119	
D - Diameter	[mm]	430						490					
INSULATION THICKNESS	[mm]	55						50					
CONNECTIONS	u.m.	PS ZN 25		PS ZN 40		PS ZN 50		PS ZN 80		PS ZN 100		PS ZN 200	
BRACKET HEIGHT - A	[mm]	120		240		450		400		540		690	
SOCKET - B	[mm]	167	F 1"	167	F 1"	162	F 1"	214	F 1" 1/4	214	F 1" 1/4	214	F 1" 1/4
SOCKET - C	[mm]	287	F 1"	387	F 1"	377	F 1"	346	F 1" 1/4	394	F 1" 1/4	444	F 1" 1/4
SOCKET - E	[mm]	-	-	-	-	592	F 1"	480	F 1" 1/4	574	F 1" 1/4	674	F 1" 1/4
SOCKET - F	[mm]							613	F 1" 1/4	754	F 1" 1/4	904	F 1" 1/4
VENT - G	[mm]	455	F 1/2"	555	F 1/2"	755	F 1/2"	827	F 1/2"	967	F 1/2"	1119	F 1/2"
FIXING - I	[mm]	260											
BRACKET WIDTH - L	[mm]	330											
OVERALL SIZE - N	[mm]	433						503					
DRAIN - M	[mm]	0	F 1/2"	0	F 1/2"	0	F 1/2"	0	F 1/2"	0	F 1/2"	0	F 1/2"

Insulation in directly foamed self-extinguishing and non-removable padding, suitable for containing hot and cold technical water.**WATER calda e fredda.**

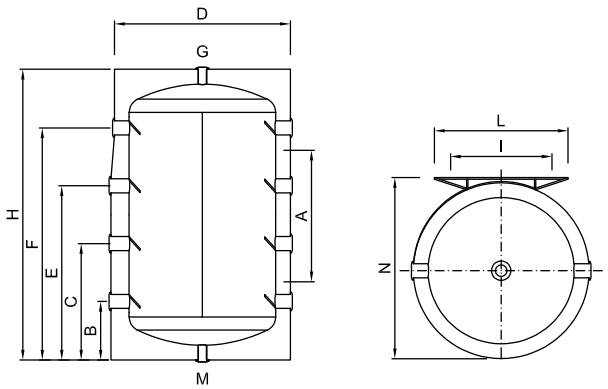
PS ZN da 25 a 40 lt



PS ZN da 50 lt



PS ZN da 80 a 120 lt



	PUFFER PS ZN 25	PUFFER PS ZN 50	PUFFER PS ZN 80	PUFFER PS ZN 100	PUFFER PS ZN 120
Energy Class	B	B	B	B	B
CODE	3010600025	3010600050	3010600080	3010600100	3010600120

P AND PS STORAGE TANKS



WIDE RANGE
FOR ANY CONSUMPTION NEED

HOT COLD
AVAILABLE IN VERSIONS WITH ARMAFLEX

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HOT COLD AVAILABLE IN VERSIONS WITH ARMAFLEX

WIDE RANGE FOR ANY CONSUMPTION NEED

Perfectly insulated for exceptional performance and long life.

P E PS-Range of storage tanks suitable for containing technical system water, built in S235 JR steel, without internal coils. Equipped with four sleeves on each side in sizes from 2000 to 2500 liters, and 7 sleeves on a single side arranged vertically for sizes from 500 to 2000 liters, to have maximum installation versatility. Available in a version with special Armaflex insulation that makes the tanks suitable for containing cold water, PS version.
Compliant with Directive 2009/125/EC in terms of eco-design and Directive 2010/30/EU in terms of energy labeling which came into force on September 26, 2015. Suitable for the minimum threshold limits in class C, imposed by the same Directives from September 26, 2017.

P

Seven sleeves on a single side for sizes from 500 to 2000 liters, with probe holder on the tank, and four sleeves per side in sizes from 2500 to 5000 liters, with four probe wells. Insulation in rigid polyurethane shells or soft depending on the size, with white PVC external finish.

PS

Buffer tank with special insulation for storing hot and cold technical water, in directly foamed polyurethane.

	P 500	P 800	P 1000	P 1500	P 2000	P 2500	P 3000	P 4000	P 5000
Energy Class	C	C	C	C	C	-	-	-	-
CODE	1030305091	1030308071	1030310071	1030315021	1030320091	1030325001	1030330011	1030340001	1030350001

	PS 50	PS 100	PS 200	PS 300	PS 500
Energy Class	A	B	B	C	B
CODE*	3010600501	3010601001	3010602001	3010603001	3010605001

***For PS 800, PS 1000 and PS 1500 (models not in the catalog) please refer to Pleion's technical office.**

P AND PS STORAGE TANKS - TECHNICAL DATA

P

ERP	u.m.	P 500	P 800	P 1000	P 1500	P 2000	P 2500	P 3000	P 4000	P 5000
Useful Volume	[l]	497	772	902	1526	1998	2347	2899	3821	5057
Heat Loss	[W]	104	129	141	171	185	-	-	-	-
Heat loss	[kWh/24h]	2,5	3,1	3,4	4,1	4,5	-	-	-	-
Energy Efficiency Class	[-]	C	C	C	C	C	-	-	-	-

PRESSURES	u.m.	P 500	P 800	P 1000	P 1500	P 2000	P 2500	P 3000	P 4000	P 5000
MAX Storage Tank	[bar]	3	3	3	3	3	3	3	3	3
TEMPERATURE	u.m.	P 500	P 800	P 1000	P 1500	P 2000	P 2500	P 3000	P 4000	P 5000
MAX Storage Tank	[°C]	95	95	95	95	95	95	95	95	95

SIZE	u.m.	P 500	P 800	P 1000	P 1500	P 2000	P 2500	P 3000	P 4000	P 5000
Empty weight	[Kg]	95	145	154	231	276	293	340	440	523
Tilting height	[mm]	1740	1950	2100	2240	2430	2366	2768	2893	2957
H-Total height	[mm]	1750	1970	2120	2240	2430	2280	2715	2835	2870
D-Diameter with insulation	[mm]	810	910	950	1250	1350	1450	1450	1600	1800
d-Diameter without insulation	[mm]	650	750	790	1000	1100	1250	1250	1400	1600
Insulation thickness	[mm]	70	70	70	110	110	100	100	100	100

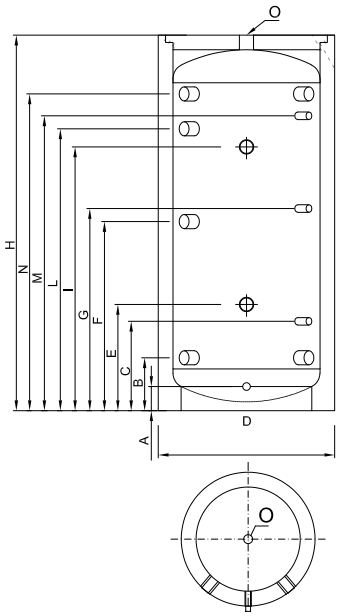
PS

ERP	u.m.	PS 50	PS 100	PS 200	PS 300	PS 500
Useful Volume	[l]	51	98	214	284	470
Heat Loss	[W]	27	44	60	61	72
Heat loss	[kWh/24h]	0.638	1.062	1.438	1.464	1.728
Energy Efficiency Class	[-]	A	B	B	B	B

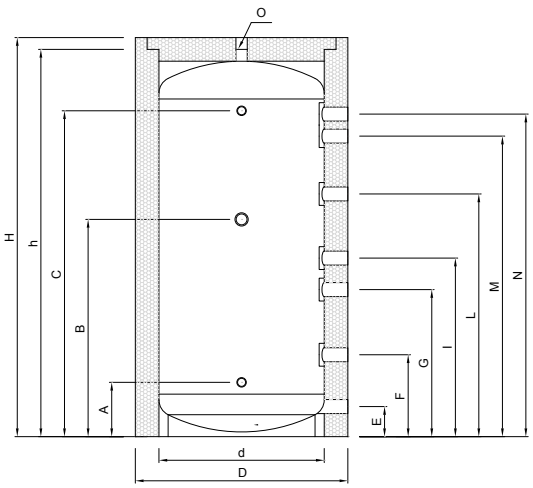
PRESSURES	u.m.	PS 50	PS 100	PS 200	PS 300	PS 500
MAX Storage Tank	[bar]	3	3	3	3	3
TEMPERATURE	u.m.	PS 50	PS 100	PS 200	PS 300	PS 500
MAX Storage Tank	[°C]	95	95	95	95	95

SIZE	u.m.	PS 50	PS 100	PS 200	PS 300	PS 500
Empty weight	[Kg]	27	30	50	74	113
Tilting height	[mm]	790	1260	1425	1870	2080
H-Total height	[mm]	640	1170	1280	1740	1930
D-Diameter with insulation	[mm]	460	460	610	660	760
d-Diameter without insulation	[mm]	50	50	50	80	80
Insulation thickness	[mm]	50	50	50	50	50

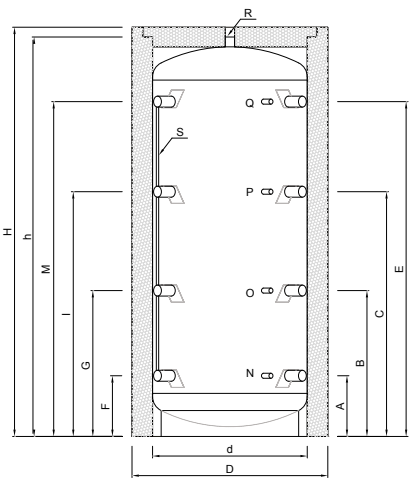
PS
50/500 lt



P
500/2000 lt



P
2500/5000 lt



PS from 50 to 500 l

CONNECTIONS	u.m	50		100		200		300		500	
A-Drain	[mm]	140	1/2"	140	1/2"	125	1/2"	155	1/2"	180	1/2"
B-Return heat pump / heating	[mm]	160	1"1/4	160	1"1/4	255	1"1/2	255	1"1/2	270	1"1/2
C-Sensor pocket	[mm]	-		290	1/2"	355	1/2"	385	1/2"	400	1/2"
D-Diameter with insulation	[mm]	460		460		610		660		760	
E-Electric heating element	[mm]	-		290	1"1/2	355	1"1/2	385	1"1/2	400	1"1/2
F-Return boiler	[mm]	160	1"1/4	575	1"1/4	640	1"1/2	870	1"1/2	965	1"1/2
G-Sensor pocket	[mm]	260	1/2"	575	1/2"	640	1/2"	870	1/2"	965	1/2"
H-Height with insulation	[mm]	640		1170		1280		1740		1930	
I-Electric heating element	[mm]	385	1"1/2	810	1"1/2	875	1"1/2	1305	1"1/2	1480	1"1/2
L-Supply boiler	[mm]	360	1"1/4	860	1"1/4	925	1"1/2	1355	1"1/2	1530	1"1/2
M-Sensor pocket	[mm]	360	1/2"	860	1/2"	925	1/2"	1355	1/2	1530	1/2
N-Supply heat pump / heating	[mm]	460	1"1/4	990	1"1/4	1055	1"1/2	1485	1"1/2	1660	1"1/2
O-Air vent	[mm]	640	1"1/4	1170	1"1/4	1280	1"1/4	1740	1"1/4	1930	1"1/4

P from 500 to 2000 l

CONNECTIONS	u.m	500		800		1000		1500		2000	
A - Sleeve for external DHW module (cold)	[mm]	260	1"1/4	270	1"1/4	270	1"1/4	335	1"1/4	350	1"1/4
B - Electric resistance (ESH)	[mm]	900	1"1/2	950	1"1/2	1100	1"1/2	1065	1"1/2	1230	1"1/2
C - Sleeve for external DHW module (hot)	[mm]	1410	1"1/4	1670	1"1/4	1820	1"1/4	1835	1"1/4	2000	1"1/4
D - Diameter with insulation	[mm]	810		910		950		1250		1350	
E - Sleeve / heating return 2	[mm]	150	1"1/2	170	1"1/2	170	1"1/2	235	1"1/2	250	1"1/2
F - Sleeve / boiler return 2	[mm]	390	1"1/2	400	1"1/2	400	1"1/2	465	1"1/2	480	1"1/2
G - Sleeve / heating return 1	[mm]	620	1"1/2	670	1"1/2	790	1"1/2	775	1"1/2	830	1"1/2
h - Height without insulation	[mm]	1690		1910		2060		2170		2350	
H - Height with insulation	[mm]	1750		1970		2120		2240		2430	
I - Sleeve / boiler return 1	[mm]	820	1"1/2	870	1"1/2	990	1"1/2	975	1"1/2	1030	1"1/2
L - Sleeve / heating flow	[mm]	1020	1"1/2	1150	1"1/2	1300	1"1/2	1285	1"1/2	1380	1"1/2
M - Sleeve / boiler flow 2	[mm]	1300	1"1/2	1560	1"1/2	1710	1"1/2	1725	1"1/2	1890	1"1/2
N - Sleeve / boiler flow 1	[mm]	1410	1"1/2	1670	1"1/2	1820	1"1/2	1835	1"1/2	2000	1"1/2
O - Vent	[mm]	1690	1"1/4	1910	1"1/4	2060	1"1/4	2170	1"1/4	235v0	1"1/4
Contact probe holder with tank enclosure	[mm]	along entire height		along entire height		along entire height		along entire height		along entire height	

P from 2500 to 5000 l

CONNECTIONS	u.m	2500		3000		4000		5000	
A - Sleeve	[mm]	535	1"1/2	380	1"1/2	505	1"1/2	400	1"1/2
B - Sleeve	[mm]	975	1"1/2	1020	1"1/2	1110	1"1/2	1100	1"1/2
C - Sleeve	[mm]	1415	1"1/2	1680	1"1/2	1860	1"1/2	1810	1"1/2
D - Diameter with insulation	[mm]	1450		1450		1600		1800	
E - Sleeve	[mm]	1855	1"1/2	2330	1"1/2	2410	1"1/2	2520	1"1/2
F - Sleeve	[mm]	535	1"1/2	380	1"1/2	505	1"1/2	400	1"1/2
G - Sleeve	[mm]	975	1"1/2	1020	1"1/2	1110	1"1/2	1100	1"1/2
h - Height without insulation	[mm]	2280		2715		2835		2870	
H - Height with insulation	[mm]	2330		2765		2885		2920	
I - Sleeve	[mm]	1415	1"1/2	1680	1"1/2	1860	1"1/2	1810	1"1/2
M - Sleeve	[mm]	1855	1"1/2	2330	1"1/2	2410	1"1/2	2520	1"1/2
N - Probe pocket or thermometer pocket	[mm]	535	1/2"	380	1/2"	505	1/2"	400	1/2"
O - Probe pocket or thermometer pocket	[mm]	975	1/2"	1020	1/2"	1110	1/2"	1100	1/2"
P - Probe pocket or thermometer pocket	[mm]	1415	1/2"	1680	1/2"	1860	1/2"	1810	1/2"
Q - Probe pocket or thermometer pocket	[mm]	1855	1/2"	2330	1/2"	2410	1/2"	2520	1/2"
R - Upper sleeve	[mm]	2330	1"1/4	2715	1"1/4	2835	1"1/4	2870	1"1/4
S - Probe tube	[mm]	Ø 14 x 1500		Ø 14 x 1500		Ø 14 x 1500		Ø 14 x 1500	

Construction material The tank is built in S 235 JR steel according to DIN 4753 standards.
Insulation P from 500 to 2000 - Insulated with rigid polyurethane shells, chlorofluorocarbon (CFC) free, self-extinguishing and removable (tilt height is intended without insulation).
P from 2500 to 5000 - Insulated with soft polyurethane, chlorofluorocarbon (CFC) free, self-extinguishing and removable (tilt height is intended without insulation).
PS from 50 to 500 - Insulated with directly injected rigid polyurethane, chlorofluorocarbon (CFC) free, self-extinguishing and non-removable (tilt height is intended with insulation).

PR STORAGE TANKS



WIDE RANGE
FOR ANY CONSUMPTION NEED

Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

WIDE RANGE FOR ANY CONSUMPTION NEED

HI-COMPETITION BUFFER TANK WITH ONE HEAT EXCHANGER

Integration for boilers and solar collectors. Single coil.

PR-Range of single coil buffer tanks suitable for containing technical system water. Suitable for integration with space heating and domestic hot water production via external module. The internal heat exchanger, positioned in the lower part of the tank, is designed to have maximum exchange efficiency with both solar collectors and heat generators. The wide range satisfies any consumption requirement, making it suitable for use in residential systems, condominiums, hotels, campgrounds, etc. Compliant with Directive 2009/125/EC in terms of eco-design and Directive 2010/30/EU in terms of energy labeling which came into force on September 26, 2015. Suitable for the minimum threshold limits in class C, imposed by the same Directives from September 26, 2017.

PR

One fixed heat exchanger, high number of sleeves, variable depending on the size, to provide maximum system versatility, insulation in rigid or soft polyurethane with white PVC external finish.

			MAXIMUM EXCHANGEABLE POWER		
	SIZE	USEFUL VOL [l]	Dt = 5 °C	Dt = 15 °C	Dt = 25 °C
			[kW]		
LOWER	500	497	7,6	21,6	37,8
	800	772	10,1	28,8	50,4
	1000	902	13,0	37,2	65,1
	1500	1526	14,7	42,0	73,5
	2000	1998	16,0	45,6	79,8
	2500	2347	17,6	50,4	88,2
	3000	2899	17,6	50,4	88,2
	4000	3821	20,6	58,8	102,9
	5000	5057	25,3	72,0	125,0

Tm = Heat generator flow temperature (entering the heat exchanger). Tr = Heat generator return temperature (exiting the heat exchanger). Tb = Tank temperature
Data referring to temperature conditions Dt = Tm-Tb

	PR 500	PR 800	PR 1000	PR 1500	PR 2000	PR 2500	PR 3000	PR 4000	PR 5000
Energy Class	C	C	C	C	C	-	-	-	-
CODE	1030305031	1030308011	1030310011	1030315011	1030320101	1030325011	1030330001	1030340011	1030350011

PR STORAGE TANK - TECHNICAL DATA

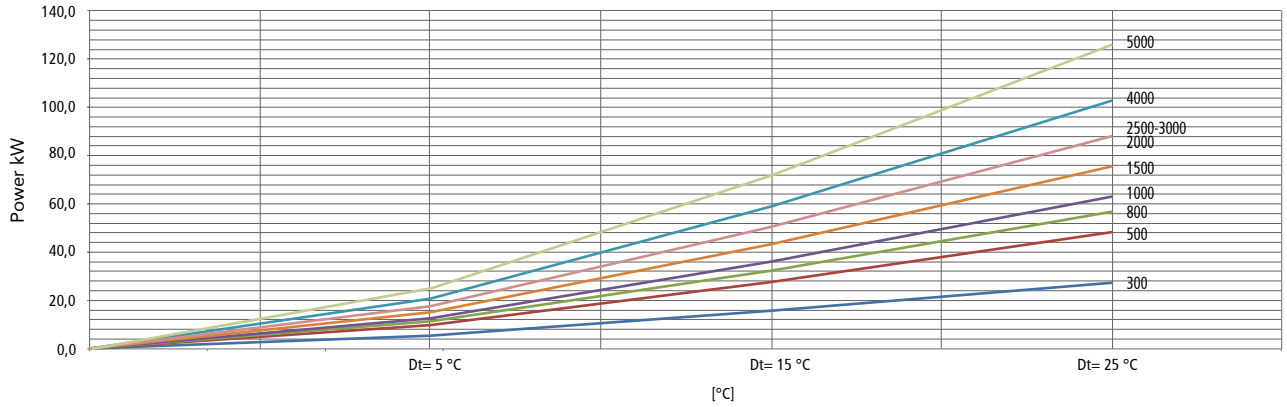
PR

ERP	u.m.	PR 500	PR 800	PR 1000	PR 1500	PR 2000	PR 2500	PR 3000	PR 4000	PR 5000
Useful Volume	[l]	497	772	902	1526	1998	2347	2899	3821	5057
Heat Loss	[W]	104	129	141	171	185	-	-	-	-
Heat Loss	[kWh/24h]	2,50	3,10	3,40	4,10	4,50	-	-	-	-
Energy Efficiency Class	[-]	C	C	C	C	C	-	-	-	-

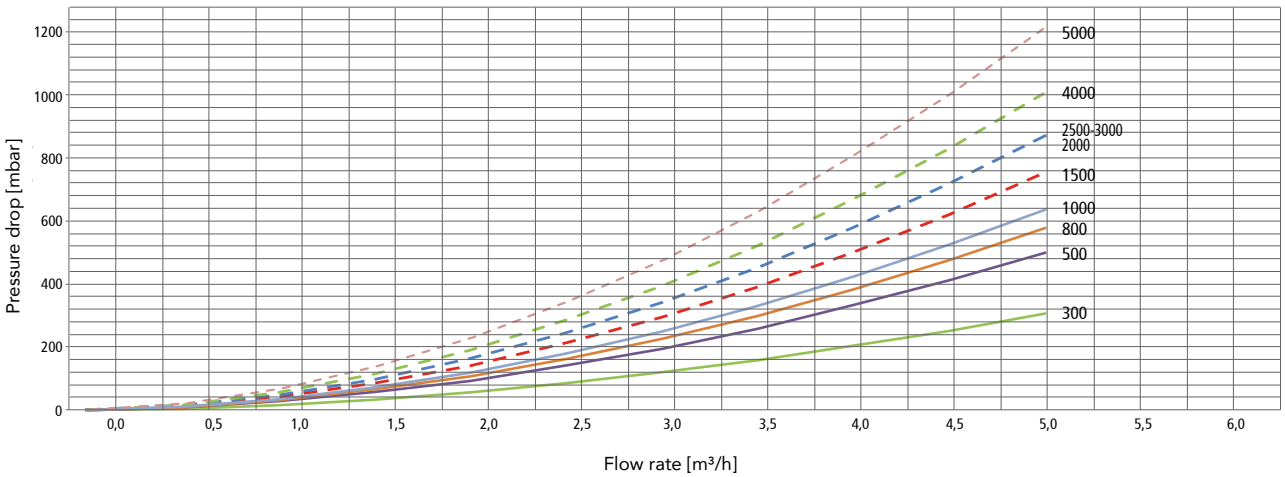
PRESSURES	u.m.	PR 500	PR 800	PR 1000	PR 1500	PR 2000	PR 2500	PR 3000	PR 4000	PR 5000
MAX Solar Heat Exchanger	[bar]	10	10	10	10	10	10	10	10	10
MAX Storage Tank	[bar]	3	3	3	3	3	3	3	3	3
TEMPERATURE	u.m.	PR 500	PR 800	PR 1000	PR 1500	PR 2000	PR 2500	PR 3000	PR 4000	PR 5000
MAX Solar Heat Exchanger	[°C]	95	95	95	95	95	95	95	95	95
MAX Storage Tank	[°C]	95	95	95	95	95	95	95	95	95

SIZE	u.m.	PR 500	PR 800	PR 1000	PR 1500	PR 2000	PR 2500	PR 3000	PR 4000	PR 5000
Solar heat exchanger content	[l]	14,5	16,2	19,0	23,5	26,4	26,4	26,4	30,9	38
Heat exchanger surface SOLAR	[m^2]	1,8	2,4	3,1	3,5	3,8	4,2	4,2	4,9	6,0
Empty weight	[Kg]	128	180	208	283	375	352	400	506	594
Tilting height senza Insulation	[mm]	1740	1950	2100	2240	2430	2370	2770	2890	2960
H-Total height	[mm]	1750	1970	2120	2240	2420	2280	2720	2885	2870
D-Diameter with insulation	[mm]	810	910	950	1250	1350	1450	1450	1600	1800
d-Diameter without insulation	[mm]	650	750	790	1000	1100	1250	1250	1400	1600
Insulation thickness	[mm]	70	70	70	110	110	100	100	100	100

Lower Heat Exchanger Power



Lower Heat Exchanger Pressure Losses



PR from 500 to 2000 l

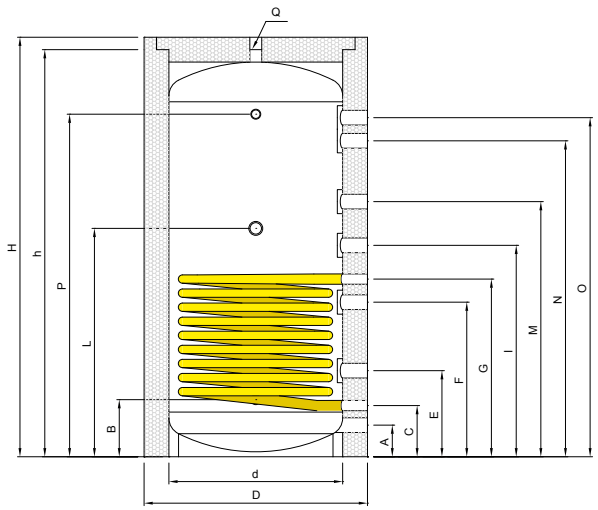
CONNECTIONS	u.m	500		800		1000		1500		2000	
A - Sleeve / heating return 2	[mm]	150	1"1/2	170	1"1/2	170	1"1/2	235	1"1/2	250	1"1/2
B - Sleeve for external DHW module	[mm]	260	1"	270	1"	270	1"	335	1"	350	1"
C - Solar heat exchanger outlet	[mm]	280	1"	290	1"	290	1"	355	1"	370	1"
D - Diameter with insulation	[mm]	810		910		950		1250		1350	
E - Sleeve / boiler return 2	[mm]	390	1"1/2	400	1"1/2	400	1"1/2	465	1"1/2	480	1"1/2
F - Sleeve / heating return 1	[mm]	620	1"1/2	670	1"1/2	790	1"1/2	775	1"1/2	830	1"1/2
G - Solar heat exchanger inlet	[mm]	720	1"	770	1"	890	1"	875	1"	930	1"
h - Height without insulation	[mm]	1700		1910		2060		2170		2350	
H - Height with insulation	[mm]	1750		1970		2120		2240		2420	
I - Sleeve / boiler return 1	[mm]	820	1"1/2	870	1"1/2	990	1"1/2	975	1"1/2	1030	1"1/2
L - Electric resistance (ESH)	[mm]	900	1"1/2	950	1"1/2	1100	1"1/2	1065	1"1/2	1230	1"1/2
M - Sleeve / heating flow	[mm]	1020	1"1/2	1150	1"1/2	1300	1"1/2	1285	1"1/2	1380	1"1/2
N - Sleeve / boiler flow 2	[mm]	1300	1"1/2	1560	1"1/2	1710	1"1/2	1725	1"1/2	1890	1"1/2
O - Sleeve / boiler flow 1	[mm]	1410	1"1/2	1670	1"1/2	1820	1"1/2	1835	1"1/2	2000	1"1/2
P - Sleeve for external DHW module	[mm]	1410	1"	1670	1"	1820	1"	1835	1"	2000	1"
Q - Vent	[mm]	1690	1"1/4	1910	1"1/4	2060	1"1/4	2170	1"1/4	2350	1"1/4
Contact probe holder with tank enclosure	[mm]	per tutta l'altezza		per tutta l'altezza		per tutta l'altezza		per tutta l'altezza		per tutta l'altezza	

PR from 2500 to 5000 l

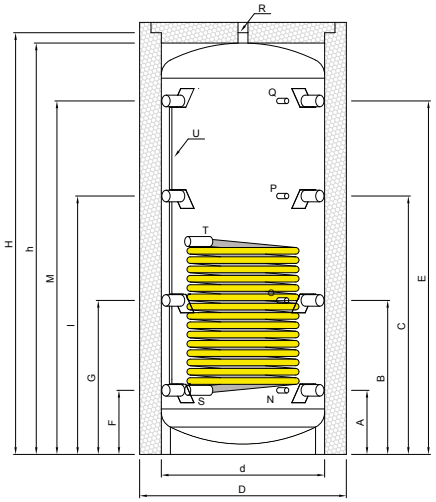
CONNECTIONS	u.m	2500		3000		4000		5000	
A - Sleeve	[mm]	535	1"1/2	380	1"1/2	505	1"1/2	400	1"1/2
B - Sleeve	[mm]	975	1"1/2	1020	1"1/2	1110	1"1/2	1100	1"1/2
C - Sleeve	[mm]	1415	1"1/2	1680	1"1/2	1860	1"1/2	1810	1"1/2
D - Diameter with insulation	[mm]	1450		1450		1600		1800	
E - Sleeve	[mm]	1855	1"1/2	2330	1"1/2	2410	1"1/2	2520	1"1/2
F - Sleeve	[mm]	535	1"1/2	380	1"1/2	505	1"1/2	400	1"1/2
G - Sleeve	[mm]	975	1"1/2	1020	1"1/2	1110	1"1/2	1100	1"1/2
h - Height without insulation	[mm]	2280		2715		2835		2870	
H - Height with insulation	[mm]	2330		2765		2885		2920	
I - Sleeve	[mm]	1415	1"1/2	1680	1"1/2	1860	1"1/2	1810	1"1/2
M - Sleeve	[mm]	1855	1"1/2	2330	1"1/2	2410	1"1/2	2520	1"1/2
N - Probe pocket or thermometer pocket	[mm]	535	1/2"	380	1/2"	505	1/2"	400	1/2"
O - Probe pocket or thermometer pocket	[mm]	975	1/2"	1020	1/2"	1110	1/2"	1100	1/2"
P - Probe pocket or thermometer pocket	[mm]	1415	1/2"	1680	1/2"	1860	1/2"	1810	1/2"
Q - Probe pocket or thermometer pocket	[mm]	1855	1/2"	2330	1/2"	2410	1/2"	2520	1/2"
R - Upper sleeve	[mm]	2280	1"1/4	2715	1"1/4	2835	1"1/4	2870	1"1/4
S - Solar heat exchanger outlet (cold side)	[mm]	535	1"	480	1"	505	1"	580	1"
T - Solar heat exchanger inlet (hot side)	[mm]	1250	1"	1430	1"	1555	1"	1580	1"
U - Probe tube	[mm]	Ø 14 x 1250 mm		Ø 14 x 1900 mm		Ø 14 x 1900 mm		Ø 14 x 1900 mm	

Construction material The tank is built in S 235 JR steel according to DIN 4753 standards.
Insulation PR from 500 to 2000 - Insulated with rigid polyurethane shells, chlorofluorocarbon (CFC) free, self-extinguishing and removable for all sizes. PR from 2500 to 5000 - Insulated with soft polyurethane, chlorofluorocarbon (CFC) free, self-extinguishing and removable for all sizes.

PR from 500 to 2000 l



PR from 2500 to 5000 l



PRR STORAGE TANKS



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-COMPETITION BUFFER TANK WITH TWO INTERNAL HEAT EXCHANGERS

Integration for boilers and solar collectors with second heat exchanger for auxiliary heat source. Double coil.

PRR - Grange of double coil buffer tanks suitable for containing technical system water. Suitable for integration with space heating and domestic hot water production via external module. The internal heat exchanger, positioned in the lower part of the tank, is designed to have maximum exchange efficiency with both solar collectors and heat generators. Similarly, the second heat exchanger, positioned in the upper part of the tank, ensures high heat exchange with all high flow temperature heat generators, such as thermo fireplaces. The wide range satisfies any consumption requirement, making it suitable for use in residential systems, condominiums, hotels, campgrounds, etc.
Compliant with Directive 2009/125/EC, in terms of eco-design, and Directive 2010/30/EU, in terms of energy labeling, which came into force on September 26, 2015, and suitable for the minimum threshold limits in class C, which the same Directives impose from September 26, 2017.

PRR

Two fixed heat exchangers, high number of sleeves ensuring maximum system versatility, insulation in removable rigid polyurethane shells, with white PVC external finish.

			MAXIMUM EXCHANGEABLE POWER serp. UPPER		
	SIZE	USEFUL VOL.	Dt = 5°C	Dt = 15°C	Dt = 25°C
		[liters]	[kW]		
UPPER	800	772	8,4	24,0	42,0
	1000	902	9,7	27,6	48,3
	1500	1526	13,4	38,4	67,2
	2000	1998	14,7	42,0	73,5

			MAXIMUM EXCHANGEABLE POWER serp. INFERIORE		
	SIZE	USEFUL VOL.	Dt = 5°C	Dt = 15°C	Dt = 25°C
		[liters]	[kW]		
LOWER	800	772	10,1	28,8	50,4
	1000	902	13,0	37,2	65,1
	1500	1526	14,7	42,0	73,5
	2000	1998	16,0	45,6	79,8

Tm = Heat generator flow temperature (inlet to the heat exchanger)
Tr = Heat generator return temperature (outlet from the heat exchanger)
Tb = Tank temperature Data referring to temperature conditions
Dt = Tm - Tb

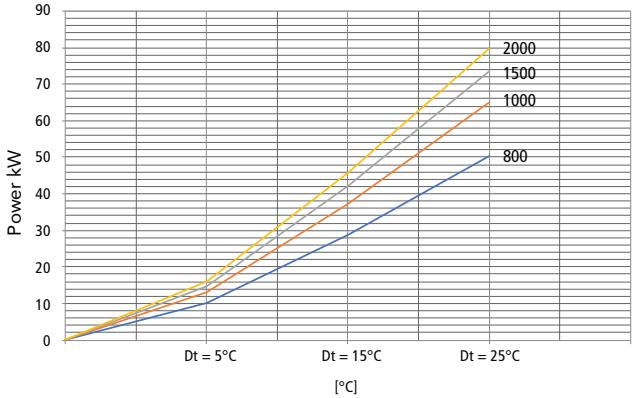
	PRR 800	PRR 1000	PRR 1500	PRR 2000
Energy Class	**C**	**C**	**C**	**C**
CODE	**1030308171**	**1030410111**	**1030315161**	**1030320171**

PRR Technical Data

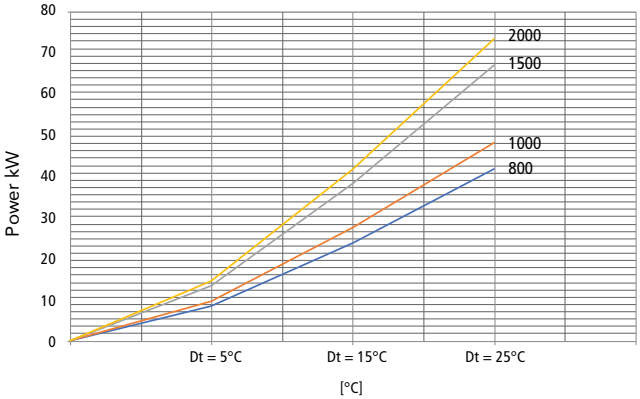
ERP	u.m.	PRR 800	PRR 1000	PRR 1500	PRR 2000
Useful Volume	[l]	772	902	1526	1998
Heat Loss	[W]	133	144	171	185
Heat Loss	[kWh/24h]	3,20	3,40	4,1	4,5
Energy Efficiency Class	[-]	C	C	C	C

PRESSURES	u.m.	PRR 800	PRR 1000	PRR 1500	PRR 2000
MAX Solar Heat Exchanger	[bar]	10	10	10	10
MAX Heat Exchanger UPPER	[bar]	10	10	10	10
MAX Storage Tank	[bar]	3	3	3	3
TEMPERATURE	**u.m.**	**PRR 800**	**PRR 1000**	**PRR 1500**	**PRR 2000**
MAX Solar Heat Exchanger	[°C]	95	95	95	95
MAX Heat Exchanger UPPER	[°C]	95	95	95	95
MAX Storage Tank	[°C]	95	95	95	95

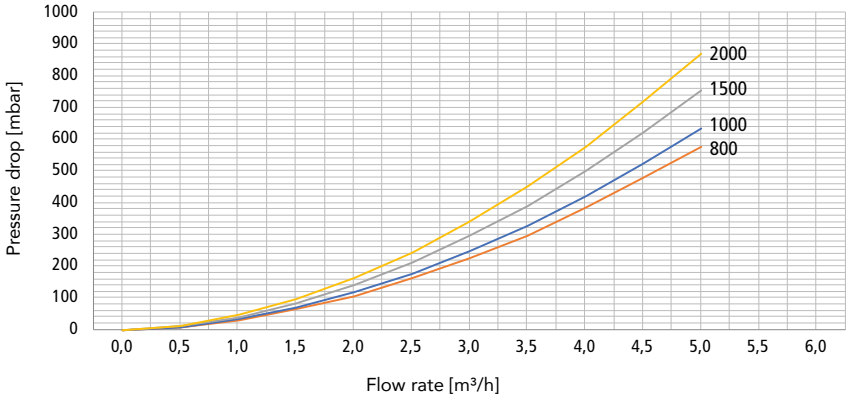
Solar heat exchanger (lower) power



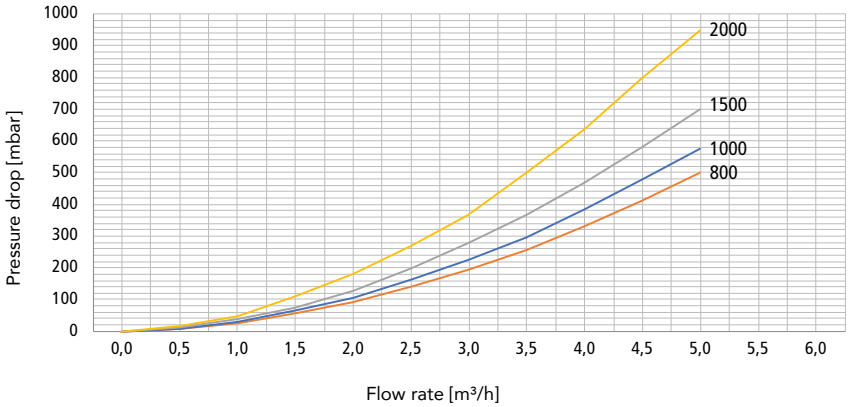
Heat exchanger (upper) power



PRESSURE DROPS IN LOWER SOLAR HEAT EXCHANGER

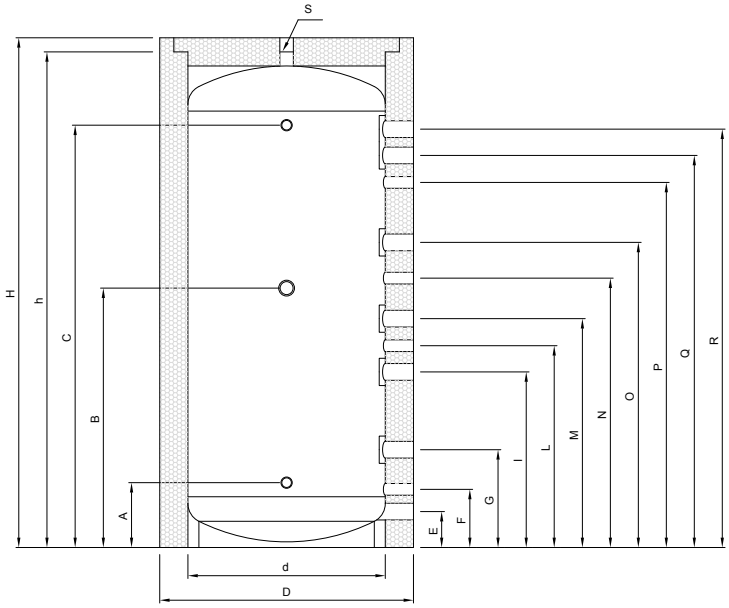


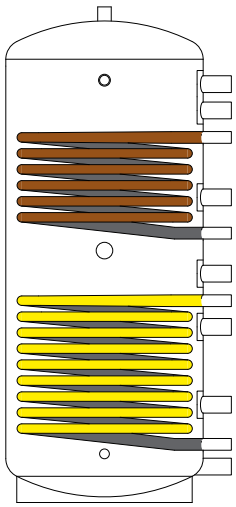
PRESSURE DROPS IN UPPER HEAT EXCHANGER

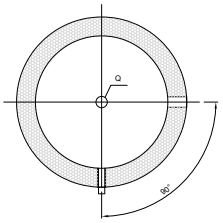


SIZE	u.m.	PRR 800	PRR 1000	PRR 1500	PRR 2000
Solar heat exchanger content	[l]	11,2	12,8	16,4	22,5
Upper heat exchanger content	[l]	12,8	14,0	14,8	16
Solar heat exchanger surface	[m^2]	2,4	3,1	3,5	3,8
Upper heat exchanger surface	[m^2]	2,0	2,3	3,2	3,5
Empty weight	[Kg]	185	192	308	369
Tilt height	[mm]	1950	2100	2240	2430
H - Total height	[mm]	1970	2120	2240	2430
D - Diameter with insulation	[mm]	910	950	1250	1350
d - Diameter without insulation	[mm]	750	790	1000	1100
Insulation thickness	[mm]	70	70	110	110

CONNECTIONS	u.m	PRR 800		PRR 1000		PRR 1500		PRR 2000	
A - Sleeve for external DHW module (cold)	[mm]	270	1"1/4	270	1"1/4	335	1"1/4	350	1"1/4
B - Electric resistance (ESH)	[mm]	950	1"1/2	1100	1"1/2	1065	1"1/2	1230	1"1/2
C - Sleeve for external DHW module (hot)	[mm]	1670	1"1/4	1820	1"1/4	1835	1"1/4	2000	1"1/4
D - Diameter with insulation	[mm]	910		950		1250		1350	
E - Sleeve - heating return 2	[mm]	170	1"1/2	170	1"1/2	235	1"1/2	250	1"1/2
F - Solar return	[mm]	290	1"	290	1"	355	1"	370	1"
G - Sleeve - boiler return 2	[mm]	400	1"1/2	400	1"1/2	465	1"1/2	480	1"1/2
H - Height with insulation	[mm]	1970		2120		2240		2430	
I - Sleeve - heating return 1	[mm]	670	1"1/2	790	1"1/2	775	1"1/2	830	1"1/2
L - Solar flow	[mm]	770	1"	890	1"	875	1"	930	1"
M - Sleeve - boiler return 1	[mm]	870	1"1/2	990	1"1/2	975	1"1/2	1030	1"1/2
N - Auxiliary heat exchanger return	[mm]	1050	1"	1160	1"	1105	1"	1270	1"
O - Sleeve - heating flow 1	[mm]	1150	1"1/2	1300	1"1/2	1285	1"1/2	1380	1"1/2
P - Auxiliary heat exchanger flow	[mm]	1450	1"	1600	1"	1585	1"	1790	1"
Q - Sleeve - boiler flow 2	[mm]	1560	1"1/2	1710	1"1/2	1725	1"1/2	1890	1"1/2
R - Sleeve - boiler flow 1	[mm]	1670	1"1/2	1820	1"1/2	1835	1"1/2	2000	1"1/2
S - Vent	[mm]	1910	1"1/4	2060	1"1/4	2170	1"1/4	2350	1"1/4
Contact probe holder with tank enclosure	[mm]	Along entire height		Along entire height		Along entire height		Along entire height	



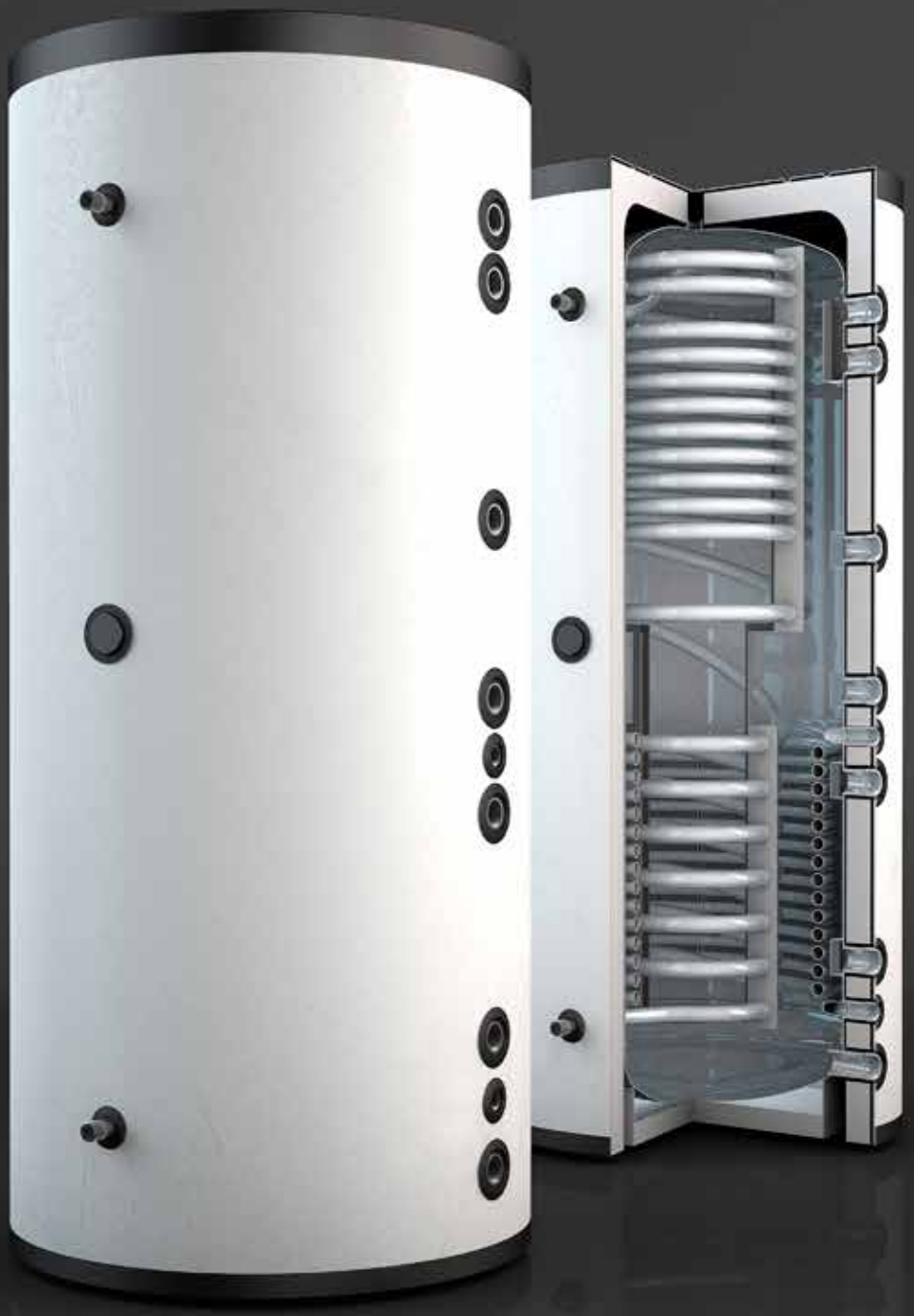




Construction material
The tank is built in S 235 JR steel according to DIN 4753 standards.

Insulation
Fully insulated with rigid polyurethane foam shells, chlorofluorocarbon (CFC) free, self-extinguishing and removable.

HR STORAGE TANKS



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

Maximum solar efficiency for domestic hot water production and space heating integration. Double coil.

HR-Range of double internal coil buffer tanks suitable for space heating and domestic hot water production for domestic and residential structures. The tank is suitable for containing hot technical water. The lower coil, positioned in the lower part of the tank, is designed to have maximum exchange efficiency with solar collectors. Domestic hot water is produced instantaneously via an internal corrugated stainless steel coil that extends throughout the entire tank volume.
Compliant with Directive 2009/125/EC in terms of eco-design and Directive 2010/30/EU in terms of energy labeling which came into force on September 26, 2015. Suitable for the minimum threshold limits in class C, imposed by the same Directives from September 26, 2017.

HR

Two fixed heat exchangers, one of which for DHW production in V4A corrugated stainless steel, eight total sleeves at different heights, with probe holder that extends throughout the height of the tank, insulation in rigid polyurethane shells with white PVC external finish.

			FULLY HEATED TANK[1]			TANK HEATED ONLY IN THE UPPER SECTION[1]						
			Initial production with heat generator off [liters]			Initial production with heat generator off [liters]			Values according to DIN 4708[2] standard			
		USEFUL VOL	Flow rate			Flow rate			NL		PEAK withdrawal in 10 minutes[3]	
	SIZE	[l]	10 l/min	15 l/min	20 l/min	10 l/min	15 l/min	20 l/min			[liters]	[l/min]
DHW	500	497	373	319	281	260	234	209	3,0	(29 kW)	232	23,2
	800	772	573	519	456	382	322	275	3,8	(30 kW)	260	26,0
	1000	902	637	600	536	402	331	281	4,0	(33 kW)	267	26,7
	1500	1526	700	650	547	385	358	301	9,3	(70 kW)	399	39,9
	2000	1998	842	714	651	463	393	358	10,4	(80 kW)	423	42,3

			MAXIMUM EXCHANGEABLE POWER[4]		
	SIZE	USEFUL VOL [l]	Dt = 5 °C	Dt = 15 °C	Dt = 25 °C
			[kW]		
LOWER	500	497	8,0	22,8	40,0
	800	772	10,0	28,8	50,4
	1000	902	13,0	37,2	65,1
	1500	1526	14,7	42,0	73,5
	2000	1998	15,9	45,6	79,8

Tm = Heat generator flow temperature (inlet to the heat exchanger). Tr = Heat generator return temperature (outlet from the heat exchanger). Tb = Tank temperature 4. Data referring to temperature conditions Dt = Tm-Tb

Tm = Heat generator flow temperature (inlet to the heat exchanger). Tb = Tank temperature TDHW = Domestic hot water temperature TCWS = Cold water supply temperature

1. Data referring to temperature conditions TDHW= 45°C; TCWS= 10°C; Tb = 65°C
2. Data referring to temperature conditions TDHW= 45°C; TCWS= 10°C; Tm= 70°C; Tb= TCWS + 50°C;
3. Data referring to the NL coefficient

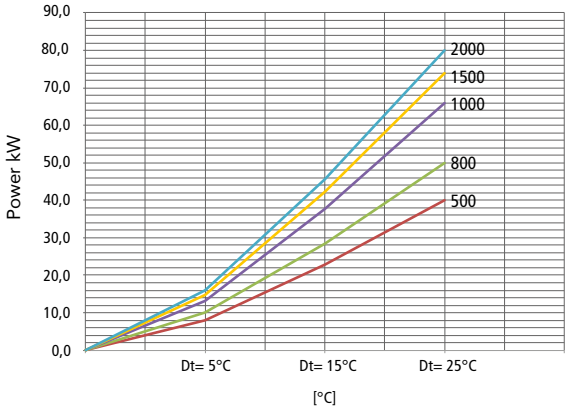
	HR 500	HR 800	HR 1000	HR 1500	HR 2000
Energy Class	**C**	**C**	**C**	**C**	**C**
CODE	**1030405031**	**1030408101**	**1030410141**	**1030415091**	**1030420071**

HR STORAGE TANK - TECHNICAL DATA

ERP	u.m.	HR 500	HR 800	HR 1000	HR 1500	HR 2000
Useful Volume	[l]	497	772	902	1526	1998
Heat Loss	[W]	104	129	141	171	185
Heat Loss	[kWh/24h]	2,50	3,10	3,38	4,10	4,44
Energy Efficiency Class	[-]	C	C	C	C	C

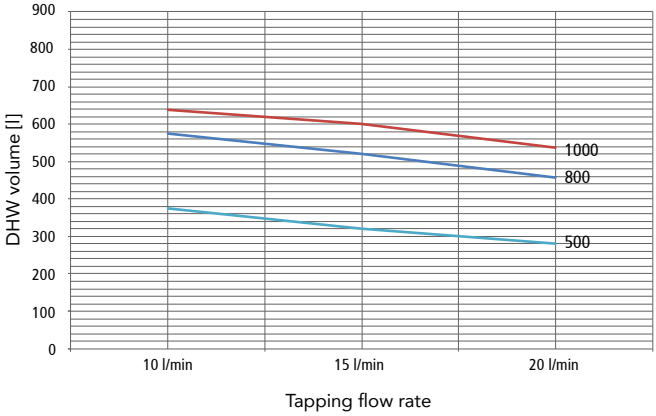
PRESSURES	u.m.	HR 500	HR 800	HR 1000	HR 1500	HR 2000
MAX Solar Heat Exchanger	[bar]	10	10	10	10	10
MAX Storage Tank	[bar]	3	3	3	3	3
TEMPERATURE	u.m.	HR 500	HR 800	HR 1000	HR 1500	HR 2000
MAX Solar Heat Exchanger	[°C]	95	95	95	95	95
MAX Storage Tank	[°C]	95	95	95	95	95

Lower Heat Exchanger Power

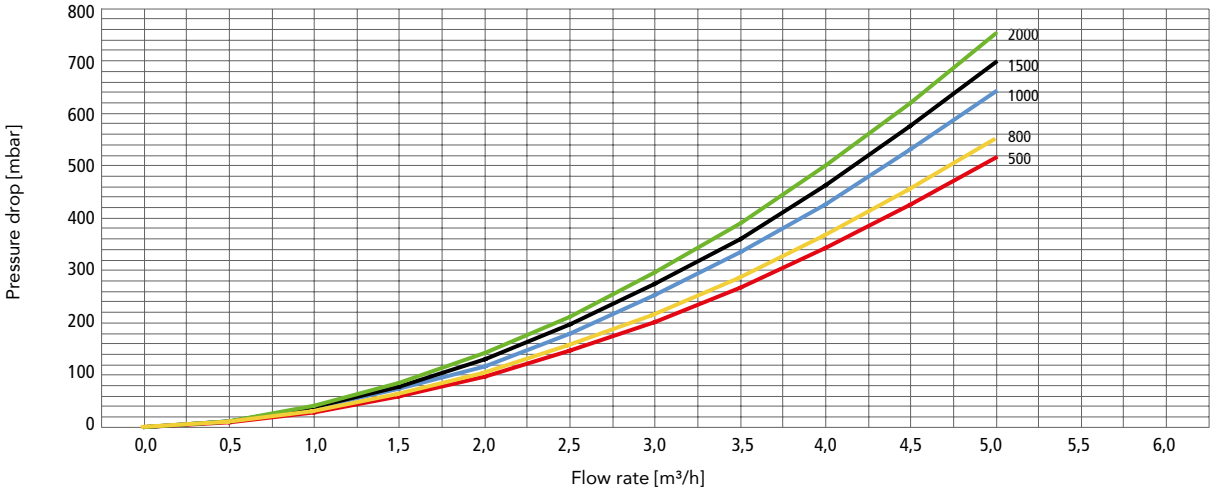


DHW Production

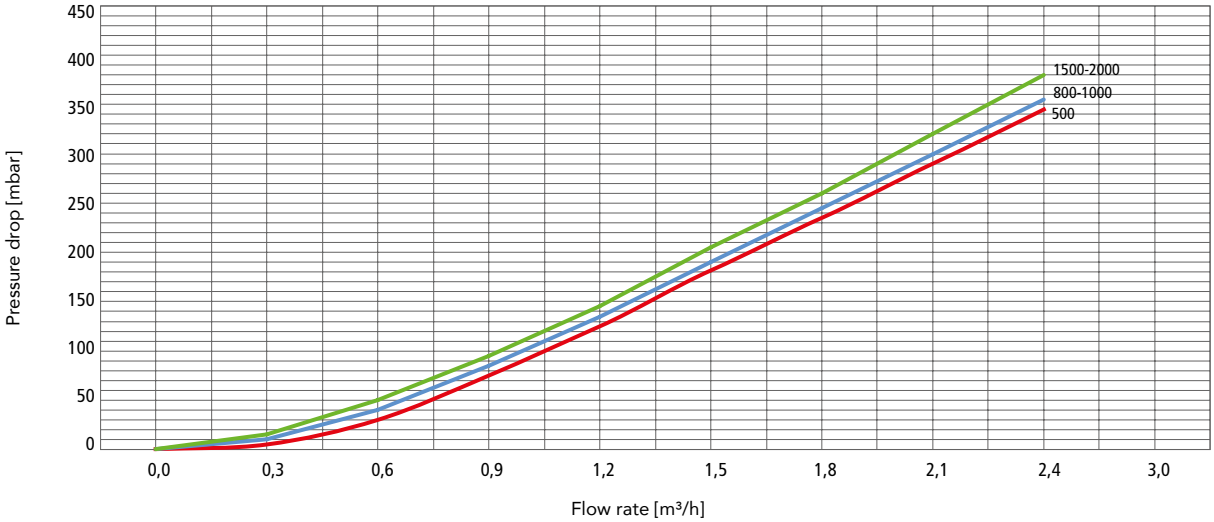
with heat generator off and completely heated tank



Lower Heat Exchanger Pressure Losses

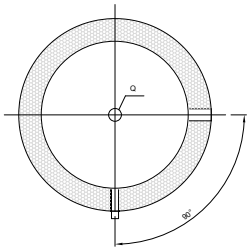


DHW Heat Exchanger Pressure Losses



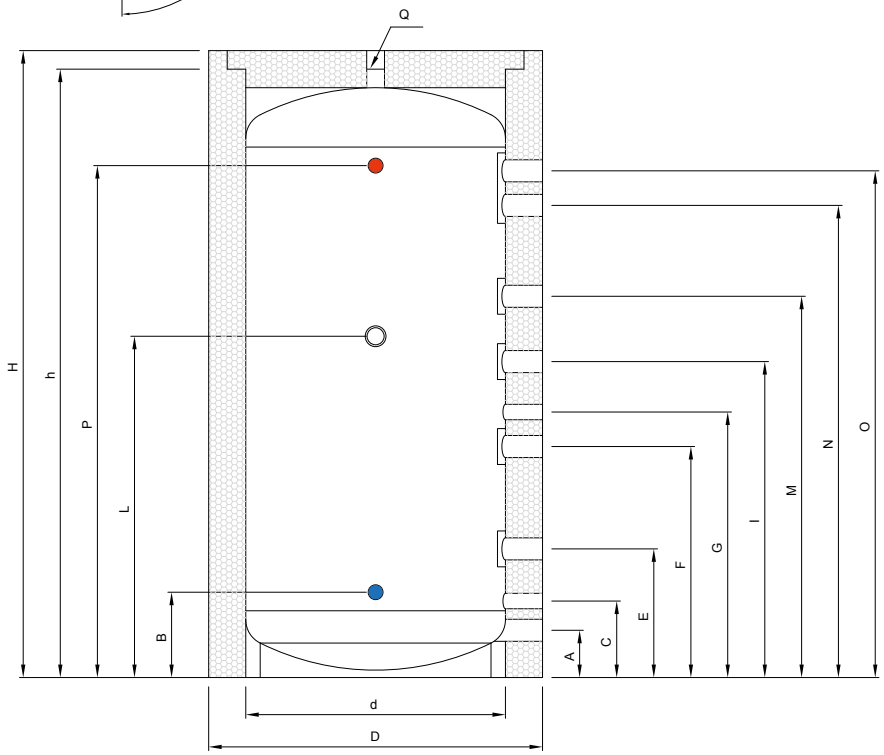
MEASUREMENTS	u.m.	HR 500	HR 800	HR 1000	HR 1500	HR 2000
Solar heat exchanger content	[l]	11,5	15,0	19,0	21,5	23,5
Domestic hot water heat exchanger content (stainless steel)	[l]	28,0	30,0	30,0	50,0	50,0
Solar heat exchanger surface	[m^2]	1,9	2,4	3,1	3,5	3,8
Domestic hot water heat exchanger surface (stainless steel)	[m^2]	5,5	6,0	6,0	9,8	9,8
Empty weight	[Kg]	180	191	219	345	375
Tilt height without insulation	[mm]	1740	1950	2100	2240	2430
H - Total height	[mm]	1750	1970	2120	2240	2430
D - Diameter with insulation	[mm]	810	910	950	1250	1350
d - Diameter without insulation	[mm]	650	750	790	1000	1100
Insulation thickness	[mm]	70	70	70	110	110

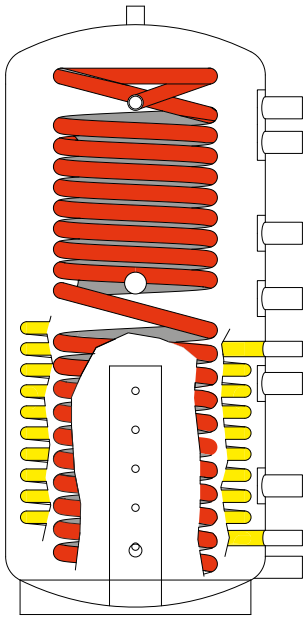
CONNECTIONS	u.m.	HR 500		HR 800		HR 1000		HR 1500		HR 2000	
A - Sleeve / heating return 2	[mm]	150	1"1/2	170	1"1/2	170	1"1/2	235	1"1/2	250	1"1/2
B - Domestic cold water inlet	[mm]	260	1"	270	1"	270	1"	335	1"	350	1"
C - Solar heat exchanger outlet	[mm]	280	1"	290	1"	290	1"	335	1"	370	1"
D - Diameter with insulation	[mm]	810		910		950		1200		1300	
E - Sleeve / boiler return 2	[mm]	390	1"1/2	400	1"1/2	400	1"1/2	465	1"1/2	480	1"1/2
F - Sleeve / heating return 1	[mm]	620	1"1/2	670	1"1/2	790	1"1/2	775	1"1/2	830	1"1/2
G - Solar heat exchanger inlet	[mm]	720	1"	770	1"	890	1"	875	1"	930	1"
h - Height without insulation	[mm]	1670		1910		2060		2140		2320	
H - Height with insulation	[mm]	1750		1970		2120		2220		2420	
I - Sleeve / boiler return 1	[mm]	820	1"1/2	870	1"1/2	990	1"1/2	975	1"1/2	1030	1"1/2
L - Electric resistance (ESH)	[mm]	900	1"1/2	950	1"1/2	1100	1"1/2	1065	1"1/2	1230	1"1/2
M - Sleeve / heating flow	[mm]	1020	1"1/2	1150	1"1/2	1300	1"1/2	1285	1"1/2	1380	1"1/2
N - Sleeve / boiler flow 2	[mm]	1300	1"1/2	1560	1"1/2	1710	1"1/2	1725	1"1/2	1890	1"1/2
O - Sleeve / boiler flow 1	[mm]	1410	1"1/2	1670	1"1/2	1820	1"1/2	1835	1"1/2	2000	1"1/2
P - Domestic hot water outlet	[mm]	1410	1"	1670	1"	1820	1"	1835	1"	2000	1"
Q - Vent	[mm]	1670	1"1/4	1910	1"1/4	2060	1"1/4	2170	1"1/4	2350	1"1/4
Contact probe holder with tank enclosure	[mm]	Along entire height		Along entire height		Along entire height		Along entire height		Along entire height	



Construction material
The tank is built in S 235 JR steel according to DIN 4753 standards. Equipped with coil for Domestic Hot Water production in corrugated V4A stainless steel.

Insulation
Fully insulated with rigid polyurethane foam shells, chlorofluorocarbon (CFC) free, self-extinguishing and removable.





HRR STORAGE TANK



Images are for illustrative purposes. Products may be subject to modifications depending on availability.

WARRANTY

WARRANTY 5 YEARS

APPLICATIONS

HI-COMPETITION BUFFER TANK WITH SOLAR HEAT EXCHANGER, DHW PIPE IN TANK + ONE AUXILIARY HEAT EXCHANGER

Combined production of DHW and heating integration with multiple heat generators. Triple coil.

HRR-Range of triple internal coil tanks suitable for space heating and domestic hot water production for domestic and residential structures. The tank is suitable for containing hot technical water. The first coil, positioned in the lower part of the tank, is designed to have maximum exchange efficiency with solar collectors. The second coil, positioned in the upper part, is designed for energy exchange with a second heat source. Hot water production occurs instantaneously through an internal corrugated stainless steel coil.
Compliant with Directive 2009/125/EC in terms of eco-design and Directive 2010/30/EU in terms of energy labelling, which came into force on September 26, 2015. Suitable for the minimum threshold limits in class C, imposed by the same Directives from September 26, 2017.

HRR

Three fixed heat exchangers, one of which for DHW production in corrugated V4A stainless steel, eight total sockets at different heights, with sensor holder that extends throughout the height of the tank, soft polyurethane insulation with white PVC external finish.

			FULLY HEATED TANK[1]			TANK HEATED ONLY IN THE UPPER SECTION[1]						
			Initial production with heat generator off [liters]			Initial production with heat generator off [liters]			Values according to DIN 4708[2] standard			
		USEFUL VOL	Flow rate			Flow rate			NL		PEAK withdrawal in 10 minutes[3]	
	SIZE	[l]	10 l/min	15 l/min	20 l/min	10 l/min	15 l/min	20 l/min			[liters]	[l/min]
DHW	500	497	373	319	281	260	234	209	3,0	(29 kW)	232	23,2
	800	772	573	519	456	382	322	275	3,8	(30 kW)	260	26,0
	1000	902	637	600	536	402	331	281	4,0	(33 kW)	267	26,7
	1500	1526	700	650	547	385	358	301	9,3	(70 kW)	399	39,9
	2000	1998	842	714	651	463	393	358	10,4	(80 kW)	423	42,3

			MAXIMUM EXCHANGEABLE POWER[4]		
	SIZE	USEFUL VOL [l]	Dt = 5 °C	Dt = 15 °C	Dt = 25 °C
			[kW]		
UPPER	500	497	5,0	14,4	25,2
	800	772	8,4	24,0	42,0
	1000	902	9,2	27,6	48,3
	1500	1526	14,2	42	73,5
	2000	1998	16	46	79

			MAXIMUM EXCHANGEABLE POWER[4]		
	SIZE	USEFUL VOL [l]	Dt = 5 °C	Dt = 15 °C	Dt = 25 °C
			[kW]		
LOWER	500	497	7,9	22,8	40,0
	800	772	10	28,8	50,4
	1000	902	12,9	37,2	65,1
	1500	1526	14,7	42,0	73,5
	2000	1998	15,9	45,6	79,8

TDHW = Domestic hot water temperature
TCWS = Cold water supply temperature
Tf = Flow temperature of heat generator (inlet to the heat exchanger)
Tr = Return temperature of heat generator (outlet from the heat exchanger)
Tt = Tank temperature
4. Data referring to temperature conditions Dt = Tf-Tt

1. Data referring to temperature conditions TDHW= 45°C; TCWS= 10°C; Tt = 65°C
2. Data referring to temperature conditions TDHW= 45°C; TCWS= 10°C; Tf= 70°C; Tt= TCWS + 50°C;
3. Data referring to coefficient NL

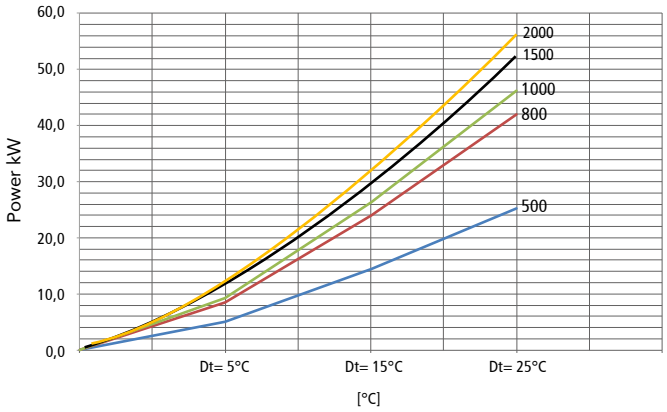
	HRR 500	HRR 800	HRR 1000	HRR 1500	HRR 2000
Energy Class	**C**	**C**	**C**	**C**	**C**
CODE	**1030405051**	**1030408131**	**1030410171**	**1030410181**	**1030410191**

HRR STORAGE TANK – TECHNICAL DATA

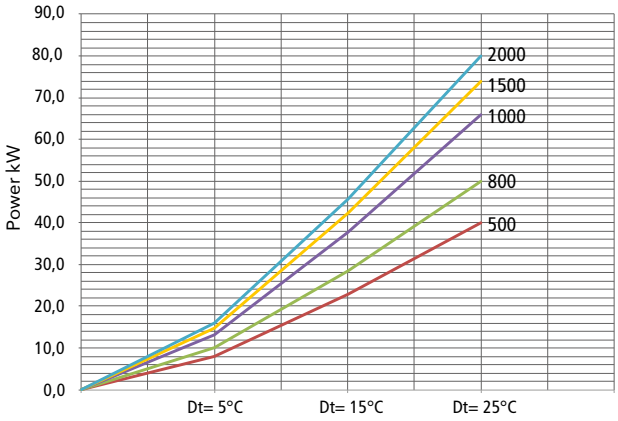
ERP	u.m.	HRR 500	HRR 800	HRR 1000	HRR 1500	HRR 2000
Useful Volume	[l]	497	772	902	1526	2007
Heat Loss	[W]	104	129	141	171	185
Heat Loss	[kWh/24h]	2,50	3,10	3,04	4.1	3,4
Energy Efficiency Class	[-]	C	C	C	C	C

PRESSURES	u.m.	HRR 500	HRR 800	HRR 1000	HRR 1500	HRR 2000
MAX Solar Heat Exchanger	[bar]	9	9	9	9	9
MAX Upper Heat Exchanger	[bar]	9	9	9	9	9
MAX Storage Tank	[bar]	6	6	6	6	6
TEMPERATURE	**u.m.**	**HRR 500**	**HRR 800**	**HRR 1000**	**HRR 1500**	**HRR 2000**
MAX Solar Heat Exchanger	[°C]	95	95	95	95	95
MAX Upper Heat Exchanger	[°C]	95	95	95	95	95
MAX Storage Tank	[°C]	95	95	95	95	95

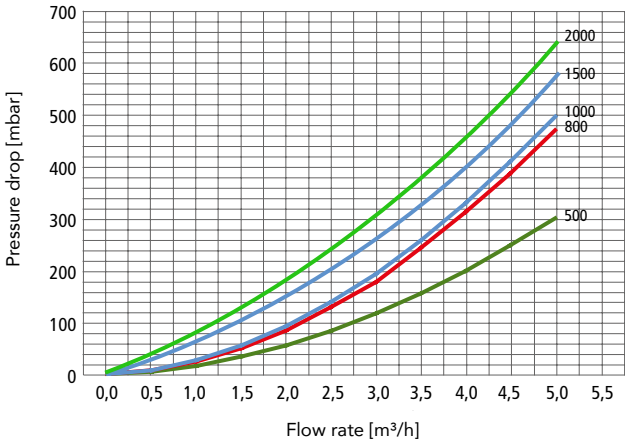
Upper Heat Exchanger Power



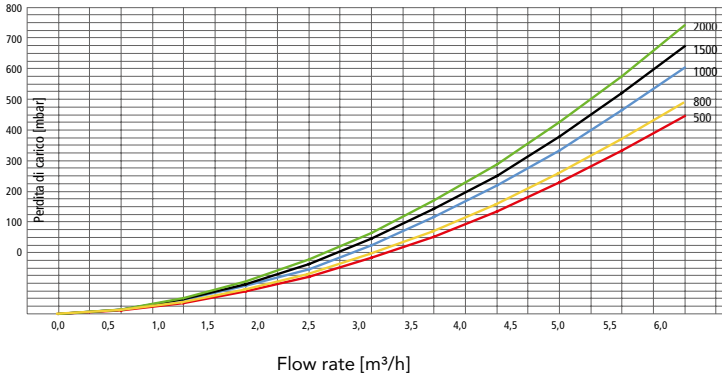
Lower Heat Exchanger Power



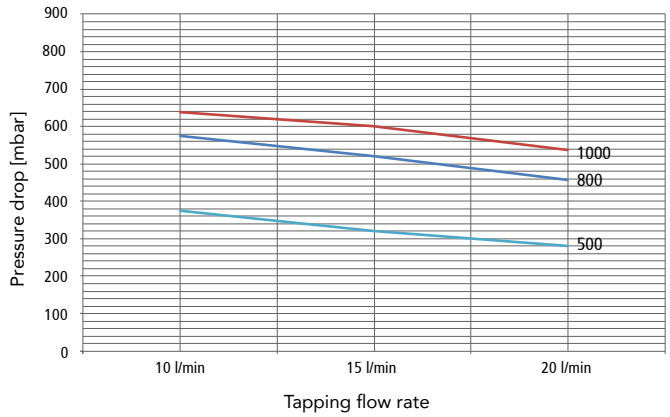
Upper Heat Exchanger Pressure Drop



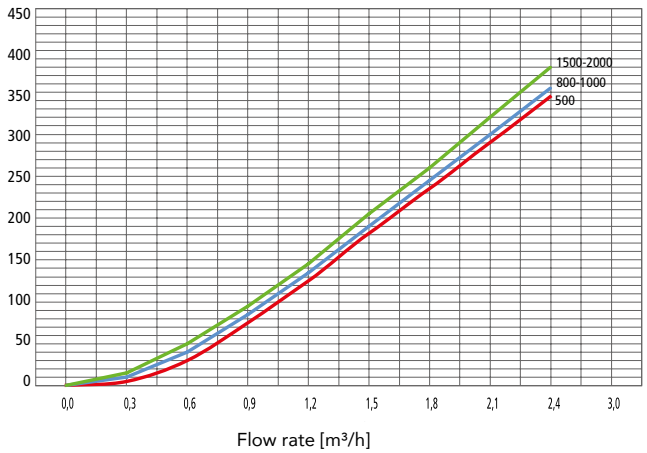
Lower Heat Exchanger Pressure Losses



DHW Production
with heat generator off and fully heated tank

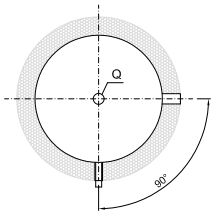


DHW Heat Exchanger Pressure Losses



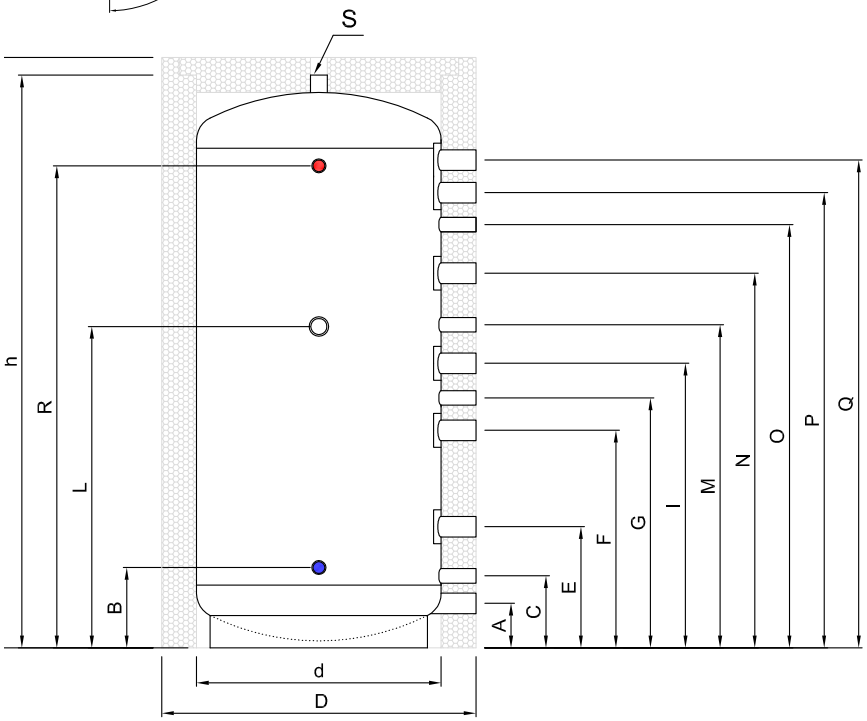
MEASUREMENTS	u.m.	HRR 500	HRR 800	HRR 1000	HRR 1500	HRR 2000
Solar heat exchanger content	[l]	11,0	15,0	19,0	19	22
Domestic hot water heat exchanger content (stainless steel)	[l]	28,8	30,0	30,0	50	50
Auxiliary heat exchanger content	[l]	7,0	12,0	14,0	21.5	23.5
Solar heat exchanger surface	[m2]	1,9	2,4	3,1	3.2	3.5
Domestic hot water heat exchanger surface (stainless steel)	[m2]	5,5	6,0	6,0	9.8	9.8
Auxiliary heat exchanger surface	[m2]	1,2	2,0	2,3	3.5	3.8
Empty weight	[Kg]	198	221	254	308	369
Tipping height	[mm]	1740	1950	2100	2240	2430
H - Total height	[mm]	1750	1970	2120	2240	2430
D - Diameter with insulation	[mm]	810	910	950	1250	1350
d - Diameter without insulation	[mm]	650	750	790	1000	1100
Insulation thickness	[mm]	70	70	70	110	110

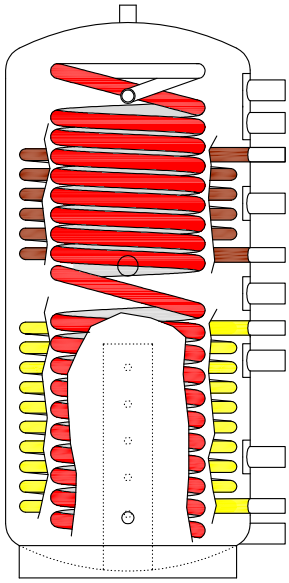
CONNECTIONS	u.m.	HRR 500		HRR 800		HRR 1000		HRR 1500		HRR 2000	
A - Socket / heating return 2	[mm]	150	1"1/2	170	1"1/2	170	1"1/2	235	1"1/2	250	1"1/2
B - Cold domestic water inlet	[mm]	260	1"	270	1"	270	1"	335	1"	350	1"
C - Solar heat exchanger outlet	[mm]	280	1"1/2	290	1"1/2	290	1"1/2	355	1"1/2	370	1"1/2
d - Diameter without insulation	[mm]	650		750		790		1000		1100	
D - Diameter with insulation	[mm]	810		910		950		1250		1350	
E - Socket / boiler return 2	[mm]	390	1"1/2	400	1"1/2	400	1"1/2	465	1"1/2	480	1"1/2
F - Socket / heating return 1	[mm]	620	1"1/2	670	1"1/2	790	1"1/2	775	1"1/2	830	1"1/2
G - Solar heat exchanger inlet	[mm]	720	1"	770	1"	890	1"1/2	875	1"	930	1"
h - Height without insulation	[mm]	1700		1920		1970		2170		2350	
H - Height with insulation	[mm]	1750		1970		2120		2240		2430	
I - Socket / boiler return 1	[mm]	820	1"1/2	870	1"1/2	990	1"1/2	975	1"1/2	1030	1"1/2
L - Electric heater	[mm]	900	1"1/2	950	1"1/2	1100	1"1/2	1065	1"1/2	1230	1"1/2
M - Auxiliary heat exchanger outlet	[mm]	950	1"	1050	1"	1160	1"	1105	1"	1270	1"
N - Socket / heating flow	[mm]	1050	1"1/2	1150	1"1/2	1300	1"1/2	1285	1"1/2	1380	1"1/2
O - Auxiliary heat exchanger inlet	[mm]	1250	1"	1450	1"	1600	1"	1585	1"	1790	1"
P - Socket / boiler flow 2	[mm]	1360	1"1/2	1560	1"1/2	1710	1"1/2	1725	1"1/2	1890	1"1/2
Q - Socket / boiler flow 1	[mm]	1470	1"1/2	1670	1"1/2	1820	1"1/2	1835	1"1/2	2000	1"1/2
R - Hot domestic water outlet	[mm]	1410	1"	1670	1"	1820	1"	1835	1"	2000	1"
S - Air vent	[mm]	1670	1"1/4	1910	1"1/4	2060	1"1/4	2170	1"1/4	2350	1"1/4
Sensor holder in contact with tank casing	[mm]	Along entire height		Along entire height		Along entire height		Along entire height		Along entire height	



Construction material
The tank is constructed in S 235 JR steel according to DIN 4753 standard. Equipped with coil for Domestic Hot Water production in corrugated V4A stainless steel.

Insulation
Fully insulated with soft polyurethane mattress, free from chlorofluorocarbons (CFCs), self-extinguishing and removable.





ACCESSORIES FOR STORAGE TANKS

ACCESSORIES

ATTENTION ACCESSORY COMPONENTS TO BE ORDERED SEPARATELY

		CODE
	**SENSOR POCKET** Sensor pocket for measuring the temperature inside the tank. Pocket length 100 mm, diameter for 6 mm sensor, 1/2" M hydraulic connectio**N**	1030901201
	**DHW RECIRCULATION KIT** Domestic hot water recirculation for systems with ECO COMPACT DUO, PH, PHR and PHRR tanks. Composed of a brass T-fitting and a stainless steel flexible pipe. To be installed on the DHW outlet sleeve.	1030902871
	**TANK THERMOMETER** Thermometer for measuring the water temperature inside the tank. Bulb length 100 mm, 9 mm diameter, temperature scale from 0 to 120 °C	1030902911
	**INSULATING CAP FOR BLIND SLEEVES** **I**nsulating cap to reduce heat loss in the tank's blind sleeves. Suitable for 1" 1/2 diameter sleeves	1030903611
	**AUXILIARY SOLAR HEAT EXCHANGER FOR BPU** Extractable copper heat exchanger to be inserted into flange, with 1.5 m² surface	1090000184

ELECTRIC HEATERS

ATTENTION ACCESSORY COMPONENTS TO BE ORDERED SEPARATELY

			[kW]	[V]	Ø [inch]	[mm]	CODE
	**ELECTRIC HEATER FOR SLEEVE - ESH** • Tubular INCOLOY insulated heating element • 220 V electrical supply up to 3 kW and 380 V up to 9 kW	**ESH M/T 2.0**	2.0	220/3 ~ 380	1"1/2	430	1030901551
		ESH M/T 2.5	2.5	220/3 ~ 380	1"1/2	430	1030901851
		ESH M/T 3.0	3.0	220/3 ~ 380	1"1/2	430	1030901861
		ESH T 3.8	3.8	3 ~ 380	1"1/2	430	1030901791
		ESH T 4.5	4.5	3 ~ 380	1"1/2	430	1030901871
		ESH T 6.0	6.0	3 ~ 380	1"1/2	630	1030901881
		ESH T 7.5	7.5	3 ~ 380	1"1/2	700	1030901801
		ESH T 9.0	9.0	3 ~ 380	1"1/2	800	1030901811

			[kW]	[V]	Ø [inch]	[mm]	CODE
	**ELECTRIC HEATER FOR FLANGE - REU, RDU, RDW** • Tubular INCOLOY insulated heating element • Safety system for the electrical circuit • Maximum thermostat adjustable from the outside • Maximum temperature limiter • (Heaters compatible with: ECO COMPACT, ECO COMPACT HPS, ECO FRESH, ECO COMPACT DUO, BPU, BR, BRR, BWP, BWPS P, PS, PR, PRR HR and HRR...)	**REU M 2.0**	2.0	~ 220	180	450	1030901901
		REU M 2.5	2.5	~ 220	180	450	1030903661
		RDU T 3.0	3.0	3 ~ 380	180	450	1030901941
		RDU T 5.0	5.0	3 ~ 380	180	450	1030901961
		RDW T 7.5	7.5	3 ~ 380	180	450	1030901981
	Enameled reduction for flange 290/180						1030902901

SALES CONDITIONS

1. APPLICATION
The following General Sales Conditions apply to all Sales Contracts in force between the seller (hereinafter also referred to as Pleion Spa) and the purchaser (hereinafter also referred to as Customer). These conditions are considered to be fully accepted and approved by the Customer when the order is placed.

2. ORDERS
The descriptions, photographs, characteristics, and prices contained in the Pleion Spa catalogue and in other Pleion Spa documentation are for informational purposes only. Pleion Spa reserves the right to change all or part of the aforementioned information and the related products at any time and without prior notice. Customer orders will be considered definitively placed, subject to requests for changes or cancellations made by the Customer within 24 hours of being received by Pleion Spa.

3. PRICES
The sales prices are those indicated in the sales documentation, unless updated to those currently in force on the date of delivery. Prices are ex-office Pleion S.p.a. for products packaged according to standard internal procedures, are net of additional transport charges and other expenses related to the processing of the order and are exclusive of VAT.

4. DELIVERIES
The terms of delivery are indicative and in no case may constitute a motive for cancellation of all or part of the order placed by the Customer. In no case is Pleion Spa responsible for reimbursement of direct or indirect damages due to delivery delays or total or partial interruption of the supply.

5. TRANSPORT
If, at the time of delivery, the customer or person receiving the goods on their behalf discovers a defect or deficiency in the packaging or in the goods received, he or she must make a written notice on the shipper's transport slip and, at the same time, notify Pleion Spa in writing. Any damages or losses related to the transported goods are the Customer's responsibility as it is travelling at the Customer's risk, even if sold postage paid, unless otherwise agreed in writing.

6. CLAIMS
The Customer must submit any complaints to Pleion S.p.a. within eight days of the arrival of the goods. The customer, who has made complaints or brought disputes is under no circumstances entitled to delay or suspend payments for supplies to Pleion S.p.a.

Notwithstanding the provisions of article 134 of the Consumer Code, the non-consumer Buyer may exercise the right of recourse against the Seller, under penalty of forfeiture, only within two years of delivery of the Products to the same non-consumer Buyer.
Without prejudice to the rights provided for by consumer law, the Seller guarantees the quality of the Products for a certain period after delivery, excluding those defects that may occur due to transport, improper use or inadequate storage or maintenance of the Products. Any claim relating to defects or faults concerning the Products must be sent to the Seller by registered letter with return receipt or certified e-mail strictly within eight days of delivery in the case of obvious defects and within eight days of discovery in the case of hidden defects, in any case within 1 year of delivery, under penalty of forfeiture. Returns will not be accepted unless previously authorised in writing by the Seller; the latter will examine the returns to verify that the defect exists and is attributable to its own responsibility and only in this case will it replace and/or repair the Products recognised as defective. Any other warranty, even by law, must be considered excluded and replaced by these Terms and Conditions.

7. PAYMENT
All payments must be made, in the agreed currency, at the domicile of Pleion S.p.a. In the event of deferred payment, failure to comply with a deadline will result in forfeiture of the deadline itself,the immediate payability of the entire remaining amount and the application of default interests to the extent imposed by law. Payments are due within the agreed deadlines even in the event of delays in the delivery of the goods, total or partial failures and losses during the transportation and/or storage phases. This also applies when the Customer does not collect the goods made available to them by Pleion S.p.a.

8. RETENTION OF OWNERSHIP
The goods are sold subject to retention of ownership Italian Civil Code Art. 1523 et seq) and therefore remain the property of Pleion Spa until full payment of the price.

9. TERMINATION AND/OR SUSPENSION OF ORDERS
Pleion Spa has the right to suspend further deliveries in the event of the following:
- failure to comply in all or in part of even one of these sales conditions;
- change in the Customer's company and/or its commercial capabilities.

10. RESPONSIBILITY
Pleion Spa will not be responsible for damages or injuries to animals or people resulting from products being installed properly or contrary to the indications in the technical manuals/instructions provided to the Customer.

11. FORCE MAJEURE CLAUSE
The performance terms written in our offers/acceptances are not binding on Pleion Spa and are automatically suspended in the event of strikes, fires, floods, and other force majeure causes.

12. NOTICE IN ACCORDANCE WITH ART. 13 OF ITALIAN LEGISLATIVE DECREE No. 196 OF 30 JUNE 2003
CODE FOR THE PROTECTION OF PERSONAL DATA

12.1. The personal data collected by Pleion Spa may be processed either in written form or by electronic means for legal and contractual requirements, any future promotional initiatives, through sending electronic and/or paper communications as well as to carry out market research and surveys.
12.2. Personal data may be communicated to credit institutions, credit collection agencies, credit insurance companies, commercial information companies, consultants and professionals, our network of agents and external technical assistants, factoring companies, purchasing groups, and companies to which Pleion Spa has requested or will request the creation of the promotional initiatives and or market research and surveys mentioned above.
12.3. Pursuant to Art. 7 of Italian Legislative Decree no. 196 of 30 June 2003, the customer has the right to obtain the following at any time: the updating, rectification or, when interested, the integration of the data; the erasure, the transformation in anonymous form or the blocking of data processed in violation of the law, including data for which conservation is unnecessary with regards to the purposes for which the data has been collected or subsequently handled; confirmation that the operations referred to above have been brought to the attention, including with regard to their content, of those to whom data have been communicated or disclosed, except in cases where it is impossible to fulfil this obligation or where the obligation leads to the use of resources manifestly disproportionate to the right protected.
12.4. Pursuant to Art. 7 of Italian Legislative Decree no. 196 of 30 June 2003, you have the right to oppose the processing of your personal data, in whole or in part, even if pertinent to the purpose for collection.
12.5. The Data Controller is Pleion Spa, the Privacy Officer, Pleion Spa, and their representatives are authorised to become knowledgeable of the data.

13. ITALIAN LAW AND COURT OF JURISDICTION
These general sales conditions and subsequent future contractual and supply relationships are governed by Italian law. The Court of Verona has jurisdiction over any dispute related or connected to these general sales conditions and subsequent future contractual and supply relationships, with Pleion Spa having the right to start proceedings in the court in the buyer's jurisdiction.

The Buyer _____ Pleion spa _____

The Buyer declares to expressly approve, pursuant to art. 1341 and 1342 of the Italian Civil Code, the following vexatious clauses: art. 6 complaints (time and form of the complaint – waiver of the recourse action) – art. 13 (Italian law and jurisdiction).

The Buyer _____

PLEION

The Sun is our Life!

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www.pleion.it