



Catalogue – Price List 2016

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fiorini

CLIMA

EBNER
ENERGIE-TECHNIK

ABC

heizer

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INDUSTRIES

Paving the way towards the future

For over thirty years we have aimed to transfer our values to our clients by designing and realising high quality and trustworthy products for both the residential and the industrial sector.

Our hard work has yielded us a leadership role in Italy and abroad. Especially, in designing and producing thermo-technical systems such as heating and conditioning systems, domestic hot water systems and heat exchangers.

All our products are handcraft with attention to the client's requirements, quality and detail. Moreover, every product is tested in order to guarantee long-term reliability.

To ensure a steadfast improvement of our products we constantly invest in innovation. As a result, our products are high-performance, efficient, energy saving and practical.

We aim to find the best solution for every specific requirement by investing in research on technologically innovative and personalized solutions. We also provide our clients with non-stop advice on our products and special projects for multinationals, from the design phase to technical support.

Experience and competence are two core points of Fiorini and the other companies that are part of the Fiorini Industries group. As such, we design and realize solutions based on the use and integration of various energy sources. In this way, we are capable of answering the customer's demand, which is becoming more diverse and complex.



Our certificates

An added value for our clients and partners

To the Fiorini group, certificates are a proof of responsibility towards the clients, the partners, the community and the territory. It springs from the awareness that our activity cannot come before the guidelines and the expectations of the stakeholders.

Whoever chooses for Fiorini products, chooses a company which:

ensures clarity and transparency towards the client by explicitly communicating every production and sales detail. This facilitates the operational management of the products (ex. estimates and order confirmations are send with a detailed description of the product, the delivery date, the transport measure, technical drawings with indications of the different uses, dimension schemes and other possible details);

testes every single product. Every product is provided with a Certificate of Conformity and Testing and our qualitative management system guarantees the correct execution of every process in accordance with the defined standards;

constantly invests in research on innovative solutions and on the improvement of the products' performance, focussing on both quality and cost reduction;

realises qualitative products which also positively influence our clients' projects;

operates with a respect for people, the environment and the territory;

invests in training on subjects such as health, occupational safety and environmental sustainability. Our staff is kept up to date on the binding rules and on how to share best practices;

assures competence, reliability and personalized solutions.

We have implemented international management systems and standards that have been recognised with numerous certificates.



Certificate for Quality management – ISO 9001



The system for quality management, which is certified in accordance with the ISO 9001 norm, has been in force in our company for years. It implicates a structured and complete analysis of every activity and the best planning and rationalizing of all operational processes. This implies:

- ✓ keeping the highest levels of efficiency and effectiveness;
- ✓ the timely control of the internal operational costs;
- ✓ constant attention to the requirements and the expectations of the client.

We want to satisfy all requirements and expectations of the clients, ensuring profitable working conditions and high standards. Moreover, we want to contribute to the reputation of the entire supply chain of the bids we are a part of, also on an international level.

We have implemented a management system focused on quality, which we apply to all of our daily business activities. Our purpose is to come up with solutions for specific problems, such as problems with deadlines, and to satisfy the expressed and unexpressed needs of both our internal and external clients.

Certificate for Environmental Management System – ISO 14001



In 2011, we have been awarded the Certificate for an Environmental Management System – ISO 14001. This means that our company works within the parameters imposed through some rules. We operate with respect for the environment and limit air pollution. Moreover, with our general approach to efficient and sustainable products and production systems, **we are continuously trying to improve the environmental management in order to globally improve our performance.**

Certification for Health and Safety on the workflow OHSAS 18001



In 2015, we have been awarded the OHSAS 18001 certificate. This is the result of Fiorini's effort to proactively protect the health and safety of its own workers and to guarantee conformity to all laws.



UGO - Certificate for responsible innovation



Because of our deep-seated vocation for improvement and innovation, we are the **first company in this sector** to have adhered to the UGO standards. Those standards distinguish organisations which operate in the field of innovation and intend to sustain the innovation in a transparent way to further **progress and improve quality of life.**

Research activities are a key part of our development strategy and have already brought us avant-garde solutions and technologies which have made our company a technological leader and a market leader.

The UGO certificate guarantees that the certified organisations invest in research and that the produced innovations do not put business before the health and safety of users. This entails that we guarantee our clients, our commercial partners and all stakeholders in general that the innovations we developed represent a perfect symbiosis between science, technology, economical progress and improvement of the quality of life.

Certificate for Ethical Company



Next to our choice to focus on **social responsibility and attention for sustainable development**, we have also chosen to adhere to the ethical company policy. We aim to combine business and sustainability values (in the broad sense), aware of the contribution we can make to the **development of well-being and the quality of life.**



Certificate for designing and producing pressurized devices

In 2014 we have been awarded another certificate: **the certificate for designing and producing pressurized devices** conform to the 97/23/CE directive (PED pressure equipment directive) which guarantees the ability of designing and producing:

- ✓ tanks
- ✓ heat exchangers
- ✓ collectors

which are produced to contain liquids and gas, also those which are classified as dangerous, up to those of the highest risk category described by the directive (risk category IV)

In particular, we have obtained the module H1 for surveillance, which **recognizes the quality** of the specific techniques and verifies the design process, the production processes and the testing procedures for all types of tanks, also those which are in the risk category. This gives the client the **guarantee they are acquiring a product which was designed and produced in accordance with criteria** for performance, but also for safety and durability.

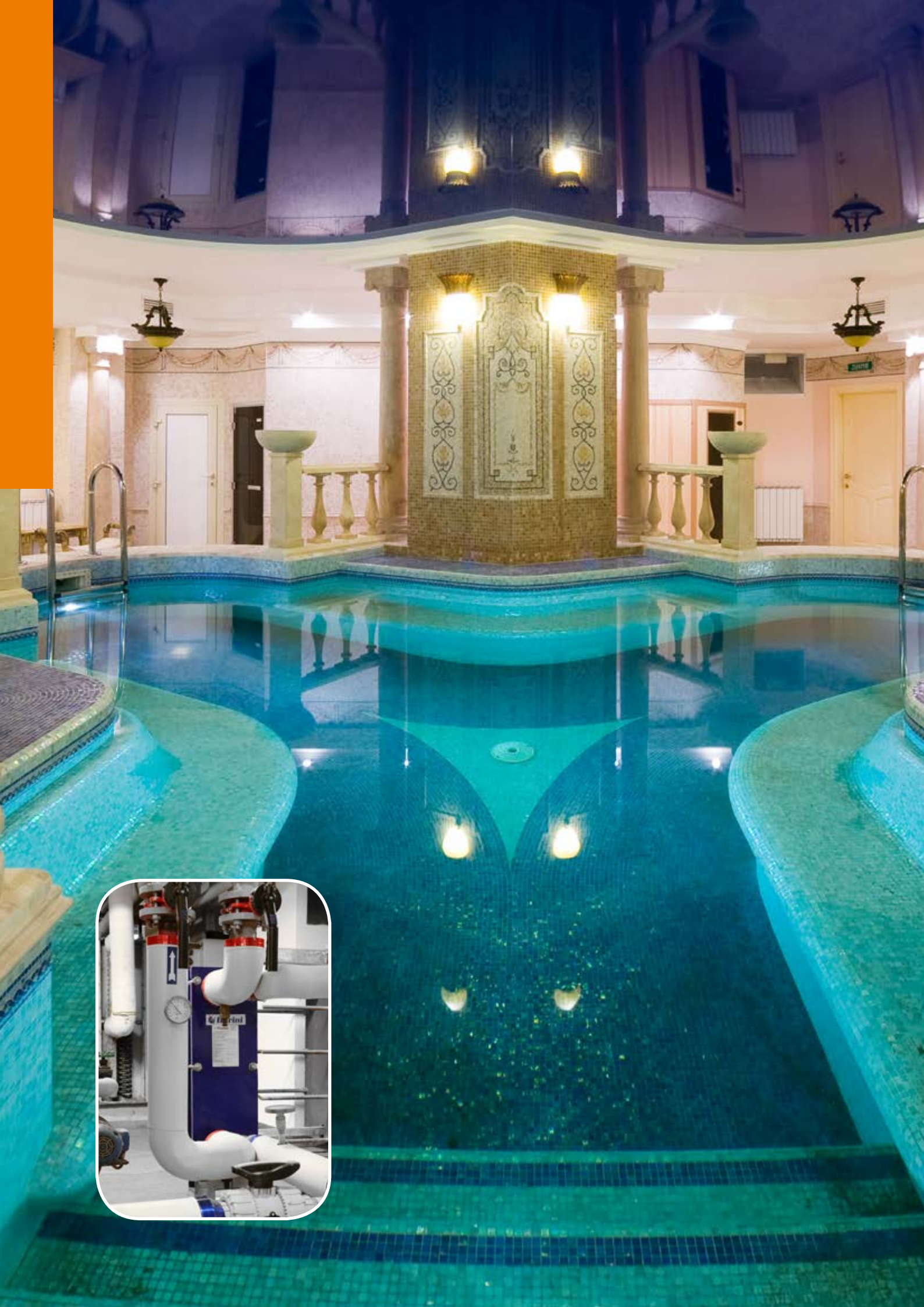




Gasketed and brazed plate heat exchangers

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Gasketed and brazed plate heat exchangers

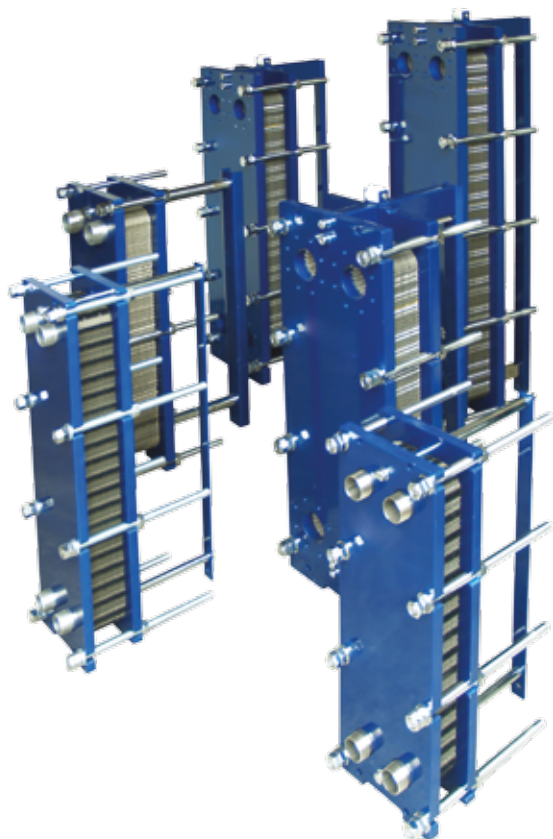
Customized and efficient options for all your requirements for heat exchanging

The gasketed plate heat exchangers (K and F series) and brazed plate heat exchangers (P series) are the option for someone who demands efficiency and trustworthiness. Our thirty years' experience in this sector makes it possible to meet every requirement, in a residential as well as an industrial setting. We guarantee support during the design phase, the installation phase and after sale.

Gasketed exchangers

Our gasketed plate heat exchangers have the following features:

- designed to improve the exchange performance and to reduce and simplify the maintenance operations;
- use of high quality materials which can be paired with a wider range of fluids and applications;
- custom made production
- design of modular and customized solutions;
- easy to inspect



Brazed exchangers

The quality of the parts, as well as the brazing process makes it possible to attach the plates without using gaskets. This is a huge advantage because it makes the exchanger compact and resistant to high temperatures and pressure.



Gasketed plate heat exchangers K and F series

The heat exchangers (K and F series) are designed and manufactured with materials and applications which guarantee high, durable efficiency standards in residential applications as well as industrial processes.

- The plates are made in high quality materials which makes it possible to reach an excellent overall heat exchange coefficient and guarantees resistance against corrosion;
- The plates can be manufactured with several corrugations which improve the exchange performance in function of the operative conditions (fluid type, viscosity). Their particular conformation makes the fluid in the device move turbulently and guarantees an elevated heat exchange coefficient.
- The lining is available in several materials, adapted to the different applications (gasoline, oil, alimentary fluids, aggressive fluids, high temperature fluids, etc.) and desired performance;
- The frame is made of varnished carbon steel, designed in such a way that it can be easily accessed, inspected and maintained;
- All exchangers are tested (leakage test) before dispatch in order to verify possible losses.



Gasketed plate heat exchangers K and F series

Environment and sectors of application

Wherever a heat exchange between two fluids takes place, the Fiorini plate heat exchangers guarantee a series of significant advantages:

- high efficiency
- long life span
- low cost
- compact dimensions
- possibility to expand
- easy maintenance
- trustworthiness

The Fiorini heat exchangers are products of reference in the residential and industrial sectors (HVAC, food, chemical, renewable energy, cooling, oil and gas).

They offer the best options for numerous applications, such as:

- DHW production
- heat exchanging in heating systems
- teleheating
- pool water heating
- solar power systems
- heating/cooling of alimentary fluids (milk, beer, wine...)
- cooling of machines
- recuperation of heat from industrial processes
- hydraulics



Gasketed plate heat exchangers

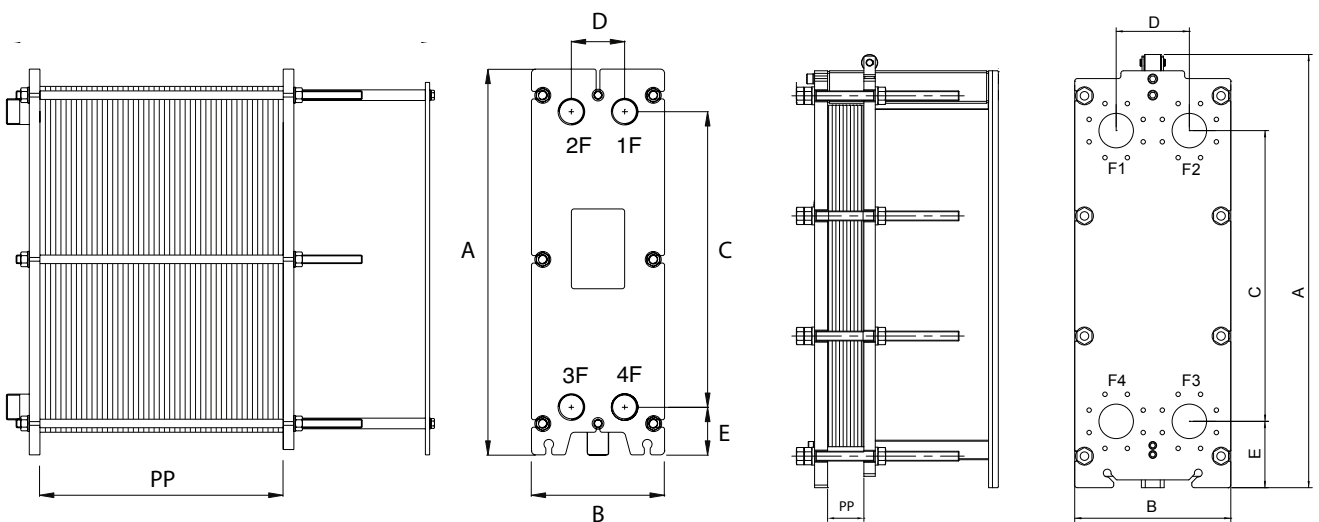
Our range



| model | DN 32 | DN 40 | DN 50 | | DN 100 | | | | DN 150 | |
|---------------------------------|-------------|-------------|-------------|-----------|-----------------|-----------|-----------|-------|-----------------|-----------|
| | Ko42 | Ko80 | F16 | F22 | F206 | F31 | F50 | F71 | F 41-42 | F60-F62 |
| Plate surface (m ²) | 0,042 | 0,085 | 0,15 | 0,22 | 0,21 | 0,30 | 0,50 | | 0,40 | 0,60 |
| Available corrugations | H | H - V | H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L |
| Standard coupling | 1"1/4 GAS M | 1"1/2 GAS M | 2" GAS M | | DN 100 UNI PN16 | | | | DN 150 UNI PN16 | |
| Coupling on request | A-B-C-D-E** | A-B-C-D-E** | A-B-C-D-E** | | F-G** | | | | F-G** | |
| PP (mm) | NPx3,1+2 | NPx3,05+2 | NPx 2,9+3 | NPx 2,9+3 | NPx 3,1 * | NPx 3,1 * | NPx 3,1 * | | NPx 3,5 * | NPx 3,5 * |
| A (mm) | 470 | 725 | 932 | 1132 | 1160 | 1132 | 1826 | 2320 | 1470 | 1835 |
| B (mm) | 200 | 250 | 310 | 310 | 480 | 480 | 480 | 480 | 620 | 620 |
| C (mm) | 380 | 68 | 694 | 894 | 719 | 894 | 1388 | 1882 | 941 | 1306 |
| E (mm) | 555 | 100 | 126 | 126 | 225 | 225 | 225 | 225 | 290 | 290 |

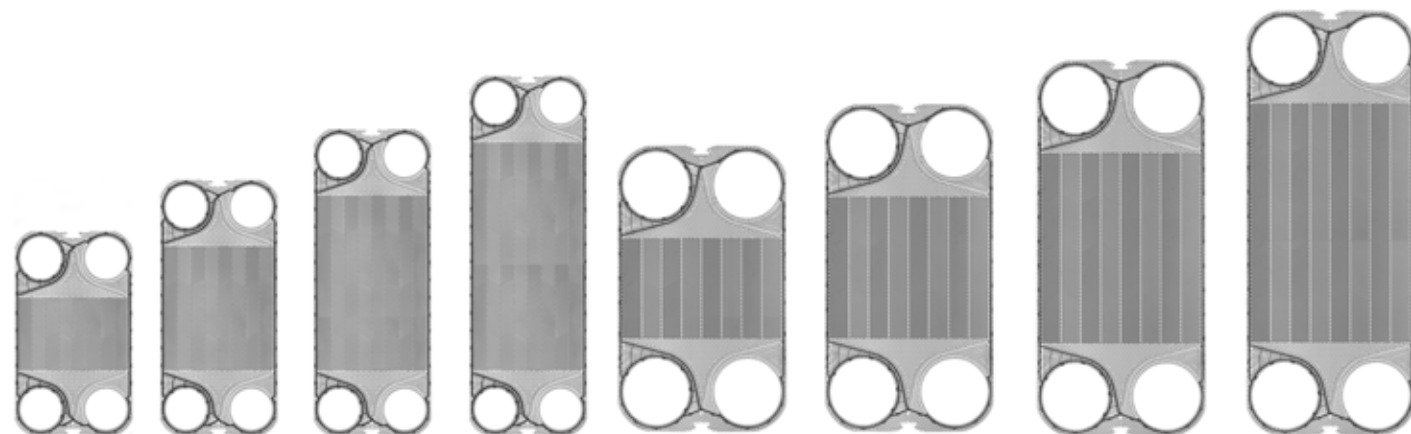
* With rubber liner add 1,5 mm

** See p. 20



DN32 DN 40 DN 50

DN ≥ 100



| DN 150 | | DN 200 | | | | DN 300 | | | | DN 500 | | | |
|------------|-------|-----------------|-----------|-----------|-----------|-----------------|-----------|-----------|-----------|-----------------|-------|-------|-------|
| F80-F82 | F112 | F405 | F70 | F100 | F130 | F81 | F120 | F160 | F190 | F150 | F200 | F250 | F300 |
| 0.80 | | 0.41 | 0.68 | 1.00 | 1.30 | 0.80 | 1.20 | 1.60 | 1.90 | | 2.00 | 2.50 | 3.00 |
| H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L | H - L |
| DN 150 UNI | PN16 | DN 200 UNI PN16 | | | | DN 300 UNI PN16 | | | | DN 500 UNI PN16 | | | |
| F-G** | | F-G** | | | | F-G** | | | | F-G** | | | |
| NPx 3.5 * | | NPx 3.1 * | NPx 3.1 * | NPx 3.1 * | NPx 3.1 * | NPx 3.8 * | NPx 3.8 * | NPx 3.8 * | NPx 3.8 * | NPx 4.1 * | | | |
| 2200 | 2687 | 1380 | 1740 | 2100 | 2460 | 930 | 2320 | 2710 | 3100 | 2500 | 2855 | 3211 | 3567 |
| 620 | 620 | 760 | 760 | 760 | 760 | 980 | 980 | 980 | 980 | 1370 | 1370 | 1370 | 1370 |
| 1671 | 2157 | 770 | 1130 | 1490 | 1850 | 1100 | 1490 | 1879 | 2267 | 1466 | 1822 | 2178 | 2534 |
| 290 | 290 | 395 | 395 | 395 | 395 | 480 | 480 | 480 | 480 | 672 | 672 | 672 | 672 |

Corrugations

The plates are available with various corrugations and can be combined in order to reach better performances.

H: this type of corrugation maximizes the thermal power which is exchanged

L and V: these versions minimize the pressure loss



Gaskets

The gaskets are attached to the plates through a clip-on system, which ensures hygiene and easy maintenance and does not use glue and solvents. The particular conformation of the gaskets creates a double barrier and prevents accidental contamination of the two fluids, also in case of loss. The gaskets are available in various materials, to be used in function of the different user parameters:



NBR (nitrile rubber): generally used with water, other liquids, oily mineral liquids T max 130C

EPDM (ethylene-propylene rubber): broad range of use, such as with non-mineral oils, water and steam T max 150C

VITON (fluoro rubber) extremely resistant to chemical substances or aggressive fluids (sulfuric acid, vegetal oil) and high temperatures (Tmax 195C)

Gasketed plate heat exchangers

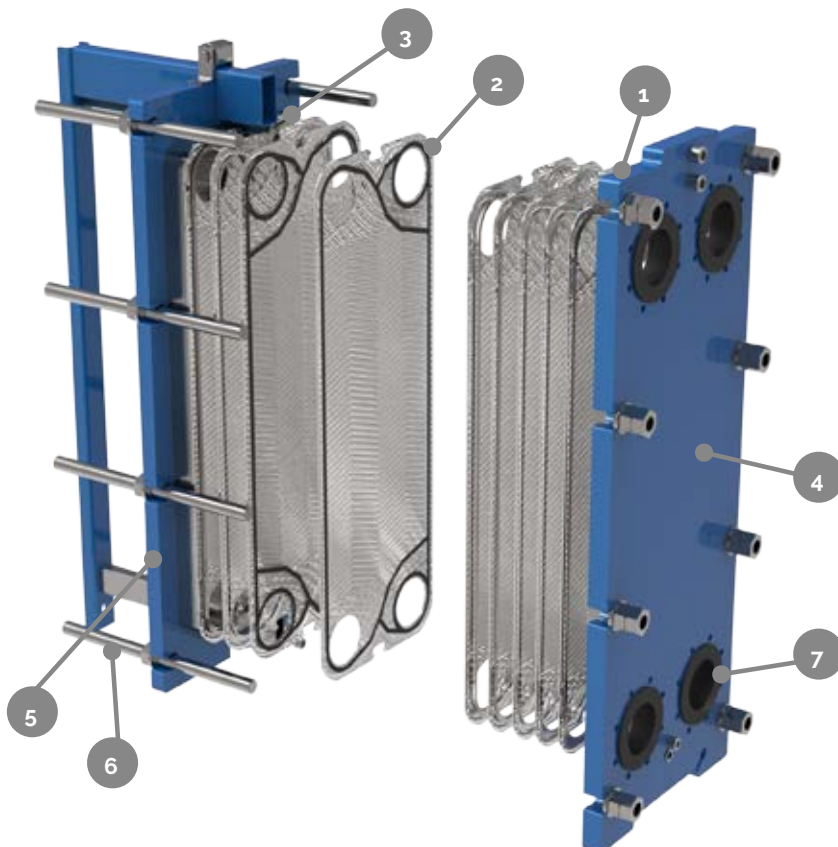
Main components DN32/40/50



Legend

- 1. anterior plate
- 2. mid plate
- 3. posterior plate
- 4. anterior shaft
- 5. posterior shaft
- 6. link
- 7. coupling

Main components DN100 and bigger



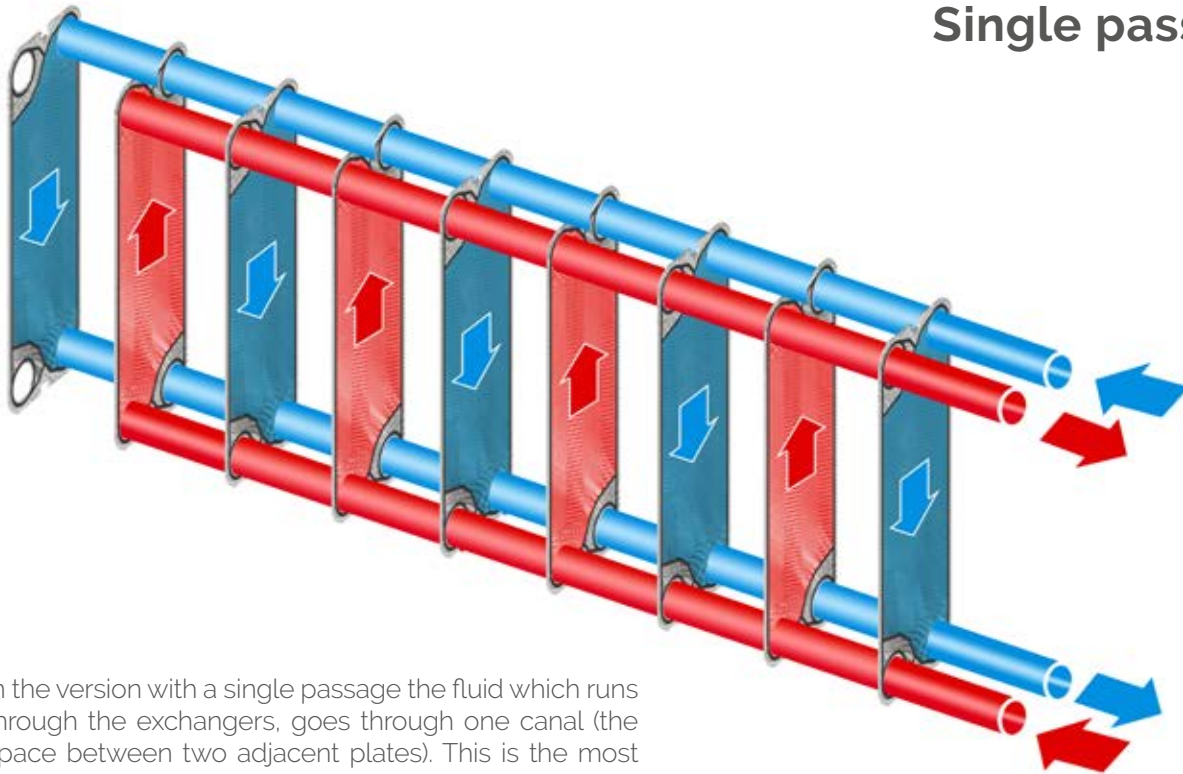
Starting from DN100

Legend

- 1. anterior plate
- 2. mid plate
- 3. posterior plate
- 4. anterior shaft
- 5. posterior shaft
- 6. link
- 7. coupling

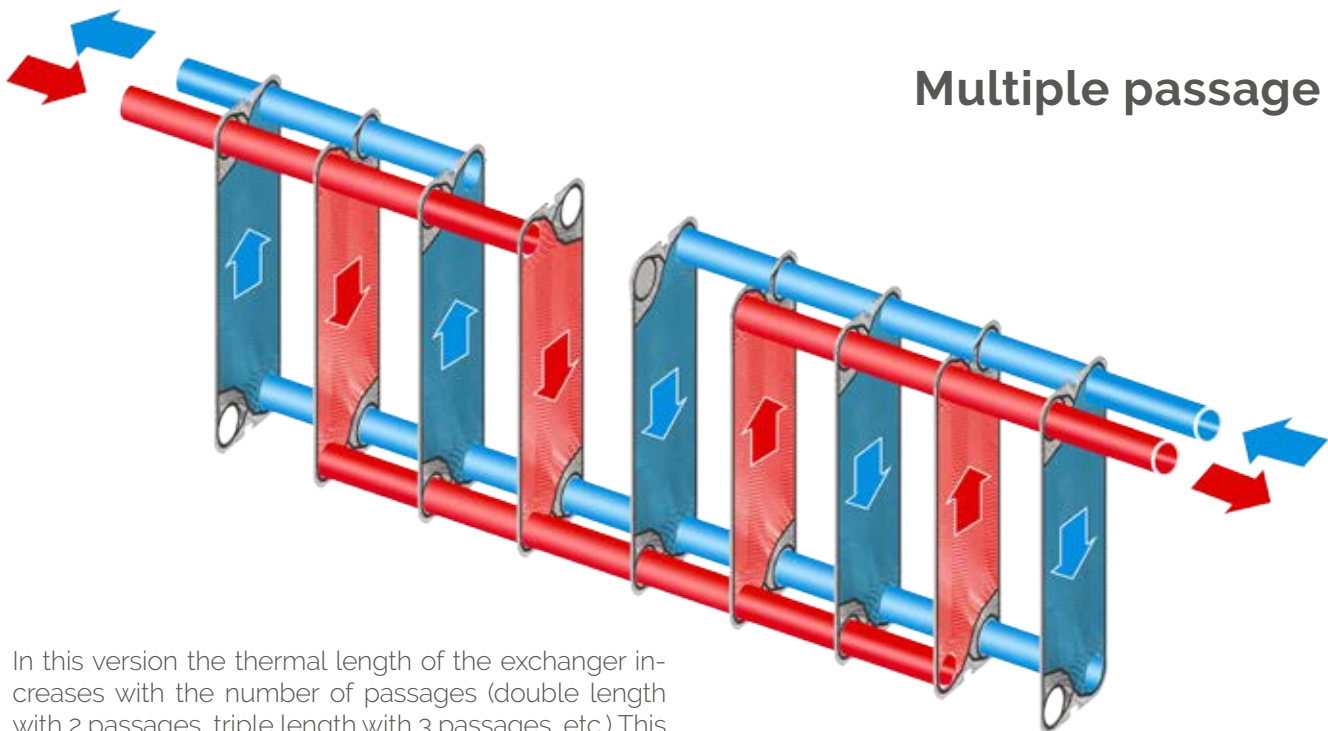
Principles

Single passage



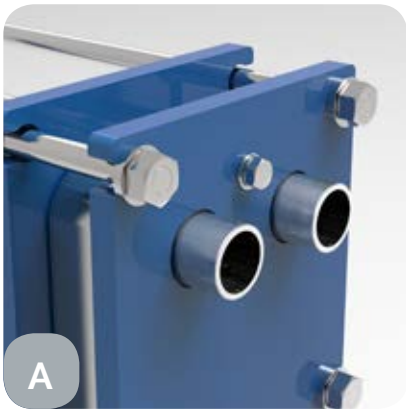
In the version with a single passage the fluid which runs through the exchangers, goes through one canal (the space between two adjacent plates). This is the most commonly used layout.

Multiple passage

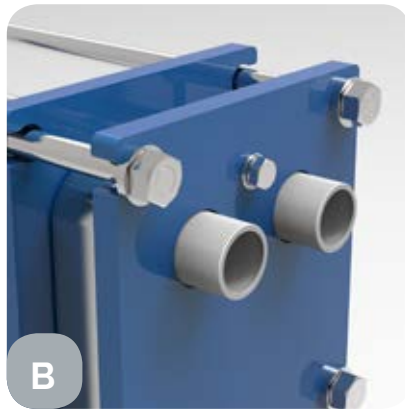


In this version the thermal length of the exchanger increases with the number of passages (double length with 2 passages, triple length with 3 passages, etc.) This solution is necessary when there is a very low temperature difference between the primary and the secondary circuit.

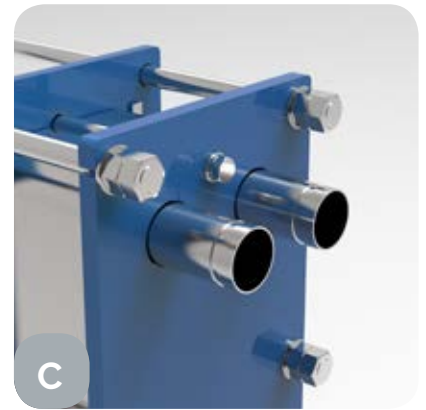
Couplings



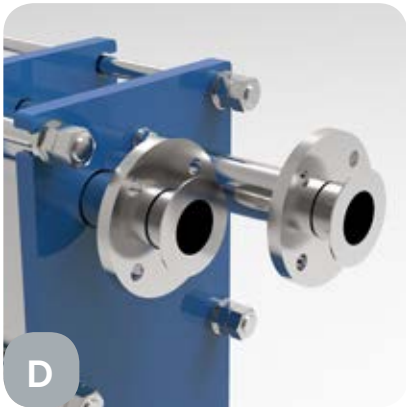
A
Threaded coupling



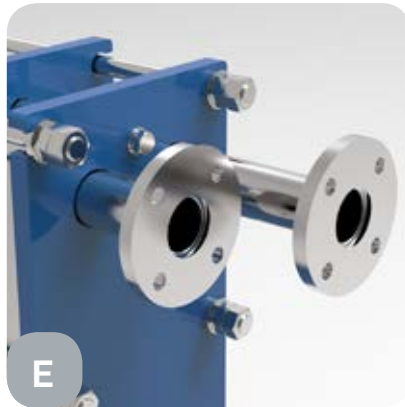
B
Nylon threaded coupling



C
Victaulic coupling



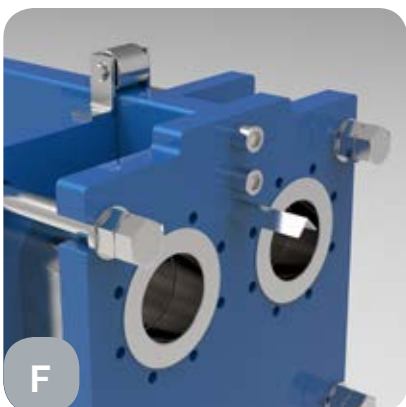
D
Free flange coupling



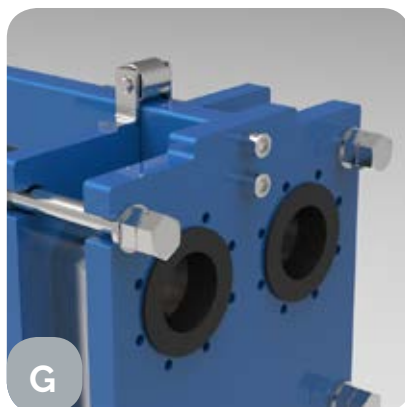
E
Welded flange coupling

Our gasketed plate heat exchangers can be manufactured with numerous kinds of couplings: threaded, with a free flange, with a welded flange and with liners. This means that the coating of the crossing of the frame can be manufactured in various materials such as iron or rubber.

In the chart on page 16-17 of this catalogue, the available couplings for all gasketed plate heat exchangers are indicated.



F
Metal Liner coupling



G
Rubber liner coupling

Insulation



The insulation box is an accessory which is available for all our exchangers. It is made from steel (which can be easily inspected thanks to openings hooks) and coated with insulating material ($\lambda = 0,0333 \text{ W/m } ^\circ\text{C}$), in order to reduce thermal loss. Also available is a tub to collect the condensation, which can be useful in cooling systems.

Compatibility

| | AISI 316L plates | AISI 304 plates | Titanium plates | Nitrile gaskets NBR | EPDM gaskets | AISI 304 stainless steel fittings | AISI 316 stainless steel fittings | Nylon fittings (Tmax 50°C) |
|----------------------------------|------------------|-----------------|-----------------|------------------------|--------------|-----------------------------------|-----------------------------------|----------------------------|
| water (t < 110°C) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T max 50°C |
| water (t > 110°C) | ✓ | - | ✓ | - | T max 150 °C | ✓ | ✓ | - |
| glycolate water (glicole < 30%) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T max 50°C |
| glycolate water (glicole > 30%) | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | T max 50°C |
| propylene glycol (glicole < 30%) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T max 50°C |
| propylene water (glicole > 30%) | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | T max 50°C |
| demineralized water | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | T max 50°C |
| sea water | - | - | ✓ | ✓ | ✓ | - | - | T max 50°C |
| pool water | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | T max 50°C |
| steam < 4 bar | ✓ | - | ✓ | - | T max 150 °C | ✓ | ✓ | - |
| oil iso vg | ✓ | - | ✓ | ✓ | - | ✓ | ✓ | - |
| oil sae | ✓ | - | ✓ | ✓ | - | ✓ | ✓ | - |
| olive oil | ✓ | - | - | ✓ | ✓ | - | ✓ | - |
| milk | ✓ | - | - | ✓ | ✓ | - | ✓ | - |
| wine | ✓ | - | - | ✓ | ✓ | - | ✓ | - |
| beer | ✓ | - | - | ✓ | ✓ | - | ✓ | - |

* Only for closed circuits and with a chloride concentration less than 25 ppm and Tmax 80C

In the table, some guidelines for the correct combination of materials are outlined. Should you want other configurations, please contact our technical office.

Gasketed plate heat exchangers

Options > instantaneous DHW

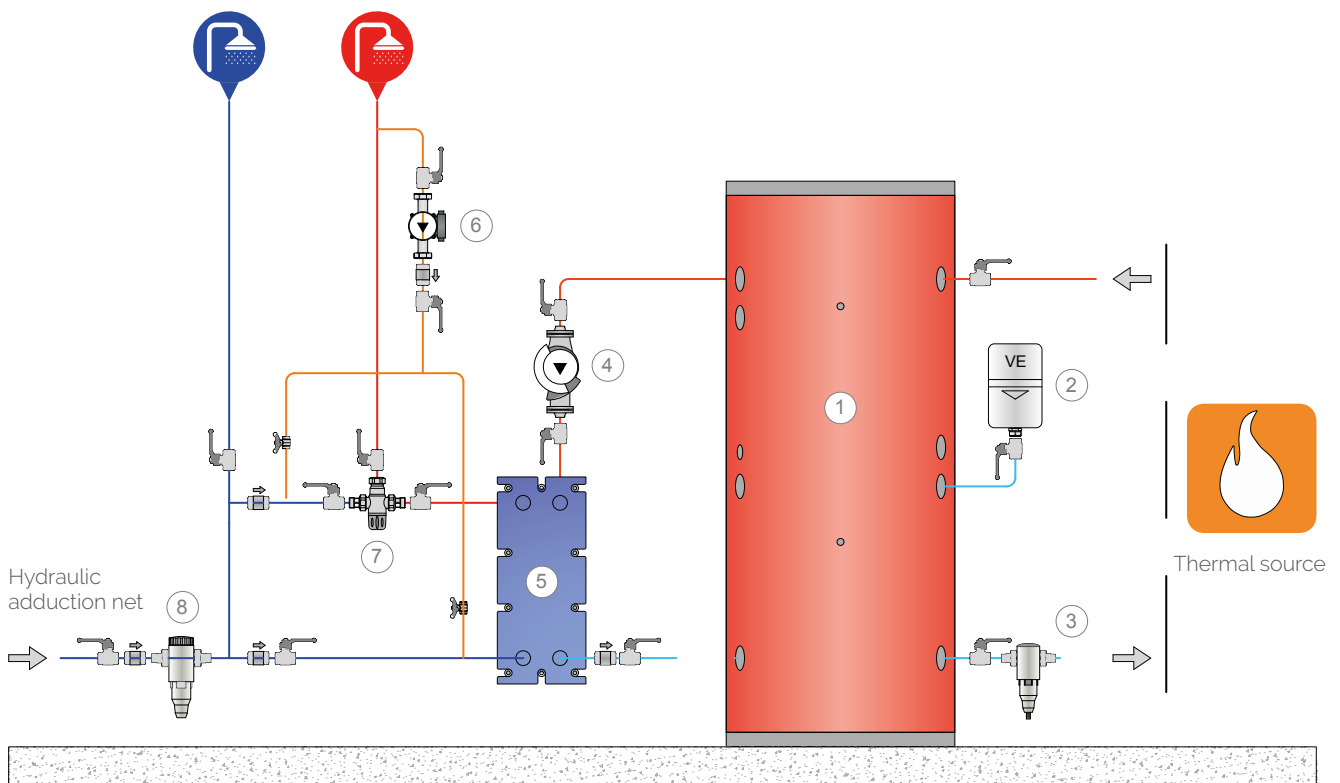
The hygienic option for the production of domestic hot water

In this type of installation, the exchanger is installed between the thermal source (heater, stove, solar power system, heat pump, etc.) and the hydraulic adduction net.

This makes it possible to instantaneously produce domestic hot water without using a storage tank. This ensures:

- ✓ Elevated hygienic circumstances
- ✓ Reduction of bacteria spreading (anti legionella)

The device can be coupled with a storage tank for technical water if there are peaks in the need for DHW. The device can also be coupled with discontinuous generators (solar power, biomass, etc.)



Legend

1. Fiorini PFA puffer
2. Expansion vessel
3. Dirt separator
4. Sanitary charging pump
5. Fiorini plate heat exchanger
6. Sanitary recirculation pump
7. Thermostatic DHW mixer
8. Bacteriostatic cold water filter



Tables for fast selection

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | kind of box |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|----------------|-----------|-------------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | |
| 30 | 1325 | 12 | 865 | 6 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 50 | 2210 | 33 | 1440 | 16 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 75 | 3310 | 33 | 2164 | 16 | 50x25x35 | 31 | 821K042AHNN013 | € 645,00 | A |
| 100 | 4415 | 34 | 2885 | 16 | 50x25x45 | 32,5 | 821K042AHNN017 | € 737,00 | A |
| 125 | 5520 | 35 | 3605 | 16 | 50x25x45 | 34 | 821K042AHNN021 | € 829,00 | A |
| 150 | 6630 | 36 | 4330 | 17 | 50x25x45 | 35 | 821K042AHNN025 | € 921,00 | A |
| 175 | 7730 | 37 | 5050 | 17 | 50x25x45 | 36,5 | 821K042AHNN029 | € 1013,0 | A |
| 200 | 8835 | 38 | 5770 | 18 | 50x25x45 | 38 | 821K042AHNN033 | € 1105,00 | A |
| 300 | 13225 | 35 | 8660 | 20 | 80x29x55 | 84 | 821K080AVNN023 | € 1290,00 | B |

- › Primary circuit: 80-60 °C
- › Secondary circuit: 15-45 °C

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | kind of box |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|----------------|----------|-------------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | |
| 15 | 1310 | 13 | 430 | 1,5 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 20 | 1750 | 22 | 580 | 3 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 25 | 2190 | 34 | 720 | 4 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 30 | 2625 | 31 | 865 | 4 | 50x25x35 | 31 | 821K042AHNN011 | € 599,00 | A |
| 40 | 3500 | 38 | 1155 | 5 | 50x25x35 | 31 | 821K042AHNN013 | € 645,00 | A |
| 50 | 4375 | 35 | 1440 | 4 | 50x25x45 | 32,5 | 821K042AHNN017 | € 737,00 | A |
| 60 | 5250 | 40 | 1730 | 5 | 50x25x45 | 33 | 821K042AHNN019 | € 783,00 | A |
| 70 | 6125 | 37 | 2020 | 5 | 50x25x45 | 35 | 821K042AHNN023 | € 875,00 | A |
| 80 | 7000 | 35 | 2310 | 4 | 50x25x45 | 36 | 821K042AHNN027 | € 967,00 | A |

- › Primary circuit: 55-45 °C
- › Secondary circuit: 15-45 °C

| kind of box | insulation | code | price | packaging | |
|-------------|----------------|------------|----------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| A | insulating box | 821080007 | € 280,00 | 80x60x65 | 10 |
| | tub | 829090894X | € 60,00 | | |
| B | insulating box | 821080004 | € 300,00 | 80x60x95 | 12 |
| | tub | 829091546X | € 60,00 | | |

| description | code | price |
|------------------------------|------------|---------|
| set with feet for K042 model | 821070049X | € 23,00 |
| set with feet for K080 model | 821070051X | € 23,00 |

Gasketed plate heat exchanger

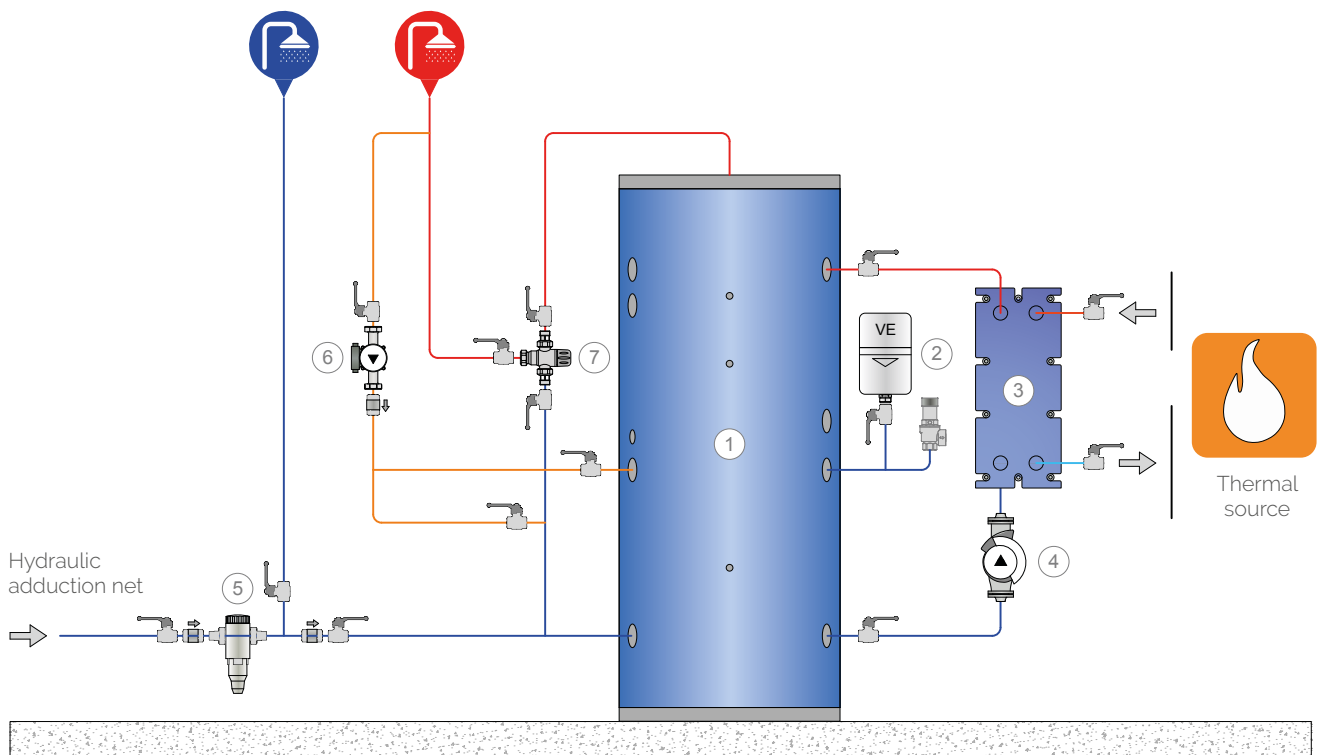
Options > DHW with storage tank

The ideal solution for big users

In this kind of installation, the exchanger is installed between the thermal source (heater, stove, solar power system, heat pump, etc.) and the DHW storage tank. A circulation pump makes the sanitary water continuously circulate between the storage tank and the plate heat exchanger, in this way rapidly heating the water in the storage tank. The option can:

- ✓ cover high peaks in consumption
- ✓ rapidly reach the needed temperature in the tank
- ✓ guarantee maximal modularity and transfer all power from the thermal source,

in this way it can cover the needs of users, such as accommodations, sport centers, health centers and of central devices of large dimensions which need elevated volumes of hot water.



Legend

1. Fiorini sanitary storage tank
2. Safety unit
3. Fiorini plate heat exchanger
4. Sanitary charging pump
5. Bacteriostatic cold water filter
6. Sanitary recirculation pump
7. Thermostatic DHW mixer



Tables for fast selection

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | kind of box |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|----------------|-----------|-------------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | |
| 30 | 1325 | 12 | 865 | 6 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 50 | 2210 | 33 | 1440 | 16 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 75 | 3310 | 33 | 2165 | 16 | 50x25x35 | 31 | 821K042AHNN013 | € 645,00 | A |
| 100 | 4420 | 34 | 2890 | 16 | 50x25x45 | 32,5 | 821K042AHNN017 | € 737,00 | A |
| 125 | 5520 | 35 | 3605 | 16 | 50x25x45 | 34 | 821K042AHNN021 | € 829,00 | A |
| 150 | 6630 | 36 | 4330 | 17 | 50x25x45 | 35 | 821K042AHNN025 | € 921,00 | A |
| 175 | 7730 | 37 | 5050 | 17 | 50x25x45 | 36 | 821K042AHNN029 | € 1013,00 | A |
| 200 | 8835 | 38 | 5770 | 18 | 50x25x45 | 37,5 | 821K042AHNN033 | € 1105,00 | A |
| 300 | 13255 | 35 | 8660 | 29 | 80x29x55 | 84 | 821K080AVNN023 | € 1290,00 | B |

- › Primary circuit: 80-60 °C
- › Secondary circuit: 15-45 °C

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | kind of box |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|----------------|-----------|-------------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | |
| 15 | 2630 | 31 | 370 | 1 | 50x25x35 | 30,5 | 821K042AHNN011 | € 599,00 | A |
| 20 | 3500 | 38 | 495 | 1 | 50x25x45 | 31 | 821K042AHNN013 | € 645,00 | A |
| 25 | 4380 | 34 | 620 | 1 | 50x25x45 | 32,5 | 821K042AHNN017 | € 737,00 | A |
| 30 | 5255 | 39 | 740 | 1 | 50x25x45 | 33 | 821K042AHNN019 | € 783,00 | A |
| 40 | 7010 | 35 | 990 | 1 | 50x25x45 | 35,5 | 821K042AHNN027 | € 967,00 | A |
| 50 | 8761 | 38 | 1235 | 1 | 50x25x45 | 37,5 | 821K042AHNN033 | € 1105,00 | A |
| 60 | 10510 | 38 | 1480 | 1 | 50x25x55 | 40 | 821K042AHNN041 | € 1289,00 | C |
| 70 | 12265 | 39 | 1730 | 1 | 50x25x55 | 43 | 821K042AHNN049 | € 1473,00 | C |
| 80 | 14020 | 36 | 1980 | 1 | 80x29x55 | 85 | 821K080AVNN025 | € 1356,00 | B |

- › Primary circuit: 55-50 °C
- › Secondary circuit: 10-45 °C

| kind of box | insulation | code | price | packaging | |
|-------------|----------------|------------|----------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| A | insulating box | 821080007 | € 280,00 | 80x60x65 | 10 |
| | tub | 829090894X | € 60,00 | | |
| B | insulating box | 821080004 | € 300,00 | 80x60x95 | 12 |
| | tub | 829091546X | € 60,00 | | |
| C | insulating box | 821080008 | € 280,00 | 80x60x65 | 10 |
| | tub | 829091409X | € 60,00 | | |

| description | code | price |
|------------------------------|------------|---------|
| set with feet for K042 model | 821070049X | € 23,00 |
| set with feet for K080 model | 821070051X | € 23,00 |

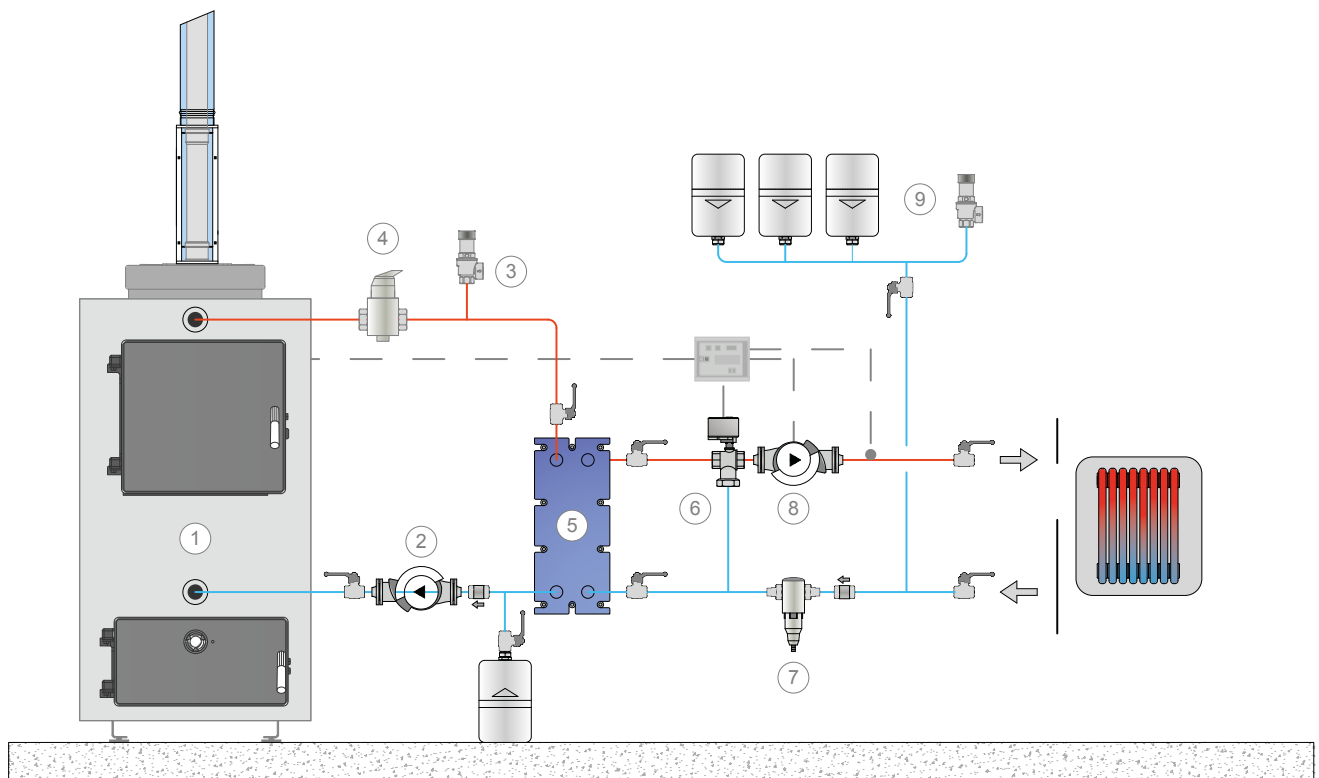
Gasketed plate heat exchangers

Options > Separation between thermal source and device

The ideal protection for every thermal source

In this kind of installation, the exchanger is installed between the thermal source (heater, stove, solar power system, heat pump, etc.) and the heating device. In this way, possible inconveniences to the thermal source can be averted. It is protected against risks due to the direct connection to the device, such as the fouling caused by impurity, corrosion, overpressure or water hammering. This option:

- ✓ ensures maximal protection for the heat generator
- ✓ prolongs the life span of the heat generator
- ✓ makes the installation of condensation heaters in existing devices possible



Legend

1. Biomass heat generator
2. Primary circuit pump
3. Primary safety valve
4. Deaerator
5. Fiorini plate heat exchanger
6. Three way mixing valve
7. Dirt separator
8. Booster pump of the thermal device
9. Safety unit



Tables for fast selection

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | kind of box | |
|----------|-----------------|------------|-------------------|------------|---------------|-----------|-------------------------|-------------|-------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | | price |
| 30 | 2655 | 31 | 2640 | 31 | 50x25x35 | 30,5 | 821K042AHNN011 | € 599,00 | A |
| 50 | 4430 | 34 | 4405 | 34 | 50x25x45 | 32,5 | 821K042AHNN017 | € 737,00 | A |
| 75 | 6640 | 35 | 6610 | 36 | 50x25x45 | 35 | 821K042AHNN025 | € 921,00 | A |
| 100 | 8855 | 38 | 8812 | 38 | 50x25x45 | 37,5 | 821K042AHNN033 | € 1105,00 | A |
| 125 | 11070 | 37 | 11015 | 38 | 50x25x55 | 41 | 821K042AHNN043 | € 1335,00 | C |
| 150 | 13285 | 39 | 13220 | 39 | 50x25x55 | 44 | 821K042AHNN053 | € 1565,00 | C |
| 175 | 15500 | 35 | 15420 | 33 | 97x33x75 | 132,5 | 821F016AN017-1HL05LL03N | € 1812,00 | D |
| 200 | 17710 | 37 | 17625 | 35 | 97x33x75 | 134 | 821F016AN019-1HL06LL03N | € 1884,00 | D |
| 300 | 26570 | 40 | 26440 | 39 | 97x33x75 | 140,5 | 821F016AN027-1HL06LL07N | € 2172,00 | D |

- › Primary circuit: 80-70 °C
- › Secondary circuit: 60-70 °C

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | kind of box | |
|----------|-----------------|------------|-------------------|------------|---------------|-----------|----------------|-------------|-------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | | price |
| 15 | 880 | 3 | 1315 | 6 | 50x25x35 | 31 | 821K042AHNN013 | € 645,00 | A |
| 20 | 1170 | 3 | 1750 | 6 | 50x25x45 | 32,5 | 821K042AHNN017 | € 737,00 | A |
| 25 | 1470 | 3 | 2190 | 7 | 50x25x45 | 33 | 821K042AHNN019 | € 783,00 | A |
| 30 | 1760 | 3 | 2630 | 7 | 50x25x45 | 34 | 821K042AHNN023 | € 875,00 | A |
| 40 | 2350 | 17 | 3510 | 38 | 80x29x55 | 76 | 821K080AHNN011 | € 894,00 | B |
| 50 | 2935 | 14 | 4385 | 30 | 80x29x55 | 78,5 | 821K080AHNN015 | € 1026,00 | B |
| 60 | 3520 | 16 | 5260 | 34 | 80x29x55 | 80 | 821K080AHNN017 | € 1092,00 | B |
| 70 | 4110 | 17 | 6140 | 37 | 80x29x55 | 81 | 821K080AHNN019 | € 1158,00 | B |
| 80 | 4695 | 18 | 7015 | 39 | 80x29x55 | 82 | 821K080AHNN021 | € 1224,00 | B |

- › Primary circuit: 70-55 °C
- › Secondary circuit: 50-60 °C

| kind of box | insulation | code | price | packaging | |
|-------------|----------------|------------|----------|---------------|-----------|
| | | | | dimensions cm | weight kg |
| A | insulating box | 821080007 | € 280,00 | 80x60x65 | 10 |
| | tub | 829090894X | € 60,00 | | |
| B | insulating box | 821080004 | € 300,00 | 80x60x95 | 12 |
| | tub | 829091546X | € 60,00 | | |
| C | insulating box | 821080008 | € 280,00 | 80x60x65 | 10 |
| | tub | 829091409X | € 60,00 | | |
| D | insulating box | 821080019X | € 500,00 | 80x60x115 | 18 |
| | tub | 829091094X | € 110,00 | | |

| description | code | price |
|------------------------------|------------|---------|
| set with feet for K042 model | 821070049X | € 23,00 |
| set with feet for K080 model | 821070051X | € 23,00 |
| set with feet for F16 model | 821070031X | € 44,00 |

Gasketed plate heat exchangers

Options > Systems for swimming pools

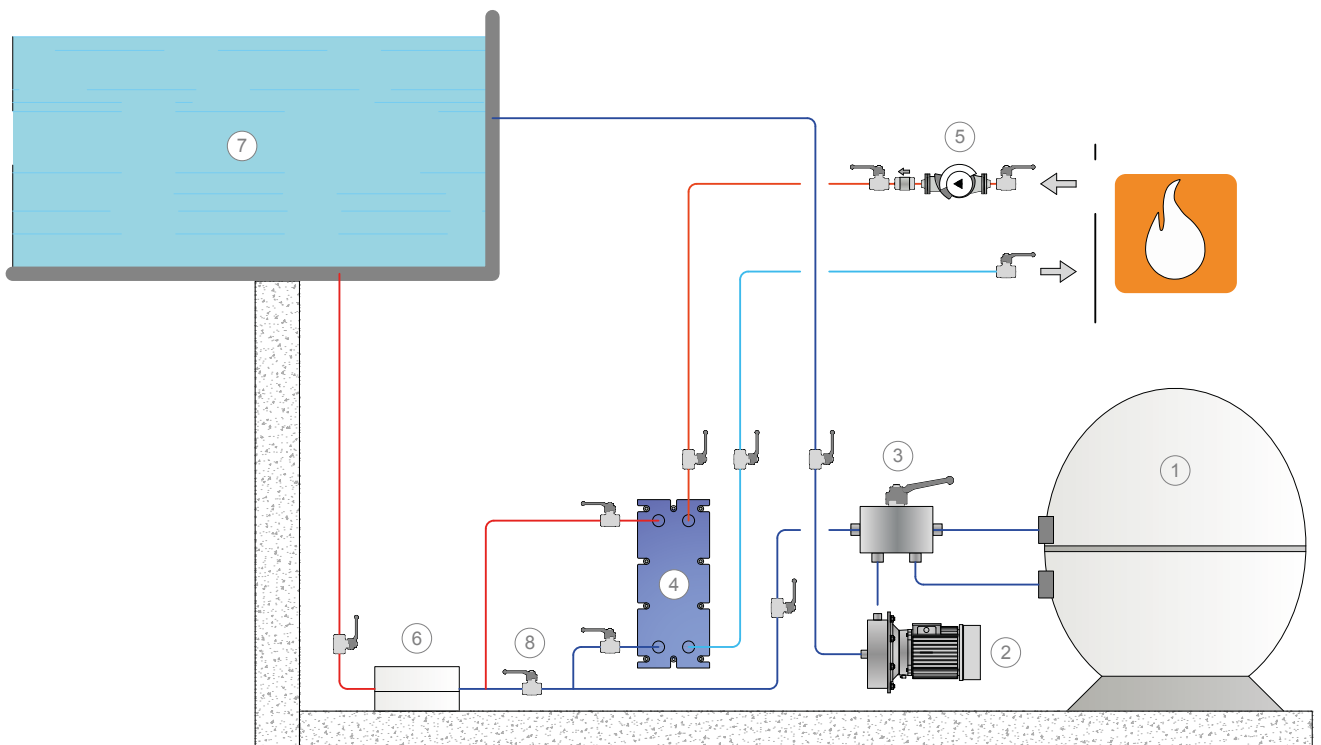
The option which ensures efficiency and a long life span

In this kind of installation, the heat exchanger is installed between the thermal source (heater, stove, solar power system, heat pump, etc.) and the swimming pool. The Fiorini heat exchanger protects the thermal source from the corrosive effect of the chlorate water.

The device ensures:

- ✓ A long life span of the device
- ✓ Possibility to maintain and expand

Moreover, a bypass is placed between the inlet and outlet of the heat exchanger, which reduces the water flow in the exchanger. In this way, the dimensions of the exchanger can be reduced in relation to its performance.



Legend

1. Pool water filter
2. Pool pump
3. Pool regulation valve
4. Fiorini plate heat exchanger
5. Exchanger charging pump
6. Pool water treatment unit
7. Pool
8. Copper bypass



Tables for fast selection

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | kind of box |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|-------------------------|-----------|-------------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | |
| 30 | 1320 | 4 | 2605 | 17 | 50x25x45 | 32 | 821K042AHNN015 | € 691,00 | A |
| 50 | 2200 | 5 | 4340 | 20 | 50x25x45 | 34 | 821K042AHNN023 | € 875,00 | A |
| 75 | 3300 | 5 | 6510 | 18 | 50x25x45 | 39 | 821K042AHNN037 | € 1197,00 | A |
| 125 | 5500 | 5 | 10850 | 20 | 80x29x55 | 87,5 | 821K080AVNN029 | € 1488,00 | A |
| 150 | 6595 | 5 | 13020 | 19 | 97x33x75 | 132 | 821F016AN017-1LL08XX00N | € 1812,00 | D |
| 175 | 7695 | 6 | 15190 | 19 | 97x33x75 | 135 | 821F016AN021-1HL03LL07N | € 1956,00 | D |
| 200 | 8795 | 5 | 17360 | 20 | 97x33x75 | 137 | 821F016AN021-1LL11XX00N | € 1956,00 | D |
| 300 | 13191 | 5 | 26043 | 20 | 97x33x75 | 155 | 821F016AN041-1HL04LL16N | € 2676,00 | D |

- › Primary circuit: 70-50 °C
- › Secondary circuit: 30-40 °C

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | kind of box |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|----------------|-----------|-------------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | |
| 15 | 1310 | 20 | 1300 | 20 | 50x25x35 | 30 | 821K042AHNN009 | € 553,00 | A |
| 20 | 1750 | 20 | 1735 | 20 | 50x25x35 | 30,5 | 821K042AHNN011 | € 599,00 | A |
| 25 | 2190 | 20 | 2170 | 20 | 50x25x35 | 31 | 821K042AHNN013 | € 645,00 | A |
| 30 | 2625 | 20 | 2605 | 20 | 50x25x45 | 32 | 821K042AHNN015 | € 691,00 | A |
| 40 | 3500 | 20 | 3470 | 20 | 50x25x45 | 33 | 821K042AHNN019 | € 783,00 | A |
| 50 | 4375 | 20 | 4340 | 20 | 50x25x45 | 34 | 821K042AHNN023 | € 875,00 | A |
| 60 | 5250 | 20 | 5210 | 20 | 50x25x45 | 36 | 821K042AHNN029 | € 1013,00 | A |
| 70 | 6125 | 20 | 6075 | 20 | 50x25x45 | 37,5 | 821K042AHNN033 | € 1105,00 | A |
| 80 | 7000 | 20 | 6945 | 20 | 80x29x55 | 39,5 | 821K042AHNN039 | € 1243,00 | C |

- › Primary circuit: 55-45 °C
- › Secondary circuit: 30-40 °C

| kind of box | insulation | code | price | packaging | |
|-------------|----------------|------------|----------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| A | insulating box | 821080007 | € 280,00 | 80x60x65 | 10 |
| | tub | 829090894X | € 60,00 | | |
| D | insulating box | 821080019X | € 500,00 | 80x60x115 | 18 |
| | tub | 829091094X | € 110,00 | | |

| description | code | price |
|------------------------------|------------|---------|
| set with feet for K042 model | 821070049X | € 23,00 |
| set with feet for F16 model | 821070031X | € 44,00 |

Brazed heat exchangers

P series

The brazed plate heat exchangers (P series) are used in heating, cooling and heat recuperation systems. The quality of the parts and the brazing process, which is carried out with care, make a trustworthy product. The plate design makes it possible to reach higher heat exchange performances and lower pressure loss. Moreover, the product has an elevated resistance to high temperatures and pressure (T max 195°C, P max 30 bar).

Our brazed plate heat exchangers can be used with many kinds of fluids in various combinations (ex: water/water, water/oil, water/steam, steam/oil, Freon/water, etc.)

Advantages

- compact design
- reasonable weight
- high heat exchange efficiency
- high temperature range (-160/+ 195 °C)
- high max operating pressure (30 bar)

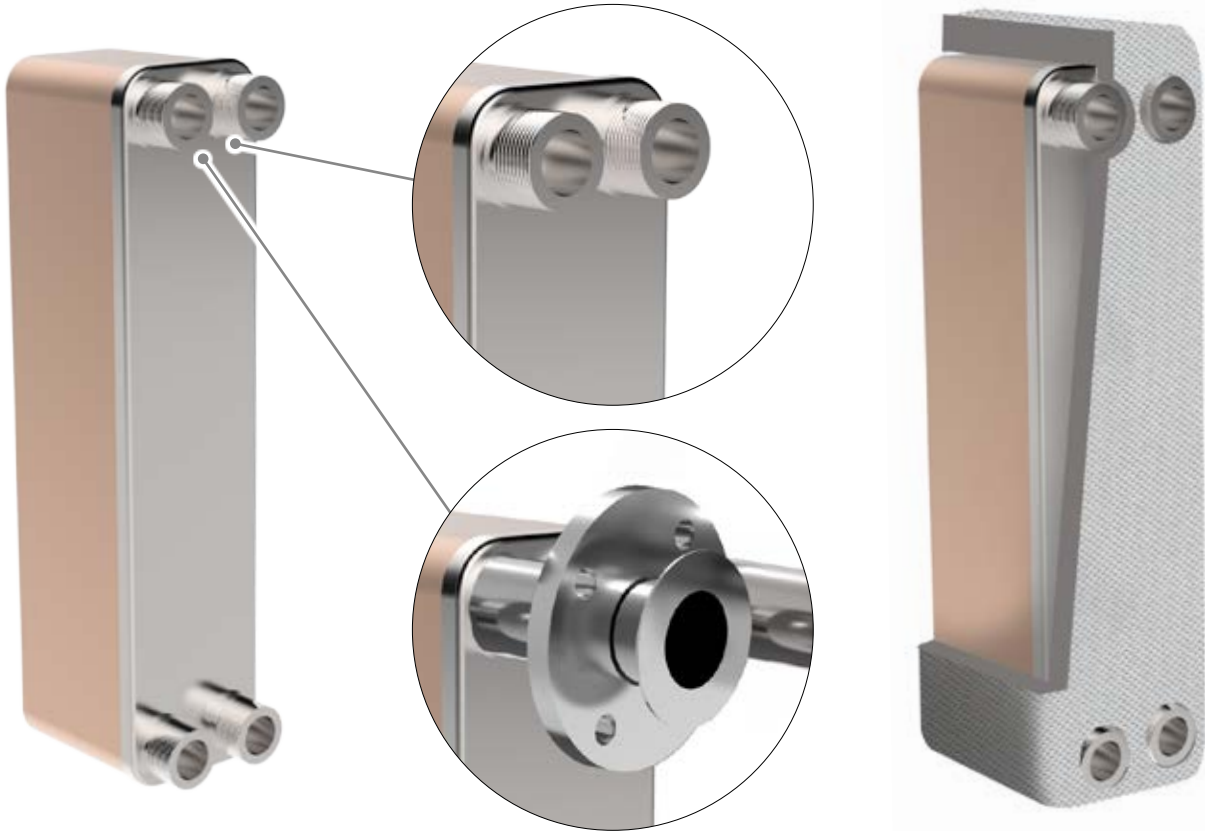
Main applications

- heating/cooling of technical water or industrial fluids
- evaporation and condensation of refrigerant gas
- hydraulic separation of the circuit
- heat recuperation in domestic applications and industrial processes
- functioning with a wide range of compatible fluids
- mechanical and chemical resistance of the materials



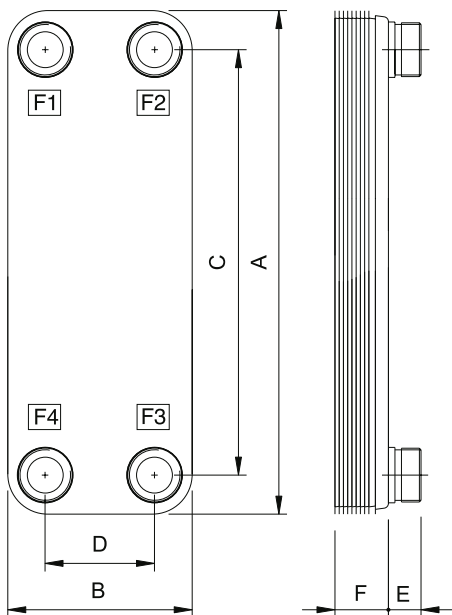
Brazed heat exchangers P series

Available couplings for brazed heat exchangers: threaded and flanged



All brazed heat exchangers are manufactured with four threaded couplings. On request, special versions can be provided with extra couplings and flanged couplings

The brazed heat exchangers can also be insulated.



| Model | A | B | C | D | E | F | Diameter coupling |
|-------|-----|-----|-----|-----|----|------------|-------------------|
| P4 | 310 | 111 | 250 | 50 | 24 | 9+2,4xN* | 1" |
| P7 | 526 | 120 | 473 | 66 | 27 | 9+2,57xN* | 1 1/4" |
| P15 | 530 | 256 | 439 | 177 | 27 | 10+2,48xN* | 2" |
| P30 | 782 | 350 | 655 | 220 | 27 | 11+2,90xN* | 2 1/2" |

*Plates No.

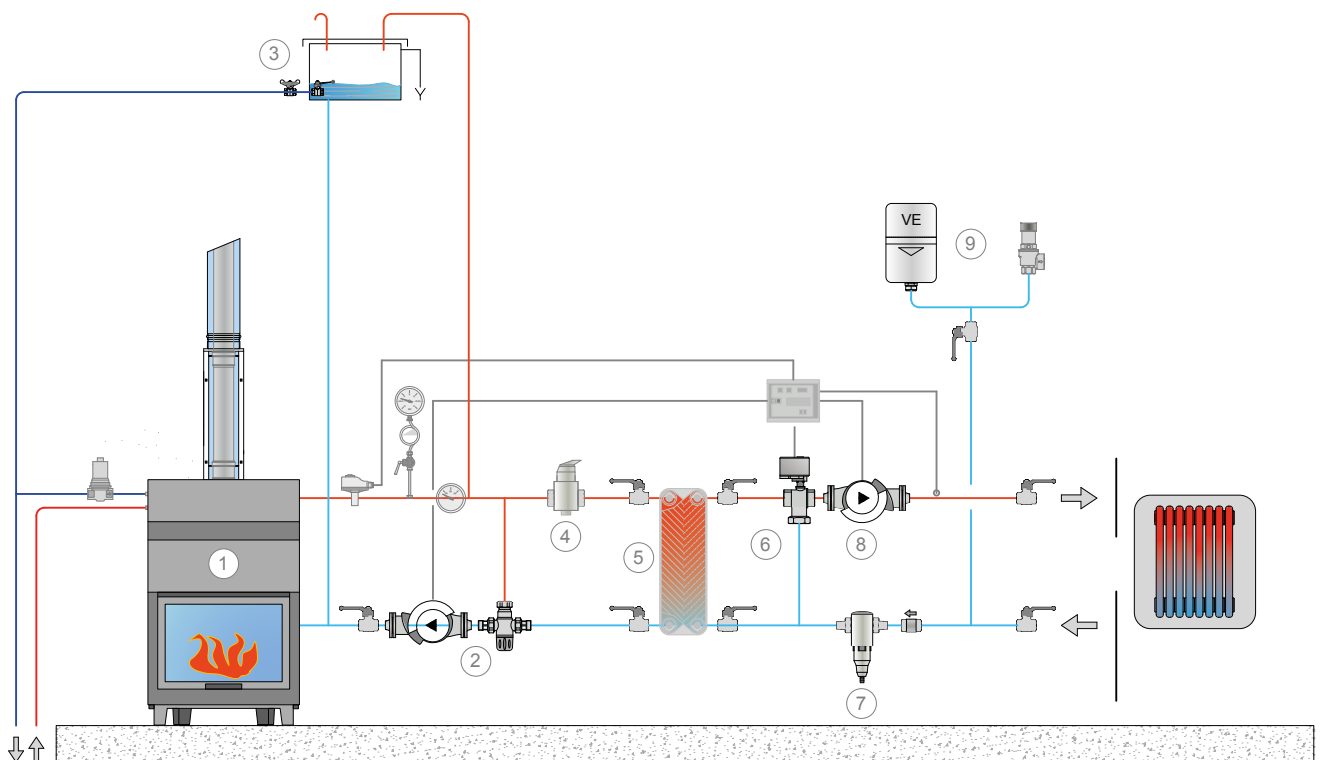
Brazed heat exchanger

Options > Separation between thermal source and device

The ideal solution for devices with an open vessel

In this type of installation, the exchanger is installed between the thermal source with open vessel and the heating system with closed vessel. The option ensures:

- ✓ Heat exchange between two fluids with a different pressure;
- ✓ Protection of the heat generator from dangerous overpressure;
- ✓ Protection of the heat generator from impurities in the device



Legend

1. Biomass heat generator
2. Anti-condensation return unit
3. Open expansion vessel
4. Deaerator
5. Fiorini plate heat exchanger
6. Three way mixing valve
7. Dirt separator
8. Booster pump of the thermal device
9. Safety unit



Tables for fast selection

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | insulation | |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|--------------------|----------|------------|---------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | code | price |
| 20 | 1760 | 30 | 1750 | 23 | 43x22x24 | 10 | P4-14 - 821020831X | € 209,00 | 843090016X | € 80,00 |
| 25 | 2200 | 22 | 2190 | 18 | 43x22x24 | 10 | P4-20 - 821020834X | € 244,00 | 843090017X | € 80,00 |
| 30 | 2640 | 30 | 2630 | 26 | 43x22x24 | 10 | P4-20 - 821020834X | € 244,00 | 843090017X | € 80,00 |
| 35 | 3080 | 40 | 3070 | 34 | 43x22x24 | 10 | P4-20 - 821020834X | € 244,00 | 843090017X | € 80,00 |
| 40 | 3520 | 24 | 3510 | 22 | 43x22x24 | 12 | P4-30 - 821020837X | € 308,00 | 843090018X | € 80,00 |
| 45 | 3960 | 30 | 3950 | 27 | 43x22x24 | 12 | P4-30 - 821020837X | € 308,00 | 843090018X | € 80,00 |
| 50 | 4400 | 36 | 4380 | 32 | 43x22x24 | 12 | P4-30 - 821020837X | € 308,00 | 843090018X | € 80,00 |
| 55 | 4840 | 26 | 4820 | 24 | 43x22x24 | 13 | P4-40 - 821020840X | € 373,00 | 843090019X | € 85,00 |
| 60 | 5280 | 30 | 5260 | 28 | 43x22x24 | 13 | P4-40 - 821020840X | € 373,00 | 843090019X | € 85,00 |

- › Primary circuit: 80-70 °C
- › Secondary circuit: 60-70 °C

| power kW | primary circuit | | secondary circuit | | packaging | | heat exchanger | | insulation | |
|-------------|-----------------|---------------|-------------------|---------------|------------------|--------------|--------------------|----------|------------|---------|
| | flow L/h | p.d.c. kPa | flow L/h | p.d.c. kPa | dimensions cm | weight kg | code | price | code | price |
| 20 | 1760 | 7 | 1750 | 6 | 43x22x24 | 12 | P4-30 - 821020837X | € 308,00 | 843090018X | € 80,00 |
| 25 | 2200 | 10 | 2190 | 9 | 43x22x24 | 12 | P4-30 - 821020837X | € 308,00 | 843090018X | € 80,00 |
| 30 | 2640 | 14 | 2630 | 13 | 43x22x24 | 12 | P4-30 - 821020837X | € 308,00 | 843090018X | € 80,00 |
| 35 | 3080 | 11 | 3070 | 10 | 43x22x24 | 13 | P4-40 - 821020840X | € 373,00 | 843090019X | € 85,00 |
| 40 | 3520 | 14 | 3510 | 13 | 43x22x24 | 13 | P4-40 - 821020840X | € 373,00 | 843090019X | € 85,00 |
| 45 | 3960 | 12 | 3950 | 12 | 43x22x24 | 15 | P4-50 - 821020842X | € 437,00 | 843090020X | € 85,00 |
| 50 | 4400 | 15 | 4380 | 14 | 43x22x24 | 15 | P4-50 - 821020842X | € 437,00 | 843090020X | € 85,00 |

- › Primary circuit: 80-70 °C
- › Secondary circuit: 65-75 °C





Refrigeration systems and systems for heat pumps

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Refrigeration systems and systems for heat pumps

The following solutions make our refrigeration systems and systems for heat pumps more efficient and high-performance.

Our line of refrigeration systems contains buffer tanks and hydronic kits, which are designed to improve the functioning and performance of even the most evolutionary air-conditioning systems. We have a broad range of buffer tanks, both horizontal and vertical, and hydraulic stations which can be combined with many pumps and storage tanks. All our products are manufactured, on request, with special and customized details.

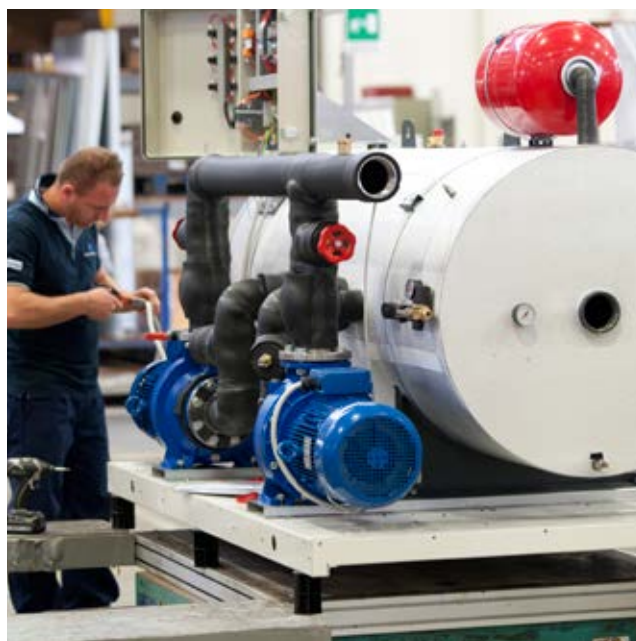
Buffer tanks

The buffer tanks, which increase the water volume in the device, improve the functioning and the performance of all air-conditioning systems. It brings numerous advantages, such as:

- longer life span of cooling systems and heat pumps because the device does not have to be activated as often;
- flexibility of use because the device can function with lower temperatures which differ from the normal temperatures
- possibility to install the cooling devices with a reduced power

Hydronic kits

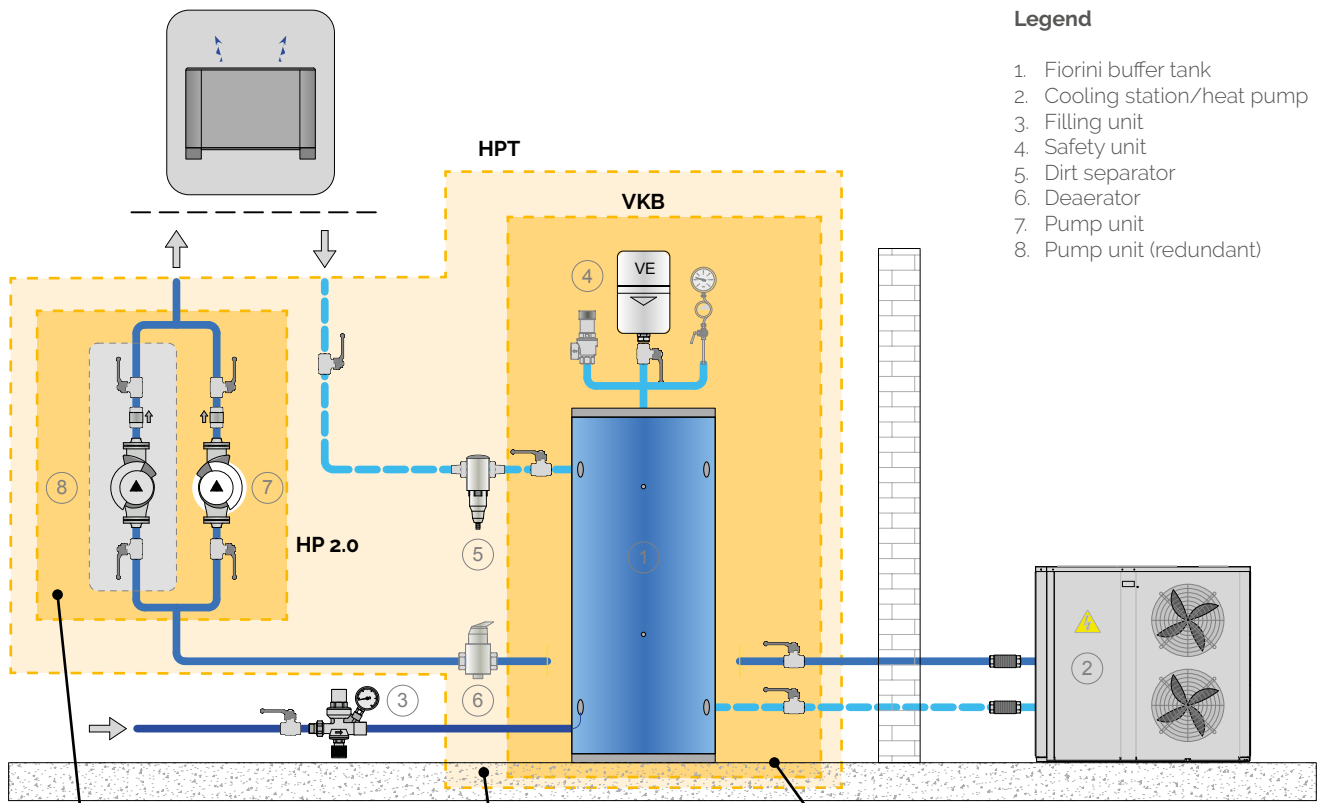
The numerous versions of the VKB, HPT and HP 2.0 are realized to use the advantages of a thermal fly-wheel as best as possible in cooling installations and installations with a heat pump. These hydraulic units ensure the correct functioning of the hydraulic circuit which can be connected to all types of water coolers and heat pumps. The units are enveloped in a supporting structure with a polished steel base, a frame and panels in galvanized and polished steel, which makes it possible to install the units outside. Moreover, non-standard solutions can also be realized, on the customer's request.



Applications

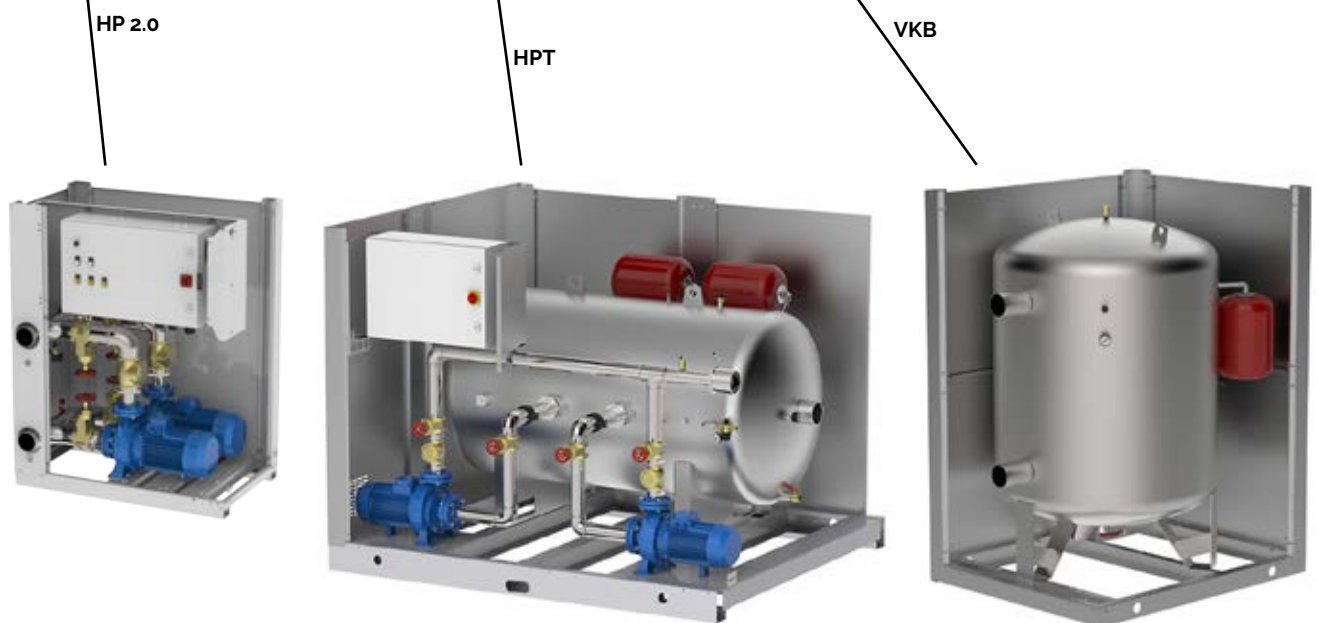
Single loop

In the single loop installations, the storage tank has the function of thermal flywheel and is placed in series with the device and the cooler. In this way the flow of the fluid in the circuit is the same in every point. This solution is recommended for simple devices.



Legend

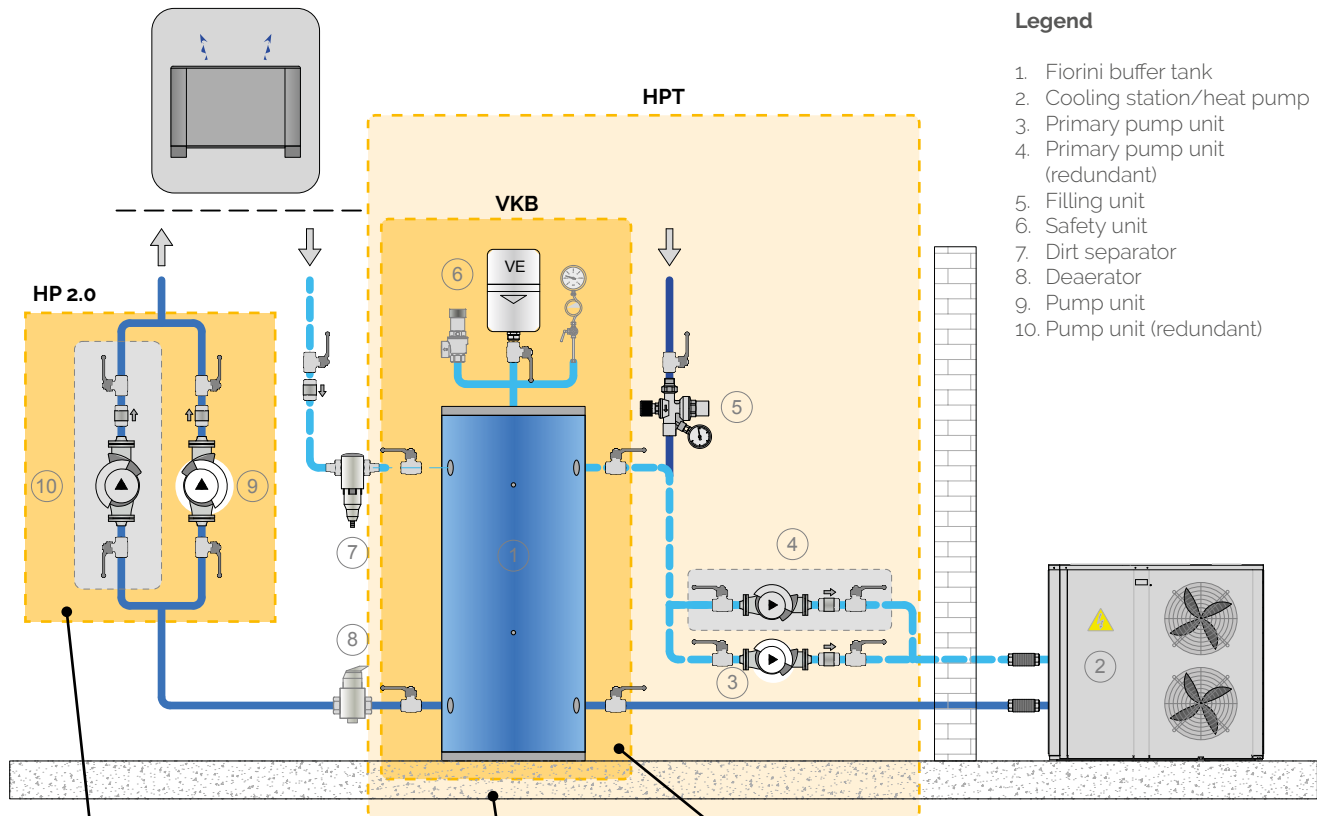
1. Fiorini buffer tank
2. Cooling station/heat pump
3. Filling unit
4. Safety unit
5. Dirt separator
6. Deaerator
7. Pump unit
8. Pump unit (redundant)



Applications

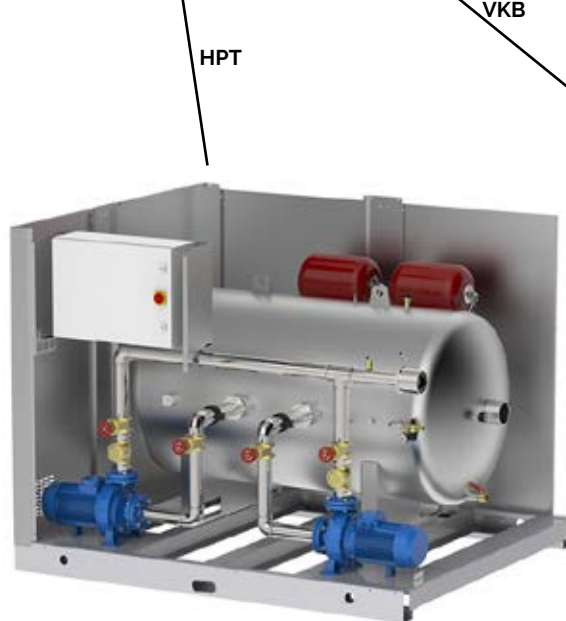
Double loop

In the double loop installations the storage tank is installed as an element to separate the thermal source and the installation. In this way the flows in the primary and the secondary circuit are independent. This solution is recommended for devices with complex settings.



Legend

1. Fiorini buffer tank
2. Cooling station/heat pump
3. Primary pump unit
4. Primary pump unit (redundant)
5. Filling unit
6. Safety unit
7. Dirt separator
8. Deaerator
9. Pump unit
10. Pump unit (redundant)



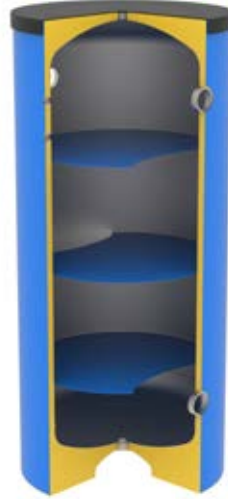
Buffer tanks

Because of our broad range of buffer tanks, we can offer the best solution for every possible installation. We offer the following products:



V
Carbon steel
Hot-dip galvanizing

For devices which need protection against corrosion and for single loop or double loop installations. These tanks, without insulation, are meant to be insulated in the heating plant.



VKS
Carbon steel
External anti-rust painting
Anti-condensate insulation

With internal baffles which prevent preferential flow. To be used with double loop installations, also with a high flow and multi-circuited.



VKR
Carbon steel
External anti-rust painting
Anti-condensate insulation

With internal pipe conveyor which favours the chilled water flow from the primary circuit during the start-up. To be used with double loop installations, with medium/high flow. Galvanized version available on demand.

VK
Carbon steel
Hot-dip galvanizing
Anti-condensate insulation

For devices which need protection against corrosion. Single or double loop installations.

VKG
Carbon steel
External anti-rust painting
Anti-condensate insulation

For devices which do not need protection against corrosion. Single or double loop installations.

VKT
Carbon steel
Internal enamelling
Anti-condensate insulation

For devices which need anti-corrosive protection and which are also compatible with most antifreeze liquids. To be used with single or double loop installations.

VKX
Stainless steel
Anti-condensate insulation

For devices which need stainless steel in case of contact with the fluid. To be used with single or double loop installations.



VKD
Carbon steel
External anti-rust painting
Anti-condensate insulation

To be used with double loop installations, with tube conveyors equipped with diffusers which make the temperature in the tank uniform.

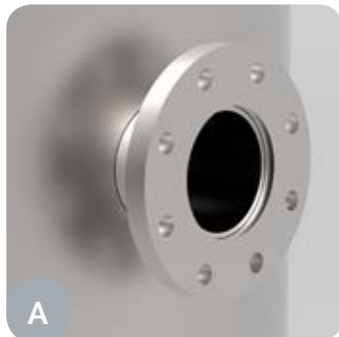


VKG-HC
Carbon steel
External anti-rust painting
Anti-condensate insulation

Can contain hot as well as chilled water in heating or cooling devices equipped with a heat pump. To be used with single and double loop installations.

Buffer tanks: couplings

All models are equipped with threaded couplings. We also manufacture special versions with several kinds of couplings on demand (flanged couplings, Victaulic couplings and increased couplings)

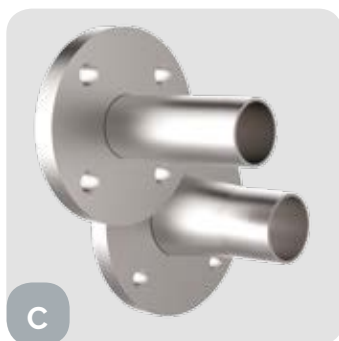


A
Flanged couplings



B
Victaulic couplings

Material: carbon raw steel
Other materials on demand



C
Transformation to flanged coupling

| Original coupling | Transformed coupling UNI-EN PN 16 | Code | Price |
|-------------------|-----------------------------------|------------|----------|
| 1 1/2" | DN 40 | 838081200X | € 75,00 |
| | DN 50 | 838081201X | € 91,00 |
| 2" | DN 50 | 838081202X | € 78,00 |
| | DN 65 | 838081203X | € 91,00 |
| 2 1/2" | DN 65 | 838081204X | € 77,00 |
| | DN 80 | 838081205X | € 104,00 |
| 3" | DN 80 | 838081206X | € 87,00 |
| | DN 100 | 838081207X | € 122,00 |
| 4" | DN 100 | 838081208X | € 100,00 |
| | DN 125 | 838081209X | € 153,00 |



D
Transformation to victaulic coupling

| Original coupling | Transformed coupling | Code | Price |
|-------------------|----------------------|------------|----------|
| 1 1/2" | 1 1/2" | 838081211X | € 30,00 |
| | 2" | 838081212X | € 69,00 |
| 2" | 2" | 838081213X | € 31,00 |
| | 2 1/2" | 838081214X | € 76,00 |
| 2 1/2" | 2 1/2" | 838081215X | € 31,00 |
| | 3" | 838081216X | € 79,00 |
| 3" | 3" | 838081217X | € 32,00 |
| | 4" | 838081218X | € 93,00 |
| 4" | 4" | 838081219X | € 39,00 |
| | 5" | 838081220X | € 119,00 |



E
Transformation to brazed coupling

| Original coupling | Transformed coupling | Code | Price |
|-------------------|----------------------|------------|---------|
| 1/2" | 1/2" | 838081221X | € 24,00 |
| 1 1/2" | 1 1/2" | 838081222X | € 24,00 |
| | 2" | 838081223X | € 56,00 |
| 2" | 2" | 838081224X | € 25,00 |
| | 2 1/2" | 838081225X | € 59,00 |
| 2 1/2" | 2 1/2" | 838081226X | € 25,00 |
| | 3" | 838081227X | € 61,00 |
| 3" | 3" | 838081228X | € 33,00 |
| | 4" | 838081229X | € 81,00 |
| 4" | 4" | 838081230X | € 39,00 |
| | 5" | 838081231X | € 97,00 |

Buffer tank: Insulation

The insulated tanks can be manufactured with two different types of insulating material on the outside. Both have an anti-condensate function.

Detail of the three points for fixing to the ground



Detail of the coupling of the discharge conveyor



Rigid foam

This insulation is made from a layer of polyurethane foam which envelops the whole tank. This solution prevents every thermal bridge with the exterior and guarantees excellent performance. It is available for vertical tanks, cannot be supplied separately and cannot be removed. The exterior is finished in coloured PVC. The insulation has a special design which makes it possible to channel the air towards the outside and to fix the tank to the ground.

Closed cell elastomeric insulation

Tanks with a volume of more than a 1000l and special models, horizontal or in galvanized steel, are insulated with closed cell elastomeric foam which is stuck to the surface of the tank. This prevents condensate formation. This type of insulation cannot be removed. The external finishing is in coloured PVC.

Technical features

| Type | Density | Thermal conductivity (15°C) | Resistance to steam diffusion |
|------------------|----------------------|-----------------------------|-------------------------------|
| Elastomere 20 mm | 30 kg/m ³ | = 0,0333 W/m °C | μ = 2190 |
| Foam 30 mm | 40 kg/m ³ | = 0,023 W/m °C | μ = 2210 |

Buffer tanks

V series



The V series includes a range of galvanized tanks for chilled water, which are not insulated and usually used to increase thermal inertia of the air-conditioning unit. Tanks with various capacities are available, from 100l up to 5000l.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** internal and external hot-dip galvanization
- ✓ **Not insulated**

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Available on request: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc.

| capacity l | V verticale code | packaging | | | V horizontal code | price |
|---------------|---------------------|------------|------------------|--------------|----------------------|------------|
| | | price | dimensions cm | weight kg | | |
| 100 | 816020040 | € 366,00 | 49x49x107 | 18 | 816020052 | € 439,00 |
| 200 | 816020041 | € 434,00 | 54x54x145,5 | 29 | 816020053 | € 520,00 |
| 300 | 816020042 | € 534,00 | 64x64x154,5 | 36 | 816020054 | € 641,00 |
| 500 | 816020043 | € 725,00 | 74x74x183,5 | 73 | 816020055 | € 870,00 |
| 800 | 816020044 | € 991,00 | 88x88x186 | 99 | 816020056 | € 1.189,00 |
| 1000 | 816020045 | € 1.139,00 | 94x94x214,6 | 120 | 816020057 | € 1.310,00 |
| 1500 | 816020046 | € 1.550,00 | 107x107x228 | 188 | 816020058 | € 1.783,00 |
| 2000 | 816020047 | € 1.948,00 | 117x117x260 | 258 | 816020059 | € 2.241,00 |
| 2500 | 816020048 | € 2.236,00 | 132x132x239,5 | 276 | 816020060 | € 2.571,00 |
| 3000 | 816020049 | € 2.516,00 | 132x132x289,5 | 324 | 816020061 | € 2.894,00 |
| 4000 | 816020050 | € 3.700,00 | 147x147x296,5 | 488 | 816020062 | € 4.255,00 |
| 5000 | 816020051 | € 4.473,00 | 167x167x300,5 | 578 | 816020063 | € 5.144,00 |

Buffer tanks

VK series

The VK series has galvanized and insulated tanks for chilled water, which are usually used to increase the thermal inertia of the conditioning device. The galvanization offers protection against corrosion.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** internal and external hot-dip galvanization
- ✓ **Insulation:**
 - Rigid foam with a thickness of 30 mm for vertical tanks with a capacity of up to 1000l
 - Closed cell elastomere with a thickness of 20 mm for horizontal and tanks and special versions with a capacity of more than 1000l
- ✓ **External covering:** coloured PVC

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...



| capacity l | VK vertical code | price | packaging | | VK horizontal code | price |
|---------------|---------------------|------------|------------------|--------------|-----------------------|------------|
| | | | dimensions cm | weight kg | | |
| 100 | 816020064 | € 457,00 | 49x49x107 | 25 | 816020076 | € 548,00 |
| 200 | 816020065 | € 542,00 | 54x54x145,5 | 37 | 816020077 | € 650,00 |
| 300 | 816020066 | € 668,00 | 64x64x154,5 | 48 | 816020078 | € 801,00 |
| 500 | 816020067 | € 907,00 | 74x74x183,5 | 81 | 816020079 | € 1.088,00 |
| 800 | 816020068 | € 1.238,00 | 88x88x186 | 110 | 816020080 | € 1.486,00 |
| 1000 | 816020069 | € 1.423,00 | 94x94x214,6 | 135 | 816020081 | € 1.637,00 |
| 1500 | 816020070 | € 1.937,00 | 107x107x228 | 192 | 816020082 | € 2.228,00 |
| 2000 | 816020071 | € 2.435,00 | 117x117x260 | 264 | 816020083 | € 2.801,00 |
| 2500 | 816020072 | € 2.795,00 | 132x132x239,5 | 281 | 816020084 | € 3.214,00 |
| 3000 | 816020073 | € 3.145,00 | 132x132x289,5 | 331 | 816020085 | € 3.617,00 |
| 4000 | 816020074 | € 4.625,00 | 147x147x296,5 | 496 | 816020086 | € 5.319,00 |
| 5000 | 816020075 | € 5.591,00 | 167x167x300,5 | 587 | 816020087 | € 6.430,00 |

Buffer tanks

VKG series



The VKG series contains insulated tanks for chilled water, which are usually used to increase thermal inertia of the conditioning device.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** external anti-rust coating
- ✓ **Insulation:**
 - Rigid foam with a thickness of 30 mm for vertical tanks with a capacity of up to 1000l
 - Closed cell elastomere with a thickness of 20 mm for horizontal and special tanks with a capacity of over 1000l
- ✓ **External covering:** coloured PVC

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...

| capacity l | VKG vertical code | price | packaging | | VKG horizontal code | price |
|---------------|----------------------|------------|------------------|--------------|------------------------|------------|
| | | | dimensions cm | weight kg | | |
| 100 | 816010130 | € 422,00 | 49x49x107 | 24 | 816010142 | € 549,00 |
| 200 | 816010131 | € 489,00 | 54x54x145,5 | 36 | 816010143 | € 611,00 |
| 300 | 816010132 | € 602,00 | 64x64x154,5 | 46 | 816010144 | € 723,00 |
| 500 | 816010133 | € 784,00 | 74x74x183,5 | 78 | 816010145 | € 941,00 |
| 800 | 816010134 | € 1.078,00 | 88x88x186 | 105 | 816010146 | € 1.294,00 |
| 1000 | 816010135 | € 1.206,00 | 94x94x214,6 | 129 | 816010147 | € 1.447,00 |
| 1500 | 816010136 | € 1.566,00 | 107x107x228 | 182 | 816010148 | € 1.879,00 |
| 2000 | 816010137 | € 1.954,00 | 117x117x260 | 250 | 816010149 | € 2.345,00 |
| 2500 | 816010138 | € 2.282,00 | 132x132x239,5 | 267 | 816010150 | € 2.739,00 |
| 3000 | 816010139 | € 2.530,00 | 132x132x289,5 | 314 | 816010151 | € 3.036,00 |
| 4000 | 816010140 | € 3.490,00 | 147x147x296,5 | 470 | 816010152 | € 3.838,00 |
| 5000 | 816010141 | € 4.196,00 | 167x167x300,5 | 557 | 816010153 | € 4.616,00 |
| 6000 | 816011186X | € 5.715,00 | 282x203x204 | 647 | | |
| 8000 | 816011187X | € 6.990,00 | 352x203x204 | 782 | | |
| 10000 | 816011188X | € 7.957,00 | 427x203x204 | 927 | | |

Buffer tanks

VKG-HC series

The VKG-HC series contains insulated tanks for hot/cold devices, which are generally used to increase the thermal inertia of the heating and conditioning device.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** external anti-rust coating
- ✓ **Insulation:**
 - Rigid foam with a thickness of 30 mm for vertical tanks of up to 1000 l
 - Double insulation (elastomere + polyurethane) for larger capacities, special versions and horizontal tanks
 - closed-cell elastomere with a thickness of 10 mm with an anti-condensate function
 - flexible polyurethane with a thickness of 40mm
- ✓ **External covering:** coloured PVC

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 90 °C | 5 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...



| capacity l | VKG-HC code | price | energy label | packaging | |
|---------------|----------------|------------|--------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 100 | 817010084X | € 514,00 | B | 49x49x107 | 25 |
| 200 | 817010085X | € 582,00 | C | 54x54x146,1 | 36 |
| 300 | 817010086X | € 672,00 | D | 64x64x154,7 | 48 |
| 500 | 817010087X | € 873,00 | D | 74x74x184,1 | 80 |
| 800 | 817010088X | € 1.269,00 | | 88x88x186,1 | 106 |
| 1000 | 817010089X | € 1.462,00 | | 94x94x214,6 | 130 |
| 1500 | 817010090X | € 2.089,00 | | 117x117x230,5 | 218 |
| 2000 | 817010091X | € 2.498,00 | | 123x123x262,5 | 260 |

Buffer tanks VKT series



The tanks in the VKT series, which are internally enamelled and insulated for use with chilled water, are usually used to increase thermal inertia of the conditioning device. The internal enamelling ensures protection against corrosion.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** Bluetech internal enamelling with thermosetting resins.
- ✓ **Insulation:**
 - Rigid foam with a thickness of 30 mm for tanks with a capacity of up to 1000l
 - Closed cell elastomere with a thickness of 20 mm for horizontal and special tanks with a capacity of over 1000l

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...

| capacity l | VKT code | price | packaging | |
|---------------|-------------|------------|------------------|--------------|
| | | | dimensions cm | weight kg |
| 100 | 816080001X | € 523,00 | 49x49x107 | 24 |
| 200 | 816080002X | € 630,00 | 54x54x145,5 | 36 |
| 300 | 816080003X | € 747,00 | 64x64x154,5 | 46 |
| 500 | 816080004X | € 991,00 | 74x74x183,5 | 78 |
| 800 | 816080005X | € 1.274,00 | 88x88x186 | 105 |
| 1000 | 816080006X | € 1.462,00 | 94x94x214,6 | 129 |
| 1500 | 816080007X | € 2.016,00 | 107x107x228 | 182 |
| 2000 | 816080008X | € 2.533,00 | 117x117x260 | 250 |
| 2500 | 816080009X | € 2.915,00 | 132x132x239,5 | 267 |
| 3000 | 816080010X | € 3.266,00 | 132x132x289,5 | 314 |
| 4000 | 816080011X | € 4.718,00 | 147x147x296,5 | 470 |
| 5000 | 816080012X | € 5.700,00 | 167x167x300,5 | 557 |

Buffer tanks

VKX series

The VKX series includes insulated stainless steel tanks for chilled water, which are usually used to increase thermal inertia of the conditioning device. The stainless steel protects the device against corrosion and makes it possible to use the tank in aggressive environments and in industrial settings.

Features

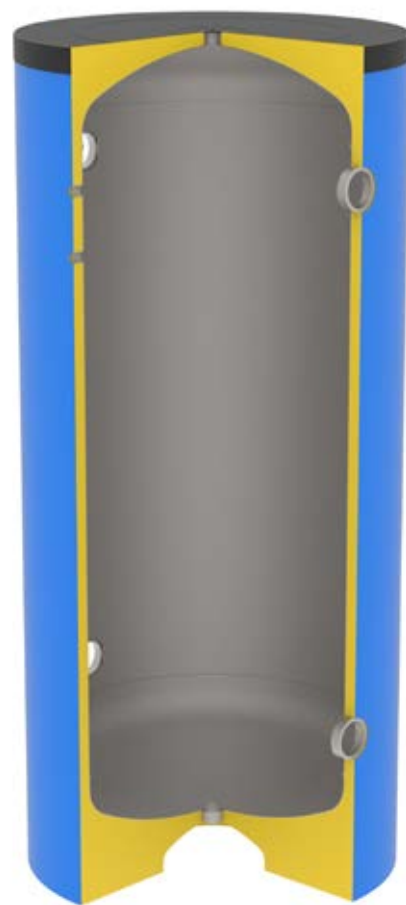
- ✓ **Material:** AISI 304 or AISI 316 stainless steel
- ✓ **Insulation:** Closed cell elastomere with a thickness of 20 mm
- ✓ **External covering:** coloured PVC

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...



| capacity l | VKX AISI 304 code | price | packaging | | VKX AISI 316 code | price | packaging | |
|---------------|----------------------|-------------|------------------|--------------|----------------------|-------------|------------------|--------------|
| | | | dimensions cm | weight kg | | | dimensions cm | weight kg |
| 100 | 816040020 | € 1.083,00 | 470x470x1050 | -- | 816040141X | € 1.162,00 | 470x470x1050 | -- |
| 200 | 816040021 | € 1.374,00 | 520x520x1520 | -- | 816040142X | € 1.516,00 | 520x520x1520 | -- |
| 300 | 816040022 | € 1.640,00 | 620x620x1545 | -- | 816040143X | € 1.866,00 | 620x620x1545 | -- |
| 500 | 816040023 | € 2.030,00 | 670x670x2000 | -- | 816040144X | € 2.290,00 | 670x670x2000 | -- |
| 800 | 816040024 | € 2.953,00 | 860x860x1970 | -- | 816040145X | € 3.405,00 | 860x860x1970 | -- |
| 1000 | 816040025 | € 3.290,00 | 870x870x2240 | -- | 816040146X | € 3.906,00 | 870x870x2240 | -- |
| 1500 | 816040026 | € 5.507,00 | 1070x1070x2250 | -- | 816040147X | € 6.006,00 | 1070x1070x2250 | -- |
| 2000 | 816040027 | € 6.780,00 | 1270x1270x2330 | -- | 816040148X | € 7.543,00 | 1270x1270x2330 | -- |
| 2500 | 816040028 | € 7.511,00 | 1270x1270x2580 | -- | 816040149X | € 8.420,00 | 1270x1270x2580 | -- |
| 3000 | 816040029 | € 9.797,00 | 1320x1320x2850 | -- | 816040150X | € 10.928,00 | 1320x1320x2850 | -- |
| 4000 | 816040030 | € 12.129,00 | 1470x1470x2930 | -- | 816040151X | € 13.386,00 | 1470x1470x2930 | -- |
| 5000 | 816040031 | € 15.203,00 | 1670x1670x2960 | -- | 816040152X | € 17.152,00 | 1670x1670x2960 | -- |

Buffer tanks VKS series



The VKS series includes insulated tanks for chilled water, which are usually used to increase thermal inertia in double loop cooling devices. They are equipped with dividing baffles which prevent preferential flow in the tank by creating perfect conditions for temperature distribution. They are especially used with medium and high flows and with special versions in which the tank is to be connected with more than two circuits.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** external anti-rust coating
- ✓ **Insulation:**
 - Rigid foam with a thickness of 30mm for tanks with a capacity of up to 1000l
 - Closed cell elastomere with a thickness of 20 mm for special tanks with a capacity of over 1000l
- ✓ **External covering:** coloured PVC

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...

| capacity l | VKS code | price | packaging | |
|---------------|-------------|------------|------------------|--------------|
| | | | dimensions cm | weight kg |
| 100 | 816010166 | € 647,00 | 49x49x107 | 29 |
| 200 | 816010167 | € 712,00 | 54x54x145,5 | 41 |
| 300 | 816010168 | € 811,00 | 64x64x154,5 | 55 |
| 500 | 816010169 | € 1.006,00 | 74x74x183,5 | 91 |
| 800 | 816010170 | € 1.201,00 | 88x88x186 | 122 |
| 1000 | 816010171 | € 1.418,00 | 94x94x214,6 | 149 |
| 1500 | 816010172 | € 2.009,00 | 107x107x228 | 208 |
| 2000 | 816010173 | € 2.468,00 | 117x117x260 | 282 |
| 2500 | 816010174 | € 2.823,00 | 132x132x239,5 | 307 |
| 3000 | 816010175 | € 3.173,00 | 132x132x289,5 | 356 |
| 4000 | 816010176 | € 4.286,00 | 147x147x296,5 | 519 |
| 5000 | 816010177 | € 4.978,00 | 167x167x300,5 | 621 |

Buffer tanks

VKR series

The insulated VKR tanks for chilled water are usually used to increase the thermal inertia of the double loop conditioning device with a medium or high flow. They are equipped with the double loop cooling device which create a preferential circuit inside the tank.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** external anti-rust coating
- ✓ **Insulation:**
 - Rigid foam with a thickness of 30 mm for vertical tanks with a capacity of up to 1000l
 - Closed cell elastomere with a thickness of 20 mm for horizontal and special tanks with a capacity of over 1000l.
- ✓ **External covering:** coloured PVC

Operational limits

| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...



| capacity l | VKR code | price | packaging | |
|---------------|-------------|------------|------------------|--------------|
| | | | dimensions cm | weight kg |
| 100 | 816010154 | € 578,00 | 49x49x107 | 26 |
| 200 | 816010155 | € 643,00 | 54x54x145,5 | 37 |
| 300 | 816010156 | € 738,00 | 64x64x154,5 | 50 |
| 500 | 816010157 | € 954,00 | 74x74x183,5 | 85 |
| 800 | 816010158 | € 1.129,00 | 88x88x186 | 113 |
| 1000 | 816010159 | € 1.296,00 | 94x94x214,6 | 137 |
| 1500 | 816010160 | € 1.859,00 | 107x107x228 | 193 |
| 2000 | 816010161 | € 2.300,00 | 117x117x260 | 262 |
| 2500 | 816010162 | € 2.853,00 | 132x132x239,5 | 283 |
| 3000 | 816010163 | € 3.120,00 | 132x132x289,5 | 330 |
| 4000 | 816010164 | € 4.065,00 | 147x147x296,5 | 487 |
| 5000 | 816010165 | € 4.753,00 | 167x167x300,5 | 577 |

Buffer tanks VKD series



The insulated VKD tanks for chilled water are usually used to increase thermal inertia of the double loop conditioning device. They are equipped with diffuser tubes which connect the two circuits linked to the tank. Energy is supplied or subtracted through the diffuser's circumferential probes. In this way the mixing of fluids is significantly reduced.

Features

- ✓ **Material:** carbon steel
- ✓ **Treatment:** external anti-rust coating
- ✓ **Insulation:**
 - Rigid foam with a thickness of 30 mm for vertical tanks with a capacity of up to 1000l
 - Closed cell elastomere with a thickness of 20 mm for special tanks with a capacity of over 1000l.

Operational limits

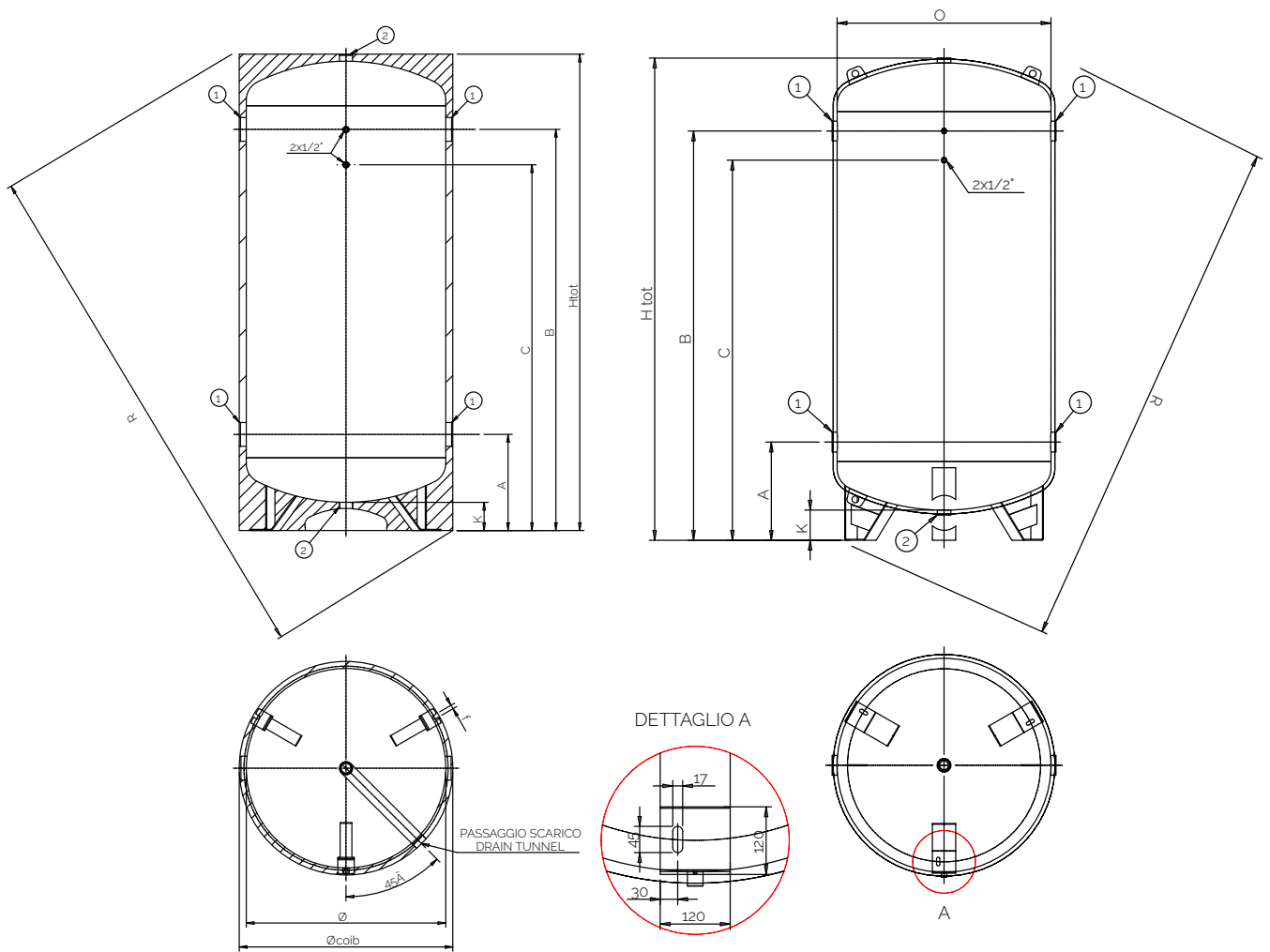
| Min temperature | Max temperature | Max pressure |
|-----------------|-----------------|--------------|
| -10 °C | 50 °C | 6 bar |

Special versions

Special versions are available on demand: customized dimensions, flanged couplings, customized couplings, thicker insulation, etc...

| capacity l | VKD code | price | packaging | |
|---------------|-------------|------------|------------------|--------------|
| | | | dimensions cm | weight kg |
| 100 | 816010417 | € 659,00 | 49x49x107 | 26 |
| 200 | 816010418 | € 763,00 | 54x54x145,5 | 37 |
| 300 | 816010419 | € 787,00 | 64x64x154,5 | 50 |
| 500 | 816010420 | € 1.007,00 | 74x74x183,5 | 85 |
| 800 | 816010421 | € 1.261,00 | 88x88x186 | 113 |
| 1000 | 816010422 | € 1.362,00 | 94x94x214,6 | 138 |
| 1500 | 816010423 | € 1.915,00 | 107x107x228 | 193 |
| 2000 | 816010424 | € 2.361,00 | 117x117x260 | 262 |
| 2500 | 816010425 | € 2.720,00 | 132x132x239,5 | 283 |
| 3000 | 816010426 | € 3.044,00 | 132x132x289,5 | 330 |
| 4000 | 816010427 | € 4.146,00 | 147x147x296,5 | 487 |
| 5000 | 816010428 | € 4.820,00 | 167x167x300,5 | 577 |

Buffer tanks: dimensions



100 < cap. < 1.000

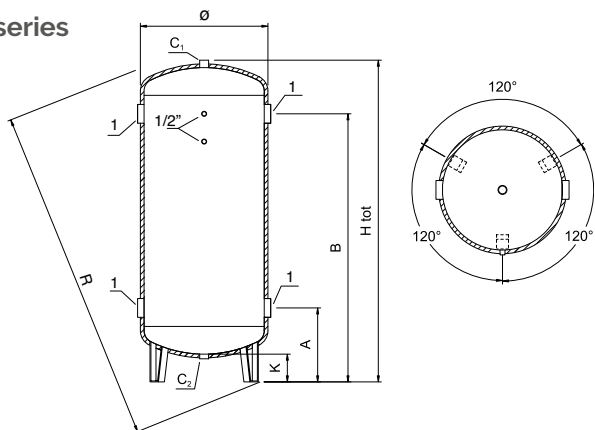
1500 < cap. < 10.000

V, VK, VKG, VKT, VKS, VKR and VKD series vertical

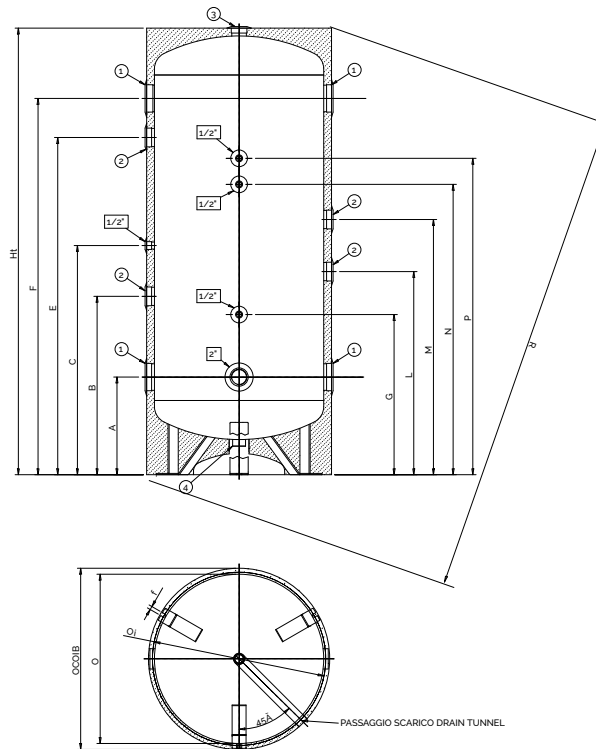
| cap. l | Ø mm | R mm | Ø insul. mm | H tot mm | A mm | B mm | C mm | K mm | f mm | 1 mm | 2 mm |
|--------|------|------|-------------|----------|------|------|------|------|------|-------|-------|
| 100 | 400 | 1056 | 460 | 950 | 290 | 760 | 610 | 125 | 17 | 1"1/2 | 1"1/4 |
| 200 | 450 | 1430 | 510 | 1335 | 290 | 1140 | 990 | 120 | 17 | 1"1/2 | 1"1/4 |
| 300 | 550 | 1551 | 610 | 1425 | 365 | 1165 | 1015 | 130 | 17 | 2" | 1"1/4 |
| 500 | 650 | 1857 | 710 | 1715 | 385 | 1435 | 1285 | 135 | 17 | 3" | 1"1/4 |
| 800 | 790 | 1937 | 850 | 1740 | 395 | 1445 | 1295 | 125 | 17 | 3" | 1"1/2 |
| 1000 | 850 | 2221 | 910 | 2026 | 410 | 1710 | 1560 | 120 | 17 | 3" | 1"1/2 |
| 1500 | 1000 | 2398 | 1040 | 2160 | 500 | 1800 | 1650 | 165 | | 3" | 2" |
| 2000 | 1100 | 2730 | 1140 | 2480 | 505 | 2105 | 1955 | 155 | | 3" | 2" |
| 2500 | 1250 | 2616 | 1290 | 2275 | 565 | 1865 | 1715 | 180 | | 4" | 2" |
| 3000 | 1250 | 3061 | 1290 | 2775 | 565 | 2365 | 2215 | 180 | | 4" | 2" |
| 4000 | 1400 | 3189 | 1440 | 2845 | 590 | 2390 | 2240 | 160 | | 4" | 2" |
| 5000 | 1600 | 3319 | 1640 | 2885 | 600 | 2400 | 2250 | 140 | | 4" | 2" |
| 6000 | 1800 | 2849 | 1840 | 2175 | 615 | 2215 | 2015 | 140 | | 4" | 2" |
| 8000 | 1800 | 3880 | 1840 | 3415 | 615 | 2915 | 2715 | 140 | | 4" | 2" |
| 10000 | 1800 | 4554 | 1840 | 4165 | 615 | 3665 | 3465 | 140 | | 4" | 2" |

Buffer tanks: dimensions

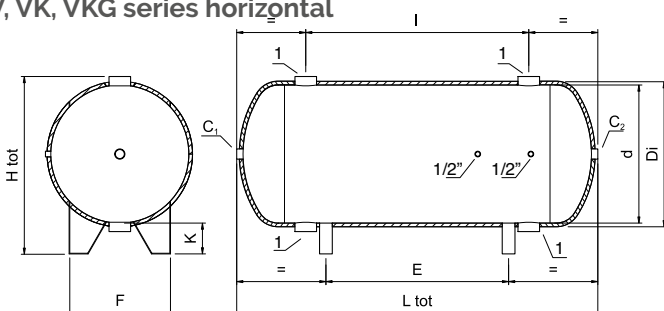
VKX series



VKG-HC series



V, VK, VKG series horizontal



V, VK, VKG series horizontal

| cap. l | Ø mm | insul. mm | Htot mm | Ltot mm | E mm | F mm | I mm | K mm | C inch | 1 inch |
|--------|------|-----------|---------|---------|------|------|------|------|--------|--------|
| 100 | 400 | 440 | 546 | 850 | 310 | 330 | 470 | 120 | 1 1/4 | 1 1/2 |
| 200 | 450 | 490 | 596 | 1240 | 700 | 350 | 850 | 120 | 1 1/4 | 1 1/2 |
| 300 | 550 | 590 | 715 | 1320 | 600 | 425 | 800 | 140 | 1 1/4 | 2 |
| 500 | 650 | 690 | 875 | 1600 | 900 | 490 | 1050 | 190 | 1 1/4 | 3 |
| 750 | 790 | 830 | 1015 | 1642 | 900 | 615 | 1050 | 190 | 1 1/2 | 3 |
| 1000 | 850 | 890 | 1075 | 1932 | 1130 | 660 | 1300 | 190 | 1 1/2 | 3 |
| 1500 | 1000 | 1040 | 1275 | 2010 | 950 | 775 | 1300 | 190 | 2 | 3 |
| 2000 | 1100 | 1140 | 1335 | 2356 | 1320 | 900 | 1600 | 200 | 2 | 3 |
| 2500 | 1200 | 1240 | 1460 | 2416 | 1180 | 950 | 1600 | 225 | 2 | 4 |
| 3000 | 1250 | 1290 | 1510 | 2626 | 1390 | 965 | 1800 | 225 | 2 | 4 |
| 4000 | 1400 | 1440 | 1660 | 2716 | 1380 | 1080 | 1800 | 225 | 2 | 4 |
| 5000 | 1600 | 1640 | 1680 | 2776 | 1380 | 1235 | 1800 | 225 | 2 | 4 |

VKX series

| cap. l | Ø mm | Htot mm | R mm | A mm | B mm | C2 inch | C1 inch | 1 inch |
|--------|------|---------|------|------|------|---------|---------|--------|
| 100 | 440 | 930 | 1029 | 265 | 735 | 1 1/4 | 1 1/4 | 2 |
| 200 | 490 | 1400 | 1484 | 300 | 1150 | 1 1/4 | 1 1/4 | 2 |
| 300 | 590 | 1425 | 1543 | 320 | 1170 | 1 1/4 | 1 1/4 | 2 |
| 500 | 690 | 1880 | 2003 | 320 | 1620 | 1 1/4 | 1 1/4 | 2 1/2 |
| 800 | 830 | 1850 | 2028 | 445 | 1495 | 1 1/4 | 1 1/4 | 2 1/2 |
| 1000 | 890 | 2120 | 2300 | 455 | 1755 | 1 1/4 | 1 1/4 | 3 |
| 1500 | 1040 | 2130 | 2371 | 465 | 1765 | 1 1/4 | 1 1/4 | 3 |
| 2000 | 1240 | 2210 | 2487 | 500 | 1800 | 1 1/4 | 1 1/4 | 3 |
| 2500 | 1240 | 2460 | 2778 | 500 | 2050 | 1 1/4 | 1 1/4 | 3 |
| 3000 | 1290 | 2730 | 3020 | 515 | 2315 | 1 1/4 | 1 1/4 | 4 |
| 4000 | 1440 | 2810 | 3158 | 550 | 2350 | 1 1/4 | 1 1/4 | 4 |
| 5000 | 1640 | 2840 | 3280 | 550 | 2350 | 1 1/4 | 1 1/4 | 4 |

VKG-HC series

| cap. l | Ø mm | R mm | insul. mm | Ht mm | A mm | B mm | C mm | E mm | F mm | G mm | L mm | M mm | N mm | P mm | K mm | Øi mm | f mm | 1 inch | 2 inch | 3 inch | 4 inch |
|--------|------|------|-----------|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|--------|--------|--------|--------|
| 100 | 400 | 1056 | 460 | 950 | 285 | 445 | - | 605 | 765 | 395 | - | / | 655 | - | 125 | 424 | 17 | 1 1/2 | 1 1/2 | 1 1/4 | 1 1/4 |
| 200 | 450 | 1435 | 510 | 1341 | 320 | 580 | - | 850 | 1120 | 520 | - | / | 920 | - | 125 | 474 | 17 | 1 1/2 | 1 1/2 | 1 1/4 | 1 1/4 |
| 300 | 550 | 1552 | 610 | 1427 | 325 | 425 | 735 | 1035 | 1185 | 535 | 635 | 835 | 1010 | 1100 | 130 | 574 | 17 | 2 | 1 1/2 | 1 1/4 | 1 1/4 |
| 500 | 650 | 1862 | 710 | 1721 | 380 | 690 | 885 | 1300 | 1450 | 620 | 785 | 985 | 1120 | 1220 | 140 | 670 | 17 | 3 | 2 | 1 1/4 | 1 1/4 |
| 800 | 790 | 1937 | 850 | 1741 | 395 | 685 | 885 | 1295 | 1445 | 610 | 820 | 1020 | 1115 | 1205 | 125 | 810 | 17 | 3 | 2 | 1 1/2 | 1 1/2 |
| 1000 | 850 | 2221 | 910 | 2026 | 410 | 950 | 1090 | 1560 | 1710 | 750 | 950 | 1150 | 1400 | 1500 | 120 | 870 | 17 | 3 | 2 | 1 1/2 | 1 1/2 |
| 1500 | 1000 | 2450 | 1100 | 2185 | 500 | 1040 | 1180 | 1650 | 1800 | 840 | 1020 | 1220 | 1510 | 1610 | 165 | 880 | 17x45 | 3 | 2 | 1 1/2 | 1 1/2 |
| 2000 | 1100 | 2780 | 1200 | 2505 | 505 | 1345 | 1450 | 1955 | 2105 | 885 | 1180 | 1380 | 1815 | 1915 | 155 | 980 | 17x45 | 3 | 2 | 1 1/2 | 1 1/2 |

Buffer tanks: Accessories

Electric resistor



* Equipped with a thermostat with incorporated settings. IP 40 protection. The others models are IP 65 protection.

| Electric power W | Tension V | Number of elements | Diameter of couplings inch | Length mm | Code | price |
|------------------|-----------|--------------------|----------------------------|-----------|-----------|----------|
| 1200* | 230 | 1 | 1" 1/4 | 220 | 824100003 | € 55,00 |
| 1500* | 230 | 1 | 1" 1/4 | 290 | 824100004 | € 59,00 |
| 2000* | 230 | 1 | 1" 1/4 | 330 | 824100005 | € 63,00 |
| 1300 | 230/380 | 3 | 2" | 220 | 824100008 | € 154,00 |
| 2000 | 230/380 | 3 | 2" | 290 | 824100009 | € 131,00 |
| 2000 | 230/380 | 3 | 1" 1/4 | 300 | 824100053 | € 131,00 |
| 3000 | 230/380 | 3 | 2" | 340 | 824100010 | € 137,00 |
| 3000 | 230/380 | 3 | 1" 1/4 | 300 | 824100011 | € 137,00 |
| 4000 | 230/380 | 3 | 2" | 390 | 824100012 | € 180,00 |
| 4000 | 230/380 | 3 | 1" 1/4 | 400 | 824100072 | € 197,00 |
| 5000 | 230/380 | 3 | 2" | 500 | 824100013 | € 184,00 |
| 5000 | 230/380 | 3 | 1" 1/4 | 450 | 824100073 | € 205,00 |
| 6000 | 230/380 | 3 | 2" | 600 | 824100014 | € 204,00 |
| 7000 | 230/380 | 3 | 2" | 580 | 824100015 | € 220,00 |
| 8000 | 230/380 | 3 | 2" | 620 | 824100016 | € 225,00 |
| 10000 | 230/380 | 3 | 2" | 770 | 824100017 | € 252,00 |



| Description | code | price |
|---------------------------|-----------|---------|
| anti-freeze resistor 200W | 824100001 | € 55,00 |



| Description | code | price |
|----------------------------|-----------|---------|
| Thermometer for hot water | 822050001 | € 18,00 |
| Thermometer for cold water | 822050004 | € 20,00 |



| Description | code | price |
|-------------|-----------|---------|
| Thermostat | 822010004 | € 20,00 |



| Description | code | price |
|--------------|-----------|---------|
| Bithermostat | 822050006 | € 91,00 |



| Description | code | price |
|--------------------------|-----------|---------|
| Anti-freeze bithermostat | 822050007 | € 22,00 |

Buffer tanks: Accessories

Covered in aluminium sheets which make it possible to install the tank outside. It is obligatory to pack in wooden boxes because this guarantees a better protection of the product during transport.

| Volume | code | price |
|--------|----------|-------|
| 100 | ALL-100 | * |
| 200 | ALL-200 | * |
| 300 | ALL-300 | * |
| 500 | ALL-500 | * |
| 800 | ALL-800 | * |
| 1000 | ALL-1000 | * |
| 1500 | ALL-1500 | * |
| 2000 | ALL-2000 | * |
| 2500 | ALL-2500 | * |
| 3000 | ALL-3000 | * |
| 4000 | ALL-4000 | * |
| 5000 | ALL-5000 | * |



| Volume | code | price |
|---------------------------|-------------|-------|
| Extra in case of man hole | GABBIA-BOCC | * |

| Volume | code | price |
|--------|---------------|-------|
| 100 | wood Box-100 | * |
| 200 | wood Box-200 | * |
| 300 | wood Box-300 | * |
| 500 | wood Box-500 | * |
| 800 | wood Box-800 | * |
| 1000 | wood Box-1000 | * |
| 1500 | wood Box-1500 | * |
| 2000 | wood Box-2000 | * |
| 2500 | wood Box-2500 | * |
| 3000 | wood Box-3000 | * |
| 4000 | wood Box-4000 | * |
| 5000 | wood Box-5000 | * |

Wooden boxes
Guarantees a better protection of the product during transport.



*Ask for a quote

Hydronic kit

The VKB, HPT and HP 2.0 units are meant to optimize the performance of heating and cooling installations and to reduce the installation time.

The units have an integrated system, which contains all the needed components for an efficient functioning of the hydraulic circuit (or for the distribution of chilled water). They are designed, pre-assembled and every unit is tested in our factory. In this way we guarantee quality in our products and a fast and simple installation.

The kits are available with a broad range of Pump/Tank combinations which can be used with any kind of cooling device or heat pump. The units are made of materials and finished in a certain way which makes it possible to install outdoor. They can be customized according to the client's specific requirements.

Advantages

- ✓ Easy installation
- ✓ All units are tested
- ✓ Pre-assembled system
- ✓ Fast installation
- ✓ Excellent dimensions
- ✓ Low energy consumption



HPT
Unit with tank, pump
and accessories



VKB
Unit with tank
and accessories



HP 2.0
Unit with pump
and accessories



The units are in accordance with the directives emitted by the European Union and labelled with the CE mark.



In accordance with the ErP directive
Efficient usage of energy



Pre-assembled accessories
and tested for a fast and
secure installation

Tank units for chilled water

Hydronic systems: HPT



Carbon steel tank and tubes insulated with anti-condensate elastomere



The HPT units are hydraulic units with buffer tanks designed to reduce the production time of conditioning and cooling systems. They can be equipped with all different kinds of water coolers.

The HPT units are made of:

- carbon steel tank and tubes insulated with anti-condensate elastomere
- Centrifugal single or double pump with a shut-off valve
- Switchboard with possibility to alternate the pumps with every start-up (2 pump version), to start-up the backup pump in case of breakdown (2 pump version), magnetothermic protection, cleaned contact to signalise the distance between the pumps, protection category IP56
- Expansion vessel
- Safety valve
- Deaerator
- Fill-up/discharge valve
- Base in galvanized and coated steel sheets
- Self-supporting panels in galvanized and coated steel sheets for installations outside.

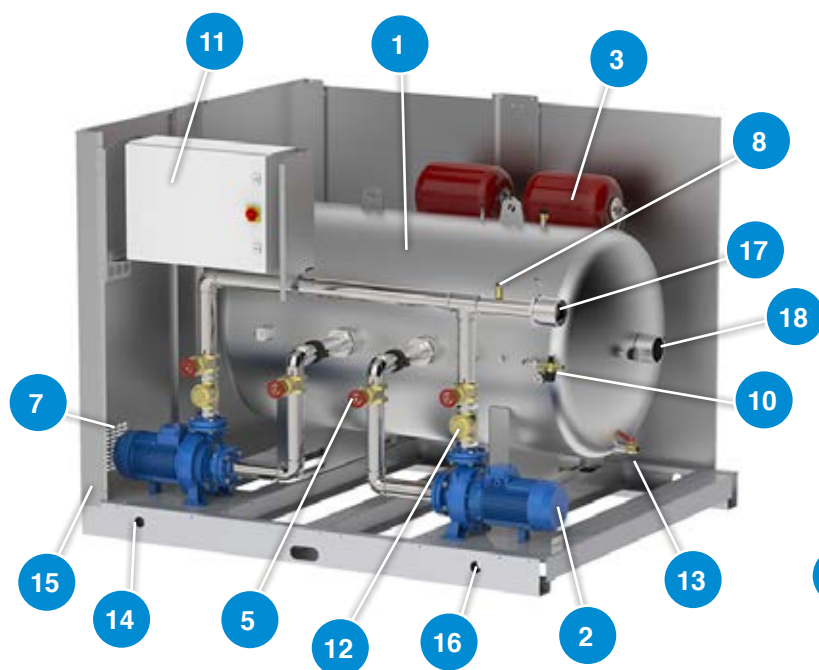
Available versions

The broad range of pump-tank combinations makes it possible to meet all requirements. Numerous versions are available: with a single or a double pump and with tanks with a capacity of 100, 200, 300, 500, 750, 1000, 1500 and 2500 liters.

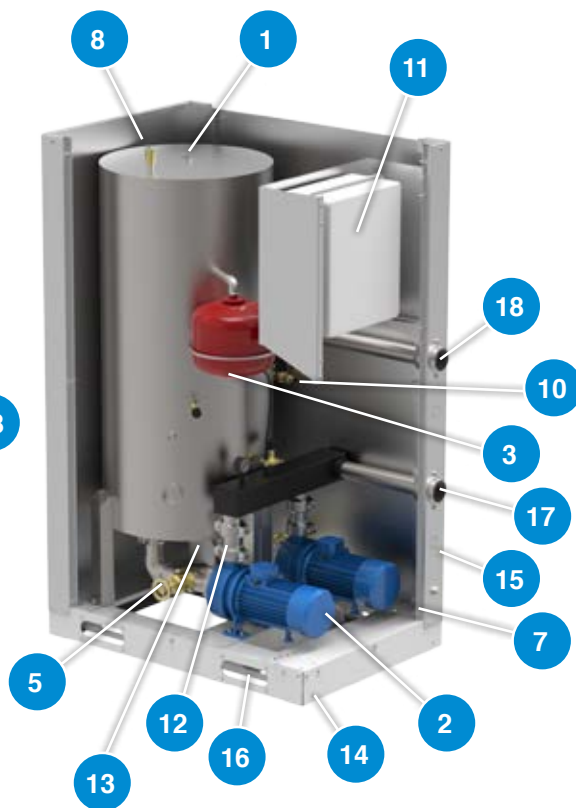
Hydronic systems

HPT: components

Horizontal HPT



Vertical HPT



Components

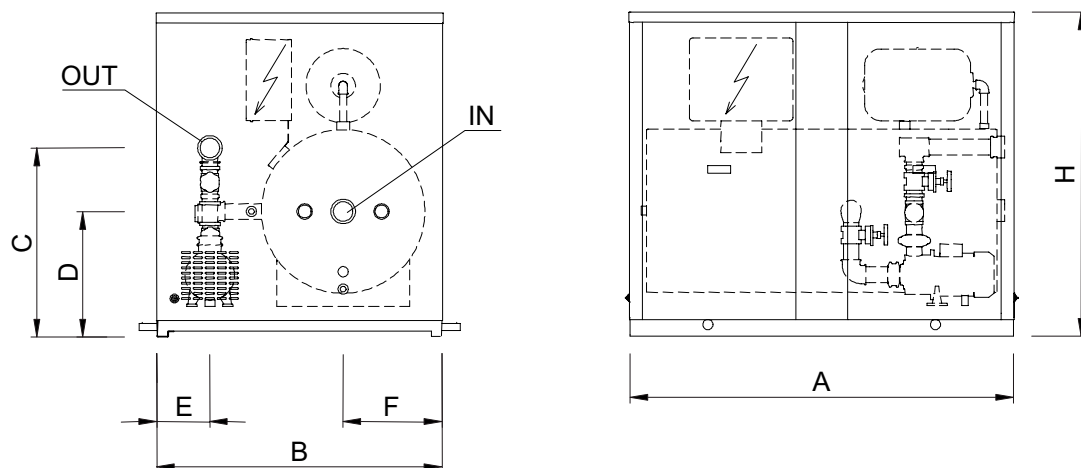
- 1 tank
- 2 circulator
- 3 expansion vessel
- 5 on-off valve
- 7 automatic ventilation system
- 8 pressure relief valve
- 9 filling tap
- 10 automatic filling unit
- 11 switchboard
- 12 Control valve (version with 2 pumps)
- 13 outlet
- 14 Anchoring point (4-6 holes M12/ Ø14)
- 15 inlet power grid
- 16 jacking points
- 17 Flow to the device
- 18 Return from the device

Components

- 1 tank
- 2 circulator
- 3 expansion vessel
- 5 on-off valve
- 7 automatic ventilation system
- 8 pressure relief valve
- 9 filling tap
- 10 automatic filling unit
- 11 switchboard
- 12 control valve (version with 2 pumps)
- 13 outlet
- 14 inlet power grid
- 15 jacking points
- 16 flow to the device
- 17 return from the device

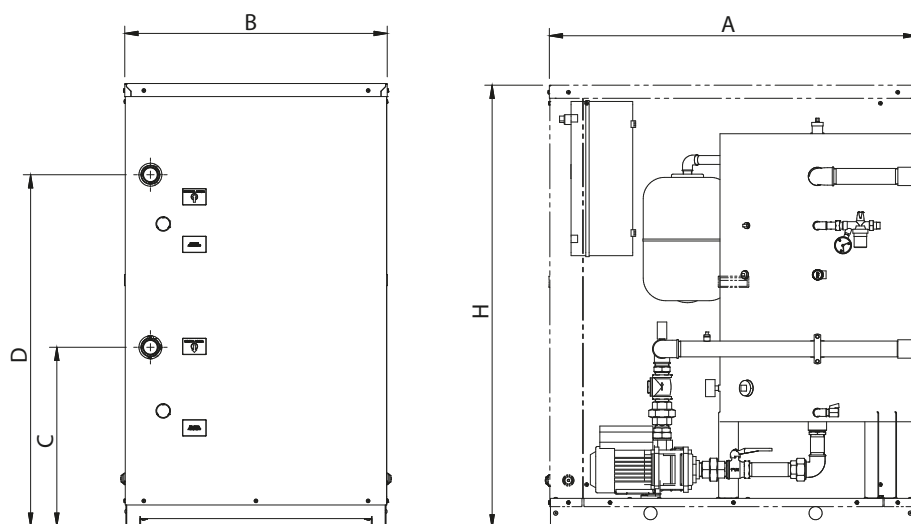
Hydronic systems

HPT: dimensions and connections



Horizontal HPT dimensions

| capacity l | A mm | B mm | H mm | C mm | D mm | E mm | F mm | IN inch | OUT inch |
|---------------|---------|---------|---------|---------|---------|---------|---------|------------|-------------|
| 300 | 1504 | 1120 | 1265 | 738 | 490 | 212 | 388 | 2" 1/2 | 2" 1/2 |
| 500 | 1504 | 1120 | 1265 | 738 | 490 | 212 | 388 | 2" 1/2 | 2" 1/2 |
| 750 | 2044 | 1200 | 1510 | 940 | 604 | 185 | 440 | 3" | 3" |
| 1000 | 2044 | 1200 | 1510 | 940 | 604 | 185 | 440 | 3" | 3" |
| 1500 | 2260 | 1900 | 1782 | 1145 | 829 | 262 | 703 | 4" | 4" |
| 2000 | 2260 | 1900 | 1782 | 1145 | 829 | 262 | 703 | 4" | 4" |



Vertical HPT dimensions

| capacity l | A mm | B mm | H mm | C mm | D mm | E mm | P mm | IN inch | OUT inch |
|---------------|---------|---------|---------|---------|---------|---------|---------|------------|-------------|
| 100 | 1120 | 800 | 1350 | 546 | 1002 | 100 | 45 | 1" 1/2 | 1" 1/2 |
| 200 | 1120 | 800 | 1350 | 546 | 1072 | 80 | 45 | 1" 1/2 | 1" 1/2 |
| 300 | 1100 | 760 | 1726 | 558 | 1008 | 60 | - | 1" 1/2 | 1" 1/2 |

HPT hydronic system: user's conditions

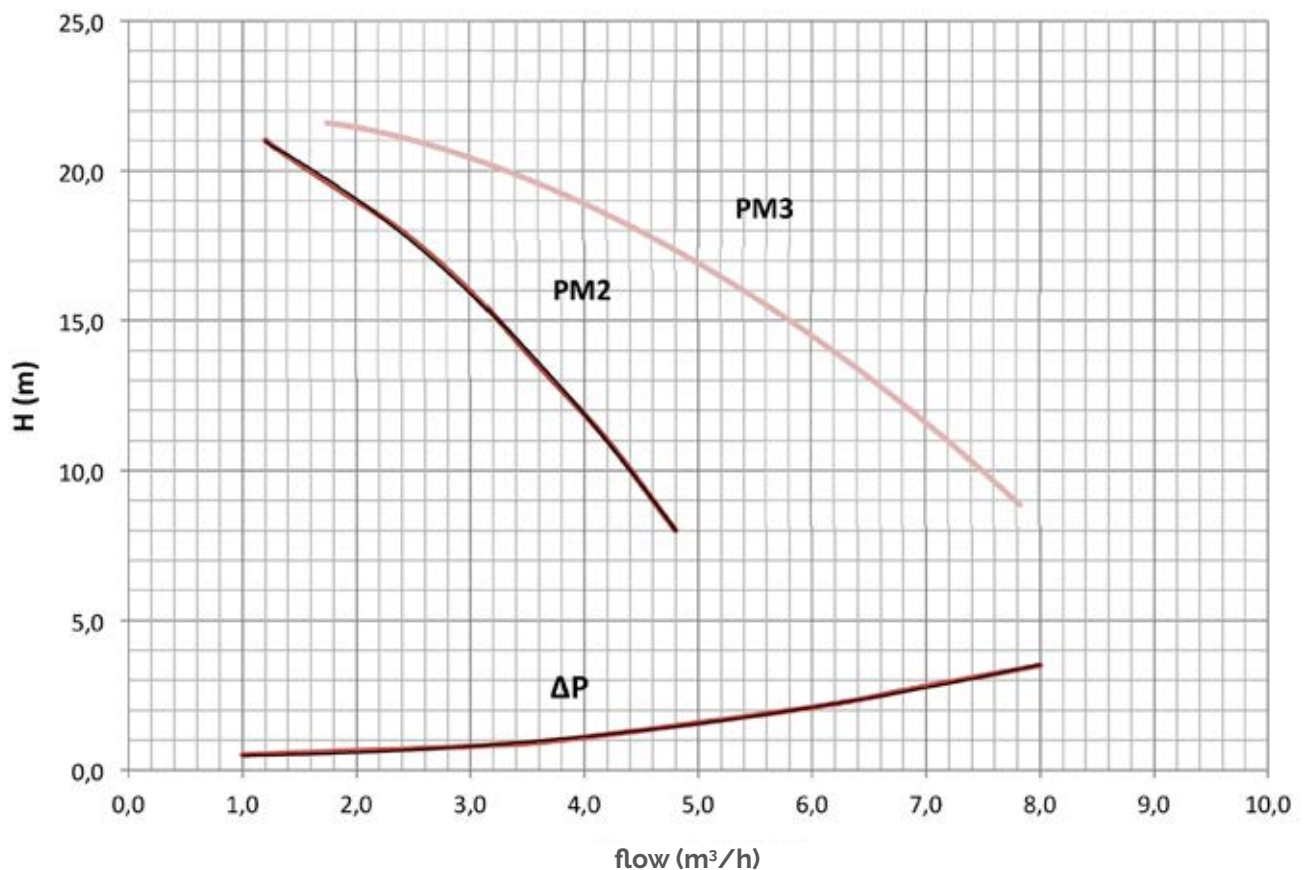
Normal user conditions

The tank is designed to be connected to a conditioning device, coupled with a chiller which takes heat from the device thanks to a standard nominal thermal leap (7-12°C). The average operating temperature is approximately 10°C and the operating pressure varies between 0.5 and 2.5 bar. The replacement of fluid in the tank depends on the functioning of the device or cooling unit, indicated by the intersection of the characteristic curve of the pump and of the device. The HPT unit is meant to be used with a heat pump, but can also function in relatively high temperatures, max 50°C and a max pressure of 3 bar. When the HPT is used in an environment with low winter temperatures, it is recommended to use anti-freeze liquid or resistance. Alternatively we recommend emptying the hydraulic circuit, to prevent the water from freezing.

Protective measures

The HPT is protected from possible functioning errors and incautious manoeuvres (!) through the installation of two devices: the differential pressure switch (optional) and the safety valve. A possible problem is the malfunctioning of the centrifugal pump, which can cause the vector fluid to stop flowing and consequently the freezing of the fluid. The use of a differential pressure switch (supplied on request), which blocks the compressor, prevents this inconvenience. The HPT is equipped, in the standard version, with an expansion vessel and a safety valve. In case of wrong manoeuvres, or other events that cause overpressure, the safety valve, calibrated at 3 bar, is automatically activated. The expansion vessel, preloaded, intervenes whenever an excessive dilation of the fluid occurs.

HPT-V 100-200

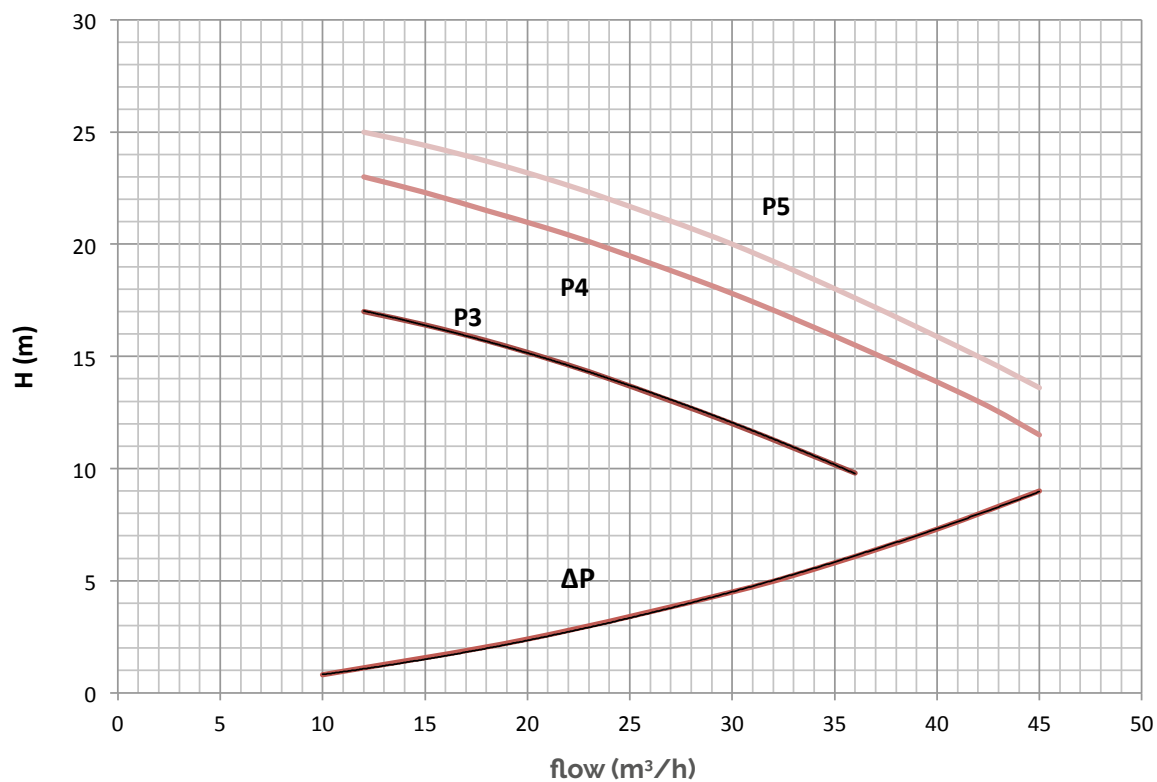
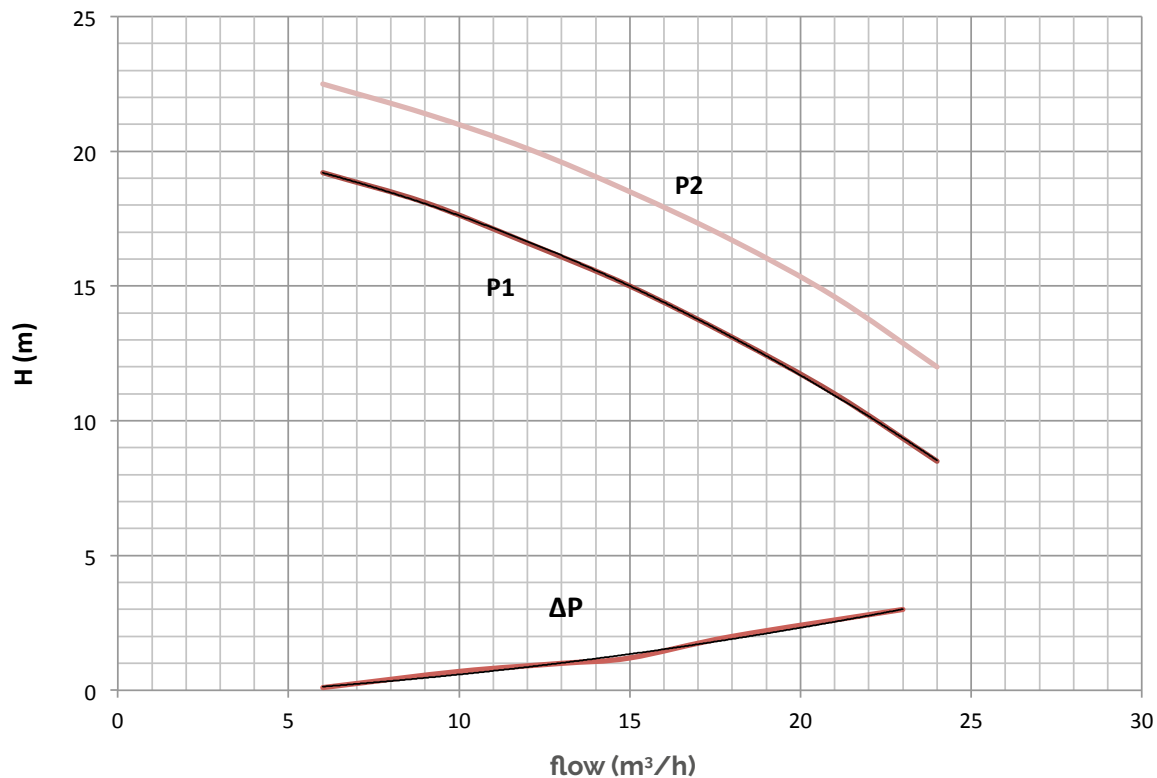


ΔP : pressure loss of the HPT unit

HPT hydronic systems

Prevalence and pressure loss curve

HPT 300-500

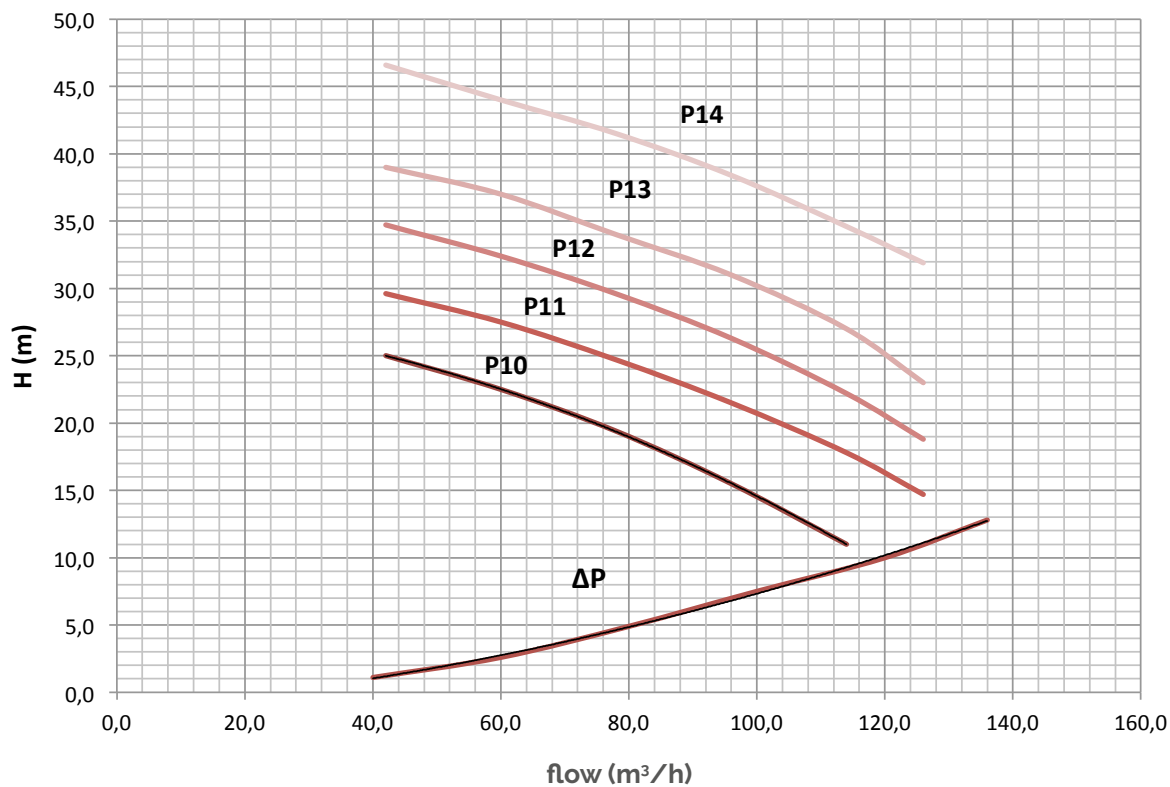
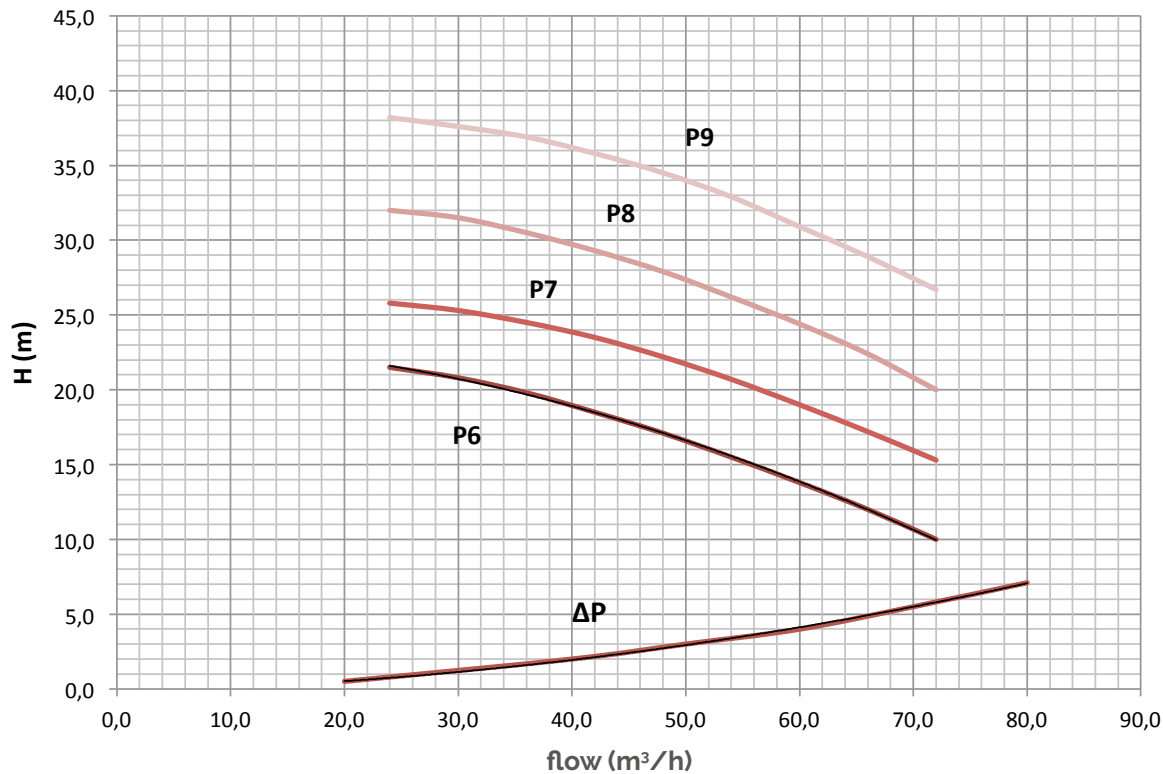


ΔP: pressure loss of the HPT unit

HPT hydronic systems

Prevalence and pressure loss curve

HPT 750-1000

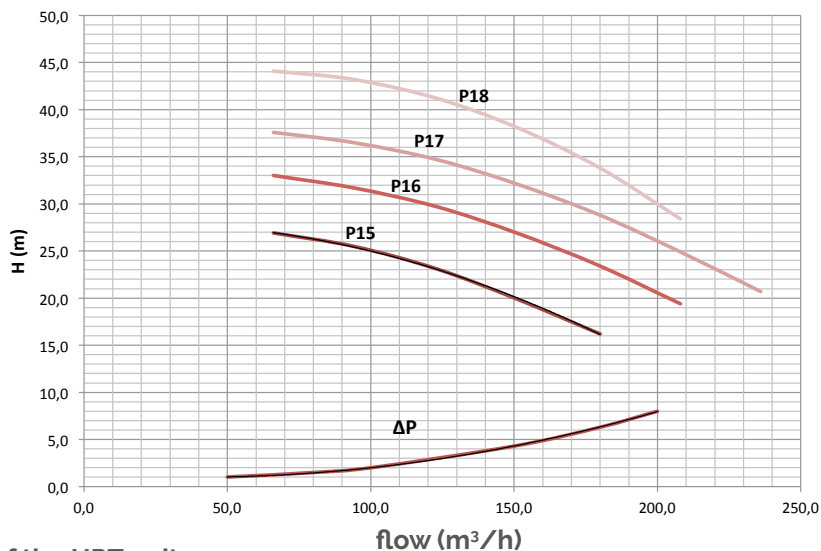
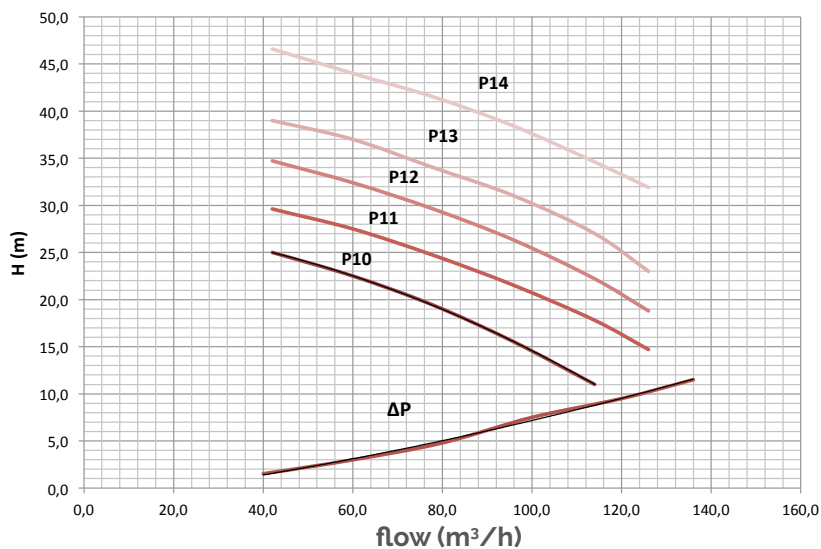
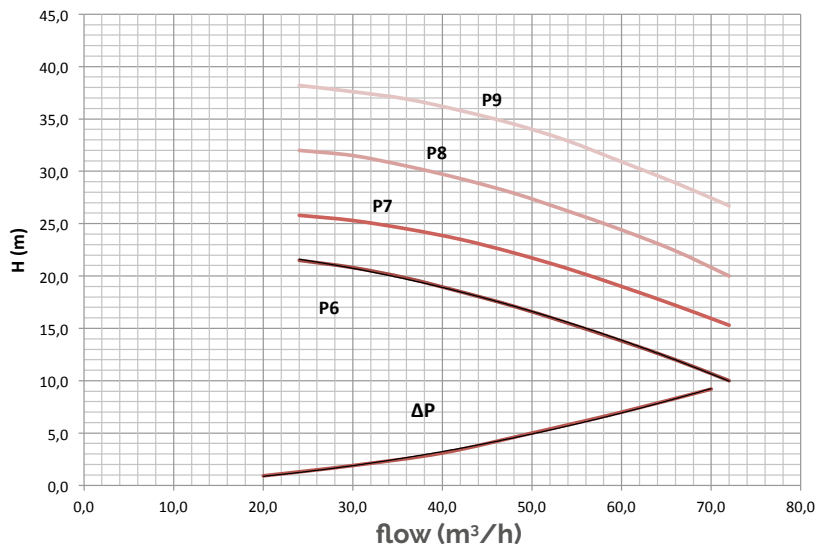


ΔP: pressure loss of the HPT unit

HPT hydronic systems

Prevalence and pressure loss curve

HPT 1500-2500



ΔP: pressure loss of the HPT unit

HPT hydronic systems

technical information

| Pump model | Tank capacity l | Wsb1 kg | Wsb2 kg | F.L.I kW | F.L.A. (400/3/50) A | F.L.A. (230/1/50) A | Ve l |
|------------|-----------------|---------|---------|----------|---------------------|---------------------|------|
| PM2 | 100 | | | 0,45 | | 3,2 | 18 |
| | 200 | | | 0,45 | | 3,2 | 18 |
| PM3 | 100 | | | 0,45 | | 3,2 | 18 |
| | 200 | | | 0,45 | | 3,2 | 18 |
| P1 | 300 | 186 | 216 | 1,1 | 2,5 | | 25 |
| | 500 | 208 | 238 | 1,1 | 2,5 | | 25 |
| P2 | 300 | 188 | 220 | 1,5 | 3,2 | | 25 |
| | 500 | 210 | 242 | 1,5 | 3,2 | | 25 |
| P3 | 300 | 188 | 220 | 1,5 | 3,4 | | 25 |
| | 500 | 210 | 242 | 1,5 | 3,4 | | 25 |
| P4 | 300 | 191 | 225 | 2,2 | 4,8 | | 25 |
| | 500 | 213 | 247 | 2,2 | 4,8 | | 25 |
| P5 | 300 | 194 | 231 | 3 | 5,6 | | 25 |
| | 500 | 215 | 253 | 3 | 5,6 | | 25 |
| P6 | 750 | 341 | 428 | 3 | 6,1 | | 25 |
| | 1000 | 364 | 455 | 3 | 6,1 | | 25 |
| | 1500 | 513 | 586 | 3 | 6,1 | | 3x25 |
| | 2500 | 565 | 638 | 3 | 6,1 | | 3x25 |
| P7 | 750 | 341 | 428 | 4 | 8,7 | | 25 |
| | 1000 | 364 | 455 | 4 | 8,7 | | 25 |
| | 1500 | 513 | 586 | 4 | 8,7 | | 3x25 |
| | 2500 | 565 | 638 | 4 | 8,7 | | 3x25 |
| P8 | 750 | 370 | 485 | 5,5 | 10,4 | | 25 |
| | 1000 | 392 | 512 | 5,5 | 10,4 | | 25 |
| | 1500 | 565 | 696 | 5,5 | 10,4 | | 3x25 |
| | 2500 | 613 | 732 | 5,5 | 10,4 | | 3x25 |
| P9 | 750 | 370 | 485 | 7,5 | 13,6 | | 25 |
| | 1000 | 392 | 512 | 7,5 | 13,6 | | 25 |
| | 1500 | 565 | 696 | 7,5 | 13,6 | | 3x25 |
| | 2500 | 613 | 732 | 7,5 | 13,6 | | 3x25 |
| P10 | 750 | 373 | 493 | 5,5 | 10,4 | | 25 |
| | 1000 | 396 | 520 | 5,5 | 10,4 | | 25 |
| | 1500 | 569 | 696 | 5,5 | 10,4 | | 3x25 |
| | 2500 | 617 | 740 | 5,5 | 10,4 | | 3x25 |

HPT hydronic systems

technical information

| Pump model | Tank capacity l | Wsb1 kg | Wsb2 kg | F.L.I kW | F.L.A. (400/3/50) A | Ve l |
|------------|-----------------|---------|---------|----------|---------------------|------|
| P11 | 750 | 377 | 501 | 7,5 | 13,6 | 25 |
| | 1000 | 400 | 528 | 7,5 | 13,6 | 25 |
| | 1500 | 569 | 696 | 7,5 | 13,6 | 3x25 |
| | 2500 | 617 | 740 | 7,5 | 13,6 | 3x25 |
| P12 | 750 | 377 | 501 | 9,2 | 17,2 | 25 |
| | 1000 | 400 | 528 | 9,2 | 17,2 | 25 |
| | 1500 | 569 | 696 | 9,2 | 17,2 | 3x25 |
| | 2500 | 617 | 740 | 9,2 | 17,2 | 3x25 |
| P13 | 750 | 377 | 501 | 11 | 21,3 | 25 |
| | 1000 | 400 | 528 | 11 | 21,3 | 25 |
| | 1500 | 569 | 696 | 11 | 21,3 | 3x25 |
| | 2500 | 617 | 740 | 11 | 21,3 | 3x25 |
| P14 | 1500 | 628 | 814 | 15 | 27,7 | 3x25 |
| | 2500 | 680 | 866 | 15 | 27,7 | 3x25 |
| P15 | 1500 | 628 | 814 | 11 | 20,2 | 3x25 |
| | 2500 | 680 | 866 | 11 | 20,2 | 3x25 |
| P16 | 1500 | 634 | 826 | 15 | 26,6 | 3x25 |
| | 2500 | 686 | 878 | 15 | 26,6 | 3x25 |
| P17 | 1500 | 646 | 850 | 18,5 | 33 | 3x25 |
| | 2500 | 698 | 902 | 18,5 | 33 | 3x25 |
| P18 | 1500 | 660 | 878 | 22 | 40,4 | 3x25 |
| | 2500 | 712 | 930 | 22 | 40,4 | 3x25 |

Pve (bar) 1,5 Ps (ba) 3 T min (°C) -10

Legend

Wsb 1 Weight HPT with 1 pump (empty)
 Wsb 2 Weight HPT with 2 pumps (empty)
 FLI maximum absorbed power
 FLA Max absorbed current
 Ve capacity of the expansion vessel
 Pve Preload of the expansion vessel
 Ps Max operating pressure
 Tmin min temperature of the liquid

Hydronic systems

HPT codes

| PUMPS | | HPT MODEL | | | | | | | | |
|-------|----|--------------------------|--------------------------|--------------------------|-------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | | 100 vertical | 200 vertical | 300 vertical | 300 | 500 | 750 | 1000 | 1500 | 2500 |
| PM2 | 1P | 838011058X € 3.040,00 | 838011062X € 2.933,00 | | | | | | | |
| PM2 | 2P | 838011059X € 4.899,00 | 838011063X € 4.995,00 | | | | | | | |
| PM3 | 1P | 838011060X € 2.863,00 | 838011064X € 3.421,92 | | | | | | | |
| PM3 | 2P | 838011061X € 4.906,00 | 838011065X € 5.002,00 | | | | | | | |
| P1 | 1P | | | 838010891X € 4.557,00 | 838010349 € 4.741,00 | 838010359 € 4.841,00 | | | | |
| P1 | 2P | | | 838010896X € 6.016,00 | 838010354 € 6.206,00 | 838010364 € 6.296,00 | | | | |
| P2 | 1P | | | 838010892X € 4.566,00 | 838010350 € 4.751,00 | 838010360 € 4.838,00 | | | | |
| P2 | 2P | | | 838010897X € 6.037,00 | 838010355 € 6.201,00 | 838010365 € 6.477,00 | | | | |
| P3 | 1P | | | 838010893X € 4.577,00 | 838010351 € 4.771,00 | 838010361 € 4.813,00 | | | | |
| P3 | 2P | | | 838010898X € 6.042,00 | 838010356 € 6.221,00 | 838010366 € 6.290,00 | | | | |
| P4 | 1P | | | 838010894X € 4.611,00 | 838010352 € 4.796,00 | 838010362 € 4.886,00 | | | | |
| P4 | 2P | | | 838010899X € 6.137,00 | 838010357 € 6.291,00 | 838010367 € 6.412,00 | | | | |
| P5 | 1P | | | 838010895X € 4.695,00 | 838010353 € 4.877,00 | 838010363 € 4.965,00 | | | | |
| P5 | 2P | | | 838010900X € 6.304,00 | 838010358 € 6.475,00 | 838010368 € 6.610,00 | | | | |
| P6 | 1P | | | | | 838010879X € 5.367,00 | 838010374 € 6.958,00 | 838010384 € 7.183,00 | 838010705 € 8.786,00 | 838010689 € 9.919,00 |
| P6 | 2P | | | | | 838011056X € 7.559,00 | 838010379 € 9.435,00 | 838010389 € 9.661,00 | 838010458 € 11.047,00 | 838010682 € 12.247,00 |
| P7 | 1P | | | | | | 838011384X € 7.079,00 | 838011386X € 7.303,00 | 838011388X € 8.846,00 | 838011390X € 9.404,00 |
| P7 | 2P | | | | | | 838011385X € 9.464,00 | 838011387X € 9.801,00 | 838011389X € 11.172,00 | 838011391X € 12.110,00 |
| P8 | 1P | | | | | | 838010375 € 7.273,00 | 838010385 € 7.531,00 | 838010704 € 9.162,00 | 838010688 € 10.300,00 |
| P8 | 2P | | | | | | 838010380 € 9.909,00 | 838010390 € 10.135,00 | 838010630 € 11.799,00 | 838010681 € 13.019,00 |
| P9 | 1P | | | | | | 838011392X € 7.333,00 | 838011394X € 7.592,00 | 838011396X € 9.092,00 | 838011398X € 9.710,00 |
| P9 | 2P | | | | | | 838011393X € 10.013,00 | 838011395X € 10.329,00 | 838011397X € 11.736,00 | 838011399X € 12.450,00 |

Hydronic systems

HPT codes

| PUMPS | | HPT MODEL | | | | | | | | |
|-------|----|-----------------|-----------------|-----------------|-----|-----|---------------------------|---------------------------|---------------------------|---------------------------|
| | | 100 vertical | 200 vertical | 300 vertical | 300 | 500 | 750 | 1000 | 1500 | 2500 |
| P10 | 1P | | | | | | 838010376 € 7.450,00 | 838010386 € 7.778,00 | 838010703 € 9.316,00 | 838010687 € 10.465,00 |
| P10 | 2P | | | | | | 838010381 € 10.176,00 | 838010391 € 10.695,00 | 838010696 € 12.323,00 | 838010680 € 13.230,00 |
| P11 | 1P | | | | | | 838010377 € 7.582,00 | 838010387 € 7.940,00 | 838010702 € 9.687,00 | 838010686 € 10.856,00 |
| P11 | 2P | | | | | | 838010382 € 10.697,00 | 838010392 € 10.998,00 | 838010695 € 12.607,00 | 838010679 € 13.859,00 |
| P12 | 1P | | | | | | 838011400X € 8.052,00 | 838011402X € 8.367,00 | 838011404X € 9.842,00 | 838011406X € 10.503,00 |
| P12 | 2P | | | | | | 838011401X € 11.549,00 | 838011403X € 12.026,00 | 838011405X € 13.512,00 | 838011407X € 14.280,00 |
| P13 | 1P | | | | | | 838010378 € 8.389,00 | 838010388 € 8.595,00 | 838010701 € 10.846,00 | 838010685 € 12.046,00 |
| P13 | 2P | | | | | | 838010383 € 13.328,00 | 838010393 € 13.555,00 | 838010694 € 14.940,00 | 838010678 € 16.259,00 |
| P14 | 1P | | | | | | | | 838010700 € 11.206,00 | 838010684 € 12.417,00 |
| P14 | 2P | | | | | | | | 838010693 € 16.202,00 | 838010677 € 17.021,00 |
| P15 | 1P | | | | | | | | 838011380X € 11.319,00 | 838011382X € 12.542,00 |
| P15 | 2P | | | | | | | | 838011381X € 16.267,00 | 838011383X € 17.192,00 |
| P16 | 1P | | | | | | | | 838010699 € 11.402,00 | 838010707 € 12.623,00 |
| P16 | 2P | | | | | | | | 838010692 € 16.284,00 | 838010459 € 17.644,00 |
| P17 | 1P | | | | | | | | 838010698 € 11.675,00 | 838010683 € 12.968,00 |
| P17 | 2P | | | | | | | | 838010691 € 16.779,00 | 838010676 € 18.241,00 |
| P18 | 1P | | | | | | | | 838010697 € 12.494,00 | 838010706 € 13.812,00 |
| P18 | 2P | | | | | | | | 838010690 € 18.406,00 | 838010633 € 19.931,00 |

1P single pump
2P double pump

HPT hydronic systems: vertical

Distribution of the weight

Single pump unit

| pump model | tank capacity l | W1 kg | W2 kg | W3 kg | W4 kg |
|------------|-----------------|-------|-------|-------|-------|
| PM2 | 100 | 50 | 115 | 86 | 199 |
| | 200 | 54 | 124 | 92 | 215 |
| PM3 | 100 | 50 | 115 | 86 | 199 |
| | 200 | 56 | 129 | 96 | 223 |
| P1 | 300 | 73 | 38 | 61 | 31 |
| P2 | 300 | 74 | 38 | 61 | 31 |
| P3 | 300 | 74 | 38 | 61 | 32 |
| P4 | 300 | 75 | 39 | 62 | 32 |
| P5 | 300 | 76 | 39 | 63 | 32 |

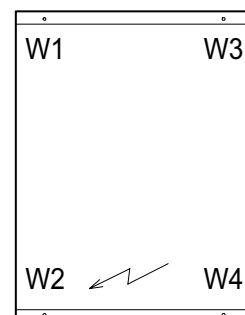
Double pump unit

| pump model | tank capacity l | W1 kg | W2 kg | W3 kg | W4 kg |
|------------|-----------------|-------|-------|-------|-------|
| PM2 | 100 | 54 | 124 | 92 | 215 |
| | 200 | 55 | 129 | 95 | 222 |
| PM3 | 100 | 54 | 125 | 93 | 216 |
| | 200 | 56 | 129 | 96 | 223 |
| P1 | 300 | 59 | 59 | 59 | 59 |
| P2 | 300 | 60 | 60 | 59 | 59 |
| P3 | 300 | 60 | 60 | 60 | 60 |
| P4 | 300 | 61 | 61 | 61 | 61 |
| P5 | 300 | 63 | 63 | 62 | 62 |

Legend

PM2,PM3,PM4,PM5: Pump model

Top view



Horizontal HPT >

Legend

PM2, PM3...PM 18: Pump model

Top view



HPT hydronic systems: horizontal

Dimensions and connections

Single pump unit

| pump model | tank capacity l | W1 kg | W2 kg | W3 kg | W4 kg | W5 kg | W6 kg |
|------------|-----------------|-------|-------|-------|-------|-------|-------|
| P1 | 300 | 148 | 96 | 154 | 102 | - | /- |
| | 500 | 219 | 134 | 226 | 141 | - | - |
| P2 | 300 | 148 | 96 | 154 | 102 | - | - |
| | 500 | 219 | 134 | 226 | 141 | - | - |
| P3 | 300 | 148 | 96 | 154 | 102 | - | - |
| | 500 | 219 | 134 | 226 | 141 | - | - |
| P4 | 300 | 148 | 96 | 154 | 102 | - | - |
| | 500 | 219 | 134 | 226 | 141 | - | - |
| P5 | 300 | 148 | 96 | 154 | 102 | - | - |
| | 500 | 219 | 134 | 226 | 141 | - | - |
| P6 | 750 | 232 | 123 | 238 | 129 | 244 | 135 |
| | 1000 | 297 | 148 | 303 | 154 | 309 | 160 |
| | 1500 | 369 | 291 | 375 | 298 | 382 | 305 |
| | 2500 | 571 | 446 | 578 | 452 | 584 | 459 |
| P7 | 750 | 232 | 123 | 238 | 129 | 244 | 135 |
| | 1000 | 297 | 148 | 303 | 154 | 309 | 160 |
| | 1500 | 369 | 291 | 375 | 298 | 382 | 305 |
| | 2500 | 571 | 446 | 578 | 452 | 584 | 459 |
| P8 | 750 | 230 | 128 | 239 | 137 | 249 | 147 |
| | 1000 | 294 | 153 | 304 | 163 | 314 | 173 |
| | 1500 | 368 | 305 | 376 | 314 | 385 | 322 |
| | 2500 | 576 | 451 | 583 | 457 | 589 | 464 |
| P9 | 750 | 230 | 128 | 239 | 137 | 249 | 147 |
| | 1000 | 294 | 153 | 304 | 163 | 314 | 173 |
| | 1500 | 368 | 305 | 376 | 314 | 385 | 322 |
| | 2500 | 576 | 451 | 583 | 457 | 589 | 464 |
| P10 | 750 | 230 | 128 | 239 | 137 | 249 | 147 |
| | 1000 | 294 | 153 | 304 | 163 | 314 | 173 |
| | 1500 | 368 | 305 | 376 | 314 | 385 | 322 |
| | 2500 | 576 | 451 | 583 | 457 | 589 | 464 |
| P11 | 750 | 230 | 128 | 239 | 137 | 249 | 147 |
| | 1000 | 294 | 153 | 304 | 163 | 314 | 173 |
| | 1500 | 368 | 305 | 376 | 314 | 385 | 322 |
| | 2500 | 576 | 451 | 583 | 457 | 589 | 464 |
| P12 | 750 | 230 | 128 | 239 | 137 | 249 | 147 |
| | 1000 | 294 | 153 | 304 | 163 | 314 | 173 |
| | 1500 | 368 | 305 | 376 | 314 | 385 | 322 |
| | 2500 | 576 | 451 | 583 | 457 | 589 | 464 |
| P13 | 750 | 235 | 133 | 244 | 142 | 254 | 152 |
| | 1000 | 292 | 159 | 305 | 172 | 318 | 185 |
| | 1500 | 365 | 315 | 377 | 327 | 389 | 338 |
| P14 | 2500 | 571 | 459 | 581 | 469 | 591 | 479 |
| | 1500 | 365 | 318 | 379 | 331 | 392 | 345 |
| P15 | 2500 | 570 | 470 | 581 | 482 | 593 | 499 |
| | 1500 | 365 | 318 | 379 | 331 | 392 | 345 |
| P16 | 2500 | 570 | 470 | 581 | 482 | 593 | 499 |
| | 1500 | 365 | 318 | 379 | 331 | 392 | 345 |
| P17 | 2500 | 572 | 472 | 583 | 484 | 595 | 501 |
| | 1500 | 367 | 320 | 381 | 333 | 394 | 347 |
| P18 | 2500 | 575 | 475 | 586 | 487 | 598 | 504 |
| | 1500 | 370 | 323 | 384 | 336 | 397 | 350 |

Double pump unit

| pump model | tank capacity l | W1 kg | W2 kg | W3 kg | W4 kg | W5 kg | W6 kg |
|------------|-----------------|-------|-------|-------|-------|-------|-------|
| P1 | 300 | 152 | 112 | 153 | 113 | / | / |
| | 500 | 227 | 153 | 227 | 153 | / | / |
| P2 | 300 | 152 | 112 | 153 | 113 | / | / |
| | 500 | 227 | 153 | 227 | 153 | / | / |
| P3 | 300 | 152 | 112 | 153 | 113 | / | / |
| | 500 | 227 | 153 | 227 | 153 | / | / |
| P4 | 300 | 152 | 112 | 153 | 113 | / | / |
| | 500 | 227 | 153 | 227 | 153 | / | / |
| P5 | 300 | 152 | 112 | 153 | 113 | / | / |
| | 500 | 227 | 153 | 227 | 153 | / | / |
| P6 | 750 | 245 | 152 | 243 | 150 | 241 | 149 |
| | 1000 | 310 | 181 | 308 | 179 | 306 | 177 |
| | 1500 | 379 | 321 | 377 | 319 | 376 | 318 |
| | 2500 | 581 | 456 | 588 | 462 | 594 | 469 |
| P7 | 750 | 245 | 152 | 243 | 150 | 241 | 149 |
| | 1000 | 310 | 181 | 308 | 179 | 306 | 177 |
| | 1500 | 379 | 321 | 377 | 319 | 376 | 318 |
| | 2500 | 581 | 456 | 588 | 462 | 594 | 469 |
| P8 | 750 | 245 | 172 | 245 | 172 | 245 | 172 |
| | 1000 | 311 | 198 | 310 | 197 | 309 | 196 |
| | 1500 | 383 | 353 | 382 | 352 | 381 | 351 |
| | 2500 | 589 | 497 | 586 | 494 | 583 | 491 |
| P9 | 750 | 245 | 172 | 245 | 172 | 245 | 172 |
| | 1000 | 311 | 198 | 310 | 197 | 309 | 196 |
| | 1500 | 383 | 353 | 382 | 352 | 381 | 351 |
| | 2500 | 589 | 497 | 586 | 494 | 583 | 491 |
| P10 | 750 | 245 | 172 | 245 | 172 | 245 | 172 |
| | 1000 | 311 | 198 | 310 | 197 | 309 | 196 |
| | 1500 | 383 | 353 | 382 | 352 | 381 | 351 |
| | 2500 | 589 | 497 | 586 | 494 | 583 | 491 |
| P11 | 750 | 245 | 172 | 245 | 172 | 245 | 172 |
| | 1000 | 311 | 198 | 310 | 197 | 309 | 196 |
| | 1500 | 383 | 353 | 382 | 352 | 381 | 351 |
| | 2500 | 589 | 497 | 586 | 494 | 583 | 491 |
| P12 | 750 | 245 | 172 | 245 | 172 | 245 | 172 |
| | 1000 | 311 | 198 | 310 | 197 | 309 | 196 |
| | 1500 | 383 | 353 | 382 | 352 | 381 | 351 |
| | 2500 | 589 | 497 | 586 | 494 | 583 | 491 |
| P13 | 750 | 255 | 182 | 255 | 182 | 255 | 182 |
| | 1000 | 314 | 215 | 313 | 214 | 312 | 212 |
| | 1500 | 382 | 377 | 381 | 376 | 380 | 375 |
| P14 | 2500 | 587 | 519 | 584 | 516 | 581 | 513 |
| | 1500 | 388 | 388 | 387 | 387 | 386 | 386 |
| P15 | 2500 | 587 | 546 | 584 | 543 | 581 | 539 |
| | 1500 | 388 | 388 | 387 | 387 | 386 | 386 |
| P16 | 2500 | 587 | 546 | 584 | 543 | 581 | 539 |
| | 1500 | 390 | 390 | 389 | 389 | 388 | 388 |
| P17 | 2500 | 587 | 546 | 584 | 543 | 581 | 539 |
| | 1500 | 394 | 394 | 393 | 393 | 392 | 392 |
| P18 | 2500 | 591 | 550 | 588 | 547 | 585 | 543 |
| | 1500 | 399 | 399 | 398 | 398 | 397 | 397 |
| | 2500 | 596 | 555 | 593 | 552 | 590 | 548 |

HPT hydronic systems

capacity of the expansion vessel

Max water content in the device and the dimensions of the expansion vessel

On the first chart, the max water content in the hydraulic device which is compatible with the capacity of the expansion vessel (supplied with every HPT model) and with the start-up value of the safety valve (3 bar for all models) is indicated. If the actual water volume in the device, the storage tank included, is more than the operative conditions on the chart, more expansion vessels need to be installed.

Tav. 1

| Hydraulic height H Preload of the expansion vessel | | m bar | 15 1,80 | 10 1,50 |
|---|---|----------|------------|------------|
| HPT 100 | Max water capacity in the circuit in liters (1) | | 708 | 885 |
| | Max water capacity in the circuit in liters (2) | | 453 | 567 |
| HPT 200 | Max water capacity in the circuit in liters (1) | | 708 | 885 |
| | Max water capacity in the circuit in liters (2) | | 453 | 567 |
| HPT 300 | Max water capacity in the circuit in liters (1) | | 984 | 1230 |
| | Max water capacity in the circuit in liters (2) | | 630 | 788 |
| HPT 500 | Max water capacity in the circuit in liters (1) | | 984 | 1230 |
| | Max water capacity in the circuit in liters (2) | | 630 | 788 |
| HPT 750 | Max water capacity in the circuit in liters (1) | | 984 | 1230 |
| | Max water capacity in the circuit in liters (2) | | 630 | 788 |
| HPT 1000 | Max water capacity in the circuit in liters (1) | | 984 | 1230 |
| | Max water capacity in the circuit in liters (2) | | 630 | 788 |
| HPT 1500 | Max water capacity in the circuit in liters (1) | | 1964 | 2461 |
| | Max water capacity in the circuit in liters (2) | | 1261 | 1576 |
| HPT 2500 | Max water capacity in the circuit in liters (1) | | 2953 | 3691 |
| | Max water capacity in the circuit in liters (2) | | 1891 | 2363 |

Operative conditions

- (1) cooling
 - Min temp of fluid = 4°C
 - Max temp of fluid = 40°C
- (2) heating (heat pump)
 - Min temp of fluid = 4°C
 - Max temp of fluid = 50°C

Tav. 2

| Water temperature | | | | |
|----------------------|------|------|-------------------|-----------|
| Water/glycol mix. | max. | min. | Correction factor | Reference |
| 10% | 40 | -2 | 0.507 | (1) |
| 10% | 5 | -2 | 0.686 | (2) |
| 20% | 40 | -4 | 0.434 | (1) |
| 20% | 50 | -4 | 0.604 | (2) |
| 30% | 40 | -6 | 0.393 | (1) |
| 30% | 50 | -6 | 0.555 | (2) |

HPT hydronic systems

Preload of the expansion vessel

The expansion vessel, of all models, is preloaded with a standard value of 1.5 bar. However, the value has to be adjusted to the height of the device H.

The formula used to calculate the preload value of the expansion vessel is:

$$P = (H / 10.2) + 0.3$$

Legend

H: height of the device in meters

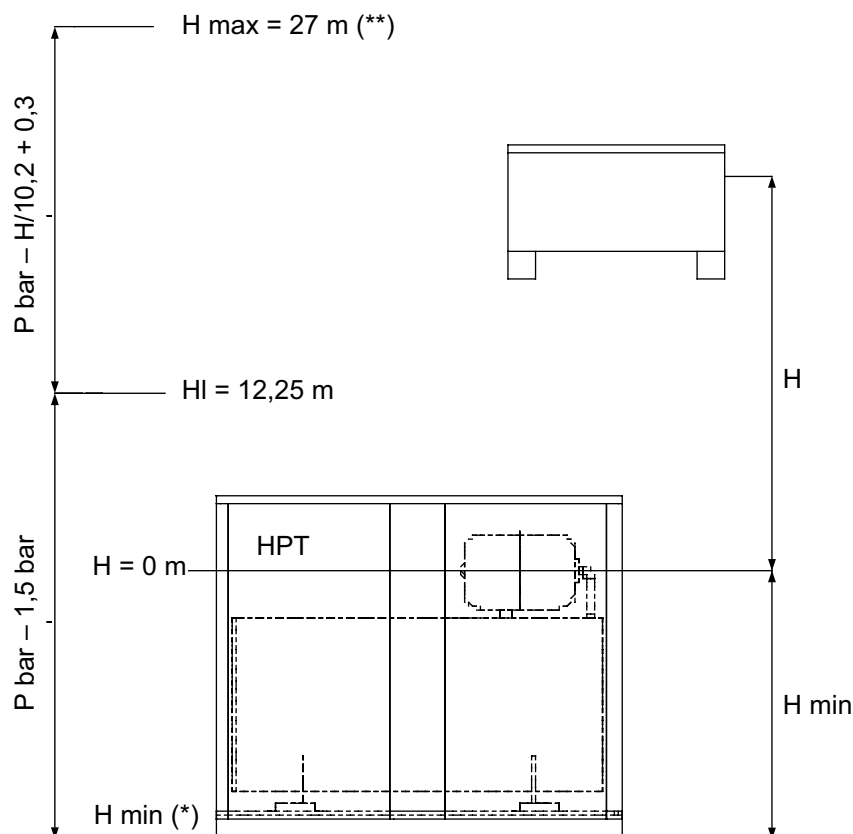
P: preload of the expansion vessel in bar

If the result of the preload value is less than the standard value, no steps should be taken. This means that for every installation with a height below 12.25 m, the preload of the expansion vessel should be 1.5 bar. In these cases the operator should only check the pressure value without carrying out any intervention.

Example:

You take a height H of 15.3 m. The preload value is:

$$P = (15.3 / 10.2) + 0.3 = 1.8 \text{ bar}$$



H height of the device

Hmax: max height of the device

H1: height when the preload of the expansion vessel is the same as the standard value

* verify that the lowest point of the device can support the device's pressure

** verify that the highest point of the device is not higher than H max = 27 m

HPT hydronic systems

Accessories

Inverter

Every pump can be managed with an inverter. The units equipped with an inverter have a pressure sensor, 0-10 bar which communicates with the inverter through a 4-20 mA signal. All regulation parameters are preloaded during the testing phase in the factory. The user has only to select the set point value for the wanted pressure.

Kit with electric anti-freeze resistor

The kit is installed in the inside of the tank and has an electric resistor of 1300 W for tanks up to 1000l and two electric resistors of 1300 W for tanks with a larger capacity. The kit also contains a anti-freeze bithermostat (-35/+35°C) and is assembled, cabled and tested before delivery.

Timer for alternative pumps

In the version with double pump, the timer can be used to manage the shift between the pumps in intervals of a determined time. Without the timer, the shift between pumps is carried out with every start-up.

ATTENTION

If the system is active 24/7 the shift between pumps is not guaranteed by the standard group. In this case it is recommended to use a timer.

Differential pressure switch

This is a safety measure which makes it possible to verify the flow in the system. The device generates an alarm signal but does not automatically stop the device.

Soundproof covering

Soundproof covering is available and significantly decreases the sound emission by the device.

Anti-vibration feet

A set of anti-vibration feet which can be put on the supportive points of the device. They are supplied non-assembled.

Filter

Mesh filter, with 1000 micron holes, to be attached to the outside of the unit in order to protect the pump from any impurities of the devices.

Balancing valve

The valve is to be attached to the outside in order to regulate the flow in the circuit. It is especially recommended in devices with a variable pressure drop.

Packaging in a wooden case

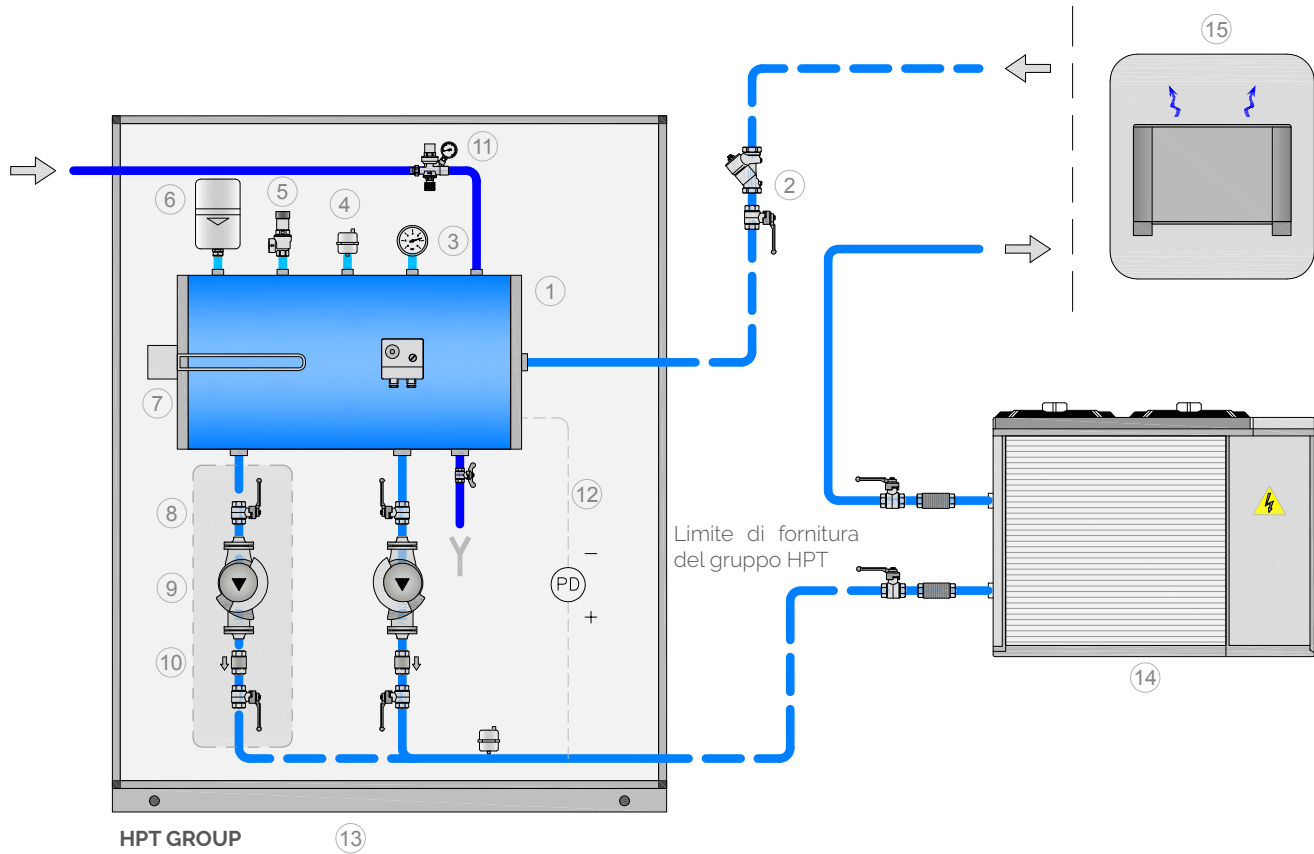
Protective packaging adapted to risky transport and long distances.

Package for overseas transport.

Extra packaging for maritime transport, with a wooden case in accordance with the international standards ISPM-15, a protective bag and hygroscopic salt.

HPT hydronic systems

Layout 1

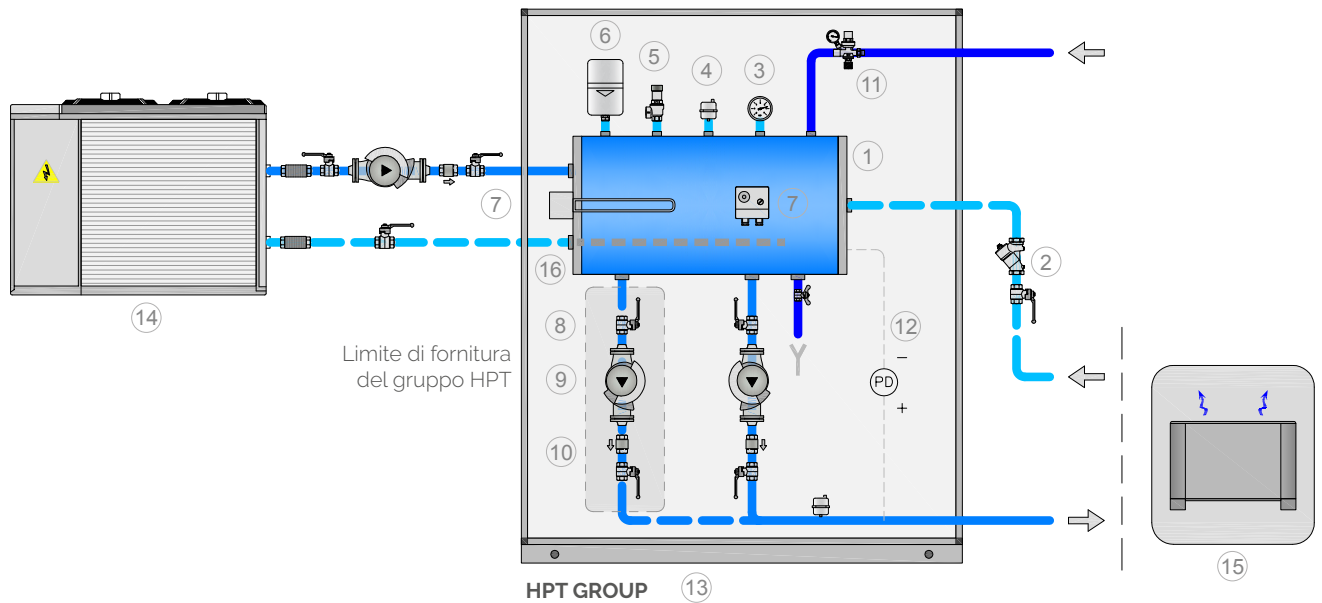


Legend

1. storage tank
2. Y filter. Optional, supplied non-assembled
3. Manometer
4. deaerator
5. Safety valve
6. Expansion vessel
7. Kit with electric anti-freeze resistance and anti-freeze thermostat (optional)
8. on-off valve
9. Circulator
10. Check valve (only version with 2 pumps)
11. automatic filling unit
12. differential pressure switch (optional)
13. self-supporting wooden structure for outside placement
14. Chiller
15. Device

HPT hydronic system

Layout 2



Legend

1. storage tank
2. Y filter. Optional, supplied non-assembled
3. Manometer
4. Deaerator
5. Safety valve
6. Expansion vessel
7. Kit with electric anti-freeze resistance and anti-freeze thermostat (optional)
8. on-off valve
9. circulator
10. check valve (only version with 2 pumps)
11. Automatic filling unit
12. Differential pressure switch (optional)
13. Self-supporting wooden structure for outdoor placement
14. Chiller
15. Device

HP 2.0 Hydronic system



Piping insulated with anti-condensate elastomere



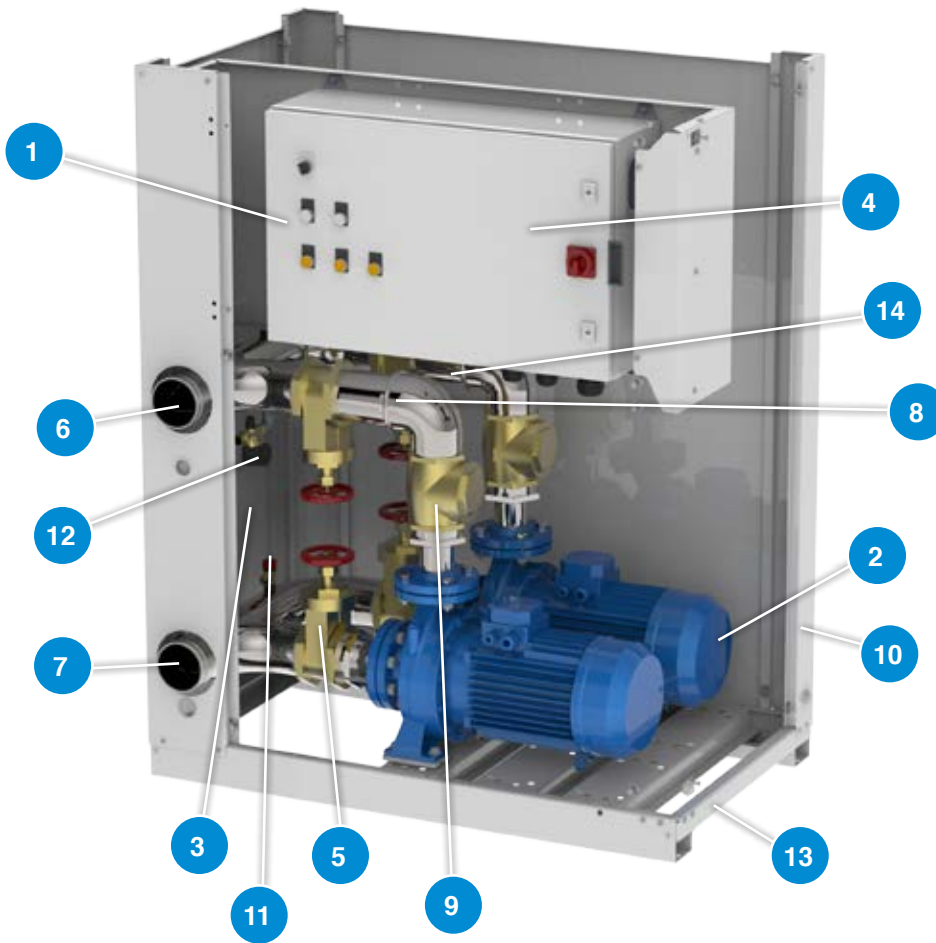
The HP 2.0 units are hydraulic stations meant to reduce the set-up time of the conditioning and cooling devices. They can be linked to any kind of water cooler.

The HP unit has:

- piping insulated with anti-condensate elastomere
- Single or double centrifugal pump with shut-off valve
- Power switchboard with device to alternate pumps with every start-up (version with two pumps), start-up of the back-up pump in case of breakdown (version with two pumps), magnetothermal protection, contacts to command the pumps from a distance, protection category IP55.
- Expansion vessel (optional)
- Safety valve
- Deaerator
- Manometer
- Fill-up/discharge valve
- Base in galvanized and coated steel sheets
- Self-supporting aluminium panels for outdoor installation
- Panels that can be quickly and easily removed
- Easy and quick access to the switchboard

The broad range of combinations offers a solution for every single type of installation.

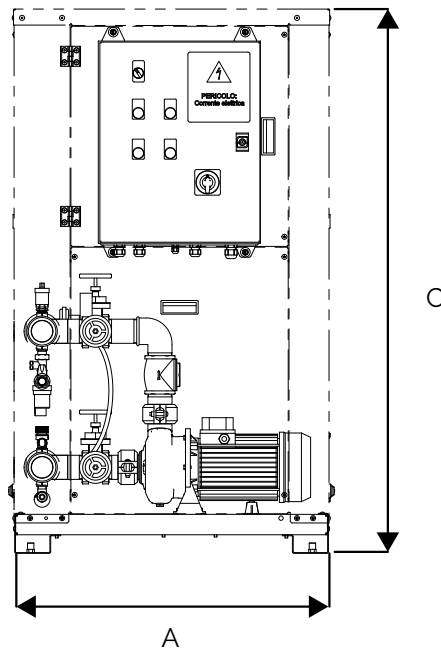
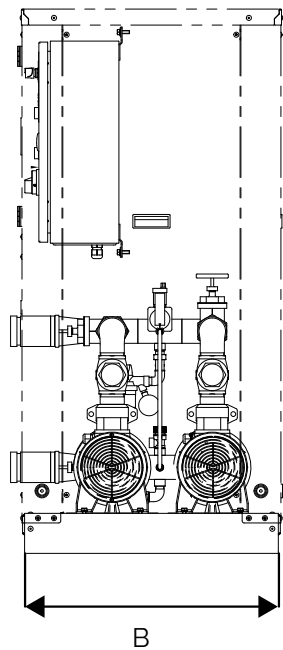
HP 2.0 hydronic system: components



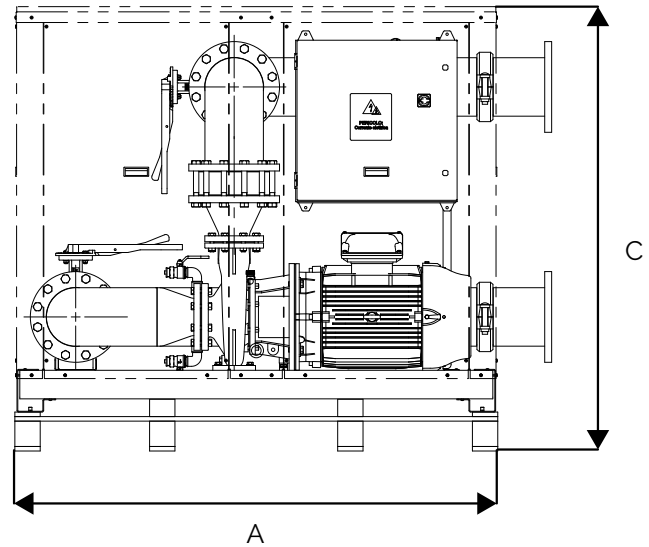
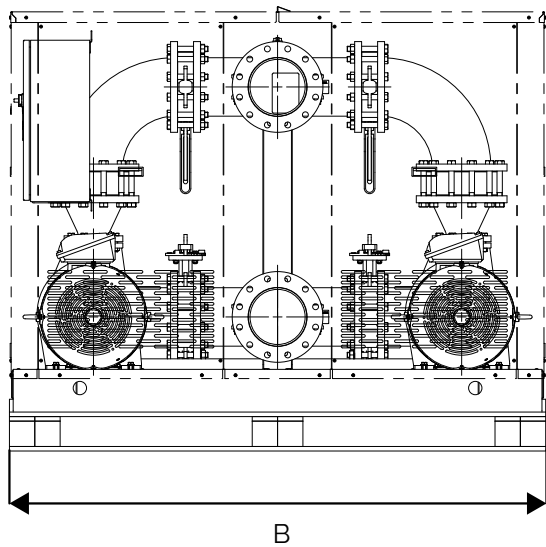
components

- | | |
|----|---|
| 1 | switchboard |
| 2 | circulation pump (version with double pump, optional) |
| 3 | removable bolted panel |
| 4 | hinged panel |
| 5 | shut-off valve |
| 6 | Water outlet |
| 7 | Water inlet |
| 8 | pressure transmitter (only version with inverter) |
| 9 | check valve (only version with double pump) |
| 10 | Ventilation grill |
| 11 | Safety valve |
| 12 | automatic filling unit |
| 13 | Base |
| 14 | automatic pressure relief |

HP 2.0 hydronic system: dimensions



TYPE A



TYPE B

Single pump

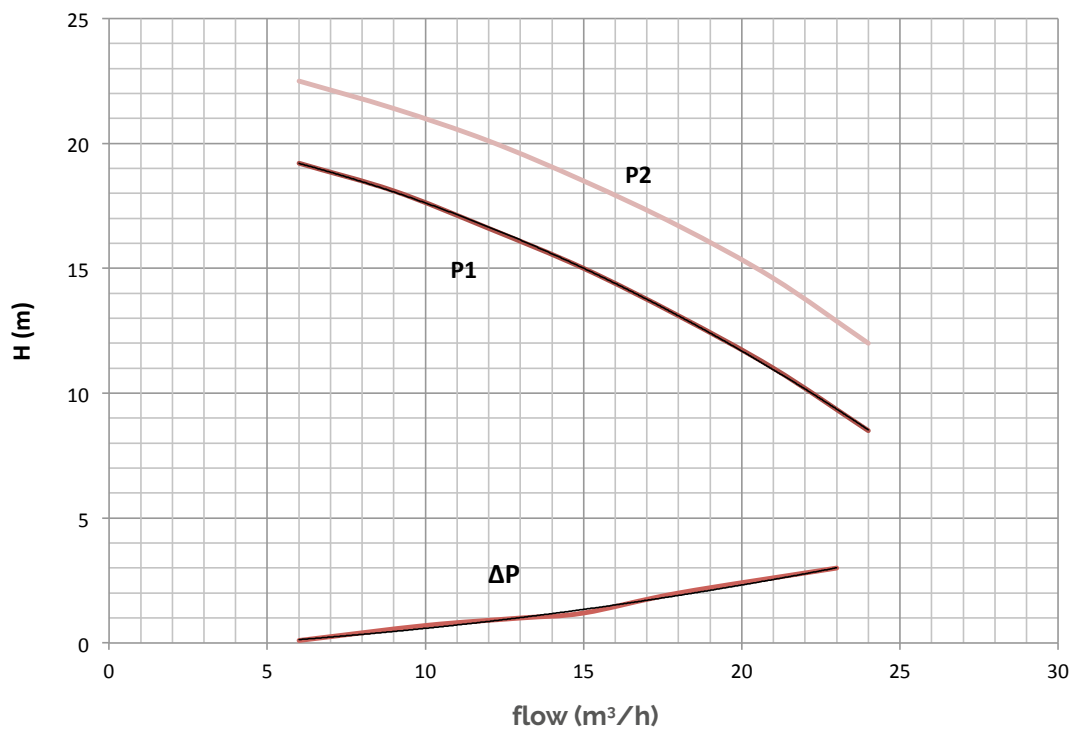
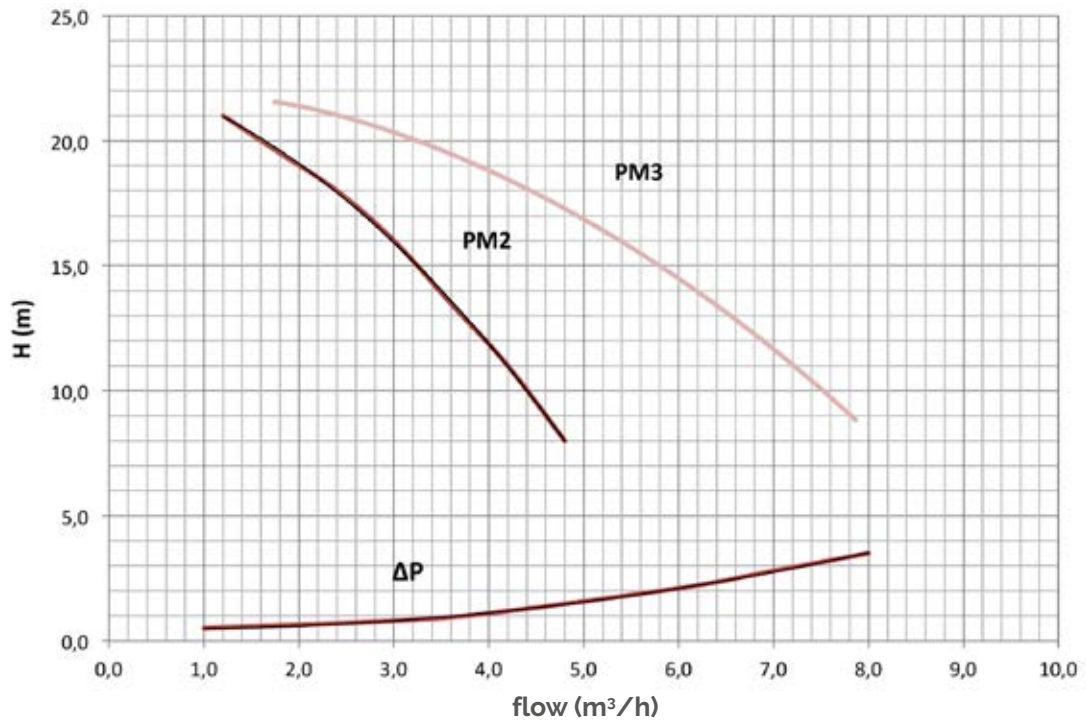
| pump model | dimensions | | | type |
|---|------------|---------|---------|------|
| | A mm | B mm | C mm | |
| PM2N PM3N P1N P2N P3N P4N P5N | 650 | 790 | 1360 | A |
| P6N P7N P8N P9N P10N P11N P12N P13N P14N P15N P16N P17N P18N | 1116 | 790 | 1360 | A |
| P19N P20N P21N | 2000 | 1800 | 1500 | B |

Double pump

| pump model | dimensions | | | type |
|---------------------------------------|------------|---------|---------|------|
| | A mm | B mm | C mm | |
| PM2R PM3R P1R P2R P3R P4R P5R | 650 | 790 | 1360 | A |
| P6R P7R P8R P9R P10R P11R | 1116 | 790 | 1360 | A |
| P12R P13R P14R P15R P16R P17R P18R | 1280 | 760 | 1600 | A |
| P19R P20R P21R | 2000 | 1800 | 1500 | B |

HP 2.0 Hydronic systems

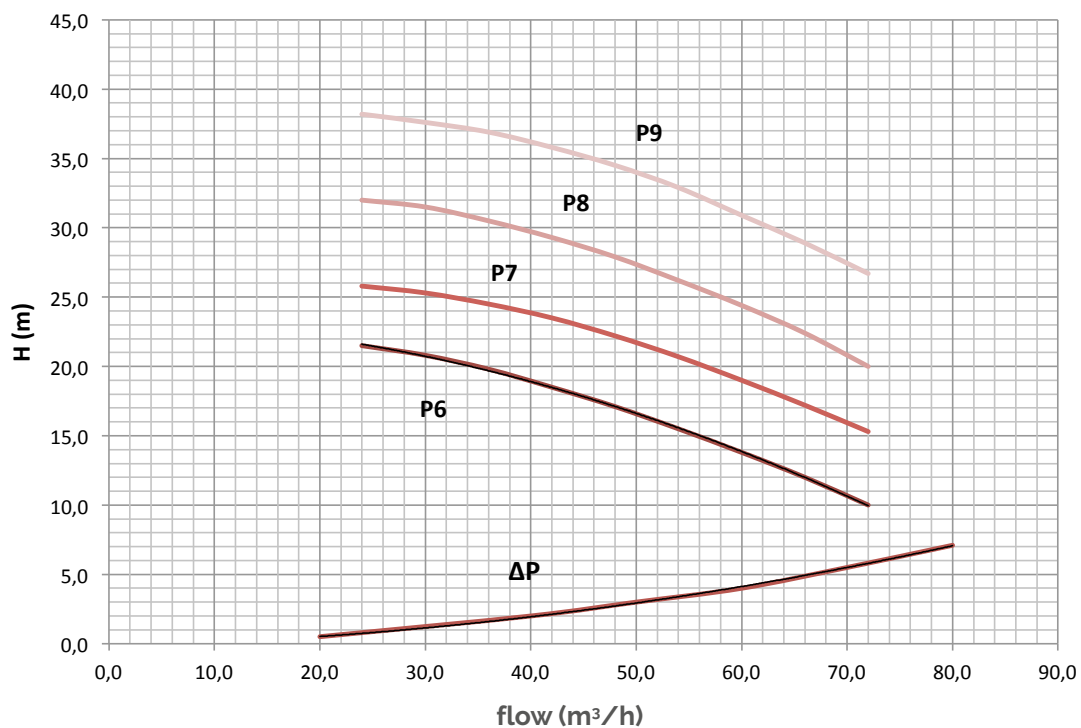
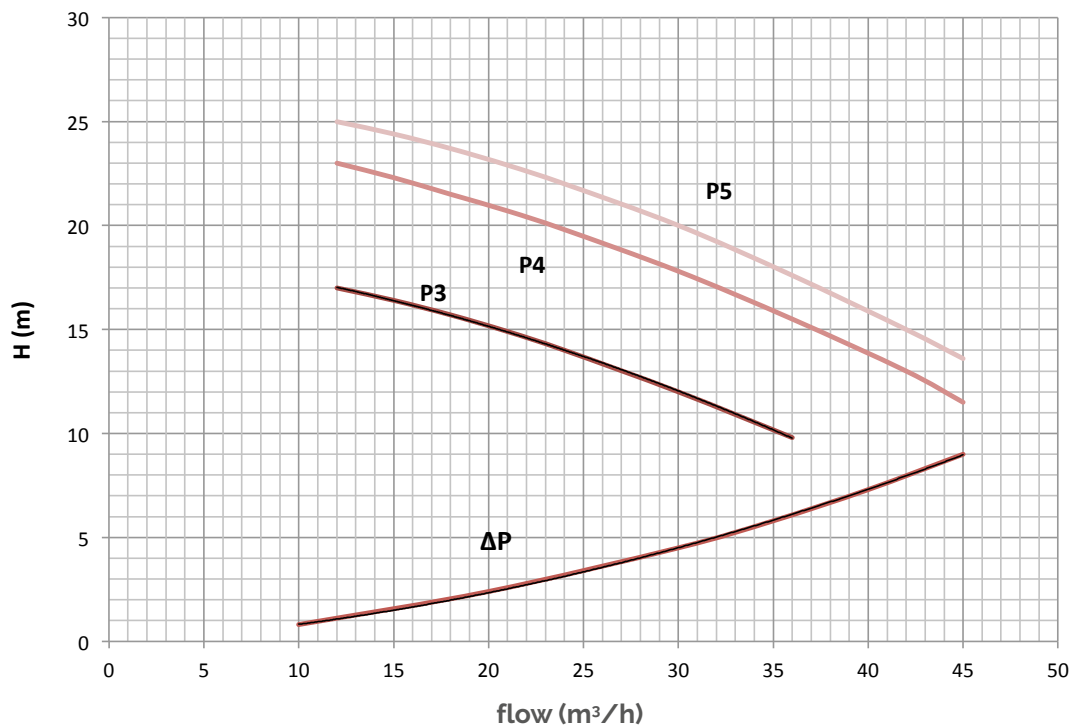
Prevalence and pressure loss curve



Pressure drop HP unit

HP 2.0 Hydronic systems

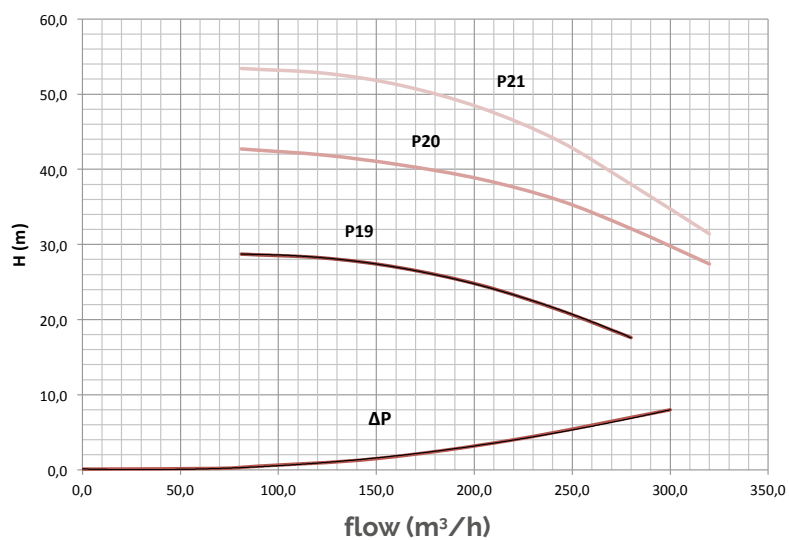
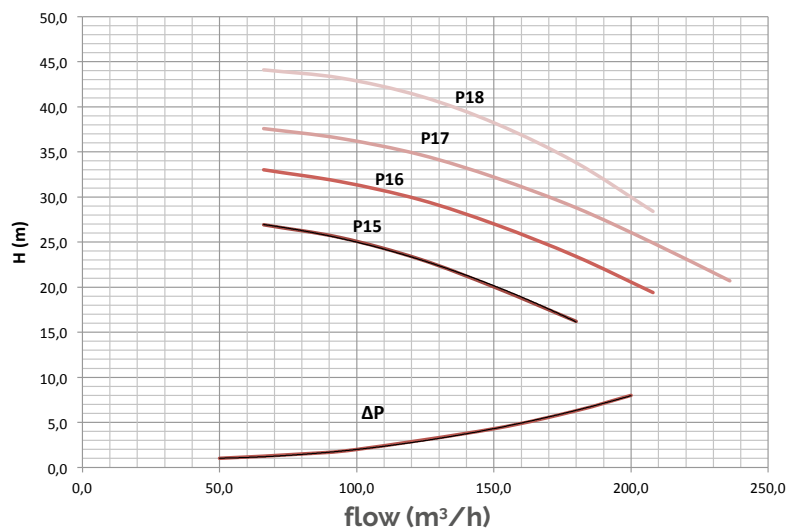
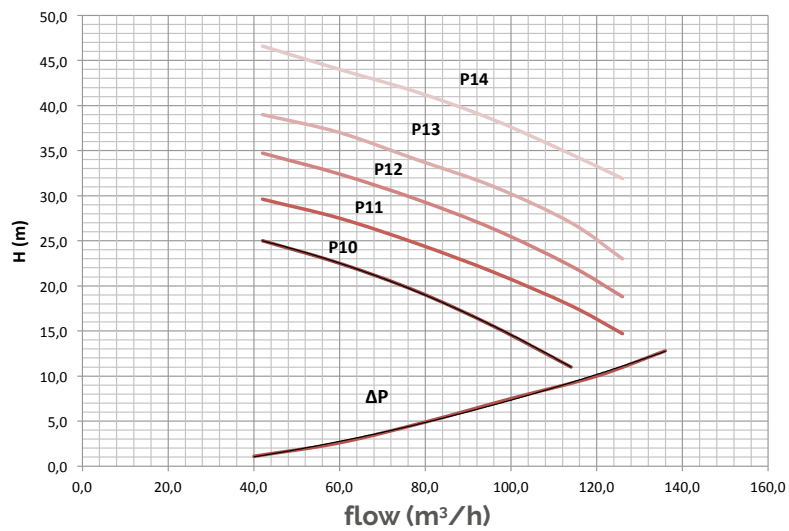
Prevalence and pressure loss curve



Pressure drop HP unit

HP 2.0 Hydronic systems

Prevalence and pressure loss curve



Pressure drop HP unit

HP 2.0 hydronic systems: technical information

| pump model | connections inch | Wsb1 kg | Wsb2 kg | F.L.I. kW | F.L.A. (400/3/50) A | F.L.A. (230/1/50) A | Ve l | single pump | | double pump | |
|------------|---------------------|---------|---------|-----------|---------------------|---------------------|------|-------------|-------------|-------------|-------------|
| | | | | | | | | code | price | code | price |
| PM2 | 1 1/2 | | | 0,45 | | 3,2 | 12 | 838060054X | € 1.884,00 | 838060055X | € 2.972,00 |
| PM3 | 1 1/2 | | | 0,45 | | 3,2 | 12 | 838060057X | € 2.104,00 | 838060058X | € 3.327,00 |
| P1 | 2 1/2 | 89 | 118 | 1,1 | 2,5 | | 12 | 838060129X | € 3.351,00 | 838060119X | € 4.912,00 |
| P2 | 2 1/2 | 90 | 119 | 1,5 | 3,2 | | 12 | 838060130X | € 3.360,00 | 838060120X | € 4.971,00 |
| P3 | 2 1/2 | 91 | 121 | 1,5 | 3,4 | | 12 | 838060131X | € 3.362,00 | 838060121X | € 5.019,00 |
| P4 | 2 1/2 | 93 | 125 | 2,2 | 4,8 | | 12 | 838060132X | € 3.402,00 | 838060122X | € 5.014,00 |
| P5 | 2 1/2 | 96 | 131 | 3 | 5,6 | | 12 | 838060133X | € 3.481,00 | 838060123X | € 5.217,00 |
| P6 | 3' | 153 | 220 | 3 | 6,1 | | 25 | 838060107X | € 4.586,00 | 838060193X | € 7.080,00 |
| P7 | 3' | | | 4 | 8,7 | | 25 | 838060108X | € 4.707,00 | 838060194X | € 7.153,00 |
| P8 | 3' | 178 | 275 | 5,5 | 10,4 | | 25 | 838060109X | € 4.899,00 | 838060195X | € 7.688,00 |
| P9 | 3' | | | 7,5 | 13,6 | | 25 | 838060110X | € 4.959,00 | 838060196X | € 7.808,00 |
| P10 | 3' | 186 | 296 | 5,5 | 10,4 | | 25 | 838060111X | € 5.141,00 | 838060197X | € 8.103,00 |
| P11 | 3' | 190 | 304 | 7,5 | 13,6 | | 25 | 838060112X | € 5.248,00 | 838060198X | € 8.453,00 |
| P12 | 3' | | | 9,2 | 17,2 | | 25 | 838060235X | € 5.781,00 | 838060236X | € 9.221,00 |
| P13 | 4' | 224 | 398 | 11 | 21,3 | | 25 | 838060183X | € 6.164,00 | 838060217X | € 10.563,00 |
| P14 | 4' | 248 | 447 | 15 | 27,7 | | 25 | 838060184X | € 7.205,00 | 838060218X | € 12.599,00 |
| P15 | 4' | | | 11 | 20,2 | | 25 | 838060227X | € 7.245,00 | 838060228X | € 12.619,00 |
| P16 | 4' | 258 | 483 | 15 | 26,6 | | 25 | 838060185X | € 7.255,00 | 838060219X | € 12.639,00 |
| P17 | 4' | 270 | 504 | 18,5 | 33 | | 25 | 838060186X | € 7.296,00 | 838060220X | € 12.691,00 |
| P18 | 4' | 284 | 532 | 22 | 40,4 | | 25 | 838060187X | € 7.982,00 | 838060221X | € 14.172,00 |
| P19 | DN 200 UNI PN 16 | | | 18,5 | 33 | | 50 | 838060229X | € 17.142,00 | 838060230X | € 27.257,00 |
| P20 | DN 200 UNI PN 16 | | | 30 | 53,5 | | 50 | 838060231X | € 18.393,00 | 838060232X | € 29.418,00 |
| P21 | DN 200 UNI PN 16 | | | 37 | 65,6 | | 50 | 838060233X | € 20.930,00 | 838060234X | € 34.920,00 |

Pve (bar) 1,5 Ps (ba) 3 T min (°C) -10

Legend

Wsb1 Weight HPT with 1 pump (empty)
 Wsb2 Weight HPT with 2 pumps (empty)
 F.L.I. Max absorbed power
 F.L.A. Max absorbed current
 Ve capacity of expansion vessel
 Pve Preload of expansion vessel
 Ps Max operating pressure
 Tmin Min temperature of the liquid

HP 2.0 hydronic systems: user conditions

Normal user conditions

The unit is designed to be connected with conditioning devices and coupled to a chiller which takes the heat from the device thanks to an increase in the thermal nominal standard (7-12°C). The average operating temperature is approximately 10°C and the operating pressure varies between 0.5 and 2.5 bar. The flow depends on the overall functioning of the installation – the cooling unit, indicated by the intersection between the characteristic curve of the pump and the characteristic curve of the installation. The HP 2.0 group is designed to function as a heat pump, but it can also function in relatively high temperatures, with a maximum of 50°C and with a max pressure of 3 bar. If the HP 2.0 is operative in an environment with low winter temperatures, it is recommended to use anti-freeze gel or resistance. Alternatively, we recommend the emptying of the hydraulic circuit, in order to prevent the water from being frozen.

Protective devices

The HP 2.0 is protected from possible functioning errors or incautious manoeuvres thanks to the installation of two devices: the differential pressure switch (optional) and the safety valve. A possible problem is a breakdown of the centrifugal pump, which causes the vector fluid to stop and eventually to freeze. The use of a differential pressure switch (supplied on demand), which blocks the compressor, prevents this inconvenient situation. The standard HP 2.0 is supplied with an expansion vessel and safety valve. In case of a wrong manoeuvre or other events which cause overpressure, the safety valve, calibrated at 3 bar, is automatically activated. The expansion vessel, appropriately preloaded, intervenes when there is an excessive dilation of the fluids in the installation.

HP 2.0 hydronic systems: Capacity of the circuit and the expansion vessel

Max water content in the device and dimensions of the expansion vessel

On chart 1 the max water volume in the hydraulic installation is indicated, compatible with the capacity of the expansion vessel and applicable to all HP 2.0 models. The safety valve also has a start-up value (3 bar for all models). If the effective water content in the device, as well as in the storage tank, exceeds the operating conditions in the chart, another/second expansion vessel should be installed to take the added water volume.

Tav. 1

| Pump model | Hydraulic height | m | 15 | 10 |
|---------------------------|---------------------------------|---|------|------|
| | | | bar | 1,80 |
| PM2 PM3 P1 P2 P3 P4 P5 | Circuit's max water content (1) | l | 492 | 615 |
| | Circuit's max water content (2) | l | 315 | 394 |
| P6 - P18 | Circuit's max water content (1) | l | 984 | 1230 |
| | Circuit's max water content (2) | l | 630 | 788 |
| P19 - P21 | Circuit's max water content (1) | l | 1968 | 2460 |
| | Circuit's max water content (2) | l | 1260 | 1576 |

Note: the expansion vessel is optional and should be ordered separately.

Operative conditions

- (1) cooling
Min temp of fluid = 4°C
Max temp of fluid = 40°C
- (2) heating (heat pump)
Min temp of fluid = 4°C
Max temp of fluid = 50°C

Tav. 2

| Water/ glycol mix. | Water temperature | | Correction factors | Reference value |
|--------------------|-------------------|--------|--------------------|-----------------|
| | max °C | min °C | | |
| 10% | 40 | -2 | 0.507 | (1) |
| 10% | 5 | -2 | 0.686 | (2) |
| 20% | 40 | -4 | 0.434 | (1) |
| 20% | 50 | -4 | 0.604 | (2) |
| 30% | 40 | -6 | 0.393 | (1) |
| 30% | 50 | -6 | 0.555 | (2) |

Hydronic systems

HP 2.0 preload of the expansion vessel

The expansion vessel, of all models, is preloaded with a standard value of 1.5 bar.
The value has to be adapted though to the height H of the device.

The formula used to calculate the preload value of the expansion vessel is:
 $P = (H / 10.2) + 0.3$

Legend

H: height of the device in meters

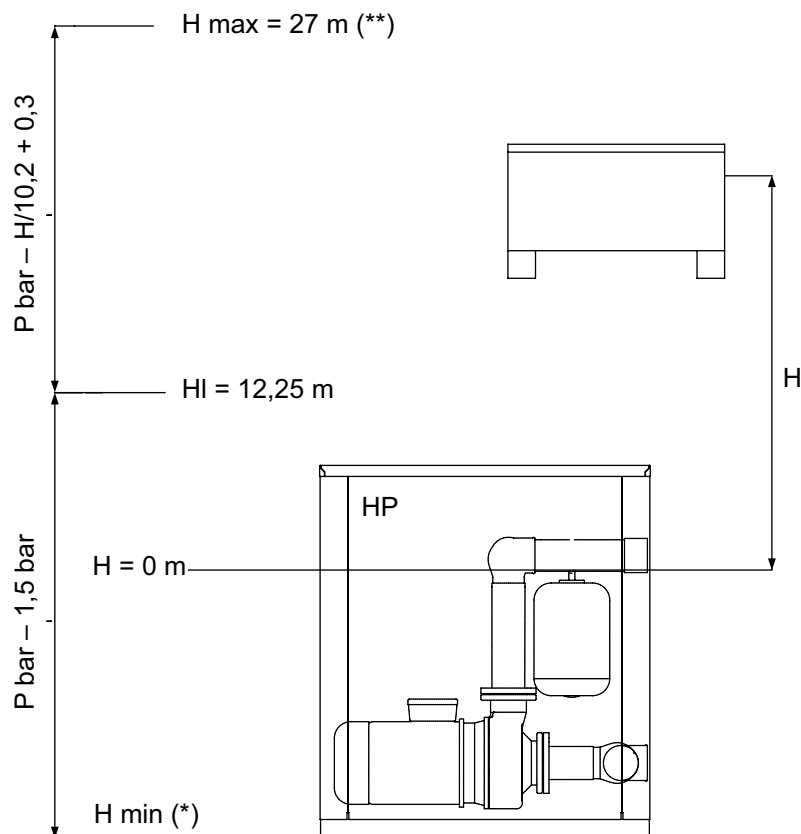
P: preload of the expansion vessel in bar

Should the preload value be less than the standard value, no intervention has to be carried out. This means that an installation with a height of less than 12.25 meters has a preload of 1.5 bar. In this case the operator should only check the pressure value and not intervene.

Example

We take a height H of 15.3. The preload value is:

$$P = (15,3/10,2)+0,3 = 1,8 \text{ bar}$$



H: height of the device

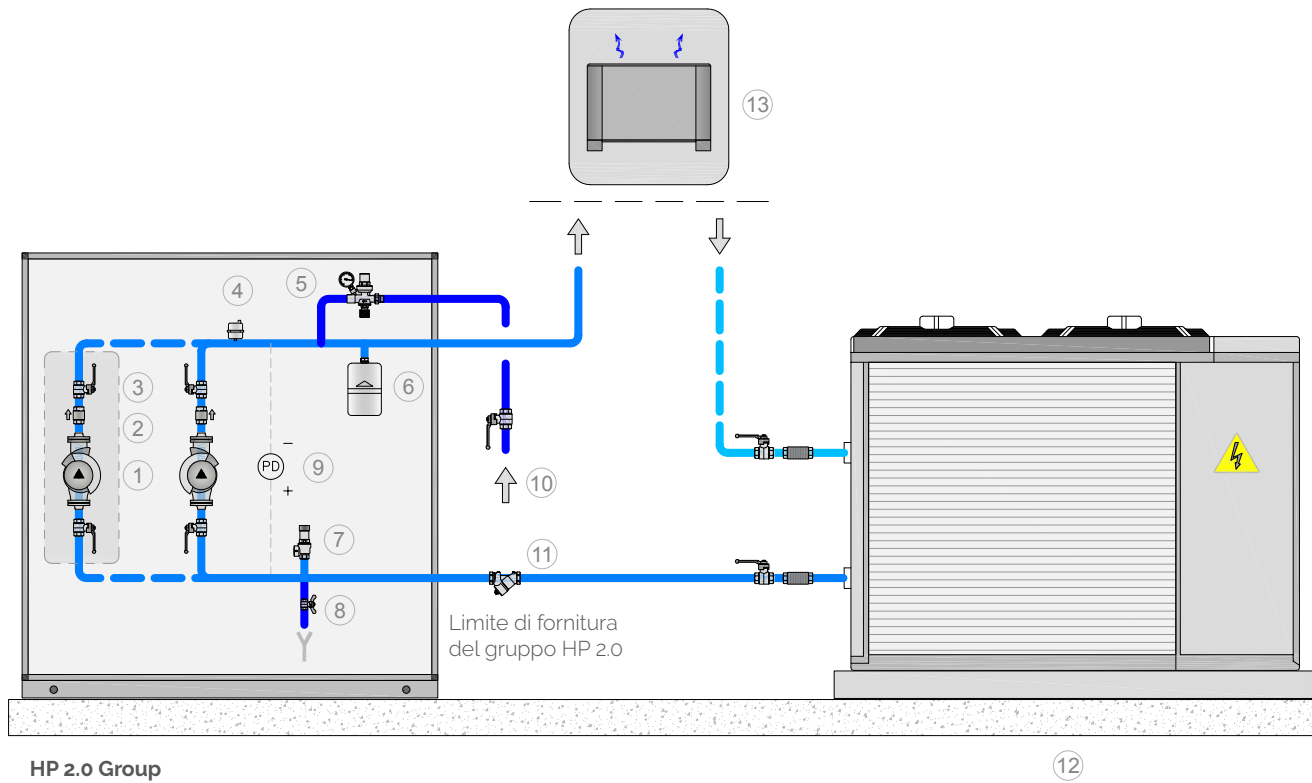
Hmax: max height of the device

H1: height when the preload of the expansion vessel is the same as the standard value

* verify that the lowest point of the device can support the pressure

** verify that the highest point of the device does not exceed the max height H max=27 m.

HP 2.0 hydronic systems: hydraulic chart



Legend

1. Circulator
2. Shut-off valve (only version with 2 pumps)
3. on-off valve
4. deaerator
5. automatic filling unit
6. expansion vessel (optional)
7. safety valve
8. outlet
9. differential pressure switch (optional)
10. inlet returning fluid
11. Y filter. Optional, supplied non-assembled
12. chiller
13. device

HP 2.0 hydronic system: accessories

Inverter

Every pump can be managed with an inverter. The units equipped with an inverter have a pressure sensor, 0-10 bar which communicates with the inverter through a 4-20 mA signal. All regulation parameters are preloaded during the testing phase in the factory. The user has only to select the set point value for the wanted pressure.

Kit with electric anti-freeze resistor

The kit is installed in the inside of the tank and has an electric resistor of 1300 W for tanks up to 1000l and two electric resistors of 1300 W for tanks with a larger capacity. The kit also contains an anti-freeze bithermostat (-35/+35°C) and is assembled, cabled and tested before delivery.

Timer for alternative pumps

In the version with double pump, the timer can be used to manage the shift between the pumps in intervals of a determined time. Without the timer, the shift between pumps is carried out with every start-up.

Attention

If the system is active 24/7 the shift between pumps is not guaranteed by the standard group. In this case it is recommended to use a timer.

Differential pressure switch

This is a safety measure which makes it possible to verify the flow in the system. The device generates an alarm signal but does not automatically stop the device.

Soundproof covering

Soundproof covering is available and significantly decreases the sound emission by the device.

Anti-vibration feet

A set of anti-vibration feet which can be put on the supportive points of the device. They are supplied non-assembled.

Filter

Mesh filter, with 1000 micron holes, to be attached to the outside of the unit in order to protect the pump from any impurities of the devices.

Balancing valve

The valve is to be attached to the outside in order to regulate the flow in the circuit. It is especially recommended in devices with a variable pressure drop.

Packaging in a wooden case

Protective packaging adapted to risky transport and long distances.

Package for overseas transport

Extra packaging for maritime transport, with a wooden case in accordance with the international standards ISPM-15, a protective bag and hygrosopic salt.

Kit to transform couplings

The kit contains two joints which transform the Victaulic coupling of the HP 2.0 unit in UNI-EN PN 16 flanged couplings. There is a version with the same diameter as the couplings and another version with a bigger diameter available.



Transformation to a flanged coupling

| Original coupling Victaulic | Transformed coupling UNI-EN PN 16 | Code | price |
|--------------------------------|--------------------------------------|------------|----------|
| 1 1/2 | DN40 | 838081247X | € 180,00 |
| | DN50 | 838081248X | € 220,00 |
| 2" | DN50 | 838081249X | € 190,00 |
| | DN65 | 38081250X | € 220,00 |
| 2 1/2 | DN65 | 838081251X | € 190,00 |
| | DN80 | 838081252X | € 250,00 |
| 3" | DN80 | 38081253X | € 210,00 |
| | DN100 | 838081254X | € 300,00 |
| 4" | DN100 | 838081255X | € 240,00 |
| | DN125 | 838081256X | € 370,00 |

VKB hydronic systems



Tank insulated with anti-condensate elastomere



The VKB units are buffer storage tanks with accessories (without circulation pump) designed in order to significantly reduce the set-up time for the conditioning and cooling devices.

With all hydraulic components which are indispensable for the correct functioning of the hydraulic circuit for the distribution of chilled water. The components can be coupled with all kind of water coolers. The units consist of an insulated buffer tank, an expansion vessel, a safety valve, a deaerator, a fill/discharge valve and a manometer.

The VKB units are enveloped in a supporting structure in a varnished steel base and with varnished steel panels. They are designed to guarantee an easy inspection and maintenance of the components. The tank, which is hydraulically inserted between the cooling station and the fan-coils, makes the water content in the entire installation increase, by increasing the pause between the shutdown of the compressor and the next start-up. In this way, the number of start-ups is significantly reduced, which improves the life span and performance of the compressor. The broad range of storage tanks makes it possible to meet every requirement. Every unit is assembled in our factory and tested to guarantee our trustworthiness.

Available versions

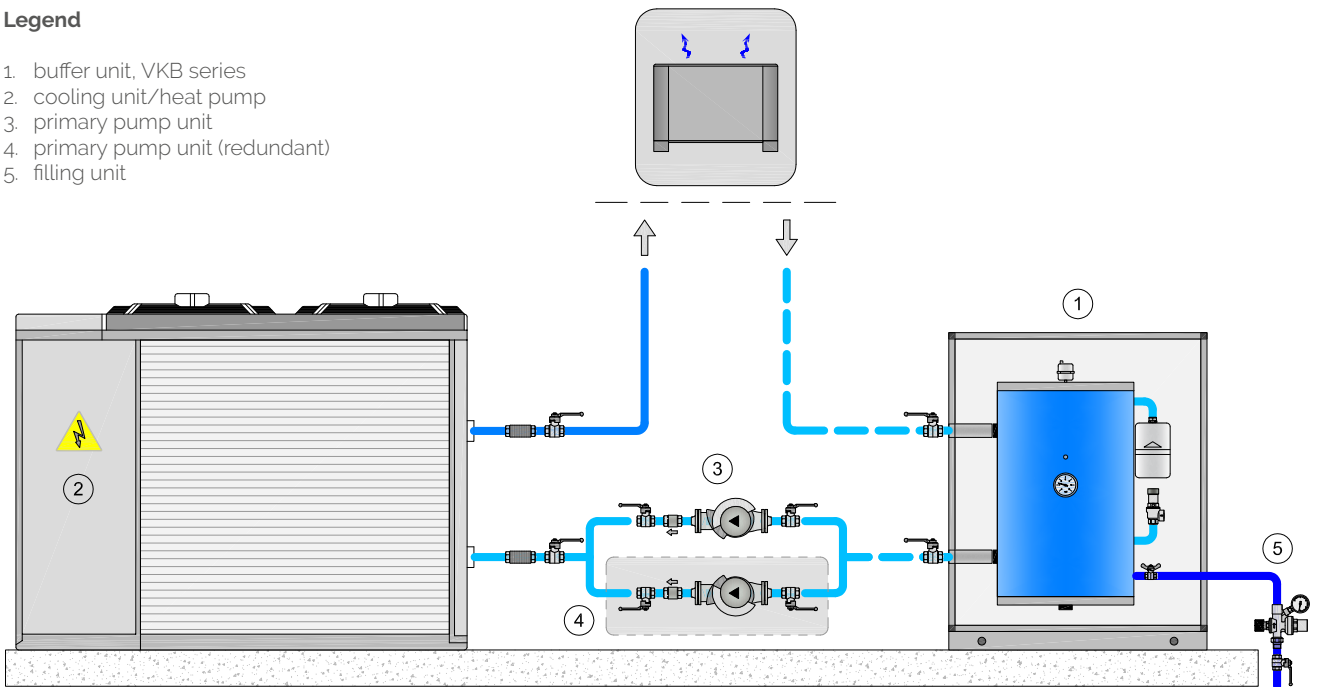
The VKB units are available with the following capacity: 200, 300, 500, 750, 1000 and 1500 liters.

Solutions with the VKB unit

Typical installation for conditioning devices. This makes it possible to optimize the functioning of the thermal source by stabilizing the return temperature in the cooling device.

Legend

1. buffer unit, VKB series
2. cooling unit/heat pump
3. primary pump unit
4. primary pump unit (redundant)
5. filling unit

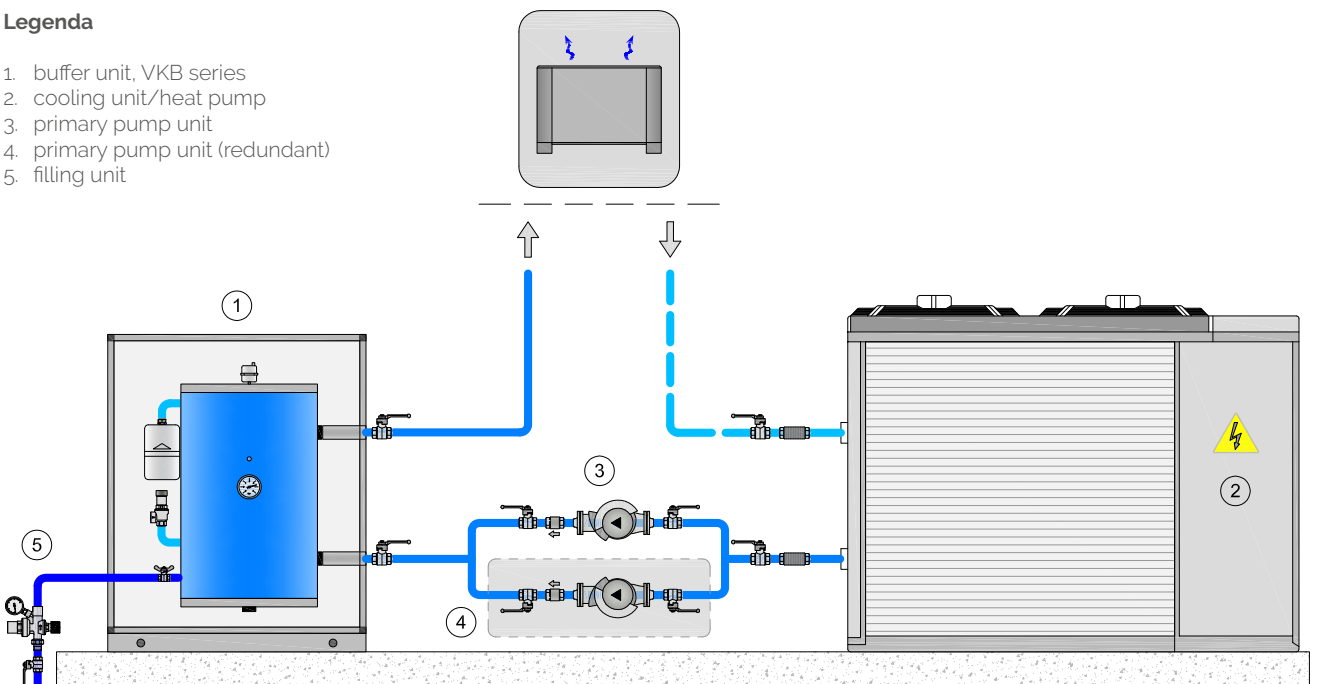


Solutions with the VKB unit

Typical installation for devices for industrial processes, in particular when a very accurate temperature control is needed.

Legenda

1. buffer unit, VKB series
2. cooling unit/heat pump
3. primary pump unit
4. primary pump unit (redundant)
5. filling unit



VKB hydronic systems

VKB Description of the main components

1. Storage tank

The storage tank is made of varnished carbon steel plates and is insulated with closed cell elastomere. This type of insulation, refinished in thick PVC, guarantees an excellent resistance to condensate formation.

2. Fill up valve

This valve refills the hydraulic circuit in the demand peak phase as well as during normal functioning.

3. Safety valve

Calibrated at 3 bar and with canalised discharge. It protects the unit from possible overpressure.

4. Automatic valve for air discharge

Placed on the upper part of the unit, it discharges air from the unit.

5. Discharge valve

It discharges air from the lowest point of the tank to make drainage possible.

6. Supporting structure

The base is made of thick steel plates varnished with RAL 7042. The frame is made from aluminium and the sides of galvanized and varnished steel plates which are resistant to atmospheric agents. All this makes it possible for the VKB to be installed in non-technical spaces and in places exposed to atmospheric agents.

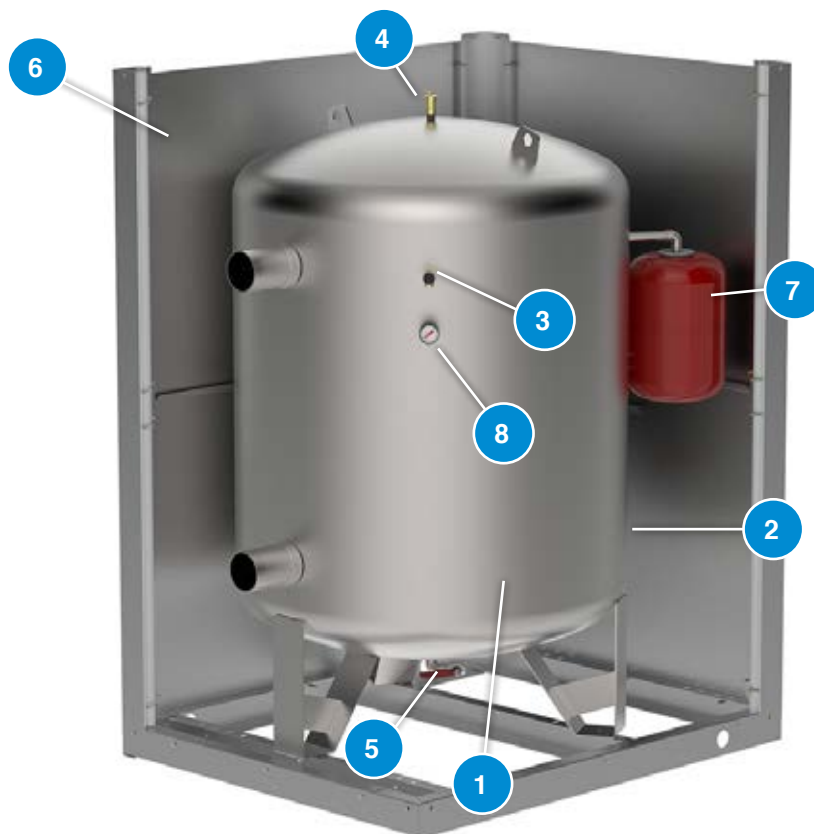
7. Expansion vessel

Supplied with a membrane, preloaded nitrogen and with dimensions that can absorb varying volumes of liquid derived from the various temperatures.

8. Manometer

This device is placed on the tank and indicates the internal pressure.

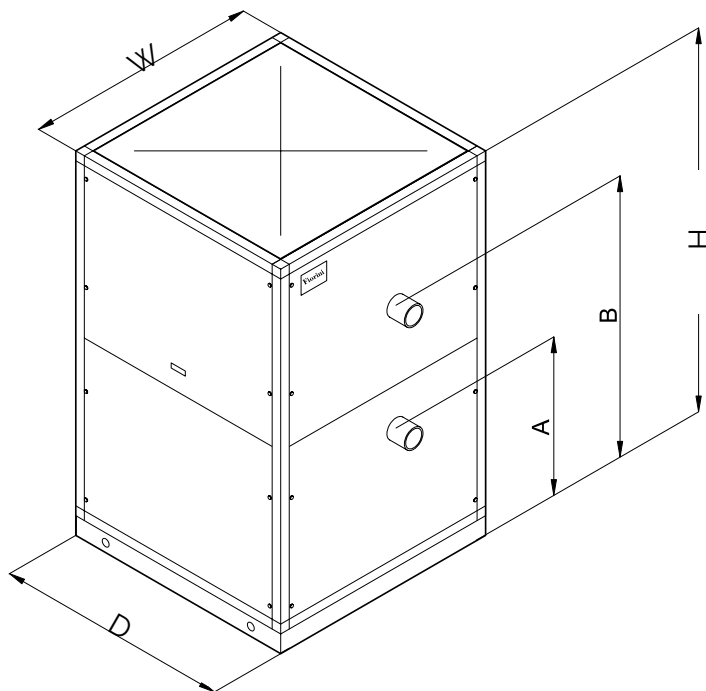
| components | |
|------------|---------------------------|
| 1 | storage tank |
| 2 | fill-up valve |
| 3 | safety valve |
| 4 | automatic discharge valve |
| 5 | discharge |
| 6 | supporting structure |
| 7 | expansion vessel |
| 8 | manometer |



VKB hydronic systems

| capacity l | Capacity of the expansion vessel l | Calibration of the expansion vessel bar | Calibration of the discharge valve bar | Hydraulic couplings inch | H mm | W mm | D mm | A mm | B mm |
|---------------|--|---|--|--------------------------------|---------|---------|---------|---------|---------|
| 200 | 8 | 1.5 | 3 | 2" | 1576 | 684 | 684 | 230 | 990 |
| 300 | 8 | 1.5 | 3 | 2" | 1950 | 1200 | 1200 | 450 | 1320 |
| 500 | 12 | 1.5 | 3 | 3" | 1950 | 1200 | 1200 | 490 | 1540 |
| 750 | 24 | 1.5 | 3 | 3" | 1950 | 1200 | 1200 | 490 | 1540 |
| 1000 | 24 | 1.5 | 3 | 4" | 1950 | 1200 | 1450 | 640 | 1460 |
| 1500 | 2x24 | 1.5 | 3 | 4" | 1950 | 1200 | 1450 | 640 | 1460 |

| capacity l | codice | prezzo |
|---------------|-----------|------------|
| 200 | 838050011 | € 1.576,00 |
| 300 | 838050012 | € 2.688,00 |
| 500 | 838050013 | € 2.884,00 |
| 750 | 838050014 | € 3.172,00 |
| 1000 | 838050015 | € 3.935,00 |
| 1500 | 838050016 | € 4.862,00 |



VKB

hydronic systems

Normal user conditions

The unit is designed to be connected with conditioning devices and coupled to a chiller which takes the heat from the device thanks to an increase in the thermal nominal standard (7-12°C). The average operating temperature is approximately 10°C and the operating pressure varies between 0.5 and 2.5 bar. The flow depends on the overall functioning of the installation – the cooling unit, indicated by the intersection between the characteristic curve of the pump and the characteristic curve of the installation. The VKB group is designed to function as a heat pump, but it can also function in relatively high temperatures, with a maximum of 50°C and with a max pressure of 3 bar. If the VKB is operative in an environment with low winter temperatures, it is recommended to use anti-freeze gel or resistance. Alternatively, we recommend the emptying of the hydraulic circuit, in order to prevent the water from being frozen.

Protective devices

The VKB is protected from possible functioning errors thanks to the installation of two devices, also in the standard version: the expansion vessel and the safety valve. The expansion vessel, preloaded, intervenes when there is an excessive dilation of the fluid in the installation. In case of a wrong manoeuvre or other events which cause overpressure, the safety valve, calibrated at 3 bar, is automatically activated.

Purpose

This type of buffer tank is designed for medium-sized cooling systems. It is installed between a refrigerator and the device and can be used in installation in places exposed to bad weather.

Operating load

The operating load of the tank is determined on the grounds of the external weather conditions and the specific requirements of the client. Those are taken in consideration during the design phase of the unit.



Hot water systems

Contents

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| Energy Label | 100 |
| Domestic hot water | 102 |
| Storage tanks | 184 |
| Solar thermal power | 194 |
| Water heaters | 220 |
| Accessories | 237 |



Hot water systems

A broad range of options which make it possible to efficiently produce Domestic Hot Water for both domestic and professional use and to manage water for technical use in heating systems.

We have numerous series of products dedicated to the production and storage of hot water. Those products meet people's needs and bring comfort to users, in individual housing, as well as public and private residential structures, the tertiary sector and the industrial sector. Our product lines consist of DHW systems, hot water storage tanks, thermal solar power systems and gas water heaters which are designed to efficiently operate in all different applications.

Our products are well-thought-out. We try to come up with new conceptual solutions and to think over the materials we use. In this way we aim for:

- high performance
- a minimum heat loss
- high quality and a long life span

Energy labels

All products for hot water production are provided with an energy label in accordance with the CE directive and the specific regulations for the devices. The label certifies the energy efficiency class which helps the professionals and the users consciously choose the most efficient solution to their requirements.

Special materials and internal treatment of the tanks

We offer products with a finishing touch adapted to every possible application: high quality stainless steel and glass lining (enamel vitrified at a temperature of more than 800°C) which ensure a maximum hygiene and life span even when the water tempera-

ture is elevated. Moreover there is Bluetech, an innovative and efficient treatment with high elasticity. It is made from thermosetting resins and ensures a 100 % cleanliness of water for domestic use.

Insulation

The following types of insulation are available:

- rigid polyurethane foam, high density, thermal insulation, conductivity coefficient of 0.023 W/mK
- Thick flexible polyurethane, also for large tanks (up to 10.000 litres) or for special projects
- Other materials, on the client's request

Protective equipment

There are sets with protective equipment which guarantee the safety and correct use of the products, such as protection against overpressure, safety valves, expansion vessels, protection against water hammering, antifreeze protection, cathodic protection against corrosion, etc... If necessary, our clients can solicit the help of the consultancy service provided by our staff during the design and selection phase. They will help you look for the perfect solution to your problem and will send you the information needed to properly and efficiently manage the product and/or the device.

You can find more details in the following part of the brochure.



Tank treatments

Bluetech

Bluetech is an innovative treatment, which is obtained from thermo-setting resins. It offers a lot of advantages in comparison to traditional treatments:

- excellent resistance and stability under high temperature
- excellent adhesion to the carbonized steel and high elasticity
- hermetically closed
- effective barrier against cathodic delamination
- long life span

It is specifically designed for coating the inside of our water heaters and Domestic Hot Water tanks (DHW) and can be used with drinking water. (Bluetech is conform with DM 174/2004 and therefore suitable for use with drinking water as prescribed by DLgs 31/2001 (att.dir. 98/83/CE).

Properties

The following data apply to a coating on 3 mm thick carbonized steel sheets as in the standard conditions.

| | |
|-----------------|-----------------|
| Application | Electrostatic |
| Firing | 20 min/200°C |
| Film thickness | 100 ÷ 140 µm |
| Look | Smooth / Glossy |
| Pencil hardness | H ÷ 2 H |
| Color | Blue RAL 5002 |

Stainless steel

In some cases when chlorides are present, even stainless steel can be damaged due to corrosion. In order to eliminate this risk our water heaters are made with special austenitic steel, such as AISI 316L (low carbon) and for more aggressive water, AISI 316 Ti (with Titanium). We use AISI 316L .4404 EN 10088-2 steel for installations with drinking water (suitable for drinking water in accordance with DM 174/2004).

Glass-lining

The solution guarantees protection against corrosion. The enamel is vitrified, by firing it at more than 800°C. The enamel is different from other kinds, i.e. the chemical composition is inorganic (no carbon) and there are chemical links. Glass-lining is only applied to tanks of a medium capacity. The enamel is inorganic (DIN 4753.3) and therefore suitable for use with drinking water (DM 174/2004)

Rigid insulation covered in PVC

The insulation is made of rigid polyurethane (which does not contain fluorocarbons), has a density of 40 kg/m³ and a thickness of 50 to 70 mm. The insulation is directly attached to the storage tank with $\lambda = 0.023$ W/m °C (in accordance with DPR 412/93 which implements L10/91). When used in systems with chilled water, it not only ensures thermal insulation, but also anti-condensate protection.

Soft insulation covered in PVC

The insulation is made of thick, soft polyurethane with a conductivity coefficient of $\lambda = 0,0456$ W/m °C and is covered in coloured pvc. It ensures thermal insulation and limits energy loss.



User conditions

If you want to properly use the storage tanks and prevent malfunctions or damage, you should respect the following limitations:

- a) the storage tank has to be equipped with an efficient cathodic protection.
- b) The quality requirements for drinking and food-grade water has to be in accordance with DLgs 31/01 (att. Dir 98/83/CE) and in particular they should respect the following parameters.

| | |
|--|------------------|
| Hydrogen-Ion concentration pH (*) | 6,5 ÷ 9,5 |
| Electrical conductivity $\mu\text{S cm}^{-1}$ (a 20°C) | < 2500 |
| Chlorides mg/L ci | < 250 |
| Sulphates mg/L SO ₄ | < 250 |
| Total hardness °Fr (*) | required min. 15 |

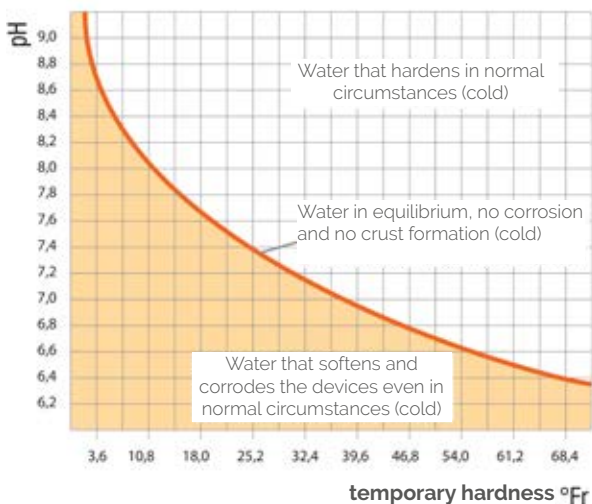
(*) The water is treated according to the Tillmann diagram to satisfy the hygienic requirements and to ensure an equilibrium (no crust formation, no hardness). The prescribed treatments (UNI 8065) cannot hinder the use of the water for food preparation and have to be carried out with the right devices. In case of softening or desalination the total hardness of the treated water cannot be less than 15°Fr (DM 443/90)

- c) The max operating temperature should always be respected. It should be kept in mind that the water aggressiveness soars when the temperature increases, especially above 60°C.

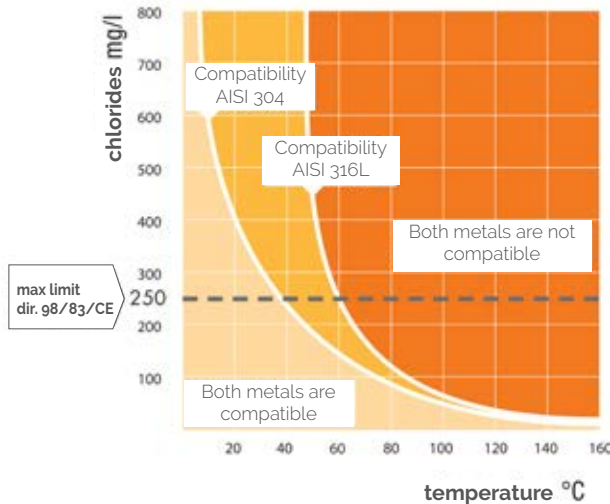
Water and usage

The different types of water, hard water and soft water, are classified on the basis of their Ph value and their temporary hardness. The compatibility of AISI 304/316L steel is based on the presence of chlorides and the water temperature.

Tillmann diagram (UNI 9182 Art.17)



Compatibility diagram



Available protection equipment

Overpressure protection

To prevent undesirable effects caused by overpressure, it is recommended to use protective devices, such as a safety valve. Since water is incompressible and it expands when heated, an adequate expansion system should be installed which can prevent a rupture in the water heater. We suggest you respect the ISPEL norms (collection R-Cap R.1.A) which state that expansion systems in heaters with water for consumption can be created with a pressure relieve valve, a counterweight or a spring with a diameter calculated with the following formula:

$$d \geq \sqrt{\frac{V}{5}} \quad \begin{array}{l} V = \text{volume of the heater in litres} \\ D = \text{diameter of the valve orifice (minimum 15 mm)} \end{array}$$

N.B. The valve's calibration pressure should not exceed the max operating pressure of the water heater.

Expansion vessel. To prevent a continuous drainage by the safety valve, chalk formation and strain on the water heater, you should also provide a closed expansion vessel with a non-toxic valve (for food-grade water). The volume should not exceed 10 % of the storage tank's volume.

Device to soften water hammering.

When the water flow is stopped brusquely or suddenly, that can cause "pressure waves", which can damage or rupture the device. Because of this, all systems for chilled and hot water distribution have to be equipped with a device to soften water hammering, either mechanical (with a spring) or even better hydro pneumatic (permanent or resettable air cushion) (UNI 9182 Art. 15).

Antifreeze protection.

If the storage tank is exposed to temperatures below zero for extended periods, the device should be protected with heating devices or a continuous flow which makes sure that the water does not stay still. (UNI 9182 Art. 20.4.3.)

Electrical protection

To protect the users against possible fault currents, the metallic mass should be properly floor-grounded. (as by law L46/90)

Cathodic Protection against corrosion

Corrosion is an electro-chemical phenomenon which especially affects water heaters because in water tanks which are constantly refilled the softness of water increases very much when the temperature increases (especially above 60°C). Therefore, it is recommended to provide 'cathodic protection'.

Magnesium Anodes

In order to make the storage tanks cathodically protected, one or more sacrificial magnesium anodes are supplied. Those protect the structure against corrosion. Our anodes are produced in a particular Magnesium alloy of the AZ 63 type and guarantee physiological innocuousness, electrode potential ($\leq -0,9$ V) and loss of mass (≤ 30 g · m⁻² · d⁻¹) in accordance with the DIN 4753-6 norms.

Correx® Impressed Current Anode

Permanent cathodic protection can be realized with a Correx Impressed Current Anode. Since the Correx is not subject to corrosion, it is strongly advised to use it for the protection of ZANI tanks and heaters that work with highly aggressive water (even those which are already installed). An electrical socket near the water heater is required and, in case of a power outage, the current should be re-engaged and sustained. Cables cannot be tampered with or modified. An instruction manual is supplied with the product.



Regulation and precaution

Below the suggestions and information are described on how to properly manage and use the devices in accordance with the 46/90 art. 7 law.

Hot water storage

Heat generators used for the production of hot water for hygienic and domestic use by various users in a residential environment have to have particular dimensions in accordance with the UNI 9182 technical norms. They have to be equipped with a hot water storage tank with an adequate capacity (DPR 412/93 Art. 5.7.)

Water for food preparation

The quality requirements for drinking water used for food preparation have to be in accordance with D Lgs 31/01 (Dir. 98/83/CE)

Tanks

The tanks for fuel and diesel for thermal installations have to be in accordance with the norms emitted by the Department of the Interior 28-04-05.

Couplings

The couplings between the piping and the devices (water heater, storage tank...) have to be equipped with flanges or with a three piece union coupling (UNI 9182 Art. 20.3.7)

Storage tank dimensions

(UNI 9182 Art. 9.3.1) The dimensions have to be considered based on: the total amount of water during the peak period, the duration of the pre-heating period, the temperature of the cold water, the distributed hot water and the stored hot water.

Separate generators

The central production of thermal energy for the air conditioning of places and the production of hot water for hygienic and domestic use by various users have to be executed by separate heat exchangers (DPR 412/93 Art. 5.6)

Floor-grounded

Electrical devices have to be floor-grounded and have to be equipped with differential circuit breakers or an equivalent protective system (L. 46/90 Art. 7.2)

Anti-legionella protection

To eliminate the presence of the legionella bacterium the World Health Organization has suggested as follows (WHO Bulletin OMS, vol.681990)

- heat the water with a storage temperature of 60°C
- ensure that the water never reaches a temperature below 50°C.

Antifreeze protection

Because frozen water has a greater volume, the internal pressure in the closed storage tanks would cause damage and ruptures. In order to prevent this possibility the device has to be produced and managed in such a way that the temperature never hits below 0°C.

Recirculation

In case of central distribution, a recirculation system has to be provided. In this way the water is continuously in movement and the consequences of heat loss in case of stagnation are prevented.

Distribution temperature

The heat exchangers for the central production of hot water for hygienic and domestic use by various users in a residential setting have to be designed and managed in a way to ensure that the water temperature, measured at the entry point of the distribution system, does not go above 48°C, with a 5°C tolerance. (DPR 412/93 Art. 5.7)

Storage temperature

(UNI 9182 - appendix L) Even though the norms recommend storage temperatures of up to 65°C, we advise not to exceed 60°C in order to save energy, prevent chalk formation and reduce electrochemical corrosion. In order to not exceed the desired temperature, the boiler has to have the right dimensions. Moreover, (appendix U) it is forbidden to send water with a temperature over 60°C through galvanized steel tubes.

Energy label

All our products for heating and DHW production are in accordance with the requirements for the reduction of energy consumptions (Ecodesign, 2009/125/CE).

These requirements help the European Union reach its objectives determined in the 20-20-20 plan. This plan aims to lower the CO₂ emissions by 20%, to increase the use of renewable energy by 20% and to increase the energy efficiency by 20% by 2020.

Our products are supplied (as prescribed) with an energy label and a technical chart which highlight the energy performance and efficiency class in a clear and transparent way.

Thanks to this label the consumer and the professional can look for the solution with the best performance and adapted to their own needs.

The products and systems which are supplied with an energy label are:

- generators for heating and DHW production with power of up to 70kW
- water heaters and hot water storage tanks with a temperature above 50°C.

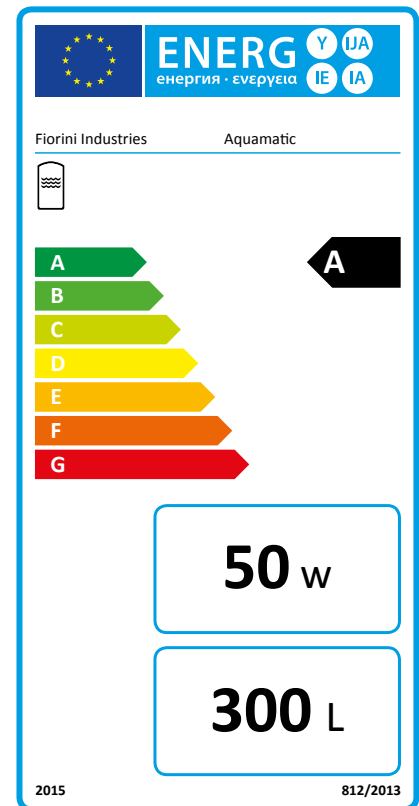
However, products which do not have to be supplied with an energy label, are also designed and produced following numerous criteria to meet the efficiency requirements and to save energy.

Product and system label

The 'product' energy label indicates the performance of the products in terms of consumption, while the 'system' energy label indicates the efficiency specifications of the heating or conditioning system. The energy classes are expressed on a scale from A to G and have to be supplied with every single product. The manufacturer has to make sure that the label is clearly visible.

The energy label on our products carry the following information:

- I. name and trademark of the company
- II. model identification
- III. reference to the heating or DHW production function
- IV. efficiency class
- V. nominal thermal power of the device and/or dispersion (based on the kind of product)
- VI. sound power in dB
- VII. Functioning during the hours when the device is not activated.



Notes

Domestic hot water

Contents

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Inertial tanks for Domestic Hot Water

FLEXY

The FLEXY gamma consists of inertial tanks for domestic hot water with several capacities, from 200 up to 1000 liters. They are equipped with very powerful rigid or flexible insulation, externally covered with PVC and provided with a magnesium anode for protection against galvanic currents and an inspection flange which makes access for control or maintenance easy. The tanks up to 500 litres are equipped with adjustable feet (easier to place and more stable).

Features

✓ **Material:** ST 235 JR carbon steel

✓ **Treatment for internal protection**

Inorganic glass lining in accordance with DIN 4753.3

✓ **Insulation**

200 to 300 litres: high-density rigid polyurethane with a thickness of 75 mm

500 to 1000 litres: flexible polyurethane with a thickness of 100 mm, removable (easier installation in a smaller space)

✓ **Optional accessories (on request)**

Thermometer, thermostat, impressed current electronic anode, electrical resistance, external plate heat exchanger kit.

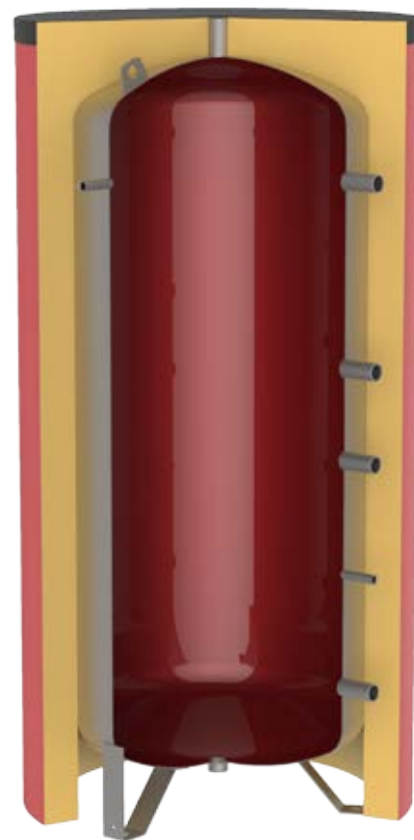
✓ **Supplied accessories**

Adjustable feet for tanks up to 500l

Safety valve

Thermometer

N1 magnesium sacrificial anode for tanks up to 300l and N2 anode for larger tanks

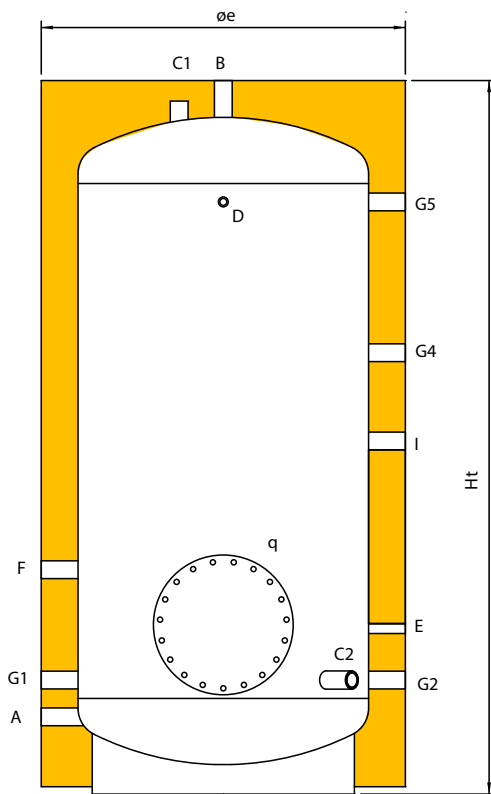


| capacity l | code | price | energy label | packed | |
|---------------|-------------|------------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 200 | 817060015X* | € 805,00 | C | 75x75x125 | 90,5 |
| 300 | 817060016X* | € 921,00 | C | 75x75x150 | 100,5 |
| 500 | 817060017X* | € 1.630,00 | D | 80x80x209 | 134,292 |
| 800 | 817060018X* | € 2.613,00 | | 105x105x214 | 260,792 |
| 1000 | 817060019X* | € 3.071,00 | | 105x105x245 | 296,264 |
| 1500 | 817060020X* | € 4.204,00 | | 115x115x283 | 411,784 |

| max. temperature | max. pressure |
|------------------|---------------|
| 95°C | 10 bar |

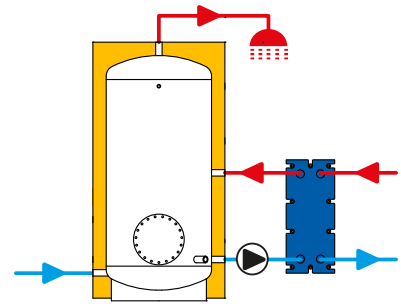
*can be coupled with the Boil custom (pag 142)

Inertial tanks for Domestic Hot Water FLEXY



Legend couplings

| | |
|-----------|-----------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C1 | anode |
| C2 | anode |
| D | thermometer |
| E | thermostat |
| F | recirculation |
| G1 | auxiliary |
| G2 | auxiliary |
| G4 | auxiliary |
| G5 | auxiliary |
| I | electrical resistor |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C1 inch | C2 inch | D inch | E inch | F inch | G1 inch | G2 inch | G4 inch | G5 inch | I inch | q mm |
|---------------|-----------|-----------|------------|------------|-----------|-----------|-----------|------------|------------|------------|------------|-----------|-----------|
| 200 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | Ø 220/300 |
| 300 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | Ø 220/300 |
| 500 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | Ø 220/300 |
| 800 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | Ø 300/380 |
| 1000 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | Ø 300/380 |

Height chart

| capacity l | øe mm | Ht mm | R* mm | A mm | C2 mm | D mm | E mm | F mm | G1 mm | G2 mm | G3 mm | G4 mm | G5 mm | q mm |
|---------------|----------|----------|----------|---------|----------|---------|---------|---------|----------|----------|----------|----------|----------|---------|
| 200 | 700 | 1100 | 1304 | 130 | - | 884 | 320 | 420 | 220 | 130 | 540 | 660 | 970 | 330 |
| 300 | 700 | 1340 | 1512 | 130 | - | 1120 | 320 | 420 | 220 | 840 | 540 | 660 | 1060 | 330 |
| 500 | 800 | 1940 | 2099 | 150 | 250 | 1640 | 380 | 480 | 250 | 250 | 945 | 1090 | 1640 | 360 |
| 800 | 990 | 1990 | 2223 | 210 | 310 | 1610 | 460 | 610 | 310 | 310 | 960 | 1150 | 1610 | 460 |
| 1000 | 990 | 2300 | 2505 | 210 | 310 | 1910 | 460 | 610 | 310 | 310 | 915 | 1150 | 1910 | 460 |

R*: reversal quota

Inertial tanks for Domestic Hot Water

FLEXY BLUE

The FLEXY BLUE gamma consists of inertial tanks for domestic hot water, available in various capacities, from 500l up to 10000l. They are equipped with very powerful flexible insulation, externally covered in PVC, provided with a magnesium anode for protection against galvanic currents and an inspection flange, which makes access for control or maintenance easier.

Features

✓ Special versions

The FLEXY BLUE tanks can be manufactured with special features on demand: customized dimensions, flange couplings, customized couplings, thicker insulation, thick aluminium coating, etc.

✓ Material: ST 235 JR carbon steel

✓ Treatment for internal protection

Bluetech enamelling with thermosetting resins suitable for use with drinking or food grade water

✓ Insulation

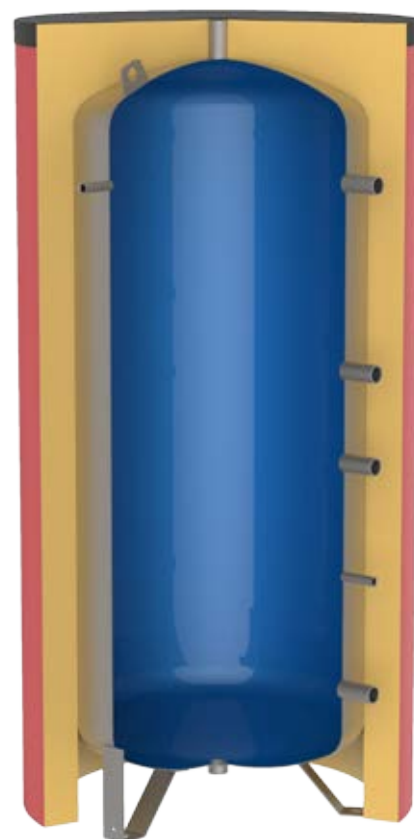
All tanks are insulated with flexible polyurethane with a thickness of 100mm. The insulation can be removed, which makes it possible to install the tanks in small spaces.

✓ Optional accessories

Thermometer, thermostat, impressed current electronic anode, electrical resistance, external plate heat exchanger kit.

✓ Supplied accessories

Magnesium sacrificial anode



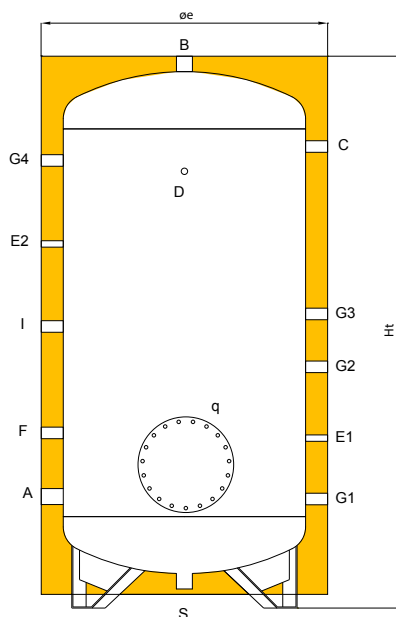
| max. temperature | max. pressure |
|------------------|---------------|
| 80°C | 6 bar |

| cap. l | with inspection hole | | | | packed | | without inspection hole | | | packed | |
|--------|----------------------|-------------|--------------|---------------|-----------|------------|-------------------------|--------------|---------------|-----------|--|
| | code | price | energy label | dimensions cm | weight kg | code | price | energy label | dimensions cm | weight kg | |
| 500 | 817080109X* | € 1.430,00 | D | 88x88x192,5 | 103,55 | 817080095X | € 1.178,00 | D | 88x88x192,5 | 98,05 | |
| 800 | 817080110X* | € 1.827,00 | | 102x102x221 | 158,71 | 817080096X | € 1.545,00 | | 102x102x221 | 148,21 | |
| 1000 | 817080111X* | € 2.041,00 | | 107x107x224 | 180,43 | 817080097X | € 1.768,00 | | 107x107x224 | 170,03 | |
| 1500 | 817080112X* | € 2.391,00 | | 123x123x237,5 | 229,06 | 817080098X | € 2.112,00 | | 123x123x237,5 | 218,76 | |
| 2000 | 817080099X* | € 3.085,00 | | 132x132x269,5 | 280,20 | 817080115X | € 2.739,00 | | 132x132x269,5 | 270,1 | |
| 2500 | 817080100X* | € 3.593,00 | | 147x147x277,5 | 316,89 | 817080116X | € 3.238,00 | | 147x147x277,5 | 306,79 | |
| 3000 | 817080101X* | € 4.114,00 | | 147x147x299 | 349,99 | 817080117X | € 3.721,00 | | 147x147x299 | 339,99 | |
| 4000 | 817080102X* | € 5.059,00 | | 163x163x306 | 508,02 | 817080118X | € 4.657,00 | | 163x163x306 | 498,02 | |
| 5000 | 817080103X* | € 5.657,00 | | 183x183x310 | 597,72 | 817080119X | € 5.356,00 | | 183x183x310 | 587,72 | |
| 6000 | 817080120X* | € 8.055,00 | | 282x203x217,5 | 746,56 | - | | | | | |
| 8000 | 817080121X* | € 9.672,00 | | 352x203x217,5 | 882,40 | - | | | | | |
| 10000 | 817080122X* | € 11.226,00 | | 427x203x217,5 | 1032,34 | - | | | | | |

*can be coupled with the Boil custom (pag 142)

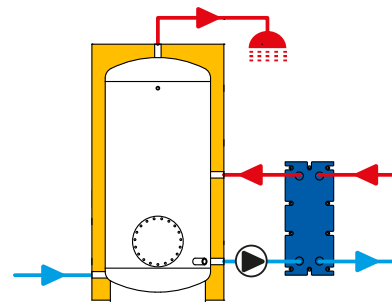
Inertial tanks for Domestic Hot Water

FLEXY BLUE



Legend couplings

| | |
|----|-----------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E1 | thermostat |
| E2 | thermostat |
| F | recirculation |
| G1 | auxiliary |
| G2 | auxiliary |
| G3 | auxiliary |
| G4 | auxiliary |
| I | electrical resistor |
| S | discharge |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C inch | D inch | E1 inch | E2 inch | F inch | G1 inch | G2 inch | G3 inch | G4 inch | I inch | S inch | q mm |
|---------------|-----------|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|-----------|-----------|-----------|
| 500 | 1 1/4 | 1 1/4 | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 220/300 |
| 800 | 1 1/2 | 1 1/2 | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 300/380 |
| 1000 | 1 1/2 | 1 1/2 | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 300/380 |
| 1500 | 2" | 2" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 300/380 |
| 2000 | 2" | 2" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 350/430 |
| 2500 | 2 1/2 | 2 1/2 | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 350/430 |
| 3000 | 3" | 3" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 350/430 |
| 4000 | 3" | 3" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 350/430 |
| 5000 | 3" | 3" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1 1/2 | 1 1/4 | Ø 350/430 |
| 6000 | 3" | 3" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 2" | Ø 400/480 |
| 8000 | 3" | 3" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 2" | Ø 400/480 |
| 10000 | 3" | 3" | 1 1/4 | 1/2" | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 2" | Ø 400/480 |

| capacity l | Øe mm | Ht mm | R* mm | A mm | C mm | D mm | E1 mm | E2 mm | F mm | G1 mm | G2 mm | G3 mm | G4 mm | I mm | q mm |
|---------------|----------|----------|----------|---------|---------|---------|----------|----------|---------|----------|----------|----------|----------|---------|---------|
| 500 | 850 | 1805 | 1996 | 375 | 1445 | 1445 | 675 | 1145 | 675 | 375 | 975 | 1215 | - | 845 | 445 |
| 800 | 950 | 2090 | 2296 | 390 | 1720 | 1720 | 710 | 1420 | 710 | 390 | 1010 | 1230 | - | 1160 | 500 |
| 1000 | 1050 | 2120 | 2366 | 400 | 1720 | 1720 | 700 | 1420 | 755 | 400 | 1000 | 1240 | - | 1140 | 510 |
| 1500 | 1200 | 2255 | 2555 | 500 | 1810 | 1810 | 805 | 1515 | 805 | 500 | 1100 | 1340 | - | 1230 | 600 |
| 2000 | 1300 | 2575 | 2885 | 505 | 2115 | 2115 | 805 | 1805 | 805 | 505 | 1105 | 1345 | - | 1505 | 620 |
| 2500 | 1400 | 2655 | 3002 | 565 | 2150 | 2150 | 865 | 1850 | 850 | 565 | 1165 | 1405 | - | 1550 | 680 |
| 3000 | 1450 | 2870 | 3216 | 575 | 2350 | 2350 | 800 | 2050 | 850 | 575 | 1050 | 1415 | - | 1750 | 690 |
| 4000 | 1600 | 2940 | 3348 | 600 | 2380 | 2380 | 900 | 2080 | 870 | 600 | 1200 | 1440 | - | 1780 | 715 |
| 5000 | 1800 | 2980 | 3482 | 610 | 2385 | 2385 | 910 | 2085 | 885 | 610 | 1210 | 1450 | - | 1785 | 725 |
| 6000 | 2000 | 2820 | 3458 | 630 | 2230 | 2230 | 930 | 1470 | 880 | 630 | 1470 | 1930 | 2080 | 1230 | 770 |
| 8000 | 2000 | 3520 | 4049 | 630 | 2830 | 2830 | 930 | 1610 | 830 | 630 | 1470 | 2130 | 2680 | 1180 | 770 |
| 10000 | 2000 | 4270 | 4716 | 630 | 3580 | 3580 | 930 | 1610 | 830 | 630 | 1470 | 2880 | 3430 | 1180 | 770 |

R*: reversal quota

Inertial tanks for Domestic Hot Water

FLEXY INOX

The FLEXY INOX gamma consists of inertial tanks for domestic hot water in stainless steel which is highly resistant against corrosion. The tanks are available in several capacities from 200 to 5000 litres. They are equipped with very powerful flexible insulation, externally covered in PVC and provided with a magnesium anode for protection against galvanic currents and an inspection flange for easy access during the control or maintenance phase.

Features

✓ Special versions

The FLEXY INOX tanks can be manufactured with special features on demand: customized dimensions, flange couplings, customized couplings, thicker insulation, thick aluminium coating, etc.

✓ **Material:** AISI 316 stainless steel

✓ **Treatment for internal protection:** Pickling and passivation

✓ Insulation

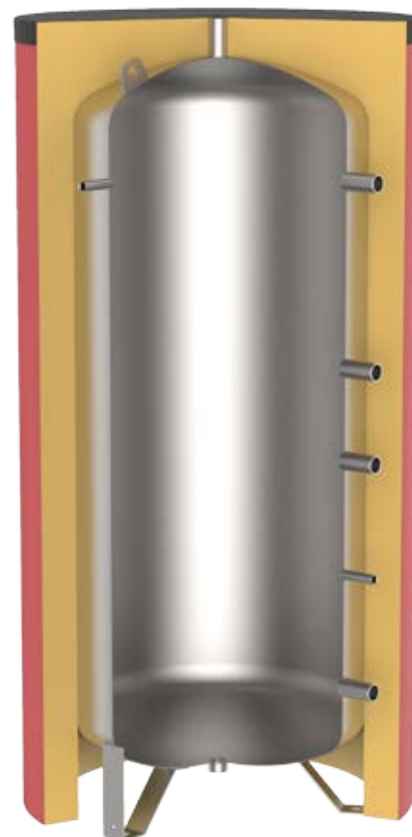
All tanks are insulated with flexible polyurethane with a thickness of 100 mm. The insulation can be removed, which makes the installation in small spaces easier.

✓ Optional accessories

Thermometer, thermostat, impressed current electronic anode, electrical resistance, external plate heat exchanger kit.

✓ Supplied accessories

Magnesium sacrificial anode



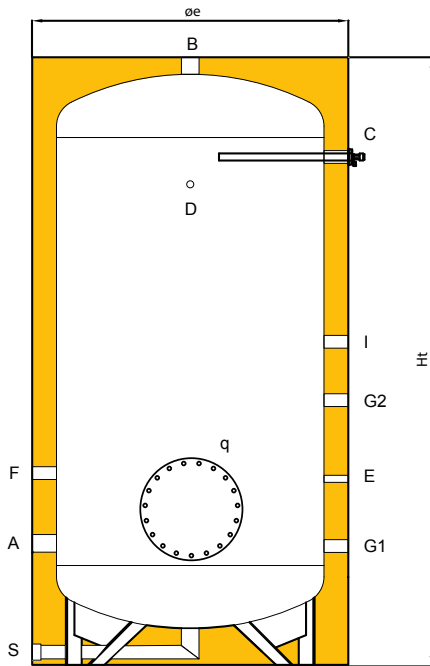
| max. temperature | max. pressure |
|------------------|---------------|
| 95°C | 6 bar |

| cap. l | with inspection hole | | | packed | without inspection hole | | | packed |
|-----------|----------------------|-------------|--------------|---------------|-------------------------|-------------|--------------|---------------|
| | code | price | energy label | dimensions cm | code | price | energy label | dimensions cm |
| 200 | 817040107X | € 2.032,00 | C | 68x68x159 | 817040025 | € 1.553,00 | C | 68x68x159 |
| 300 | 817040108X | € 2.352,00 | C | 78x78x163 | 817040026 | € 1.835,00 | C | 78x78x163 |
| 500 | 817040109X | € 2.847,00 | D | 83x83x207 | 817040027 | € 2.356,00 | D | 83x83x207 |
| 800 | 817040110X | € 3.514,00 | | 102x102x204 | 817040028 | € 2.945,00 | | 102x102x204 |
| 1000 | 817040111X | € 3.994,00 | | 103x103x231 | 817040029 | € 3.471,00 | | 103x103x231 |
| 1500 | 817040112X | € 5.924,00 | | 123x123x232 | 817040030 | € 5.246,00 | | 123x123x232 |
| 2000 | 817040113X | € 8.030,00 | | 143x143x240 | 817040031 | € 7.246,00 | | 143x143x240 |
| 2500 | 817040114X | € 8.549,00 | | 143x143x265 | 817040032 | € 7.745,00 | | 143x143x265 |
| 3000 | 817040115X | € 9.961,00 | | 148x148x292 | 817040033 | € 9.118,00 | | 148x148x292 |
| 4000 | 817040116X | € 14.235,00 | | 163x163x300 | 817040034 | € 12.585,00 | | 163x163x300 |
| 5000 | 817040117X | € 16.552,00 | | 183x183x303 | 817040035 | € 15.163,00 | | 183x183x303 |

*can be coupled with the Boil custom (pag 142)

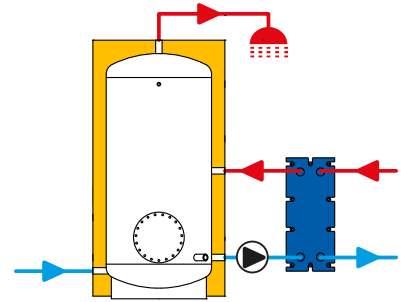
Inertial tanks for Domestic Hot Water

FLEXY INOX



Legend couplings

| | |
|-----------|-----------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E | thermostat |
| F | recirculation |
| G1 | auxiliary |
| G2 | auxiliary |
| I | electrical resistor |
| S | discharge |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C inch | D inch | E inch | F inch | G1 inch | G2 inch | I inch | S inch | q mm |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|-----------|
| 200 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1" | 1 1/4" | 1 1/4" | 1 1/2" | 1" | Ø 220/300 |
| 300 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1" | 1 1/4" | 1 1/4" | 1 1/2" | 1" | Ø 220/300 |
| 500 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1" | 1 1/4" | 1 1/4" | 1 1/2" | 1" | Ø 220/300 |
| 800 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 1 1/4" | Ø 300/380 |
| 1000 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 1 1/4" | Ø 300/380 |
| 1500 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 1 1/2" | Ø 300/380 |
| 2000 | 2" | 2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | Ø 350/430 |
| 2500 | 2" | 2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | Ø 350/430 |
| 3000 | 2" | 2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | Ø 350/430 |
| 4000 | 2 1/2" | 2 1/2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2 1/2" | Ø 350/430 |
| 5000 | 2 1/2" | 2 1/2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2 1/2" | Ø 350/430 |

Height chart

| capacity l | Øe mm | Ht mm | R' mm | A mm | C mm | D mm | E mm | F mm | G1 mm | G2 mm | I mm | q mm |
|---------------|----------|----------|----------|---------|---------|---------|---------|---------|----------|----------|---------|---------|
| 200 | 650 | 1470 | 1608 | 275 | 1195 | 1195 | 275 | 725 | 275 | 1115 | 915 | 375 |
| 300 | 750 | 1510 | 1687 | 295 | 1215 | 1215 | 295 | 745 | 295 | 1135 | 965 | 395 |
| 500 | 800 | 1950 | 2108 | 270 | 1690 | 1690 | 270 | 970 | 270 | 1110 | 1410 | 370 |
| 800 | 990 | 1920 | 2161 | 395 | 1550 | 1550 | 395 | 970 | 395 | 1235 | 1385 | 535 |
| 1000 | 1000 | 2190 | 2408 | 405 | 1805 | 1805 | 405 | 1105 | 405 | 1245 | 1445 | 545 |
| 1500 | 1200 | 2200 | 2506 | 425 | 1815 | 1815 | 425 | 1115 | 425 | 1265 | 1455 | 555 |
| 2000 | 1400 | 2280 | 2676 | 460 | 1850 | 1850 | 460 | 1150 | 460 | 1300 | 1490 | 615 |
| 2500 | 1400 | 2530 | 2892 | 460 | 2100 | 2100 | 460 | 1275 | 460 | 1300 | 1600 | 615 |
| 3000 | 1450 | 2800 | 3154 | 475 | 2365 | 2365 | 475 | 1415 | 475 | 1315 | 1645 | 630 |
| 4000 | 1600 | 2880 | 3295 | 530 | 2400 | 2400 | 530 | 1450 | 530 | 1370 | 1680 | 665 |
| 5000 | 1800 | 2910 | 3422 | 530 | 2400 | 2400 | 530 | 1450 | 530 | 1370 | 1680 | 665 |

R': reversal quota

Glass lined water heater with fixed internal heat exchanger – SMART 1

The Smart 1 gamma consists of water heaters for the production of domestic hot water with a single fixed heat exchanger, available in several capacities, from 200 to 3000 litres. They are equipped with very thick high-density rigid polyurethane insulation, external metal-coloured PVC coating, a magnesium anode for protection against galvanic currents and an inspection flange to make access in the control and maintenance phase easier. The tanks up to 500 litres are supplied with a safety valve and adjustable feet (easier to place and more stable).

Features

✓ **Material:** ST 235 JR carbon steel

✓ **Treatment for internal protection:**

The boilers up to 1000l are treated with food grade inorganic glass lining in accordance with DIN 4753.3. The tanks with a capacity between 1500 and 3000 litres are varnished with Bluetech.

✓ **Insulation:**

The boilers with a capacity between 200 and 1000 litres are insulated with high-density rigid polyurethane with a thickness of 75 mm

The boilers with a capacity between 1500 and 3000 litres are insulated with high-density soft polyurethane with a thickness of 100mm

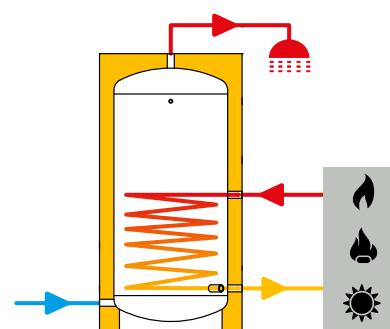
✓ **Optional accessories:**

Thermometer, thermostat, impressed current electronic anode, electrical resistance.

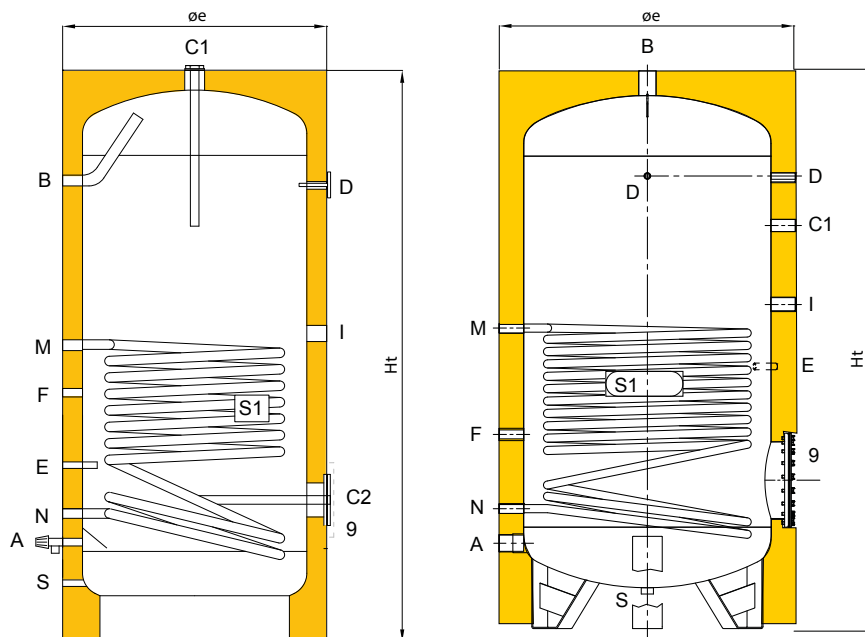


| | Storage | | Primary circuit | |
|---------------|------------------|---------------|------------------|---------------|
| | temperature max. | pressure max. | temperature max. | pressure max. |
| V≤1000 l | 95°C | 10 bar | 110°C | 12 bar |
| 1500≤V≤5000 l | 80°C | 6 bar | 110°C | 12 bar |

| capacity l | code | price | energy label | packed | |
|------------|------------|------------|--------------|---------------|-----------|
| | | | | dimensions cm | weight kg |
| 200 | 819060107X | € 840,00 | C | 75x75x120 | 99 |
| 300 | 819060108X | € 1.024,00 | C | 75x75x168 | 115 |
| 400 | 819060109X | € 1.260,00 | D | 75x75x180 | 147 |
| 500 | 819060110X | € 1.352,00 | D | 75x75x204 | 168 |
| 750 | 819060111X | € 1.962,00 | | 97x97x229 | 249 |
| 1000 | 819060112X | € 2.494,00 | | 115x115x215 | 347 |
| 1500 | 819080001X | € 3.186,00 | | 123x123x237,5 | 255 |
| 2000 | 819080002X | € 3.860,00 | | 132x132x269,5 | 325 |
| 3000 | 819080005X | € 5.017,00 | | 147x147x299 | 411 |



Glass lined water heater with fixed internal heat exchanger – SMART 1



Legend couplings

| | |
|---|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E | probe |
| F | recirculation |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| S | discharge |
| q | inspection hole |

Coupling chart

| capacity l | A inch | B inch | C1 inch | C2 | D mm | E mm | F inch | I inch | M inch | N inch | S inch | q mm |
|---------------|-----------|-----------|------------|----|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| 200 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 mm | 3/4" | 1 1/2" | 1" | 1" | 1" | Ø 115/180 |
| 300 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 mm | 3/4" | 1 1/2" | 1" | 1" | 1" | Ø 115/180 |
| 400 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 mm | 3/4" | 1 1/2" | 1" | 1" | 1" | Ø 115/180 |
| 500 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 mm | 3/4" | 1 1/2" | 1" | 1" | 1" | Ø 115/180 |
| 750 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 mm | 3/4" | 1 1/2" | 1" | 1" | 1" | Ø 115/180 |
| 1000 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 mm | 3/4" | 1 1/2" | 1" | 1" | 1" | Ø 115/180 |
| 1500 | 2" | 2" | 1 1/4" | - | 1/2" | 1/2" | 1 1/4" | 1 1/2" | 1" | 1" | 1 1/4" | Ø 300/380 |
| 2000 | 2" | 2" | 1 1/4" | - | 1/2" | 1/2" | 1 1/4" | 1 1/2" | 1" | 1" | 1 1/4" | Ø 300/380 |
| 3000 | 3" | 3" | 1 1/4" | - | 1/2" | 1/2" | 1 1/4" | 1 1/2" | 1" | 1" | 1 1/4" | Ø 300/380 |

Height chart

| capacity l | Øe mm | Ht mm | R* mm | A mm | B mm | E mm | F mm | M mm | N mm |
|---------------|----------|----------|----------|---------|---------|---------|---------|---------|---------|
| 200 | 670 | 1100 | 1288 | 210 | 860 | 435 | 680 | 790 | 290 |
| 300 | 670 | 1360 | 1517 | 210 | 1135 | 435 | 650 | 750 | 290 |
| 400 | 700 | 1660 | 1802 | 240 | 1420 | 570 | 770 | 870 | 320 |
| 500 | 700 | 1890 | 2016 | 240 | 1650 | 530 | 850 | 970 | 320 |
| 750 | 855 | 2050 | 2222 | 350 | 1770 | 650 | 910 | 1030 | 430 |
| 1000 | 1055 | 1960 | 2226 | 370 | 1590 | 600 | 750 | 1000 | 450 |
| 1500 | 1200 | 2255 | 2555 | 345 | 2255 | 1060 | 785 | 1215 | 485 |
| 2000 | 1300 | 2575 | 2885 | 345 | 2575 | 1165 | 815 | 1325 | 490 |
| 3000 | 1450 | 2870 | 3216 | 400 | 2870 | 1375 | 875 | 1540 | 550 |

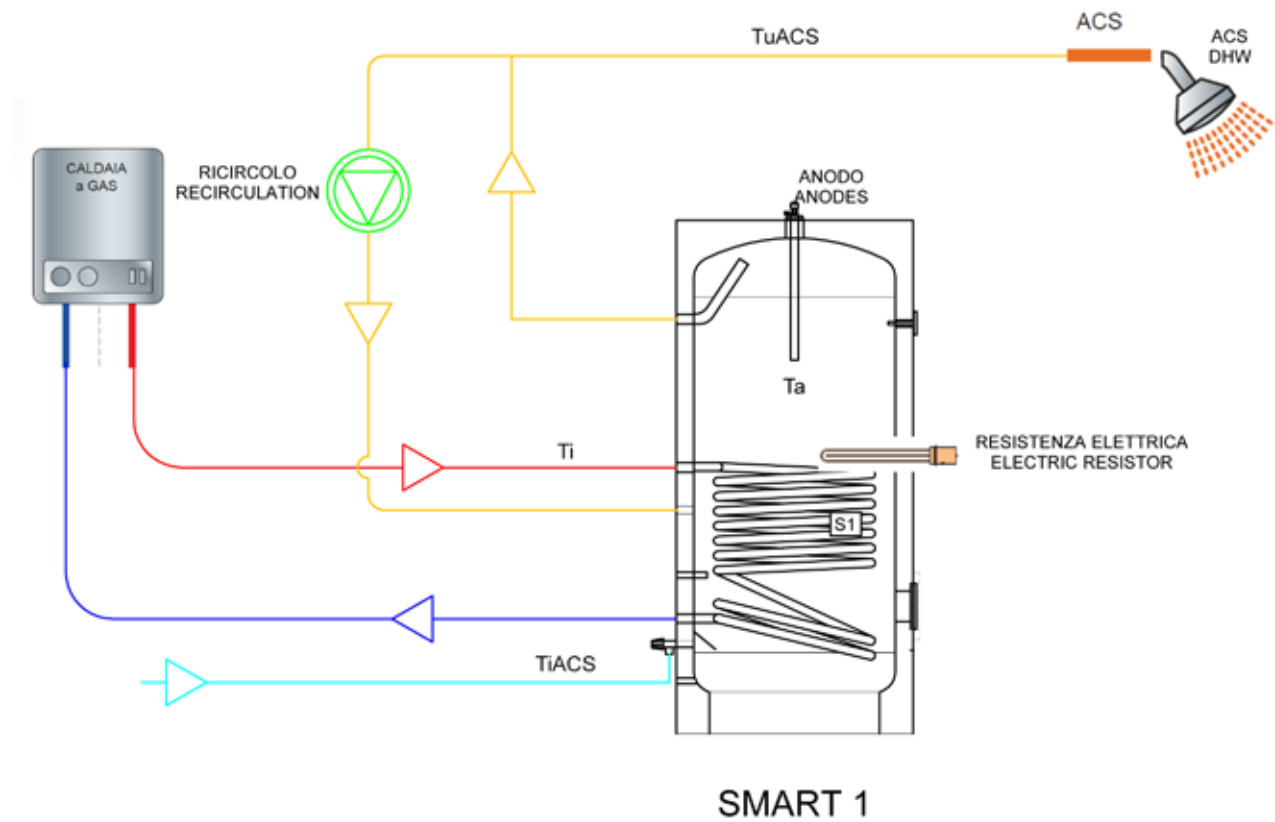
R*: reversal quote

Technical information for SMART 1 series

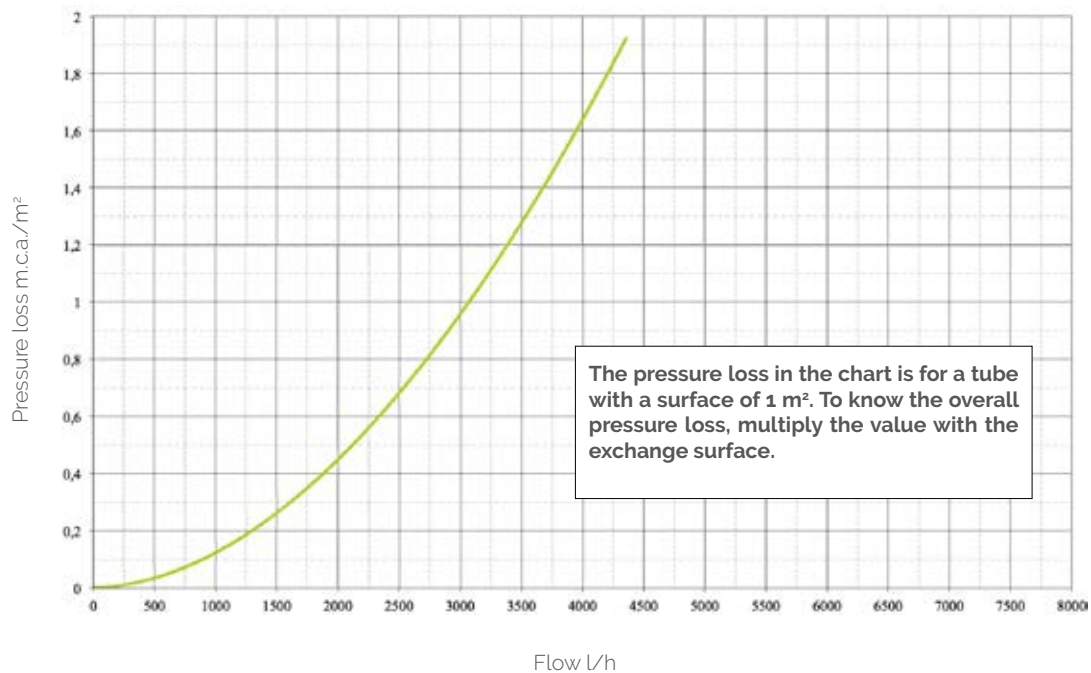
| capacity | Ti | DHW production TiACS = 10°C | | | | | | Exchanger | |
|----------|----|-----------------------------|-----------|--------------|-----------|---------------------------|---------------------------|--------------|--------------|
| | | TuACS= 45°C | | TuACS = 60°C | | Ta = 50°C TuACS = 45°C | Ta = 60°C TuACS = 45°C | Surface area | Nominal flow |
| | | L/h (a) | kW (b) | L/h (c) | kW (d) | L/10 min. (e) | L/10 min. (f) | | |
| l | °C | | | | | | m ² | mc/h | |
| 200 | 70 | 810 | 33 | 395 | 23 | 347 | 390 | 1.4 | 3 |
| | 80 | 1081 | 44 | 602 | 35 | 392 | 435 | | |
| | 90 | 1253 | 51 | 739 | 43 | 421 | 464 | | |
| 300 | 70 | 810 | 33 | 395 | 23 | 454 | 517 | 1.4 | 3 |
| | 80 | 1081 | 44 | 602 | 35 | 499 | 563 | | |
| | 90 | 1253 | 51 | 739 | 43 | 527 | 591 | | |
| 400 | 70 | 1056 | 43 | 516 | 30 | 601 | 686 | 1.8 | 3 |
| | 80 | 1400 | 57 | 774 | 45 | 658 | 743 | | |
| | 90 | 1646 | 67 | 963 | 56 | 699 | 784 | | |
| 500 | 70 | 1179 | 48 | 584 | 34 | 728 | 834 | 2 | 3 |
| | 80 | 1572 | 64 | 877 | 51 | 793 | 900 | | |
| | 90 | 1842 | 75 | 1083 | 63 | 838 | 945 | | |
| 750 | 70 | 1400 | 57 | 688 | 40 | 1031 | 1190 | 2.4 | 3 |
| | 80 | 1867 | 76 | 1032 | 60 | 1109 | 1268 | | |
| | 90 | 2186 | 89 | 1290 | 75 | 1162 | 1321 | | |
| 1000 | 70 | 1572 | 64 | 774 | 45 | 1325 | 1538 | 2.7 | 3 |
| | 80 | 2113 | 86 | 1169 | 68 | 1415 | 1628 | | |
| | 90 | 2481 | 101 | 1462 | 85 | 1477 | 1690 | | |
| 1500 | 70 | 2137 | 87 | 1049 | 61 | 1951 | 2271 | 3.7 | 4 |
| | 80 | 2874 | 117 | 1599 | 93 | 2074 | 2393 | | |
| | 90 | 3390 | 138 | 1995 | 116 | 2160 | 2479 | | |
| 2000 | 70 | 2506 | 102 | 1221 | 71 | 2545 | 2970 | 4.3 | 4 |
| | 80 | 3341 | 136 | 1840 | 107 | 2684 | 3110 | | |
| | 90 | 3931 | 160 | 2287 | 133 | 2782 | 3208 | | |
| 3000 | 70 | 3022 | 123 | 1479 | 86 | 3695 | 4333 | 5.2 | 4 |
| | 80 | 4029 | 164 | 2236 | 130 | 3862 | 4501 | | |
| | 90 | 4717 | 192 | 2786 | 162 | 3977 | 4615 | | |

- a continuous DHW flow with TuACS= 45°C
- b power of the exchanger with TuACS=45°C
- c continuous DHW flow with TuACS= 60°C
- d power of the exchanger with TuACS=60°C
- e amount of DHW at 45°C in the first 20 min. with a storage temperature of 50°C
- f amount of DHW at 45°C in the first 10 min. with a storage temperature of 60°C
- Exchanger capacity: 7.10 Lt/mq

Technical information for SMART 1 series



Pressure loss fixed heat exchanger



Glass lined water heater with fixed internal heat exchanger – SMART 2

The Smart 2 gamma consists of Water heaters for the production of domestic hot water with a double fixed heat exchanger, available in several capacities (from 200 up to 3000 litres). They are equipped with very thick high-density rigid polyurethane insulation, external metal-coloured PVC coating, a magnesium anode for protection against galvanic currents, an inspection flange for easy access during the control and maintenance phase. The tanks of up to 500 litres are supplied with a safety valve and adjustable feet (easier placement and more stability).

Features

✓ **Material:** ST 235 JR carbon steel

✓ **Treatment for internal protection:**

The boilers with a capacity of up to 1000 l are treated with food grade inorganic glass lining in accordance with DIN 4753.3, those with a capacity of 1500 to 3000 l with Bluetech.

✓ **Insulation:**

The boilers with a capacity of 200 to 1000 litres are insulated with high-density rigid polyurethane with a thickness of 75 mm

The boilers with a capacity of 1500 to 3000 litres are insulated with soft polyurethane with a thickness of 100 mm.

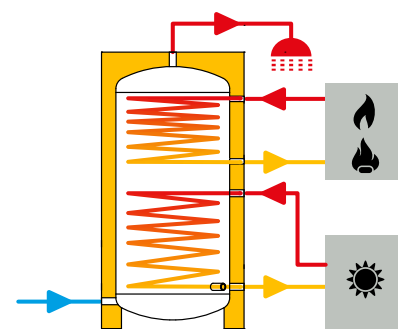
✓ **Optional accessories:**

Thermometer, thermostat, impressed current electronic anode, electrical resistance.

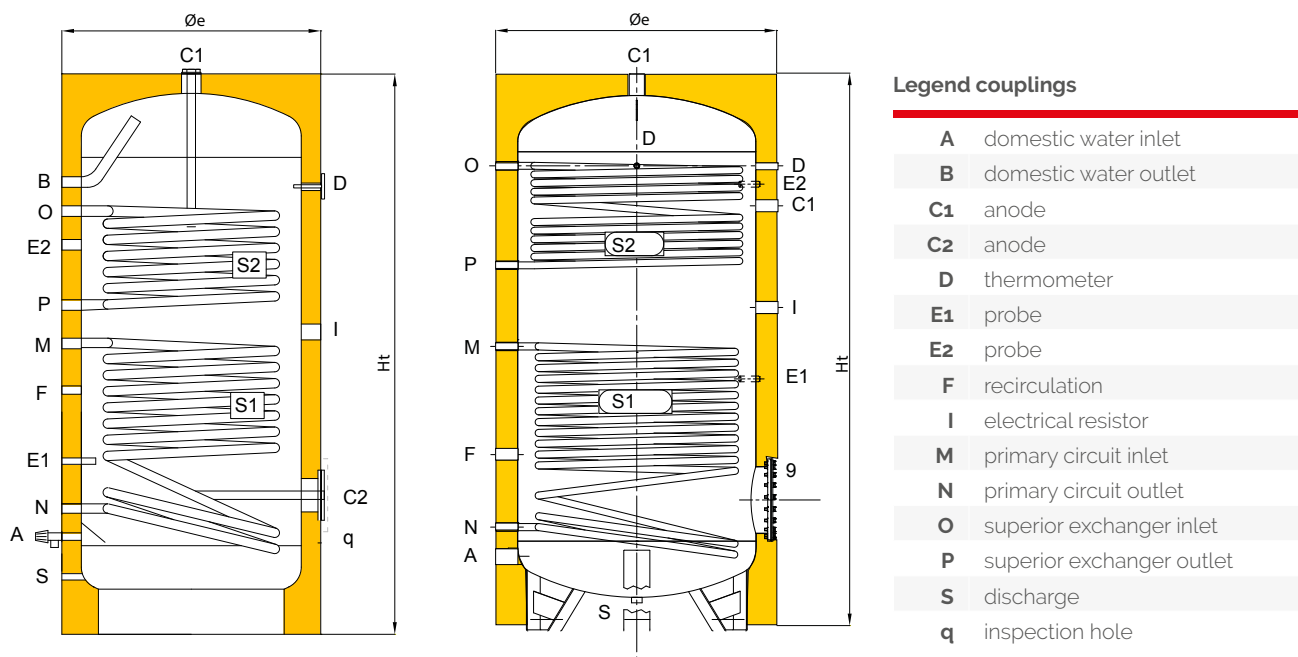


| | Storage | | Primary circuit | |
|---------------|------------------|---------------|------------------|---------------|
| | temperature max. | pressure max. | temperature max. | pressure max. |
| V≤1000 l | 95°C | 10 bar | 110°C | 12 bar |
| 1500≤V≤5000 l | 80°C | 6 bar | 110°C | 12 bar |

| capacity l | code | price | energy label | packed | |
|------------|------------|------------|--------------|---------------|-----------|
| | | | | dimensions cm | weight kg |
| 200 | 819060114X | € 885,00 | C | 75x75x120 | 972 |
| 300 | 819060115X | € 1.077,00 | C | 75x75x168 | 1155 |
| 400 | 819060116X | € 1.320,00 | D | 75x75x180 | 1365 |
| 500 | 819060117X | € 1.433,00 | D | 75x75x204 | 1497 |
| 750 | 819060118X | € 2.079,00 | | 97x97x229 | 2310 |
| 1000 | 819060119X | € 2.701,00 | | 115x115x215 | 2888 |
| 1500 | 819080003X | € 3.563,00 | | 123x123x237,5 | 281 |
| 2000 | 819080004X | € 4.273,00 | | 132x132x269,5 | 366 |
| 3000 | 819080006X | € 5.466,00 | | 147x147x299 | 454 |



Glass lined water heater with fixed internal heat exchanger – SMART 2



Coupling chart

| capacity l | A inch | B inch | C1 inch | C2 | D mm | E1 mm | E2 mm | F inch | I inch | M inch | N inch | O inch | P inch | S inch | q mm |
|---------------|-----------|-----------|------------|----|---------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 200 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 | Ø 16 | 3/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | Ø 115/180 |
| 300 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 | Ø 16 | 3/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | Ø 115/180 |
| 400 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 | Ø 16 | 3/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | Ø 115/180 |
| 500 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 | Ø 16 | 3/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | Ø 115/180 |
| 750 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 | Ø 16 | 3/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | Ø 115/180 |
| 1000 | 1" | 1" | 2" | M8 | 1/2" | Ø 16 | Ø 16 | 3/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | Ø 115/180 |
| 1500 | 2" | 2" | 1 1/4" | - | 1/2" | 1/2" | - | 1 1/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1 1/4" | Ø 300/380 |
| 2000 | 2" | 2" | 1 1/4" | - | 1/2" | 1/2" | - | 1 1/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1 1/4" | Ø 300/380 |
| 3000 | 3" | 3" | 1 1/4" | - | 1/2" | 1/2" | - | 1 1/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1 1/4" | Ø 300/380 |

Height chart

| capacity l | Øe mm | Ht mm | R' mm | A mm | B mm | E1 mm | E2 mm | F mm | M mm | N mm | O mm | P mm |
|---------------|----------|----------|----------|---------|---------|----------|----------|---------|---------|---------|---------|---------|
| 200 | 670 | 1140 | 1323 | 130 | 975 | 345 | 780 | 450 | 580 | 210 | 895 | 685 |
| 300 | 670 | 1450 | 1598 | 210 | 1260 | 440 | 1015 | 650 | 760 | 290 | 1190 | 845 |
| 400 | 700 | 1660 | 1802 | 240 | 1410 | 570 | 1150 | 650 | 870 | 320 | 1330 | 980 |
| 500 | 700 | 1890 | 2016 | 240 | 1650 | 530 | 1260 | 850 | 970 | 320 | 1440 | 1090 |
| 750 | 855 | 2050 | 2222 | 350 | 1770 | 650 | 1330 | 910 | 1030 | 430 | 1480 | 1180 |
| 1000 | 1055 | 1960 | 2226 | 370 | 1590 | 600 | 1250 | 750 | 1000 | 450 | 1400 | 1100 |
| 1500 | 1200 | 2255 | 2555 | 345 | 2255 | 1060 | 1740 | 785 | 1215 | 485 | 1830 | 1430 |
| 2000 | 1300 | 2575 | 2885 | 345 | 2575 | 1165 | 2065 | 815 | 1325 | 490 | 2150 | 1690 |
| 3000 | 1450 | 2870 | 3216 | 400 | 2870 | 1375 | 2225 | 875 | 1540 | 550 | 2410 | 1680 |

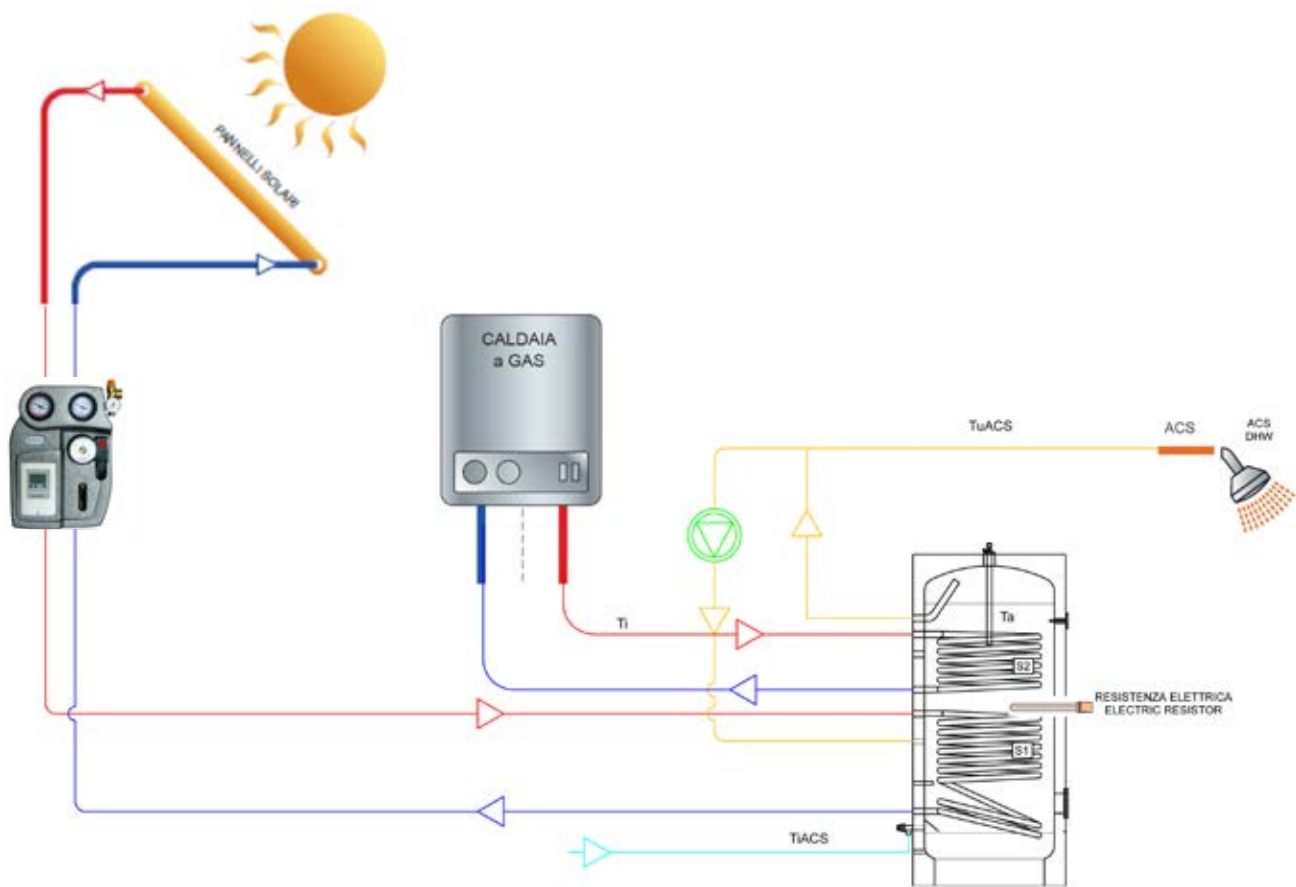
R': reversal quota

Technical information for SMART 2 series

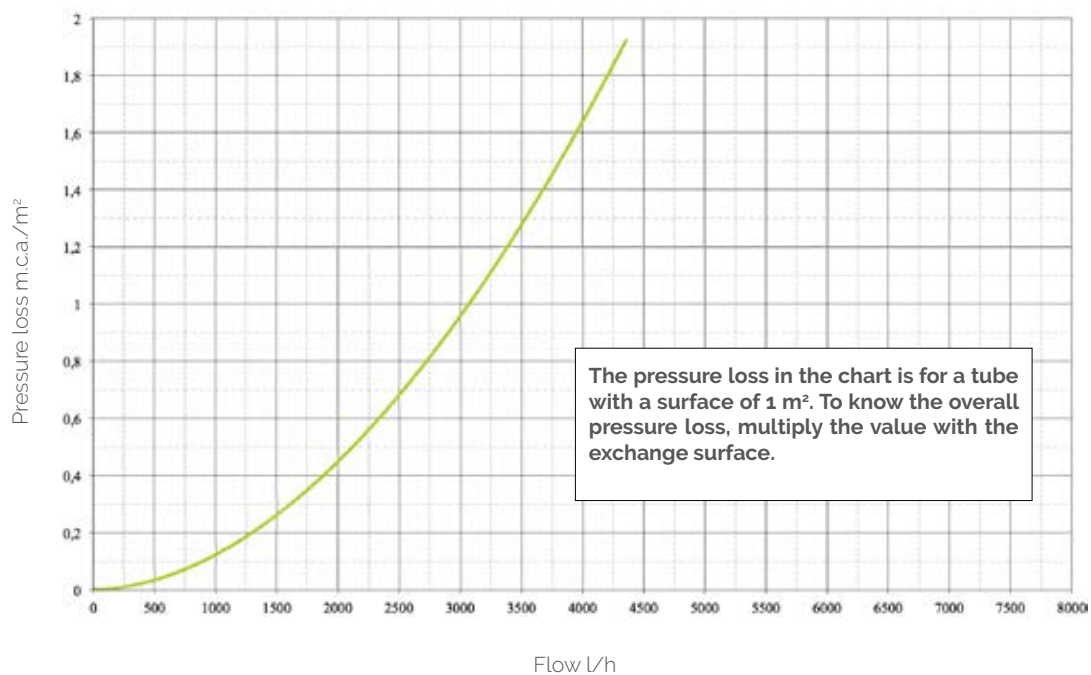
| Capacity | Ti | DHW production TiACS = 10°C | | | | | | Upper Exchanger | Lower Exchanger | Nominal flow |
|----------|----|-----------------------------|-----------|--------------|-----------|---------------------------|---------------------------|-----------------|-----------------|--------------|
| | | TuACS= 45°C | | TuACS = 60°C | | Ta = 50°C TuACS = 45°C | Ta = 60°C TuACS = 45°C | Surface area | Surface area | |
| | | L/h (a) | kW (b) | L/h (c) | kW (d) | L/10 min. (e) | L/10 min. (f) | m ² | m ² | |
| 200 | 70 | 417 | 17 | 206 | 12 | 282 | 324 | 0.7 | 1 | 3 |
| | 80 | 540 | 22 | 292 | 17 | 302 | 345 | | | |
| | 90 | 614 | 25 | 361 | 21 | 315 | 357 | | | |
| 300 | 70 | 638 | 26 | 309 | 18 | 425 | 489 | 1.1 | 1.4 | 3 |
| | 80 | 860 | 35 | 481 | 28 | 462 | 526 | | | |
| | 90 | 1007 | 41 | 584 | 34 | 486 | 550 | | | |
| 400 | 70 | 638 | 26 | 309 | 18 | 531 | 616 | 1.1 | 1.8 | 3 |
| | 80 | 860 | 35 | 481 | 28 | 568 | 653 | | | |
| | 90 | 1007 | 41 | 584 | 34 | 593 | 678 | | | |
| 500 | 70 | 638 | 26 | 309 | 18 | 638 | 744 | 1.1 | 2 | 3 |
| | 80 | 860 | 35 | 481 | 28 | 675 | 781 | | | |
| | 90 | 1007 | 41 | 584 | 34 | 699 | 806 | | | |
| 750 | 70 | 688 | 28 | 344 | 20 | 912 | 1072 | 1.2 | 2.4 | 3 |
| | 80 | 933 | 38 | 516 | 30 | 953 | 1112 | | | |
| | 90 | 1081 | 44 | 636 | 37 | 978 | 1137 | | | |
| 1000 | 70 | 884 | 36 | 430 | 25 | 1211 | 1423 | 1.5 | 2.7 | 3 |
| | 80 | 1179 | 48 | 653 | 38 | 1260 | 1473 | | | |
| | 90 | 1376 | 56 | 808 | 47 | 1293 | 1505 | | | |
| 1500 | 70 | 1326 | 54 | 653 | 38 | 1816 | 2135 | 3.7 | 2.3 | 6.0 |
| | 80 | 1793 | 73 | 980 | 57 | 1894 | 2213 | | | |
| | 90 | 2113 | 86 | 1238 | 72 | 1947 | 2267 | | | |
| 2000 | 70 | 1744 | 71 | 860 | 50 | 2418 | 2843 | 4.3 | 3.0 | 8.0 |
| | 80 | 2334 | 95 | 1290 | 75 | 2516 | 2942 | | | |
| | 90 | 2727 | 111 | 1599 | 93 | 2582 | 3007 | | | |
| 3000 | 70 | 2211 | 90 | 1083 | 63 | 3559 | 4198 | 5.2 | 3.8 | 8.0 |
| | 80 | 2948 | 120 | 1634 | 95 | 3682 | 4321 | | | |
| | 90 | 3440 | 140 | 2029 | 118 | 3764 | 4403 | | | |

- a continuous DHW flow with TuACS= 45°C
- b power of the exchanger with TuACS=45°C
- c continuous DHW flow with TuACS= 60°C
- d power of the exchanger with TuACS=60°C
- e amount of DHW at 45°C in the first 10 min. with a storage temperature of 50°C
- f amount of DHW at 45°C in the first 10 min. with a storage temperature of 60°C
- Exchanger capacity: 710 Lt/mq

Technical information for SMART 2 series



Pressure loss fixed heat exchanger



Glass lined water heater with a solar power station – SMART 2 SOLAR KIT

Water heater for the production of domestic hot water with a double fixed heat exchanger and a solar power station S2 SOLAR 30 - 25/6. The capacity is 300l. The water heater is equipped with very thick high-density rigid polyurethane insulation, external metal-coloured PVC coating, a magnesium anode for protection against galvanic currents, an inspection flange for easier access during the inspection and maintenance phase, a safety valve and adjustable feet (easier placement and more stability).

Features

✓ **Material:** ST 235 JR carbon steel

✓ **Treatment for internal protection:**

Food grade inorganic glass lining according to DIN 4753.3

✓ **Insulation:**

High-density rigid polyurethane with a thickness of 75 mm

✓ **Optional accessories:**

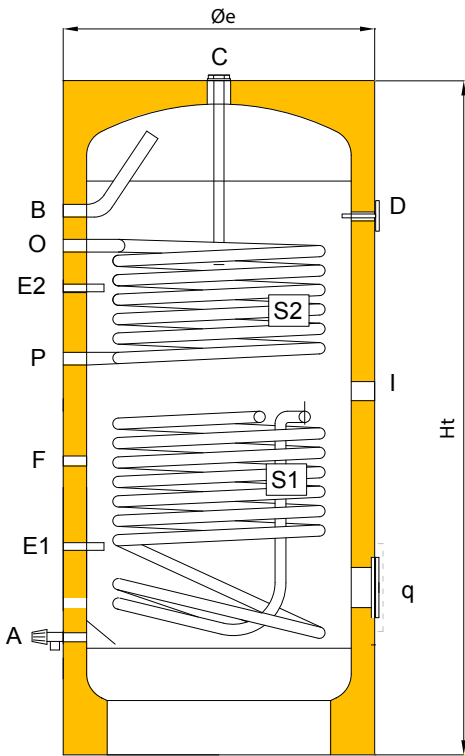
Thermometer, thermostat, impressed current electronic anode, electrical resistance.



| Storage | | Primary circuit | |
|------------------|---------------|------------------|---------------|
| max. temperature | max. pressure | max. temperature | max. pressure |
| 95°C | 10 bar | 110°C | 12 bar |

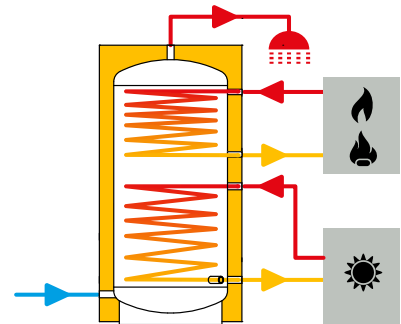
| capacity l | code | price | energy label |
|------------|------------|-----------|--------------|
| 300 | 838110066X | € 2200.00 | C |

Glass lined water heater with a solar power station – SMART 2 SOLAR KIT



Legend couplings

- A domestic water inlet
- B domestic water outlet
- C anode
- D thermometer
- E1 probe
- E2 probe
- F recirculation
- I electrical resistor
- M primary circuit inlet
- N primary circuit outlet
- O superior exchanger inlet
- P superior exchanger outlet
- S discharge
- q inspection hole



Coupling chart

| capacity l | A inch | B inch | C inch | D mm | E1 mm | E2 mm | F inch | I inch | M inch | N inch | O inch | P inch | S inch | q mm |
|---------------|-----------|-----------|-----------|---------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 300 | 1" | 1" | 2" | 1/2" | Ø 16 | Ø 16 | 3/4" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | Ø 115/180 |

Height chart

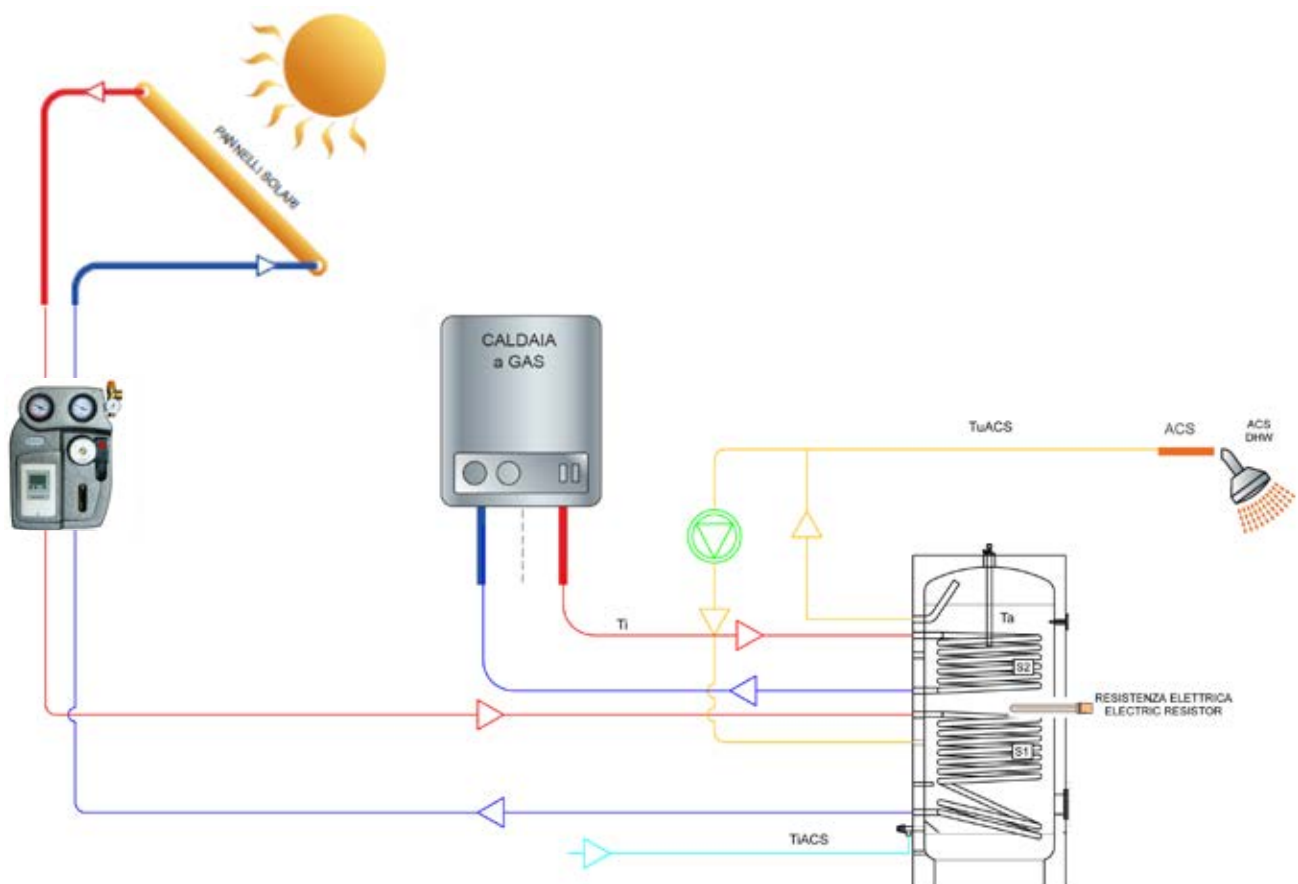
| capacity l | Øe mm | Ht mm | R* mm | A mm | B mm | D mm | E1 mm | E2 mm | F mm | M mm | N mm | O mm | P mm | q mm |
|---------------|----------|----------|----------|---------|---------|---------|----------|----------|---------|---------|---------|---------|---------|---------|
| 300 | 670 | 1360 | 1517 | 210 | 1250 | 950 | 385 | 1005 | 600 | 700 | 700 | 1175 | 1005 | 290 |

R*: reversal quota

Technical information for SMART 2 SOLAR KIT series

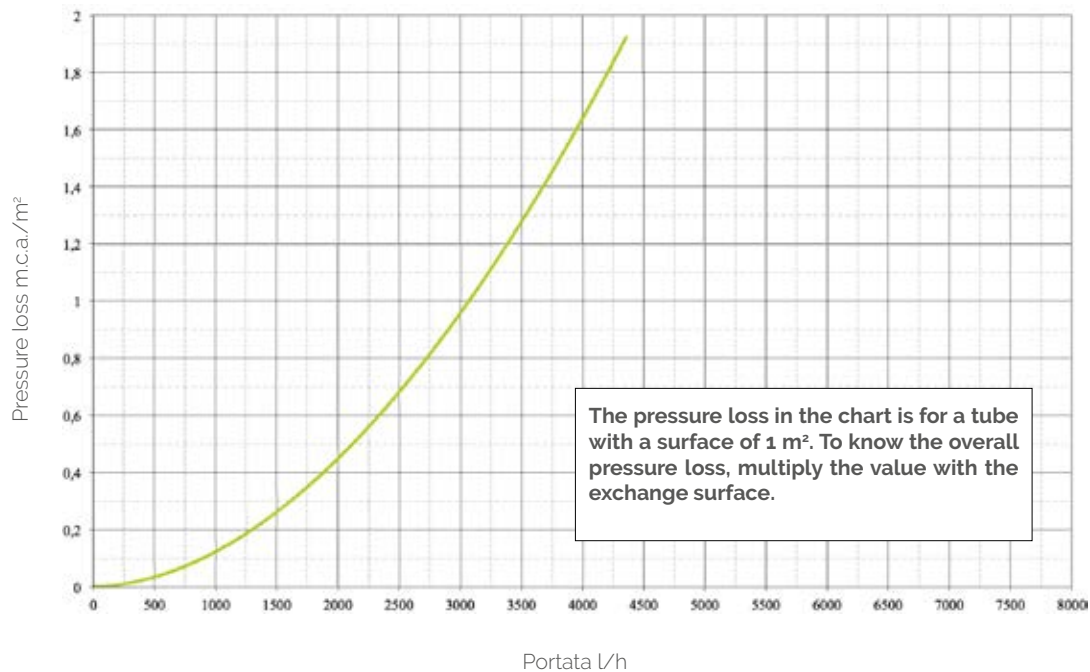
| Capacity | Ti | DHW production TiACS = 10°C | | | | | | Upper Exchanger | Lower Exchanger | Nominal flow |
|----------|----|-----------------------------|-----------|--------------|-----------|---------------------------|---------------------------|-----------------|-----------------|--------------|
| | | TuACS = 45°C | | TuACS = 60°C | | Ta = 50°C TuACS = 45°C | Ta = 60°C TuACS = 45°C | Surface area | Surface area | |
| | | L/h (a) | kW (b) | L/h (c) | kW (d) | L/10 min. (e) | L/10 min. (f) | m ² | m ² | |
| 300 | 70 | 638 | 26 | 309 | 18 | 425 | 489 | 1.1 | 1.4 | 3 |
| | 80 | 860 | 35 | 481 | 28 | 462 | 526 | | | |
| | 90 | 1007 | 41 | 584 | 34 | 486 | 550 | | | |

- a continuous DHW flow with TuACS= 45°C
- b power of the exchanger with TuACS=45°C
- c continuous DHW flow with TuACS= 60°C
- d power of the exchanger with TuACS=60°C
- e amount of DHW at 45°C in the first 10 min. with a storage temperature of 50°C
- f amount of DHW at 45°C in the first 10 min. with a storage temperature of 60°C
- Exchanger capacity: 7.10 Lt/mq



Technical information for SMART 2 SOLAR KIT series

Pressure loss fixed heat exchanger



S2 SOLAR 30 solar unit

The S2 SOLAR 30 solar unit is the ideal option for small and medium-sized installations of which the components are tested and pre-assembled to guarantee the quality of the performance and the easy installation. The electronic control unit of the solar unit MTDC is an integral part of the kit and comes cabled and with a probe for measuring the temperature. The kit is insulated in polystyrene.

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Glass lined water heater with a fixed heat exchanger for Heat pumps – SMART HP

The HP gamma consists of water heaters for the production of domestic hot water with a single heat fixed heat exchanger and a double spiral with a large surface, to be coupled with a heat pump. The heaters are available in several capacities, from 300 to 1000 l and are insulated with very thick high density rigid polyurethane, externally covered with metal-coloured PVC and provided with a magnesium anode to protect against galvanic currents and an inspection flange for easy access during the inspection and maintenance phase. The tanks with a capacity of up to 500 litres are supplied with a safety valve and adjustable feet (easier to place and more stable).

Features

✓ **Material:** ST 235 JR carbon steel

✓ **Treatment for internal protection:**

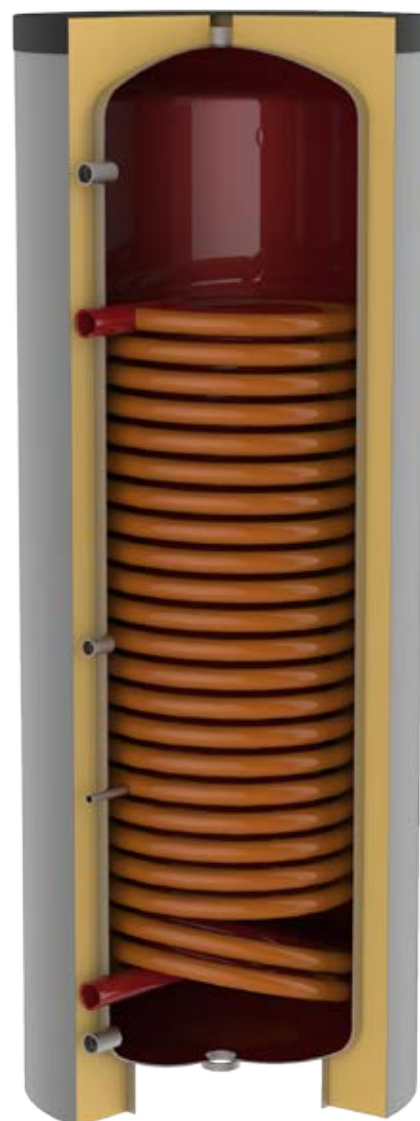
Food grade inorganic glass lining according to DIN 4753.3

✓ **Insulation:**

high-density rigid polyurethane with a thickness of 75 mm

✓ **Optional accessories:**

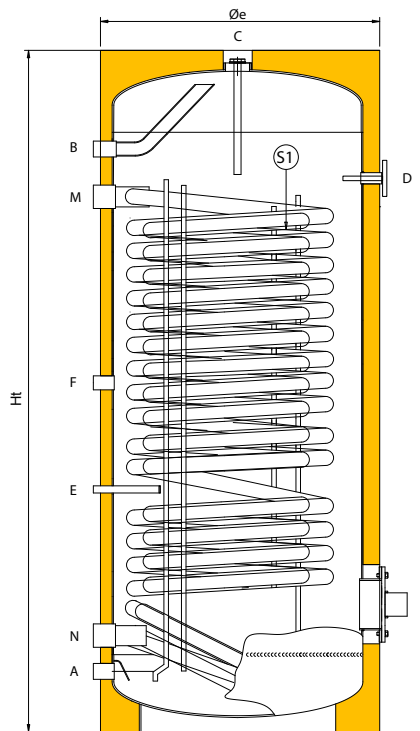
Thermometer, thermostat, impressed current electronic anode, electrical resistance.



| Storage | | Primary circuit | |
|------------------|---------------|------------------|---------------|
| max. temperature | max. pressure | max. temperature | max. pressure |
| 95°C | 10 bar | 110°C | 12 bar |

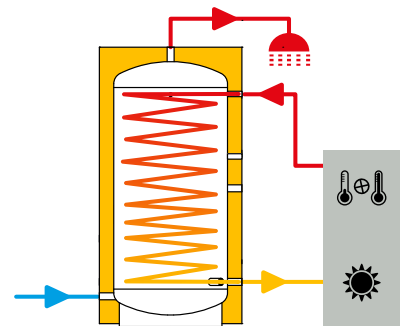
| capacity l | code | price | energy label | packed | |
|------------|------------|------------|--------------|---------------|-----------|
| | | | | dimensions cm | weight kg |
| 300 | 819060121X | € 1.342,00 | C | 75x75x168 | 177 |
| 400 | 819060122X | € 1.560,00 | C | 75x75x180 | 206 |
| 500 | 819060123X | € 1.783,00 | D | 75x75x204 | 239 |
| 750 | 819060124X | € 2.888,00 | | 97x97x229 | 318 |
| 1000 | 819060125X | € 3.707,00 | | 115x115x215 | 409 |

Glass lined water heater with a fixed heat exchanger for Heat pumps – SMART HP



Legend couplings

| | |
|---|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E | probe |
| F | recirculation |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C inch | D mm | E mm | F inch | I inch | M inch | N inch | q mm |
|---------------|-----------|-----------|-----------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| 300 | 1" | 1" | 1 1/4" | 1/2" | Ø 16 mm | 3/8" | 1 1/2" | 1 1/4" | 1 1/4" | Ø 115/180 |
| 400 | 1" | 1" | 1 1/4" | 1/2" | Ø 16 mm | 3/8" | 1 1/2" | 1 1/4" | 1 1/4" | Ø 115/180 |
| 500 | 1" | 1" | 1 1/4" | 1/2" | Ø 16 mm | 3/8" | 1 1/2" | 1 1/4" | 1 1/4" | Ø 115/180 |
| 750 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | Ø 16 mm | 3/8" | 1 1/2" | 1 1/4" | 1 1/4" | Ø 115/180 |
| 1000 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | Ø 16 mm | 3/8" | 1 1/2" | 1 1/4" | 1 1/4" | Ø 115/180 |

Height chart

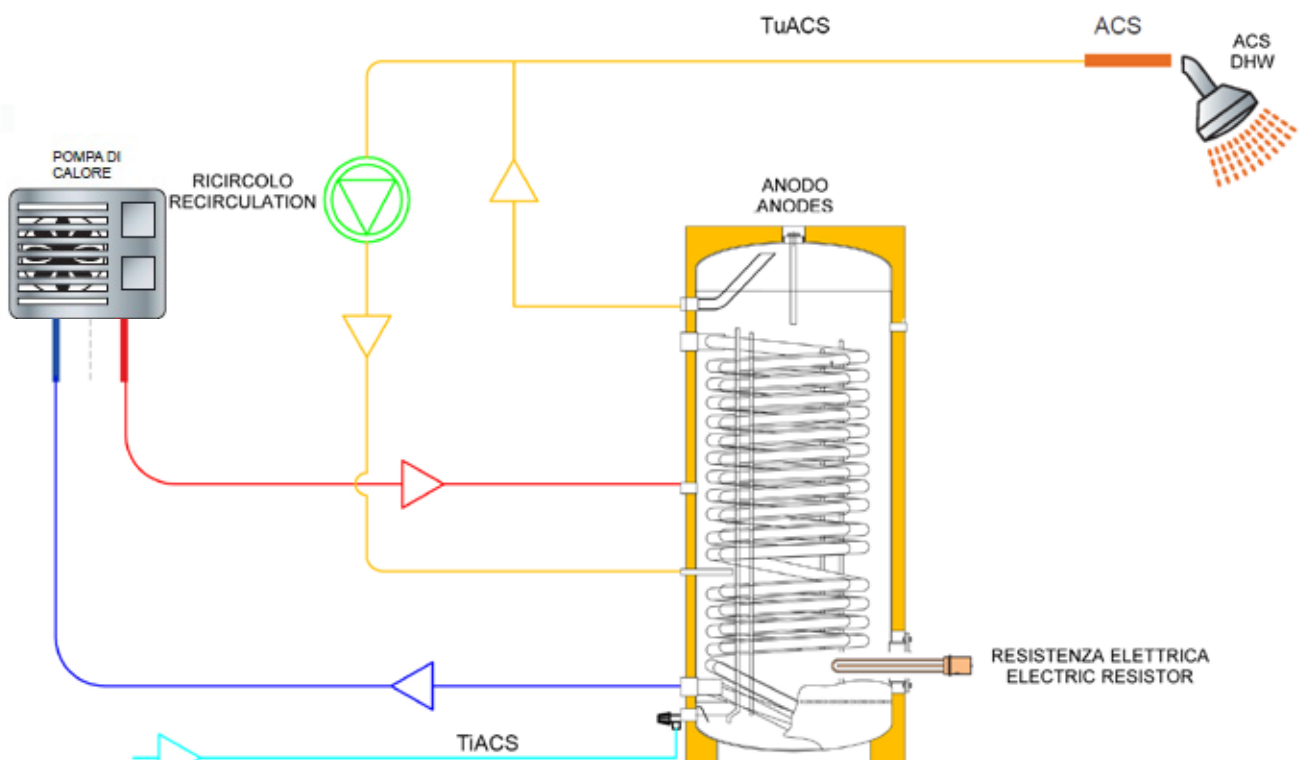
| capacity l | Øe mm | Ht mm | R* mm | A mm | B mm | E mm | F mm | M mm | N mm |
|---------------|----------|----------|----------|---------|---------|---------|---------|---------|---------|
| 300 | 670 | 1450 | 1598 | 130 | 1240 | 550 | 770 | 1035 | 215 |
| 400 | 700 | 1620 | 1765 | 150 | 1400 | 560 | 840 | 1285 | 235 |
| 500 | 700 | 1850 | 1979 | 150 | 1640 | 560 | 840 | 1385 | 235 |
| 750 | 855 | 2140 | 2305 | 250 | 1750 | 670 | 1270 | 1390 | 370 |
| 1000 | 1055 | 2050 | 2306 | 210 | 1570 | 690 | 1125 | 1245 | 375 |

R*: reversal quota

Technical information for SMART HP series

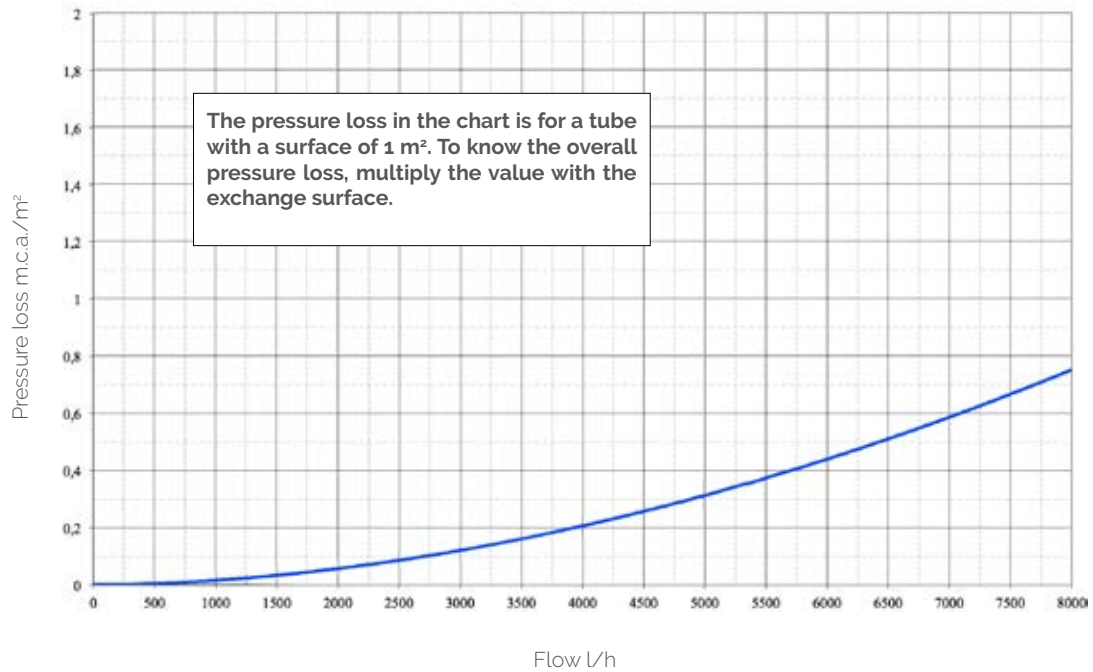
| Capacity L | Ti °C | DHW production $T_{iDHW} = 10^{\circ}\text{C}$ | | | Exchanger | |
|---------------|----------|--|-----------|---------------------------|--------------------------------|----------------------|
| | | TuDHW= 45°C | | Ta = 50°C TuDHW = 45°C | Surface area m ² | Nominal flow mc/h |
| | | L/h (a) | kW (b) | L/10 min. (e) | | |
| 300 | 50 | 688 | 28 | 433 | 3,8 | 4,0 |
| | 80 | 2236 | 91 | 691 | | |
| 400 | 50 | 860 | 35 | 568 | 5 | 4,0 |
| | 80 | 2334 | 95 | 814 | | |
| 500 | 50 | 958 | 39 | 691 | 6 | 4,0 |
| | 80 | 2432 | 99 | 937 | | |
| 750 | 50 | 982 | 40 | 961 | 6,5 | 4,0 |
| | 80 | 3390 | 138 | 1362 | | |
| 1000 | 50 | 982 | 40 | 1227 | 6,5 | 4,0 |
| | 80 | 3390 | 138 | 1628 | | |

- a continuous DHW flow with TuDHW= 45°C
- e amount of DHW at 45°C in the first 10 min. with a storage temperature of 50°C
- Exchanger capacity: 7.10 Lt/mq



Technical information for SMART HP series

Pressure loss fixed heat exchanger



Stainless steel water heater with fixed heat exchanger - SMART INOX 1

The SMART INOX 1 gamma consists of water heaters for the production of sanitary hot water with a single fixed heat exchanger. They are available in several capacities, from 200 up to 3000 litres and are insulated with very thick high density rigid polyurethane, externally covered in red PVC and equipped with a magnesium anode for the protection against galvanic currents, an inspection flange for the easy access during the inspection and maintenance phase and a safety valve.

Features

✓ Special versions:

The SMART INOX 1 water heaters can be customized on request in order to meet specific requirements, such as: customized dimensions, flanged couplings, customized couplings, thicker insulation, thick aluminium coating or other needs.

✓ **Material:** AISI 316 stainless steel

✓ Insulation:

All tanks are insulated with flexible polyurethane with a thickness of 100mm. The insulation can be removed, which makes it easier to install the tank in small spaces.

✓ Accessories on request:

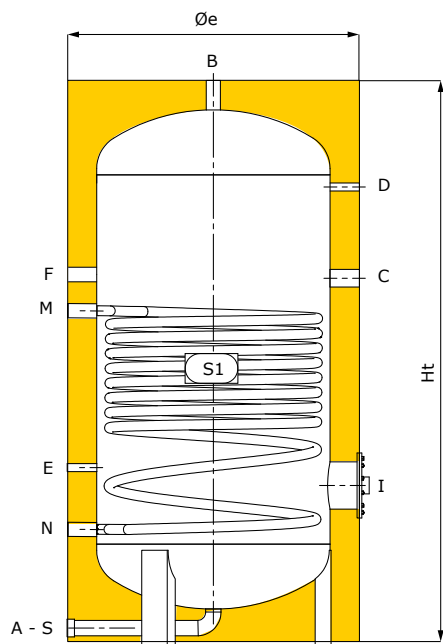
Thermometer, thermostat, impressed current electronic anode, resistance



| Storage | | Primary circuit | |
|------------------|---------------|------------------|---------------|
| max. temperature | max. pressure | max. temperature | max. pressure |
| 95°C | 6 bar | 95°C | 16 bar |

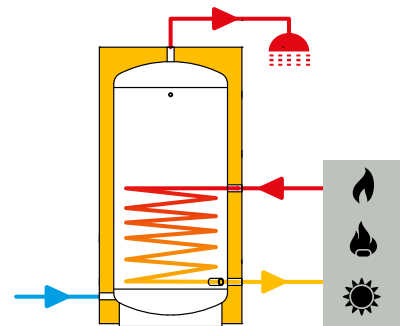
| capacity l | code | price | energy label | packed |
|------------|------------|-------------|--------------|---------------|
| | | | | dimensions cm |
| 200 | 819040060X | € 1.887,00 | C | 75x75x120 |
| 300 | 819040061X | € 2.259,00 | C | 75x75x168 |
| 400 | 819040062X | € 2.602,00 | C | 75x75x180 |
| 500 | 819040063X | € 2.985,00 | D | 75x75x204 |
| 600 | 819040084X | € 3.331,00 | | 75x75x204 |
| 800 | 819040064X | € 4.052,00 | | 97x97x229 |
| 1000 | 819040065X | € 4.746,00 | | 115x115x215 |
| 1500 | 819040066X | € 7.501,00 | | 123x123x237,5 |
| 2000 | 819040067X | € 9.048,00 | | 132x132x269,5 |
| 2500 | 819040089X | € 10.391,00 | | 147x147x299 |
| 3000 | 819040090X | € 12.258,00 | | 147x147x299 |

Stainless steel water heater with fixed heat exchanger - SMART INOX 1



Legend couplings

| | |
|---|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E | probe |
| F | recirculation |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| S | discharge |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C inch | D inch | E inch | F inch | I inch | M inch | N inch | S inch | q mm |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| 200 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 3/4" | 3/4" | 1" | 100/160 |
| 300 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1" | 1" | 1" | 100/160 |
| 400 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1" | 1" | 1" | 100/160 |
| 500 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1" | 1" | 1" | 100/160 |
| 600 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1" | 1" | 1" | 100/160 |
| 800 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 100/160 |
| 1000 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 160/220 |
| 1500 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |
| 2000 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |
| 2500 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |
| 3000 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 1/2" | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |

Height chart

| capacity l | Øe mm | Ht mm | R* mm | E mm | F mm | I mm | M mm | N mm | q mm |
|---------------|----------|----------|----------|---------|---------|---------|---------|---------|---------|
| 200 | 650 | 1470 | 1608 | 425 | 870 | 870 | 770 | 265 | 385 |
| 300 | 750 | 1510 | 1687 | 445 | 965 | 965 | 790 | 285 | 405 |
| 400 | 800 | 1700 | 1879 | 420 | 930 | 1050 | 765 | 260 | 380 |
| 500 | 800 | 1950 | 2108 | 420 | 1050 | 1060 | 885 | 260 | 380 |
| 600 | 850 | 2050 | 2220 | 500 | 1130 | 1130 | 1060 | 340 | 460 |
| 800 | 990 | 1920 | 2161 | 545 | 1185 | 1185 | 1005 | 395 | 505 |
| 1000 | 1000 | 2190 | 2408 | 555 | 1335 | 1335 | 1155 | 405 | 515 |
| 1500 | 1200 | 2200 | 2506 | 565 | 1295 | 1315 | 1115 | 415 | 545 |
| 2000 | 1400 | 2280 | 2676 | 600 | | | | 450 | 580 |
| 2500 | 1400 | 2530 | 2892 | 600 | | | | 450 | 580 |
| 3000 | 1450 | 2800 | 3154 | 615 | 1345 | 1645 | 1265 | 465 | 595 |

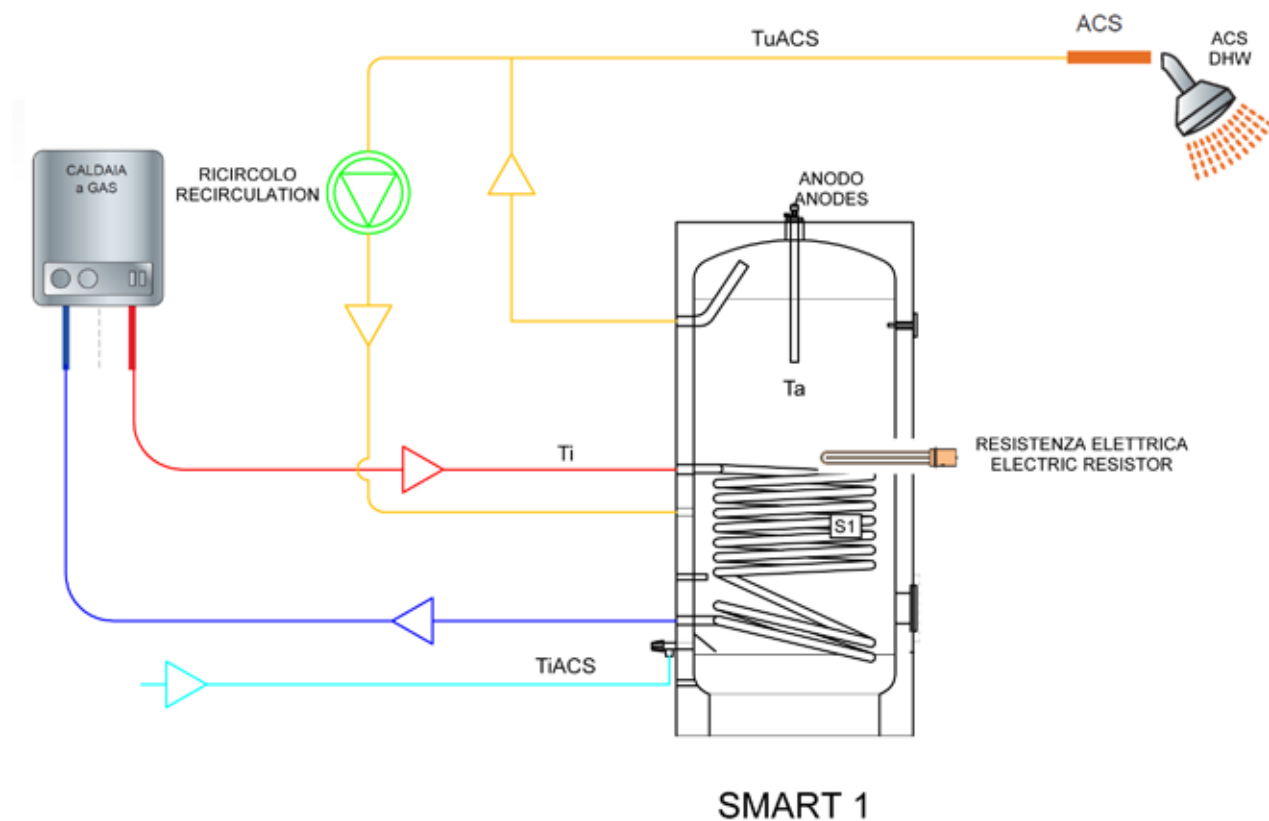
R*: reversal quota

Technical information for SMART INOX 1 series

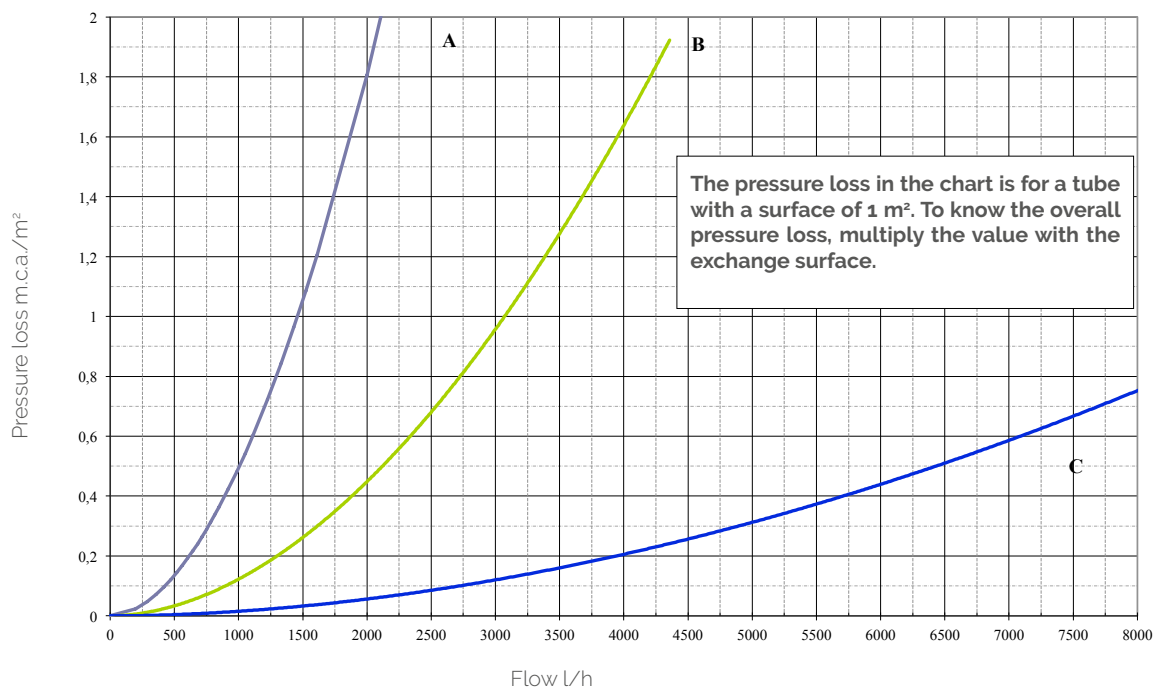
| Capacity | Ti | DHW production TiDHW = 10°C | | | | | | Exchanger | |
|----------|----|-----------------------------|-----------|--------------|-----------|---------------------------|---------------------------|--------------|--------------|
| | | TuDHW= 45°C | | TuDHW = 60°C | | Ta = 50°C TuDHW = 45°C | Ta = 60°C TuDHW = 45°C | Surface area | Nominal flow |
| | | L/h (a) | kW (b) | L/h (c) | kW (d) | L/10 min. (e) | L/10 min. (f) | | |
| 200 | 70 | 565 | 23 | 275 | 16 | 306 | 349 | 1.0 | 3.0 |
| | 80 | 761 | 31 | 430 | 25 | 339 | 382 | | |
| | 90 | 884 | 36 | 516 | 30 | 360 | 402 | | |
| 300 | 70 | 737 | 30 | 361 | 21 | 441 | 505 | 1.3 | 3.0 |
| | 80 | 982 | 40 | 550 | 32 | 482 | 546 | | |
| | 90 | 1154 | 47 | 670 | 39 | 511 | 575 | | |
| 400 | 70 | 761 | 31 | 361 | 21 | 552 | 637 | 1.3 | 3.0 |
| | 80 | 1007 | 41 | 550 | 32 | 593 | 678 | | |
| | 90 | 1179 | 48 | 688 | 40 | 622 | 707 | | |
| 500 | 70 | 1105 | 45 | 550 | 32 | 716 | 822 | 1.9 | 3.0 |
| | 80 | 1474 | 60 | 825 | 48 | 777 | 883 | | |
| | 90 | 1744 | 71 | 1014 | 59 | 822 | 928 | | |
| 600 | 70 | 1105 | 45 | 533 | 31 | 822 | 950 | 1.9 | 3.0 |
| | 80 | 1474 | 60 | 808 | 47 | 883 | 1011 | | |
| | 90 | 1720 | 70 | 1014 | 59 | 924 | 1052 | | |
| 800 | 70 | 1400 | 57 | 688 | 40 | 1084 | 1254 | 2.4 | 4.0 |
| | 80 | 1867 | 76 | 1032 | 60 | 1162 | 1332 | | |
| | 90 | 2186 | 89 | 1290 | 75 | 1215 | 1385 | | |
| 1000 | 70 | 1842 | 75 | 911 | 53 | 1370 | 1583 | 3.2 | 6.0 |
| | 80 | 2481 | 101 | 1376 | 80 | 1477 | 1690 | | |
| | 90 | 2924 | 119 | 1720 | 100 | 1551 | 1763 | | |
| 1500 | 70 | 2309 | 94 | 1135 | 66 | 1980 | 2299 | 4.0 | 6.0 |
| | 80 | 3120 | 127 | 1720 | 100 | 2115 | 2434 | | |
| | 90 | 3661 | 149 | 2150 | 125 | 2205 | 2525 | | |
| 2000 | 70 | 2801 | 114 | 1376 | 80 | 2594 | 3020 | 4.8 | 8.0 |
| | 80 | 3734 | 152 | 2064 | 120 | 2749 | 3175 | | |
| | 90 | 4373 | 178 | 2562 | 149 | 2856 | 3282 | | |
| 2500 | 70 | 3292 | 134 | 1634 | 95 | 3208 | 3740 | 5.6 | 8.0 |
| | 80 | 4398 | 179 | 2442 | 142 | 3392 | 3924 | | |
| | 90 | 5160 | 210 | 3027 | 176 | 3519 | 4051 | | |
| 3000 | 70 | 3734 | 152 | 1823 | 106 | 3813 | 4452 | 6.4 | 8.0 |
| | 80 | 4963 | 202 | 2752 | 160 | 4018 | 4656 | | |
| | 90 | 5823 | 237 | 3440 | 200 | 4161 | 4800 | | |

- a continuous DHW flow with TuDHW= 45°C
- b exchanger power with TuDHW=45°C
- c continuous DHW flow with TuDHW= 60°C
- d exchanger power with TuDHW=60°C
- e amount of DHW at 45°C in the first 10 min. with a storage temperature of 50°C
- f amount of DHW at 45°C in the first 10 min. with a storage temperature of 60°C
- Exchanger capacity: 7.10 Lt/mq

Technical information for SMART INOX 1 series



Pressure loss fixed heat exchanger



A) 200 l tank B) 300 - 600 l tank C) 800 - 3000 l tank

Stainless steel water heater with fixed heat exchanger - SMART INOX 2

The SMART INOX 2 gamma consists of water heaters for the production of domestic hot water with a double fixed heat exchanger. They are available in several capacities, from 200 up to 3000 litres and are insulated with very thick high density rigid polyurethane, externally covered in red PVC and equipped with a magnesium anode for the protection against galvanic currents, an inspection flange for the easy access during the inspection and maintenance phase and a safety valve.

Features

✓ Special versions:

The SMART INOX 1 water heaters can be customized on request in order to meet specific requirements, such as: customized dimensions, flanged couplings, customized couplings, thicker insulation, thick aluminium coating or other needs.

✓ **Material:** AISI 316 stainless steel

✓ Insulation:

All tanks are insulated with flexible polyurethane with a thickness of 100mm. The insulation can be removed, which makes it easier to install the tank in small spaces.

✓ Accessories on request:

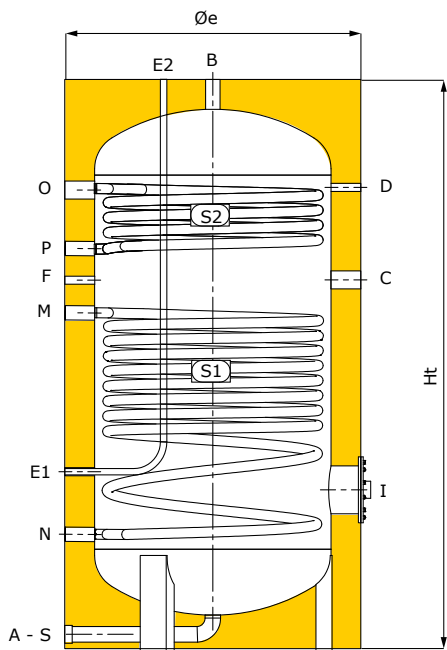
Thermometer, thermostat, impressed current electronic anode, resistance



| Storage | | Primary circuit | |
|------------------|---------------|------------------|---------------|
| max. temperature | max. pressure | max. temperature | max. pressure |
| 95°C | 6 bar | 95°C | 16 bar |

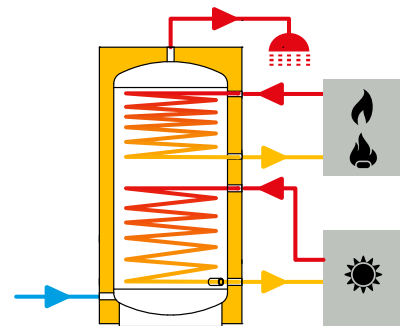
| capacity l | code | price | energy label | packed |
|---------------|------------|-------------|-----------------|------------------|
| | | | | dimensions cm |
| 200 | 819040068X | € 2.163,00 | C | 75x75x120 |
| 300 | 819040069X | € 2.560,00 | C | 75x75x168 |
| 400 | 819040070X | € 2.930,00 | C | 75x75x180 |
| 500 | 819040071X | € 3.451,00 | D | 75x75x204 |
| 600 | 819040097X | € 3.814,00 | | 75x75x204 |
| 800 | 819040072X | € 4.583,00 | | 97x97x229 |
| 1000 | 819040073X | € 5.412,00 | | 115x115x215 |
| 1500 | 819040074X | € 8.226,00 | | 123x123x237,5 |
| 2000 | 819040075X | € 9.946,00 | | 132x132x269,5 |
| 2500 | 819040102X | € 11.471,00 | | 147x147x299 |
| 3000 | 819040103X | € 13.393,00 | | 147x147x299 |

Stainless steel water heater with fixed heat exchanger - SMART INOX 2



Legend couplings

| | |
|-----------|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E1 | probe |
| E2 | probe |
| F | recirculation |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| O | upper exchanger inlet |
| P | upper exchanger outlet |
| S | discharge |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C inch | D inch | E1-E2 mm | F inch | I inch | M inch | N inch | O inch | P inch | S inch | q mm |
|---------------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| 200 | 1" | 1" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 3/4" | 3/4" | 3/4" | 3/4" | 1" | 100/160 |
| 300 | 1" | 1" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | 100/160 |
| 400 | 1" | 1" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | 100/160 |
| 500 | 1" | 1" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | 100/160 |
| 600 | 1" | 1" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1" | 1" | 1" | 1" | 1" | 100/160 |
| 800 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 100/160 |
| 1000 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 160/220 |
| 1500 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |
| 2000 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |
| 2500 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |
| 3000 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 21,3 | 1/2" | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 220/300 |

Height chart

| capacity l | Øe mm | Ht mm | R* mm | E1 mm | F mm | I mm | M mm | N mm | O mm | P mm | q mm |
|---------------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|
| 200 | 650 | 1470 | 1608 | 425 | 870 | 870 | 770 | 265 | 1170 | 990 | 385 |
| 300 | 750 | 1510 | 1687 | 445 | 965 | 965 | 790 | 285 | 1190 | 1040 | 405 |
| 400 | 800 | 1700 | 1879 | 420 | 930 | 1050 | 765 | 260 | 1420 | 1270 | 380 |
| 500 | 800 | 1950 | 2108 | 420 | 1050 | 1060 | 885 | 260 | 1670 | 1445 | 380 |
| 600 | 850 | 2050 | 2220 | 500 | 1130 | 1130 | 1060 | 340 | 1745 | 1525 | 460 |
| 800 | 990 | 1920 | 2161 | 545 | 1185 | 1185 | 1005 | 395 | 1540 | 1360 | 505 |
| 1000 | 1000 | 2190 | 2408 | 555 | 1335 | 1335 | 1155 | 405 | 1800 | 1560 | 515 |
| 1500 | 1200 | 2200 | 2506 | 565 | 1295 | 1315 | 1115 | 415 | | | 545 |
| 2000 | 1400 | 2280 | 2676 | 600 | | | | 450 | | | 580 |
| 2500 | 1400 | 2530 | 2892 | 600 | | | | 450 | | | 580 |
| 3000 | 1450 | 2800 | 3154 | 615 | 1345 | 1645 | 1265 | 465 | 2365 | 2060 | 595 |

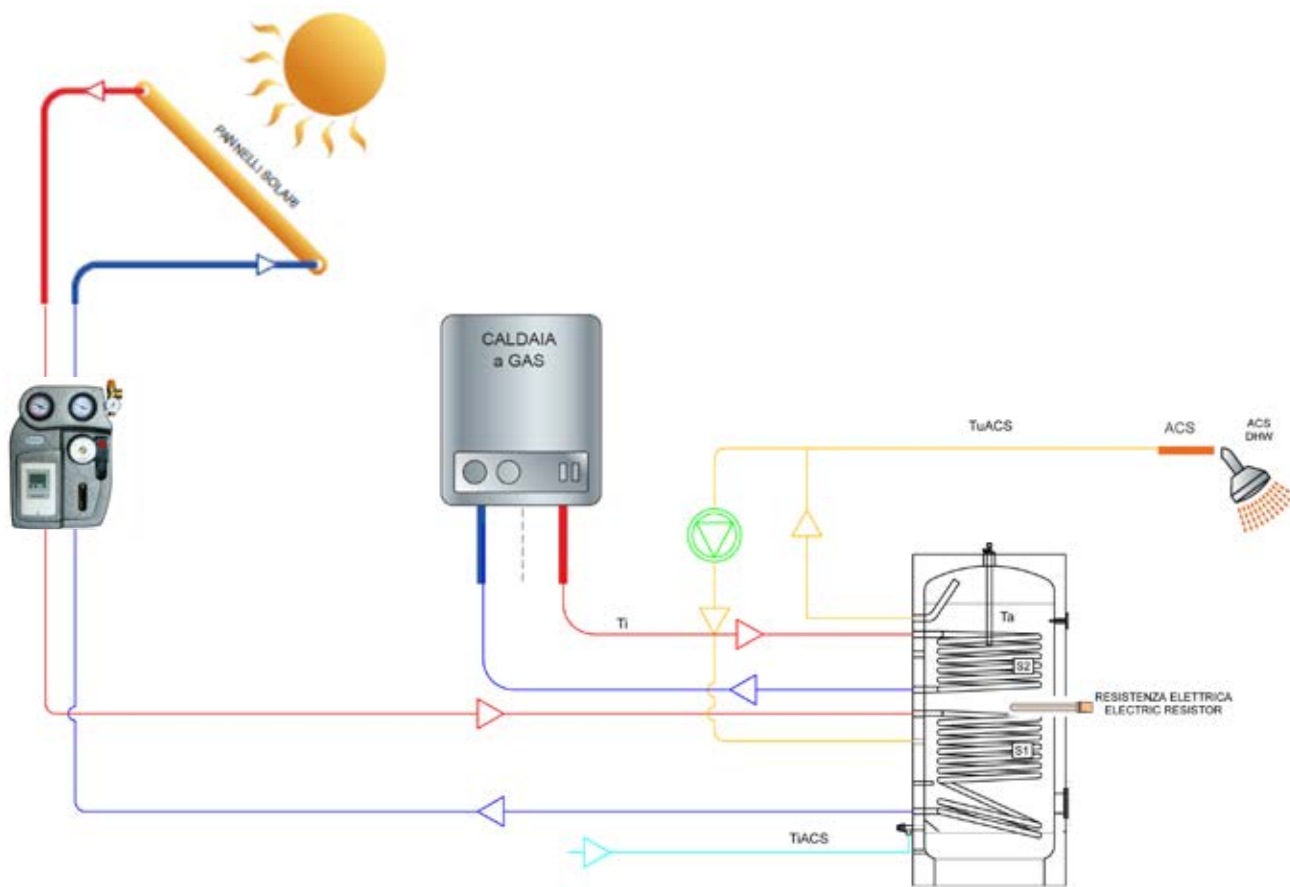
R*: reversal quota

Technical information for SMART INOX 2 series

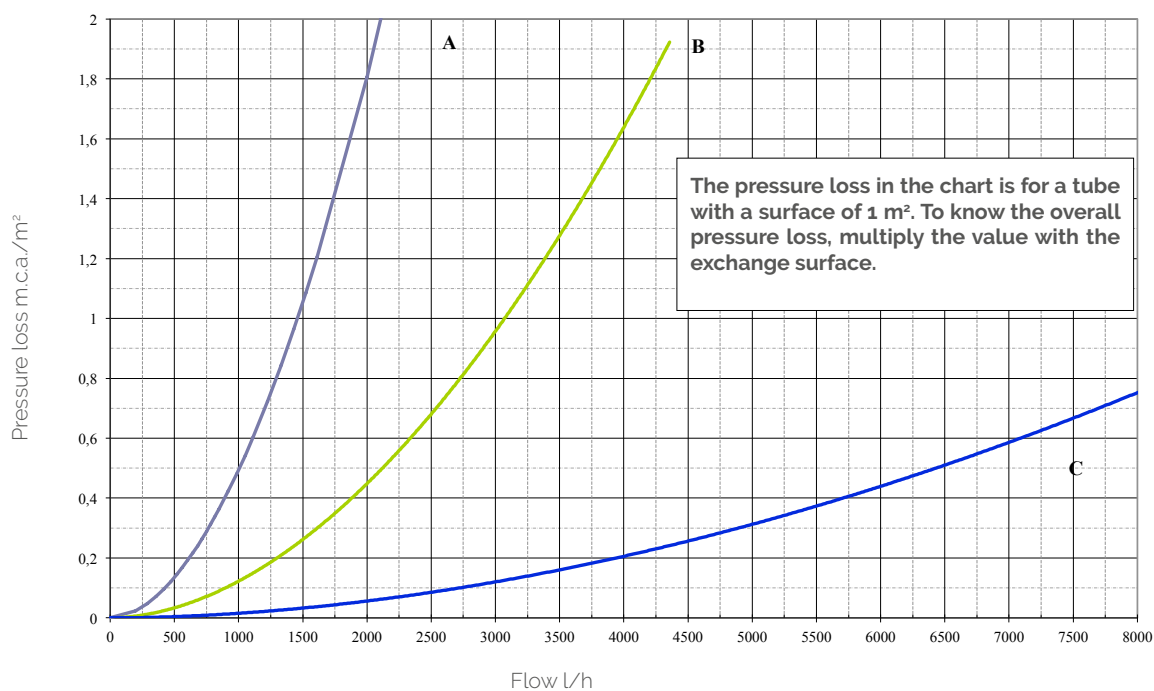
| Capacity | Ti | DHW production TiDHW = 10°C | | | | | | Upper | Lower | Nominal flow |
|----------|----|-----------------------------|-----------|--------------|-----------|------------------|------------------|----------------|--------------|--------------|
| | | TuDHW= 45°C | | TuDHW = 60°C | | Ta = 50°C | Ta = 60°C | exchanger | exchanger | |
| | | L/h (a) | kW (b) | L/h (c) | kW (d) | L/10 min. (e) | L/10 min. (f) | Surface area | Surface area | |
| l | °C | | | | | | m ² | m ² | mc/h | |
| 200 | 70 | 270 | 11 | 137 | 8 | 257 | 300 | 1,0 | 0,5 | 3,0 |
| | 80 | 368 | 15 | 206 | 12 | 274 | 316 | | | |
| | 90 | 442 | 18 | 258 | 15 | 286 | 328 | | | |
| 300 | 70 | 344 | 14 | 154 | 9 | 376 | 440 | 1,3 | 0,6 | 3,0 |
| | 80 | 442 | 18 | 258 | 15 | 392 | 456 | | | |
| | 90 | 516 | 21 | 309 | 18 | 405 | 468 | | | |
| 400 | 70 | 344 | 14 | 172 | 10 | 482 | 567 | 1,3 | 0,6 | 3,0 |
| | 80 | 466 | 19 | 258 | 15 | 503 | 588 | | | |
| | 90 | 540 | 22 | 309 | 18 | 515 | 600 | | | |
| 500 | 70 | 589 | 24 | 292 | 17 | 630 | 736 | 1,9 | 1,0 | 3,0 |
| | 80 | 786 | 32 | 430 | 25 | 662 | 769 | | | |
| | 90 | 909 | 37 | 533 | 31 | 683 | 789 | | | |
| 600 | 70 | 565 | 23 | 275 | 16 | 732 | 860 | 1,9 | 1,0 | 3,0 |
| | 80 | 761 | 31 | 430 | 25 | 765 | 892 | | | |
| | 90 | 909 | 37 | 533 | 31 | 789 | 917 | | | |
| 800 | 70 | 688 | 28 | 344 | 20 | 965 | 1135 | 2,4 | 1,2 | 4,0 |
| | 80 | 933 | 38 | 516 | 30 | 1006 | 1176 | | | |
| | 90 | 1081 | 44 | 636 | 37 | 1031 | 1201 | | | |
| 1000 | 70 | 688 | 28 | 344 | 20 | 1178 | 1391 | 3,2 | 1,2 | 6,0 |
| | 80 | 933 | 38 | 516 | 30 | 1219 | 1432 | | | |
| | 90 | 1081 | 44 | 636 | 37 | 1243 | 1456 | | | |
| 1500 | 70 | 909 | 37 | 447 | 26 | 1747 | 2066 | 4,0 | 1,6 | 6,0 |
| | 80 | 1228 | 50 | 688 | 40 | 1800 | 2119 | | | |
| | 90 | 1449 | 59 | 860 | 50 | 1837 | 2156 | | | |
| 2000 | 70 | 1154 | 47 | 567 | 33 | 2319 | 2745 | 4,8 | 2,0 | 8,0 |
| | 80 | 1548 | 63 | 860 | 50 | 2385 | 2811 | | | |
| | 90 | 1818 | 74 | 1066 | 62 | 2430 | 2856 | | | |
| 2500 | 70 | 1400 | 57 | 688 | 40 | 2892 | 3424 | 5,6 | 2,4 | 8,0 |
| | 80 | 1867 | 76 | 1049 | 61 | 2970 | 3502 | | | |
| | 90 | 2211 | 90 | 1290 | 75 | 3028 | 3559 | | | |
| 3000 | 70 | 1400 | 57 | 688 | 40 | 3424 | 4063 | 6,4 | 2,4 | 8,0 |
| | 80 | 1867 | 76 | 1032 | 60 | 3502 | 4140 | | | |
| | 90 | 2186 | 89 | 1290 | 75 | 3555 | 4194 | | | |

- a continuous DHW flow with TuDHW= 45°C
- b exchanger power with TuDHW=45°C
- c continuous DHW flow with TuDHW= 60°C
- d exchanger power with TuDHW=60°C
- e amount of DHW at 45°C in the first 10 min. with a storage temperature of 50°C
- f amount of DHW at 45°C in the first 10 min. with a storage temperature of 60°C
- Exchanger capacity: 7.10 Lt/mq

Technical information for SMART INOX 2 series



Pressure loss fixed heat exchanger



A) 200 l tank B) 300 - 600 l tank C) 800 - 3000 l tank

Glass lined water heater with tube heat exchanger – BOIL

The BOIL gamma consists of water heaters with a tube heat exchanger for the production of domestic hot water. There are several capacities, from 200 up to 1000 litres. They are equipped, depending on the capacity, with very thick rigid or flexible insulation, an external cover in red PVC and a magnesium anode for the protection against galvanic currents.

Features

✓ Special versions:

The BOIL gamma can also be customized on request: customized dimensions, flanged couplings, customized couplings, thicker insulation, thick aluminium coating etc...

✓ Materials:

The boilers are made from high quality materials such as:

Tank: carbon steel ST235 JR

Tube heat exchanger: galvanized stainless steel ST235

Exchanger head: galvanized carbon steel ST235 JR

✓ Internal protective treatment:

Food grade inorganic glass lining according to DIN 4753.3

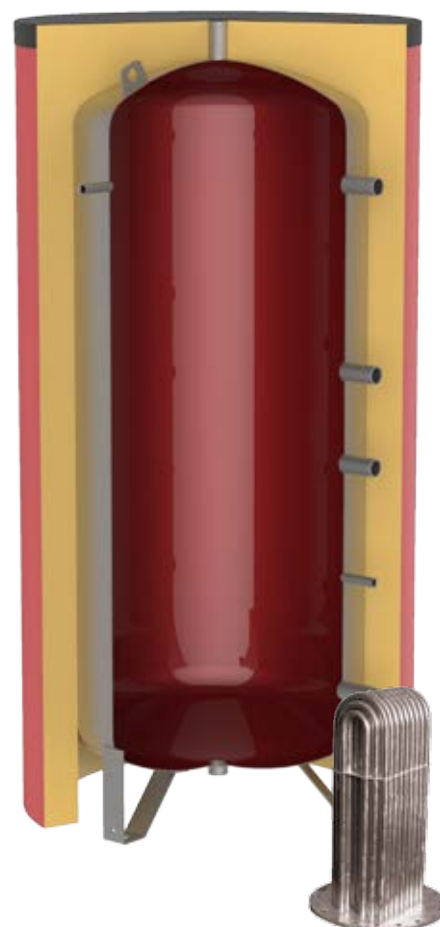
✓ Insulation:

The water heaters with a capacity from 200 to 300 litres are insulated with thick polyurethane with a thickness of 70mm.

The water heater with a capacity of 500 to 1000 litres are insulated with flexible polyurethane with a thickness of 100mm. The latter can be removed, which makes it possible to install the device in small spaces.

✓ Accessories on request:

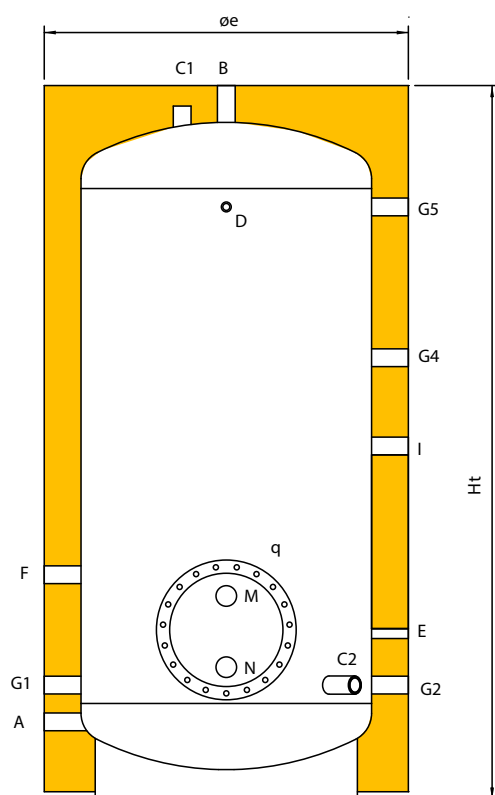
Tube heat exchanger for steam or superheated water, external plate heat exchanger kit, impressed current electronic anode, electrical resistance.



| capacity l | Storage | | Primary circuit | |
|---------------|---------------------|------------------|---------------------|------------------|
| | max. temperature | max. pressure | max. temperature | max. pressure |
| < 1000 l | 95°C | 10 bar | 110°C | 12 bar |

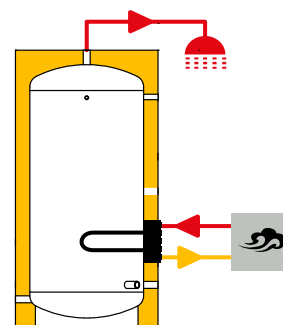
| capacity l | code | price | energy label | packed | |
|---------------|------------|------------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 200 | 818060068X | € 1.017,00 | C | 75x75x125 | 101 |
| 300 | 818060069X | € 1.205,00 | C | 75x75x150 | 113 |
| 500 | 818060070X | € 1.886,00 | D | 80x80x209 | 148 |
| 800 | 818060071X | € 2.705,00 | | 105x105x214 | 283 |
| 1000 | 818060072X | € 3.167,00 | | 105x105x245 | 322 |
| | | | | 115x115x283 | 445 |

Glass lined water heater with tube heat exchanger – BOIL



Legend couplings

| | |
|----|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C1 | anode |
| C2 | anode |
| D | thermometer |
| E | thermostat |
| F | recirculation |
| G1 | auxiliary |
| G2 | auxiliary |
| G4 | auxiliary |
| G5 | auxiliary |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C1 inch | C2 inch | D inch | E1 mm | F inch | G1 inch | G2 inch | I inch | G4 inch | G5 inch | M inch | N inch | q mm |
|---------------|-----------|-----------|------------|------------|-----------|----------|-----------|------------|------------|-----------|------------|------------|-----------|-----------|---------|
| 200 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 1 1/4 | 1 1/4 | 1" | 1" | 220/300 |
| 300 | 1 1/4 | 1 1/4 | 1 1/4 | - | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 1 1/4 | 1 1/4 | 1" | 1" | 220/300 |
| 500 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 1 1/4 | 1 1/4 | 1" | 1" | 220/300 |
| 800 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 1 1/4 | 1 1/4 | 2" | 2" | 300/380 |
| 1000 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1/2" | 1/2" | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 1 1/4 | 1 1/4 | 2" | 2" | 300/380 |

Height chart

| capacity l | øe mm | Ht mm | R* mm | A mm | C2 mm | D mm | E mm | F mm | G1 mm | G2 mm | G3 mm | G4 mm | G5 mm | M mm | N mm | q mm |
|---------------|----------|----------|----------|---------|----------|---------|---------|---------|----------|----------|----------|----------|----------|---------|---------|---------|
| 200 | 700 | 1100 | 1304 | 130 | - | 884 | 320 | 420 | 220 | 130 | 540 | 660 | 970 | 390 | 270 | 330 |
| 300 | 700 | 1340 | 1512 | 130 | - | 1120 | 320 | 420 | 220 | 840 | 540 | 660 | 1060 | 390 | 370 | 330 |
| 500 | 800 | 1940 | 2099 | 150 | 250 | 1640 | 380 | 480 | 250 | 250 | 945 | 1090 | 1640 | 450 | 330 | 360 |
| 800 | 990 | 1990 | 2223 | 210 | 310 | 1610 | 460 | 610 | 310 | 310 | 960 | 1150 | 1610 | 532.5 | 387.5 | 460 |
| 1000 | 990 | 2300 | 2505 | 210 | 310 | 1910 | 460 | 610 | 310 | 310 | 915 | 1150 | 1910 | 532.5 | 387.5 | 460 |

R*: reversal quota

Water heater with tube heat exchanger, internal treatment with Bluetech – BOIL BLUE

The BLUE BOIL gamma consists of water heaters with tube heat exchanger for the production of domestic hot water. They are available in several capacities, from 500 up to 5000 litres. Depending on their capacity, they are equipped with very thick rigid or flexible insulation, external cover in red PVC and a magnesium anode for the protection against galvanic currents.

Features

✓ Special versions:

The BOIL BLUE gamma can also be customized on request: customized dimensions, flanged couplings, customized couplings, thicker insulation, thick aluminium coating etc..

✓ Materials:

The boilers are made from high quality materials such as:

Tank: carbon steel ST235 JR

Tube heat exchanger: AISI 304 stainless steel

Exchanger head: galvanized carbon steel ST235 JR

✓ Internal protective treatment:

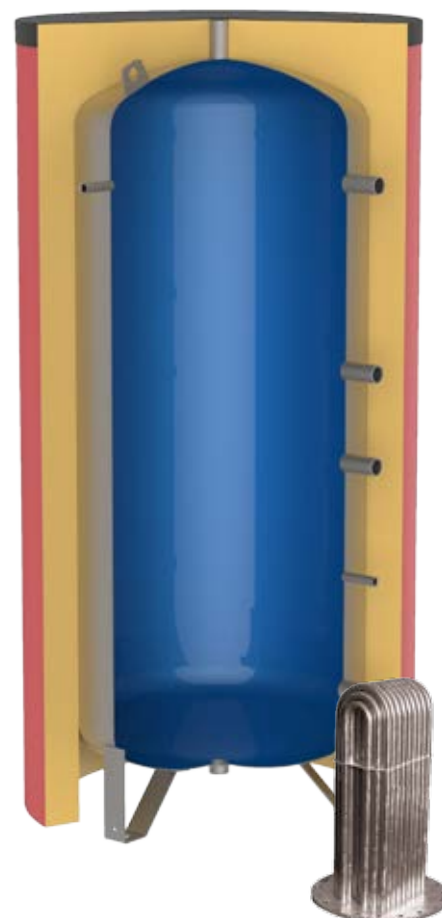
The water heaters are treated with Bluetech varnish, made of thermosetting resins, and suited for use with drinking water and food.

✓ Insulation:

The water heaters are insulated with flexible polyurethane with a thickness of 100mm. The insulation can be removed, which makes it possible to install the device in small spaces.

✓ Accessories on request:

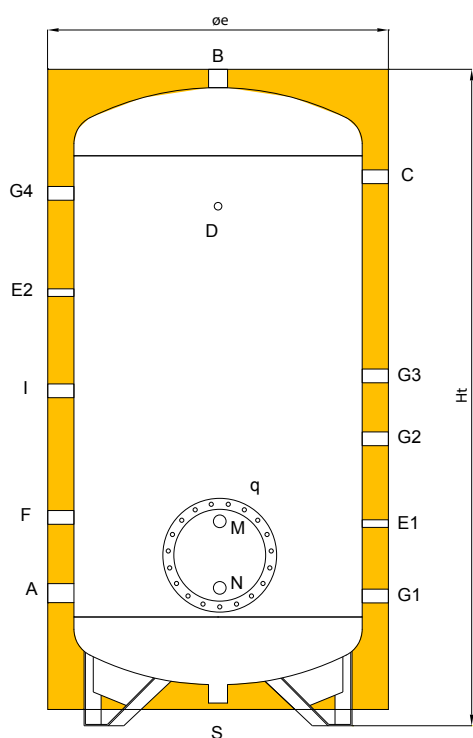
Tube heat exchanger for steam or superheated water, external plate heat exchanger kit, impressed current electronic anode, electrical resistance.



| Storage | | Primary circuit | |
|------------------|---------------|------------------|---------------|
| max. temperature | max. pressure | max. temperature | max. pressure |
| 80°C | 6 bar | 110°C | 12 bar |

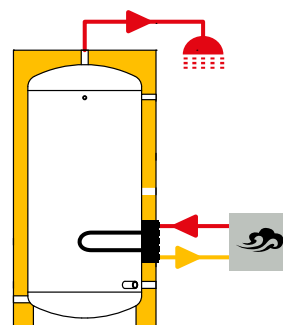
| capacity l | code | price | energy label | packed | |
|------------|------------|------------|--------------|---------------|-----------|
| | | | | dimensions cm | weight kg |
| 500 | 818080372X | € 1.778,00 | D | 88x88x192,5 | 118 |
| 800 | 818080373X | € 2.326,00 | | 102x102x221 | 181 |
| 1000 | 818080374X | € 2.637,00 | | 107x107x224 | 206 |
| 1500 | 818080375X | € 3.489,00 | | 123x123x237,5 | 262 |
| 2000 | 818080361X | € 4.203,00 | | 132x132x269,5 | 324 |
| 2500 | 818080362X | € 4.931,00 | | 147x147x277,5 | 368 |
| 3000 | 818080363X | € 5.644,00 | | 147x147x299 | 409 |
| 4000 | 818080364X | € 7.035,00 | | 163x163x306 | 582 |
| 5000 | 818080365X | € 8.066,00 | | 183x183x310 | 687 |

Water heater with tube heat exchanger, internal treatment with Bluetech – BOIL BLUE



Legend couplings

| | |
|----|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E1 | thermostat |
| E2 | thermostat |
| F | recirculation |
| G1 | auxiliary |
| G2 | auxiliary |
| G4 | auxiliary |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| S | discharge |
| q | inspection hole |



Coupling chart

| capacity l | A pollici | B pollici | C pollici | D pollici | E1 mm | E2 mm | F pollici | G1 pollici | G2 pollici | G4 pollici | G5 pollici | I pollici | M pollici | N pollici | S pollici | q mm |
|---------------|--------------|--------------|--------------|--------------|----------|----------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|---------|
| 500 | 1'1/4 | 1'1/4 | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 1" | 1" | 1'1/4 | 220/300 |
| 800 | 1'1/2 | 1'1/2 | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 300/380 |
| 1000 | 1'1/2 | 1'1/2 | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 300/380 |
| 1500 | 2" | 2" | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 300/380 |
| 2000 | 2" | 2" | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 350/430 |
| 2500 | 2'1/2 | 2'1/2 | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 350/430 |
| 3000 | 3" | 3" | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 350/430 |
| 4000 | 3" | 3" | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 350/430 |
| 5000 | 3" | 3" | 1'1/4 | 1/2" | 1/2" | 1/2" | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | \ | 1'1/2 | 2" | 2" | 1'1/4 | 350/430 |

Height chart

| capacity l | Øe mm | Ht mm | R' mm | A mm | C mm | D mm | E1 mm | E2 mm | F mm | G1 mm | G2 mm | G3 mm | G4 mm | I mm | M mm | N mm | q mm |
|---------------|----------|----------|----------|---------|---------|---------|----------|----------|---------|----------|----------|----------|----------|---------|---------|---------|---------|
| 500 | 850 | 1805 | 1996 | 375 | 1445 | 1445 | 675 | 1145 | 675 | 375 | 975 | 1215 | - | 845 | 505 | 385 | 445 |
| 800 | 950 | 2090 | 2296 | 390 | 1720 | 1720 | 710 | 1420 | 710 | 390 | 1010 | 1230 | - | 1160 | 572,5 | 427,5 | 500 |
| 1000 | 1050 | 2120 | 2366 | 400 | 1720 | 1720 | 700 | 1420 | 755 | 400 | 1000 | 1240 | - | 1140 | 582,5 | 437,5 | 510 |
| 1500 | 1200 | 2255 | 2555 | 500 | 1810 | 1810 | 805 | 1515 | 805 | 500 | 1100 | 1340 | - | 1230 | 672,5 | 527,5 | 600 |
| 2000 | 1300 | 2575 | 2885 | 505 | 2115 | 2115 | 805 | 1805 | 805 | 505 | 1105 | 1345 | - | 1505 | 715 | 525 | 620 |
| 2500 | 1400 | 2655 | 3002 | 565 | 2150 | 2150 | 865 | 1850 | 850 | 565 | 1165 | 1405 | - | 1550 | 775 | 585 | 680 |
| 3000 | 1450 | 2870 | 3216 | 575 | 2350 | 2350 | 800 | 2050 | 850 | 575 | 1050 | 1415 | - | 1750 | 785 | 595 | 690 |
| 4000 | 1600 | 2940 | 3348 | 600 | 2380 | 2380 | 900 | 2080 | 870 | 600 | 1200 | 1440 | - | 1780 | 810 | 620 | 715 |
| 5000 | 1800 | 2980 | 3482 | 610 | 2385 | 2385 | 910 | 2085 | 885 | 610 | 1210 | 1450 | - | 1785 | 820 | 630 | 725 |

R': reversal quota

Water heater with tube heat exchanger

BOIL INOX

The BOIL INOX gamma consists of water heaters with tube heat exchanger for the production of domestic hot water. They are available in several capacities, from 200 up to 5000 litres and equipped with very thick flexible insulation, external cover in red PVC and a magnesium anode for protection against galvanic currents.

Features

✓ Special versions:

The BOIL INOX gamma can also be customized on request: customized dimensions, flanged gamma couplings, customized couplings, thicker insulation, thick aluminium coating etc...

✓ Materials:

The boilers are made from high quality materials such as:

Tank: AISI 316T stainless steel

Tube heat exchanger: AISI 316 stainless steel

Exchanger head: galvanized carbon steel ST235 JR

✓ Insulation:

The water heaters are insulated with flexible polyurethane with a thickness of 100mm. The insulation can be removed, which makes it possible to install the device in small spaces.

✓ Accessories on request:

Tube heat exchanger for steam or superheated water, external plate heat exchanger kit, impressed current electronic anode, electrical resistance.

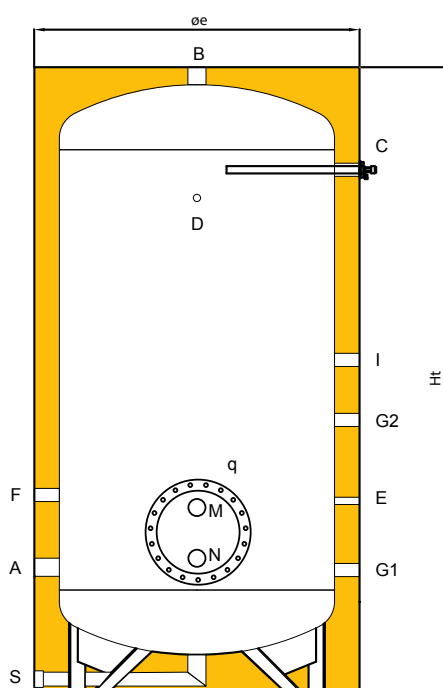


| Storage | | Primary circuit | |
|------------------|---------------|------------------|---------------|
| max. temperature | max. pressure | max. temperature | max. pressure |
| 95°C | 6 bar | 110°C | 12 bar |

| capacity l | code | price | energy label | packed dimensions cm |
|------------|------------|-------------|--------------|----------------------|
| 200 | 818040067X | € 2.235,00 | C | 68x68x159 |
| 300 | 818040068X | € 2.560,00 | C | 78x78x163 |
| 500 | 818040069X | € 3.124,00 | D | 83x83x207 |
| 800 | 818040070X | € 4.161,00 | | 102x102x204 |
| 1000 | 818040071X | € 4.509,00 | | 103x103x231 |
| 1500 | 818040072X | € 6.780,00 | | 123x123x232 |
| 2000 | 818040073X | € 9.168,00 | | 143x143x240 |
| 2500 | 818040074X | € 10.260,00 | | 143x143x265 |
| 3000 | 818040075X | € 11.331,00 | | 148x148x292 |
| 4000 | 818040076X | € 14.815,00 | | 163x163x300 |
| 5000 | 818040077X | € 18.895,00 | | 183x183x303 |

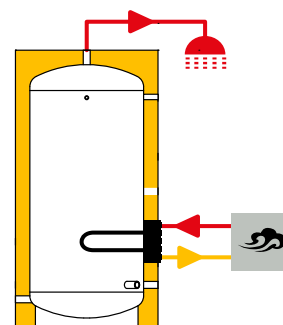
Water heater with tube heat exchanger

BOIL INOX



Legend couplings

| | |
|----|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E | thermostat |
| F | recirculation |
| G1 | auxiliary |
| G2 | auxiliary |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| S | discharge |
| q | inspection hole |



Coupling chart

| capacity l | A inch | B inch | C inch | D inch | E mm | F inch | G1 inch | G2 inch | I inch | M inch | N inch | S inch | q mm |
|---------------|-----------|-----------|-----------|-----------|---------|-----------|------------|------------|-----------|-----------|-----------|-----------|---------|
| 200 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1" | 1 1/4" | 1 1/4" | 1 1/2" | 1" | 1" | 1" | 220/300 |
| 300 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1" | 1 1/4" | 1 1/4" | 1 1/2" | 1" | 1" | 1" | 220/300 |
| 500 | 1" | 1" | 1 1/4" | 1/2" | 1/2" | 1" | 1 1/4" | 1 1/4" | 1 1/2" | 1" | 1" | 1" | 220/300 |
| 800 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 1 1/4" | 300/380 |
| 1000 | 1 1/4" | 1 1/4" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 1 1/4" | 300/380 |
| 1500 | 1 1/2" | 1 1/2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 1 1/2" | 300/380 |
| 2000 | 2" | 2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 2" | 350/430 |
| 2500 | 2" | 2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 2" | 350/430 |
| 3000 | 2" | 2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 2" | 350/430 |
| 4000 | 2 1/2" | 2 1/2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 2 1/2" | 350/430 |
| 5000 | 2 1/2" | 2 1/2" | 1 1/4" | 1/2" | 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | 2" | 2" | 2 1/2" | 350/430 |

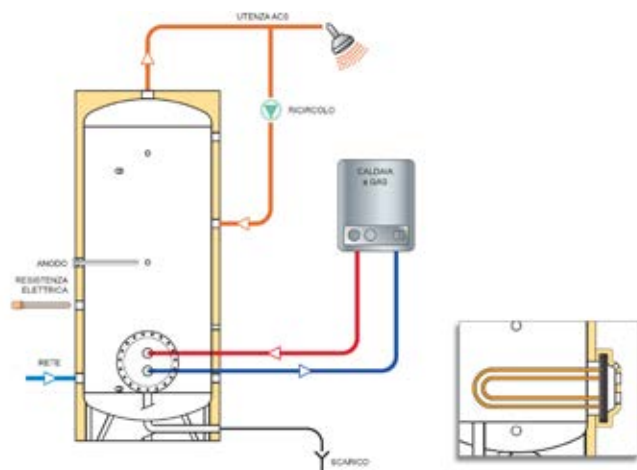
Height chart

| capacity l | øe mm | Ht mm | R* mm | A mm | C mm | D mm | E mm | F mm | G1 mm | G2 mm | I mm | M mm | N mm | q mm |
|---------------|----------|----------|----------|---------|---------|---------|---------|---------|----------|----------|---------|---------|---------|---------|
| 200 | 650 | 1470 | 1608 | 275 | 1195 | 1195 | 275 | 725 | 275 | 1115 | 870 | 435 | 315 | 375 |
| 300 | 750 | 1510 | 1687 | 295 | 1215 | 1215 | 295 | 745 | 295 | 1135 | 965 | 455 | 335 | 395 |
| 500 | 800 | 1950 | 2108 | 270 | 1690 | 1690 | 270 | 970 | 270 | 1110 | 1050 | 430 | 310 | 370 |
| 800 | 990 | 1920 | 2161 | 395 | 1550 | 1550 | 395 | 970 | 395 | 1235 | 1185 | 607,5 | 462,5 | 535 |
| 1000 | 1000 | 2190 | 2408 | 405 | 1805 | 1805 | 405 | 1105 | 405 | 1245 | 1445 | 617,5 | 472,5 | 545 |
| 1500 | 1200 | 2200 | 2506 | 425 | 1815 | 1815 | 425 | 1115 | 425 | 1265 | 1455 | 627,5 | 482,5 | 555 |
| 2000 | 1400 | 2280 | 2676 | 460 | 1850 | 1850 | 460 | 1150 | 460 | 1300 | 1490 | 710 | 520 | 615 |
| 2500 | 1400 | 2530 | 2892 | 460 | 2100 | 2100 | 460 | 1275 | 460 | 1300 | 1350 | 710 | 520 | 615 |
| 3000 | 1450 | 2800 | 3154 | 475 | 2365 | 2365 | 475 | 1415 | 475 | 1315 | 1645 | 725 | 535 | 630 |
| 4000 | 1600 | 2880 | 3295 | 530 | 2400 | 2400 | 530 | 1450 | 530 | 1370 | 1680 | 760 | 570 | 665 |
| 5000 | 1800 | 2910 | 3422 | 530 | 2400 | 2400 | 530 | 1450 | 530 | 1370 | 1680 | 760 | 570 | 665 |

R*: reversal quota

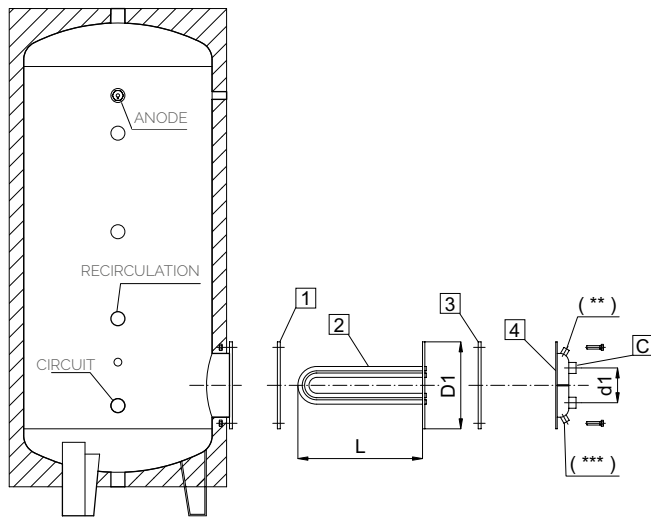
Technical information for BOIL series

| Capacity | DHW production $T_{iDHW} = 10^{\circ}\text{C}$ | | | | | | | Exchanger | | Nominal flow |
|----------|--|---------------------------------|---------|---------------------------------|---------|----------------------------|----------------------------|--------------|----------|--------------|
| | T_i | $T_{uDHW} = 45^{\circ}\text{C}$ | | $T_{uDHW} = 60^{\circ}\text{C}$ | | $T_a = 50^{\circ}\text{C}$ | $T_a = 60^{\circ}\text{C}$ | Surface area | Capacity | |
| | | $^{\circ}\text{C}$ | L/h (a) | kW (b) | L/h (c) | kW (d) | L/10 min. (e) | | | |
| 200 | 70 | 196 | 8.0 | 96 | 5.6 | 258 | 315 | 0.5 | 2 | 5 |
| | 80 | 247 | 10.0 | 137 | 8.0 | 266 | 323 | | | |
| | 90 | 297 | 12.1 | 175 | 10.2 | 273 | 330 | | | |
| 300 | 70 | 290 | 11.8 | 143 | 8.3 | 384 | 470 | 0.75 | 2.8 | 5 |
| | 80 | 366 | 14.9 | 203 | 11.8 | 395 | 480 | | | |
| | 90 | 440 | 17.9 | 259 | 15.1 | 405 | 491 | | | |
| 500 | 70 | 383 | 15.6 | 189 | 11.0 | 620 | 763 | 1 | 3.6 | 5 |
| | 80 | 482 | 19.6 | 269 | 15.6 | 632 | 775 | | | |
| | 90 | 580 | 23.6 | 342 | 19.9 | 644 | 787 | | | |
| 800 | 70 | 562 | 22.9 | 278 | 16.2 | 983 | 1212 | 1.5 | 5.9 | 10 |
| | 80 | 707 | 28.8 | 395 | 23.0 | 1001 | 1229 | | | |
| | 90 | 849 | 34.6 | 502 | 29.2 | 1018 | 1247 | | | |
| 1000 | 70 | 732 | 29.8 | 365 | 21.2 | 1224 | 1510 | 2 | 7.2 | 10 |
| | 80 | 921 | 37.5 | 517 | 30.0 | 1245 | 1531 | | | |
| | 90 | 1106 | 45.0 | 656 | 38.1 | 1266 | 1552 | | | |
| 1500 | 70 | 1054 | 42.9 | 530 | 30.8 | 1837 | 2266 | 3 | 10.9 | 10 |
| | 80 | 1322 | 53.8 | 746 | 43.4 | 1869 | 2297 | | | |
| | 90 | 1585 | 64.5 | 944 | 54.9 | 1899 | 2328 | | | |
| 2000 | 70 | 1348 | 54.9 | 684 | 39.7 | 2421 | 2992 | 4 | 14.7 | 20 |
| | 80 | 1688 | 68.7 | 959 | 55.7 | 2454 | 3026 | | | |
| | 90 | 2020 | 82.2 | 1210 | 70.3 | 2488 | 3059 | | | |
| 2500 | 70 | 1620 | 65.9 | 828 | 48.1 | 3014 | 3728 | 5 | 18.5 | 20 |
| | 80 | 2022 | 82.3 | 1156 | 67.2 | 3053 | 3767 | | | |
| | 90 | 2416 | 98.3 | 1455 | 84.6 | 3091 | 3805 | | | |
| 3000 | 70 | 1620 | 65.9 | 828 | 48.1 | 3577 | 4434 | 6 | 22 | 20 |
| | 80 | 2022 | 82.3 | 1156 | 67.2 | 3614 | 4471 | | | |
| | 90 | 2416 | 98.3 | 1455 | 84.6 | 3650 | 4507 | | | |
| 4000 | 70 | 2308 | 93.9 | 1209 | 70.3 | 4775 | 5918 | 8 | 30.1 | 20 |
| | 80 | 2863 | 116.5 | 1666 | 96.8 | 4824 | 5967 | | | |
| | 90 | 3407 | 138.6 | 2080 | 120.9 | 4872 | 6015 | | | |
| 5000 | 70 | 2681 | 109.1 | 1426 | 82.9 | 5938 | 7366 | 10 | 36.4 | 20 |
| | 80 | 3314 | 134.9 | 1949 | 113.3 | 5990 | 7419 | | | |
| | 90 | 3932 | 160.0 | 2422 | 140.8 | 6042 | 7470 | | | |



- a continuous DHW flow with $T_{uDHW} = 45^{\circ}\text{C}$
- b exchanger power with $T_{uDHW} = 45^{\circ}\text{C}$
- c continuous DHW flow with $T_{uDHW} = 60^{\circ}\text{C}$
- d exchanger power with $T_{uDHW} = 60^{\circ}\text{C}$
- e amount of DHW at 45°C in the first 10 min. with a storage temperature of 50°C
- f amount of DHW at 45°C in the first 10 min. with a storage temperature of 60°C
- Exchanger capacity: 7.10 Lt/mq

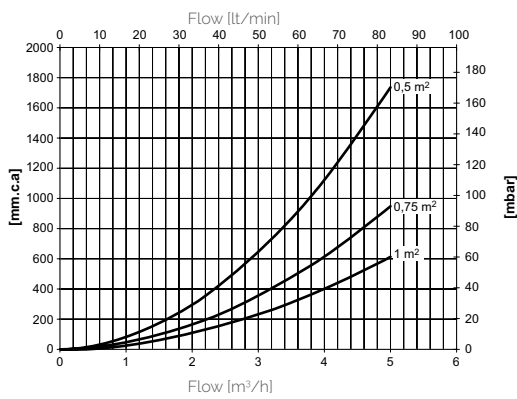
Technical information for BOIL series



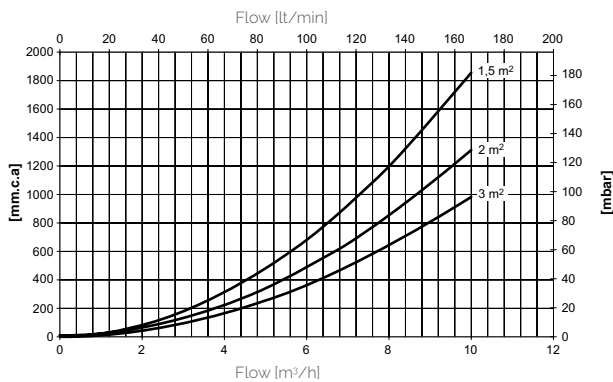
Legend couplings

- 1 gaskets S/T
black rubber (**)
asbestos free (***)
- 2 tube heat exchanger
- 3 gaskets C/T
black rubber (**)
asbestos free (***)
- 4 head

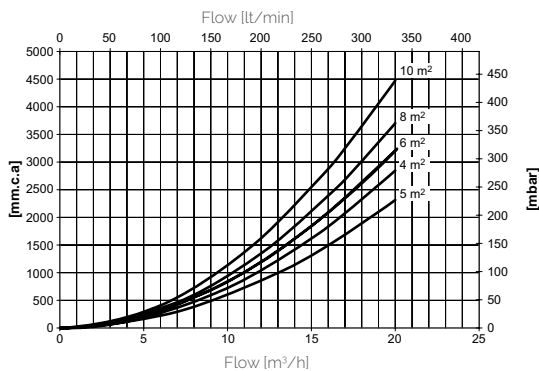
(**) = functioning with water
(***) = functioning with steam



0,5 - 0,75 - 1 m²



1,5 - 2 - 3 m²



4 - 5 - 6 - 8 - 10 m²

| Tube heat exchanger (copper or AISI 304 stainless steel) | | | | | |
|---|---------------------------|-----|------|-----|-----|
| Capacity l | surface m ² | D1 | L | d1 | C |
| 200 | 0,5 | 300 | 400 | 120 | 1°F |
| 300 | 0,75 | 300 | 430 | 120 | 1°F |
| 500 | 1 | 300 | 430 | 120 | 1°F |
| 750 | 1,5 | 380 | 590 | 150 | 2°F |
| 1000 | 2 | 380 | 590 | 150 | 2°F |
| 1500 | 3 | 380 | 720 | 150 | 2°F |
| 2000 | 4 | 430 | 750 | 200 | 2°F |
| 2500 | 5 | 430 | 780 | 200 | 2°F |
| 3000 | 6 | 430 | 1000 | 200 | 2°F |
| 4000 | 8 | 430 | 1250 | 200 | 2°F |
| 5000 | 10 | 430 | 1520 | 200 | 2°F |

Hot water

Customized water heater with extractible exchanger – BOIL Custom – 1 inspection hole



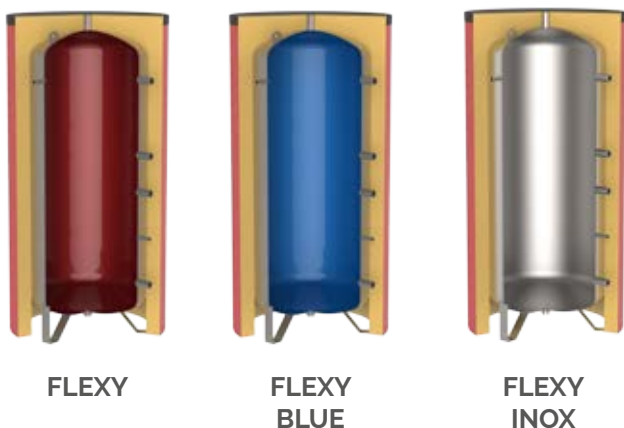
The concept of the Boil custom gamma was introduced to give the user the possibility of composing their own system for domestic hot water production by coupling it with several types of storage tanks and exchangers. This enables the conception of flexible solutions for every type of storage tank, volume or power of the exchanger. The option with one hole makes it possible to couple the storage tanks listed below with a tube heat exchanger or an exchanger with copper spiral. The following pages discuss the possible combinations.

Storage tanks with one inspection hole. Available options:

FLEXY glass lined version (see p. 104)

FLEXY BLUE (version with inspection hole): version with Bluetech enameling (see p. 106)

FLEXY INOX version in AISI 316 stainless steel (vedi p. 108)

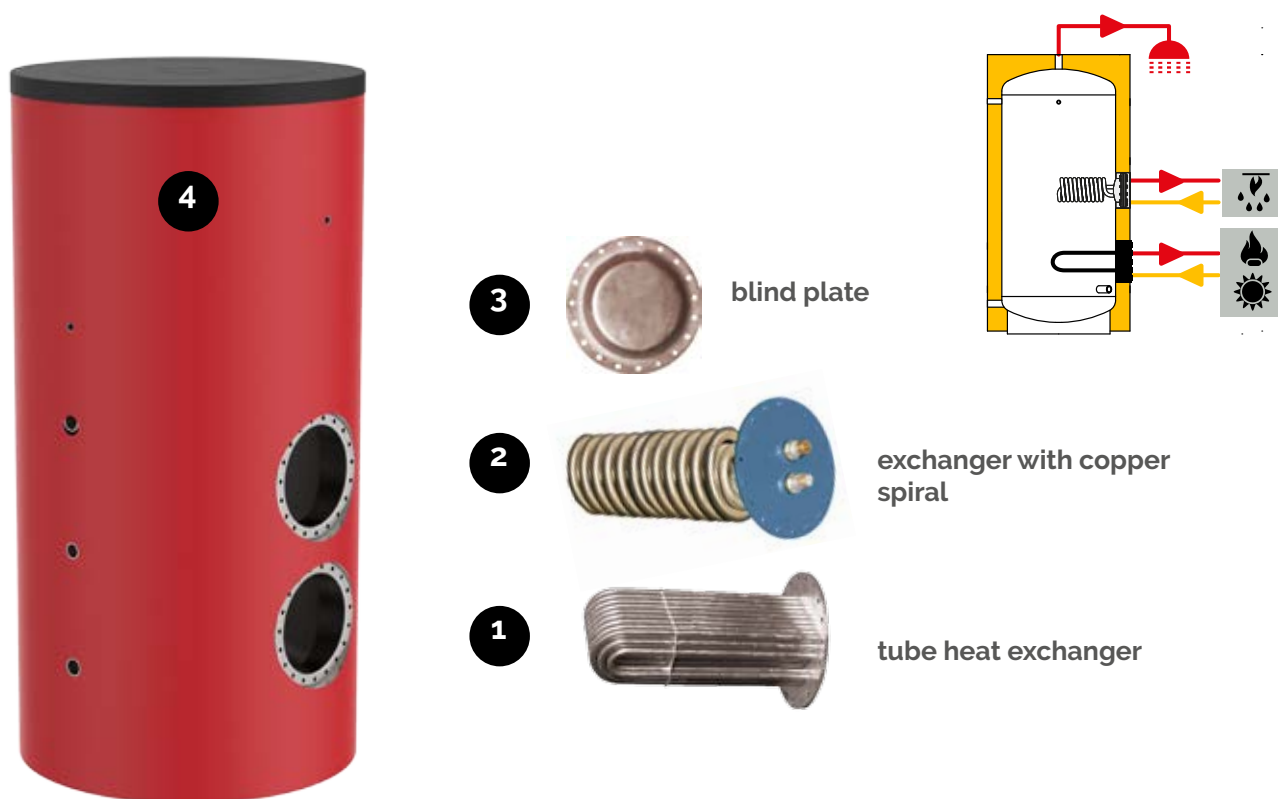


❖ how to compose a Boil custom installation

- 1) take the code of the Flexy storage tank with inspection hole
 2. Add the code of the exchanger
- You can choose between the following:
- Tube heat exchanger (p.145)
 - Exchanger with copper spiral (p.146)

BOIL CUSTOM CODE =
Storage tank code
exchanger code

Customized water heater with extractible exchanger – BOIL Custom – 2 inspection holes



The concept of the Boil custom gamma was introduced to give the user the possibility of composing their own system for domestic hot water production by coupling it with several types of storage tanks and exchangers. This enables the conception of flexible solutions for every type of storage tank, volume or power of the exchanger. The option with two inspection holes makes it possible to couple the storage tank with:

- ✓ Two tube heat exchangers
- ✓ Two exchangers with a copper spiral
- ✓ A tube heat exchanger and an exchanger with a copper spiral
- ✓ One of the two heat exchangers and a blind plate that guarantees an easy inspection.

❖ Come comporre il Boil Custom

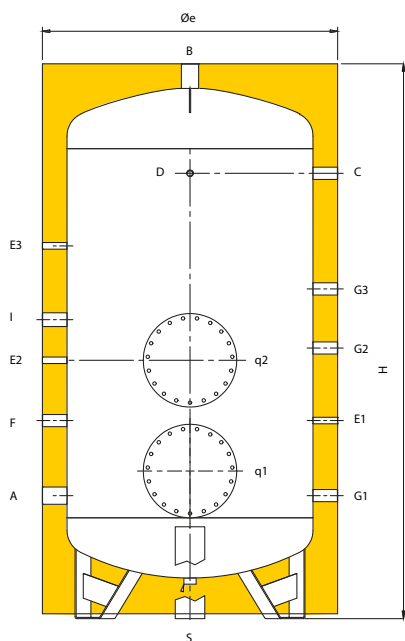
- 1) take the code of the storage tank with two inspection holes
 - 2) add the code of the exchanger
- You can choose between
- tube heat exchanger (see p. 145)
 - heat exchanger with a copper spiral (see p. 146)

Boil custom code =
code of storage tank +
code of exchanger

Codes and prices of the tanks with two inspection holes

| capacity l | code | price | energy label | packed | |
|---------------|------------|------------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 200 | 817080134X | € 1.156,00 | C | 68x68x155,5 | 55 |
| 300 | 817080135X | € 1.322,00 | C | 78x78x164 | 80 |
| 500 | 817080136X | € 1.606,00 | D | 88x88x192,5 | 105 |
| 800 | 817080137X | € 2.065,00 | | 102x102x221 | 160 |
| 1000 | 817080138X | € 2.295,00 | | 107x107x224 | 180 |
| 1500 | 817080139X | € 2.911,00 | | 123x123x237,5 | 230 |
| 2000 | 817080140X | € 3.400,00 | | 132x132x269,5 | 280 |
| 2500 | 817080141X | € 3.915,00 | | 147x147x277,5 | 315 |
| 3000 | 817080142X | € 4.462,00 | | 147x147x299 | 350 |
| 4000 | 817080143X | € 5.458,00 | | 163x163x306 | 505 |
| 5000 | 817080144X | € 6.128,00 | | 183x183x310 | 595 |

Customized water heater with extractible exchanger – BOIL Custom – 2 inspection holes



Legend couplings

| | |
|-----|------------------------|
| A | domestic water inlet |
| B | domestic water outlet |
| C | anode |
| D | thermometer |
| E 1 | thermostat |
| E 2 | thermostat |
| E 3 | thermostat |
| F | recirculation |
| G1 | auxiliary |
| G2 | auxiliary |
| G3 | auxiliary |
| I | electrical resistor |
| M | primary circuit inlet |
| N | primary circuit outlet |
| S | discharge |
| q1 | inspection hole |
| q2 | inspection hole |

Features

✓ Material:

ST 235 JR carbon steel

✓ Internal protective treatment:

Bluetech enamelling with thermosetting resins, suited for domestic water

✓ Insulation:

All tanks are insulated with flexible polyurethane with a thickness of 100 mm. The insulation can be removed.

✓ Available accessories:

Thermometer, thermostat, current impressed electronic anode, safety valve, electrical resistance, external plate heat exchanger kit.

✓ Supplied accessories:

Sacrificial magnesium anode

Coupling chart

| capacity l | A inch | B inch | C inch | D inch | E1 inch | E2 inch | E3 inch | F inch | G1 inch | G2 inch | G3 inch | I inch | M inch | N inch | S inch | q1 / q2 |
|---------------|-----------|-----------|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|
| 200 | 1'1/4 | 1'1/4 | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 1' | 1' | 1'1/4 | Ø 220/300 |
| 300 | 1'1/4 | 1'1/4 | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 1' | 1' | 1'1/4 | Ø 220/300 |
| 500 | 1'1/4 | 1'1/4 | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 1' | 1' | 1'1/4 | Ø 220/300 |
| 800 | 1'1/2 | 1'1/2 | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 300/380 |
| 1000 | 1'1/2 | 1'1/2 | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 300/380 |
| 1500 | 2' | 2' | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 300/380 |
| 2000 | 2' | 2' | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 350/430 |
| 2500 | 2'1/2 | 2'1/2 | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 350/430 |
| 3000 | 3' | 3' | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 350/430 |
| 4000 | 3' | 3' | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 350/430 |
| 5000 | 3' | 3' | 1'1/4 | 1/2' | 1/2' | 1/2' | 1/2' | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/4 | 1'1/2 | 2' | 2' | 1'1/4 | Ø 350/430 |

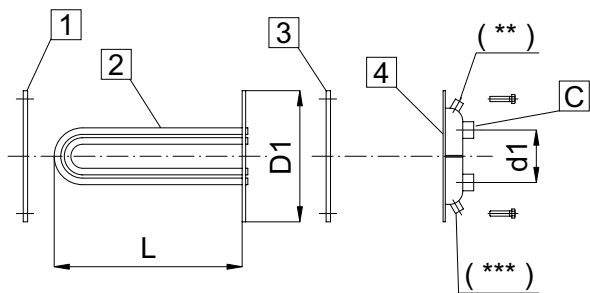
Height chart

| capacity l | Øe mm | Ht mm | R* mm | A mm | C mm | D mm | E1 mm | E2 mm | E3 mm | F mm | G1 mm | G2 mm | G3 mm | I mm | q1 mm | q2 mm |
|---------------|----------|----------|----------|---------|---------|---------|----------|----------|----------|---------|----------|----------|----------|---------|----------|----------|
| 200 | 650 | 1435 | 1576 | 310 | ** | 1150 | 620 | 730 | - | 440 | 310 | 930 | 1150 | 555 | 380 | 730 |
| 300 | 750 | 1520 | 1695 | 355 | ** | 1195 | 655 | 775 | - | 485 | 355 | 955 | 1195 | 625 | 425 | 775 |
| 500 | 850 | 1805 | 1996 | 375 | 1445 | 1445 | 675 | 795 | 1145 | 675 | 375 | 975 | 1215 | 960 | 445 | 795 |
| 800 | 950 | 2090 | 2296 | 390 | 1720 | 1720 | 710 | 980 | 1420 | 710 | 390 | 1010 | 1230 | 1160 | 500 | 980 |
| 1000 | 1050 | 2120 | 2366 | 400 | 1720 | 1720 | 700 | 960 | 1420 | 755 | 400 | 1000 | 1240 | 1140 | 510 | 960 |
| 1500 | 1200 | 2255 | 2555 | 500 | 1810 | 1810 | 805 | 1050 | 1515 | 805 | 500 | 1100 | 1340 | 1230 | 600 | 1050 |
| 2000 | 1300 | 2575 | 2885 | 505 | 2115 | 2115 | 805 | 1150 | 1805 | 805 | 505 | 1105 | 1345 | 1505 | 620 | 1150 |
| 2500 | 1400 | 2655 | 3002 | 565 | 2150 | 2150 | 865 | 1210 | 1850 | 850 | 565 | 1165 | 1405 | 1550 | 680 | 1210 |
| 3000 | 1450 | 2870 | 3216 | 575 | 2350 | 2350 | 800 | 1220 | 2050 | 850 | 575 | 1050 | 1415 | 1750 | 690 | 1220 |
| 4000 | 1600 | 2940 | 3348 | 600 | 2380 | 2380 | 900 | 1245 | 2080 | 870 | 600 | 1200 | 1440 | 1780 | 715 | 1245 |
| 5000 | 1800 | 2980 | 3482 | 610 | 2385 | 2385 | 910 | 1255 | 2085 | 885 | 610 | 1210 | 1450 | 1785 | 725 | 1255 |

R*: reversal quota

**for the 200 and 300 L tanks, the anode is placed in the G2 coupling.

Customized water heater with extractible heat exchanger – BOIL custom – tube heat exchanger



Legend couplings

| | |
|---|---------------------------|
| 1 | gasket without cross-beam |
| 2 | tube heat exchanger |
| 3 | gasket with cross-beam |
| 4 | head |

Compatibility between (1) the tube heat exchanger and (4) the storage tank

| Capacity l | Surface m ² | | | | | | | | | | |
|---------------|------------------------|------|---|-----|---|-----|---|---|---|---|----|
| | 0,5 | 0,75 | 1 | 1,5 | 2 | 2,5 | 4 | 5 | 6 | 8 | 10 |
| 200 | ✓ | ✓ | ✓ | | | | | | | | |
| 300 | ✓ | ✓ | ✓ | | | | | | | | |
| 500 | ✓ | ✓ | ✓ | | | | | | | | |
| 800 | | | | ✓ | ✓ | ✓ | | | | | |
| 1000 | | | | ✓ | ✓ | ✓ | | | | | |
| 1500 | | | | ✓ | ✓ | ✓ | | | | | |
| 2000 | | | | | | | ✓ | ✓ | ✓ | | |
| 2500 | | | | | | | ✓ | ✓ | ✓ | | |
| 3000 | | | | | | | ✓ | ✓ | ✓ | ✓ | |
| 4000 | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5000 | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ |

✓ Combination is possible

| surf. m ² | Version 1 INOX AISI 304 | | Version 2 INOX AISI 316 | | Version with steam P ≤ 6 bar | | | Version with steam P ≤ 12 bar | | |
|-------------------------|----------------------------|------------|----------------------------|------------|---------------------------------|------------|----------------|----------------------------------|------------|----------------|
| | code | price | code | price | code | price | cat. P.E.D. | code | price | cat. P.E.D. |
| 0,5 | 821030379X | € 350,00 | 821030393X | € 597,00 | 821030285X | € 1.082,00 | Art.3 par.3 | 821030405X | € 1.082,00 | Cat. I |
| 0,75 | 821030380X | € 423,00 | 821030394X | € 658,00 | 821030286X | € 1.191,00 | Art.3 par.3 | 821030406X | € 1.191,00 | Cat. I |
| 1 | 821030381X | € 481,00 | 821030395X | € 732,00 | 821030287X | € 1.280,00 | Art.3 par.3 | 821030407X | € 1.326,00 | Cat. I |
| 1,5 | 821030382X | € 669,00 | 821030396X | € 1.096,00 | 821030288X | € 1.913,00 | Cat. I | 821030408X | € 1.901,00 | Cat. I |
| 2 | 821030383X | € 774,00 | 821030397X | € 1.222,00 | 821030289X | € 2.141,00 | Cat. I | 821030409X | € 2.142,00 | Cat. I |
| 3 | 821030385X | € 1.009,00 | 821030399X | € 1.513,00 | 821030291X | € 2.661,00 | Cat. I | 821030411X | € 2.662,00 | Cat. I |
| 4 | 821030386X | € 1.300,00 | 821030400X | € 2.126,00 | 821030292X | € 3.684,00 | Cat. I | 821030412X | € 3.985,00 | Cat. II |
| 5 | 821030387X | € 1.513,00 | 821030401X | € 2.713,00 | 821030293X | € 4.216,00 | Cat. I | 821030413X | € 4.562,00 | Cat. II |
| 6 | 821030388X | € 1.706,00 | 821030402X | € 2.616,00 | 821030294X | € 4.608,00 | Cat. I | 821030414X | € 4.991,00 | Cat. II |
| 8 | 821030389X | € 2.304,00 | 821030403X | € 3.517,00 | 821030296X | € 5.893,00 | Cat. I | 821030416X | € 6.365,00 | Cat. II |
| 10 | 821030390X | € 2.753,00 | 821030404X | € 4.353,00 | 821030298X | € 6.663,00 | Cat. II | 821030418X | € 7.197,00 | Cat. II |

Version 1: AISI 304 stainless steel tube heat exchanger, assembled on a varnished plate

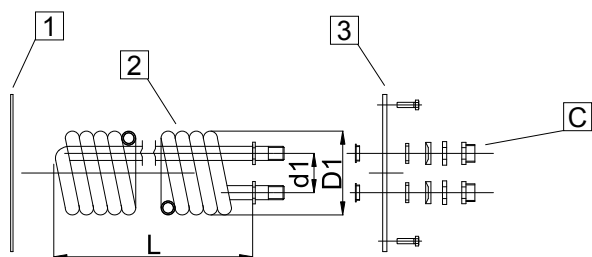
Version 2 and version with steam: AISI 306 stainless steel tube heat exchanger, assembled on a stainless steel plate

Technical information tube heat exchanger

| Surface area m ² | Power kW | D1 mm | L mm | d1 mm | C inch | Volume l |
|--------------------------------|-------------|----------|---------|----------|-----------|-------------|
| 0,5 | 12,2 | 300 | 400 | 120 | 1" F | 3,15 |
| 0,75 | 18,4 | 300 | 430 | 120 | 1" F | 4,15 |
| 1 | 24,5 | 300 | 430 | 120 | 1" F | 5,15 |
| 1,5 | 36,7 | 380 | 590 | 150 | 2" F | 8,43 |
| 2 | 49 | 380 | 590 | 150 | 2" F | 10,43 |
| 3 | 73,5 | 380 | 720 | 150 | 2" F | 13,43 |
| 4 | 98 | 430 | 750 | 200 | 2" F | 18,1 |
| 5 | 122,5 | 430 | 780 | 200 | 2" F | 21,6 |
| 6 | 147 | 430 | 1000 | 200 | 2" F | 23,9 |
| 8 | 196 | 430 | 1250 | 200 | 2" F | 33,1 |
| 10 | 245 | 430 | 1520 | 200 | 2" F | 40,1 |

Performance calculated with the following temperatures: primary 80°C and domestic water 10-45°C

Customized water heater with extractible heat exchanger – BOIL custom with copper spiral coil



Legend couplings

- 1 gasket without cross-beam
- 2 copper spiral coil
- 3 assembly plate

Compatibility chart for (2) copper spiral coil and (4) storage tank

| Capacity l | Surface area m ² | | | | | | | |
|---------------|-----------------------------|------|------|------|-----|------|------|------|
| | 0,82 | 1,38 | 1,53 | 2,27 | 3,1 | 4,54 | 5,26 | 6,34 |
| 200 | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| 300 | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| 500 | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| 800 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1500 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2500 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Copper spiral coil

✓ Combination is possible

| Surface area m ² | Assembled on a plate ø 300 (D1) | | Assembled on a plate ø 380 (D1) | | Assembled on a plate ø 430 (D1) | |
|--------------------------------|------------------------------------|----------|------------------------------------|------------|------------------------------------|------------|
| | code | price | code | price | code | price |
| 0,82 | 821040017 | € 275,00 | 821040254X | € 296,00 | 821040259X | € 313,00 |
| 1,38 | 821040019 | € 395,00 | 821040255X | € 417,00 | 821040260X | € 433,00 |
| 1,53 | 821040020 | € 433,00 | 821040256X | € 454,00 | 821040261X | € 471,00 |
| 2,27 | 821040252X | € 575,00 | 821040021 | € 597,00 | 821040262X | € 613,00 |
| 3,1 | 821040253X | € 862,00 | 821040022 | € 884,00 | 821040263X | € 900,00 |
| 4,54 | - | - | 821040023 | € 1.169,00 | 821040027 | € 1.186,00 |
| 5,26 | - | - | 821040257X | € 1.312,00 | 821040024 | € 1.328,00 |
| 6,34 | - | - | 821040258X | € 1.533,00 | 821040025 | € 1.549,00 |

The copper coils are supplied with plates, bolts, nuts and gaskets

Technical information copper spiral coil

| Surface area m ² | Type of coil | D1 mm | d1 mm | L mm | C inch | Internal volume l | Thermal efficiency (*) kW | Dp kPa |
|--------------------------------|-----------------|----------|----------|---------|-----------|-------------------------|---------------------------------|-----------|
| 0,82 | SS | 160 | 75 | 380 | 3/4" | 0,7 | 15 | 25 |
| 1,38 | SS | 170 | 75 | 420 | 3/4" | 1,2 | 21,6 | 30 |
| 1,53 | SS | 170 | 75 | 450 | 3/4" | 1,4 | 24 | 35 |
| 2,27 | SS | 170 | 75 | 570 | 3/4" | 2 | 27 | 35 |
| 3,1 | SD | 180 | 90 | 550 | 1"1/4 | 2,7 | 35 | 26 |
| 4,54 | SD | 242 | 120 | 570 | 1"1/4 | 3,9 | 55 | 35 |
| 5,26 | SD | 242 | 120 | 660 | 1"1/4 | 4,5 | 57,5 | 35 |
| 6,34 | SD | 242 | 120 | 780 | 1"1/4 | 5,5 | 61,5 | 35 |

*Performance calculated with the following temperatures: primary 80°C and domestic water 10-45°C

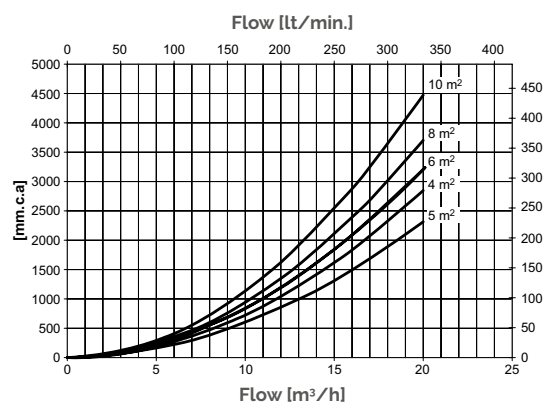
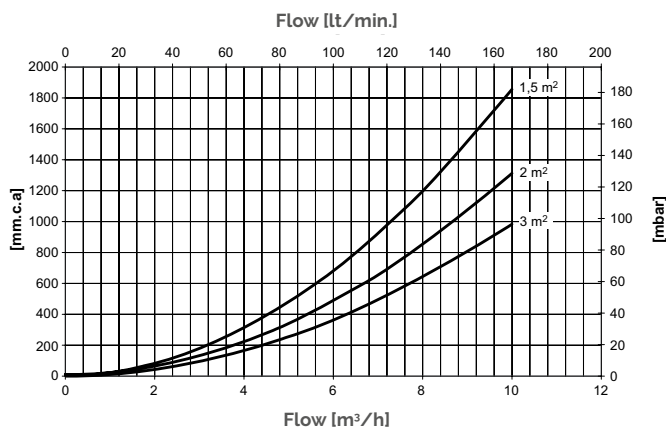
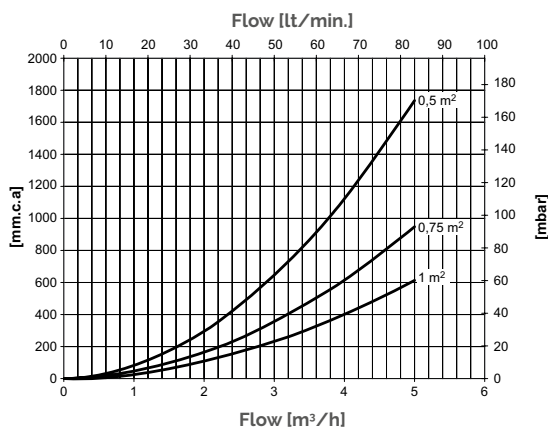
SS single coil with one tube

SD double coil with two tubes connected in parallel

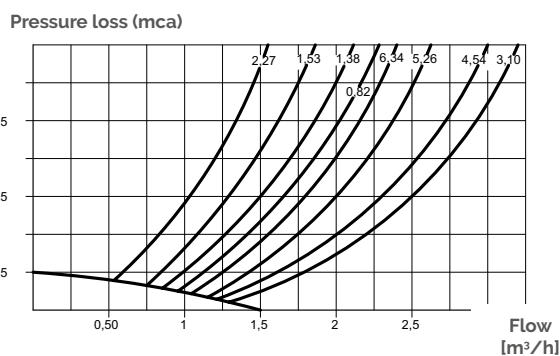
Customized water heater with extractible heat exchanger – BOIL custom

Curve: pressure loss

Pressure loss tube heat exchanger



Pressure loss copper spiral coil



Accessories



| Diameter mm | Without crossbeam | | With crossbeam | |
|-------------|-------------------|---------|----------------|---------|
| | Code | Price | Code | Price |
| 300 | 808020050 | € 7,00 | 808020045 | € 7,00 |
| 380 | 808020051 | € 8,00 | 808020046 | € 8,00 |
| 430 | 808020052 | € 10,00 | 808020047 | € 10,00 |

The copper coils have a gasket without cross-beam with the same diameter as the assembly plate.

The tube heat exchangers have two gaskets: one with and one without a cross-beam. Both have the same diameter as the closing head.

The blind closing heads have one gasket without cross-beam with the same diameter as the assembly plate.



| Diameter mm | Code | Price |
|-------------|------------|----------|
| 300 | 843030018X | € 79,00 |
| 380 | 843030019X | € 86,00 |
| 430 | 843030020X | € 100,00 |

The heads are made of carbon steel, varnished for alimentary use. They are supplied with nuts, bolts and gaskets.

Hot water cylinder for DHW AFK, AFK-INOX

The AFK and AFK INOX systems for the fast production of domestic hot water are composed of two parts: a Flexy or Boil storage tank with a capacity of up to 2000l and an AFK kit. The AFK kit consists of a high efficiency gasketed plate thermal exchange unit and a circulation pump on the domestic water circuit. Because of the possibility of combining the AFK kit with a large number of storage tanks, we can come up with many options for the fast production of domestic hot water in small and medium-sized buildings (houses, restaurants, hotels, sport centres, etc.). It is also possible to couple the storage tank with an external heat exchanger. This reduces the stress on the system and optimizes the equilibrium between the power of the heater (or heat generator) and the performance of the heat exchanger.

This makes it possible to:

- ✓ opt for a smaller tank than with a traditional water heater
- ✓ customize the combination of the storage tank's volume and the thermal capacity of the heat exchanger

With the SLC electronic control unit you can manage the system by using the pre-set hydraulic schemes, which makes it possible to optimize and control the functioning of the system.



❖ How to compose the AFK system you want?

1. take the code of the AFK kit with the desired power
2. take the code of the storage tank or the water heater you want to connect (see Flexy and Boil sections)
3. if desired, choose one of the accessories

The AFK kits consist of:

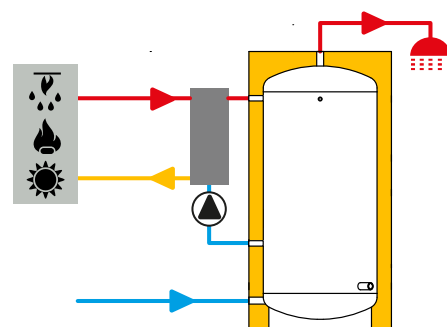
- ✓ a K042 gasketed plate heat exchanger with a various number of plates depending on the power which has to be exchanged
- ✓ high efficiency recirculation pump
- ✓ chrome-plated brass pipe fittings

✓ Materials

The heat exchange unit, i.e. the K042 heat exchanger, is made of corrugated AISI 316 stainless steel plates, encased in a carbon steel frame. The frame is varnished with epoxy dust and closed with galvanized steel bolts and nuts.

The plates are separated with NBR or EPDM (on demand) gaskets. The body of the storage tank, the internal protective treatments and the available insulation are indicated in the sections on the Flexy and the Boil water heaters in this catalogue.

Hot water cylinder for DHW AFK, AFK-INOX



Kit AFK

Flexy series p.104
Flexy Blue series p. 106
Flexy Inox series p. 108

| Size of the exchanger l | Power kW | Continuous DHW production l/h | dP Primary kPa | Couplings inch | Min-max power of the pump W | Tension V/Hz/ph | Min-max current A | |
|----------------------------|-------------|--|----------------------|-------------------|-----------------------------------|--------------------|-------------------------|----------|
| K042/09 | 35 | 14* | 859 | 18 | 1 1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| K042/15 | 70 | 24* | 1717 | 24 | 1 1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| K042/21 | 115 | 34* | 2862 | 33 | 1 1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| K042/25 | 150 | 40* | 3721 | 39 | 1 1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| K042/33 | 200 | 53* | 4866 | 39 | 1 1/4 | 3-140 | 230/50/1 | 0,04-1,1 |

Performance calculated with the following temperatures:
primary 80-60 °C and domestic water 10-45 °C * primary 55-50 and domestic water 35-45 °C

| Size of the exchanger | Code | Price | Packed | |
|-----------------------|------------|------------|------------------|--------------|
| | | | Dimensions cm | Weight kg |
| K042/09 | 841060038X | € 1.547,00 | 105x41x27 | 38 |
| K042/15 | 841060039X | € 1.661,00 | 105x41x27 | 40 |
| K042/21 | 841060040X | € 1.760,00 | 105x41x27 | 42 |
| K042/25 | 841060041X | € 1.827,00 | 105x41x27 | 43 |
| K042/33 | 841060042X | € 1.947,00 | 105x41x27 | 45 |

| Code | Accessory | Price |
|------------|---|----------|
| 822120028 | SLC electronic control unit (see. P. 238) | € 599,00 |
| 843090014X | AFK insulation kit for heat exchanger and pipe fittings | € 320,00 |

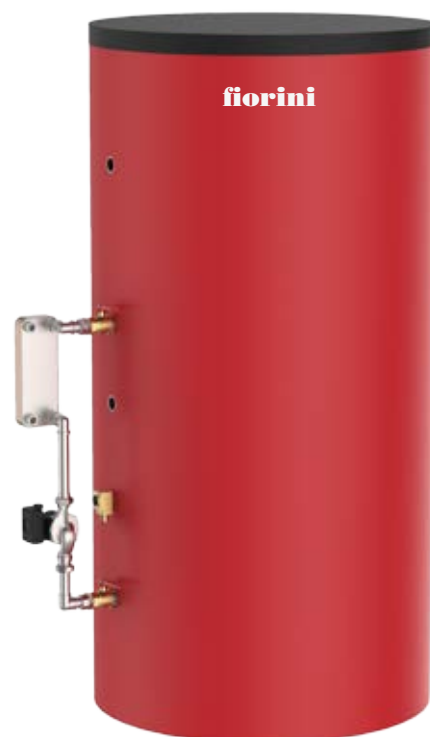
Hot water cylinder for DHW AFW, AFW-INOX

The AFW and AFW-INOX systems for the fast production of domestic hot water are composed of: a Flexy or Boil storage tank with a capacity of up to 2000l and an AFW kit. The AFW kit consists of a high efficiency brazed plate heat exchanger and a circulation pump on the domestic water circuit. Because of the possibility of combining the AFW kit with any kind of storage tank, we have a broad range of options for the fast production of domestic hot water in small or medium-sized buildings (houses, restaurants, hotels, sport centres, etc.). It is also possible to couple the storage tank with an external heat exchanger. This reduces the stress on the system and optimizes the equilibrium between the power of the heater (or heat generator) and the performance of the heat exchanger.

This makes it possible to:

- ✓ opt for a smaller tank than with a traditional water heater
- ✓ customize the combination of the storage tank's volume and the thermal capacity of the heat exchanger

With the SLC electronic control unit you can manage the system by using the pre-set hydraulic schemes, which makes it possible to optimize and control the functioning of the system.



❖ How to compose the AFW system you want?

1. take the code of the AFW kit with the desired power
2. take the code of the storage tank or the water heater you want to connect (see Flexy and Boil sections)
3. if desired, choose one of the accessories

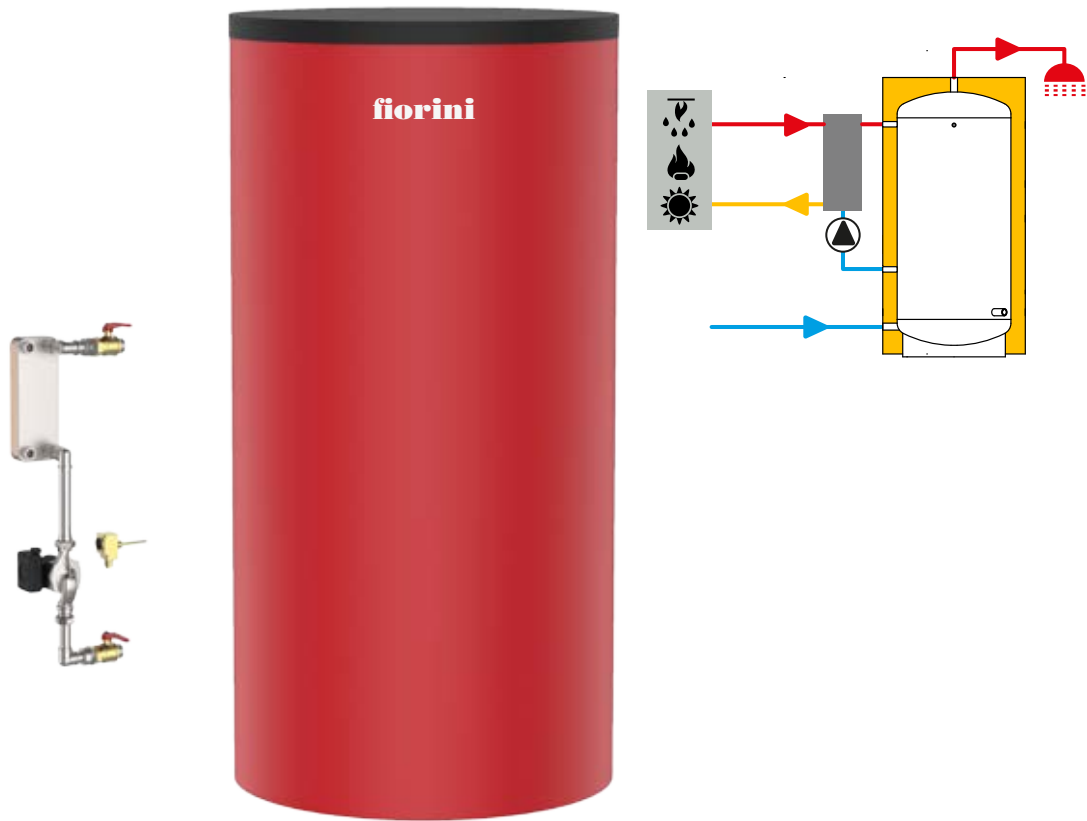
The AFW kits consist of:

- ✓ a P4 brazed plate heat exchanger with a various number of plates depending on the power which has to be exchanged
- ✓ high efficiency recirculation pump
- ✓ chrome-plated brass pipe fittings

✓ Materials

The heat exchange unit, i.e. the brazed P4 heat exchanger, is made of corrugated AISI 316 stainless steel plates, soldered with pure copper. The body of the storage tank, the internal protective treatments and the available insulation are indicated in the sections on the Flexy and the Boil water heaters in this catalogue.

Hot water cylinder for DHW AFW, AFW-INOX



Kit AFW

Flexy series p.104
Flexy Blue series p. 106
Flexy Inox series p. 108

| Size of the exchanger l | Power kW | Continuous DHW production L/h | dP Primary kPa | Couplings inch | Min-max power of the pump W | Tension V/Hz/ph | Min-max current A | |
|----------------------------|-------------|----------------------------------|-------------------|-------------------|--------------------------------|--------------------|----------------------|----------|
| P4/14 | 35 | 14* | 859 | 18 | 1"1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| P4/20 | 70 | 24* | 1717 | 24 | 1"1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| P4/30 | 115 | 34* | 2862 | 33 | 1"1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| P4/40 | 150 | 40* | 3721 | 39 | 1"1/4 | 3-140 | 230/50/1 | 0,04-1,1 |
| P4/50 | 200 | 53* | 4866 | 39 | 1"1/4 | 3-140 | 230/50/1 | 0,04-1,1 |

Performance calculated with the following temperatures:
primary 80-60 °C and domestic water 10-45 °C * primary 55-50 and domestic water 35-45 °C

| Size of the exchanger | Code | Price | Packed Dimensions cm | Weight kg | Code | Accessory | Price |
|-----------------------|------------|------------|-------------------------|--------------|------------|---|----------|
| K042/09 | 841060043X | € 1.156,00 | 105x41x27 | 12 | 822120028 | SLC electronic control unit (see. P. 238) | € 599,00 |
| K042/15 | 841060044X | € 1.212,00 | 105x41x27 | 12 | 843090015X | AFW insulation kit for heat exchanger and pipe fittings | € 315,00 |
| K042/21 | 841060045X | € 1.286,00 | 105x41x27 | 12 | | | |
| K042/25 | 841060046X | € 1.334,00 | 105x41x27 | 12 | | | |
| K042/33 | 841060047X | € 1.410,00 | 105x41x27 | 12 | | | |

Technical information - DHW fast production units – AFK and AFW series

Dimensions

The AFKX DHW production station is different from regular water heaters because of the presence of a high efficiency plate heat exchanger. This feature ensures that the available power from the energy source is fully used even when the temperature in the storage tank increases. Because of all this, smaller storage tanks can be used instead of the larger ones that would be used with a normal water heater with tube heat exchanger. To select the right DHW production unit the following data are needed:

| | |
|---------------|---|
| P_p : | Power available from the primary source |
| T_{in} : | Water temperature of the circuit |
| T_p : | Temperature of the primary source |
| T_u : | Temperature of the DHW |
| V_p : | DHW flow to be distributed during the sampling period |
| T_{punta} : | Duration of the sampling period |
| T_{rip} : | Time available to restore the temperature in the storage tank |

In the following pages there are a series of charts which indicate the DHW production when the sampling period lengthens and when the temperature varies in time, with the zero use. The graphics can help you with the selection of the correct model for your application.

Example

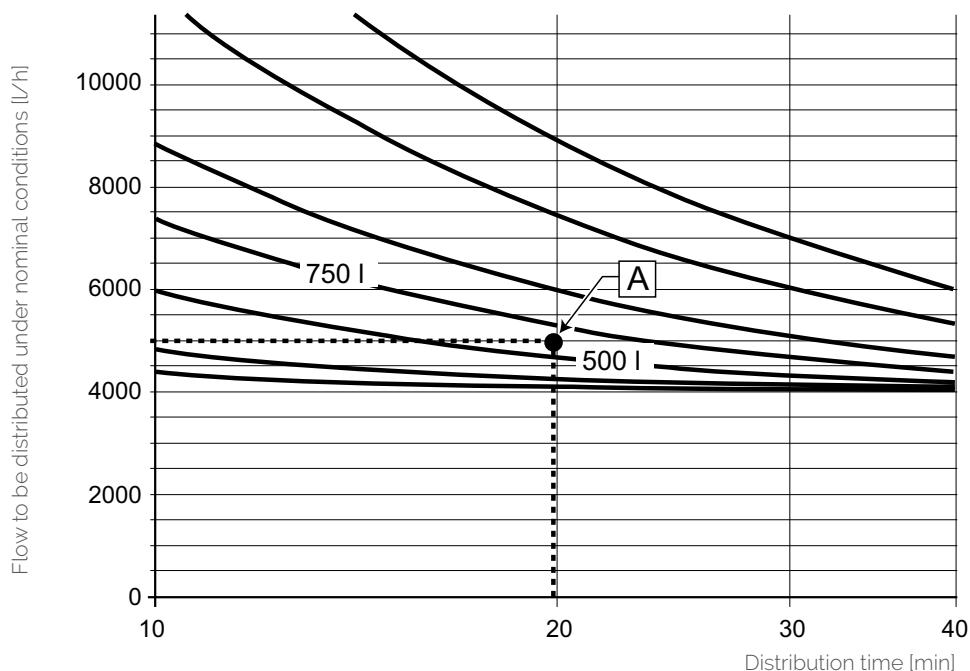
You have to distribute a DHW flow of 5000L/h at 40°C for a sampling period of 20 min. The inlet temperature of the circuit is 15°C and the available power from the heater is 150 kW with a flow at 80°C.

Determining the volume

We use the graphic in which the nominal power of the heat exchanger is equal to or inferior to the power of the heater. Therefore, we select a K042 with 25 plates. We look at the axis with the abscissas with the duration of the sampling period (20 min). Then, we vertically move the line until we cross the straight line with the flow. This is point A. Near that point there is the 750l storage tank with a 5250 L/h flow for 20 min, while the 500l storage tank has a 4100 L/h flow for 20 min. You should choose the boiler with the features that are the most similar to the project data.

Determining the heat exchanger

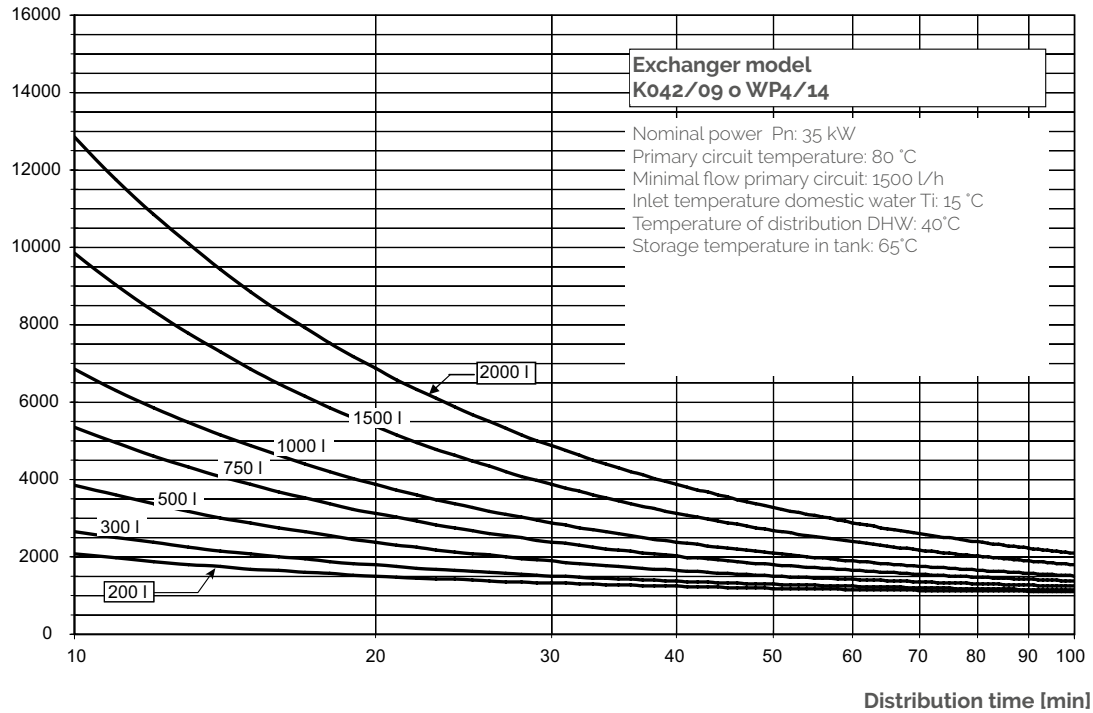
The correct heat exchanger should guarantee a thermal exchange equal to or superior to the power destined for the DHW production. Very important when choosing the heat exchanger is the flow temperature of the heat generator.



Technical information - DHW fast production units – AFK and AFW series

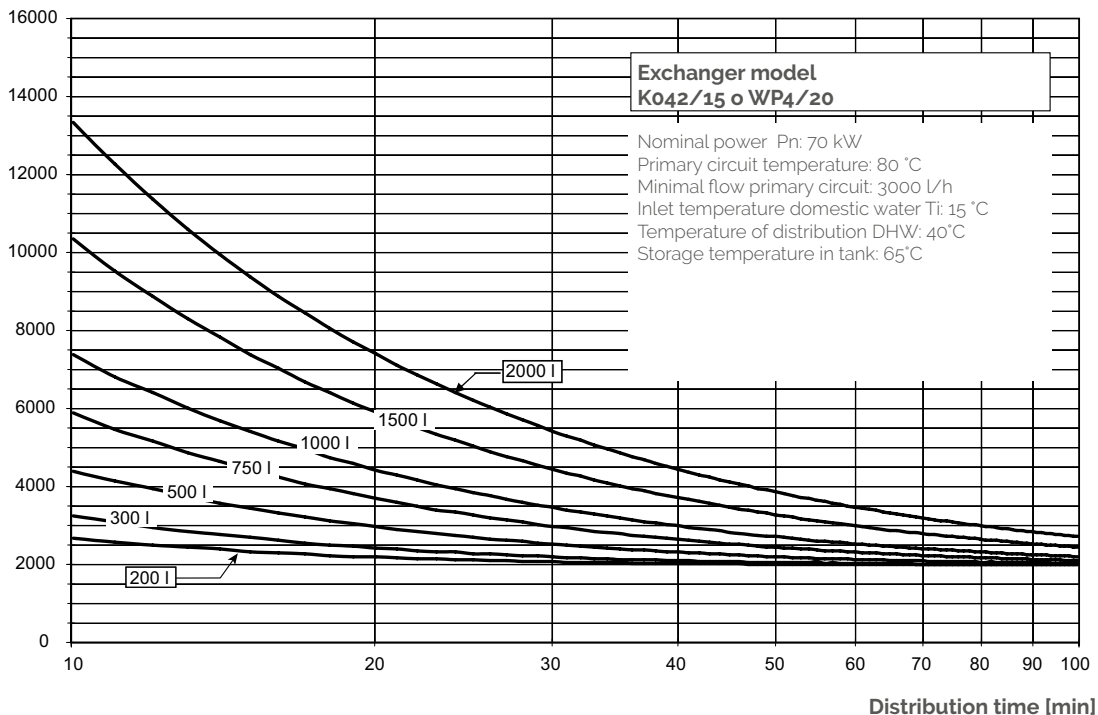
Performance with K042/09 plate heat exchanger

Flow to be distributed under nominal conditions [L/h]



Performance with K042/15 plate heat exchanger

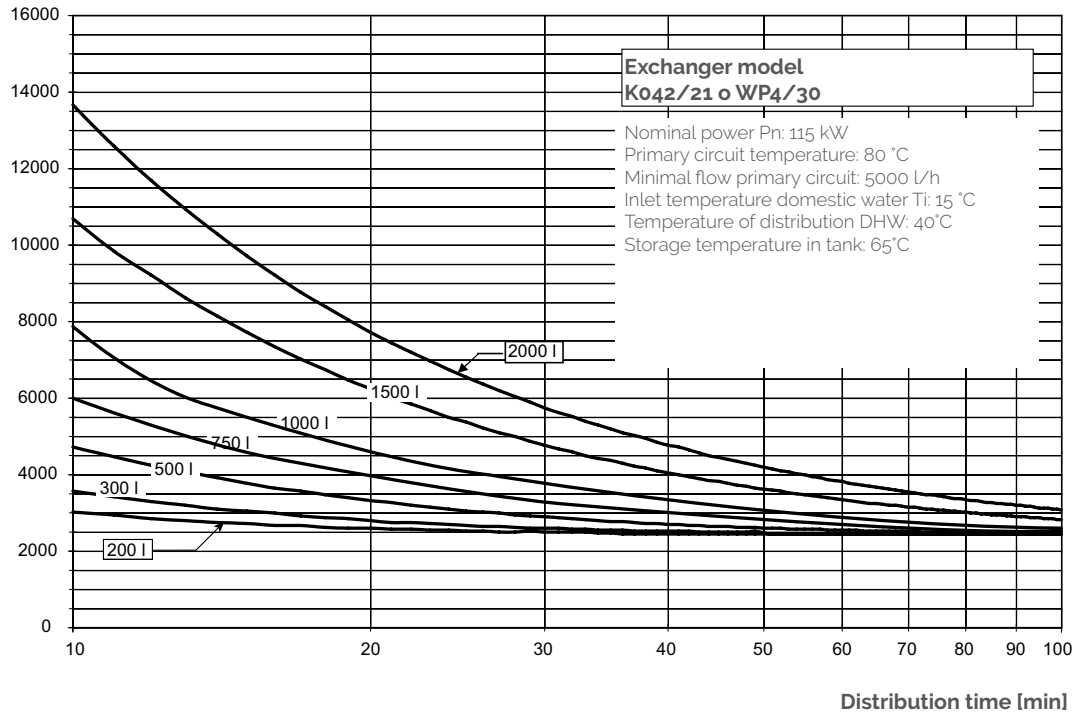
Flow to be distributed under nominal conditions [L/h]



Technical information - DHW fast production units – AFK and AFW series

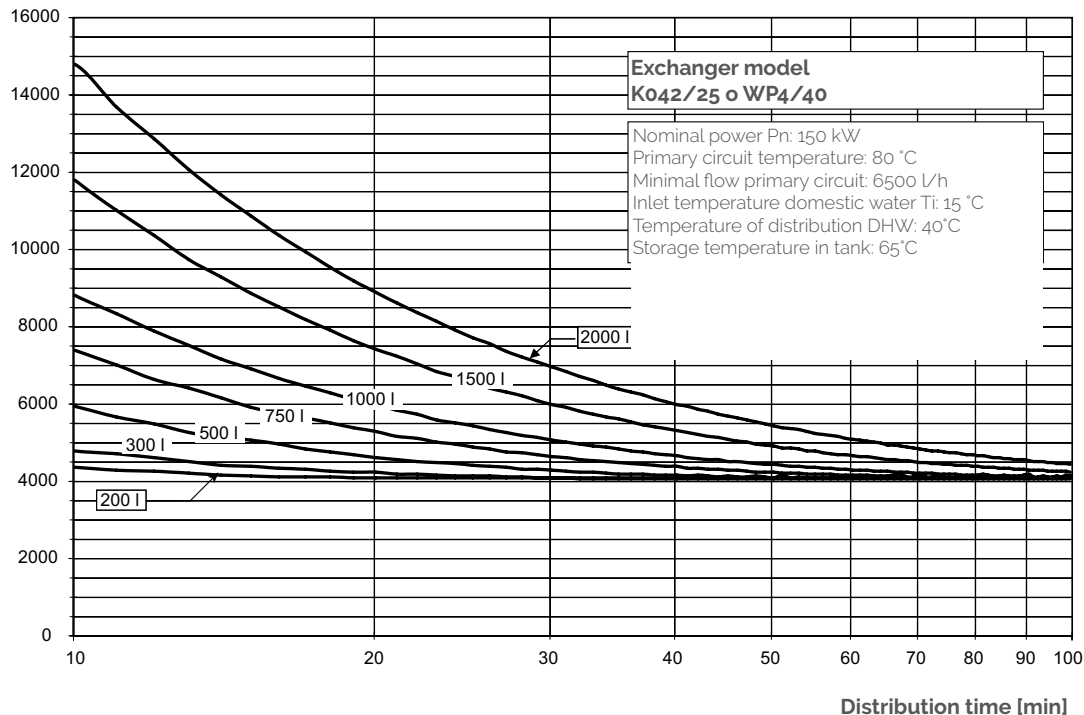
Performance with K042/21 plate heat exchanger

Flow to be distributed under nominal conditions [L/h]



Performance with K042/25 plate heat exchanger

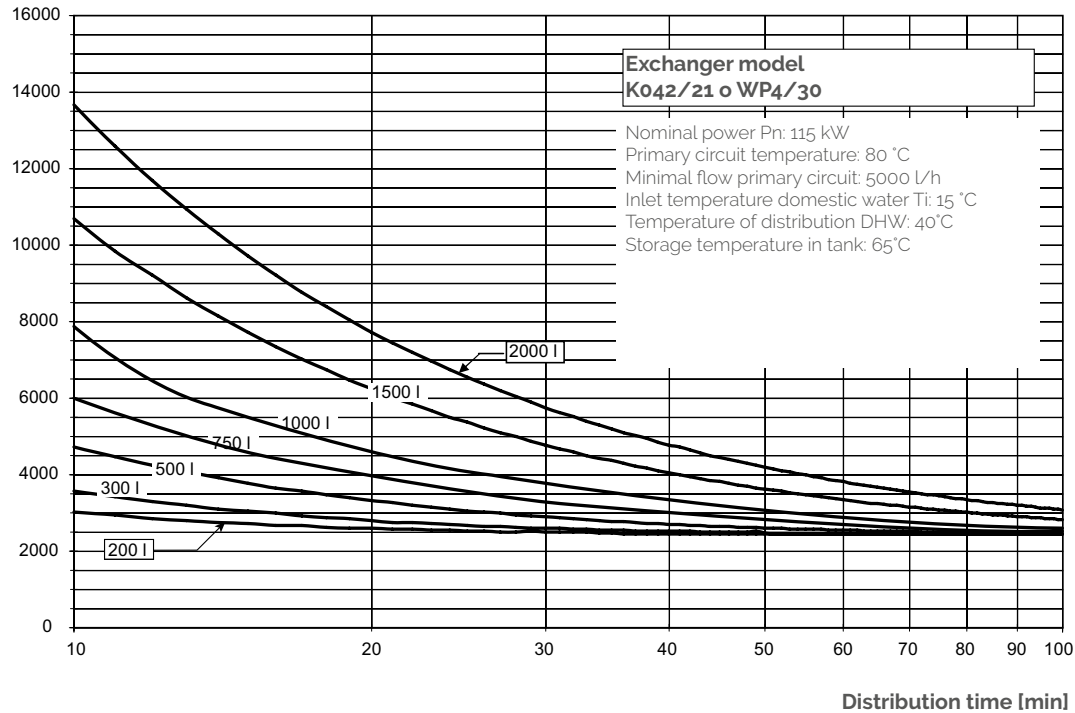
Flow to be distributed under nominal conditions [L/h]



Technical information - DHW fast production units – AFK and AFW series

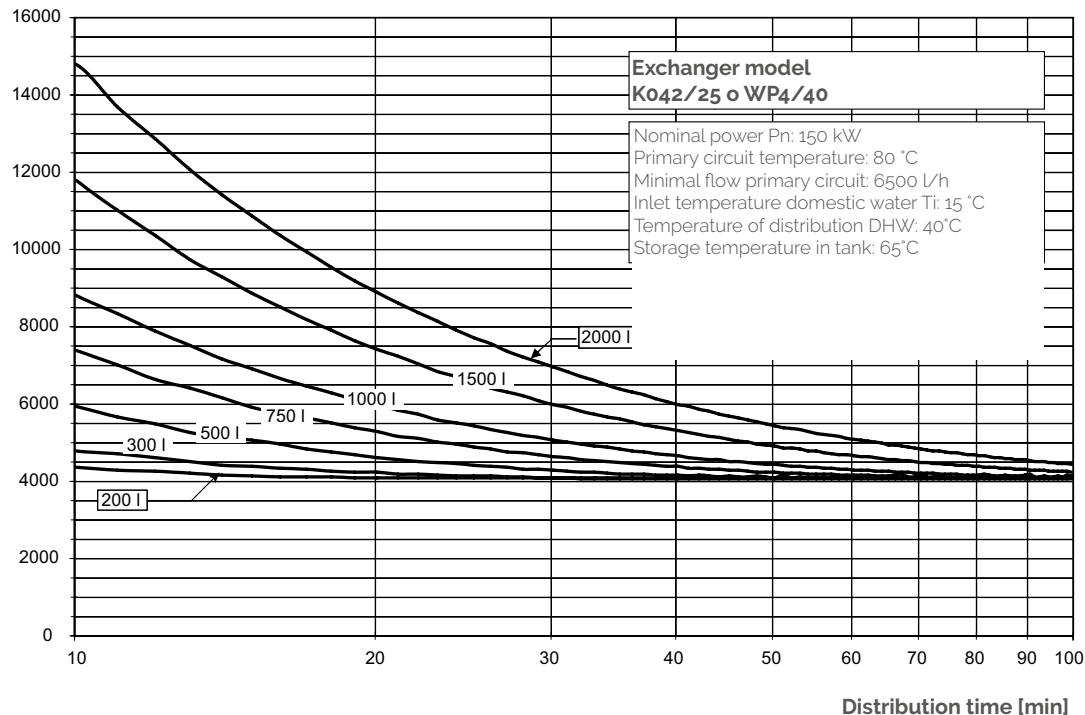
Performances with K042/21 plate heat exchanger

Flow to be distributed under nominal conditions [L/h]



Performances with K042/25 plate heat exchanger

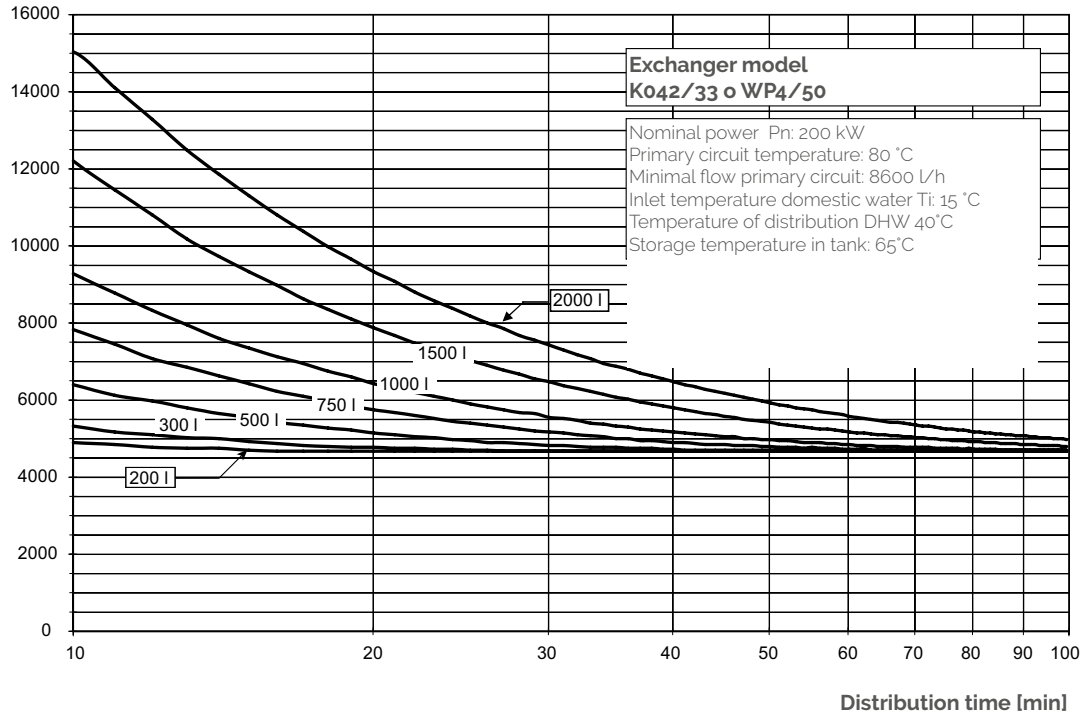
Flow to be distributed under nominal conditions [L/h]



Technical information - DHW fast production units – AFK and AFW series

Performance with K042/33 plate heat exchanger

Flow to be distributed under nominal conditions [L/h]



Technical information - DHW fast production units – AFK and AFW series

Chart for fast selection

The two charts below can help you with the selection of the AFKX unit in some standard circumstances.

Hotel rooms

| Exchanger model | Storage tank capacity | | | | | | |
|------------------|-----------------------|-------|-------|-------|--------|--------|--------|
| | 200 l | 300 l | 500 l | 750 l | 1000 l | 1500 l | 2000 l |
| K042/ 9 / WP4/14 | 6 | 8 | 13 | 14 | 16 | * | * |
| K042/15 / WP4/20 | 12 | 16 | 22 | 23 | 25 | 28 | * |
| K042/21 / WP4/30 | 16 | 22 | 28 | 29 | 30 | 34 | 38 |
| K042/25 / WP4/40 | 30 | 40 | 51 | 51 | 52 | 54 | 58 |
| K042/33 / WP4/50 | 35 | 47 | 60 | 60 | 60 | 62 | 65 |

Consumption in the room during the peak period: 130 l

Duration of the peak period: 1.5 h

Inlet temperature T_i : 15°C

DHW distribution temperature: 40°C

Initial storage temperature: 65°C

Max recovery time: 2h

Synchronism coefficient: 1

*: recovery time more than 2h

Residential setting

| Exchanger model | Storage tank capacity | | | | | | |
|------------------|-----------------------|-------|-------|-------|--------|--------|--------|
| | 200 l | 300 l | 500 l | 750 l | 1000 l | 1500 l | 2000 l |
| K042/ 9 / WP4/14 | 7 | 10 | 14 | 16 | 18 | * | * |
| K042/15 / WP4/20 | 13 | 17 | 23 | 24 | 25 | 28 | * |
| K042/21 / WP4/30 | 16 | 22 | 28 | 29 | 30 | 33 | 36 |
| K042/25 / WP4/40 | 28 | 37 | 47 | 47 | 48 | 49 | 52 |
| K042/33 / WP4/50 | 31 | 42 | 53 | 53 | 53 | 55 | 58 |

Consumption in the room during the peak period: 260 l

Duration of the peak period: 1.5 h

Inlet temperature T_i : 15°C

DHW distribution temperature: 40°C

Initial storage temperature: 65°C

Max recovery time: 2h

Synchronism coefficient: table synchronism coefficients

*: recovery time more than 2h

Synchronism coefficient

| N° rooms | Coeff. | N° rooms | Coeff. |
|----------|--------|----------|--------|
| <5 | 1 | 36 ÷ 40 | 0,48 |
| 6 ÷ 15 | 0,61 | 41 ÷ 45 | 0,47 |
| 16 ÷ 20 | 0,54 | 46 ÷ 50 | 0,46 |
| 21 ÷ 25 | 0,52 | 51 ÷ 55 | 0,45 |
| 26 ÷ 30 | 0,51 | 56 ÷ 60 | 0,44 |
| 31 ÷ 35 | 0,49 | | |

Heat exchanger group for domestic hot water production – AFK-HD

The AFK-HD system for the fast preparation of Domestic Hot Water can be coupled with storage tanks that are already installed in small, medium-sized and large settings. The available thermal exchange units can be coupled with all storage tank of the FLEXY, FLEXY INOX, BOIL and BOIL INOX series.

The AFK-HD system consists of:

- ✓ Gasketed plate heat exchanger – AISI 316L stainless steel, model K042 or K080;
- ✓ Stainless steel self-supporting base with adjustable feet;
- ✓ Stainless steel recirculation pump on the tap water side;

Available accessories

All exchangers can be installed with the following accessories (on request)

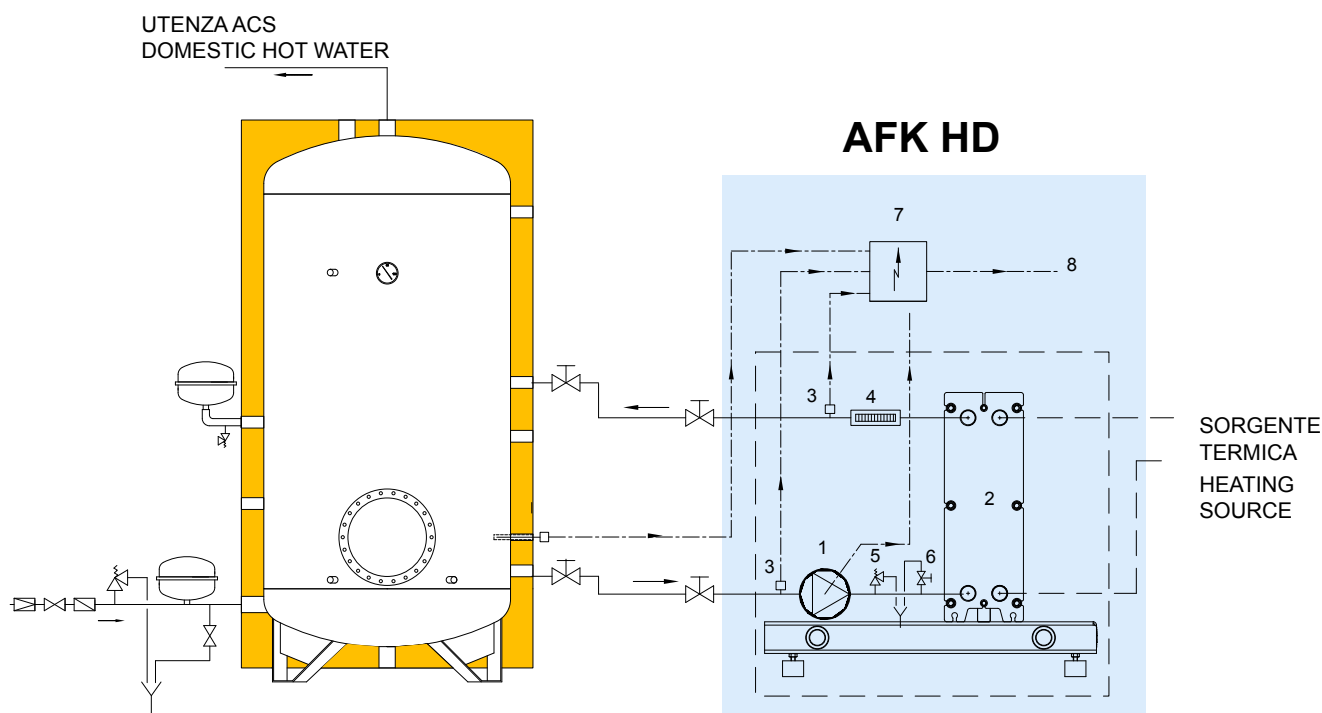
- ✓ Removable heat exchanger insulation (optional);
 - ✓ Thermostat for primary circuit (optional);
 - ✓ control unit SLC (see p. 238)
- Available on request, for versions up to the AFK HD 200.



| Primary circuit | | Secondary circuit | |
|-----------------|--------------|-------------------|--------------|
| Max temperature | Max pressure | Max temperature | Max pressure |
| 95°C | 16 bar | 195°C | 6 bar |

Codes and accessories

AFK-HD



| model | exchanger | code | price | packed | |
|------------|-----------|------------|------------|---------------|-----------|
| | | | | dimensions cm | weight kg |
| AFK-HD 35 | K042/09 | 841060019X | € 1.739,00 | 28x49x105 | 51 |
| AFK-HD 70 | K042/15 | 841060020X | € 1.842,00 | 28x49x105 | 53 |
| AFK-HD 115 | K042/21 | 841060021X | € 1.926,00 | 28x49x105 | 55 |
| AFK-HD 150 | K042/25 | 841060022X | € 1.988,00 | 28x49x105 | 56 |
| AFK-HD 200 | K042/33 | 841060018X | € 2.108,00 | 28x49x105 | 59 |
| AFK-HD 250 | K080H/23 | 841060023X | € 3.229,00 | 105x33x95 | 126 |
| AFK-HD 300 | K080H/29 | 841060024X | € 3.334,00 | 105x33x95 | 129 |
| AFK-HD 350 | K080H/33 | 841060025X | € 3.404,00 | 105x33x95 | 131 |
| AFK-HD 400 | K080H/39 | 841060026X | € 3.507,00 | 105x33x95 | 140 |

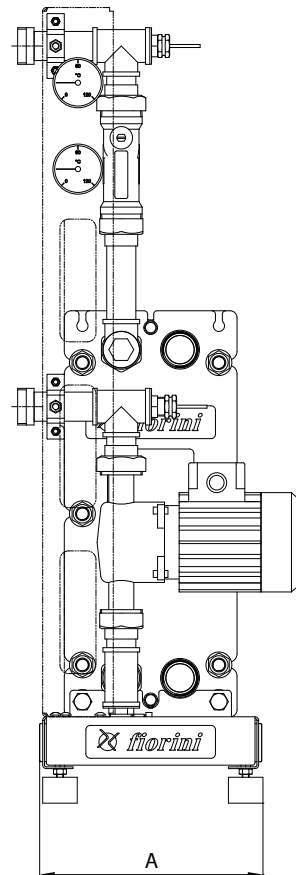
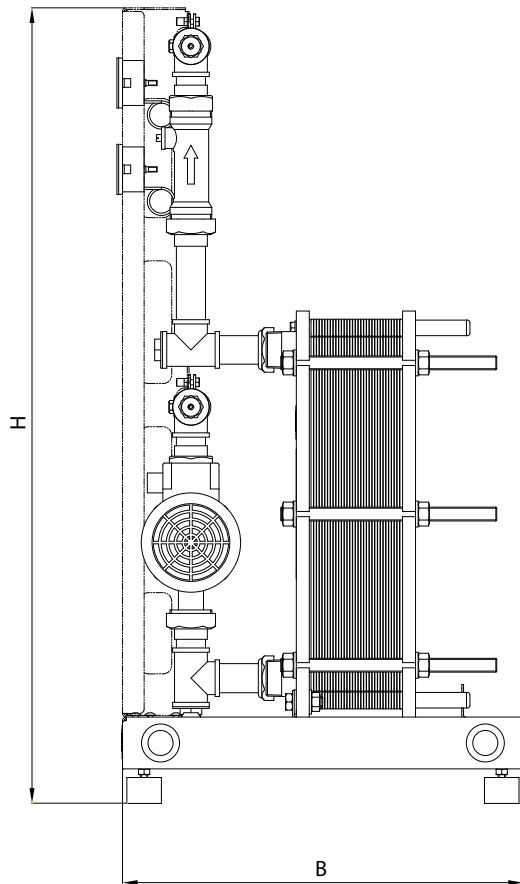
| List of components |
|--|
| 1. Stainless steel recirculation pump |
| 2. Gasketed plate heat exchanger |
| 3. Flow rate regulator |
| 4. Probe holder |
| 5. Safety valve |
| 6. drain valve |
| 7. Electronic control panel (optional) |
| 8. Output signal for primary circuit |

| code | accessories | price |
|-----------|--|----------|
| 822120028 | SLC electronic control unit (see p. 238) | € 599,00 |

| Insulation kit AFK HD | | | |
|-----------------------|----------|------------|----------|
| K042 | | K080 | |
| code | price | code | price |
| 821080037X | € 255,00 | 821080038X | € 301,00 |

Technical information

AFK-HD



Technical information

| Model | Exchanger | Power kW | Flow primary L/h | Pdc primary kPa | Electrical features pump | | A | B | H | Couplings inch |
|---------------|-----------|------------|------------------|-----------------|--------------------------|-------------------|-----|------|-----|----------------|
| | | | | | Tension V/Hz/ph | Min-max current A | | | | |
| SIZE 1 | | | | | | | | | | |
| AFK-HD 35 | K042/09 | 30*/10** | 1500*/1800* | 18*/25** | 230/50/1 | 0.04-1.1 | 305 | 464 | 921 | 1 1/4 |
| AFK-HD 70 | K042/15 | 70*/22** | 3000*/3900** | 24*/40** | 230/50/1 | 0.04-1.1 | 305 | 464 | 921 | 1 1/4 |
| AFK-HD 115 | K042/21 | 110*/33** | 5000*/5800** | 33*/45** | 230/50/1 | 0.04-1.1 | 305 | 464 | 921 | 1 1/4 |
| AFK-HD 150 | K042/25 | 150*/39** | 6500*/6800** | 39*/45** | 230/50/1 | 0.04-1.1 | 305 | 464 | 921 | 1 1/4 |
| AFK-HD 200 | K042/33 | 200*/50** | 8600*/8700** | 39*/43** | 230/50/1 | 0.04-1.1 | 305 | 464 | 921 | 1 1/4 |
| SIZE 2 | | | | | | | | | | |
| AFK-HD 250 | K080H/23 | 250*/165** | 8800*/8800** | 49*/49** | 400/50/3 | 1.03 | 305 | 1031 | 829 | 1 1/2 |
| AFK-HD 300 | K080H/29 | 300*/170** | 10500*/10500** | 48*/48** | 400/50/3 | 1.03 | 305 | 1031 | 829 | 1 1/2 |
| AFK-HD 350 | K080H/33 | 350*/210** | 12500*/12500** | 47*/47** | 400/50/3 | 1.03 | 305 | 1031 | 829 | 1 1/2 |
| AFK-HD 400 | K080H/39 | 400*/250** | 14100*/14100** | 46*/46** | 400/50/3 | 1.03 | 305 | 1031 | 829 | 1 1/2 |

* Primary 80°C, Secondary 10/45°C ** Primary 55°C, Secondary 10/45°C

Performance

AFK-HD

| capacity l | k042/09 | k042/15 | k042/21 | k042/25 | k042/33 | ko80h/23 | ko80h/29 | ko80h/33 | ko80h/39 |
|---------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--------------------------|
| 200 | 330/500 1100/859 | 440/725 2000/1717 | 500/1300 2900/2862 | 730/2075 4150/3721 | 810/2330 4900/4866 | 1055/1995 5765/5650 | 1340/2570 7485/7370 | 1505/2895 8465/8350 | 1830/3550 10430/10320 |
| 300 | 430/600 1300/859 | 535/1200 2000/1717 | 590/1400 2905/2862 | 800/2125 4200/3721 | 880/2375 4900/4866 | 1110/2055 5820/5650 | 1400/2625 7540/7370 | 1560/2955 8525/8350 | 1890/3610 10490/10320 |
| 500 | 665/800 1500/859 | 730/1475 2100/1717 | 785/1660 2910/2862 | 990/2310 4175/3721 | 1060/2560 4910/4866 | 1225/2165 5935/5650 | 1510/2740 7655/7370 | 1675/3070 8640/8350 | 2005/3725 10605/10320 |
| 800 | 900/1030 1750/859 | 980/1835 2300/1717 | 1030/2025 2920/2862 | 1230/2625 4175/3721 | 1300/2860 4915/4866 | 1395/2340 6105/5650 | 1685/2910 7825/7370 | 1845/3240 8810/8350 | 2175/3895 10775/10320 |
| 1000 | 1130/1300 1900/859 | 1220/2200 2500/1414 | 1280/2385 2930/2862 | 1470/300 4300/3721 | 1540/3200 4920/4866 | 1510/2455 6220/5650 | 1800/3025 7940/7370 | 1960/3355 8925/8350 | 2290/4010 10890/10320 |
| 1500 | 1630/1830 2490/859 | 1725/2950 2975/1717 | 1780/3125 3350/2862 | 1965/3710 4675/3721 | 2025/3925 5150/4866 | 1795/2740 6505/5650 | 2085/3310 8225/7370 | 2245/3640 9210/8350 | 2575/4295 11175/10320 |
| 2000 | 2160/2300 300/859 | 2220/3700 3450/1717 | 2280/3860 3825/2862 | 2465/4450 5100/3721 | 2500/4650 5550/4866 | 2080/3025 6790/5650 | 2370/3600 8510/7370 | 2535/3925 9595/8350 | 2860/4580 11460/10320 |

DHW distribution in liters in the first 10/20/60 minutes and continuous distribution flow in l/h (primary 80°C, distribution 45°C)

SET 2.0 suspended fresh Water Stations

A plug and play system for transferring heat from the technical water storage tank with a programmable control unit and a circulator. The SET 2.0 unit ensures the DHW production with a limited formation of chalk and at a temperature chosen by the user. The heat exchange is carried out by the AISI 316 stainless steel plate heat exchanger in a high performance and hygienic manner. The unit, connected to the water storage tank from which it takes energy, is composed of all necessary parts. Through a control unit with a graphical display the user can monitor the functioning or easily impose user parameters. The heart of the SET 2.0 unit is the special electronic control unit which keeps up the imposed DHW temperature by modulating the flow in the primary circuit.

In this way the following is guaranteed:

- ✓ max heat drop in the primary circuit in order to optimize the efficiency of the generator (solar thermal power, heat pump, biomass, etc.)
- ✓ precise and trustworthy management

Thanks to the high efficiency heat exchanger the unit is ideal for installations with heat pumps or solar panels that use water storage tanks for low temperatures (50-55°C)

Plus

- ✓ temperature management of the hot water
- ✓ easy and cheap in use
- ✓ high efficiency circulation pump (in accordance with the 2005-35/CE directive) and with an electronic control of the number of turns
- ✓ synoptically graphical display with the indication of the temperatures in the installation and of the power
- ✓ easy Plug and Play installation
- ✓ insulated pipe fittings
- ✓ vessel with a metal structure and thermoform panels for mounting to the wall
- ✓ possibility to manage the sanitary recirculation pump
- ✓ two models are available: one with an electronic entry level (S) and one with electronics with more options (L)



Available versions

Fiorini offers two versions of the SET 2.0 fresh water station. The difference between the two is in the control unit: one version with a limited number of functions (SET 2.0 S) and another version with many functions and control settings (SET 2.0 L).

Below the main features of the two units are indicated.

| | SET 2.0 | |
|---|---------|---|
| | S | L |
| Efficient, electronic regulation of the velocity of the pump | ✓ | ✓ |
| Graphical display | ✓ | ✓ |
| Imposing the temperature of the DHW | ✓ | ✓ |
| Imposing the max temperature of the DHW. This is a safety option which stops the unit in case the max value is reached. | ✓ | ✓ |
| Management kit in series | | ✓ |
| Management kit Mixing valve on the primary circuit | | ✓ |
| Management kit stratification of the tank | | ✓ |
| Possibility to control the recirculation pump for sanitary purposes by fixing the activation times of the pump and the temperature of the recirculation circuit | ✓ | ✓ |
| Anti-legionella: carry out anti-legionella treatments through thermal shocks along the DHW adduction line | ✓ | ✓ |
| AL heating: activation of an integrative heat source when the anti-legionella treatment is carried out | | ✓ |
| Comfort function: when activated, the exchanger is kept warm in order to guarantee a fast recuperation | ✓ | ✓ |
| Anti-chalk protection: when activated, the circulator keeps on running even when the DHW distribution time is up in order to reduce chalk formation | ✓ | ✓ |
| Solar: control and command the circulator of a solar power device | | ✓ |
| Management of the heat generator: activate and deactivate a heat generator when the temperature in the tank is below the set point | | ✓ |

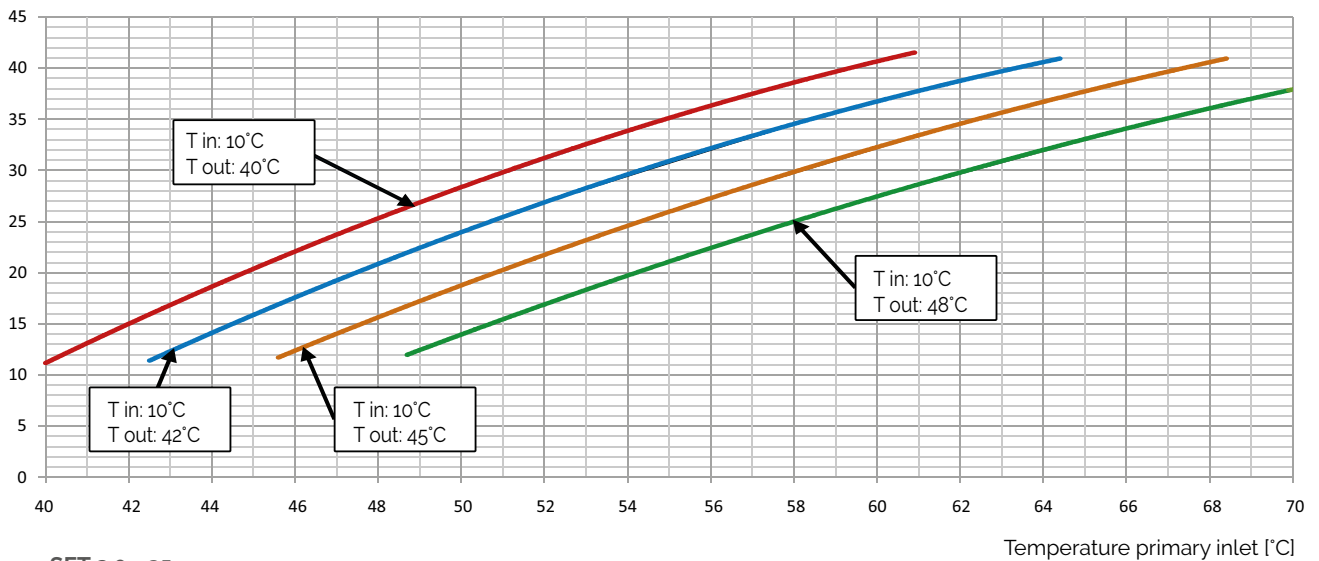


Hot water

SET 2.0 (S and L) thermal performance

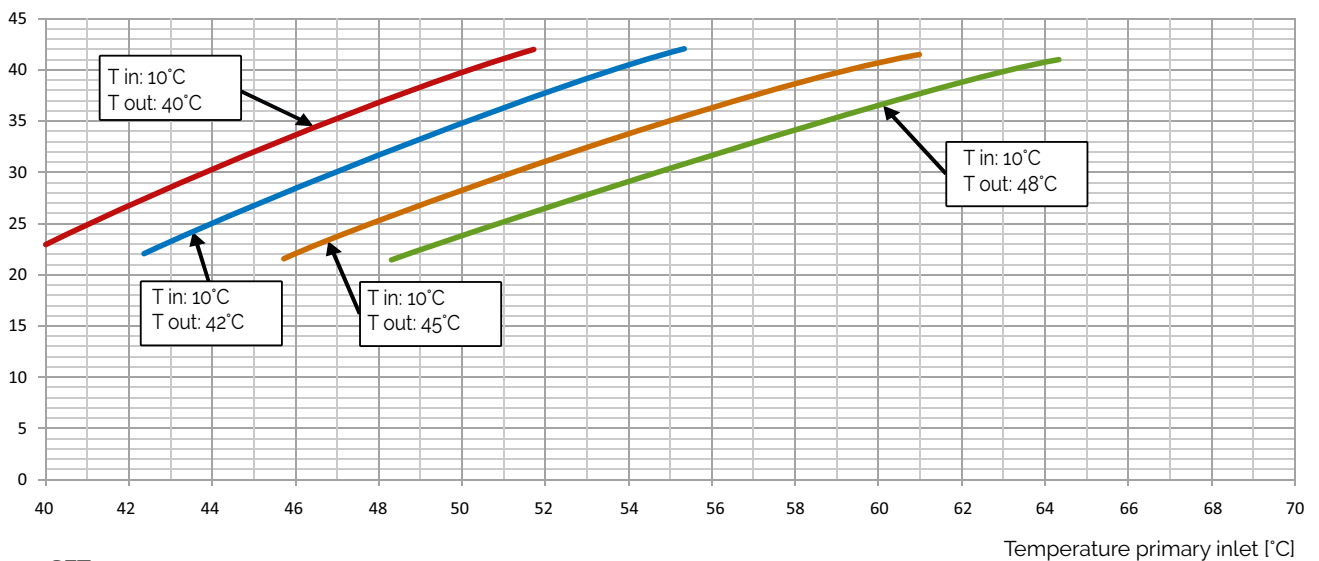
SET 2.0 - 25

Flow of DHW to be distributed [L/min]



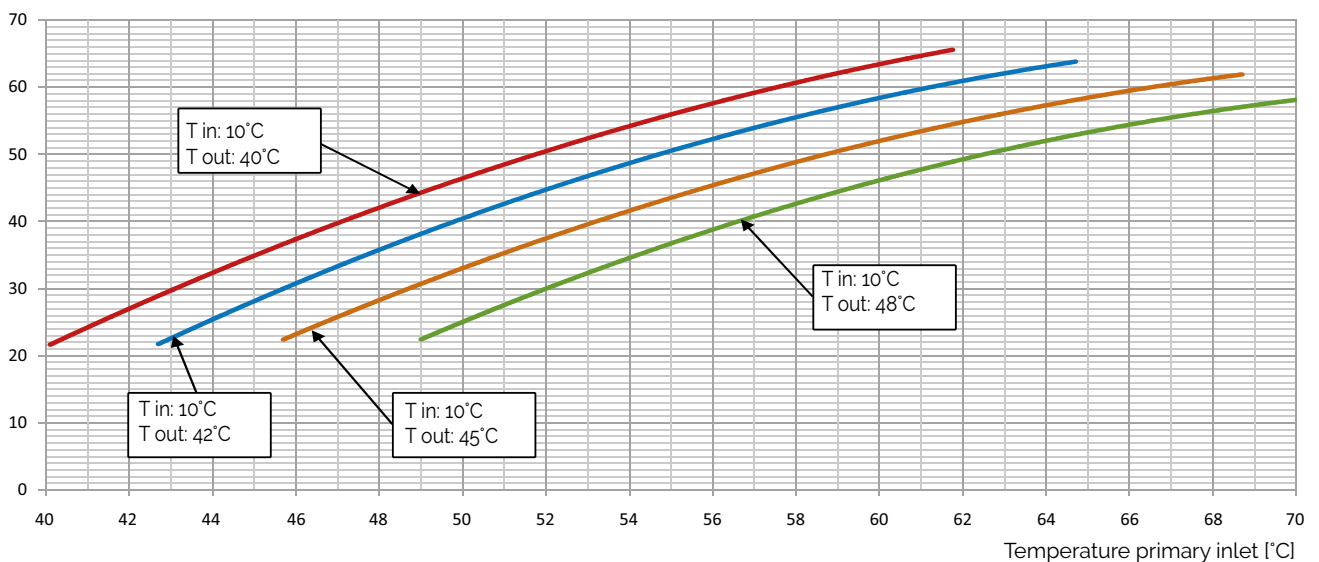
SET 2.0 - 35

Flow of DHW to be distributed [L/min]

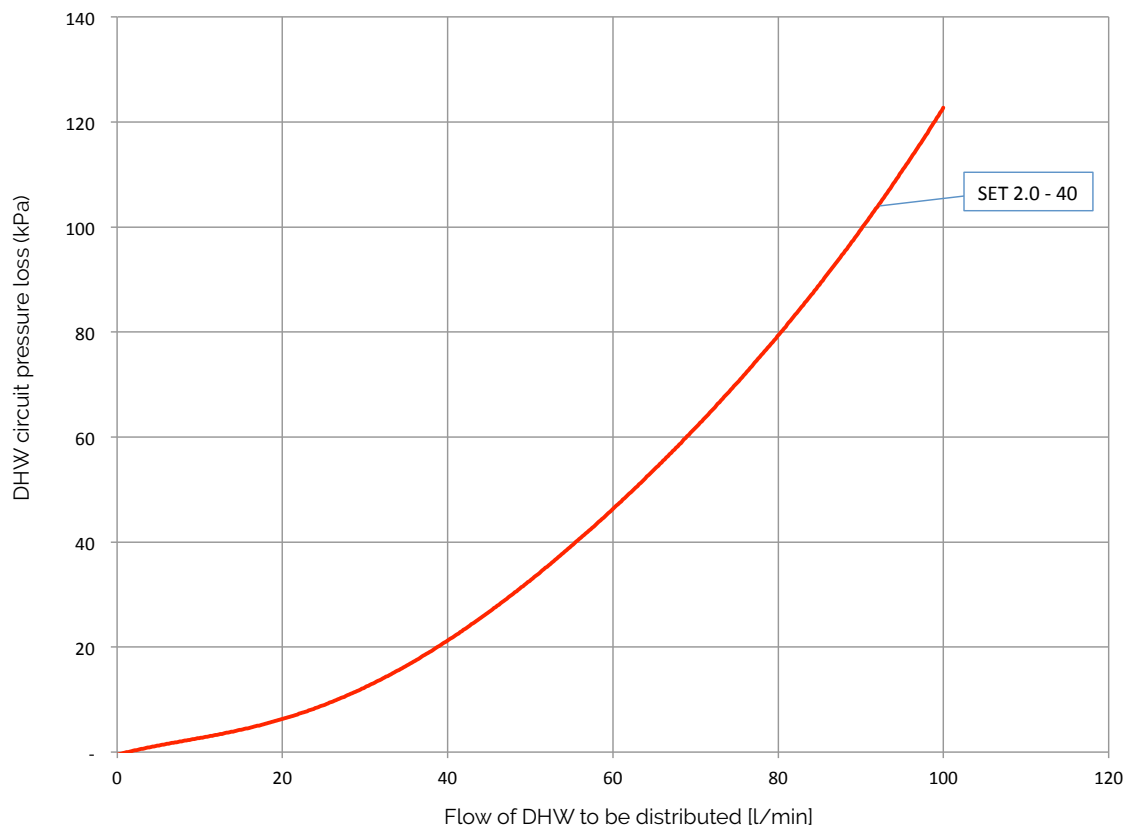
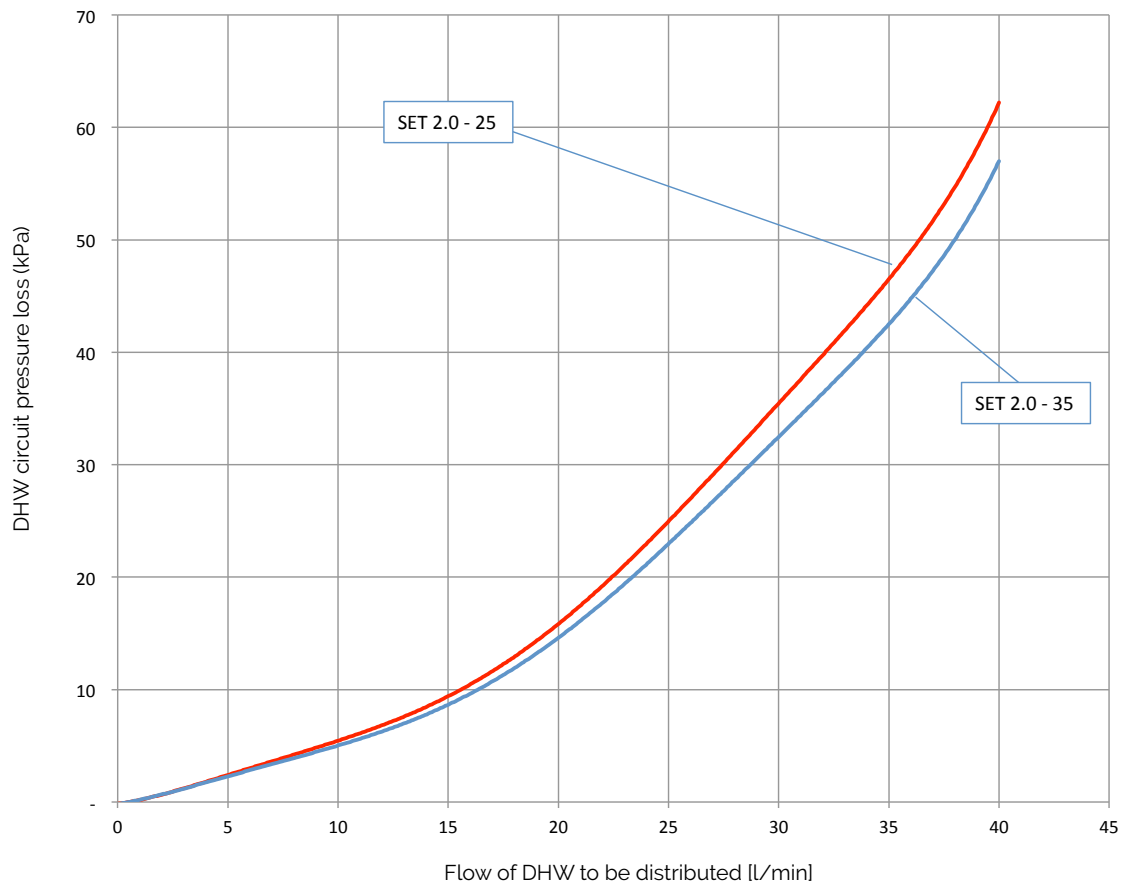


SET 2.0 - 40

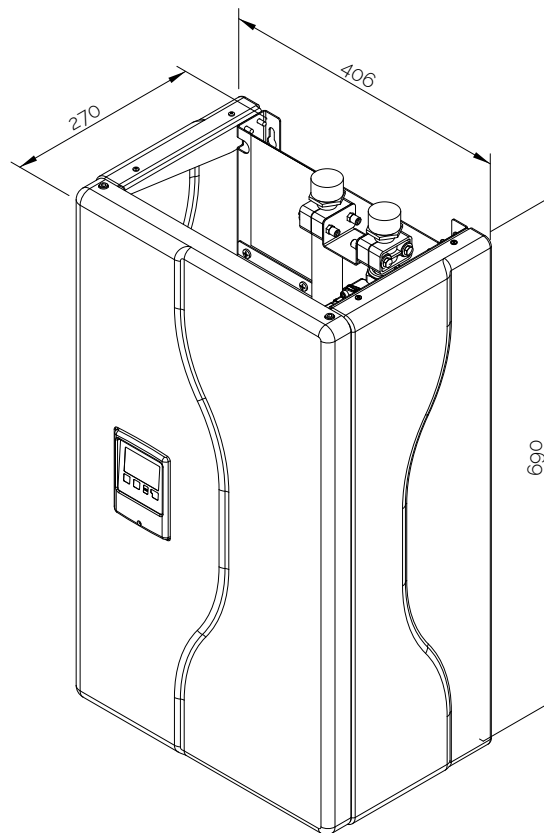
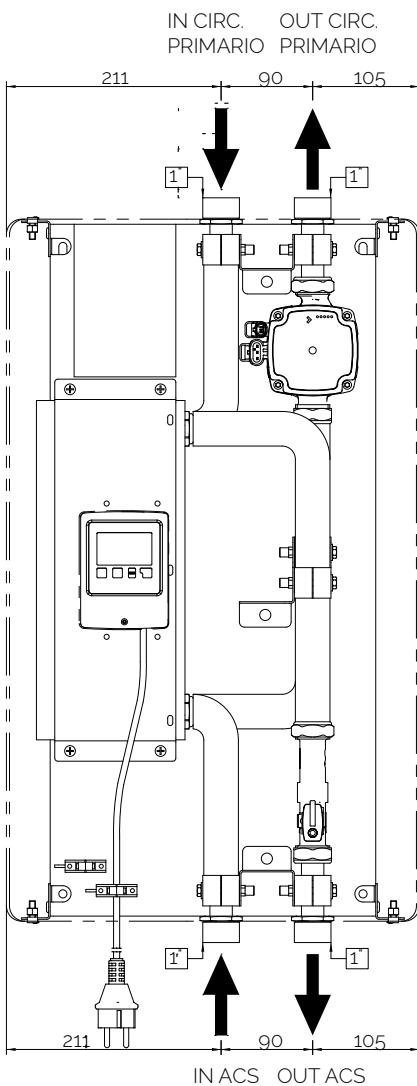
Flow of DHW to be distributed [L/min]



SET 2.0 (S and L) thermal performance

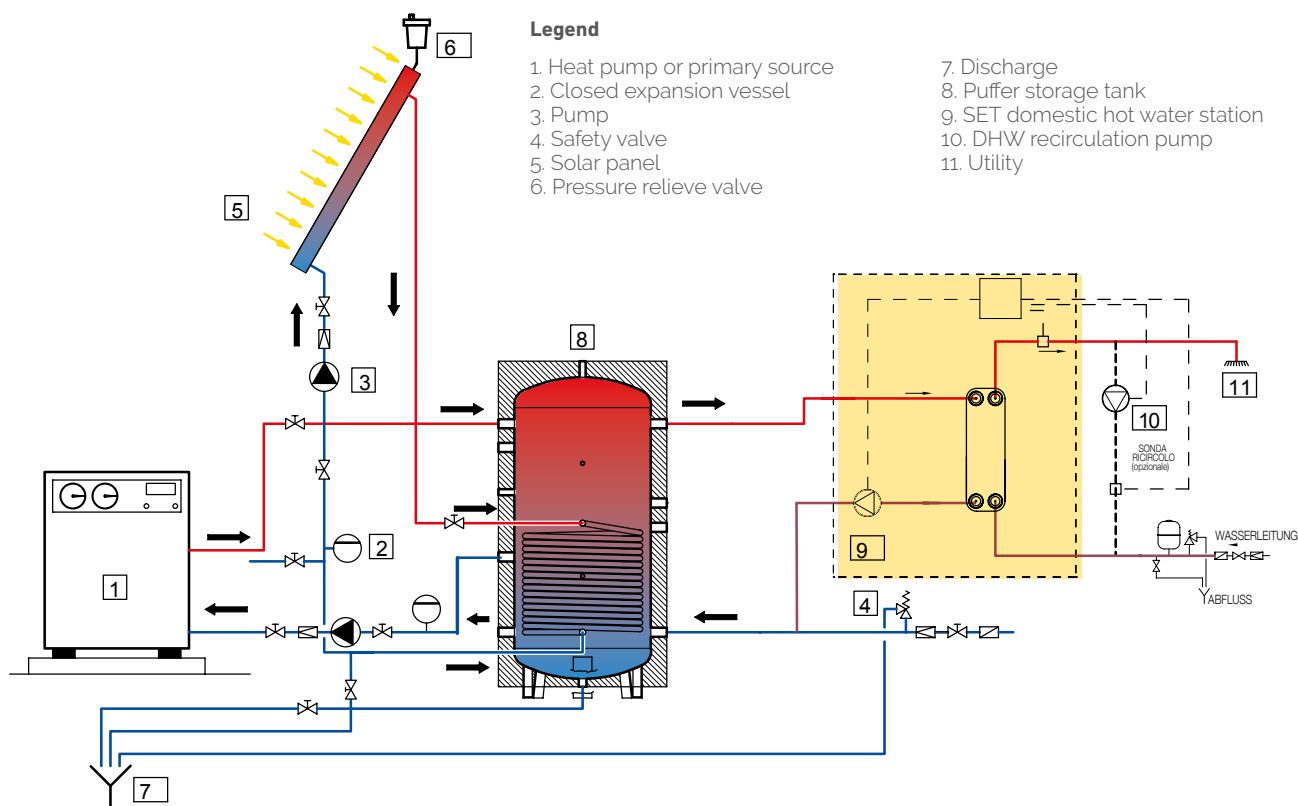


Dimensions



| technical information | SET 2.0 (S e L) | | |
|---|---------------------|-------|-------|
| | 25 | 35 | 40 |
| Electrical supply | 230V / 50 hz / 1 ph | | |
| Power of primary pump min/max (W) | 2/52 | | |
| Absorption of primary pump min/max (A) | 0.04/0.52 | | |
| Max power of the recirculation pump (can be managed from the control unit)(pump not supplied) | 185 | | |
| Primary flow (litri/h) | 2000 | 2800 | 2800 |
| Residual prevalence of the primary circuit (m.c.a.) | 2,0 | 2,5 | 1,0 |
| Weight unpacked/packed (kg) | 15/22 | 18/25 | 20/27 |
| Volume of the primary circuit (l) | 1,1 | 1,62 | 1,6 |
| Volume of the domestic circuit (l) | 0,85 | 1,75 | 1,4 |
| Max operating pressure (bar) | 6 | | |
| Couplings primary circuit (inch) | 1" GAS M | | |
| Couplings secondary circuit (inch) | 1" GAS M | | |
| Max operating temperature (°C) | 95 | | |
| Category of electrical protection | IP40 | | |
| Type of plug (electrical connection) | Schuko 10-16A/250V | | |
| Length of the electric cable (m) | 1,5 | | |
| Min DHW ignition flow (L/min) | 2 | 2 | 5 |
| Max DHW flow (L/min) | 40 | 40 | 100 |

Installation chart in combination with the water storage tank



Equipment

The SET 2.0 fresh water station is delivered in a cardboard box with:

- ✓ Fresh water station with electric cable with a Schuko plug
- ✓ Template to facilitate making the holes in the wall for anchoring the fresh water station
- ✓ Pegs and screws to anchor the fresh water station to the wall

Accessories on request

Several accessory kits are available that can be combined with the SET 2.0 fresh water station. Some can only be coupled with the SET 2.0L. Below you can consult the compatibility chart.

| Description | Set 2.0 S | Set 2.0 L |
|--|-----------|-----------|
| kit to connect the SET in series | | ✓ |
| recirculation kit | ✓ | ✓ |
| kit with mixing valve on the primary circuit | | ✓ |
| kit with stratification valve for the storage tank | | ✓ |

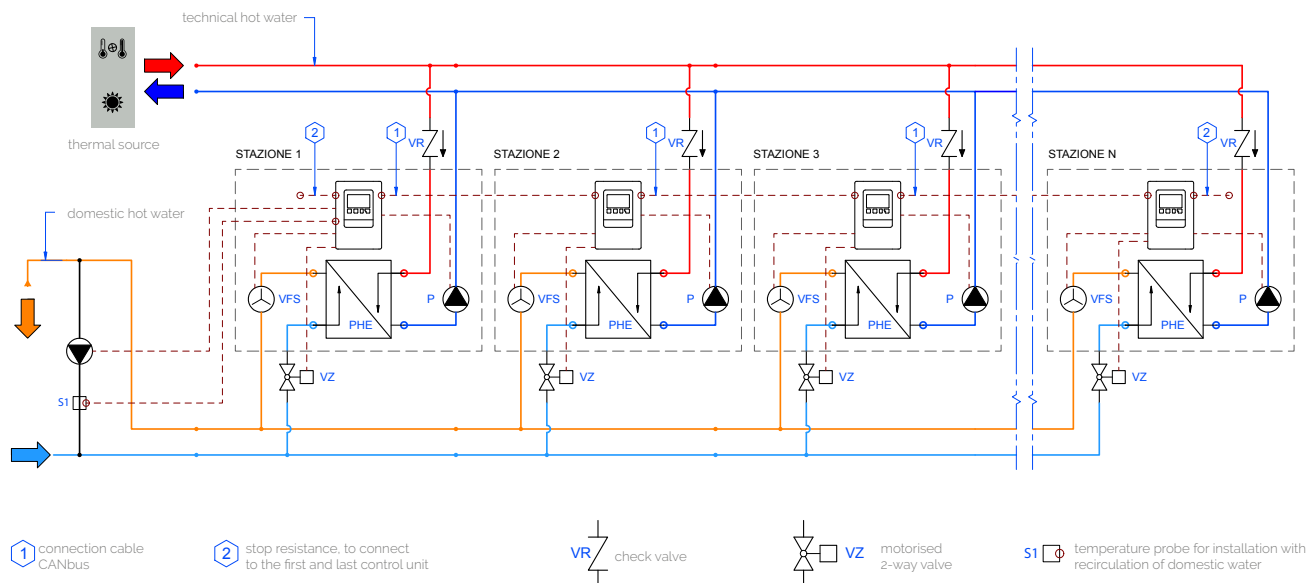
Kit to connect the SET in series

The kit to connect the SET in series is the option for all applications in which the need for Domestic hot water is very variable. In this way it is possible to connect max 8 fresh water stations and ensure a DHW production of min 2 L/m and max 800 L/min*. The electronic control units that are mounted on every fresh water station enables communication between the stations via Modbus (only the L version). As such, the electronics decide how many and which fresh water stations are activated, depending on the user conditions.

Advantages and benefits:

- ✓ variable DHW production: from 2 to 800 L/min*
- ✓ trustworthy. Because the control unit carries out diagnoses by itself, in case of malfunctioning of one of the stations, the station is automatically deactivated and another station is activated. In this way the DHW distribution continues.
- ✓ regulation of the temperature is even more precise. The regulation makes it possible to activate the right number of fresh water stations based on the flow and the temperature of the DHW. In this way, every fresh water station always operates in circumstances that approach the nominal circumstances and the precision and efficiency of the regulation is improved.
- ✓ The system with the fresh water system in series can be expanded. You can add more units, even after the initial installation.
- ✓ The programmed maintenance of the fresh water stations can be executed without interrupting the DHW distribution.
- ✓ every fresh water station operates for an equal number of hours which guarantees a long life span of the system.

Installation chart



Installation of the Kit

Install one kit for every fresh water station. The kit is supplied in parts, non-assembled and is composed of:

- ✓ one motorized zone valve with a fast 230V motor
- ✓ one pipe fitting for the coupling
- ✓ one CanBus cable
- ✓ the instructions

* The production by several SET connected in series depends on the temperature in the primary circuit and the DHW production. The flow of DHW to be distributed by the stations connected in series equals the sum of the flow of the fresh water stations indicated in the section hydraulic performance

Recirculation kit

The recirculation kit offers multiple possibilities for the electronic control unit to control the pump of the sanitary recirculation circuit (circulator not supplied).

Possible settings

- ✓ Programming the recirculation in time slots. The recirculation pump is activated only during the indicated time slots and when the recirculation temperature is below the programmed temperature
- ✓ recirculation pump is always activated
- ✓ activation of the recirculation pump after a brief sampling period. This option activates the recirculation pump only when strictly necessary, as such heating the domestic circuit without wasting drinking water.

Composition of the kit

The kit is supplied in parts, non-assembled and is composed of:

- ✓ temperature probe to be put on the recirculation ring
- ✓ instructions

Recirculation pump

The recirculation pump is not supplied with the kit because the pump has to be selected on the basis of the specifics of your installation.

However, because the pump is to be controlled by the SET regulator, it has to have the following features

- ✓ power supply 230V/50hz/1ph
- ✓ max power 185 W

Kit with mixing valve on the primary circuit

The kit helps regulate the temperature at the entrance of the fresh water station. In this way, especially in installations that can reach high temperatures in the primary circuit, the precision of the regulation is improved, which guarantees better comfort.

Composition of the kit

The kit is supplied in parts, non-assembled and is composed of:

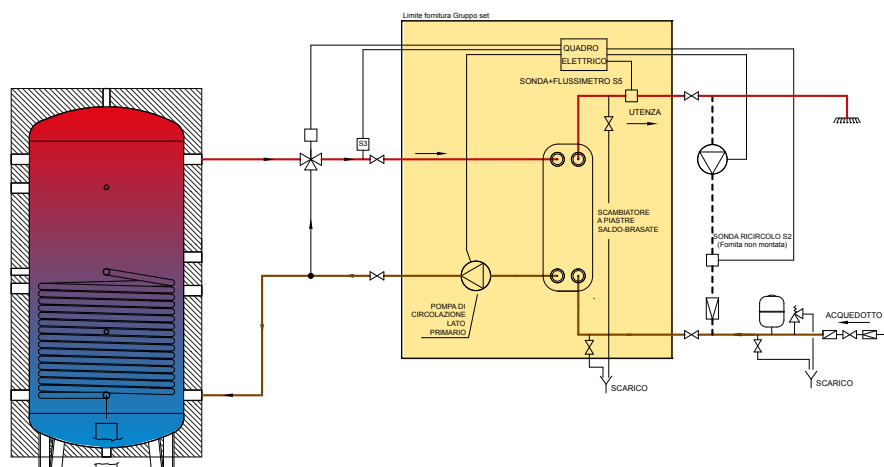
- ✓ S3 temperature probe to be placed at the entrance of the exchanger on the primary circuit
- ✓ instructions

Mixing valve

The mixing valve is not supplied with the kit because it should be selected on the basis of the specifics of your installation.

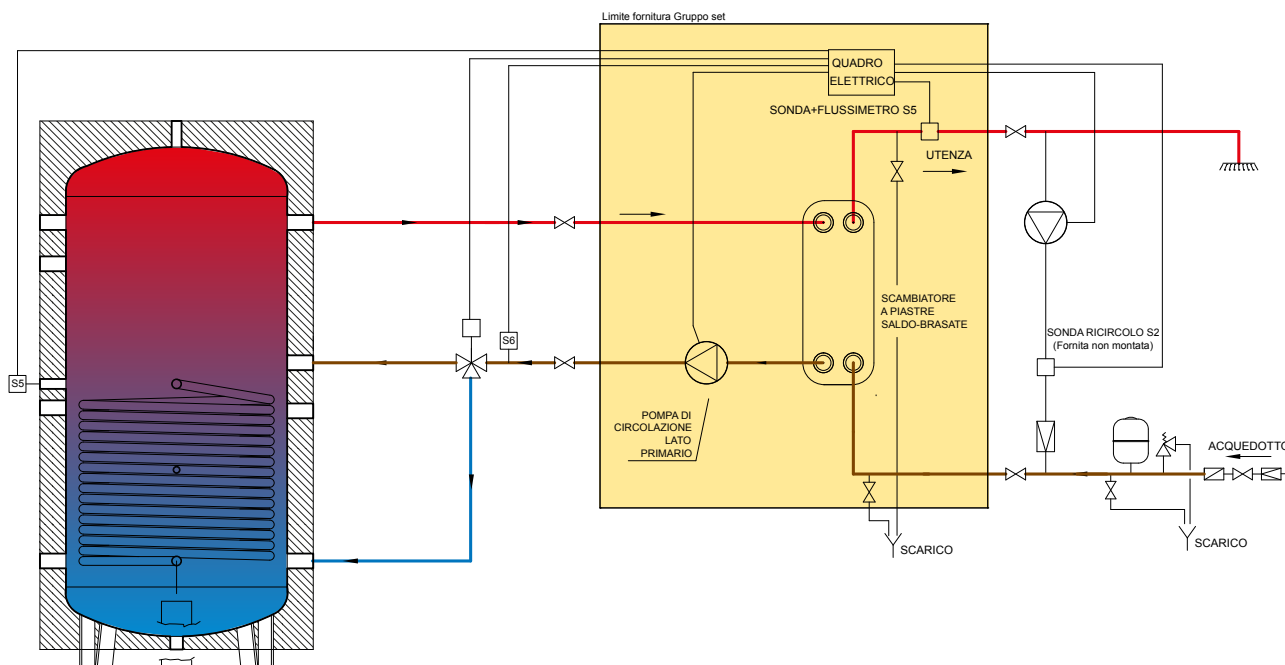
However, because it is controlled by the SET regulator, it should have the following features:

- ✓ power supply 230V/50hz/1ph
- ✓ Three way regulation
- ✓ fast motor, runs at a time less than 10s
- ✓ kvs value compatible with the residual prevalence of the fresh water system and the pressure loss of the device



Kit with stratification valve for the storage tank

The kit makes it possible to direct the return from the fresh water station to the lower part instead of the mid part of the storage tank. Because of this, the stratification phenomenon in the storage tank is favoured and the efficiency of the entire heating system is maximized.



Composition of the kit

The kit is supplied in parts, non-assembled and is composed of:

- ✓ S5 temperature probe to be placed in the middle of the storage tank
- ✓ S6 temperature probe on the return of the primary circuit
- ✓ instructions

Stratification valve

The valve is not supplied with the kit because it should be selected on the basis of the specifics of your installation.

However, because it is controlled by the SET regulator, it should have the following features

- ✓ three way deviation valve
- ✓ 230V/50hz/1ph power supply
- ✓ relay with spring return
- ✓ kvs value compatible with the residual prevalence of the fresh water station and the pressure loss of the device

Codes

SET 2.0 (S)

| code | description | price | packed | |
|------------|------------------|------------|---------------|-----------|
| | | | dimensions cm | weight kg |
| 842030034X | SET 2.0 (S) - 25 | € 1.547,00 | 77x45x39 | 25 |
| 84203A018X | SET 2.0 (S) - 35 | € 1.790,00 | 77x45x39 | 28 |
| 842030035X | SET 2.0 (S) - 40 | € 1.893,00 | 77x45x39 | 31 |

SET 2.0 (L)

| code | description | price | packed | |
|------------|------------------|------------|---------------|-----------|
| | | | dimensions cm | weight kg |
| 842030090X | SET 2.0 (L) - 25 | € 1.810,00 | 77x45x39 | 25 |
| 84203A024X | SET 2.0 (L) - 35 | € 2.095,00 | 77x45x39 | 28 |
| 842030088X | SET 2.0 (L) - 40 | € 2.220,00 | 77x45x39 | 31 |

| Kits with external accessories | | price |
|--------------------------------|--------------------------------------|----------|
| 842030089X | External kit in series | € 450,00 |
| 842030099X | External kit recirculation SET 2.0 | € 46,00 |
| 842030097X | External kit mixing valve set 2.0 | € 313,00 |
| 842030095X | External kit deviation valve set 2.0 | € 199,00 |

Mounted SET 2.0 DHW fresh water station

A plug and play system for transferring heat from the technical water storage tank with a programmable control unit and a circulator. The SET 2.0 unit ensures the DHW production with a limited formation of chalk and at a temperature chosen by the user. The heat exchange is carried out by the AISI 316 stainless steel plate heat exchanger in a high performance and hygienic manner. The unit, connected to the water storage tank from which it takes energy, is composed of all necessary parts. Through a control unit with a graphical display the user can monitor the functioning or easily impose user parameters. The heart of the SET 2.0 unit is the special electronic control unit which keeps up the imposed DHW temperature by modulating the flow in the primary circuit.



The mounted SET 2.0 unit is available in several sizes (60, 70, 80, 100, 120 and 200*)

*: DHW production of 10 to 45°C with a temperature of 55°C in the primary circuit

The innovative and qualifying element of the SET 2.0 unit is the electronic control unit which guarantees the DHW temperature through the modulation of the flow in the primary circuit.

In this way the following is guaranteed:

- ✓ max heat drop in the primary circuit in order to optimize the efficiency of the generator (solar thermal power, heat pump, biomass, etc.)
- ✓ precise and trustworthy management

Thanks to the high efficiency heat exchanger the unit is ideal for installations with heat pumps or solar panels that use water storage tanks for low temperatures (50-55°C)

Plus

- ✓ regulation of the hot water temperature
- ✓ easy and cheap in use
- ✓ high efficiency circulation pump (in accordance with the 2005-35/CE directive) and with an electronic control of the number of turns
- ✓ synoptically graphical display with the indication of the temperatures in the installation and of the power
- ✓ easy Plug and Play installation
- ✓ insulated pipe fittings
- ✓ vessel with a metal structure and thermoform panels for mounting to the wall
- ✓ possibility to manage the sanitary recirculation pump

Functions of the regulator

The SET 2.0 fresh water station is equipped with a regulator that can execute the following functions:

Efficient, electronic regulation of the velocity of the pump

Graphical display

Imposing the temperature of the DHW

Imposing the max temperature of the DHW. This is a safety option which stops the unit in case the max value is reached.

Management kit in series

Management kit Mixing valve on the primary circuit

Management kit stratification of the tank

Possibility to control the recirculation pump for sanitary purposes by fixing the activation times of the pump and the temperature of the recirculation circuit

Anti-legionella: carry out anti-legionella treatments through thermal shocks along the DHW adduction line

AL heating: activation of an integrative heat source when the anti-legionella treatment is carried out

Comfort function: when activated, the exchanger is kept warm in order to guarantee a fast recuperation

Anti-chalk protection: when activated, the circulator keeps on running even when the ACS distribution time is up in order to reduce chalk formation

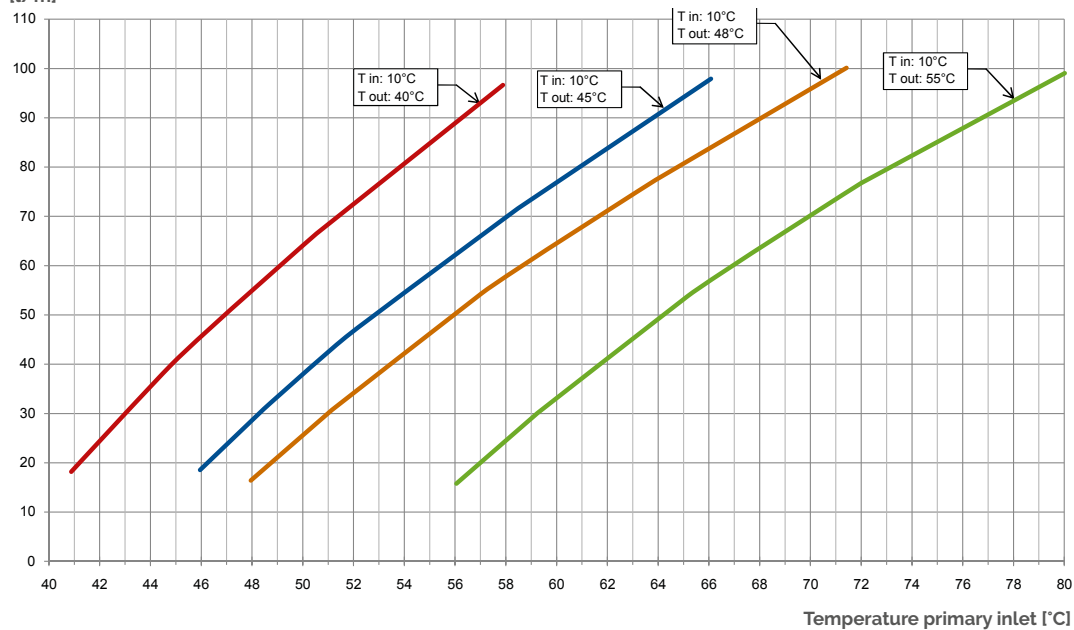
Solar: control and command the circulator of a solar power device

Management of the heat generator: activate and deactivate a heat generator when the temperature in the tank is below the set point

Mounted SET 2.0 thermal performance

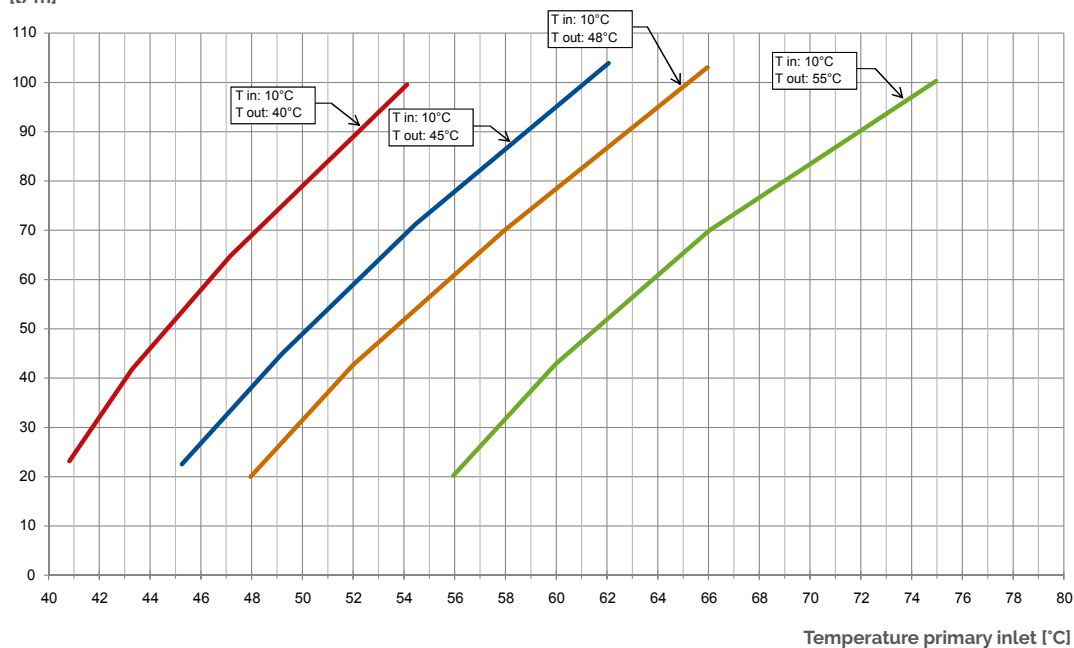
SET 60 performance

Flow of DHW to be distributed [L/m]



SET 70 performance

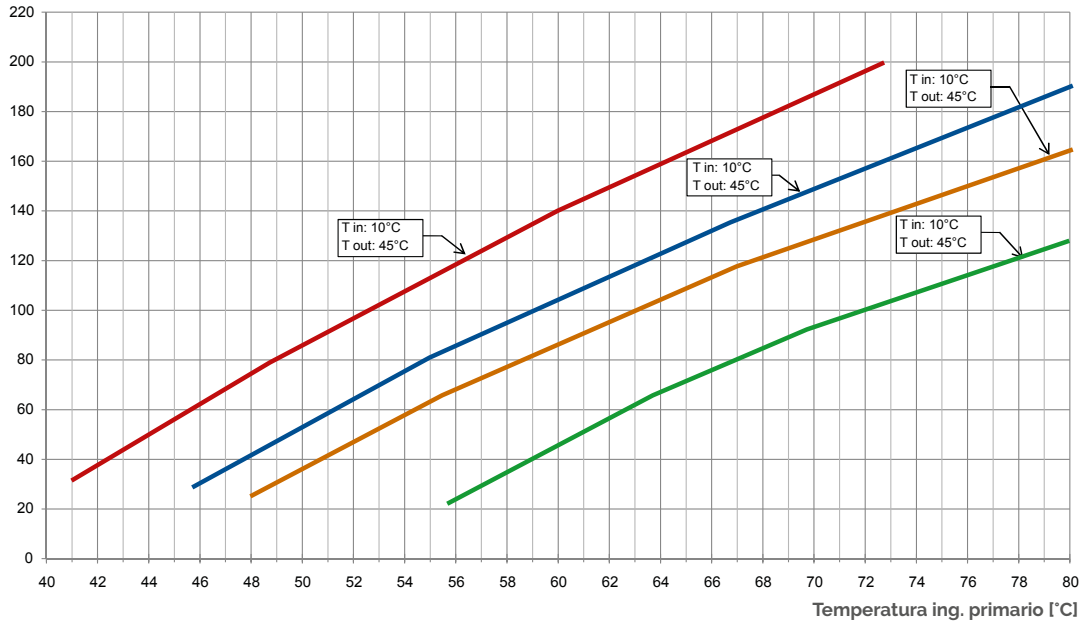
Flow of DHW to be distributed [L/m]



Mounted SET 2.0 thermal performance

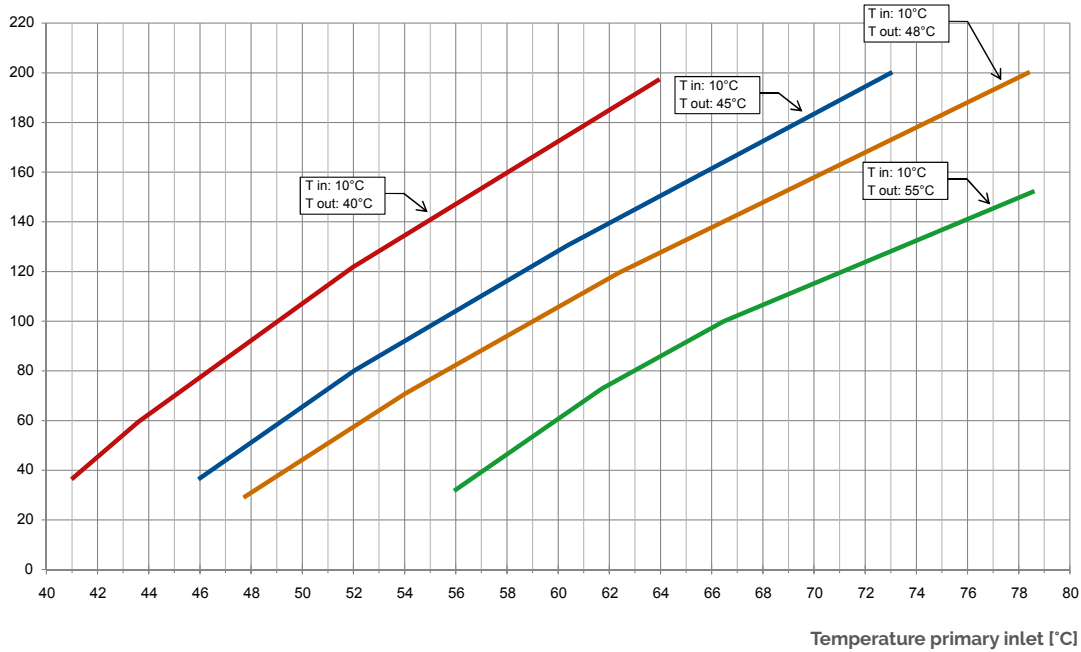
SET 80 performance

Flow of DHW to be distributed [L/m]



SET 100 performance

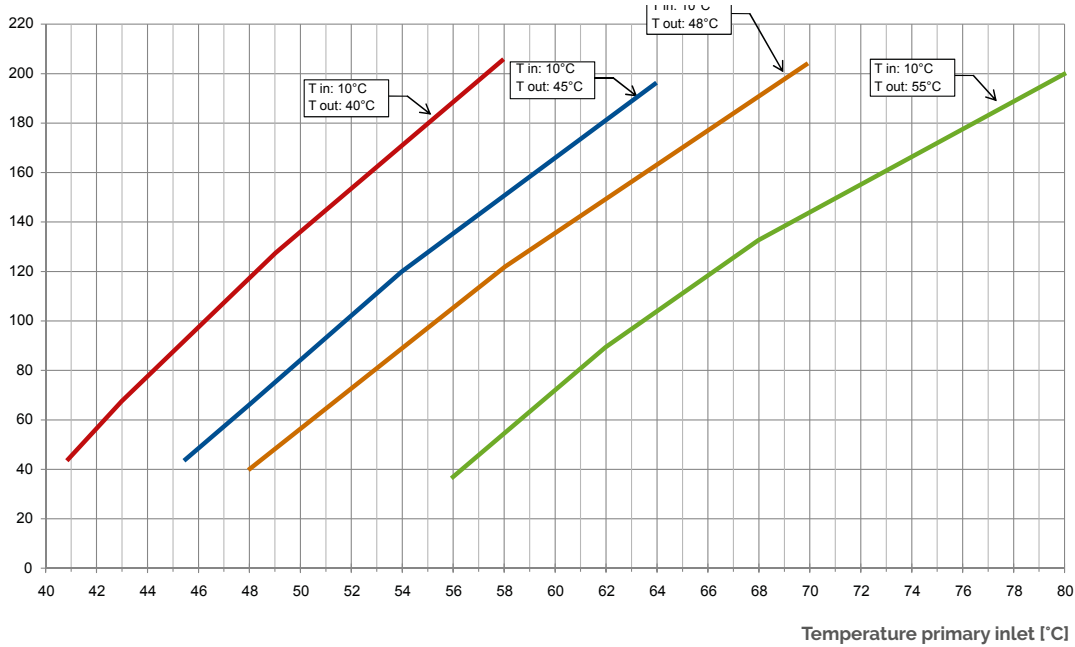
Flow of DHW to be distributed [L/m]



Mounted SET 2.0 thermal performance

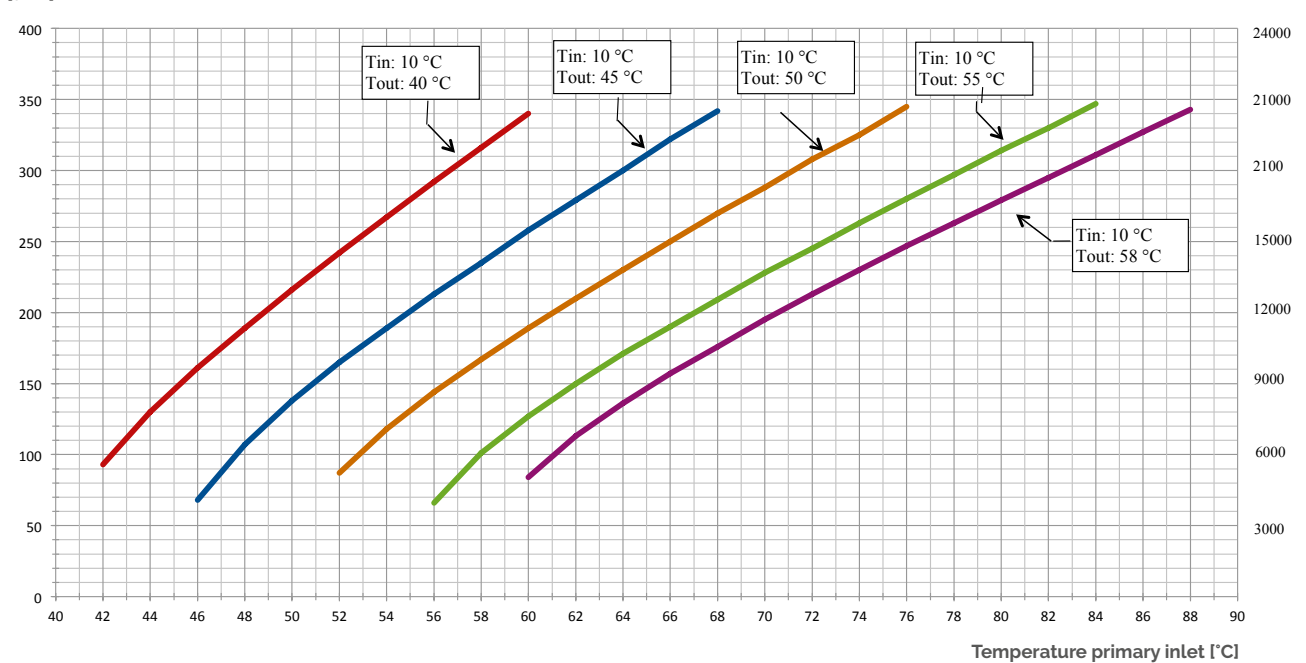
SET 120 performance

Flow of DHW to be distributed [L/m]

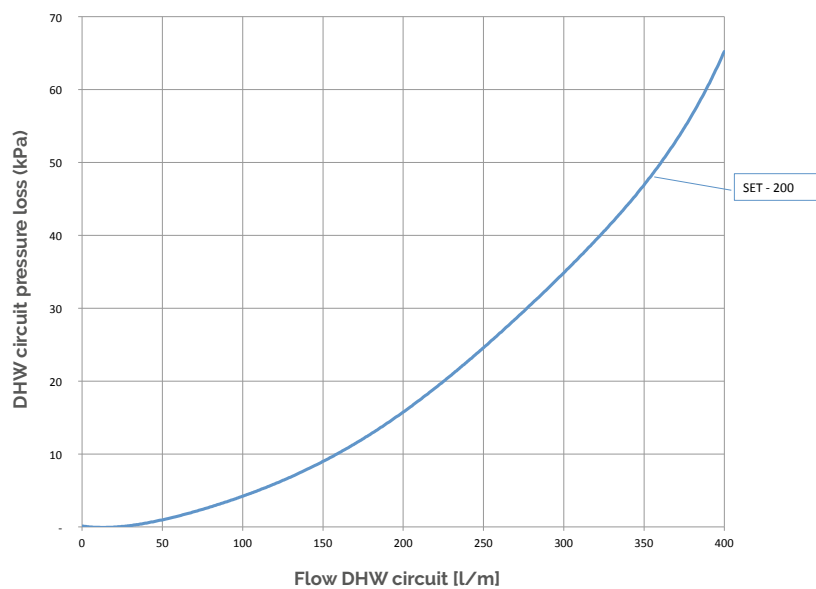
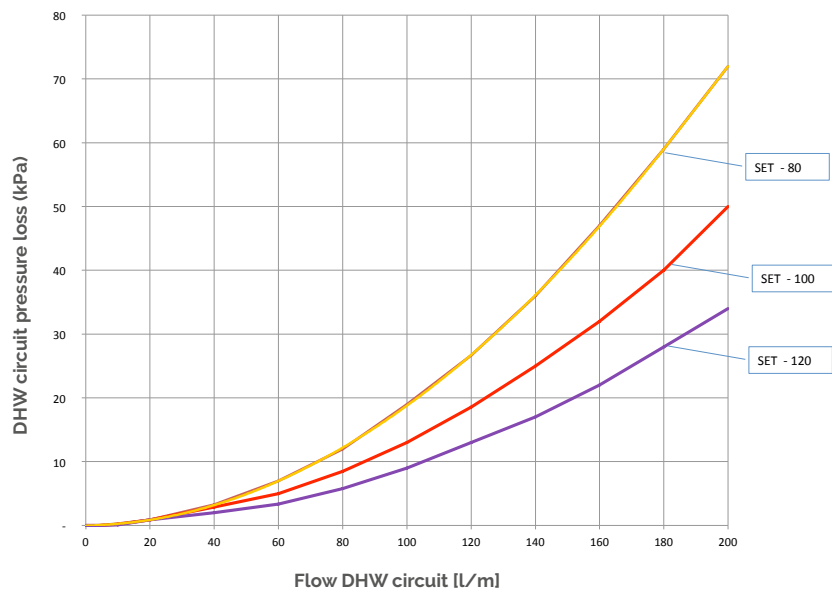
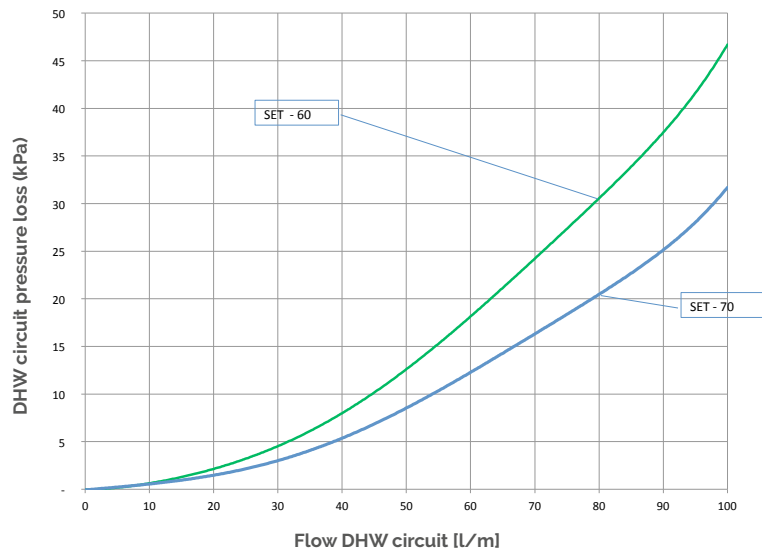


SET 200 performance

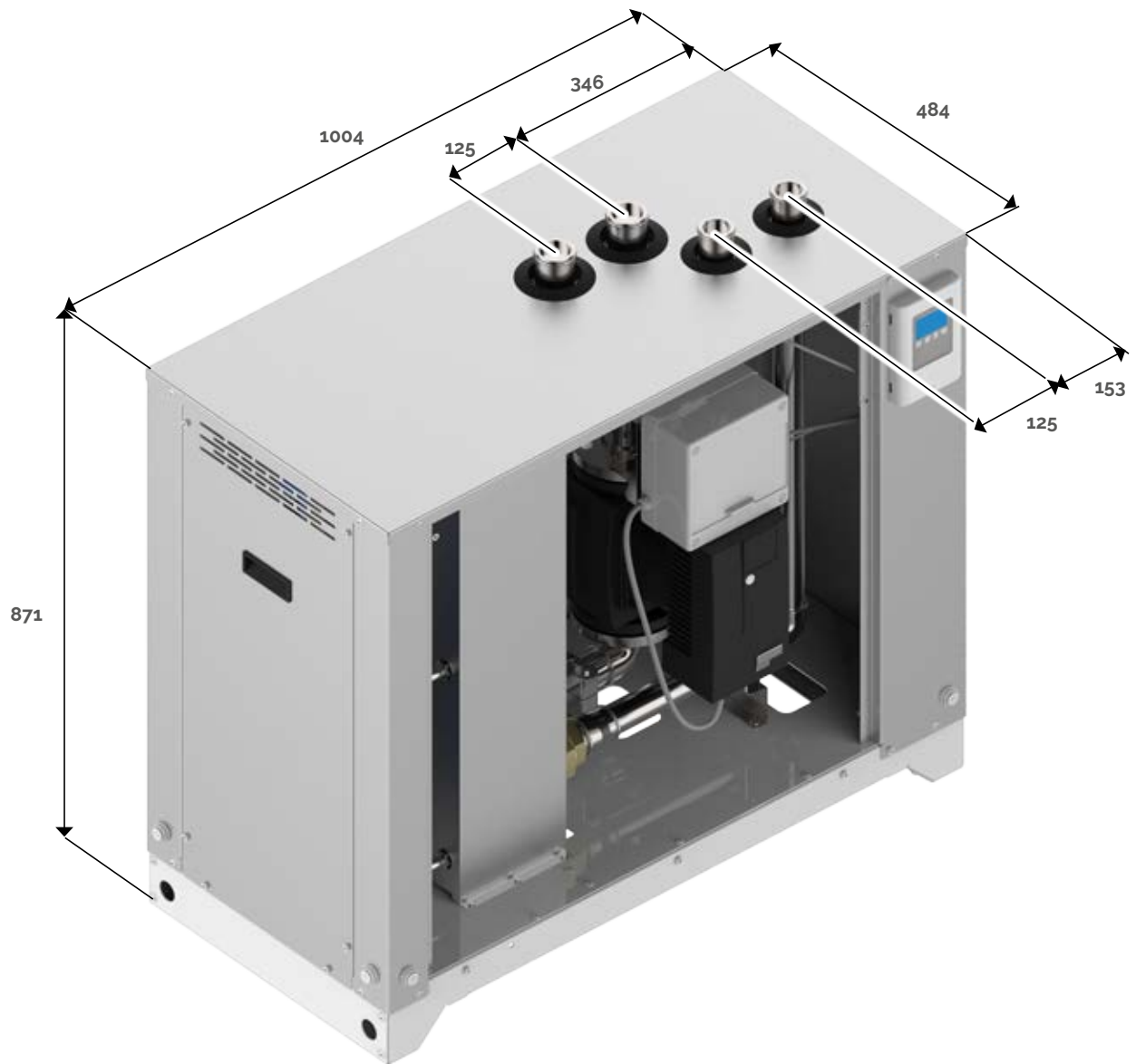
Flow of DHW to be distributed [L/m]



Hydraulic performance (SET 2.0 S and L)



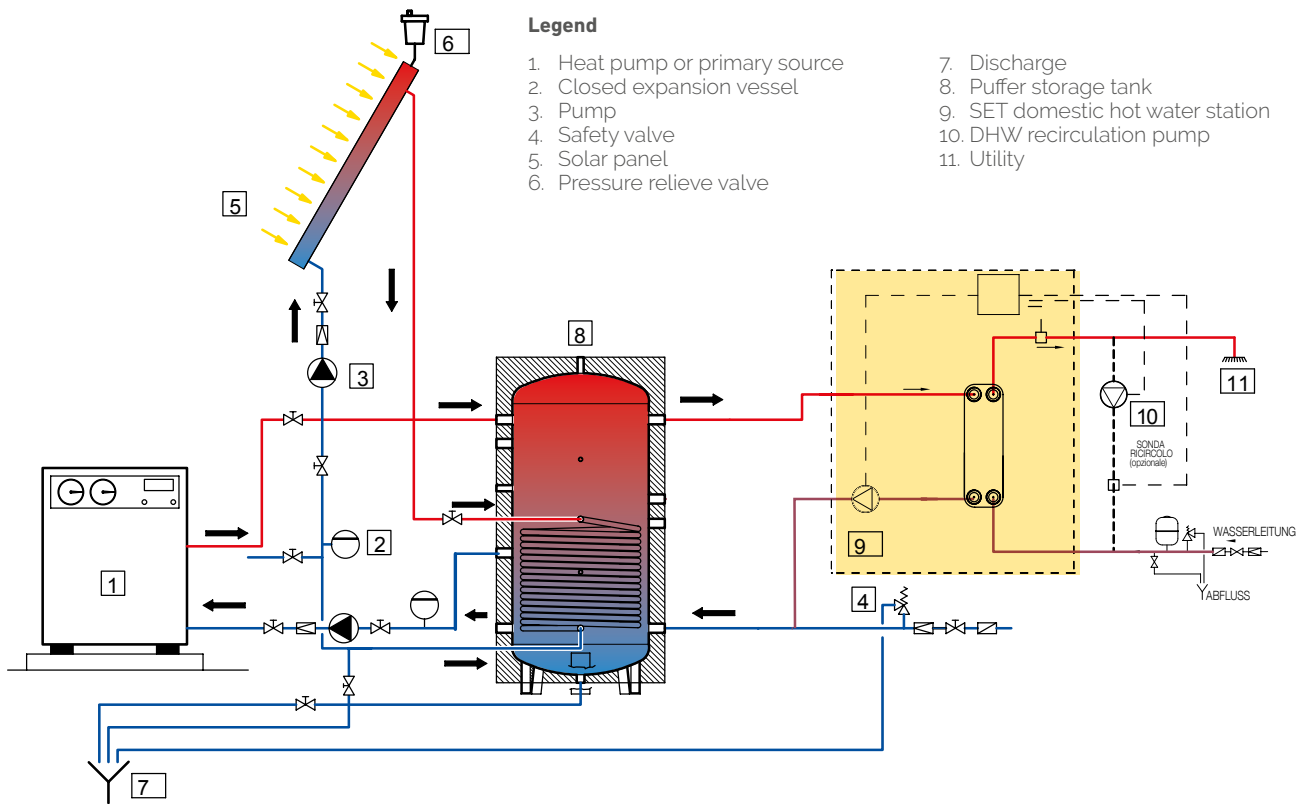
Dimensions



| Technical information | MOUNTED SET | | | | | |
|---|---------------------|------|------|-------|-------|-------|
| | 60 | 70 | 80 | 100 | 120 | 200 |
| Electrical supply | 230V / 50 hz / 1 ph | | | | | |
| Power of primary pump max (W) | | 310 | | | 450 | 600 |
| Absorption of primary pump max (A) | | 1,37 | | | 2,01 | 2,7 |
| Max power of the recirculation pump (can be managed from the control unit)(pump not supplied) | 185 | | | | | |
| Primary flow (liters/h) | 6700 | 8200 | 9000 | 11000 | 14000 | 22000 |
| Residual prevalence of the primary circuit (m.c.a.) | 2,0 | 4,0 | 2,0 | 2,0 | 4,0 | 2,0 |
| Volume of the primary circuit (l) | 2,66 | 2,90 | 3,15 | 3,87 | 4,84 | 6,55 |
| Volume of the domestic circuit (l) | 2,54 | 2,14 | 3,06 | 3,77 | 4,71 | 6,37 |
| Max operating pressure (bar) | 6 | | | | | |
| Couplings primary circuit (pollici) | 1" 1/2 GAS M | | | | | |
| Couplings secondary circuit (pollici) | 1" 1/4 GAS M | | | | | |
| Max operating temperature (°C) | 95 | | | | | |
| Category of electrical protection | IP40 | | | | | |
| Min DHW ignition flow (L/min) | 5 | 5 | 10 | 10 | 10 | 20 |
| Max DHW flow (L/min) | 100 | 100 | 200 | 200 | 200 | 400 |

Installation chart

In combination with the water storage tank



Equipment

The mounted SET 2.0 fresh water station is delivered in a cardboard box with:

- ✓ Fresh water station with electric switchboard for connection to the electric grid
- ✓ User guide

Accessories on request

Several accessory kits are available that can be combined with the SET 2.0 fresh water station.

| Description | |
|--|---|
| kit to connect the SET in series | ✓ |
| recirculation kit | ✓ |
| kit with mixing valve on the primary circuit | ✓ |
| kit with stratification valve for the storage tank | ✓ |

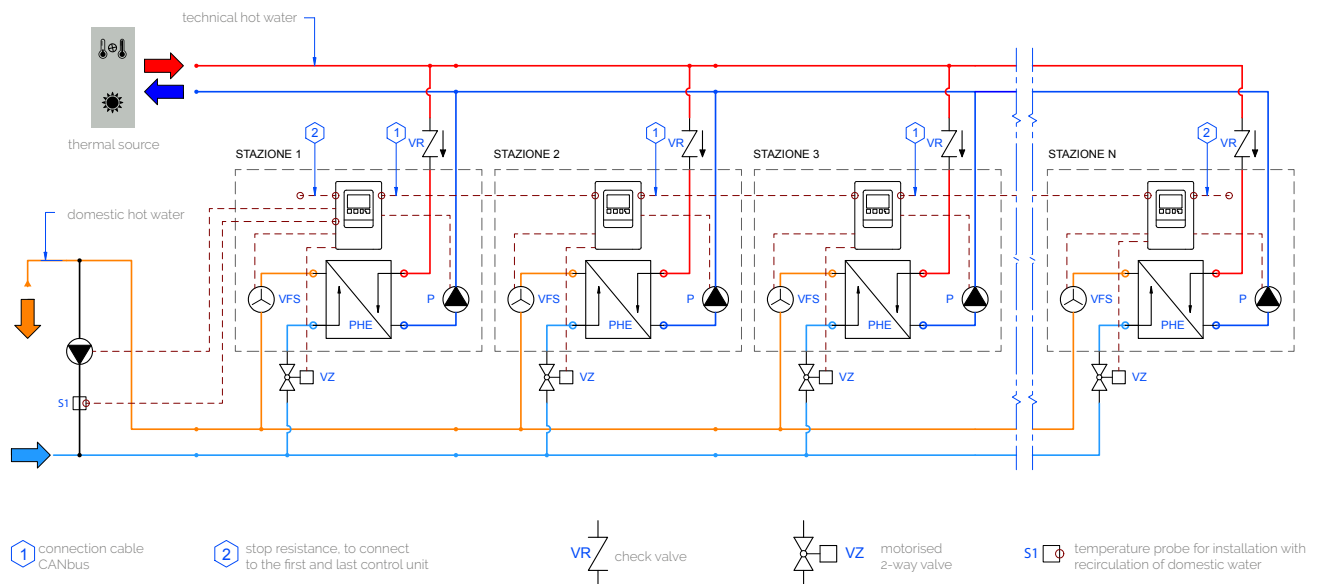
Kit to connect the SET in series

The kit to connect the SET in series is the option for all applications in which the need for domestic hot water is very variable, for example in sport centres, etc. In this way it is possible to connect max 8 fresh water stations and ensure a DHW production of min 5 l/m and max 3200 l/min*. The electronic control units that are mounted on every fresh water station enables communication between the stations via Modbus. As such, the electronics decide how many and which fresh water stations are activated, depending on the user conditions.

Advantages and benefits

- ✓ variable DHW production: from 5 to 3200 l/min
- ✓ The production by several SET connected in series depends on the temperature in the primary circuit and the production of DHW. The DHW flow that is to be distributed by a system in series is equal to the sum of the flow of all fresh water station as indicated in the graphic Hydraulic Performance
- ✓ trustworthy. Because the control unit carries out diagnoses by itself, in case of malfunctioning of one of the stations, the station is automatically deactivated and another station is activated. In this way, every fresh water station always operates in circumstances that approach the nominal circumstances and the precision and efficiency of the regulation is improved.
- ✓ The installation with the fresh water system in series can be expanded. You can add more units, even after the initial installation.
- ✓ The programmed maintenance of the fresh water stations can be executed without interrupting the DHW distribution.
- ✓ Every fresh water station operates for an equal number of hours which guarantees a long life span of the system.
- ✓ Regulation of the temperature is even more precise. The regulation makes it possible to activate the right number of fresh water station based on the flow and the temperature of the DHW.

Installation chart



Installation of the Kit

Install one kit for every fresh water station. The kit is supplied in parts, non-assembled and is composed of:

- ✓ one motorized zone valve with a fast 230V motor
- ✓ one CanBus cable
- ✓ the instructions

Recirculation kit

The recirculation kit makes it possible to opt for one of the multiple option offered by the electronic control station to control the pump of the sanitary recirculation circuit (circulator not supplied).

Possible settings

- ✓ Programming the recirculation in time slots. The recirculation pump is activated only during the indicated time slots and when the recirculation temperature is below the programmed temperature
- ✓ recirculation pump is always activated
- ✓ activation of the recirculation pump after a brief sampling period.

This option activates the recirculation pump only when strictly necessary, as such heating the domestic circuit without wasting drinking water.

Composition of the kit

The kit is supplied in parts, non-assembled and is composed of:

- ✓ temperature probe to be put on the recirculation ring
- ✓ instructions

Recirculation pump

The recirculation pump is not supplied with the kit because the pump has to be selected on the basis of the specifics of your installation. However, because the pump is to be controlled by the SET regulator, it has to have the following features

- ✓ power supply 230V/50hz/1ph
- ✓ max power 185 W

Kit with mixing valve on the primary circuit

The kit helps regulate the temperature at the entrance of the fresh water station. In this way, especially in installations that can reach high temperatures in the primary circuit, the precision of the regulation is improved, which guarantees higher comfort.

Composition of the kit

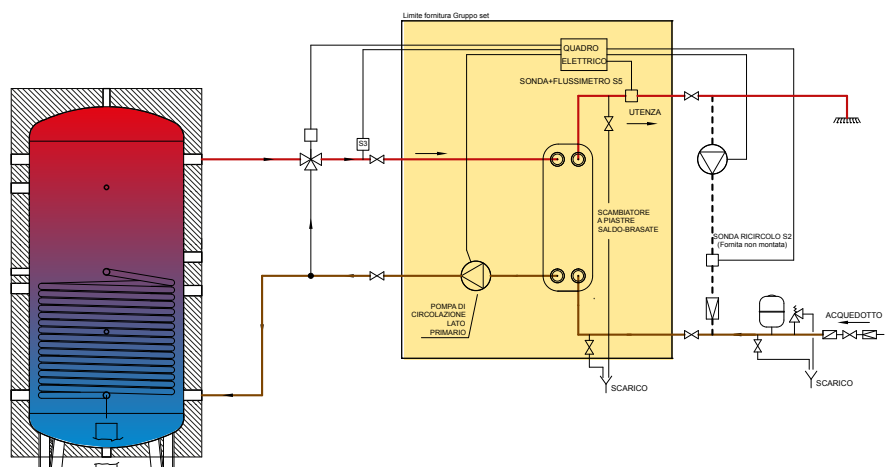
The kit is supplied in parts, non-assembled and is composed of:

- ✓ S3 temperature probe to be placed at the entrance of the exchanger on the primary circuit
- ✓ instructions

Mixing valve

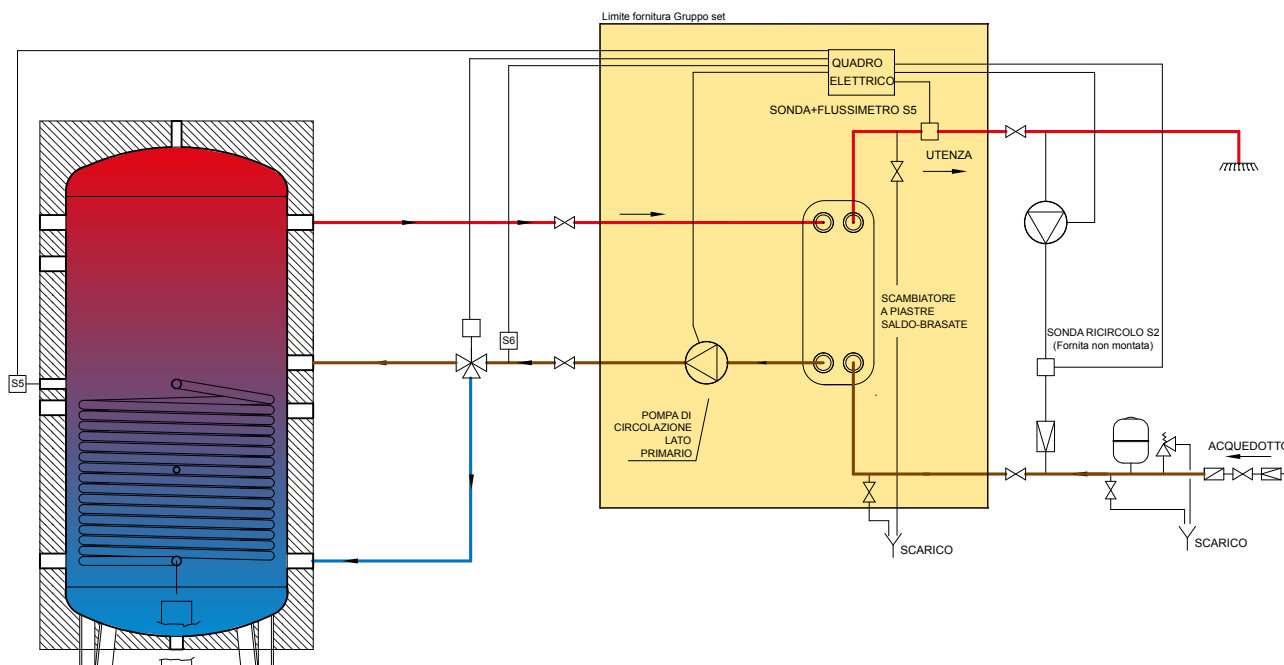
The mixing valve is not supplied with the kit because it should be selected on the basis of the specifics of your installation. However, because it is controlled by the SET regulator, it should have the following features:

- ✓ power supply 230V/50hz/1ph
- ✓ Three way regulation
- ✓ fast motor, runs at a time less than 10s
- ✓ kvs value compatible with the residual prevalence of the fresh water system and the pressure loss of the device



Kit with stratification valve for the storage tank

The kit makes it possible to direct the return from the fresh water station to the lower part instead of the mid part of the storage tank. Because of this, the stratification phenomenon in the storage tank is favoured and the efficiency of the entire heating system is maximized.



Composition of the kit

The kit is supplied in parts, non-assembled and is composed of:

- ✓ S6 temperature probe to be placed in the middle of the storage tank
- ✓ S6 temperature probe on the return of the primary circuit
- ✓ instructions

Stratification valve

The valve is not supplied with the kit because it should be selected on the basis of the specifics of your installation.

However, because it is controlled by the SET regulator, it should have the following features

- ✓ three way deviation valve
- ✓ 230V/50hz/1ph power supply
- ✓ relay with spring return
- ✓ kvs value compatible with the residual prevalence of the fresh water station and the pressure loss of the device

Codes

| code | description | price | packed | |
|------------|-------------------------------|-------------|------------------|--------------|
| | | | dimensions cm | weight kg |
| 842030004X | SET 60 - Fresh water station | € 5,647,00 | 110x60x100 | 166 |
| 842030005X | SET 70 - Fresh water station | € 5,725,00 | 110x60x100 | 168 |
| 842030006X | SET 80 - Fresh water station | € 6,536,00 | 110x60x100 | 189 |
| 842030007X | SET 100 - Fresh water station | € 6,653,00 | 110x60x100 | 193 |
| 842030008X | SET 120 - Fresh water station | € 6,806,00 | 110x60x100 | 198 |
| 842030016X | SET 200 - Fresh water station | € 10,500,00 | 139,2x63,4x125 | 200 |

| Kits with external accessories | | prezzo |
|--------------------------------|--------------------------------------|----------|
| 842030092X | External kit in series SET 2.0 DN32 | € 523,00 |
| 842030099X | External kit recirculation SET 2.0 | € 46,00 |
| 842030096X | External kit mixing valve set 2.0 | € 725,00 |
| 842030098X | External kit deviation valve set 2.0 | € 969,00 |

* please contact Fiorini to evaluate the series of SET 200

Water storage tanks

Contents

| | |
|------------------------------------|-----|
| Puffer water storage tanks | |
| PUFFER | 186 |
| Combined water storage tank | |
| COMBI PLUS | 190 |

PUFFER

Water storage tanks

The Puffer tanks are inertial tanks for heating installations which store non-domestic hot water. They are used in all devices powered by discontinuous power sources (e.g. solar panels, wood burners, boiler stoves, etc.) or wherever the volume of water stored in the device must be increased (e.g. devices with heat pumps, combined heat and power units, biomass burners, etc.). Several versions are available, to be used with one or more energy sources:

PFA Regular storage tank

PFB Storage tank fitted with smooth tube heat exchanger to add an additional power source (e.g. solar).

PFC Storage tank fitted with two smooth tube heat exchangers to add two additional power sources (e.g. solar and boiler stove).

✓ Materials

All storage tanks are made of carbon steel sheets, externally varnished

✓ Insulation

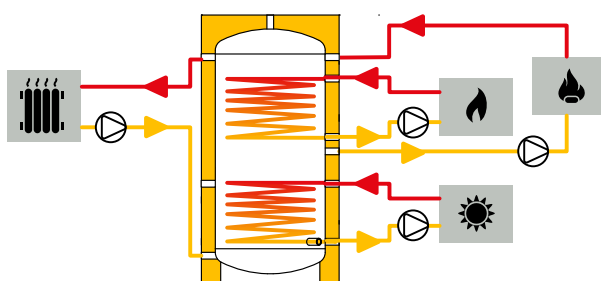
Up to 500l: Rigid foam with a thickness of 50mm (cannot be removed).
Larger tanks: flexible polyurethane with a thickness of 100mm (can be removed). Covered with coloured PVC.

✓ Available accessories

The following accessories can be supplied on demand: thermometer, thermostat, current impressed electronic anode, electrical resistor.

✓ Special versions

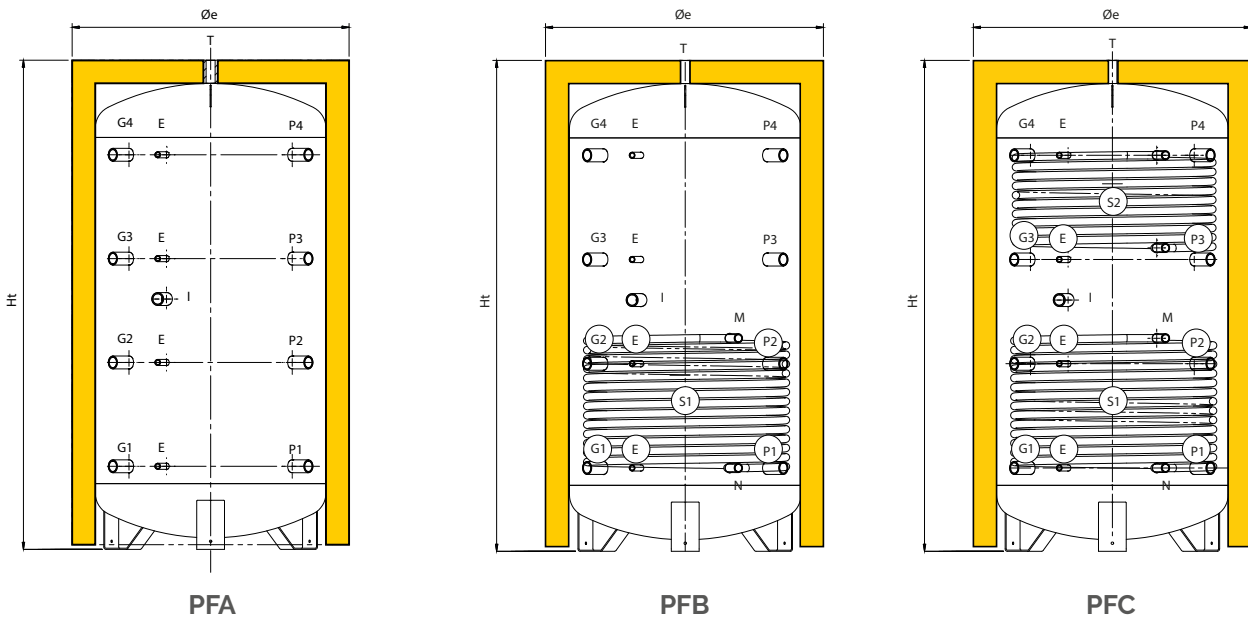
The Puffer tanks can be adapted to your requirements with customized dimensions, flanged couplings, customized couplings, thicker insulation, very thick aluminium coating, etc.



| Model | Storage tank | | S1 Coil Circuit | | S2 Coil Circuit | |
|-------|------------------|---------------|------------------|---------------|------------------|---------------|
| | max. temperature | max. pressure | max. temperature | max. pressure | max. temperature | max. pressure |
| PFA | 95°C | 5 bar | - | - | - | - |
| PFB | 95°C | 5 bar | 99°C | 9 bar | - | - |
| PFC | 95°C | 5 bar | 99°C | 9 bar | 99°C | 9 bar |

PUFFER

Dimensions



Coupling chart

| capacity l | G inch | P inch | E inch | I inch | T mm | M-N inch | O-P inch |
|---------------|-----------|-----------|-----------|-----------|---------|-------------|-------------|
| 300 | 1 1/4 | 1 1/4 | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 500 | 1 1/4 | 1 1/4 | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 800 | 1 1/2 | 1 1/2 | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 1000 | 1 1/2 | 1 1/2 | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 1500 | 1 1/2 | 1 1/2 | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 2000 | 1 1/2 | 1 1/2 | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 2500 | 2" | 2" | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 3000 | 2" | 2" | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 4000 | 2" | 2" | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 5000 | 2" | 2" | 1/2" | 1 1/2 | 1" | 1" | 1" |
| 6000 | 3" | 3" | 1/2" | 1 1/2 | 2" | - | - |
| 8000 | 3" | 3" | 1/2" | 1 1/2 | 2" | - | - |
| 10000 | 3" | 3" | 1/2" | 1 1/2 | 2" | - | - |

Legend couplings

| | |
|-----------|---------------------------------|
| G1 | heating return |
| G2 | auxiliary - free |
| G3 | low temperature heating supply |
| G4 | high temperature heating supply |
| M | inlet inferior fixed exchanger |
| N | outlet inferior fixed exchanger |
| O | inlet superior fixed exchanger |
| P | outlet superior fixed exchanger |
| P1 | auxiliary - free |
| P2 | return energy source |
| P3 | auxiliary - free |
| P4 | supply energy source |
| E | temperature probe |
| T | electric resistor |

Height chart

| capacity l | Øe mm | Ht mm | R* | G1-P1 mm | G2-P2 mm | G3-P3 mm | G4-P4 mm | I mm | M mm | N mm | O mm | P mm | Exchanger surface area | |
|---------------|----------|----------|------|-------------|-------------|-------------|-------------|---------|---------|---------|---------|---------|---------------------------|----------|
| | | | | | | | | | | | | | S1 m² | S2 m² |
| 300 | 610 | 1680 | 1788 | 325 | 695 | 1065 | 1435 | 880 | 695 | 325 | 1435 | 1075 | 1 | 1 |
| 500 | 710 | 1715 | 1857 | 345 | 715 | 1085 | 1455 | 975 | 715 | 345 | 1455 | 1135 | 1.9 | 1.2 |
| 800 | 990 | 1740 | 2002 | 290 | 660 | 1030 | 1400 | 845 | 770 | 290 | 1400 | 1130 | 2.5 | 1.5 |
| 1000 | 990 | 2100 | 2322 | 290 | 780 | 1270 | 1760 | 1020 | 890 | 290 | 1760 | 1280 | 3.1 | 2.5 |
| 1500 | 1200 | 2120 | 2437 | 360 | 810 | 1260 | 1710 | 1085 | 920 | 360 | 1710 | 1310 | 3.8 | 2.8 |
| 2000 | 1300 | 2450 | 2774 | 390 | 930 | 1470 | 2010 | 1200 | 990 | 390 | 2010 | 1650 | 4.6 | 2.8 |
| 2500 | 1450 | 2220 | 2652 | 425 | 865 | 1305 | 1745 | 1145 | 985 | 425 | 1745 | 1305 | 5 | 4 |
| 3000 | 1450 | 2720 | 3083 | 435 | 1035 | 1635 | 2235 | 1435 | 1115 | 435 | 2235 | 1755 | 6 | 4.2 |
| 4000 | 1600 | 2810 | 3234 | 480 | 1080 | 1680 | 2280 | 1430 | 1160 | 480 | 2280 | 1800 | 7 | 5 |
| 5000 | 1800 | 2870 | 3388 | 510 | 1110 | 1710 | 2310 | 1510 | 1190 | 510 | 2310 | 1910 | 8 | 5 |
| 6000 | 2000 | 2790 | 3433 | 635 | 1155 | 1675 | 2195 | 1415 | - | - | - | - | - | - |
| 8000 | 2000 | 3490 | 4023 | 625 | 1385 | 2145 | 2905 | 1615 | - | - | - | - | - | - |
| 10000 | 2000 | 4240 | 4689 | 625 | 1635 | 2645 | 3655 | 2365 | - | - | - | - | - | - |

R*: reversal quota

PUFFER

Product code

PFA series

| capacity l | code | price | energy label | packed | |
|---------------|------------|------------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 300 | 817010119X | € 669,00 | D | 64x64x180 | 55 |
| 500 | 817010120X | € 828,00 | D | 74x74x183,5 | 77 |
| 800 | 817010046 | € 1.090,00 | | 102x102x186 | 109 |
| 1000 | 817010002 | € 1.275,00 | | 102x102x222 | 125 |
| 1500 | 817010003 | € 1.630,00 | | 123x123x224 | 194 |
| 2000 | 817010004 | € 1.958,00 | | 132x132x257 | 263 |
| 2500 | 817010101X | € 2.499,00 | | 147x147x234 | 296 |
| 3000 | 817010102X | € 2.699,00 | | 147x147x284 | 346 |
| 4000 | 817010103X | € 3.539,00 | | 163x163x293 | 492 |
| 5000 | 817010104X | € 4.098,00 | | 183x183x299 | 582 |
| 6000 | 817010129X | € 5.464,00 | | 282x203x217,5 | 684 |
| 8000 | 817010130X | € 6.625,00 | | 352x203x217,5 | 823 |
| 10000 | 817010131X | € 7.895,00 | | 427x203x217,5 | 973 |

PFB series

| capacity l | code | price | energy label | packed | |
|---------------|------------|------------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 300 | 819010129X | € 825,00 | D | 64x64x180 | 65 |
| 500 | 819010130X | € 1.023,00 | D | 74x74x183,5 | 98 |
| 800 | 819010053 | € 1.354,00 | | 102x102x186 | 137 |
| 1000 | 819010003 | € 1.590,00 | | 102x102x222 | 153 |
| 1500 | 819010004 | € 2.019,00 | | 123x123x224 | 237 |
| 2000 | 819010005 | € 2.383,00 | | 132x132x257 | 315 |
| 2500 | 819010135X | € 2.995,00 | | 147x147x234 | 352 |
| 3000 | 819010136X | € 3.264,00 | | 147x147x284 | 413 |
| 4000 | 819010137X | € 4.159,00 | | 163x163x293 | 571 |
| 5000 | 819010138X | € 4.785,00 | | 183x183x299 | 672 |

PFC series

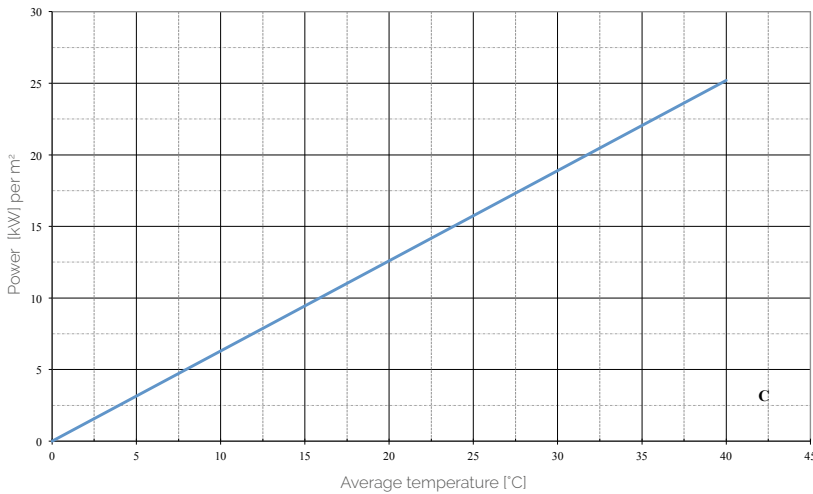
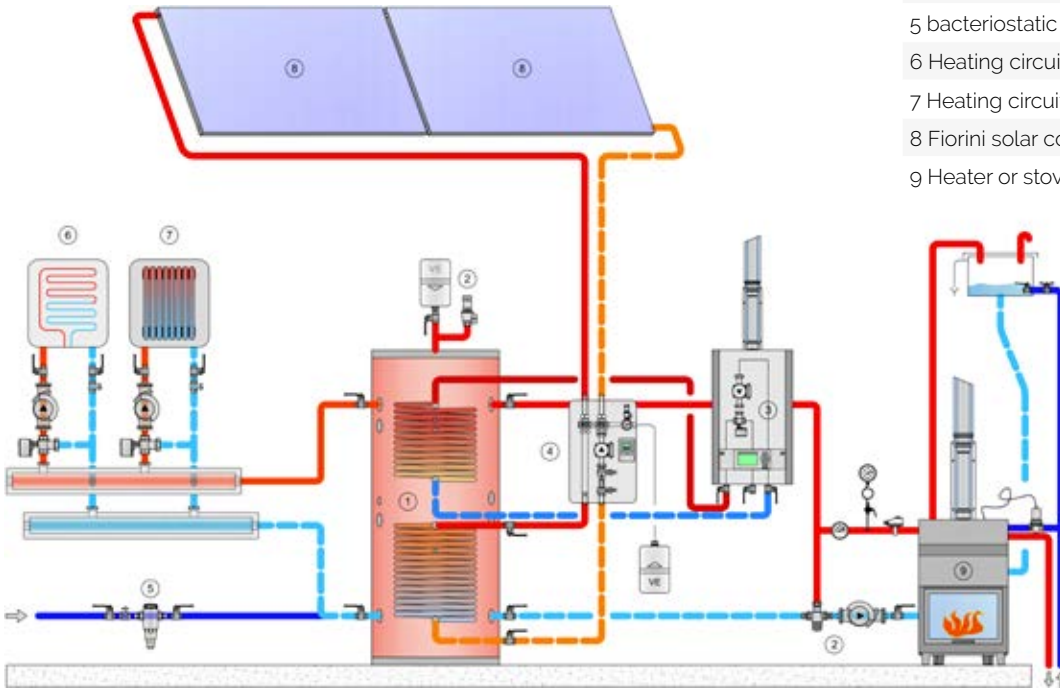
| capacity l | code | price | energy label | packed | |
|---------------|------------|------------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 300 | 819010149X | € 1.031,00 | D | 64x64x180 | 77 |
| 500 | 819010150X | € 1.245,00 | D | 74x74x183,5 | 111 |
| 800 | 819010056 | € 1.583,00 | | 102x102x186 | 154 |
| 1000 | 819010006 | € 1.866,00 | | 102x102x222 | 181 |
| 1500 | 819010007 | € 2.409,00 | | 123x123x224 | 268 |
| 2000 | 819010008 | € 2.811,00 | | 132x132x257 | 346 |
| 2500 | 819010155X | € 3.423,00 | | 147x147x234 | 383 |
| 3000 | 819010156X | € 3.860,00 | | 147x147x284 | 460 |
| 4000 | 819010157X | € 5.066,00 | | 163x163x293 | 628 |
| 5000 | 819010158X | € 5.751,00 | | 183x183x299 | 730 |

PUFFER

Installation chart

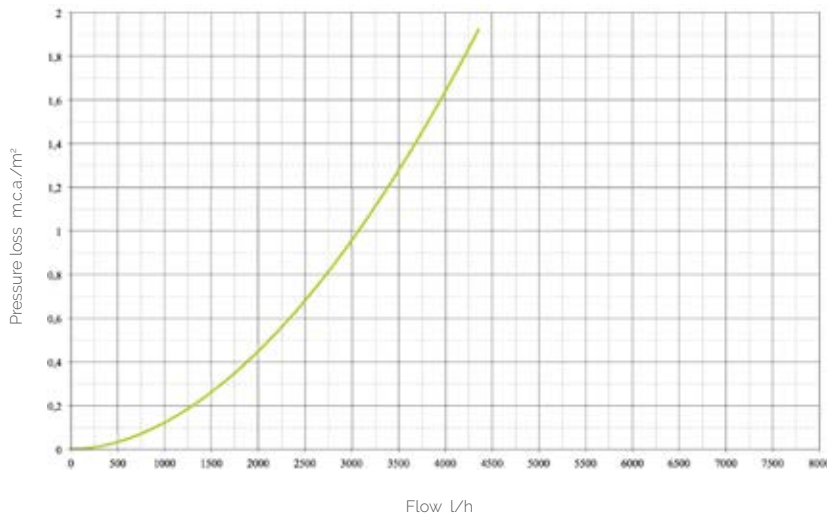
List of components

- 1 PFC Fiorini Puffer
- 2 Safety unit
- 3 Heating by alternative source
- 4 solar thermal return unit
- 5 bacteriostatic cold water filter
- 6 Heating circuit 1
- 7 Heating circuit 2
- 8 Fiorini solar collectors
- 9 Heater or stove with open vessel



Instantaneous DHW production

The chart indicates the maximum instantaneous DHW production (10-45°C) through the stainless steel coil in function of the storage temperature in the tank



Pressure loss in the fixed coil

The pressure loss indicated in the chart refers to a surface area of 1 m² of the coil. Multiply this value with the exchange surface in order to come to the total pressure loss.

COMBI PLUS

Mixed storage tank

The COMBI PLUS gamma consists of inertial tanks for installations which use discontinuous energy sources, such as solar power systems, biomass systems and wood burning systems. Thanks to the internal exchanger with a stainless steel corrugated tube with a large surface, the instantaneous DHW production is guaranteed. There are three versions of which several capacities are available, from 600 to 2000 liters.

COMBI PLUS A: equipped with n°1 internal fixed exchanger with a stainless steel corrugated tube for instantaneous DHW production

COMBI PLUS B: equipped with n°2 internal fixed heat exchangers, one with a stainless steel corrugated tube for instantaneous DHW production and another for coupling to an ulterior heat source.

COMBI PLUS C: equipped with n°3 internal fixed heat exchangers, one with a stainless steel corrugated tube for instantaneous DHW production and two in carbon steel for coupling to other integrative heat sources

✓ Materials

The inertial tanks are made of high quality material, in particular:

Coil for domestic use: AISI 316L stainless steel

Tank and integration coil: ST235JR carbon steel

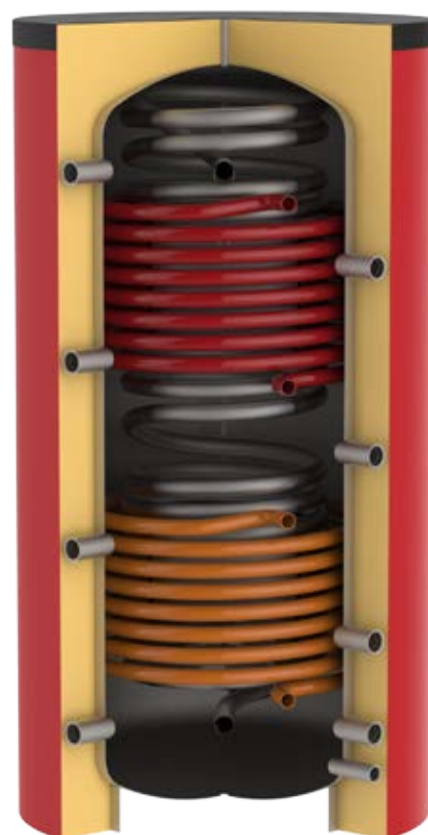
✓ **External protective treatment:** enameling with industrial varnish

✓ Insulation

Flexible polyurethane with a thickness of 100mm, covered with coloured PVC

✓ Available accessories

On demand, several adaptations and accessories are available: external plate heat exchanger kit, thermometer, thermostat and electrical resistor.

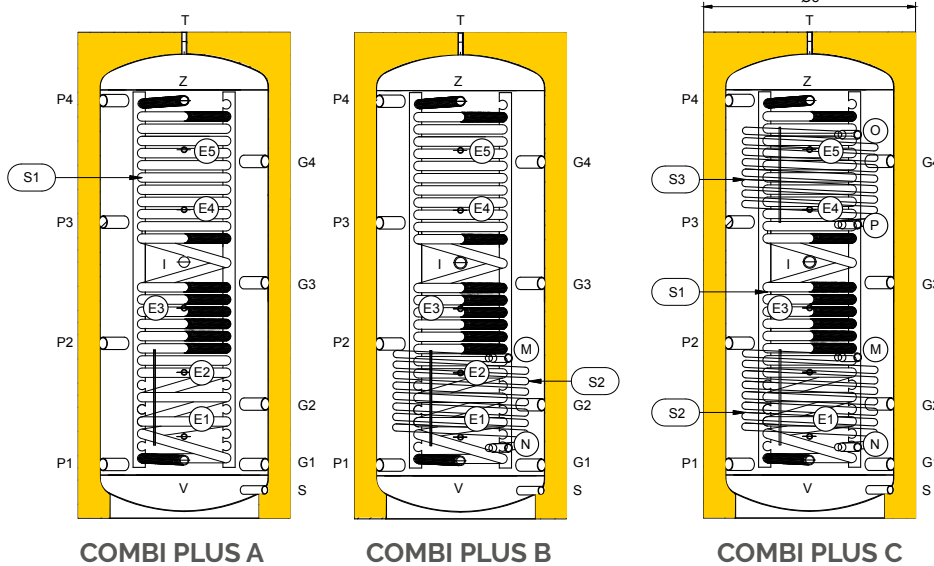


| Storage tank | | S1 Coil Circuit | | S2 Coil Circuit | |
|------------------|---------------|------------------|---------------|------------------|---------------|
| max. temperature | max. pressure | max. temperature | max. pressure | max. temperature | max. pressure |
| 90°C | 3 bar | 90°C | 16 bar | 90°C | 6 bar |

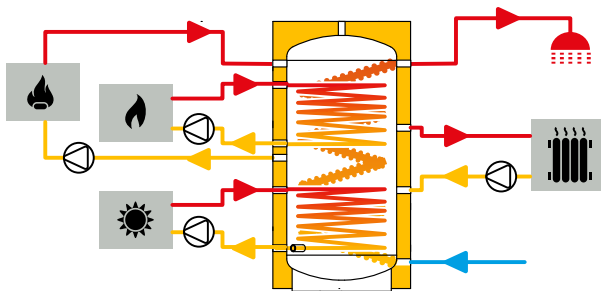
COMBI PLUS

Dimensions

Coupling chart



- G1** heating return
- G2** auxiliary - free
- G3** low temperature heating supply
- G4** high temperature heating supply
- P1** auxiliary - free
- P2** return energy source
- P3** auxiliary - free
- P4** supply energy source
- I** electrical resistor
- V** inlet cold water from the hydraulic circuit
- Z** DHW outlet
- N** inlet inferior fixed exchanger
- M** outlet inferior fixed exchanger
- P** outlet superior fixed exchanger
- O** inlet superior fixed exchanger
- E1** temperature probe
- E2** temperature probe
- E3** temperature probe
- E4** temperature probe
- E5** temperature probe
- S** discharge



Coupling chart

| capacity l | G1..4 inch | P1..4 inch | i inch | V inch | Z inch | N inch | M inch | P inch | O inch | E1..5 inch | S inch | S1 m² | S3 m² | S3 m² |
|---------------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|-----------|----------|----------|----------|
| 600 | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/4 | 1 1/4 | 1' | 1' | 1' | 1' | 1/2' | 1' | 5,65 | 1,4 | 1,4 |
| 800 | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/4 | 1 1/4 | 1' | 1' | 1' | 1' | 1/2' | 1' | 5,65 | 1,8 | 1,8 |
| 1000 | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/4 | 1 1/4 | 1' | 1' | 1' | 1' | 1/2' | 1' | 6,95 | 1,8 | 1,8 |
| 1500 | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/4 | 1 1/4 | 1' | 1' | 1' | 1' | 1/2' | 1' | 6,95 | 3 | 2,4 |
| 2000 | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/4 | 1 1/4 | 1' | 1' | 1' | 1' | 1/2' | 1' | 8 | 4,5 | 3 |

Height chart

| cap. l | Øe mm | Ht mm | R* mm | P1 mm | P2 mm | P3 mm | P4 mm | G1 mm | G2 mm | G3 mm | G4 mm | V mm | Z mm | N mm | M mm | P mm | O mm | E1 mm | E2 mm | E3 mm | E4 mm | E5 mm |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| 600 | 900 | 1900 | 2103 | 290 | 715 | 1145 | 1570 | 290 | 505 | 930 | 1355 | 285 | 1575 | 360 | 760 | 1120 | 1520 | 435 | 655 | 880 | 1230 | 1425 |
| 800 | 990 | 1880 | 2125 | 250 | 685 | 1115 | 1550 | 250 | 455 | 900 | 1335 | 270 | 1555 | 330 | 750 | 1060 | 1480 | 380 | 570 | 750 | 1150 | 1450 |
| 1000 | 990 | 2270 | 2477 | 250 | 815 | 1380 | 1950 | 250 | 530 | 1100 | 1665 | 270 | 1950 | 330 | 750 | 1370 | 1790 | 380 | 680 | 980 | 1440 | 1720 |
| 1500 | 1100 | 2665 | 2884 | 380 | 1015 | 1640 | 2260 | 380 | 705 | 1325 | 1950 | 400 | 2260 | 460 | 1260 | 1590 | 2190 | 510 | 875 | 1240 | 1680 | 2020 |
| 2000 | 1300 | 2500 | 2818 | 380 | 925 | 1475 | 2030 | 380 | 655 | 1205 | 1750 | 380 | 2030 | 450 | 1250 | 1410 | 1960 | 610 | 840 | 1070 | 1530 | 1830 |

R*: reversal quota

COMBI PLUS

Mixed storage tank

COMBI PLUS A

| capacity l | code | price | energy label | packed | |
|---------------|------------|-----------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 600 | 842020178X | € 2403,00 | | 97x97x205 | 195 |
| 800 | 842020179X | € 2564,00 | | 105x105x203 | 210 |
| 1000 | 842020180X | € 2786,00 | | 105x105x242 | 238 |
| 1500 | 842020181X | € 3547,00 | | 115x115x283 | 330 |
| 2000 | 842020182X | € 4502,00 | | 135x135x265 | 378 |

COMBI PLUS B

| capacity l | code | price | energy label | packed | |
|---------------|------------|-----------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 600 | 842020148X | € 2500,00 | | 97x97x205 | 205 |
| 800 | 842020149X | € 2776,00 | | 105x105x203 | 232 |
| 1000 | 842020150X | € 2891,00 | | 105x105x242 | 246 |
| 1500 | 842020151X | € 3730,00 | | 115x115x283 | 371 |
| 2000 | 842020152X | € 4553,00 | | 135x135x265 | 404 |

COMBI PLUS C

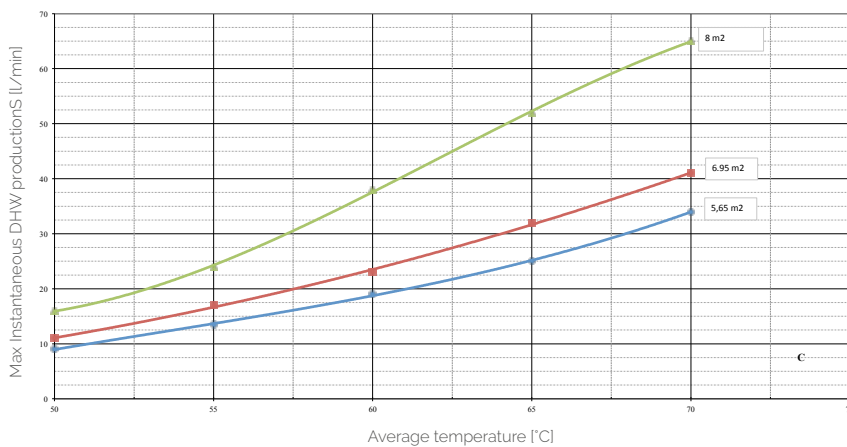
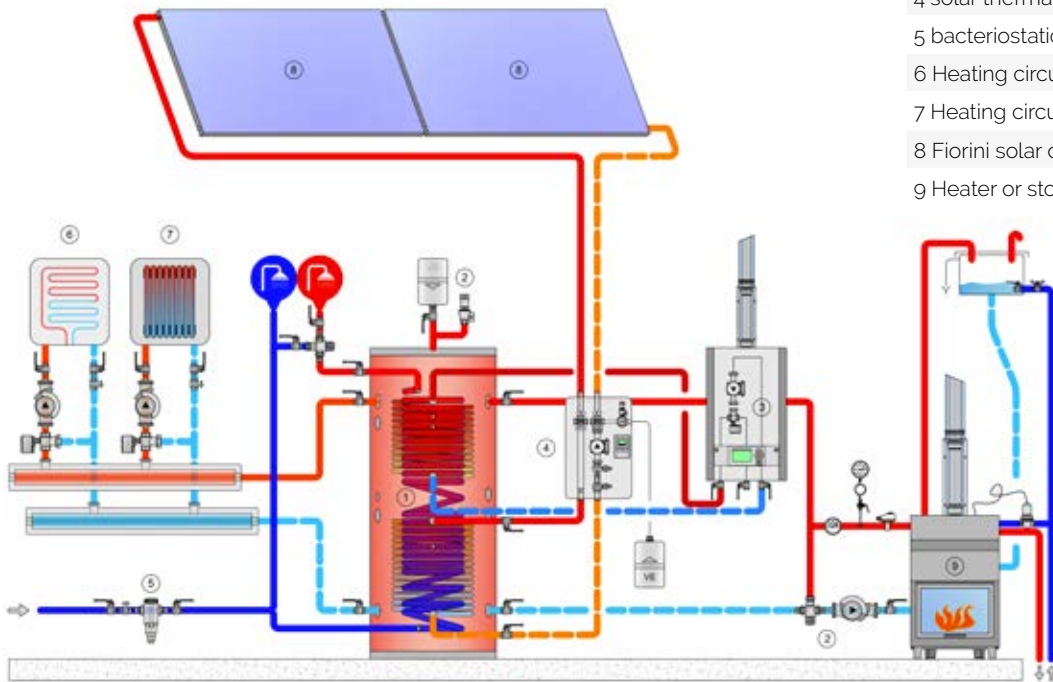
| capacity l | code | price | energy label | packed | |
|---------------|------------|-----------|-----------------|------------------|--------------|
| | | | | dimensions cm | weight kg |
| 600 | 842020153X | € 2654,00 | | 97x97x205 | 220 |
| 800 | 842020154X | € 2928,00 | | 105x105x203 | 254 |
| 1000 | 842020155X | € 3079,00 | | 105x105x242 | 278 |
| 1500 | 842020156X | € 3936,00 | | 115x115x283 | 411 |
| 2000 | 842020157X | € 4846,00 | | 135x135x265 | 455 |

COMBI PLUS

Installation chart

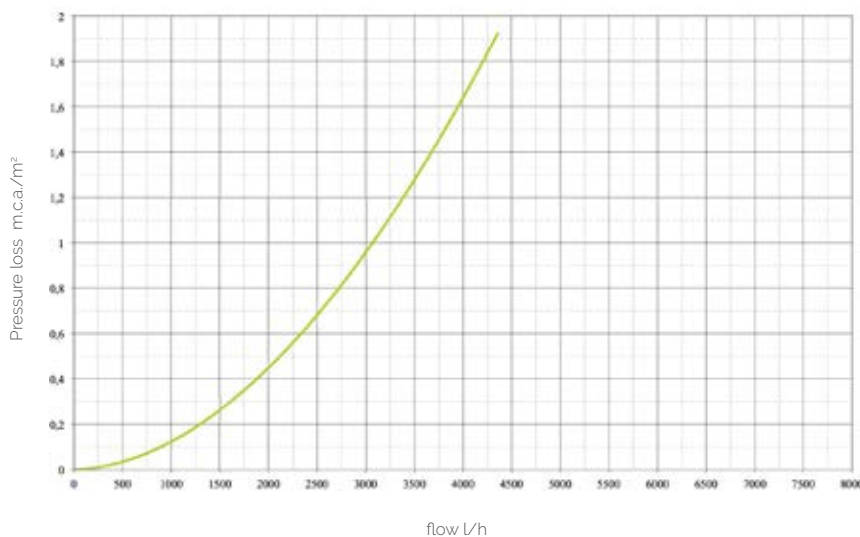
List of components

- 1 PFC Fiorini Puffer
- 2 Safety unit
- 3 Heating by alternative source
- 4 solar thermal return unit
- 5 bacteriostatic cold water filter
- 6 Heating circuit 1
- 7 Heating circuit 2
- 8 Fiorini solar collectors
- 9 Heater or stove with open vessel



Instantaneous DHW production

The chart indicates the maximum instantaneous DHW production (10-45°C) through the stainless steel coil in function of the storage temperature in the tank



Pressure loss in the fixed coil

The pressure loss indicated in the chart refers to a surface area of 1 m² of the coil. Multiply this value with the exchange surface in order to come to the total pressure loss.

Solar thermal systems

Contents

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Solar Thermal Kit for DHW production

HOT WATER AND SOLAR HEATING SYSTEM

Solar energy is an inexhaustible source of energy that can be easily used both in hot water preparation and in the heating process. Solar energy helps protect the environment and ensures significant energy savings.

OUR SOLUTIONS

Fiorini has designed two product lines: the Aqua Sun line for domestic hot water production and the Combi Sun line for domestic hot water production and heating. Both solutions are available in different versions which are realized based on the user's consumption and the heating system typology, in order to meet a wide range of needs.

WHY THE SOLAR THERMAL KIT

In order to facilitate the choice for the most efficient solution and to make the installation of a solar thermal system easier, faster and therefore cheaper we conceived a series of devices which have many benefits and satisfy users' needs (single housing, multi-family houses, artisanal or commercial activities, accommodation facilities).



Solar Thermal Kit for DHW production

ADVANTAGES

☼ Saving money. The technology we use ensures high efficiency. Acqua Sun and Combi Sun solutions make your working environment or your household more energy-efficient which saves you money every day. The solar Thermal Kit is not expensive and can be written off.

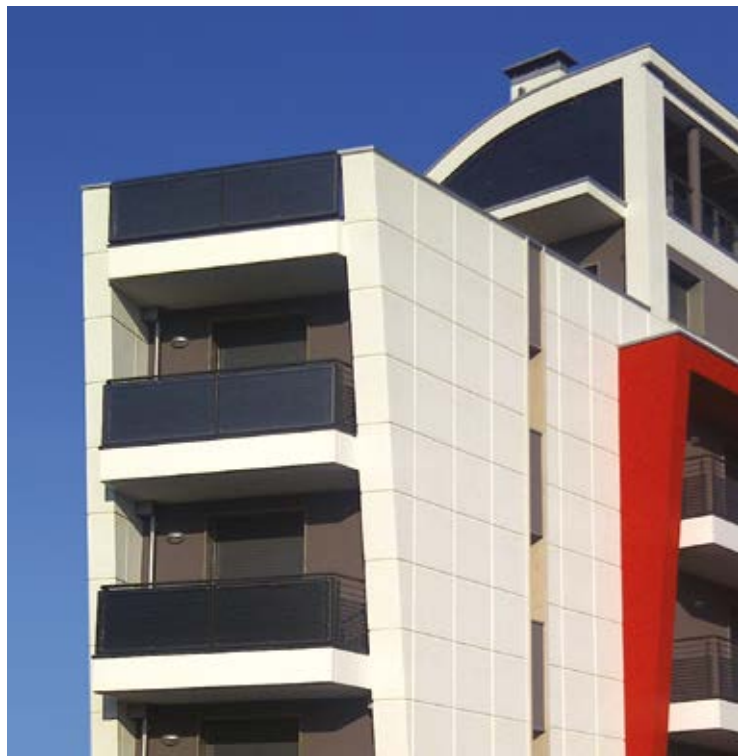
☼ Value of the property. The installation of a system based on renewable energy can improve the energetic classification of the household and working environments which makes the property value and commercial value increase.

☼ Respect for the environment. Solar energy is clean and eco-friendly. It helps reducing polluting emissions.

☼ Energy autonomy. Solar energy is an energy source which is always available and it is not subject to restrictions or conditioning. For this reason, it helps reaching energy autonomy. Consequently, thermal energy production is low-cost and not subject to price increases.

☼ Fast and easy installation. The production of devices in a Kit facilitates the assembly which also reduces installation time.

☼ Minimal maintenance. The equipment (collectors, regulators, pumps) and accessories require minimal maintenance.

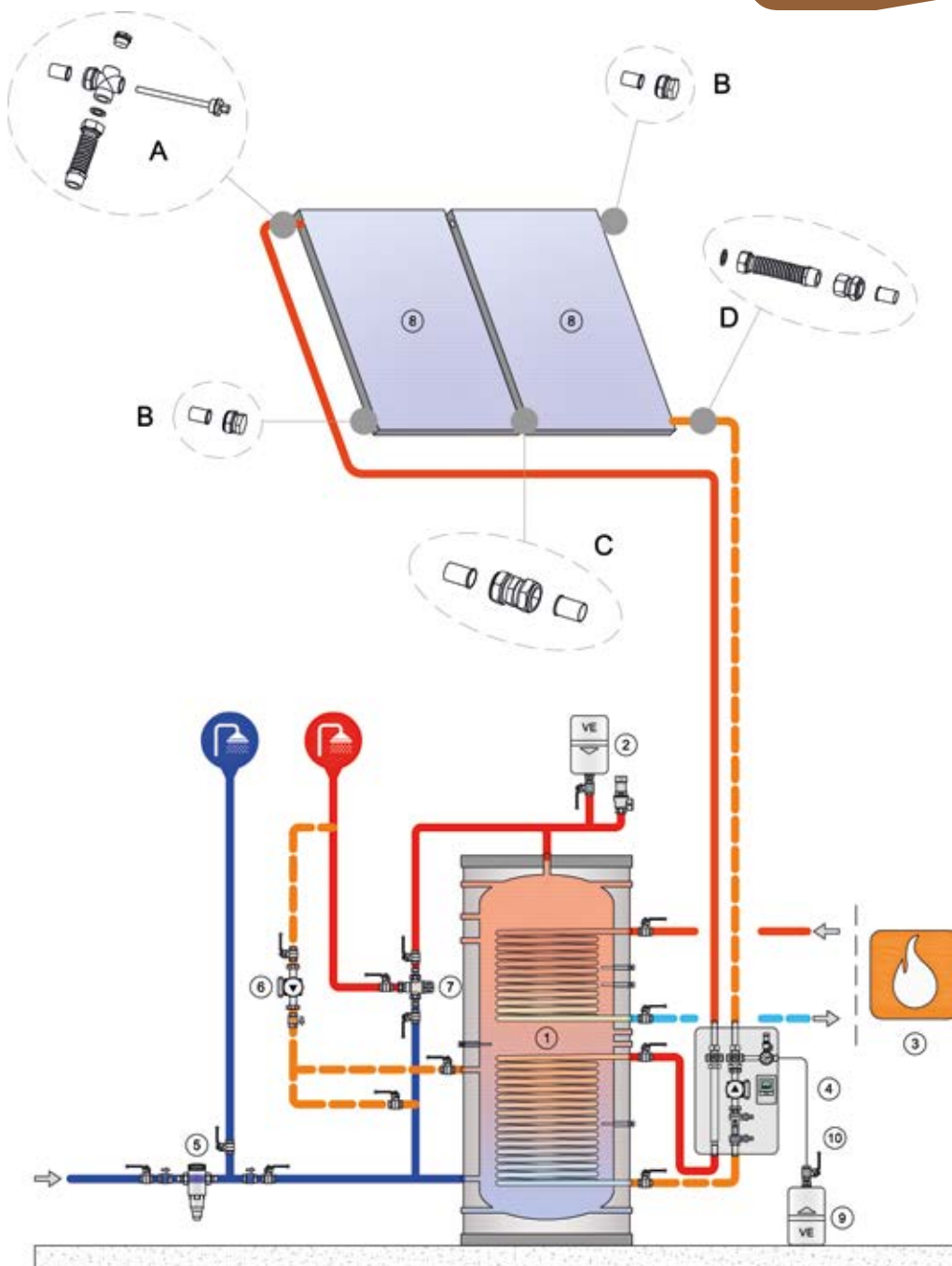
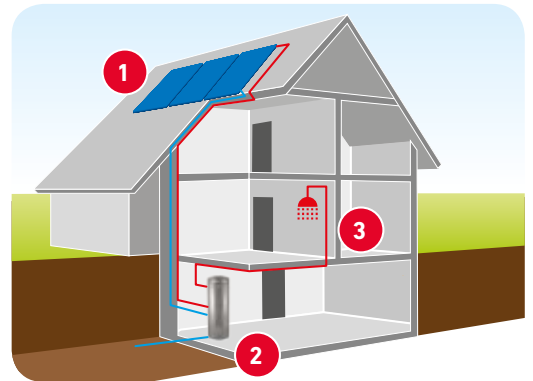


AQUA SUN solar thermal kit for DHW production

The Aqua Sun Kit is the easiest and most efficient way to produce hot water using solar power. There are two versions of the Aqua Sun systems which correspond to different daily needs (see 'daily needs' chart).

Principles

1. The sun heats the solar liquid in the solar collectors
2. The solar liquid reaches the storage tank and heats the water with help of the exchanger.
3. The hot water is available for domestic use.



List of components

A) kit outlet for the assembly of the collectors

B) kit plug for the assembly of the collectors

C) connection between collectors

D) kit inlet for the assembly of the collectors

List of components

1. Fiorini domestic water storage tank

2. safety unit

3. heating from alternative source

4. return unit solar thermal system

5. bacteriostatic cold water filter

6. sanitary recirculation pump



7. DHW thermostatic mixer



8. Fiorini solar collectors



9. solar expansion vessel

10. kit to fix the expansion vessel

AQUA SUN solar thermal kit for DHW production

| | | Series Code Price Energy label Composition | Aqua Sun 1 83811114X € 2.992,00 C 1 H2000*SMART2 200 | | | Aqua Sun 1.1 83811115X € 3.122,00 C 1 H2500*SMART2 200 |
|-------|--|---|---|----------|--|---|
| Rif. | Number of persons* | |  x 2 | | |  x 3 |
| 8 | Solar collector | | 1xH2000 | pag. 202 | | 1xH2500 |
| A+B+D | Kit for basic connections | | 1 piece | | | 1 piece |
| C | Kit for expansive connections | | - | | | - |
| 4 | Solar station for pumping and regulation | | S2 SOLAR 30 - 25/7.0 | pag. 211 | | S2 SOLAR 30 - 25/7.0 |
| / | Anti-freeze liquid | | 20 liters | pag. 214 | | 20 liters |
| 9 | Expansion vessel | | 18 liters | pag. 215 | | 18 liters |
| 10 | Set for fixing the vessel | | SSTOAS | pag. 215 | | SSTOAS |
| 1 | Solar power water heater | | SMART2 200 | pag. 114 | | SMART2 200 |

| | | Series Code Price Energy label Composition | Aqua Sun 2 83811116X € 3.935,00 C 2 H2000*SMART2 SOLAR KIT | | | Aqua Sun 2.1 83811113X € 4.195,00 C 2 H2500*SMART2 SOLAR KIT |
|-------|--|---|---|----------|--|---|
| Rif. | Number of persons* | |  x 4 | | |  x 5 |
| 8 | Solar collector | | 2xH2000 | pag. 202 | | 2xH2500 |
| A+B+D | Kit for basic connections | | 1 piece | | | 1 piece |
| C | Kit for expansive connections | | 1 piece | | | 1 piece |
| 4 | Solar station for pumping and regulation | | S2 SOLAR 30 - 25/7.0 | pag. 211 | | S2 SOLAR 30 - 25/7.0 |
| / | Anti-freeze liquid | | 20 liters | pag. 214 | | 20 liters |
| 9 | Expansion vessel | | 18 liters | pag. 215 | | 18 liters |
| 10 | Set for fixing the vessel | | SSTOAS | pag. 215 | | SSTOAS |
| 1 | Solar power water heater | | SMART 2 SOLAR KIT 300 l | pag. 118 | | SMART 2 SOLAR KIT 300 l |

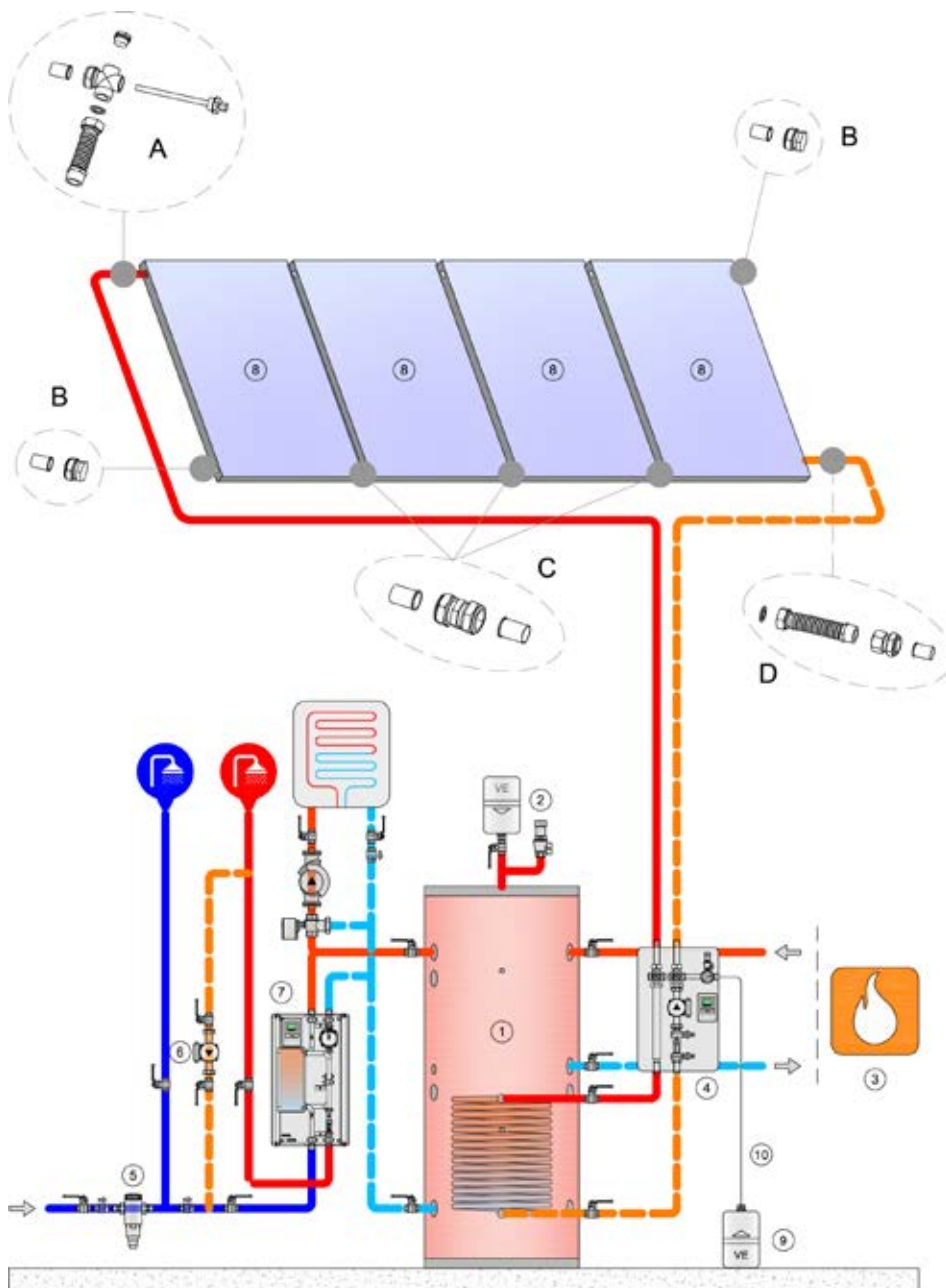
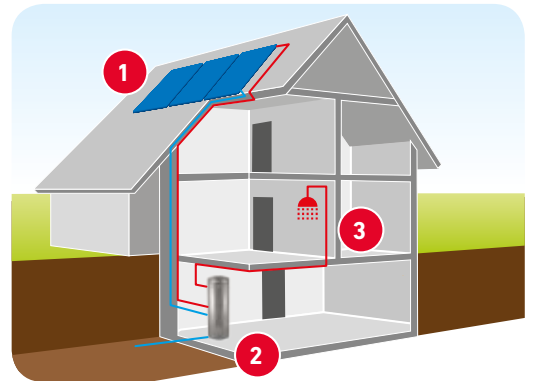
| | | Series Code Price Energy label Composition | Aqua Sun 3 83811117X € 4.908,00 D 3 H2000*SMART2 500 | | | Aqua Sun 3.1 83811118X € 5.298,00 D 3 H2500*SMART2 500 |
|-------|--|---|---|----------|--|---|
| Rif. | Number of persons* | |  x 7 | | |  x 7 |
| 8 | Solar collector | | 3xH2000 | pag. 202 | | 3xH2500 |
| A+B+D | Kit for basic connections | | 1 piece | | | 1 piece |
| C | Kit for expansive connections | | 2 pieces | | | 2 pieces |
| 4 | Solar station for pumping and regulation | | S2 SOLAR 30 - 25/7.0 | pag. 211 | | S2 SOLAR 30 - 25/7.0 |
| / | Anti-freeze liquid | | 20 liters | pag. 214 | | 20 liters |
| 9 | Expansion vessel | | 18 liters | pag. 215 | | 18 liters |
| 10 | Set for fixing the vessel | | SSTOAS | pag. 215 | | SSTOAS |
| 1 | Solar power water heater | | SMART2 500 | pag. 114 | | SMART2 500 |

Thermal solar power kit for DHW production and heating – COMBI SUN

The Combi Sun kit is the solution which makes it possible to heat domestic water and water for the heating system. There are three versions of the Combi Sun system which correspond to different daily needs and different compositions/surfaces.

Principles

1. The sun heats the solar fluid in the solar collectors
2. The solar fluid reaches the storage tank and heats the water with the exchanger.
3. The hot water in the storage tank can be used to heat domestic water and to heat the surroundings.



List of components

A) kit outlet for the assembly of the collectors

B) kit plug for the assembly of the collectors

C) connection between collectors

D) kit inlet for the assembly of the collectors

List of components

1. Fiorini domestic water storage tank

2. safety unit

3. heating from alternative source

4. return unit solar thermal system

5. bacteriostatic cold water filter

6. sanitary recirculation pump

7. DHW thermostatic mixer

8. Fiorini solar collectors

9. solar expansion vessel

10. kit to fix the expansion vessel

Thermal solar power kit for DHW production and heating – COMBI SUN

| Rif. | Residence* | Combi Sun 4 838111120X € 7.742,00 D | | Combi Sun 6 838111121X € 9.778,00 D | | Combi Sun 8 838111122X € 10.725,00 D | |
|-------|--|--|-----------------------|--|----------|---|----------|
| | | 4 H2500+PFB800+SET25 | 6 H2500+PFB1000+SET25 | 8 H2500+PFB1500+SET40 | small | medium | large |
| 8 | Solar collector | 4xH2500 | pag. 204 | 6xH2500 | pag. 204 | 8xH2500 | pag. 204 |
| A+B+D | Kit for basic connections | 1 piece | | 1 piece | | 1 piece | |
| C | Kit for expansive connections | 3 pieces | | 5 pieces | | 7 pieces | |
| 4 | Solar station for pumping and regulation | S2 SOLAR 30 - 25/7.0 | pag. 211 | S2 SOLAR 30 - 25/7.0 | pag. 211 | S2 SOLAR 30 - 25/7.0 | pag. 211 |
| | Anti-freeze liquid | 40 liters | pag. 214 | 60 liters | pag. 214 | 60 liters | pag. 214 |
| 9 | Expansion vessel | 25 liters | pag. 215 | 50 liters | pag. 215 | 50 liters | pag. 215 |
| 10 | Set for fixing the vessel | SSTOAS | pag. 215 | N.A. | pag. 215 | N.A. | pag. 215 |
| 1 | Puffer storage tank | PFB 800 | pag. 186 | PFB 1000 | pag. 186 | PFB 1500 | pag. 186 |
| 7 | SET 2.0 fresh water station | SET 25 2.0 | pag. 162 | SET 25 2.0 | pag. 162 | SET 40 2.0 | pag. 162 |

N.A. Not Available



Hot water

H2000 - High efficiency flat plate solar panels with stainless steel tank

H2000 high performance solar collector – 2 m² with an aluminium frame for vertical and horizontal installation

The new solar collector is made of profiles in high quality anticorrosive aluminium (Al Mg). Closing system with integrated perimeter gasket in vulcanized EPDM, resistant to temperature swings and UV rays. Solar glass with antireflex safety, high transparency and a low iron content. Insulation in qualitative mineral wool without formaldehyde and adhesives. Absorber covered in highly selective vacuum aluminium. Connections. The collector can be installed on a roof, integrated or placed on a structure. Performance and quality tested.



Features

Unique and intelligent design

Unbeatable price/quality ratio

Precise manufacturing: construction on a motorized product line

Intelligent fixing system: reduced installation time

Several installation possibilities: up to 6 connected collectors, on tile, flat roofs...

Connection options

Parallel connection



Max 6 collectors

Series connection



Based on pressure drop

Combined connection



Based on pressure drop

H2000 - High efficiency flat plate solar panels with stainless steel tank

| Available models | |
|------------------|---------------------|
| Article | External dimensions |
| H2000 | 1730 x 1170 x 83 mm |

| Technical information | |
|-----------------------------------|--|
| Gross surface (m ²) | 2,02 |
| Exposed surface (m ²) | 1,84 |
| Net surface (m ²) | 1,84 |
| Capacity (l) | 1,56 |
| Flow | high flow/low flow |
| Glass thickness | 3,2 mm |
| Glass transmission coefficient | 91% |
| Thickness of insulation | 40 mm flat |
| Absorber | covered in highly selective vacuum aluminium |
| Absorption | 95% |
| Emission | 5% |
| Connections | 4 x 22 mm |
| Operating pressure | 10 bar |
| Testing pressure | 15 bar |
| Max temperature | 192°C |
| Weight | 35 kg |
| Certificates | EN 12975 + Keymark |
| Warranty | 10 years (glass not included) |

| Efficiency coefficient | Opening | Absorber |
|------------------------|---------|----------|
| η_0 | 0,814 | 0,814 |
| a_1 | 4,061 | 4,061 |
| a_2 | 0,013 | 0,013 |

| H2000 Vertical | | |
|------------------|------------|----------|
| Gross surface | code | price |
| 2 m ² | 821120058X | € 650,00 |

| Set for coupling collectors H2000/H2500 | | |
|---|------------|----------|
| | code | price |
| base * | 843070274X | € 142,00 |
| joint ** | 843070275X | € 34,00 |
| expansion *** | 843070277X | € 53,00 |

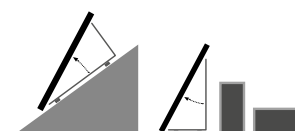
Assembly



On the roof
Horizontal, vertical
Fixing kit, frames and accessories



Integrated
Horizontal, vertical
Set with connecting plates and accessories



Supported
Frame for horizontal or vertical structure

H2500 - High efficiency flat plate solar panels with stainless steel tank

H2500 high performance solar collector – 2,5 m² with an aluminium frame for vertical and horizontal installation

The new solar collector is made of profiles in high quality anticorrosive aluminium (Al Mg). Closing system with integrated perimeter gasket in vulcanized EPDM, resistant to temperature swings and UV rays. Solar glass with antireflex safety, high transparency and a low iron content. Insulation in qualitative mineral wool without formaldehyde and adhesives. Absorber covered in highly selective vacuum aluminium. Connections. The collector can be installed on a roof, integrated or placed on a structure. Performance and quality tested.

Features

Unique and intelligent design

Unbeatable price/quality ratio

Precise manufacturing: construction on a motorized product line

Intelligent fixing system: reduced installation time

Several installation possibilities: up to 6 connected collectors, on tile, flat roofs...



Connection options

Parallel connection



Series connection



Based on pressure drop

Combined connection



Based on pressure drop

H2500 - High efficiency flat plate solar panels with stainless steel tank

| Available models | |
|------------------|---------------------|
| Article | External dimensions |
| H2500 | 2150 x 1170 x 83 mm |

| Technical information | |
|-----------------------------------|--|
| Gross surface (m ²) | 2,51 |
| Exposed surface (m ²) | 2,31 |
| Net surface (m ²) | 2,31 |
| Capacity (l) | 1,95 |
| Flow | high flow/low flow |
| Glass thickness | 3,2 mm |
| Glass transmission coefficient | 91% |
| Thickness of insulation | 50 mm flat |
| Absorber | covered in highly selective vacuum aluminium |
| Absorption | 95% |
| Emission | 5% |
| Connections | 4 x 22 mm |
| Operating pressure | 10 bar |
| Testing pressure | 15 bar |
| Max temperature | 192°C |
| Weight | 35 kg |
| Certificates | EN 12975 + Keymark |
| Warranty | 10 years (glass not included) |

| Efficiency coefficient | Opening | Absorber |
|------------------------|---------|----------|
| η_0 | 0,807 | 0,807 |
| a_1 | 4,04 | 4,04 |
| a_2 | 0,012 | 0,012 |

| H2500 Vertical | | |
|----------------|------------|----------|
| Gross surface | code | price |
| 2,51 m2 | 821120067X | € 780,00 |

| Set for coupling collectors H2000/H2500 | | |
|---|------------|----------|
| | code | price |
| base * | 843070274X | € 142,00 |
| joint ** | 843070275X | € 34,00 |
| expansion *** | 843070277X | € 53,00 |

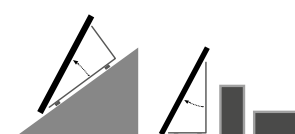
Assembly



On the roof
Horizontal, vertical
Fixing kit, frames and accessories



Integrated
Horizontal, vertical
Set with connecting plates and accessories



Supported
Frame for horizontal or vertical structure

Assembly and materials

Assembly and materials

A broad range of installation solutions. All models of the collector are available in several versions in terms of installation, fixing and materials. Depending on the functional characteristics and the type of roof (flat roof, pitched roof with tile, on sheet, etc.) it is possible to choose from a broad range of solutions to ensure the maximum structural strength of the system and efficient heat exchanging of the collector. Custom solutions are meant to match the solar power system with the rest of the architecture to minimize the visual impact and structural obstructions.

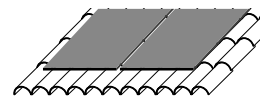
| Installation | On the roof | | | Integrated | On a frame | | |
|--------------|-------------|-----------------|-----------------------|------------------------|---------------------------|----------------------------|---------------------|
| | On tile | On frame (roof) | Stainless steel sheet | Galvanized steel sheet | Stainless steel structure | Galvanized steel structure | Aluminium structure |
| H2000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| H2500 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Installation

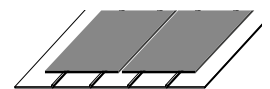


On the roof
vertical/horizontal installation kit,
frame and accessories

On tile
System for fixing the solar collector on a tiled pitched roof by means of sturdy hooks and frames.

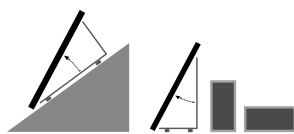
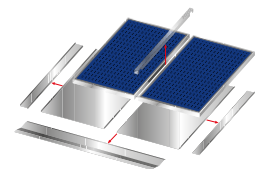


On sheet
System for fixing the solar collector on a pitched sheet roof, with resistant aluminium structures and shaped welded stainless steel clamps.



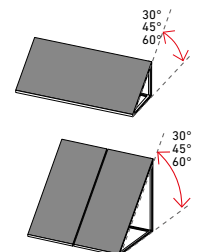
Integrated
vertical/horizontal coupling sheets
and accessories

Plates for integrated mounting, rain and snow-proof, grooved and shaped for a perfect concordance between the collector and the tiles.



On a frame
vertical/horizontal frame

Supporting structure for mounting the solar collector in 30°/45°/60° from the flat surface. Suitable with flat and pitched roof.



Available accessories

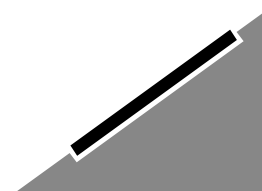
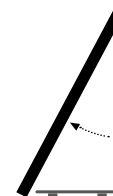
Snow barrier

Rain deflector

Reinforced concrete weights
to anchor the supporting structures.

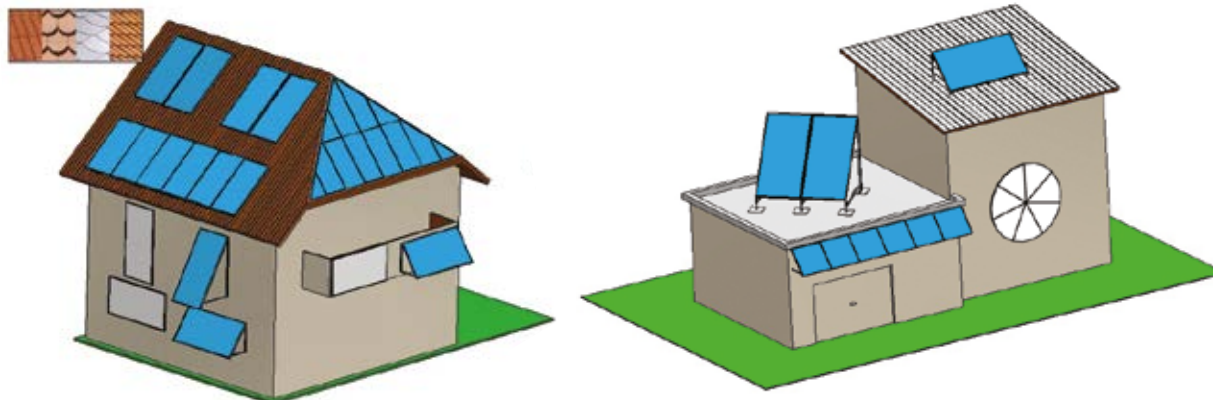
Collector fixing systems

| Standard solar collector fixing systems H2000/H2500 | | | | | |
|--|-----------------------|-------------|------------|------------|-------|
| Arrangement | | Vertical | | Horizontal | |
| Installation | Num. Panels | code | price | code | price |
| On the roof | On tile | ■ | 843070210X | € 176,00 | ** |
| | | ■ ■ | 843070211X | € 220,00 | ** |
| | | ■ ■ ■ | 843070212X | € 352,00 | ** |
| | | ■ ■ ■ ■ | 843070213X | € 454,00 | ** |
| | | ■ ■ ■ ■ ■ | 843070214X | € 585,00 | ** |
| | | ■ ■ ■ ■ ■ ■ | 843070215X | € 677,00 | ** |
| | On tile/sheet | ■ | 843070301X | € 245,00 | ** |
| | | ■ ■ | 843070294X | € 380,00 | ** |
| | | ■ ■ ■ | 843070293X | € 423,00 | ** |
| | | ■ ■ ■ ■ | 843070302X | € 522,00 | ** |
| | | ■ ■ ■ ■ ■ | 843070303X | € 669,00 | ** |
| | | ■ ■ ■ ■ ■ ■ | 843070304X | € 777,00 | ** |
| On support (structure to be put on flat surfaces) | 45° pitched aluminium | ■ | 843070242X | € 357,00 | ** |
| | | ■ ■ | 843070243X | € 403,00 | ** |
| | | ■ ■ ■ | 843070244X | € 609,00 | ** |
| | | ■ ■ ■ ■ | 843070245X | € 777,00 | ** |
| | | ■ ■ ■ ■ ■ | 843070246X | € 980,00 | ** |
| | | ■ ■ ■ ■ ■ ■ | 843070247X | € 1.148,00 | ** |
| Integrated in tile | H2000 | ■ | 843070368X | € 789,00 | ** |
| | | ■ ■ | 843070369X | € 1.011,00 | ** |
| | | ■ ■ ■ | 843070370X | € 1.398,00 | ** |
| | | ■ ■ ■ ■ | 843070371X | € 1.785,00 | ** |
| | | ■ ■ ■ ■ ■ | 843070372X | € 2.172,00 | ** |
| | | ■ ■ ■ ■ ■ ■ | 843070373X | € 2.559,00 | ** |
| | H2500 | ■ | 843070305X | € 880,00 | ** |
| | | ■ ■ | 843070306X | € 1.178,00 | ** |
| | | ■ ■ ■ | 843070307X | € 1.624,00 | ** |
| | | ■ ■ ■ ■ | 843070308X | € 2.070,00 | ** |
| | | ■ ■ ■ ■ ■ | 843070309X | € 2.516,00 | ** |
| | | ■ ■ ■ ■ ■ ■ | 843070310X | € 2.961,00 | ** |



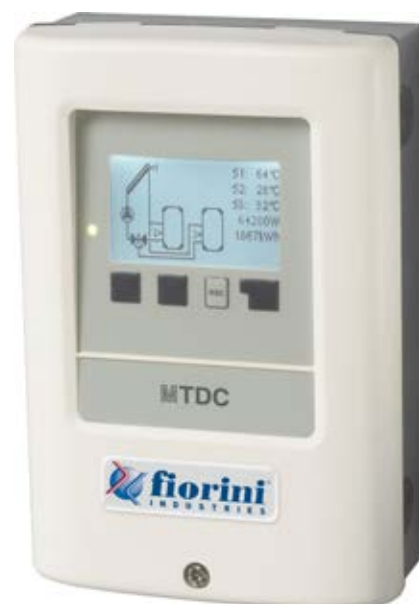
** ask for a quote

Examples of installation



MTDC Solar regulator

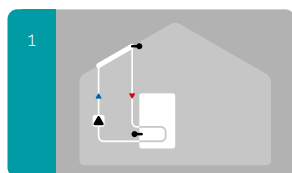
The MTDC differential controller is an electronic regulator for solar power systems. It is equipped with a large LED screen which enables an efficient control of the solar power system. A very useful wizard will guide you during the start-up of the system. Step by step the wizard program will configure your system using one of the various pre-set hydraulic diagrams indicated in the following list.



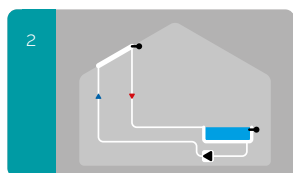
| Technical data | | |
|---------------------------|--|---------|
| Temperature sensor Pt1000 | | 3 |
| Relay outputs 230VAC | | 1 |
| 0-10V or PWM outputs | | 1 |
| Power supply | | 230 VAC |
| Protection Category | | IP 40 |

| Code | Model | Price |
|-----------|----------------|----------|
| 822130020 | MTDC regulator | € 289,00 |

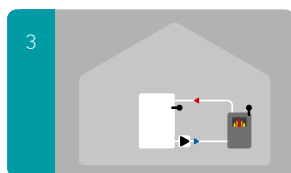
Pre-set installations MTDC



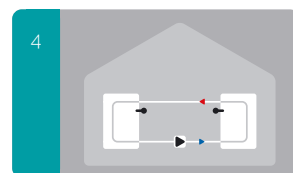
Solar + tank



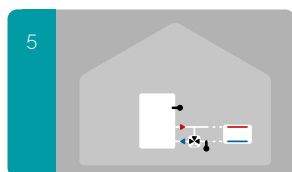
Solar + pool



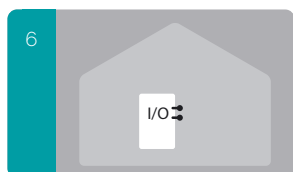
Wood-fired boiler with tank



Tank recharge



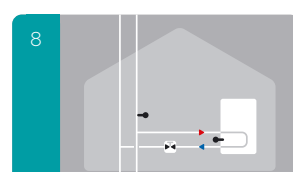
Solar with heating circuit



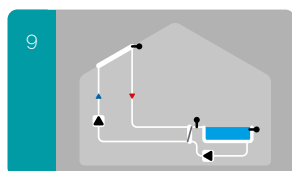
Thermostat



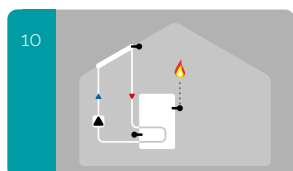
Universal temperature



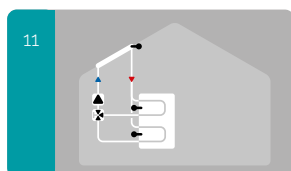
Cut-off valve



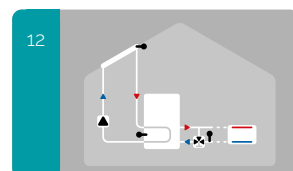
Solar with heat exchanger (sensor on secondary) and pool



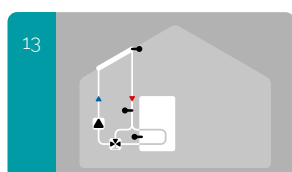
Solar with thermostat (auxiliary heating)



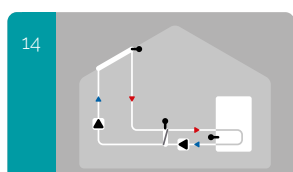
Solar with double zone tank



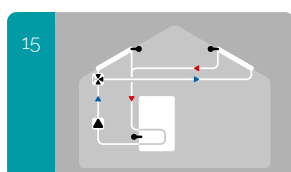
Solar with heating circuit



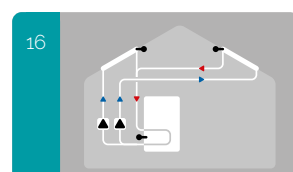
Solar with bypass



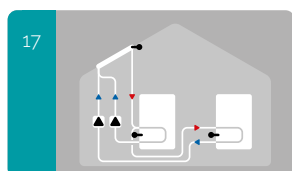
Solar with exchanger



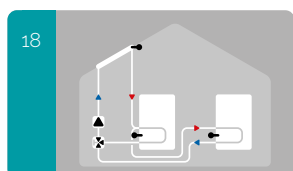
Solar with two collectors



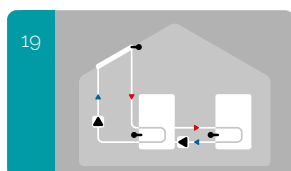
Solar with two collectors and two pumps



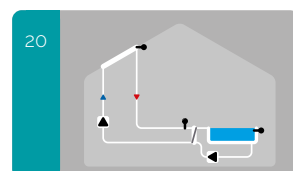
Solar with two tanks and two pumps



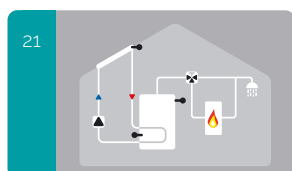
Solar with two tanks and valve



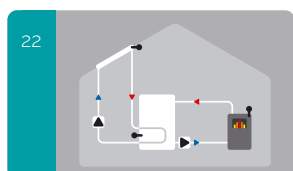
Solar with storage tank



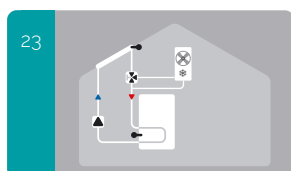
Solar with pool and exchanger



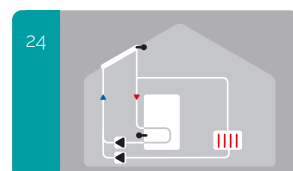
Solar with thermostat and valve



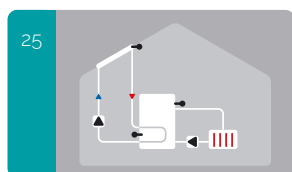
Solar with wood-fired boiler



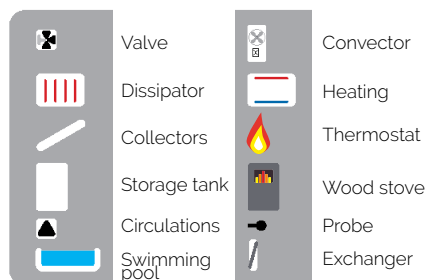
Solar with cooling 1 (panel cooling)



Solar with cooling 2 (panel cooling)



Solar with cooling 3 (panel cooling)



S1 SOLAR 1

Solar module

The Solar module S1 SOLAR 1 is pre-assembled, tested and can be used for small solar installations.

The unit consists of a single return circuit.
The return circuit is equipped with:

- Flow meter and flow regulator, together with fill and drain couplings
- Solar circulation pump
- Ball valve with check valve. The check valve can be deactivated by turning the handle 45° (useful when filling the device)
- Thermometer 0-120 °C
- Safety valve (6 bar) with manometer Ø50 mm 0-10 bar and screwed discharge 3/4" F
- Coupling for expansion vessel 3/4" M

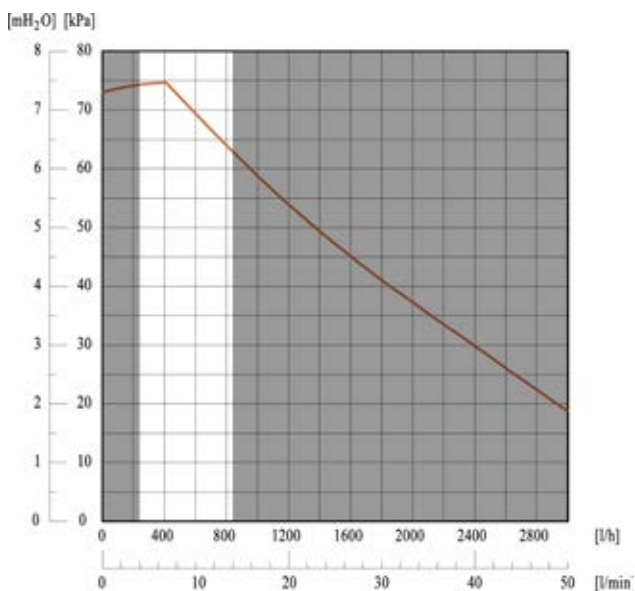


The solar module is available in one version

| Code | Model | Pump | Flow (L/min) | | Power min/max W | Price | max. press. | max. temp. |
|-----------|------------|---------------------------|--------------|------|-----------------|----------|-------------|------------|
| | | | Min. | Max. | | | | |
| 838110001 | S1 SOLAR 1 | Wilo Yonos Para ST 25/7.0 | 2 | 12 | 3 / 45 | € 499,00 | 6 bar | 120°C(*) |

For a brief period (20s) the max T is 160°C

Flow/performance curve



up to 16 m²*

* approximate value, to be verified based on the installation conditions

S2 SOLAR 30 Solar module

The Solar module S2 SOLAR 30 is pre-assembled, tested and can be used in small and medium solar installations. It is equipped with a pre-wired regulator and temperature sensors.

The unit consists of a RETURN and DELIVERY circuit. The delivery circuit comes with:

- Ball valve with check valve. The check valve can be deactivated by turning the handle 45° (useful when filling the device)
- Thermometer 0-120 °C
- Deaerator made of brass, with manual vent valve
- Piping and couplings

Return circuit comes with:

- Flow meter and flow regulator, equipped with fill and drain connections
- Solar circulation pump
- Ball valve with check valve. The check valve can be deactivated by turning the handle 45° (useful when filling the device)
- Safety valve (6 bar) with manometer
- Coupling for expansion vessel ¾" M
- Thermometer 0-120 °C



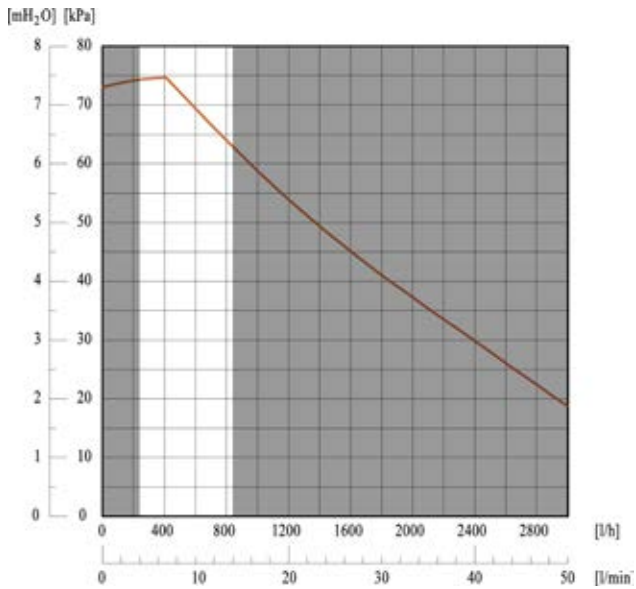
The solar module is available in two versions

| Code | Model | Pump | Flow (L/min) | | Potenza min / max W | Price | max. press. | max. temp. |
|------------|--------------------|---------------------------|--------------|------|---------------------|-----------|-------------|------------|
| | | | Min. | Max. | | | | |
| 838110064X | S2 SOLAR 30 - 25/6 | Wilo Yonos Para ST 25/7.0 | 2 | 12 | 3 / 45 | € 1056,00 | 6 bar | 120 °C (*) |
| 838110065X | S2 SOLAR 30 - 25/7 | Wilo Yonos Para ST 25/7.0 | 8 | 28 | 3 / 45 | € 1073,00 | 6 bar | 120 °C (*) |

(*) For a brief period (20s) the max T is 160°C

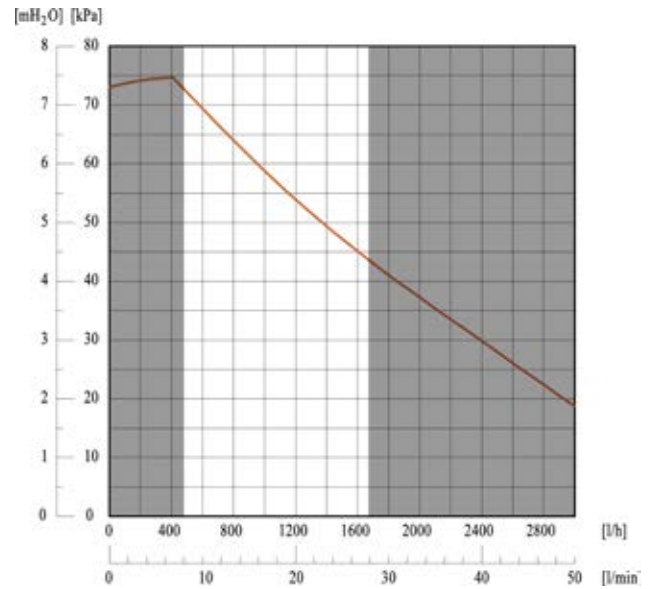
S2 SOLAR 30 Solar module

S2 SOLAR 30 - 838110064X Flow/performance curve



Up to 16m²

*approximate value, to be verified based on the installation conditions



From 8 up to 35m²*

*approximate value, to be verified based on the installation conditions

Electronic solar regulator MTDC model, part of the solar module S2 SOLAR 3

| Main features | |
|------------------------------|---------|
| Power supply | 230 VAC |
| Protection category | IP 40 |
| Temperature sensor PT1000 | 3 |
| Mechanical relay (ON/OFF) | 1 |
| Electronic relay (phase cut) | 1 |



S2 SOLAR 2 solar module

The two-pipe solar station consists of the following components:

Return:

- Flow regulator gauge 5-42 l/min or 20-70 l/min
- high efficiency synchronous solar circulator 0-10V command
- ball valve with non-return valve 18 bar (the non-return valve can be left out by turning the handle for 45 degrees) with a thermometer handle (thermometer with blue ring; 0°C-120°C).
- T coupling for the safety unit
- 6 bar safety unit with 0-10 bar manometer - 3/4" male connection for expansion vessel. Discharge outlet 1" F

Delivery:

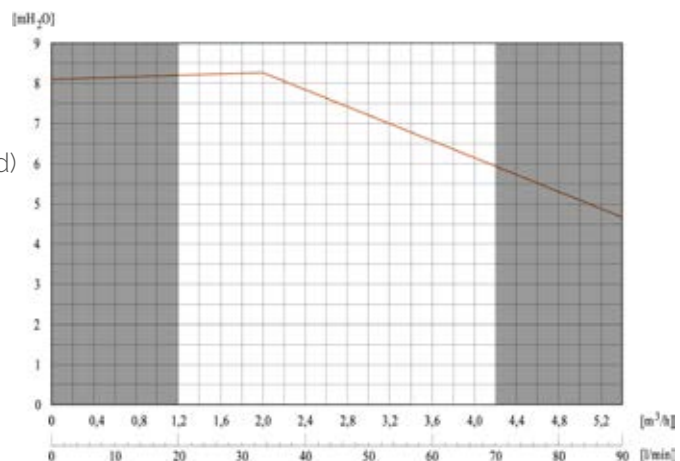
- T coupling for well omm
- ball valve with non-return valve 18 mbar (the non-return valve can be left out by turning the handle for 45 degrees) with a thermometer handle (thermometer with red ring; 0°C-120°C).
- coupling tube and coupling

Other features:

- EPP insulation box (dimensions: 125x250x400 mm).
- Wall mount set.
- Nominal pressure: 10 bar.
- Continuous temperature: 120°C (brief period: 160°C for 20 sec.).
- External couplings: 22 mm compression coupling and 1 1/4" female coupling.
- WILO TOP S 30/10 solar thermal pump (can be closed, does not have to be drained when serviced)
- Power: 195 / 270 / 380 W

Dimensions:

- Couplings: 1 1/4"
- Wheelbase: 125 mm
- Width with insulation: 285 mm
- Height with insulation: 500 mm



From 30 up to 90m²*

*approximate value, to be verified based on the installation conditions

| Code | Model | Pump | Flow (L/min) | | Power min / max W | Price | max. press. | max. temp. |
|------------|-----------|---------------------------|--------------|------|-------------------|-----------|-------------|------------|
| | | | Min. | Max. | | | | |
| 838110068X | S2 SOLAR2 | Wilco Stratos Para 25/1-8 | 20 | 70 | 8/130 | € 1190,00 | 6 bar | 120°C(*) |

Accessories for devices

Art. SOL000



| Description | |
|------------------------|--|
| SOL000 | Mix of protective liquid, anticorrosive liquid and antifreeze liquid. Ready for use, non-toxic and biodegradable |
| Technical data | |
| Components | Propanidol and a lot of propylene glycol in a liquid solution |
| Colour | green |
| Ph | da 7,5 a 9 (not diluted, at 20°C) (DIN 51369) |
| Pour point | -34° C (DIN 51583) |
| Boiling point | ca. / approx. +107° C (with atmospheric pressure) |
| Continuous temperature | max. 180° C |
| Vapour pressure | ca. 20 hPa (a 20° C) |
| Density | ca. 1,065 g/cm ³ (a/at 20° C) (DIN 51757) |
| Viscosity/kinematics | da 6 a 8 mm ² /s (a 20° C) (DIN 51562) |

| Code | Description | Price |
|-----------|---|----------|
| 830040032 | Can of 10 l pre-mixed antifreeze liquid (46%) | € 70,00 |
| 830040031 | Can of 20 l pre-mixed antifreeze liquid (46%) | € 140,00 |

| Code | Description | Price |
|-----------|--|----------|
| 809040007 | Permanent discharge valve for solar power system DN20 SAC020 | € 191,00 |
| 809040012 | Permanent discharge valve for solar power system DN25 SADO25 | € 287,00 |
| 809040009 | Permanent discharge valve for solar power system DN40 SADO40 | .. |

| Technical information | | | |
|---------------------------|--|------------------------|--------|
| | SAC020 | SA0025 | SA0040 |
| material | stainless steel | brass | |
| Max operating temperature | da -30°C a +200°C from -30°C to 200°C | 180°C | |
| Max operating pressure | 10 bar | 10 bar | |
| Fitting | 2 x 3/4" FF DN20 | 2 x 1" IG, 1 x 1/2" FE | |

| Code | Description | Price |
|-----------|--|----------|
| 811010061 | Expansion vessel for solar power system 18 LT A00018 | € 51,00 |
| 811010062 | Expansion vessel for solar power system 24 LT A00024 8 bar | € 69,00 |
| 811010064 | Expansion vessel for solar power system 50 LT A00050 | € 152,00 |
| 811010065 | Expansion vessel for solar power system 80 LT A00080 | € 182,00 |

| Technical information | | | | |
|-------------------------|-------------|--------|--------|--------|
| | A00018 | A00024 | A00050 | A00080 |
| Capacity | 18 lt | 24 lt | 50 lt | 80 lt |
| Pre-load pressure | 3 bar | | | |
| Max. operating pressure | 10 bar | | | |
| Fittings | 1 x 3/4" AG | | | |

Set of fittings for expansion vessel art. A00018, A00024, A00035, with brass quick-fit coupling for changing the vessel when the device is under pressure.

Included in the set:

- galvanized steel wall mount
- stainless steel flexible pipe with 2 x 3/4" IG end fittings for direct connection of expansion tank to pump
- Screws, anchors, brass reductions from 1" IG to 3/4" AG.

Art. SAC020

Art. SA0025

Art. SA0040



Art. A00018

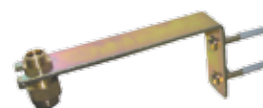
Art. A00024

Art. A00050

Art. A00080



Art. SSTOAS



843070019
price € 68,00

Accessories for devices

ON/OFF motor-driven 2-way valve with red brass casing, internal elements made of brass and steel. Adjusted by electro-thermal device (manual emergency command) with an adjustment time of approximately 3 min.

Art. VA2025

Art. VA2032



| | Description and available models | Code | Price |
|--------|---|-----------|----------|
| VA2025 | DN25 2-way motor-driven valve, closed when not powered. | 809020103 | € 211,00 |
| VA2032 | DN32 2-way motor-driven valve, closed when not powered. | 809020104 | € 278,00 |

| Technical information | | | |
|----------------------------|---------------------------------------|--------------------------|--------------------------------|
| | VA2025 | VA2025 | VA2032 |
| Max. operating pressure | 10 bar | | |
| Max. operating temperature | 120°C, for briefs periods up to 140°C | | |
| Motor | 230 V - 2,5 watt | | |
| Couplings | 1 x 3/4" IG 1 x 3/4" FE | 1 x 1" FI 1 x 3/4" FE | 1 x 1 1/4" FI 1 x 1 1/4" FE |

Art. V13120

Art. V13125

Art. V13132

Art. V13150



ON/OFF motor-driven 3-way valve with red brass casing, internal parts made of brass and steel, one inlet - two outlets. Can be adjusted with an electro-thermal device (manual emergency command). The valves come with threaded brass fittings.

| | Description and available models | Code | Price |
|--------|----------------------------------|-----------|----------|
| V13120 | Motor-driven 3-way valve DN20 | 809020237 | € 79,00 |
| V13125 | Motor-driven 3-way valve DN25 | 809020238 | € 80,00 |
| V13132 | Motor-driven 3-way valve DN32 | 809020239 | € 85,00 |
| V13150 | Motor-driven 3-way valve DN50 | 809020241 | € 195,00 |

| Technical information | | | | |
|----------------------------|---------------------------------------|----------|---------------|-----------|
| | V13120 | V13125 | V13132 | V13150 |
| Max. operating pressure | 10 bar | | | |
| Max. operating temperature | 120°C, for briefs periods up to 140°C | | | |
| Motor | 230 V - 2,5 watt | | | |
| Couplings | 3 x 3/4" FE | 3 x 1 FE | 3 x 1 1/4" FE | 3 x 2" FE |

Art. VR0645



| | Description and available models | Code | Price |
|--------|---|-----------|----------|
| VR0645 | Electric actuator for valve series 645 220 V three-way, two point control | 809020150 | € 218,00 |

Accessories for devices

Single burn-proof mixer tap with red brass casing for integration in hot water piping with a set of fittings. Independent adjustment and water temperature limitation without additional delivery, continuous adjustment between 30 and 70°C.

Art. TVB522

Art. TVB572

| Description and available models | | Code | Price |
|----------------------------------|--|-----------|----------|
| TVB522 | Thermostatic Mixer tap for domestic water 35-60°C-1" | 809020151 | € 120,00 |
| TVB572 | Thermostatic Mixer tap for domestic water 35-60°C-1" 1/4 | 809020152 | € 143,00 |

| Technical information | |
|----------------------------|-------------|
| VA2025 | |
| Max. operating pressure | 10 bar |
| Max. operating temperature | 100°C |
| Couplings | 3 x 1" FE |
| Fittings | 3 x 3/4" FE |



Document to request ulterior information on solar thermal installations

| Address | | | |
|------------------|--|---------------------------------------|--|
| Client | | Type of residence (one family, condo) | |
| Name | | Name | |
| Street | | Street | |
| Postal code/city | | Postal code/city | |
| Telephone | | Telephone | |
| Fax | | Fax | |

| Requested installation | | Planned cost of the installation | |
|---|----------------|--|--|
| <input type="checkbox"/> DHW (domestic hot water) | | Budget € | |
| <input type="checkbox"/> Heating (room) | | | |
| <input type="checkbox"/> Heating (swimming pool) | | | |
| Hot water use | | Consumer/recirculation profile | |
| Number of persons | | Peak need | h |
| Hot water per person | | Recirculation | <input type="checkbox"/> yes <input type="checkbox"/> no |
| Period of the year | | Duration | h per day |
| <input type="checkbox"/> Connection to dish washer wanted | | Total length of the pipes | m |
| <input type="checkbox"/> Connection to washing machine wanted | | | |
| other HW/g consumption | L/g | | |
| Use for room heating | | | |
| Gross surface of the room | m ² | Specific energy consumption | KWh/mq'a |
| Wanted temperature | °C | Min outside temperature | °C |
| Temperature at which the heating switches on | °C outdoor | Type of heating (radiator, solar panels) | |
| | | Period of the year | |
| Use for heating (swimming pool) | | | |
| Length | m | <input type="checkbox"/> Indoor swimming pool | |
| Width | m | <input type="checkbox"/> Outdoor swimming pool | |
| Average depth | m | <input type="checkbox"/> With coverage | |
| Heating system | | Position of the solar thermal central | |
| Wood | KW | <input type="checkbox"/> Cellar | |
| Fuel | KW | <input type="checkbox"/> Apartment | |
| Gas | KW | <input type="checkbox"/> Attic | |
| Heat pump | KW | Surface of the thermal central | m ² |
| Electrical energy | KW | Height | m |
| Other | KW | Access to the thermal central | m x m |

Document to request ulterior information on solar thermal installations

| Installation of the solar panels | | | |
|---|----------------------------|---------------------------------|-----------------------------|
| <input type="checkbox"/> Integrated in the roof | Useful size of the roof | | m |
| <input type="checkbox"/> On the roof | Useful height of the roof | | m |
| <input type="checkbox"/> On the façade (optional) | Height of the installation | | m |
| <input type="checkbox"/> On tile | Shadow | <input type="checkbox"/> yes | <input type="checkbox"/> no |
| <input type="checkbox"/> Other | need of crane | <input type="checkbox"/> yes | <input type="checkbox"/> no |
| orientation of the roof | | solar tubes (length, simple) | |
| orientation | | External | m |
| Inclination | | Internal | m |
| | | | |
| Quality of the water | | Intensity of the wind | |
| <input type="checkbox"/> Soft | | <input type="checkbox"/> Calm | |
| <input type="checkbox"/> Medium | | <input type="checkbox"/> Low | |
| <input type="checkbox"/> Hard | | <input type="checkbox"/> Medium | |
| <input type="checkbox"/> Very hard | | <input type="checkbox"/> Hard | |
| Use | | Notes | |
| Hot water | % | | |
| Room heating | % | | |

| Annual cost for heating | |
|-------------------------|------|
| DHW cost | Euro |
| Heating cost | Euro |
| Total cost | Euro |
| Cost per unit | Euro |

| Confirmation of data | |
|--|--|
| Hereby I confirm the correctness of the data provided | |
| Date and signature of the requester | |
| Declaration of consent in accordance with articles 20-22 of N.675/1996 | |
| <p>In relation to the information supplied, in accordance with Article 10 of Act 675/1996, we give full consent for the processing of our personal data by this Company to establish contractual/commercial relations or for the performance of the same. In any case we request that this processing is limited to the execution of the obligations deriving from established contractual/commercial relations, therefore authorizing the Company in accordance with article 20 paragraph 1, let. A of Act 675/1996, and notwithstanding the hypothesis of free dissemination envisaged by the same Act, the communication and diffusion of all the above data to companies, bodies or consortiums providing your Company with data processing services and other associated activities, also consenting to the communication of said data to associated companies with registered offices in EC member states or outside the same.</p> | |
| Date and signature of the requester | |

Water heaters

Indice

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Conventional flow water heaters

G, G+

These devices are the most widespread and thanks to a wide range of products they can offer a solution to all requirements for hot water for every type of utility. The conventional flow water heaters are equipped with a piezo ignition, pilot light, gas valve with double thermostat and a thermocouple.

The water heaters are also equipped with a stainless steel multi gas burner, which functions with either methane or LPG. Moreover, they are supplied with a device to control fumes which interrupts the gas flow to the burner in case of abnormal discharges or combustion.

The gas valve is doubly secured because next to a operating thermostat it also has a ECO. That is a device that limits the overtemperature when the thermostat cannot intervene.

Magnesium anodes which can easily be inspected make it possible to control the strain and thus ensure a longer life span of the device.

The right dimensions provide an efficient cathodic protection against corrosion while the insulation with high density wool fiber blankets ensures minimal heat loss and easy use.

The available capacities are between 150 and 2000 litres with power between 10.6 and 34.8 kW. The very wide range makes it possible to come up with various solutions amongst which the connection in series of several devices.

Features

- ✓ Piezo ignition
- ✓ Open Combustion Chamber
- ✓ Available for LPG and fuel



| description | code | price |
|------------------------------|------------|------------|
| G-1 lt. 150, power 7,2 kW | 855020001X | € 948,00 |
| G-2 lt. 200, power 8 kW | 855020002X | € 1.093,00 |
| G-1+ lt. 150, power 10,6 kW | 855020003X | € 1.124,00 |
| G-2+lt. 200, power 10,6 kW | 855020004X | € 1.288,00 |
| G3 lt. 300, power 26,7 kW | 855020005X | € 2.117,00 |
| G4 lt. 400, power 26,7 kW | 855020006X | € 2.573,00 |
| G5 lt. 500, power 26,7 kW | 855020007X | € 2.895,00 |
| G-6 lt. 600, power 26,7 kW | 855020008X | € 3.263,00 |
| G-8 lt. 800, power 34,8 kW | 855020009X | € 4.460,00 |
| G-10 lt. 1000, power 34,8 kW | 855020010X | € 5.728,00 |
| G-15 lt. 1500, power 34,8 kW | 855020011X | € 7.899,00 |
| G-20 lt. 2000, power 34,8 kW | 855020012X | € 8.859,00 |

Conventional flow water heaters

G, G+

| Model | Capacity | A | B | C | E | F | G | H | I | J | L | M | N | O | P | Q | 1 | 2 | 3 | 4 | 6 |
|-------|----------|------|------|-----|------|-----|-----|------|------|-----|------|-----|--------|----|--------|------|------|------|------|------|------|
| | l | mm | | | | | | | | | | | inch | | | | | | | | |
| G-1 | 150 | 470 | 1511 | 230 | - | - | 170 | 1573 | - | 373 | 823 | 480 | - | 83 | - | - | 3/4" | 3/4" | 3/4" | 3/4" | 1/2" |
| G-2 | 195 | 570 | 1409 | 230 | - | - | 170 | 1482 | - | 373 | 747 | 580 | - | 83 | - | - | 3/4" | 3/4" | 3/4" | 3/4" | 1/2" |
| G-1+ | 150 | 580 | 1315 | - | 500 | 100 | - | 300 | 500 | - | - | - | 3/4" | - | - | 3/4" | - | - | - | - | - |
| G-2+ | 200 | 580 | 1565 | - | 500 | 100 | - | 300 | 500 | - | - | - | 3/4" | - | - | 3/4" | - | - | - | - | - |
| G-3 | 300 | 680 | 1715 | - | 600 | 140 | - | 300 | 510 | - | - | - | 3/4" | - | - | 3/4" | - | - | - | - | - |
| G-4 | 400 | 730 | 1725 | - | 650 | 140 | - | 310 | 510 | - | - | - | 1" | - | - | 1" | - | - | - | - | - |
| G-5 | 500 | 730 | 1975 | - | 650 | 140 | - | 310 | 510 | - | - | - | 1" | - | - | 1" | - | - | - | - | - |
| G-6 | 600 | 780 | 2165 | - | 700 | 140 | - | 310 | 1010 | - | 1730 | - | 1" | - | 1" | - | - | - | - | - | - |
| G-8 | 800 | 980 | 1975 | - | 900 | 160 | - | 340 | 900 | - | 1470 | - | 1 1/4" | - | 1 1/4" | - | - | - | - | - | - |
| G-10 | 1000 | 1080 | 2025 | - | 1000 | 160 | - | 340 | 900 | - | 1470 | - | 1 1/4" | - | 1 1/4" | - | - | - | - | - | - |
| G-15 | 1500 | 1180 | 2255 | - | 1100 | 160 | - | 340 | 960 | - | 2000 | - | 1 1/4" | - | 1 1/4" | - | - | - | - | - | - |
| G-20 | 2000 | 1280 | 2475 | - | 1200 | 160 | - | 340 | 960 | - | 2150 | - | 1 1/4" | - | 1 1/4" | - | - | - | - | - | - |

| | | G-1 | G-2 | G-1+ | G-2+ | G-3 | G-4 | G-5 | G-6 | G-8 | G-10 | G-15 | G-20 |
|------------------------|-------------------|--------------------|------|------|------|------|------|-----------------------|------|------|------|------|------|
| Capacity | l | 150 | 195 | 150 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | 1500 | 2000 |
| Gross weight | kg | 54.5 | 75.7 | 78 | 90 | 153 | 163 | 185 | 233 | 290 | 332 | 453 | 547 |
| Net weight | kg | 50.6 | 71.1 | 71 | 82 | 127 | 136 | 154 | 194 | 241 | 276 | 377 | 456 |
| Package dimensions | | | | | | | | | | | | | |
| height | cm | 156 | 148 | 145 | 170 | 183 | 183 | 212 | 220 | 203 | 203 | 228 | 255 |
| width | cm | 49.7 | 61.2 | 65 | 65 | 78 | 82 | 82 | 89 | 110 | 120 | 130 | 140 |
| depth | cm | 50.7 | 61.2 | 65 | 65 | 78 | 82 | 82 | 89 | 110 | 120 | 130 | 145 |
| Gas fitting | ø | - | - | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| Methane | m ³ /h | 0,76 | 0,84 | 1,16 | 1,16 | 2,68 | 2,68 | 2,68 | 2,68 | 3,49 | 3,49 | 3,49 | 3,49 |
| LPG | kg/h | 0,44 | 0,49 | 0,86 | 0,86 | 1,99 | 1,99 | 1,99 | 1,99 | 2,59 | 2,59 | 2,59 | 2,59 |
| Max operating pressure | bar | 6 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Thermal flow | kW | 7,2 | 8 | 10,6 | 10,6 | 26,7 | 26,7 | 26,7 | 26,7 | 34,8 | 34,8 | 34,8 | 34,8 |
| Treatment | | Glass lining 870°C | | | | | | Hot-dip galvanization | | | | | |
| Heating time | | | | | | | | | | | | | |
| Δt=35°C | min. | 61' | 71' | 42' | 54' | 31' | 39' | 48' | 62' | 66' | 82' | 18' | 151' |
| Δt=25°C | min. | 43' | 50' | 30' | 38' | 22' | 28' | 34' | 44' | 44' | 58' | 85' | 108' |
| Continuous production | | | | | | | | | | | | | |
| Δt=35°C | l/h | 148 | 165 | 219 | 219 | 562 | 562 | 562 | 562 | 734 | 734 | 734 | 734 |
| Δt=25°C | l/h | 209 | 232 | 308 | 308 | 787 | 787 | 787 | 787 | 1028 | 1028 | 1028 | 1028 |

Electronic gas water heaters

GE

This type is the most technological and advanced gas water heater with an open combustion chamber. They are equipped with an electrical gas valve and an electronic ignition with flame ionization which replaces the pilot flame. All operations are commanded from an electronic control unit which supervises the correct functioning of the system, together with the detection electrode and the operating and security thermostat. The ignition of the devices can be programmed from a distance through a programmable weekly timer which is connected to a command unit. The GE series have a number of advantages in comparison to devices with a pilot flame:

- ✓ lower operating cost because of the absence of a pilot flame
- ✓ no possibility of wrong functioning due to the extinction of the pilot flame by the wind, air currents or the poor regulation of that flame

The heaters are supplied with stainless steel multi gas burners, which function with methane or LPG, and a device which controls fumes. That device interrupts the gas flow to the burner in case of abnormal discharge and/or combustion. Magnesium anodes which are easily inspected and insulation with high density glass wool fibre blankets ensure a long life span and simple use. The capacities vary between 150 and 2000 litres with a power between 10.6 and 34.8 kW.

Features

- ✓ Piezo ignition
- ✓ Open combustion chamber
- ✓ Versions with LPG and methane



| descrizione | codice | prezzo |
|-------------------------------|------------|------------|
| GE-1 lt. 150, power 10,6 kW | 855020038X | € 1.545,00 |
| GE-2 lt. 200, power 10,6 kW | 855020039X | € 1.669,00 |
| GE-3 lt. 300, power 26,7 kW | 855020040X | € 2.503,00 |
| GE-4 lt. 400, power 26,7 kW | 855020041X | € 2.847,00 |
| GE-5 lt. 500, power 26,7 kW | 855020042X | € 3.167,00 |
| GE-6 lt. 600, power 26,7 kW | 855020043X | € 3.643,00 |
| GE-8 lt. 800, power 34,8 kW | 855020044X | € 4.738,00 |
| GE-10 lt. 1000, power 34,8 kW | 855020045X | € 5.908,00 |
| GE-15 lt. 1500, power 34,8 kW | 855020046X | € 8.047,00 |
| GE-20 lt. 2000, power 34,8 kW | 855020047X | € 9.020,00 |

Electronic gas water heaters

GE

| Model | Capacity | A | B | E | F | H | I | L | N | P | Q | |
|-------|----------|------|------|------|-----|-----|------|------|--------|--------|------|--|
| | l | mm | | | | | | | inch | | | |
| GE-1 | 150 | 580 | 1315 | 500 | 100 | 300 | 500 | - | 3/4" | - | 3/4" | |
| GE-2 | 200 | 580 | 1565 | 500 | 100 | 300 | 500 | - | 3/4" | - | 3/4" | |
| GE-3 | 300 | 680 | 1715 | 600 | 140 | 300 | 510 | - | 3/4" | - | 3/4" | |
| GE-4 | 400 | 730 | 1725 | 650 | 140 | 310 | 510 | - | 1" | - | 1" | |
| GE-5 | 500 | 730 | 1975 | 650 | 140 | 310 | 510 | - | 1" | - | 1" | |
| GE-6 | 600 | 780 | 2165 | 700 | 140 | 310 | 1010 | 1730 | 1" | 1" | - | |
| GE-8 | 800 | 980 | 1975 | 900 | 160 | 340 | 900 | 1470 | 1 1/4" | 1 1/4" | - | |
| GE-10 | 1000 | 1080 | 2025 | 1000 | 160 | 340 | 900 | 1470 | 1 1/4" | 1 1/4" | - | |
| GE-15 | 1500 | 1180 | 2255 | 1100 | 160 | 340 | 960 | 2000 | 1 1/4" | 1 1/4" | - | |
| GE-20 | 2000 | 1280 | 2475 | 1200 | 160 | 340 | 960 | 2150 | 1 1/4" | 1 1/4" | - | |

| | | GE-1 | GE-2 | GE-3 | GE-4 | GE-5 | GE-6 | GE-8 | GE-10 | GE-15 | GE-20 | |
|------------------------|-------------------|--------------------|---------|---------|---------|---------|-----------------------|---------|---------|---------|---------|------|
| Capacity | l | 150 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | 1500 | 2000 | |
| Gross weight | kg | 78 | 90 | 153 | 163 | 185 | 233 | 290 | 332 | 453 | 547 | |
| Net weight | kg | 71 | 82 | 127 | 136 | 154 | 194 | 241 | 276 | 377 | 456 | |
| Package dimensions | cm | height | 145 | 170 | 183 | 183 | 212 | 220 | 203 | 203 | 228 | 255 |
| | | width | 65 | 65 | 78 | 82 | 82 | 89 | 110 | 120 | 130 | 140 |
| | | depth | 65 | 65 | 78 | 82 | 82 | 89 | 110 | 120 | 130 | 145 |
| Gas fitting | ø | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | |
| Tension | V | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | |
| Methane | m ³ /h | 1,16 | 1,16 | 2,68 | 2,68 | 2,68 | 2,68 | 3,49 | 3,49 | 3,49 | 3,49 | |
| | LPG kg/h | 0,86 | 0,86 | 1,99 | 1,99 | 1,99 | 1,99 | 2,59 | 2,59 | 2,59 | 2,59 | |
| Max operating pressure | bar | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| Thermal flow | kW | 10,6 | 10,6 | 26,7 | 26,7 | 26,7 | 26,7 | 34,8 | 34,8 | 34,8 | 34,8 | |
| Treatment | | Glass lining 870°C | | | | | Hot-dip galvanization | | | | | |
| Heating time | min. | Δt=35°C | 42' | 54' | 31' | 39' | 48' | 62' | 66' | 82' | 118' | 151' |
| | | Δt=25°C | 30' | 38' | 22' | 28' | 34' | 44' | 47' | 58' | 85' | 108' |
| Continuous production | l/h | Δt=35°C | 219 | 219 | 562 | 562 | 562 | 562 | 734 | 734 | 734 | 734 |
| | | Δt=25°C | 308 | 308 | 787 | 787 | 787 | 787 | 1028 | 1028 | 1028 | 1028 |

High recovery water heaters GP

The use of these high recovery devices is recommended in situations where large quantities of hot water are needed. In comparison to the other heaters, almost twice the amount of water can be produced by the GP water heaters thanks to the high power which is used. They are equipped with an electro valve, a double thermostat (operation and safety) and stainless steel multi gas burners with a pilot flame and a thermocouple.

All devices are also supplied with an inspection flange and a device which controls the fumes. It controls the gas flow to the burner in case of abnormal discharge and/or combustion. Magnesium anodes of adjusted dimensions which are easily inspected are an efficient protection against corrosion while the insulation with high density glass wool fibre blankets ensures minimal heat loss and easy use.

The available capacities are from 300 to 2000 litres with a power of 49 to 81 kW.

Features

- ✓ High recovery
- ✓ Piezo ignition
- ✓ Open combustion chamber
- ✓ Versions available with LPG and methane



| description | code | price |
|-----------------------------|------------|-------------|
| GP-3 lt. 300, power 49 kW | 855020023X | € 3.052,00 |
| GP-4 lt. 400, power 49 kW | 855020024X | € 3.519,00 |
| GP-5 lt. 500, power 58 kW | 855020025X | € 4.247,00 |
| GP-8 lt. 800, power 81 kW | 855020026X | € 6.603,00 |
| GP-10 lt. 1000, power 81 kW | 855020027X | € 7.959,00 |
| GP-20 lt. 2000, power 81 kW | 855020028X | € 11.729,00 |

High recovery water heaters

GP

| Model | Capacity | A | B | E | F | H | I | L | P |
|-------|----------|------|------|------|-----|-----|-----|------|-------|
| | l | mm | | | | | | | inch |
| GP-3 | 300 | 730 | 1645 | 650 | 180 | 320 | 520 | 1400 | 3/4" |
| GP-4 | 400 | 730 | 1945 | 650 | 180 | 320 | 520 | 1710 | 1" |
| GP-5 | 500 | 780 | 2005 | 700 | 180 | 320 | 520 | 1770 | 1" |
| GP-8 | 800 | 980 | 1985 | 900 | 200 | 320 | 530 | 1700 | 11/4" |
| GP-10 | 1000 | 1080 | 2025 | 1000 | 200 | 320 | 530 | 1750 | 11/4" |
| GP-20 | 2000 | 1280 | 2475 | 1200 | 200 | 320 | 530 | 2200 | 11/4" |

| | | GP-3 | GP-4 | GP-5 | GP-8 | GP-10 | GP-20 | |
|------------------------|-------------------|--------------------|---------|---------|---------|-----------------------|---------|------|
| Capacity | l | 300 | 400 | 500 | 800 | 1000 | 2000 | |
| Gross weight | kg | 164 | 198 | 234 | 332 | 371 | 586 | |
| Net weight | kg | 137 | 165 | 195 | 277 | 309 | 489 | |
| Package dimensions | height | 183 | 212 | 217 | 203 | 203 | 255 | |
| | width | 82 | 82 | 89 | 110 | 120 | 140 | |
| | depth | 82 | 82 | 89 | 110 | 120 | 140 | |
| Gas fitting | ø | 1/2" | 1/2" | 1/2" | 3/4" | 3/4" | 3/4" | |
| Tension | V | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | |
| Methane | m ³ /h | 4,92 | 4,92 | 5,82 | 8,12 | 8,12 | 8,12 | |
| | LPG kg/h | 3,65 | 3,65 | 4,32 | 6,03 | 6,03 | 6,03 | |
| Max operating pressure | bar | 6 | 6 | 6 | 6 | 6 | 6 | |
| Thermal flow | kW | 49 | 49 | 58 | 81 | 81 | 81 | |
| Treatment | | Glass lining 870°C | | | | Hot-dip galvanization | | |
| Heating time | min. | Δt=35°C | 18' | 23' | 25' | 29' | 36' | 67' |
| | | Δt=25°C | 13' | 17' | 18' | 21' | 26' | 48' |
| Continuous production | l/h | Δt=35°C | 1032 | 1032 | 1221 | 1710 | 1710 | 1710 |
| | | Δt=25°C | 1445 | 1445 | 1709 | 2394 | 2394 | 2394 |

Electronic high recovery water heaters

GPE

The GPE series are the most technological and high-powered of all gas water heaters with an open combustion chamber. The use of high powered devices is recommended in situations where high amounts of hot water have to be produced in small spaces. In comparison to the other heaters, more than twice the amount of water can be produced by the GPE water heaters thanks to the high power which is used.

These devices are equipped with an electrical gas valve and an electronic ignition with flame ionization. All operations are commanded by a control unit which supervises the correct functioning of the device, together with the revelation electrode and the operation and safety thermostat. The ignition of the devices can be programmed from a distance through a programmable weekly timer which is connected to a command unit. The GPE series have a number of advantages in comparison to the GP series:

- ✓ less operating costs because of the absence of a pilot flame
- ✓ No malfunctioning thanks to the extinction of the pilot flame by the wind, air currents or a bad setting of that flame.

The devices in the GPE series are equipped with stainless steel multi gas burners, which function with methane or LPG, an inspection flange and a device which controls the fumes (DCF). This device interrupts the gas flow to the burner in case of abnormal discharge and/or combustion. Magnesium anodes which can be easily inspected and insulation with high density glass wool fibre blankets ensure a long life span and easy use. The available capacities are from 300 to 2000 litres with power between 49 and 81 kW.

Features

- ✓ High power
- ✓ Electronic ignition
- ✓ Open combustion chamber
- ✓ Version available with LPG and methane



| description | code | price |
|------------------------------|------------|-------------|
| GPE-3 lt. 300, power 49 kW | 855020050X | € 3.532,00 |
| GPE-4 lt. 400, power 49 kW | 855020051X | € 3.927,00 |
| GPE-5 lt. 500, power 58 kW | 855020052X | € 4.629,00 |
| GPE-8 lt. 800, power 81 kW | 855020053X | € 6.783,00 |
| GPE-10 lt. 1000, power 81 kW | 855020054X | € 8.193,00 |
| GPE-20 lt. 2000, power 81 kW | 855020055X | € 12.035,00 |

Electronic high recovery water heaters

GPE

| Model | Capacity | A | B | E | F | H | I | L | P |
|--------|----------|------|------|------|-----|-----|-----|------|-------|
| | l | mm | | | | | | | inch |
| GPE-3 | 300 | 730 | 1645 | 650 | 180 | 320 | 520 | 1400 | 3/4" |
| GPE-4 | 400 | 730 | 1945 | 650 | 180 | 320 | 520 | 1710 | 1" |
| GPE-5 | 500 | 780 | 2005 | 700 | 180 | 320 | 520 | 1770 | 1" |
| GPE-8 | 800 | 980 | 1985 | 900 | 200 | 320 | 530 | 1700 | 11/4" |
| GPE-10 | 1000 | 1080 | 2025 | 1000 | 200 | 320 | 530 | 1750 | 11/4" |
| GPE-20 | 2000 | 1280 | 2475 | 1200 | 200 | 320 | 530 | 2200 | 11/4" |

| | | GPE-3 | GPE-4 | GPE-5 | GPE-8 | GPE-10 | GPE-20 |
|------------------------|-------------------|-----------------------|---------|---------|---------|-----------------------|---------|
| Capacity | l | 300 | 400 | 500 | 800 | 1000 | 2000 |
| Gross weight | kg | 164 | 198 | 234 | 332 | 371 | 586 |
| Net weight | kg | 137 | 165 | 195 | 277 | 309 | 489 |
| Package dimensions | | | | | | | |
| height | cm | 183 | 212 | 217 | 203 | 203 | 255 |
| width | | 82 | 82 | 89 | 110 | 120 | 140 |
| depth | | 82 | 82 | 89 | 110 | 120 | 140 |
| Gas fitting | ø | 1/2" | 1/2" | 1/2" | 3/4" | 3/4" | 3/4" |
| Tension | V | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 | 220/240 |
| Methane | m ³ /h | 4,92 | 4,92 | 5,82 | 8,12 | 8,12 | 8,12 |
| LPG | kg/h | 3,65 | 3,65 | 4,32 | 6,03 | 6,03 | 6,03 |
| Max operating pressure | bar | 6 | 6 | 6 | 6 | 6 | 6 |
| Thermal flow | kW | 49 | 49 | 58 | 81 | 81 | 81 |
| Treatment | | Glass-lining at 870°C | | | | Hot-dip galvanization | |
| Heating time | | | | | | | |
| Δt=35°C | min. | 18' | 23' | 25' | 29' | 36' | 67' |
| Δt=25°C | | 13' | 17' | 18' | 21' | 26' | 48' |
| Continuous production | | | | | | | |
| Δt=35°C | L/h | 1032 | 1032 | 1221 | 1710 | 1710 | 1710 |
| Δt=25°C | | 1445 | 1445 | 1709 | 2394 | 2394 | 2394 |

Water heater with gas-tight housing and forced flow – TWH, TWHE

The TWH and TWHE gas water heaters have a gas-tight housing, a forced flow and electric ignition. They are designed to be used in a professional setting, where a large amount of hot water is needed. They are also adapted to the needs of restaurants, hairdressers, thermal centres, laundry services, car washing services and other commercial purposes. They differ from traditional water heaters in the fact that they measure the flow and temperature of the incoming water and then modulate the burner according to the needs, with a precision of 1°C. The technology makes it possible to have a continuous hot water flow.

A remote control, designed to be used with these water heaters and needed for making the machine function, makes it possible to regulate the temperature and the flow (function flow SET). Moreover, it gives detailed information about the functioning and gives diagnoses and information on possible malfunctioning and/or technical errors through numeric codes. If a technical problem is detected, the error code will light up. It is easy to connect the remote control to the device thanks to the low tension cable (which is supplied)

Main advantages

- ✓ Precise temperature selection (37 up to 80°C)
- ✓ Automatic start-up
- ✓ Anti-freeze protection on all models
- ✓ Up to 6 devices can be connected in series
- ✓ Very high performance copper heat exchanger which guarantees protection against corrosion
- ✓ Indoor and outdoor installation possible



Remote control

The remote control makes it possible to pre-set the water temperature. The digital display signals the velocity of the ventilator and other useful information.



TWH
indoor installation



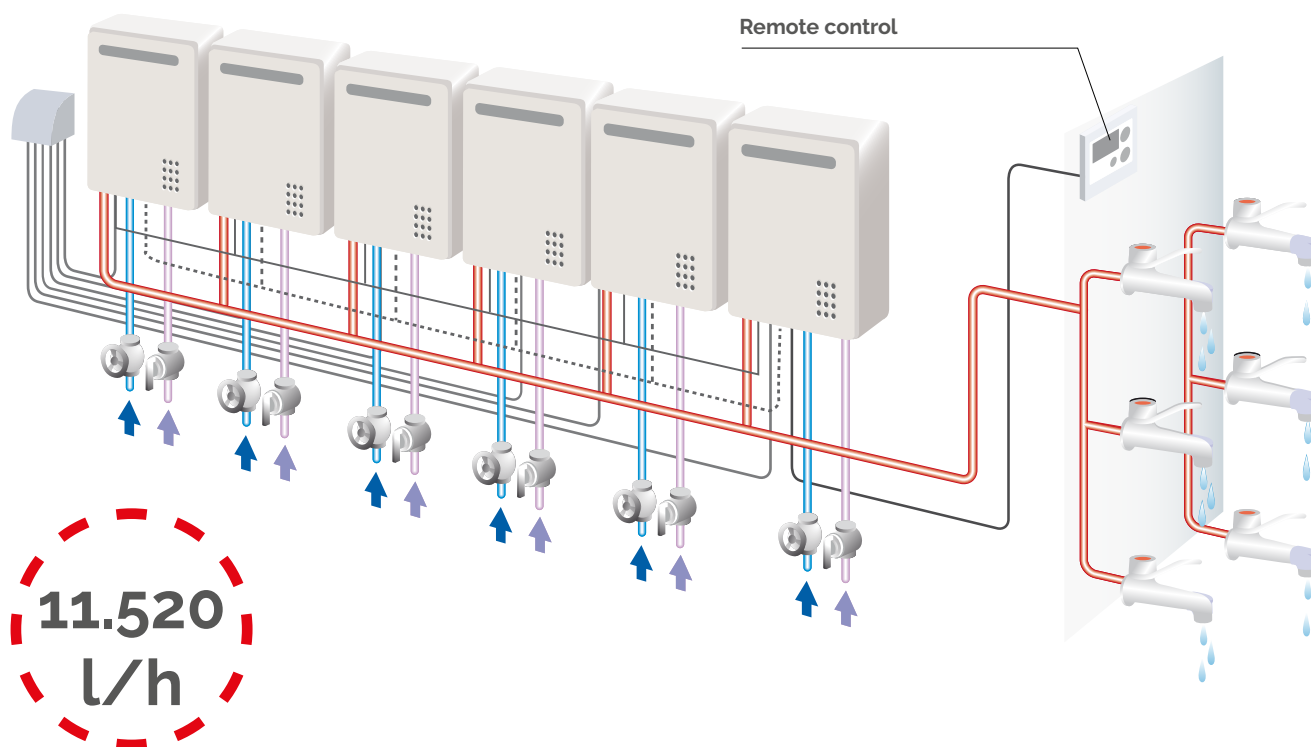
TWHE
outdoor installation

| Model | Description | Code | price | Gross weight kg | Net weight kg | Package dimensions mm |
|--------|--|------------|------------|-----------------|---------------|-----------------------|
| TWH-24 | Indoor water heater 24 l/min, energy supply methane | 855010001X | € 1.603,00 | 35 | 29 | 359x578x725 |
| TWH-32 | Indoor water heater 32 l/min, energy supply LPG | 855010002X | € 2.208,00 | 35 | 29 | 359x578x725 |
| TWH-32 | Indoor water heater 32 l/min, energy supply methane | 855010003X | € 2.208,00 | 35 | 29 | 359x578x725 |
| TWH-24 | Indoor water heater 24 l/min, energy supply LPG | 855010004X | € 1.603,00 | 35 | 29 | 359x578x725 |
| TWH-32 | Outdoor water heater 32 l/min, energy supply methane | 855010005X | € 2.083,00 | 35 | 30 | 359x578x779 |
| TWH-32 | Outdoor water heater 32 l/min, energy supply LPG | 855010006X | € 2.083,00 | 35 | 30 | 359x578x779 |

Water heater with gas-tight housing and forced flow – TWH, TWHE

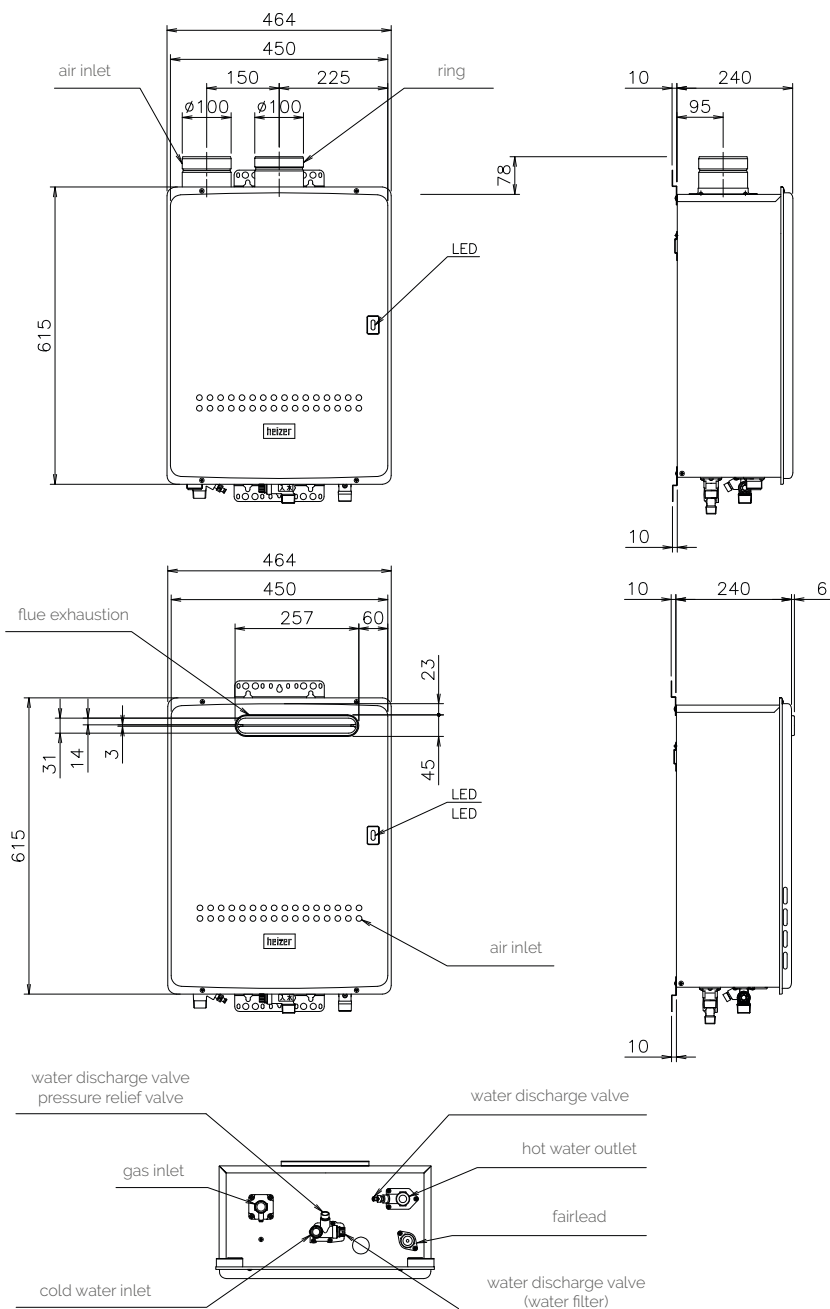
The TWH (indoor) and TWHE (outdoor) series of gas installations consist of three different models to meet all requirements of professional users. You can choose a flow of 24 or 32 L/min and it is possible to connect up to six devices in series. An installation in which 6 devices are connected in series guarantees the impressive flow of 192 L/min.

The installation of two units in parallel is simplified by the Quick connect cable and requires only one remote control. For the installation of several units in series (up to six units), however, the System Controller is needed. It is a sophisticated electronic device that makes the flow pass through the master unit instead of dividing it over all water heaters. When the demand for hot water increases, the other units will be used in order to maintain the right temperature in the system. Other features of the System Controller are: indication of malfunctions and a remote device that indicates a start-up, connection to the recirculation pump or a shutdown.



| Description | Code | Price |
|--------------------------------------|------------|----------|
| KTO 1 Horizontal fume discharge kit | 855900002X | € 230,00 |
| KTV 1 vertical fume discharge kit | 855900003X | € 293,00 |
| QC Quick Connect cable | 855900005X | € 42,00 |
| RC-1 remote control (cable included) | 855900001X | € 159,00 |

Dimensions TWH, TWHE



| Model | Installation | Efficiency % | Gas fitting | Tension | Max operating pressure | Gas consumption | | Min-max thermal flow | Continuous production $\Delta t=20/25/35\text{ }^{\circ}\text{C}$ | |
|---------|--------------|--------------|-------------|---------|------------------------|----------------------------------|----------------------------|----------------------|--|----------------|
| | | | | | | methane m^3/h | LPG g/h | | lt/min | lt/h |
| TWH-24 | indoor | 86 | 3/4" | 230 | 10 | 5.70 | 4247 | 5 - 49 | 30/24/17 | 1800/1440/1020 |
| TWH-32 | indoor | 90 | 3/4" | 230 | 10 | 7.21 | 5373 | 5 - 62.3 | 38/32/23 | 2280/1920/1380 |
| TWHE-32 | outdoor | 90 | 3/4" | 230 | 10 | 7.21 | 5373 | 5 - 62.3 | 38/32/23 | 2280/1920/1380 |

Technical information

TWH, TWHE

Coupled with storage tanks

The TWH and TWHE models can be coupled with our storage tanks or AT and BSFV water heaters if you want to produce large amounts of hot water for short periods and with intense consumption peaks. Coupling the TWH and AT is especially useful when a large thermal flywheel is needed because the need for hot water during a brief period supersedes the continuous flow of hot water. A similar situation can occur in hospitals, hotels, sport centers and gyms. Moreover, coupling the TWH and the BSFV can also be advantageous in solar power installations. The Quick Connect cable or System Controller are not needed if an AT storage tank is used or when a constant hot water volume is desired. Because of the broad range of products we can also assemble a kit, the KOMBI SYSTEM (K24, K32 OR K32E), which consists of a water heater and a storage tank.

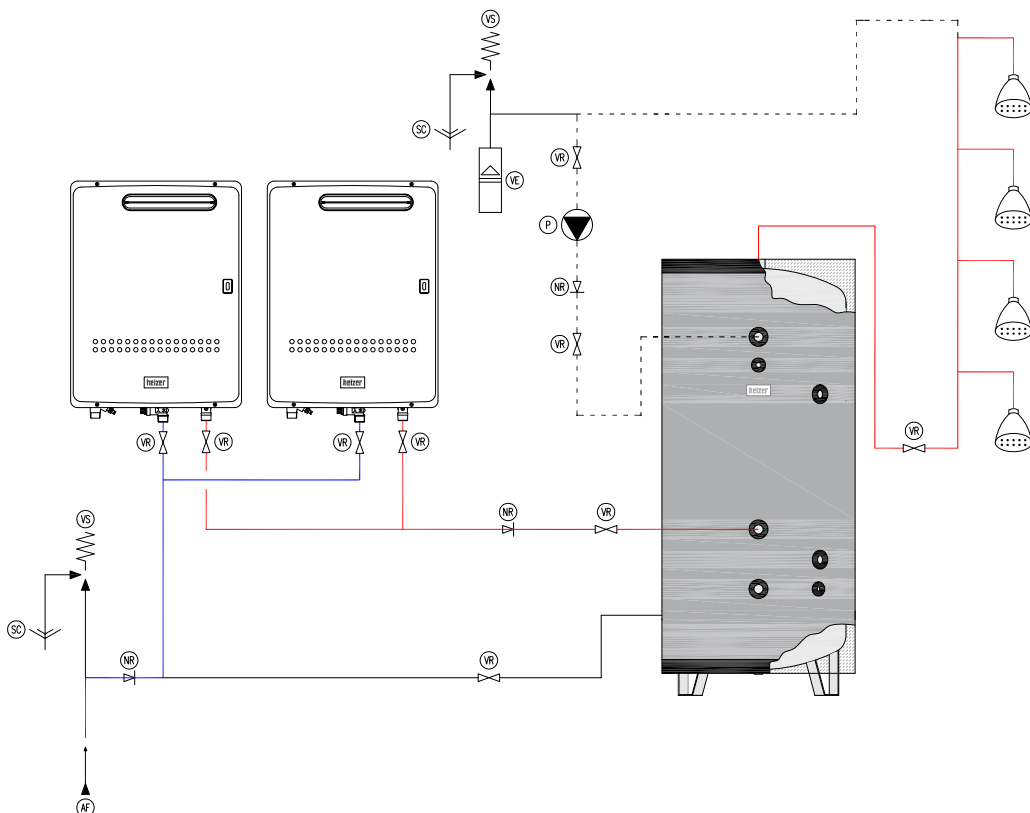
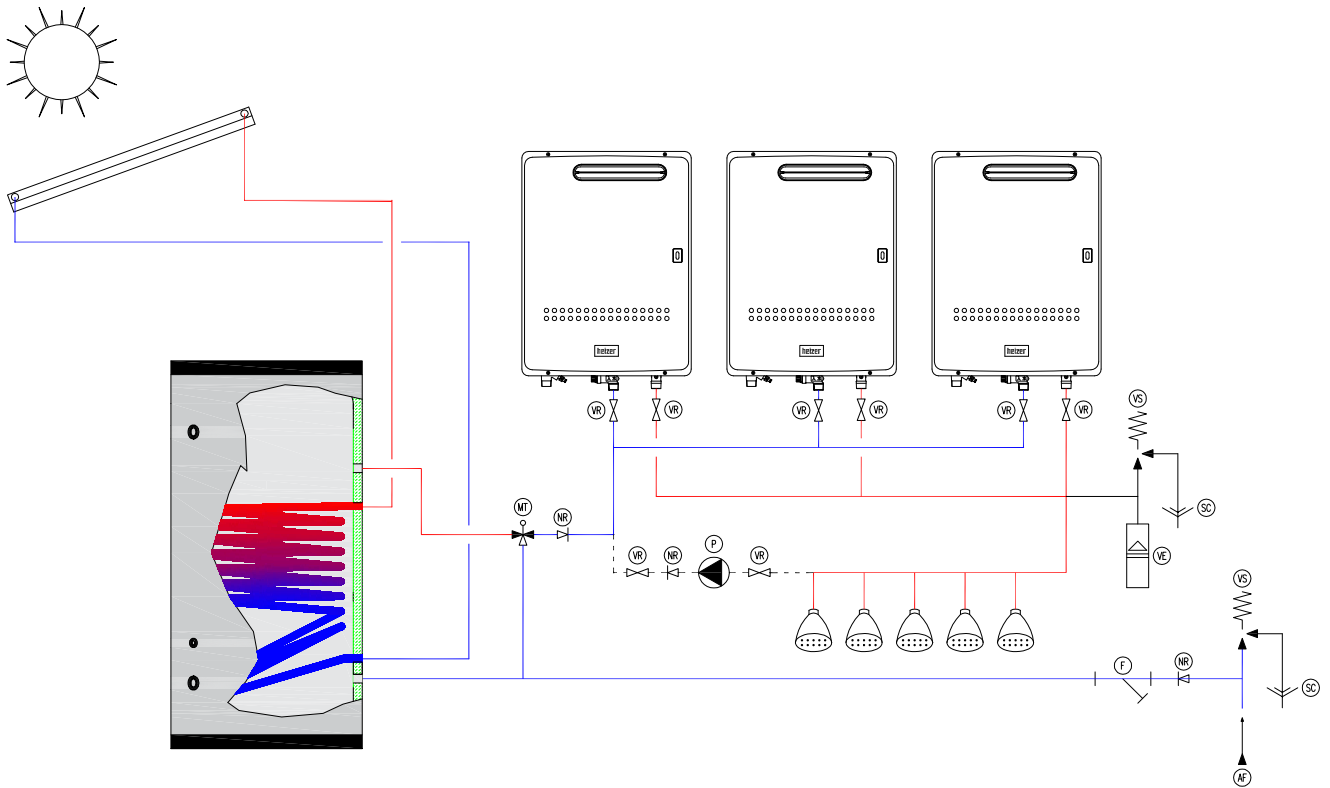
Water quality and treatment

In places with hard water, chalk crust formation in installations that use gas for DHW production is a possibility. The high power of the water heaters even facilitates the phenomenon. How higher the temperature and the water volume, how faster chalk crusts can form. Because of this, water treatment is highly recommended when the hardness reaches 20°f. Italian law (DPR n°59, 02/05/2009) imposes the installation of a suitable treatment system for water with a hardness of at least 15°f. The water treatment is highly recommended when the hardness reaches 15°f in order to prevent ruptures in the exchanger (dispenser or water softener). The problem can also be minimized by reducing the water temperature.

Recirculation pump

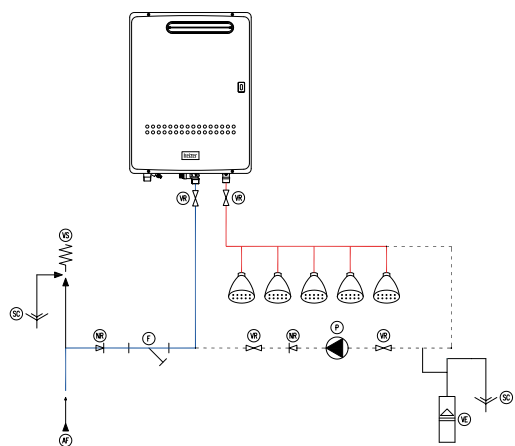
If one installs one or more devices in a system with recirculation a minimal flow has to be maintained in order to ensure the optimal functioning of the system. In an installation with several devices in series, coupled with an AT or BSFV storage tank, the thermal power of all devices is needed in order to ensure the shortest recovery time. In this case, a recirculation pump has to be of the right size to be able to keep a minimal flow through every device.

Coupling chart TWH, TWHE

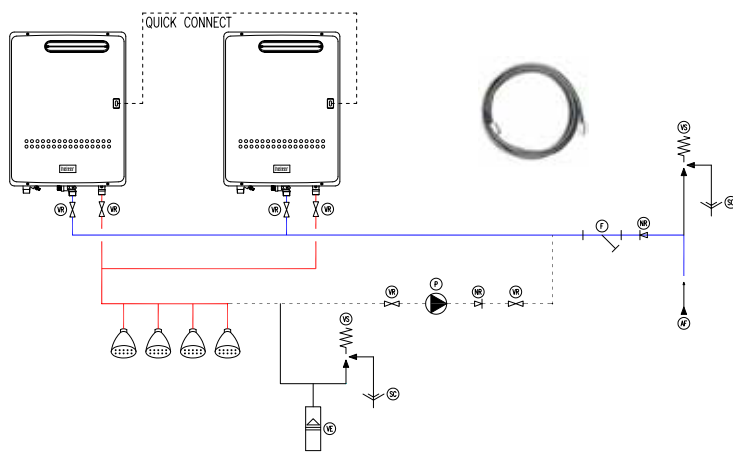


Coupling chart TWH, TWHE

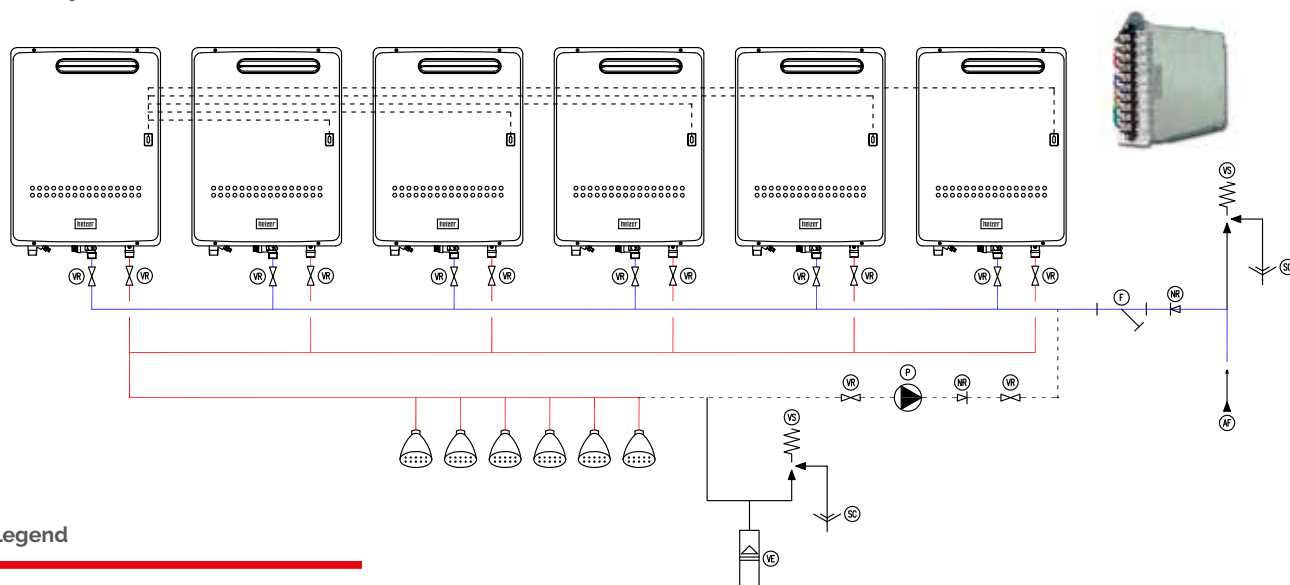
Standard installation



2 units connected in series with Quick Connect



6 units connected in series with System



Legend

| | |
|----|---------------------|
| SC | discharge |
| VS | safety valve |
| AF | cold water inlet |
| NR | non-return valve |
| F | filter |
| VR | return valve |
| P | recirculation valve |
| VE | expansion vessel |
| MT | thermostatic mixer |

Hot water

Accessories

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Storage tanks loading controller SLC

The SLC unit is a modern electronic regulator for loads of large DHW storage tanks with a high temperature precision. They are equipped with a wide display and makes it possible to program the desired temperature in the inside of the tanks on three different peak times a day. It is possible to control and command the electronic pump (0-10 V or PWM) by regulating the velocity on the ground of the difference between the measured temperature and the set point temperature. When cold water is stored the velocity of the pump is reduced in order to maximize the stratification in the tank. Numerous hydraulic programs are pre-loaded in the control unit, as you can see below.



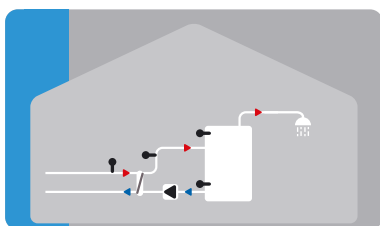
Composition

- ✓ electronic control unit
- ✓ 2 contact probes pt1000
- ✓ 1 emersion probe pt1000
- ✓ instructions

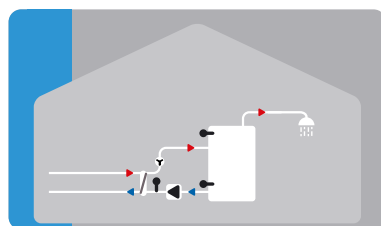
| Code | Model | Price |
|-----------|----------------|----------|
| 822120028 | SLC controller | € 599,00 |

| Technical details | |
|--|-----|
| Inlet for the temperature probe pt 1000 | 6 |
| Inlet for the grundfos VFS sensor | 0-2 |
| Outlet 230V | 3 |
| Outlet 0.0010V or PWM for the control of the high efficiency pump's velocity | 1 |
| Number of pre-set programs | 5 |
| Red/green LED light | Yes |
| Energy gauge | Yes |
| Crono function of the thermostat | Yes |
| Crono function of the thermostat for the activation of the pump | Yes |
| Anti-legionella function | Yes |
| Memorizing the data with statistics and graphics | Yes |
| Possibility to block the menu | Yes |
| Universal alimention (100...240 VAC) with reduction of the consumption in standby mode | Yes |

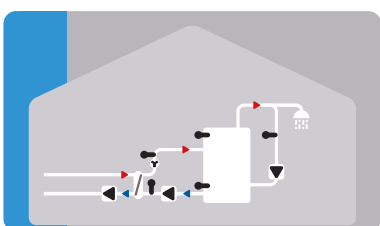
Pre-set layout SLC



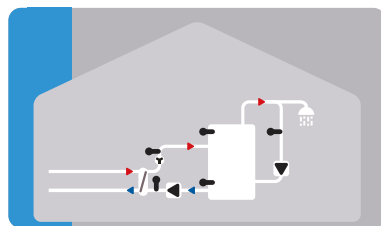
Storage load without VFS



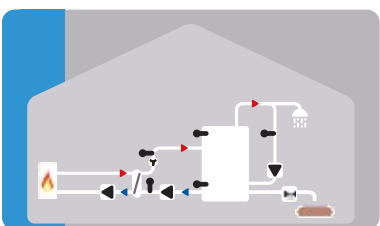
Storage load with VFS



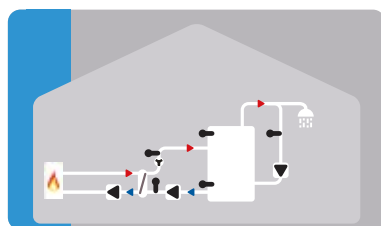
Storage load with VFS, primary pump and recirculation pump



Storage load with VFS and recirculation pump



Storage load with VFS, primary pump, anti-legiionella heating and discharge of sediments



Storage load with VFS, primary pump, anti-legiionella heating and recirculation pump

Spare parts – supplements – accessories

| Description | Compatibility | Code | Price |
|--|---|-----------|---------|
| Magnesium anode 22x400 M8 without plug | FLEXY, FLEXY BLUE, FLEXY INOX, BOIL , BOIL INOX, SMART INOX capacity 200÷300 l | 822100003 | € 22,00 |
| Magnesium anode 33x500 M8 without plug | *FLEXY, FLEXY BLUE, FLEXY INOX, BOIL , BOIL INOX, SMART INOX capacity 500÷5000 l 6000÷10000 l (N°2 pieces)* | 822100004 | € 25,00 |
| Plug for anode fitting 1" ¼ | *FLEXY, FLEXY BLUE, FLEXY INOX, BOIL , BOIL INOX, SMART INOX | 801050042 | € 5,00 |

One is provided for every installed anode

Magnesium anodes for SMART boilers

| Capacity | Description | Code | Price |
|----------|--|-----------|---------|
| 200 | Isolated anode 33 x 500 | 822100013 | € 30,00 |
| 300 | Isolated anode 33 x 500 | 822100013 | € 30,00 |
| 400 | Isolated anode 33 x 500 | 822100013 | € 30,00 |
| | Magnesium anode 22 x 400 M8 without plug | 822100003 | € 22,00 |
| 500 | Isolated anode 33 x 500 | 822100013 | € 30,00 |
| | Magnesium anode 22 x 400 M8 without plug | 822100003 | € 22,00 |
| 750 | Isolated anode 33 x 500 | 822100013 | € 30,00 |
| | Magnesium anode 22 x 400 M8 without plug | 822100003 | € 22,00 |
| 1000 | Isolated anode 33 x 500 | 822100013 | € 30,00 |
| | Magnesium anode 22 x 400 M8 without plug | 822100003 | € 22,00 |
| 1500 | Magnesium anode 33 x 500 M8 SENZA TAPPO | 822100004 | € 25,00 |
| | Plug for anode fitting 1"1/4 | 801050042 | € 5,00 |
| 2000 | Magnesium anode 33 x 500 M8 without plug | 822100004 | € 25,00 |
| | Plug for anode fitting 1"1/4 | 801050042 | € 5,00 |
| 3000 | Magnesium anode 33 x 500 M8 without plug | 822100004 | € 25,00 |
| | Plug for anode fitting 1"1/4 | 801050042 | € 5,00 |

| Description | Code | Price |
|---------------------------------------|-----------|----------|
| Current impressed cathodic protection | | |
| Up to 1500 liters | 822100014 | € 294,00 |
| From 2000 to 5000 liters | 822100015 | € 378,00 |

| Description | Code | Price |
|----------------------------|-----------|---------|
| thermometer for hot water | 822050001 | € 18,00 |
| thermometer for cold water | 822050004 | € 20,00 |

| Description | Code | Price |
|--------------------------|-----------|---------|
| Thermostat | 822010004 | € 20,00 |
| Bithermostat | 822050006 | € 91,00 |
| Anti-freeze bithermostat | 822050007 | € 22,00 |

| Description | Code | Price |
|---------------------------|-----------|---------|
| Anti-freeze resistor 200W | 824100001 | € 18,00 |



Electrical resistance kit

Single-phase electrical heaters that can be integrated with the boilers, copper heating elements, IP44 protection category, supplied with regulation thermostat, safety thermostat (manual reset), electric cable and Schuko plug 10-16A/250V

| Code | Price | Power W | Length L mm | Connection GAS M | Temperature safety thermostat °C | Tension V |
|-----------|----------|------------|----------------|---------------------|---|--------------------------|
| 824100166 | € 110,00 | 1200 | 365 | 1 1/2 | 95 | 220 V single phase |
| 824100167 | € 111,00 | 2000 | 368 | 1 1/2 | 95 | |
| 824100168 | € 127,00 | 3000 | 350 | 1 1/2 | 85 | |



Three-phase electrical heaters that can be integrated with the boilers, copper heating elements, IP44 protection category, supplied with regulation thermostat, safety thermostat (manual reset), electric cable and no plug. Regulation thermostat 20-70°C

| Code | Price | Power W | Length L mm | Connection GAS M | Temperature safety thermostat °C | Tension V |
|-----------|----------|------------|----------------|---------------------|---|--------------------------|
| 824100169 | € 309,00 | 2000 | 300 | 1 1/2 | 95 | 400 V three phased |
| 824100170 | € 328,00 | 3000 | 300 | 1 1/2 | 95 | |
| 824100171 | € 365,00 | 4500 | 375 | 1 1/2 | 95 | |
| 824100172 | € 399,00 | 6000 | 450 | 1 1/2 | 95 | |
| 824100173 | € 443,00 | 9000 | 580 | 1 1/2 | 95 | |





Pressure tanks

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P.E.D. tested pressure tanks

A broad range of pressurized tank, with CE mark, in accordance with the P.E.D. directive (Directive 97/23/CE)

The products are manufactured as prescribed by the P.E.D. directive, which applies to storage tanks that have to contain dangerous fluids or fluids under high pressure and/or temperatures. The tanks are designed to meet the specific requirements for several applications: autoclaves, compressed air tanks, expansion vessels, steam accumulators and expansion vessels for heat transfer oil. They are made of carbon steel sheets, welded in an automatic process, accurately refinished and controlled and tested on the grounds of the operative circumstances of the project.

On demand, we also manufacture:

- products with customized dimensions
- inspection holes
- external protective treatments
- specific insulation
- internal protective treatments (hot dip galvanizing (UNI EN1179) suited for contact with water for human consumption, external anti-rust coating, internal Teflon coating for alimentary use)
- external covering (anti-condensation insulation covered in PVC or aluminium sheet, flexible polyurethane coating covered in PVC or aluminium sheet)



P.E.D. directive

The PED directive (Directive 97/23/CE) regulates the design, manufacturing and conformity valuation of pressure vessels and products submitted to a maximum allowable pressure "PS" over 0,5 bar. The CE directive aims to harmonize the national laws in the member states that relate to the valuation of the project, the production, the testing and the conformity of the pressurized vessels and products.

The directive concerns pressure vessels, heat exchangers, steam generators, heaters, industrial piping and safety equipment, used in residential and industrial settings (oil & gas, chemical, pharmaceuticals, plastic and rubber, alimentary, paper).

Hazard category of the devices

This is an indication of the danger level of the pressure vessels which can be divided in the following categories: Article 3 section 3, I, II, III, IV. The category is determined on the grounds of numerous factors: typology of the fluid, (dangerous and not dangerous), max allowable temperature, pressure and capacity.

According to the PED, fluids are divided in 2 categories:

GROUP 1: includes dangerous fluids

- Explosives
- Extremely flammable fluids
- Easily flammable fluid
- Flammable fluids (where the allowed maximum temperature is above flashpoint)
- Highly toxic fluids
- Toxic fluids
- Reactive fluids

GROUP 2: includes all fluids not listed in group 1 and therefore not considered dangerous.

The following chart illustrates the typology of our products, in function of the used fluid and the temperature values. First you individuate the table which applies to the device in question, then you determine the hazard category of the device under the tested pressure.

Note

- The five tables should be consulted per line.
- The pressure vessels which are not subject to Article 3 section 3 and belong to the \geq I category have to have the CE label in accordance with the PED directive
- **WATER, ETHYLENE GLYCOL AND PROPYLENE GLYCOL BELONG TO GROUP 2.**

P.E.D. directive

| category | PED | CE label | Intervention by notified body | Additional costs |
|-----------------------|----------------|----------|-------------------------------------|-------------------------------------|
| PS ≤ 0,5 | Not applicable | No | No | No |
| Article 3 paragraph 3 | Applicable | No | No | No |
| I | Applicable | Yes | No | Yes |
| II | Applicable | Yes | Project delivery without approval | Inspection visit |
| III | Applicable | Yes | Project approval | Inspection visit + project approval |
| IV | Applicable | Yes | Inspection visit + project approval | Inspection visit + project approval |

PS: is the maximum allowed pressure, the maximum pressure for which the equipment is designed, specified by the manufacturer.

V: is the internal volume of a chamber, including the volume of nozzles to the first connection and excluding the volume of permanent internal parts.

ARTICLE 3 PARAGRAPH 3: the pressure equipment belongs to category <I and therefore should not bear the CE mark according to PED.

Note: please consult the technical department

- If a vessel is composed of several compartments, or if one compartment contains several fluids.
- If the fluid is different from those listed in NOTE 1.
- If the equipment belongs to a category ≥ I.
- If a vessel contains pressure equipment which belongs to a category ≥ I.
- In case of doubt or uncertainty.

Tables for classification of pressure vessels

According to the Pressure Equipment Directive 97/23/CE

Index

| Type of pressure equipment | Fluid | Temperature | Table to consult |
|---------------------------------|---------------------------------------|-------------|------------------|
| Tanks and plate heat exchangers | Water | ≤110 | 4 |
| Tanks and plate heat exchangers | Steam or superheated water | >110 | 2 |
| Tube bundle exchangers | Water | ≤110 | 4 |
| Tube bundle exchangers | Steam or superheated water | >110 | 2 |
| Steam generators | Steam or superheated water | >110 | 5 |
| Tanks and plate heat exchangers | Water, ethylene and propylene glycol | ≤120 | 4 |
| Tanks and plate heat exchangers | Water, ethylene and propylene glycol | >120 | 2 |
| Tanks and plate heat exchangers | Freon and dangerous gases | | 1 |
| Autoclaves | Nitrogen or other non-dangerous gases | | 2 |
| Autoclaves | Dangerous gases | | 1 |

Table 1 – Pressure vessels

| V l | PS bar | PS x V bar | Category |
|------------------|----------------------|-------------------------------|-----------------------|
| $0,1 < V \leq 1$ | $0,5 < PS < 200$ | | Article 3 paragraph 3 |
| $0,1 < V < 1$ | $200 < PS \leq 1000$ | | III |
| $0,1 < V < 1$ | $PS > 1000$ | | IV |
| $1 < V \leq 50$ | $PS > 0,5$ | $PS \times V \leq 25$ | Article 3 paragraph 3 |
| $1 < V < 100$ | $PS > 0,5$ | $25 < PS \times V \leq 50$ | I |
| $1 < V < 400$ | $PS > 0,5$ | $50 < PS \times V \leq 200$ | II |
| $1 < V < 2000$ | $0,5 < PS < 1000$ | $200 < PS \times V \leq 1000$ | III |
| $V > 1$ | $PS > 0,5$ | $PS \times V > 1000$ | IV |

Table 2 – Pressure vessels

| V l | PS bar | PS x V bar | Category |
|-------------------|--------------------|----------------------------------|-----------------------|
| $0,1 < V \leq 1$ | $0,5 < PS < 1000$ | | Article 3 paragraph 3 |
| $0,1 < V \leq 1$ | $1000 < PS < 3000$ | | III |
| $0,1 < V \leq 1$ | $PS > 3000$ | | IV |
| $1 < V \leq 100$ | $PS > 0,5$ | $PS \times V \leq 50$ | Article 3 paragraph 3 |
| $1 < V \leq 400$ | $PS > 0,5$ | $50 < PS \times V \leq 200$ | I |
| $1 < V < 750$ | $PS > 0,5$ | $1000 < PS \times V \leq 3000$ | III |
| $1 < V \leq 750$ | $PS > 0,5$ | $PS \times V > 3000$ | IV |
| $V > 750$ | $0,5 < PS < 4$ | | III |
| $V > 750$ | $PS > 4$ | | IV |
| $1 < V \leq 2000$ | $PS > 0,5$ | $200 \leq PS \times V \leq 1000$ | II |

Tables for classification of pressure vessels

According to the Pressure Equipment Directive 97/23/CE

Table 3 – Pressure vessels

| V l | PS bar | PS x V bar | Category |
|------------------|---------------------|------------------------|-----------------------|
| $0,1 < V \leq 1$ | $0,5 < PS < 500$ | | Article 3 paragraph 3 |
| $0,1 < V \leq 1$ | $PS > 500$ | | II |
| $V > 1$ | $200 < PS \leq 500$ | | II |
| $V > 1$ | $PS > 500$ | | III |
| $V > 20$ | $0,5 < PS \leq 10$ | $PS \times V > 200$ | I |
| $1 < V \leq 400$ | $PS > 0,5$ | $PS \times V \leq 200$ | Article 3 paragraph 3 |
| $V > 1$ | $10 < PS \leq 200$ | $PS \times V > 200$ | II |

Table 4 – Pressure vessels

| V l | PS bar | PS x V bar | Category |
|-------------------|----------------------|--------------------------|-----------------------|
| $0,1 < V \leq 10$ | $10 < PS < 1000$ | | Article 3 paragraph 3 |
| $0,1 < V < 10$ | $PS > 1000$ | | I |
| $V > 0,1$ | $0,5 < PS \leq 10$ | | Article 3 paragraph 3 |
| $V \geq 10$ | $PS > 1000$ | | II |
| $10 < V < 20$ | $500 < PS \leq 1000$ | $PS \times V > 10000$ | II |
| $10 < V < 1000$ | $PS > 10$ | $PS \times V \leq 10000$ | Article 3 paragraph 3 |
| $V > 20$ | $10 < PS \leq 500$ | $PS \times V > 10000$ | I |

Table 5 – Steam or superheated water at temperatures above 110°C

| V l | PS bar | PS x V bar | Category |
|-------------------|---------------------|----------------------------------|-----------------------|
| $0,1 < V \leq 2$ | $PS > 0,5$ | | Article 3 paragraph 3 |
| $2 < V < 100$ | $0,5 < PS < 25$ | $PS \times V \leq 50$ | I |
| $V > 2$ | $25 < PS < 32$ | $PS \times V \leq 200$ | II |
| $V > 2$ | $PS > 32$ | | IV |
| | $0,5 < PS < 25$ | $50 < PS \times V \leq 200$ | II |
| | $3 \leq PS \leq 32$ | $PS \times V > 3000$ | IV |
| $V < 1000$ | $0,5 < PS < 32$ | $200 < PS \times V \leq 3000$ | III |
| $V > 1000$ | $0,5 < PS < 3$ | | IV |
| $V > 750$ | $PS > 4$ | | IV |
| $1 < V \leq 2000$ | $PS > 0,5$ | $200 \leq PS \times V \leq 1000$ | II |

P.E.D. tested autoclaves 6/8/12 bar

AC series

Fiorini autoclaves are designed for lifting and distributing water under pressure. They are intended to form a lung of pressurized water which, if properly sized, serves to limit the number of start-ups of the pump. They are used to ensure perfect water distribution in the upper floors of buildings making up possible shortcomings of water aqueducts.

The models, with CE label, have capacities of 300 up to 20.000 litres in both the vertical and horizontal version with 6, 8 or 12 bar.

✓ Special versions

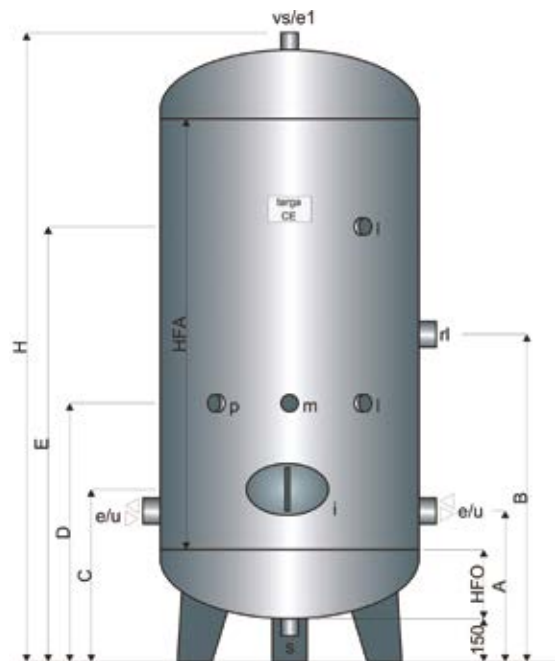
The AC storage tanks can be modified on demand in order to meet your specific requirements.

✓ **Materials:** carbon steel

✓ **Protective treatment:** hot dip galvanizing and external coating

✓ Operative conditions

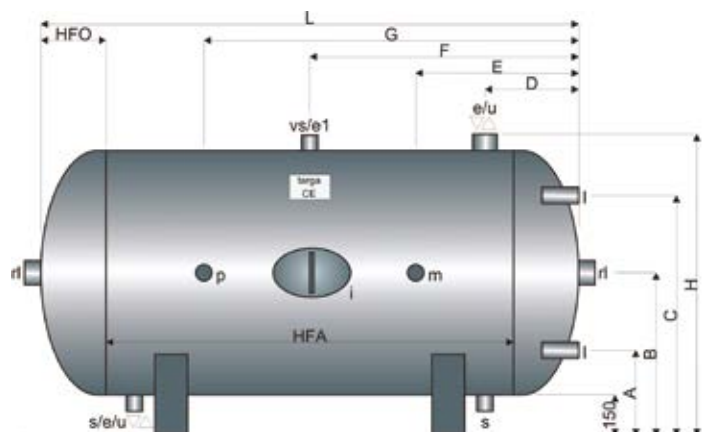
The storage tanks have a max pressure of 6,8 or 12 bar and operating temperatures fro 10 to 50°C.



To rapidly select the capacity of the autoclave and the flow of the pump in a residential setting (in function of the number of apartments), the following diagram should be consulted.

Connections

- s Discharge
- vs Safety valve
- m Pressure gauge
- p Pressure controller
- i Inspection hole
- e Water inlet
- u Water outlet
- e1 Air inlet
- l Level
- rl Level regulator



P.E.D. tested autoclaves 6/8/12 bar AC series

Vertical

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | H mm | peso kg | e/u (*) inch | L/m/p (*) inch | rl/vs/s/e1 (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|------------|-----------------|-------------------|------------------------|----------|
| 300 | 500 | 165 | 1250 | 415 | 940 | 465 | 715 | 1415 | 1760 | 75 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 200 | 1250 | 450 | 975 | 500 | 750 | 1450 | 1830 | 101 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 800 | 240 | 1250 | 490 | 1015 | 540 | 790 | 1490 | 1910 | 136 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 240 | 1650 | 490 | 1215 | 540 | 990 | 1890 | 2310 | 162 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 950 | 280 | 1750 | 530 | 1305 | 580 | 1030 | 2030 | 2490 | 232 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1100 | 310 | 1750 | 560 | 1335 | 610 | 1060 | 2060 | 2550 | 274 | 2 | 1/2 | 1 1/4 | */** |
| 3000 | 1250 | 350 | 2000 | 620 | 1500 | 650 | 1200 | 2200 | 2880 | 466 | 2 1/2 | 1/2 | 1 1/4 | */** |
| 4000 | 1400 | 390 | 2000 | 740 | 1540 | 690 | 1240 | 2240 | 2960 | 541 | 3 | 1/2 | 1 1/4 | */**/*** |
| 5000 | 1450 | 410 | 2500 | 760 | 1810 | 710 | 1360 | 2360 | 3500 | 646 | 3 | 1/2 | 1 1/4 | */**/*** |
| 6000 | 1450 | 410 | 3000 | 760 | 2060 | 710 | 1360 | 2860 | 4000 | 767 | 3 | 1/2 | 1 1/4 | */**/*** |
| 8000 | 1650 | 460 | 3000 | 830 | 2110 | 860 | 1410 | 2910 | 4100 | 1090 | 4 | 1/2 | 1 1/4 | */**/*** |
| 10000 | 1650 | 460 | 4000 | 830 | 2610 | 860 | 1610 | 3110 | 5100 | 1318 | 4 | 1/2 | 1 1/4 | */**/*** |
| 15000 | 2000 | 550 | 4000 | 920 | 2700 | 1000 | 1700 | 3200 | 5280 | 2016 | 4 | 1/2 | 1 1/4 | 300x400 |
| 20000 | 2000 | 550 | 5500 | 920 | 3450 | 1000 | 1700 | 3700 | 6780 | 2513 | 4 | 1/2 | 1 1/4 | 300x400 |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | peso kg | e/u (*) inch | L/m/p (*) inch | rl/vs/s/e1 (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------|-----------------|-------------------|------------------------|----------|
| 300 | 500 | 165 | 1250 | 220 | 400 | 580 | 265 | 265 | 790 | 1315 | 680 | 1580 | 75 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 200 | 1250 | 250 | 475 | 700 | 300 | 300 | 825 | 1350 | 830 | 1650 | 101 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 800 | 240 | 1250 | 325 | 550 | 775 | 340 | 340 | 865 | 1390 | 980 | 1730 | 136 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 240 | 1650 | 250 | 550 | 850 | 340 | 340 | 1065 | 1790 | 980 | 2130 | 162 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 950 | 280 | 1750 | 295 | 625 | 955 | 380 | 380 | 1155 | 1930 | 1130 | 2310 | 232 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1100 | 310 | 1750 | 315 | 700 | 1085 | 410 | 410 | 1185 | 1960 | 1280 | 2370 | 274 | 2 | 1/2 | 1 1/4 | */** |
| 3000 | 1250 | 350 | 2000 | 338 | 775 | 1213 | 470 | 470 | 1350 | 2230 | 1430 | 2700 | 466 | 2 1/2 | 1/2 | 1 1/4 | */** |
| 4000 | 1400 | 390 | 2000 | 360 | 850 | 1340 | 590 | 590 | 1390 | 2190 | 1580 | 2780 | 541 | 3 | 1/2 | 1 1/4 | */**/*** |
| 5000 | 1450 | 410 | 2500 | 375 | 875 | 1375 | 610 | 610 | 1660 | 2710 | 1630 | 3320 | 646 | 3 | 1/2 | 1 1/4 | */**/*** |
| 6000 | 1450 | 410 | 3000 | 375 | 875 | 1375 | 610 | 610 | 1910 | 3210 | 1630 | 3820 | 767 | 3 | 1/2 | 1 1/4 | */**/*** |
| 8000 | 1650 | 460 | 3000 | 425 | 975 | 1525 | 680 | 680 | 1960 | 3240 | 1830 | 3920 | 1090 | 4 | 1/2 | 1 1/4 | */**/*** |
| 10000 | 1650 | 460 | 4000 | 425 | 975 | 1525 | 680 | 680 | 2460 | 4240 | 1830 | 4920 | 1318 | 4 | 1/2 | 1 1/4 | */**/*** |
| 15000 | 2000 | 550 | 4000 | 450 | 1150 | 1850 | 770 | 770 | 2550 | 4330 | 2180 | 5100 | 2016 | 4 | 1/2 | 1 1/4 | 300x400 |
| 20000 | 2000 | 550 | 5500 | 450 | 1150 | 1850 | 770 | 770 | 3300 | 5830 | 2180 | 6600 | 2513 | 4 | 1/2 | 1 1/4 | 300x400 |

Inspection hole on demand: * 100x150; ** 220x320; *** 300x400

Product code of P.E.D. tested varnished autoclaves 6/8 bar

PN 6 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------|------------|------------|-----------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865010004X | VERN 500L PED 6BAR VERT | € 863,00 | 865010022X | VERN 500L PED 6BAR ORIZZ | € 906,00 |
| 865010005X | VERN 800L PED 6BAR VERT | € 1.086,00 | 865010023X | VERN 800L PED 6BAR ORIZZ | € 1.141,00 |
| 865010006X | VERN 1000L PED 6BAR VERT | € 1.219,00 | 865010024X | VERN 1000L PED 6BAR ORIZZ | € 1.280,00 |
| 865010007X | VERN 1500L PED 6BAR VERT | € 2.026,00 | 865010025X | VERN 1500L PED 6BAR ORIZZ | € 2.128,00 |
| 865010008X | VERN 2000L PED 6BAR VERT | € 2.285,00 | 865010026X | VERN 2000L PED 6BAR ORIZZ | € 2.400,00 |
| 865010009X | VERN 3000L PED 6BAR VERT | € 3.148,00 | 865010027X | VERN 3000L PED 6BAR ORIZZ | € 3.305,00 |
| 865010010X | VERN 3000B L PED 6BAR VERT | € 4.083,00 | 865010028X | VERN 3000B L PED 6BAR ORIZZ | € 4.286,00 |
| 865010011X | VERN 4000L PED 6BAR VERT | € 4.773,00 | 865010029X | VERN 4000L PED 6BAR ORIZZ | € 5.011,00 |
| 865010012X | VERN 5000L PED 6BAR VERT | € 6.166,00 | 865010030X | VERN 5000L PED 6BAR ORIZZ | € 6.475,00 |
| 865010013X | VERN 5000B L PED 6BAR VERT | € 6.153,00 | 865010031X | VERN 5000B L PED 6BAR ORIZZ | € 6.460,00 |
| 865010014X | VERN 6000L PED 6BAR VERT | € 7.605,00 | 865010032X | VERN 6000L PED 6BAR ORIZZ | € 7.986,00 |
| 865010015X | VERN 8000L PED 6BAR VERT | ◆ | 865010033X | VERN 8000L PED 6BAR ORIZZ | ◆ |
| 865010016X | VERN 10000L PED 6BAR VERT | ◆ | 865010034X | VERN 10000L PED 6BAR ORIZZ | ◆ |
| 865010017X | VERN 15000L PED 6BAR VERT | ◆ | 865010035X | VERN 15000L PED 6BAR ORIZZ | ◆ |
| 865010018X | VERN 20000L PED 6BAR VERT | ◆ | 865010036X | VERN 20000L PED 6BAR ORIZZ | ◆ |

PN 8 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------|------------|------------|-----------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865010040X | VERN 500L PED 8BAR VERT | € 863,00 | 865010058X | VERN 500L PED 8BAR ORIZZ | € 906,00 |
| 865010041X | VERN 800L PED 8BAR VERT | € 1.126,00 | 865010059X | VERN 800L PED 8BAR ORIZZ | € 1.183,00 |
| 865010042X | VERN 1000L PED 8BAR VERT | € 1.259,00 | 865010060X | VERN 1000L PED 8BAR ORIZZ | € 1.321,00 |
| 865010043X | VERN 1500L PED 8BAR VERT | € 2.028,00 | 865010061X | VERN 1500L PED 8BAR ORIZZ | € 2.129,00 |
| 865010044X | VERN 2000L PED 8BAR VERT | € 2.703,00 | 865010062X | VERN 2000L PED 8BAR ORIZZ | € 2.838,00 |
| 865010045X | VERN 3000L PED 8BAR VERT | € 3.335,00 | 865010063X | VERN 3000L PED 8BAR ORIZZ | € 3.501,00 |
| 865010046X | VERN 3000B L PED 8BAR VERT | € 4.485,00 | 865010064X | VERN 3000B L PED 8BAR ORIZZ | € 4.709,00 |
| 865010047X | VERN 4000L PED 8BAR VERT | € 5.233,00 | 865010065X | VERN 4000L PED 8BAR ORIZZ | € 5.494,00 |
| 865010048X | VERN 5000L PED 8BAR VERT | € 6.756,00 | 865010066X | VERN 5000L PED 8BAR ORIZZ | € 7.094,00 |
| 865010049X | VERN 5000B L PED 8BAR VERT | € 6.900,00 | 865010067X | VERN 5000B L PED 8BAR ORIZZ | € 7.245,00 |
| 865010050X | VERN 6000L PED 8BAR VERT | € 8.826,00 | 865010068X | VERN 6000L PED 8BAR ORIZZ | € 9.268,00 |
| 865010051X | VERN 8000L PED 8BAR VERT | ◆ | 865010069X | VERN 8000L PED 8BAR ORIZZ | ◆ |
| 865010052X | VERN 10000L PED 8BAR VERT | ◆ | 865010070X | VERN 10000L PED 8BAR ORIZZ | ◆ |
| 865010053X | VERN 15000L PED 8BAR VERT | ◆ | 865010071X | VERN 15000L PED 8BAR ORIZZ | ◆ |
| 865010054X | VERN 20000L PED 8BAR VERT | ◆ | 865010072X | VERN 20000L PED 8BAR ORIZZ | ◆ |

◆ Request quotation

Product code of P.E.D. tested varnished autoclaves 12 bar

PN 12 bar

| Vertical | | | Horizontal | | |
|------------|-----------------------------|------------|------------|------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865010073X | VERN 100L PED 12BAR VERT | € 610,00 | 865010091X | VERN 100L PED 12BAR ORIZZ | € 640,00 |
| 865010074X | VERN 200L PED 12BAR VERT | € 656,00 | 865010092X | VERN 200L PED 12BAR ORIZZ | € 689,00 |
| 865010075X | VERN 300L PED 12BAR VERT | € 746,00 | 865010093X | VERN 300L PED 12BAR ORIZZ | € 784,00 |
| 865010076X | VERN 500L PED 12BAR VERT | € 1.075,00 | 865010094X | VERN 500L PED 12BAR ORIZZ | € 1.129,00 |
| 865010077X | VERN 800L PED 12BAR VERT | € 1.351,00 | 865010095X | VERN 800L PED 12BAR ORIZZ | € 1.419,00 |
| 865010078X | VERN 1000L PED 12BAR VERT | € 1.524,00 | 865010096X | VERN 1000L PED 12BAR ORIZZ | € 1.599,00 |
| 865010079X | VERN 1500L PED 12BAR VERT | € 2.585,00 | 865010097X | VERN 1500L PED 12BAR ORIZZ | € 2.714,00 |
| 865010080X | VERN 2000L PED 12BAR VERT | € 3.119,00 | 865010098X | VERN 2000L PED 12BAR ORIZZ | € 3.275,00 |
| 865010081X | VERN 3000L PED 12BAR VERT | € 4.385,00 | 865010099X | VERN 3000L PED 12BAR ORIZZ | € 4.605,00 |
| 865010082X | VERN 3000B L PED 12BAR VERT | € 5.405,00 | 865010100X | VERN 3000B L PED 12BAR ORIZZ | € 5.675,00 |
| 865010083X | VERN 4000L PED 12BAR VERT | € 6.081,00 | 865010101X | VERN 4000L PED 12BAR ORIZZ | € 6.386,00 |
| 865010084X | VERN 5000L PED 12BAR VERT | € 7.406,00 | 865010102X | VERN 5000L PED 12BAR ORIZZ | € 7.778,00 |
| 865010085X | VERN 5000B L PED 12BAR VERT | € 8.279,00 | 865010103X | VERN 5000B L PED 12BAR ORIZZ | € 8.693,00 |
| 865010086X | VERN 6000L PED 12BAR VERT | € 8.690,00 | 865010104X | VERN 6000L PED 12BAR ORIZZ | € 9.125,00 |
| 865010087X | VERN 8000L PED 12BAR VERT | ◆ | 865010105X | VERN 8000L PED 12BAR ORIZZ | ◆ |
| 865010088X | VERN 10000L PED 12BAR VERT | ◆ | 865010106X | VERN 10000L PED 12BAR ORIZZ | ◆ |
| 865010089X | VERN 15000L PED 12BAR VERT | ◆ | 865010107X | VERN 15000L PED 12BAR ORIZZ | ◆ |
| 865010090X | VERN 20000L PED 12BAR VERT | ◆ | 865010108X | VERN 20000L PED 12BAR ORIZZ | ◆ |

◆ Request quotation

Product code of P.E.D. tested galvanized autoclaves 6/8 bar

PN 6 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------|------------|------------|---------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020004X | ZN 500L PED 6BAR VERT | € 940,00 | 865020022X | ZN 500L PED 6BAR ORIZZ | € 1.242,00 |
| 865020005X | ZN 800L PED 6BAR VERT | € 1.193,00 | 865020023X | ZN 800L PED 6BAR ORIZZ | € 1.537,00 |
| 865020006X | ZN 1000L PED 6BAR VERT | € 1.338,00 | 865020024X | ZN 1000L PED 6BAR ORIZZ | € 1.739,00 |
| 865020007X | ZN 1500L PED 6BAR VERT | € 2.256,00 | 865020025X | ZN 1500L PED 6BAR ORIZZ | € 2.609,00 |
| 865020008X | ZN 2000L PED 6BAR VERT | € 2.544,00 | 865020026X | ZN 2000L PED 6BAR ORIZZ | € 2.935,00 |
| 865020009X | ZN 3000L PED 6BAR VERT | € 3.780,00 | 865020027X | ZN 3000L PED 6BAR ORIZZ | € 4.379,00 |
| 865020010X | ZN 3000B L PED 6BAR VERT | € 4.729,00 | 865020028X | ZN 3000B L PED 6BAR ORIZZ | € 5.450,00 |
| 865020011X | ZN 4000L PED 6BAR VERT | € 5.505,00 | 865020029X | ZN 4000L PED 6BAR ORIZZ | € 6.350,00 |
| 865020012X | ZN 5000L PED 6BAR VERT | € 7.044,00 | 865020030X | ZN 5000L PED 6BAR ORIZZ | € 8.089,00 |
| 865020013X | ZN 5000B L PED 6BAR VERT | € 7.360,00 | 865020031X | ZN 5000B L PED 6BAR ORIZZ | € 8.462,00 |
| 865020014X | ZN 6000L PED 6BAR VERT | € 8.149,00 | 865020032X | ZN 6000L PED 6BAR ORIZZ | € 10.263,00 |
| 865020015X | ZN 8000L PED 6BAR VERT | ◆ | 865020033X | ZN 8000L PED 6BAR ORIZZ | ◆ |
| 865020016X | ZN 10000L PED 6BAR VERT | ◆ | 865020034X | ZN 10000L PED 6BAR ORIZZ | ◆ |
| 865020017X | ZN 15000L PED 6BAR VERT | ◆ | 865020035X | ZN 15000L PED 6BAR ORIZZ | ◆ |
| 865020018X | ZN 20000L PED 6BAR VERT | ◆ | 865020036X | ZN 20000L PED 6BAR ORIZZ | ◆ |

PN 8 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------|------------|------------|---------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020040X | ZN 500L PED 8BAR VERT | € 940,00 | 865020058X | ZN 500L PED 8BAR ORIZZ | € 988,00 |
| 865020041X | ZN 800L PED 8BAR VERT | € 1.259,00 | 865020059X | ZN 800L PED 8BAR ORIZZ | € 1.321,00 |
| 865020042X | ZN 1000L PED 8BAR VERT | € 1.418,00 | 865020060X | ZN 1000L PED 8BAR ORIZZ | € 1.489,00 |
| 865020043X | ZN 1500L PED 8BAR VERT | € 2.256,00 | 865020061X | ZN 1500L PED 8BAR ORIZZ | € 2.370,00 |
| 865020044X | ZN 2000L PED 8BAR VERT | € 3.163,00 | 865020062X | ZN 2000L PED 8BAR ORIZZ | € 3.320,00 |
| 865020045X | ZN 3000L PED 8BAR VERT | € 3.968,00 | 865020063X | ZN 3000L PED 8BAR ORIZZ | € 4.166,00 |
| 865020046X | ZN 3000B L PED 8BAR VERT | € 5.390,00 | 865020064X | ZN 3000B L PED 8BAR ORIZZ | € 5.660,00 |
| 865020047X | ZN 4000L PED 8BAR VERT | € 6.281,00 | 865020065X | ZN 4000L PED 8BAR ORIZZ | € 6.596,00 |
| 865020048X | ZN 5000L PED 8BAR VERT | € 7.993,00 | 865020066X | ZN 5000L PED 8BAR ORIZZ | € 8.393,00 |
| 865020049X | ZN 5000B L PED 8BAR VERT | € 8.453,00 | 865020067X | ZN 5000B L PED 8BAR ORIZZ | € 8.875,00 |
| 865020050X | ZN 6000L PED 8BAR VERT | € 9.846,00 | 865020068X | ZN 6000L PED 8BAR ORIZZ | € 10.339,00 |
| 865020051X | ZN 8000L PED 8BAR VERT | ◆ | 865020069X | ZN 8000L PED 8BAR ORIZZ | ◆ |
| 865020052X | ZN 10000L PED 8BAR VERT | ◆ | 865020070X | ZN 10000L PED 8BAR ORIZZ | ◆ |
| 865020053X | ZN 15000L PED 8BAR VERT | ◆ | 865020071X | ZN 15000L PED 8BAR ORIZZ | ◆ |
| 865020054X | ZN 20000L PED 8BAR VERT | ◆ | 865020072X | ZN 20000L PED 8BAR ORIZZ | ◆ |

◆ Request quotation

Product code of P.E.D. tested galvanized autoclaves 12 bar

PN 12 bar

| Vertical | | | Horizontal | | |
|------------|---------------------------|-------------|------------|----------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020073X | ZN 100L PED 12BAR VERT | € 649,00 | 865020091X | ZN 100L PED 12BAR ORIZZ | € 681,00 |
| 865020074X | ZN 200L PED 12BAR VERT | € 708,00 | 865020092X | ZN 200L PED 12BAR ORIZZ | € 744,00 |
| 865020075X | ZN 300L PED 12BAR VERT | € 798,00 | 865020093X | ZN 300L PED 12BAR ORIZZ | € 838,00 |
| 865020076X | ZN 500L PED 12BAR VERT | € 1.225,00 | 865020094X | ZN 500L PED 12BAR ORIZZ | € 1.286,00 |
| 865020077X | ZN 800L PED 12BAR VERT | € 1.563,00 | 865020095X | ZN 800L PED 12BAR ORIZZ | € 1.641,00 |
| 865020078X | ZN 1000L PED 12BAR VERT | € 1.775,00 | 865020096X | ZN 1000L PED 12BAR ORIZZ | € 1.864,00 |
| 865020079X | ZN 1500L PED 12BAR VERT | € 3.080,00 | 865020097X | ZN 1500L PED 12BAR ORIZZ | € 3.234,00 |
| 865020080X | ZN 2000L PED 12BAR VERT | € 3.780,00 | 865020098X | ZN 2000L PED 12BAR ORIZZ | € 3.970,00 |
| 865020081X | ZN 3000L PED 12BAR VERT | € 5.471,00 | 865020099X | ZN 3000L PED 12BAR ORIZZ | € 5.746,00 |
| 865020082X | ZN 3000B L PED 12BAR VERT | € 6.713,00 | 865020100X | ZN 3000B L PED 12BAR ORIZZ | € 7.049,00 |
| 865020083X | ZN 4000L PED 12BAR VERT | € 7.526,00 | 865020101X | ZN 4000L PED 12BAR ORIZZ | € 7.901,00 |
| 865020084X | ZN 5000L PED 12BAR VERT | € 9.143,00 | 865020102X | ZN 5000L PED 12BAR ORIZZ | € 9.600,00 |
| 865020085X | ZN 5000B L PED 12BAR VERT | € 10.171,00 | 865020103X | ZN 5000B L PED 12BAR ORIZZ | € 10.680,00 |
| 865020086X | ZN 6000L PED 12BAR VERT | € 10.274,00 | 865020104X | ZN 6000L PED 12BAR ORIZZ | € 10.788,00 |
| 865020087X | ZN 8000L PED 12BAR VERT | ◆ | 865020105X | ZN 8000L PED 12BAR ORIZZ | ◆ |
| 865020088X | ZN 10000L PED 12BAR VERT | ◆ | 865020106X | ZN 10000L PED 12BAR ORIZZ | ◆ |
| 865020089X | ZN 15000L PED 12BAR VERT | ◆ | 865020107X | ZN 15000L PED 12BAR ORIZZ | ◆ |
| 865020090X | ZN 20000L PED 12BAR VERT | ◆ | 865020108X | ZN 20000L PED 12BAR ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested pressurized autoclaves 16 bar HP series

The "HP" series consists of pressurized autoclaves, used in industrial installations to maintain constant pressure or to absorb water hammering.

The HP gamma is different from the AC series because of the max operating pressure which is higher in the HP series. The models, with CE label, are available in several capacities in function of the max operating pressure:

- 16 bar version: 100 up to 10.000 litres
- 18 bar version: 100 up to 5.000 litres
- 20 bar version: 4.000 up to 10.000 litres
- 25 bar version: 100 up to 9.500 litres
- 30 bar version: 800 up to 6.000 litres
- 35 bar version: 100 up to 3.000 litres
- 64 bar version: 100 up to 1.000 litres

✓ Special versions

The HP storage tanks can be modified on demand in order to meet your specific requirements.

✓ **Material:** carbon steel

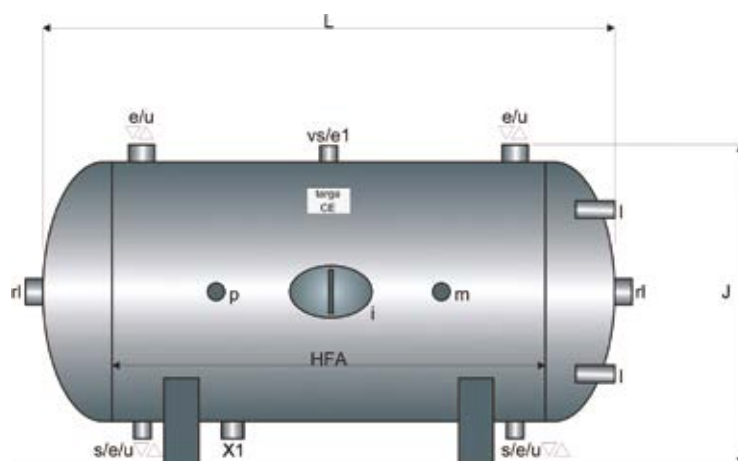
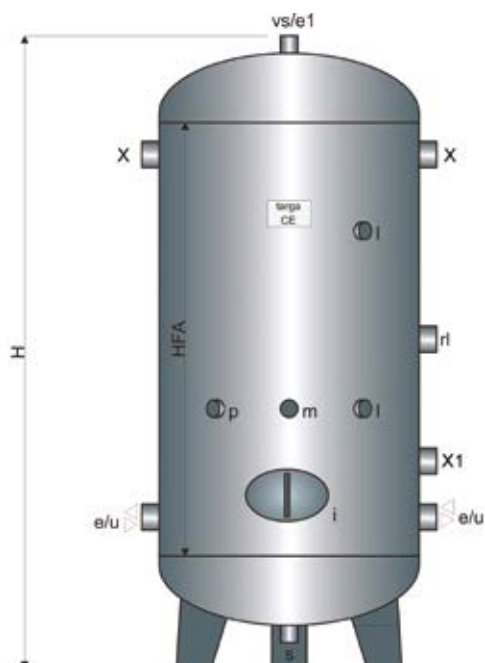
✓ **Protective treatment:** hot dip galvanizing and external coating

✓ **Operative conditions**

The storage tanks have a max pressure of 16, 18, 25, 30, 35, 64 bar and operating temperatures from -10 to 50°C.

Coupling

| | |
|----|---------------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| rl | level regulator |
| X | auxiliary of 1000 l |
| X1 | auxiliary of 4000 l |

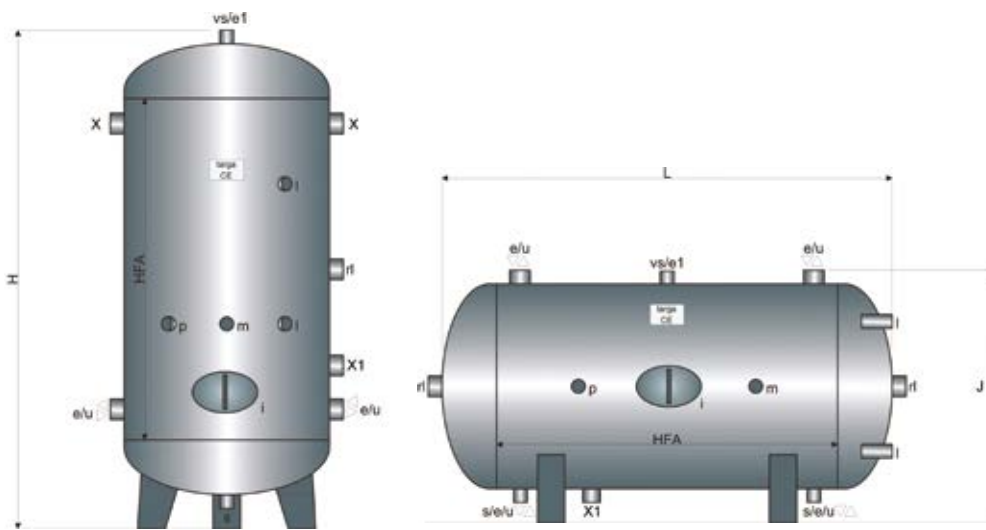


P.E.D. tested pressurized autoclaves 16 bar HP series

| Capacity l | Ø mm | H mm | L mm | J mm | e/u/x/x1 inch | L/m/p inch | rL/vs/s/e1 inch | i mm | weight mm |
|---------------|---------|---------|---------|---------|------------------|---------------|--------------------|---------|--------------|
| 100 | 350 | 1420 | 1240 | 530 | 1 | 1/2 | 1 1/4 | * | 43 |
| 200 | 450 | 1480 | 1300 | 630 | 1 | 1/2 | 1 1/4 | * | 62 |
| 300 | 500 | 1760 | 1580 | 680 | 1 | 1/2 | 1 1/4 | * | 99 |
| 500 | 650 | 1830 | 1650 | 830 | 1 1/2 | 1/2 | 1 1/4 | * | 144 |
| 800 | 800 | 1910 | 1730 | 980 | 2 | 1/2 | 1 1/4 | * | 232 |
| 1000 | 800 | 2360 | 2180 | 980 | 2 | 1/2 | 1 1/4 | * | 281 |
| 1500 | 950 | 2490 | 2310 | 1130 | 2 | 1/2 | 1 1/4 | * | 365 |
| 2000 | 1000 | 2800 | 2620 | 1180 | 2 | 1/2 | 1 1/4 | * | 481 |
| 2000 B | 1100 | 2590 | 2410 | 1280 | 2 | 1/2 | 1 1/4 | * | 485 |
| 2500 | 1250 | 2400 | 2220 | 1430 | 2 | 1/2 | 1 1/4 | * | 568 |
| 3000 | 1250 | 2900 | 2720 | 1430 | 2 1/2 | 1/2 | 1 1/4 | * | 670 |
| 3500 | 1400 | 2800 | 2620 | 1580 | 3 | 1/2 | 1 1/4 | *** | 820 |
| 4000 | 1400 | 3000 | 2820 | 1580 | 3 | 1/2 | 1 1/4 | **/** | 898 |
| 5000 | 1450 | 3530 | 3350 | 1630 | 3 | 1/2 | 1 1/4 | **/** | 1080 |
| 7000 | 1650 | 3620 | 3440 | 1830 | 3 | 1/2 | 1 1/4 | **/** | 1556 |
| 8000 | 1650 | 4120 | 3940 | 1830 | 4 | 1/2 | 1 1/4 | **/** | 1741 |
| 10000 | 1650 | 5120 | 4940 | 1830 | 4 | 1/2 | 1 1/4 | **/** | 2106 |

Inspection holes on demand *100x150mm **220x320, ***300x400
Weight and measurements are indicative and can be subject to changes

P.E.D. tested 18 bar pressurized autoclaves HP series



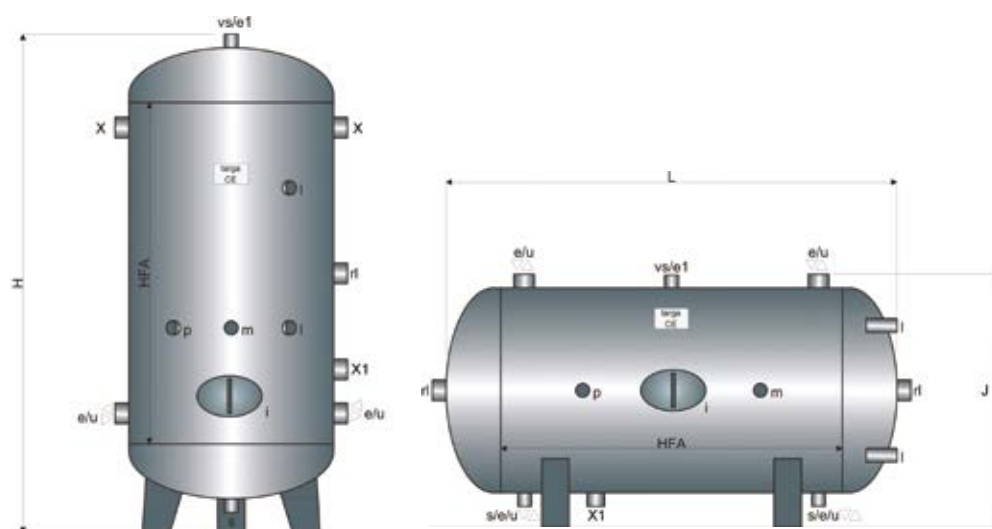
Couplings

| | |
|----|---------------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| rl | level regulator |
| X | auxiliary of 1000 l |
| X1 | auxiliary of 4000 l |

| Capacity l | Ø mm | H mm | L mm | J mm | e/u/x/x1 inch | L/m/p inch | rl/vs/s/e1 inch | i mm | weight mm |
|---------------|---------|---------|---------|---------|------------------|---------------|--------------------|---------|--------------|
| 100 | 350 | 1420 | 1240 | 530 | 1 | 1/2 | 1 1/4 | * | 82 |
| 200 | 450 | 1480 | 1300 | 630 | 1 | 1/2 | 1 1/4 | * | 110 |
| 300 | 500 | 1760 | 1580 | 680 | 1 | 1/2 | 1 1/4 | * | 146 |
| 500 | 650 | 1830 | 1650 | 830 | 1 1/2 | 1/2 | 1 1/4 | * | 199 |
| 800 | 800 | 1910 | 1730 | 980 | 2 | 1/2 | 1 1/4 | * | 259 |
| 1000 | 800 | 2360 | 2180 | 980 | 2 | 1/2 | 1 1/4 | * | 319 |
| 1500 | 950 | 2490 | 2310 | 1130 | 2 | 1/2 | 1 1/4 | * | 408 |
| 2000 | 1100 | 2590 | 2410 | 1280 | 2 | 1/2 | 1 1/4 | * | 516 |
| 2500 | 1250 | 2400 | 2220 | 1430 | 2 | 1/2 | 1 1/4 | * | 653 |
| 3000 | 1250 | 2900 | 2720 | 1430 | 2 1/2 | 1/2 | 1 1/4 | * | 772 |
| 4000 | 1400 | 3000 | 2820 | 1580 | 3 | 1/2 | 1 1/4 | * | 1067 |
| 5000 | 1450 | 3530 | 3350 | 1630 | 3 | 1/2 | 1 1/4 | * | 1279 |

Inspection holes on demand *100x150m **220x320, ***300x400
Weight and measurements are indicative and can be subject to changes

P.E.D. tested 20 bar pressurized autoclaves HP series



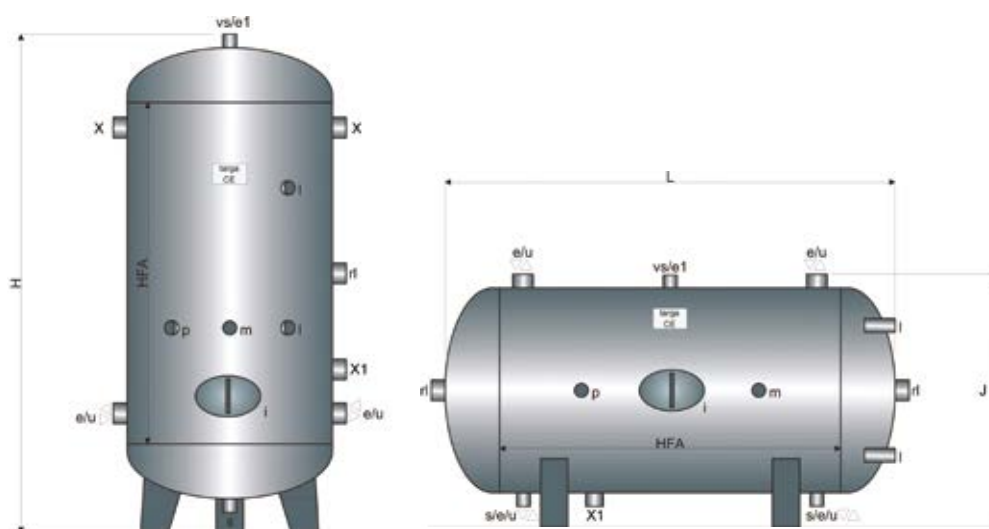
Couplings

- s discharge
- vs safety valve
- m manometer
- p pressostat
- i inspection
- e water inlet
- u water outlet
- e1 air inlet
- l level
- rl level regulator
- X auxiliary of 1000 l
- X1 auxiliary of 4000 l

| Capacity l | Ø mm | H mm | L mm | J mm | e/u/x/x1 inch | L/m/p inch | rl/vs/s/e1 inch | i mm | weight mm |
|---------------|---------|---------|---------|---------|------------------|---------------|--------------------|---------|--------------|
| 4000 | 1400 | 3000 | 2820 | 1580 | 3 | 1/2 | 1 1/4 | * | 1222 |
| 5000 | 1450 | 3520 | 3340 | 1630 | 3 | 1/2 | 1 1/4 | * | 1479 |
| 6000 | 1600 | 3400 | 3220 | 1780 | 3 | 1/2 | 1 1/4 | * | 1628 |
| 7000 | 1650 | 3640 | 3460 | 1830 | 4 | 1/2 | 1 1/4 | * | 1902 |
| 8000 | 1650 | 4140 | 3960 | 1830 | 4 | 1/2 | 1 1/4 | * | 2130 |
| 9000 | 1600 | 5100 | 4920 | 1780 | 4 | 1/2 | 1 1/4 | * | 2382 |
| 10000 | 1650 | 5140 | 4960 | 1830 | 4 | 1/2 | 1 1/4 | * | 2586 |

Inspection holes on demand *100x150mm **220x320, ***300x400
Weight and measurements are indicative and can be subject to changes

P.E.D. tested 25 bar pressurized autoclaves HP series



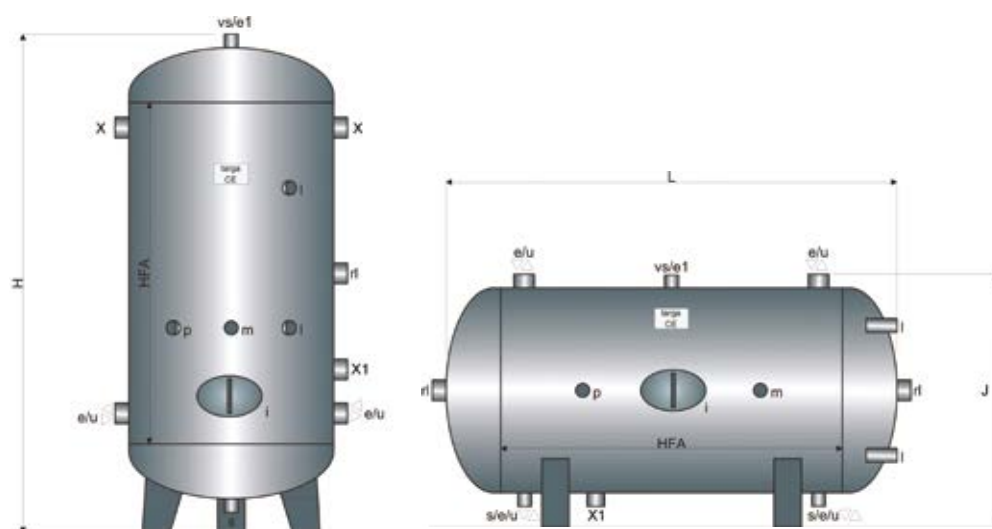
Couplings

| | |
|----|---------------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| rl | level regulator |
| X | auxiliary of 1000 l |
| X1 | auxiliary of 4000 l |

| Capacity l | Ø mm | H mm | L mm | J mm | e/u/x/x1 inch | L/m/p inch | rl/vs/s/e1 inch | i mm | weight mm |
|---------------|---------|---------|---------|---------|------------------|---------------|--------------------|---------|--------------|
| 100 | 350 | 1420 | 1240 | 530 | 1 | 1/2 | 1 1/4 | n.d. | 83 |
| 200 | 450 | 1480 | 1300 | 630 | 1 | 1/2 | 1 1/4 | n.d. | 111 |
| 300 | 500 | 1760 | 1580 | 680 | 1 | 1/2 | 1 1/4 | n.d. | 146 |
| 500 | 650 | 1830 | 1650 | 830 | 1 1/2 | 1/2 | 1 1/4 | n.d. | 200 |
| 800 | 800 | 1910 | 1730 | 980 | 2 | 1/2 | 1 1/4 | n.d. | 272 |
| 1000 | 800 | 2360 | 2180 | 980 | 2 | 1/2 | 1 1/4 | n.d. | 332 |
| 1500 | 950 | 2490 | 2310 | 1130 | 2 | 1/2 | 1 1/4 | *** | 544 |
| 2000 | 1000 | 2800 | 2620 | 1180 | 2 | 1/2 | 1 1/4 | **/** | 638 |
| 2000 B | 1100 | 2590 | 2410 | 1280 | 2 | 1/2 | 1 1/4 | **/** | 813 |
| 2500 | 1250 | 2422 | 2242 | 1430 | 2 | 1/2 | 1 1/4 | **/** | 882 |
| 3000 | 1250 | 2922 | 2742 | 1430 | 2 1/2 | 1/2 | 1 1/4 | **/** | 1054 |
| 3000 B | 1400 | 2510 | 2330 | 1580 | 2 1/2 | 1/2 | 1 1/4 | **/** | 1238 |
| 4000 | 1400 | 3010 | 2830 | 1580 | 3 | 1/2 | 1 1/4 | **/** | 1471 |
| 5000 | 1450 | 3540 | 3360 | 1630 | 3 | 1/2 | 1 1/4 | **/** | 1780 |
| 5000 B | 1650 | 2860 | 2680 | 1830 | 3 | 1/2 | 1 1/4 | **/** | 1934 |
| 6000 | 1450 | 4040 | 3860 | 1630 | 3 | 1/2 | 1 1/4 | **/** | 2061 |
| 6000 B | 1650 | 3160 | 2980 | 1830 | 3 | 1/2 | 1 1/4 | **/** | 2166 |
| 8000 | 1650 | 4160 | 3980 | 1830 | 4 | 1/2 | 1 1/4 | **/** | 2806 |
| 9500 | 1650 | 4660 | 4480 | 1830 | 4 | 1/2 | 1 1/4 | **/** | 3125 |

Inspection holes on demand *100x150mm **220x320, ***300x400
Weight and measurements are indicative and can be subject to changes

P.E.D. tested 30 bar pressurized autoclaves HP series



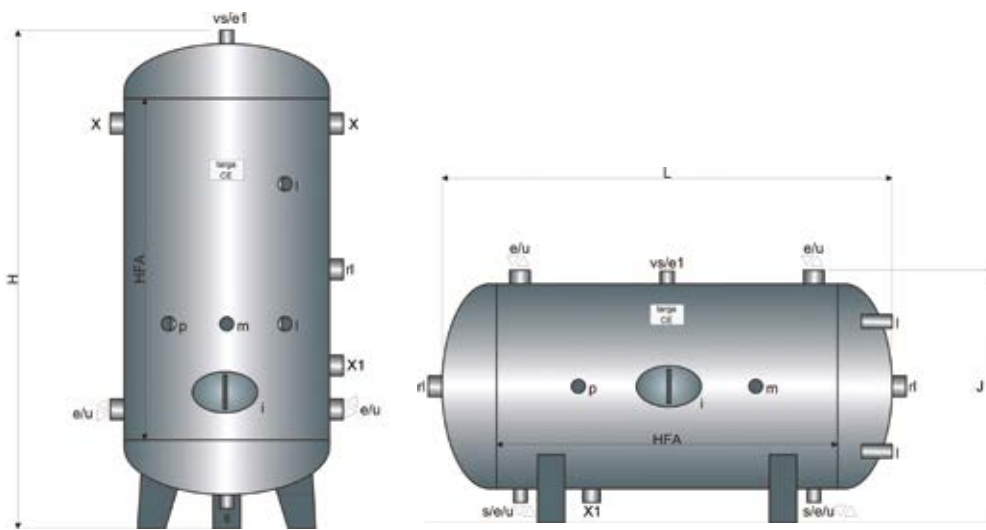
Couplings

- s discharge
- vs safety valve
- m manometer
- p pressostat
- i inspection
- e water inlet
- u water outlet
- e1 air inlet
- l level
- rl level regulator
- X auxiliary of 1000 l
- X1 auxiliary of 4000 l

| Capacity l | Ø mm | H mm | L mm | J mm | e/u/x/x1 inch | L/m/p inch | rl/vs/s/e1 inch | i mm | weight mm |
|---------------|---------|---------|---------|---------|------------------|---------------|--------------------|---------|--------------|
| 800 | 800 | 1930 | 1750 | 980 | 2 | 1/2 | 1 1/4 | * | 427 |
| 1000 | 800 | 2380 | 2200 | 980 | 2 | 1/2 | 1 1/4 | * | 527 |
| 1500 | 900 | 2750 | 2310 | 1130 | 2 | 1/2 | 1 1/4 | * | 695 |
| 2000 | 1100 | 2610 | 2430 | 1280 | 2 | 1/2 | 1 1/4 | * | 813 |
| 3000 | 1100 | 3360 | 3180 | 1280 | 2 1/2 | 1/2 | 1 1/4 | * | 1050 |
| 5000 | 1450 | 3560 | 3380 | 1630 | 3 | 1/2 | 1 1/4 | * | 2073 |
| 6000 | 1450 | 4060 | 3880 | 1630 | 3 | 1/2 | 1 1/4 | * | 2393 |

Inspection holes on demand *100x150mm **220x320, ***300x400
Weight and measurements are indicative and can be subject to changes

P.E.D. tested 35 bar pressurized autoclaves HP series



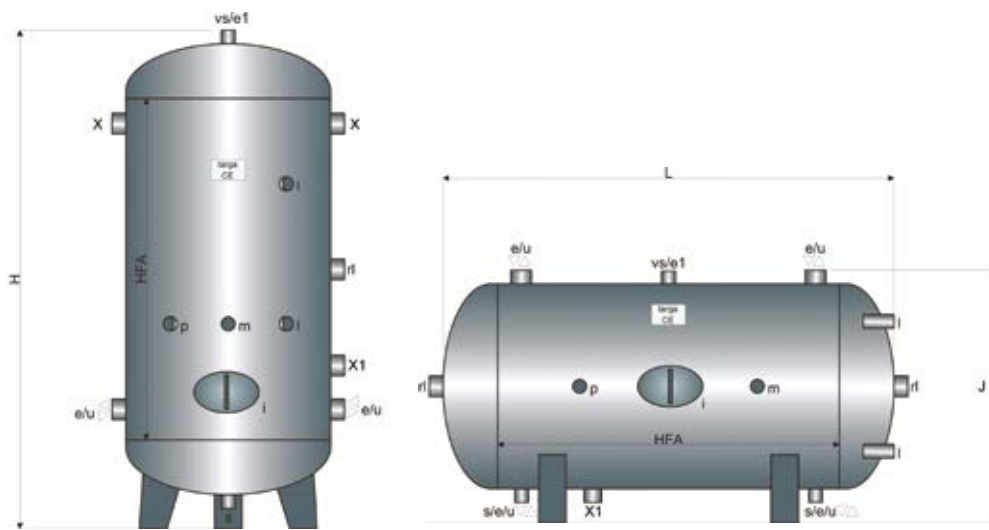
Couplings

| | |
|----|---------------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| rl | level regulator |
| X | auxiliary of 1000 l |

| Capacity l | Ø mm | H mm | L mm | J mm | e/u/x/x1 inch | L/m/p inch | rl/vs/s/e1 inch | i mm | weight mm |
|---------------|---------|---------|---------|---------|------------------|---------------|--------------------|---------|--------------|
| 100 | 350 | 1420 | 1240 | 530 | 1 | 1/2 | 1 1/4 | * | 81 |
| 200 | 450 | 1480 | 1300 | 630 | 1 | 1/2 | 1 1/4 | * | 109 |
| 300 | 500 | 1760 | 1580 | 680 | 1 | 1/2 | 1 1/4 | * | 144 |
| 500 | 650 | 1840 | 1660 | 830 | 1 1/2 | 1/2 | 1 1/4 | * | 229 |
| 800 | 800 | 1930 | 1750 | 980 | 2 | 1/2 | 1 1/4 | * | 427 |
| 1000 | 800 | 2380 | 2200 | 980 | 2 | 1/2 | 1 1/4 | * | 527 |
| 1500 | 950 | 2520 | 2340 | 1130 | 2 | 1/2 | 1 1/4 | * | 676 |
| 2000 | 1000 | 2810 | 2630 | 1180 | 2 | 1/2 | 1 1/4 | * | 954 |
| 2000 B | 1100 | 2630 | 2450 | 1280 | 2 | 1/2 | 1 1/4 | * | 982 |
| 2500 | 1250 | 2460 | 2280 | 1430 | 2 | 1/2 | 1 1/4 | * | 1238 |
| 3000 | 1250 | 2960 | 2780 | 1430 | 2 1/2 | 1/2 | 1 1/4 | * | 1476 |

Inspection holes on demand *100x150m **220x320, ***300x400
Weight and measurements are indicative and can be subject to changes

P.E.D. tested 64 bar pressurized autoclaves HP series



Couplings

- s discharge
- vs safety valve
- m manometer
- p pressostat
- i inspection
- e water inlet
- u water outlet
- e1 air inlet
- l level
- rl level regulator
- X auxiliary of 1000 l

| Capacity l | Ø mm | H mm | L mm | J mm | e/u/x/x1 inch | L/m/p inch | rl/vs/s/e1 inch | i mm | weight mm |
|---------------|---------|---------|---------|---------|------------------|---------------|--------------------|---------|--------------|
| 100 | 350 | 1440 | 1260 | 530 | 1 | 1/2 | 1 1/4 | * | 94 |
| 200 | 450 | 1510 | 1330 | 630 | 1 | 1/2 | 1 1/4 | * | 178 |
| 300 | 500 | 1794 | 1614 | 680 | 1 | 1/2 | 1 1/4 | * | 237 |
| 500 | 650 | 1890 | 1710 | 830 | 1 1/2 | 1/2 | 1 1/4 | * | 389 |
| 800 | 750 | 2220 | 2040 | 930 | 2 | 1/2 | 1 1/4 | * | 620 |
| 1000 | 750 | 2720 | 2540 | 930 | 2 | 1/2 | 1 1/4 | * | 765 |

Inspection holes on demand *100x150m **220x320, ***300x400
Weight and measurements are indicative and can be subject to changes

Product codes of P.E.D. tested 16/18/20 bar varnished autoclaves

PN 16 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|-------------|------------|-----------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865010109X | H.P. VERN 100L PED 16BAR VERT | € 1.428,00 | 865010132X | H.P. VERN 100L PED 16BAR ORIZZ | € 1.580,00 |
| 865010110X | H.P. VERN 200L PED 16BAR VERT | € 1.436,00 | 865010133X | H.P. VERN 200L PED 16BAR ORIZZ | € 1.974,00 |
| 865010111X | H.P. VERN 300L PED 16BAR VERT | € 1.794,00 | 865010134X | H.P. VERN 300L PED 16BAR ORIZZ | € 2.656,00 |
| 865010112X | H.P. VERN 500L PED 16BAR VERT | € 2.414,00 | 865010135X | H.P. VERN 500L PED 16BAR ORIZZ | € 3.449,00 |
| 865010113X | H.P. VERN 800L PED 16BAR VERT | € 3.135,00 | 865010136X | H.P. VERN 800L PED 16BAR ORIZZ | € 3.709,00 |
| 865010114X | H.P. VERN 1000L PED 16BAR VERT | € 3.371,00 | 865010137X | H.P. VERN 1000L PED 16BAR ORIZZ | € 4.761,00 |
| 865010115X | H.P. VERN 1500L PED 16BAR VERT | € 4.328,00 | 865010138X | H.P. VERN 1500L PED 16BAR ORIZZ | € 5.331,00 |
| 865010116X | H.P. VERN 2000L PED 16BAR VERT | € 4.846,00 | 865010139X | H.P. VERN 2000L PED 16BAR ORIZZ | € 5.481,00 |
| 865010117X | H.P. VERN 2000B L PED 16BAR VERT | € 4.982,00 | 865010140X | H.P. VERN 2000B L PED 16BAR ORIZZ | € 7.059,00 |
| 865010118X | H.P. VERN 2500L PED 16BAR VERT | € 6.417,00 | 865010141X | H.P. VERN 2500L PED 16BAR ORIZZ | € 7.246,00 |
| 865010119X | H.P. VERN 3000L PED 16BAR VERT | € 6.587,00 | 865010142X | H.P. VERN 3000L PED 16BAR ORIZZ | € 9.310,00 |
| 865010121X | H.P. VERN 3500L PED 16BAR VERT | € 8.463,00 | 865010144X | H.P. VERN 3500L PED 16BAR ORIZZ | € 9.531,00 |
| 865010122X | H.P. VERN 4000L PED 16BAR VERT | € 8.664,00 | 865010145X | H.P. VERN 4000L PED 16BAR ORIZZ | € 11.202,00 |
| 865010123X | H.P. VERN 5000L PED 16BAR VERT | € 10.183,00 | 865010146X | H.P. VERN 5000L PED 16BAR ORIZZ | ◆ |
| 865010127X | H.P. VERN 7000L PED 16BAR VERT | ◆ | 865010150X | H.P. VERN 7000L PED 16BAR ORIZZ | ◆ |
| 865010128X | H.P. VERN 8000L PED 16BAR VERT | ◆ | 865010151X | H.P. VERN 8000L PED 16BAR ORIZZ | ◆ |
| 865010131X | H.P. VERN 10000L PED 16BAR VERT | ◆ | 865010154X | H.P. VERN 10000L PED 16BAR ORIZZ | ◆ |

PN 18 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865010155X | H.P. VERN 100L PED 18BAR VERT | € 2.360,00 | 865010170X | H.P. VERN 100L PED 18BAR ORIZZ | € 2.596,00 |
| 865010156X | H.P. VERN 200L PED 18BAR VERT | € 2.555,00 | 865010171X | H.P. VERN 200L PED 18BAR ORIZZ | € 2.811,00 |
| 865010157X | H.P. VERN 300L PED 18BAR VERT | € 2.818,00 | 865010172X | H.P. VERN 300L PED 18BAR ORIZZ | € 3.100,00 |
| 865010158X | H.P. VERN 500L PED 18BAR VERT | € 3.092,00 | 865010173X | H.P. VERN 500L PED 18BAR ORIZZ | € 3.402,00 |
| 865010159X | H.P. VERN 800L PED 18BAR VERT | € 3.649,00 | 865010174X | H.P. VERN 800L PED 18BAR ORIZZ | € 4.014,00 |
| 865010160X | H.P. VERN 1000L PED 18BAR VERT | € 3.872,00 | 865010175X | H.P. VERN 1000L PED 18BAR ORIZZ | € 4.260,00 |
| 865010161X | H.P. VERN 1500L PED 18BAR VERT | € 5.183,00 | 865010176X | H.P. VERN 1500L PED 18BAR ORIZZ | € 5.702,00 |
| 865010162X | H.P. VERN 2000L PED 18BAR VERT | € 5.912,00 | 865010177X | H.P. VERN 2000L PED 18BAR ORIZZ | € 6.504,00 |
| 865010164X | H.P. VERN 2500L PED 18BAR VERT | € 7.557,00 | 865010179X | H.P. VERN 2500L PED 18BAR ORIZZ | € 8.313,00 |
| 865010165X | H.P. VERN 3000L PED 18BAR VERT | € 7.599,00 | 865010180X | H.P. VERN 3000L PED 18BAR ORIZZ | € 8.359,00 |
| 865010168X | H.P. VERN 4000L PED 18BAR VERT | € 9.615,00 | 865010183X | H.P. VERN 4000L PED 18BAR ORIZZ | € 10.577,00 |
| 865010169X | H.P. VERN 5000L PED 18BAR VERT | € 11.570,00 | 865010184X | H.P. VERN 5000L PED 18BAR ORIZZ | € 12.727,00 |

PN 20 bar

| Vertical | | | Horizontal | | |
|------------|---------------------------------|-------------|------------|----------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865010198X | H.P. VERN 4000L PED 20BAR VERT | € 12.056,00 | 865010221X | H.P. VERN 4000L PED 20BAR ORIZZ | € 13.262,00 |
| 865010199X | H.P. VERN 5000L PED 20BAR VERT | € 15.362,00 | 865010222X | H.P. VERN 5000L PED 20BAR ORIZZ | € 16.899,00 |
| 865010201X | H.P. VERN 6000L PED 20BAR VERT | € 18.153,00 | 865010224X | H.P. VERN 6000L PED 20BAR ORIZZ | ◆ |
| 865010203X | H.P. VERN 7000L PED 20BAR VERT | ◆ | 865010226X | H.P. VERN 7000L PED 20BAR ORIZZ | € 19.969,00 |
| 865010204X | H.P. VERN 8000L PED 20BAR VERT | ◆ | 865010227X | H.P. VERN 8000L PED 20BAR ORIZZ | ◆ |
| 865010205X | H.P. VERN 9000L PED 20BAR VERT | ◆ | 865010228X | H.P. VERN 9000L PED 20BAR ORIZZ | ◆ |
| 865010207X | H.P. VERN 10000L PED 20BAR VERT | ◆ | 865010230X | H.P. VERN 10000L PED 20BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested 25/30 bar varnished autoclaves

PN 25 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|------------|------------|-----------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865010231X | H.P. VERN 100L PED 25BAR VERT | € 2.321,00 | 865010254X | H.P. VERN 100L PED 25BAR ORIZZ | ◆ |
| 865010232X | H.P. VERN 200L PED 25BAR VERT | € 2.516,00 | 865010255X | H.P. VERN 200L PED 25BAR ORIZZ | ◆ |
| 865010233X | H.P. VERN 300L PED 25BAR VERT | € 2.899,00 | 865010256X | H.P. VERN 300L PED 25BAR ORIZZ | € 2.554,00 |
| 865010234X | H.P. VERN 500L PED 25BAR VERT | € 3.388,00 | 865010257X | H.P. VERN 500L PED 25BAR ORIZZ | € 2.768,00 |
| 865010235X | H.P. VERN 800L PED 25BAR VERT | € 4.445,00 | 865010258X | H.P. VERN 800L PED 25BAR ORIZZ | € 3.189,00 |
| 865010236X | H.P. VERN 1000L PED 25BAR VERT | € 4.733,00 | 865010259X | H.P. VERN 1000L PED 25BAR ORIZZ | € 3.727,00 |
| 865010237X | H.P. VERN 1500L PED 25BAR VERT | € 6.164,00 | 865010260X | H.P. VERN 1500L PED 25BAR ORIZZ | € 4.890,00 |
| 865010238X | H.P. VERN 2000L PED 25BAR VERT | € 6.727,00 | 865010261X | H.P. VERN 2000L PED 25BAR ORIZZ | € 5.207,00 |
| 865010239X | H.P. VERN 2000B L PED 25BAR VERT | € 8.346,00 | 865010262X | H.P. VERN 2000B L PED 25BAR ORIZZ | € 6.781,00 |
| 865010240X | H.P. VERN 2500L PED 25BAR VERT | € 8.931,00 | 865010263X | H.P. VERN 2500L PED 25BAR ORIZZ | € 7.400,00 |
| 865010241X | H.P. VERN 3000L PED 25BAR VERT | € 8.972,00 | 865010264X | H.P. VERN 3000L PED 25BAR ORIZZ | € 9.181,00 |
| 865010242X | H.P. VERN 3000B L PED 25BAR VERT | ◆ | 865010265X | H.P. VERN 3000B L PED 25BAR ORIZZ | € 9.825,00 |
| 865010244X | H.P. VERN 4000L PED 25BAR VERT | ◆ | 865010267X | H.P. VERN 4000L PED 25BAR ORIZZ | € 9.870,00 |
| 865010245X | H.P. VERN 5000L PED 25BAR VERT | ◆ | 865010268X | H.P. VERN 5000L PED 25BAR ORIZZ | ◆ |
| 865010246X | H.P. VERN 5000B L PED 25BAR VERT | ◆ | 865010269X | H.P. VERN 5000B L PED 25BAR ORIZZ | ◆ |
| 865010247X | H.P. VERN 6000L PED 25BAR VERT | ◆ | 865010270X | H.P. VERN 6000L PED 25BAR ORIZZ | ◆ |
| 865010248X | H.P. VERN 6000B L PED 25BAR VERT | ◆ | 865010271X | H.P. VERN 6000B L PED 25BAR ORIZZ | ◆ |
| 865010250X | H.P. VERN 8000L PED 25BAR VERT | ◆ | 865010273X | H.P. VERN 8000L PED 25BAR ORIZZ | ◆ |
| 865010252X | H.P. VERN 9500L PED 25BAR VERT | ◆ | 865010285X | H.P. VERN 9500L PED 25BAR ORIZZ | ◆ |

PN 30 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|------------|------------|---------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865010281X | H.P. VERN 800L PED 30BAR VERT | € 5.429,00 | 865010295X | H.P. VERN 800L PED 30BAR ORIZZ | ◆ |
| 865010282X | H.P. VERN 1000L PED 30BAR VERT | € 4.971,00 | 865010296X | H.P. VERN 1000L PED 30BAR ORIZZ | ◆ |
| 865010283X | H.P. VERN 1500L PED 30BAR VERT | € 6.839,00 | 865010297X | H.P. VERN 1500L PED 30BAR ORIZZ | € 5.972,00 |
| 865010284X | H.P. VERN 2000L PED 30BAR VERT | € 7.747,00 | 865010298X | H.P. VERN 2000L PED 30BAR ORIZZ | € 5.469,00 |
| 865010287X | H.P. VERN 3000L PED 30BAR VERT | € 8.838,00 | 865010301X | H.P. VERN 3000L PED 30BAR ORIZZ | € 7.523,00 |
| 865010289X | H.P. VERN 5000L PED 30BAR VERT | ◆ | 865010303X | H.P. VERN 5000L PED 30BAR ORIZZ | € 8.522,00 |
| 865010290X | H.P. VERN 6000L PED 30BAR VERT | ◆ | 865010304X | H.P. VERN 6000L PED 30BAR ORIZZ | € 9.722,00 |

◆ Request quotation

Product codes of P.E.D. tested 35/64 bar varnished autoclaves

PN 35 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|------------|------------|-----------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865010305X | H.P. VERN 100L PED 35BAR VERT | € 3.293,00 | 865010316X | H.P. VERN 100L PED 35BAR ORIZZ | ◆ |
| 865010306X | H.P. VERN 200L PED 35BAR VERT | € 3.332,00 | 865010317X | H.P. VERN 200L PED 35BAR ORIZZ | ◆ |
| 865010307X | H.P. VERN 300L PED 35BAR VERT | € 3.807,00 | 865010318X | H.P. VERN 300L PED 35BAR ORIZZ | € 3.623,00 |
| 865010308X | H.P. VERN 500L PED 35BAR VERT | € 4.873,00 | 865010319X | H.P. VERN 500L PED 35BAR ORIZZ | € 3.666,00 |
| 865010309X | H.P. VERN 800L PED 35BAR VERT | € 5.965,00 | 865010320X | H.P. VERN 800L PED 35BAR ORIZZ | € 4.188,00 |
| 865010310X | H.P. VERN 1000L PED 35BAR VERT | € 6.572,00 | 865010321X | H.P. VERN 1000L PED 35BAR ORIZZ | € 5.361,00 |
| 865010311X | H.P. VERN 1500L PED 35BAR VERT | € 8.271,00 | 865010322X | H.P. VERN 1500L PED 35BAR ORIZZ | € 6.562,00 |
| 865010312X | H.P. VERN 2000L PED 35BAR VERT | ◆ | 865010323X | H.P. VERN 2000L PED 35BAR ORIZZ | € 7.230,00 |
| 865010313X | H.P. VERN 2000B L PED 35BAR VERT | ◆ | 865010324X | H.P. VERN 2000B L PED 35BAR ORIZZ | € 9.099,00 |
| 865010314X | H.P. VERN 2500L PED 35BAR VERT | ◆ | 865010325X | H.P. VERN 2500L PED 35BAR ORIZZ | ◆ |
| 865010315X | H.P. VERN 3000L PED 35BAR VERT | ◆ | 865010326X | H.P. VERN 3000L PED 35BAR ORIZZ | ◆ |

PN 64 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------|------------|---------------------------------|-------|
| Code | Description | Price | Code | Description | Price |
| 865010327X | H.P. VERN 100L PED 64BAR VERT | ◆ | 865010333X | H.P. VERN 100L PED 64BAR ORIZZ | ◆ |
| 865010328X | H.P. VERN 200L PED 64BAR VERT | ◆ | 865010334X | H.P. VERN 200L PED 64BAR ORIZZ | ◆ |
| 865010329X | H.P. VERN 300L PED 64BAR VERT | ◆ | 865010325X | H.P. VERN 300L PED 64BAR ORIZZ | ◆ |
| 865010330X | H.P. VERN 500L PED 64BAR VERT | ◆ | 865010336X | H.P. VERN 500L PED 64BAR ORIZZ | ◆ |
| 865010331X | H.P. VERN 800L PED 64BAR VERT | ◆ | 865010337X | H.P. VERN 800L PED 64BAR ORIZZ | ◆ |
| 865010332X | H.P. VERN 1000L PED 64BAR VERT | ◆ | 865010338X | H.P. VERN 1000L PED 64BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested 16/18/20 bar galvanized autoclaves

PN 16 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020109X | H.P. ZN 100L PED 16BAR VERT | € 1.245,00 | 865020132X | H.P. ZN 100L PED 16BAR ORIZZ | € 1.369,50 |
| 865020110X | H.P. ZN 200L PED 16BAR VERT | € 1.338,00 | 865020133X | H.P. ZN 200L PED 16BAR ORIZZ | € 1.471,80 |
| 865020111X | H.P. ZN 300L PED 16BAR VERT | € 1.723,00 | 865020134X | H.P. ZN 300L PED 16BAR ORIZZ | € 1.895,30 |
| 865020112X | H.P. ZN 500L PED 16BAR VERT | € 2.141,00 | 865020135X | H.P. ZN 500L PED 16BAR ORIZZ | € 2.355,10 |
| 865020113X | H.P. ZN 800L PED 16BAR VERT | € 3.074,00 | 865020136X | H.P. ZN 800L PED 16BAR ORIZZ | € 3.381,40 |
| 865020114X | H.P. ZN 1000L PED 16BAR VERT | € 3.379,00 | 865020137X | H.P. ZN 1000L PED 16BAR ORIZZ | € 3.716,90 |
| 865020115X | H.P. ZN 1500L PED 16BAR VERT | € 4.571,00 | 865020138X | H.P. ZN 1500L PED 16BAR ORIZZ | € 5.028,10 |
| 865020116X | H.P. ZN 2000L PED 16BAR VERT | € 5.150,00 | 865020139X | H.P. ZN 2000L PED 16BAR ORIZZ | € 5.665,00 |
| 865020117X | H.P. ZN 2000B L PED 16BAR VERT | € 5.300,00 | 865020140X | H.P. ZN 2000B L PED 16BAR ORIZZ | € 5.830,00 |
| 865020118X | H.P. ZN 2500L PED 16BAR VERT | € 6.725,00 | 865020141X | H.P. ZN 2500L PED 16BAR ORIZZ | € 7.397,50 |
| 865020119X | H.P. ZN 3000L PED 16BAR VERT | € 7.050,00 | 865020142X | H.P. ZN 3000L PED 16BAR ORIZZ | € 7.755,00 |
| 865020121X | H.P. ZN 3500L PED 16BAR VERT | € 9.663,00 | 865020144X | H.P. ZN 3500L PED 16BAR ORIZZ | € 10.629,30 |
| 865020122X | H.P. ZN 4000L PED 16BAR VERT | € 10.038,00 | 865020145X | H.P. ZN 4000L PED 16BAR ORIZZ | € 11.041,80 |
| 865020123X | H.P. ZN 5000L PED 16BAR VERT | € 11.500,00 | 865020146X | H.P. ZN 5000L PED 16BAR ORIZZ | € 12.650,00 |
| 865020127X | H.P. ZN 7000L PED 16BAR VERT | ◆ | 865020150X | H.P. ZN 7000L PED 16BAR ORIZZ | ◆ |
| 865020128X | H.P. ZN 8000L PED 16BAR VERT | ◆ | 865020151X | H.P. ZN 8000L PED 16BAR ORIZZ | ◆ |
| 865020131X | H.P. ZN 10000L PED 16BAR VERT | ◆ | 865020154X | H.P. ZN 10000L PED 16BAR ORIZZ | ◆ |

PN 18 bar

| Vertical | | | Horizontal | | |
|------------|------------------------------|-------------|------------|-------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020155X | H.P. ZN 100L PED 18BAR VERT | € 2.075,00 | 865020170X | H.P. ZN 100L PED 18BAR ORIZZ | € 2.282,50 |
| 865020156X | H.P. ZN 200L PED 18BAR VERT | € 2.371,00 | 865020171X | H.P. ZN 200L PED 18BAR ORIZZ | € 2.608,10 |
| 865020157X | H.P. ZN 300L PED 18BAR VERT | € 2.663,00 | 865020172X | H.P. ZN 300L PED 18BAR ORIZZ | € 2.929,30 |
| 865020158X | H.P. ZN 500L PED 18BAR VERT | € 2.994,00 | 865020173X | H.P. ZN 500L PED 18BAR ORIZZ | € 3.293,40 |
| 865020159X | H.P. ZN 800L PED 18BAR VERT | € 3.564,00 | 865020174X | H.P. ZN 800L PED 18BAR ORIZZ | € 3.920,40 |
| 865020160X | H.P. ZN 1000L PED 18BAR VERT | € 3.948,00 | 865020175X | H.P. ZN 1000L PED 18BAR ORIZZ | € 4.342,80 |
| 865020161X | H.P. ZN 1500L PED 18BAR VERT | € 5.230,00 | 865020176X | H.P. ZN 1500L PED 18BAR ORIZZ | € 5.753,00 |
| 865020162X | H.P. ZN 2000L PED 18BAR VERT | € 6.050,00 | 865020177X | H.P. ZN 2000L PED 18BAR ORIZZ | € 6.655,00 |
| 865020164X | H.P. ZN 2500L PED 18BAR VERT | € 7.990,00 | 865020179X | H.P. ZN 2500L PED 18BAR ORIZZ | € 8.789,00 |
| 865020165X | H.P. ZN 3000L PED 18BAR VERT | € 8.335,00 | 865020180X | H.P. ZN 3000L PED 18BAR ORIZZ | € 9.168,50 |
| 865020168X | H.P. ZN 4000L PED 18BAR VERT | € 10.426,00 | 865020183X | H.P. ZN 4000L PED 18BAR ORIZZ | € 11.468,60 |
| 865020169X | H.P. ZN 5000L PED 18BAR VERT | € 12.950,00 | 865020184X | H.P. ZN 5000L PED 18BAR ORIZZ | € 14.245,00 |

PN 20 bar

| Vertical | | | Horizontal | | |
|------------|-------------------------------|-------------|------------|--------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020198X | H.P. ZN 4000L PED 20BAR VERT | € 14.375,00 | 865020221X | H.P. ZN 4000L PED 20BAR ORIZZ | € 15.812,50 |
| 865020199X | H.P. ZN 5000L PED 20BAR VERT | € 17.969,00 | 865020222X | H.P. ZN 5000L PED 20BAR ORIZZ | € 19.765,90 |
| 865020201X | H.P. ZN 6000L PED 20BAR VERT | € 20.413,00 | 865020224X | H.P. ZN 6000L PED 20BAR ORIZZ | € 22.454,30 |
| 865020203X | H.P. ZN 7000L PED 20BAR VERT | ◆ | 865020226X | H.P. ZN 7000L PED 20BAR ORIZZ | ◆ |
| 865020204X | H.P. ZN 8000L PED 20BAR VERT | ◆ | 865020227X | H.P. ZN 8000L PED 20BAR ORIZZ | ◆ |
| 865020205X | H.P. ZN 9000L PED 20BAR VERT | ◆ | 865020228X | H.P. ZN 9000L PED 20BAR ORIZZ | ◆ |
| 865020207X | H.P. ZN 10000L PED 20BAR VERT | ◆ | 865020230X | H.P. ZN 10000L PED 20BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested 25/30 bar galvanized autoclaves

PN 25 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020231X | H.P. ZN 100L PED 25BAR VERT | € 2.171,00 | 865020254X | H.P. ZN 100L PED 25BAR ORIZZ | € 2.388,10 |
| 865020232X | H.P. ZN 200L PED 25BAR VERT | € 2.448,00 | 865020255X | H.P. ZN 200L PED 25BAR ORIZZ | € 2.692,80 |
| 865020233X | H.P. ZN 300L PED 25BAR VERT | € 2.750,00 | 865020256X | H.P. ZN 300L PED 25BAR ORIZZ | € 3.025,00 |
| 865020234X | H.P. ZN 500L PED 25BAR VERT | € 3.286,00 | 865020257X | H.P. ZN 500L PED 25BAR ORIZZ | € 3.614,60 |
| 865020235X | H.P. ZN 800L PED 25BAR VERT | € 4.284,00 | 865020258X | H.P. ZN 800L PED 25BAR ORIZZ | € 4.712,40 |
| 865020236X | H.P. ZN 1000L PED 25BAR VERT | € 4.686,00 | 865020259X | H.P. ZN 1000L PED 25BAR ORIZZ | € 5.154,60 |
| 865020237X | H.P. ZN 1500L PED 25BAR VERT | € 6.174,00 | 865020260X | H.P. ZN 1500L PED 25BAR ORIZZ | € 6.791,40 |
| 865020238X | H.P. ZN 2000L PED 25BAR VERT | € 6.875,00 | 865020261X | H.P. ZN 2000L PED 25BAR ORIZZ | € 7.562,50 |
| 865020239X | H.P. ZN 2000B L PED 25BAR VERT | € 8.800,00 | 865020262X | H.P. ZN 2000B L PED 25BAR ORIZZ | € 9.680,00 |
| 865020240X | H.P. ZN 2500L PED 25BAR VERT | € 9.625,00 | 865020263X | H.P. ZN 2500L PED 25BAR ORIZZ | € 10.587,50 |
| 865020241X | H.P. ZN 3000L PED 25BAR VERT | € 10.038,00 | 865020264X | H.P. ZN 3000L PED 25BAR ORIZZ | € 11.041,80 |
| 865020242X | H.P. ZN 3000B L PED 25BAR VERT | ◆ | 865020265X | H.P. ZN 3000B L PED 25BAR ORIZZ | ◆ |
| 865020244X | H.P. ZN 4000L PED 25BAR VERT | ◆ | 865020267X | H.P. ZN 4000L PED 25BAR ORIZZ | ◆ |
| 865020245X | H.P. ZN 5000L PED 25BAR VERT | ◆ | 865020268X | H.P. ZN 5000L PED 25BAR ORIZZ | ◆ |
| 865020246X | H.P. ZN 5000B L PED 25BAR VERT | ◆ | 865020269X | H.P. ZN 5000B L PED 25BAR ORIZZ | ◆ |
| 865020247X | H.P. ZN 6000L PED 25BAR VERT | ◆ | 865020270X | H.P. ZN 6000L PED 25BAR ORIZZ | ◆ |
| 865020248X | H.P. ZN 6000B L PED 25BAR VERT | ◆ | 865020271X | H.P. ZN 6000B L PED 25BAR ORIZZ | ◆ |
| 865020250x | H.P. ZN 8000L PED 25BAR VERT | ◆ | 865020273X | H.P. ZN 8000L PED 25BAR ORIZZ | ◆ |
| 865020252x | H.P. ZN 9500L PED 25BAR VERT | ◆ | 865020285X | H.P. ZN 9500L PED 25BAR ORIZZ | ◆ |

PN 30 bar

| Vertical | | | Horizontal | | |
|------------|------------------------------|-------------|------------|-------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 865020281X | H.P. ZN 800L PED 30BAR VERT | € 6.148,00 | 865020295X | H.P. ZN 800L PED 30BAR ORIZZ | € 6.762,80 |
| 865020282X | H.P. ZN 1000L PED 30BAR VERT | € 6.570,00 | 865020296X | H.P. ZN 1000L PED 30BAR ORIZZ | € 7.227,00 |
| 865020283X | H.P. ZN 1500L PED 30BAR VERT | € 8.123,00 | 865020297X | H.P. ZN 1500L PED 30BAR ORIZZ | € 8.935,30 |
| 865020284X | H.P. ZN 2000L PED 30BAR VERT | € 9.401,00 | 865020298X | H.P. ZN 2000L PED 30BAR ORIZZ | € 10.341,10 |
| 865020287X | H.P. ZN 3000L PED 30BAR VERT | € 10.896,00 | 865020301X | H.P. ZN 3000L PED 30BAR ORIZZ | € 11.985,60 |
| 865020289X | H.P. ZN 5000L PED 30BAR VERT | ◆ | 865020303X | H.P. ZN 5000L PED 30BAR ORIZZ | ◆ |
| 865020290X | H.P. ZN 6000L PED 30BAR VERT | ◆ | 865020304X | H.P. ZN 6000L PED 30BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested 35/64 bar galvanized autoclaves

PN 35 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|------------|------------|---------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865020305X | H.P. ZN 100L PED 35BAR VERT | € 2.685,00 | 865020316X | H.P. ZN 100L PED 35BAR ORIZZ | € 2.953,50 |
| 865020306X | H.P. ZN 200L PED 35BAR VERT | € 2.933,00 | 865020317X | H.P. ZN 200L PED 35BAR ORIZZ | € 3.226,30 |
| 865020307X | H.P. ZN 300L PED 35BAR VERT | € 3.450,00 | 865020318X | H.P. ZN 300L PED 35BAR ORIZZ | € 3.795,00 |
| 865020308X | H.P. ZN 500L PED 35BAR VERT | € 4.290,00 | 865020319X | H.P. ZN 500L PED 35BAR ORIZZ | € 4.719,00 |
| 865020309X | H.P. ZN 800L PED 35BAR VERT | € 6.148,00 | 865020320X | H.P. ZN 800L PED 35BAR ORIZZ | € 6.762,80 |
| 865020310X | H.P. ZN 1000L PED 35BAR VERT | € 6.904,00 | 865020321X | H.P. ZN 1000L PED 35BAR ORIZZ | € 7.594,40 |
| 865020311X | H.P. ZN 1500L PED 35BAR VERT | € 7.113,00 | 865020322X | H.P. ZN 1500L PED 35BAR ORIZZ | € 7.824,30 |
| 865020312X | H.P. ZN 2000L PED 35BAR VERT | ◆ | 865020323X | H.P. ZN 2000L PED 35BAR ORIZZ | ◆ |
| 865020313X | H.P. ZN 2000B L PED 35BAR VERT | ◆ | 865020324X | H.P. ZN 2000B L PED 35BAR ORIZZ | ◆ |
| 865020314X | H.P. ZN 2500L PED 35BAR VERT | ◆ | 865020325X | H.P. ZN 2500L PED 35BAR ORIZZ | ◆ |
| 865020315X | H.P. ZN 3000L PED 35BAR VERT | ◆ | 865020326X | H.P. ZN 3000L PED 35BAR ORIZZ | ◆ |

PN 64 bar

| Vertical | | | Horizontal | | |
|------------|------------------------------|------------|------------|-------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 865020327X | H.P. ZN 100L PED 64BAR VERT | € 3.868,00 | 865020333X | H.P. ZN 100L PED 64BAR ORIZZ | € 4.254,80 |
| 865020328X | H.P. ZN 200L PED 64BAR VERT | € 4.558,00 | 865020334X | H.P. ZN 200L PED 64BAR ORIZZ | € 5.013,80 |
| 865020329X | H.P. ZN 300L PED 64BAR VERT | € 5.075,00 | 865020325X | H.P. ZN 300L PED 64BAR ORIZZ | € 5.582,50 |
| 865020330X | H.P. ZN 500L PED 64BAR VERT | ◆ | 865020336X | H.P. ZN 500L PED 64BAR ORIZZ | ◆ |
| 865020331X | H.P. ZN 800L PED 64BAR VERT | ◆ | 865020337X | H.P. ZN 800L PED 64BAR ORIZZ | ◆ |
| 865020332X | H.P. ZN 1000L PED 64BAR VERT | ◆ | 865020338X | H.P. ZN 1000L PED 64BAR ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested pressurized air tanks

8, 11, 12 bar – AK series

The AK pressurized air tanks are indispensable in systems that distribute compressed air. The tanks guarantee a constant flow, reduce the compressor start-ups and ensure a stable pressure in the entire distribution net to compensate consumption peaks (ex. Installations assembled in series). The models, with CE label, are available in capacities of 300 up to 20.000 litres in the vertical, the horizontal, the 8 bar, the 11 bar, the 12 bar, the zincate and the varnished version.

✓ Special versions

The AK storage tanks can be modified on demand in order to meet your specific requirements.

✓ **Material:** carbon steel

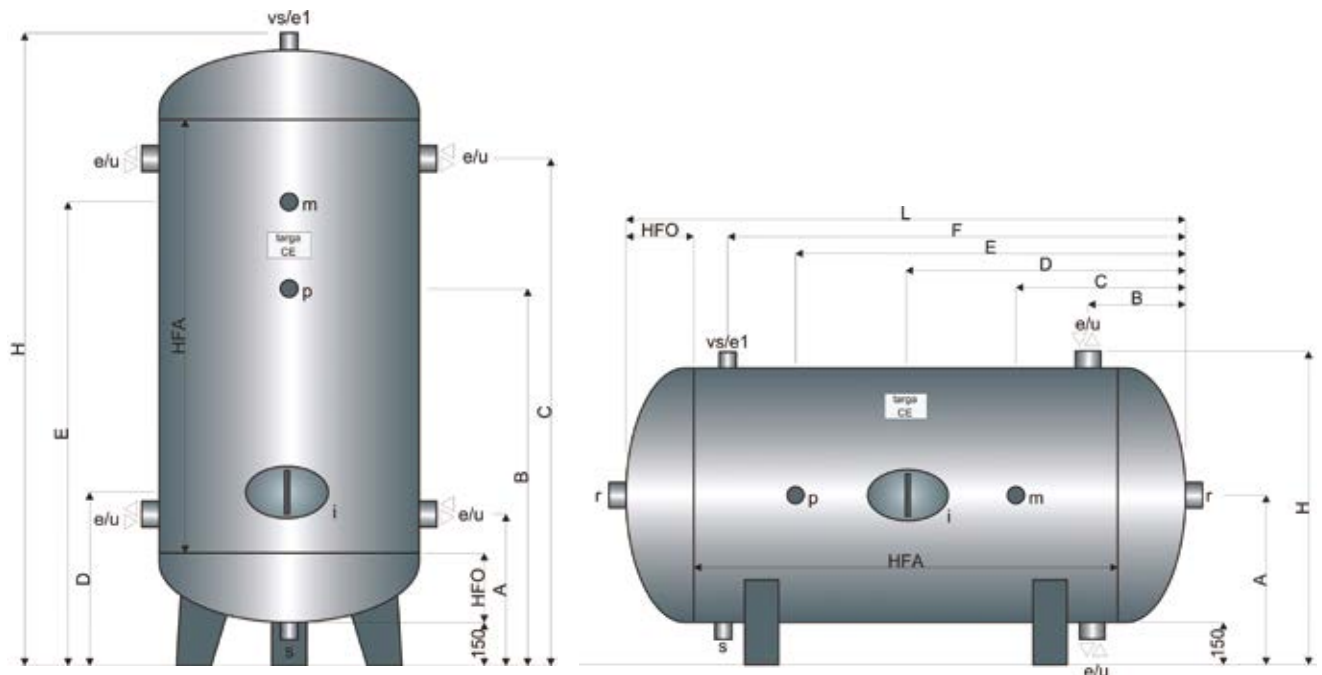
✓ **Protective treatment:** hot dip galvanizing and external coating

✓ **Operative conditions**

The storage tanks have a max pressure of 8, 11 and 12 bar and operating temperatures from -10 to +50°C.

Connections

| | |
|----|---------------------|
| s | Discharge |
| vs | Safety valve |
| m | Pressure gauge |
| p | Pressure controller |
| i | Inspection hole |
| e | Water inlet |
| u | Water outlet |
| e1 | Air inlet |
| l | Level |
| r | back-up |



P.E.D. tested pressurized air tanks

8, 11, 12 bar – AK series

Vertical

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | H mm | weight kg | e/u (*) inch | vs/s/e1 (*) inch | m/p (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|--------------|-----------------|---------------------|-----------------|---------|
| 300 | 500 | 165 | 1250 | 415 | 1065 | 1465 | 465 | 1365 | 1760 | 75 | 1 | 1 1/4 | 1/2 | * |
| 500 | 650 | 200 | 1250 | 450 | 1100 | 1500 | 500 | 1400 | 1830 | 102 | 1 1/2 | 1 1/4 | 1/2 | * |
| 800 | 800 | 240 | 1250 | 490 | 1140 | 1540 | 540 | 1440 | 1910 | 151 | 2 | 1 1/4 | 1/2 | * |
| 1000 | 800 | 240 | 1650 | 490 | 1540 | 1940 | 540 | 1840 | 2310 | 177 | 2 | 1 1/4 | 1/2 | * |
| 1500 | 950 | 280 | 1750 | 550 | 1680 | 2060 | 580 | 1980 | 2490 | 232 | 2 | 1 1/4 | 1/2 | * |
| 2000 | 1100 | 310 | 1750 | 580 | 1710 | 2090 | 610 | 2010 | 2550 | 353 | 2 | 1 1/4 | 1/2 | */** |
| 3000 | 1250 | 350 | 2000 | 640 | 2000 | 2360 | 650 | 2300 | 2880 | 466 | 2 1/2 | 1 1/4 | 1/2 | */** |
| 4000 | 1400 | 390 | 2000 | 680 | 2040 | 2400 | 690 | 2340 | 2960 | 660 | 3 | 1 1/4 | 1/2 | */**/** |
| 5000 | 1450 | 410 | 2500 | 700 | 2360 | 2920 | 710 | 2760 | 3500 | 792 | 3 | 1 1/4 | 1/2 | */**/** |
| 6000 | 1450 | 410 | 3000 | 700 | 2860 | 3420 | 710 | 3260 | 4000 | 932 | 3 | 1 1/4 | 1/2 | */**/** |
| 8000 | 1650 | 460 | 3000 | 840 | 2910 | 3380 | 860 | 3310 | 4100 | 1286 | 4 | 1 1/4 | 1/2 | */**/** |
| 10000 | 1650 | 460 | 4000 | 840 | 3910 | 4380 | 860 | 4110 | 5100 | 1560 | 4 | 1 1/4 | 1/2 | */**/** |
| 15000 | 2000 | 560 | 4000 | 940 | 4010 | 4480 | 1010 | 3710 | 5300 | 2323 | 4 | 1 1/4 | 1/2 | 300x400 |
| 20000 | 2000 | 560 | 5500 | 940 | 5510 | 5980 | 1010 | 5210 | 6800 | 2903 | 4 | 1 1/4 | 1/2 | 300x400 |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | H mm | L mm | F mm | weight kg | e/u/s vs/e1 (*) inch | r (*) inch | m/p (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|----------------------------|---------------|-----------------|---------|
| 300 | 500 | 165 | 1250 | 400 | 265 | 440 | 790 | 1140 | 680 | 1580 | 1140 | 75 | 1 | 1 1/4 | 1/2 | * |
| 500 | 650 | 200 | 1250 | 475 | 300 | 475 | 825 | 1175 | 830 | 1650 | 1175 | 102 | 1 1/2 | 1 1/4 | 1/2 | * |
| 800 | 800 | 240 | 1250 | 550 | 340 | 515 | 865 | 1215 | 980 | 1730 | 1215 | 151 | 2 | 1 1/4 | 1/2 | * |
| 1000 | 800 | 240 | 1650 | 550 | 340 | 765 | 1065 | 1365 | 980 | 2130 | 1365 | 177 | 2 | 1 1/4 | 1/2 | * |
| 1500 | 950 | 280 | 1750 | 625 | 400 | 805 | 1155 | 1505 | 1130 | 2310 | 1505 | 232 | 2 | 1 1/4 | 1/2 | * |
| 2000 | 1100 | 310 | 1750 | 700 | 430 | 910 | 1185 | 1460 | 1280 | 2370 | 1460 | 353 | 2 | 1 1/4 | 1/2 | */** |
| 3000 | 1250 | 350 | 2000 | 775 | 490 | 625 | 1350 | 2075 | 1430 | 2700 | 2075 | 466 | 2 1/2 | 1 1/4 | 1/2 | */** |
| 4000 | 1400 | 390 | 2000 | 850 | 530 | 1140 | 1390 | 1640 | 1580 | 2780 | 1640 | 660 | 3 | 1 1/4 | 1/2 | */**/** |
| 5000 | 1450 | 410 | 2500 | 875 | 550 | 1660 | 1660 | 1660 | 1630 | 3320 | 1660 | 792 | 3 | 1 1/4 | 1/2 | */**/** |
| 6000 | 1450 | 410 | 3000 | 875 | 550 | 1660 | 1910 | 2160 | 1630 | 3820 | 2160 | 932 | 3 | 1 1/4 | 1/2 | */**/** |
| 8000 | 1650 | 460 | 3000 | 975 | 690 | 1710 | 1960 | 2210 | 1830 | 3920 | 2210 | 1286 | 4 | 1 1/4 | 1/2 | */**/** |
| 10000 | 1650 | 460 | 4000 | 975 | 690 | 1710 | 2460 | 3210 | 1830 | 4920 | 3210 | 1560 | 4 | 1 1/4 | 1/2 | */**/** |
| 15000 | 2000 | 560 | 4000 | 1150 | 790 | 1810 | 2560 | 3310 | 2180 | 5120 | 3310 | 2323 | 4 | 1 1/4 | 1/2 | 300x400 |
| 20000 | 2000 | 560 | 5500 | 1150 | 790 | 2560 | 3310 | 4060 | 2180 | 6620 | 4060 | 2903 | 4 | 1 1/4 | 1/2 | 300x400 |

Inspection hole on demand: * 100x150; ** 220x320; *** 300x400

P.E.D. tested varnished pressurized air tanks

PN 6 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------|------------|------------|-----------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866010001X | VERN 20L PED 8BAR VERT | ◆ | 866010024X | VERN 20L PED 8BAR ORIZZ | ◆ |
| 866010002X | VERN 33L PED 8BAR VERT | ◆ | 866010025X | VERN 33L PED 8BAR ORIZZ | ◆ |
| 866010003X | VERN 50L PED 8BAR VERT | ◆ | 866010026X | VERN 50L PED 8BAR ORIZZ | ◆ |
| 866010004X | VERN 100L PED 8BAR VERT | ◆ | 866010027X | VERN 100L PED 8BAR ORIZZ | ◆ |
| 866010005X | VERN 200L PED 8BAR VERT | ◆ | 866010028X | VERN 200L PED 8BAR ORIZZ | ◆ |
| 866010006X | VERN 300L PED 8BAR VERT | € 746,00 | 866010029X | VERN 300L PED 8BAR ORIZZ | € 784,00 |
| 866010007X | VERN 500L PED 8BAR VERT | € 850,00 | 866010030X | VERN 500L PED 8BAR ORIZZ | € 894,00 |
| 866010008X | VERN 700L PED 8BAR VERT | ◆ | 866010031X | VERN 700L PED 8BAR ORIZZ | ◆ |
| 866010009X | VERN 800L PED 8BAR VERT | € 1.113,00 | 866010032X | VERN 800L PED 8BAR ORIZZ | € 1.170,00 |
| 866010010X | VERN 1000L PED 8BAR VERT | € 1.246,00 | 866010033X | VERN 1000L PED 8BAR ORIZZ | € 1.309,00 |
| 866010011X | VERN 1500L PED 8BAR VERT | € 2.015,00 | 866010034X | VERN 1500L PED 8BAR ORIZZ | € 2.116,00 |
| 866010012X | VERN 2000L PED 8BAR VERT | € 2.690,00 | 866010035X | VERN 2000L PED 8BAR ORIZZ | € 2.825,00 |
| 866010013X | VERN 2000B L PED 8BAR VERT | ◆ | 866010036X | VERN 2000B L PED 8BAR ORIZZ | ◆ |
| 866010014X | VERN 3000L PED 8BAR VERT | € 3.323,00 | 866010037X | VERN 3000L PED 8BAR ORIZZ | € 3.489,00 |
| 866010015X | VERN 3000B L PED 8BAR VERT | € 4.473,00 | 866010038X | VERN 3000B L PED 8BAR ORIZZ | € 4.696,00 |
| 866010016X | VERN 4000L PED 8BAR VERT | € 5.220,00 | 866010039X | VERN 4000L PED 8BAR ORIZZ | € 5.481,00 |
| 866010017X | VERN 5000L PED 8BAR VERT | € 6.744,00 | 866010040X | VERN 5000L PED 8BAR ORIZZ | € 7.081,00 |
| 866010018X | VERN 5000B L PED 8BAR VERT | € 6.888,00 | 866010041X | VERN 5000B L PED 8BAR ORIZZ | € 7.233,00 |
| 866010019X | VERN 6000L PED 8BAR VERT | € 8.814,00 | 866010042X | VERN 6000L PED 8BAR ORIZZ | € 9.255,00 |
| 866010020X | VERN 8000L PED 8BAR VERT | ◆ | 866010043X | VERN 8000L PED 8BAR ORIZZ | ◆ |
| 866010021X | VERN 10000L PED 8BAR VERT | ◆ | 866010044X | VERN 10000L PED 8BAR ORIZZ | ◆ |
| 866010022X | VERN 15000L PED 8BAR VERT | ◆ | 866010045X | VERN 15000L PED 8BAR ORIZZ | ◆ |
| 866010023X | VERN 20000L PED 8BAR VERT | ◆ | 866010046X | VERN 20000L PED 8BAR ORIZZ | ◆ |

PN 8 bar

| Vertical | | | Horizontal | | |
|------------|-------------------------------|------------|------------|------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866010047X | VERN 20L PED 11BAR VERT | ◆ | 866010070X | VERN 20L PED 11BAR ORIZZ | ◆ |
| 866010048X | VERN 33L PED 11BAR VERT | ◆ | 866010071X | VERN 33L PED 11BAR ORIZZ | ◆ |
| 866010049X | VERN 50L PED 11BAR VERT * | € 556,00 | 866010072X | VERN 50L PED 11BAR ORIZZ | € 585,00 |
| 866010050X | VERN 100L PED 11BAR VERT * | € 633,00 | 866010073X | VERN 100L PED 11BAR ORIZZ | € 665,00 |
| 866010051X | VERN 200L PED 11BAR VERT * | € 676,00 | 866010074X | VERN 200L PED 11BAR ORIZZ | € 711,00 |
| 866010052X | VERN 300L PED 11BAR VERT * | € 798,00 | 866010075X | VERN 300L PED 11BAR ORIZZ | € 838,00 |
| 866010053X | VERN 500L PED 11BAR VERT | € 1.141,00 | 866010076X | VERN 500L PED 11BAR ORIZZ | € 1.199,00 |
| 866010054X | VERN 700L PED 11BAR VERT * | € 1.251,00 | 866010077X | VERN 700L PED 11BAR ORIZZ | € 1.315,00 |
| 866010055X | VERN 800L PED 11BAR VERT | € 1.365,00 | 866010078X | VERN 800L PED 11BAR ORIZZ | € 1.434,00 |
| 866010056X | VERN 1000L PED 11BAR VERT | € 1.524,00 | 866010079X | VERN 1000L PED 11BAR ORIZZ | € 1.600,00 |
| 866010057X | VERN 1500L PED 11BAR VERT * | € 2.461,00 | 866010080X | VERN 1500L PED 11BAR ORIZZ | € 2.585,00 |
| 866010058X | VERN 2000L PED 11BAR VERT * | € 2.833,00 | 866010081X | VERN 2000L PED 11BAR ORIZZ | € 2.975,00 |
| 866010059X | VERN 2000B L PED 11BAR VERT * | € 2.970,00 | 866010082X | VERN 2000B L PED 11BAR ORIZZ | € 3.119,00 |
| 866010060X | VERN 3000L PED 11BAR VERT | € 4.028,00 | 866010083X | VERN 3000L PED 11BAR ORIZZ | € 4.230,00 |
| 866010061X | VERN 3000B L PED 11BAR VERT * | € 4.565,00 | 866010084X | VERN 3000B L PED 11BAR ORIZZ | € 4.794,00 |
| 866010062X | VERN 4000L PED 11BAR VERT | € 5.923,00 | 866010085X | VERN 4000L PED 11BAR ORIZZ | € 6.219,00 |
| 866010063X | VERN 5000L PED 11BAR VERT | € 7.115,00 | 866010086X | VERN 5000L PED 11BAR ORIZZ | € 7.471,00 |
| 866010064X | VERN 5000B L PED 11BAR VERT * | ◆ | 866010087X | VERN 5000B L PED 11BAR ORIZZ | ◆ |
| 866010065X | VERN 6000L PED 11BAR VERT | € 8.665,00 | 866010088X | VERN 6000L PED 11BAR ORIZZ | € 9.099,00 |
| 866010066X | VERN 8000L PED 11BAR VERT | ◆ | 866010089X | VERN 8000L PED 11BAR ORIZZ | ◆ |
| 866010067X | VERN 10000L PED 11BAR VERT | ◆ | 866010090X | VERN 10000L PED 11BAR ORIZZ | ◆ |
| 866010068X | VERN 15000L PED 11BAR VERT | ◆ | 866010091X | VERN 15000L PED 11BAR ORIZZ | ◆ |
| 866010069X | VERN 20000L PED 11BAR VERT | ◆ | 866010092X | VERN 20000L PED 11BAR ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested varnished pressurized air tanks

PN 12 bar

| Vertical | | | Horizontal | | |
|------------|-----------------------------|------------|------------|------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866010093X | VERN 20L PED 12BAR VERT | € 488,00 | 866010116X | VERN 20L PED 12BAR ORIZZ | € 513,00 |
| 866010094X | VERN 33L PED 12BAR VERT | € 488,00 | 866010117X | VERN 33L PED 12BAR ORIZZ | € 513,00 |
| 866010095X | VERN 50L PED 12BAR VERT | € 525,00 | 866010118X | VERN 50L PED 12BAR ORIZZ | € 551,00 |
| 866010096X | VERN 100L PED 12BAR VERT | € 598,00 | 866010119X | VERN 100L PED 12BAR ORIZZ | € 628,00 |
| 866010097X | VERN 200L PED 12BAR VERT | € 644,00 | 866010120X | VERN 200L PED 12BAR ORIZZ | € 676,00 |
| 866010098X | VERN 300L PED 12BAR VERT | € 734,00 | 866010121X | VERN 300L PED 12BAR ORIZZ | € 771,00 |
| 866010099X | VERN 500L PED 12BAR VERT | € 1.063,00 | 866010122X | VERN 500L PED 12BAR ORIZZ | € 1.116,00 |
| 866010100X | VERN 700L PED 12BAR VERT | ◆ | 866010123X | VERN 700L PED 12BAR ORIZZ | ◆ |
| 866010101X | VERN 800L PED 12BAR VERT | € 1.339,00 | 866010124X | VERN 800L PED 12BAR ORIZZ | € 1.406,00 |
| 866010102X | VERN 1000L PED 12BAR VERT | € 1.511,00 | 866010125X | VERN 1000L PED 12BAR ORIZZ | € 1.586,00 |
| 866010103X | VERN 1500L PED 12BAR VERT | € 2.573,00 | 866010126X | VERN 1500L PED 12BAR ORIZZ | € 2.701,00 |
| 866010104X | VERN 2000L PED 12BAR VERT | € 3.106,00 | 866010127X | VERN 2000L PED 12BAR ORIZZ | € 3.263,00 |
| 866010105X | VERN 2000B L PED 12BAR VERT | ◆ | 866010128X | VERN 2000B L PED 12BAR ORIZZ | ◆ |
| 866010106X | VERN 3000L PED 12BAR VERT | € 4.373,00 | 866010129X | VERN 3000L PED 12BAR ORIZZ | € 4.593,00 |
| 866010107X | VERN 3000B L PED 12BAR VERT | € 5.393,00 | 866010130X | VERN 3000B L PED 12BAR ORIZZ | € 5.663,00 |
| 866010108X | VERN 4000L PED 12BAR VERT | € 6.069,00 | 866010131X | VERN 4000L PED 12BAR ORIZZ | € 6.374,00 |
| 866010109X | VERN 5000L PED 12BAR VERT | € 7.394,00 | 866010132X | VERN 5000L PED 12BAR ORIZZ | € 7.765,00 |
| 866010110X | VERN 5000B L PED 12BAR VERT | € 8.266,00 | 866010133X | VERN 5000B L PED 12BAR ORIZZ | € 8.680,00 |
| 866010111X | VERN 6000L PED 12BAR VERT | € 8.678,00 | 866010134X | VERN 6000L PED 12BAR ORIZZ | € 9.113,00 |
| 866010112X | VERN 8000L PED 12BAR VERT | ◆ | 866010135X | VERN 8000L PED 12BAR ORIZZ | ◆ |
| 866010113X | VERN 10000L PED 12BAR VERT | ◆ | 866010136X | VERN 10000L PED 12BAR ORIZZ | ◆ |
| 866010114X | VERN 15000L PED 12BAR VERT | ◆ | 866010137X | VERN 15000L PED 12BAR ORIZZ | ◆ |
| 866010115X | VERN 20000L PED 12BAR VERT | ◆ | 866010138X | VERN 20000L PED 12BAR ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested galvanized pressurized air tanks

PN 6 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------|------------|------------|---------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020001X | ZN 20L PED 8BAR VERT | ◆ | 866020024X | ZN 20L PED 8BAR ORIZZ | ◆ |
| 866020002X | ZN 33L PED 8BAR VERT | ◆ | 866020025X | ZN 33L PED 8BAR ORIZZ | ◆ |
| 866020003X | ZN 50L PED 8BAR VERT | ◆ | 866020026X | ZN 50L PED 8BAR ORIZZ | ◆ |
| 866020004X | ZN 100L PED 8BAR VERT | ◆ | 866020027X | ZN 100L PED 8BAR ORIZZ | ◆ |
| 866020005X | ZN 200L PED 8BAR VERT | ◆ | 866020028X | ZN 200L PED 8BAR ORIZZ | ◆ |
| 866020006X | ZN 300L PED 8BAR VERT | ◆ | 866020029X | ZN 300L PED 8BAR ORIZZ | ◆ |
| 866020007X | ZN 500L PED 8BAR VERT | € 928,00 | 866020030X | ZN 500L PED 8BAR ORIZZ | € 975,00 |
| 866020008X | ZN 700L PED 8BAR VERT | ◆ | 866020031X | ZN 700L PED 8BAR ORIZZ | ◆ |
| 866020009X | ZN 800L PED 8BAR VERT | € 1.246,00 | 866020032X | ZN 800L PED 8BAR ORIZZ | € 1.309,00 |
| 866020010X | ZN 1000L PED 8BAR VERT | € 1.405,00 | 866020033X | ZN 1000L PED 8BAR ORIZZ | € 1.476,00 |
| 866020011X | ZN 1500L PED 8BAR VERT | € 2.244,00 | 866020034X | ZN 1500L PED 8BAR ORIZZ | € 2.358,00 |
| 866020012X | ZN 2000L PED 8BAR VERT | € 3.150,00 | 866020035X | ZN 2000L PED 8BAR ORIZZ | € 3.308,00 |
| 866020013X | ZN 2000B L PED 8BAR VERT | ◆ | 866020036X | ZN 2000B L PED 8BAR ORIZZ | ◆ |
| 866020014X | ZN 3000L PED 8BAR VERT | € 3.955,00 | 866020037X | ZN 3000L PED 8BAR ORIZZ | € 4.154,00 |
| 866020015X | ZN 3000B L PED 8BAR VERT | € 5.378,00 | 866020038X | ZN 3000B L PED 8BAR ORIZZ | € 5.648,00 |
| 866020016X | ZN 4000L PED 8BAR VERT | € 6.269,00 | 866020039X | ZN 4000L PED 8BAR ORIZZ | € 6.584,00 |
| 866020017X | ZN 5000L PED 8BAR VERT | € 7.980,00 | 866020040X | ZN 5000L PED 8BAR ORIZZ | € 8.380,00 |
| 866020018X | ZN 5000B L PED 8BAR VERT | € 8.440,00 | 866020041X | ZN 5000B L PED 8BAR ORIZZ | € 8.863,00 |
| 866020019X | ZN 6000L PED 8BAR VERT | € 9.834,00 | 866020042X | ZN 6000L PED 8BAR ORIZZ | € 10.326,00 |
| 866020020X | ZN 8000L PED 8BAR VERT | ◆ | 866020043X | ZN 8000L PED 8BAR ORIZZ | ◆ |
| 866020021X | ZN 10000L PED 8BAR VERT | ◆ | 866020044X | ZN 10000L PED 8BAR ORIZZ | ◆ |
| 866020022X | ZN 15000L PED 8BAR VERT | ◆ | 866020045X | ZN 15000L PED 8BAR ORIZZ | ◆ |
| 866020023X | ZN 20000L PED 8BAR VERT | ◆ | 866020046X | ZN 20000L PED 8BAR ORIZZ | ◆ |

PN 8 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------|------------|------------|----------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020047X | ZN 20L PED 8BAR VERT | ◆ | 866020070X | ZN 20L PED 11BAR ORIZZ | ◆ |
| 866020048X | ZN 33L PED 8BAR VERT | ◆ | 866020071X | ZN 33L PED 11BAR ORIZZ | ◆ |
| 866020049X | ZN 50L PED 8BAR VERT | € 583,00 | 866020072X | ZN 50L PED 11BAR ORIZZ | € 613,00 |
| 866020050X | ZN 100L PED 8BAR VERT | € 674,00 | 866020073X | ZN 100L PED 11BAR ORIZZ | € 708,00 |
| 866020051X | ZN 200L PED 8BAR VERT | € 715,00 | 866020074X | ZN 200L PED 11BAR ORIZZ | € 751,00 |
| 866020052X | ZN 300L PED 8BAR VERT | € 853,00 | 866020075X | ZN 300L PED 11BAR ORIZZ | € 895,00 |
| 866020053X | ZN 500L PED 8BAR VERT | € 1.238,00 | 866020076X | ZN 500L PED 11BAR ORIZZ | € 1.299,00 |
| 866020054X | ZN 700L PED 8BAR VERT | € 1.361,00 | 866020077X | ZN 700L PED 11BAR ORIZZ | € 1.429,00 |
| 866020055X | ZN 800L PED 8BAR VERT | € 1.519,00 | 866020078X | ZN 800L PED 11BAR ORIZZ | € 1.595,00 |
| 866020056X | ZN 1000L PED 8BAR VERT | € 1.725,00 | 866020079X | ZN 1000L PED 11BAR ORIZZ | € 1.811,00 |
| 866020057X | ZN 1500L PED 8BAR VERT | € 2.846,00 | 866020080X | ZN 1500L PED 11BAR ORIZZ | € 2.989,00 |
| 866020058X | ZN 2000L PED 8BAR VERT | € 3.479,00 | 866020081X | ZN 2000L PED 11BAR ORIZZ | € 3.653,00 |
| 866020059X | ZN 2000B L PED 8BAR VERT | € 3.603,00 | 866020082X | ZN 2000B L PED 11BAR ORIZZ | € 3.783,00 |
| 866020060X | ZN 3000L PED 8BAR VERT | € 4.713,00 | 866020083X | ZN 3000L PED 11BAR ORIZZ | € 4.948,00 |
| 866020061X | ZN 3000B L PED 8BAR VERT | € 5.473,00 | 866020084X | ZN 3000B L PED 11BAR ORIZZ | € 5.746,00 |
| 866020062X | ZN 4000L PED 8BAR VERT | € 7.169,00 | 866020085X | ZN 4000L PED 11BAR ORIZZ | € 7.526,00 |
| 866020063X | ZN 5000L PED 8BAR VERT | € 8.613,00 | 866020086X | ZN 5000L PED 11BAR ORIZZ | € 9.043,00 |
| 866020064X | ZN 5000B L PED 8BAR VERT | ◆ | 866020087X | ZN 5000B L PED 11BAR ORIZZ | ◆ |
| 866020065X | ZN 6000L PED 8BAR VERT | € 9.720,00 | 866020088X | ZN 6000L PED 11BAR ORIZZ | € 10.206,00 |
| 866020066X | ZN 8000L PED 8BAR VERT | ◆ | 866020089X | ZN 8000L PED 11BAR ORIZZ | ◆ |
| 866020067X | ZN 10000L PED 8BAR VERT | ◆ | 866020090X | ZN 10000L PED 11BAR ORIZZ | ◆ |
| 866020068X | ZN 15000L PED 8BAR VERT | ◆ | 866020091X | ZN 15000L PED 11BAR ORIZZ | ◆ |
| 866020069X | ZN 20000L PED 8BAR VERT | ◆ | 866020092X | ZN 20000L PED 11BAR ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested galvanized pressurized air tanks

PN 12 bar

| Vertical | | | Horizontal | | |
|------------|---------------------------|------------|------------|----------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020093X | ZN 20L PED 12BAR VERT | € 500,00 | 866020116X | ZN 20L PED 12BAR ORIZZ | € 525,00 |
| 866020094X | ZN 33L PED 12BAR VERT | € 500,00 | 866020117X | ZN 33L PED 12BAR ORIZZ | € 525,00 |
| 866020095X | ZN 50L PED 12BAR VERT | € 550,00 | 866020118X | ZN 50L PED 12BAR ORIZZ | € 578,00 |
| 866020096X | ZN 100L PED 12BAR VERT | € 636,00 | 866020119X | ZN 100L PED 12BAR ORIZZ | € 669,00 |
| 866020097X | ZN 200L PED 12BAR VERT | € 695,00 | 866020120X | ZN 200L PED 12BAR ORIZZ | € 731,00 |
| 866020098X | ZN 300L PED 12BAR VERT | € 785,00 | 866020121X | ZN 300L PED 12BAR ORIZZ | € 825,00 |
| 866020099X | ZN 500L PED 12BAR VERT | € 1.213,00 | 866020122X | ZN 500L PED 12BAR ORIZZ | € 1.274,00 |
| 866020100X | ZN 700L PED 12BAR VERT | ◆ | 866020123X | ZN 700L PED 12BAR ORIZZ | ◆ |
| 866020101X | ZN 800L PED 12BAR VERT | € 1.550,00 | 866020124X | ZN 800L PED 12BAR ORIZZ | € 1.629,00 |
| 866020102X | ZN 1000L PED 12BAR VERT | € 1.763,00 | 866020125X | ZN 1000L PED 12BAR ORIZZ | € 1.851,00 |
| 866020103X | ZN 1500L PED 12BAR VERT | € 3.068,00 | 866020126X | ZN 1500L PED 12BAR ORIZZ | € 3.221,00 |
| 866020104X | ZN 2000L PED 12BAR VERT | € 3.768,00 | 866020127X | ZN 2000L PED 12BAR ORIZZ | € 3.958,00 |
| 866020105X | ZN 2000B L PED 12BAR VERT | ◆ | 866020128X | ZN 2000B L PED 12BAR ORIZZ | ◆ |
| 866020106X | ZN 3000L PED 12BAR VERT | € 5.459,00 | 866020129X | ZN 3000L PED 12BAR ORIZZ | € 5.734,00 |
| 866020107X | ZN 3000B L PED 12BAR VERT | € 6.700,00 | 866020130X | ZN 3000B L PED 12BAR ORIZZ | € 7.036,00 |
| 866020108X | ZN 4000L PED 12BAR VERT | € 7.514,00 | 866020131X | ZN 4000L PED 12BAR ORIZZ | € 7.889,00 |
| 866020109X | ZN 5000L PED 12BAR VERT | € 9.130,00 | 866020132X | ZN 5000L PED 12BAR ORIZZ | € 9.588,00 |
| 866020110X | ZN 5000B L PED 12BAR VERT | ◆ | 866020133X | ZN 5000B L PED 12BAR ORIZZ | € 10.668,00 |
| 866020111X | ZN 6000L PED 12BAR VERT | ◆ | 866020134X | ZN 6000L PED 12BAR ORIZZ | € 10.775,00 |
| 866020112X | ZN 8000L PED 12BAR VERT | ◆ | 866020135X | ZN 8000L PED 12BAR ORIZZ | ◆ |
| 866020113X | ZN 10000L PED 12BAR VERT | ◆ | 866020136X | ZN 10000L PED 12BAR ORIZZ | ◆ |
| 866020114X | ZN 15000L PED 12BAR VERT | ◆ | 866020137X | ZN 15000L PED 12BAR ORIZZ | ◆ |
| 866020115X | ZN 20000L PED 12BAR VERT | ◆ | 866020138X | ZN 20000L PED 12BAR ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested 16 bar compressed air tanks, under high pressure – AP series

The AP tanks for compressed air under high pressure are used in all compressed air distribution systems with elevated pressure. The AP series is different from the AK series because of the operating pressure which is superior in the AP series.

The models, with CE label, are available in the vertical and horizontal version, with various capacities in function of the max operating pressure:

- 16 bar version: 300 up to 10.000 litres
- 18 bar version: 100 up to 5.000 litres
- 20 bar version: 4.000 up to 10.000 litres
- 25 bar version: 300 up to 6.000 litres
- 30 bar version: 800 up to 6.000 litres
- 35 bar version: 100 up to 3.000 litres
- 64 bar version: 100 up to 1.000 litres

✓ Special versions

The AK storage tanks can be modified on demand in order to meet your specific requirements.

✓ **Material:** carbon steel

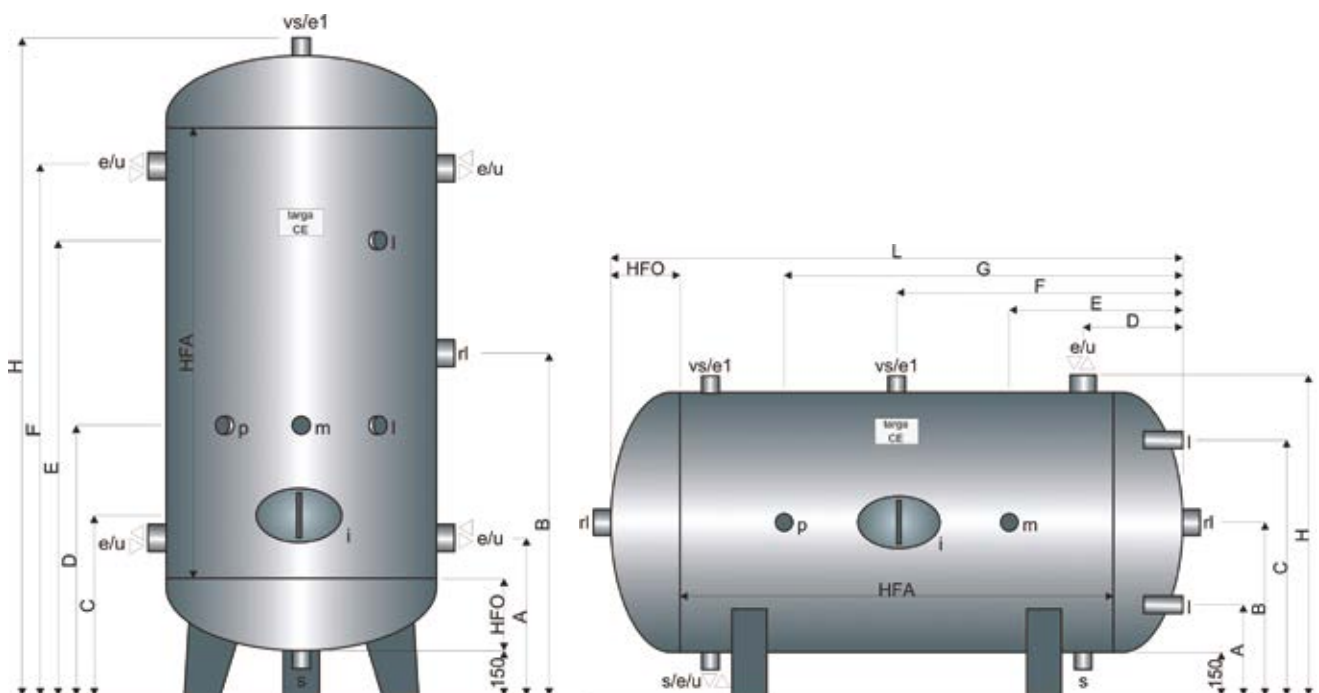
✓ **Protective treatment:** hot dip galvanizing and external coating

✓ **Operative conditions**

The storage tanks have a max pressure of 16, 18, 20, 25, 30, 35, 64 bar and operating temperatures from -10 to +50°C.

Couplings

| | |
|----|--------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| r | back-up |



P.E.D. tested 16 bar compressed air tanks, under high pressure – AP series

Vertical

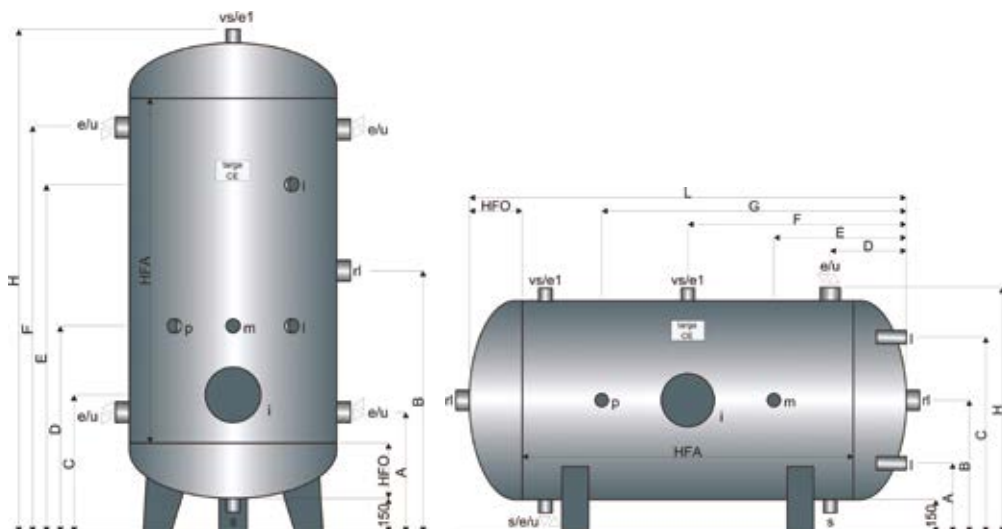
| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | weight kg | e/u (*) inch | L/m/p (*) inch | vs/e1/rl/s (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------------|-------------------|------------------------|---------|
| 300 | 500 | 165 | 1250 | 415 | 940 | 465 | 665 | 1415 | 1465 | 1760 | 99 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 200 | 1250 | 450 | 975 | 500 | 700 | 1450 | 1500 | 1830 | 144 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 800 | 240 | 1250 | 500 | 1015 | 540 | 740 | 1490 | 1530 | 1910 | 232 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 240 | 1700 | 500 | 1240 | 540 | 990 | 1890 | 1980 | 2360 | 281 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 950 | 280 | 1750 | 550 | 1305 | 680 | 1030 | 2030 | 2060 | 2490 | 365 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1000 | 310 | 2000 | 600 | 1460 | 710 | 1060 | 2060 | 2320 | 2800 | 481 | 2 | 1/2 | 1 1/4 | * |
| 2500 | 1250 | 360 | 1500 | 660 | 1260 | 760 | 910 | 1810 | 1860 | 2400 | 568 | 2 | 1/2 | 1 1/4 | * |
| 3000 | 1250 | 360 | 2000 | 660 | 1510 | 760 | 1210 | 2210 | 2360 | 2900 | 670 | 2 1/2 | 1/2 | 1 1/4 | * |
| 3500 | 1400 | 410 | 1800 | 800 | 1460 | 860 | 1260 | 2260 | 2120 | 2800 | 820 | 3 | 1/2 | 1 1/4 | *** |
| 4000 | 1400 | 410 | 2000 | 800 | 1560 | 860 | 1260 | 2260 | 2320 | 3000 | 898 | 3 | 1/2 | 1 1/4 | **/** |
| 5000 | 1450 | 425 | 2500 | 815 | 1825 | 875 | 1375 | 2375 | 2835 | 3530 | 1080 | 3 | 1/2 | 1 1/4 | **/** |
| 7000 | 1650 | 470 | 2500 | 860 | 1870 | 920 | 1420 | 2920 | 2880 | 3620 | 1556 | 3 | 1/2 | 1 1/4 | **/** |
| 8000 | 1650 | 470 | 3000 | 860 | 2120 | 920 | 1420 | 2920 | 3380 | 4120 | 1741 | 4 | 1/2 | 1 1/4 | **/** |
| 10000 | 1650 | 470 | 4000 | 860 | 2620 | 920 | 1620 | 3120 | 4380 | 5120 | 2106 | 4 | 1/2 | 1 1/4 | **/** |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | weight kg | e/u/s (*) inch | L/m/p (*) inch | rl (*) inch | vs/e1 (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------------|----------------------|----------------|-------------------|---------|
| 300 | 500 | 165 | 1250 | 220 | 400 | 580 | 265 | 440 | 790 | 1140 | 680 | 1580 | 99 | 1 | 1/2 | 1 1/4 | 1 | * |
| 500 | 650 | 200 | 1250 | 250 | 475 | 700 | 300 | 475 | 825 | 1175 | 830 | 1650 | 144 | 1 1/2 | 1/2 | 1 1/4 | 1 1/2 | * |
| 800 | 800 | 240 | 1250 | 270 | 550 | 830 | 350 | 515 | 865 | 1215 | 980 | 1730 | 232 | 2 | 1/2 | 1 1/4 | 2 | * |
| 1000 | 800 | 240 | 1700 | 270 | 550 | 830 | 350 | 765 | 1090 | 1415 | 980 | 2180 | 281 | 2 | 1/2 | 1 1/4 | 2 | * |
| 1500 | 950 | 280 | 1750 | 300 | 625 | 950 | 400 | 805 | 1155 | 1505 | 1130 | 2310 | 365 | 2 | 1/2 | 1 1/4 | 2 | * |
| 2000 | 1000 | 310 | 2000 | 300 | 650 | 1000 | 450 | 910 | 1310 | 1710 | 1180 | 2620 | 481 | 2 | 1/2 | 1 1/4 | 2 | * |
| 2500 | 1250 | 360 | 1500 | 338 | 775 | 1213 | 510 | 860 | 1110 | 1360 | 1430 | 2220 | 568 | 3 | 1/2 | 1 1/4 | 3 | * |
| 3000 | 1250 | 360 | 2000 | 338 | 775 | 1213 | 510 | 960 | 1360 | 1760 | 1430 | 2720 | 670 | 3 | 1/2 | 1 1/4 | 3 | * |
| 3500 | 1400 | 410 | 1800 | 350 | 850 | 1350 | 650 | 1010 | 1310 | 1610 | 1580 | 2620 | 820 | 3 | 1/2 | 1 1/4 | 3 | *** |
| 4000 | 1400 | 410 | 2000 | 350 | 850 | 1350 | 650 | 1010 | 1410 | 1810 | 1580 | 2820 | 898 | 4 | 1/2 | 1 1/4 | 4 | **/** |
| 5000 | 1450 | 425 | 2500 | 375 | 875 | 1375 | 665 | 1175 | 1675 | 2175 | 1630 | 3350 | 1080 | 4 | 1/2 | 1 1/4 | 4 | **/** |
| 7000 | 1650 | 470 | 2500 | 400 | 975 | 1550 | 710 | 1220 | 1720 | 2220 | 1830 | 3440 | 1556 | 4 | 1/2 | 1 1/4 | 4 | **/** |
| 8000 | 1650 | 470 | 3000 | 400 | 975 | 1550 | 710 | 1470 | 1970 | 2470 | 1830 | 3940 | 1741 | 4 | 1/2 | 1 1/4 | 4 | **/** |
| 10000 | 1650 | 470 | 4000 | 400 | 975 | 1550 | 710 | 1720 | 2470 | 3220 | 1830 | 4940 | 2106 | 4 | 1/2 | 1 1/4 | 4 | **/** |

Inspection hole on demand: * 100x150; ** 220x320; *** 300x400

P.E.D. tested 18 bar compressed air tanks, under high pressure – AP series



Couplings

| | |
|----|--------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| r | back-up |

Vertical

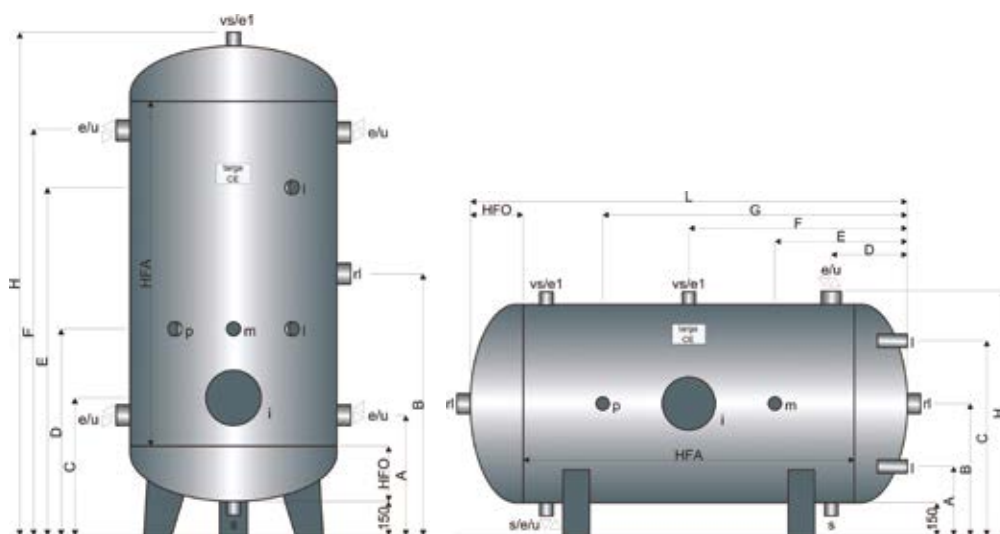
| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | weight kg | e/u (*) inch | L/m/p (*) inch | vs/e1/rl/s (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------------|-------------------|------------------------|---------|
| 100 | 350 | 120 | 1000 | 370 | 770 | 420 | 570 | 1070 | 1170 | 1420 | 82 | 1 | 1/2 | 1 1/4 | * |
| 200 | 450 | 150 | 1000 | 400 | 800 | 450 | 650 | 1150 | 1200 | 1480 | 110 | 1 | 1/2 | 1 1/4 | * |
| 300 | 500 | 165 | 1250 | 415 | 940 | 465 | 665 | 1365 | 1465 | 1760 | 146 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 200 | 1250 | 450 | 975 | 500 | 750 | 1450 | 1500 | 1830 | 199 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 800 | 240 | 1250 | 500 | 1015 | 540 | 790 | 1490 | 1530 | 1910 | 259 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 240 | 1700 | 500 | 1240 | 540 | 990 | 1890 | 1980 | 2360 | 319 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 950 | 280 | 1750 | 560 | 1305 | 580 | 1030 | 2030 | 2050 | 2490 | 408 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1100 | 330 | 1750 | 610 | 1355 | 630 | 1080 | 2080 | 2100 | 2590 | 516 | 2 | 1/2 | 1 1/4 | * |
| 2500 | 1250 | 360 | 1500 | 660 | 1260 | 660 | 910 | 1810 | 1860 | 2400 | 653 | 2 | 1/2 | 1 1/4 | * |
| 3000 | 1250 | 360 | 2000 | 660 | 1510 | 660 | 1210 | 2210 | 2360 | 2900 | 772 | 2 1/2 | 1/2 | 1 1/4 | * |
| 4000 | 1400 | 410 | 2000 | 780 | 1560 | 710 | 1260 | 2260 | 2340 | 3000 | 1067 | 3 | 1/2 | 1 1/4 | * |
| 5000 | 1450 | 425 | 2500 | 795 | 1825 | 725 | 1375 | 2375 | 2855 | 3530 | 1279 | 3 | 1/2 | 1 1/4 | * |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | weight kg | e/u/s (*) inch | L/m/p (*) inch | rl (*) inch | vs/e1 (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------------|----------------------|----------------|-------------------|---------|
| 100 | 350 | 120 | 1000 | 195 | 325 | 475 | 220 | 320 | 620 | 920 | 530 | 1240 | 82 | 1 | 1/2 | 1 1/4 | 1 | * |
| 200 | 450 | 150 | 1000 | 225 | 375 | 555 | 250 | 350 | 650 | 950 | 630 | 1300 | 110 | 1 | 1/2 | 1 1/4 | 1 | * |
| 300 | 500 | 165 | 1250 | 220 | 400 | 625 | 265 | 440 | 790 | 1140 | 680 | 1580 | 146 | 1 | 1/2 | 1 1/4 | 1 | * |
| 500 | 650 | 200 | 1250 | 250 | 475 | 755 | 300 | 475 | 825 | 1175 | 830 | 1650 | 199 | 1 1/2 | 1/2 | 1 1/4 | 1 1/2 | * |
| 800 | 800 | 240 | 1250 | 270 | 550 | 830 | 350 | 515 | 865 | 1215 | 980 | 1730 | 259 | 2 | 1/2 | 1 1/4 | 2 | * |
| 1000 | 800 | 240 | 1700 | 270 | 550 | 875 | 350 | 765 | 1090 | 1415 | 980 | 2180 | 319 | 2 | 1/2 | 1 1/4 | 2 | * |
| 1500 | 950 | 280 | 1750 | 300 | 625 | 1010 | 410 | 805 | 1155 | 1505 | 1130 | 2310 | 408 | 2 | 1/2 | 1 1/4 | 2 | * |
| 2000 | 1100 | 330 | 1750 | 315 | 700 | 1138 | 460 | 855 | 1205 | 1555 | 1280 | 2410 | 516 | 2 | 1/2 | 1 1/4 | 2 | * |
| 2500 | 1250 | 360 | 1500 | 338 | 775 | 1213 | 510 | 860 | 1110 | 1360 | 1430 | 2220 | 653 | 2 | 1/2 | 1 1/4 | 2 | * |
| 3000 | 1250 | 360 | 2000 | 338 | 775 | 1275 | 510 | 960 | 1360 | 1760 | 1430 | 2720 | 772 | 2 1/2 | 1/2 | 1 1/4 | 2 1/2 | * |
| 4000 | 1400 | 410 | 2000 | 350 | 850 | 1350 | 630 | 1010 | 1410 | 1810 | 1580 | 2820 | 1067 | 3 | 1/2 | 1 1/4 | 3 | * |
| 5000 | 1450 | 425 | 2500 | 375 | 875 | 1475 | 645 | 1175 | 1675 | 2175 | 1630 | 3350 | 1279 | 3 | 1/2 | 1 1/4 | 3 | * |

*Inspection hole on demand

P.E.D. tested 20 bar compressed air tanks, under high pressure – AP series



Couplings

| | |
|----|--------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| r | back-up |

Vertical

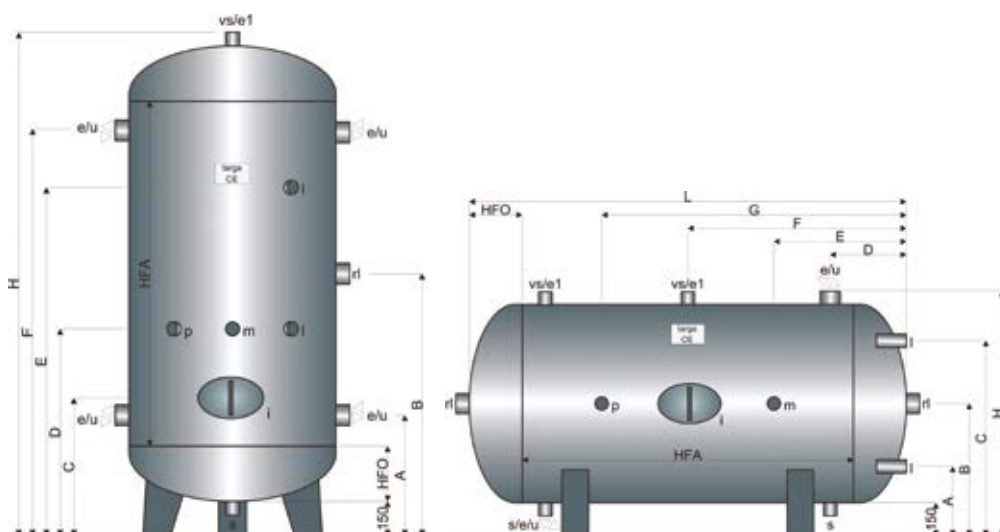
| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | weight kg | e/u (*) inch | L/m/p (*) inch | vs/e1/rl/s (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------------|-------------------|------------------------|---------|
| 4000 | 1400 | 410 | 2000 | 810 | 1560 | 850 | 1260 | 2260 | 2310 | 3000 | 1222 | 3 | 1/2 | 1 1/4 | * |
| 5000 | 1450 | 420 | 2500 | 820 | 1820 | 875 | 1370 | 2370 | 2820 | 3520 | 1479 | 3 | 1/2 | 1 1/4 | * |
| 6000 | 1600 | 460 | 2300 | 860 | 1760 | 950 | 1410 | 2910 | 2660 | 3400 | 1628 | 3 | 1/2 | 1 1/4 | * |
| 7000 | 1650 | 480 | 2500 | 880 | 1880 | 975 | 1430 | 2930 | 2880 | 3640 | 1902 | 4 | 1/2 | 1 1/4 | * |
| 8000 | 1650 | 480 | 3000 | 880 | 2130 | 975 | 1430 | 2930 | 3380 | 4140 | 2130 | 4 | 1/2 | 1 1/4 | * |
| 9000 | 1600 | 460 | 4000 | 860 | 2610 | 950 | 1610 | 3110 | 4360 | 5100 | 2382 | 4 | 1/2 | 1 1/4 | * |
| 10000 | 1650 | 480 | 4000 | 880 | 2630 | 975 | 1630 | 3130 | 4380 | 5140 | 2586 | 4 | 1/2 | 1 1/4 | * |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | weight kg | e/u/s (*) inch | L/m/p (*) inch | rl/vs/e1 (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------------|-------------------|----------------------|---------|
| 4000 | 1400 | 410 | 2000 | 350 | 850 | 1350 | 660 | 1010 | 1410 | 1810 | 1580 | 2820 | 1222 | 3 | 1/2 | 1 1/4 | * |
| 5000 | 1450 | 420 | 2500 | 375 | 875 | 1375 | 670 | 1170 | 1670 | 2170 | 1630 | 3340 | 1479 | 3 | 1/2 | 1 1/4 | * |
| 6000 | 1600 | 460 | 2300 | 450 | 950 | 1450 | 710 | 1210 | 1610 | 2010 | 1780 | 3220 | 1628 | 3 | 1/2 | 1 1/4 | * |
| 7000 | 1650 | 480 | 2500 | 475 | 975 | 1475 | 730 | 1230 | 1730 | 2230 | 1830 | 3460 | 1902 | 4 | 1/2 | 1 1/4 | * |
| 8000 | 1650 | 480 | 3000 | 475 | 975 | 1475 | 730 | 1480 | 1980 | 2480 | 1830 | 3960 | 2130 | 4 | 1/2 | 1 1/4 | * |
| 9000 | 1600 | 460 | 4000 | 450 | 950 | 1450 | 710 | 1710 | 2460 | 3210 | 1780 | 4920 | 2382 | 4 | 1/2 | 1 1/4 | * |
| 10000 | 1650 | 480 | 4000 | 475 | 975 | 1475 | 730 | 1730 | 2480 | 3230 | 1830 | 4960 | 2586 | 4 | 1/2 | 1 1/4 | * |

*Inspection hole on demand

P.E.D. tested 25 bar compressed air tanks, under high pressure – AP series



Couplings

| | |
|----|--------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| r | back-up |

Vertical

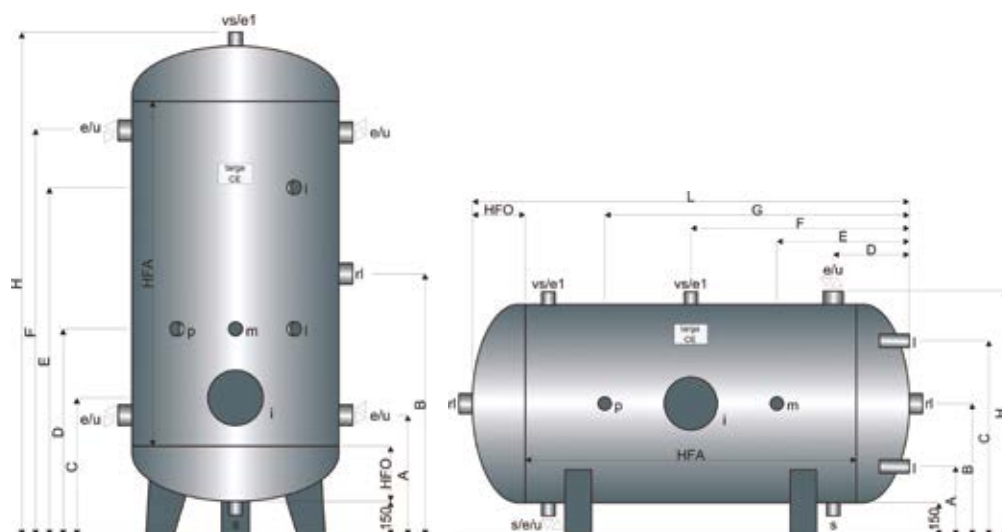
| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | weight kg | e/u (*) inch | L/m/p (*) inch | vs/e1/rl/s (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------------|-------------------|------------------------|---------|
| 300 | 500 | 165 | 1250 | 415 | 940 | n.p. | 715 | 1415 | 1465 | 1760 | 146 | 1 | 1/2 | 1 1/4 | n.p. |
| 500 | 650 | 200 | 1250 | 460 | 975 | n.p. | 750 | 1450 | 1490 | 1830 | 200 | 1 1/2 | 1/2 | 1 1/4 | n.p. |
| 800 | 800 | 240 | 1250 | 510 | 1015 | n.p. | 790 | 1490 | 1520 | 1910 | 272 | 2 | 1/2 | 1 1/4 | n.p. |
| 1000 | 800 | 240 | 1700 | 510 | 1240 | n.p. | 990 | 1890 | 1970 | 2360 | 332 | 2 | 1/2 | 1 1/4 | n.p. |
| 1500 | 950 | 280 | 1750 | 570 | 1305 | 690 | 1030 | 1930 | 2040 | 2490 | 544 | 2 | 1/2 | 1 1/4 | *** |
| 2000 | 1000 | 310 | 2000 | 600 | 1460 | 720 | 1260 | 2260 | 2320 | 2800 | 638 | 2 | 1/2 | 1 1/4 | **/** |
| 2500 | 1250 | 371 | 1500 | 691 | 1271 | 801 | 921 | 1821 | 1851 | 2422 | 882 | 2 | 1/2 | 1 1/4 | **/** |
| 3000 | 1250 | 371 | 2000 | 691 | 1521 | 801 | 1321 | 2321 | 2351 | 2922 | 1054 | 2 1/2 | 1/2 | 1 1/4 | **/** |
| 3000 | 1400 | 415 | 1500 | 805 | 1315 | 895 | 965 | 1765 | 1825 | 2510 | 1238 | 2 1/2 | 1/2 | 1 1/4 | **/** |
| 4000 | 1400 | 415 | 2000 | 805 | 1565 | 895 | 1265 | 2265 | 2325 | 3010 | 1471 | 3 | 1/2 | 1 1/4 | **/** |
| 5000 | 1450 | 430 | 2500 | 820 | 1830 | 910 | 1280 | 2280 | 2840 | 3540 | 1780 | 3 | 1/2 | 1 1/4 | **/** |
| 5000 | 1650 | 490 | 1700 | 900 | 1490 | 990 | 1240 | 2240 | 2080 | 2860 | 1934 | 3 | 1/2 | 1 1/4 | **/** |
| 6000 | 1450 | 430 | 3000 | 820 | 2080 | 910 | 1580 | 2580 | 3340 | 4040 | 2061 | 3 | 1/2 | 1 1/4 | **/** |
| 6000 | 1650 | 490 | 2000 | 900 | 1640 | 990 | 1240 | 2240 | 2380 | 3160 | 2166 | 3 | 1/2 | 1 1/4 | **/** |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | weight kg | e/u/s/vs/e1 (*) inch | L/m/p (*) inch | rl (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------------------|-------------------|----------------|---------|
| 300 | 500 | 165 | 1250 | 250 | 400 | 550 | 265 | 440 | 790 | 1140 | 680 | 1580 | 146 | 1 | 1/2 | 1 1/4 | n.p. |
| 500 | 650 | 200 | 1250 | 265 | 475 | 685 | 310 | 475 | 825 | 1175 | 830 | 1650 | 200 | 1 1/2 | 1/2 | 1 1/4 | n.p. |
| 800 | 800 | 240 | 1250 | 300 | 550 | 800 | 360 | 515 | 865 | 1215 | 980 | 1730 | 272 | 2 | 1/2 | 1 1/4 | n.p. |
| 1000 | 800 | 240 | 1700 | 300 | 550 | 800 | 360 | 765 | 1090 | 1415 | 980 | 2180 | 332 | 2 | 1/2 | 1 1/4 | n.p. |
| 1500 | 950 | 280 | 1750 | 300 | 625 | 950 | 420 | 805 | 1155 | 1505 | 1130 | 2310 | 544 | 2 | 1/2 | 1 1/4 | *** |
| 2000 | 1000 | 310 | 2000 | 300 | 650 | 1000 | 450 | 810 | 1310 | 1810 | 1180 | 2620 | 638 | 2 | 1/2 | 1 1/4 | **/** |
| 2500 | 1250 | 371 | 1500 | 345 | 775 | 1205 | 541 | 871 | 1121 | 1371 | 1430 | 2242 | 882 | 2 | 1/2 | 1 1/4 | **/** |
| 3000 | 1250 | 371 | 2000 | 345 | 775 | 1205 | 541 | 971 | 1371 | 1771 | 1430 | 2742 | 1054 | 2 1/2 | 1/2 | 1 1/4 | **/** |
| 3000 | 1400 | 415 | 1500 | 350 | 850 | 1350 | 655 | 1165 | 1165 | 1580 | 2330 | 1238 | 1238 | 2 1/2 | 1/2 | 1 1/4 | **/** |
| 4000 | 1400 | 415 | 2000 | 350 | 850 | 1350 | 655 | 1015 | 1415 | 1815 | 1580 | 2830 | 1471 | 3 | 1/2 | 1 1/4 | **/** |
| 5000 | 1450 | 430 | 2500 | 375 | 875 | 1375 | 670 | 1180 | 1680 | 2180 | 1630 | 3360 | 1780 | 3 | 1/2 | 1 1/4 | **/** |
| 5000 | 1650 | 490 | 1700 | 475 | 975 | 1475 | 750 | 990 | 1340 | 1690 | 1830 | 2680 | 1934 | 3 | 1/2 | 1 1/4 | **/** |
| 6000 | 1450 | 430 | 3000 | 375 | 875 | 1375 | 670 | 1180 | 1930 | 2680 | 1630 | 3860 | 2061 | 3 | 1/2 | 1 1/4 | **/** |
| 6000 | 1650 | 490 | 2000 | 475 | 975 | 1475 | 750 | 1090 | 1490 | 1890 | 1830 | 2980 | 2166 | 3 | 1/2 | 1 1/4 | **/** |

* Inspection hole on demand ** 320x420; *** 300x400.

P.E.D. tested 30 bar compressed air tanks, under high pressure – AP series



Couplings

| | |
|----|--------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| r | back-up |

Vertical

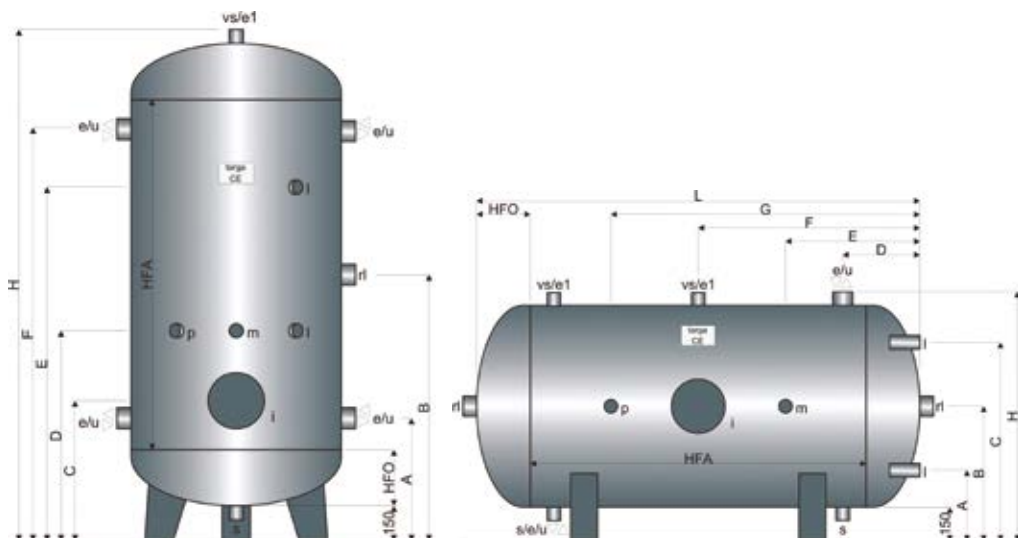
| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | weight kg | e/u (*) inch | L/m/p (*) inch | vs/e1/r/l/s (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------------|-------------------|-------------------------|---------|
| 800 | 800 | 250 | 1250 | 530 | 1025 | 700 | 750 | 1450 | 1520 | 1930 | 427 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 250 | 1700 | 530 | 1250 | 700 | 900 | 1850 | 1970 | 2380 | 527 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 900 | 285 | 2000 | 585 | 1435 | 785 | 935 | 1885 | 2285 | 2750 | 695 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1100 | 340 | 1750 | 640 | 1365 | 840 | 990 | 1990 | 2090 | 2610 | 813 | 2 | 1/2 | 1 1/4 | * |
| 3000 | 1100 | 340 | 2500 | 710 | 1740 | 840 | 1490 | 2490 | 2770 | 3360 | 1050 | 2 1/2 | 1/2 | 1 1/4 | * |
| 5000 | 1450 | 440 | 2500 | 840 | 1840 | 990 | 1590 | 2590 | 2840 | 3560 | 2073 | 3 | 1/2 | 1 1/4 | * |
| 6000 | 1450 | 440 | 3000 | 840 | 2090 | 990 | 1590 | 3090 | 3340 | 4060 | 2393 | 3 | 1/2 | 1 1/4 | * |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | weight kg | e/u/s/vs/e1 (*) inch | L/m/p (*) inch | rl (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------------------|-------------------|----------------|---------|
| 800 | 800 | 250 | 1250 | 300 | 550 | 800 | 380 | 525 | 875 | 1225 | 980 | 1750 | 427 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 250 | 1700 | 300 | 550 | 800 | 380 | 775 | 1100 | 1425 | 980 | 2200 | 527 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 950 | 280 | 1750 | 300 | 625 | 950 | 430 | 805 | 1155 | 1505 | 1130 | 2310 | 695 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1100 | 340 | 1750 | 300 | 700 | 1100 | 490 | 865 | 1215 | 1565 | 1280 | 2430 | 813 | 2 | 1/2 | 1 1/4 | * |
| 3000 | 1100 | 340 | 2500 | 300 | 700 | 1100 | 490 | 940 | 1590 | 2240 | 1280 | 3180 | 1050 | 2 1/2 | 1/2 | 1 1/4 | * |
| 5000 | 1450 | 440 | 2500 | 375 | 875 | 1375 | 690 | 1190 | 1690 | 2190 | 1630 | 3380 | 2073 | 3 | 1/2 | 1 1/4 | * |
| 6000 | 1450 | 440 | 3000 | 375 | 875 | 1375 | 690 | 1190 | 1940 | 2690 | 1630 | 3880 | 2393 | 3 | 1/2 | 1 1/4 | * |

* Inspection hole on demand ** 320x420; *** 300x400.

P.E.D. tested 35 bar compressed air tanks, under high pressure – AP series



Couplings

| | |
|----|--------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| e | water inlet |
| u | water outlet |
| e1 | air inlet |
| l | level |
| r | back-up |

Vertical

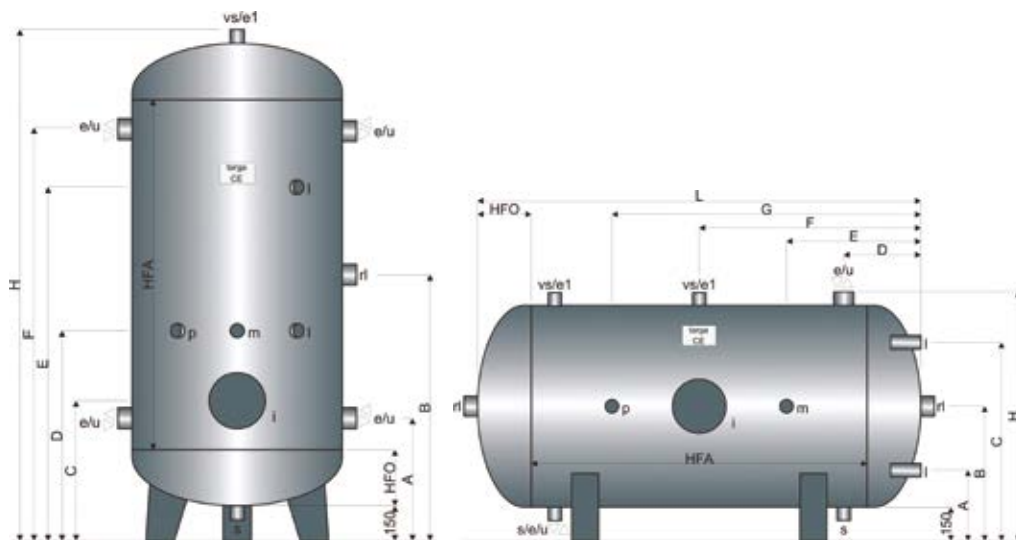
| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | weight kg | e/u (*) inch | L/m/p (*) inch | vs/e1/rl/s (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------------|-------------------|------------------------|---------|
| 100 | 350 | 120 | 1000 | 370 | 770 | 420 | 570 | 1070 | 1170 | 1420 | 81 | 1 | 1/2 | 1 1/4 | * |
| 200 | 450 | 150 | 1000 | 400 | 800 | 500 | 600 | 1100 | 1200 | 1480 | 109 | 1 | 1/2 | 1 1/4 | * |
| 300 | 500 | 165 | 1250 | 415 | 940 | 515 | 665 | 1365 | 1465 | 1760 | 144 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 205 | 1250 | 475 | 980 | 605 | 705 | 1405 | 1485 | 1840 | 229 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 800 | 250 | 1250 | 530 | 1025 | 650 | 750 | 1450 | 1520 | 1930 | 427 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 250 | 1700 | 530 | 1250 | 650 | 1000 | 1900 | 1970 | 2380 | 527 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 950 | 295 | 1750 | 655 | 1320 | 695 | 1045 | 1945 | 1985 | 2520 | 676 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1000 | 315 | 2000 | 685 | 1465 | 715 | 1065 | 2065 | 2245 | 2810 | 954 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1100 | 350 | 1750 | 740 | 1375 | 800 | 1100 | 2000 | 2010 | 2630 | 982 | 2 | 1/2 | 1 1/4 | * |
| 2500 | 1250 | 390 | 1500 | 780 | 1290 | 890 | 940 | 1740 | 1800 | 2460 | 1238 | 2 | 1/2 | 1 1/4 | * |
| 3000 | 1250 | 390 | 2000 | 780 | 1540 | 890 | 1240 | 2240 | 2300 | 2960 | 1476 | 2 1/2 | 1/2 | 1 1/4 | * |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | weight kg | e/u/s/vs/e1 (*) inch | L/m/p (*) inch | rl (*) pollici | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------------------|-------------------|-------------------|---------|
| 100 | 350 | 120 | 1000 | 215 | 325 | 435 | 220 | 320 | 620 | 920 | 530 | 1240 | 81 | 1 | 1/2 | 1 1/4 | * |
| 200 | 450 | 150 | 1000 | 235 | 375 | 515 | 250 | 350 | 650 | 950 | 630 | 1300 | 109 | 1 | 1/2 | 1 1/4 | * |
| 300 | 500 | 165 | 1250 | 250 | 400 | 550 | 265 | 440 | 790 | 1140 | 680 | 1580 | 144 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 205 | 1250 | 265 | 475 | 685 | 325 | 480 | 830 | 1180 | 830 | 1660 | 229 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 800 | 250 | 1250 | 300 | 550 | 800 | 380 | 525 | 875 | 1225 | 980 | 1750 | 427 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 800 | 250 | 1700 | 300 | 550 | 800 | 380 | 775 | 1100 | 1425 | 980 | 2200 | 527 | 2 | 1/2 | 1 1/4 | * |
| 1500 | 950 | 295 | 1750 | 300 | 625 | 950 | 505 | 820 | 1170 | 1520 | 1130 | 2340 | 676 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1000 | 315 | 2000 | 300 | 650 | 1000 | 535 | 915 | 1315 | 1715 | 1180 | 2630 | 954 | 2 | 1/2 | 1 1/4 | * |
| 2000 | 1100 | 350 | 1750 | 315 | 700 | 1085 | 590 | 875 | 1225 | 1575 | 1280 | 2450 | 982 | 2 | 1/2 | 1 1/4 | * |
| 2500 | 1250 | 390 | 1500 | 345 | 775 | 1205 | 630 | 890 | 1140 | 1390 | 1430 | 2280 | 1238 | 2 | 1/2 | 1 1/4 | * |
| 3000 | 1250 | 390 | 2000 | 345 | 775 | 1205 | 630 | 990 | 1390 | 1790 | 1430 | 2780 | 1476 | 2 1/2 | 1/2 | 1 1/4 | * |

* Inspection hole on demand

P.E.D. tested 64 bar compressed air tanks, under high pressure – AP series



Couplings

- s discharge
- vs safety valve
- m manometer
- p pressostat
- i inspection
- e water inlet
- u water outlet
- e1 air inlet
- l level
- r back-up

Vertical

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | weight kg | e/u (*) inch | L/m/p (*) inch | vs/e1/rl/s (*) inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------------|-------------------|------------------------|---------|
| 100 | 350 | 130 | 1000 | 390 | 780 | 480 | 580 | 1080 | 1170 | 1440 | 94 | 1 | 1/2 | 1 1/4 | * |
| 200 | 450 | 165 | 1000 | 435 | 815 | 515 | 615 | 1115 | 1195 | 1510 | 178 | 1 | 1/2 | 1 1/4 | * |
| 300 | 500 | 182 | 1250 | 462 | 957 | 582 | 682 | 1382 | 1452 | 1794 | 237 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 230 | 1250 | 530 | 1005 | 680 | 730 | 1430 | 1480 | 1890 | 389 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 750 | 270 | 1500 | 580 | 1170 | 720 | 770 | 1470 | 1760 | 2220 | 620 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 750 | 270 | 2000 | 580 | 1420 | 720 | 1020 | 2020 | 2260 | 2720 | 765 | 2 | 1/2 | 1 1/4 | * |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | L mm | weight kg | e/u/s/vs/e1 (*) inch | L/m/p (*) inch | rl (*) pollici | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------------------|-------------------|-------------------|---------|
| 100 | 350 | 130 | 1000 | 215 | 325 | 435 | 240 | 330 | 630 | 930 | 530 | 1260 | 94 | 1 | 1/2 | 1 1/4 | * |
| 200 | 450 | 165 | 1000 | 235 | 375 | 515 | 285 | 365 | 665 | 965 | 630 | 1330 | 178 | 1 | 1/2 | 1 1/4 | * |
| 300 | 500 | 182 | 1250 | 250 | 400 | 550 | 312 | 457 | 807 | 1157 | 680 | 1614 | 237 | 1 | 1/2 | 1 1/4 | * |
| 500 | 650 | 230 | 1250 | 265 | 475 | 685 | 380 | 505 | 855 | 1205 | 830 | 1710 | 389 | 1 1/2 | 1/2 | 1 1/4 | * |
| 800 | 750 | 270 | 1500 | 275 | 525 | 775 | 430 | 545 | 1020 | 1495 | 930 | 2040 | 620 | 2 | 1/2 | 1 1/4 | * |
| 1000 | 750 | 270 | 2000 | 275 | 525 | 775 | 430 | 795 | 1270 | 1745 | 930 | 2540 | 765 | 2 | 1/2 | 1 1/4 | * |

* Inspection hole on demand

Product codes of P.E.D. tested varnished high pressure tanks

PN 16 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|-------------|------------|-----------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866010139X | H.P. VERN 100L PED 16BAR VERT | € 1.385,00 | 866010162X | H.P. VERN 100L PED 16BAR ORIZZ | € 1.524,00 |
| 866010140X | H.P. VERN 200L PED 16BAR VERT | € 1.394,00 | 866010163X | H.P. VERN 200L PED 16BAR ORIZZ | € 1.534,00 |
| 866010141X | H.P. VERN 300L PED 16BAR VERT | € 1.752,00 | 866010164X | H.P. VERN 300L PED 16BAR ORIZZ | € 1.928,00 |
| 866010142X | H.P. VERN 500L PED 16BAR VERT | € 2.371,00 | 866010165X | H.P. VERN 500L PED 16BAR ORIZZ | € 2.609,00 |
| 866010143X | H.P. VERN 800L PED 16BAR VERT | € 3.092,00 | 866010166X | H.P. VERN 800L PED 16BAR ORIZZ | € 3.402,00 |
| 866010144X | H.P. VERN 1000L PED 16BAR VERT | € 3.328,00 | 866010167X | H.P. VERN 1000L PED 16BAR ORIZZ | € 3.661,00 |
| 866010145X | H.P. VERN 1500L PED 16BAR VERT | € 4.285,00 | 866010168X | H.P. VERN 1500L PED 16BAR ORIZZ | € 4.714,00 |
| 866010146X | H.P. VERN 2000L PED 16BAR VERT | € 4.803,00 | 866010169X | H.P. VERN 2000L PED 16BAR ORIZZ | € 5.284,00 |
| 866010147X | H.P. VERN 2000B L PED 16BAR VERT | € 4.939,00 | 866010170X | H.P. VERN 2000B L PED 16BAR ORIZZ | € 5.433,00 |
| 866010148X | H.P. VERN 2500L PED 16BAR VERT | € 6.374,00 | 866010171X | H.P. VERN 2500L PED 16BAR ORIZZ | € 7.012,00 |
| 866010149X | H.P. VERN 3000L PED 16BAR VERT | € 6.544,00 | 866010172X | H.P. VERN 3000L PED 16BAR ORIZZ | € 7.199,00 |
| 866010150X | H.P. VERN 3000B L PED 16BAR VERT | ◆ | 866010173X | H.P. VERN 3000B L PED 16BAR ORIZZ | ◆ |
| 866010151X | H.P. VERN 3500L PED 16BAR VERT | € 8.420,00 | 866010174X | H.P. VERN 3500L PED 16BAR ORIZZ | € 9.262,00 |
| 866010152X | H.P. VERN 4000L PED 16BAR VERT | € 8.621,00 | 866010175X | H.P. VERN 4000L PED 16BAR ORIZZ | € 9.484,00 |
| 866010153X | H.P. VERN 5000L PED 16BAR VERT | € 10.140,00 | 866010176X | H.P. VERN 5000L PED 16BAR ORIZZ | € 11.154,00 |
| 866010154X | H.P. VERN 5000B L PED 16BAR VERT | ◆ | 866010177X | H.P. VERN 5000B L PED 16BAR ORIZZ | ◆ |
| 866010155X | H.P. VERN 6000L PED 16BAR VERT | ◆ | 866010178X | H.P. VERN 6000L PED 16BAR ORIZZ | ◆ |
| 866010156X | H.P. VERN 6000B L PED 16BAR VERT | ◆ | 866010179X | H.P. VERN 6000B L PED 16BAR ORIZZ | ◆ |
| 866010157X | H.P. VERN 7000L PED 16BAR VERT | ◆ | 866010180X | H.P. VERN 7000L PED 16BAR ORIZZ | ◆ |
| 866010158X | H.P. VERN 8000L PED 16BAR VERT | ◆ | 866010181X | H.P. VERN 8000L PED 16BAR ORIZZ | ◆ |
| 866010159X | H.P. VERN 9000L PED 16BAR VERT | ◆ | 866010182X | H.P. VERN 9000L PED 16BAR ORIZZ | ◆ |
| 866010160X | H.P. VERN 9500L PED 16BAR VERT | ◆ | 866010183X | H.P. VERN 9500L PED 16BAR ORIZZ | ◆ |
| 866010161X | H.P. VERN 10000L PED 16BAR VERT | ◆ | 866010184X | H.P. VERN 10000L PED 16BAR ORIZZ | ◆ |

PN 18 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|-------------|------------|-----------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866010185X | H.P. VERN 100L PED 18BAR VERT | € 2.317,00 | 866010200X | H.P. VERN 100L PED 18BAR ORIZZ | € 2.549,00 |
| 866010186X | H.P. VERN 200L PED 18BAR VERT | € 2.512,00 | 866010201X | H.P. VERN 200L PED 18BAR ORIZZ | € 2.764,00 |
| 866010187X | H.P. VERN 300L PED 18BAR VERT | € 2.775,00 | 866010202X | H.P. VERN 300L PED 18BAR ORIZZ | € 3.053,00 |
| 866010188X | H.P. VERN 500L PED 18BAR VERT | € 3.049,00 | 866010203X | H.P. VERN 500L PED 18BAR ORIZZ | € 3.354,00 |
| 866010189X | H.P. VERN 800L PED 18BAR VERT | € 3.607,00 | 866010204X | H.P. VERN 800L PED 18BAR ORIZZ | € 3.968,00 |
| 866010190X | H.P. VERN 1000L PED 18BAR VERT | € 3.829,00 | 866010205X | H.P. VERN 1000L PED 18BAR ORIZZ | € 4.212,00 |
| 866010191X | H.P. VERN 1500L PED 18BAR VERT | € 5.141,00 | 866010206X | H.P. VERN 1500L PED 18BAR ORIZZ | € 5.656,00 |
| 866010192X | H.P. VERN 2000L PED 18BAR VERT | € 5.869,00 | 866010207X | H.P. VERN 2000L PED 18BAR ORIZZ | € 6.456,00 |
| 866010193X | H.P. VERN 2000B L PED 18BAR VERT | € 7.514,00 | 866010208X | H.P. VERN 2000B L PED 18BAR ORIZZ | € 8.266,00 |
| 866010194X | H.P. VERN 2500L PED 18BAR VERT | € 7.556,00 | 866010209X | H.P. VERN 2500L PED 18BAR ORIZZ | € 8.312,00 |
| 866010195X | H.P. VERN 3000L PED 18BAR VERT | € 9.572,00 | 866010210X | H.P. VERN 3000L PED 18BAR ORIZZ | € 10.530,00 |
| 866010196X | H.P. VERN 3000B L PED 18BAR VERT | € 11.527,00 | 866010211X | H.P. VERN 3000B L PED 18BAR ORIZZ | € 12.680,00 |
| 866010197X | H.P. VERN 3500L PED 18BAR VERT | ◆ | 866010212X | H.P. VERN 3500L PED 18BAR ORIZZ | ◆ |
| 866010198X | H.P. VERN 4000L PED 18BAR VERT | ◆ | 866010213X | H.P. VERN 4000L PED 18BAR ORIZZ | ◆ |
| 866010199X | H.P. VERN 5000L PED 18BAR VERT | ◆ | 866010214X | H.P. VERN 5000L PED 18BAR ORIZZ | ◆ |

◆ Request quotation

Product code of P.E.D. tested varnished high pressure tanks

PN 20 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|-------------|------------|-----------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866010215X | H.P. VERN 100L PED 20BAR VERT | ◆ | 866010238X | H.P. VERN 100L PED 20BAR ORIZZ | ◆ |
| 866010216X | H.P. VERN 200L PED 20BAR VERT | ◆ | 866010239X | H.P. VERN 200L PED 20BAR ORIZZ | ◆ |
| 866010217X | H.P. VERN 300L PED 20BAR VERT | ◆ | 866010240X | H.P. VERN 300L PED 20BAR ORIZZ | ◆ |
| 866010218X | H.P. VERN 500L PED 20BAR VERT | ◆ | 866010241X | H.P. VERN 500L PED 20BAR ORIZZ | ◆ |
| 866010219X | H.P. VERN 800L PED 20BAR VERT | ◆ | 866010242X | H.P. VERN 800L PED 20BAR ORIZZ | ◆ |
| 866010220X | H.P. VERN 1000L PED 20BAR VERT | ◆ | 866010243X | H.P. VERN 1000L PED 20BAR ORIZZ | ◆ |
| 866010221X | H.P. VERN 1500L PED 20BAR VERT | ◆ | 866010244X | H.P. VERN 1500L PED 20BAR ORIZZ | ◆ |
| 866010222X | H.P. VERN 2000L PED 20BAR VERT | ◆ | 866010245X | H.P. VERN 2000L PED 20BAR ORIZZ | ◆ |
| 866010223X | H.P. VERN 2000B L PED 20BAR VERT | ◆ | 866010246X | H.P. VERN 2000B L PED 20BAR ORIZZ | ◆ |
| 866010224X | H.P. VERN 2500L PED 20BAR VERT | ◆ | 866010247X | H.P. VERN 2500L PED 20BAR ORIZZ | ◆ |
| 866010225X | H.P. VERN 3000L PED 20BAR VERT | ◆ | 866010248X | H.P. VERN 3000L PED 20BAR ORIZZ | ◆ |
| 866010226X | H.P. VERN 3000B L PED 20BAR VERT | ◆ | 866010249X | H.P. VERN 3000B L PED 20BAR ORIZZ | ◆ |
| 866010227X | H.P. VERN 3500L PED 20BAR VERT | ◆ | 866010250X | H.P. VERN 3500L PED 20BAR ORIZZ | ◆ |
| 866010228X | H.P. VERN 4000L PED 20BAR VERT | € 12.013,00 | 866010251X | H.P. VERN 4000L PED 20BAR ORIZZ | € 13.215,00 |
| 866010229X | H.P. VERN 5000L PED 20BAR VERT | € 15.319,00 | 866010252X | H.P. VERN 5000L PED 20BAR ORIZZ | € 16.851,00 |
| 866010230X | H.P. VERN 5000B L PED 20BAR VERT | € 18.110,00 | 866010253X | H.P. VERN 5000B L PED 20BAR ORIZZ | € 19.921,00 |
| 866010231X | H.P. VERN 6000L PED 20BAR VERT | ◆ | 866010254X | H.P. VERN 6000L PED 20BAR ORIZZ | ◆ |
| 866010232X | H.P. VERN 6000B L PED 20BAR VERT | ◆ | 866010255X | H.P. VERN 6000B L PED 20BAR ORIZZ | ◆ |
| 866010233X | H.P. VERN 7000L PED 20BAR VERT | ◆ | 866010256X | H.P. VERN 7000L PED 20BAR ORIZZ | ◆ |
| 866010234X | H.P. VERN 8000L PED 20BAR VERT | ◆ | 866010257X | H.P. VERN 8000L PED 20BAR ORIZZ | ◆ |
| 866010235X | H.P. VERN 9000L PED 20BAR VERT | ◆ | 866010258X | H.P. VERN 9000L PED 20BAR ORIZZ | ◆ |
| 866010236X | H.P. VERN 9500L PED 20BAR VERT | ◆ | 866010259X | H.P. VERN 9500L PED 20BAR ORIZZ | ◆ |
| 866010237X | H.P. VERN 10000L PED 20BAR VERT | ◆ | 866010260X | H.P. VERN 10000L PED 20BAR ORIZZ | ◆ |

PN 25 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|------------|------------|-----------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866010261X | H.P. VERN 100L PED 25BAR VERT | € 2.278,00 | 866010284X | H.P. VERN 100L PED 25BAR ORIZZ | € 2.506,00 |
| 866010262X | H.P. VERN 200L PED 25BAR VERT | € 2.473,00 | 866010285X | H.P. VERN 200L PED 25BAR ORIZZ | € 2.721,00 |
| 866010263X | H.P. VERN 300L PED 25BAR VERT | € 2.856,00 | 866010286X | H.P. VERN 300L PED 25BAR ORIZZ | € 3.142,00 |
| 866010264X | H.P. VERN 500L PED 25BAR VERT | € 3.345,00 | 866010287X | H.P. VERN 500L PED 25BAR ORIZZ | € 3.680,00 |
| 866010265X | H.P. VERN 800L PED 25BAR VERT | € 4.402,00 | 866010288X | H.P. VERN 800L PED 25BAR ORIZZ | € 4.843,00 |
| 866010266X | H.P. VERN 1000L PED 25BAR VERT | € 4.690,00 | 866010289X | H.P. VERN 1000L PED 25BAR ORIZZ | € 5.159,00 |
| 866010267X | H.P. VERN 1500L PED 25BAR VERT | € 6.121,00 | 866010290X | H.P. VERN 1500L PED 25BAR ORIZZ | € 6.734,00 |
| 866010268X | H.P. VERN 2000L PED 25BAR VERT | € 6.684,00 | 866010291X | H.P. VERN 2000L PED 25BAR ORIZZ | € 7.353,00 |
| 866010269X | H.P. VERN 2000B L PED 25BAR VERT | € 8.303,00 | 866010292X | H.P. VERN 2000B L PED 25BAR ORIZZ | € 9.134,00 |
| 866010270X | H.P. VERN 2500L PED 25BAR VERT | € 8.888,00 | 866010293X | H.P. VERN 2500L PED 25BAR ORIZZ | € 9.777,00 |
| 866010271X | H.P. VERN 3000L PED 25BAR VERT | € 8.929,00 | 866010294X | H.P. VERN 3000L PED 25BAR ORIZZ | € 9.822,00 |
| 866010272X | H.P. VERN 3000B L PED 25BAR VERT | ◆ | 866010295X | H.P. VERN 3000B L PED 25BAR ORIZZ | ◆ |
| 866010273X | H.P. VERN 3500L PED 25BAR VERT | ◆ | 866010296X | H.P. VERN 3500L PED 25BAR ORIZZ | ◆ |
| 866010274X | H.P. VERN 4000L PED 25BAR VERT | ◆ | 866010297X | H.P. VERN 4000L PED 25BAR ORIZZ | ◆ |
| 866010275X | H.P. VERN 5000L PED 25BAR VERT | ◆ | 866010298X | H.P. VERN 5000L PED 25BAR ORIZZ | ◆ |
| 866010276X | H.P. VERN 5000B L PED 25BAR VERT | ◆ | 866010299X | H.P. VERN 5000B L PED 25BAR ORIZZ | ◆ |
| 866010277X | H.P. VERN 6000L PED 25BAR VERT | ◆ | 866010300X | H.P. VERN 6000L PED 25BAR ORIZZ | ◆ |
| 866010278X | H.P. VERN 6000B L PED 25BAR VERT | ◆ | 866010301X | H.P. VERN 6000B L PED 25BAR ORIZZ | ◆ |
| 866010279X | H.P. VERN 7000L PED 25BAR VERT | ◆ | 866010302X | H.P. VERN 7000L PED 25BAR ORIZZ | ◆ |
| 866010280X | H.P. VERN 8000L PED 25BAR VERT | ◆ | 866010303X | H.P. VERN 8000L PED 25BAR ORIZZ | ◆ |
| 866010281X | H.P. VERN 9000L PED 25BAR VERT | ◆ | 866010304X | H.P. VERN 9000L PED 25BAR ORIZZ | ◆ |
| 866010282X | H.P. VERN 9500L PED 25BAR VERT | ◆ | 866010305X | H.P. VERN 9500L PED 25BAR ORIZZ | ◆ |
| 866010283X | H.P. VERN 10000L PED 25BAR VERT | ◆ | 866010306X | H.P. VERN 10000L PED 25BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested varnished high pressure tanks

PN 30 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|------------|------------|-----------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866010307X | H.P. VERN 100L PED 30BAR VERT | ◆ | 866010321X | H.P. VERN 100L PED 30BAR ORIZZ | ◆ |
| 866010308X | H.P. VERN 200L PED 30BAR VERT | ◆ | 866010322X | H.P. VERN 200L PED 30BAR ORIZZ | ◆ |
| 866010309X | H.P. VERN 300L PED 30BAR VERT | ◆ | 866010323X | H.P. VERN 300L PED 30BAR ORIZZ | ◆ |
| 866010310X | H.P. VERN 500L PED 30BAR VERT | ◆ | 866010324X | H.P. VERN 500L PED 30BAR ORIZZ | ◆ |
| 866010311X | H.P. VERN 800L PED 30BAR VERT | € 5,386.00 | 866010325X | H.P. VERN 800L PED 30BAR ORIZZ | ◆ |
| 866010312X | H.P. VERN 1000L PED 30BAR VERT | € 4,928.00 | 866010326X | H.P. VERN 1000L PED 30BAR ORIZZ | € 5,421.00 |
| 866010313X | H.P. VERN 1500L PED 30BAR VERT | € 6,796.00 | 866010327X | H.P. VERN 1500L PED 30BAR ORIZZ | € 7,476.00 |
| 866010314X | H.P. VERN 2000L PED 30BAR VERT | € 7,704.00 | 866010328X | H.P. VERN 2000L PED 30BAR ORIZZ | € 8,475.00 |
| 866010315X | H.P. VERN 2000B L PED 30BAR VERT | ◆ | 866010329X | H.P. VERN 2000B L PED 30BAR ORIZZ | ◆ |
| 866010316X | H.P. VERN 2500L PED 30BAR VERT | ◆ | 866010330X | H.P. VERN 2500L PED 30BAR ORIZZ | ◆ |
| 866010317X | H.P. VERN 3000L PED 30BAR VERT | € 8,795.00 | 866010331X | H.P. VERN 3000L PED 30BAR ORIZZ | € 9,675.00 |
| 866010318X | H.P. VERN 4000L PED 30BAR VERT | ◆ | 866010332X | H.P. VERN 4000L PED 30BAR ORIZZ | ◆ |
| 866010319X | H.P. VERN 5000L PED 30BAR VERT | ◆ | 866010333X | H.P. VERN 5000L PED 30BAR ORIZZ | ◆ |
| 866010320X | H.P. VERN 6000L PED 30BAR VERT | ◆ | 866010334X | H.P. VERN 6000L PED 30BAR ORIZZ | ◆ |

PN 35 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|------------|------------|-----------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866010335X | H.P. VERN 100L PED 35BAR VERT | € 3,250.00 | 866010346X | H.P. VERN 100L PED 35BAR ORIZZ | € 3,575.00 |
| 866010336X | H.P. VERN 200L PED 35BAR VERT | € 3,289.00 | 866010347X | H.P. VERN 200L PED 35BAR ORIZZ | € 3,618.00 |
| 866010337X | H.P. VERN 300L PED 35BAR VERT | € 3,764.00 | 866010348X | H.P. VERN 300L PED 35BAR ORIZZ | € 4,141.00 |
| 866010338X | H.P. VERN 500L PED 35BAR VERT | € 4,830.00 | 866010349X | H.P. VERN 500L PED 35BAR ORIZZ | € 5,313.00 |
| 866010339X | H.P. VERN 800L PED 35BAR VERT | € 5,923.00 | 866010350X | H.P. VERN 800L PED 35BAR ORIZZ | € 6,516.00 |
| 866010340X | H.P. VERN 1000L PED 35BAR VERT | € 6,529.00 | 866010351X | H.P. VERN 1000L PED 35BAR ORIZZ | € 7,182.00 |
| 866010341X | H.P. VERN 1500L PED 35BAR VERT | € 8,228.00 | 866010352X | H.P. VERN 1500L PED 35BAR ORIZZ | € 9,051.00 |
| 866010342X | H.P. VERN 2000L PED 35BAR VERT | ◆ | 866010353X | H.P. VERN 2000L PED 35BAR ORIZZ | ◆ |
| 866010343X | H.P. VERN 2000B L PED 35BAR VERT | ◆ | 866010354X | H.P. VERN 2000B L PED 35BAR ORIZZ | ◆ |
| 866010344X | H.P. VERN 2500L PED 35BAR VERT | ◆ | 866010355X | H.P. VERN 2500L PED 35BAR ORIZZ | ◆ |
| 866010345X | H.P. VERN 3000L PED 35BAR VERT | ◆ | 866010356X | H.P. VERN 3000L PED 35BAR ORIZZ | ◆ |

PN 64 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|------------|------------|---------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866010357X | H.P. VERN 100L PED 64BAR VERT | € 3,406.00 | 866010363X | H.P. VERN 100L PED 64BAR ORIZZ | € 3,747.00 |
| 866010358X | H.P. VERN 200L PED 64BAR VERT | € 4,239.00 | 866010364X | H.P. VERN 200L PED 64BAR ORIZZ | € 4,663.00 |
| 866010359X | H.P. VERN 300L PED 64BAR VERT | € 4,292.00 | 866010365X | H.P. VERN 300L PED 64BAR ORIZZ | € 4,722.00 |
| 866010360X | H.P. VERN 500L PED 64BAR VERT | ◆ | 866010366X | H.P. VERN 500L PED 64BAR ORIZZ | ◆ |
| 866010361X | H.P. VERN 800L PED 64BAR VERT | ◆ | 866010367X | H.P. VERN 800L PED 64BAR ORIZZ | ◆ |
| 866010362X | H.P. VERN 1000L PED 64BAR VERT | ◆ | 866010368X | H.P. VERN 1000L PED 64BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested galvanized high pressure tanks

PN 16 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020139X | H.P. ZN 100L PED 16BAR VERT | € 1.423,00 | 866020162X | H.P. ZN 100L PED 16BAR ORIZZ | € 1.566,00 |
| 866020140X | H.P. ZN 200L PED 16BAR VERT | € 1.450,00 | 866020163X | H.P. ZN 200L PED 16BAR ORIZZ | € 1.595,00 |
| 866020141X | H.P. ZN 300L PED 16BAR VERT | € 1.875,00 | 866020164X | H.P. ZN 300L PED 16BAR ORIZZ | € 2.063,00 |
| 866020142X | H.P. ZN 500L PED 16BAR VERT | € 2.551,00 | 866020165X | H.P. ZN 500L PED 16BAR ORIZZ | € 2.807,00 |
| 866020143X | H.P. ZN 800L PED 16BAR VERT | € 3.419,00 | 866020166X | H.P. ZN 800L PED 16BAR ORIZZ | € 3.761,00 |
| 866020144X | H.P. ZN 1000L PED 16BAR VERT | € 3.748,00 | 866020167X | H.P. ZN 1000L PED 16BAR ORIZZ | € 4.123,00 |
| 866020145X | H.P. ZN 1500L PED 16BAR VERT | € 4.834,00 | 866020168X | H.P. ZN 1500L PED 16BAR ORIZZ | € 5.318,00 |
| 866020146X | H.P. ZN 2000L PED 16BAR VERT | € 5.575,00 | 866020169X | H.P. ZN 2000L PED 16BAR ORIZZ | € 6.133,00 |
| 866020147X | H.P. ZN 2000B L PED 16BAR VERT | € 5.713,00 | 866020170X | H.P. ZN 2000B L PED 16BAR ORIZZ | € 6.285,00 |
| 866020148X | H.P. ZN 2500L PED 16BAR VERT | € 7.194,00 | 866020171X | H.P. ZN 2500L PED 16BAR ORIZZ | € 7.914,00 |
| 866020149X | H.P. ZN 3000L PED 16BAR VERT | € 7.682,00 | 866020172X | H.P. ZN 3000L PED 16BAR ORIZZ | € 8.451,00 |
| 866020150X | H.P. ZN 3000B L PED 16BAR VERT | ◆ | 866020173X | H.P. ZN 3000B L PED 16BAR ORIZZ | ◆ |
| 866020151X | H.P. ZN 3500L PED 16BAR VERT | € 9.856,00 | 866020174X | H.P. ZN 3500L PED 16BAR ORIZZ | € 10.842,00 |
| 866020152X | H.P. ZN 4000L PED 16BAR VERT | € 10.217,00 | 866020175X | H.P. ZN 4000L PED 16BAR ORIZZ | € 11.239,00 |
| 866020153X | H.P. ZN 5000L PED 16BAR VERT | € 12.293,00 | 866020176X | H.P. ZN 5000L PED 16BAR ORIZZ | € 13.523,00 |
| 866020154X | H.P. ZN 5000B L PED 16BAR VERT | ◆ | 866020177X | H.P. ZN 5000B L PED 16BAR ORIZZ | ◆ |
| 866020155X | H.P. ZN 6000L PED 16BAR VERT | ◆ | 866020178X | H.P. ZN 6000L PED 16BAR ORIZZ | ◆ |
| 866020156X | H.P. ZN 6000B L PED 16BAR VERT | ◆ | 866020179X | H.P. ZN 6000B L PED 16BAR ORIZZ | ◆ |
| 866020157X | H.P. ZN 7000L PED 16BAR VERT | ◆ | 866020180X | H.P. ZN 7000L PED 16BAR ORIZZ | ◆ |
| 866020158X | H.P. ZN 8000L PED 16BAR VERT | ◆ | 866020181X | H.P. ZN 8000L PED 16BAR ORIZZ | ◆ |
| 866020159X | H.P. ZN 9000L PED 16BAR VERT | ◆ | 866020182X | H.P. ZN 9000L PED 16BAR ORIZZ | ◆ |
| 866020160X | H.P. ZN 9500L PED 16BAR VERT | ◆ | 866020183X | H.P. ZN 9500L PED 16BAR ORIZZ | ◆ |
| 866020161X | H.P. ZN 10000L PED 16BAR VERT | ◆ | 866020184X | H.P. ZN 10000L PED 16BAR ORIZZ | ◆ |

PN 18 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020185X | H.P. ZN 100L PED 18BAR VERT | € 2.416,00 | 866020200X | H.P. ZN 100L PED 18BAR ORIZZ | € 2.658,00 |
| 866020186X | H.P. ZN 200L PED 18BAR VERT | € 2.640,00 | 866020201X | H.P. ZN 200L PED 18BAR ORIZZ | € 2.904,00 |
| 866020187X | H.P. ZN 300L PED 18BAR VERT | € 2.955,00 | 866020202X | H.P. ZN 300L PED 18BAR ORIZZ | € 3.251,00 |
| 866020188X | H.P. ZN 500L PED 18BAR VERT | € 3.284,00 | 866020203X | H.P. ZN 500L PED 18BAR ORIZZ | € 3.613,00 |
| 866020189X | H.P. ZN 800L PED 18BAR VERT | € 3.901,00 | 866020204X | H.P. ZN 800L PED 18BAR ORIZZ | € 4.292,00 |
| 866020190X | H.P. ZN 1000L PED 18BAR VERT | € 4.215,00 | 866020205X | H.P. ZN 1000L PED 18BAR ORIZZ | € 4.637,00 |
| 866020191X | H.P. ZN 1500L PED 18BAR VERT | € 5.802,00 | 866020206X | H.P. ZN 1500L PED 18BAR ORIZZ | € 6.383,00 |
| 866020192X | H.P. ZN 2000L PED 18BAR VERT | € 6.700,00 | 866020207X | H.P. ZN 2000L PED 18BAR ORIZZ | € 7.370,00 |
| 866020193X | H.P. ZN 2000B L PED 18BAR VERT | € 8.622,00 | 866020208X | H.P. ZN 2000B L PED 18BAR ORIZZ | € 9.485,00 |
| 866020194X | H.P. ZN 2500L PED 18BAR VERT | € 8.916,00 | 866020209X | H.P. ZN 2500L PED 18BAR ORIZZ | € 9.808,00 |
| 866020195X | H.P. ZN 3000L PED 18BAR VERT | € 11.571,00 | 866020210X | H.P. ZN 3000L PED 18BAR ORIZZ | € 12.729,00 |
| 866020196X | H.P. ZN 3000B L PED 18BAR VERT | € 14.204,00 | 866020211X | H.P. ZN 3000B L PED 18BAR ORIZZ | € 15.625,00 |
| 866020197X | H.P. ZN 3500L PED 18BAR VERT | ◆ | 866020212X | H.P. ZN 3500L PED 18BAR ORIZZ | ◆ |
| 866020198X | H.P. ZN 4000L PED 18BAR VERT | ◆ | 866020213X | H.P. ZN 4000L PED 18BAR ORIZZ | ◆ |
| 866020199X | H.P. ZN 5000L PED 18BAR VERT | ◆ | 866020214X | H.P. ZN 5000L PED 18BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested galvanized high pressure tanks

PN 20 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020215X | H.P. ZN 100L PED 20BAR VERT | ◆ | 866020238X | H.P. ZN 100L PED 20BAR ORIZZ | ◆ |
| 866020216X | H.P. ZN 200L PED 20BAR VERT | ◆ | 866020239X | H.P. ZN 200L PED 20BAR ORIZZ | ◆ |
| 866020217X | H.P. ZN 300L PED 20BAR VERT | ◆ | 866020240X | H.P. ZN 300L PED 20BAR ORIZZ | ◆ |
| 866020218X | H.P. ZN 500L PED 20BAR VERT | ◆ | 866020241X | H.P. ZN 500L PED 20BAR ORIZZ | ◆ |
| 866020219X | H.P. ZN 800L PED 20BAR VERT | ◆ | 866020242X | H.P. ZN 800L PED 20BAR ORIZZ | ◆ |
| 866020220X | H.P. ZN 1000L PED 20BAR VERT | ◆ | 866020243X | H.P. ZN 1000L PED 20BAR ORIZZ | ◆ |
| 866020221X | H.P. ZN 1500L PED 20BAR VERT | ◆ | 866020244X | H.P. ZN 1500L PED 20BAR ORIZZ | ◆ |
| 866020222X | H.P. ZN 2000L PED 20BAR VERT | ◆ | 866020245X | H.P. ZN 2000L PED 20BAR ORIZZ | ◆ |
| 866020223X | H.P. ZN 2000B L PED 20BAR VERT | ◆ | 866020246X | H.P. ZN 2000B L PED 20BAR ORIZZ | ◆ |
| 866020224X | H.P. ZN 2500L PED 20BAR VERT | ◆ | 866020247X | H.P. ZN 2500L PED 20BAR ORIZZ | ◆ |
| 866020225X | H.P. ZN 3000L PED 20BAR VERT | ◆ | 866020248X | H.P. ZN 3000L PED 20BAR ORIZZ | ◆ |
| 866020226X | H.P. ZN 3000B L PED 20BAR VERT | ◆ | 866020249X | H.P. ZN 3000B L PED 20BAR ORIZZ | ◆ |
| 866020227X | H.P. ZN 3500L PED 20BAR VERT | ◆ | 866020250X | H.P. ZN 3500L PED 20BAR ORIZZ | ◆ |
| 866020228X | H.P. ZN 4000L PED 20BAR VERT | € 14.451,00 | 866020251X | H.P. ZN 4000L PED 20BAR ORIZZ | € 15.897,00 |
| 866020229X | H.P. ZN 5000L PED 20BAR VERT | € 18.486,00 | 866020252X | H.P. ZN 5000L PED 20BAR ORIZZ | € 20.335,00 |
| 866020230X | H.P. ZN 5000B L PED 20BAR VERT | € 20.702,00 | 866020253X | H.P. ZN 5000B L PED 20BAR ORIZZ | € 22.773,00 |
| 866020231X | H.P. ZN 6000L PED 20BAR VERT | ◆ | 866020254X | H.P. ZN 6000L PED 20BAR ORIZZ | ◆ |
| 866020232X | H.P. ZN 6000B L PED 20BAR VERT | ◆ | 866020255X | H.P. ZN 6000B L PED 20BAR ORIZZ | ◆ |
| 866020233X | H.P. ZN 7000L PED 20BAR VERT | ◆ | 866020256X | H.P. ZN 7000L PED 20BAR ORIZZ | ◆ |
| 866020234X | H.P. ZN 8000L PED 20BAR VERT | ◆ | 866020257X | H.P. ZN 8000L PED 20BAR ORIZZ | ◆ |
| 866020235X | H.P. ZN 9000L PED 20BAR VERT | ◆ | 866020258X | H.P. ZN 9000L PED 20BAR ORIZZ | ◆ |
| 866020236X | H.P. ZN 9500L PED 20BAR VERT | ◆ | 866020259X | H.P. ZN 9500L PED 20BAR ORIZZ | ◆ |
| 866020237X | H.P. ZN 10000L PED 20BAR VERT | ◆ | 866020260X | H.P. ZN 10000L PED 20BAR ORIZZ | ◆ |

PN 25 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020261X | H.P. ZN 100L PED 25BAR VERT | € 2.377,00 | 866020284X | H.P. ZN 100L PED 25BAR ORIZZ | € 2.615,00 |
| 866020262X | H.P. ZN 200L PED 25BAR VERT | € 2.601,00 | 866020285X | H.P. ZN 200L PED 25BAR ORIZZ | € 2.862,00 |
| 866020263X | H.P. ZN 300L PED 25BAR VERT | € 3.050,00 | 866020286X | H.P. ZN 300L PED 25BAR ORIZZ | € 3.355,00 |
| 866020264X | H.P. ZN 500L PED 25BAR VERT | € 3.602,00 | 866020287X | H.P. ZN 500L PED 25BAR ORIZZ | € 3.963,00 |
| 866020265X | H.P. ZN 800L PED 25BAR VERT | € 4.829,00 | 866020288X | H.P. ZN 800L PED 25BAR ORIZZ | € 5.312,00 |
| 866020266X | H.P. ZN 1000L PED 25BAR VERT | € 5.234,00 | 866020289X | H.P. ZN 1000L PED 25BAR ORIZZ | € 5.758,00 |
| 866020267X | H.P. ZN 1500L PED 25BAR VERT | € 7.099,00 | 866020290X | H.P. ZN 1500L PED 25BAR ORIZZ | € 7.809,00 |
| 866020268X | H.P. ZN 2000L PED 25BAR VERT | € 7.830,00 | 866020291X | H.P. ZN 2000L PED 25BAR ORIZZ | € 8.613,00 |
| 866020269X | H.P. ZN 2000B L PED 25BAR VERT | € 9.828,00 | 866020292X | H.P. ZN 2000B L PED 25BAR ORIZZ | € 10.811,00 |
| 866020270X | H.P. ZN 2500L PED 25BAR VERT | € 10.537,00 | 866020293X | H.P. ZN 2500L PED 25BAR ORIZZ | € 11.591,00 |
| 866020271X | H.P. ZN 3000L PED 25BAR VERT | € 10.958,00 | 866020294X | H.P. ZN 3000L PED 25BAR ORIZZ | € 12.054,00 |
| 866020272X | H.P. ZN 3000B L PED 25BAR VERT | ◆ | 866020295X | H.P. ZN 3000B L PED 25BAR ORIZZ | ◆ |
| 866020273X | H.P. ZN 3500L PED 25BAR VERT | ◆ | 866020296X | H.P. ZN 3500L PED 25BAR ORIZZ | ◆ |
| 866020274X | H.P. ZN 4000L PED 25BAR VERT | ◆ | 866020297X | H.P. ZN 4000L PED 25BAR ORIZZ | ◆ |
| 866020275X | H.P. ZN 5000L PED 25BAR VERT | ◆ | 866020298X | H.P. ZN 5000L PED 25BAR ORIZZ | ◆ |
| 866020276X | H.P. ZN 5000B L PED 25BAR VERT | ◆ | 866020299X | H.P. ZN 5000B L PED 25BAR ORIZZ | ◆ |
| 866020277X | H.P. ZN 6000L PED 25BAR VERT | ◆ | 866020300X | H.P. ZN 6000L PED 25BAR ORIZZ | ◆ |
| 866020278X | H.P. ZN 6000B L PED 25BAR VERT | ◆ | 866020301X | H.P. ZN 6000B L PED 25BAR ORIZZ | ◆ |
| 866020279X | H.P. ZN 7000L PED 25BAR VERT | ◆ | 866020302X | H.P. ZN 7000L PED 25BAR ORIZZ | ◆ |
| 866020280X | H.P. ZN 8000L PED 25BAR VERT | ◆ | 866020303X | H.P. ZN 8000L PED 25BAR ORIZZ | ◆ |
| 866020281X | H.P. ZN 9000L PED 25BAR VERT | ◆ | 866020304X | H.P. ZN 9000L PED 25BAR ORIZZ | ◆ |
| 866020282X | H.P. ZN 9500L PED 25BAR VERT | ◆ | 866020305X | H.P. ZN 9500L PED 25BAR ORIZZ | ◆ |
| 866020283X | H.P. ZN 10000L PED 25BAR VERT | ◆ | 866020306X | H.P. ZN 10000L PED 25BAR ORIZZ | ◆ |

◆ Request quotation

Product codes of P.E.D. tested galvanized high pressure tanks

PN 30 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|-------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020307X | H.P. ZN 100L PED 30BAR VERT | ◆ | 866020321X | H.P. ZN 100L PED 30BAR ORIZZ | ◆ |
| 866020308X | H.P. ZN 200L PED 30BAR VERT | ◆ | 866020322X | H.P. ZN 200L PED 30BAR ORIZZ | ◆ |
| 866020309X | H.P. ZN 300L PED 30BAR VERT | ◆ | 866020323X | H.P. ZN 300L PED 30BAR ORIZZ | ◆ |
| 866020310X | H.P. ZN 500L PED 30BAR VERT | ◆ | 866020324X | H.P. ZN 500L PED 30BAR ORIZZ | ◆ |
| 866020311X | H.P. ZN 800L PED 30BAR VERT | € 6.710,00 | 866020325X | H.P. ZN 800L PED 30BAR ORIZZ | € 7.381,00 |
| 866020312X | H.P. ZN 1000L PED 30BAR VERT | € 7.529,00 | 866020326X | H.P. ZN 1000L PED 30BAR ORIZZ | € 8.282,00 |
| 866020313X | H.P. ZN 1500L PED 30BAR VERT | € 9.049,00 | 866020327X | H.P. ZN 1500L PED 30BAR ORIZZ | € 9.954,00 |
| 866020314X | H.P. ZN 2000L PED 30BAR VERT | € 10.161,00 | 866020328X | H.P. ZN 2000L PED 30BAR ORIZZ | € 11.178,00 |
| 866020315X | H.P. ZN 2000B L PED 30BAR VERT | ◆ | 866020329X | H.P. ZN 2000B L PED 30BAR ORIZZ | ◆ |
| 866020316X | H.P. ZN 2500L PED 30BAR VERT | ◆ | 866020330X | H.P. ZN 2500L PED 30BAR ORIZZ | ◆ |
| 866020317X | H.P. ZN 3000L PED 30BAR VERT | € 11.986,00 | 866020331X | H.P. ZN 3000L PED 30BAR ORIZZ | € 13.185,00 |
| 866020318X | H.P. ZN 4000L PED 30BAR VERT | ◆ | 866020332X | H.P. ZN 4000L PED 30BAR ORIZZ | ◆ |
| 866020319X | H.P. ZN 5000L PED 30BAR VERT | ◆ | 866020333X | H.P. ZN 5000L PED 30BAR ORIZZ | ◆ |
| 866020320X | H.P. ZN 6000L PED 30BAR VERT | ◆ | 866020334X | H.P. ZN 6000L PED 30BAR ORIZZ | ◆ |

PN 35 bar

| Vertical | | | Horizontal | | |
|------------|--------------------------------|------------|------------|---------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 866020335X | H.P. ZN 100L PED 35BAR VERT | € 3.383,00 | 866020346X | H.P. ZN 100L PED 35BAR ORIZZ | € 3.722,00 |
| 866020336X | H.P. ZN 200L PED 35BAR VERT | € 3.464,00 | 866020347X | H.P. ZN 200L PED 35BAR ORIZZ | € 3.811,00 |
| 866020337X | H.P. ZN 300L PED 35BAR VERT | € 4.000,00 | 866020348X | H.P. ZN 300L PED 35BAR ORIZZ | € 4.400,00 |
| 866020338X | H.P. ZN 500L PED 35BAR VERT | € 5.228,00 | 866020349X | H.P. ZN 500L PED 35BAR ORIZZ | € 5.751,00 |
| 866020339X | H.P. ZN 800L PED 35BAR VERT | € 6.718,00 | 866020350X | H.P. ZN 800L PED 35BAR ORIZZ | € 7.390,00 |
| 866020340X | H.P. ZN 1000L PED 35BAR VERT | € 7.539,00 | 866020351X | H.P. ZN 1000L PED 35BAR ORIZZ | € 8.293,00 |
| 866020341X | H.P. ZN 1500L PED 35BAR VERT | € 9.559,00 | 866020352X | H.P. ZN 1500L PED 35BAR ORIZZ | € 10.515,00 |
| 866020342X | H.P. ZN 2000L PED 35BAR VERT | ◆ | 866020353X | H.P. ZN 2000L PED 35BAR ORIZZ | ◆ |
| 866020343X | H.P. ZN 2000B L PED 35BAR VERT | ◆ | 866020354X | H.P. ZN 2000B L PED 35BAR ORIZZ | ◆ |
| 866020344X | H.P. ZN 2500L PED 35BAR VERT | ◆ | 866020355X | H.P. ZN 2500L PED 35BAR ORIZZ | ◆ |
| 866020345X | H.P. ZN 3000L PED 35BAR VERT | ◆ | 866020356X | H.P. ZN 3000L PED 35BAR ORIZZ | ◆ |

PN 64 bar

| Vertical | | | Horizontal | | |
|------------|------------------------------|------------|------------|-------------------------------|------------|
| Code | Description | Price | Code | Description | Price |
| 866020357X | H.P. ZN 100L PED 64BAR VERT | € 4.258,00 | 866020363X | H.P. ZN 100L PED 64BAR ORIZZ | € 4.684,00 |
| 866020358X | H.P. ZN 200L PED 64BAR VERT | € 4.927,00 | 866020364X | H.P. ZN 200L PED 64BAR ORIZZ | € 5.420,00 |
| 866020359X | H.P. ZN 300L PED 64BAR VERT | € 5.429,00 | 866020365X | H.P. ZN 300L PED 64BAR ORIZZ | € 5.972,00 |
| 866020360X | H.P. ZN 500L PED 64BAR VERT | ◆ | 866020366X | H.P. ZN 500L PED 64BAR ORIZZ | ◆ |
| 866020361X | H.P. ZN 800L PED 64BAR VERT | ◆ | 866020367X | H.P. ZN 800L PED 64BAR ORIZZ | ◆ |
| 866020362X | H.P. ZN 1000L PED 64BAR VERT | ◆ | 866020368X | H.P. ZN 1000L PED 64BAR ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested expansion vessel for pressurized water, 6, 8, 12 bar – VE series

The VE expansion vessels are generally used in industrial installations in order to compensate for the volume variation of the heat transfer fluid caused by temperature variations. They have no membrane, which brings the heat transfer fluid in direct contact with the air cushion in the tank. Because of the absence of the membrane, you do not have to think about replacing it. The models, with the CE label, are available in capacities from 300 to 20.000 litres in the horizontal, vertical, 6 bar, 8 bar and 12 bar versions.

✓ Special versions

The VE expansion vessels can be modified on demand in order to meet your specific requirements.

✓ **Material:** carbon steel

✓ **Protective treatment:** hot dip galvanizing and external coating

✓ **Covering:** rock wool insulation with variable thickness and an external bush-hammered aluminium cover

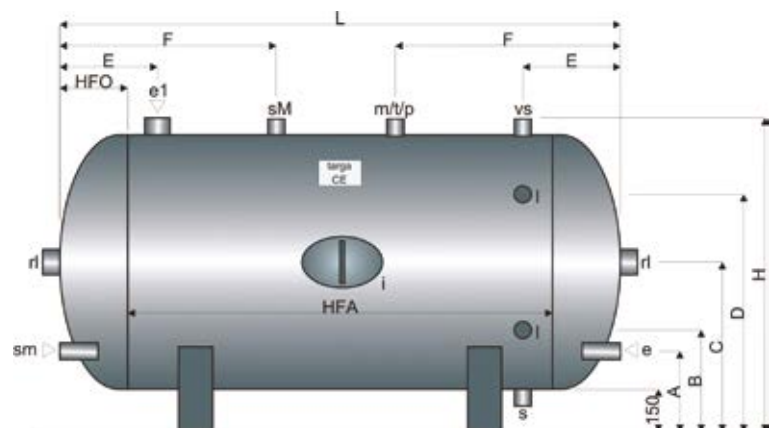
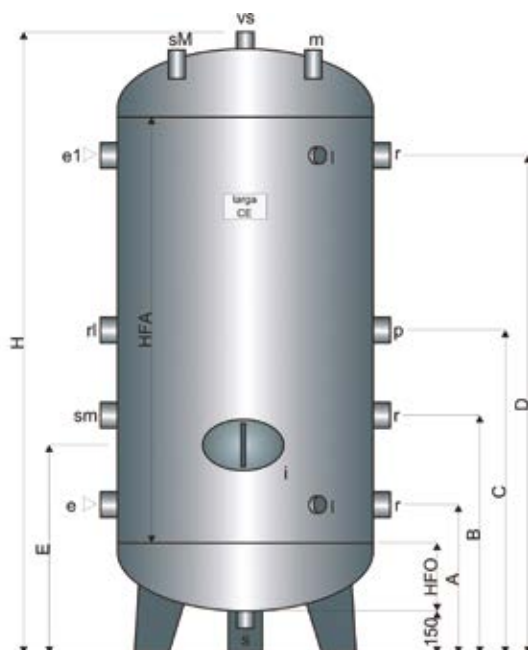
✓ **Operative conditions**

The storage tanks have a max operating temperature from 10°C to the max temperatures, which vary in the versions

| max pressure | max temperature |
|--------------|-----------------|
| 6 bar | 165°C |
| 8 bar | 175°C |
| 12 bar | 200°C |

Couplings

| | |
|----|-------------------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| rl | level regulator |
| i | inspection |
| e | superheated water inlet |
| e1 | air inlet |
| sm | minimum probe |
| sM | maximum probe |
| l | level |
| r | back-up |



P.E.D. tested expansion vessel for pressurized water, 6, 8, 12 bar – VE series

Vertical

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | H mm | weight kg | e inch | e1/sm/s inch | l pn16 | rl/p/r inch | vs inch | m/sM inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|--------------|-----------|-----------------|-----------|----------------|------------|--------------|---------|
| 300 | 550 | 175 | 1000 | 425 | 625 | 825 | 1225 | 475 | 1600 | 89 | 1 1/4 | 1 1/4 | dn20 | 1 | 1 1/4 | 1/2 | * |
| 500 | 650 | 200 | 1250 | 450 | 650 | 975 | 1500 | 500 | 1900 | 126 | 1 1/2 | 1 1/4 | dn20 | 1 | 1 1/2 | 1/2 | * |
| 1000 | 800 | 240 | 1750 | 500 | 700 | 1265 | 2030 | 540 | 2480 | 207 | 2 | 1 1/4 | dn20 | 1 | 2 | 1/2 | * |
| 1500 | 950 | 280 | 1750 | 540 | 740 | 1305 | 2070 | 580 | 2560 | 280 | 2 1/2 | 1 1/4 | dn20 | 1 | 2 1/2 | 1/2 | 100x150 |
| 2000 | 1100 | 310 | 1750 | 580 | 780 | 1335 | 2090 | 610 | 2620 | 401 | 2 1/2 | 1 1/4 | dn20 | 1 | 2 1/2 | 1/2 | 100x150 |
| 3000 | 1250 | 350 | 2000 | 690 | 890 | 1500 | 2310 | 650 | 2950 | 530 | 3 | 1 1/4 | dn20 | 1 | 3 | 1/2 | 100x150 |
| 4000 | 1400 | 390 | 2000 | 750 | 950 | 1540 | 2330 | 790 | 3030 | 731 | 3 | 1 1/4 | dn20 | 1 | 3 | 1/2 | 220x320 |
| 5000 | 1450 | 410 | 2500 | 770 | 970 | 1810 | 2850 | 810 | 3570 | 876 | 3 | 1 1/4 | dn20 | 1 | 3 | 1/2 | 220x320 |
| 6000 | 1450 | 410 | 3000 | 770 | 970 | 2060 | 3350 | 810 | 4070 | 1023 | 3 | 1 1/4 | dn20 | 1 | 3 | 1/2 | 220x320 |
| 8000 | 1650 | 460 | 3000 | 840 | 1040 | 2110 | 3380 | 910 | 4170 | 1390 | 4 | 1 1/4 | dn20 | 1 | 4 | 1/2 | 300x400 |
| 9000 | 1650 | 460 | 3800 | 840 | 1040 | 2510 | 4180 | 910 | 4970 | 1625 | 4 | 1 1/4 | dn20 | 1 | 4 | 1/2 | 300x400 |
| 10000 | 1650 | 460 | 4000 | 840 | 1040 | 2610 | 4380 | 910 | 5170 | 1683 | 4 | 1 1/4 | dn20 | 1 | 4 | 1/2 | 300x400 |
| 15000 | 2000 | 560 | 4000 | 950 | 1150 | 2710 | 4470 | 1010 | 5370 | 2496 | 4 | 1 1/4 | dn20 | 1 | 4 | 1/2 | 300x400 |
| 20000 | 2000 | 560 | 5500 | 950 | 1150 | 3460 | 5970 | 1010 | 6870 | 3104 | 4 | 1 1/4 | dn20 | 1 | 4 | 1/2 | 300x400 |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | L mm | weight kg | e/vs inch | e1/s inch | l pn16 | rl inch | m/sM inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|--------------|--------------|-----------|------------|--------------|---------|
| 300 | 550 | 175 | 1000 | 280 | 295 | 425 | 555 | 275 | 575 | 800 | 1350 | 89 | 1 1/4 | 1 1/4 | dn20 | 1 | 1/2 | * |
| 500 | 650 | 200 | 1250 | 295 | 345 | 475 | 605 | 300 | 725 | 900 | 1650 | 126 | 1 1/2 | 1 1/4 | dn20 | 1 | 1/2 | * |
| 1000 | 800 | 240 | 1750 | 340 | 380 | 550 | 720 | 350 | 1015 | 1050 | 2230 | 207 | 2 | 1 1/4 | dn20 | 1 | 1/2 | * |
| 1500 | 950 | 280 | 1750 | 395 | 420 | 625 | 830 | 390 | 1055 | 1200 | 2310 | 280 | 2 1/2 | 1 1/4 | dn20 | 1 | 1/2 | 100x150 |
| 2000 | 1100 | 310 | 1750 | 410 | 450 | 700 | 950 | 430 | 1065 | 1350 | 2370 | 401 | 2 1/2 | 1 1/4 | dn20 | 1 | 1/2 | 100x150 |
| 3000 | 1250 | 350 | 2000 | 425 | 525 | 775 | 1025 | 540 | 1230 | 1500 | 2700 | 530 | 3 | 1 1/4 | dn20 | 1 | 1/2 | 100x150 |
| 4000 | 1400 | 390 | 2000 | 460 | 600 | 850 | 1100 | 600 | 1270 | 1650 | 2780 | 731 | 3 | 1 1/4 | dn20 | 1 | 1/2 | 220x320 |
| 5000 | 1450 | 410 | 2500 | 465 | 625 | 875 | 1125 | 620 | 1530 | 1700 | 3320 | 876 | 3 | 1 1/4 | dn20 | 1 | 1/2 | 220x320 |
| 6000 | 1450 | 410 | 3000 | 465 | 625 | 875 | 1125 | 620 | 1780 | 1700 | 3820 | 1023 | 3 | 1 1/4 | dn20 | 1 | 1/2 | 220x320 |
| 8000 | 1650 | 460 | 3000 | 525 | 725 | 975 | 1225 | 690 | 1810 | 1900 | 3920 | 1390 | 4 | 1 1/4 | dn20 | 1 | 1/2 | 300x400 |
| 9000 | 1650 | 460 | 3800 | 525 | 725 | 975 | 1225 | 690 | 2210 | 1900 | 4720 | 1625 | 4 | 1 1/4 | dn20 | 1 | 1/2 | 300x400 |
| 10000 | 1650 | 460 | 4000 | 525 | 725 | 975 | 1225 | 690 | 2310 | 1900 | 4920 | 1683 | 4 | 1 1/4 | dn20 | 1 | 1/2 | 300x400 |
| 15000 | 2000 | 560 | 4000 | 700 | 900 | 1150 | 1400 | 800 | 2410 | 2250 | 5120 | 2496 | 4 | 1 1/4 | dn20 | 1 | 1/2 | 300x400 |
| 20000 | 2000 | 560 | 5500 | 700 | 900 | 1150 | 1400 | 800 | 3160 | 2250 | 6620 | 3104 | 4 | 1 1/4 | dn20 | 1 | 1/2 | 300x400 |

Inspection hole on demand * 100x150

P.E.D. tested varnished expansion vessel for pressurized water, 6, 8 bar – VE series

PN 6 bar

| Vertical | | | Horizontal | | |
|------------|-----------------------------------|------------|------------|------------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 867010001X | VERN 300L PED 6BAR 165°C VERT | € 1.783,00 | 867010022X | VERN 300L PED 6BAR 165°C ORIZZ | € 1.871,00 |
| 867010002X | VERN 500L PED 6BAR 165°C VERT | € 2.040,00 | 867010023X | VERN 500L PED 6BAR 165°C ORIZZ | € 2.143,00 |
| 867010003X | VERN 1000L PED 6BAR 165°C VERT | € 2.628,00 | 867010024X | VERN 1000L PED 6BAR 165°C ORIZZ | € 2.760,00 |
| 867010004X | VERN 1000B L PED 6BAR 165°C VERT | € 3.383,00 | 867010025X | VERN 1000B L PED 6BAR 165°C ORIZZ | € 3.551,00 |
| 867010005X | VERN 1500L PED 6BAR 165°C VERT | € 4.174,00 | 867010026X | VERN 1500L PED 6BAR 165°C ORIZZ | € 4.383,00 |
| 867010006X | VERN 1500B L PED 6BAR 165°C VERT | € 4.386,00 | 867010027X | VERN 1500B L PED 6BAR 165°C ORIZZ | € 4.605,00 |
| 867010007X | VERN 2000L PED 6BAR 165°C VERT | € 4.653,00 | 867010028X | VERN 2000L PED 6BAR 165°C ORIZZ | € 4.885,00 |
| 867010008X | VERN 2000B L PED 6BAR 165°C VERT | € 4.916,00 | 867010029X | VERN 2000B L PED 6BAR 165°C ORIZZ | € 5.163,00 |
| 867010009X | VERN 2500B1 L PED 6BAR 165°C VERT | € 6.296,00 | 867010030X | VERN 2500B1 L PED 6BAR 165°C ORIZZ | € 6.611,00 |
| 867010010X | VERN 3000L PED 6BAR 165°C VERT | € 5.314,00 | 867010031X | VERN 3000L PED 6BAR 165°C ORIZZ | € 5.580,00 |
| 867010011X | VERN 3000B L PED 6BAR 165°C VERT | € 6.541,00 | 867010032X | VERN 3000B L PED 6BAR 165°C ORIZZ | € 6.868,00 |
| 867010012X | VERN 3000C L PED 6BAR 165°C VERT | € 6.900,00 | 867010033X | VERN 3000C L PED 6BAR 165°C VERT | € 7.245,00 |
| 867010013X | VERN 4000L PED 6BAR 165°C VERT | € 7.246,00 | 867010034X | VERN 4000L PED 6BAR 165°C ORIZZ | € 7.609,00 |
| 867010014X | VERN 5000L PED 6BAR 165°C VERT | € 8.704,00 | 867010035X | VERN 5000L PED 6BAR 165°C ORIZZ | € 9.140,00 |
| 867010015X | VERN 5000B L PED 6BAR 165°C VERT | € 9.589,00 | 867010036X | VERN 5000B L PED 6BAR 165°C ORIZZ | € 10.068,00 |
| 867010016X | VERN 6000L PED 6BAR 165°C VERT | € 9.818,00 | 867010037X | VERN 6000L PED 6BAR 165°C ORIZZ | € 10.309,00 |
| 867010017X | VERN 8000L PED 6BAR 165°C VERT | ◆ | 867010038X | VERN 8000L PED 6BAR 165°C ORIZZ | ◆ |
| 867010018X | VERN 9000L PED 6BAR 165°C VERT | ◆ | 867010039X | VERN 9000L PED 6BAR 165°C ORIZZ | ◆ |
| 867010019X | VERN 10000L PED 6BAR 165°C VERT | ◆ | 867010040X | VERN 10000L PED 6BAR 165°C ORIZZ | ◆ |

PN 8 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|-------------|------------|-----------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 867010043X | VERN 300L PED 8BAR 176°C VERT | € 1.783,00 | 867010058X | VERN 300L PED 8BAR 176°C ORIZZ | € 1.871,00 |
| 867010044X | VERN 500L PED 8BAR 176°C VERT | € 2.040,00 | 867010059X | VERN 500L PED 8BAR 176°C ORIZZ | € 2.143,00 |
| 867010045X | VERN 1000L PED 8BAR 176°C VERT | € 2.636,00 | 867010060X | VERN 1000L PED 8BAR 176°C ORIZZ | € 2.769,00 |
| 867010046X | VERN 1500L PED 8BAR 176°C VERT | € 4.214,00 | 867010061X | VERN 1500L PED 8BAR 176°C ORIZZ | € 4.424,00 |
| 867010047X | VERN 2000L PED 8BAR 176°C VERT | € 5.088,00 | 867010062X | VERN 2000L PED 8BAR 176°C ORIZZ | € 5.343,00 |
| 867010048X | VERN 3000L PED 8BAR 176°C VERT | € 5.871,00 | 867010063X | VERN 3000L PED 8BAR 176°C ORIZZ | € 6.165,00 |
| 867010049X | VERN 4000L PED 8BAR 176°C VERT | € 7.686,00 | 867010064X | VERN 4000L PED 8BAR 176°C ORIZZ | € 8.071,00 |
| 867010050X | VERN 5000L PED 8BAR 176°C VERT | € 9.268,00 | 867010065X | VERN 5000L PED 8BAR 176°C ORIZZ | € 9.731,00 |
| 867010051X | VERN 5000B L PED 8BAR 176°C VERT | € 9.818,00 | 867010066X | VERN 5000B L PED 8BAR 176°C ORIZZ | € 10.309,00 |
| 867010052X | VERN 6000L PED 8BAR 176°C VERT | € 10.354,00 | 867010067X | VERN 6000L PED 8BAR 176°C ORIZZ | € 10.871,00 |
| 867010053X | VERN 8000L PED 8BAR 176°C VERT | ◆ | 867010068X | VERN 8000L PED 8BAR 176°C ORIZZ | ◆ |
| 867010054X | VERN 9000L PED 8BAR 176°C VERT | ◆ | 867010069X | VERN 9000L PED 8BAR 176°C ORIZZ | ◆ |
| 867010055X | VERN 10000L PED 8BAR 176°C VERT | ◆ | 867010070X | VERN 10000L PED 8BAR 176°C ORIZZ | ◆ |
| 867010056X | VERN 15000L PED 8BAR 176°C VERT | ◆ | 867010071X | VERN 15000L PED 8BAR 176°C ORIZZ | ◆ |
| 867010057X | VERN 20000L PED 8BAR 176°C VERT | ◆ | 867010072X | VERN 20000L PED 8BAR 176°C ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested varnished expansion vessel for pressurized water, 12 bar – VE series

PN 12 bar

| Vertical | | | Horizontal | | |
|------------|-----------------------------------|-------------|------------|------------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 867010073X | VERN 300L PED 12BAR 200°C VERT | € 1.860,00 | 867010088X | VERN 300L PED 12BAR 200°C ORIZZ | € 1.953,00 |
| 867010074X | VERN 500L PED 12BAR 200°C VERT | € 2.214,00 | 867010089X | VERN 500L PED 12BAR 200°C ORIZZ | € 2.325,00 |
| 867010075X | VERN 1000L PED 12BAR 200°C VERT | € 3.379,00 | 867010090X | VERN 1000L PED 12BAR 200°C ORIZZ | € 3.548,00 |
| 867010076X | VERN 1500L PED 12BAR 200°C VERT | € 4.888,00 | 867010091X | VERN 1500L PED 12BAR 200°C VERT | € 5.133,00 |
| 867010077X | VERN 2000L PED 12BAR 200°C VERT | € 5.765,00 | 867010092X | VERN 2000L PED 12BAR 200°C ORIZZ | € 6.053,00 |
| 867010078X | VERN 3000L PED 12BAR 200°C VERT | € 6.785,00 | 867010093X | VERN 3000L PED 12BAR 200°C ORIZZ | € 7.124,00 |
| 867010079X | VERN 4000L PED 12BAR 200°C VERT | € 9.589,00 | 867010094X | VERN 4000L PED 12BAR 200°C ORIZZ | € 10.068,00 |
| 867010080X | VERN 5000L PED 12BAR 200°C VERT | € 11.199,00 | 867010095X | VERN 5000L PED 12BAR 200°C ORIZZ | € 11.758,00 |
| 867010081X | VERN 5000B L PED 12BAR 200°C VERT | € 11.471,00 | 867010096X | VERN 5000B L PED 12BAR 200°C ORIZZ | € 12.045,00 |
| 867010082X | VERN 6000L PED 12BAR 200°C VERT | € 12.263,00 | 867010097X | VERN 6000L PED 12BAR 200°C ORIZZ | € 12.875,00 |
| 867010083X | VERN 8000L PED 12BAR 200°C VERT | ◆ | 867010098X | VERN 8000L PED 12BAR 200°C ORIZZ | ◆ |
| 867010084X | VERN 9000L PED 12BAR 200°C VERT | ◆ | 867010099X | VERN 9000L PED 12BAR 200°C ORIZZ | ◆ |
| 867010085X | VERN 10000L PED 12BAR 200°C VERT | ◆ | 867010100X | VERN 10000L PED 12BAR 200°C ORIZZ | ◆ |
| 867010086X | VERN 15000L PED 12BAR 200°C VERT | ◆ | 867010101X | VERN 15000L PED 12BAR 200°C ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested expansion vessel for pressurized heat transfer oil – VO series

The VO series are installed in industrial heaters with heat transfer oil in a closed circuit in order to compensate for the thermal expansion of the heat transfer fluid. The models, with CE label, are available in capacities from 300 up to 15.000 litres in the horizontal, vertical and 6 bar version. It operates with a maximum operating temperature of 350°C.

✓ Special versions

The VE expansion vessels can be modified on demand in order to meet your specific requirements.

✓ **Material:** carbon steel

✓ **Protective treatment:** hot dip galvanizing and external coating

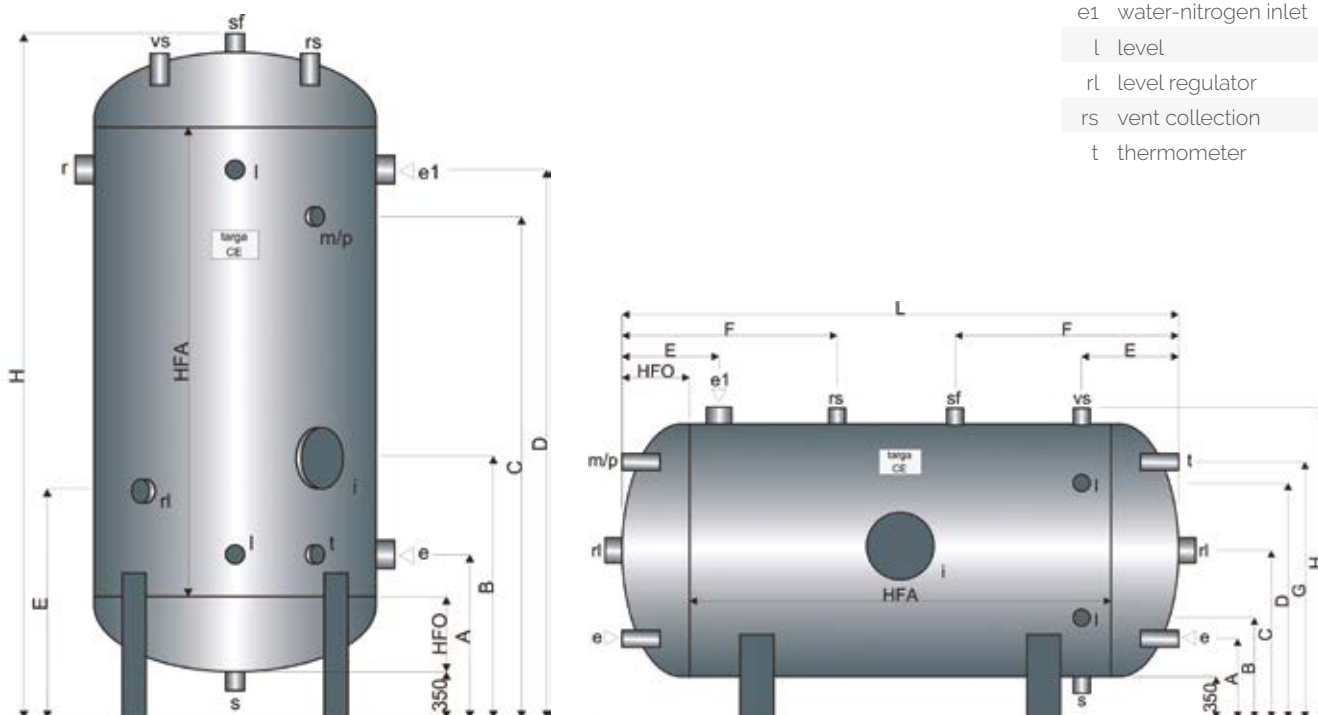
✓ **Covering:** on demand rock wool insulation with variable thickness and an external bush-hammered aluminium cover

✓ Operative conditions

The storage tanks have a max operating temperature from 10°C to the max temperatures, which vary in the versions

Couplings

| | |
|----|----------------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| i | inspection |
| sf | vent |
| e | oil inlet |
| r | back-up |
| e1 | water-nitrogen inlet |
| l | level |
| rl | level regulator |
| rs | vent collection |
| t | thermometer |



P.E.D. tested expansion vessel for pressurized heat transfer oil – VO series

Vertical

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | H mm | weight kg | e pn16 | e1/l sf/rs pn16 | rl pn16 | vs pn16 | s inch | m/p/t inch | r pn16 | i pn16 |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|--------------|-----------|-----------------------|------------|------------|-----------|---------------|-----------|-----------|
| 300 | 500 | 165 | 1250 | 605 | 915 | 1615 | 1675 | 765 | 2030 | 81 | Dn32 | Dn20 | Dn100 | Dn25 | 1 1/2 | 1/2 | Dn15 | Dn100 |
| 500 | 650 | 200 | 1250 | 640 | 1150 | 1550 | 1710 | 800 | 2100 | 120 | Dn32 | Dn20 | Dn100 | Dn25 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 800 | 800 | 240 | 1250 | 700 | 1190 | 1590 | 1730 | 840 | 2180 | 192 | Dn50 | Dn20 | Dn100 | Dn25 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 1000 | 800 | 240 | 1700 | 700 | 1190 | 2040 | 2180 | 840 | 2630 | 230 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 1500 | 950 | 280 | 1750 | 750 | 1230 | 2130 | 2260 | 880 | 2760 | 332 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 2000 | 1100 | 310 | 1750 | 780 | 1260 | 2160 | 2290 | 910 | 2820 | 412 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 2500 | 1250 | 350 | 1800 | 840 | 1300 | 2250 | 2360 | 950 | 2950 | 594 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 3000 | 1250 | 350 | 2000 | 840 | 1300 | 2450 | 2560 | 950 | 3150 | 632 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 4000 | 1400 | 390 | 2000 | 890 | 1340 | 2490 | 2590 | 990 | 3230 | 837 | Dn65 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 5000 | 1450 | 410 | 2500 | 910 | 1360 | 3010 | 3110 | 1010 | 3770 | 1005 | Dn65 | Dn20 | Dn100 | Dn40 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 6000 | 1450 | 410 | 3000 | 920 | 1360 | 3510 | 3600 | 1010 | 4270 | 1171 | Dn65 | Dn20 | Dn100 | Dn40 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 8000 | 1650 | 460 | 3000 | 970 | 1410 | 3560 | 3650 | 1060 | 4370 | 1594 | Dn80 | Dn20 | Dn100 | Dn50 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 9000 | 1650 | 460 | 3800 | 970 | 1410 | 4360 | 4450 | 1060 | 5170 | 1861 | Dn80 | Dn20 | Dn100 | Dn50 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 10000 | 1650 | 460 | 4000 | 970 | 1410 | 4560 | 4650 | 1060 | 5370 | 1930 | Dn80 | Dn20 | Dn100 | Dn50 | 1 1/2 | 1/2 | Dn15 | Dn150 |
| 15000 | 1650 | 460 | 6000 | 1040 | 1410 | 6560 | 6580 | 1060 | 7370 | 2594 | Dn100 | Dn20 | Dn100 | Dn80 | 1 1/2 | 1/2 | Dn15 | Dn150 |

Horizontal

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | L mm | weight kg | e pn16 | e1/l sf/rs pn16 | rl pn16 | vs pn16 | s inch | m/p/t inch | i pn16 |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-----------|-----------------------|------------|------------|-----------|---------------|-----------|
| 300 | 500 | 165 | 1250 | 430 | 490 | 600 | 710 | 255 | 690 | 950 | 1580 | 81 | Dn32 | Dn20 | Dn100 | Dn25 | 1 1/2 | 1/2 | Dn 100 |
| 500 | 650 | 200 | 1250 | 450 | 545 | 675 | 805 | 290 | 725 | 1100 | 1650 | 120 | Dn32 | Dn20 | Dn100 | Dn25 | 1 1/2 | 1/2 | Dn 150 |
| 800 | 800 | 240 | 1250 | 480 | 580 | 750 | 920 | 350 | 765 | 1250 | 1730 | 192 | Dn50 | Dn20 | Dn100 | Dn25 | 1 1/2 | 1/2 | Dn 150 |
| 1000 | 800 | 240 | 1700 | 480 | 580 | 750 | 920 | 350 | 990 | 1250 | 2180 | 230 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn 150 |
| 1500 | 950 | 280 | 1750 | 500 | 620 | 825 | 1030 | 400 | 1035 | 1400 | 2310 | 332 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn 150 |
| 2000 | 1100 | 310 | 1750 | 515 | 650 | 900 | 1150 | 430 | 1065 | 1550 | 2370 | 412 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn 150 |
| 2500 | 1250 | 350 | 1800 | 590 | 725 | 975 | 1225 | 490 | 1130 | 1700 | 2500 | 594 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn 150 |
| 3000 | 1250 | 350 | 2000 | 538 | 675 | 975 | 1275 | 490 | 1220 | 1700 | 2700 | 632 | Dn50 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn 150 |
| 4000 | 1400 | 390 | 2000 | 613 | 750 | 1050 | 1350 | 540 | 1260 | 1850 | 2780 | 837 | Dn65 | Dn20 | Dn100 | Dn32 | 1 1/2 | 1/2 | Dn 150 |
| 5000 | 1650 | 460 | 1700 | 605 | 675 | 1175 | 1675 | 610 | 1160 | 2100 | 2620 | 1125 | Dn65 | Dn20 | Dn100 | Dn40 | 1 1/2 | 1/2 | Dn 150 |
| 6000 | 1450 | 410 | 3000 | 575 | 475 | 1075 | 1675 | 570 | 1760 | 1900 | 3820 | 1171 | Dn65 | Dn20 | Dn100 | Dn40 | 1 1/2 | 1/2 | Dn 150 |
| 8000 | 1650 | 460 | 3000 | 605 | 675 | 1175 | 1675 | 620 | 1810 | 2100 | 3920 | 1594 | Dn80 | Dn20 | Dn100 | Dn50 | 1 1/2 | 1/2 | Dn 150 |
| 9000 | 1650 | 460 | 3800 | 605 | 575 | 1175 | 1775 | 620 | 2210 | 2100 | 4720 | 1861 | Dn80 | Dn20 | Dn100 | Dn50 | 1 1/2 | 1/2 | Dn 150 |
| 10000 | 1650 | 460 | 4000 | 605 | 575 | 1175 | 1775 | 620 | 2310 | 2100 | 4920 | 1930 | Dn80 | Dn20 | Dn100 | Dn50 | 1 1/2 | 1/2 | Dn 150 |
| 15000 | 1650 | 460 | 6000 | 605 | 575 | 1175 | 1775 | 620 | 3310 | 2100 | 6920 | 2594 | Dn100 | Dn20 | Dn100 | Dn80 | 1 1/2 | 1/2 | Dn 150 |

Possibility: execution with customized dimensions

Product codes P.E.D. tested expansion vessel for pressurized heat transfer oil 6 bar 350°C

PN 6 bar

| Vertical | | | Horizontal | | |
|------------|----------------------------------|-------------|------------|-----------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 868010001X | VERN 300L PED 6BAR 350°C VERT | € 2.091,00 | 868010017X | VERN 300L PED 6BAR 350°C ORIZZ | € 2.196,00 |
| 868010002X | VERN 500L PED 6BAR 350°C VERT | € 2.397,00 | 868010018X | VERN 500L PED 6BAR 350°C ORIZZ | € 2.517,00 |
| 868010003X | VERN 800L PED 6BAR 350°C VERT | ◆ | 868010019X | VERN 800L PED 6BAR 350°C ORIZZ | ◆ |
| 868010004X | VERN 1000L PED 6BAR 350°C VERT | € 3.520,00 | 868010020X | VERN 1000L PED 6BAR 350°C ORIZZ | € 3.696,00 |
| 868010005X | VERN 1500L PED 6BAR 350°C VERT | € 4.535,00 | 868010021X | VERN 1500L PED 6BAR 350°C ORIZZ | € 4.761,00 |
| 868010006X | VERN 2000L PED 6BAR 350°C VERT | € 5.352,00 | 868010022X | VERN 2000L PED 6BAR 350°C ORIZZ | € 5.620,00 |
| 868010007X | VERN 2500L PED 6BAR 350°C VERT | ◆ | 868010023X | VERN 2500L PED 6BAR 350°C ORIZZ | ◆ |
| 868010008X | VERN 3000L PED 6BAR 350°C VERT | € 6.682,00 | 868010024X | VERN 3000L PED 6BAR 350°C ORIZZ | € 7.016,00 |
| 868010009X | VERN 4000L PED 6BAR 350°C VERT | € 8.225,00 | 868010025X | VERN 4000L PED 6BAR 350°C ORIZZ | € 8.636,00 |
| 868010010X | VERN 5000L PED 6BAR 350°C VERT | € 10.586,00 | 868010026X | VERN 5000L PED 6BAR 350°C ORIZZ | € 11.115,00 |
| 868010011X | VERN 5000B L PED 6BAR 350°C VERT | € 11.642,00 | 868010027X | VERN 5000B L PED 6BAR 350°C ORIZZ | € 12.225,00 |
| 868010012X | VERN 6000L PED 6BAR 350°C VERT | € 11.158,00 | 868010028X | VERN 6000L PED 6BAR 350°C ORIZZ | € 11.716,00 |
| 868010013X | VERN 8000L PED 6BAR 350°C VERT | ◆ | 868010029X | VERN 8000L PED 6BAR 350°C ORIZZ | ◆ |
| 868010014X | VERN 9000L PED 6BAR 350°C VERT | ◆ | 868010030X | VERN 9000L PED 6BAR 350°C ORIZZ | ◆ |
| 868010015X | VERN 10000L PED 6BAR 350°C VERT | ◆ | 868010031X | VERN 10000L PED 6BAR 350°C ORIZZ | ◆ |
| 868010016X | VERN 15000L PED 6BAR 350°C VERT | ◆ | 868010032X | VERN 15000L PED 6BAR 350°C ORIZZ | ◆ |

◆ Request quotation

P.E.D. tested steam accumulator tanks 12 bar 200°C – AV series

The AV steam accumulators are generally installed to support industrial steam generators (fast and with a forced circulation). The accumulator is the lung in applications in which the steam content of the heaters is low and not sufficient to manage the numerous transitions generated by the start-up and shut-down cycles of the heater.

The models, with CE label, are available in capacities from 300 up to 20.000 litres in the vertical and horizontal versions with a max pressure of 12 bar and a max operating temperature of 200°C.

✓ Special versions

The AV expansion vessels can be modified on demand in order to meet your specific requirements.

✓ **Material:** carbon steel

✓ **Protective treatment:** hot dip galvanizing and external coating

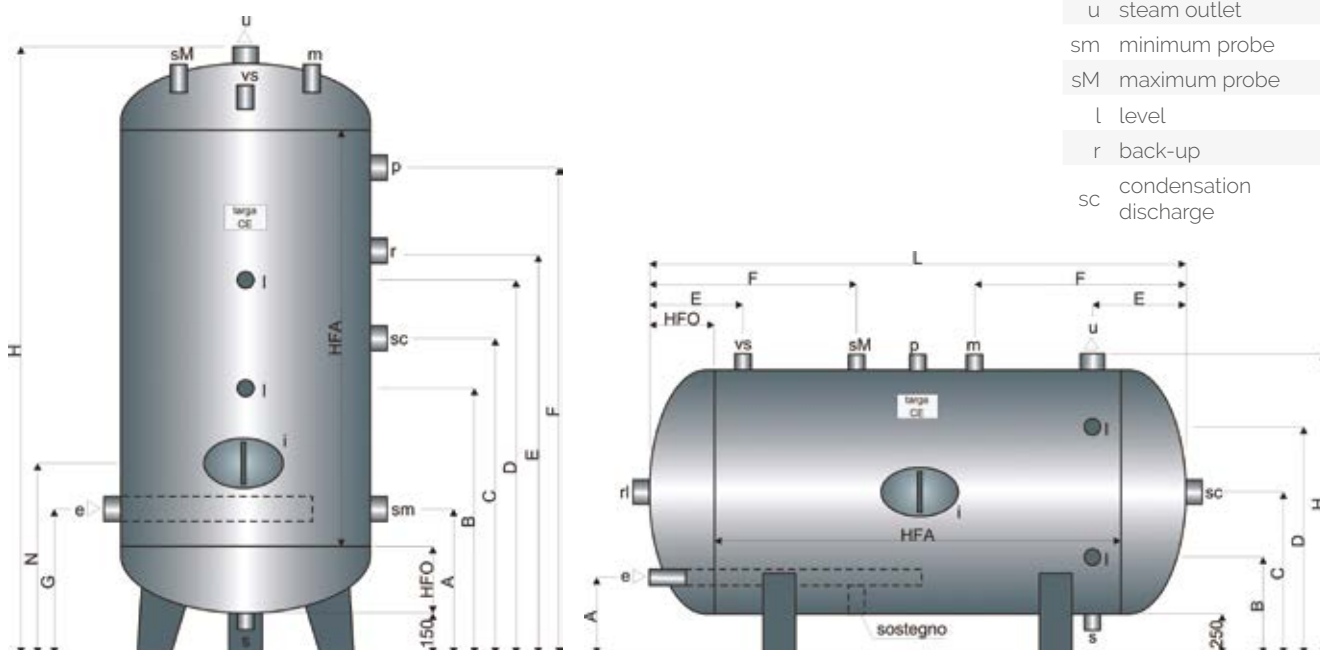
✓ **Covering:** on demand rock wool insulation with variable thickness and an external bush-hammered aluminium cover

✓ Operative conditions

The storage tanks have a max operating temperature from 10°C to the max temperatures, which vary in the versions

Coupling

| | |
|----|------------------------|
| s | discharge |
| vs | safety valve |
| m | manometer |
| p | pressostat |
| rl | level regulator |
| i | inspection |
| e | steam inlet |
| u | steam outlet |
| sm | minimum probe |
| sM | maximum probe |
| l | level |
| r | back-up |
| sc | condensation discharge |



P.E.D. tested steam accumulator tanks 12 bar 200°C – AV series

Vertical

| capacity l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | N mm | H mm | weight kg | e/u pn16 | l pn16 | sc sm/r inch | vs pn16 | s inch | m/p sM inch | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------|-----------|--------------------|------------|-----------|-------------------|---------|
| 300 | 550 | 175 | 1000 | 445 | 695 | 825 | 955 | 1005 | 1205 | 445 | 475 | 1600 | 95 | Dn40 | Dn20 | 1 | Dn25 | 1 1/4 | 1/2 | 100x150 |
| 500 | 650 | 200 | 1250 | 470 | 805 | 975 | 1145 | 1280 | 1480 | 470 | 500 | 1900 | 135 | Dn40 | Dn20 | 1 | Dn25 | 1 1/4 | 1/2 | 100x150 |
| 1000 | 800 | 240 | 1700 | 590 | 1070 | 1240 | 1410 | 1690 | 1890 | 540 | 640 | 2430 | 270 | Dn50 | Dn20 | 1 | Dn25 | 1 1/4 | 1/2 | 220x320 |
| 1500 | 950 | 280 | 1750 | 630 | 1135 | 1305 | 1475 | 1780 | 1980 | 580 | 680 | 2560 | 395 | Dn65 | Dn20 | 1 | Dn40 | 1 1/4 | 1/2 | 220x320 |
| 2000 | 1100 | 320 | 1750 | 720 | 1175 | 1345 | 1515 | 1770 | 1970 | 620 | 720 | 2640 | 545 | Dn65 | Dn20 | 1 | Dn40 | 1 1/4 | 1/2 | 220x320 |
| 3000 | 1250 | 360 | 2000 | 760 | 1340 | 1510 | 1680 | 2060 | 2260 | 670 | 760 | 2970 | 795 | Dn65 | Dn20 | 1 | Dn50 | 1 1/4 | 1/2 | 220x320 |
| 4000 | 1400 | 410 | 2000 | 810 | 1390 | 1560 | 1730 | 2110 | 2310 | 800 | 810 | 3070 | 1132 | Dn100 | Dn20 | 1 | Dn50 | 1 1/4 | 1/2 | 220x320 |
| 5000 | 1450 | 420 | 2500 | 820 | 1650 | 1820 | 1990 | 2620 | 2820 | 810 | 820 | 3590 | 1369 | Dn150 | Dn20 | 1 | Dn50 | 1 1/4 | 1/2 | 220x320 |
| 6000 | 1450 | 420 | 3000 | 820 | 1900 | 2070 | 2240 | 3120 | 3320 | 810 | 820 | 4090 | 1590 | Dn150 | Dn20 | 1 | Dn50 | 1 1/4 | 1/2 | 220x320 |
| 8000 | 1650 | 480 | 3000 | 880 | 1960 | 2130 | 2300 | 3180 | 3380 | 880 | 880 | 4210 | 1856 | Dn150 | Dn20 | 1 | Dn65 | 1 1/4 | 1/2 | 220x320 |
| 9000 | 1650 | 480 | 3800 | 880 | 2360 | 2530 | 2700 | 3980 | 4180 | 880 | 880 | 5010 | 2190 | Dn150 | Dn20 | 1 | Dn65 | 1 1/4 | 1/2 | 220x320 |
| 10000 | 1650 | 480 | 4000 | 880 | 2460 | 2630 | 2800 | 4180 | 4380 | 880 | 880 | 5210 | 2275 | Dn150 | Dn20 | 1 | Dn65 | 1 1/4 | 1/2 | 220x320 |
| 15000 | 2000 | 570 | 4000 | 970 | 2515 | 2720 | 2925 | 4270 | 4470 | 990 | 1020 | 5390 | 2910 | Dn150 | Dn20 | 1 | Dn65 | 1 1/4 | 1/2 | 300x400 |
| 20000 | 2000 | 570 | 5500 | 970 | 3265 | 3470 | 3675 | 5770 | 5970 | 990 | 1020 | 6890 | 3670 | Dn150 | Dn20 | 1 | Dn65 | 1 1/4 | 1/2 | 300x400 |

Horizontal

| capacità l | Ø mm | HFO mm | HFA mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | L mm | weight kg | e/u pn16 | l pn16 | sc/rl pollici | vs pn16 | s pn16 | m/p sM pollici | i mm |
|---------------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------|-----------|------------------|------------|-----------|----------------------|---------|
| 300 | 550 | 175 | 1000 | 380 | 395 | 525 | 655 | 295 | 475 | 900 | 1350 | 95 | Dn40 | Dn20 | 1 | Dn25 | Dn25 | 1/2 | 100x150 |
| 500 | 650 | 200 | 1250 | 395 | 445 | 575 | 705 | 320 | 625 | 1000 | 1650 | 135 | Dn40 | Dn20 | 1 | Dn25 | Dn25 | 1/2 | 100x150 |
| 1000 | 800 | 240 | 1700 | 440 | 480 | 650 | 820 | 440 | 890 | 1150 | 2180 | 270 | Dn50 | Dn20 | 1 | Dn25 | Dn25 | 1/2 | 220x320 |
| 1500 | 950 | 280 | 1750 | 495 | 555 | 725 | 895 | 480 | 955 | 1300 | 2310 | 395 | Dn65 | Dn20 | 1 | Dn40 | Dn25 | 1/2 | 220x320 |
| 2000 | 1100 | 320 | 1750 | 510 | 630 | 800 | 970 | 570 | 995 | 1450 | 2390 | 545 | Dn65 | Dn20 | 1 | Dn40 | Dn25 | 1/2 | 220x320 |
| 3000 | 1250 | 360 | 2000 | 525 | 705 | 875 | 1045 | 610 | 1080 | 1600 | 2720 | 795 | Dn65 | Dn20 | 1 | Dn50 | Dn25 | 1/2 | 220x320 |
| 4000 | 1400 | 410 | 2000 | 560 | 780 | 950 | 1120 | 660 | 1130 | 1750 | 2820 | 1132 | Dn100 | Dn20 | 1 | Dn50 | Dn25 | 1/2 | 220x320 |
| 5000 | 1450 | 420 | 2500 | 585 | 805 | 975 | 1145 | 670 | 1370 | 1800 | 3340 | 1369 | Dn100 | Dn20 | 1 | Dn50 | Dn25 | 1/2 | 220x320 |
| 6000 | 1450 | 420 | 3000 | 585 | 805 | 975 | 1145 | 670 | 1620 | 1800 | 3840 | 1590 | Dn150 | Dn20 | 1 | Dn50 | Dn25 | 1/2 | 220x320 |
| 8000 | 1650 | 480 | 3000 | 575 | 905 | 1075 | 1245 | 730 | 1670 | 2000 | 3960 | 1856 | Dn150 | Dn20 | 1 | Dn65 | Dn32 | 1/2 | 220x320 |
| 9000 | 1650 | 480 | 3800 | 575 | 905 | 1075 | 1245 | 730 | 1900 | 2000 | 4760 | 2190 | Dn150 | Dn20 | 1 | Dn65 | Dn32 | 1/2 | 220x320 |
| 10000 | 1650 | 480 | 4000 | 575 | 905 | 1075 | 1245 | 730 | 2000 | 2000 | 4960 | 2275 | Dn150 | Dn20 | 1 | Dn65 | Dn32 | 1/2 | 220x320 |
| 15000 | 2000 | 570 | 4000 | 700 | 1045 | 1250 | 1455 | 820 | 2090 | 2350 | 5140 | 2910 | Dn150 | Dn20 | 1 | Dn65 | Dn32 | 1/2 | 300x400 |
| 20000 | 2000 | 570 | 5500 | 700 | 1045 | 1250 | 1455 | 820 | 2840 | 2350 | 6640 | 3670 | Dn150 | Dn20 | 1 | Dn65 | Dn32 | 1/2 | 300x400 |

On demand: execution with customized dimensions

P.E.D. tested steam accumulator tanks 12 bar 200°C – AV series

PN 12 bar

| Vertical | | | Horizontal | | |
|------------|-----------------------------------|-------------|------------|------------------------------------|-------------|
| Code | Description | Price | Code | Description | Price |
| 869010001X | VERN 300L PED 12BAR 200°C VERT | € 2.670,00 | 869010016X | VERN 300L PED 12BAR 200°C ORIZZ | € 2.804,00 |
| 869010002X | VERN 500L PED 12BAR 200°C VERT | € 2.915,00 | 869010017X | VERN 500L PED 12BAR 200°C ORIZZ | € 3.061,00 |
| 869010003X | VERN 1000L PED 12BAR 200°C VERT | € 4.758,00 | 869010018X | VERN 1000L PED 12BAR 200°C ORIZZ | € 4.996,00 |
| 869010004X | VERN 1500L PED 12BAR 200°C VERT | € 5.693,00 | 869010019X | VERN 1500L PED 12BAR 200°C ORIZZ | € 5.978,00 |
| 869010005X | VERN 2000L PED 12BAR 200°C VERT | € 6.573,00 | 869010020X | VERN 2000L PED 12BAR 200°C ORIZZ | € 6.901,00 |
| 869010006X | VERN 3000L PED 12BAR 200°C VERT | € 7.810,00 | 869010021X | VERN 3000L PED 12BAR 200°C ORIZZ | € 8.200,00 |
| 869010007X | VERN 4000L PED 12BAR 200°C VERT | € 10.216,00 | 869010022X | VERN 4000L PED 12BAR 200°C ORIZZ | € 10.728,00 |
| 869010008X | VERN 5000L PED 12BAR 200°C VERT | € 11.798,00 | 869010023X | VERN 5000L PED 12BAR 200°C ORIZZ | € 12.388,00 |
| 869010009X | VERN 5000B L PED 12BAR 200°C VERT | € 11.908,00 | 869010024X | VERN 5000B L PED 12BAR 200°C ORIZZ | € 12.503,00 |
| 869010010X | VERN 6000L PED 12BAR 200°C VERT | € 12.650,00 | 869010025X | VERN 6000L PED 12BAR 200°C ORIZZ | € 13.283,00 |
| 869010011X | VERN 8000L PED 12BAR 200°C VERT | ◆ | 869010026X | VERN 8000L PED 12BAR 200°C ORIZZ | ◆ |
| 869010012X | VERN 9000L PED 12BAR 200°C VERT | ◆ | 869010027X | VERN 9000L PED 12BAR 200°C ORIZZ | ◆ |
| 869010013X | VERN 10000L PED 12BAR 200°C VERT | ◆ | 869010028X | VERN 10000L PED 12BAR 200°C ORIZZ | ◆ |
| 869010014X | VERN 15000L PED 12BAR 200°C VERT | ◆ | 869010029X | VERN 15000L PED 12BAR 200°C ORIZZ | ◆ |
| 869010015X | VERN 20000L PED 12BAR 200°C VERT | ◆ | 869010030X | VERN 20000L PED 12BAR 200°C ORIZZ | ◆ |

◆ Request quotations

Accessories for pressurized tanks

All tanks for autoclaves in the AC series and for compressed air in the AK and AP series are equipped with the following accessories:



P.E.D. tested safety valve

Can be installed on all tanks. They prevent the exceedance of the max operating pressure in the planned circumstances. There are various typologies. The designer of the installation should identify the model that is suitable. The selection depends on several factors, such as the max pressure and the discharge flow and is therefore closely connected to the typology of the installation and the causes that could ask for an intervention by the safety valve. All valves are supplied with a CE conformity certificate, emitted by an Notified Body and the installation of the valves is regulated by the national norms on the use of pressurized devices.

| Test pressure in the tank | 6 bar | | 7,84 bar | | 8 bar | | 11 bar | | 12 bar | | |
|----------------------------|-------|-----------|----------|-----------|-------|-----------|--------|-----------|--------|-----------|---|
| Calibrated pressure* (bar) | 5,7 | 6 | 7,4 | 7,84 | 7,6 | 8 | 10,4 | 11 | 11,4 | 12 | |
| Coupling | 1/2" | 809230013 | ◆ | 809230012 | ◆ | 809230021 | ◆ | 809230008 | ◆ | 809230009 | ◆ |
| | 3/4" | 809230017 | ◆ | ◆ | ◆ | 809230027 | ◆ | 809230030 | ◆ | 809230015 | ◆ |
| | 1" | 809230031 | ◆ | ◆ | ◆ | 809230007 | ◆ | 809230001 | ◆ | 809230003 | ◆ |

◆ Models available on demand

* safety valve with different calibrated pressure available on demand



Manometer for detecting the pressure to which the vessel is subjected

| | Scale* bar | Code |
|---------------------|---------------|-----------|
| Manometer D 63 1/4" | 0/10 | 822030022 |
| | 0/16 | 822030024 |

* Models with other scales available on demand



Tap for manometer

| | Code |
|------------------------|-----------|
| Tap for manometer 1/4" | 809120021 |

Accessories for pressurized tanks

The following accessories are designed to be coupled with AC series tanks for autoclaves:



Visible level indicators

| | Length tube m | Code |
|---|------------------|-----------|
| Kit visible level (needle valve + plexiglass tube) | 1 | 822110003 |
| | 1,5 | 822110004 |
| | 2 | 822110004 |



Level switch with probe

| | Code |
|---------------|-----------|
| Diameter 3/8" | 822110060 |

Electric compressor for autoclaves

| | Code |
|---------------------------------------|-----------|
| Power 0,75 kW - max prevalence 10 bar | 822110060 |





Heat pump systems

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fiorini



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MYCLIMA



MyClima Philosophy

Why choose geothermal heating for our home? ...for five excellent reasons

- ✓ energy saving
- ✓ user-friendly
- ✓ eco-friendly
- ✓ independence from fossil fuels
- ✓ system flexibility

Innovation, safety, user-friendly, eco-friendly: 4 key words

MyClima is a young and dynamic company which combines a strong need for innovation and the experience of the Fiorini group that has been working in the HVAC field for over thirty years. This makes the company a pioneer in an industry that is still in its infancy. Building on this, MyClima not only offers heat pumps, but also "systems". The goal is to provide a complete device in which each element is carefully selected and the components are perfectly integrated to provide a quick and flexible response ensuring the highest level of comfort and efficiency. The applications are varied: winter heating, summer cooling, efficient production of domestic hot water, from a single residence up to an industrial complex. Our strength is a comprehensive knowledge of renewable energy technologies, which makes it possible to design and build integrated systems aimed at exploiting and integrating various energy sources such as geothermal, aerothermal, solar thermal, photovoltaic sources, etc..

The heart of the system: the heat pump

The heart of the system is the heat pump, which is designed and manufactured in-house from scratch: the wide range of powers makes it possible to satisfy every need. Our highly technical expertise ensures excellent support at all stages, from project assess-

ment and investment analysis with targeted amortization schemes to system design, commissioning and after-sales service. Despite being standardized, the system can be customized. Every customer is our partner. The technical information on the device is conserved in order to be able to add further components, at any time, based on changing needs.

The brain of the system: continuous monitoring and easy management

The brain of the system is the control and adjustment software, stemming from the experience of our in-house technicians. The control system makes it possible to manage and to monitor the correct operation of all hydraulic and mechanical components. The GEO HF and ADV plus series heat pumps are operated by micro-processors equipped with our flagship software Galileus. That software has been conceived by MyClima not only to supervise all operational modes of the device, but also to monitor the whole air conditioning and DHW production system. It is an integrated system capable of independently managing the terminals of a radiant system, ambient dehumidification and the integration of a solar thermal system. It also makes it possible to control free cooling during intermediate seasons. All Galileus functions can be managed through the LCD panel supplied with it, which indicates the set operation mode and any system malfunctioning. Adjustment and control can also be remotely managed through a special kit that enables you to conveniently check and change any operation parameter from your own computer or from the service centre.



Our range

| Products | Geothermal heat pumps | | | Air-water heat pumps | |
|----------------------------|---|---|---|---|---|
| | GEO HFE | GEO HF | EASY HT | IDEA FLEX | EOS PLUS |
| | kW 5.7 - 27 | kW 32.2 - 86.4 | kW 5.7 - 28.4 | kW 3.0 - 16 | kW 1,73 |
| |  |  |  |  |  |
| Typology | | | | | |
| Functions | Heating + cooling + DHW | | Heating + DHW | Heating + cooling + DHW | DHW |
| Source | Geothermal probe or well | | Geothermal probe or well | Air | Air duct |
| Hydraulic circuit | | | | | |
| Geothermal | Inverter pumps | On-off pumps | Optional | - | - |
| Well | modulating valve | modulating valve | Optional | - | - |
| Installation | Inverter pumps | On-off pumps | Optional | On-off pumps | - |
| Domestic | Inverter pumps | On-off pumps | - | On-off pumps | On-off pumps |
| Domestic production | | | | | |
| DHW | Dedicated circuit up to 65°C | Dedicated circuit up to 65°C | Optional up to 65 °C | up to 55 °C | up to 60 °C |
| Storage tank | Optional | Optional | Optional | Optional | integrated 300 L |
| Characteristics | | | | | |
| Regulation | Galileus | Galileus | Tolomeus | MyEnergy | MyEnergy |
| Master/Slave | 5 | 5 | - | - | - |
| COP | 4.3 | 4.3 | 4.3 | 4.1 | 3.7 |
| Compressor type | Scroll high efficiency | Scroll high efficiency | Scroll high efficiency | Rotary DC Inverter | Rotary |
| Refrigerant | R410a | R407c | R410a | R410a | R134a |

| Machinery accessories | | | | | |
|--------------------------------------|---|---|---|---|---|
| Geothermal on-off circulator | - | ● | ○ | - | - |
| Geothermal inverter circulator | ● | - | - | - | - |
| Device on-off circulator | - | ● | ○ | ● | - |
| Device inverter circulator | ● | - | - | - | - |
| Sanitary on-off circulator | - | ● | - | ● | ● |
| Sanitary inverter circulator | ● | - | - | - | - |
| Deviation sanitary kit | - | - | ○ | ○ | - |
| Deviation sanitary control kit | - | - | ○ | ● | - |
| 2 way modulating valve (well) | ● | ● | - | - | - |
| Pressostatic valve (well) | - | - | - | - | - |
| Solenoid valve (well) | - | - | ○ | - | - |
| Freecooling control kit MFREE | ● | ● | ○ | - | - |
| External air probe kit | ● | ● | ○ | - | - |
| Phase cut kit | - | - | ○ | - | - |
| Carter resistance kit | - | - | ○ | - | - |
| Exchanger anti-freeze resistance kit | - | - | ○ | - | - |
| Integration resistance kit | - | - | ○ | ○ | ○ |
| Soundproofing compressor kit | ○ | ○ | ○ | - | - |

● Standard ○ Optional - Not Available

Our range

| SYSTEMS | Geothermal systems | | | Air system | | IANUS system | |
|---|---|---|---|--|---|---|---|
| | GEO HFE | GEO HF | EASY HT | IDEA FLEX | EOS PLUS | GEO HFE | EASY HT - HTR |
| |  |  |  |  |  |  |  |
| Available system accessories | | | | | | | |
| Remote regulation via internet KIT WEB |  | ■ | ■ | | | ■ | |
| Sanitary storage tank Pfa - pfb - pfc |  | ■ | ■ | ■ | | ■ | ■ |
| Fast DHW production unit Set |  | ■ | ■ | ■ | | ■ | ■ |
| Device's storage tank Hc |  | ■ | ■ | ■ | | | |
| Solar panel |  | ■ | ■ | ■ | ■ | | |
| Thermal photovoltaic panel |  | | | | | ■ | ■ |
| Solar kit |  | ■ | ■ | ■ | ■ | | |
| Solar pumping unit |  | ■ | ■ | | ■ | | |
| Freecooling unit Mfree |  | ■ | ■ | ■ | | | |
| Temperature-humidity control Kit zona |  | ■ | ■ | | | ■ | |
| Mixing zone valve kit |  | ■ | ■ | | | | |
| Deviation valve kit |  | ■ | ■ | | | ■ | |
| Freeheating unit HFREE |  | | | | | ■ | ■ |
| Drycooler |  | | | | | ■ | ■ |

Geothermal systems

Earth heat

- Earth is a renewable heat source. The energy it contains comes from the sun and the natural heat of the earth crust. This energy is free of charge and available in large amounts; it must only be transferred from the soil to the homes. Geothermal and clean energy represents an essential source not only for the end user but also for the entire ecosystem.

How to exchange heat between the soil and the house

- Geothermal energy is available at a constant temperature (approximately 14°C at a depth of 20 to 100 m) throughout the year, but it is not enough to supply the entire heating system.
- GEO heat pumps transfer the heat from the soil and increase the temperature of the thermovevector fluid by means of the compressor powered solely by electricity.
- This process is particularly efficient; in fact, 1 kW of electricity can produce up to 5 kW of thermal energy. Efficiency is ensured throughout the year, unlike with air-heat exchangers.

- By reversing the cycle during summer, GEO heat pumps can cool your home by releasing the heat captured inside to the outdoors, thereby settling the energy balance.

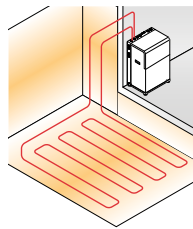
How does a geothermal system work?

- The soil on which the house is built can be a sufficient energy source to heat and cool your home.
- There are several solutions to exchange heat between an underground source and the thermovevector fluid:
 - horizontal heat exchanger probes buried 2 metres deep;
 - vertical probes (buried 80 - 120 m deep);
 - Stratum, river or lake water.
- A thermovevector fluid, usually water or a glycol-water mixture, flows inside the probes, transferring the heat to the GEO heat pump, thereby making it available for heating, cooling and sanitary production.

Probes

Horizontal heat exchanger probes

- This type of probes must be buried 1 - 1.5 m deep (always 20 cm below the freezing limit) in the soil, which must be left unsown.
- PE probes (DN 25 o DN 32) require an average lawn surface equal to 2.5 - 3 times the area to be heated.

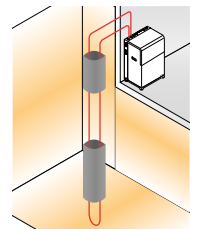


Indications:

- moist and clay soils.
- Do not divert rainwater through drains to optimise soil regeneration.
- Do not pave over the surface of the manifold
- Avoid trees and bushes with deep roots.
- The circuit piping must be provided with a water vapour barrier to prevent condensation and ice dams from forming.

Closed circuit vertical probes (water-glycol)

- Vertical probes require a perforation of approximately 150 mm diameter where a PE pipe circuit is placed (geothermal probe) sealed with a bentonite mixture.
- PE probes (DN 32 for double-U pipes or DN 40 for U-pipes)
- According to the soil quality, for every thermal kW yielded by the heat pump an average between 15 and 20 m probe is required.



Indications:

- Drilling depth ranges between 80 and 120 m. For larger demands, several parallel probes must be used.
- In the event of multiple drilling, keep the probes at a distance of at least 8 - 10 m (grid) to prevent thermal interference.
- When drilling vertical probes, always provide an adequate distance from the building foundations in order to prevent soil subsidence and thermal strain. It is advisable to consult a geologist.

| Performance | |
|-----------------------|--------------------|
| Subsoil | Performance [W/m2] |
| Dry sandy soil | 10-15 |
| Moist sandy soil | 15-20 |
| Dry cohesive soil | 20-25 |
| Moist cohesive soil | 25-30 |
| Saturated sand/gravel | 30-40 |

| Performance | |
|------------------------|--------------------|
| Subsoil | Performance [W/m2] |
| Bad subsoil (dry soil) | 20 |
| Rock or moist soil | 50 |
| High conductivity rock | 70 |
| Dry gravel/sand | <20 |
| Saturated gravel/sand | 55-65 |
| Moist clay, silt | 30-40 |
| Limestone rock | 45-60 |
| Sandstone | 55-65 |
| Granite | 55-70 |
| Gneiss | 60-70 |

Geothermal systems

Stratum-water wells

Placement close to a water source or an underground stratum makes a direct heat exchange possible. The water which is collected is reintroduced by a second well after the heat exchange with the heat pump.

The geothermal system flow rate is 4 l/min/kW (heating).

Indications:

- The use of groundwater strata requires authorisation by the Province of competence.
- The minimum water temperature must not drop below 7°C, whereas the maximum water temperature must not exceed 20°C.
- The quality of the water must comply with the indications in the "chemical-physical properties" table at the end of the paragraph; otherwise, an external inspectable plate heat exchanger must be placed between the heat pump and the well water circuit.
- The level of the detected stratum must be measured by having it pour continuously for 24 – 48 hours, making sure that after this period the level of the stratum has not decreased (if so, a deeper or larger stratum must be found).
- It is important to ensure a distance of at least 10-15 m between the suction well and the drainage well to prevent underground hydraulic short-circuits (unless water is reintroduced in a stratum at a different level from the suction well).

Heating systems

Geothermal heat pumps are advanced energy systems that are integrated in systems with certain basic features e.g., good thermal insulation class, especially for cooling applications during summer. It is important to consider the operating temperatures: The economic convenience of using a geothermal heat pump is set to a 50°C flow temperature in domestic hot water production and at lower temperatures (35-40 °C) for the flow to the heating system.

This is why a typical system which is to be installed downstream a geothermal system (except for heated towel rails and radiators for bathrooms) can be:

- a low temperature floor radiant heating system
- a low temperature radiant wall heating system
- a low temperature ceiling radiant heating system
- a low temperature radiant plate heating system (e.g. as a replacement for old radiators)
- a medium temperature convection heating system (e.g. as a replacement for old radiators)
- a medium temperature fan coil heating system (e.g. as a replacement for old radiators)
- an oversized heated towel rail with auxiliary heating element or pouring of the primary boiler circuit.

Should there be several areas designed on the (floor or wall) radiant system i.e., in the event the heating system does not have enough water content/thermal inertia, the installation has to be adapted with a hydraulic breaker or a heat storage device to ensure adequate water circulation in the geothermal pump for regular operation.



Water-water geothermal heat pumps

GEO HFE 6-33

Reversible geothermal heat pump with highly efficient domestic hot water production unit

Power from 6 to 33 kW

Functions

- ✓ Production of hot water for installation
- ✓ Production of chilled water for installation
- ✓ Production of high temperature domestic water
- ✓ Production in priority of DHW simultaneous with the production for the installation

Main features

- ✓ high efficiency scroll-compressor
- ✓ inverter circulators on the three circuits (device, domestic, geothermal)
- ✓ total DHW recovery
- ✓ DHW production up to 65°C
- ✓ Galileus regulation for the whole system
- ✓ up to 5 heat pumps in series

Applications

Exchange on probe

Exchange on well



Models

| | |
|---------|---|
| GEO/R | Heating-cooling for device and DHW production with geothermal probe |
| GEO/R/P | Heating-cooling for device and DHW production with well |
| GEO | Heating-cooling for device with geothermal probe |
| GEO/P | Heating-cooling for device with well |

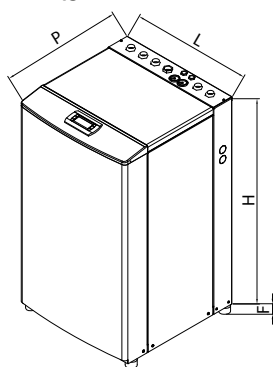
Technical data

GEO HFE 6-33

| Sizes | | 6 | 8 | 12 | 16 | 20 | 24 | 33 |
|---|---------|--------|--------------------|------|--------|-----------|--------|------|
| Winter functioning B0/W35 | | | | | | | | |
| Thermal power | kW | 5,8 | 7,5 | 10,2 | 13,2 | 17,1 | 21,0 | 25,4 |
| Compressor absorbed power | kW | 1,30 | 1,7 | 2,2 | 2,9 | 3,7 | 4,4 | 5,5 |
| COP | | 4,43 | 4,57 | 4,68 | 4,60 | 4,60 | 4,82 | 4,60 |
| Device | | | | | | | | |
| Device's water flow rate | m3/h | 0,99 | 1,30 | 1,75 | 2,26 | 2,93 | 3,61 | 4,37 |
| Head pressure | mca | 6,5 | 6,2 | 5,8 | 5,0 | 6,7 | 6,0 | 11,1 |
| Pump's absorbed power | kW | 0,07 | 0,07 | 0,07 | 0,07 | 0,14 | 0,14 | 0,31 |
| Geothermal | | | | | | | | |
| Cooling power to exchange in probe | kW | 4,5 | 6,0 | 8,1 | 10,5 | 13,5 | 16,0 | 20,2 |
| Probe liquid flow rate | m3/h | 1,30 | 1,71 | 2,32 | 3,00 | 3,87 | 4,58 | 5,79 |
| Head pressure | mca | 5,9 | 5,5 | 8,9 | 6,1 | 5,1 | 4,1 | 8,7 |
| Pump's absorbed power | kW | 0,07 | 0,07 | 0,14 | 0,14 | 0,14 | 0,14 | 0,31 |
| Domestic | | | | | | | | |
| Thermal power | kW | 5,3 | 7,0 | 9,4 | 11,9 | 15,7 | 18,6 | 23,7 |
| Domestic water flow | m3/h | 0,91 | 1,21 | 1,62 | 2,05 | 2,70 | 3,20 | 4,08 |
| Head pressure | mca | 6,6 | 6,2 | 5,7 | 5,5 | 4,1 | 5,2 | 5,3 |
| Pump's absorbed power | kW | 0,07 | 0,07 | 0,07 | 0,07 | 0,07 | 0,14 | 0,14 |
| Winter functioning | | | | | | | | |
| Thermal power | kW | 7,5 | 9,9 | 13,3 | 16,7 | 22,2 | 26,1 | 33,5 |
| Compressor absorbed power | kW | 1,3 | 1,6 | 2,2 | 2,8 | 3,8 | 4,4 | 5,6 |
| COP | | 5,85 | 6,10 | 6,14 | 6,04 | 5,88 | 5,99 | 6,02 |
| Device | | | | | | | | |
| Device's water flow rate | m3/h | 1,27 | 1,67 | 2,24 | 2,82 | 3,75 | 4,40 | 5,64 |
| Head pressure | mca | 5,94 | 5,59 | 4,93 | 3,70 | 5,40 | 4,61 | 8,82 |
| Well | | | | | | | | |
| Cooling power to exchange in well | kW | 6,2 | 8,2 | 11,1 | 13,9 | 18,4 | 21,6 | 27,8 |
| Well liquid flow rate | m3/h | 1,06 | 1,40 | 1,88 | 2,37 | 3,14 | 3,68 | 4,73 |
| Exchanger pressure loss | mca | 0,3 | 0,4 | 0,6 | 0,7 | 0,7 | 0,9 | 0,9 |
| Summer functioning | | | | | | | | |
| Cooling power | kW | 9,5 | 12,5 | 16,6 | 20,9 | 27,5 | 32,7 | 41,6 |
| Compressor's absorbed power | kW | 1,3 | 1,5 | 2,1 | 2,8 | 3,8 | 4,3 | 5,7 |
| EER | | 7,39 | 8,19 | 7,84 | 7,44 | 7,33 | 7,68 | 7,35 |
| Device | | | | | | | | |
| Device's water flow rate | m3/h | 1,63 | 2,14 | 2,85 | 3,59 | 4,55 | 5,62 | 7,16 |
| Device's head pressure | mca | 5,8 | 5,0 | 3,7 | 3,0 | 3,3 | 3,3 | 6,6 |
| Geothermal | | | | | | | | |
| Thermal power to exchange in probe | kW | 10,7 | 13,9 | 18,6 | 23,6 | 31,0 | 36,8 | 47,0 |
| Probe liquid flow rate | m3/h | 3,07 | 2,39 | 3,20 | 4,06 | 5,33 | 6,33 | 8,08 |
| Head pressure | mca | 5,1 | 4,5 | 5,4 | 3,1 | 3,4 | 4,2 | 4,1 |
| Compressor type | | | | | Scroll | | | |
| Number of compressors | | | | 1 | | | 2 | |
| Refrigerant | | | | | R410a | | | |
| Power supply | V/Ph/Hz | 230-50 | 230-50 / 400-3N-50 | | | 400-3N-50 | | |
| Diametric hydraulic fittings | | | | 1" | | | 1 1/4" | |
| Expansion vessels (device and geothermal) | liters | | 2 | | 4 | | 8 | |
| Water circuit's max content | liters | 29 | 29 | 57 | 57 | 114 | 114 | 114 |
| Sound pressure at 1m | dB(A) | 48 | 49 | 50 | 52 | 54 | 56 | 60 |
| Weight (unpacked) | Kg | 146 | 153 | 169 | 195 | 215 | 262 | 302 |
| Weight (packed) | Kg | 151 | 158 | 175 | 200 | 220 | 270 | 310 |

All indicated operating conditions comply with the regulation EN14511

| Utility circuit | | | | |
|-------------------------|-----------------------------------|----|-------|--------|
| B0/W35 | radiant plant | °C | 30/35 | In-Out |
| W5/W35 | radiant plant | °C | 30/35 | In-Out |
| B30/W18 | radiant plant | °C | 23/18 | In-Out |
| Domestic circuit | | | | |
| B0/W50 | DHW | °C | 45/50 | In-Out |
| External circuit | | | | |
| B0/W35 | glycol water geothermal probe 20% | °C | 0/-3 | In-Out |
| W5/W35 | well water | °C | 10/5 | In-Out |
| B30/W18 | glycol water geothermal probe 20% | °C | 30/35 | In-Out |
| B0/W50 | glycol water geothermal probe 20% | °C | 0/-3 | In-Out |



| Dimensions | Sizes | | | |
|------------|-------|------|-------|-------|
| | 6-8 | 12 | 16-20 | 24-33 |
| L | 620 | 620 | 620 | 800 |
| P | 575 | 650 | 650 | 880 |
| H | 970 | 1050 | 1050 | 1040 |
| F | 30 | 30 | 30 | 30 |

Code GEO HFE 6-33



| GEO Geothermal systems | | | | | |
|------------------------|--------------------|-----------------------------|----------------------------|-------------------------------|------------------------------|
| | | sonda | | pozzo | |
| | | Without recovery GEO HFE | With recovery GEO HFE/R | Without recovery GEO HFE/P | With recovery GEO HFE/R/P |
| gas | model | code price | code price | code price | code price |
| R410a | 6 M | 444090045 € 10.034,00 | 444090001 € 11.615,00 | 444090067 € 9.959,00 | 444090023 € 11.454,00 |
| | 6 M + SMART START | 444090046 € 10.324,00 | 444090002 € 11.913,00 | 444090068 € 10.256,00 | 444090024 € 11.752,00 |
| | 6 T | 444090047 € 10.125,00 | 444090003 € 11.714,00 | 444090069 € 10.057,00 | 444090025 € 11.553,00 |
| | 6 T+ SOFT START | 444090048 € 10.840,00 | 444090004 € 12.429,00 | 444090070 € 10.772,00 | 444090026 € 12.268,00 |
| | 8 M | 444090049 € 10.369,00 | 444090005 € 12.019,00 | 444090071 € 10.213,00 | 444090027 € 11.844,00 |
| | 8 M + SMART START | 444090050 € 10.669,00 | 444090006 € 12.295,00 | 444090072 € 10.516,00 | 444090028 € 12.256,00 |
| | 8 T | 444090051 € 10.471,00 | 444090007 € 12.102,00 | 444090073 € 10.315,00 | 444090029 € 11.946,00 |
| | 8 T + SOFT START | 444090052 € 11.322,00 | 444090008 € 12.953,00 | 444090074 € 11.166,00 | 444090030 € 12.787,00 |
| | 12 M | 444090053 € 13.295,00 | 444090009 € 15.305,00 | 444090075 € 12.652,00 | 444090031 € 14.612,00 |
| | 12 M + SMART START | 444090054 € 13.663,00 | 444090010 € 15.609,00 | 444090076 € 13.018,00 | 444090032 € 14.923,00 |
| | 12 T | 444090055 € 13.468,00 | 444090011 € 15.435,00 | 444090077 € 12.825,00 | 444090033 € 14.572,00 |
| | 12 T + SOFT START | 444090056 € 14.491,00 | 444090012 € 16.458,00 | 444090078 € 13.848,00 | 444090034 € 15.552,00 |
| | 16 T | 444090059 € 13.939,00 | 444090015 € 16.023,00 | 444090081 € 13.295,00 | 444090037 € 15.405,00 |
| | 16 T + SOFT START | 444090060 € 15.162,00 | 444090016 € 17.246,00 | 444090082 € 14.519,00 | 444090038 € 16.601,00 |
| | 20 T | 444090061 € 15.143,00 | 444090017 € 17.537,00 | 444090083 € 14.535,00 | 444090039 € 16.938,00 |
| | 20 T + SOFT START | 444090062 € 16.264,00 | 444090018 € 18.657,00 | 444090084 € 15.656,00 | 444090040 € 18.059,00 |
| | 24 T | 444090063 € 18.738,00 | 444090019 € 21.896,00 | 444090085 € 18.314,00 | 444090041 € 21.350,00 |
| | 24 T + SOFT START | 444090064 € 20.745,00 | 444090020 € 23.903,00 | 444090086 € 18.943,00 | 444090042 € 23.357,00 |
| | 33 T | 444090065 € 21.217,00 | 444090021 € 24.621,00 | 444090087 € 20.138,00 | 444090043 € 23.543,00 |
| | 33 T + SOFT START | 444090066 € 23.663,00 | 444090022 € 27.067,00 | 444090088 € 22.585,00 | 444090044 € 25.990,00 |

Accessories

GEO HFE 6-33

| Control/regulation accessories | | | |
|--------------------------------|--|------------|---|
| code | description | price | function |
| 452010006 | Web Kit (remote control) | € 768,00 | Makes it possible to control and supervise the installation via internet |
| 452010010 | Serial port kit RS485 Modbus | € 261,00 | Makes it possible to communicate with the supervision systems through the Modbus protocol |
| 452010074 | Serial port kit Konnex | € 496,00 | Makes it possible to communicate with the supervision systems through the Konnex protocol |
| 452010075 | Serial port kit RS485 BACnet | € 623,00 | Makes it possible to communicate with the supervision systems through the Bacnet protocol |
| 452010050 | My-zone kit with T/U thermostat | € 268,00 | Thermostat for temperature and humidity. Max 30 |
| 452010051 | My-board kit expansion kit for My-zone | € 360,00 | Expansion kit to control the dehumidifier, the circulation pump, zone valve and mixing valve |
| 452010010 | Field-bus for zone RS485 kit | € 261,00 | Necessary for connection of Galileus5 with Myzone and Myboard |
| 452010061 | My-power 3PH kit | € 1.060,00 | Records and optimizes the auto-consumption of the energy produced by the photovoltaic installation. Version for three-phase meter |
| 452010069 | MY power 1ph kit | € 593,00 | Records and optimizes the auto-consumption of the energy produced by the photovoltaic. Version for single phase meter |
| 452010070 | MY Touch 7 kit environment supervision panel | € 2.705,00 | 7" touchscreen screen for the management of the installation |
| 452010062 | Meter Source-installation-sanitary 6>20 kit | € 942,00 | Meter that measures the energy produced for cooling, DHW production and exchange with the source. Size from 6 to 20 kW. |
| 452010063 | Meter Source-installation 6>20 | € 758,00 | Meter that measures the energy produced for cooling and exchange with the source. Size from 6 to 20 kW. |
| 452010064 | Meter Source-installation-sanitary 24>33 kit | € 1.366,00 | Meter that measures the energy produced for cooling, DHW production and exchange with the source. Size from 24 to 33 kW |
| 452010065 | Meter Source-installation 24>33 kit | € 1.010,00 | Meter that measures the energy produced for cooling and exchange with the source. Size from 24 to 33 kW |

| Accessories for the device | | | |
|----------------------------|--|------------|--|
| code | description | price | function |
| 421120013 | MFREE SMALL 6-8 | € 1.735,00 | Module for passive cooling – application size 6-8 |
| 421120014 | MFREE MEDIUM 10-16 | € 2.125,00 | Module for passive cooling – application size 12-16 |
| 421120015 | MFREE LARGE | € 3.225,00 | Module for passive cooling – application size 20-24-33 |
| 452010005 | GEO recovery deviation kit (size 6>20) | € 204,00 | Makes it possible to transfer excess heat accrued in the tank for DHW to the heating installation. Only con solar power. |
| 452010003 | Mixing kit | € 302,00 | Makes it possible to regulate the supply temperature of the cooling device |
| 452010004 | GEO SOL | € 935,00 | Makes it possible to regulate the solar thermal device. Solar circulator not provided. |

| Machinery Accessories | | | |
|-----------------------|-----------------------------------|----------|--|
| code | description | price | function |
| 452020006 | GEO 6-8 soundproof cover kit | € 132,00 | Soundproofing for compressor, size 6 to 8 kW |
| 452020007 | GEO 12-16-20 soundproof cover kit | € 132,00 | Soundproofing for compressor, size 12 to 20 kW |
| 452020087 | GEO 24 soundproof cover kit | € 234,00 | Soundproofing for compressor, size 24 kW |
| 452020088 | GEO 33-40 soundproof cover kit | € 234,00 | Soundproofing for compressor, size 33 to 40 kW |

| Accessories for IANUS system and GEO (up to GEO 33) | | | |
|---|-------------------------|------------|---|
| code | description | price | function |
| 421120024 | GEO FREE HEATING SMALL | € 1.735,00 | Module for passive heating which uses thermal heat from the hybrid photovoltaic panels – size 6-8 |
| 421120023 | GEO FREE HEATING MEDIUM | € 2.180,00 | Module for passive heating which uses thermal heat from the hybrid photovoltaic panels – size 12-16 |
| 421120025 | GEO FREE HEATING LARGE | € 2.975,00 | Module for passive heating which uses thermal heat from the hybrid photovoltaic panels – size 20-24-33 |
| 452010042 | IANUS SOL KIT | € 1.050,00 | Makes it possible to regulate thermal solar system for hybrid photovoltaic panels. Solar circulator not included |
| 452010037 | IANUS deviation kit | € 347,00 | Optimized the use of thermal sources (PVT and probes) base on the environmental conditions. Obligated with mixed system (PVT + probe) |
| 821060053X | DRY cooler kit 15' | € 2.913,00 | Air-water heat exchanger to dispel excessive heat from the IANUS system |
| 821060054X | DRY cooler kit 30' | € 4.725,00 | Air-water heat exchanger to dispel the excessive heat from the IANUS system |

*the selection of the DRY COOLER model and quantity depends on the power of the IANUS system

Water-water geothermal heat pumps

GEO HF 40-100

Reversible geothermal heat pump with highly efficient domestic hot water production unit

Power from 40 to 100 kW

Functions

- ✓ Production of hot water for installation
- ✓ Production of cold water for installation
- ✓ Production of high temperature domestic water
- ✓ Production in priority of DHW simultaneous with the production for the installation

Main features

- ✓ high efficiency scroll-compressor
- ✓ inverter circulators on the three circuits (device, domestic, geothermal)
- ✓ total DHW recovery
- ✓ DHW production up to 65°C
- ✓ Galileus regulation for the whole system
- ✓ up to 5 heat pumps in series

Applications

Exchange on probe

Exchange on well



| Models | |
|---------|---|
| GEO/R | Heating-cooling for device and DHW production with geothermal probe |
| GEO/R/P | Heating-cooling for device and DHW production with well |
| GEO | Heating-cooling for device with geothermal probe |
| GEO/P | Heating- cooling for device with well |

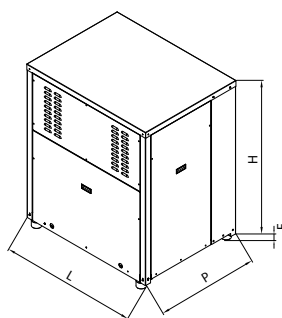
Technical data

GEO HF 40-100

| Sizes | | 40 | 50 | 60 | 80 | 100 |
|---|-------------------|--------|--------|-----------|-------|-------|
| Winter functioning B0/W35 | | | | | | |
| Thermal power | kW | 32.2 | 42.8 | 57.6 | 70.6 | 86.4 |
| Compressor absorbed power | kW | 7.1 | 9.7 | 12.9 | 16.0 | 19.4 |
| COP | | 4.51 | 4.41 | 4.46 | 4.41 | 4.45 |
| Device | | | | | | |
| Device's water flow rate | m ³ /h | 5.54 | 7.36 | 9.91 | 12.14 | 14.86 |
| Head pressure | mca | 16.1 | 13.3 | 14.3 | 13.0 | 13.3 |
| Pump's absorbed power | kW | 0.82 | 0.82 | 1.12 | 1.12 | 1.44 |
| Geothermal | | | | | | |
| Cooling power to exchange in probe | kW | 25.5 | 33.6 | 45.4 | 55.4 | 68.0 |
| Probe liquid flow rate | m ³ /h | 7.31 | 9.63 | 13.01 | 15.88 | 19.49 |
| Head pressure | mca | 12.5 | 13.8 | 11.2 | 11.4 | 10.0 |
| Pump's absorbed power | kW | 0.82 | 1.12 | 1.12 | 1.44 | 1.44 |
| Domestic B0/W50 | | | | | | |
| Thermal power | kW | 30.6 | 39.2 | 52.6 | 64.8 | 81.8 |
| Domestic water flow | m ³ /h | 5.26 | 6.74 | 9.05 | 11.15 | 14.07 |
| Head pressure | mca | 4.3 | 3.1 | 3.8 | 3.0 | 3.5 |
| Pump's absorbed power | kW | 0.14 | 0.14 | 0.31 | 0.31 | 0.31 |
| Winter functioning W5/W35 | | | | | | |
| Thermal power | kW | 42.6 | 54.8 | 76.4 | 92.4 | 114.6 |
| Compressor's absorbed power | kW | 7.8 | 10.6 | 14.3 | 17.4 | 21.8 |
| COP | | 5.46 | 5.16 | 5.34 | 5.31 | 5.25 |
| Device | | | | | | |
| Device's water flow rate | m ³ /h | 7.33 | 13.14 | 11.35 | 15.89 | 19.71 |
| Head pressure | mca | 4.80 | 11.70 | 11.00 | 9.80 | 10.00 |
| Well | | | | | | |
| Cooling power to exchange in well | kW | 35.3 | 44.8 | 62.8 | 75.8 | 94.0 |
| Well's liquid flow rate | m ³ /h | 6.07 | 7.71 | 10.80 | 13.04 | 16.17 |
| Exchanger's pressure loss | mca | 1.4 | 8.7 | 1.5 | 1.4 | 2.9 |
| Summer functioning B30/W18 | | | | | | |
| Cooling power | kW | 44.2 | 58.2 | 81.0 | 96.4 | 120.0 |
| Compressor's absorbed power | kW | 8.9 | 11.7 | 16.2 | 19.0 | 24.0 |
| EER | | 4.96 | 4.97 | 5.00 | 5.07 | 5.00 |
| Device | | | | | | |
| Device's water flow rate | m ³ /h | 7.60 | 10.01 | 13.9 | 16.58 | 20.64 |
| Device's head pressure | mca | 12.2 | 6.8 | 11.1 | 9.3 | 8.7 |
| Geothermal | | | | | | |
| Thermal power to exchange in probe | kW | 52.8 | 69.4 | 96.4 | 114.4 | 142.8 |
| Probe liquid flow rate | m ³ /h | 9.08 | 11.94 | 16.58 | 19.68 | 24.56 |
| Head pressure | mca | 8.8 | 13.1 | 10.9 | 10.8 | 7.1 |
| Compressor type | | | | Scroll | | |
| Number of compressors | | | | 2 | | |
| Refrigerant | | | | R407c | | |
| Power supply | V/Ph/Hz | | | 400-3N-50 | | |
| Diametric hydraulic couplings | | 1" 1/2 | 1" 1/2 | 1" 1/2 | 2" | 2" |
| Expansion vessels (device and geothermal) | litri | - | - | - | - | - |
| Water circuit max content | litri | - | - | - | - | - |
| Sound pressure at 1m | dB(A) | 63 | 70 | 70 | 70 | 73 |
| Weight (unpacked) | Kg | 495 | 647 | 656 | 732 | 784 |
| Weight (packed) | Kg | 510 | 662 | 671 | 747 | 799 |

All indicated working conditions comply with the regulation EN14511

| Utility circuit | | | | |
|------------------|-----------------------------------|----|-------|--------|
| B0/W35 | radiant plant | °C | 30/35 | In-Out |
| W5/W35 | radiant plant | °C | 30/35 | In-Out |
| B30/W18 | radiant plant | °C | 23/18 | In-Out |
| Domestic circuit | | | | |
| B0/W50 | DHW | °C | 45/50 | In-Out |
| External circuit | | | | |
| B0/W35 | glycol water geothermal probe 20% | °C | 0/-3 | In-Out |
| W5/W35 | well water | °C | 10/5 | In-Out |
| B30/W18 | glycol water geothermal probe 20% | °C | 30/35 | In-Out |
| B0/W50 | glycol water geothermal probe 20% | °C | 0/-3 | In-Out |



| Dim. | Sizes | | | | |
|------|-------|-------|-------|-------|-------|
| | 40 | 50 | 60 | 80 | 100 |
| L | 1200 | 1200 | 1200 | 1200 | 1200 |
| P | 914.7 | 914.7 | 914.7 | 914.7 | 914.7 |
| H | 1344 | 1344 | 1344 | 1344 | 1344 |
| F | 60 | 60 | 60 | 60 | 60 |

Code GEO HF 40-100



| gas | Model | probe | | well | |
|-------|-------|----------------------------|---------------------------|------------------------------|-----------------------------|
| | | Without recovery GEO HF | With recovery GEO HF/R | Without recovery GEO HF/P | With recovery GEO HF/R/P |
| | | Code Price | Code Price | Code Price | Code Price |
| R407c | 40 T | 444050038 | 444050015 | 444050054 | 444050040 |
| | | € 26.302,00 | € 31.272,00 | € 26.274,00 | € 31.587,00 |
| | 50 T | 444050039 | 444050008 | 444050055 | 444050041 |
| | | € 29.624,00 | € 35.722,00 | € 30.285,00 | € 35.880,00 |
| | 60 T | 444050009 | 444050011 | 444050056 | 444050042 |
| | | € 31.529,00 | € 38.800,00 | € 32.084,00 | € 38.195,00 |
| | 80 T | 444050013 | 444050012 | 444050057 | 444050043 |
| | | € 35.185,00 | € 43.689,00 | € 35.731,00 | € 44.752,00 |
| | 100 T | 444050071 | 444050070 | 444050073 | 444050072 |
| | | € 41.363,00 | € 48.994,00 | € 41.607,00 | € 49.332,00 |

Accessories

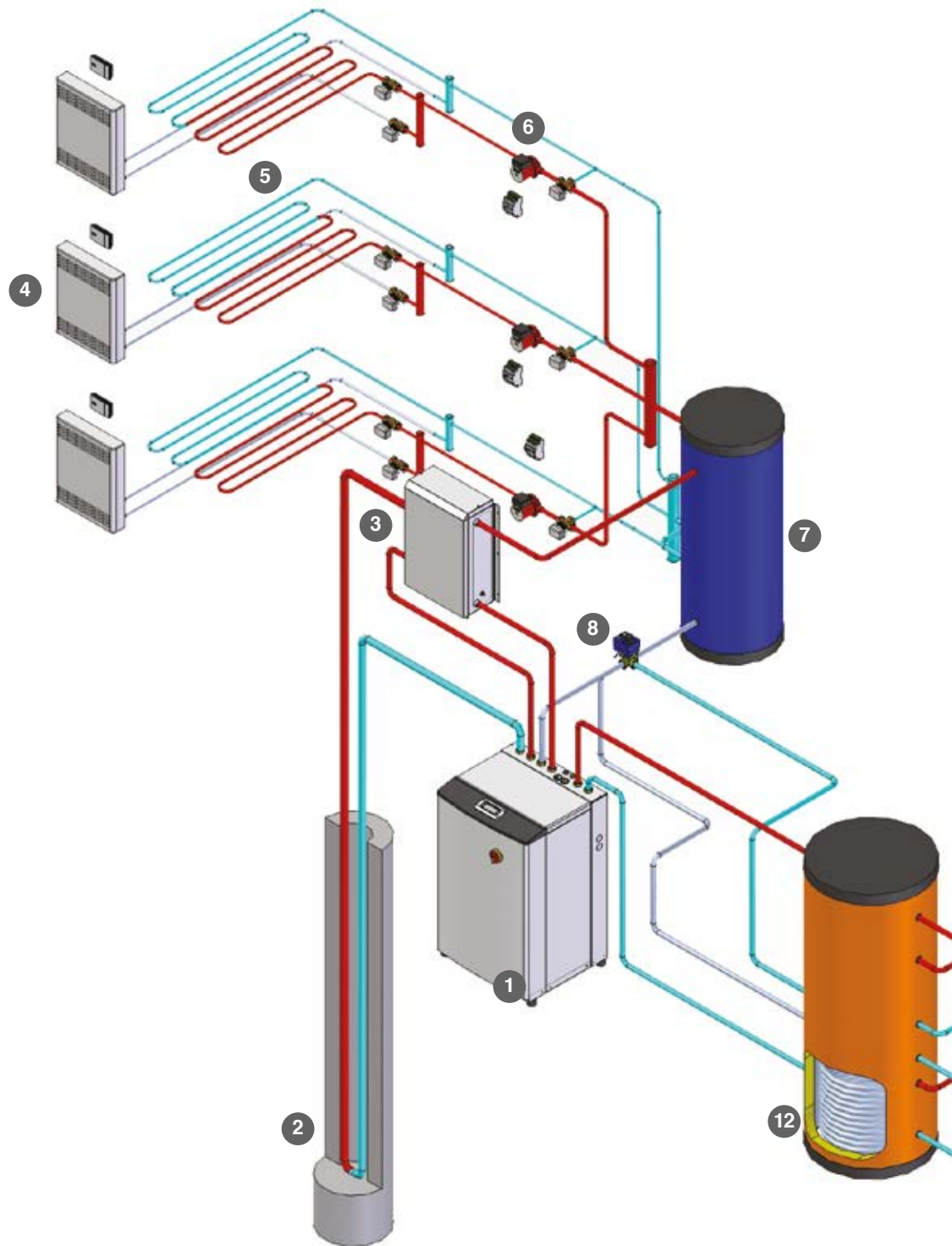
GEO HF 40-100

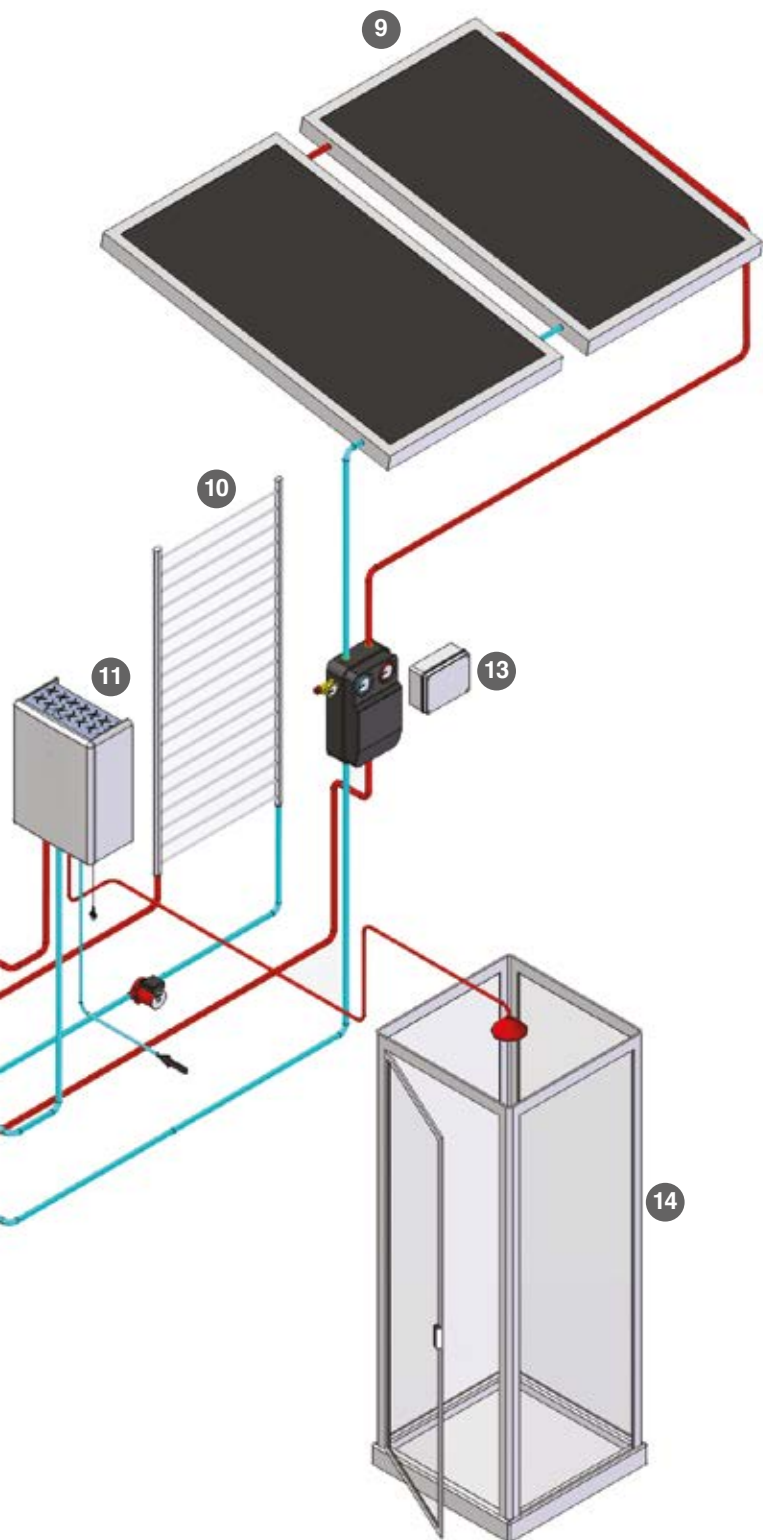
| Control/regulation accessories | | | |
|--------------------------------|---|------------|---|
| code | description | price | function |
| 452010006 | Web Kit (remote control) | € 768,00 | Makes it possible to control and supervise the installation via internet |
| 452010010 | Serial port kit RS485 Modbus | € 261,00 | Makes it possible to communicate with the supervision systems through the Modbus protocol |
| 452010074 | Serial port kit Konnex | € 496,00 | Makes it possible to communicate with the supervision systems through the Konnex protocol |
| 452010075 | Serial prot kit RS485 BACnet | € 623,00 | Makes it possible to communicate with the supervision systems through the Bacnet protocol |
| 452010050 | My-zone kit with T/U thermostat | € 268,00 | Thermostat for temperature and humidity. Max 30 |
| 452010051 | My-board kit expansion kit for My-zone | € 360,00 | Expansion kit to control the dehumidifier, the circulation pump, zone valve and mixing valve |
| 452010053 | Field-bus for zone RS485 kit | € 230,00 | Necessary for connection of Galileus5 with Myzone and Myboard |
| 452010061 | My-power 3PH kit | € 1.060,00 | Records and optimizes the auto-consumption of the energy produced by the photovoltaic installation. Version for three-phase meter |
| 452010069 | MY power 1ph kit | € 593,00 | Records and optimizes the auto-consumption of the energy produced by the photovoltaic. Version for single phase meter |
| 452010070 | MY Touch 7 kit environment supervision panel | € 2.705,00 | 7" touchscreen screen for the management of the installation |
| 452010065 | Meter Source-installation-24x33 kit | € 1.010,00 | Meter that measures the energy produced for cooling and exchange with the source. Size from 24 to 33 kW. |
| 452010066 | Meter Source-installation-sanitary 40>100 kit | € 1.538,00 | Meter that measures the energy produced for cooling, DHW production and exchange with the source. Size from 40 to 100 kW |
| 452010067 | Meter Source-installation 40>100 kit | € 1.156,00 | Meter that measures the energy produced for cooling and exchange with the source. Size from 40 to 100 kW |

| Accessories for the device | | | |
|----------------------------|-------------|------------|--|
| code | description | price | function |
| 421120020 | MFREE A | € 6.940,00 | Module for passive cooling – application size 40-50 |
| 421120022 | MFREE B | € 7.450,00 | Module for passive cooling – application size 60 |
| 421120016 | MFREE C | € 7.985,00 | Module for passive cooling – application size 80-100 |
| 452010003 | Mixing kit | € 302,00 | Makes it possible to regulate the supply temperature of the cooling device |
| 452010004 | GEO SOL | € 935,00 | Makes it possible to regulate the solar thermal device. Solar circulator not provided. |

| Machinery Accessories | | | |
|-----------------------|-----------------------------------|----------|--|
| code | description | price | function |
| 452020088 | GEO 33-40 soundproof cover kit | € 234,00 | Soundproofing for compressor, size 33 to 40 kW |
| 452020089 | GEO 50-60-80 soundproof cover kit | € 234,00 | Soundproofing for compressor, size 50 to 80 kW |
| 452020079 | GEO 100 soundproof cover kit | € 234,00 | Soundproofing for compressor, size 100 kW |

Installation chart GEO HF





- 1 GEO heat pump
- 2 geothermal or well source
- 3 MFREE freecooling unit
- 4 dehumidifiers
- 5 floor heating
- 6 mixing valve
- 7 inertial storage tank
- 8 deviation valve kit
- 9 solar collectors
- 10 towel warmer
- 11 ACS SET instantaneous production unit
- 12 domestic storage tank
- 13 control unit for solar pumping
- 14 DHW use

Water-water geothermal heat pumps

GEO EASY HT/HTR

High temperature geothermal heat pump

Power from 6 to 33kW

Functions

- ✓ Production of very hot water for the installation
- ✓ Production of cold water for the installation (HTR version)
- ✓ Production of DHW (with accessory)

Main features

- ✓ High efficiency scroll-compressor
- ✓ On-off circulators on the three circuits as accessory to install on the outside of the device
- ✓ DHW production up to 65°C with kit to assembly on the outside of the device
- ✓ Tolomeus regulation for the whole system



Applications

Exchange on probe

Exchange on well



Models

GEO EASY HT

Heating and DHW production (accessory)

GEO EASY HTR

Heating-cooling and DHW production (accessory)

Compatibility

| | Domestic diverter control kit | Easy diverter kit | MFREE | Control kit MFREE | Plant circulator kit | Geotherm circulator kit | Pressure switch kit | Solenoid kit | External air probe kit | Guard resistance kit | Exchangers resistance kit | Phase cut kit (1) | Compressor insulation kit |
|---------------------------|-------------------------------|-------------------|-------|-------------------|----------------------|-------------------------|---------------------|--------------|------------------------|----------------------|---------------------------|-------------------|---------------------------|
| EASY HT geothermal probe | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | - | ✓ |
| EASY HT well water | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | - | ✓ |
| EASY HTR geothermal probe | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | ✓ |
| EASY HTR well water | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ |

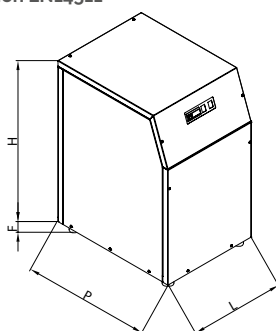
Technical data

GEO EASY HT/HTR

| Sizes | | 6 | 8 | 12 | 16 | 20 | 24 | 33 |
|------------------------------------|-------------------|------------------|------|------|-----------|------|--------|------|
| Winter functioning BO/W35 | | | | | | | | |
| Energy label | | A++ | A++ | A++ | A++ | A++ | A++ | A++ |
| Thermal power | kW | 5,8 | 7,5 | 10,2 | 13,2 | 17,1 | 21,1 | 28,3 |
| Compressor's absorbed power | kW | 1,3 | 1,7 | 2,2 | 2,9 | 3,7 | 4,6 | 6,1 |
| COP | | 4,43 | 4,57 | 4,68 | 4,60 | 4,60 | 4,64 | 4,62 |
| Device | | | | | | | | |
| Device's water flow rate | m ³ /h | 0,99 | 1,30 | 1,75 | 2,26 | 2,93 | 3,63 | 4,87 |
| Exchanger pressure loss | mca | 0,3 | 0,3 | 0,5 | 0,7 | 0,7 | 0,8 | 1,0 |
| Geothermal | | | | | | | | |
| Cooling power to exchange in probe | kW | 4,5 | 6,0 | 8,1 | 10,5 | 13,5 | 16,8 | 22,5 |
| Probe liquid flow rate | m ³ /h | 1,30 | 1,71 | 2,32 | 3,00 | 3,87 | 4,82 | 6,45 |
| Exchanger pressure loss | mca | 0,7 | 0,7 | 1,1 | 1,4 | 1,4 | 1,4 | 1,7 |
| Domestic W5/W35 | | | | | | | | |
| Thermal power | kW | 7,5 | 9,9 | 13,3 | 16,7 | 22,2 | 27,5 | 37,2 |
| Compressor's absorbed power | kW | 1,3 | 1,6 | 2,2 | 2,8 | 3,8 | 4,7 | 6,3 |
| COP | | 5,85 | 6,10 | 6,14 | 6,04 | 5,88 | 5,86 | 5,95 |
| Device | | | | | | | | |
| Domestic water flow | m ³ /h | 1,27 | 1,67 | 2,24 | 2,82 | 3,75 | 4,64 | 6,28 |
| Exchanger pressure loss | mca | 0,46 | 0,51 | 0,78 | 1,00 | 1,10 | 1,19 | 1,62 |
| Well | | | | | | | | |
| Cooling power to exchange in well | kW | 6,2 | 8,2 | 11,1 | 13,9 | 18,4 | 22,7 | 30,9 |
| Well liquid flow rate | m ³ /h | 1,06 | 1,40 | 1,88 | 2,37 | 3,14 | 3,87 | 5,26 |
| Exchanger's pressure loss | mca | 0,3 | 0,4 | 0,6 | 0,7 | 0,7 | 0,9 | 0,9 |
| Summer functioning B30/W18 | | | | | | | | |
| Cooling power | kW | 9,5 | 12,5 | 16,6 | 20,9 | 27,5 | 34,3 | 43,8 |
| Compressor's absorbed power | kW | 1,3 | 1,5 | 2,1 | 2,8 | 3,8 | 4,9 | 6,7 |
| COP | | 7,39 | 8,19 | 7,84 | 7,44 | 7,33 | 6,97 | 6,55 |
| Device | | | | | | | | |
| Device's water flow rate | m ³ /h | 1,63 | 2,14 | 2,85 | 3,59 | 4,55 | 5,90 | 7,53 |
| Device's head pressure | mca | 0,7 | 0,8 | 1,2 | 1,5 | 3,3 | 1,6 | 1,9 |
| Geothermal | | | | | | | | |
| Thermal power to exchange in probe | kW | 10,7 | 13,9 | 18,6 | 23,6 | 31,0 | 39,0 | 50,5 |
| Probe's liquid flow rate | m ³ /h | 3,07 | 2,39 | 3,20 | 4,06 | 5,33 | 6,71 | 8,69 |
| Exchanger pressure loss | mca | 0,9 | 1,0 | 1,5 | 2,0 | 3,4 | 2,4 | 3,0 |
| Refrigerant | | | | | R 410a | | | |
| Compressor type | | | | | Scroll | | | |
| Number of compressors | | | | | 1 | | | |
| Power supply | V/Ph/Hz | 230-50/400-3N-50 | | | 400-3N-50 | | | |
| Hydraulic coupling | | | | 1" | | | 1 1/4" | |
| Sound pressure at 1m | dB(A) | 48 | 49 | 50 | 52 | 54 | 59 | 61 |
| Weight (unpacked) | kg | 112 | 117 | 127 | 139 | 172 | 197 | 215 |
| Weight (packed) | kg | 130 | 135 | 145 | 157 | 192 | 217 | 235 |

All indicated working conditions comply with the regulation EN14511

| Utility circuit | | | | | |
|------------------|-----------------------------------|----|-------|--------|--|
| B0/W35 | radiant plant | °C | 30/35 | In-Out | |
| W5/W35 | radiant plant | °C | 30/35 | In-Out | |
| B30/W18 | radiant plant | °C | 23/18 | In-Out | |
| External circuit | | | | | |
| B0/W35 | glycol water geothermal probe 20% | °C | 0/-3 | In-Out | |
| W5/W35 | glycol water geothermal probe 20% | °C | 10/5 | In-Out | |
| B30/W18 | glycol water geothermal probe 20% | °C | 30/35 | In-Out | |



| Dim. | Sizes | |
|------|-------|-------|
| | 6-16 | 20-33 |
| L | 500 | 670 |
| P | 660 | 855 |
| H | 835 | 935 |
| F | 30 | 30 |

Code GEO EASY HT/HTR



| EASY geothermal systems | | | | | |
|-------------------------|--------------------|-------------------------|-------------|--------------------------|-------------|
| gas | model | Only hot GEO EASY HT | | Hot/cold GEO EASY HTR | |
| | | code | price | code | price |
| R410a | 6 M | 444100001 | € 6.660,00 | 444100012 | € 6.758,00 |
| | 6 M + SMART START | 444100002 | € 6.968,00 | 444100013 | € 7.067,00 |
| | 6 T | 444100003 | € 6.805,00 | 444100014 | € 6.902,00 |
| | 8 M | 444100004 | € 6.774,00 | 444100015 | € 7.044,00 |
| | 8 M + SMART START | 444100005 | € 7.033,00 | 444100016 | € 7.345,00 |
| | 8 T | 444100006 | € 6.800,00 | 444100017 | € 7.166,00 |
| | 12 M | 444100009 | € 8.123,00 | 444100018 | € 8.426,00 |
| | 12 M + SMART START | 444100007 | € 8.374,00 | 444100019 | € 8.654,00 |
| | 12 T | 444100008 | € 8.277,00 | 444100020 | € 8.533,00 |
| | 16 T | 444100010 | € 8.840,00 | 444100021 | € 9.147,00 |
| | 20 T | 444100011 | € 10.263,00 | 444100022 | € 10.138,00 |
| | 24 T | 444010023 | € 11.531,00 | 444010025 | € 11.661,00 |
| | 33T | 444010024 | € 13.701,00 | 444010026 | € 14.175,00 |

*R indicated that the heat pump is reversible

Accessories

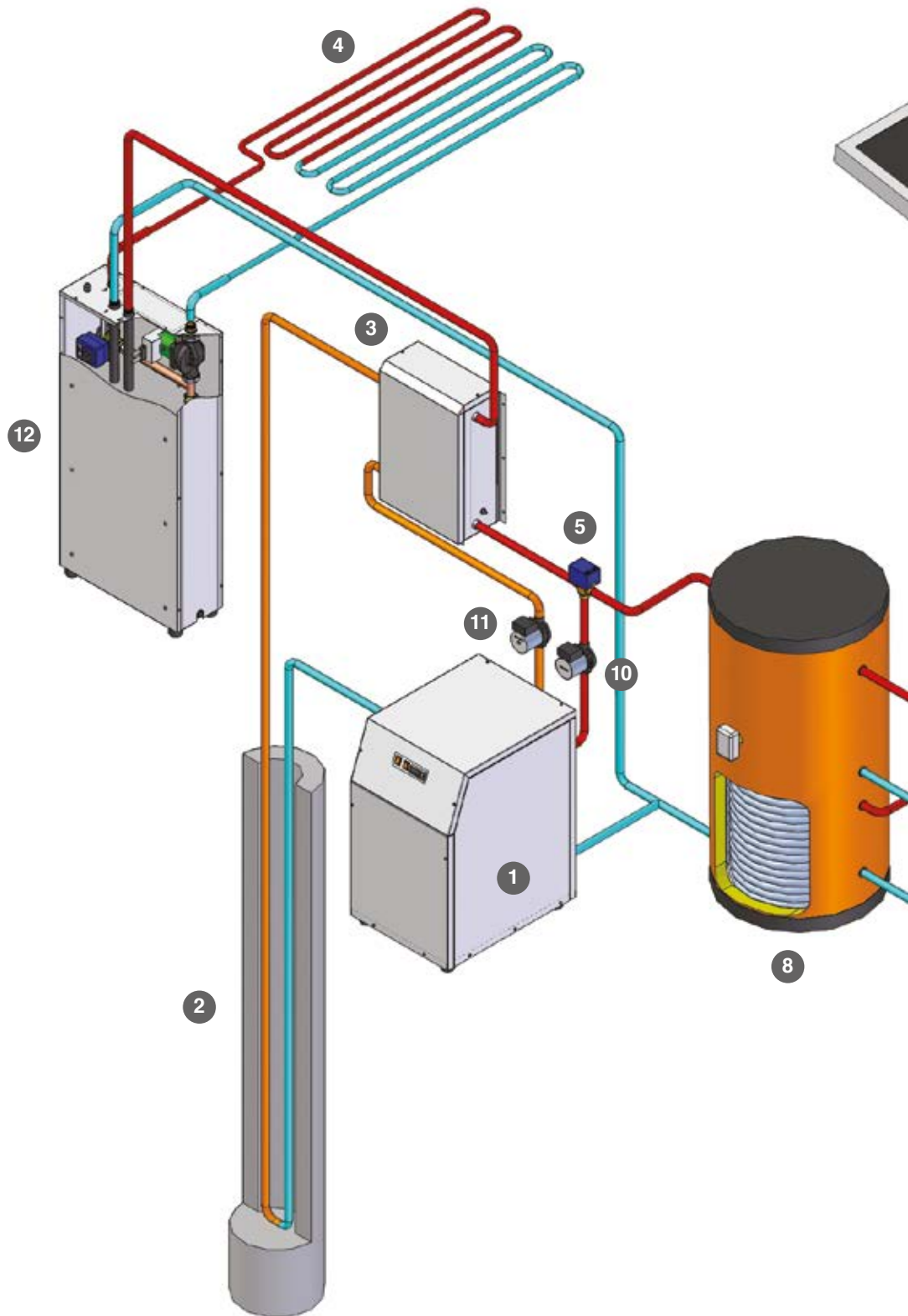
GEO EASY HT/HTR

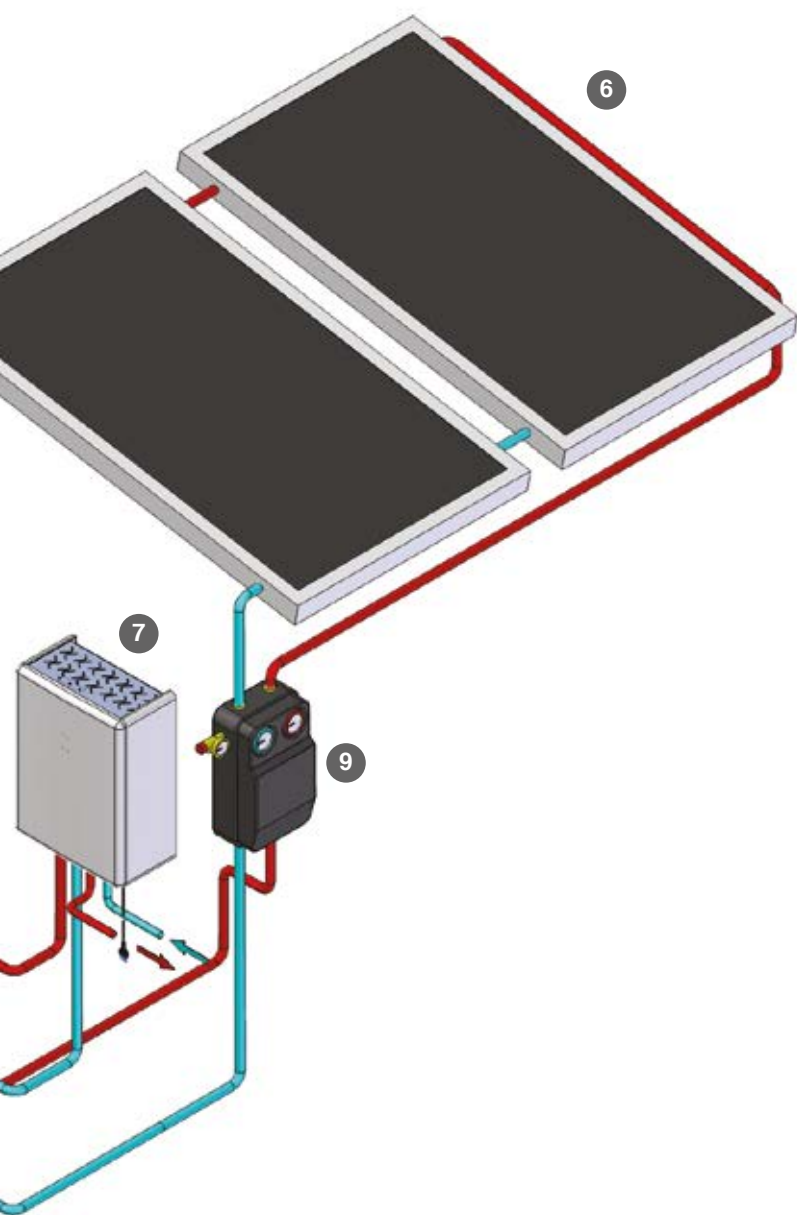
| Device accessories | | | |
|--------------------|--|------------|--|
| code | description | price | function |
| 421120017 | MFREE EASY : 6-8 | € 1.720,00 | Module for passive cooling – applied to size 6-8 |
| 421120018 | MFREE EASY : 12-16 | € 2.110,00 | Module for passive cooling – applied to size 12-16 |
| 421120019 | MFREE EASY : 20-24-33 | € 3.153,00 | Module for passive cooling – applied to size 20-24-33 |
| 452010025 | MFREE X EASY HTR control kit | € 295,00 | Makes the functioning of the MFREE EASY kit possible with the GEO easy HTR |
| 452010026 | MFREE X EASY HT control kit | € 201,00 | Makes the functioning of the MFREE EASY kit possible with the GEO easy HT |
| 452020028 | EASY Domestic deviation valve kit | € 305,00 | Deviation valve for DHW production |
| 452010024 | EASY contr. Domestic deviation valve kit | € 350,00 | Makes the functioning of the easy domestic deviation valve kit possible |

| Accessories for control and regulation | | | |
|--|------------------------|---------|--|
| code | description | price | function |
| 452010008 | External air probe kit | € 70,00 | Makes it possible to check the outside air temperature for the EASY series with box, external assembly |

| Accessori Macchina | | | |
|--------------------|---|------------|---|
| code | description | price | function |
| 452020097 | Circ with inverter kit EASY 6-8-12-16 for device | € 412,00 | Circulator with inverter for the installation (external assembly) sizes 6 to 16 kW |
| 452020098 | Circ with inverter kit EASY 20 for device | € 718,00 | Circulator with inverter for the installation (external assembly) size 20 kW |
| 452020099 | Circ with inverter kit EASY 24 for device | € 725,00 | Circulator with inverter for the installation (external assembly) size 24 kW |
| 452020100 | Circ with inverter kit EASY 33 for device | € 1.106,00 | Circulator with inverter for the installation (external assembly) size 33 kW |
| 452020101 | Circ with inverter kit EASY 6-8 for geothermal | € 412,00 | Circulator with inverter for the installation (external assembly) sizes 6 to 8 kW |
| 452020102 | Circ with inverter kit EASY 12-16 for geothermal | € 718,00 | Circulator with inverter for the installation (external assembly) sizes 12 to 16 kW |
| 452020103 | Circ with inverter kit EASY 20 for device | € 688,00 | Circulator with inverter for the installation (external assembly) size 20 kW |
| 452020104 | Circ with inverter kit EASY 24 for device | € 725,00 | Circulator with inverter for the installation (external assembly) size 24 kW |
| 452020105 | Circ with inverter kit EASY 33 for device | € 1.106,00 | Circulator with inverter for the installation (external assembly) size 33 kW |
| 452010068 | Pump control kit Modulating geothermal unit phase cut 0-10 V | € 130,00 | Regulates the velocity of the geothermal circulator, through evaporation and condensation of the installation |
| 452020047 | Solenoid kit for well EASY HT/HTR 6-8-12 | € 315,00 | To use in case of connection to the well |
| 452020052 | Solenoid kit for well EASY HT/HTR 16-20 | € 581,00 | To use in case of connection to the well |
| 452020048 | Solenoid kit for well EASY HT/HTR 24 | € 582,00 | To use in case of connection to the well |
| 452020051 | Solenoid kit for well EASY HT/HTR 33 | € 582,00 | To use in case of connection to the well |
| 452020026 | Pressostat kit for well EASY HTR 6-8 | € 226,00 | To use on the HTR in case of connection to the well, for cooling purposes |
| 452020044 | Pressostat kit for well EASY HTR 12-16 | € 255,00 | To use on the HTR in case of connection to the well, for cooling purposes |
| 452020045 | Pressostat kit for well EASY HTR 20-24 | € 320,00 | To use on the HTR in case of connection to the well, for cooling purposes |
| 452020046 | Pressostat kit for well EASY HTR 33 | € 676,00 | To use on the HTR in case of connection to the well, for cooling purposes |
| 452020006 | Soundproof cover kit GEO 6-8 | € 131,00 | Soundproofing for compressor, size 6 to 8 kW |
| 452020007 | Soundproof cover kit GEO 12-16-20 | € 132,00 | Soundproofing for compressor, size 12 to 20 kW |
| 452020090 | Soundproof cover kit EASY HT/HTR 24-33 | € 150,00 | Soundproofing for compressor, size 24 to 33 kW |
| 452020023 | Carter resistor kit EASY 6-20 | € 56,00 | Resistance for heating the oil in the compressor |
| 452020024 | Carter resistor kit EASY 24-33 | € 63,00 | Resistance for heating the oil in the compressor |
| 452020025 | Anti-freeze resistor kit for exchanger EASY 6-33 | € 150,00 | Anti-freeze resistor for the exchanger |

Layout GEO EASY HT / HTR





- 1 heat pump GEO
- 2 geothermal probe or well
- 3 MFREE free-cooling unit
- 4 floor heating
- 5 deviation valve
- 6 solar collectors
- 7 SET fast production unit
- 8 Sanitary water storage tank
- 9 solar station unit
- 10 device circulator kit
- 11 geothermal circulator kit
- 12 compact inertial tank

Air-water system

Excellent alternative to traditional heating

- ✓ Outside air, a resource which is always available and free
- ✓ Simple design, minimal architectural impact
- ✓ Significant energy saving
- ✓ Significant reduction in CO₂ emissions
- ✓ Heating, cooling and domestic hot water production by means of one single system

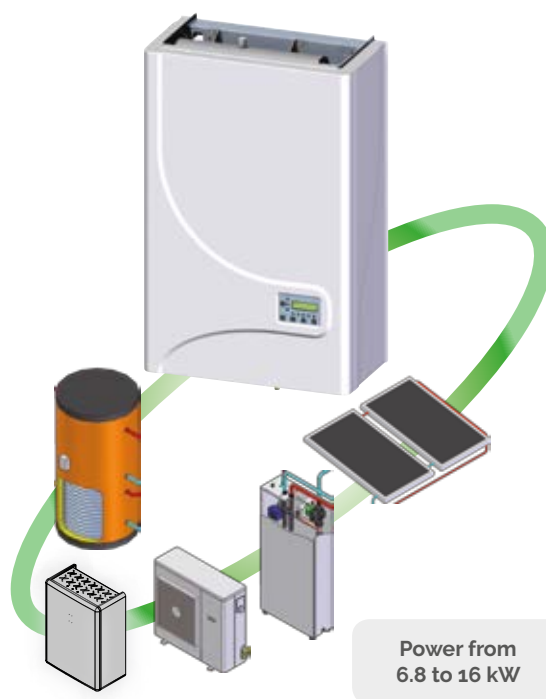
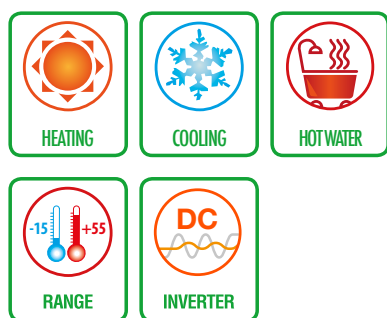
How does an air-water heat pump work?

Air-water heat pumps use a sustainable energy source by extracting the heat present in outdoor air at a low temperature. Evaporation, condensation, compression and expansion create the refrigeration cycle that makes it possible to raise the extracted heat to a higher temperature. Then energy is transferred by means of a heat exchanger to the distribution system, such as floor heating, low temperature radiators and/or fan coil.

Air-water system products range

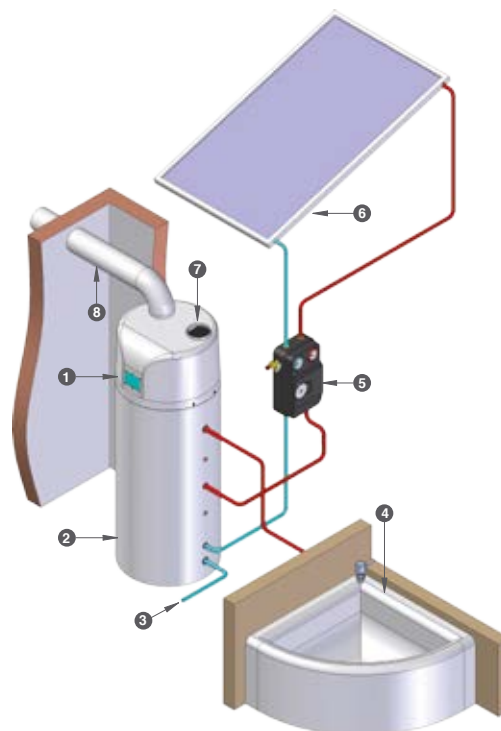
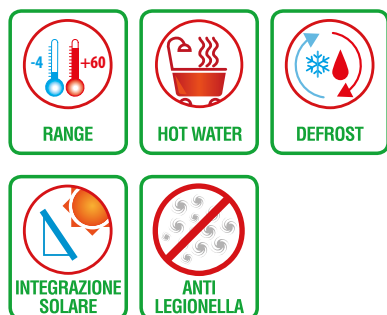
IDEA FLEX system

High Energy efficient system with integrated components for heating, cooling and domestic hot water production with a DC inverter.



EOS PLUS

Air-water heat pump for efficient and eco-friendly domestic hot water up to 60°C



Idea Flex

A compact and efficient option for climatization in residential applications.

The Idea system enables total control over the habitation climate both where floor heating and fan coil is used.

Main features:

- high seasonal efficiency
- easy to install in new buildings and in renovated buildings
- easy to use, to start-up and to maintain with all the internal components accessible from the front
- all couplings in the unit are placed on the inferior part as in a traditional heater
- adapted to all climate circumstances, the external units are designed to guarantee operation in -20°C
- external unit with inverter to efficiently exchange heat with the environment
- DHW production up to 55°C
- integrated management of the solar thermal system or the heater
- all hydraulic components that are necessary are included in the internal unit: recirculation pump, back-up reheater (optional electrical resistor), deviation valve for DHW production (optional)
- minimal encumbrance and accurate design for a perfect integration

CONTROL

During the first start-up a menu will send the installer through the right order of operations. A programming timer for heating, cooling and DHW production makes it possible to adapt the activity of the unit to your personal requirements. The graphical display of the control panel clearly shows all operation parameters.

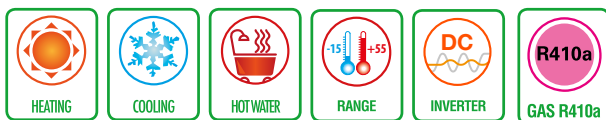
Main components

Idea (Indoor components)

The heart of the Idea system is the indoor unit, which looks like a traditional wall-mounted water heater. With a microprocessor control unit to manage and control the heating and cooling of the water running through the system for maximum comfort.

DC-Inverter condensing unit (Outdoor components)

It consists of a condensing unit with an inverter; in the winter this technology makes it possible to efficiently extract heat from outdoor air. In summer, a pleasant cooling is obtained by inverting the cooling cycle.

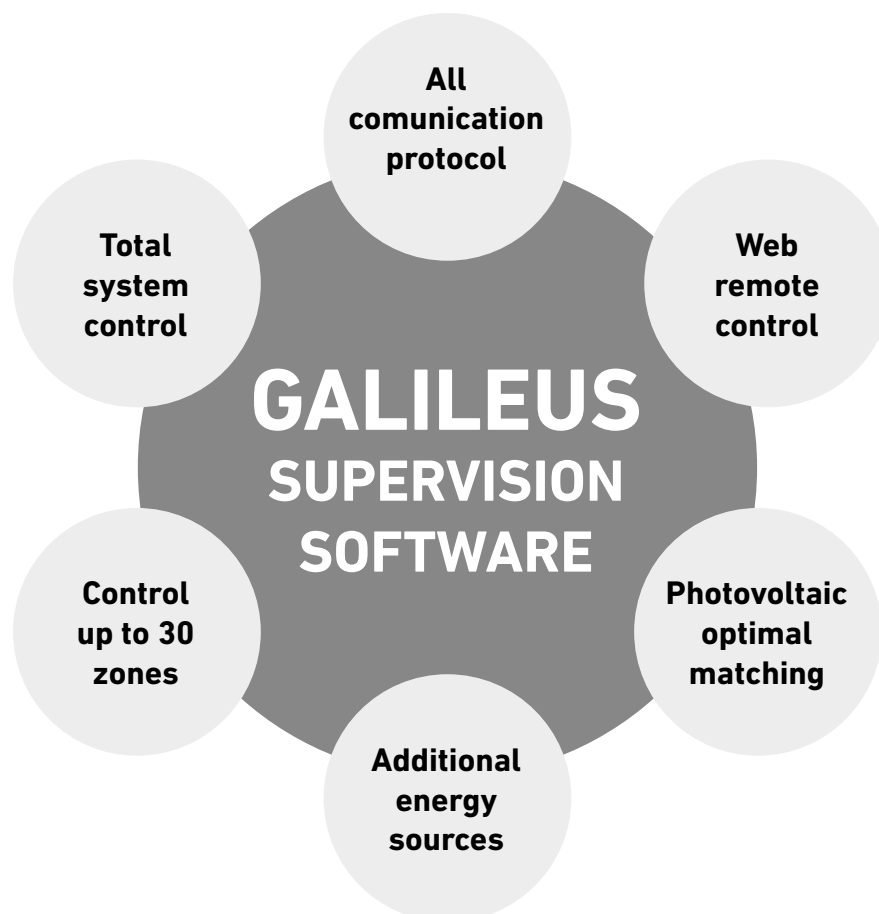


Idea Flex GALILEUS

Idea flex is also available for the special Galileus software.

Galileus is the result of the long experience Fiorini has in the field of renewable energy. The system makes it possible to intelligently control the whole heating and cooling installation. The main features of the Galileus are:

- ✓ temperature and humidity management of up to 30 zones
- ✓ management of the optimization of the consumption of photovoltaic energy production
- ✓ connection to the web
- ✓ management of the anti-legionella cycles
- ✓ management of up to 5 units connected in series
- ✓ management of the solar thermal system
- ✓ management of the integration of the heater and other sources on the device or domestic side
- ✓ management of the mixing valve
- ✓ management of the pumps and the zone valve
- ✓ alarms
- ✓ recording of the energy



Technical information

Idea Flex

| Sizes | Idea | 6 | 8 | 12 | 16 |
|--|---------|-------------|--------------|-------------|-------------|
| Winter functioning A7/W35 (A) | | | | | |
| Energy label | | A++ | A++ | A++ | A++ |
| Thermal power | kW | 5.34 - 2.8 | 9.0- 4.5 | 11.3-5.7 | 14.6-7.3 |
| Compressor's absorbed power | kW | 1.3 | 2.2 | 2.8 | 3.6 |
| COP | | 4.27 | 4.10 | 4.10 | 4.05 |
| Domestic A7/W50 (B) | | | | | |
| Thermal power | kW | 5.0 | 8.4 | 10.4 | 13.6 |
| Domestic water flow | m3/h | 0.97 | 1.44 | 1.78 | 2.33 |
| Summer functioning A35/W18 (C) | | | | | |
| Cooling power | kW | 5.2 | 8.2 | 11.0 | 14.1 |
| Compressor's absorbed power | kW | 1.2 | 2.1 | 2.8 | 3.6 |
| EER | | 3.95 | 3.93 | 3.92 | 3.91 |
| Summer functioning A35/W7 (D) | | | | | |
| Cooling power | kW | 4.3 | 6.8 | 9.2 | 11.7 |
| Compressor's absorbed power | kW | 1.2 | 1.9 | 2.6 | 3.4 |
| EER | | 3.57 | 3.55 | 3.50 | 3.40 |
| Device | | | | | |
| Water flow | m3/h | 0.89 | 1.41 | 2.04 | 2.46 |
| Heat pressure | mca | 4.5 | 4.2 | 3.8 | 3.2 |
| Expansion vessel | | | | | |
| Resistance in series | kW | | | 10 | |
| Max amount of water in the circuit | litri | | | 350 | |
| Refrigerant | | | | | |
| Compressor type | | | R410A rotary | | |
| Number of compressors | | | | | |
| Number of compressors | | 1 | 1 | 1 | 1 |
| Electric supply of internal unit | V/Ph/Hz | 230-N-50 | 230-N-50 | 230-N-50 | 230-N-50 |
| Electric supply of external unit | V/Ph/Hz | 230-N-50 | 230-N-50 | 230-N-50 | 400-3N-50 |
| Pipes | | | | | |
| Pipes | mm | 6.35 | 9.53 | 9.53 | 9.53 |
| Gas | mm | 12.7 | 16 | 16 | 16 |
| Max length | m | 25 | 30 | 30 | 30 |
| Max difference in level | m | 15 | 15 | 20 | 20 |
| Dimensions of internal unit LxHxP | | | | | |
| Dimensions of internal unit LxHxP | mm | 515x800x270 | | | |
| Dimensions of external unit LxHxP | | | | | |
| Dimensions of external unit LxHxP | mm | 880x707x340 | 930x860x330 | 990x960x360 | 990x960x360 |
| Weight (unpacked) | | | | | |
| Weight (unpacked) | kg | 34 | 34 | 34 | 34 |
| Weight (packed) | | | | | |
| Weight (packed) | kg | 37 | 37 | 37 | 37 |

All indicated working conditions comply with the regulation EN14511

(A) Utility circuit: radiant plant 30/35°C In-Out ;
External circuit: outdoor air °C 7-85% RH

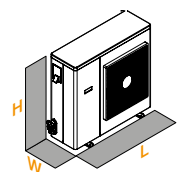
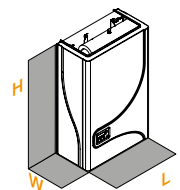
(B) Domestic circuit: °C 45/50 In/Out;
External circuit: outdoor air °C 7-85% RH

(C) Utility circuit: radiant plant °C 23/18 In/Out;
External circuit: outdoor air °C 35-50% RH

(D) Utility circuit: radiant plant °C 12/7 In/Out;
External circuit: outdoor air °C 35-50% RH

| | | 6 | 8 | 12 | 16 |
|---|----|-----|-----|-----|-----|
| L | mm | 515 | 515 | 515 | 515 |
| P | mm | 270 | 270 | 270 | 270 |
| H | mm | 816 | 816 | 816 | 816 |

| | | 6 | 8 | 12 | 16 |
|---|----|-----|-----|-----|-----|
| L | mm | 890 | 930 | 990 | 990 |
| P | mm | 340 | 330 | 360 | 360 |
| H | mm | 707 | 860 | 960 | 960 |



Code Idea Flex



| Air/water system | | | | |
|------------------|------------|------------|--------------------|------------|
| model | IDEA FLEX | | IDEA FLEX GALILEUS | |
| | code | price | code | price |
| Monofase | 840010090X | € 2.634,00 | 840010092X | € 3.800,00 |
| Trifase | 840010091X | € 2.685,00 | 840010093X | € 3.900,00 |

| Air/water system Motocondensing IDEA | | |
|---|------------|------------|
| model | code | price |
| IDEA 6 M | 844040012X | € 2.900,00 |
| IDEA 8 M | 844040013X | € 3.200,00 |
| IDEA 12 M | 844040014X | € 5.250,00 |
| IDEA 16 T | 844040015X | € 6.750,00 |

| IDEA FLEX accessories Accessories for the device | | |
|---|-------------------------------------|----------|
| code | description | price |
| 452010033 | IDEA FLEX solar kit | € 88,00 |
| 838110001 | Control unit for solar pumping kit | € 350,00 |
| 452020069 | Resistance for DHW boiler 2kW M kit | € 337,00 |
| 452020071 | Resistance for DHW boiler 3kW M kit | € 354,00 |

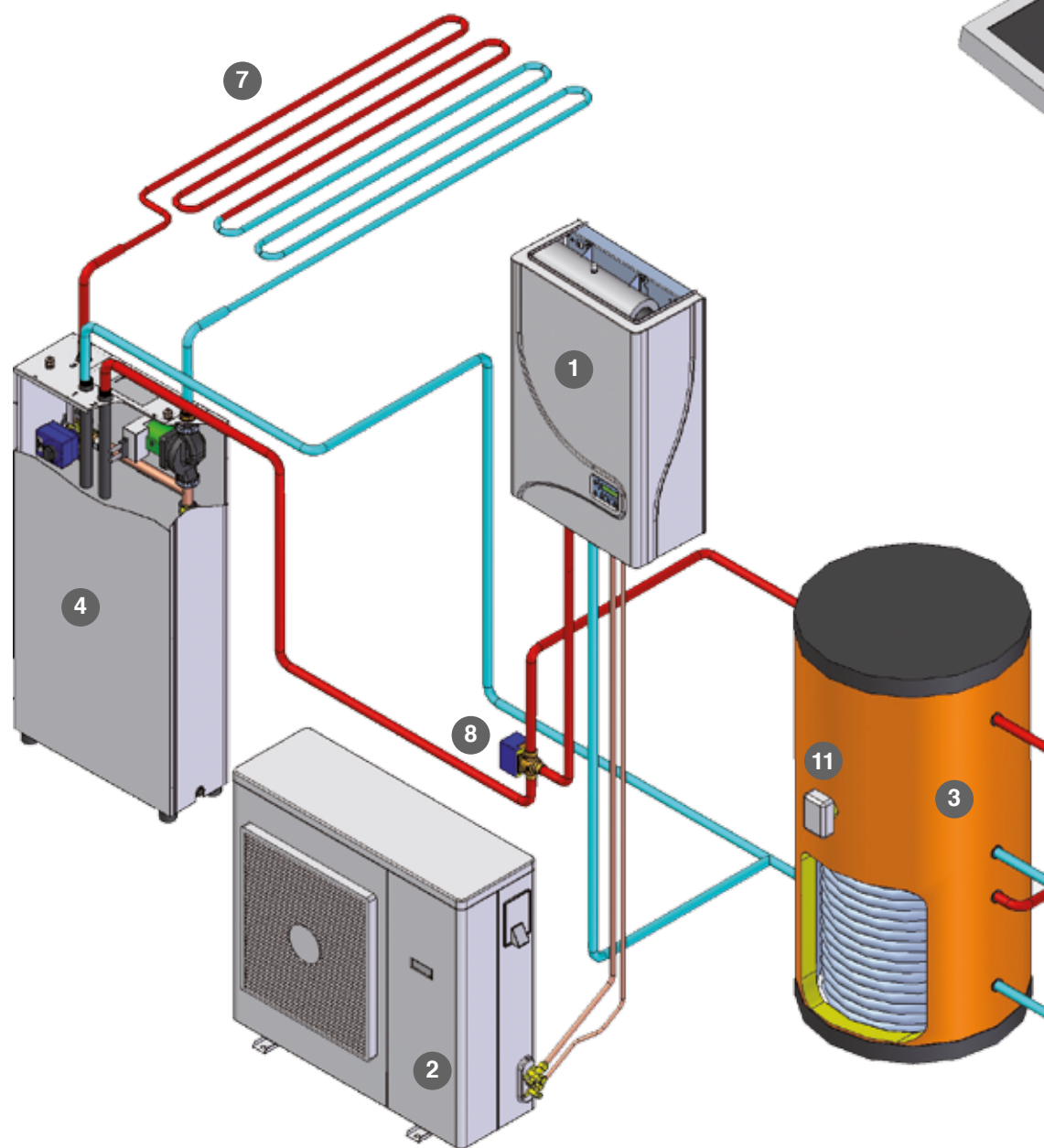
| IDEA FLEX GALILEUS accessories Accessories for control and regulation | | |
|--|---|------------|
| code | description | price |
| 452010050 | MYZONE KIT thermostat T/U | € 268,00 |
| 452010051 | MY BOARD expansion for MYZONE kit | € 360,00 |
| 452010053 | KIT with RS485 fieldbus for zone | € 230,00 |
| 452010061 | Mypower kit 3ph | € 1.060,00 |
| 452010069 | My power kit 1 ph | € 593,00 |
| 452010070 | Mytouch 7 kit environment supervision panel | € 2.705,00 |

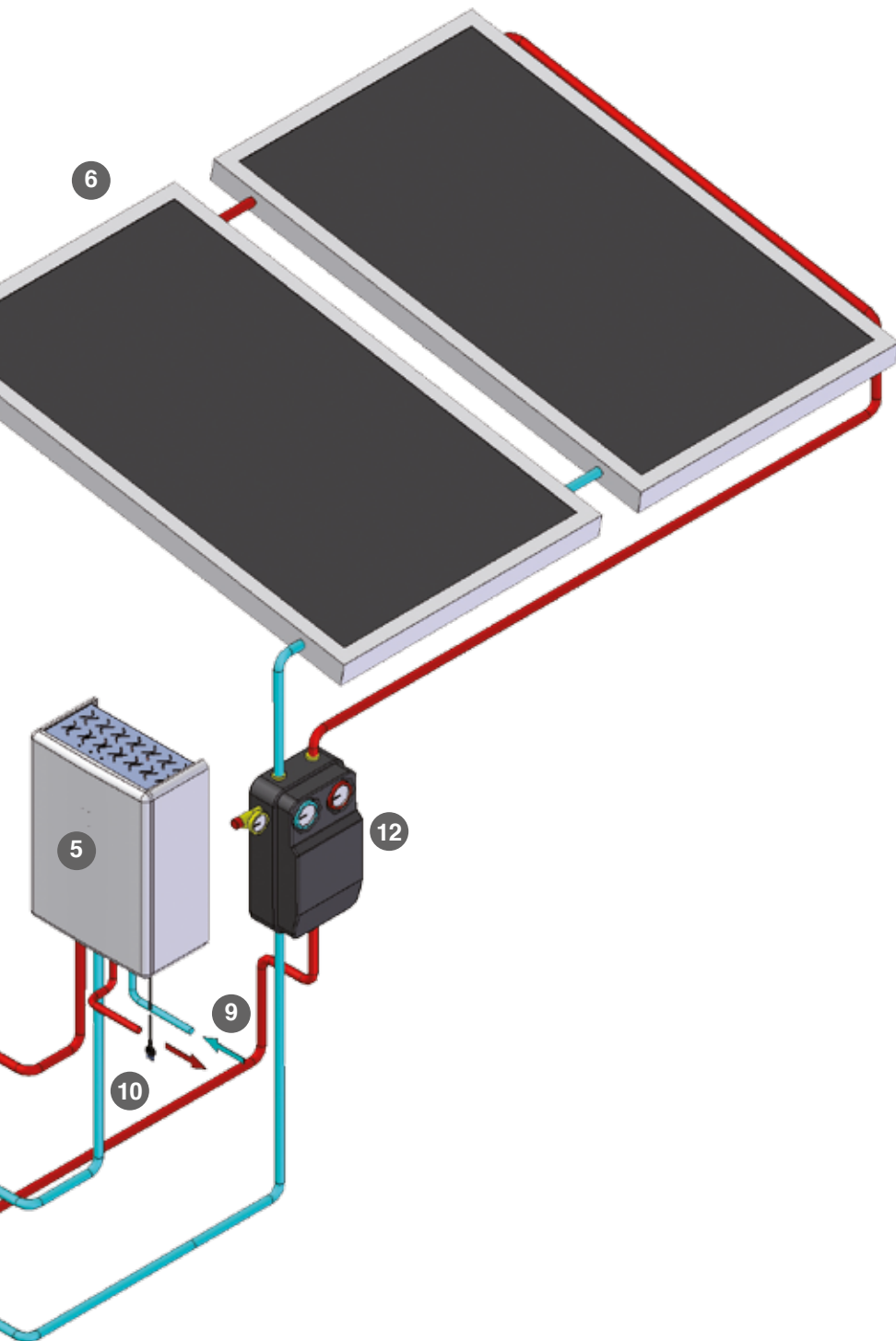
| IDEA FLEX accessories Accessories for internal machine | | |
|---|---------------------------------------|----------|
| code | description | price |
| 452010071 | Internal domestic deviation valve kit | € 295,00 |
| 452020106 | Resistor for collector 1kw m | € 118,00 |
| 452020107 | Resistor for collector 2kw m | € 156,00 |
| 452020108 | Resistor for collector 3kw m | € 153,00 |
| 452020109 | Resistor for collector 2kw T | € 209,00 |
| 452020110 | Resistor for collector 3kw T | € 214,00 |
| 452020111 | Resistor for collector 4kw T | € 218,00 |
| 824180085 | Modbus converter RS485 | € 140,00 |

| IDEA FLEX GALILEUS accessories Accessories for device | | |
|--|------------------------------------|----------|
| code | description | price |
| 452010072 | SOLAR IDEA GALILEUS kit | € 31,00 |
| 838110001 | Control unit for solar pumping kit | € 350,00 |
| 452020069 | Resistor for DHW boiler kti 2KW M | € 337,00 |
| 452020071 | Resistor for DHW boiler kit 3 KW M | € 354,00 |

| IDEA FLEX GALILEUS accessories Accessories internal installation | | |
|---|---------------------------------------|----------|
| code | description | price |
| 452010071 | Internal domestic deviation valve kit | € 295,00 |
| 452020106 | Resistor for collector kit 1KW M | € 118,00 |
| 452020107 | Resistor for collector kit 2KW M | € 156,00 |
| 452020108 | Resistor for collector kit 3KW M | € 153,00 |
| 452020109 | Resistor for collector kit 2KW T | € 209,00 |
| 452020110 | Resistor for collector kit 3KW T | € 214,00 |
| 452020111 | Resistor for collector kit 4KW T | € 218,00 |

Layout IDEA System





- 1 idea (indoor unit)
- 2 DC inverter condensation unit (outdoor unit)
- 3 water storage unit
- 4 compact inertial storage tank
- 5 set - fast DHW preparation unit
- 6 solar collector
- 7 radiant system
- 8 system/DHW bypass valve
- 9 domestic hot water inlet
- 10 domestic hot water outlet
- 11 resistor by integration
- 12 solar pump control unit

Air-water heat pumps EOS PLUS

Air-water heat pump for efficient DHW production

Functions

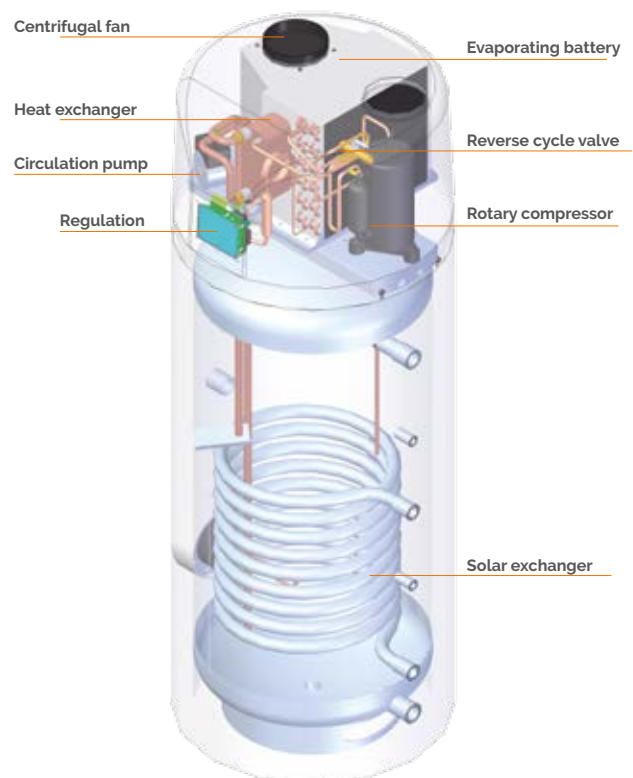
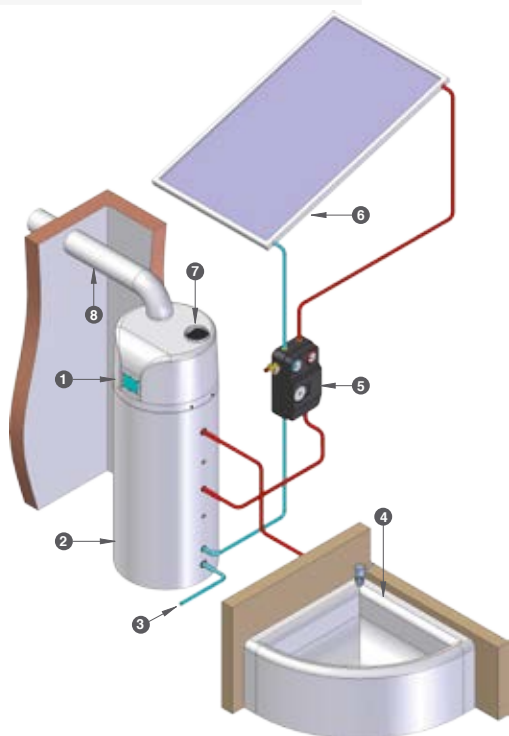
- ✓ Production of high temperature sanitary water

Main features

- ✓ Integrated compact unit with storage tank for DHW production
- ✓ DHW production up to 60°C
- ✓ MyEnergy regulation
- ✓ Integration and management of solar thermal unit (optional)
- ✓ Application range up to -4°C (external air)
- ✓ Available: flexible ducts for air intake and delivery
- ✓ Integrated defrosting system
- ✓ Antilegionella cycle



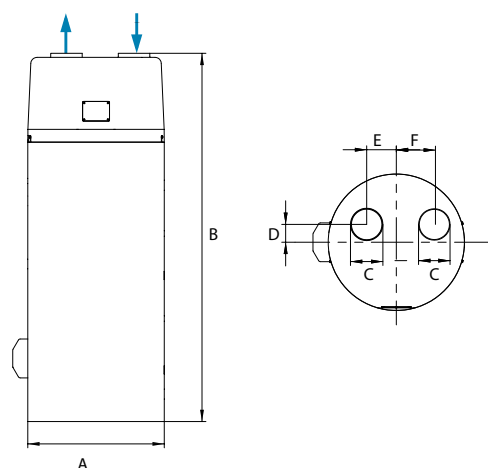
- 1 Air-water heat pump
- 2 300 lt storage unit
- 3 domestic cold water inlet
- 4 utilities (bath/shower)
- 5 solar pump unit
- 6 solar collector
- 7 heat pump air inlet
- 8 air duct



Air-water heat pumps

EOS PLUS

| Domestic mode | | |
|--|-------------------|----------|
| Capacity | l | 300 |
| Thermal power | kW | 1,73 |
| Compressor's absorbed power | kW | 0,29 |
| Device's pump absorbed power | kW | 0,04 |
| Fan's absorbed power | kW | 0,15 |
| Energy label | | A+ |
| COP | | 3,68 (*) |
| Sanitary | | |
| Device's water flow rate | m ³ /h | 0,4 |
| Useful head | mca | 1,2 |
| Max outlet water temperature | °C | 60 |
| Max working pressure- water side | Bar | 6 |
| Fitting diameter | | 3/4 |
| Fan | | |
| cooling power to exchange | kW | 0,96 |
| Air flow | m ³ /h | 500 |
| Useful head | Pa | 82 |
| Outdoor operating air temperature | min/max | -4/32 |
| Diameter of round duct fitting | mm | 150 |
| Max duct length | m | 10 |
| Integration heating element | | |
| Heating element output | kW | 1,2 |
| Fitting diameter | | 1 1/4 |
| Thermostat for adjustment and protection | °C | 47 |
| General information | | |
| Compressor type | | Rotary |
| Number of compressors | | 1 |
| Power supply | V/Ph/Hz | 230-50 |
| R134a coolant | kg | 0,55 |
| Sound pressure at 1 m | dB(A) | 50 (**) |
| Weight (unpacked) | kg | 93 |
| Weight (packed) | kg | 100 |



| | | |
|---|----|------|
| A | mm | 650 |
| B | mm | 1754 |
| C | mm | 150 |
| D | mm | 85 |
| E | mm | 141 |
| F | mm | 186 |

| Air/water system EOS PLUS | | |
|------------------------------|------------|------------|
| model | code | price |
| EOS PLUS 300 l | 844020011X | € 3.700,00 |

| Accessories EOS heat pump Accessories for device | | |
|---|-----------|----------|
| description | code | price |
| EOS PLUS solar kit | 452010039 | € 99,00 |
| Control unit for solar pumping kit | 838110001 | € 350,00 |

| Accessories EOS heat pump Machinery Accessories | | |
|--|-----------|----------|
| description | code | price |
| Electrical resistance kit 1.2 kW M EOS PLUS | 452020074 | € 96,00 |
| EOS PLUS Canalization kit | 452020075 | € 144,00 |

Nominal conditions

(*) Values calculated at 15°C air temperature, 71% humidity and 15°C inlet water temperature

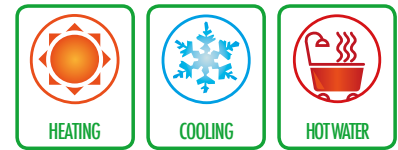
(**) Value measured with delivery duct

Hybrid systems

IANUS system

Ianus: The latest green technology generation

IANUS is an autonomous system combining a geothermal heat pump with hybrid photovoltaic thermal panels. It provides residential heating, cooling and domestic hot water production by using the generated electrical power. The IANUS system transforms free and renewable air and solar energy into the thermal and electric power needed by the housing unit. IANUS makes the most out of available renewable energy with no need for any fossil fuels, and without contributing to greenhouse gas emissions.



Benefits of the IANUS system

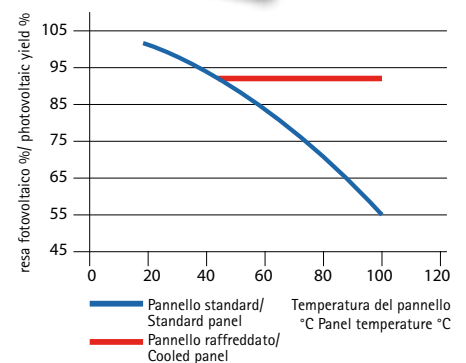
- Thermal and electrical energy form the same solar panel
- Improved use of panel absorbing surface area
- Increase photovoltaic performance through cell cooling
- Reduced material and installation costs
- Autonomous electrical power generation
- Use of state incentives feed -in tariff + tax relief
- Use of reduced rate meter for the heat pump, resulting in improved energy consumption balance

What does "hybrid system" mean?

Hybrid photovoltaic collectors transform part of the absorbed solar radiation into electric power and transfer the thermal energy generated by radiation and by the electric power to the heat pump.

Two important benefits are therefore obtained:

- the conditions for the efficient operation of the heat pump are created (high COP), as the pump receives the necessary electric and thermal energy from photovoltaic collectors;
- photovoltaic cell operating temperature is reduced, thus increasing kWh production by up to 30%.



Hybrid systems

IANUS system

The system components' operation is coordinated and improved by the Galileus software, which creates the right conditions for high comfort and user-friendly technology. In case of frost or ice formation on the front side of the photovoltaic panel that would cause an interruption in electricity production, the system automatically removes the ice by shortly reversing the refrigeration cycle and heating the glass surface.

The system ensures the same level of comfort with high performance even in case of snow, ice or frost. It improves power production efficiency by heating the panel surface in the most cost-effective way and making it run in the shortest time possible.

Main components of the IANUS system are:

- Heat pump for heating, cooling and DHW productions
- Hybrid photovoltaic panels
- Device's storage tank
- FREE HEATING kit which contains a plate heat exchanger, a 3-way deviation valve and a circulation pump; it heats DHW under sufficient solar radiation conditions without activating the heat pump compressor.



Typical combinations for housing units from 6 to 10 kW

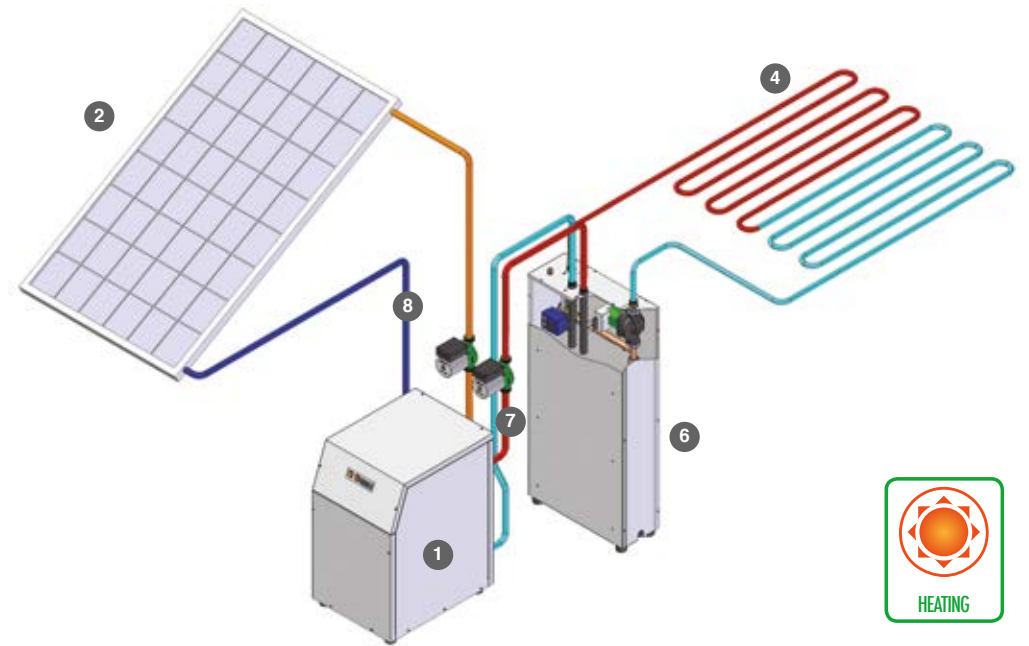
| GEO HFE | Thermal photovoltaic panel | | Kit Freeheating | Kit Drycooler | Diverter kit |
|---------|---|-----|---|--|---|
| |  | |  |  |  |
| Size | n° | kWp | n° | Size | n° |
| 6 | 19 | 4.5 | 1 | Dry 6-8 | 1 |
| 8 | 26 | 6 | 1 | Dry 6-8 | 1 |
| 10 | 34 | 8 | 1 | Dry 10-12 | 1 |

IANUS hybrid system solutions

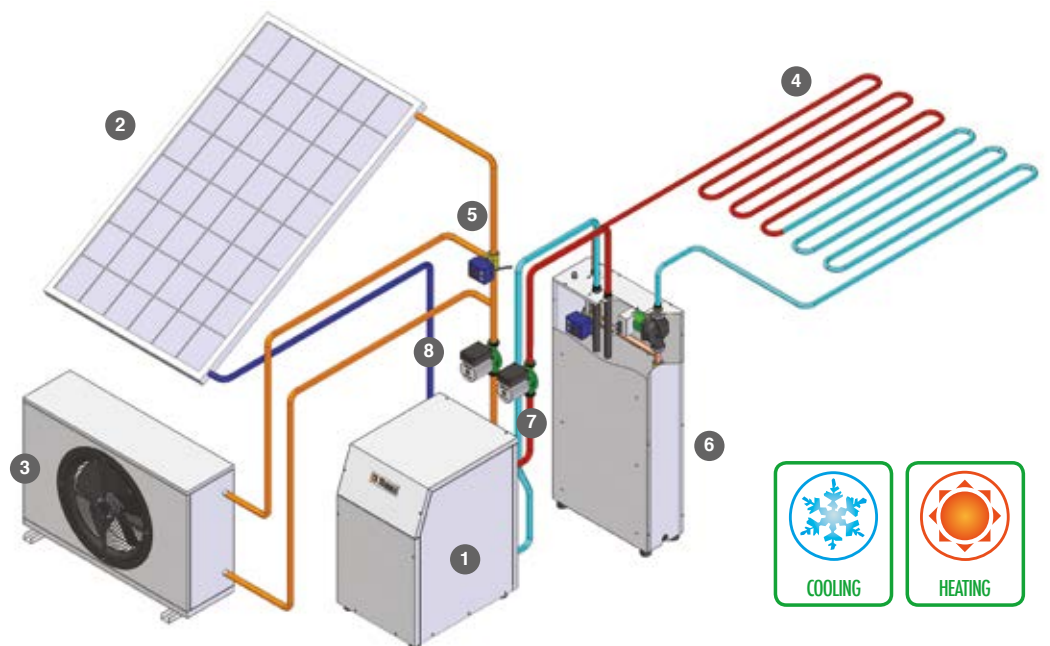
- 1 GEO EASY HT heat pump
- 2 thermal photovoltaic panel
- 3 dry cooler
- 4 floor heating
- 5 IANUS deviation valve kit
- 6 compact storage tank for the installation
- 7 device's circulation kit
- 8 geothermal circulation kit

Device's solutions with Ianus system are proposed below according to the energy demand of the housing unit.

Heating with EASY HT

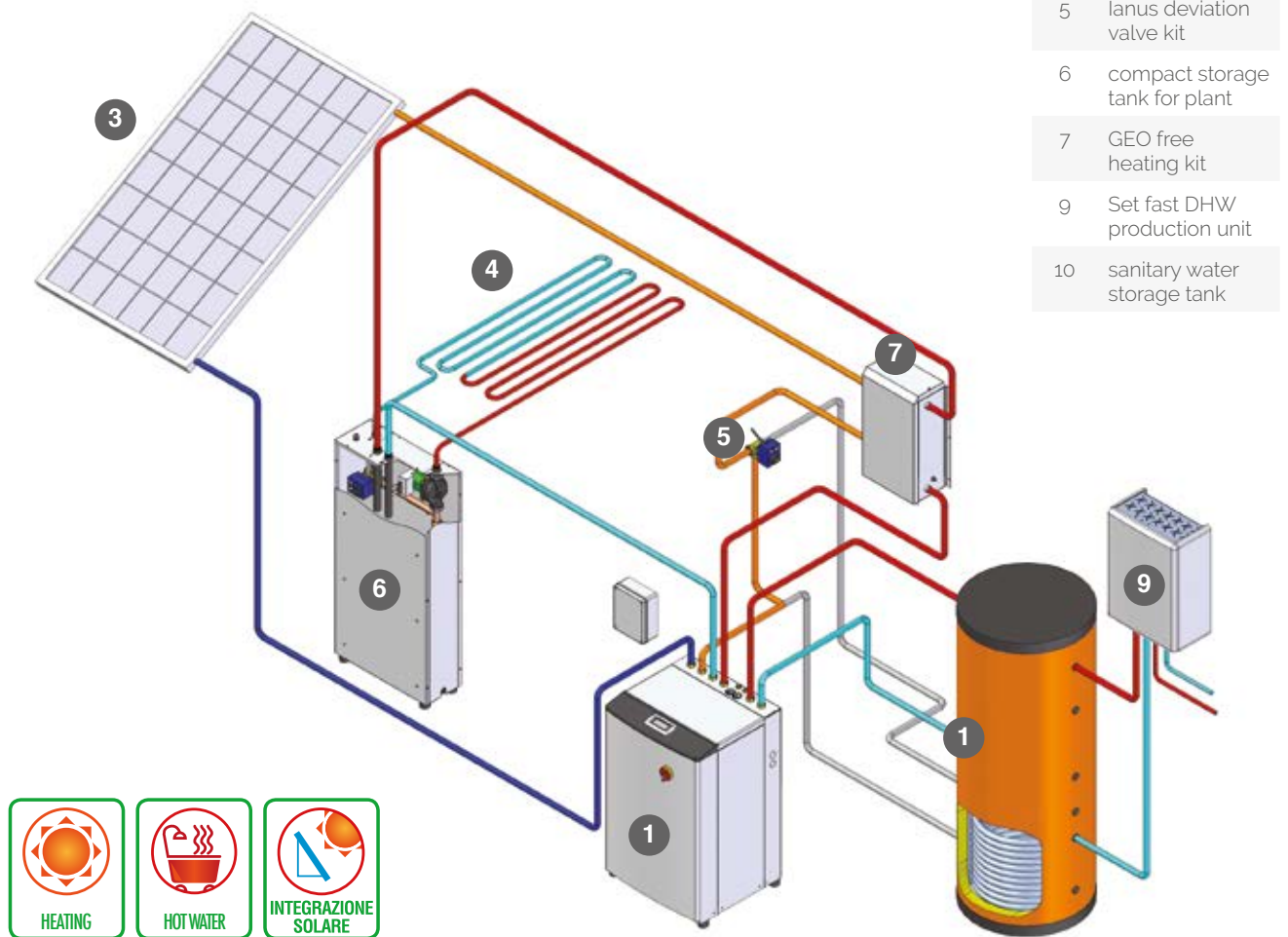


Heating and cooling with EASY HTR



IANUS hybrid system solutions

Heating + DHW + solar thermal
With GEO HF + HFREE kit free heating

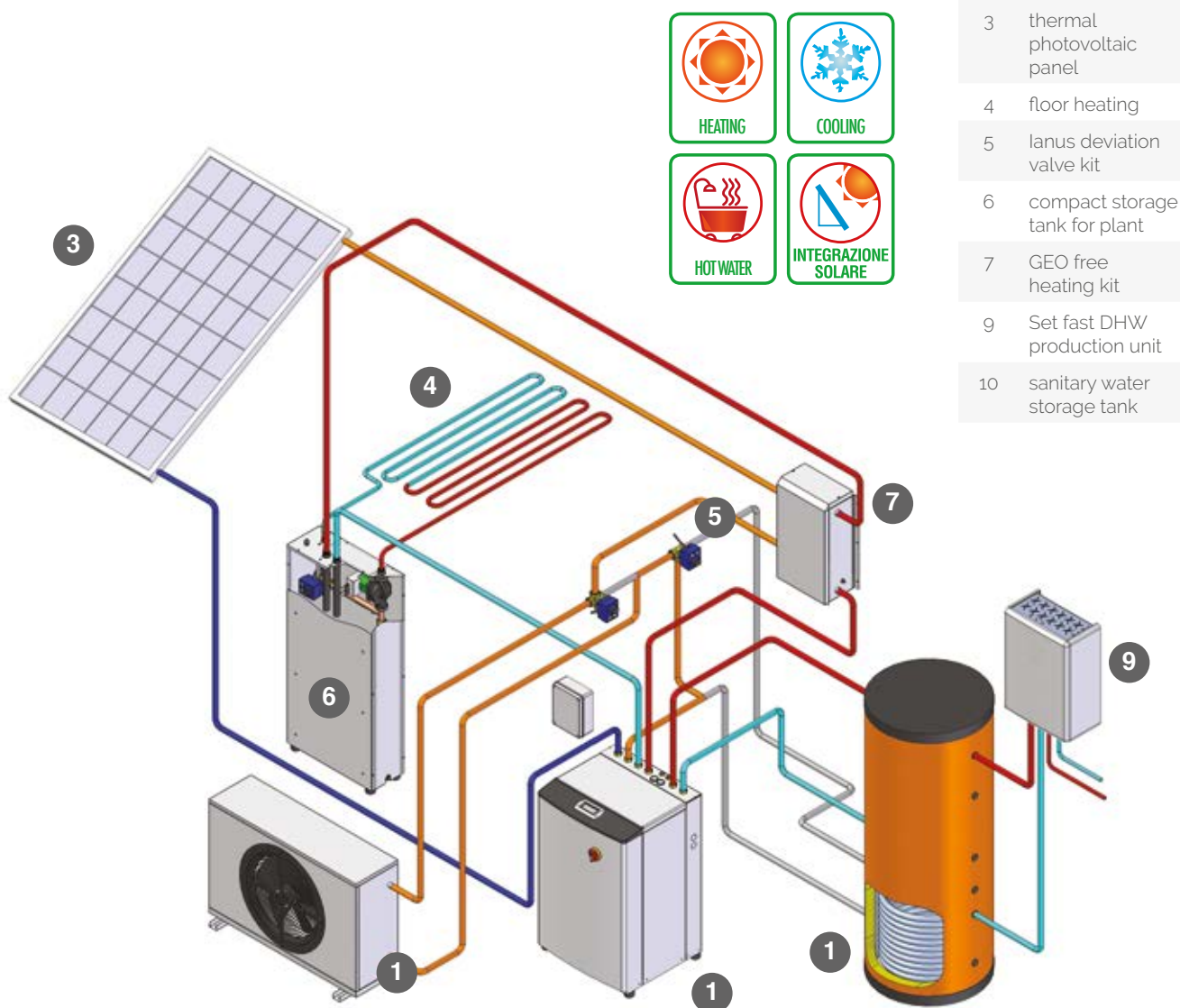


- 1 GEO HF heat pump
- 3 thermal photovoltaic panel
- 4 floor heating
- 5 Ianus deviation valve kit
- 6 compact storage tank for plant
- 7 GEO free heating kit
- 9 Set fast DHW production unit
- 10 sanitary water storage tank



IANUS hybrid system solutions

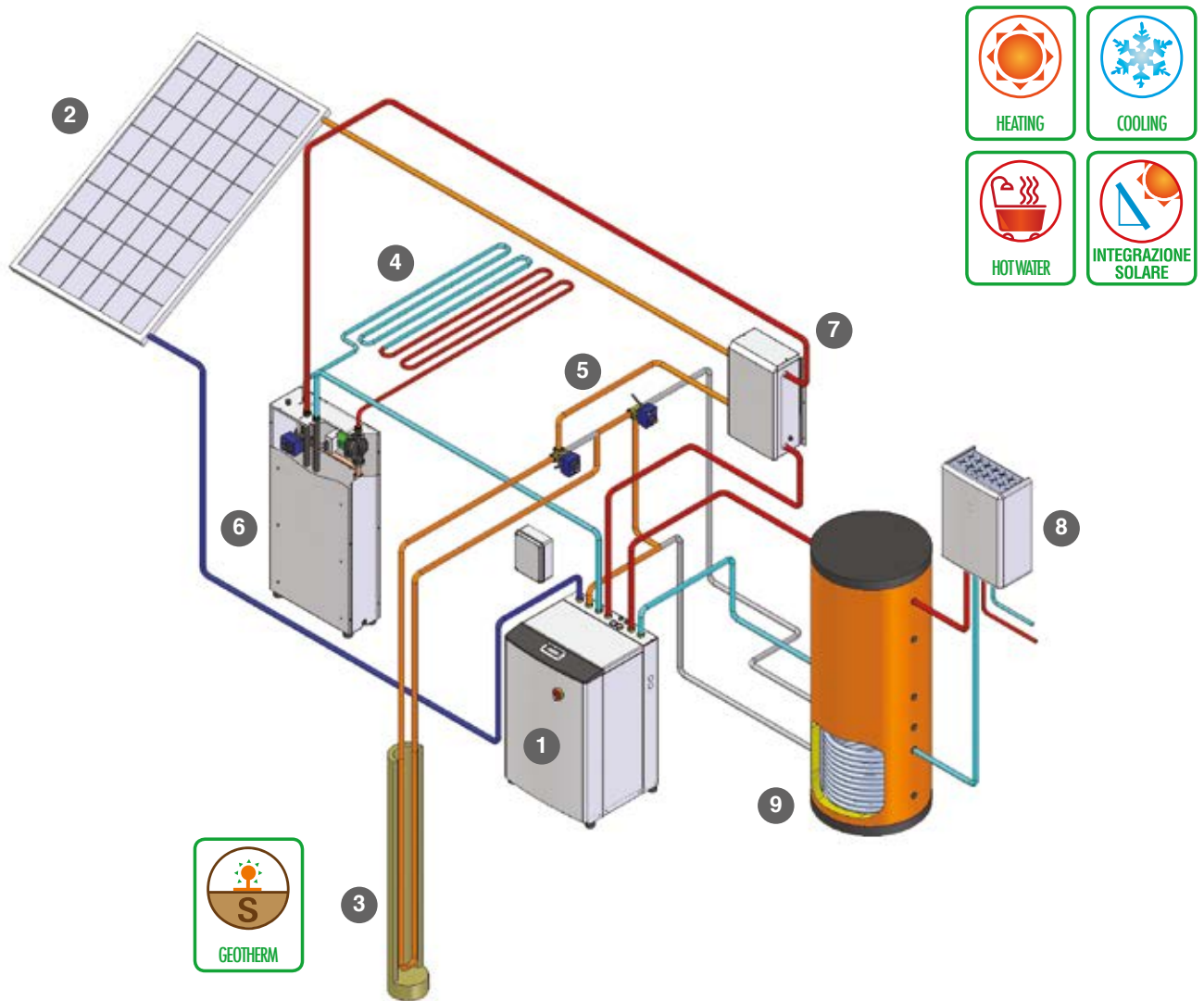
heating + cooling + DHW + solar thermal with GEO HF



- 1 GEO HF heat pump
- 3 thermal photovoltaic panel
- 4 floor heating
- 5 lanus deviation valve kit
- 6 compact storage tank for plant
- 7 GEO free heating kit
- 9 Set fast DHW production unit
- 10 sanitary water storage tank

IANUS hybrid system solutions

COMBINED SYSTEM WITH PHOTOVOLTAIC PANEL AND GEOTHERMAL PROBE
HEATING + COOLING + DHW + SOLAR THERMAL con GEO HF / with GEO HF



- 1 GEO HF heat pump
- 2 thermal photovoltaic panel
- 3 geothermal probe
- 4 floor heating
- 5 IANUS deviation valve kit
- 6 compact inertial tank for the installation
- 7 GEO free heating kit
- 8 SET fast DHW production unit
- 9 sanitary water storage tank

By combining the heat pump with a double source (geothermal probe + PV/T panel), the heat pump receives the power needed to ensure the proper operation for winter heating and summer cooling. It also makes it possible to improve energy source management, by reducing the area of the photovoltaic field and the depth and number of probes. During cooling, the heat dissipated by the heat pump and the panel – which, in the meantime, is cooled down – is exchanged in the geothermal probe to obtain a useful soil regeneration effect, working as thermal storage for the following heating phase.

Accessories for geothermal devices

MFREE

Description

The Freecooling module is the method that makes direct use of the cooling energy available in the subsoil for summer air conditioning, supplied with a structure in varnished steel, a high efficiency plate heat exchanger and an electric diverter valve. Regulation optimized by the Galileus software.

Model

| | |
|--------------|---|
| MFREE small | for sizes 6-8 |
| MFREE medium | for sizes 12-14-16 |
| MFREE large | for sizes 20-24-33 |
| MFREE A | for sizes 40-50 |
| MFREE B | for sizes 60 |
| MFREE C | for sizes 80-100 |
| MFREE EASY | for GEO Easy models (in combination with MFREE control kit) |



HFREE

Description

The Freeheating module is the method that makes direct use of the heating energy available in the PVT panel in the lanus system, supplied with a structure in varnished steel, a high efficiency plate heat exchanger and an electric diverter valve. Regulation optimized by the Galileus software.

Model

| | |
|--------------|--------------------|
| HFREE small | for sizes 6-8 |
| HFREE medium | for sizes 12-14-16 |
| HFREE large | for sizes 20-24-33 |



Accessories for geothermal plants



SOLAR KIT

Model

Description

geosol

Solar kit for GEO ADV - HF heat pumps is a control unit supplied with a solar circulator management board and a temperature sensor contact board(2), which have to be placed on collectors and the storage tank. The Galileus software manages the integration of the collectors and their correct operation.

IANUS SOL

The solar system control module for the IANUS System, manages the PVT thermal-photovoltaic panel as a thermal collector. Controlled and managed by the Galileus software (only for GEO HF).

IDEA SOLAR KIT

It consists of a control card to adjust solar collectors. Fitted inside the Idea unit, it makes it possible to transfer the heat supplied by the thermal solar collectors to the water heater through an external heat exchanger.

EOS PLUS SOLAR KIT

It consists of a control card to adjust solar collectors. Fitted inside the EOS PLUS unit, it makes it possible to transfer the heat supplied by thermal solar collectors to the water heater through an internal heat exchanger.



WEB KIT

Description

Network board for the connection and complete management of the heat pump via Internet, does not require the installation of software. It requires a permanent Internet connection with fixed IP.

Accessories for geothermal plants

DIVERTER KIT

Description

Diverter valve with electric actuator at 24V governed by the Galileus system for the transfer and recovery of the free thermal energy and distributing it inside the domestic storage or the device's storage (with electric control kit for GEO Easy).



AREA KIT

Description

Room temperature and humidity control kit consisting of a fan expansion board and remote probes for managing up to n areas. Management for each area of: mixing valve, hydraulic pump and stand alone dehumidifiers, temperature/humidity control with double set point, comfort or economy, which switches to watch and dew point calculation for the summer regulation.



MIXING KIT

Description

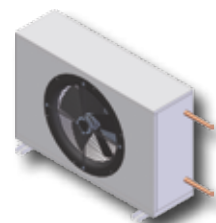
Servo-motor modulating mixing valve for controlling the temperature of the flow to the radiant floor.



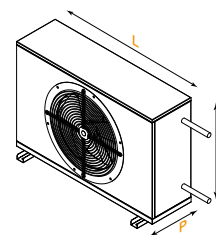
DRY COOLER

Description

Air heat exchanger for the control of the superficial panel temperature in the summer



| | | Dry 6-8 | Dry 10-12 |
|---------------------------|-------------------|-------------|-----------|
| | kW | 15,01 | 29,91 |
| Thermal power | m ³ /h | 0,7 | 1,4 |
| Liquid flow rate | m ³ /h | 3156 | 6313 |
| Electric power supply | V-Ph-Hz | 230-1-50 | 230-1-50 |
| Total power | W | 130 | 260 |
| Total nominal current | A | 0,6 | 1,2 |
| Pressure level (10m) | dB(A) | 29 | 32 |
| Couplings (In-Out) | pollici | 1/2 - 1/2 | 1 - 1 |
| Weight | kg | 71 | 140 |
| Conditions | | | |
| Air temperature | °C | 35,0 - 50,0 | |
| In/out liquid temperature | °C | 60,0 - 40,1 | |
| Propylene glycol liquid | % | 30 | |
| Dimensions | | | |
| L | mm | 1105 | 2005 |
| P | mm | 428 | 428 |
| H | mm | 828 | 828 |



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Fiorini Industries S.r.l.
Ph. +39 0543 723197 – Fax +39 0543 720413
Via Zampeschi 119 – 47122 Forlì (FC)
VAT IT03948070408



826080047 R00