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DESCRIPTION

The Optitank Inox range is specially designed for the preparation of DHW in a solar installation. You can order tanks with (1 or 2) or without exchangers, depending on your needs.

Advantages:

- AISI 316T stainless steel tank, ideal for the preparation of hygienic water and corrosion resistance in time.
- CFC-free reinforced insulation (50 mm up to 800 l and 100 mm beyond).
- Inspection hatch at the bottom for easy cleaning of the tank.
- Can be ordered with 0, 1 or 2 exchangers.
- Maximum storage temperature of 95°C allows optimum use of the tank volume.
- Maximum operating pressure: 6 bar. (All tanks are factory tested at 1.5 times the working pressure).

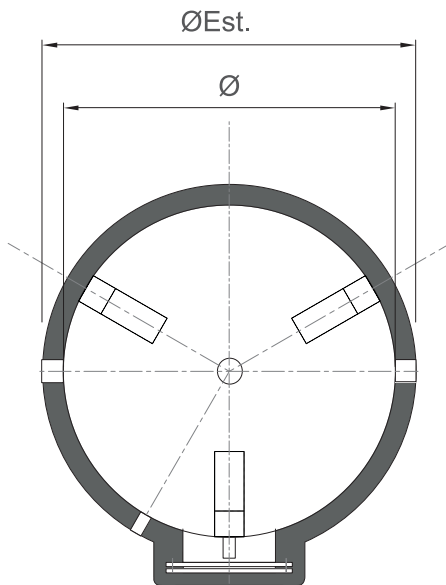
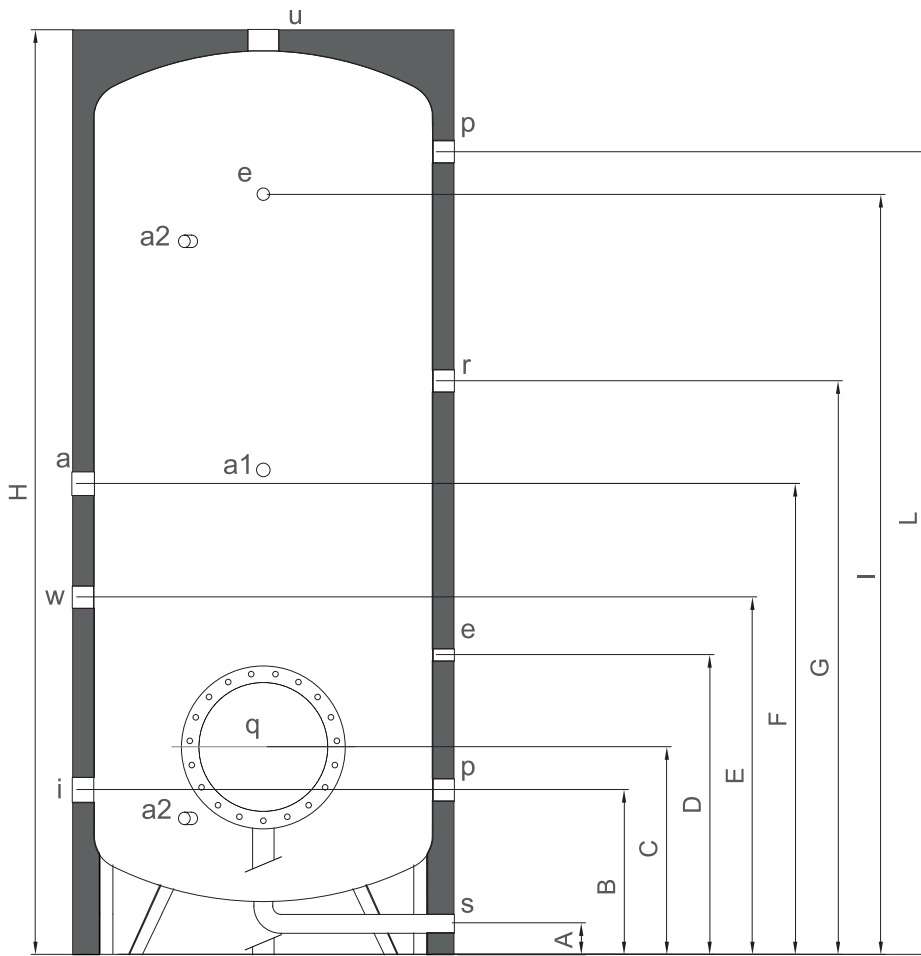


TECHNICAL FEATURES

Optitank Inox 0 exchanger

| Optitank Inox 0 exchanger | | 300 l | 500 l | 800 l | 1.000 l | 1.500l | 2.000 l | 2.500 l | 3.000 l | 4.000 l | 5.000 l |
|-------------------------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Item code | | 104.030 | 104.031 | 104.032 | 104.033 | 104.034 | 104.035 | 104.036 | 104.037 | 104.038 | 104.039 |
| Height (in mm) | H | 1.675 | 1.730 | 1.760 | 2.130 | 2.185 | 2.505 | 2.585 | 2.795 | 2.875 | 2.910 |
| Tilting measure (in mm) | | 1.710 | 1.770 | 1.810 | 2.280 | 2.250 | 2.580 | 2.670 | 2.880 | 2.970 | 3.030 |
| Diameter with insulation (in mm) | ØEst. | 600 | 750 | 990 | 990 | 1.200 | 1.300 | 1.400 | 1.450 | 1.600 | 1.800 |
| Diameter without insulation (in mm) | Ø | 500 | 650 | 790 | 790 | 1.000 | 1.100 | 1.200 | 1.250 | 1.400 | 1.600 |
| Removable insulation | | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Max. operating pressure (in bar) | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| PU foam insulation (in mm) | | 50 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Max. operating temperature (in°C) | | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Tare weight (in kg) | | 56 | 72 | 111 | 135 | 189 | 243 | 270 | 305 | 349 | 533 |
| Tapping DHW - size | u | 1"1/4 | 1"1/4 | 1"1/2 | 1"1/2 | 2" | 2" | 2"1/2 | 3" | 3" | 3" |
| Cold water tapping - size | i | 1"1/4 | 1"1/4 | 1"1/2 | 1"1/2 | 2" | 2" | 2"1/2 | 3" | 3" | 3" |
| Height (in mm) | B | 320 | 350 | 360 | 410 | 500 | 495 | 550 | 550 | 580 | 590 |
| Sanitary loop tapping - size | r | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| Height (in mm) | G | 1.160 | 1.190 | 1.200 | 1.250 | 1.340 | 1.335 | 1.390 | 1.390 | 1.420 | 1.430 |
| Access hatch - size | q | 220/300 | 220/300 | 300/380 | 300/380 | 300/380 | 350/430 | 350/430 | 350/430 | 350/430 | 350/430 |
| height (in mm) | C | 415 | 445 | 495 | 535 | 650 | 645 | 700 | 700 | 730 | 740 |
| Energy start tapping - size | p | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| height (in mm) | B | 320 | 350 | 360 | 410 | 500 | 495 | 550 | 550 | 580 | 590 |
| Energy return tapping - size | p | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| height (in mm) | L | 1.420 | 1.450 | 1.460 | 1.785 | 1.820 | 2.095 | 2.150 | 2.350 | 2.365 | 2.385 |
| MG Anode tapping - size | a | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| height (in mm) | F | 920 | 950 | 960 | 1.010 | 1.100 | 1.095 | 1.150 | 1.150 | 1.180 | 1.190 |
| Electronic anode tapping - size a1 | a1 | - | - | 1/2" | 1/2" | 1/2" | - | - | - | - | - |
| size a2 | a2 | - | - | - | - | - | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| Drain tapping - size | s | | | | | | | | | | |
| height (in mm) | A | 80 | 75 | 75 | 75 | 110 | 100 | 120 | 120 | 100 | 85 |
| Sensor tapping - size | e | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| height (in mm) | D | 470 | 500 | 510 | 560 | 650 | 645 | 700 | 700 | 730 | 740 |
| height (in mm) | I | 1.420 | 1.450 | 1.460 | 1.785 | 1.820 | 1.825 | 1.815 | 1.820 | 2.000 | 2.000 |

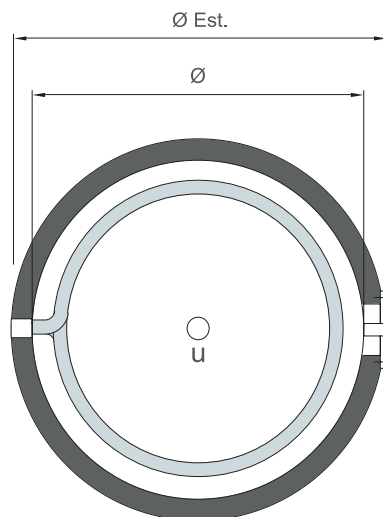
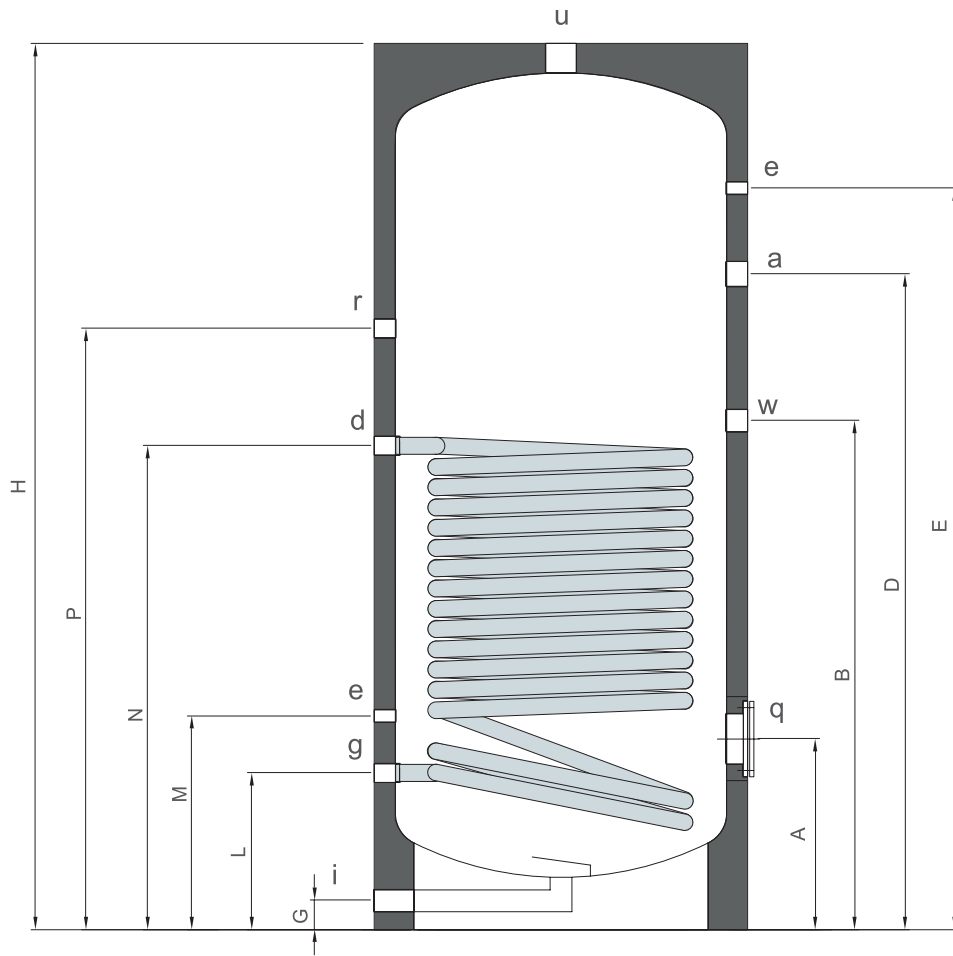
Tab. 1 Technical data of the different Optitank stainless steel tanks without heat exchanger



Optitank Inox 1 exchanger

| Optitank Inox 1 exchanger | | 300 | 400 | 500 | 800 | 1.000 | 1.500 | 2.000 |
|--|-------|---------|---------|---------|---------|---------|---------|---------|
| Item code | | 104.040 | 104.041 | 104.042 | 104.043 | 104.044 | 104.045 | 104.046 |
| Height (in mm) | H | 1.675 | 1.480 | 1.730 | 1.810 | 2.210 | 2.215 | 2.525 |
| Tilting measure (in mm) | | 1.780 | 1.660 | 1.890 | 2.070 | 2.420 | 2.530 | 2.850 |
| Diameter with insulation (in mm) | ØEst. | 600 | 750 | 750 | 990 | 990 | 1.200 | 1.300 |
| Diameter without insulation (in mm) | Ø | 500 | 650 | 650 | 790 | 790 | 1.000 | 1.100 |
| Removable insulation | | No | No | No | Yes | Yes | Yes | Yes |
| Max. operating pressure (in bar) | | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| PU foam insulation (in mm) | | 50 | 50 | 50 | 100 | 100 | 100 | 100 |
| Max. operating temperature (in°C) | | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Tare weight (in kg) | | 90 | 101 | 120 | 162 | 195 | 271 | 385 |
| DHW tapping - size | u | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/2 | 1"1/2 | 2" | 2" |
| Cold water tapping - size | i | 1" | 1" | 1" | 1"1/2 | 1"1/2 | 2" | 2" |
| Height (in mm) | G | 80 | 75 | 75 | 70 | 70 | 110 | 90 |
| Sanitary loop tapping - size | r | 1/2" | 1/2" | 1/2" | 1" | 1" | 1" | 1" |
| Height (in mm) | P | 1.140 | 995 | 1.175 | 1.215 | 1.525 | 1.575 | 1.795 |
| Access hatch - size | q | 120/180 | 120/180 | 120/180 | 120/180 | 120/180 | 220/290 | 220/290 |
| height (in mm) | A | 345 | 375 | 375 | 395 | 395 | 550 | 555 |
| MG Anode tapping - size | a | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| height (in mm) | D | 1.335 | 1.155 | 1.380 | 1.290 | 1.655 | 1.625 | 1.945 |
| Immersion heater tapping - size | w | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 |
| height (in mm) | B | 925 | 820 | 985 | 1.025 | 1.230 | 1.295 | 1.485 |
| Sensor tapping - size | e | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| height (in mm) | M | 565 | 500 | 510 | 450 | 450 | 655 | 660 |
| height (in mm) | E | 1.450 | 1.250 | 1.485 | 1.490 | 1.865 | 1.830 | 2.150 |
| Solar exchanger | | | | | | | | |
| Exchanger surface (in m ²) | | 1,50 | 1,70 | 2,10 | 2,70 | 3,00 | 3,70 | 5,00 |
| Max. operating pressure (in bar) | | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Solar outflow - size | d | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| height (in mm) | N | 870 | 775 | 935 | 945 | 1.095 | 1.210 | 1.365 |
| Solar return - size | g | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| height (in mm) | L | 320 | 325 | 335 | 350 | 350 | 475 | 480 |
| Continuous filling according to DIN 4708 (10°-80°-60°) (l/h) | | 642 | 737 | 813 | 1.020 | 1.203 | 1.559 | 1.916 |
| Heating power (EF 10°C - ECS 60°C - boiler 80°C) (en KW) | | 37,32 | 42,85 | 47,27 | 59,30 | 69,94 | 90,64 | 111,39 |

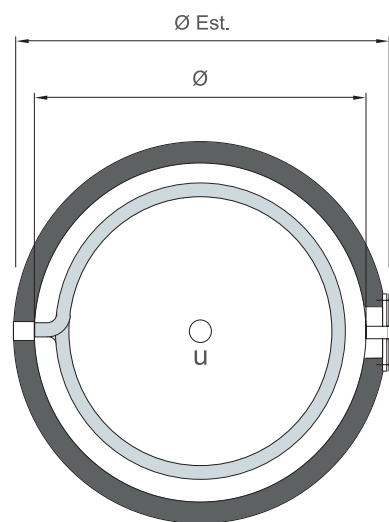
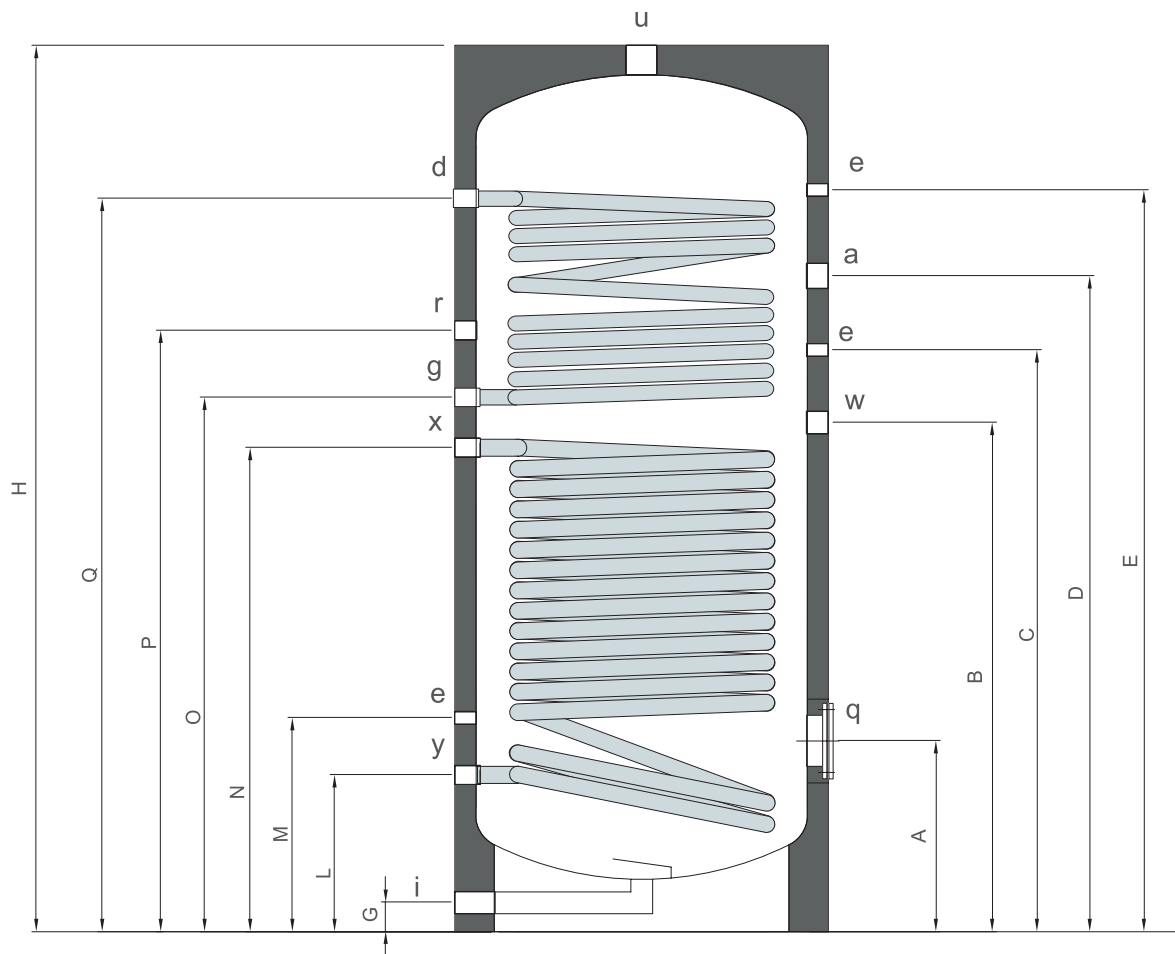
Tab. 2 Technical data of the different Optitank stainless steel tanks with 1 heat exchanger



Optitank Inox 2 exchangers

| Optitank Inox 2 exchangers | | 300 | 400 | 500 | 800 | 1.000 | 1.500 | 2.000 |
|--|-------|---------|---------|---------|---------|---------|---------|---------|
| Item code | | 104.047 | 104.048 | 104.049 | 104.050 | 104.051 | 104.052 | 104.053 |
| Height (in mm) | H | 1.675 | 1.480 | 1.730 | 1.810 | 2.210 | 2.215 | 2.525 |
| Tilting measure (in mm) | | 1.780 | 1.660 | 1.890 | 2.070 | 2.420 | 2.530 | 2.850 |
| Diameter with insulation (in mm) | ØEst. | 600 | 750 | 750 | 990 | 990 | 1.200 | 1.300 |
| Diameter without insulation (in mm) | Ø | 500 | 650 | 650 | 790 | 790 | 1.000 | 1.100 |
| Removable insulation | | No | No | No | Yes | Yes | Yes | Yes |
| Max. operating pressure (in bar) | | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| PU foam insulation (in mm) | | 50 | 50 | 50 | 100 | 100 | 100 | 100 |
| Max. operating temperature (in°C) | | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Tare weight (in kg) | | 90 | 101 | 120 | 162 | 195 | 271 | 385 |
| DHW tapping - size | u | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/2 | 1"1/2 | 2" | 2" |
| Cold water tapping - size | i | 1" | 1" | 1" | 1"1/2 | 1"1/2 | 2" | 2" |
| Height (in mm) | G | 80 | 75 | 75 | 70 | 70 | 110 | 90 |
| Sanitary loop tapping - size | r | 1/2" | 1/2" | 1/2" | 1" | 1" | 1" | 1" |
| Height (in mm) | P | 1.140 | 995 | 1.175 | 1.215 | 1.525 | 1.575 | 1.795 |
| Access hatch - size | q | 120/180 | 120/180 | 120/180 | 120/180 | 120/180 | 220/290 | 220/290 |
| height (in mm) | A | 345 | 375 | 375 | 395 | 395 | 550 | 555 |
| MG Anode tapping - size | a | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| height (in mm) | D | 1.335 | 1.155 | 1.380 | 1.290 | 1.655 | 1.625 | 1.945 |
| Immersion heater tapping - size | w | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 | 1"1/2 |
| height (in mm) | B | 925 | 820 | 985 | 1.025 | 1.230 | 1.295 | 1.485 |
| Sensor tapping - size | e | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| height (in mm) | M | 565 | 500 | 510 | 450 | 450 | 655 | 660 |
| height (in mm) | C | 1.145 | 970 | 1.135 | 1.155 | 1.480 | 1.460 | 1.685 |
| height (in mm) | E | 1.450 | 1.250 | 1.485 | 1.490 | 1.865 | 1.830 | 2.150 |
| Solar exchanger | | | | | | | | |
| Exchanger surface (in m²) | | 1,50 | 1,70 | 2,10 | 2,70 | 3,00 | 3,70 | 5,00 |
| Max. operating pressure (in bar) | | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Solar outflow - size | x | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| height (in mm) | N | 870 | 775 | 935 | 945 | 1.095 | 1.210 | 1.365 |
| Solar return - size | y | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| height (in mm) | L | 320 | 325 | 335 | 350 | 350 | 475 | 480 |
| Continuous filling according to DIN 4708 (10°-80°-60°) (l/h) | | 642 | 737 | 813 | 1.020 | 1.203 | 1.559 | 1.916 |
| Heating power (cold water 10°C - DHW 60°C - boiler 80°C) (en KW) | | 37,32 | 42,85 | 47,27 | 59,30 | 69,94 | 90,64 | 111,39 |
| Secondary exchanger | | | | | | | | |
| Exchanger surface (in m²) | | 1,00 | 1,00 | 1,20 | 1,50 | 1,90 | 2,30 | 3,00 |
| Max. operating pressure (in bar) | | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Solar outflow - size | g | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| height (in mm) | O | 980 | 865 | 1.035 | 1.100 | 1.365 | 1.385 | 1.605 |
| Solar return - size | d | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| height (in mm) | Q | 1.260 | 1.115 | 1.335 | 1.475 | 1.840 | 1.810 | 2.130 |
| Continuous filling according to DIN 4708 (10°-80°-60°) (l/h) | | 305 | 370 | 432 | 568 | 591 | 742 | 883 |
| Heating power (cold water 10°C - DHW 60°C - boiler 80°C) (en KW) | | 21,51 | 21,52 | 25,12 | 33,02 | 34,36 | 43,14 | 51,34 |

Tab. 3 Technical characteristics of the different Optitank stainless steel tanks with 2 heat exchangers



SAFETY INSTRUCTIONS

Transport and warehousing

- The tanks must remain on the pallet in their original position during transport. Any alteration of the packaging during transport will invalidate the guarantee on the tank.
- The tanks must be transported in a vehicle that provides optimum protection against the weather and impact.

Handling and storage

- When receiving the products, please handle them with care.
- Avoid shocks when handling the tanks to prevent damage to the welded joints of the heat exchangers.
- The packaging must not be removed until the tank is finally installed. Before this step, please keep all products in their original packaging.
- When storing the products, choose a dry, dust-free room, protected from frost and weather.

Installer qualification

The installation and commissioning of an Optitank storage tank must be carried out by a qualified professional installer approved by Sunoptimo. Please note that the warranty is only valid if a qualified installer has carried out the installation and regular maintenance of the tank.

Local standards and guidelines

- The installation must comply with the European, national and local regulations in force at the time of commissioning.
- Please refer to the instructions of the manufacturer of the backup system for its connection to the storage tank.
- Please follow the guidelines of the local water supplier as well as the European guidelines for the prevention of legionella.

Please comply with the following standards:

- DIN 4753: Hot water tanks and hot water preparation systems
- DIN 1988: Technical regulations for drinking water systems
- DVGW 551/552: Technical guidelines for the prevention of legionella in the heating and transport of water
- EN 12977-3: Solar thermal systems and components. Performance test of the DHW storage tank for solar systems.

- For France: Decrees of 23 June 1978 and 30 November 2005 concerning fixed installations for heating and domestic hot water supply in residential buildings, workplaces or premises open to the public.

Safety devices

- Sanitary tanks must be protected against the risk of damage caused by excess pressure in the drinking water supply system. Therefore, make sure that a safety valve limiting the pressure to 7 bar is installed in the tank.
- Please check regularly that this valve is working properly. The outlet of the valve must never be blocked or reduced.
- If necessary, install a particle filter in the cold water supply to the tank.
- If the water hardness is less than 12°f, a softener should be installed to protect the system from limescale deposits.

MAINTENANCE

We recommend regular maintenance of the solar system. Check the following once every two years:

1- The safety valve on the cold water inlet of the storage tank: activate the valve and check that the water flows properly.

2- Scaling of the tank and the electric resistance: isolate the tank, drain it (at least by half), loosen the inspection door and check the condition of the resistance and the inside of the tank.

The limescale deposited at the bottom of the tank must be removed. The electric resistance can be descaled with a solution of vinegar or other specific products.

To close the door, use a torque spanner according to the instructions on the sticker.



You can find this data sheet and all our other documents on our website www.sunoptimo.com