AquaTank 316Ti

Hot water storage tank, 300-1000 litres

AquaTank 316Ti is our range of stainless steel hot water storage tanks for customers who prefer a high-alloy austenitic stainless steel. This leaflet describes cylinders available as standard in capacities between 300 and 1000 litres. Furthermore we offer also vessels up to 4000 litre capacity with standardized dimensions.

Pressure vessel code
AquaTank 316Ti meets the requirements of the PED 97/23/EEC code. Other pressure vessel codes can be offered on request.

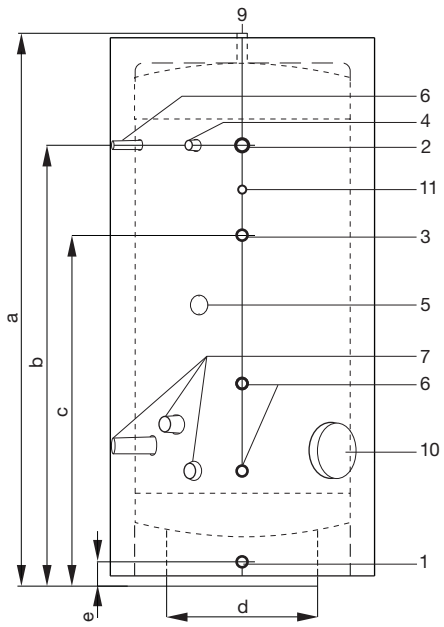
Charge heat exchangers reduce power demand
AquaTank 316Ti is designed for use in combination with charge heat exchangers. The AquaTank is then employed to store drinking quality water in facilities in which the water flow is not constant – where sudden high demands occur more or less regularly, such as in apartment houses, sports centres, schools, hotels and hospitals. With a charge heat exchanger, the power demand can be substantially reduced compared to a separate coil heater, since the AquaTank acts as a buffer to meet the power peaks occurring at high water flow rates. Following such high water demand, heating takes place very quickly, because the water that has been heated by the charge heat exchanger is stored at the top of the tank. The recovery period is short, unlike that of a traditional coil heater in which the entire heater volume must first be reheated, before the user obtains the domestic hot water comfort provided by an AquaTank with charge heat exchanger.

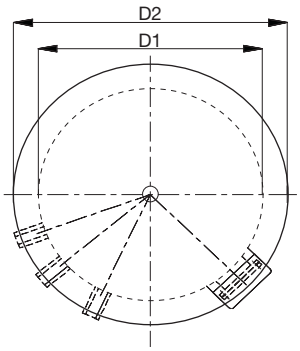
Flexible energy source
All types and sizes of the AquaTank 316Ti are equipped with threaded connections for electric immersion heaters. The immersion heater can be fitted directly to the connection, which simplifies the installation work.

High effectiveness for maximum hot water
The effectiveness of this type of storage tank from which hot water is drawn depends on its ability to keep the hot water separated from the cold water admitted into the tank. The AquaTank is particularly good in this respect because of its internal tube arrangement. The incoming cold water is distributed gently across the bottom of the tank, which prevents it from mixing with the hot water. The hot water then is drawn from the very top in the centre of the cylinder. Moreover, since vertical hot water storage tanks are more effective than horizontal ones, the AquaTank is of upright design.

Effective and environment-friendly insulation
The insulation is made of environment-friendly polyurethane foam that is produced without the use of Freons. The surface of the insulation is covered with an impact-resistant ABS plastic. The insulation is very easy to remove and refit, which makes the unit easy to transport into and out of the premises.

The special design of the insulation avoids the so called “chimney-effect” between insulation and cylinder surface and guarantees for the lowest heat losses. The insulation conforms to the strict energy saving demands made by the German EnEV law.





Connections (see table for sizes)

1. Cold water inlet
2. Hot water outlet
3. Hot water circulation
4. Charge heat exchanger
5. Support sleeve, 2”
6. Instrument connection, ¾”
7. Immersion heater, 2” (see table for number and rating of heaters)
8. Drain (to be put into connecting pipework)
9. Air vent, 1”
10. Inspection opening, 120 mm dia.
11. Instrument connection, ½”

Note: All connections have female threads, except the inspection openings. The capacity 300 litre has only three instrument connections.

Operating data

Max. operating pressure (gauge) 10 bar
Max. operating temperature 95°C

Tank capacity litres	Dimensions (mm)							Connection sizes (inch)				Heat loss kWh in 24h	Dry weight kg	Immersion heater rating kW
	a	b	c	d	D1	D2	e	1	2	3	4			
300	1505	1217	908	400	550	700	97	2	2	1	2	2.2	67	1 x 5.25
500	1815	1507	1158	450	650	800	97	2	2	1	2	3.1	89	1 x 9
500/2	1815	1507	1158	450	650	800	97	2	2	1	2	3.1	89	2 x 9
750	2105	1730	1360	600	750	900	97	2	2	1	2	3.8	144	2 x 12
750/3	2105	1730	1360	600	750	900	97	2	2	1	2	3.8	144	3 x 12
1000	2180	1763	1402	650	850	1040	97	2	2	1	2	4.2	197	3 x 12

Dimensions are target values. Binding figures are shown on the drawings.
The dimensions for the larger vessels up to 4000 litres are available on request.

How to contact Alfa Laval
Up-to-date AlfaLaval contact details for all countries are always available on our website on www.alfalaval.com

AquaTank HC 316Ti

Storage water heater, 125-1000 litres

AquaTank HC 316Ti is our range of indirectly heated, unvented (closed) storage water heaters made of stainless steel. This leaflet describes standard cylinders available in capacities between 125 and 1000 litres.

Pressure vessel code
AquaTank HC 316Ti meets the requirements of the PED 97/23/EEC code. Other pressure vessel codes can be offered on request.

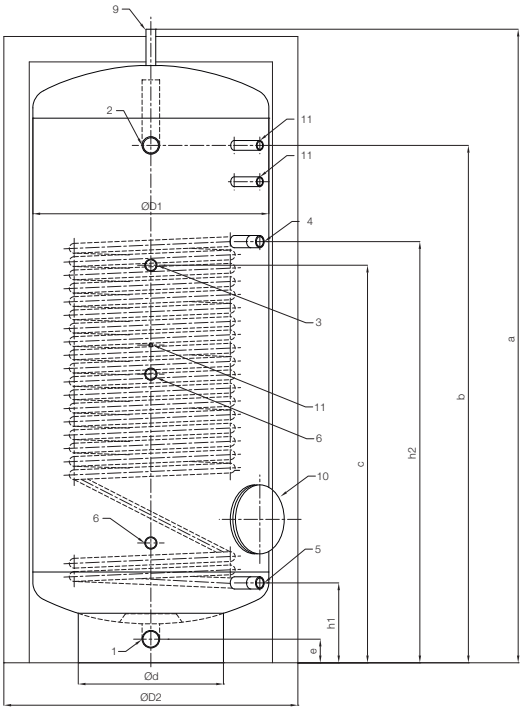
Heating coil reduces the power demand
AquaTank HC 316Ti is equipped with a stainless steel heating coil to charge the vessel. The AquaTank HC is then employed to store drinking water in facilities in which the water flow is not constant – where sudden high demands occur more or less regularly, such as in apartment houses, sports centres, schools, hotels and hospitals.

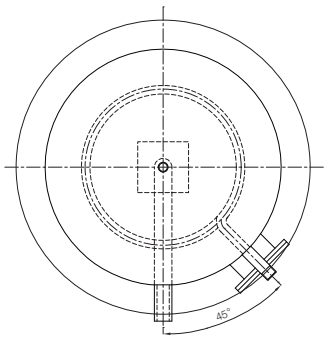
With a built in heating coil, the power demand can be substantially reduced compared to a direct water heater, since the AquaTank HC acts as a buffer to meet the power peaks occurring at high water flow rates. Following such high water demand, heating takes place very quickly, because the water that has been heated by the coil is stored at the top of the tank. The recovery period is short. The unique shape of the heating coil reaches down to the bottom and heats all of the water inside the vessel.

High effectiveness for maximum hot water
The effectiveness of this type of storage tank from which hot water is drawn depends on its ability to keep the hot water separated from the cold water admitted into the tank. The AquaTank HC is particularly good in this respect because of its internal tube arrangement. The incoming cold water is gently distributed across the bottom of the tank, which prevents it from mixing with the hot water. The hot water is then drawn from the very top in the centre of the cylinder. Moreover, since vertical hot water storage tanks are more effective than horizontal ones, the AquaTank HC is of upright design.

Effective and environment-friendly insulation
The insulation is made of environment-friendly CFC-free polyurethane foam, The surface of the insulation is covered with an impact-resistant ABS plastic. The insulation is very easy to remove and refit, making the unit easy to transport into and out of the premises. The special design of the insulation avoids the so called “chimney-effect” between insulation and cylinder surface guaranteeing for the lowest heat losses.

This insulation conforms to the strict energy saving demands stipulated by the German EnEV law.





Connections (see table for sizes)

1. Cold water inlet
2. Hot water outlet *
3. Hot water circulation *
4. Primary flow, male thread
5. Primary return, male thread
6. Instrument connection, ¾" **
8. Drain (to be put into connecting pipe work)
9. Air vent, 1/2" **
10. Inspection opening, 120 mm dia.***
11. Instrument connection, ½"

Note: All connections have female threads, except the primary connections.

Operating data

Vessel	Max. operating pressure (gauge)	10 bar
	Max. operating temperature	95°C
Coil	Max. operating pressure (gauge)	25 bar
	Max. operating temperature	200°C

Tank capacity litres	Dimensions (mm)									Connection sizes (inch)					Heat losses kWh in 24h	Dry weight kg
	a	b	c	h1	h2	d	D1	D2	e	1	2	3	4	5		
125	940	940	940	190	560	400	500	660	65	1	1	¾	1	1	1.8	40
160	1190	1190	1190	190	740	400	500	660	65	1	1	¾	1	1	1.9	50
200	1440	1440	1440	190	740	400	500	660	65	1	1	¾	1	1	2.2	58
350	1725	1425	1095	220	1280	400	550	710	65	1¼	1¼	¾	1	1	2.5	85
500	1745	1425	1095	220	1325	400	650	810	65	1¼	1¼	¾	1	1	3.1	95
750	1830	1470	1090	275	1155	600	800	1000	80	2	2	1	1	1	3.8	145
1000	2080	1705	1440	265	1080	700	850	1050	80	2	2	1	1	1	4.2	195

Dimensions are target values. Binding figures are shown on the drawings.
* For capacities between 125 and 200 litres, the connections are at the top of the vessel
** Only for capacities between 350 and 1000 litres
*** 2" female for capacities between 125 and 200 litres

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AquaTank EM (10 bar)

Hot water storage tank, 200-1000 litres

AquaTank EM is our range of enamelled (glass lined) hot water storage tanks for customers who prefer the hygienic coating of enamel which also allows operation with chlorinated water. This leaflet describes cylinders available as standard in capacities between 200 and 1000 litres. Furthermore we offer also vessels up to 3000 litre capacity rated for 7 bar operation pressure with standardized dimensions.

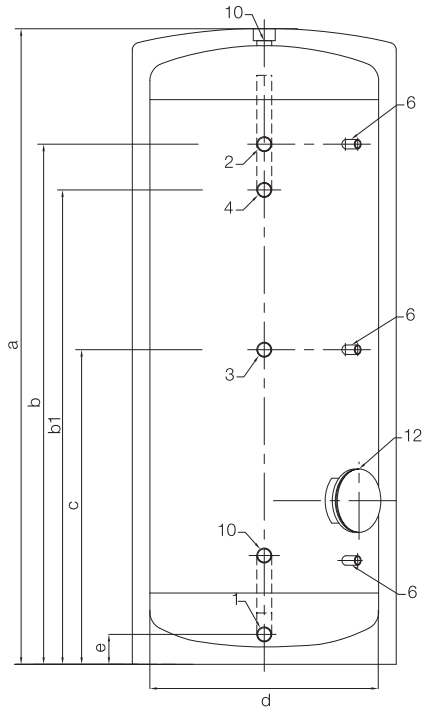
Pressure vessel code
AquaTank EM meets the requirements of the PED 97/23/EEC code. Other pressure vessel codes can be offered on request.

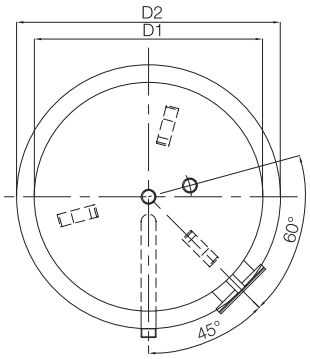
Charge heat exchangers reduce power demand
AquaTank EM is designed for use in combination with charge heat exchangers. The AquaTank is then employed to store drinking quality water in facilities in which the water flow is not constant – where sudden high demands occur more or less regularly, such as in apartment houses, sports centres, schools, hotels and hospitals. With a charge heat exchanger, the power demand can be substantially reduced compared to a separate coil heater, since the AquaTank acts as a buffer to meet the power peaks occurring at high water flow rates. Following such high water demand, heating takes place very quickly, because the water that has been heated by the charge heat exchanger is stored at the top of the tank. The recovery period is short, unlike that of a traditional coil heater in which the entire heater volume must first be reheated before the user obtains the domestic hot water comfort provided by an AquaTank with charge heat exchanger.

High effectiveness for maximum hot water
The effectiveness of this type of storage tank from which hot water is drawn depends on its ability to keep the hot water separated from the cold water admitted into the tank. The AquaTank is particularly good in this respect because of its internal tube arrangement. The incoming cold water is distributed gently across the bottom of the tank, which prevents it from mixing with the hot water. The hot water then is drawn from the very top in the centre of the cylinder. Moreover, since vertical hot water storage tanks are more effective than horizontal ones, the AquaTank is of upright design.

Effective and environment-friendly insulation
The insulation is made of environment-friendly foam that is produced without the use of Freons. The special design of the insulation avoids the so called “chimney-effect” between insulation and cylinder surface and guarantees for the lowest heat losses.

The insulation conforms to the strict energy saving demands made by the German EnEV law.





Connections (see table for sizes)

1. Cold water inlet, male thread
2. Hot water outlet, male thread
3. Hot water circulation
4. Charge heat exchanger, male thread
6. Instrument connection, ½”
9. Drain (to be put into connecting pipework)
10. Spare connection, see design drawing
12. Inspection opening, 180 mm dia.

Note: Connections no. 3 and 6 have female threads.

Operating data

Max. operating pressure (gauge) 10 bar
Max. operating temperature 95°C

Tank capacity litres	Dimensions (mm)								Connection sizes (inch)				Heat loss kWh in 24h	Dry weight kg
	a	b	b1	c	d	D1	D2	e	1	2	3	4		
200	1300	1044	914	652	-	-	600	85	1¼	1¼	1	1¼	1.9	96
300	1758	1501	1371	880	-	-	600	85	1¼	1¼	1	1¼	2.3	115
500	1806	1478	1348	894	-	-	750	85	1¼	1¼	1	1¼	3.2	184
800	1982	1580	1450	900	600	790	1000	120	2	2	1	2	4.5	200
1000	2328	1904	1774	1246	600	790	1000	120	2	2	1	2	5.5	270

Dimensions are target values. Binding figures are shown on the drawings.

Insulation material

Capacity 200 to 500 L >> PUR foam direct moulded between vessel and outer metal cladding (powder-coated)
Capacity 800 & 1000 L >> Soft-foam covered with a PVC-jacket

AquaTank HC EM (10 bar)

Storage water heater, 200-1000 litres

AquaTank HC EM is our range of indirectly heated, unvented (closed) storage water heaters. These enamelled (glass lined) hot water storage heaters are for customers who prefer the hygienic coating of enamel which also allows operation with chlorinated water. This leaflet describes standard cylinders available in capacities between 200 and 1000 litres.

Pressure vessel code
AquaTank HC EM meets the requirements of the PED 97/23/EEC code. Other pressure vessel codes can be offered on request.

Heating coil reduces the power demand
AquaTank HC EM is equipped with an enamelled heating coil to charge the vessel. The AquaTank HC is then employed to store drinking water in facilities in which the water flow is not constant – where sudden high demands occur more or less regularly, such as in apartment houses, sports centres, schools, hotels and hospitals.

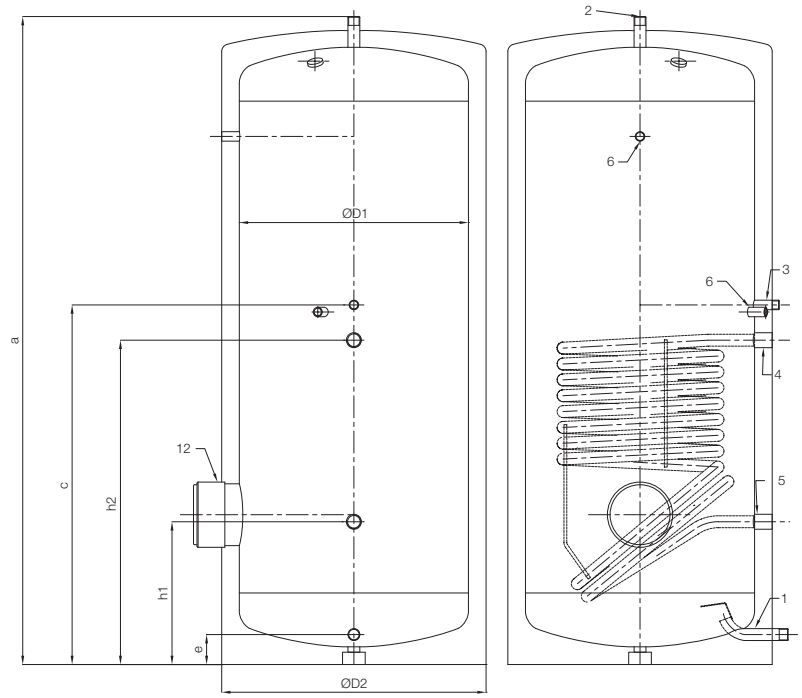
With a built in heating coil, the power demand can be substantially reduced compared to a direct water heater, since the AquaTank HC acts as a buffer to meet the power peaks occurring at high water flow rates. Following such high water demand, heating takes place very quickly, because the water that has been heated by the coil is stored at the top of the tank. The recovery period is short. The unique shape of the heating coil reaches down to the bottom and heats all of the water inside the vessel.

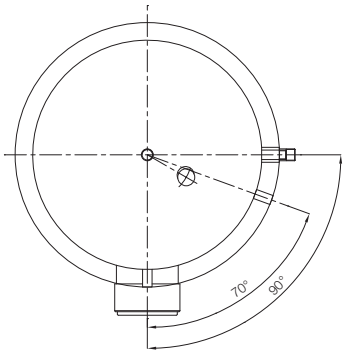
High effectiveness for maximum hot water
The effectiveness of this type of storage tank from which hot water is drawn depends on its ability to keep the hot water separated from the cold water admitted into the tank.

The AquaTank HC is particularly good in this respect because of its internal tube arrangement. The incoming cold water is gently distributed across the bottom of the tank, which prevents it from mixing with the hot water. The hot water is then drawn from the very top in the centre of the cylinder. Moreover, since vertical hot water storage tanks are more effective than horizontal ones, the AquaTank HC is of upright design.

Effective and environment-friendly insulation
The insulation is made of environment-friendly CFC-free foam. The special design of the insulation avoids the so called “chimney-effect” between insulation and cylinder surface guaranteeing for the lowest heat losses.

The insulation conforms to the strict energy saving demands stipulated by the German EnEV law.





Connections (see table for sizes)

1. Cold water inlet
2. Hot water outlet *
3. Hot water circulation
4. Primary flow
5. Primary return
6. Instrument connection, ½" **
9. Drain (to be put into connecting pipework)
12. Inspection opening, 120/180 mm dia.***

Note: Connections 1, 2, 3 have male threads number 4, 5, 6 have female threads.

Operating data

Vessel	Max. operating pressure (gauge)	10 bar
	Max. operating temperature	95°C
Heating coil	Max. operating pressure (gauge)	10 bar
	Max. operating temperature	110°C

Tank capacity litres	Dimensions (mm)							Connection sizes (inch)					Heat loss kWh in 24h	Dry weight kg
	a	c	h1	h2	D1	D2	e	1	2	3	4	5		
200	1340	748	263	638	-	600	85	1	1	¾	1	1	1.8	121
300	1797	1028	263	728	-	600	85	1	1	¾	1	1	2.2	149
500	1838	1020	405	920	-	750	85	1	1	1	1	1	2.7	205
800	1982	860	380	1025	790	990	120	1½	1½	1¼	1¼	1¼	4.5	272
1000	2328	1025	380	1190	790	990	120	1½	1½	1¼	1¼	1¼	5.5	299

Dimensions are target values. Binding figures are shown on the drawings.
* for capacities 800 & 1000 litres the hot water outlet is in the cylindrical part of the vessel, see details in the design drawings
** ½" only for capacities 200 to 500 litres, capacities 800 & 1000 litres are equipped with a fastening bar for surface sensors
*** 180/240 mm for capacities 800 & 1000 litres

Insulation material

Capacity 200 to 500 L >> PUR foam injected between vessel and outer metal cladding (powder-coated)
Capacity 800 & 1000 L >> Soft-foam covered with a PVC-jacket

AquaTank EM (7 bar)

Hot water storage tank, 300-3000 litres

AquaTank EM is our range of enamelled (glass lined) hot water storage tanks for customers who prefer the hygienic coating of enamel which also allows operation with chlorinated water. This leaflet describes cylinders available as standard in capacities between 300 and 3000 litres. Furthermore we offer also vessels up to 1000 litre capacity rated for 10 bar operation pressure with standardized dimensions.

Pressure vessel code
AquaTank EM meets the requirements of the PED 97/23/EEC code. Other pressure vessel codes can be offered on request.

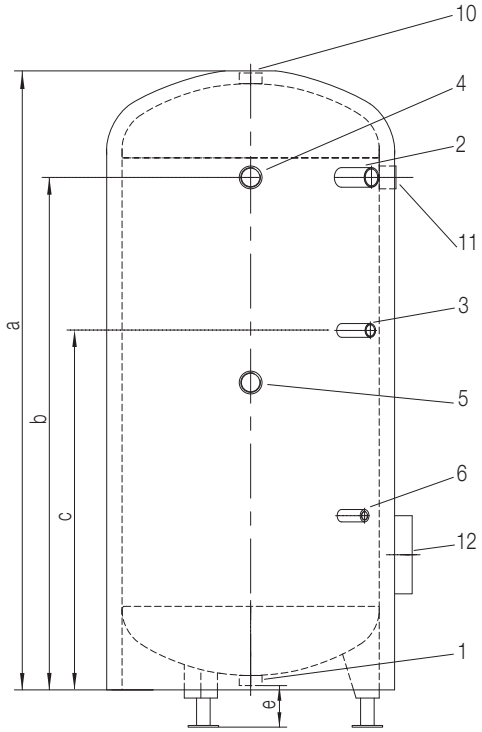
Charge heat exchangers reduce power demand
AquaTank EM is designed for use in combination with charge heat exchangers. The AquaTank is then employed to store drinking quality water in facilities in which the water flow is not constant – where sudden high demands occur more or less regularly, such as in apartment houses, sports centres, schools, hotels and hospitals.

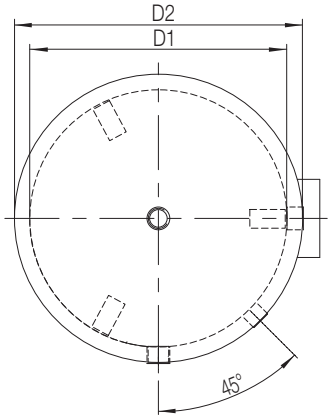
With a charge heat exchanger, the power demand can be substantially reduced compared to a separate coil heater, since the AquaTank acts as a buffer to meet the power peaks occurring at high water flow rates. Following such high water demand, heating takes place very quickly, because the water that has been heated by the charge heat exchanger is stored at the top of the tank. The recovery period is short, unlike that of a traditional coil heater in which the entire heater volume must first be reheated before the user obtains the domestic hot water comfort provided by an AquaTank with charge heat exchanger.

Flexible energy source
All types and sizes of the AquaTank EM can be equipped with electric immersion heaters. The immersion heater are fitted directly to the inspection opening/man hole, which simplifies the installation work.

High effectiveness for maximum hot water
The effectiveness of this type of storage tank from which hot water is drawn depends on its ability to keep the hot water separated from the cold water admitted into the tank. The AquaTank is particularly good in this respect because of its internal tube arrangement. The incoming cold water is distributed gently across the bottom of the tank, which prevents it from mixing with the hot water. The hot water then is drawn from the very top in the centre of the cylinder. Moreover, since vertical hot water storage tanks are more effective than horizontal ones, the AquaTank is of upright design.

Effective and environment-friendly insulation
The insulation is made of 50 mm mineral wool and covered with a PVC-jacket. As option we offer also 100 mm mineral wool and an aluminium-plate cladding. The insulation is very easy to remove and refit, which makes the unit easy to transport into and out of the premises.





Connections (see table for sizes)

1. Cold water inlet
2. Spare connection 2”
3. Hot water circulation
4. Charge heat exchanger
5. Support sleeve 2”
6. Instrument connection ¾”
9. Drain (to be put into connecting pipework)
10. Hot water outlet 2”
11. P&T connection 2”
12. Inspection opening, 110 mm dia.

Note: All connections have female threads, except the inspection opening.

Operating data

Max. operating pressure (gauge)	7 bar
Max. operating temperature	95°C

Tank capacity litres	Dimensions (mm)						Connection sizes (inch)				Heat losses kWh in 24h *	Heat losses kWh in 24h **	Dry weight kg
	a	b	c	D1	D2	e	1	2	3	4			
300	1718	1395	1074	549	660	216	2	2	1	2	5.3	3.2	107
500	2046	1748	959	630	740	210	2	2	1	2	6	3.7	137
750	1951	1599	1150	790	900	197	2	2	1	2	6.9	4.6	233
1000	2304	1954	1324	790	900	197	2	2	1	2	7	5.4	263
1500	2127	1700	1250	1100	1210	221	2	2	1	2	9.2	7.2	344

Dimensions are target values. Binding figures are shown on the separate drawings.
The dimension drawings for larger vessels up to 3000 litre as well as the optional extras like manhole and immersion heater are available on request.

* heat losses 50 mm glass wool
** heat losses 50 mm rock wool

Insulation material

Standard delivery 50 mm glass wool with PVC-jacket.

Options:
- 100 mm glass wool with PVC-jacket
- 50 mm rock wool with aluminium-plate cladding
- 100 mm rock wool with aluminium-plate cladding

ECF00116EN 1204

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SolarTank

Heating water storage tank, 300-3000 litres

SolarTank is our range of vessels that store primary energy from different heat sources including boilers, solar heaters, heat recovery systems and others. This leaflet describes the standard cylinders that are available in capacities between 300 and 3000 litres and rated for 10 bar operation pressure.

Pressure vessel code
SolarTank meets the requirements of the PED 97/23/EEC code.

Freshwater heating on demand
SolarTank is designed for use in combination with instantaneous tap water heaters. The SolarTank can store energy from any heat source to generate hot tap water on demand in facilities where water flow is not constant – where sudden high demands occur on a fairly regular basis such as in blocks of flats, sports centres, schools, hotels and hospitals.

When discharging the SolarTank in combination with an instantaneous tap water heater, the primary power demand can be substantially reduced since the SolarTank acts as a buffer on the primary side to meet the power peaks that occur at high tap water flow rates. Following such high tap water consumption, heating takes place very quickly and only on demand. This ensures a hygienic hot tap water supply that reduces the risk of lime scaling in the tap water system and scalding at the tap.

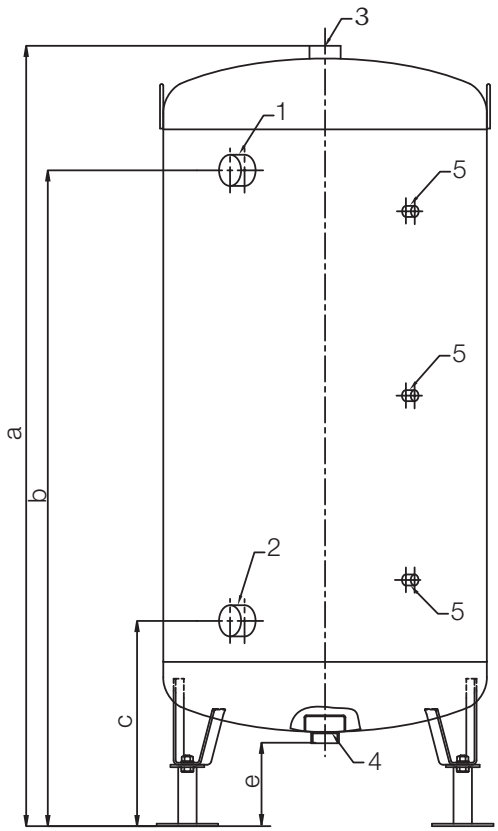
Flexible energy sources
The SolarTank can be connected to any type of primary heat source as long as it is connected in a closed heating loop. To heat tap water to the right comfort level when showering and bathing, we recommend a minimum charging temperature of 45 to 50°C for the primary heating water.

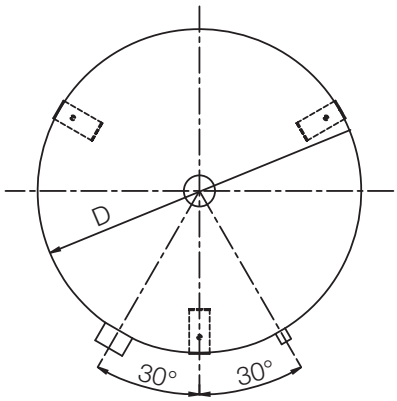
High effectiveness for maximum hot water
The effectiveness of this type of energy storage tank from which hot tap water is generated depends on its ability to keep the hot heating water separated from the cold return water that is admitted into the tank. The SolarTank is particularly positive in this respect due to its internal tube arrangement.

The returned cold heating water is distributed gently across the bottom of the tank, which prevents it from mixing with the hot water that is fed on top of the vessel.

The hot heating water is then drawn from the very top at the centre of the cylinder and is supplied to the instantaneous tap water heater. Moreover, since vertical storage tanks are more effective than horizontal ones, the SolarTank has an upright design.

Effective and environmentally friendly insulation
The insulation is made of 100 mm rockwool cladded with an alaminium metal plate (Euroclass A) or 100 mm glasswool with a PVC jacket (Euroclass B). The insulation is very easy to remove and refit, which makes the unit easy to transport in and out of the premises.





Connections (see table for sizes)

1. Primary heating water inlet
2. Primary heating water outlet
3. Feed to tap water heater
4. Return from tap water heater
5. Instrument connection, ½”

Note: All connections have female threads.

Operating data

Max. operating pressure (gauge)	10 bar
Max. operating temperature	100°C

Tank capacity litres	Dimensions (mm)					Connection sizes (inch)				Heat loss kWh in 24h *	Dry weight kg
	a	b	c	D	e	1	2	3	4		
300	1668	1395	495	549	215	2	2	2	2	5.3	107
500	1996	1748	495	630	210	2	2	2	2	6	137
750	1905	1601	501	790	200	2	2	2	2	6.9	233
1000	2258	1954	501	790	195	2	2	2	2	7	263
1500	2083	1700	600	1100	215	2	2	2	2	9.2	344
2000	2271	1888	600	1100	215	2	2	2	2	10.9	371
2500	2144	1680	680	1400	215	2	2	2	2	12.3	501
3000	2272	1810	680	1400	215	2	2	2	2	14	540

Dimensions are target values. Binding figures are shown on the separate drawings.

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