



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

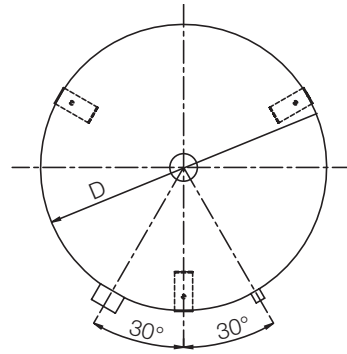
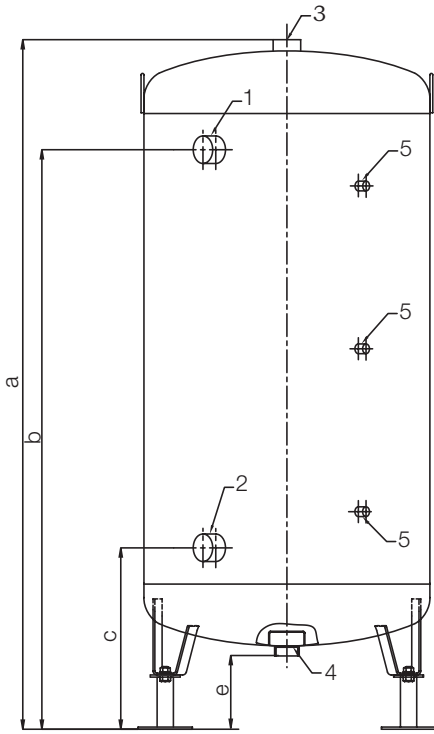
The effectiveness of this type of energy storage tank from which hot tap water is generated depends on its ability to keep the hot heating water separated from the cold return water that is admitted into the tank. The SolarTank is particularly positive in this respect due to its internal tube arrangement. 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 100mm rockwool clad with an aluminium metal plate (Euroclass A) or 100mm 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, 1/2"

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	459	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.

ECF00181EN 1001

Alfa Laval reserves the right to change specifications without prior notification.

How to contact Alfa Laval

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