



AquaTank EM (10 bar)

Hot water storage tank, 200-1000 litre

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

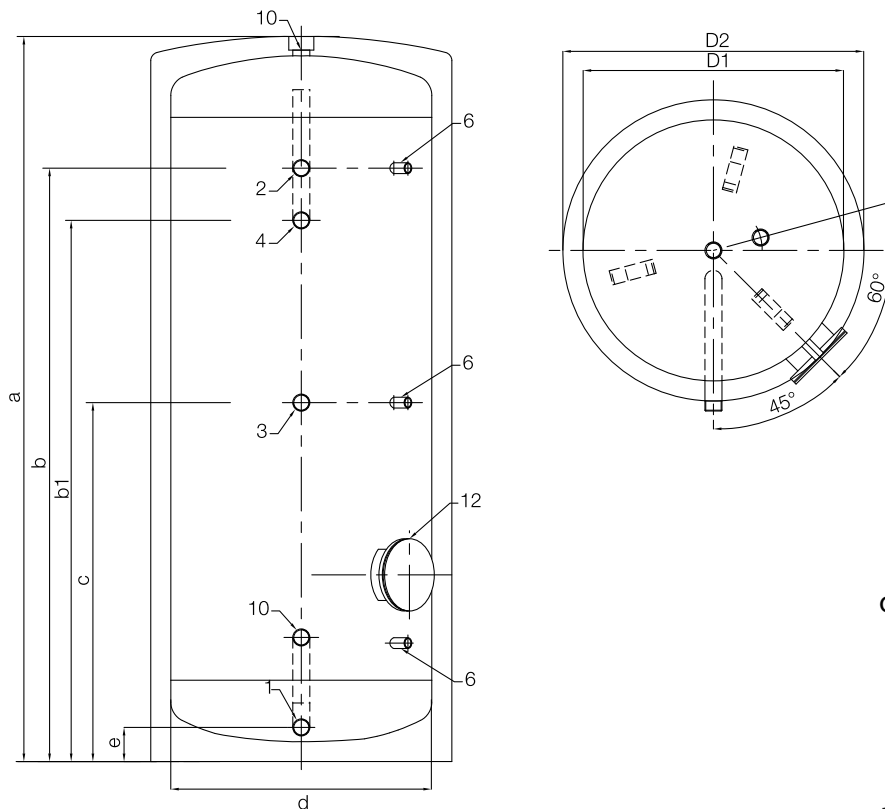
The effectiveness of this type of storage tank from which hot water is drawn depends on its ability to keep the hot water separated from the cold water admitted into the tank. The AquaTank is particularly good in this respect because of its internal tube arrangement. The incoming cold water is distributed 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, 1/2"
9. Drain (to be put into connecting pipework)
10. Spare connection, see design drawing
12. Inspection opening, 180 mm dia.

Operating data:

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

Notes:

Connections no. 3 and 6 have female threads.

Tank capacity Litres	Dimensions, mm								Connection sizes, inch				Heat losses 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

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.