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.

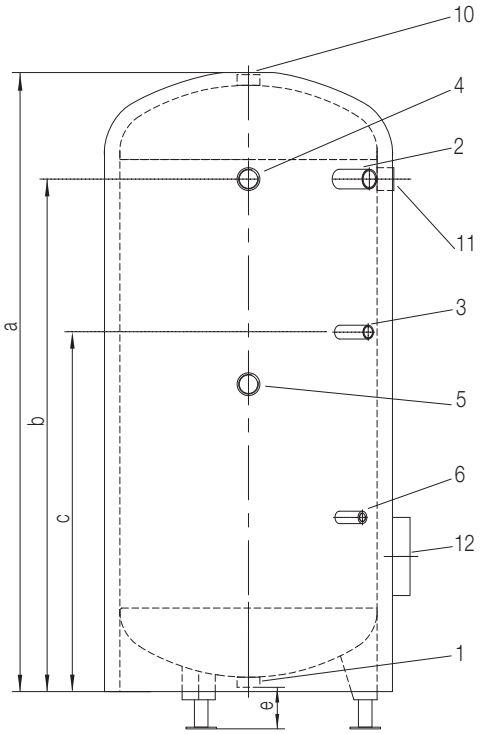
Charge heat exchangers reduce power demand
AquaTank EM is designed for use in combination with charge heat exchangers. The AquaTank is then employed to store drinking quality water in facilities in which the water flow is not constant – where sudden high demands occur more or less regularly, such as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

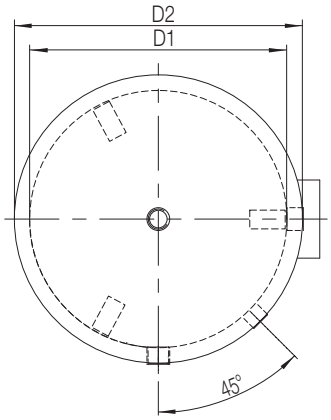
With a charge heat exchanger, the power demand can be substantially reduced compared to a separate coil heater, since the AquaTank acts as a buffer to meet the power peaks occurring at high water flow rates. Following such high water demand, heating takes place very quickly, because the water that has 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

How to contact Alfa Laval

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