



AquaTank 316Ti

Hot water storage tank, 300-1000 litre

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



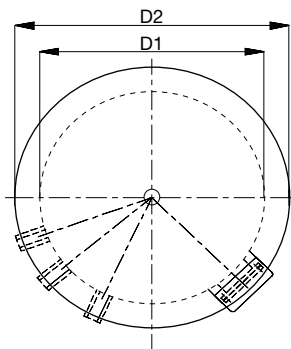
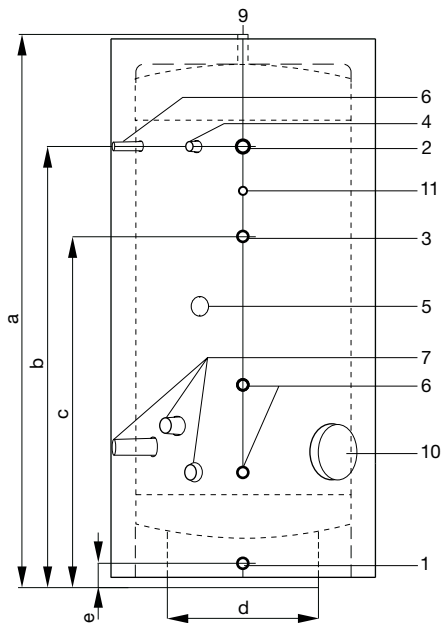
from the very top in the centre of the cylinder. Moreover, since vertical hot water storage tanks are more effective than horizontal ones, the AquaTank is of upright design.

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, 3/4"
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, 1/2"

Notes:

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 losses kWh in 24h | Dry weight kg | Immers. 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 | 1x5.25 |
| 500 | 1815 | 1507 | 1158 | 450 | 650 | 800 | 97 | 2 | 2 | 1 | 2 | 3.1 | 89 | 1x9 |
| 500/2 | 1815 | 1507 | 1158 | 450 | 650 | 800 | 97 | 2 | 2 | 1 | 2 | 3.1 | 89 | 2x9 |
| 750 | 2105 | 1730 | 1360 | 600 | 750 | 900 | 97 | 2 | 2 | 1 | 2 | 3.8 | 144 | 2x12 |
| 750/3 | 2105 | 1730 | 1360 | 600 | 750 | 900 | 97 | 2 | 2 | 1 | 2 | 3.8 | 144 | 3x12 |
| 1000 | 2180 | 1763 | 1402 | 650 | 850 | 1040 | 97 | 2 | 2 | 1 | 2 | 4.2 | 197 | 3x12 |

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

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.