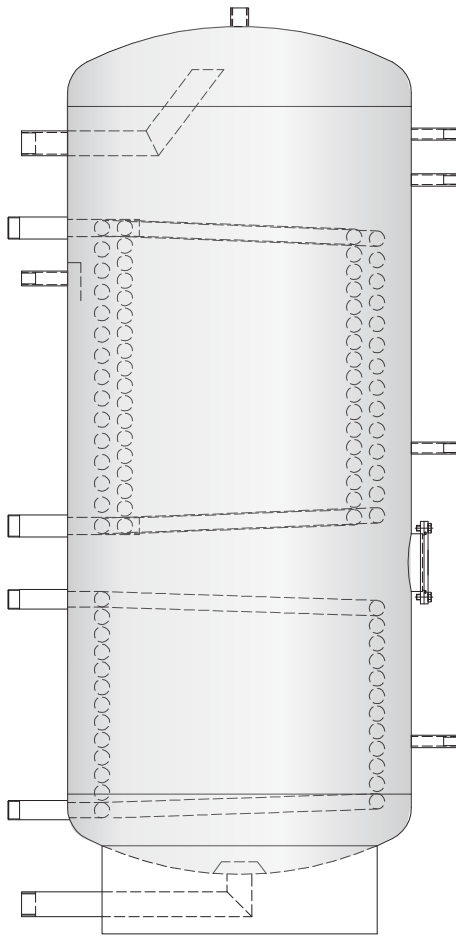


# ATSR 300-1000

## Stainless Steel Renewable Cylinders for DHW Applications



The Adveco ATSR range of stainless steel hot water tanks serve as buffer vessels and indirect hot water calorifiers suitable for use with high pressure applications.

The ATSR is a high quality indirect water heater constructed from corrosion resistant AISI 316Ti and 316L stainless steel. Each vessel features two internal fixed heating coils with an increased surface area designed for use with renewable heat sources, at low and high-level, as well as multiple connection points and a mid-level clean-out access flange.

All tanks are designed, manufactured, and tested to the requirements of the Pressure Equipment Directive (97/23/EC) and EN 12897.

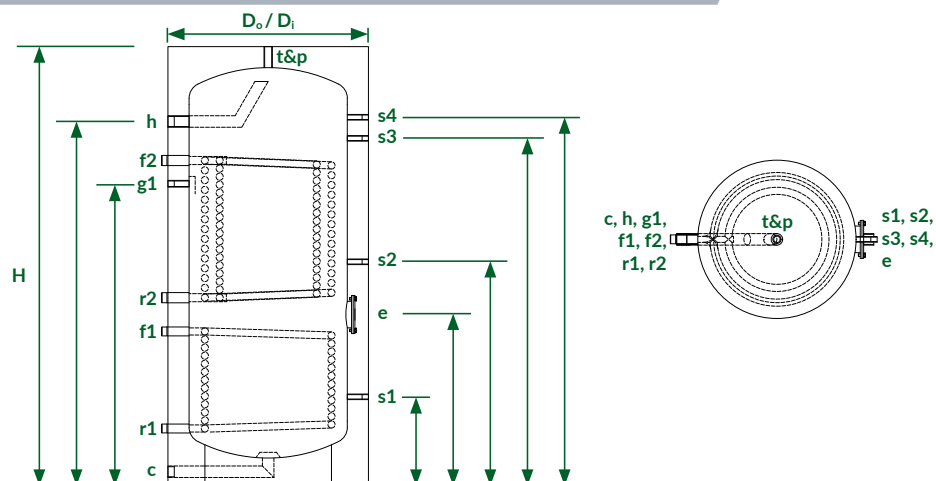
### FEATURES

- Available with 300 - 1000 litre capacities
- Produced from high quality 316Ti and 316L stainless steel
- 100 mm removable insulation for improved energy efficiency
- Suitable for vented or unvented installation
- 10 bar / 95°C max. working pressure/temp (tank)
- 10 bar / 95-110°C max. working pressure/temp (coils)



### OPTIONS & ANCILLARIES

- E0008/0-95C: Control Thermostat with 0-95°C range
- E0011: Overheat thermostat
- E0009.2: Chrome thermostat pocket
- Immersion heater options from 3-12 kW
- MB0001: Destratification pump kit
- Unvented Kits: Contact Adveco for options and details



## Specifications

| Description                                   |                          | 300    | 400    | 500    | 750     | 1000    |
|-----------------------------------------------|--------------------------|--------|--------|--------|---------|---------|
| Storage volume (l)                            |                          | 289    | 401    | 490    | 756     | 990     |
| Standing losses (W) / Energy efficiency class |                          | 66 / B | 85 / C | 98 / C | 120 / C | 140 / C |
| Coil surface area (m <sup>2</sup> )           | Lower coil               | 1.4    | 1.5    | 1.6    | 2.5     | 2.8     |
|                                               | Upper coil               | 2.5    | 3.0    | 4.5    | 5.5     | 6.5     |
| Output capacity (kW)                          | Lower coil (50/40:10/45) | 29.8   | 31.9   | 34.0   | 53.1    | 59.5    |
|                                               | Upper coil (70/50:10/60) | 53.1   | 63.8   | 95.6   | 116.9   | 138.1   |
| Nominal primary flow rate (m <sup>3</sup> /h) | Lower coil               | 1.28   | 1.37   | 1.46   | 2.28    | 2.55    |
|                                               | Upper coil               | 2.28   | 2.73   | 4.10   | 5.01    | 5.92    |
| Nominal coil pressure drop (mbar)             | Lower coil               | 18.1   | 22.0   | 26.4   | 91.9    | 126.3   |
|                                               | Upper coil               | 15.1   | 22.7   | 70.8   | 124.2   | 198.2   |
| Continuous DHW flow rate (l/h)                | Lower coil (50/40:10/45) | 511    | 547    | 583    | 911     | 1021    |
|                                               | Upper coil (70/50:10/60) | 911    | 1095   | 1640   | 2006    | 2370    |
|                                               | Combined coils           | 1423   | 1642   | 2224   | 2917    | 3391    |
| Peak draw off capacity (l)                    | 30 min.                  | 824    | 1005   | 1319   | 1820    | 2205    |
|                                               | 60 min.                  | 1544   | 1837   | 2445   | 3298    | 3922    |
|                                               | 120 min.                 | 2958   | 3468   | 4655   | 6196    | 7291    |
| Dry mass (kg)                                 |                          | 75     | 86     | 137    | 175     | 268     |

## Connections

| Label          | Description                          | 300      | 400      | 500      | 750      | 1000     |
|----------------|--------------------------------------|----------|----------|----------|----------|----------|
| c, h           | Water inlet and outlet               | 1½"      | 1½"      | 1½"      | 1½"      | 2"       |
| f1, r1         | Lower heat exchanger flow and return | 1¼"      | 1¼"      | 1¼"      | 1½"      | 1½"      |
| f2, r2         | Upper heat exchanger flow and return | 1"       | 1"       | 1¼"      | 1¼"      | 1¼"      |
| t&p            | T&P relief valve connection          | 1"       | 1"       | 1"       | 1"       | 1"       |
| g1             | Additional connection                | ¾"       | ¾"       | ¾"       | ¾"       | ¾"       |
| s1, s2, s3, s4 | Sensor pockets                       | ¾"       | ¾"       | ¾"       | ¾"       | ¾"       |
| e              | Clean-out flange (mm)                | Ø180/120 | Ø180/120 | Ø180/120 | Ø180/120 | Ø180/120 |

## Dimensions

| Label          | Description                       | 300  | 400  | 500  | 750  | 1000  |
|----------------|-----------------------------------|------|------|------|------|-------|
| H              | Height including insulation       | 1740 | 1975 | 1985 | 2080 | 2090  |
| D <sub>o</sub> | Outer diameter with insulation    | Ø700 | Ø750 | Ø800 | Ø950 | Ø1050 |
| D <sub>i</sub> | Inner diameter without insulation | Ø500 | Ø550 | Ø600 | Ø750 | Ø850  |
| g1             | Additional connection             | 1120 | 1330 | 1285 | 1430 | 1480  |
| s1             | Sensor pocket                     | 540  | 325  | 330  | 420  | 420   |
| s2             | Sensor pocket                     | 845  | 980  | 950  | 1060 | 1110  |
| s3             | Sensor pocket                     | 1315 | 1590 | 1590 | 1645 | 1655  |
| s4             | Sensor pocket                     | 1415 | 1690 | 1690 | 1745 | 1755  |
| e              | Flange centre point               | 700  | 780  | 740  | 810  | 860   |

All threaded connections are BSPT female unless otherwise stated. Coil connections BSPT male. All dimensions in mm.