

Flextherm

Stainless Steel Storage vessels
& Water heaters

that's excellence.



ENG Installation and operating manual

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1. Technical data

Storage vessels and indirectly stainless steel water heaters AISI 316L with up to two fixed welded tube heat exchangers in stainless steel AISI 316L. Complete with thermal insulation with variable thickness from 50 to 100 mm in accordance with the size. All units are equipped by an inspection flange on the top. For the 750 and 1000 l an inspection and cleaning opening flange is included. Storage vessels and indirectly heaters can be combined with all modern heating systems. For units with a capacity over 300 l a specific connection port for the electrical heated water heaters is included. Installation-friendly construction, equipped with connection for thermometer and temperature sensor/thermostat. (type-dependent).

Permissible system pressure	Heating coil 16 bar	Vessel 10 bar
Permissible system temperature	Heating coil 110 °C <i>* Temporary peak temperature of 130°C on the coil is allowed but might cause discoloration around the coil connections.</i>	Vessel 95 °C
Thermal insulation	Up to 500 l From 750 l	Polyuretan foam Polystyrene shell
Side inspection flange	Up to 750 l	DN 180 with net diameter 120 mm
Cleaning flange on top	80 x 95 mm	

See type plate and datasheet for further technical data.

2. Safety requirement

Read these instructions carefully before commencing installation. For any additional questions, please consult our Customer Service department:

+31 36 52 62 530

service.nl@aalberts-hfc.com



WARNING

Do not expose the insulation to open fire!

3. Installation

Installation, commissioning and maintenance must be carried out by specialists according to the applicable regulations (including EN 1717, DIN 1988, EN 12828 and VDI 2035, the relevant regulations for local distributors, national legislation and other regulations).

The chloride content of the drinking water must be less than 250 ppm. Suitable measures must be taken to protect the vessel from damage caused by underpressure.

Damage that is caused by underpressure (vacuum) is not covered by the warranty.

Protective gloves must be worn when cleaning inside the unit. The flange seal must be replaced after cleaning. Furthermore, facilities for the secure collection and drainage of water from the boiler must be provided to avoid water damage.

**WARNING**

Hot water may escape from the safety valves or when draining the boiler. Danger - risk of scalding.

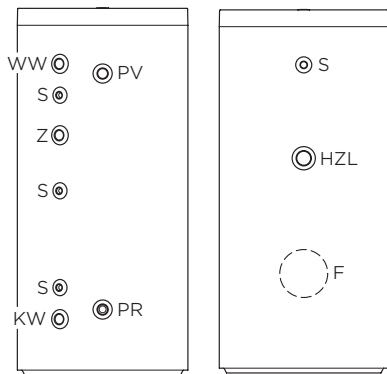
**WARNING**

Failure to comply with this instruction may result in damage to the mains water boiler or the stainless steel heat exchanger.

4. Description of connection

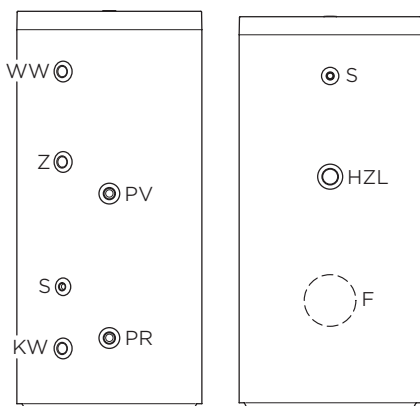
See the sticker applied to the specific vessel.

Flextherm LS-E



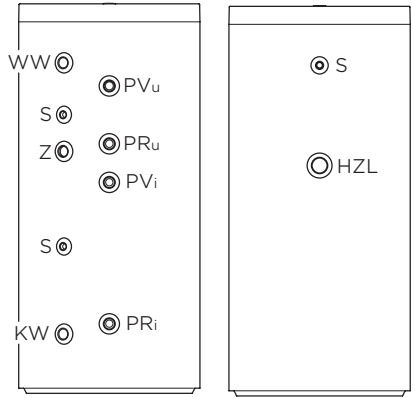
KW	Cold water Inlet
WW	Hot water Outlet
Z	Recirculation
PV	Boiler supply
PR	Boiler return
s	Probe for sensor
HZL	Heating element connection (if present)
F	Inspection flange (if present)

Flextherm Duo HLS-E



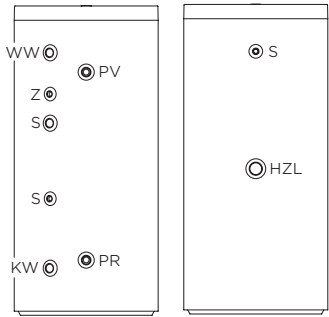
KW	Cold water Inlet
WW	Hot water Outlet
Z	Recirculation
PV	Boiler supply
PR	Boiler return
s	Probe for Sensor
HZL	Heating element connection (if present)
F	Inspection flange (if present)

Flextherm Duo HLS-E Solar



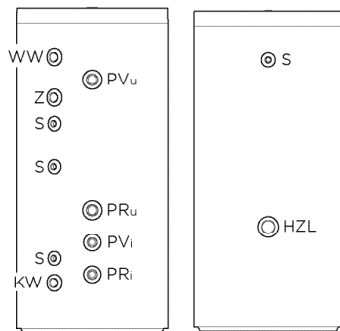
KW	Cold water Inlet
WW	Hot water Outlet
Z	Recirculation
PVI	Boiler supply
PRI	Boiler return
PVu	Solar collector supply
PRu	Solar collector return
s	Probe for sensor
HZL	Heating element connection

Flextherm WPS-E



KW	Cold water Inlet
WW	Hot water Outlet
Z	Recirculation
PV	Heat pump supply
PR	Heat Pump return
s	Probe for Sensor
HZL	Heating element connection

Flextherm WPS-E Solar



KW	Cold water Inlet
WW	Hot water Outlet
Z	Recirculation
PVI	Solar supply
PRI	Solar return
PVu	Heat Pump coll. supply
PRu	Heat Pump coll. return
s	Probe for sensor
HZL	Heating element connection

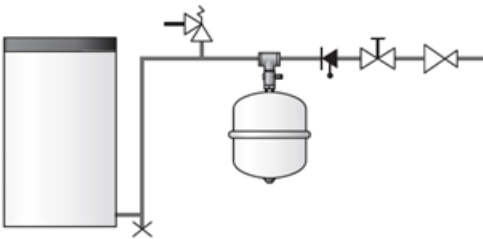
5. Commissioning

The entire system must be thoroughly flushed before commissioning. The system may only be set up in frost-free rooms and a surface that is sufficiently able to bear the load of the completely filled vessel.

Any unused connections must be professionally sealed.

A drainage device is to be provided at the cold water inlet. We recommend installing an Airfix membrane expansion vessel to the cold water supply line. Water hammer in the system must be avoided.

However, if water hammer is imminent in conjunction with the potable water boiler appropriate precautions are to be taken by installing a Flexofit Water Hammer Arrestor. The Prescor B safety valve must be installed in an easily accessible place as it is subject to regular inspection. The valve must also be equipped with a drain connection (see schematic for the cold water connection).



For safety reasons, it may be necessary for water to escape from the blow-off pipe while the system is heating up. Do not shut off or obstruct the blow-off pipe.

The seal tightness of the system as a whole must be checked under normal operating conditions and during maintenance and, if necessary, the flange couplings must be tightened. Check the safety valve at regular intervals.

The boiler must be included in the potential equalisation.

Temperature control/gauge:

The temperature sensor in the heating control unit and, if applicable, the solar-power controller and/or thermostat sensor must be fitted in the appropriate plunge pipe. The height of the plunge pipe determines the switching point for reheating.

6. Inspection & maintenance

No liability shall be accepted for damage that is caused by failure to follow the installation and operating instructions. The boiler must be installed to allow easy access for maintenance, operation, repairs or replacement. Site preparation and suitability for installation of the vessel are not the responsibility of the manufacturer or the responsible distributor. Furthermore, facilities for the secure drainage of the boiler in the event of any water leakage must be provided to avoid water damage.

If the local water is highly calciferous, a commercial de-calcifier can be fitted before the potable water part of the system. Natural calcification is not the boiler manufacturer's responsibility. If in doubt please consult the manufacturer. Dirt traps are recommended for both mains water and hot water systems. They must be serviced regularly depending on the system conditions. Sources of electro-chemical corrosion, such as mixing systems, must be avoided.

Removal

Once cooled, depressurize the system and remove the product from the system. Local legislation must be adhered to when disposing of the various components.



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Contact us !

We supply products for the installation industry in more than 70 countries. This is done from Flamco sales offices and via distributors who know the local market, and can give you the right advice at all times.

Aalberts hydronic flow control

The Netherlands

Postbus 30110 / 1303 AC Almere
Fort Blauwkapel 1 / 1358 AD Almere

+31 (0)36 526 2300 / nl.nfo@aalberts-hfc.com

flamco.aalberts-hfc.com



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