Flamco

KE KELIT®
CLIMATE CONTROL SYSTEMS

Flexcon® Solar

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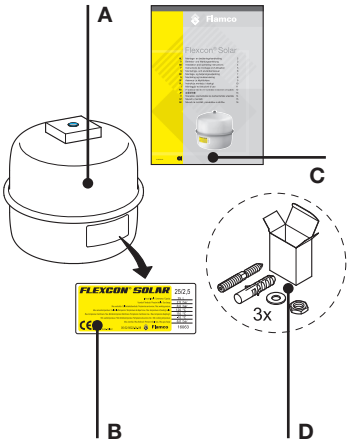

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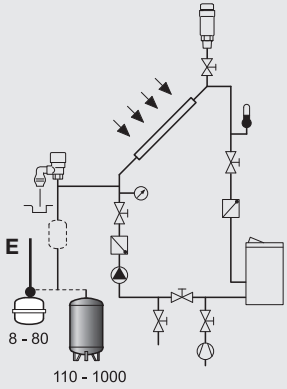

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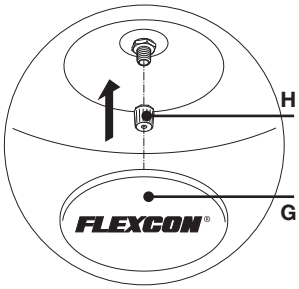

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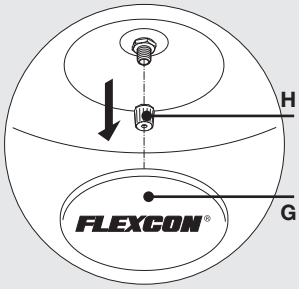

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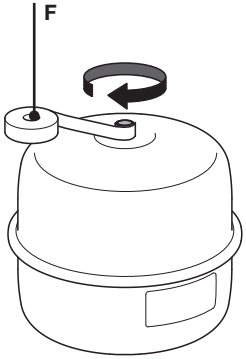

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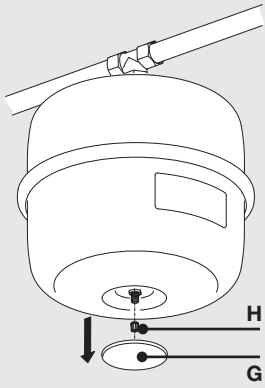

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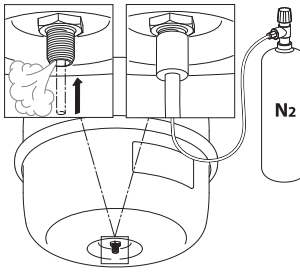

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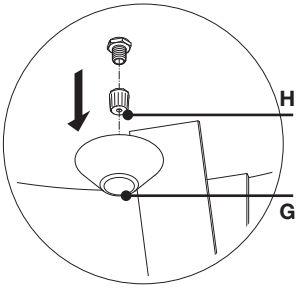

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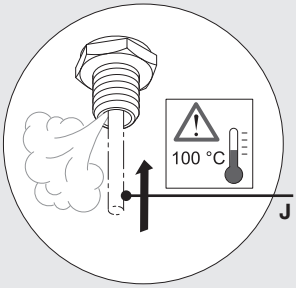

Flexcon Solar 8 - 1000

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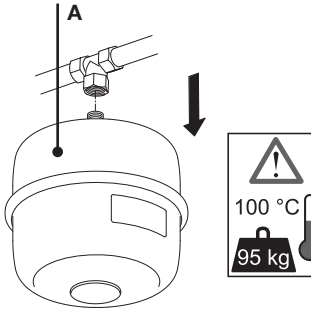

1. General

This manual applies to Flexcon Solar expansion vessels with a capacity of 8-1000 litres. The package includes an expansion vessel (A) with label (B), a manual (C) and an installation kit (D) (fig. 1). See the label for the maximum working pressure and the pre-charge. Flexcon Solar expansion vessels are pressure equipment, and conform to Pressure Equipment Directive 97/23/EG. A conformity declaration can be obtained from Flamco.

Application

Flexcon Solar expansion vessels are exclusively intended for use in closed solar energy heating installations (with additives based on glycol to a max. of 50%) with a maximum supply temperature of 120 °C. See the label for the maximum working pressure as well as the min./max. temperature on the membrane. Refer to the Flamco documentation for calculating the capacity and pre-charge.

Safety

The expansion vessel comes pre-charged: damage may result in serious injuries. The bracket must be able to carry the weight of a full expansion vessel. Prevent overpressure in the installation. Install a safety valve for this (for example Prescor Solar). The opening pressure of the safety value should be equal to or lower than the maximum working pressure shown on the label. The connection between the expansion vessel and the boiler must always be open.

2. Installation

The installation must be carried out by approved personnel only. Observe local regulations and guidelines.

Fitting

- Expansion vessels of 8 to 80 litres must be installed with the water nipple (E) pointing upwards (fig. 2). Use, if necessary, wall bracket MB 2 or Flexconsole (up to 25 litres).
- Expansion vessels with a capacity between 110 and 1000 litres are installed standing on the floor (fig. 2).

The vessel must be installed as close as possible to the pump on the pressure side. Install the vessel so that the water it contains cannot circulate.

1. Apply plastic tape (F) (do not use hemp!) to the connection of the expansion vessel (fig. 3). Choose a seal that is suitable for the maximum temperature and the liquid used!
2. Screw the expansion vessel to the installation (T-piece or expansion pipe).

First use

a. Calculate and set pre-charge (see Flamco documentation):
   - Remove protective cap (G) and valve cap (H) (fig. 4).
   - Measure the pressure.
   - If the pressure is too high, allow gas to discharge through the gas valve; if the pressure is too low, fill with expansion gas. Nitrogen must be used as filling gas (fig. 5).
   - Replace protective cap (G) and valve cap (H) (fig. 6).

b. Calculate filling pressure (see Flamco documentation).
c. Fit the vessel in the installation.
d. Slowly fill the installation until the filling pressure is reached. Bleed the system during filling. Follow the directions of the manufacturer!
e. Check the seals for leaks.
f. The expansion vessel is now ready for use.

3. Maintenance and service

It is recommended that the expansion vessel is checked annually by approved personnel.

4. Dismantling

- Depressurise the installation.
- Remove protective cap (G) and valve cap (H) (fig. 7,8).
- Push the inner valve (J) in to drain the pressure from the expansion vessel (fig. 9).
- Unscrew the expansion vessel (A) (fig. 10).

Note: a full expansion vessel is heavy!
The water in the expansion vessel may be hot.

Observe local regulations when disposing of the expansion vessel.

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