









### **Application**

Flexcon expansion vessels are intended for sealed heating installations with a maximum working pressure according to the label on the vessel. The heating installation must be according to the most recent technical regulations.

**Before the installation**Care should be taken that the initial pressure of the Flexcon expansion vessel is equal to the calculated initial pressure. The installation has to be fitted with a Prescor safety valve. The opening pressure of this safety valve has to be chosen in accordance with the maximum working pressure of the heating installation. Additionally, a Flexcon pressure gauge or thermo-pressure gauge, which is in line with the pressure range must be fitted.

Flush the system (never via the safety valve). Check system for leaks by pressure testing.

## Fitting the Flexcon components

### Flexcon expansion vessel

Fit the expansion vessel in the return pipe from the system as close as possible to the boiler, on the suction side of the pump. Fit the vessel in such a way that any air in the connecting pipe vents through the system. When mounting Flexcon vessels of 2 to 25 liters, vertically with the water connection on top, it is advisable to use a ¾" Flexfast isolating union.

## 2. Prescor safety valve

Check the arrow showing the direction of flow. Place the valve on top of the boiler or in the flow pipe as close as possible to the boiler. Never in the return pipe or lower than the highest point of the boiler. Fit a funnel to the discharge port of the valve if required.

## Flexcon pressure gauge and thermo-pressure gauge

Fit these gauges preferably on the boiler. Keep difference in height between pressure gauge and Flexcon expansion tank as small as possible.

## Flamcovent or Flexair air separator

The air separator should always be fitted horizontally, preferably directly behind the boiler on the suction side of the pump.

## Flexvent or Flexvent Super automatic air vent

It is recommended to fit a Flexvent or Flexvent Super automatic air vent at those points of the installation where air is liable to collect.

## Setting the pressure gauge or thermo-pressure gauge

Set the adjustable red pointer to the corrected pre-charge pressure in the expansion vessel. (Corrected pre-charge pressure = pre-charge pressure in vessel plus or minus the difference in height between pressure gauge and vessel). Note: 1 kg/cm<sup>2</sup> = 1 bar (approx.).

### Open air vents

Before filling the system open the air vents provided.

## Venting the pipe to the expansion vessel

The expansion pipe should be thoroughly vented.

## Filling the system

Filling should be done slowly. During filling, release air via the air vents. Fill the system until the pressure gauge black pointer reads 0.2 bar higher than the red pointer setting.

## 10. Initial firing of installation

Fire the boiler, allow the system to reach maximum operating temperature and keep at this temperature for as long as possible, purging air from the system at regular intervals.

11. **Topping up the system**Carefully vent the filler hose before topping up, then, when the water temperature has dropped to approximately 50 °C (120 °F), top up the system until the pressure shown on gauge is 0.5 bar higher than the red pointer setting.

# Normal operation of system

Disconnect temporary hose connection and open stop cock of auto make up assembly (if fitted). System should operate between the pressure range shown by the green segment of the pressure gauge.

## 12. Dismantling the Flexcon expansion vessel

The temperature of the water in the heating installation must be lower than 35 °C when the Flexcon expansion vessel is dismantled (to prevent burning). All pressure must be released from the expansion pipe.

