

## **New buffer storage tank for optimum integration of solar systems**

Solar buffer storage tank  
ISH 2009

### **Logalux PNR with solar heat exchanger, temperature-sensitive infeed of the return flow and a volume of 500, 750 or 1000 litres**

The new Logalux PNR buffer storage tank simplifies the efficient integration of solar systems. Available with volumes of 500, 750 or 1000 litres, the Logalux PNR tanks expand the existing product range based on the proven Logalux PR technology.

A special feature of the Logalux PNR system is its internal straight-tube heat exchanger whose particularly large surface transfers solar heat very efficiently. Moreover, the new buffer storage tanks feature a temperature-sensitive infeed of the return flow, i.e. the water flowing back from the heating system is fed into the tank level which has exactly the same temperature at any given time. This permits to maintain the temperature layers within the tank even if the temperature of the return flow changes, which means that the high temperature level in the upper part of the tank stays available for a longer period of time. As a result, the storage capacity is used optimally and in line with the demand for hot water. This solution offers significant advantages, in particular, when combined with fresh water systems that need a constantly high flow pipe temperature.

Numerous connectors allow the hydraulic combination of the Logalux PNR buffer storage tank with several heat generators such as a gas condensing boiler and a solid fuel boiler. Additional heat generators can therefore be easily added at a later date. Moreover, the simple integration of a heat pump was taken into consideration

during the development of the new tanks. The heat pump connectors are equipped with special inflow brakes which permit to minimise the mixing of different temperature layers even when large flows are fed into the tank. In addition, the system offers a socket for the installation of an electrical heating element.

The necessary heat insulation is provided by a foil-coated 80 millimetre thick foam layer. For particularly low heat losses, Logalux PNR is optionally available with a 120 millimetre thick foam layer and PE coating. This insulation can even be added subsequently, which facilitates the tank's installation. Without insulation, the 750 and 1000 litre buffer storage tanks have a diameter of only 790 millimetres. The Logalux PNR tanks thus fit through 800 millimetre wide doors. Both models are available in blue and white.

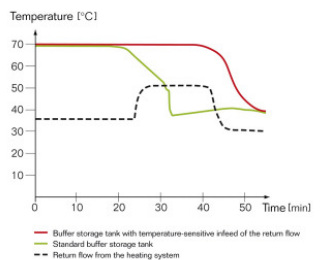
The new buffer storage tank can be optimally combined with Buderus' range of solar systems. For specification selection, Buderus offers coordinated Logaplus packages which include all collector series and the Logalux FS or FS-Z fresh water systems.



**Caption:**

The new Logalux PNR buffer storage tank simplifies the efficient integration of solar systems.

**Source: Buderus**



Temperature layers of 20-70 °C exist in the buffer storage tank at the beginning of the experiment.

**Caption:**

Temperature level in the buffer storage tank with and without temperature-sensitive infeed of the return flow.

**Source: Buderus**

For lists of manufacturers:

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