

THE SOLAR-FLEX[®] SYSTEM FOR POOL HEATING

SOLAR-FLEX[®] is a unique system developed especially for pool heating, as a cost efficient alternative to conventional solar energy systems.

Pool heating requires a temperature rise of relatively few degrees, however, of large amounts of water. This calls for a large absorber area and quick pumping to transfer the solar energy to the pool. Conventional collectors, used for domestic hot water and combined systems, are designed to obtain high temperatures of smaller amounts of water. These types of systems demand slow pumping through closed well-insulated collectors.

The SOLAR-FLEX[®] collector consists of a series of flexible tubes made of black polypropylene. The material is resistant to UV-radiation and pool chemicals. The tubes are corrugated, which means that the surface area is almost doubled compared to plain tubes.

The flexibility of the materials allows a variety of different installation possibilities. The SOLAR-FLEX[®] collector is made to measure and can be installed in any place exposed to sun, for instance on a terrace, a sloping roof, a wall or on a platform on the ground.

The recommended collector size is between 75% and 125% of the surface area of the pool. It is highly recommended to use a thermal pool cover to reduce heat loss during nights and in periods of bad weather.

The SOLAR-FLEX[®] system works by circulating pool water directly through the collector, which is connected to the pool cleaning system after the filter pump and the filter.

In some cases, the existing filter pump can handle the circulation. Installations with a large collector and/or a considerable difference in altitude between the collector and the filter room will need an additional pump, and also if the user prefers to run the filter system independently via a timer.

The system is controlled automatically by an electronic control, which measures the temperature difference between the solar collector and the pool. When the temperature in the collector exceeds that of the pool, the pump starts circulating the pool water through the collector. The pump stops automatically when there is no more solar energy to transfer to the pool. The control has a max. temperature function, that stops the circulating pump when a preset temperature has been reached.

In periods where pool heating is not required, the SOLAR-FLEX[®] system can be turned off without risk of damage.