

Solar thermal develops...

Globally as well as in Europe solar thermal heating experiences massive growth due to the increased gas and oil prices as well as increased environmental focus.

Also the fast technological improvement of solar thermal systems has made solar more attractive for the end-users. E.g. even in mid and northern Europe you can cover 25% or more of the yearly space heating demand as well as your DHW demand of a modern one-family house with a 10 m² system.

Important to choose the right solar pump

The dimensioning of the solar system to the thermal output required affects what flow is needed as well as the pressure loss in the system (a typical system has a flow of 100 to 500 l/h with a pressure loss between 200 to 400 mbar).

And this influences, which type of circulator is optimal to integrate.

The normal standard circulators are designed for optimal performance at a flow of 2-2½ m³/h and this kind of pump has been widely used in thermal solar systems

New solar developments from Grundfos

To meet the application demands Grundfos has developed an OEM solar pump range, which is energy and flow optimised for solar thermal systems.

The range consists of:

- SOLAR 15-45
- SOLAR 15-65
- SOLAR PM 15-85

Choose the new Grundfos SOLAR range and save up till 70% power consumption on the solar pump

GRUNDFOS HVAC OEM DIVISION



A High Efficiency

Grundfos SOLAR – circulators for solar thermal systems

Grundfos HVAC OEM Division

With an annual production of around ten million circulator pumps and hydraulic systems, Grundfos is the world's leading manufacturer of circulator pumps.

The Grundfos HVAC OEM Division is dedicated and organised to serving manufacturers of domestic heating systems worldwide. In the last ten years, a strong effort and the most ingenious solutions for pumps and hydraulic systems available to the domestic heating industry have made us the preferred supplier.

Here is why:

- Innovative products and solutions
- Reliable and long-living products
- Focus on low energy products
- Broad product portfolio from components to complete hydraulic systems
- Application specific solutions for:
 - Wall-hung & floor-standing boilers
 - Kits & domestic hot water systems
 - Renewable heating like Solar thermal systems, Heat pumps and Micro CHPs
- Customer-oriented organisation

Low Energy

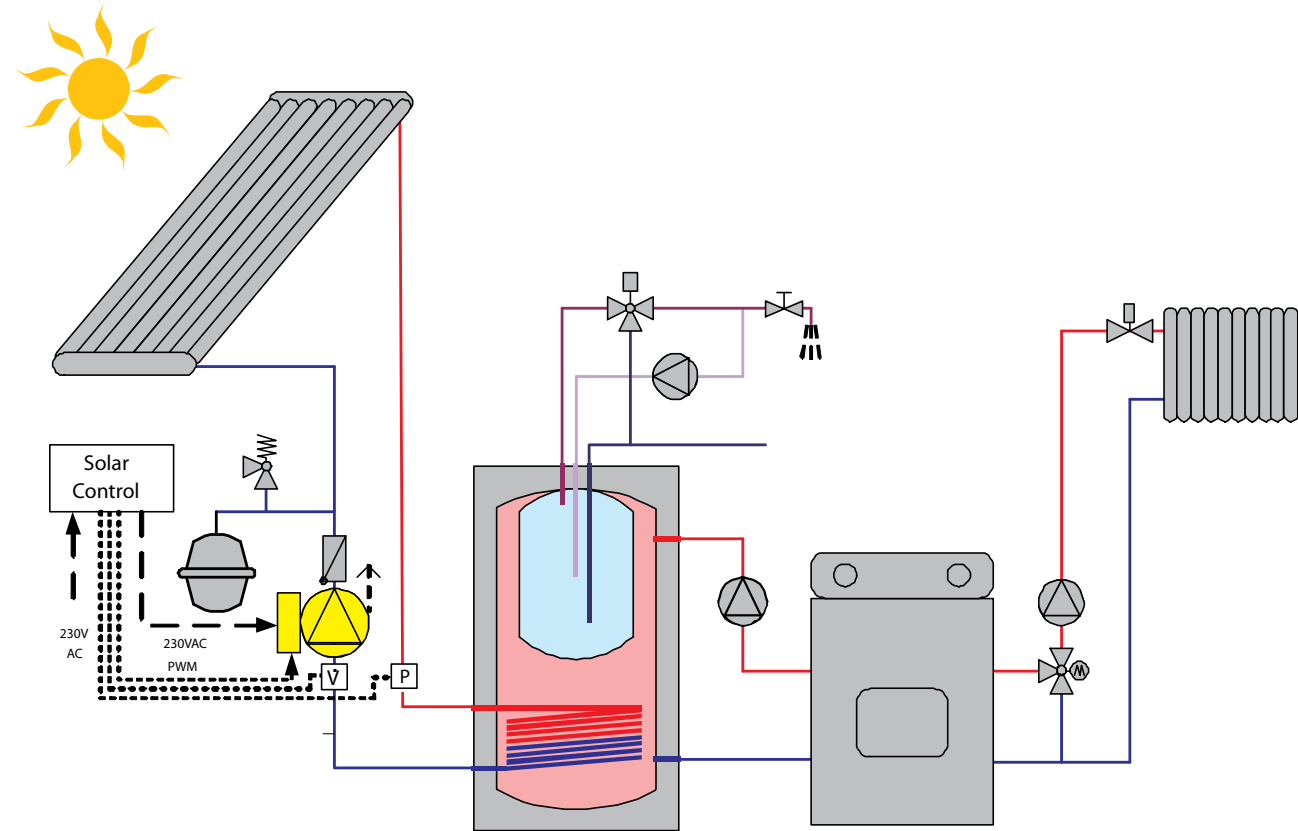
SOLAR

The right choice for all solar systems

- Optimised for lower flow – minimal flow adjustment necessary
- Energy-saving Grundfos LOW ENERGY B-class technology – reduced power consumption at low flow up to 50%
- Anti-corrosion coated – resistant to solar medium with glycol and inhibitors
- Proven technology, short circuit proofed asynchronous wet running motor – available with air separator – reliable and silent operation for a long life time
- Resistant to short temperature peaks of up to 140°C, system pressure up to 10 bar and even higher pressure shocks – safe even while stagnated
- Resistant to condense water at low temperature (down to -10° C) – cold start protected
- Available with different housings as G1" x 130 mm, G 1 ½" x 180 mm or AOS with airvent outlet.



Thermal solar system with SOLAR PM



A High Efficiency

SOLAR PM

The right choice for match flow thermal solar systems

- Grundfos PERMANENT MAGNET A-class technology – saves up to 70% primary energy
- Energy-optimised for variable flow – controlled via PWM-signal
- Special filling speed for drain-back systems to improve the air-venting/flushing of the solar collectors when starting up.
- Anti-corrosion coated – resistant to solar medium with glycol and inhibitors
- For medium temperature up to +95°C, resistant to short temperature peaks of up to 120°C
- For system pressure up to 10 bar and even higher pressure shocks.
- For non-condensing environment down to +2°C medium temperature
- Available with different housings as G1" x 130 mm, G 1 ½" x 180 mm or AOS with air-vent outlet.



SOLAR 15-45, SOLAR 15-65

SOLAR PM 15-85

