

Solar heat transfer system Solex – HF Upgrade your hydronic heating system with solar thermal!

The compact and completely preassembled solar water heating system Solex for high flow systems is completely insulated. It is equipped with a generously dimensioned stainless steel flat plate heat exchanger, prewired and preset controller. All those advantages allow for a simple and quick installation as well as secure commissioning.

Your advantages:

All connections 3/4" female

With pre-assembled steel wall bracket
can be mounted easily onto the wall

Fully assembled with flat sealing union connections

Full port ball valves

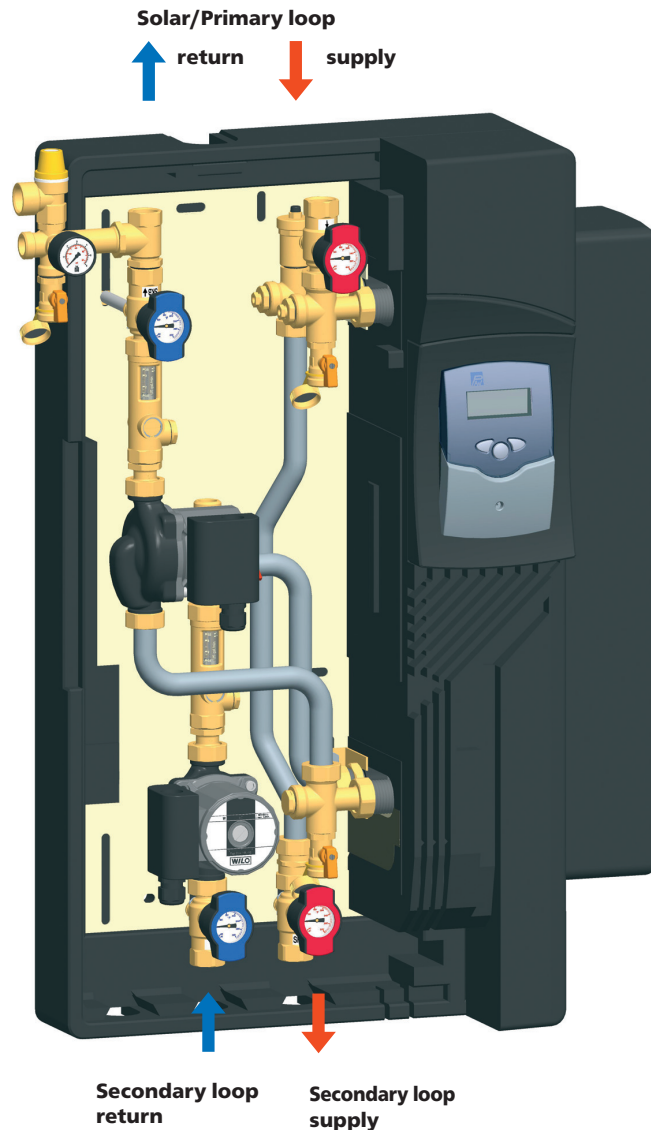
Flow check valves inside the solar loop and inside the secondary loop, manual opener, inside the solar loop with 400 mm WC, especially for solar systems, secondary with 200 mm WC, prevent any gravity circulations

Both loops with large ball valve handles
easy handling, visible closing position, with integrated full metal thermometer 0-160 °C / 32 - 320 °F, can be pulled off, with thermowell integrated inside the ball valve

With solar circulation pumps by WILO, three speed pre-assembled; aligned to the performance of the water heating system, pumps are completely isolatable- no draining necessary during pump service

Primary and secondary loop with flow meter
for easy adjustment of the flow rate

Integrated flushing and filling valves
three drain valves permit filling and flushing the primary circuit as well as only the heat exchanger. On the secondary side automatic airvent on the highest point of the heat exchanger.



basic conditions: global radiation = 800 W/m²; efficiency $\eta_{0,05} = 0,625$

For systems in high flow mode [20 - 30 l/(m²solar panels x h)]

Heat exchanger Type 1P with 20 plates

operational mode
20 l/(m²*h)
30 l/(m²*h)

surface of solar panels
30 m²
20 m²

performance
15 kW
10 kW

Heat exchanger Type 1P with 30 plates

operational mode
20 l/(m²*h)
30 l/(m²*h)

surface of solar panels
50 m²
30 m²

performance
25 kW
15 kW

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Solar safety assembly

pressure relief valve 6 bar / 87 psi, high-temperature manometer 0-6 bar / 0-90 psi with valve, flat sealing connection for expansion tank

secondary side fitted with 3/4" pressure relief valve connection

Compact function-optimised design insulation

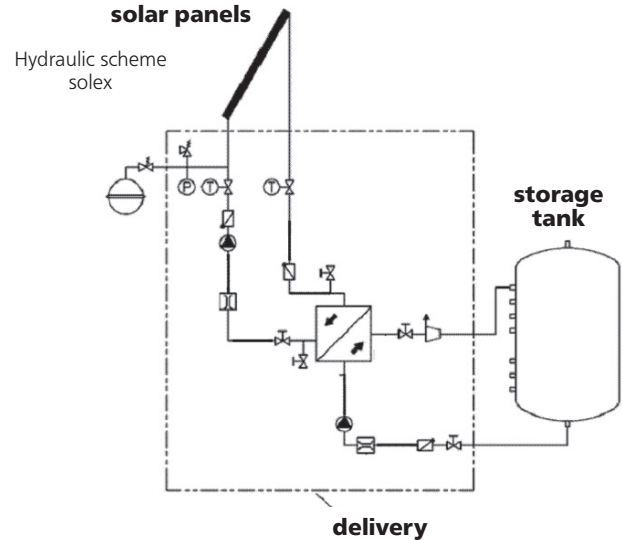
made of durable elastic EPP; **100% insulation of the fittings** – minimized heat loss

Highly efficient stainless steel heat exchanger

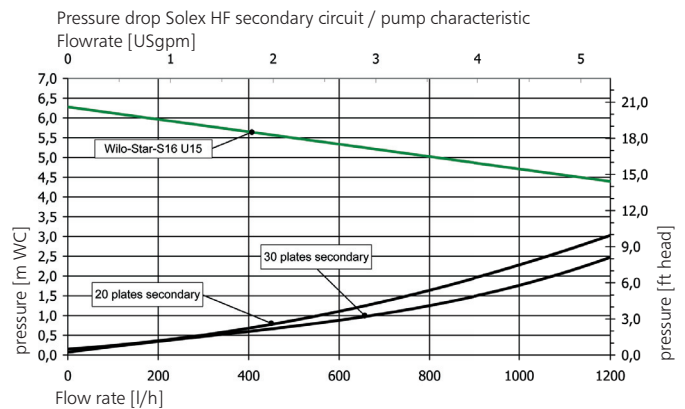
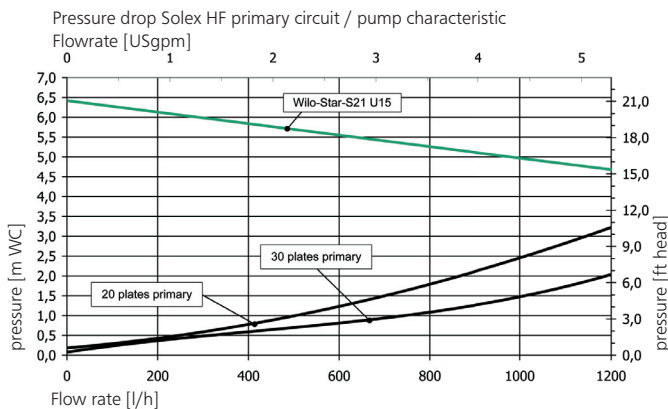
two sizes for small and larger installations, designed for high flow operation. Generously dimensioned, for transmitting high performances high ΔT , completely integrated into the insulation.

Integrated solar controller

completely pre-assembled, preset and prewired, assures quick assembly – only the sensors for the storage tank and for the solar panels have to be connected branched. The preset control system makes commissioning simple and clean.



TECHNICAL DATA Solex - HF		
Dimension		DN 20 - 3/4"
Material	fittings	brass
	gaskets	Klingersil / EPDM
	insulation	EPP
	check valves	brass
	heat exchanger	plates + sockets: 1.4400 solder: 99,99% copper
Techn. data	max. pressure	10 bar / 145 psi
	max. temperature	130 °C / 266 °F, temp. 160 °C, 320 °F
Equipment	check valves	400 mm WC primary 200 mm WC secondary
	safety valve	6 bar / 87 psi, for thermal solar
	Flowmeters	0.5-3.5 USgpm
	manometer	0-6 bar / 0-90 psi, resistant to high temperatures
	temperature gauges	32-320 °F
Measurements	connections	3/4" female
	over-all width	560 mm / 22 1/32"
	over-all height	880 mm / 34 21/32"



Heat exchanger	Pump version	Item n°
Type 1P 20 plates	primary: Wilo Star S 21 U-15 ; secondary: Wilo Star S 16 U-15	6091822 US 01
Type 1P 30 plates	primary: Wilo Star S 21 U-15 ; secondary: Wilo Star S 16 U-15	6091832 US 01