

Solar heat transfer unit SolexDWHX

Solar heat transfer unit

The solar heat transfer station Solex DWHX is a preinstalled and leak-tested unit with integrated double wall heat exchanger for transferring heat from the collector to the storage tank.

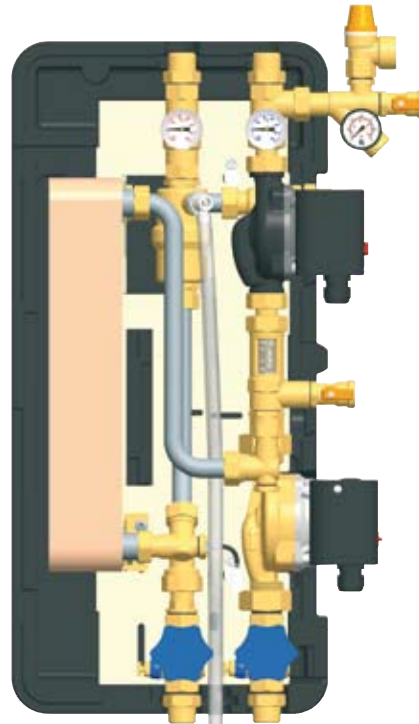
Completely insulated, with generously dimensioned double wall stainless steel plate heat exchanger, integrated preset and prewired controller assures a simple and quick installation as well as a safe commissioning.

It contains important fittings and safety devices for the operation of the solar thermal system:

- **Ball valves in supply and return in combination with check valves to prevent gravity and thermo circulation**
- **Connections for flushing, filling and draining the system**
- **Air vent for manual bleeding of the heat exchanger**
- **Flow meter for displaying and setting the flow rate**
- **Temperature gauges in supply and return for displaying both temperatures**
- **Pressure gauge for displaying the system pressure**
- **Pressure relief valve to prevent overpressure**
- **Three-speed solar pump for wide range of flow rates**
- **Three-speed bronze pump for the secondary (DHW) loop**
- **double wall design heat exchanger with visible leak detection**

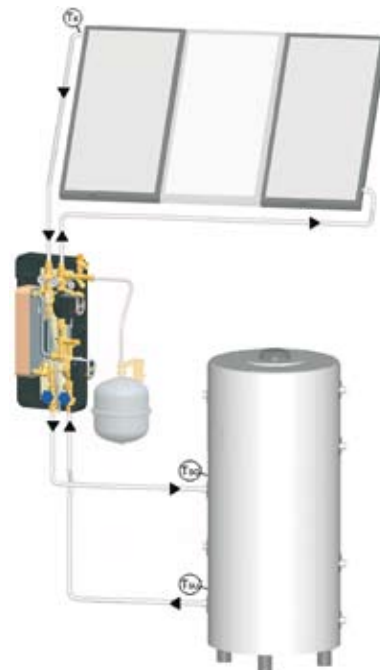
Compact wall hung design of the unit with insulation shell made of durable elastic EPP prevents heat losses and increases overall system efficiency. Integral to the unit are variable speed collector and storage tank circulators, double wall design heat exchanger, and the electronics to drive it all. With only four piping connections needed, the SolexDWHX significantly reduces the time and space required for installation.

The heat exchanger provides complete isolation between fluid on the collector side and domestic hot water.



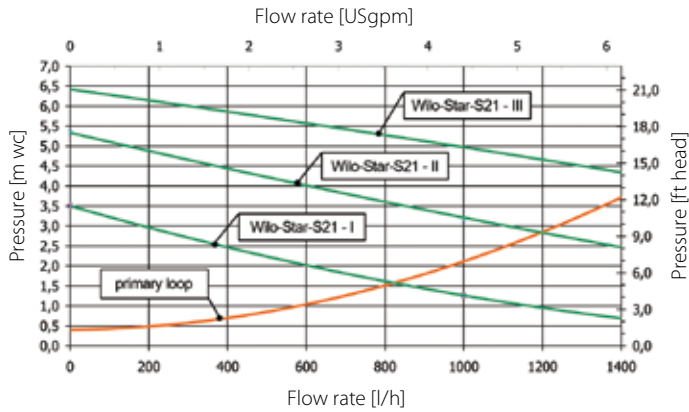
TECHNICAL DATA SolexDWHX

Dimension	DN 20 - ¾"		
Material	fittings	brass	
	gaskets	Klingersil / EPDM	
	insulation	EPP	
	check valves	brass	
	heat exchanger	plates + connection pieces: 1.4400 solder: 99.99 % copper	
Techn. data	max. pressure	6 bar / 87 psi	
	max. temperature	248 °F, short-term. 320 °F,	
Equipment	check valves	7.87" WC primary 7.87" WC secondary	
	flow meter	0.3 - 3.5 USgpm (1-13l/min)	
	pressure relief valve	6 bar / 87 psi, f.thermal solar syst.	
	manometer	0-6 bar / 0-87 psi, resistant to high temperatures	
	thermometer	0-160 °C / 0-320 °F, in the solar loop	
	controller	BS Plus	
	Dimensions	connections	primary loop ¾" cutting-ring connection secondary loop: ¾" male thread
		overall width	390 mm / 15.6 in
		overall height	650 mm / 25.6 in"

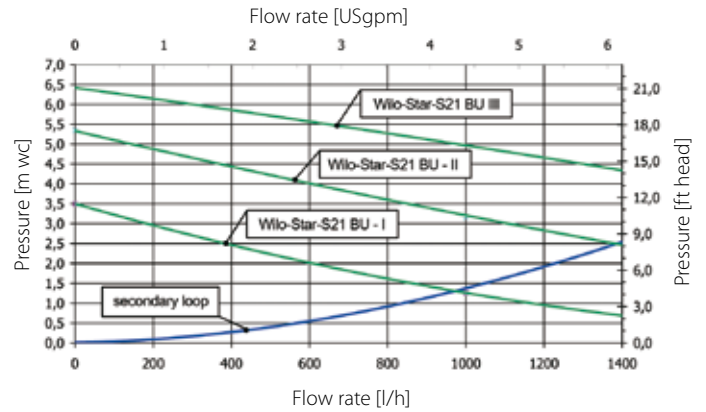


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Pressure drop SolexDWHX primary / pump characteristics



Pressure drop SolexDWHX secondary / pump characteristics



SolexDWHX - for systems up to 538 ft2 [0.4-0.74 G / (ft2 collector surface x h)]			
SolexDWHX 6094603US	Operating flow rate in solar loop		Performance
	0.4 G/ft ² collector surface x h	15 l/m ² collector surface x h	85.3 MBH
	0.5 G/ft ² collector surface x h	20 l/m ² collector surface x h	64.2 MBH
	0.6 G/ft ² collector surface x h	25 l/m ² collector surface x h	51.2 MBH
	0.74 G/ft ² collector surface x h	30 l/m ² collector surface x h	42.7 MBH
			25.0 kW
			18.8 kW
			15.0 kW
			12.5 kW

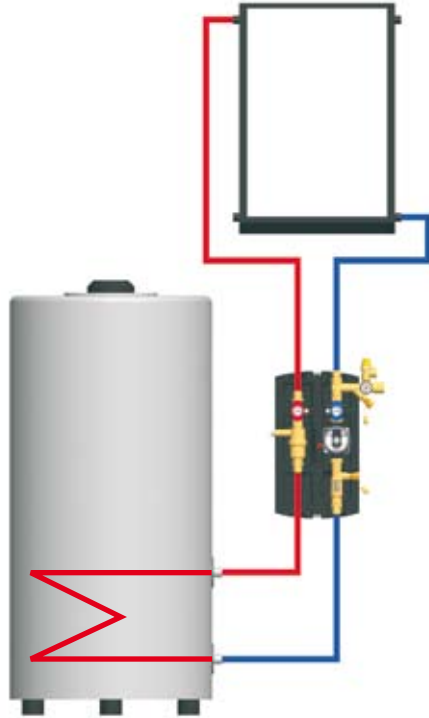
Item	SolexDWHX – ¾" / DN 20	Item no.
	primary: Wilo Star-S21 ; secondary: Wilo Star-S21 BU	6094603US
Equipment		
	Connection set DN 20 for expansion tank for the connection of an expansion tank with a maximum tank diameter of 440 mm and max. 35 kg to the transfer station SolexDWHX	
	Stainless steel corrugated hose, wall bracket with mounting equipment, tank coupling with brass valves, with BSP coupling	437509
	Stainless steel corrugated hose, wall bracket with mounting equipment, tank coupling with brass valves, with NPT coupling	437509NA



Solar systems with PAW pump modules

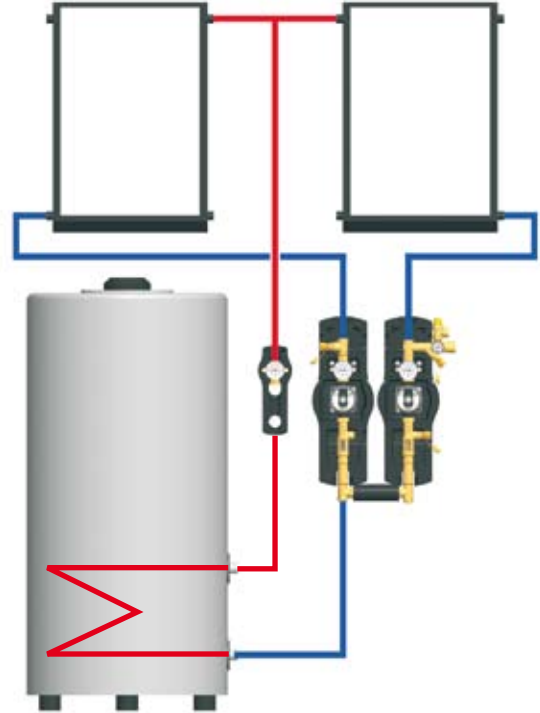
FlowCon , FlowCon C , FlowCon MAX

One solar panel field, single storage tank with integrated heat exchanger



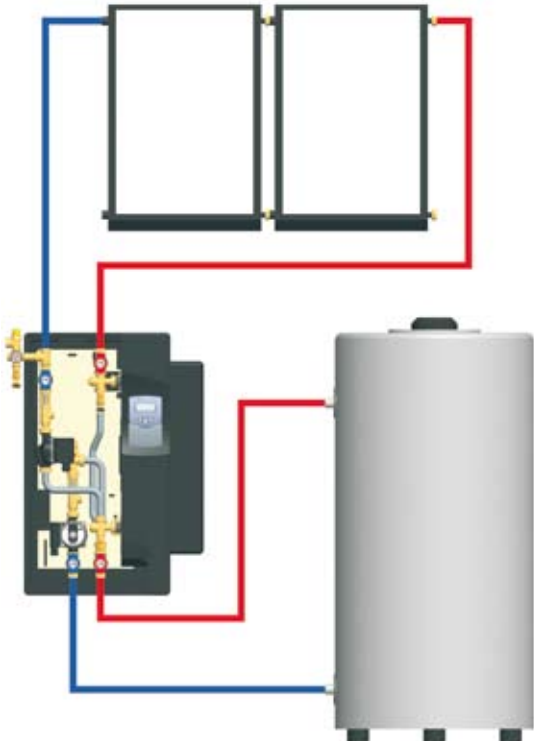
FlowCon D2F

Two independantly operated solar panel fields, one storage tank with integrated heat exchanger



Solex

One solar panel field, one buffer storage tank without heat exchanger



FlowCon S2F

One solar panel field, two independantly or parallely operated storage tanks with integrated heat exchanger

