

## Solar station FlowCon C with integrated controller

**USE in closed loop design only.** The circulation unit is used on the primary circuit of solar heating systems to control the temperature in the hot water storage. The pump inside the unit is activated by the signal from the differential temperature regulator. In addition, this unit contains the functional and safety devices for optimum circuit control.

### Your advantages:

All medium-bearing parts are made of brass.

All connections ¾" female.

With pre-assembled steel wall bracket.

Full port ball valve in return pipe.

Check valve inside the supply and return ball valve, manual opener, thanks to 45° position of the ball valve handle, 200mm WC each, special design for solar systems, avoid any gravity circulation.

Large ball valve handles easy grip and visible closing position.

**Air scoop in the supply line** for a permanent deaeration of the heat transfer medium.

**Function-optimized design insulation** made of durable elastic EPP; **100% insulation of the fittings** – excellent pump ventilation and cooling.

**Solar controller** integrated into the insulation, pre-wired and splash-proof.

**Solar safety assembly** pressure relief valve 6 bar / 87 psi, high-temperature pressure gauge 0-6 bar/0-90 psi, with shut off valve, drain valve for flushing and filling, flat sealing connection for expansion tank.

**Full metal solar temperature gauge, 0 - 160 °C / 32 - 320°F** can be pulled off, with immersion sleeve integrated in the ball valve.

**Fully assembled with flat sealing union connections.**

**With three speed solar circulation pump by Wilo** without wire.

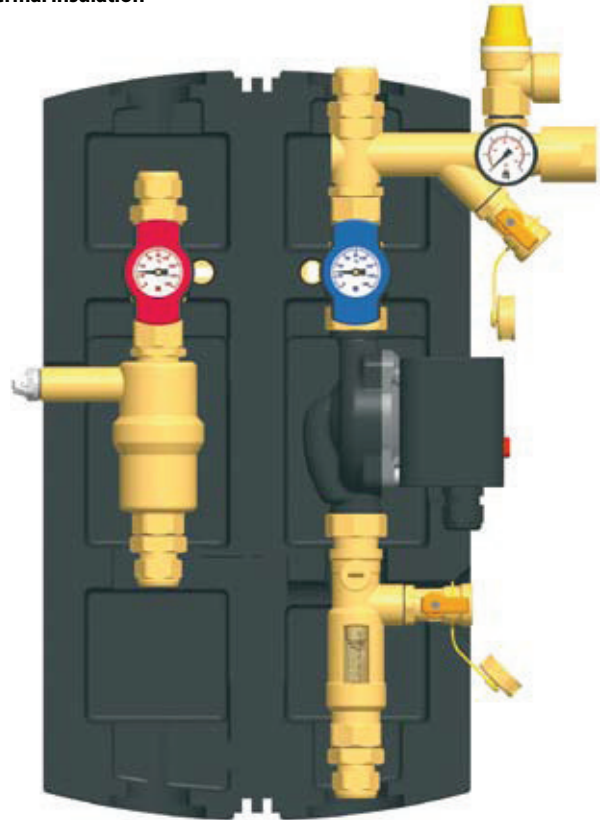
**Pump can be completely isolated**, no draining necessary during servicing.

**Flowmeter** Flow quantity measuring device with adjustable flow quantity gauge and function control device, installed in the (cold) return - up to 130 °C / 266 °F heat resistant – two measurement ranges: 0.5 – 5 l/min or 1 – 13 l/min or 0.5 – 3.5 USgpm.

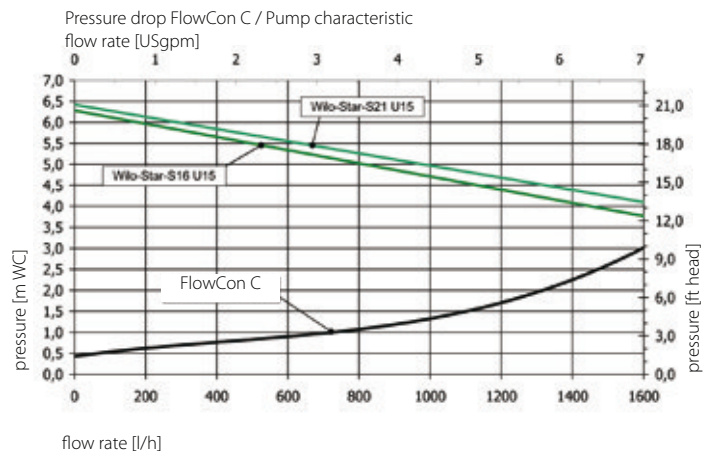
**Flushing and filling unit integrated** two drain valves (at the flowmeter and at the safety assembly) permit filling and flushing the system.

### The unit components enable:

- Medium circulation with specific pump
- Safety against pressure increase
- Accurate flow rate control
- Filling / draining the circuit
- Measuring the supply and return line temperature
- Separating the air contained in the circuit
- Shutting off the circuits and no return
- Thermal insulation

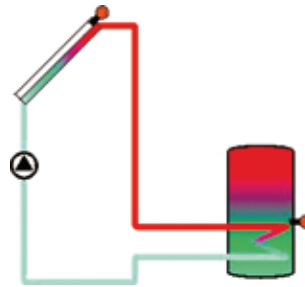


TECHNICAL DATA FlowCon C		
<b>Dimension</b>		<b>DN 20 - ¾"</b>
<b>Material</b>	fittings	brass
	gaskets	EPDM / NBR
	insulation	EPP
	check valves	brass
<b>Techn. data</b>	max. pressure	10 bar / 145 psi
	max. temperature	130 °C / 266 °F, temporarily 160 °C / 320 °F
<b>Equipment</b>	check valves	2 x 200 mm WC = <b>400 mm WC</b>
	flow meter range	0.5 - 5 l/min 1 - 13 l/min or 0.5 - 3.5 USgpm
	pressure relief valve	6 bar / 87 psi, fthermal solar syst.
	pressure gauge	0-6 bar / 0-90 psi, resistant to high temperatures
	thermometer	0-160 °C / 32-320 °F, full metal
<b>Dimensions</b>	connections	¾" female
	pipe-center distance	125 mm / 4 15/16"
	width of insulation	300 mm / 11 7/8"
	height of insulation	480 mm / 18 7/8"

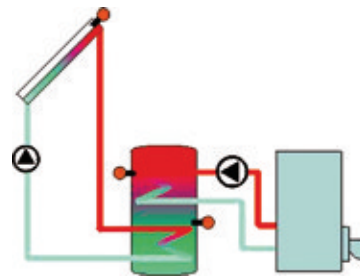


## Solar station FlowCon C with integrated controller

The **controller Type BS/3** is integrated in the insulation. It is designed for the application in basic systems. This controller has 2 standard relay outputs and 4 sensor inputs for Pt1000 temperature sensors. The illuminated display with system monitoring (with blinking symbols for a clear allocation of the indicated data) permits a simple and clear appliance and function control. The controller is equipped with a storage temperature limit, an operation hours' count, a thermostat function, a heat metering as well as (selectable) pipe collector functions. UL/CSA certified. Supplied with 3 Pt1000 sensors (Ø 6 mm, 1 with silicon wire) and 3 immersion sleeves (1 x 60 mm, 1 x 100 mm and 1 x 150 mm long).



Standard solar system  
1 collector / 1 storage



Standard solar system  
with auxiliary heating  
1 collector / 1 storage

Overview of the functions	Controller type 4
<b>Indication</b>	combined display as system monitor
<b>Appliance</b>	3 press buttons
<b>Relay outputs</b>	2 x standard
<b>Sensor inputs</b>	4, Pt1000
<b>Operation hours' count</b>	yes
<b>Heat quantity count</b>	yes
<b>System choice</b>	2 basic systems
<b>Thermostat function</b>	yes
<b>Emergency shut-down</b>	yes
<b>Recooling function</b>	yes
<b>Solar collector cooling function</b>	yes
<b>Frost protection</b>	yes
<b>Special function for solar pipe collectors</b>	yes

**Range of application / Solar collector surface** depending on the flowmeter and the operational mode (see explanations on page 39)

<b>flow types in the solar collector field:</b>	with flowmeter <b>0.5 - 5 l/min</b>	with flowmeter <b>1 - 13 l/min / 0.5-3.5 USgpm</b>
<b>Low-Flow</b> = 0.2 l / min. per m <sup>2</sup> collector surface	until <b>25 m<sup>2</sup></b> collector surface	until <b>65 m<sup>2</sup></b> collector surface
<b>High-Flow</b> = 0.5 l / min. per m <sup>2</sup> collector surface	until <b>10 m<sup>2</sup></b> collector surface	until <b>26 m<sup>2</sup></b> collector surface

**Please note:** In order to guarantee a trouble-free function it is necessary to carry out a hydraulic dimensioning / check of the solar system.

Illustration	Options	Pumps	Item #
	<b>FlowCon C metric</b> flowmeter 1-13 l/min, temperature gauges in °C	<b>Wilco Star S 16 U-15-130</b> , 1/2" copper connection	<b>609260NA01</b>
		<b>Wilco Star S 21 U-15-130</b> , 3/4" copper connection	<b>609260NA02</b>
	<b>FlowCon C imperial</b> flowmeter 0.5-3.5 USgpm, temperature gauges in °F	<b>Wilco Star S 16 U-15-130</b> , 1/2" copper connection	<b>609260US01</b>
		<b>Wilco Star S 21 U-15-130</b> , 3/4" copper connection	<b>609260US02</b>