

## Solar station FlowCon MAX FA

**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 1" male,**

flat-sealing, for the direct assembly of corrugated stainless steel pipes and solder fittings, prepared for assembly of ferrule compression fittings for copper pipe (with PAW ferrule compression fittings)

**Steel wall bracket for the easiest assembly**

simply attach the solar station

**Full port ball valves**

**Check valve inside the supply and return ball valve,**

manual opener, 2 x 200mm WC each, special design for solar systems, avoid any gravity circulation

**Large ball valve handles**

easy handling and visible closing position

**Full metal solar thermometers, 0-160 °C / 32 - 320 °F dual scale**

can be pulled off, with immersion sleeve integrated in the ball valve

**Air scoop in the supply line**

for a permanent deaeration of the heat transfer medium

**Function-optimised design insulation** made of durable elastic EPP;

**100% insulation of the fittings** – excellent pump ventilation and cooling

**Solar safety assembly**

pressure relief valve 6 bar / 87 psi, high-temperature pressure gauge 0-6 bar / 0-90 psi with valve, drain valve for flushing and filling, flat sealing connection for expansion tank

**Solar circulation 3-speed pump by Wilo**

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

**Flushing and filling unit integrated**

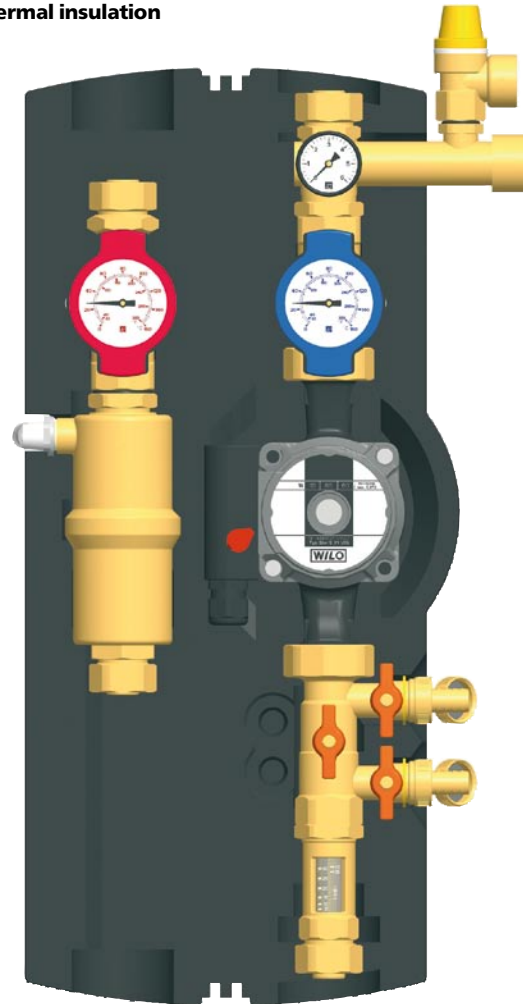
below the pump, for a clear and simple handling, permits filling and flushing the system.

**FlowCheck**

Flow quantity measuring device with function control, integrated in the (cold) return - up to 130 °C / 266 °F heat resistant – measurement range: 5 – 40 l/min. or 1 - 10 USgpm

The unit components enable:

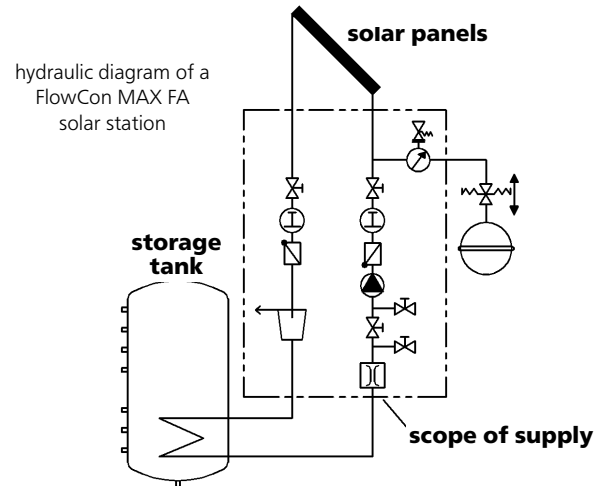
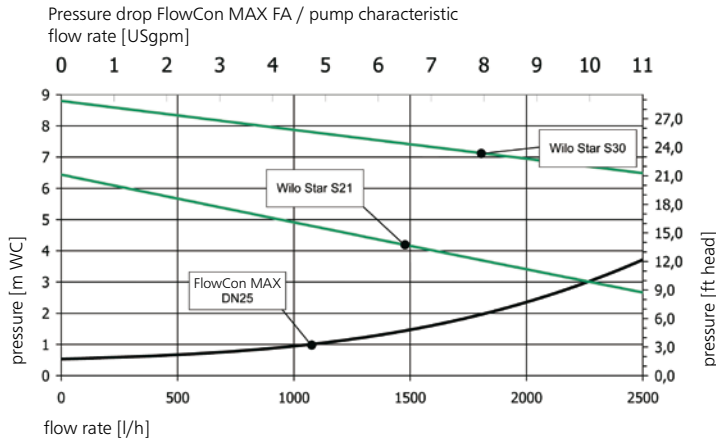
- Medium circulation with specific pump
- Safety against pressure increase
- Accurate flow rate control
- Filling / draining the circuit
- Measuring the supply and return line temperature
- Separating the air contained in the circuit
- Shutting off the circuits and no return
- Thermal insulation



### TECHNICAL DATA FlowCon MAX FA

Dimension	DN 25 - 3/4"	
<b>Material</b>	fittings	brass
	gaskets	Klingersil / EPDM
	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
	flow meter range	5-40 l/min or 1-10 USgpm
	pressure relief valve	6 bar / 87 psi, f.thermal 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	3/4" female
	pipe-center distance	125 mm / 4 24/32" "
	width of insulation	300 mm / 11 13/16" "
	height of insulation	480 mm / 18 29/32" "

## Solar station FlowCon MAX FA



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

**Flow types in the solar collector field:**

**Low-Flow** = 0.2 l / min. per m<sup>2</sup> collector surface

**High-Flow** = 0.5 l / min. per m<sup>2</sup> 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.




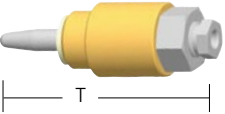
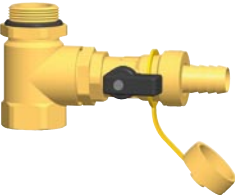
**type MAX FA**

until **150 m<sup>2</sup>** collector surface



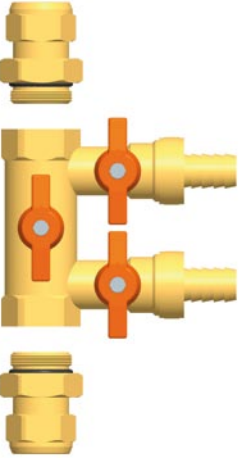


until **70 m<sup>2</sup>** collector surface

Illustration	Options	Pumps	Item #
	<b>Flushing and filling unit, air scoop, FlowCheck</b> 5 - 40 l/min	<b>Wilo Star S 21 U-25-180</b>	<b>607 042 WS21 NA</b>
		<b>Wilo Star S 30 U-25-180</b>	<b>607 042 WS30 US</b>
	<b>Set of ferrule compression fittings</b> only matching for FlowCon MAX, 2 pieces as set, made of brass, with support sleeves  <b>for copper pipe ø 22 mm, with 1"-nut</b>	<b>Wilo Star S 21 U-25-180</b>	<b>607 042 WS21 US</b>
		<b>Wilo Star S 30 U-25-180</b>	<b>607 042 WS30 US</b>
	<b>Connecting set 3/4" for expansion tank</b> for connecting the safety set 3/4", stainless steel corrugated hose 3/4" female – female x 500 mm, wall brackets with fixation material, <b>for max. Ø of tank = 400 mm</b>	<b>connection set with tank connecting coupling 3/4"</b>	<b>437 509</b>
		<b>as before, but tank connecting coupling with integrated cap valve 3/4"</b>	<b>437 510</b>

## Solar station FlowCon - assembly accessories

Illustration	Description	Item #
	<p><b>Connecting set 3/4" for expansion tank</b> On the solar station system "FlowCon" to connect the safety set 3/4"; for max. tank diameter of 440 mm.</p>	
	<p><b>Stainless steel corrugated hose</b> 3/4" female - female x 500 mm, Wall bracket with fastening material, solar tank connecting coupling 3/4"</p>	<p><b>437 509</b></p>
	<p>As before, but tank connecting coupling with integrated cap valve 3/4"</p>	<p><b>437 510</b></p>
	<p><b>Service unit for solar systems</b> With solar fluid fine filter (250 µ) As protection of the pump, the flow check valve(s) and the flow meter against dirt particles (e. g. solder residues and scales particles). For assembly inside the solar supply line, above the ball valve. Completely closable for servicing so that only a small amount of solar fluid has to be refilled. Connection to the solar station with self sealing screw connection 3/4", outlet 3/4" female.</p>	
	<p><b>Maintenance unit for solar systems</b></p>	<p><b>56701</b></p>
	<p><b>Connecting piece for sensor well</b> For thermowell with 1/2" male, up to 60 mm length 1" union nut with gasket, 3/4" female, bushing 1/2"</p> <p><b>Connecting piece for sensor well</b></p>	<p><b>5660</b></p>
	<p><b>Thermowells</b> For the assembly of the temperature sensors inside the storage, collector etc.</p>	
	<p>self-sealing with o-ring, brass blank, for sensor Ø 5.5 mm, depth = 30 mm</p>	<p><b>566 001</b></p>
	<p>standard, chromed brass, for sensor Ø 6 mm, depth = 60 mm</p>	<p><b>566 002</b></p>
	<p>standard, chromed brass, for sensor Ø 6 mm, depth = 100 mm</p>	<p><b>566 003</b></p>
<p>standard, chromed brass, for sensor Ø 6 mm, depth = 150 mm</p>	<p><b>566 004</b></p>	
	<p><b>Flush and drain kit</b> t-piece with counter nut, self-sealing with drain valve, for expanding the solar system with a flush and drain connection, assembly at the lowest point (drain unit).</p>	
	<p><b>1 piece DN 20 - 3/4"</b></p>	<p><b>31611NA</b></p>

## Solar station FlowCon - assembly accessories

Illustration	Description	Item #
	<p><b>Manually operated filling and injection pump</b>  <b>Male = 1/2", 15 mm hose connection</b>            Attainable pressure until approx. 4 bar, length: 175 mm</p>	
<p><b>Manually operated filling and injection pump</b></p>		<p><b>7061</b></p>
	<p><b>Manually operated filling and injection pump</b>  <b>Male = 1/2", 15 mm hose connection</b>  <b>Additional drain valve</b>            Attainable pressure until approx. 4 bar, length: 225 mm</p>	
<p><b>Manually operated filling and injection pump</b></p>		<p><b>7062</b></p>
	<p><b>Flush and fill kit DN 20</b>  <b>Consisting of:</b>            Brass ball valve 3/4" female, with red wing handle,            with 2 drain valves with hose clip 15 mm</p> <p><b>Additionally with:</b>            2 compression fittings with support sleeves, preassembled</p>	
<p><b>DN 15 for 1/2" mm copper pipe</b></p>		<p><b>565 151 NA</b></p>
<p><b>DN 22 for 3/4" mm copper pipe</b></p>		<p><b>565 221 NA</b></p>
	<p><b>Compression adaptors for copper pipe</b>  <b>For the connection of 3/4" solar stations – DN 20, self-sealing with o-ring, additionally with support sleeve, also appropriate for soft copper pipes!</b>  <b>Applicable until 150 °C!</b></p>	
<p><b>3/4" male x 15 mm</b></p>		<p><b>561 215</b></p>
<p><b>3/4" male x 22 mm</b></p>		<p><b>561 222</b></p>
	<p><b>Soldering inserts 3/4" male for copper pipe</b>            For the connection of solar stations 3/4" – DN 20</p>	
<p><b>3/4" to 15 mm: soldering inserts 3/4" x 1/2"</b></p>		<p><b>206 212</b></p>
<p><b>3/4" to 22 mm: soldering inserts 3/4" x 3/4"</b></p>		<p><b>206 234</b></p>