

Solar station FlowCon D2F

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. Module with two return lines, suitable for two solar panel fields. The pumps inside the unit are 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 3/4" 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, 3 x 200 mm WC each, special design for solar systems, avoid any gravity circulation. The check valves are integrated into the ball valves so that each line has a total pressure drop of 400 mm WC.

Ball valves are key-actuated
easy handling, no danger of burnings

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

Application

In a system with 2 independantly working solar panel fields, the pumps are connected in order to switch between the collector fields. This assembly allows a parallel operation of both collector fields.

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 thermometer, 0-160 °C / 32-320 °F dual scale

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

Fully assembled with flat sealing union connections

With solar circulation pump by Wilo

pre-assembled, without wire

Pump can be completely isolated, no draining necessary during servicing

2 flowmeters

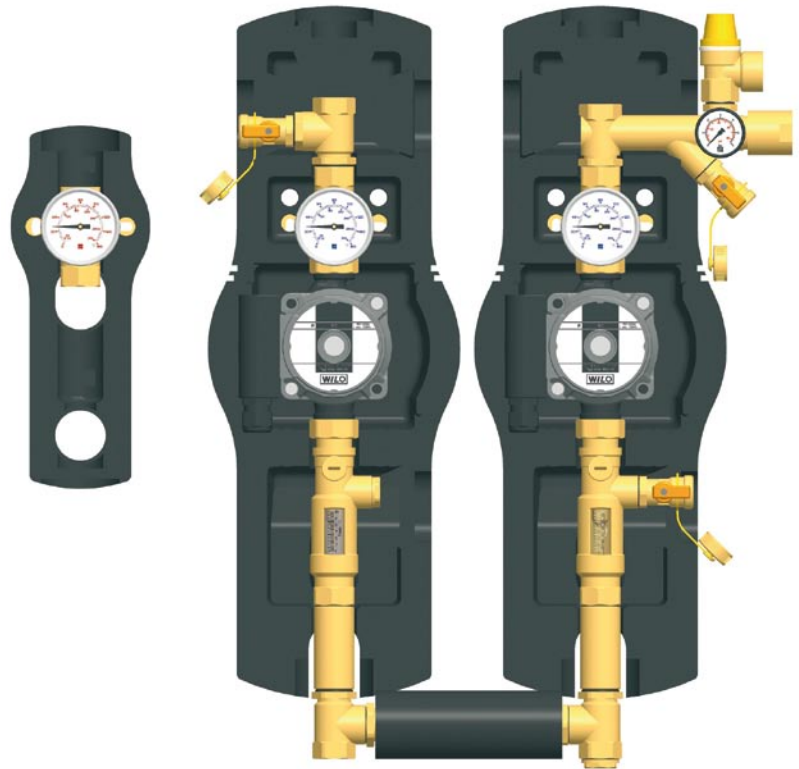
Flow quantity measuring devices with adjustable flow quantity gauge and function control device, installed in the (cold) return - up to 130 °C / 266 °F heat resistant measurement range: 1 – 13 l/min.

Flushing and filling unit integrated

three drain valves, two flushing valves, for each collector field, located above the pump, a drain valve inside the flowmeter permit filling and flushing the system.

The unit components enable:

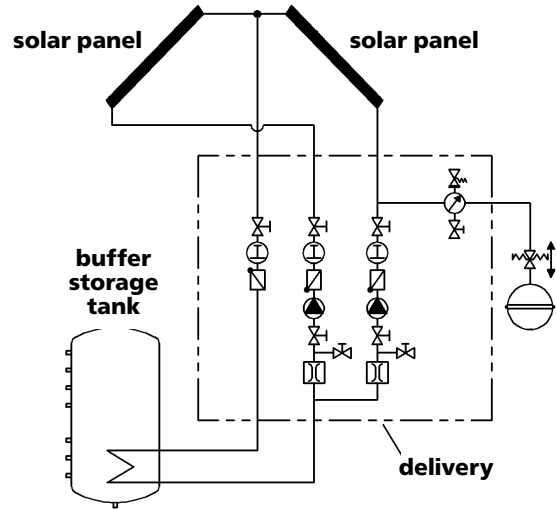
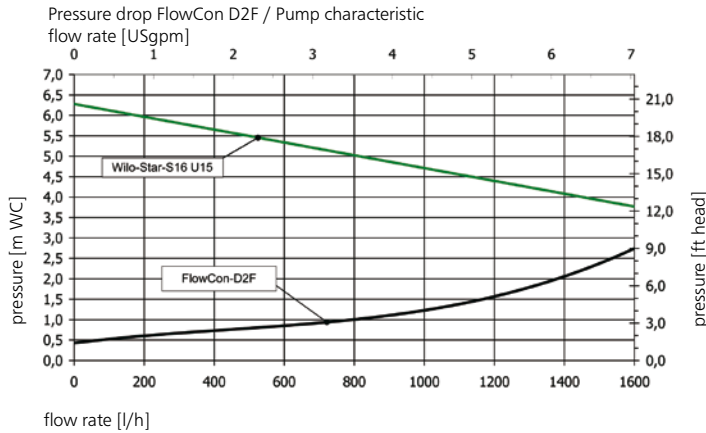
- Medium circulation with specific pump
- Safety against pressure increase
- Accurate flow rate control
- Filling / draining the circuit
- Measuring the supply and return line temperature
- Separating the air contained in the circuit
- Shutting off the circuits and no return
- Thermal insulation



TECHNICAL DATA FlowCon D2F

Dimension	DN 20 - 3/4"	
Material	fittings	brass
	gaskets	Klingersil / EPDM
	insulation	EPP
	check valves	brass
Techn. data	max. pressure	10 bar / 145 psi
	max. temperature	130 °C / 266 °F, temp. 160 °C / 320 °F
Equipment	check valves	2 x 200 mm WC = 400 mm WC per line
	flowmeter range	type D2F 1 - 13 l/min
	pressure relief valve	6 bar / 87 psi, for thermal solar systems
	pressure gauge	0 - 6 bar / 0-90 psi, resistant to high temperatures
	thermometer	0-160 °C / 32-320 °F, full metal
Dimensions	connections	3/4" female
	pipe-center distance	125 mm / 4 29/32"
	width of insulation	550 mm / 21 21/32"
	height of insulation	590 mm / 22 1/16"




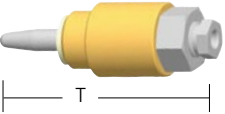
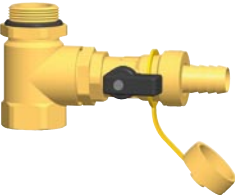
Solar station FlowCon D2F





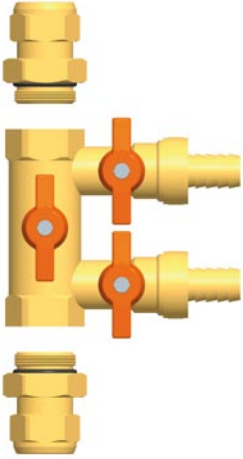


hydraulic diagram of a FlowCon D2F solar station

Illustration	Options	Pumps	Item #
	FlowCon D2F metric 2 roof-system, 2 flowmeters 1 - 13 l/min	2 x Wilo Star S 16 U-15 - 130	608175 NA 01
	FlowCon D2F imperial 2 roof-system, 2 flowmeters 0.5 - 3.5 USgpm	2 x Wilo Star S 16 U-15 - 130	608175 US01
	Accessories		Item #
	Connecting set 3/4" for expansion tank Stainless steel corrugated hose 3/4" female - female x 2", Wall bracket with fastening material, solar tank connecting coupling 3/4"		437 509
As before, but tank connecting coupling with integrated cap valve 3/4"			437 510
	Compression-ring couplings for copper pipe 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! Applicable until 150 °C!		
	3/4" male x 1/2" copper pipe		561 212
	3/4" male x 3/4" copper pipe		561 222
	Soldering inserts 3/4" male for copper pipe		
	3/4" to ø x 1/2" copper pipe		206 212
	3/4" to ø x 3/4" copper pipe		206 234
	Adaptor nipple		
	3/4" male x outlet 3/4" male - flat sealing		548 310 NA

Solar station FlowCon - assembly accessories

Illustration	Description	Item #
	<p>Connecting set 3/4" for expansion tank On the solar station system "FlowCon" to connect the safety set 3/4"; for max. tank diameter of 440 mm.</p>	
	<p>Stainless steel corrugated hose 3/4" female - female x 500 mm, Wall bracket with fastening material, solar tank connecting coupling 3/4"</p>	<p>437 509</p>
	<p>As before, but tank connecting coupling with integrated cap valve 3/4"</p>	<p>437 510</p>
	<p>Service unit for solar systems 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>Maintenance unit for solar systems</p>	<p>56701</p>	
	<p>Connecting piece for sensor well For thermowell with 1/2" male, up to 60 mm length 1" union nut with gasket, 3/4" female, bushing 1/2"</p>	
<p>Connecting piece for sensor well</p>	<p>56600</p>	
	<p>Thermowells 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>566 001</p>	
<p>standard, chromed brass, for sensor Ø 6 mm, depth = 60 mm</p>	<p>566 002</p>	
<p>standard, chromed brass, for sensor Ø 6 mm, depth = 100 mm</p>	<p>566 003</p>	
<p>standard, chromed brass, for sensor Ø 6 mm, depth = 150 mm</p>	<p>566 004</p>	
	<p>Flush and drain kit 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>1 piece DN 20 - 3/4"</p>	<p>31611NA</p>	

Solar station FlowCon - assembly accessories

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