

3 Technical information for the zeoTHERM zeolite gas-fired heat pump Solar pump unit, 2-line

Special features

- 3-stage circulation pump
- 2 ball cocks with 2 separately arranged non-return valves
- 2x1/2" combined filling and draining taps
- 2 thermometers
- 1 pressure gauge
- Flow-rate display with flow-rate limiter for 6l/min
- Expansion relief valve, 6 bar
- Corrugated hose for connecting the diaphragm expansion vessel, with wall bracket and screw connection

Potential applications

The Vaillant solar pump unit (order no.0020129141) is designed for volume flow rates of up to 6l/min. The entirely pre-assembled and pressure-tested unit simplifies and speeds up system installation and start-up.

Note:

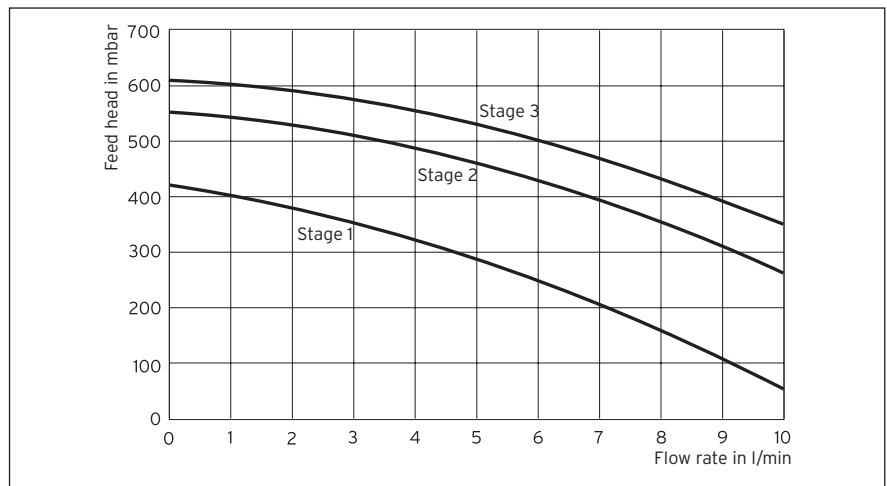
This diagram states the residual feed head for the entire solar pump unit. Here, the pressure losses of the flow rate limiter and the pipes have already been deducted from the pump characteristic curve.

Note:

In order to ensure there is no incorrect circulation in the solar circuit, install the supplied non-return valve (see Chapter 4 Planning, System hydraulics, item 30a).



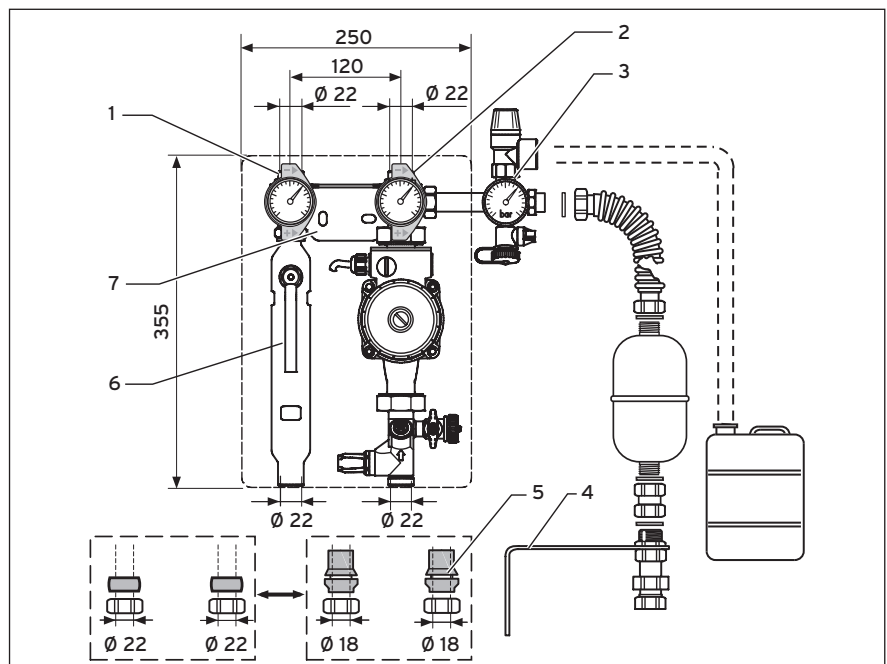
Solar pump unit



Pump diagram for 6l/min solar pump unit




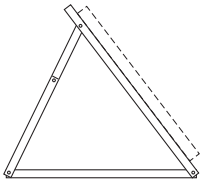
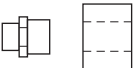
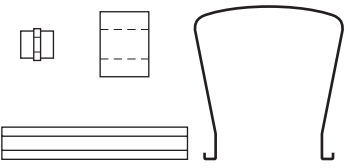

Key:

- 1 Supply pipe with stop cock, non-return valve and temperature indicator
- 2 Return pipe with non-return valve, flow-rate limiter with combined filling and draining tap, circulation pump and temperature indicator
- 3 Expansion relief valve with pressure gauge, filling cock and corrugated hose (DN 16) incl. wall bracket for solar expansion vessel
- 4 Wall bracket for expansion vessel with screw connection
- 5 Crimp connection, 18mm or 22mm
- 6 Air pot
- 7 Mounting rail

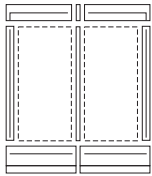
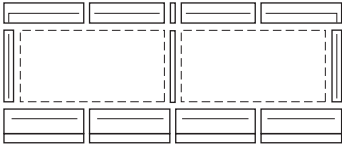

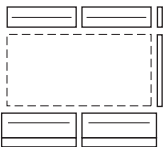
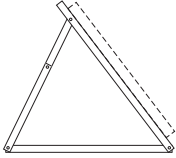

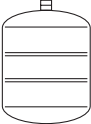


Dimensions and structure of the solar pump unit

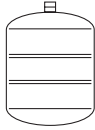

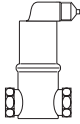
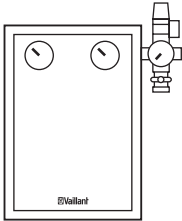


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Accessories	Description	Order no.
	Set of flexible connection hoses for VTK and VFK collector (2x, DN 16 x 1 m, G 3/4") thermally insulated, of stainless steel	302 444
	Set of rails for on-roof/flat-roof installation for auroTHERM exclusiv VTK 1140/2 Aluminium	0020076781
	Set of roof brackets, type P (Frankfurter) for auroTHERM plus /auroTHERM (collectors side-by-side), on-roof installation consisting of: 4 roof brackets incl. retainers, black anodised Note: Set of rails (on-roof installation) is essential	0020067273
	Open-air/flat-roof installation set for auroTHERM exclusiv consisting of: 1 frame for 30°, 45° and 60° inclination, pre-assembled incl. brackets, aluminium, rail joints. Note: 2 supports are required for the first collector and 1 support for each additional collector in an array. The support is supplied without attaching anchor bolts for the roof. For direct roof attachment, accessory part no. 0020146025 can also be ordered. Set of rails is essential	0020137776
	Loading plates for mounting frames for open-air/flat-roof installation (2x) Allows positioning without damaging the roof skin. Note: Information regarding ballast must be taken from the auroTHERM planning information or installation manual.	0020137768
	Anchor bolts for open-air/flat-roof mounting frame (2x) consisting of: 2x anchor bolts incl. M10 nuts Note: The set can be used for a support with 2 fastening points.	0020146025
	Connection set for VTK/2 (basic module) for on-roof/open-air installation consisting of: - 1 x connection nipple - 2x thermal insulation - 1 x instructions for collector array, order 1 x per row for flat-sealing assembly	0020143704
	VTK/2 connection set (extension module) for additional collector, side-by-side for on-roof installation and open-air positioning consisting of: - 1 x connection nipple - 1 x thermal insulation - 1 x header casing cover panel - 2x rail joints	0020076779
	Set of rails for on-roof installation (vertical collector) for VFK (2x) Aluminium, black anodised	0020059899
	Set of rails for on-roof installation (horizontal collector) for VFK (2x) Aluminium, black anodised	0020059898

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Accessories	Description	Order no.
	<p>Basic module, in-roof flashing (vertical collector, side-by-side) For 2 VFK flat collectors Colour: anthracite</p> <p>Note: No connection sets</p>	0020055196
	<p>Basic module, in-roof flashing (horizontal collector, side-by-side) For 2 VFK 150 flat collectors</p> <p>Note: No connection sets</p>	0020055197
	<p>Expansion module, in-roof flashing (vertical collector, side-by-side) From the 3rd VFK collector</p> <p>Note: No hydraulic basic and expansion set</p>	0020055198
	<p>Expansion module, in-roof flashing (horizontal collector, side-by-side) From the 3rd auroTHERM VFK collector</p> <p>Note: No hydraulic basic and expansion set</p>	0020055199
	<p>Open-air/flat-roof installation set (vertical collector) for VFK consisting of: 1 frame for 30°, 45° and 60° inclination, pre-assembled incl. brackets, aluminium, rail joints</p> <p>Note: 2 supports are required for the first collector and 1 support for each additional collector in an array. The support is supplied without attaching anchor bolts for the roof. For direct roof attachment, accessory part no. 0020146025 can also be ordered. Set of rails is essential</p>	0020137774
	<p>Open-air/flat-roof installation set (horizontal collector) for VFK consisting of: 1 frame for 30°, 45° and 60° inclination, pre-assembled incl. brackets, aluminium, rail joints</p> <p>Note: 2 supports are required for the first collector and 1 support for each additional collector in an array. The support is supplied without attaching anchor bolts for the roof. For direct roof attachment, accessory part no. 0020146025 can also be ordered. Set of rails is essential</p>	0020137775
	<p>Set of rails for flat-roof installation (vertical collector) for VFK (2x) Aluminium</p>	0020092558
	<p>Set of rails for flat-roof installation (horizontal collector) for VFK (2x) Aluminium</p>	0020092559
	<p>Solar expansion vessel plus (35 l) incl. in-line vessel for auroTHERM VTK Solar expansion vessel combined with in-line vessel for solar plants up to 10 bar. 3-chamber vessel up to 100 °C. Solar expansion vessel capacity: 35 l In-line vessel capacity: 12 l</p>	0020065939

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Accessories	Description	Order no.
	<p>Solar expansion vessel plus (25 litres) incl. in-line vessel for auroTHERM VFK Solar expansion vessel combined with in-line vessel for solar plants up to 10 bar, 3-chamber vessel up to 100 °C. 25 l capacity solar expansion vessel 10 l capacity in-line vessel</p>	0020059914
	<p>Solar fluid, ready mixed, 20 l can High-performance solar fluid (ready mixed) with frost protection for temperatures down to -35 °C. Container can be re-used as a collecting container below the expansion relief valve, contents 20 l.</p> <p>Note: Mixing of solar fluids from different manufacturers is not permitted. Only use Vaillant solar fluid.</p>	302 498
	<p>Automatic air separator system DN 16, max. operating pressure 10 bar</p>	302 418
	<p>Solar pump unit (solar pipe group) - 6 l/min</p> <ul style="list-style-type: none"> - 3-stage circulation pump - 2 ball cocks with integral non-return valve - 2 combined filling and draining taps, 1/2" - 2 thermometers - 1 pressure gauge - 1 non-return valve - 1 air pot - Flow rate display with flow rate limiter - Expansion relief valve, 6 bar - Corrugated hose for connecting the diaphragm expansion vessel, with wall bracket and screw connection 	0020129141
	<p>VR 10 standard sensor</p> <p>VR 11 collector sensor as accessories for auroMATIC for connection of a second collector array or solid fuel boiler</p>	306 787 306 788
	<p>External non-return valve, solar pump unit</p>	0020093134