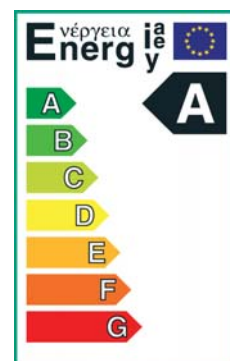


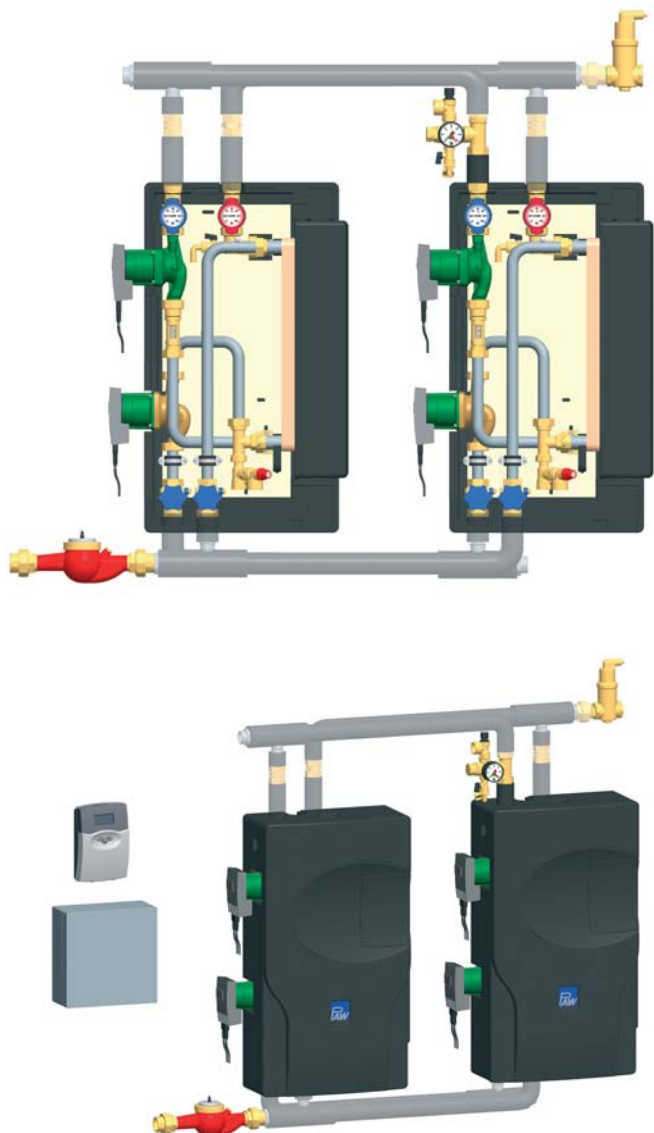
SolexMax-Kaskade

Innovative system technology for modern heating and solar thermal systems



- for direct charging of buffer storage tanks (HZ)
- for direct charging of domestic hot water storage tanks (TW)

New SolexMax-Kaskade for heating or domestic hot water circuits



The completely premounted solar transfer station for **high-flow or low-flow systems**, valves and fittings completely insulated, with generously dimensioned stainless steel plate heat exchanger, with prewired control unit and preset controller, assures a simple and quick installation as well as a safe commissioning.

Connections 1" internal thread, secondary side 1" internal thread (HZ) / 1 1/4" external thread (TW)

All fluid-carrying parts made of brass or stainless steel, fully assembled - self-sealing or flat gaskets

Premounted on steel wall bracket, can be easily mounted to the wall

Full port ball valves

Check valve in the return ball valves, 200 mm wc, can be opened, especially for solar systems, prevents any gravity circulation

Solar circuit with large ball valves

ball valves key-actuated, easy handling, no risk of scalding, in solar circuit with integrated **full metal thermometer** 0-160 °C, can be pulled off, with immersion sleeve integrated in the ball valve

Microbubble resorber in the primary circuit, for permanent deaeration of the solar fluid, adapted to the size of the cascade

With high-efficiency circulation pumps by Wilo, adapted to the performance of the transfer station, **pumps can be isolated completely**, no draining during servicing, speed control via an analog signal (0-10 V)

Secondary side with flowmeter for electronic flow rate and heat quantity measurement; **primary side with FlowCheck**, flowmeter and control unit, measuring range: 5-40 l/min

Flush and fill unit integrated

two fill and drain valves (on the safety group and on the elbow gland of the heat exchanger) permit filling and flushing of the primary circuit as well as only the heat exchangers, **secondary circuit with deaerator** at the highest point of the heat exchanger

Basic conditions: global radiation = 800 W/m²; efficiency $\eta_{0.05} = 0.625$

| SolexMax-Kaskade HZH for high-flow systems [25 - 40 l / (m ² collector x h)] | | | | |
|--|--|-------------|--|-------------|
| Type | Collector surface with 25 l/m ² h | Performance | Collector surface with 40 l/m ² h | Performance |
| double | 145 m² | 73 kW | 90 m² | 45 kW |
| triple | 215 m² | 108 kW | 135 m² | 68 kW |
| quadruple | 290 m² | 145 kW | 180 m² | 90 kW |
| SolexMax-Kaskade HZL - for low-flow systems [15 - 20 l / (m ² collectors x h)] | | | | |
| Type | Collector surface with 15 l/m ² h | Performance | Collector surface with 20 l/m ² h | Performance |
| double | 215 m² | 108 kW | 160 m² | 80 kW |
| triple | 320 m² | 160 kW | 240 m² | 120 kW |
| quadruple | 430 m² | 215 kW | 320 m² | 160 kW |



Solar safety group

Solar pressure relief valve 6 bars, adapted to the size of the cascade, pressure gauge resistant to high temperatures 0-6 bars with valve, flat sealing connection for expansion tank, **secondary side with 6 bars pressure relief valve**

Compact design insulation with optimised function

made of durable elastic EPP, **100 % insulated valves and fittings** - excellent ventilation and cooling of the pumps, minimal heat losses

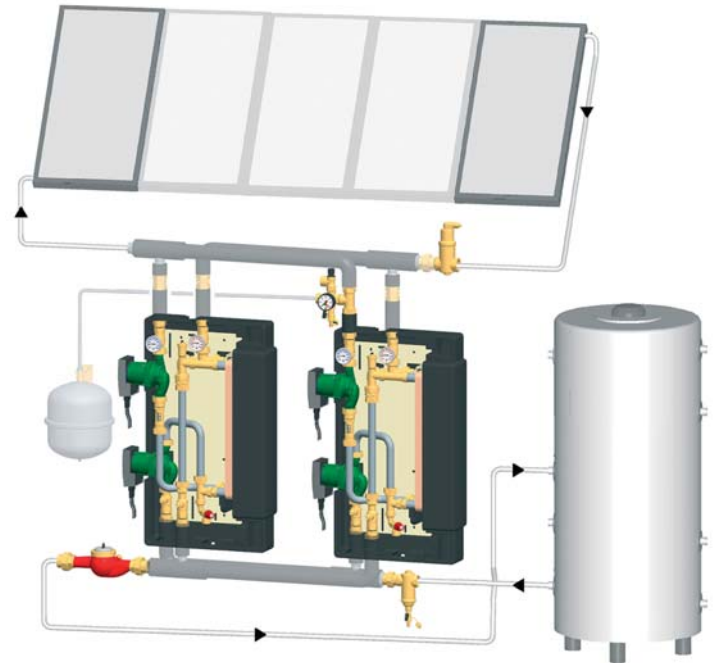
Mud strainer in the secondary circuit, to protect the heat exchanger from accumulation of mud from the buffer tank circuit, adapted to the size of the cascade










High-efficiency stainless steel plate heat exchangers

two types, designed for high-flow operation (1P with 50 plates) or for low-flow operation (1H with 40 plates), generously dimensioned, for transmitting high performances with low temperature differences, completely integrated into the insulation

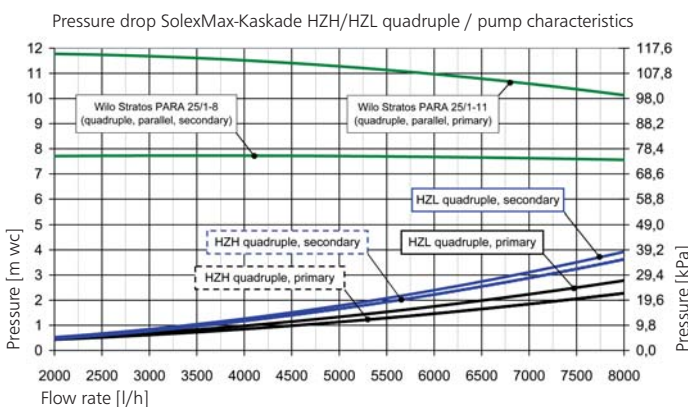
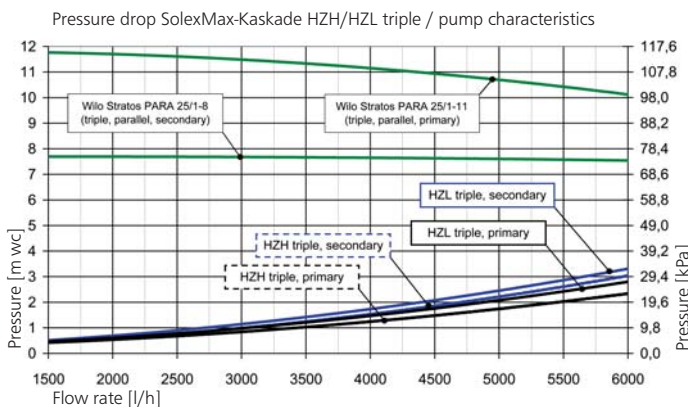
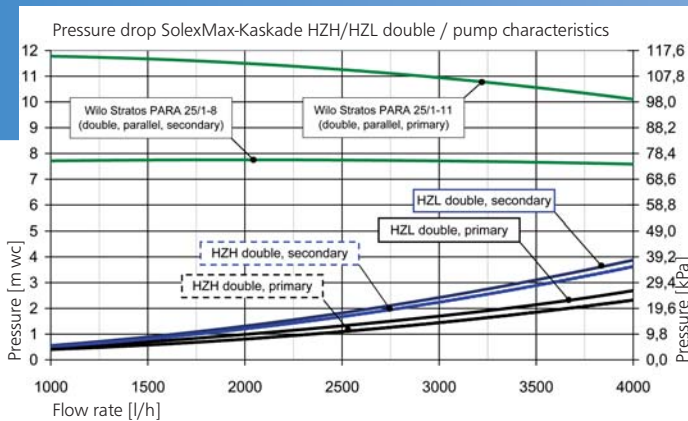
Solar controller for the cascade system

preset and prewired, assures quick assembly. The preset control system makes commissioning simple and clean. The module logic controls each module individually. Fault messages are displayed for each module and can be processed as general fault message. The speed control of the primary and secondary pump depends on temperature and ensures the optimum use of the energy gained, a heat quantity measuring device is also integrated. The solar controller can be used in systems with one collector field and up to 3 storage tanks.



| Type: heating | Pumps | corresponding to  | Number of modules | Item no. |
|-----------------------------|--|--|-------------------|-------------------|
| SolexMax-Kaskade HZH | Heat exchanger 1P - 50 plates primary: Wilo Stratos 25/1-11 secondary: Wilo Stratos 25/1-8 |   | double | 609 284 H2 |
| | | | triple | 609 284 H3 |
| | | | quadruple | 609 284 H4 |
| SolexMax-Kaskade HZL | Heat exchanger 1H - 40 plates primary: Wilo Stratos 25/1-11 secondary: Wilo Stratos 25/1-8 |   | double | 609 284 L2 |
| | | | triple | 609 284 L3 |
| | | | quadruple | 609 284 L4 |
| Type: domestic hot water | Pumps | | Number of modules | Item no. |
| SolexMax-Kaskade TWH | Heat exchanger 1P - 50 plates primary: Wilo Stratos 25/1-11 secondary: Wilo Stratos 25/1-8 with bronze housing |   | double | 609 484 H2 |
| | | | triple | 609 484 H3 |
| | | | quadruple | 609 484 H4 |
| SolexMax-Kaskade TWL | Heat exchanger 1H - 40 plates primary: Wilo Stratos 25/1-11 secondary: Wilo Stratos 25/1-8 with bronze housing |   | double | 609 484 L2 |
| | | | triple | 609 484 L3 |
| | | | quadruple | 609 484 L4 |

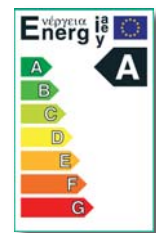
| TECNICAL DATA SolexMax-Kaskade - for each module | | | |
|--|-----------------------------|--|---|
| | Heating HZH/HZL | | Domestic hot water TWH/TWL |
| Dimension | DN 25 - 1" | | DN 25 - 1" |
| Materials | Valves and fittings | Brass | Brass |
| | Gaskets | Klingersil/EPDM | Klingersil/EPDM |
| | Insulation | EPP | EPP |
| | Check valve | Brass | Brass |
| Technical data | Maximum pressure | PN 10 | PN 10 |
| | Maximum temperature | 120 °C, short-term 160 °C | 120 °C, short-term 160 °C |
| Equipment | Microbubble resorber | yes | yes |
| | Mud strainer | yes | - |
| | Check valves | 1 x 200 mm wc primary 1 x 200 mm wc secondary | 1 x 200 mm wc primary |
| | FlowCheck | 5-40 l/min | 5-40 l/min |
| | Pressure relief valve | 6 bars, solar 3 bars, heating | 6 bars, solar 6 bars, domestic water |
| | Pressure gauge | 0-6 bars | 0-6 bars |
| | Thermometers | 0-160 °C in the solar circuit | 0-160 °C in the solar circuit |
| Dimensions | Connections, primary | 1" internal thread | 1" internal thread |
| | Connections, secondary | 1" internal thread | 1 ¼" external thread |
| | Width of each module about | 620 mm | 620 mm |
| | Height of each module about | 820 mm | 820 mm |



New: the energy label

Leading manufacturers of heating pumps obliged themselves to a voluntary labelling of the energy consumption.

The energy label shows the energy consumption and thus facilitates the comparison between different pumps. The pumps are divided in energy efficiency grades from A to G, the grade **A** standing for a very low and the grade **G** standing for a very high energy consumption. You will find the energy label in the table with the order data. It helps you to find the most efficient pump!



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