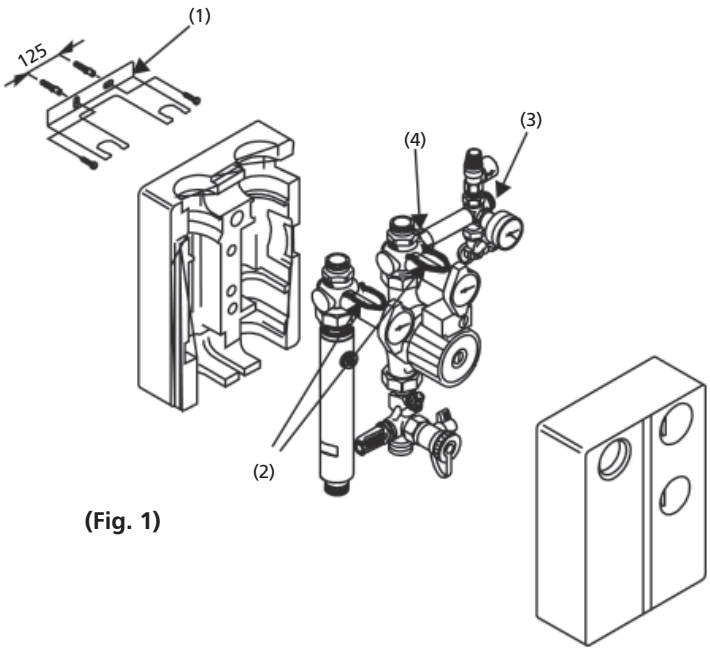
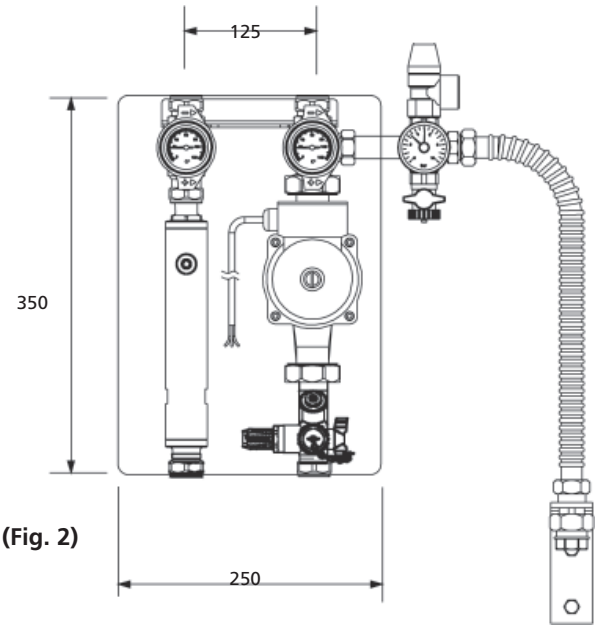
Installation instructions

Roth Solarstation RS 25/6-3 und RS 25/7-3

Wall mounting



(Fig. 1)



(Fig. 2)

Montage (Fig. 1)

- Fasten the wall bracket (1) with a center spacing of 125 mm using plugs and screws that are suitable for the surface in question.

- Push the FlowBox Solar module from the front into the slots provided on the wall bracket. Then secure the module in place by attaching the supplied clamping rings (2) beneath the retainer plate.

- After mounting, if must not be possible to easily Pull the module towards you and off the bracket. Removal is described below. **Ensure the correct mounting orientation of the flow Fitting!**

- Connect the safety assembly (3) (supplied separately with the module) to the outlet of the return flow fitting (4) above the pump using the G 3/4" union nut.The package accompanying the module contains a suitable Gasket.
- Mount the wall bracket for the expansion tank at the side of the module. Ensure that the corrugated hose is long enough for connection of the the expansion cloupling and the 3/4" male thread of the safety assembly!

- Connect the system up to the solar energy circuit.

- After the system has been filled and a complete seal-tightness check performed, attach the front section of the heat insulation.

- Removing the module from the wall bracket: use a screwdriver of similar tool to pull the clamping rings off towards you. **N.B.: the FlowBox Solar module is now loose! Make sure that it does**

Torque for connctions with flat seals

Torque values when tightening the screw connections using Reinz AFM 34 gaskets, thickness 2 mm:

3/4" Screw connection 35 Nm
1" Screw connection 55 Nm
11/4" Screw connection 90 Nm
11/2" Screw connection130 Nm

As the gasket may settle over time, it may be necessary for the customer to re-tighten the screw connections.

Mounting the clamping ring screw connections

- Cut off the copper pipe at a right angle using a pipe cutter and debur the edges of the pipe.

- First push the clamping ring nut over the pipe, then the clamping ring.
- Insert the pipe with clamping ring nut and clamping ring into the screw connection an push up to the stop.
- Tighten the clamping ring nut by hand.
- If necessary, tighten the clamping ring screw connetion further using a Sw30 fork/open-end spanner (approx. 45 Nm).

Connection safety valve

- A blower line leading to a collection container (e. g. empty canister of the solar heating medium) must be fitted to the safety valve. This permits collection and reuse of any heating medium which escapes in the event of malfunction.

Heat insulation cladding

- The heat insulation cladding is for thermal insulation an protection during transport.

Connection plug for filling and draining

- Both the safety assembly and the Flow Indicator are fitted with a fill-and-drain valve for filling and daining the system.

Safety assembly

- Consisting of safety valve, pressure gauge, fill-and-drain valve, and an expansion tank connection. In order to reduce the thermal load, the safety assembly is installed in the return flow line.

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Flow volume adjustment (Fig. 2)

- The flow volume is set on the regulating valve using an SW 4 Allen key.

- The set volume can be directly read on the scale.

- The valve stroke is spread over several spindle revolutions, thereby permitting a high level of setting precision.
- The setting values are based on the calculations for the system.

Standard adjustment

- For installations with up to 8 flat collectors, set a volum flow of approx. 0,5 - 0,7 l/min m² (US: 0,13 - 0,18 gpm/ m²).

System Pressure

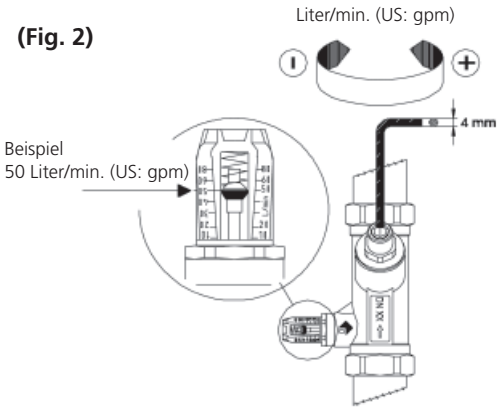
- with a static height of less than 15m, the system pressure should be 2 bar. (The opening pressure of the saftey valve of the Roth solar station is 6 bar

Gravity flow stops (Fig. 3)

- The gravity flow stop in the collector flow line must be open for filling, venting and rinsing of the system. It is open when the ball valve in question is in the 45 ° position. The ball of the ball presses the gravity flow stop open.

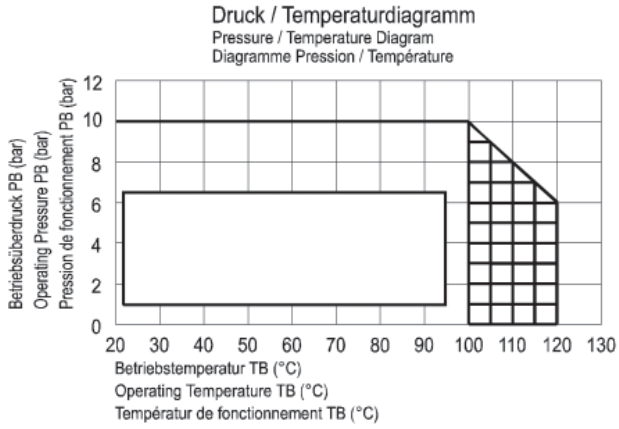
- The ball valves must be fully open for opertion of the system.

(Fig. 2)



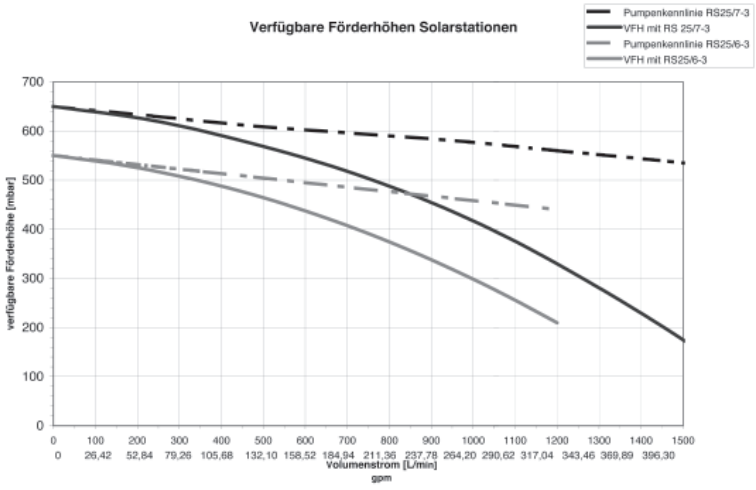
(Fig. 3)

0° = ready for operation | 45° = open | 90° = closed



Attention

Pressure and temperature should be kept within the limits shown in the adjacent diagram. Avoid temperatures higher than 100 °C during continuous operation!



Technical data

Fittings:	hot-pressed brass Ms58
Pipe systems:	precision pipes
Flowmeter:	high-grade impact-proof and temperature-resistant plastic
Spring-flowmeter:	stainless steel
Heat insulation cladding:	EPP

Materials

Max. adm. operating temperature:	see Pressure/Temperature Diagramm
Min. adm. operating temperature:	20 °C
Max. adm. operating pressure:	see Pressure/Temperature Diagramm
Indicating accuracy **Flow indicator**:	±10 % of the meter reading

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