

Solar pump assemblies PrimoSol®



- 1 Solar pump assembly PrimoSol 130-4
- 2 Collector tank for solar liquid
- 3 Air separator combination Solar LKS

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Efficient solar thermal systems are taking centre stage in heating system design as a result of rising energy costs, new legislation and, most important, increasing environmental awareness. Advanced solar thermal systems can be easily integrated into the heating system concepts for new buildings and for the conversion of existing systems.

AFRISO offers a comprehensive range of components for solar thermal systems for maximum reliability - all from a single supplier. The innovative solar pump assemblies PrimoSol® are made to meet the requirements of the solar systems available on the market.

The pre-assembled, tightness-tested and heat-insulated assemblies are extremely easy and fast to install. The offer is complemented by a comprehensive range of accessories.

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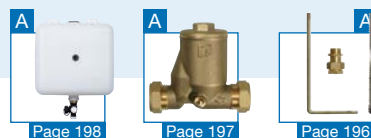
We provide a great variety of custom-specific solar pump assemblies for OEMs. Please enquire.

Solar pump assembly

PrimoSol® 130



- Pre-assembled, tightness-tested and heat-insulated assembly
- Available with flow meter with ball valve, integrated filling and flushing unit and vent pot for degassing the heat transfer fluid in the flow line



Application Solar pump assembly/line for connection of collector and storage tank in intrinsically safe, sealed solar thermal systems. PrimoSol® 130 circulates heat transfer fluids such as water/glycol mixtures in the system.

Description Complete, pre-assembled and tightness-tested solar pump assembly/line with all required safety and functional components, including form-fit insulation.

Depending on the version, the pump line (return/cold) consists of:

- Circulation pump
- Flow meter with ball valve for shut-off, pump side with flange and union nut G1½. Measuring range: 2–12 l/min. With integrated filling and flushing unit, system connection: G¾ male thread.
- Combination valve with system connection G¾ male thread, pump side with flange and union nut G1½. With adjustable gravity brake and thermometer in the hand wheel (blue mark, range 0/120 °C)
- Safety group assembly with connection for expansion vessel. With solar safety valve 6 bar, outlet Rp¾ female thread, pressure gauge Ø 63 mm, 0/10 bar, mounting valve.

The flow line consists of (130-4 only):

- Combination valve with adjustable gravity brake and thermometer in the handle (red mark, range 0/120 °C) with system connection G¾
- Vent pot to remove the gas from the heat transfer fluid with system connection G¾. Transparent hose 200 mm as venting aid.

The insulation is also used to package the product for safe transport.

The safety valve of the safety group assembly complies with Pressure Equipment Directive 2014/68/EC.

Technical specifications

Axis distance

100 mm

System connections

G¾ male thread

Operating temperature range

Ambient: $T_{max} = 40\text{ °C}$
 Medium: $T_{max} = 120\text{ °C}$,
 short-term $T_{max} = 160\text{ °C}$

System pressure

Max. 6 bar

Flow meter

2–12 l/min

Insulation

Polypropylene EPP

Circulation pump

Grundfos UPM 3 Solar 25–75
 Length: 130 mm
 Degree of protection IP 42

Supply voltage

AC 230 V, 50 Hz

Power input/pumping head

19 W/4.5 m
 28 W/5.5 m
 35 W/6.5 m
 45 W/7.5 m

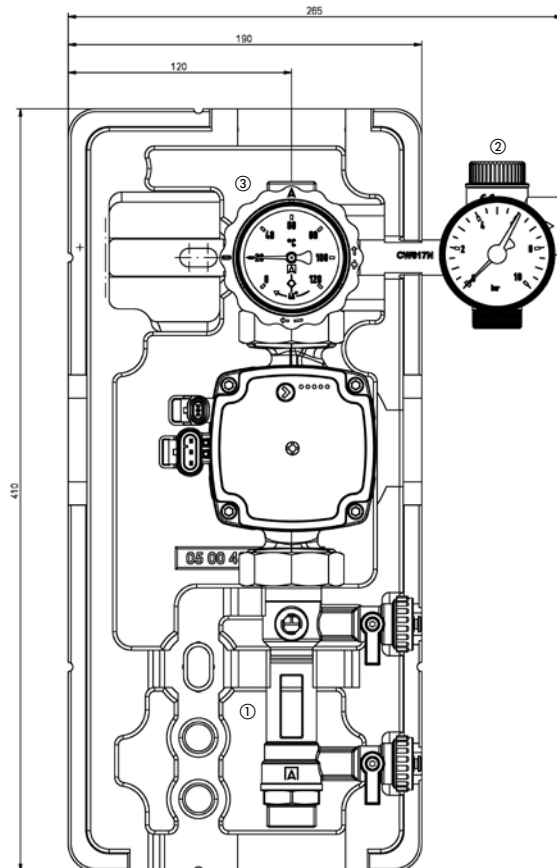
DG: G, PG: 2	Part no.	Price €
PrimoSol® 130-1, 2-12 l/min	77886	
PrimoSol® 130-4, 2-12 l/min	77889	
PrimoSol® 130-4, 8-38 l/min	77018	

Solar pump assembly PrimoSol® 130



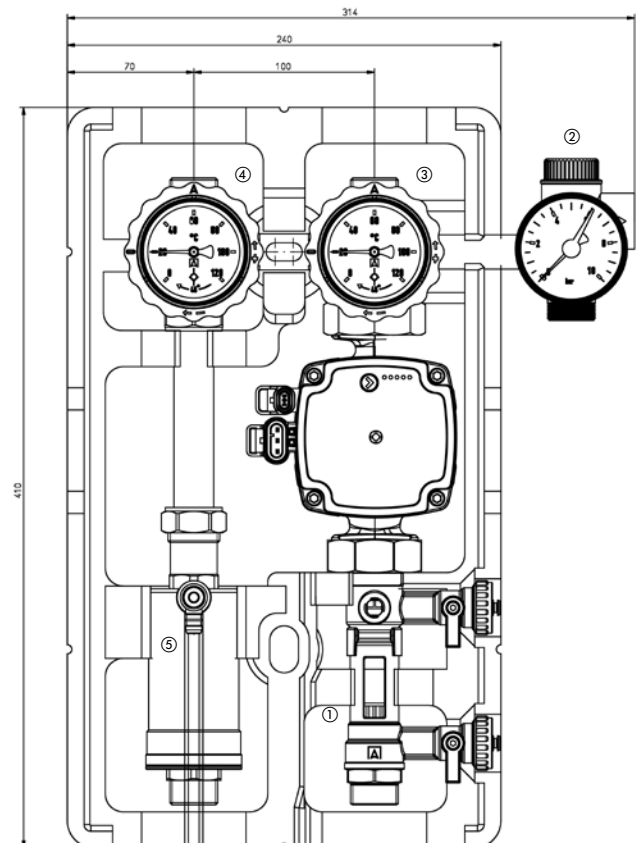
Dimensions (mm)

Solar pump line PrimoSol® 130-1



- ① Flow meter with ball valve as well as filling and flushing unit
- ② Safety group assembly
- ③ Combination valve with thermometer (return/cold)

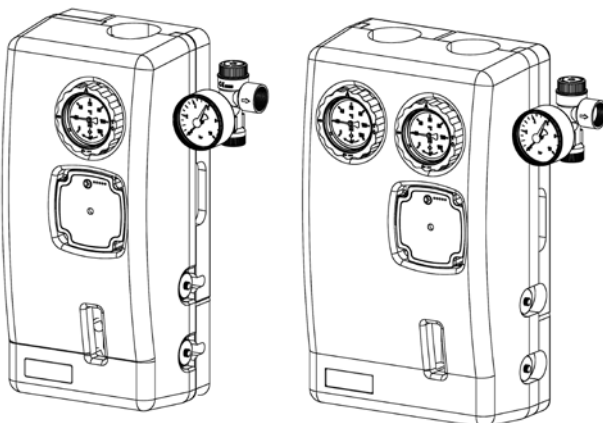
Solar pump assembly PrimoSol® 130-4



- ① Flow meter with ball valve as well as filling and flushing unit
- ② Safety group assembly
- ③ Combination valve with thermometer (return/cold)
- ④ Combination valve with thermometer (flow)
- ⑤ Vent pot for fast and easy venting, especially during filling of the system

Insulation 130-1 and 130-4

The insulation is also used to package the product for safe transport.



Scope of delivery

PrimoSol® completely pre-assembled with circulation pump and mounting accessories.

