

Vacuum collectors, HEAT PIPE

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HP22	194 100 036
HP30	194 100 048

HP solar panels are manufactured with HEAT PIPE technology which guarantees high reliability, even during long periods of plant stagnation and during high irradiation. The use of HP collectors provides a high level of heating support, because in summer there is no risk of overheating, as it is the case with traditional collectors.

Innovative collector frame construction

- High quality 2 mm thick tubes made of borosilicate glass with low silicon and iron oxide.
- The collection pipes are protected with mineral wool in a black aluminum casing for maximum protection from the weather.
- The collector is delivered in parts for self-assembly on the roof or construction site, which minimizes transport costs and makes the assembly faster and easier.
- High efficiency due to the cathodic sputtering process on the glass of the highly selective copper layer.
- The HEAT PIPE technology allows for quick glass pipe replacement without draining the system.
- The vacuum insulation material provides maximum protection against heat loss.
- The stainless steel support structure ensures maximum service life.
- The copper tubes ensure maximum energy yield.

Technical specifications

HP 22

HP 30

Number of vacuum pipes:	22	30
Vacuum pipe diameter	58 mm	58 mm
Wall thickness:	2 mm	2 mm
Total surface area	3,61 m ²	4,89 m ²
Aperture area:	2,60 m ²	3,57m ²
Height / width / depth:	199 / 192 / 18,2 cm	199 / 245,5 / 18,2 cm
Connection diameter:	22 mm	22 mm
Optical absorber efficiency:	55 %	60 %
Absorber a1 losses:	1,83 W/m ² K	1,84 W/m ² K
Absorber a2 losses:	0,003 W/m ² K ²	0,001 W/m ² K ²
Absorption coefficient:	> 0,93	> 0,93
Emission factor	< 0,08	< 0,08
Weight	82 kg	105,4 kg
Admissible collector angle	15 - 50°	15 - 50°
Stagnation temperature	220°C	220°C

Pressure loss diagram

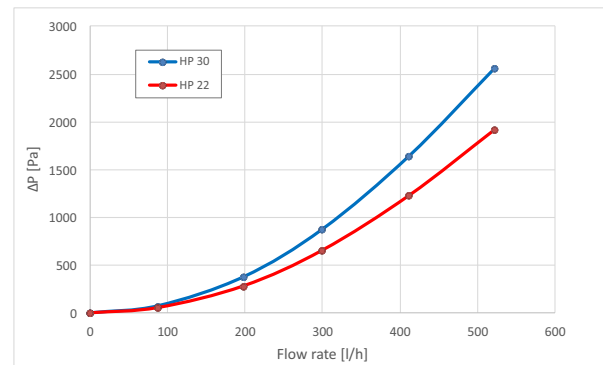
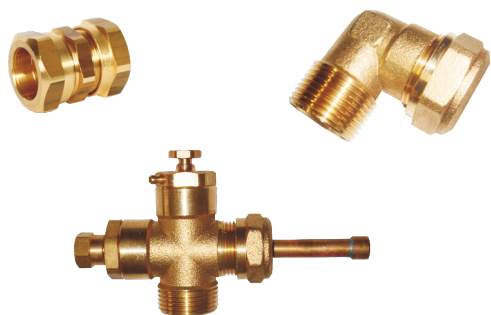


Diagram for water



Connection sets

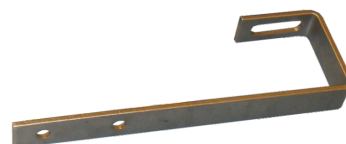
for HP collectors:

- Elbow coupling $\varnothing 22 \times \frac{3}{4}$ "
- Coupling with immersion sleeve and manual air vent $\varnothing 22 \times \frac{3}{4}$ "
- Double clamp coupling $\varnothing 22$

Type	Remarks	Cat. no.
HP22 collector		721 310 006
Collector mirror HP22		721 310 007
HP30 collector		721 310 008
Collector mirror HP30		721 310 009
Connection set for 1 HP22/HP30 collector		300 010 140
Connection set for 2 HP22/HP30 collector		300 010 240
Connection set for 3 HP22/HP30 collector		300 010 340
Connection set for 4 HP22/HP30 collector		300 010 440
Connection set for 5 HP22/HP30 collector		300 010 540
Connection set for 6 HP22 collector		300 010 640
Connection set for 7 HP22 collector		300 010 740



Mounting set for **flat roof**



Mounting set for **sloped roof - flat surface**



Mounting set for **sloped roof - roof tile**



Mounting set for **sloped roof - corrugated surface**

Type	Remarks	Cat. no.
Sloped roof mounting set for 1 col. - roof tile HP22/HP30		650 160 024
Sloped roof mounting set for 1 col. - Plain tile HP22/HP30		650 160 025
Sloped roof mounting set for 1 col - Corrugated sheet HP22/HP30		650 160 026
Flat roof mounting set for 1 col. HP22		650 160 027
Flat roof mounting set for 1 col. HP30		650 160 028