

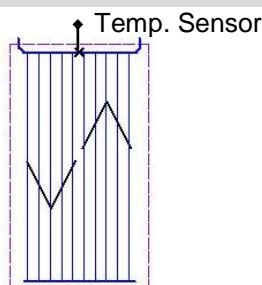
## Collector Data

Model	<b>SSK21_02</b>
Type	Flat plate collector
Dimensions (L x W x H)	1999 x 1038 x 98 mm
Gross area	2.07 m <sup>2</sup>
Aperture area	1.92 m <sup>2</sup>
Absorber area	1.91 m <sup>2</sup>
Weight	38 kg
Glass energy transmission	91 % (AM 1.5)
Glass seal	2-Component adhesive
Frame material	Aluminium
Frame finish	Uncoated, anodising optional
Rear plate	Al sheet, stucco embossed
Back insulation	Rock wool, 50 mm thick
Conversion factor $\eta_0$	78.3 %
Heat transfer coef. $k_1$	4.110 W/m <sup>2</sup> ·K
$k_2$	0.008 W/m <sup>2</sup> ·K <sup>2</sup>
Stagnation temperature	197 °C
Max. snow load	800 kg/m <sup>2</sup>
Max. wind load	300 kg/m <sup>2</sup>
Min. tilt angle	15°
Max. tilt angle	90° / suitable for wall mounting

## COLLECTOR FEATURES

- Frame mitre joints with continuous welds, frame with glass fully bonded providing a tight seal all around and optimal rigidity
- Connections on top for collectors to butt up against each other for a pleasing collector arrangement, leaving no gaps
- Highly transparent solar safety glass

## Absorber Data



HVO Principle

**Single aluminium sheet, 0.5 mm thick, laser welded**

Double harp grid design per Tichelmann

Header tubes  
Cu Ø18 x 0.8 mm

5 + 5 Parallel harp grid tubes  
Cu Ø8 x 0.5 mm

Vacuum sputter, highly selective

$\alpha = 95 \%$

$\epsilon = 5 \%$

2 Top connections, 3/4" union nut

1.15 l

40 % Propylene glycol

15 – 50 kg/h·m<sup>2</sup>

6 bar (limited by fittings)

Coating

Absorption

Emission

Connections

Fluid volume

Recom. heat transfer fluid

Recom. flow rate

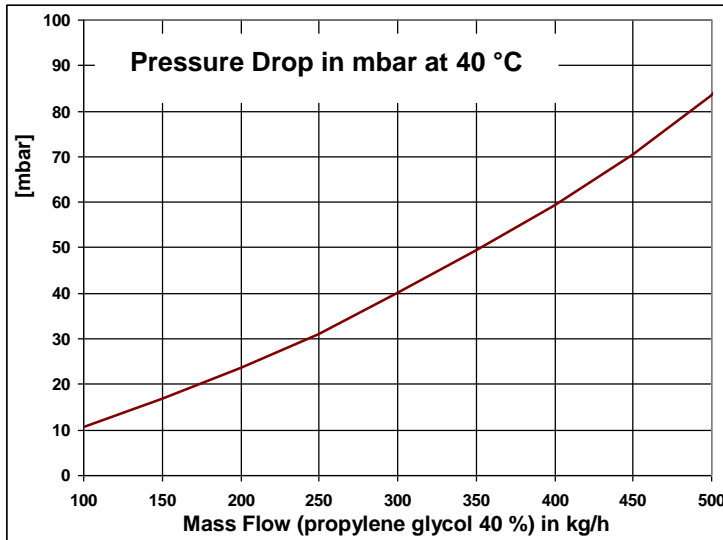
Max. operating pressure

## Certificates / Warranty

Solar Keymark Certificate	DIN CERTCO 011-7S578 F
Test Report per EN 12975-2	ITW Stuttgart 08COL686
Quality Standard	ISO 9001
Warranty	7 years



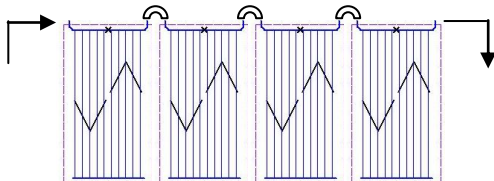
## Pressure Drop in mbar at 40 °C



## CONNECTION EXAMPLES AND CONNECTION ACCESSORIES

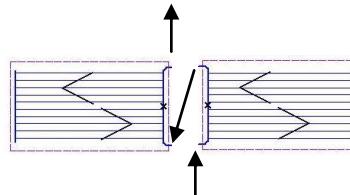
### A) 4 COLLECTORS IN SERIES "HIGH FLOW"

400 kg/h Flow Rate / 240 mbar Pressure Drop  
Spec. Flow Rate 50 l/m<sup>2</sup>·h = ca. + 9 K Temperature Gain



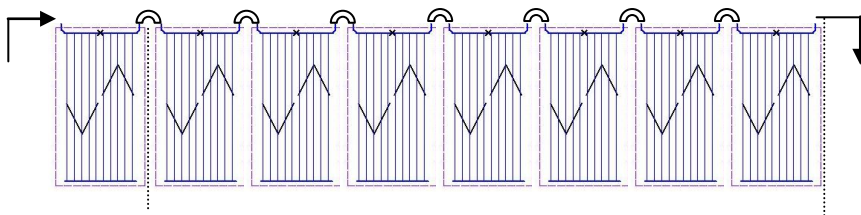
### B) 2 COLLECTORS IN SERIES "HORIZONTAL"

200 kg/h Flow Rate / 44 mbar Pressure Drop  
Spec. Flow Rate 50 l/m<sup>2</sup>·h = ca. + 9 K Temperature Gain



### C) 8 COLLECTORS IN SERIES "LOW FLOW"

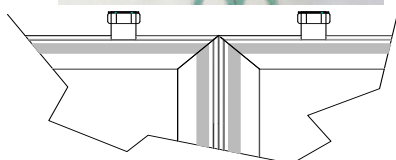
240 kg/h Flow Rate / 240 mbar Pressure Drop  
Spec. Flow Rate 15 l/m<sup>2</sup>·h = ca. + 30 K Temperature Gain



Part No. 20006

#### U-Bend Connector

1x Metal Flex Hose Insulated  
5x Gasket

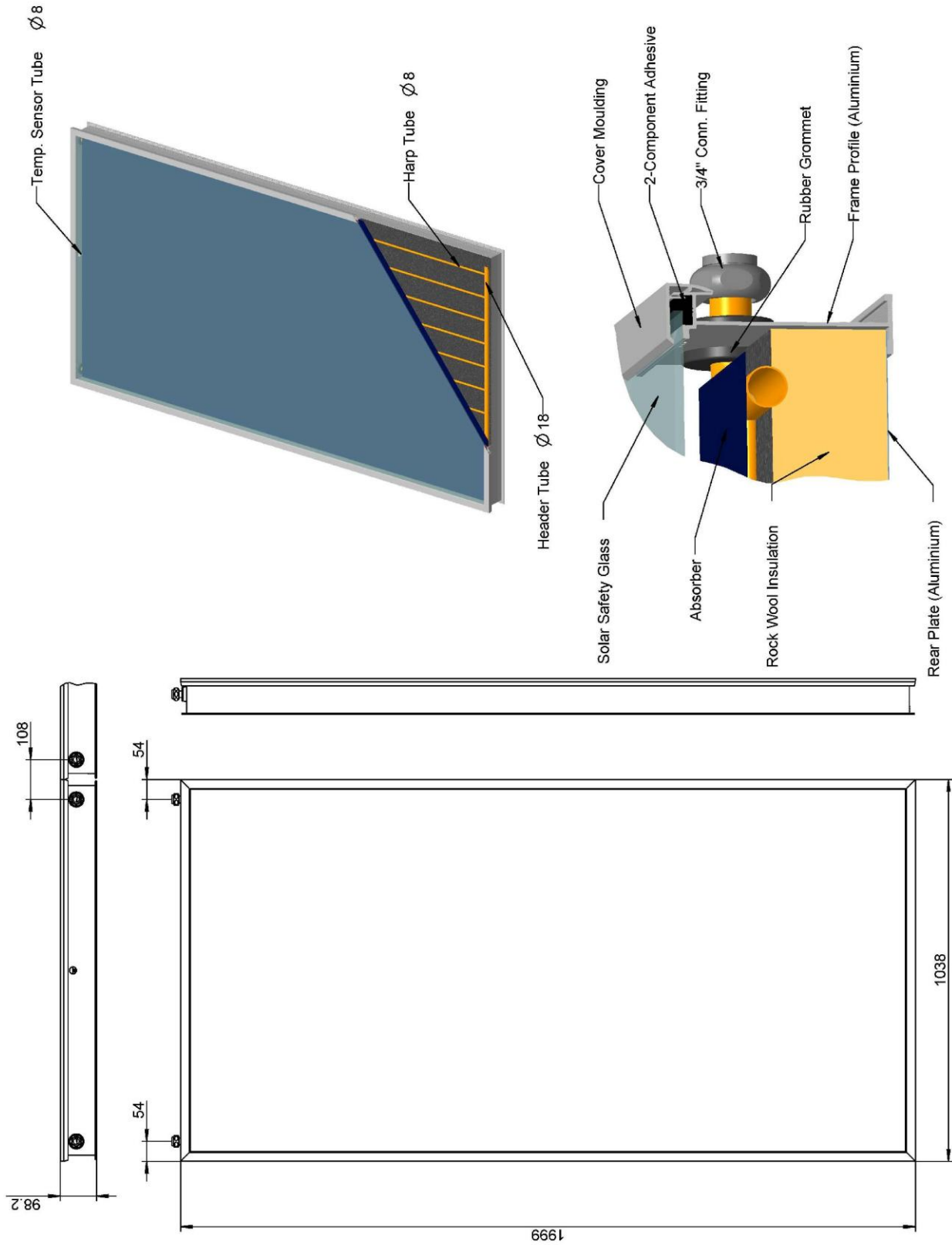


Part No. 28022

#### Connection Kit

2x Metal Flex Hose 1 m, insulated  
2x Elbow 90°, 3/4"  
2x Compression Fitting Cu Ø18 mm x 3/4" male thread  
2x Tube Support Sleeve  
6x Gasket





SSK21\_02\_KZ\_EN\_01