

### Absorber

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sunWin 27H

Frame optional black anodized





Assembly:	
Glass:	Hardened, hail proof, structured solar glass, 3.2 mm, transmissivity: 91 %
Frame:	Aluminium frame, welded, top surface "natural", (opt. black anodized), cover strip black anodized
Absorber:	Aluminium full-plate absorber (meander geometry) with highly selective coating; laser welded; absorption: 95 %, emission: 5 %, with external sensor
Rear wall insulation:	50 mm of degassing-free mineral wool
Glass sealing:	2-component silicone
Rear wall:	Made of aluminium, sea water resistant, 0.4 mm
Connections:	Compression fitting 22 mm, 4 connections on side, heat transfer fluid can flow in both directions (L -> R or R -> L), approved for drain-back systems

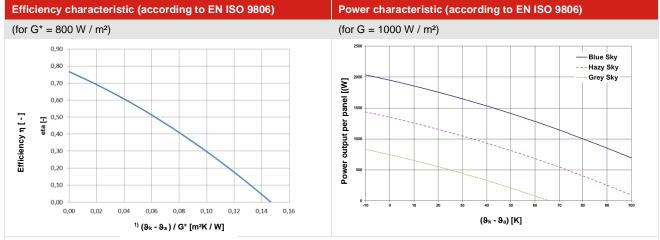
Technical data:			
Dimensions (HxWxD):	1255 x 2150 x 98 mm	Total volume of the collector:	2,42 lt.
Gross area:	2,70 m <sup>2</sup>	Max. inclination:	90°
Aperture area:	2,52 m <sup>2</sup>	Min. inclination:	20°
Absorber area:	2,50 m <sup>2</sup>	Max. operating pressure:	10 bar
Weight without heat carrier:	45 kg	Testing pressure:	15 bar
Assembling:	Horizontal, on-roof, freestanding, in-roof		

Efficiency values (according to EN ISO 9806):		
Reference	Aperture area	
Test number:	TÜV Rheinland, 21250086.002	
Conversion factor no:	0,767	
Thermal transmittance coefficient simple a1:	3,561 W/m²K	
Thermal transmittance coefficient square a2:	0,0142 W/m²K²	
Angle factor:	0,93	
Efficiency η <sub>0,05</sub> :	0,609	



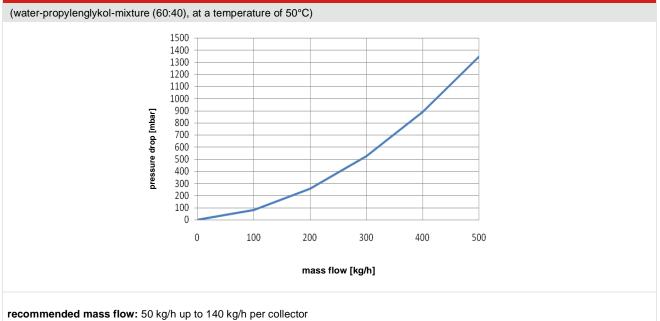
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Power output in Watt (according to EN ISO 9806)			
Irradiance W / m <sup>2</sup>			
	400 W/m <sup>2</sup>	700 W/m <sup>2</sup>	1000 W/m <sup>2</sup>
<sup>1)</sup> $\vartheta_k - \vartheta_a = 10 \text{ K}$	655	1258	1858
<sup>1)</sup> $\vartheta_k - \vartheta_a = 30 \text{ K}$	447	1050	1650
<sup>1)</sup> $\vartheta_k - \vartheta_a = 50 \text{ K}$	210	813	1413



<sup>1)</sup>  $\vartheta_k - \vartheta_{a...}$  Temperature difference between the mean panel temperature and the outside temperature

Pressure loss:





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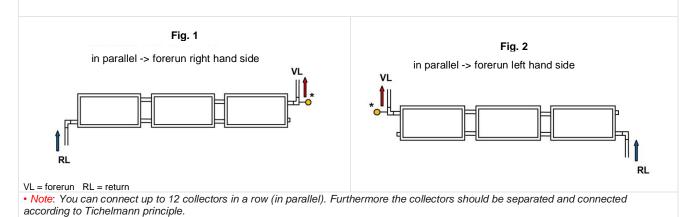
# Connecting kit: Sensor Set of connections with clamping ring (elbow) and sensor pocket; also with pre-insulated stainless-steel flexible tubes; dimension 22 mm • Help: One kit is necessary for positioning the sensor ! Connecting kit: with elbow • Help: For further collector fields without a sensor !



## Hydraulic connection:

Install the sensor (\*) on the furthest to the right/left collector (using the connecting kit).

**Attention!** If the sun is shining during the installation of the collectors the connection units can get very hot! **Attention!** Make arrangements against accidents before working on the roof! Note the rules for accident prevention!





# sunWin 27H

Measurements type horizontal:		
1255		
2150		
4350	<b>_</b>	
Number of collectors	Width	Collector hight
2 units	4370 mm	
3 units	6590 mm	
4 units	8810 mm	
5 units	11030 mm	
6 units	13250 mm	
7 units	15470 mm	1255 mm
8 units	17690 mm	
9 units	19910 mm	
10 units	22130 mm	
11 units	24350 mm	