

# SKR500

ON-ROOF COLLECTOR

*SONNENKRAFT*

## **EASY**

Plug in connectors and temperature sensor sleeve are already integrated in each collector.

## **EFFICIENT**

Improved generation of mounting system makes the installation fast and more flexible.

## **EXTRA**

The frameless flat collector looks great in all installation variants.



## TECHNICAL DATA

Name	SKR500	SKR500L	
Collectortype	Flat collector		
Mounting type	On-roof mounting		
Gross area	m <sup>2</sup>	2.57	
Aperture area	m <sup>2</sup>	2.26	
Absorber area	m <sup>2</sup>	2.30	
Length	mm	2079	1240
Width (incl. fittings)	mm	1240	2079
Height	mm	95	
Weight (empty)	kg	38	38,5
Collector capacity	l	1,45	1,72
max. operating pressure	bar	10	
Idle temperature	°C	174	
Recommended throughput	l/m <sup>2</sup> h	10 - 35	
Collector field piping		max. 12 pcs. parallel	max. 10 pcs. parallel
min. collector incline	°	15	
max. collector incline	°	75	
Connections	18 mm copper pipe		
Absorber	Full surface aluminium absorber, highly selective vacuum coating		
Hydraulic design	Meander		
Absorption (α) / Emission (ε)	0,95 / 0,05		
Collector housing	Deep-drawn, salt water resistant aluminium tray		
Heat insulation	50 mm mineral wool		
Collector glazing	3.2 mm toughened, low iron solar safety glass		
Efficiency (Aperture/Absorber) $\eta_{0a} / \eta_{0A}$		0,820 / 0,806	0,794 / 0,781
Heat transfer coefficient $a_{1a} / a_{1A}$	W/(m <sup>2</sup> K)	3,821 / 3,758	3,514 / 3,456
Temperature depending heat transfer coefficient $a_{2a} / a_{2A}$	W/(m <sup>2</sup> K <sup>2</sup> )	0,0108 / 0,0106	0,0147 / 0,0145
Angle correction factor $K_{\theta}$ (50°)		0,96	
Solar Keymark Reg. N°		011-7S1277F	011-7S1284F
Collector efficiency acc. to ErP Lot1 dT 40K@1000W/m <sup>2</sup>	%	65	63

### MOUNTING SYSTEMS



Roof bracket  
DBPN/L



Roof bracket  
DBA20N/L

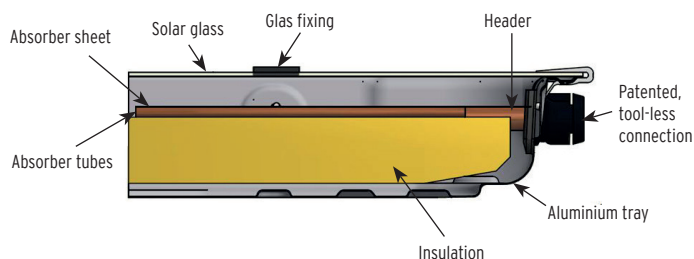


Bench screw  
SSPN/L

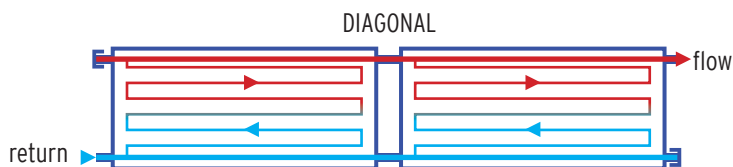
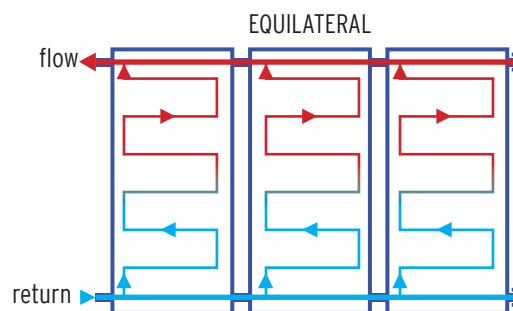


Bench screw  
SSA20/35/50N/L

### CROSS SECTION



### CONNECTION



Fraunhofer  
ISE

RegisterN°  
DIN  
SKR500  
SKR500L  
011-7S1277 F  
011-7S1284 F