

# SONNENKRAFT™

## ON-ROOF COLLECTOR

# SKR500

**New!**

**E<sup>3</sup>**

### 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.



**SONNENKRAFT™**  
SOLAR • ENERGY MADE BRIGHTER

# SKR500

The exclusive SONNENKRAFT SKR500 collector combines the latest technology with established know-how. The SKR500 is the first collector with a frameless design and extremely fast Plug & Flow® installation. The mounting system allows fast installation using only few standard tools. The flat, lightweight and frameless collector looks good in all standard installation variants.

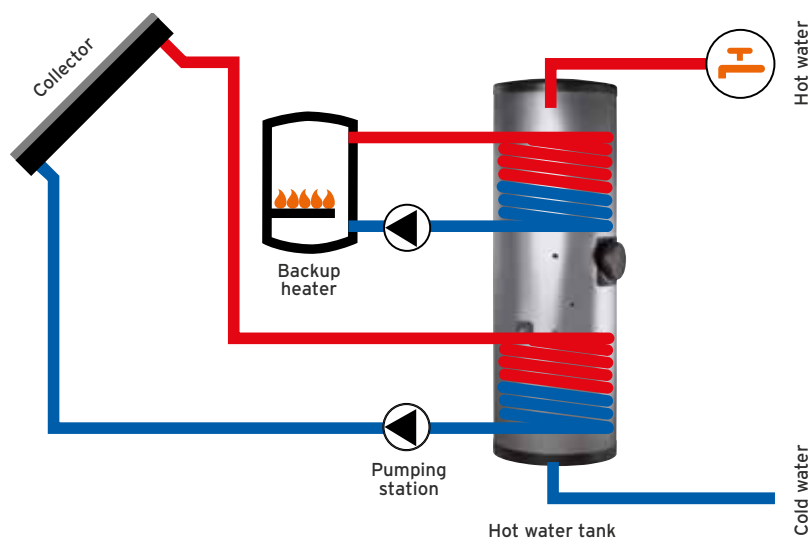
The next generation of the unique SKR500 collector includes an improved mounting system which makes the installation even easier, faster and better-looking than before. An efficiency  $\eta_0$  of 82% makes it one of the best performing collectors on the market.

## WHAT IT DOES

The solar thermal collector absorbs the radiation from the sun and converts it into usable energy to produce domestic hot water, room heating and swimming pool heating.

## HOW IT WORKS

The solar radiation passes the glass and is converted into thermal energy and the liquid inside the absorber is heated up. The high efficient coating of the absorber ensures highest possible absorption and minimum emission - even on cloudy days.



## GREAT DESIGN NOW CLOSER TO THE ROOF

The frameless flat collector looks great in all installation variants. The new roof mounting system for parallel mounting (left) enables a perfect and harmonic integration of the collector field on the roof. The distance between the collectors and the roof is minimized for an even more aesthetic look.



## YOUR BENEFITS AS AN INSTALLER



### EASY

Plug-in connections for a faster and safe hydraulic connection.

### EFFICIENT

Easier installation due to height adjustable mounting brackets and support profiles with integrated sliding safety.

### EXTRA

Adjustable tilt from 35° - 50°.

## YOUR BENEFITS AS A CUSTOMER



### EASY

Variety of mounting systems for every roof.

### EFFICIENT

Higher solar yield due to adjustable tilt of the collector mounting system.

### EXTRA

Low distance to the roof effects in a great look on the roof.

## IMPROVED SAFETY

The new slideprotection ensures an easier and faster installation. New glass fixings fulfill safety requirements of country specific building regulations.



## PLUG & FLOW

For all main applications you can mount the SKR500 with very few tools. Now it is much easier and faster - plug-in connectors and temperature sensor sleeve are integrated in each collector.



## EASY MOUNTING & HIGH FLEXIBILITY

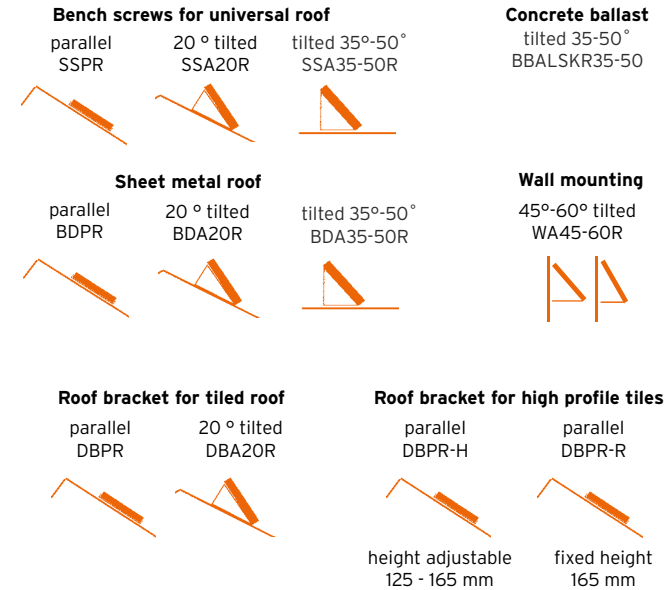
The SKR500 has the widest range of mounting systems of all SONNENKRAFT collectors and is so the best solution for every roof. Now an improved generation of mounting systems makes the installation easier and more flexible again.



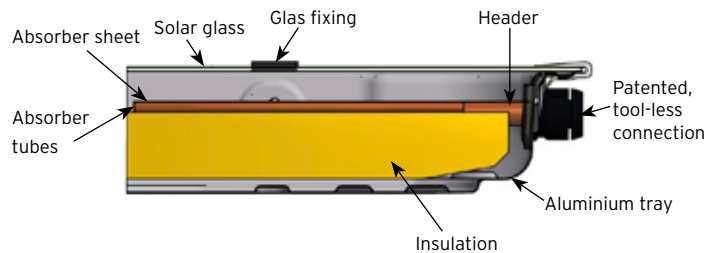
# TECHNICAL SPECIFICATIONS

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	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 $K_{\theta}(50^{\circ})$		0.96	
Solar Keymark Reg.Nr.		011-7S1277F	011-7S1284F

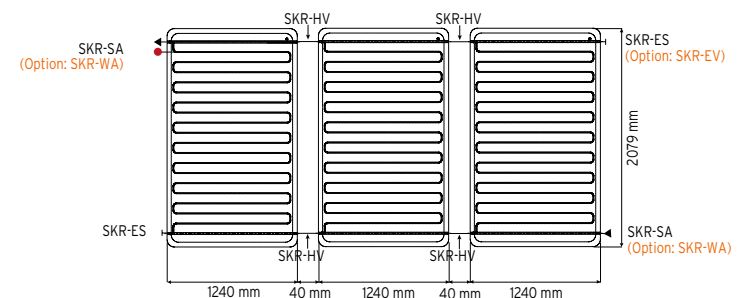
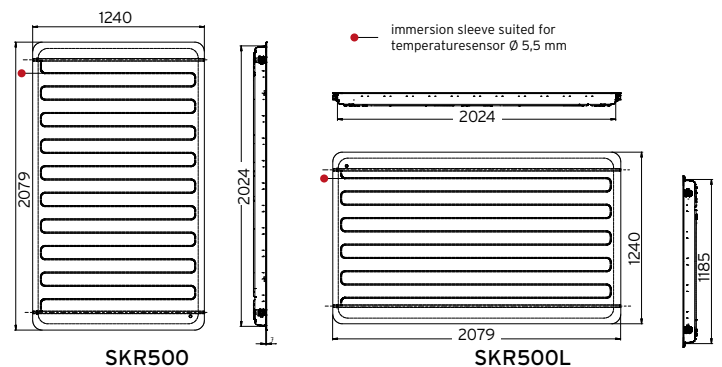
## Mounting systems SKR500



## Cross section SKR500



## Dimensions



Contact your SONNENKRAFT™ sales representative today.  
The sun will rise again tomorrow.

