

On-roof collector

SKR500/SKR500L



On-roof collector (SKR500)

The brand new and exclusive SONNENKRAFT collector combines the latest technology with established know-how.

The new SKR500 is the first collector with a frameless design and extremely fast Plug & Flow® installation.

The fastening system allows fast installation using just one standard tool.

The flat, lightweight and frameless collector looks good in all standard installation variants.

Specifications SKR500

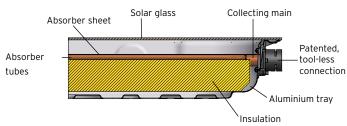
Name		SKR500	SKR500L
Collectortype		Flat collector	
Mounting type		On-roof mounting	
Gross area	m²	2.57	
Aperture area	m²	2.26	
Absorber area	m²	2.30	
Length	mm	2079	1240
Width	mm	1240	2079
Height	mm	95	
Weight empty	kg	38	38.5
Collector capacity	1	1.45	1.72
Max. operating pressure	bar	10	
Idle temperature	° C	174	
Recommended throughput	I/m²h	10 - 35	
Collector field piping		max. 12 pcs. parallel	max. 10 pcs. parallel
Min. collector incline	0	15	
Max. collector incline	0	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) $\eta_{\text{\tiny Oa}}$ / $\eta_{\text{\tiny OA}}$		0.820 / 0.806	0.794 / 0.781
Heat transfer coefficient a_{1a} / a_{1A}	$W/(m^2K)$	3.821 / 3.758	3.514 / 3.456
Temperature depending heat transfer coefficient ${\bf a_{2a}}$ / ${\bf a_{2A}}$	$W/(m^2K^2)$	0.0108 / 0.0106	0.0147 / 0.0145
Angle correction factor K _e (50°)		0.96	
Solar Keymark Reg.Nr.		011-7 S1277F	011-7 S1284F

Fastening system SKR500

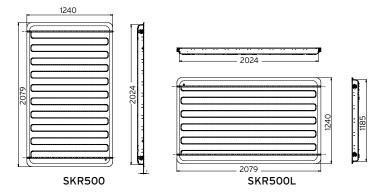




Cross section SKR500



Dimensions





Benefits of the on roof collector SKR500

- Unique frameless design
- Specific fastening system installed using just one tool
- Improved performance levels
- Self-draining and hence excellent stagnation behaviour
- Fastening system for all standard areas of application
- Exclusive to SONNENKRAFT customers
- Stylish collector with 2.57m² of gross area, weighing just 38 kg
- Patented, tool-free, hydraulic quick connector
- Collector and fastening statically calculated in accordance with applicable standard EN 1991
- · Available as an upright or horizontal format collector

