

High grade solar thermal components
Made in Berlin

K720-TS-D12

FLAT PLATE COLLECTOR



K7 – THE ATTRACTIVE ALL-ROUNDER
Efficiency and elegance combined

Thin, metallic shining border
inside provides an elegant look.

Outstanding glass strips – collectors can be pushed together
optically closer than normal frame collectors.

Plastic caps with appealing design as impact protection
and drainage of the first sealing level

Technical Data

Type of construction	Flat plate collector for thermosiphon systems for on-roof, flat-roof and field mounting	
Absorber type	KBB absorber with aluminum sheet and copper tubes Absorber with 8 harp tubes \varnothing 12 mm and 2 manifolds \varnothing 22 mm	
Measurements (L x B x H)	1884 x 1035 x 77 mm	
Gross area	1,95 m ²	
Aperture area	1,84 m ²	
Total weight dry	30 kg	
Liquid content	2,1 l	
Reference area	Gross area	Aperture area
Efficiency $\eta_{0,b}$ *	71,1 %*	75,4 %*
Heat loss coefficient a1 *	3,472 W/m ² K*	3,680 W/m ² K*
Heat loss coefficient a2 *	0,012 W/m ² K ² *	0,013 W/m ² K ² *
Annual collector output (Würzburg, 50°C) *	454 kWh/m ² *	
Max stagnation temperature *	188°C* ($G_s=1000$ W/m ² , $\vartheta_{as}=30^\circ\text{C}$)	
Absorber coating	High selective coating on aluminum sheet	
Absorption / emissivity	95 % / 5 %	
Covering	Low iron, structured solar safety glass (ESG)	
Transmission of covering	91,5 %	
Impact resistance of covering	Cover passed the optional impact resistance tests acc. ISO 9808	
Hydraulic connection	Parallel connection with collectors side-by-side	
Collector connection	Sideways 4 connectors \varnothing 22mm bare tube for compression fitting	
Max operation pressure	10 bar	
Thermal insulation	Mineral wool 30 mm	
Collector case	Aluminum frame, glass strip powder coated	
Permissible wind and snow load	3 kN/m ² suction, 3 kN/m ² pressure	
Angle of inclination	15° – 75°	
Recommended heat transfer fluid	Antifreeze mix based on propylene-glycol	
Transport capacity	10 years	



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* Preliminary collector coefficients, based on own measurements and calculations
 Technical modifications and errors excepted. v17.01