

High grade solar thermal components
Made in Berlin

K721-MS

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 on-roof, flat-roof and field mounting	
Absorber type	KBB absorber with aluminum sheet and copper tubes Absorber with meander and 2 manifolds $\varnothing 22$ mm	
Measurements (L x B x H)	1854 x 1135 x 77 mm	
Gross area	2,10 m ²	
Aperture area	1,98 m ²	
Total weight dry	32,5 kg	
Liquid content	1,5 l	
Reference area	Gross area	Aperture area
Efficiency $\eta_{0,b}$	76,5 %	81,1 %
Heat loss coefficient a1	3,665 W/m ² K	3,887 W/m ² K
Heat loss coefficient a2	0,015 W/m ² K ²	0,016 W/m ² K ²
Annual collector output (Würzburg, 50°C)	481 kWh/m ²	
Max stagnation temperature	188°C ($G_s=1000$ W/m ² , $\vartheta_{as}=30$ °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	
Nominal flow	100 l/h (low flow: 50 l/h)	
Nominal pressure loss	225 mbar (low flow: 70 mbar, water / 20°C)	
Hydraulic connection	Parallel connection with collectors side-by-side	
Collector connection	Sideways 4 connectors $\varnothing 22$ mm 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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