Flat plate collector K416-TS1



Technical data

Type of construction Flat plate collector for thermo-syphon systems

for on-roof, flat-roof and facade mounting

Absorber type KBB absorber with Al-sheet and Cu-tubes,

Absorber with 6 harp tubes ø15mm and 2 manifolds ø22mm

Measurement (L / W / H) 1568 / 1058 / 75 mm

Gross area 1.66 m²
Aperture area 1.53 m²
Absorber area (net) 1.53 m²
Total Weight dry 26 kg
Liquid content 2.1 I

*Efficiency η_0 76 %, related to the aperture area

*Heat loss coefficient a1 $3.95 \text{ W} / (\text{m}^2 \text{ x K})$ *Heat loss coefficient a2 $0.015 \text{ W} / (\text{m}^2 \text{ x K}^2)$ *Heat loss coefficient a40 $4.55 \text{ W} / (\text{m}^2 \text{ x K}^2)$

Absorber coating Highly selective on Aluminium

Absorptance / Emittance 95 % / 5%

Covering Low iron, structured, solar safety glass (ESG)

Transmission of covering >91 %

Impact resistance of covering Cover meets the requirements of the optional impact resistance tests

following EN12975-2

Collector connection 4 connectors ø22 mm for compression fittings

Max operation pressure 10 bar

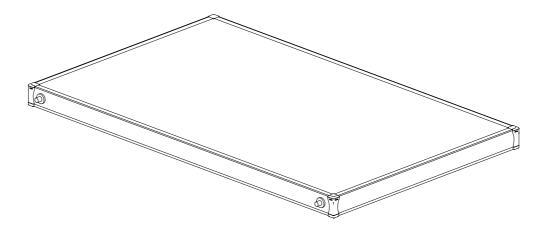
Heat insulation Mineral wool 30 mm

Collector case Aluminium frame, powder coated

Angle of inclination $15 - 90^{\circ}$

Permissible wind and snow load 3 kN/m² suction, 3 kN/m² pressure
Recommended heat transfer fluid Antifreeze mix based on propylene-glycol

Guarantee 10 years for functionality and weathering resistance



^{(*} data calculated from tested similar collector type K420 LC)