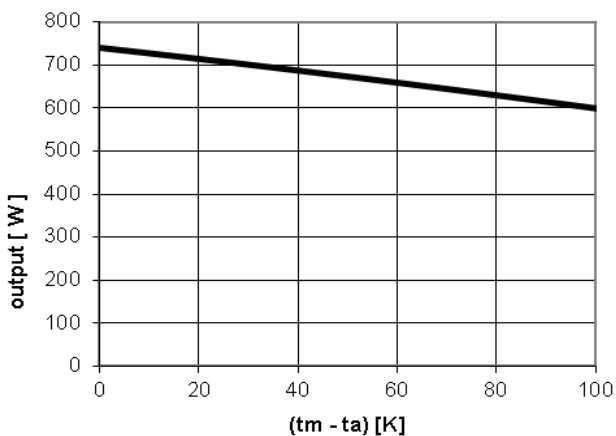


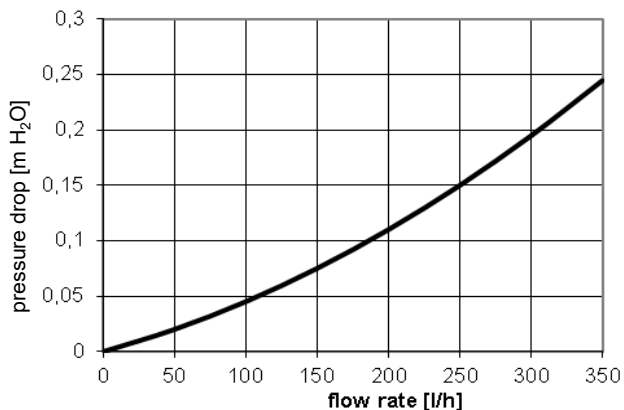
KTU 10 Solar Collector



Momentary collector output for insolation of 1000 W/m²



Collector pressure drop



Code	7 126
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Dimensions and weights

height × width × thickness	1970 × 920 × 141 mm
installation width	1000 mm
total area	1.81 m ²
aperture area	1.01 m ²
absorber area	0.81 m ²
empty weight	41 kg

Glazing

material	borosilicate glass
thickness	1.8 mm

Absorber

material	borosilicate glass
surface finish	AIN/Al-N/Al-N/Al-N/Al-N
design	evacuated tube type
connection pipes material	copper
connection pipes dimension	4 × Ø 22 mm × 1 mm
absorber tube material	copper
absorber tube dimension	10 × Ø 8 mm × 0.5 mm
max. working pressure	10 bar
max. working temperature	120 °C
stagnation temperature	309.9 °C
heat carrier	water solution of propylene glycol (1.7 l)
recommended flow rate	60 – 120 l/h

Thermal insulation

material	mineral wool
thickness	20 mm

Frame

frame material	aluminium alloy + steel AISI 304 SS
colour	silver
back plate	steel AISI 304 SS, 0.8 mm thick

Collector efficiency data related to absorber/aperture/total area

η_{0a} [-]	0,894	0,733	0,41
a_{1a} [W/m ² K]	2,730	2,237	1,252
a_{2a} [W/m ² K ²]	0,0031	0,0025	0,0014

Max. collector output for insolation of 1000 W/m²

Q_{max}	739 W
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Incidence Angle Modifier IAM

$K_{\Theta 50^\circ}$	0.96
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Heat Capacity

C	26.6 J/kg
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Tested according to EN ISO 9806