

KPS1 SOLAR COLLECTOR



Flat plate collector of 1481 W output (at 1000 W/m² irradiance), designed for on-roof portrait installation. A harp absorber with highly selective TiNO_x surface is laser welded to the copper pipes. The insulation consists of 40mm mineral wool. Connections are located on both sides on the top and bottom.

Code: 16277

DIMENSIONS AND WEIGHT

height x width x thickness	2037 x 1036 x 90 mm
total area	2.11 m ²
aperture area	1.907 m ²
empty weight	38 kg

GLAZING

material	tempered prismatic glass
thickness	3.2 mm

ABSORBER

material	Al, 0.5 mm thick
surface finish	TiNO _x
design type	harp type, laser welded
material and size of connection pipes	copper 4 x Ø 22 mm x 0.7 mm
material and size of absorber tubes	copper 9 x Ø 8 mm x 0.5 mm
max. working pressure	10 bar
max. working temperature	110 °C
stagnation temperature	200 °C
heat transfer fluid	water solution of propylene glycol, 1.4l
recommended flow rate	60 - 120 l/h

THERMAL INSULATION

insulation material	mineral wool
insulation thickness	40 mm

FRAME

frame material	aluminum alloy
frame color	grey
rear sheet	zinc-plated steel, 0.5 mm thick

COLLECTOR EFFICIENCY PARAMETERS RELATED TO APERTURE/TOTAL SURFACE AREA

η_{0a}	0.777 / 0.702
a_{1a}	4.35 / 3.93 W/m ² K
a_{2a}	0.0073 / 0.0066 W/m ² K ²

Mount and connection kits (portrait mount)

		Code
Connection kit		7710
Kit for 1 collector	[for 4 roof anchors or 2 supports + 1 strut]	12178
Kit for 2 collectors	[for 6 roof anchors or 3 supports + 1 strut]	12179
Kit for 3 collectors	[for 8 roof anchors or 4 supports + 1 strut]	12180
Kit for 4 collectors	[for 10 roof anchors or 5 supports + 1 strut]	12181
Mount and interconnection kit for 1 collector	[for 4 roof anchors or 2 supports + 1 strut]	12183

The Connection kit contains an inlet elbow (Cu22 x 3/4" F), outlet pipe cross (Cu22 x 3/4" F + 3/8" F for an air vent valve and 1/2" F for a temperature sensor sheath), sheath with a temperature sensor and 2 straight adapters (Cu22 x 3/4" F) with a plug and gaskets.



The mount and connection kits consist of aluminum mounting rails, retaining hooks for bottom mounting rails, retaining side clamps, bolts and nuts, straight fittings (2 and more collectors) and pipe insulation.