SUNEX®

AMP 2.0

Solar Collector, *flat collector*

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Solar installations with AMP collectors convert the sun's radiant energy into usable heat.

The heat generated in the solar collectors is transferred via the operating medium to the domestic or industrial water tank, where it is stored. Efficient system operation is controlled by a differential temperature controller in conjunction with a circulating pump.

A unique method of absorber connection

The AMP flat-plate liquid collector has an absorber, in which a modern technology of connecting the plate with the pipe system, so far the only one of its kind on the market, is used. The technology consists in partial rolling of the copper pipe, which increases the transfer surface by seven times. An additional advantage is that the connector, i.e. the solder, is located outside the main heat transfer surface. Considering the fact that thermal conductivity of copper from which the pipes are made is 401 W/mK and solder is only 60 W/mK this is a significant advantage.

Innovative collector frame construction

In the AMP collector a modern technology of bending aluminum frame has been used. The technology consists in making the main frame from one section of the profile without unnecessary joints in the corners. The frame without joints is much tighter, has a more aesthetic appearance, and most importantly, there is no risk of unsealing after several years of operation.

Unique design

The natural aluminium color of the collector housing and the dark blue - black shade of the absorber visible through the solar glass refines the look of any roof.

High performance

The excellent absorber and very good thermal insulation of the AMX collector makes it achieve very high efficiency in both summer and winter.

Can be installed on any roof

Specially designed mounting sets, made of aluminum and stainless steel, ensure fast and safe installation of collectors on any roof with any covering.

Standards & Testing

The AMP collector has been tested at the INTA Testing Laboratory in Spain and holds the Solar Keymark quality seal.

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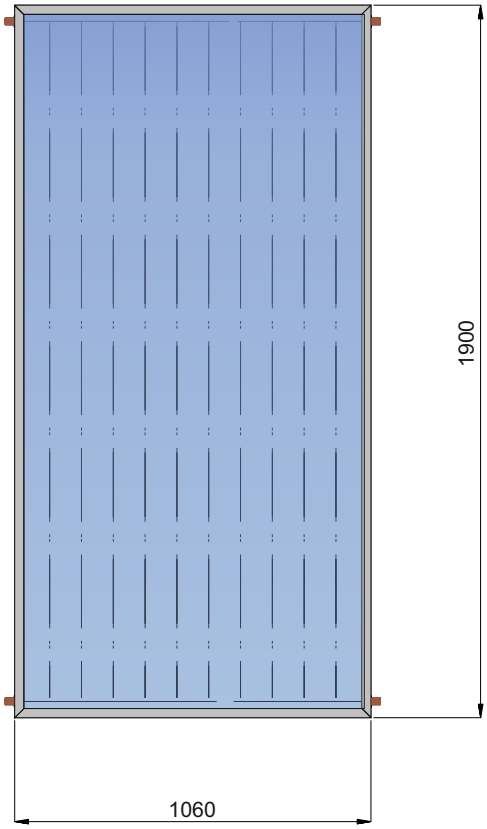
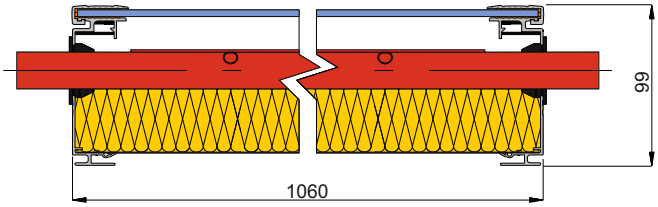
Technical Specifications

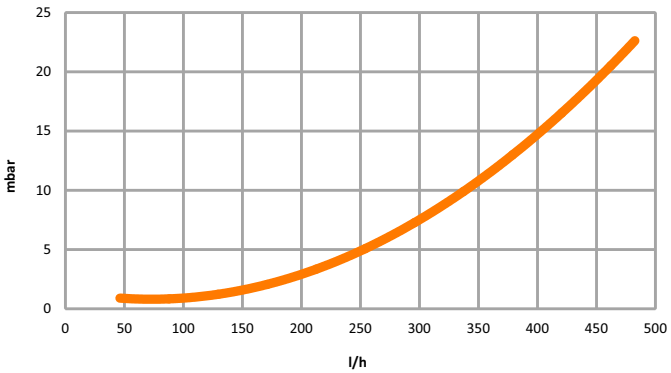
AMP 2.0

Application:	Domestic hot water heating support Swimming pool heating support Underfloor heating support
Dimensions:	
Length	1900 mm
Width	1060 mm
Height	99 mm
Weight	34 kg
Surface area:	
Gross area	2,01 m^2
Aperture area	1,84 m^2
Absorber's area	1,84 m^2
Frame:	
Frame material	Aluminium (without welds)
Sealing material	Glue
Collector bottom:	
Material thickness	Aluminium sheet 0.4 mm thick
Absorber:	
Material	Copper harp, aluminum coating
Thickness	0,3 mm
Selective coating	highly selective
Solar absortance	0,95 ± 0,01
Hemispherical emittance	0,05 ± 0,02
Absorber capacity	1,4 l
Connection	Soldering
Heat transfer fluid	Propylene glycol + water
Flow pattern	Single harp
Dimensions of flow channels	10 x Ø8 x 0,5 mm
Dimensions of header	2 x Ø22 x 1,0 mm
Number of connections	4
Glass:	
Type	Anti-reflection
Thickness	4 mm
Transmission rate	0,95%
Thermal insulation:	
Material	Mineral wool
Thickness	50 mm
Additional data:	
Collector efficiency η0	79,1%
Stagnation temperature	210°C
Max. operating pressure	10 bar
Microventilation	Yes
Recommended Flow Rate	25 l/m^2 h
Connection in 1 row	Up to 10 collectors
Available colours:	Natural aluminum colour
Assembly options:	Roof Terrace Foundation Wall
Compliance with standard	EN 12975

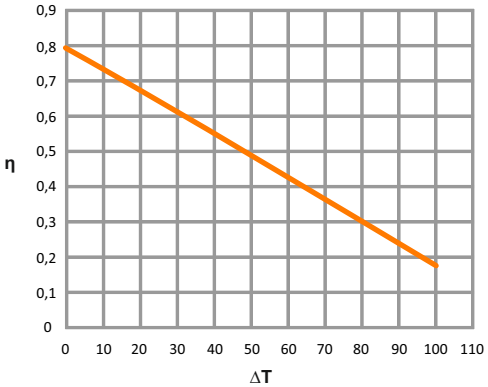




Pressure **drops**



Thermal **efficiency**



a_1 = 4,69 [W/m^2K]
a_2 = 0,002 [W/m^2K^2]

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