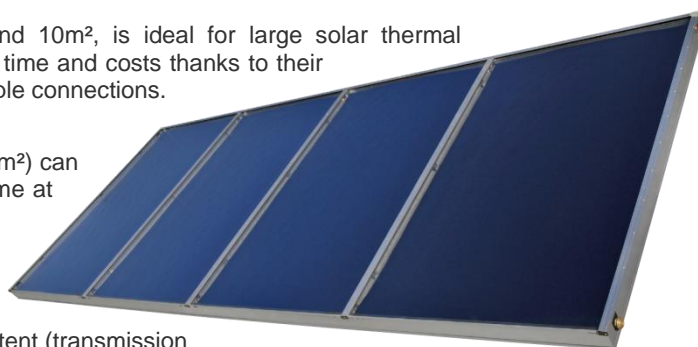


LARGE FLAT-PLATE COLLECTOR SUN 700

Technical datasheet Nr 93

The large-size flat-plate collector, available in 5m² and 10m², is ideal for large solar thermal systems. These collectors considerably reduce assembly time and costs thanks to their large area, their optimized mounting system and their simple connections.

The collectors SUN 700.50 (5m²) and SUN 700.100 (10m²) can be installed on the ground or on a flat-roof with tilted frame at 30°, 45° and 60°.



• DESCRIPTION:

- 3.2mm tempered solar safety glass with low iron content (transmission 91%).
- Aluminium full plate absorber of 0.4mm, laser-welded copper meander tube (risers 8mm and manifold 28mm) with highly selective coating (absorption 95%, emissivity 5%).
- 50mm rock wool insulation on backside.
- Aluminium frame collector with a high degree of long-term stability and high strength.
- Weatherproofing between cover and frame ensured by EPDM gaskets.
- Optimized ventilation.
- Optimal overheating and draining behaviour.
- Time-saving collector installation thanks to optimized mounting systems and four 1"1/4 connections including anti-rotation element.
- Easy handling thanks to the 2 lifting rings.
- Glass covers and collectors can be individually replaced.

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Installation options:

- Installation on flat-roof or on ground.



• TECHNICAL SPECIFICATIONS:

Designation	Unit	SUN 700.50	SUN 700.100
Reference: 1 collector per pallet		50070102207	50070102213
Reference: 2 collectors per pallet		50070102208	50070102214
Reference: 3 collectors per pallet		50070102209	50070102215
Reference: 4 collectors per pallet		50070102210	50070102216
Reference: 5 collectors per pallet		50070102211	50070102217
Reference: 6 collectors per pallet		50070102212	50070102218
Gross area	m ²	5.04	10.05
Aperture area	m ²	4.64	9.28
Overall height	mm	2064	2064
Overall width	mm	2440	4867
Depth	mm	114	114
Empty weight	kg	90	170
Fluid capacity	l	4.4	8.8
Connections	"	4 x 1"1/4 external thread	4 x 1"1/4 external thread
Zero-loss efficiency η_0		0.801	0.801
First-order coefficient a1	W/(m ² .K)	3.188	3.188
Second-order coefficient a2	W/(m ² .K ²)	0.015	0.015
Zero-loss efficiency B		0.81	0.81
Overall coefficient of heat transfer K	W/(m ² .K)	4.24	4.24
Maximum operating pressure	bar	10	10
Stagnation temperature	°C	192	192
Recommended flow rate	l/(h.m ² _{aperture})	25*	25*
Maximum quantity of collectors per array		6*	6*
Tilt angle limits	°	25° to 75°	25° to 75°
Warranty (Term and Conditions apply) – Collector = 10 year (except cover, under conditions).			

* Other versions upon request.