

# Savo 15 DG collector



*The sun rises in the North!*



## Key features

- Direct flow MPE absorber with optimal heat transfer
- Highly effective, selective PVD MEMO absorber coating applied to the complete absorber (patent pending)
- High transmittance tempered glass
- Etched antireflective treatment of the glass, which does not degrade over time
- Double glazing which minimises heat losses from convection
- Integrated connection hoses, minimising heat losses and shadowing
- Self-supporting frame structure for loads up to 2500 Pa
- PED module A2 certification according to the directive 2014/68/EU of the European commission

## Savo 15 DG collector

### Savosolar collector with Direct Flow MPE absorber

The Savo 15 DG collector is characterised by a direct flow aluminium absorber, which is manufactured from MPE profiles.

This technology is adopted from the automotive industry, where it has dominated heat exchanger designs the past 30 years, and has now been optimised for solar heating by Savosolar.

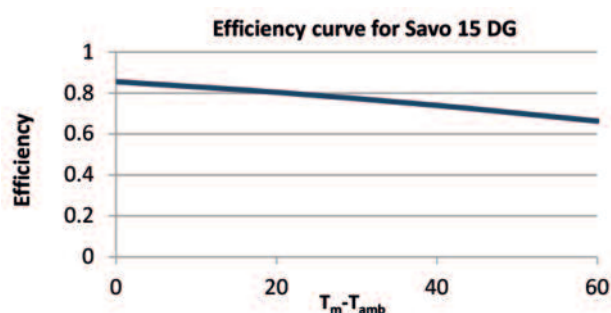
The absorber is coated with a highly selective PVD MEMO coating (patent pending) and the use of MPE profiles minimises the average distance between the coated surface and the heat transfer fluid.

This leads to a uniform temperature distribution where conductive heat losses are minimised.

Just as modern cars and aircraft are assembled with glue, Savosolar assembles its collectors by gluing the galvanised steel frames, molded corner pieces and anti-reflective solar glass together.

In combination with a protective membrane in the venting elements, this minimises condensation or dust contamination.

The Savo 15 DG collector is tested and Solar Keymark certified according to ISO 9806:2013 by SPF in Switzerland.



# Integrated connections

Savosolar's large area collector for district heating and industrial installations has integrated connection hoses within the collector which allows mounting with no more than 40 mm distance between collector (patent pending).

This technology reduces heat loss since the connection hoses are protected by the collector's insulation.

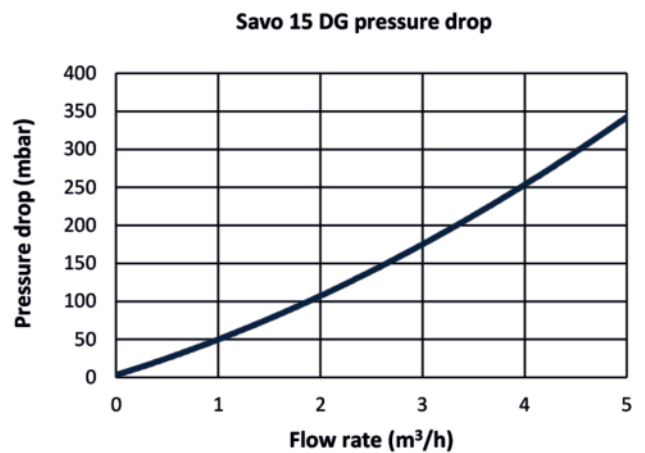


## Technical data

<b>Product number</b>	SF500-15DG
<b>External Dimensions</b>	6158 x 2591 x 157 mm
<b>Gross area</b>	15,96 m <sup>2</sup>
<b>Aperture area</b>	14,83 m <sup>2</sup>
<b>Efficiency acc. to Solar Keymark*</b>	$\eta_0 = 0.853$ $a_1 = 2.71$ $a_2 = 0.0046$
<b>Incident angle modifier</b>	$K_{50} = 0.97$
<b>Stagnation temperature</b>	250 °C
<b>Absorber coating</b>	3 layer highly selective MEMO
<b>Coating absorption</b>	96 +/- 2%
<b>Coating emissivity</b>	5 +/- 2%
<b>Max. operating pressure</b>	1000 kPa (10 bar)
<b>Thermal insulation</b>	80/35 mm mineral wool + double glass
<b>Glass</b>	Tempered solar safety antireflective glass
<b>Solar glass transmittance</b>	95%
<b>Liquid content</b>	28,0 liters
<b>Weight empty</b>	590 kg
<b>CE marking</b>	Yes

\*Related to aperture area

## Pressure drop



## Quality

Savosolar has been ISO 9001 certified since 2013 and has also received PED module A2 certification for the production of its large area collectors according to the European commission's directive 2014/68/EU. Savosolar is the only producer of collectors for district heating and industrial applications with PED module A2 certification.

Technical specifications and optical appearance may vary without prior notice due to constant product improvement.

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