

## Hewalex KS2000 SP



<b>Parameters</b>	
Length:	2019 mm
Width:	1037 mm
Height:	90 mm
Weight:	39 kg
Liquid capacity:	1.1 l
Gross surface:	2.094 m <sup>2</sup>
Aperture area:	1.82 m <sup>2</sup>
Optical efficiency:	81.1 %
Loss factor A1:	4.46 W/(m <sup>2</sup> K)
Loss factor depending on the temperature A2:	0.0096 W/(m <sup>2</sup> K <sup>2</sup> )

### **Art. no.: 11.21.00**

KS2000 SP flat plate solar collector is designed for heating tap water, supporting central heating and heating swimming pool water.

The special feature of the KS2000 SP collector is absorber covered with a black chrome. This solution provides uniquely high absorption characteristics, durability and resistance to corrosion, especially at high humidity environment. The black chrome collector has been successfully subjected to full energy and quality tests which are confirmed by the SOLAR KEYMARK certificate (011-7S180 F). The efficiency and heat loss coefficients given in the table below are related to the collector's active (aperture) surface area and heat transfer fluid of 33% glycol concentration.

#### **Features of the solar collector:**

- selective coating of the absorber with black chrome, which is a layer of the highest resistance to aging confirmed in practice and in tests
- absorber made of copper only ensures the best thermal output and durability
- the cover of the housing is made with structural glass providing high permeability to solar radiation (91.6%, representing the highest class U1)
- a parallel ("harp") arrangement of copper pipes provides minimum flow resistance, reducing electricity consumption by the circulation pump and enabling rapid emptying of glycol from the pipes in case of overheating and stagnation of the collector (when boiling and evaporation occur)
- low heat losses to the environment are ensured by the use of thermal insulation made of mineral wool, 55 mm thick on the bottom of the housing and 20 mm thick on the side walls

### **Ways of installing the solar collector**

Flat collectors require as standard a certain inclination from the horizontal to ensure proper operation. For year-round operation, an inclination of between 30° and 60° from the horizontal is recommended. When a collector is installed on a roof with smaller inclination, adjusting fasteners are used. It is also possible to install KS2000 SP solar collectors on the elevation of a building, at ground level or on a flat roof. We offer universal constructions for this purpose.

### **Solar collector performance**

The parameters of the KS2000 SP solar collector have been measured in tests carried out at the SPF Rapperswil institute in Switzerland. The optical efficiency of 81,1% relates to the aperture surface area (active surface).

### **Solar collector quality**

The quality of the KS2000 SP solar collector is confirmed by a SOLAR KEYMARK certificate. Collectors with this document comply with the quality requirements of the PN-EN 12975 standard. The quality tests performed on collectors are based on a 20-year minimum life cycle. Hewalex solar collectors have been sold in Poland and abroad for more than 20 years.

### **Comprehensive range of solar installations**

KS2000 SP solar collectors can be used both in small installations and in large systems in public and industrial buildings and the like. The system can be configured for this purpose based on a comprehensive range of hot water heaters, universal heaters to support central heating, pumping and control units, and other equipment.