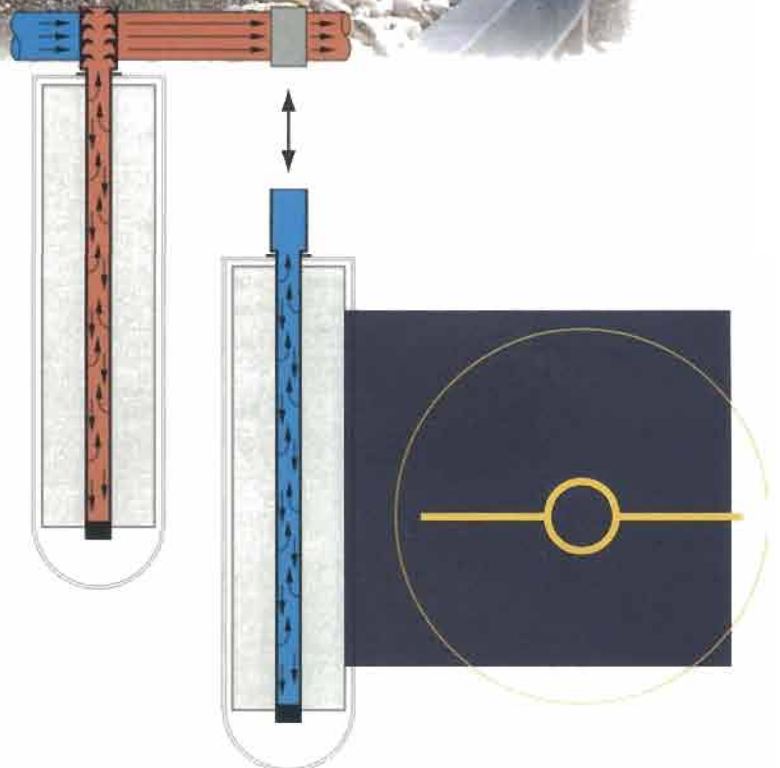


Solar Collectors – SEIDO 1



- highly efficient
- extremely durable
- compact
- maintenance free
- easy mounting



SEIDO 1

Energy technology with convincing results

The sun provides us with an inexhaustible potential for energy which today can be usefully exploited by means of high technology.

SEIDO solar collectors have been specially designed for the supply of hot water. They can obtain up to 70 per cent of the energy required for this purpose over one year. During the summer, they can practically cover 100% of the daily requirements and they still make an important contribution even in the relatively sunless months of winter.

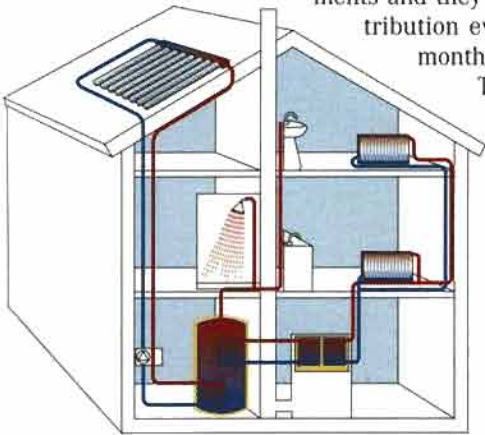
The convincing results were accomplished through the use of tried-and-tested technology developed in the aerospace industry.

A new type of solar collector

The heart of the SEIDO solar collector is an aluminium nitride absorber plate. With its selective coating, the absorber transforms over 92 percent of incoming solar radiation into heat.

A "heat pipe" transfers the heat and feeds this into the heating circuit via a copper condenser. The collector pipes and the heating circuit are separated from one another by means of dry connection. This means that individual pipes can easily be replaced at any time whenever necessary - without interrupting the operation of the system. In order to prevent the heat loss which usually occurs in solar collectors due to the circulation of air, the absorber and heat pipe are mounted in a highly stable vacuum glass tube. This stops energy from being lost due to air circulation and protects the absorber plate and heat pipe in the long term against corrosion or other environmental influences.

Due to the condenser plug-in system the vacuum glass tube of the SEIDO 1 solar collector is rotatable. This means the flat absorber plate can manually be directed towards the optimum position of the sun, in case the roof area deviates from south.



A circuit and a system



A concept to meet your own personal requirements

Technical Data

Model type	SEIDO 1-8	SEIDO 1-16
Construction	Vacuum tube collector with heat pipe	Vacuum tube collector with heat pipe
Certificate	DIN 4757	DIN 4757
Number of collector pipes	8	16
Absorber surface	1,5 m ²	3,0 m ²
Total surface	2,15 m ²	4,3 m ²
Length x width x height (mm)	2.110 x 960 x 125	2.110 x 1.920 x 125
Weight	50 kg	100 kg
Pressure drop per module at 100 l/h	5 mbar	10 mbar
Fluid content	0,48 l	0,96 l
Glass material	High quality borosilicate glass	High quality borosilicate glass
Glass tube diameter	100 mm	100 mm
Wall thickness	2,5 mm	2,5 mm
High vacuum, long-term stability	< 10 ⁻⁵ mbar	< 10 ⁻⁵ mbar
Absorber material	Aluminium	Aluminium
Coating	Aluminiumnitride	Aluminiumnitride
Absorptioncoefficient	> 92%	> 92%
Emission coefficient	< 8%	< 8%
Angle of inclination	15 to 90 degrees	15 to 90 degrees
Max. operating pressure	10 bar	10 bar
Max. temperature, module	190 °C	190 °C
non-operating mode pipe	247 °C	247 °C
Connection	Clamping ring	Clamping ring



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