

Solar heating systems Flat-plate and tube collectors





Heat from the sun: Free energy

The sun can radiate the annual energy consumption of the world's population onto the earth in less than four hours – completely free of charge. Per annum 1000 KWh are irradiated onto each square metre of Germany, representing the energy content of 100 litres of fuel oil.

Utilising the free energy offered by the sun

This energy can be utilised thermally as well as through photovoltaic conversion for generating heat or power. Solar heating collectors are an ideal supplement to any heating system and contribute consistently to lower energy consumption.

An advanced and worthwhile addition to any modern heating system

Highly efficient solar collectors from Viessmann help you to save up to 35 % of your total heating costs, if you utilise them for both DHW heating and central heating backup. When used for DHW alone they can save up to 60 % of your annual consumption.

Viessmann is a leading European manufacturer of solar heating systems and can draw on more than 30 years of experience in this sector.

The heating system that loves the environment

Even when it comes to environmental compatibility, Viessmann solar heating systems are on the sunny side of the street: On average, in a detached house, about three quarters of a tonne less carbon dioxide (CO_2) is produced.

Future-proof in any case

Viessmann solar systems are distinguished by their high operational safety and long service life. No wonder: The Vitosol solar collectors are made of corrosion and UV resistant materials. This is most impressively verified by quality tests according to the EN 12975 test standard, which at the same time also confirms the consistently high thermal output.

Designed suitable for recycling

All Viessmann products are designed with recycling in mind. The equipment is easy to dismantle, and all components used are clearly identified according to material type.



Technology from Viessmann – Government subsidies

You don't only save on the running costs – various subsidies are available for energy efficient and environmentally friendly heating technology. Check out the various subsidies that may be on offer. Up-to-date information can be found on the internet (www.viessmann.de/ foerderprogramme) or ask your local heating contractor.

> In a detached house, solar energy covers up to 60 % of the energy required for heating DHW



Vacuum tube collector based on the heat pipe principle

First class high performance vacuum tube collector

The Vitosol 300-T high performance vacuum tube collector operates according to the proven heat pipe principle. It consequently offers particularly high operational reliability. One of the specific applications of the Vitosol 300-T is in systems with long phases of high solar irradiation without heat transfer, so-called "stagnation phases". The dry connection of the heat pipe tubes inside the header and the integral temperature limiter ensure particularly high operational reliability.

Heat pipe principle for high operational reliability

In heat pipe systems, the solar medium does not flow directly through the collector tubes. Instead, a process medium circulates in the copper pipe below the absorber and evaporates when subjected to solar irradiation, transferring the heat to the heat transfer medium via a heat exchanger.

Duotec: Twice the benefit

The condensers are completely surrounded by the patented Duotec twin-pipe heat exchangers. This absorbs the heat particularly well and passes it into the heat transfer medium flowing past it.

Simple installation and maintenance

The collectors are rapidly interconnected through the reliable stainless steel corrugated pipe plug-in connectors on installation. The individual tubes can be precisely aligned with the sun by axial rotation. The tubes are connected in a dry state, i.e. without direct contact between the process and the heating transfer medium, thus ensuring a perfect tube connection. It is also possible, for example, to replace individual tubes when the system is already filled.

Protection against overheating

The temperature limiter integrated into the Vitosol 300-T protects the system against overheating during longer idle periods.

Made from high-grade materials

High quality corrosion-resistant materials ensure reliability, operational safety and durability. Among others, glass, aluminium, copper and stainless steel are used.



"Duotec" twin-pipe heat exchanger

Benefits at a glance:

- Highly efficient vacuum tube collector based on the heat pipe principle for high operational reliability
- The absorber surfaces with Sol-titanium coating, which are integrated into the vacuum tubes, are not susceptible to contamination
- Efficient heat transfer through fully encapsulated condensers inside the Duotec twin-pipe heat exchanger
- Tubes can be rotated for optimum alignment with the sun, thereby maximising the energy yield
- Highly effective thermal insulation of the header casing for minimum thermal losses
- Integral temperature limiter controls the heat flow at very high collector temperatures
- Easy installation through the Viessmann assembly and connection systems
- Attractive collector design, header casing in RAL 8019 (brown)

Highly effective thermal insulation "Dry" connection, no direct contact between carrier and heat transfer medium

High-grade, low ferrous glass

Duotec twin-pipe heat exchanger with integral overheating protection

Heat pipe

Sol-titanium coated absorber

Systems technology

Well thought-out convenience and economy



Everything at Viessmann fits together – perfectly

Viessmann offers a complete range of solar heating systems, along with optimally matched system technology, where everything fits perfectly together. The matching system enables you to achieve optimum efficiency and high operational reliability. Viessmann supplies you with everything from one source: Solar collectors, specially developed DHW cylinders for use with solar heating systems, Vitosolic solar control units, Solar-Divicon pump station for reliable hydraulics and thermal protection of solar heating systems, as well as oil and gas fired boilers, employing either low temperature or condensing technology.

In detached houses and two-family homes, correctly sized solar heating systems with matching components can cover approx. 50 to 60 % of the annual energy demand required for DHW heating.

Vitoset solar collectors at a glance



VITOSOL 200-F VITOSOL 300-F	Vitosol 200-F/300-F	Туре	SV2/SV3*	SH2/SH3**	5DI ¹⁾	
	Gross area	m ²	2.51	2.51	5.25	
Flat-plate collectors	Absorber area	m ²	2.30	2.30	4.76	
	Aperture area	m ²	2.32	2.32	4.96	
	Dimension (total)	Width mm	1056	2380	2570	
		Height mm	2380	1056	2040	
		Depth mm	90	90	116	
	Weight					
	(with thermal insulation)	kg	52	52	105	
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* Vertical installation
** Horizontal installation
Complete with cover frame (bright aluminium), also available in special colours (RAL)

VITOSOL 200-T	Туре		SD1	SD2	SD2	
Vacuum tube collector, direct flow	Version	m ²	1	2	3	
	Gross area	m ²	1.44	2.88	4.32	
	Absorber area	m ²	1.03	2.05	3.07	
	Aperture area	m ²	1.06	2.11	3.17	
	Dimension (total)	Width mm	709	1418	2127	
		Height mm	2031	2031	2031	
		Depth mm	143	143	143	
	Weight					
	(with thermal insulation)	kg	26	51	76	

VITOSOL 300-T	Туре		SP3	SP3	
Vacuum tube collectors, heat pipe principle	Version	m ²	2	3	
	Gross area	m ²	2.88	4.32	
	Absorber area	m ²	2.05	3.07	
	Aperture area	m ²	2.11	3.17	
	Dimension (total)	Width mm	1418	2127	
		Height mm	2031	2031	
		Depth mm	143	143	
	Weight				
	(with thermal insulation)	kg	51	76	



Your local contractor:

Viessmann Werke 35107 Allendorf (Eder) Tel. +49 6452 70-0 Fax +49 6452 70-2780 www.viessmann.com

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