

SOLAR THERMAL SYSTEMS ACCESSORIES

Using VENMAN's accessories will increase the lifespan and will preserve the efficiency of your solar water heater.





Safety & Instalation Accessories





CLOSED CIRCUIT EXPANSION VESSEL

The VTX -2 is a closed cylindrical expansion tank suitable only for the closed circuit of the solar water heater.

It has a screw thread, at the bottom, so that it can be connected to the tank of the solar water heater. On its top side, it has a spot, where a 1.5 Bar safety valve can be installed.

TECHNICAL FEATURES

- > 6 bar endurance pressure
- > 4 bar maximum operation pressure
- $> 160^{\circ}$ C endurance pressure
- > Galvanized and electrostatically painted for maximum endurance
- > Designed for use outside
- > Without welding

DIMENSIONS

Diameter: 155 mm **Height:** 158 mm **Weight:** 784 gr

OVERHEATING PROTECTION COVER

The VENMAN solar collector's cover is designed for endurance, efficiency and also easy installation. It is water-proof and reflects all the incoming solar radiation by pausing the solar collector. It has adjustable binding straps so that it can be fully attached on the collector's surface without allowing air currents to penetrate between the surfaces.

It can be easily and rapidly installed. It is also easy to store so that you do not lose it and have it always at hand.

PROTECTION AGAINST:

- > Overheating
- > Thermal expansion
- > Dust & other materials

RECOMMENDED FOR:

- > Absence from your home for a long period of time
- > Cottages
- > During the summer months for systems with excessive or oversized collectors







THERMOSTATIC MIXING VALVE

Thermostatic mixing valves are used in domestic hot water systems to regulate and maintain the temperature of domestic hot water, thereby providing protection against burns.

Manufactured according to European standards EN 12164:2011, EN 12165:2011, EN 1503–4:2003, EN 10088–3:2005, EN 12516–3:2003, EN 12266–1:2012.

TECHNICAL FEATURES

Material: Dzr brass

Max working pressure: 1,0 MPa (10 bar)
Max working temperature: 99°C

Temperature setting range: $+38^{\circ}\text{C}$ to $+65^{\circ}\text{C}$

SOLAR SYSTEM CONNECTION MATERIAL

Complete solution variety to choose for your solar themosiphonic system set. All the offered sets are quality specified with respect towards the end user.

Safety & Instalation Accessories



TEMPERATURE & PRESSURE SAFETY VALVE

Temperature and pressure relief valves are suitable for the solar water heaters to provide automatic overpressure and overheating protection.

At first, it responds to excessive pressure by opening the valve at the regulated pressure level, typically at 10 Bar, to prevent further pressure increase. The pressure & temperature relief valve detects excessive pressure, opens and discharges thermal expansion by returning pressure back to normal conditions.

Secondly, it responds to overheating. When the water temperature in the solar water heater reaches 95°C, the internal thermostatic element of the discharge valve expands, lifting the valve tray from its position to expel the overheated water. This allows colder water to enter the tank and adjust the temperatures. When the temperature returns to a safe level (below 95°C), the thermostat shrinks, allowing the spring to reposition the valve. At this point the temperature discharge element is ready to protect the system again.

TECHNICAL PARAMETERS

Pressure setting: 10 Bar

Adjustable pressure tolerance: +5%, -10% of the adjusted

pressure

Temperature adjustment: Up to 99° C Temperature tolerance setting: 95° C $- 99^{\circ}$ C





REMOVABLE SOLAR WATER HEATER EXCHANGER

What it is

The Solar Water Heater Exchanger is a device designed by VENMAN which is used to transfer heat from the boiler or heat pump to your Solar Water Heater tank.

Your benefits

You enjoy domestic hot water even in days with little or no sunlight.



Advantages

- > It is made of materials that do not generate electrolysis effects, which would reduce the life of your solar water heater.
- > It is accompanied by a complete installation set that includes a vent, an isolation valve and connection accessories.
- > It has a built-in electrical resistance, in case you are not able to use the two other energy sources.
- > It is compatible with all solar water heaters, which you can convert from using a single energy source to using three energy sources, directly and easily, without uninstalling the tank.







1284

COMMONROOM GR

Brass remaie ½

(For temperature & pressure valve)

430

420

Brass male ½

Diaphragm



11th klm Old National Road Thessaloniki – Kilkis PC: 57022 – PO Box: 1091 Sindos Industrial Area, Thessaloniki, Greece

T: +30 2310 788 700 **E:** info@venman.gr

WWW.VENMAN.GR