

SOLAR THERMAL SYSTEMS

ACCESSORIES

# 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°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  $+65^{\circ}\text{C}$ 

# Anti-Freeze Preeze

# 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.



# 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  $99^{\circ}$ C Temperature tolerance setting:  $95^{\circ}$ C –  $99^{\circ}$ C







1284

COMMONROOM GR

(For temperature & pressure valve)

Brass male ½"

255

Diaphragm



11th klm Old National Road Thessaloniki – Kilkis PC: 57022 – PO Box: 1170

Sindos Industrial Area, Thessaloniki, Greece

**T:** +30 2310 788 700 **F:** +30 2310 781 666 **E:** info@venman.gr

WWW.VENMAN.GR