www.caleffi.com

28062.02

Automatic air vent for solar heating systems

250 Series

Installation, commissioning and servicing instructions

Function

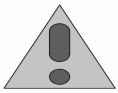
Automatic air vents are used in the closed circuits of solar heating systems to allow air contained in the fluid to be released automatically by means of a valve operated by a float in contact with fluid in the system.
These particular series of products have been specially made to work at high temperature with a glycol medium.

Product range

Code 250041A Automatic air vent for solar systems with threaded connection, size 1/2" M.

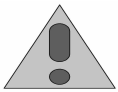
Technical specifications

Connections:		1/2" NPT Male
Materials:	- body:	brass, chrome plated
	- cover:	brass, chrome plated
	- control spindle:	antidezincification alloy CR
	- float and conveoyr:	high resistance polymer
	- hydraulic seals:	high resistance elastomer
Medium:		water, glycol solution
Max percentage of glycol:		50%
Temperature range:		-22°F÷360°F (-30÷180°C)
Max working pressure:		150 psi (10 bar)
Max discharge pressure:		75 psi (5 bar)

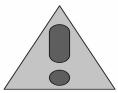


SAFETY INSTRUCTION

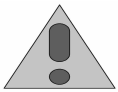
This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.**



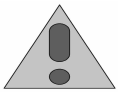
CAUTION: All work must be performed by qualified personnel trained in the proper application, installation, and maintenance of systems in accordance with all applicable codes and ordinances.



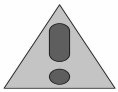
CAUTION: If the automatic air vent valve is not installed, commissioned and maintained properly, according to the instructions contained in this manual, it may not operate correctly and may endanger the user.



CAUTION: Make sure that all the connecting pipework is water tight.



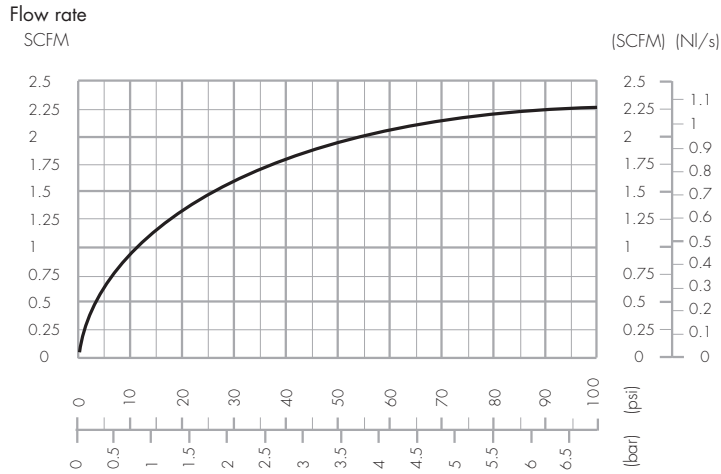
CAUTION: When making the water connections, make sure that the pipework connecting the automatic air vent valve is not mechanically over-stressed. Over time this could cause breakages, with consequent water losses which, in turn, could cause harm to property and/or people.



CAUTION: Water temperatures higher than 100°F (38°C) can be dangerous. During the installation, commissioning and maintenance of the automatic air vent valve, take the necessary precautions to ensure that such temperatures do not endanger people.

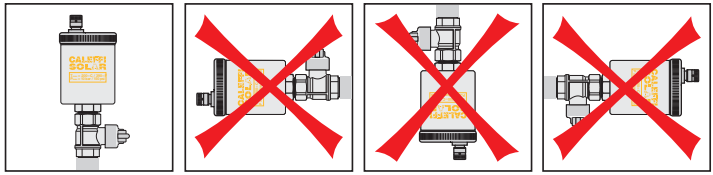
Leave this manual for the user

Discharge capacity in the phase of filling the system



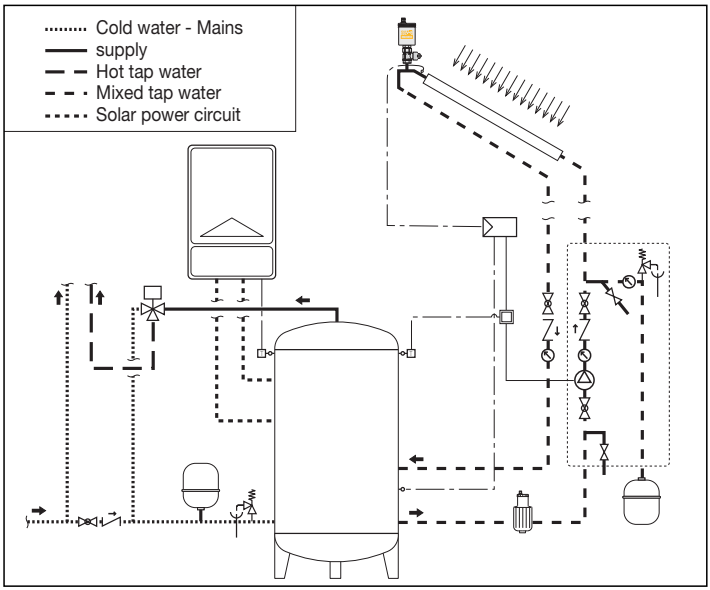
Installation

The 250 series automatic air vents must be installed in vertical position, typically on the top of the solar heating system panels and at points in the circuit where air bubbles that need to be discharged gather.
They must always be installed in combination with a shut-off valve.
This is necessary since the vent valves must be shut off after use to remove the air in the phase of filling and starting up the system.



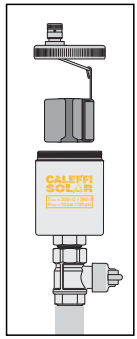
Application diagram

Solar powered system with twin coil storage and wall-mounted boiler



Maintenance

The 250 series automatic air vent is made to allow checking of the internal mechanism.
Access to the moving parts that govern the air vent is attained by simply taking off the top cover.
A shut-off valve must be installed before the 250 series device in order to simplify any maintenance work and for shutting off after the phase of filling.



Caleffi North America, Inc.
3883 West Milwaukee Road
Milwaukee, WI 53208
T: 414.238.2360 F: 414.238.2366