# **Complements for Solar Energy Systems**



# **FLAMCOVENT Air Separator**

#### **Main features**

Absorption Air Separator

The FLAMCOVENT Air Separator affords the ultimate solution to problems with in solar collector systems. The removal of air from solar collector systems is an all too familiar problem. Although automatic air vents are effective in the removal of larger air bubbles accumulating in the system, they are unable to eliminate micro-bubbles, normally invisible to the naked eye, which remain suspended in the water because they lack upward lift. These microbubbles stay in the circuit, causing:

- Accumulation in spots within the radiators and pipes where air venting becomes
- Difficulties in water circulation.
- Poor pump performance caused by cavitation.
- Damage to the impellers.
- Poor performance of boilers and heat exchangers.
- Corrosion.



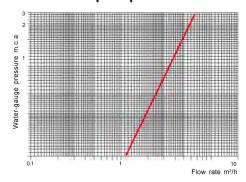
#### Models of 22 mm Ø

- Max. working pressure: 10 bar.
- Maximum temperature: 120 °C.
- Max. efficiency at water flow velocities up to 0.7 m/sec.
- In solar energy systems with a mixture of up 50% water/glycol.
- Delivered in individual cardboard boxes.

#### **Working Principles**

In addition to acting as a high-capacity automatic vent, the FLACOVENT air separator also eliminates the micro-bubbles suspended in the water. Its internal arrangement absobs these micro-bubbles, bringing them together and enbling them to rise into de upper chamber, where they are expelled. This leaves the water unsaturated and ready to absob more air from sections that are awkward to drain, taking that air to the FLACOVENT as well for elimination. The FLAMCOVENT assures totally air-free

### **Pressure Drop Graph**

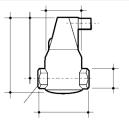


#### Installation

The FLAMCOVENT air separators provide their best perfomance when fitted at the point with the highest temperature and the lowest pressure in the system, which is where the water's air-absorption is lowest and thus where bubbles will apper.

#### **Dimensions**

Model	Dimensions in mm						Weigh
	Α	В	ØС	ØD	Ε	F	Kg
22 mm	151	116	68	22	121	36	1,4



# **Automatic Air Vent FLEXVENT SUPER 1/2"**

#### **Main features**

Air vent including a float and a valve that acts automatically when the level of water drops and entrains air with it.

Screwed brass body in two halves. The air that has been separated accumulates at the top and is expelled through an outlet hole. The float is located between both halves and allows the air to be expelled to pass through.

The tappings are ½".

- Max. working pressure: 10 bar. - Maximum temperature: 120 °C.
- In solar energy systems with a mixture of up 50% water/glycol.

#### **Delivery presentation**

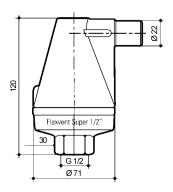
Delivered in individual boxes. As an option, an isolating valve can be supplied to enable repairing or replacing the FLEXVENT SUPER air vent without draining the system.





## **Dimensions**

FLEXVENT SUPER 1/2



Isolating valve

