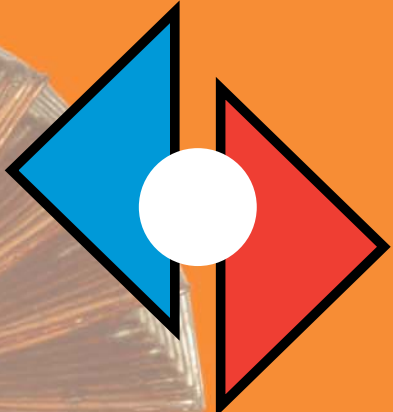


**SPIROVENT®**

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**JUNIOR SERIES  
SOLAR  
MICROBUBBLE™  
SEPARATORS**



# Air in system water causes many problems.

Noisy pipes, valves, and other air-related noises are often accepted as the signs of a functioning system. Excessive pump noise, cavitation, and cascading in terminal units are considered normal.

But... air in system water can cause corrosion, reduced efficiency, poorly heated or inadequately cooled rooms, accelerated component wear and on-going complaints.

There is a device that will keep your system free of air ... permanently. Less maintenance, quiet operation, fewer costs!

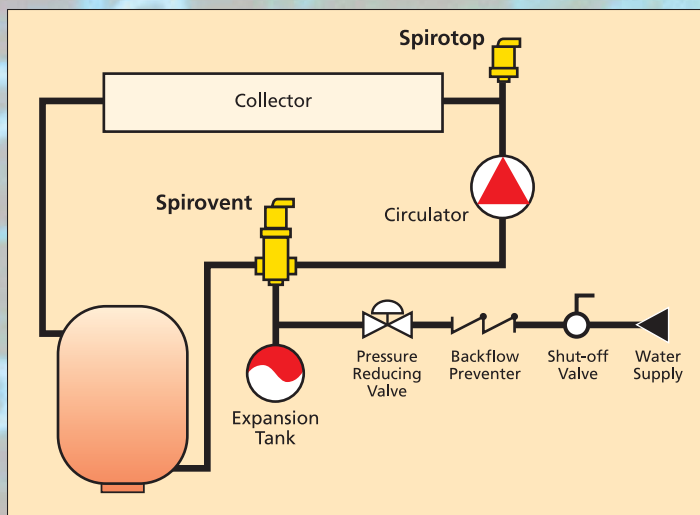
The name:

## **SPIROVENT®**

Unlike conventional air eliminators or air scoops, the Spirovent completely eliminates 100% of the free air, 100% of the entrained air, and up to 99.6% of the dissolved air in the system. Consisting of woven copper wire soldered to a copper tube, the patented Spirotube® creates a low velocity area in the Spirovent that scrubs the bubbles from the water. The air bubbles rise and collect in the air chamber before they are vented from the system via an integral automatic valve. Air problems become a thing of the past.

### Install the Spirovent for optimum performance

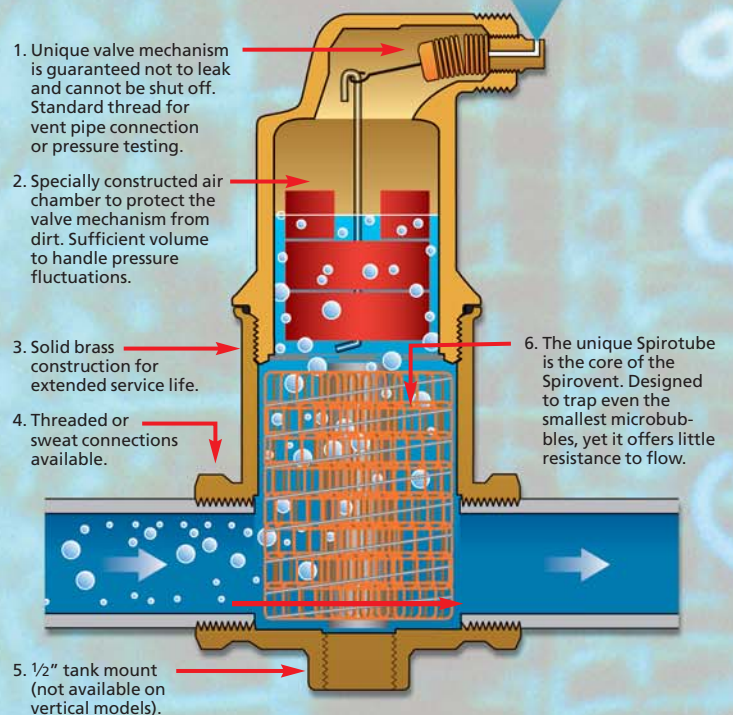
Ideal placement of the Spirovent Junior is based on microbubble separation and Henry's Law. Simply put, Henry's Law states that air is released from water as the temperature increases or the pressure decreases. In solar systems, the Spirovent should be installed in the supply line where the temperature is highest. Should the circulator be located on the supply line as well, the Spirovent should be installed between the tank and the circulator where pressure is also the lowest.



## ADVANTAGES TO THE INSTALLER AND END-USER

- High temperature design for solar applications ("HT" models only)
- Maintenance free.
- No venting required.
- Vent head is designed to stay dry. Dirt and leak resistant.
- 1/2" male thread port for pressure testing or remote venting of unwanted gases.
- Quiet operation.
- Increased component life.
- Reduced oxygen-based corrosion and pump cavitation.

### The Principal Difference



The Spirotube is the core of the Spirovent. It allows the Spirovent to scrub out 100% of the free air, 100% of the entrained air, and up to 99.6% of the dissolved air in the system. Even the smallest microbubbles coalesce and rise. Air is eliminated, component life and heat transfer abilities are increased; oxygen-based corrosion and pump cavitation are reduced; and annoying gurgling, cascading, and other air-related system noises are eliminated.

# Technical Specification — Spirovent Junior Air Eliminator

SPIROVENT		JUNIOR				
Threaded Part Number		VJR075HT	VJR100HT	VJR125HT	VJR150HT	VJR200HT
Sweat Part Number		VJS075HT	VJS100HT	VJS125HT	N/A	N/A
Vertical Part Number		VJV075HT	VJV100HT	VJV125HT	N/A	N/A
Pipe Size		¾"	1"	1¼"	1½"	2"
Thread	NPT	¾"	1"	1¼"	1½"	2"
D	Inch	2.6	2.6	2.6	2.6	4.0
H1 (Threaded)	Inch	6.0	7.0	7.8	9.1	10.8
H1 (Sweat)	Inch	6.0	7.0	7.8	N/A	N/A
H1 (Vertical)	Inch	6.0	7.0	9.1	N/A	N/A
h1 (Threaded)	Inch	0.8	1.4	1.5	1.6	2.3
h1 (Sweat)	Inch	0.8	1.4	1.5	N/A	N/A
B (Vertical)	Inch	4.8	4.8	5.4	N/A	N/A
L (Threaded)	Inch	3.4	3.5	3.5	3.5	5.2
L (Sweat)	Inch	4.1	4.5	4.5	N/A	N/A
L (Vertical)	Inch	3.4	3.5	3.8	N/A	N/A
Plug (e)*		½"	½"	½"	½"	½"
Wt. Threaded	Lbs.	3.0	3.5	4	4.5	8.5
Wt. Sweat	Lbs.	3.0	3.0	3.5	N/A	N/A
Wt. Vertical	Lbs.	4.8	5.0	6.0	N/A	N/A
Recommended Flow**	GPM	6	10	15	30	40

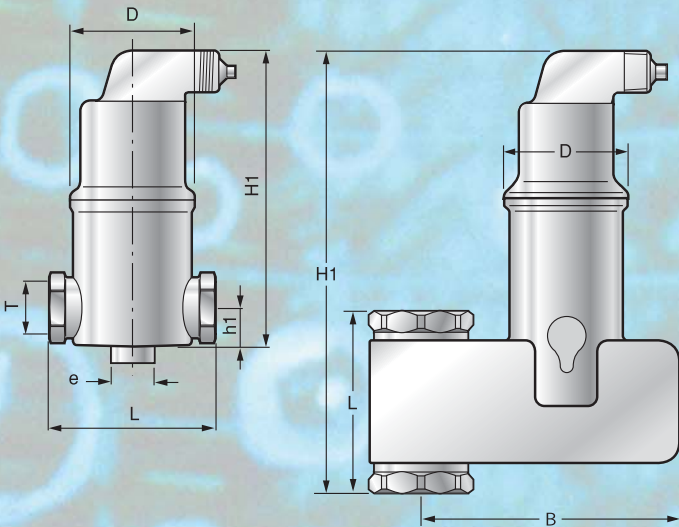
\* Not available on Vertical units.

\*\*Approximately 4 ft. per second inlet velocity

Consult Senior Air Brochure for larger Senior units.

Maximum Temperature: 360°F

Maximum Pressure: 150 psig



## Insulation Kits Available



Horizontal Insulation Kit



Vertical Insulation Kit

Part No. PJR0001K includes Insulation and Trimming Knife  
Fits all ¾" through 1½" models.

## ADVANTAGES TO THE INSTALLER AND END-USER

When you first start up your solar system, you'll find that many air bubbles are large enough to rise to the top on their own. There is an automatic air vent that will quickly gather and release these bubbles. You won't have to manually bleed hard-to-reach areas, such as the tops of risers, tanks, unit heaters, and horizontal lines near the ceiling.

### The result?

Hydronic and solar systems start up in much less time with no aggravation.

Known for its reliability, this unique automatic air vent can be found in millions of installations around the world.

### The name:

## SPIROTOP®

Spirotop's low profile and high-compression valve combine to give you a leak-resistant, high point vent that fits just about anywhere. Moreover, Spirotop resists dirt particles and sudden pressure shocks, which can cause ordinary vents to leak.

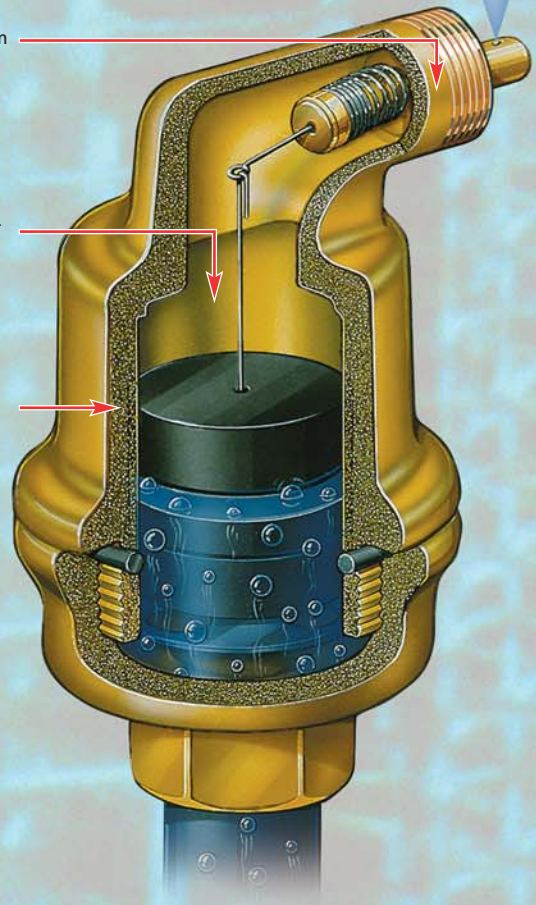
When filling or draining a system, venting high points, or eliminating air locks, the Spirotop automatic air vent is the only choice for those who want reliable, problem-free results every time.

Try a Spirotop. We think you'll find it's much more than an air vent. It's a problem solver!

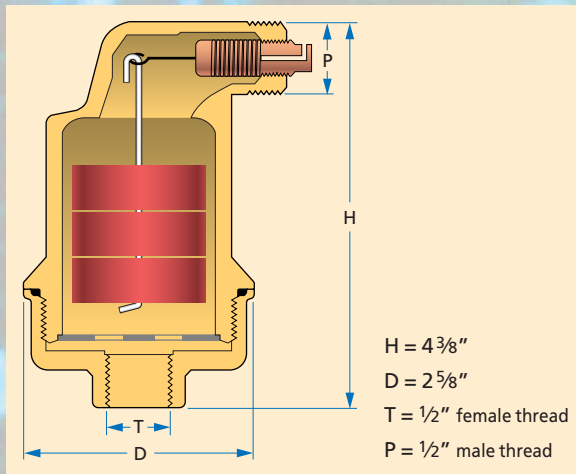
- 360° F maximum temperature (Model VTP050HT only).
- Maintenance free.
- Continuous air venting.
- 150 psig standard working pressure.
- Sized to fit almost anywhere.
- Dirt resistant.
- Leak resistant.
- 1/2" male thread at vent point for pressure testing or remote venting of unwanted gasses.
- Quick removal of large air bubbles.
- Reliable vacuum breaker for system draining.

## The Principal Difference

1. Unique valve mechanism is guaranteed not to leak and cannot be shut off. Standard thread for vent pipe connection or pressure testing.
2. Specially constructed air chamber to protect the valve mechanism from dirt. Sufficient volume to handle pressure fluctuations.
3. Solid brass construction for extended service life.



Model VTP050HT  
for Solar Applications



## SPIROTHERM

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