

# SPIROVENT<sup>®</sup> AIR



**MICROBUBBLE™ SEPARATORS**  
**STANDARD VELOCITY**

## SPIROTHERM

THE ULTIMATE IN DISTRIBUTION EFFICIENCY

# PERMANENTLY AIR-FREE SYSTEM WATER

## AIR IN SYSTEM WATER CAUSES MANY PROBLEMS.

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

But....serious problems can occur.

Air in system water can cause corrosion, reduced efficiency, poorly heated or inadequately cooled rooms, accelerated component wear, and ongoing complaints.

Result:

Unnecessary maintenance costs and a dissatisfied owner.

There is a solution!

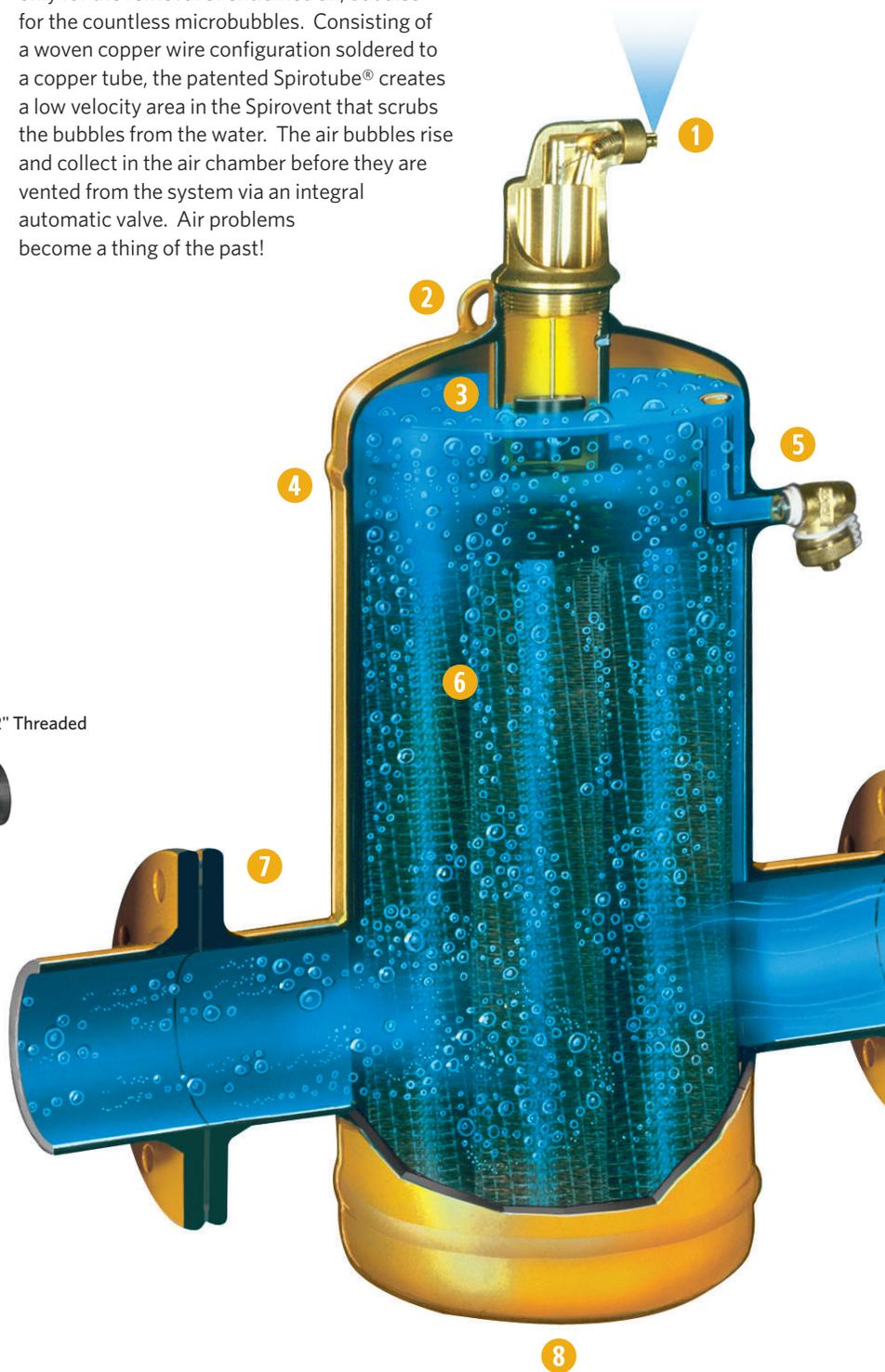
A system without air-related problems is possible! There is a device that will keep your system free of air, permanently. Less maintenance, quiet operation, fewer costs!

The name:

**SPIROVENT AIR**

## THE KEY DIFFERENCE

The Spirovent's unique construction allows not only for the removal of entrained air, but also for the countless microbubbles. Consisting of a woven copper wire configuration 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!



THE ULTIMATE IN DISTRIBUTION EFFICIENCY

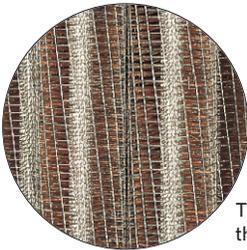


## ADVANTAGES TO THE INSTALLER AND THE END-USER

- Greatly reduced initial fill and start-up time
- No venting required
- Optimum heat transfer
- Increased component life
- Reduced oxygen-based corrosion and pump cavitation
- Quiet operation

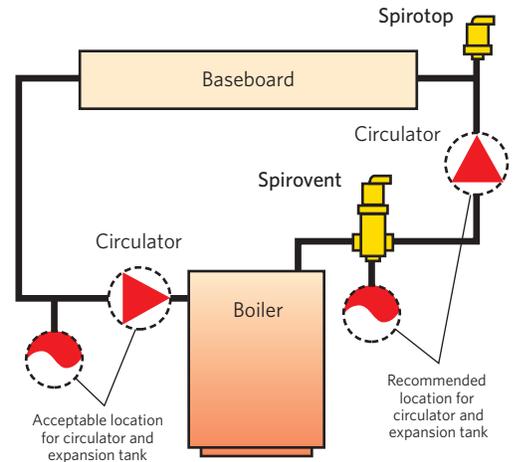
## THE SPIROTUBE MAKES THE DIFFERENCE

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.



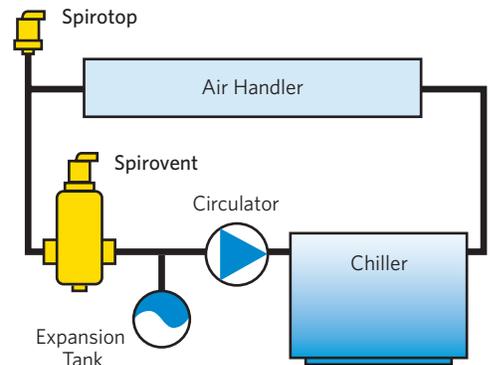
The patented Spirotube, the core of the Spirovent

- 1 The automatic air vent is guaranteed not to leak and can only be closed by the installer for a pressure test.
- 2 Lifting eyes make installation easy.
- 3 The air chamber has been designed so that dirt cannot reach the valve.
- 4 Welded steel construction guarantees long life.
- 5 Valve for releasing large amounts of air during filling and for skimming off floating dirt.
- 6 The unique Spirotube is the core of the Spirovent. Designed to trap the smallest microbubble, yet it offers little resistance to flow.
- 7 Threaded or flanged connections available. Threaded 3/4"- 4" ; Flanged 2" and up
- 8 Drain plug. Also suitable for connecting a valve or temperature sensor.



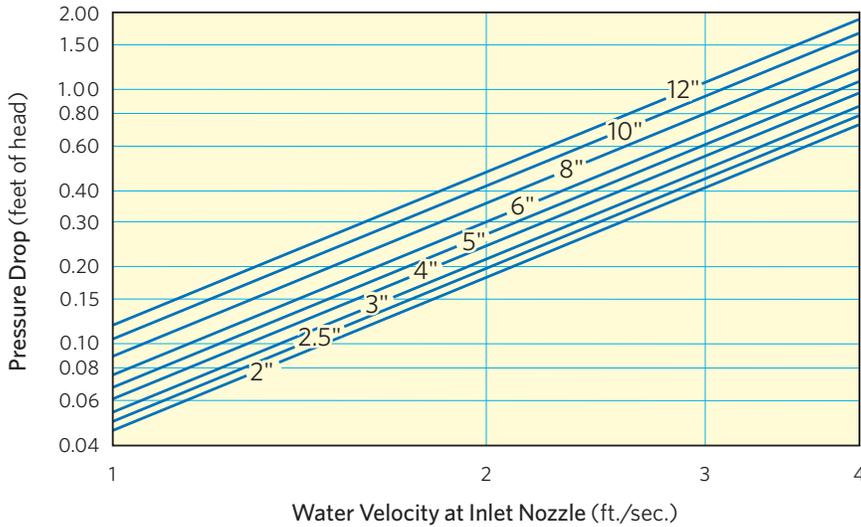
## INSTALL THE SPIROVENT FOR OPTIMUM PERFORMANCE

Ideal placement of the Spirovent 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\*. For this reason, the Spirovent is typically installed in the hottest point of the system. For a heating installation, this is in the supply from the boiler. In a chilled water circuit, the warmest point is in the return to the chiller.



\*For more detailed technical information, ask about our Spirotism booklet .

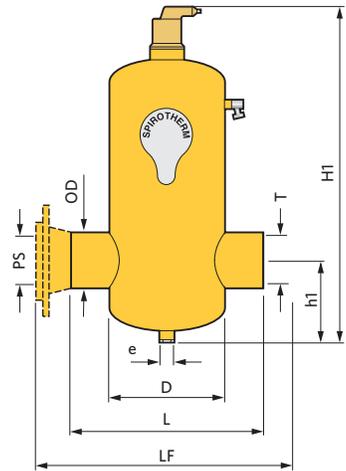
## PRESSURE DROP



## TECHNICAL SPECIFICATIONS

### SPIROVENT AIR

Part Number		VSR200	VSR250	VSR300	VSR400	VSR500	VSR600	VSR800	VSR1000	VSR1200
Pipe Size	Inch	2	2.5	3	4	5	6	8	10	12
O.D.	Inch	2.375	3.0	3.5	4.5	5.5	6.625	8.625	10.75	12.75
Thread	NPT	2	2.5	3	4	—	—	—	—	—
D	Inch	6.3	6.3	8.6	8.6	12.8	12.8	16.0	20.0	24.0
H1	Inch	19.0	19.0	23.7	23.7	30.6	30.6	38.4	47.8	56.3
h1	Inch	5.0	5.4	6.4	6.8	8.6	9.2	10.8	13.0	15.2
L	Inch	10.2	10.2	14.6	14.6	—	—	—	—	—
LF	Inch	15.2	15.7	20.2	20.6	27.7	27.7	33.6	37.5	42.5
e	Inch	1	1	1	1	1	1	1	1	1
Volume	Gal.	1.3	1.3	4.5	4.5	13.2	13.2	27.7	55.5	92.5
Weight										
Threaded	Lbs.	23	28	45	47	—	—	—	—	—
Flanged	Lbs.	48	59	95	107	186	200	360	564	1050
Recom. Flow*	GPM	45	70	95	170	260	375	625	950	1400



\*Approximately 4 ft. per second inlet velocity

All Spirovents fabricated and stamped in accordance with ASME Section VIII, Division 1 for unfired pressure vessels.

Standard rating is 150 psi at 270°F. Consult local sales office for special requirements.

Custom dimensions available for space limitations.

Refer to High Velocity models for higher flows and web site Submittal Data for models up to 36".