

MICROBUBBLE DEAERATORS

# SPIROVENT®



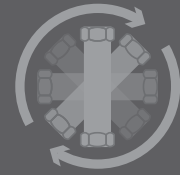
Industry-leading  
20-year guarantee



Reduction of  
maintenance and malfunction



Energy saving



Quick and easy, universal  
installation (360°)



Sturdy brass  
housing



Reliable, leak-free  
venting system

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.



## BENEFITS OF SPIROVENT

- Removes all circulating air and microbubbles effectively
- Removes trapped air when installed at the correct location
- Greatly reduces the need for manual venting
- Constant low pressure drop
- No unnecessary shutdown
- Connection diameters from ¾" to DN 800 (see page 30 for additional options)
- A complete range, suitable for various pressures and temperatures
- Exceptional guarantee

Shortly after the first decade of Spirotech's existence a game-changing product family was announced. By introducing the SpiroVent in 1968, Spirotech laid the foundation of understanding microbubble deaeration and optimising performance of HVAC systems. 50 years later, the SpiroVent microbubble deaerator range stands stronger than ever. The once narrow product range, now offers a broad and well customizable portfolio. From ¾" up to DN 800, from brass to steel, from normal- to high-flow, a wide variety of microbubble deaerators are being manufactured in the Netherlands to satisfy customer needs.

Check the Spirotech website for more on the 50th anniversary of our beloved SpiroVent.

## SPIROVENT MICROBUBBLE DEAERATORS

SpiroVent microbubble deaerators are installed inline and continuously remove free air and microbubbles from the system fluid.

A SpiroVent deaerator should always be installed at the hottest point within a system. In the case of a heating system, for example, this is the point where the water exits the boiler. In the case of a cooling system, it is in the return before the chiller unit. When installed in the correct location a SpiroVent has the capability to deaerate the entire system as it can make the water absorptive to remaining air in the system.

## WHY USE SPIROVENT PRODUCTS?

Today's highly energy-efficient heating and cooling systems offer optimal performance with air-free system water. Automatic air vents and bleeding valves cannot remove microbubbles or circulating air. Venting devices on boilers and other devices will not remove air that is present elsewhere in the system. Furthermore, presence of air is the major cause of dirt formation corrosion and related negative effects on efficiency, failure sensitivity and wear and tear.

## HOW DOES IT WORK?

The SpiroVent is a fully universal deaerator that works non-stop to effectively remove circulating air and microbubbles from system water. At the heart of the SpiroVent is the Spirotube separation element, which ensures that microbubbles are separated from the water flow, allowing them to rise up to the air chamber. The specially constructed air chamber provides sufficient volume to absorb pressure fluctuations and prevents valve contamination. This is one of the main causes of leaks. Thanks to the special construction and the solid valve seat, the leak-proof air release valve opens, releases the air and always closes perfectly. This avoids unwanted entry of air from outside the system.

## UNIQUE FOR SPIROVENT RV2

The sturdy brass SpiroVent RV2 is equipped with a swivel connection making it very easy to install, also ideal for existing pipework because of the slide-over compression coupling. Thanks to the swivel connection, the SpiroVent RV2 is suitable for horizontal, vertical, and diagonal pipes.



Studies from Kiwa GASTEC, BSRIA, TNO and others show SpiroVent deaerators can save up to 6% on energy consumption.



**SPIROVENT® RV2** – Brass solution with universal connection

Art.-No.	Connection d	int.	Hv	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [ltr]	Weight [kg]
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]						
UA022W	22 mm	(M)	205	177	125	120	62	32	145	143	>50	>50	M4	(F)	1,30	0,36	2,1	0,18	1,8
UA028W	28 mm	(M)	205	177	128	120	62	32	145	151	>50	>50	M4	(F)	2,00	0,56	3,8	0,18	1,8
UA075W	Rp¾	(F)	195	177	127	100	62	32	145	144	>50	>50	M4	(F)	1,30	0,36	2,1	0,38	1,6
UA100W	Rp1	(F)	195	177	131	100	62	32	145	154	>50	>50	M4	(F)	2,00	0,56	3,8	0,41	1,8
UA125W	Rp1¼	(F)	290	276	149	128	80	50	226	174	>50	>50	R½	(M)	3,60	1,00	2,5	1,12	4,0
UA150W	Rp1½	(F)	290	276	152	128	80	50	226	179	>50	>50	R½	(M)	5,00	1,40	4,0	1,16	4,0
UA200W	Rp2	(F)	310	296	159	128	80	50	246	194	>50	>50	R½	(M)	7,50	2,10	8,3	1,38	5,0



Op. pressure  
max. 10 bar



Temperature  
max. 110 °C



Nom. flow velocity  
1 m/s

**SPIROVENT®** – Brass solution with horizontal connection

Art.-No.	Connection d	int.	H	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [ltr]	Weight [kg]
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]						
AA022	22 mm	-	154	-	52	105	65	21	133	106	>50	>50	R½	(M)	1,30	0,36	1,3	0,2	1,2
AA075	G¾	(F)	154	-	52	85	65	21	133	96	>50	>50	R½	(M)	1,30	0,36	1,3	0,2	1,0
AA100	G1	(F)	180	-	52	88	65	35	145	97	>50	>50	R½	(M)	2,00	0,56	1,3	0,2	1,3
AA125	G1¼	(F)	198	-	52	88	65	39	159	97	>50	>50	R½	(M)	3,60	1,00	1,3	0,3	1,4
AA150	G1½	(F)	234	-	52	88	65	42	192	97	>50	>50	R½	(M)	5,00	1,39	1,3	0,3	1,6
AA200	G2	(F)	276	-	52	132	100	59	217	119	>50	>50	R½	(M)	7,50	2,08	1,4	1,1	3,9



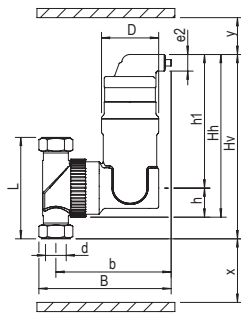
Op. pressure  
max. 10 bar



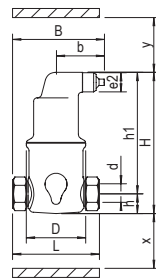
Temperature  
max. 110 °C



Nom. flow velocity  
1 m/s



SPIROVENT RV2



SPIROVENT HORIZONTAL

# SPIROVENT®

Brass solution

SPECIAL

## SPIROVENT® – Brass solution for high temperature

Art.-No.	Connection d	int.	H	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[m³/h]	[l/s]	[kPa]	[ltr]	[kg]
AA022/002	22 mm	-	154	-	52	105	65	21	133	106	>50	>50	R½	(M)	1,30	0,36	n/a	0,2	1,2
AA075/002	G¾	(F)	154	-	52	85	65	21	133	96	>50	>50	R½	(M)	1,30	0,36	n/a	0,2	1,0
AA100/002	G1	(F)	180	-	52	88	65	35	145	97	>50	>50	R½	(M)	2,00	0,56	n/a	0,2	1,3
AA125/002	1¼	(F)	198	-	52	88	65	39	159	97	>50	>50	R½	(M)	3,60	1,00	n/a	0,3	1,4
AA150/002	G1½	(F)	234	-	52	88	65	42	192	97	>50	>50	R½	(M)	5,00	1,39	n/a	0,3	1,6



Op. pressure  
max. 10 bar



Temperature  
max. 180 °C

## SPIROVENT® – Brass solution for high temperature and high pressure

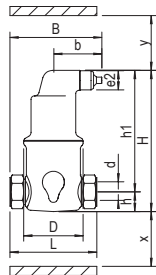
Art.-No.	Connection d	int.	H	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[m³/h]	[l/s]	[kPa]	[ltr]	[kg]
AA075/025	G¾	(F)	176	-	52	85	65	21	155	96	>50	>50	R½	(M)	1,30	0,36	n/a	0,2	1,4
AA100/025	G1	(F)	202	-	52	88	65	35	167	97	>50	>50	R½	(M)	2,00	0,56	n/a	0,2	1,6
AA125/025	G1¼	(F)	220	-	52	88	65	39	181	97	>50	>50	R½	(M)	3,60	1,00	n/a	0,3	1,8
AA150/025	G1½	(F)	256	-	52	88	65	42	214	97	>50	>50	R½	(M)	5,00	1,39	n/a	0,3	1,9



Op. pressure  
max. 25 bar



Temperature  
max. 150 °C



SPIROVENT  
HORIZONTAL

## CUSTOM


Please visit page 30 for further information on our custom products.

**SPIROVENT®**  
Stainless steel solution

SPECIAL

**SPIROVENT®** – Stainless steel solution for high temperature


Art.-No.	Connection d	int.	H	b	L	D	h	h1	B	x	y	e2	ext.	Material: housing	Material: float
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]				
AA125/R002	G1¼	(F)	198	52	88	65	39	159	97	>50	>50	R½	(M)	AISI 316	TPX
AA125/R007	G1¼	(F)	198	52	88	65	39	159	97	>50	>50	R½	(M)	AISI 316	AISI 316

 Op. pressure  
max. 10 bar

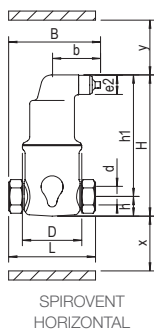
 Temperature  
max. 180 °C

**SPIROVENT®** – Stainless steel solution for high temperature and high pressure

Art.-No.	Connection d	int.	H	b	L	D	h	h1	B	x	y	e2	ext.	Material: housing	Material: float
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]				
AA125/R004	G1¼	(F)	220	52	88	65	39	181	97	>50	>50	R½	(M)	AISI 316	TPX

 Op. pressure  
max. 25 bar

 Temperature  
max. 200 °C



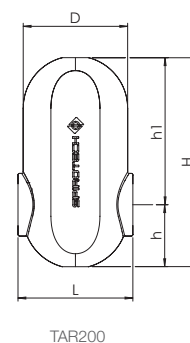
**CUSTOM**


Please visit page 30 for further information on our custom products.

ACCESSORIES

**SPIROVENT®** – Accessories for brass solution

Art.-No.	Description	Suitable for
TAA150	Insulation set	AA022, AA075, AA100, AA125, AA150
TAR200	Insulation set G2/2" horizontal connection	AA200
TUR100	Insulation set universal connection 22/28 mm	UA022W, UA028W
TUR125	Insulation set Rp1¼	UA125W
TUR150	Insulation set Rp1½	UA150W
TUR200	Insulation set Rp2	UA200W



 Have you thought of a dirt separator?  
Learn more on page 13.


**SPIROVENT® – Steel solution – standard flow**

STANDARD

Art.-No.	DN	OD	H	L/LF	D	h	h1	e1	ext.	x	y	e2	ext.	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[mm]	[mm]			[m³/h]	[l/s]	[kPa]	[ltr]	[kg]
BA050L	50	60,3	470	260	159	120	350	G¾	(M)	>50	>50	R½	(M)	12,50	3,47	3,0	5,0	9,0
BA050F	50	60,3	470	350	159	120	350	G¾	(M)	>50	>50	R½	(M)	12,50	3,47	3,0	5,0	14,0
BA065L	65	76,1	470	260	159	130	340	G¾	(M)	>50	>50	R½	(M)	20,00	5,56	2,7	5,0	9,0
BA065F	65	76,1	470	350	159	130	340	G¾	(M)	>50	>50	R½	(M)	20,00	5,56	2,7	5,0	15,0
BA080L	80	88,9	580	370	219	150	430	G¾	(M)	>50	>50	R½	(M)	27,00	7,50	2,9	17,0	18,0
BA080F	80	88,9	580	470	219	150	430	G¾	(M)	>50	>50	R½	(M)	27,00	7,50	2,9	17,0	25,0
BA100L	100	114,3	580	370	219	160	420	G¾	(M)	>50	>50	R½	(M)	47,00	13,06	3,7	17,0	18,0
BA100F	100	114,3	580	475	219	160	420	G¾	(M)	>50	>50	R½	(M)	47,00	13,06	3,7	17,0	27,0
BA125L	125	139,7	750	525	324	195	555	G¾	(M)	>50	>50	R½	(M)	72,00	20,00	4,2	50,0	42,0
BA125F	125	139,7	750	635	324	195	555	G¾	(M)	>50	>50	R½	(M)	72,00	20,00	4,2	50,0	54,0
BA150L	150	168,3	750	525	324	210	540	G¾	(M)	>50	>50	R½	(M)	108,00	30,00	4,9	50,0	42,0
BA150F	150	168,3	750	635	324	210	540	G¾	(M)	>50	>50	R½	(M)	108,00	30,00	4,9	50,0	57,0
BA200F	200	219,1	1.000	775	406	290	710	G¾	(M)	>50	>50	R½	(M)	180,00	50,00	5,8	105,0	106,0
BA250F	250	273,0	1.250	890	508	385	865	G¾	(M)	>50	>50	R½	(M)	288,00	80,00	6,9	210,0	171,0
BA300F	300	323,9	1.465	1.005	610	450	1.015	G¾	(M)	>50	>50	R½	(M)	405,00	112,50	7,7	350,0	251,0

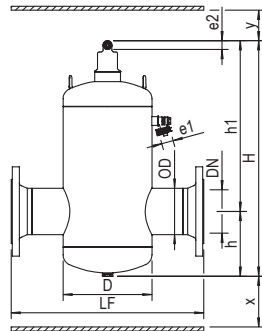
 Op. pressure  
max. 10 bar

 Temperature  
max. 110 °C

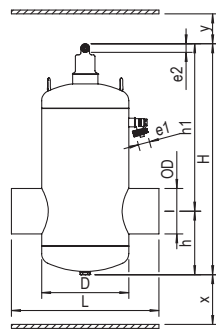
 Nom. flow velocity  
1.5 m/s

Products in the range are available up to DN800 and are made to order – prices on application.

L= Weld ends / F= Flange design (PN 16)



SPIROVENT  
FLANGE DESIGN



SPIROVENT  
WELD ENDS

# SPIROVENT®

Steel solution

SPIROVENT®

## SPIROVENT® – Steel solution – Hi-flow

SPECIAL

Art.-No.	DN	OD	H	L/LF	D	h	h1	e1	ext.	x	y	e2	ext.	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
														[m³/h]	[l/s]			
HA050L	50	60,3	630	260	159	120	510	G¾	(M)	>50	>50	R½	(M)	25,00	6,94	11,7	7,0	12,0
HA050F	50	60,3	630	350	159	120	510	G¾	(M)	>50	>50	R½	(M)	25,00	6,94	11,7	7,0	17,0
HA065L	65	76,1	630	260	159	130	500	G¾	(M)	>50	>50	R½	(M)	40,00	11,11	11,9	7,0	12,0
HA065F	65	76,1	630	350	159	130	500	G¾	(M)	>50	>50	R½	(M)	40,00	11,11	11,9	7,0	19,0
HA080L	80	88,9	780	370	219	150	630	G¾	(M)	>50	>50	R½	(M)	54,00	15,00	12,4	25,0	24,0
HA080F	80	88,9	780	470	219	150	630	G¾	(M)	>50	>50	R½	(M)	54,00	15,00	12,4	25,0	32,0
HA100L	100	114,3	780	370	219	160	620	G¾	(M)	>50	>50	R½	(M)	94,00	26,11	14,7	25,0	24,0
HA100F	100	114,3	780	475	219	160	620	G¾	(M)	>50	>50	R½	(M)	94,00	26,11	14,7	25,0	33,0
HA125L	125	139,7	1.030	525	324	195	835	G¾	(M)	>50	>50	R½	(M)	144,00	40,00	16,9	75,0	59,0
HA125F	125	139,7	1.030	635	324	195	835	G¾	(M)	>50	>50	R½	(M)	144,00	40,00	16,9	75,0	71,0
HA150L	150	168,3	1.030	525	324	210	820	G¾	(M)	>50	>50	R½	(M)	215,00	59,72	19,2	75,0	59,0
HA150F	150	168,3	1.030	635	324	210	820	G¾	(M)	>50	>50	R½	(M)	215,00	59,72	19,2	75,0	74,0
HA200F	200	219,1	1.340	775	406	290	1.050	G¾	(M)	>50	>50	R½	(M)	360,00	100,00	23,4	150,0	137,0
HA250F	250	273,0	1.750	890	508	385	1.365	G¾	(M)	>50	>50	R½	(M)	575,00	159,72	27,5	300,0	212,0
HA300F	300	323,9	2.060	1.005	610	450	1.610	G¾	(M)	>50	>50	R½	(M)	810,00	225,00	31,2	500,0	392,0



Op. pressure  
max. 10 bar



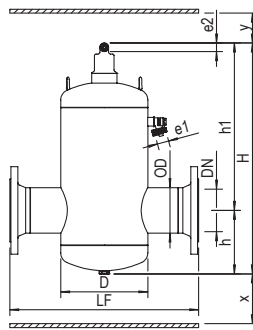
Temperature  
max. 110 °C



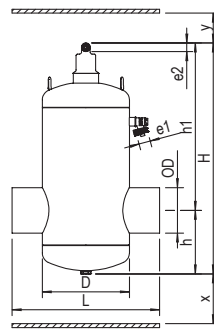
Nom. flow velocity  
3 m/s

Products in the range are available up to DN800 and are made to order – prices on application.

L = Weld ends / F = Flange design (PN 16)



SPIROVENT  
FLANGE DESIGN



SPIROVENT  
WELD ENDS

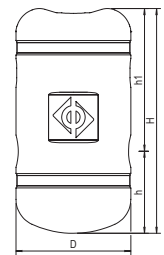
## CUSTOM

Please visit page 30 for further information on our custom products.

## SPIROVENT® – Accessories for steel solution

ACCESSORIES

Art.-No.	Description	Suitable for
TB050	Insulation Set for SpiroVent DN 50 + 65	BA050F/L, BA065F/L
TB080	Insulation Set for SpiroVent DN 80 + 100	BA080F/L, BA100F/L
TB125	Insulation Set for SpiroVent DN 125 + 150	BA125F/L, BA150F/L



SPIROVENT  
INSULATION



Have you thought of a dirt separator?  
Learn more on page 13.