

SpiralAir™

High-Flow Air Atomizing

DESIGN FEATURES

- A two-fluid nozzle using any gas as the atomizing fluid
- Three-stage atomization for highest performance
- Designed for high reliability in extremely hostile environments
- Efficient design reduces compressed air consumption
- U.S. Patent #5,240,183

SPRAY CHARACTERISTICS

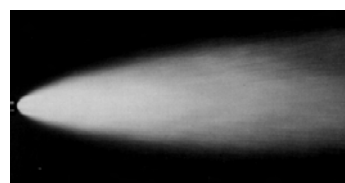
Spray patterns: Full Cone and Flat Fan

Spray angles: 20°, 60°, 90°
(Other angles available by special order)

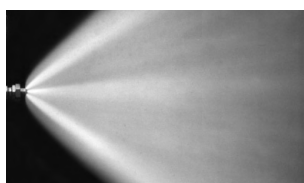
Flow rates: 0.33 to 26 gpm



1 1/2" SA (Set-up #) - A - 00



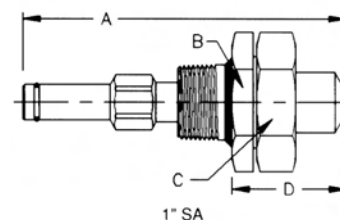
Narrow Round 20°



Wide Round 90°



Flat Fan 60°

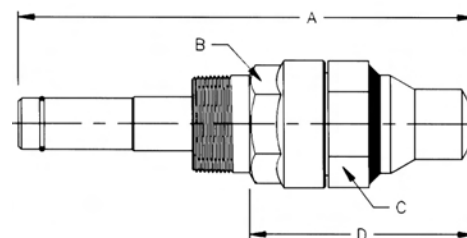


1 SA (Set-up #) - A - 00

Dimensions are approximate. Check with BETE for critical dimension applications.

SpiralAir Spray Set-up, Spiral Tip and Dimensions

Pipe Size	Spray Set-up No.	Spiral Tip No.	Approx. Free Pass. Dia. (in.)			Dimensions (in.)					Wt. (lbs)				
			Spray Angle	Spray Type		Pipe Size	A	B	C	D					
1"	SA 101	14	20°	Narrow Round	0.19	1	5.83	2.00	2.00	2.00	1.4				
	SA 308		90°	Wide Round	0.106										
	SA 310		60°	Round	0.106										
	SA 402		90°	Flat Fan	0.166										
	SA 404	20	60°	Flat Fan	0.166	1	5.83	2.00	2.00	2.00	1.4				
	SA 103		20°	Narrow Round	0.281										
	SA 307		90°	Wide Round	0.137										
	SA 309		60°	Round	0.137										
1 1/2"	SA 401	24	90°	Flat Fan	0.205	1 1/2	9.00	2.00	2.19	4.45	3.3				
	SA 403		60°	Flat Fan	0.205										
	SA 2001		20°	Narrow Round	0.365										
	SA 2008		90°	Wide Round	0.213										
	SA 2012	28	60°	Round	0.213							SA 2100	20°	Narrow Round	0.365
	SA 2300		90°	Wide Round	0.213										
	SA 2301		60°	Round	0.213										



1 1/2" SA (Set-up #) - A - 00

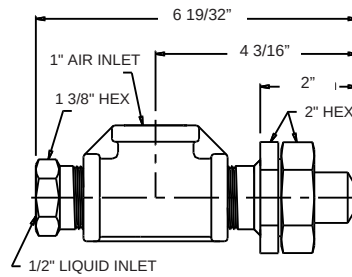
Larger sizes and flow rates available upon request.

Standard Materials: 316 Stainless Steel OR Cobalt Alloy 6 wear components.

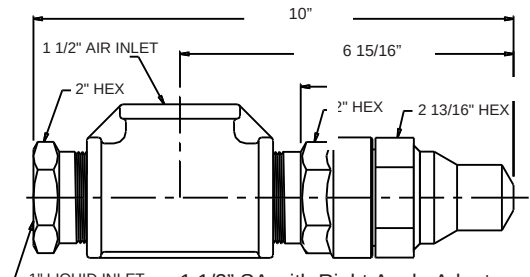
Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

The SpiralAir can be configured to fit any installation requirement. The examples shown are just a few of the custom assemblies available. For more information, contact BETE Applications Engineering.

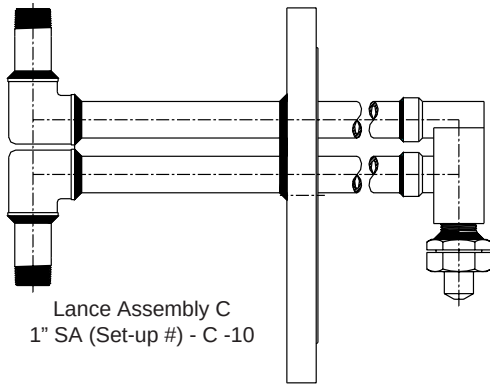
A guide with additional engineering data about the SpiralAir series is available on request.



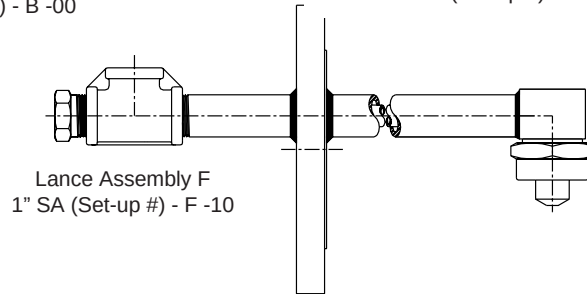
1" SA with Right Angle Adapter
1" SA (Set-up #) - B -00



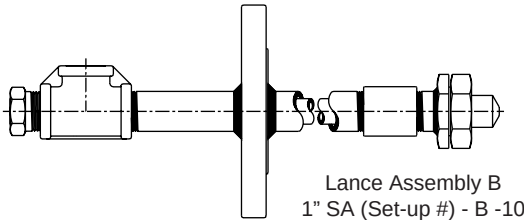
1 1/2" SA with Right Angle Adapter
1 1/2" SA (Set-up #) - B -00



Lance Assembly C
1" SA (Set-up #) - C -10



Lance Assembly F
1" SA (Set-up #) - F -10



Lance Assembly B
1" SA (Set-up #) - B -10

Since very small variations in liquid pressure produce large variations in liquid flow, BETE recommends using a metering pump or other flow metering device to control the liquid flow.

SpiralAir Set-up Flow Rates

Narrow, Wide and Flat Fan Patterns 1" and 1 1/2" Pipe Size

Pipe Size	Spiral Tip Rating	30 PSI Air			40 PSI Air			50 PSI Air			60 PSI Air			70 PSI Air			80 PSI Air			90 PSI Air			100 PSI Air		
		GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM
1"	14	0.33	26	37	0.33	34	52	0.33	44	68	0.33	53	85	0.33	64	103	0.33	75	121	0.33	86	139	0.33	98	158
		0.66	28	24	0.66	37	34	0.66	46	45	0.66	56	56	0.66	67	68	0.66	78	79	0.66	90	92	0.66	102	104
		1.00	30	19	1.00	39	27	1.00	48	35	1.00	58	44	1.00	69	53	1.00	80	62	1.00	92	71	1.00	104	81
		1.33	31	16	1.33	40	22	1.33	50	30	1.33	60	37	1.33	71	44	1.33	82	52	1.33	94	60	1.33	106	68
		1.66	32	14	1.66	41	20	1.66	51	26	1.66	61	32	1.66	72	39	1.66	83	45	1.66	95	52	1.66	107	59
		2.00	33	12	2.00	42	18	2.00	52	23	2.00	62	29	2.00	73	35	2.00	85	41	2.00	96	47	2.00	109	53
		2.33	34	11	2.33	43	16	2.33	53	21	2.33	63	26	2.33	74	31	2.33	86	37	2.33	98	43	2.33	110	48
		2.66	35	10	2.66	44	15	2.66	54	19	2.66	64	24	2.66	75	29	2.66	87	34	2.66	99	39	2.66	111	45
		3.00	35	10	3.00	45	14	3.00	55	18	3.00	65	22	3.00	76	27	3.00	88	32	3.00	100	37	3.00	112	42
	20	1.0	27	38	1.0	34	52	1.0	42	65	1.0	51	79	1.0	59	92	1.0	69	106	1.0	78	120	1.0	88	133
		2.0	29	27	2.0	37	36	2.0	45	45	2.0	54	55	2.0	63	64	2.0	72	74	2.0	82	84	2.0	92	93
		3.0	31	22	3.0	39	29	3.0	47	37	3.0	56	45	3.0	65	52	3.0	75	60	3.0	84	68	3.0	94	76
		4.0	33	19	4.0	41	25	4.0	49	32	4.0	58	38	4.0	67	45	4.0	76	52	4.0	86	58	4.0	96	65
		5.0	35	17	5.0	42	22	5.0	51	28	5.0	59	34	5.0	69	40	5.0	78	46	5.0	88	52	5.0	98	58
		6.0	35	15	6.0	43	20	6.0	52	26	6.0	61	31	6.0	70	36	6.0	79	42	6.0	89	47	6.0	100	53
		7.0	36	14	7.0	44	19	7.0	53	24	7.0	62	29	7.0	71	34	7.0	81	39	7.0	91	44	7.0	101	49
		8.0	37	13	8.0	45	18	8.0	54	22	8.0	63	27	8.0	72	31	8.0	82	36	8.0	92	41	8.0	102	45
		9.0	38	12	9.0	46	17	9.0	55	21	9.0	64	25	9.0	73	30	9.0	83	34	9.0	93	38	9.0	103	43
1 1/2"	24	10	39	12	10	47	16	10	56	20	10	65	24	10	74	28	10	84	32	10	94	36	10	104	41
					5.0	39	87	5.0	49	106	5.0	59	127	5.0	68	152	5.0	78	181	5.0	87	213	5.0	95	248
					8.0	42	68	8.0	53	83	8.0	62	101	8.0	72	122	8.0	82	145	8.0	91	173	8.0	100	203
					11	47	53	11	57	66	11	67	80	11	77	98	11	86	118	11	96	141	11	105	168
								14	62	52	14	73	65	14	83	79	14	93	96	14	102	116	14	111	139
								17			17	80	52	17	90	65	17	100	79	17	110	97	17	119	117
											20			20	98	53	20	108	66	20	118	81	20	128	98
																	23	118	55	23	128	68	23	138	84
																				26	139	58	26	149	72
	28	10	46	36	10	54	51	10	64	67	10	73	85	10	84	105	10	94	126	10	105	148	10	116	137
		11	46	34	11	55	47	11	65	63	11	74	79	11	85	98	11	95	117	11	106	137	11	117	128
		12	47	31	12	56	44	12	65	59	12	75	74	12	85	91	12	96	109	12	107	128	12	118	121
		13	48	30	13	57	42	13	66	55	13	76	70	13	86	86	13	97	103	13	108	121	13	119	114
		14	48	28	14	57	39	14	67	52	14	77	66	14	87	81	14	98	97	14	109	114	14	120	108
		15	49	27	15	58	37	15	67	49	15	77	63	15	88	77	15	98	92	15	109	108	15	121	103
		16	50	25	16	59	36	16	68	47	16	78	60	16	88	73	16	99	88	16	110	103	16	122	100
		17	50	24	17	59	34	17	69	45	17	79	57	17	89	70	17	100	84	17	111	98	17	123	99
		18	51	23	18	60	32	18	69	43	18	79	54	18	90	67	18	100	80	18	111	94	18	124	97
		19	51	22	19	60	31	19	70	41	19	80	52	19	90	64	19	101	77	19	112	90	19	125	95
		20	52	21	20	61	30	20	70	40	20	80	50	20	91	62	20	102	74	20	113	87	20	126	93

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