Anemostat® AIR DISTRIBUTION

by AEROSONICS A Division of Anemostat, Inc.

Standard Elbow Attenuator - Model SRE-3

Model	Flow	Velocity fpm	Static Press	Dynamic Insertion Loss (dB) Octave Band/Center Frequency (Hz) 1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
SRE-3-36 36"	Reverse Flow	-1500	0.3	5	10	15	24	34	27	16	11
		-1000	0.13	5	9	14	23	34	27	17	12
		-500	0.03	4	9	13	23	34	28	17	12
		0		4	8	13	23	34	28	19	12
	Forward Flow	500	0.03	4	8	13	22	33	28	19	13
		1000	0.13	5	8	12	22	33	29	20	13
		1500	0.3	4	8	12	22	32	29	20	13
SRE-3-48 48"	Reverse Flow	-1500	0.34	6	12	19	29	40	31	21	13
		-1000	0.15	6	12	18	29	41	33	21	13
		-500	0.04	5	11	17	29	41	35	22	14
		0		5	11	17	28	41	36	24	15
	Forward Flow	500	0.04	5	10	16	27	41	36	24	15
		1000	0.15	5	9	15	27	41	36	25	16
		1500	0.34	5	9	15	27	40	35	25	16
SRE-3-60 60"	Reverse Flow	-1500	0.38	7	16	24	35	46	36	25	15
		-1000	0.17	7	15	23	35	49	39	26	16
		-500	0.04	6	14	21	35	49	43	27	16
		0		6	13	20	34	49	44	30	18
	Forward Flow	500	0.04	6	13	20	33	49	44	30	19
		1000	0.17	6	12	19	33	49	44	30	19
		1500	0.38	6	12	18	32	48	42	30	20
SRE-3-72 72"	Reverse Flow	-1500	0.45	8	18	28	40	46	39	29	17
		-1000	0.2	8	17	26	41	50	44	30	18
		-500	0.05	7	16	25	41	52	50	32	18
		0		7	15	24	40	53	51	35	20
	Forward Flow	500	0.05	7	14	23	39	53	52	35	21
		1000	0.2	7	13	22	38	53	51	35	22
		1500	0.45	6	13	21	36	51	46	35	23
SRE-3-84 84"	Reverse Flow	-1500	0.52	10	21	32	45	46	43	33	19
		-1000	0.23	9	20	30	47	51	49	35	20
		-500	0.06	8	18	29	47	56	57	37	21
		0		8	18	27	46	57	60	40	23
	Forward Flow	500	0.06	8	16	26	45	58	61	40	24
		1000	0.23	8	15	25	44	57	59	40	25
		1500	0.52	7	15	23	42	55	51	40	26

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SRE-3-96 96"	Reverse Flow	-1500	0.62	10	22	35	47	51	48	36	22
		-1000	0.28	9	21	34	48	54	52	37	23
		-500	0.07	8	20	32	47	57	57	38	23
		0		8	20	31	47	58	59	40	24
	Forward Flow	500	0.07	8	19	31	46	58	61	40	25
		1000	0.28	8	18	30	44	58	59	40	26
		1500	0.62	7	17	28	43	56	54	40	27
SRE-3-108 108"	Reverse Flow	-1500	0.71	11	24	39	49	56	54	39	26
		-1000	0.32	10	23	38	49	58	56	39	26
		-500	0.08	9	23	37	48	59	59	40	25
		0		9	23	36	48	59	60	40	25
	Forward Flow	500	0.08	9	22	36	47	59	61	40	26
		1000	0.32	9	21	35	46	59	61	41	28
		1500	0.71	8	20	34	45	57	58	41	28
SRE-3-120 120"	Reverse Flow	-1500	0.79	11	25	43	53	61	60	42	29
		-1000	0.35	11	25	42	51	61	60	42	29
		-500	0.09	10	25	41	50	60	60	41	27
		0		10	25	41	49	61	61	41	27
	Forward Flow	500	0.09	9	25	40	48	60	61	41	27
		1000	0.35	9	23	40	48	61	61	41	29
		1500	0.79	9	23	39	48	59	61	41	29

Forward Flow: Characteristic of supply or discharge fan systems

Reverse Flow: Typical of return or intake fan systems

Calculating Actual Pressure Drop:

- Determine Actual Velocity (FPM) = CFM / Area, ft^2 = CFM / (W x H / 144) where W and H are Silencer Width and Height, inches

- Static Pressure Drop = (Actual Velocity/1000)^2 x Catalog Static Pressure Drop @ 1000 FPM

FLO Anemostat Product Selection

Anemostat FLO performance data software provides silencer performance at actual conditions and can be downloaded from: https://www.anemostat-hvac.com/Tech_Center/software.asp

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Rectangular Elbow Attenuators - Model SRE

Self-noise Power Levels

Model	Velocity fpm	Self-Noise Power Levels, dB re 10^{-12} Watts Octave Band/Center Frequency (Hz) 1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
SRE - 2	750	55	41	37	36	43	45	39	33
	1000	60	50	42	38	45	53	50	44
	1500	71	62	55	50	50	59	63	59
SRE - 3	750	54	40	36	36	42	42	35	31
	1500	60	54	48	44	47	55	53	47
	2000	71	62	56	53	54	60	63	59
SRE - 4	750	54	40	35	36	42	39	32	29
	1500	60	58	55	50	50	57	56	50
	2000	72	62	57	56	58	62	64	59
SRE - 5	750	56	40	34	35	42	40	32	28
	1500	64	57	53	49	50	57	57	51
	2000	73	63	58	55	56	62	64	60
SRE - 6	1000	59	40	33	35	42	41	32	27
	2000	68	57	52	49	51	58	59	53
	2500	75	64	59	55	55	62	65	61

Area Adjustment Factors: The generated self-noise power levels shown above in the table are based on silencers with a Face Area of 4 sq. feet. For silencers with a different face area, add the adjustment factor as shown below based on the face area of the silencer:

Silencer Face Area, ft^2	.50	1	2	4	6	8	16	32	64	128
Power Level Adjustment Factor, dB	-9	-6	-3	0	2	3	6	9	12	15