

## Low Frequency

# Hospital/Clean Room Attenuator - Model **SRLH-2**

Dynamic Insertion Loss (dB)  
Octave Band/Center Frequency (Hz)

Model	Flow	Velocity fpm	Static Press	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
<b>SRLH-2-36</b> <b>36"</b>	Reverse	-1500	1.48	9	12	17	21	27	22	18	8
		-1000	0.66	9	12	17	21	27	22	18	8
	Flow	-500	0.17	9	12	17	21	26	22	17	7
		0		8	12	16	20	25	23	17	7
	Forward	500	0.17	8	12	16	19	25	24	17	8
		1000	0.66	8	12	16	19	24	24	16	8
		1500	1.48	8	12	16	19	24	24	16	8
<b>SRLH-2-60</b> <b>60"</b>	Reverse	-1500	1.62	12	21	24	27	38	28	22	9
		-1000	0.72	12	21	24	27	38	28	22	9
	Flow	-500	0.18	12	19	23	26	38	29	21	9
		0		11	18	23	25	37	30	19	8
	Forward	500	0.18	11	17	23	24	36	30	19	9
		1000	0.72	11	17	22	23	35	30	19	9
		1500	1.62	11	17	22	23	35	30	19	9
<b>SRLH-2-84</b> <b>84"</b>	Reverse	-1500	2.11	16	25	33	37	45	32	26	13
		-1000	0.94	16	25	33	37	45	32	26	13
	Flow	-500	0.24	15	24	32	36	45	32	25	12
		0		14	23	31	35	45	33	24	11
	Forward	500	0.24	14	22	31	35	43	33	23	12
		1000	0.94	14	21	30	35	42	34	23	12
		1500	2.11	14	21	30	35	42	34	23	12
<b>SRLH-2-120</b> <b>120"</b>	Reverse	-1500	2.70	18	30	42	44	47	39	34	16
		-1000	1.20	18	30	42	44	47	39	34	16
	Flow	-500	0.30	17	29	41	43	47	40	33	15
		0		16	29	41	43	47	40	33	15
	Forward	500	0.30	16	28	40	43	46	40	32	15
		1000	1.20	15	27	39	43	46	41	31	16
		1500	2.70	15	27	39	43	46	41	31	16

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<sup>2</sup> = CFM / (W x H / 144)  
where W and H are Silencer Width and Height, inches
- Static Pressure Drop = (Actual Velocity/1500)<sup>2</sup> x Catalog Static Pressure Drop @ 1500 FPM

# Low Frequency Hospital / Clean Room Attenuators

## Self-noise Power Levels

## MODEL SRLH

		Self-Noise Power Levels, dB re 10 <sup>-12</sup> Watts							
		Octave Band/Center Frequency (Hz)							
Model	Velocity fpm	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
SRLH-2	1000	56	41	41	47	46	41	30	30
	1500	56	47	45	48	53	59	56	48
	2000	63	55	49	51	54	63	67	60
SRLH-3	1000	52	40	39	42	43	40	27	26
	1500	53	45	46	48	49	53	46	39
	2000	58	52	54	53	53	59	58	50
SRLH-4	1000	47	39	37	37	39	39	24	22
	1500	50	43	47	48	45	46	36	30
	2000	52	49	59	55	52	54	49	40
SRLH-5	1000	46	38	36	36	38	38	23	21
	1500	48	42	44	44	43	45	33	30
	2000	50	47	54	51	50	54	47	40
SRLH-6	1000	45	37	34	35	36	36	22	20
	1500	46	41	40	39	41	44	30	29
	2000	47	44	48	47	48	53	45	39

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 <sup>2</sup>	.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