

Insertion Loss (IL)

LENGTH (inches)	FACE VELOCITY (feet per minute)	OCTAVE BAND -Hz/DYNAMIC INSERTION LOSS (dB)							
		63	125	250	500	1000	2000	4000	8000
36	-2000	4	5	11	18	20	15	10	7
36	+2000	3	4	9	16	19	15	11	7
60	-2000	4	7	16	29	30	21	13	9
60	+2000	3	5	13	26	29	23	16	11
84	-2000	7	13	27	43	42	33	20	12
84	+2000	6	8	21	38	43	36	23	15
108	-2000	6	15	30	49	46	35	21	13
108	+2000	4	11	25	44	48	39	24	16

+: "forward flow" where noise & airflow move in same direction (e.g. supply side)

-: "reverse flow" where noise & airflow move in opposite directions (e.g. return side)

See pages 4.1-4.25 for selection information. DIL above 50dB may be limited due to noise flanking around the silencer or along the duct walls. If more than 50dB DIL is required, contact your local Vibro-Acoustics Representative or call 1-800-565-8401.

Pressure Drop (PD)

LENGTH (inches)	FACE VELOCITY (feet per minute) / Pressure Drop (In.w.g.)						
	500	1000	1500	1750	2000	2250	2500
36	0.01	0.04	0.09	0.12	0.16	0.20	0.25
60	0.01	0.05	0.12	0.17	0.22	0.28	0.34
84	0.02	0.09	0.20	0.28	0.36	0.46	0.56
108	0.02	0.08	0.18	0.24	0.32	0.40	0.50

Acceptable (0-0.35 in.w.g.)

Caution (>0.35 in.w.g.) Pressure Drop may be too high for certain applications

Pressure drops are reported in accordance with ASTM E477 methods and are based upon IDEAL flow conditions (5 diameters of straight duct on silencer inlet and 10 on outlet). Less than ideal conditions will result in an increase in pressure drop due to System Effects. See Silencer System Effects Data on page 4.19.

Generated Noise (GN) @ 5 sq. ft. face area

LENGTH (inches)	FACE VELOCITY (feet per minute)	OCTAVE BAND - Hz/GENERATED NOISE (dB re 10 ⁻¹² watts)							
		63	125	250	500	1000	2000	4000	8000
ALL	-2000	56	56	55	54	54	58	50	38
ALL	-1250	53	50	47	47	49	47	34	26
ALL	+1250	55	49	42	39	40	40	29	26
ALL	+2000	59	58	52	48	48	52	47	37

GN correction chart at right must be used to correct GN to other face areas.

Face Area (sq. ft.)	2.5	5	10	20	40	80
dB	-3	0	+3	+6	+9	+12

Questions? 1-800-565-8401

We reserve the right to improve our designs and data at any time without notice

CROSS-SECTION SIZES*

"A" dimension (silencer width)

(inches):

8.25-9.5
16.5-19
33-38
49.5-57
66-76
82.5-95
99-114
115.5-133
132-152
148.5-171

"B" dimension (silencer height):

ANY SIZE

* To ensure a silencer selection that matches the ductwork dimensions, see page 4.25 or 5.3.