

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	-500	10	14	15	14	22	25	19	12
36	+500	9	13	14	13	21	29	21	13
60	-500	12	16	23	24	31	33	23	12
60	+500	11	15	22	23	30	35	27	15
84	-500	14	17	31	34	40	41	28	13
84	+500	12	16	30	32	40	41	33	16
108	-500	17	20	39	39	46	51	32	15
108	+500	14	19	37	39	46	50	39	19

+: "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.)						
	250	500	750	1000	1250	1500	1750
36	0.03	0.12	0.26	0.46	0.72	1.04	1.41
60	0.04	0.16	0.35	0.63	0.98	1.41	1.92
84	0.05	0.20	0.45	0.80	1.24	1.79	2.43
108	0.06	0.24	0.54	0.96	1.50	2.17	2.95

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	-750	60	41	39	40	46	52	43	36
ALL	-500	56	43	34	36	40	39	29	34
ALL	+500	62	41	38	36	34	27	26	34
ALL	+750	59	46	44	44	43	40	36	35

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):

14.5-15.5
29-31
58-62
87-93
116-124
145-155
174-186
203-217
232-248

"B" dimension (silencer height):

ANY SIZE

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