

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	-750	6	8	16	23	27	22	14	10
36	+750	4	7	14	21	27	22	15	11
60	-750	8	14	23	38	42	33	20	13
60	+750	8	12	21	36	42	37	23	16
84	-750	13	19	33	46	55	45	27	16
84	+750	11	17	30	45	55	51	31	19
108	-750	15	24	40	45	55	48	29	19
108	+750	13	21	36	46	55	54	35	22

+: "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	0.02	0.06	0.15	0.26	0.41	0.58	0.80
60	0.02	0.09	0.21	0.37	0.58	0.83	1.13
84	0.03	0.11	0.24	0.43	0.67	0.96	1.31
108	0.03	0.11	0.25	0.45	0.70	1.00	1.37

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	50	47	46	49	50	48	36	26
ALL	-500	51	42	45	45	43	37	23	24
ALL	+500	50	39	34	32	31	28	20	23
ALL	+750	51	45	39	36	39	40	30	25

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):

10.5-11.5
21-23
42-46
63-69
84-92
105-115
126-138
147-161
168-184
189-207

"B" dimension (silencer height):

ANY SIZE

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