

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	9	10	14	19	27	31	20	9
36	+500	8	9	13	18	27	32	22	10
60	-500	11	14	21	29	38	43	27	11
60	+500	10	12	20	28	38	45	31	13
84	-500	14	17	28	40	49	54	35	13
84	+500	12	15	26	39	49	55	40	16
108	-500	16	21	35	40	49	55	42	15
108	+500	13	18	32	41	49	55	46	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	0.13	0.28	0.50	0.78	1.13	1.53
60	0.04	0.16	0.36	0.64	0.99	1.43	1.95
84	0.05	0.20	0.45	0.81	1.26	1.82	2.47
108	0.05	0.22	0.49	0.87	1.36	1.96	2.66

☐ : 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	57	47	47	47	49	53	44	36
ALL	-500	55	45	42	42	44	42	30	32
ALL	+500	57	43	42	40	36	28	25	31
ALL	+750	59	50	47	46	43	41	35	33

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):

9.5-10.5
19-21
38-42
57-63
76-84
95-105
114-126
133-147
152-168
171-189

"B" dimension (silencer height):

ANY SIZE

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