

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	5	11	19	28	35	30	24	20
36	+500	4	8	18	27	33	30	23	19
60	-500	7	17	29	42	45	46	29	25
60	+500	6	14	27	40	44	46	30	25
84	-500	10	23	38	55	55	55	35	30
84	+500	7	20	36	53	55	55	37	30
108	-500	13	29	48	55	55	55	41	35
108	+500	9	26	45	55	55	55	44	36

+: "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	0.04	0.16	0.35	0.63	0.98	1.42	1.93
60	0.05	0.19	0.42	0.75	1.18	1.70	2.31
84	0.05	0.22	0.49	0.88	1.37	1.98	2.69
108	0.06	0.25	0.57	1.00	1.57	2.26	3.08

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	53	43	43	46	49	52	42	33
ALL	-500	54	40	39	44	43	40	26	30
ALL	+500	51	41	34	33	33	29	24	29
ALL	+750	56	50	41	38	39	41	33	30

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):

6.75-8.25
13.5-16.5
27-33
40.5-49.5
54-66
67.5-82.5
81-99
94.5-115.5
108-132
121.5-148.5

"B" dimension (silencer height):

ANY SIZE

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