

## 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	7	12	19	24	32	26	16	12
36	+500	7	11	17	23	31	26	18	13
60	-500	10	16	27	40	49	39	23	17
60	+500	8	14	25	37	48	42	27	19
84	-500	13	22	35	47	55	50	30	18
84	+500	12	20	33	46	55	55	36	23
108	-500	15	26	43	48	55	55	37	22
108	+500	13	23	40	48	55	55	42	27

+: "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	0.47	0.73	1.06	1.44
60	0.04	0.15	0.34	0.60	0.94	1.36	1.85
84	0.05	0.19	0.44	0.78	1.22	1.75	2.38
108	0.05	0.20	0.46	0.81	1.27	1.83	2.50

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 <sup>-12</sup> watts)							
		63	125	250	500	1000	2000	4000	8000
ALL	-750	52	46	44	46	49	51	41	31
ALL	-500	51	42	40	42	45	43	29	28
ALL	+500	51	40	34	31	34	32	24	27
ALL	+750	53	48	41	38	40	43	36	29

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.