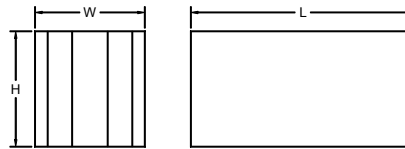


Availability

L: 3 feet and greater (sections if L>12ft)
W: 11.5-12.5, 23-25, 35-38, 46-50 inches
H: any length (72 inches practical limit)



5 ft Quick Rating = P80-L51-M128

See bottom of page for explanation.

Table 1: Insertion Loss

Length (in)	Face Velocity (fpm)	Insertion Loss (dB)							
		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
36	-500	6	11	19	27	32	29	21	18
	0	6	10	19	28	30	30	22	16
	500	6	10	19	28	32	32	21	18
60	-500	10	18	29	41	46	44	27	21
	0	10	17	28	40	44	44	29	21
	500	8	16	27	39	45	44	27	22
84	-500	14	23	39	47	51	48	33	25
	0	13	26	37	48	50	48	35	27
	500	10	23	36	46	51	48	33	27
120	-500	18	29	47	56	(60)	(60)	40	30
	0	17	32	46	58	(60)	(60)	46	32
	500	13	29	45	59	(60)	(60)	44	33

Note that ASTM inter-laboratory testing has shown insertion loss may vary as much as 6 dB in the 63hz band, and 3 dB for all other frequencies. Data in parenthesis () may be greater than shown due to limitations in laboratory equipment and/or facilities.

Table 2: Airflow Generated Sound Power Level

Face Velocity (fpm)	Airflow Generated Sound Power Level (dB)							
	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
-500	58	44	38	48	43	39	25	32
500	51	41	36	32	35	28	24	27

Note that ASTM inter-laboratory testing has shown that generated noise may vary as much as 6 dB in the 63hz band, and 3 dB for all other frequencies. Data in parenthesis () may be less than shown due to limitations in laboratory equipment and/or facilities.

Table 3: Face Area Adjustment Factor

Silencer cross-sectional area (sq ft)							
1	2	4	8	16	32	64	128
-6	-3	0	+3	+6	+9	+12	+15

Look up silencer cross-sectional area in table. Add adjustment to each octave band airflow generated sound power level from Table 2.

Weight =6.0 lb/ft³

Table 4: Pressure Loss

Length (in)	Loss Coefficient	Dynamic Pressure Loss (in wg)					
		Face Velocity (fpm)					
		250	500	750	1000	1250	1500
36	10.41	0.04	0.16	0.37	0.65	1.01	1.46
60	12.45	0.05	0.19	0.44	0.78	1.21	1.75
84	14.40	0.06	0.22	0.51	0.90	1.40	2.02
120	17.71	0.07	0.28	0.62	1.10	1.73	2.48

Note: Shaded regions represent a design condition that may have negative consequences for acoustically sensitive applications.

The Quick Rating is a designation used for comparing different silencer models to note differences in energy consumption (pressure loss), low frequency performance, and mid-frequency performance. The P rating is the pressure drop at 1000 fpm where PXX is the pressure drop in hundredths of an inch wg. The LYY rating is the total insertion loss, YY dB, of the 63, 125 and 250 Hz octave bands at 0 fpm. The MZZ rating is the total insertion loss, ZZ dB, of the 500, 1000 and 2000 Hz octave bands at 0 fpm. See the sheet titled "Quick Rating Guide" for further information.