McGill AirSilence LLC

An enterprise of United McGill Corporation - Founded in 1951

Availability

L: 3 feet and greater (sections if L>12ft) W: 5.5-6.5, 11.5-12.5, 23-25, 35-38, 46-50 inches

H: any length (72 inches practical limit)





RSF-LV-L44

Rectangular, Straight, Fiber-Filled, Low Velocity Sounpak® Silencer

5 ft Quick Rating = P26-L44-M132

See bottom of page for explanation.

Table 1: Insertion Loss

1	Face Velocity (fpm)	Insertion Loss (dB)								
Length (in)		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	
	- 1000	6	11	18	30	36	29	18	11	
36	0	6	9	16	28	36	31	21	12	
	1000	5	8	15	27	33	31	22	15	
	- 1000	9	16	30	43	50	43	31	18	
60	0	9	14	25	41	48	46	33	21	
	1000	8	13	23	39	46	47	34	22	
	- 1000	11	23	38	48	51	48	40	23	
84	0	10	20	34	47	50	52	44	25	
	1000	8	17	30	46	49	52	45	27	
120	-1000	16	30	45	51	53	49	49	30	
	0	14	26	43	52	52	53	52	33	
	1000	11	24	40	53	54	55	53	35	

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

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Face	Airflow Generated Sound Power Level (dB)										
Velocity (fpm)	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz			
- 2000	63	61	58	56	58	64	68	67			
- 1000	47	42	38	41	45	47	46	42			
1000	47	42	37	35	37	38	37	37			
2000	64	61	58	55	52	56	59	58			

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 = 8.0 lb/ft³

Table 4: Pressure Loss

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	Loss Coefficient	Dynamic Pressure Loss (in wg)								
Length (in)		Face Velocity (fpm)								
(,	Coomoione	500	750	1000	1250	1500	2000			
36	3.45	0.05	0.12	0.22	0.34	0.48	0.86			
60	4.16	0.06	0.15	0.26	0.41	0.58	1.04			
84	4.94	0.08	0.17	0.31	0.48	0.69	1.23			
120	5.92	0.09	0.21	0.37	0.58	0.83	1.48			

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.