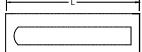
## McGill AirSilence LLC

An enterprise of United McGill Corporation - Founded in 1951





## CSF-MV-L25

Circular, Straight, Fiber-Filled, Medium Velocity Sounpak® Silencer

<u>Availability</u>

Diameters from 12 to 60 inches, in 2-inch increments. Length equal to approximately 3.25 times the diameter. Custom lengths also available.

## Table 1: Insertion Loss

ID (in)	Length (in)	Face Velocity (fpm)	Insertion Loss (dB)							
			63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
		- 2500	5	2	12	20	28	14	13	10
12	40	0	4	3	10	20	26	15	13	12
		2500	2	2	9	17	22	14	10	11
		- 2500	6	8	18	27	28	14	10	13
24	78	0	5	8	16	23	26	14	12	11
		2500	3	4	14	22	25	14	10	11
	118	- 2500	3	6	14	22	24	15	10	11
36		0	3	6	14	22	24	15	10	11
		2500	4	6	14	21	26	15	10	11
	156	- 2500	8	11	19	27	26	9	11	11
48		0	7	10	17	27	26	9	9	10
		2500	5	8	16	22	25	10	9	9
	196	- 2500	8	13	22	28	24	7	8	11
60		0	8	8	20	30	25	5	10	9
		2500	7	12	22	30	24	6	11	10

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

Table 2. All low Schelated Sould I Swel											
ID (in)	Face Velocity	Airflow Generated Sound Power Level (dB)									
	(fpm)	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz		
	-2500	67	58	54	53	56	53	46	38		
	- 1500	63	47	48	44	45	37	25	23		
24	1500	58	50	46	43	42	36	27	20		
	2500	66	57	52	52	55	53	48	41		

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.

**Table 3: Face Area Adjustment Factor** 

Silencer Diameter (in)										
12	18	24	34	48	68	96				
-6	-3	0	+3	+6	+9	+12				

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

Table 4: Pressure Loss

ID (in)	Weight (lbs)	Loss Coefficient	Dynamic Pressure Loss (in wg)							
			Face Velocity (fpm)							
( )			500	1000	1500	2000	2500	3000		
12	30	1.11	0.02	0.07	0.16	0.28	0.43	0.62		
12 T	35	0.77	0.01	0.05	0.11	0.19	0.30	0.43		
24	130	1.11	0.02	0.07	0.16	0.28	0.43	0.62		
24 T	155	0.77	0.01	0.05	0.11	0.19	0.30	0.43		
36	320	1.11	0.02	0.07	0.16	0.28	0.43	0.62		
36 T	370	0.77	0.01	0.05	0.11	0.19	0.30	0.43		
48	705	1.11	0.02	0.07	0.16	0.28	0.43	0.62		
48 T	815	0.77	0.01	0.05	0.11	0.19	0.30	0.43		
60	1265	1.11	0.02	0.07	0.16	0.28	0.43	0.62		
60 T	1470	0.77	0.01	0.05	0.11	0.19	0.30	0.43		

T denotes silencer with tail cone. Weights rounded up to nearest 5 lbs. Shaded regions represent a design condition that may have negative consequences for acoustically Notes: sensitive applications.