McGill AirSilence LLC

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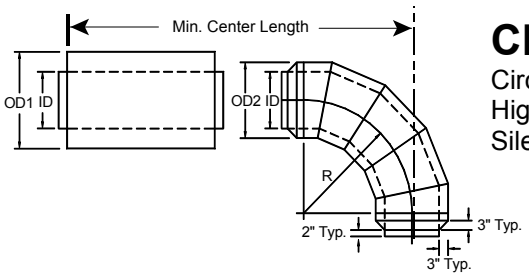

CEF-HV-L55

Circular, Elbow, Fiber-Filled, High Velocity Sounpak® Silencer

Availability
Diameters from 3 to 26 inches, in 1-inch increments; 26 to 60 inches, in 2-inch increments. Standard lengths shown in Table 1 below. Custom lengths also available.

Table 1: Insertion Loss

ID (in)	Face Velocity (fpm)	Insertion Loss (dB)							
		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
6	-3000	15	22	35	33	38	45	38	25
	0	12	22	33	32	39	45	39	24
	3000	13	20	33	32	39	46	40	26
12	-3000	11	16	31	29	41	45	30	24
	0	10	16	29	29	41	44	27	36
	3000	10	15	28	29	42	45	28	25
18	-3000	4	17	36	36	39	31	28	28
	0	3	15	32	33	39	31	26	27
	3000	2	14	27	32	37	32	29	24
24	-3000	9	15	31	44	40	29	31	31
	0	6	15	28	42	42	29	32	30
	3000	8	13	28	38	42	32	35	29
36	-3000	11	12	31	40	40	32	33	30
	0	8	13	28	38	42	32	35	29
	3000	10	11	28	34	43	36	38	29
48	-3000	13	21	41	46	27	28	29	24
	0	9	22	37	44	28	28	30	23
	3000	12	18	37	40	28	31	32	22

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: Dimensions

ID (in)	Straight Portion OD1 (in)	Elbow Portion OD2 (in)	Minimum Centerline Length[1] (in)	Elbow Radius, R
3	ID + 12	ID + 6	1.5(ID + 6) +3(ID) + 9	1.5(ID) + 9
4	ID + 12	ID + 6	1.5(ID + 6) +3(ID) + 9	1.5(ID) + 9
5	ID + 12	ID + 6	1.5(ID + 6) +3(ID) + 9	1.5(ID) + 9
6 to 16	ID + 12	ID + 6	1.5(ID + 6) +3(ID) + 9	1.5(ID) + 9
17 to 30	ID + 12	ID + 6	1.5(ID + 6) +3(ID) + 7	1.5(ID) + 9
32 to 60	ID + 16	ID + 6	1.5(ID + 6) +3(ID) + 7	1.5(ID) + 9

Notes: (1) Any length of duct may be used between straight and elbow sections, but the standard length is 4 inches.

Airflow Generated Sound Power

This silencer does not have internal components that would cause generated noise. The results of laboratory testing indicate indiscernible differences between the noise generated by the silencer and the noise generated by the connecting duct.

Table 3: Pressure Loss

ID (in)	Total Weight (lbs)	Loss Coefficient	Dynamic Pressure Loss (in wg)				
			Face Velocity (fpm)				
			1000	1500	2000	2500	3000
3	35	0.96	0.06	0.13	0.24	0.37	0.54
6	55	0.62	0.04	0.09	0.15	0.24	0.35
12	125	0.40	0.02	0.06	0.10	0.16	0.22
18	230	0.27	0.02	0.04	0.07	0.11	0.15
24	370	0.20	0.01	0.03	0.05	0.08	0.11
36	1050	0.13	0.01	0.02	0.03	0.05	0.07
48	1860	0.11	0.01	0.02	0.03	0.04	0.06
60	2890	0.09	0.01	0.01	0.02	0.04	0.05

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