



CVD Constant Volume Dampers (round) Noise Data

Constant Volume Damper(Round) Table Values dB			Pressure Drop Across Constant Volume Damper																									
			0.4 InWC (100 Pa) Octave Power Level										1.0 InWC (250 Pa) Octave Power Level										2.0 InWC (500 Pa) Octave Power Level					
			L _w (dB/octave)										L _w (dB/octave)										L _w (dB/octave)				L _w - a = dB(A)	
Size	CFM	M ³ /hr	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz		
3" (80mm)	24	40	37	37	35	33	33	33	28	27	38	39	42	43	44	44	46	41	41	50	46	49	49	50	51	53	48	48
	48	82	49	47	44	41	39	39	33	32	45	51	51	50	49	48	49	44	44	54	58	58	56	55	55	56	51	51
	74	125	52	51	48	45	44	44	38	37	49	61	60	57	54	53	53	47	46	58	68	66	63	61	59	59	53	52
4" (100 mm)	41	70	40	39	38	36	35	36	30	29	41	43	45	46	46	47	49	44	43	53	49	52	52	53	54	55	50	50
	80	135	50	48	45	42	41	40	34	33	46	59	57	54	51	50	49	43	42	55	60	60	58	57	57	58	53	52
	118	200	54	52	49	47	45	45	39	38	51	63	61	58	55	54	54	48	47	59	70	68	65	62	61	60	54	53
5" (125 mm)	59	100	41	40	38	36	35	36	30	29	41	45	47	47	48	48	49	44	43	54	52	54	54	54	55	56	50	49
	112	190	51	49	46	42	41	40	34	32	46	55	54	53	51	51	51	46	45	56	61	61	59	58	57	58	52	52
	165	280	54	53	50	47	45	45	39	37	50	63	61	58	55	54	53	47	46	59	64	64	62	61	61	62	57	56
6" (150 mm)	89	150	43	42	40	38	37	37	31	30	42	47	49	49	49	50	51	45	44	55	54	56	56	56	56	57	52	51
	159	270	52	50	46	43	41	41	34	33	47	56	56	54	52	52	52	46	46	57	63	62	60	59	58	59	53	52
	236	400	56	54	50	47	46	45	39	38	51	64	62	59	56	54	54	48	46	60	65	65	64	62	62	63	57	57
8" (200 mm)	148	250	45	43	41	39	38	37	31	30	43	51	52	52	51	51	51	45	44	56	57	59	58	58	57	58	52	50
	339	575	55	53	50	46	44	44	37	36	50	64	62	58	55	53	53	46	45	59	66	66	64	62	62	62	56	56
	531	900										68	66	63	60	58	58	52	50	64	75	73	70	67	65	65	58	57
10" (250 mm)	295	500	48	47	45	43	41	41	35	34	47	54	56	55	55	54	55	49	48	60	61	62	62	61	61	62	56	54
	590	1000	57	55	52	49	47	46	39	38	52	66	64	61	57	55	55	48	47	61	69	68	67	65	64	64	59	58
	885	1500										70	68	65	62	60	60	53	52	65	77	75	72	68	67	66	60	58
12" (315 mm)	472	800	48	46	44	41	39	39	32	31	44	55	56	55	54	53	53	46	44	58	62	63	62	61	60	59	53	51
	826	1400	57	55	52	48	46	45	39	37	51	66	64	60	57	55	54	47	46	60	70	69	67	65	64	64	58	57
	1298	2200										71	69	65	62	60	59	53	51	65	77	75	72	69	67	66	60	58
14" (350 mm)	531	900	50	48	46	43	42	41	35	33	47	57	58	57	56	55	55	49	47	60	64	65	64	63	62	62	55	53
	1180	2000	59	57	53	50	48	47	40	39	53	68	66	62	59	57	56	49	47	62	72	71	69	67	66	66	60	59
	1888	3200										73	71	67	64	62	61	55	54	68	79	77	74	71	69	68	62	60
16" (400 mm)	590	1000	50	48	45	42	41	40	33	31	46	58	59	57	56	55	54	47	45	59	65	65	64	62	61	61	54	51
	1298	2200	58	56	52	49	47	46	39	37	52	67	65	61	57	55	54	48	46	61	72	71	68	66	65	65	59	57
	2242	3800										73	71	67	64	62	61	55	53	67	79	77	74	70	68	68	61	60

Notes:

Local conditions will effect perceived noise greatly. Your conditions may vary from the example.

Table data is uncorrected for Attenuation, Reflection and weighting. (see table to right)

Example:

6" CVD in unwrapped pipe above a drop ceiling. Pressure = 0.4InWC - 240 CFM	Sound Level (dB/octave)								
	63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz	DB(A)
Flow Noise	61	59	56	53	51	51	44	53	57
Reflection Attenuation	-27	-28	-27	-21	-18	-14	-12	-10	
Room Attenuation	-4	-4	-4	-4	-4	-4	-4	-4	
A-Weighting	-26	-16	-9	-3	0	+1	+1	-1	
Corrected Sound Pressure Level	4	11	16	25	29	34	29	28	37