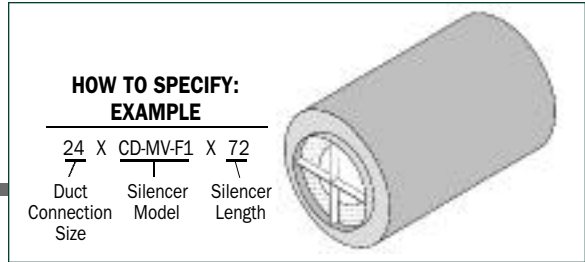


Vibro-Acoustics[®]

CERTIFIED PERFORMANCE DATA

CD-MV-F1

CIRCULAR DISSIPATIVE MEDIUM VELOCITY SILENCER (<3000 FPM)



Insertion Loss (IL)

+ : "forward flow" where noise & airflow move in same direction (e.g. supply side)
 - : "reverse flow" where noise & airflow move in opposite directions (e.g. return side)

DC - Duct Connection Size (inches)
SL - Silencer Length (inches)

DC (in.)	SL (in.)	FACE VEL. (ft. per min.)	OCTAVE BAND - Hz/D.I.L. (dB)							
			63	125	250	500	1000	2000	4000	8000
12	24	- 2000	5	8	13	22	31	33	30	18
		0	5	8	13	21	29	33	31	20
		+ 2000	5	8	13	20	27	33	32	22
24	48	- 2000	5	9	18	27	37	34	22	13
		0	5	9	18	26	35	34	23	15
		+ 2000	5	9	18	25	33	34	24	17
36	72	- 2000	8	14	22	32	37	26	16	9
		0	8	14	22	31	35	26	17	11
		+ 2000	8	14	22	30	33	26	18	13
48	96	- 2000	10	17	26	35	35	22	13	9
		0	10	17	26	34	33	22	14	11
		+ 2000	10	17	26	33	31	22	15	13
60	120	- 2000	10	17	29	36	31	19	12	8
		0	10	17	29	35	29	19	13	10
		+ 2000	10	17	29	34	27	19	14	12

DC (in.)	SL (in.)	FACE VEL. (ft. per min.)	OCTAVE BAND - Hz/D.I.L. (dB)							
			63	125	250	500	1000	2000	4000	8000
12	36	- 2000	7	11	20	32	46	49	46	28
		0	7	11	20	31	44	49	47	30
		+ 2000	7	11	20	30	42	49	48	32
24	72	- 2000	8	14	28	42	55	52	32	19
		0	8	14	28	41	53	52	33	21
		+ 2000	8	14	28	40	51	52	34	23
36	108	- 2000	12	20	33	48	54	39	25	15
		0	12	20	33	47	52	39	26	17
		+ 2000	12	20	33	46	50	39	27	19
48	144	- 2000	13	24	40	52	51	33	20	14
		0	13	24	40	51	49	33	21	16
		+ 2000	13	24	40	50	47	33	22	18
60	180	- 2000	15	26	43	53	46	28	18	13
		0	15	26	43	52	44	28	19	15
		+ 2000	15	26	43	51	42	28	20	17

See pages 4.1 - 4.25 for selection information. DIL above 50dB may be limited due to noise flanking around the silencer or along the duct walls. If more than 50dB DIL is required, contact your local Vibro-Acoustics Representative or call 1-800-565-8401.

Pressure Drop (PD)

DUCT CONNECT. SIZE (in.)	SILENCER OUTER DIA. (in.)	SILENCER LENGTH (in.)	WEIGHT (lbs)	FACE VELOCITY (feet per minute) / Pressure Drop (in.w.g.)						
				1000	1500	2000	2500	3000	3500	4000
12	28	24	123	0.02	0.05	0.10	0.15	0.21	0.29	0.38
12	28	36	160	0.04	0.09	0.16	0.24	0.35	0.48	0.63
24	40	48	353	0.02	0.05	0.10	0.15	0.21	0.29	0.38
24	40	72	471	0.04	0.08	0.15	0.23	0.33	0.45	0.59
36	52	72	699	0.02	0.05	0.10	0.15	0.21	0.29	0.38
36	52	108	956	0.03	0.07	0.13	0.20	0.29	0.40	0.52
48	64	96	1180	0.02	0.05	0.09	0.14	0.20	0.28	0.36
48	64	144	1635	0.03	0.07	0.12	0.19	0.28	0.38	0.49
60	76	120	1796	0.02	0.05	0.09	0.14	0.19	0.26	0.35
60	76	180	2457	0.03	0.07	0.12	0.18	0.26	0.36	0.47

☐ : Acceptable (0 - 0.35")

▒ : Caution (>0.35") Pressure Drop may be too high for certain applications

Pressure drops are reported in accordance with ASTM E477 methods and are based upon IDEAL flow conditions (5 diameters of straight duct on silencer inlet and 10 on outlet). Less than ideal conditions will result in an increase in pressure drop due to System Effects. See Silencer System Effects Data on page 4.19.

Generated Noise (GN) @ 3 sq.ft. face area

LENGTH (inches)	FACE VELOCITY (feet per minute)	OCTAVE BAND - Hz/GENERATED NOISE (dB re 10 ⁻¹² watts)							
		63	125	250	500	1000	2000	4000	8000
ALL	- 3000	63	56	50	57	56	57	55	52
	- 1500	49	42	38	43	43	42	36	31
	+ 1500	48	41	38	42	40	39	34	29
	+ 3000	62	55	50	56	53	54	53	50

GN correction chart at right must be used to correct GN to other face areas.

FACE AREA (sq.ft.)	1.5	3	6	12	24	48
dB	-3	0	+3	+6	+9	+12

Questions? 1-800-565-8401

5.145

CD-MV-F1