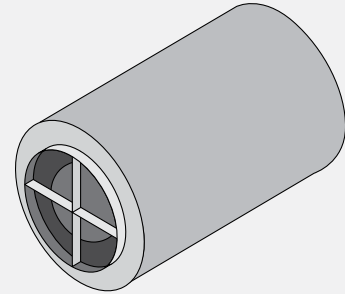


## CD-LV-F1

Circular Dissipative  
Low velocity silencer  
(<1500 fpm)

### How to Specify Example:

**24** X **CD-LV-F1** X **72**  
 ↑                      ↑                      ↑  
 Duct Connection   Silencer   Silencer  
 Size                    Model                  Length



### 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 Size** - Duct Connection Size (in.)

**SL** - Silencer Length (in.)

**FV** - Face Velocity (ft. per min)

**SO Dia.** - Silencer Outer Diameter (in.)

See [Silencer Selection Instructions](#). 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**.

DC Size (in.)	SL (in.)	FV (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
12	24	- 1000	7	11	18	28	39	44	43	31
		0	7	11	17	27	37	43	43	31
		+ 1000	7	11	16	26	35	42	43	31
24	48	- 1000	7	12	25	34	47	47	35	20
		0	7	12	24	33	45	46	35	20
		+ 1000	7	12	23	32	43	45	35	20
36	72	- 1000	10	17	30	41	47	39	24	15
		0	10	17	29	40	45	38	24	15
		+ 1000	10	17	28	39	43	37	24	15
48	96	- 1000	12	21	36	45	45	34	19	14
		0	12	21	35	44	43	33	19	14
		+ 1000	12	21	33	43	41	32	19	14
60	120	- 1000	13	23	37	46	43	30	17	13
		0	13	23	36	45	41	29	17	13
		+ 1000	13	23	35	44	39	28	17	13

DC Size (in.)	SL (in.)	FV (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
12	36	- 1000	8	15	26	41	57	60	60	46
		0	8	15	25	40	55	60	60	46
		+ 1000	8	15	24	39	53	60	60	46
24	72	- 1000	10	18	38	49	60	60	49	29
		0	10	18	37	48	60	59	49	29
		+ 1000	10	18	36	47	59	58	49	29
36	108	- 1000	13	24	44	58	60	56	36	23
		0	13	24	43	57	60	55	36	23
		+ 1000	13	24	41	56	59	54	36	23
48	144	- 1000	18	32	53	60	60	50	29	21
		0	18	32	52	59	59	49	29	21
		+ 1000	18	32	51	58	57	48	29	21
60	180	- 1000	18	33	55	60	60	44	26	20
		0	18	33	54	60	59	43	26	20
		+ 1000	18	33	53	60	57	42	26	20

### Pressure Drop (PD)

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](#).

- Acceptable (0 - 0.35")
- Caution (>0.35") Pressure Drop may be too high for certain applications

DC Size (in.)	SO Dia. (in.)	SL (in.)	Weight (lbs)	Face Velocity (ft. per min)/Pressure Drop (in.w.g.)						
				500	1000	1500	2000	2500	3000	3500
12	28	24	126	0.02	0.09	0.20	0.36	0.57	0.82	1.11
		36	164	0.04	0.15	0.33	0.59	0.92	1.33	1.81
24	40	48	363	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		72	487	0.03	0.13	0.29	0.51	0.80	1.15	1.56
36	52	72	726	0.02	0.09	0.20	0.36	0.57	0.82	1.11
		108	995	0.03	0.12	0.27	0.48	0.74	1.07	1.46
48	64	96	1233	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		144	1689	0.03	0.10	0.23	0.42	0.65	0.94	1.28
60	76	120	1890	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		180	2599	0.03	0.10	0.23	0.40	0.63	0.90	1.23

### Generated Noise (GN)

@ 3 sq.ft. face area

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Generated Noise (dB re 10 <sup>-12</sup> watts)							
		63	125	250	500	1000	2000	4000	8000
All	- 1500	59	52	44	43	45	47	44	42
	- 1000	54	47	39	38	40	42	39	37
	+ 1000	53	46	39	37	37	39	37	35
	+ 1500	58	51	44	42	42	44	42	40

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

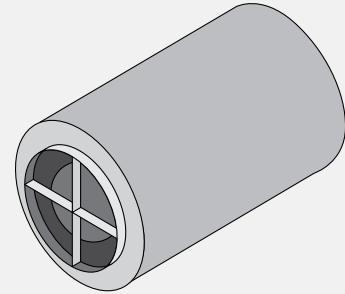
Face Area (sq.ft.)	1.5	3	6	12	24	48
dB	-3	0	+3	+6	+9	+12

## CD-LV-F2

Circular Dissipative  
Low velocity silencer  
(<1500 fpm)

### How to Specify Example:

**24** X **CD-LV-F2** X **72**  
 ↑ Duct Connection Size      ↑ Silencer Model      ↑ Silencer Length



### 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 Size** - Duct Connection Size (in.)

**SL** - Silencer Length (in.)

**FV** - Face Velocity (ft. per min)

**SO Dia.** - Silencer Outer Diameter (in.)

See [Silencer Selection Instructions](#). 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**.

DC Size (in.)	SL (in.)	FV (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
12	24	- 1000	4	7	16	28	39	44	43	31
		0	4	7	15	27	37	43	43	31
		+ 1000	4	7	14	26	35	42	43	31
24	48	- 1000	4	8	22	34	47	47	35	20
		0	4	8	21	33	45	46	35	20
		+ 1000	4	8	20	32	43	45	35	20
36	72	- 1000	6	11	26	41	47	39	24	15
		0	6	11	25	40	45	38	24	15
		+ 1000	6	11	24	39	43	37	24	15
48	96	- 1000	7	14	31	45	45	34	19	14
		0	7	14	30	44	43	33	19	14
		+ 1000	7	14	29	43	41	32	19	14
60	120	- 1000	8	15	32	46	43	30	17	13
		0	8	15	31	45	41	29	17	13
		+ 1000	8	15	30	44	39	28	17	13

DC Size (in.)	SL (in.)	FV (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
12	36	- 1000	5	10	23	41	57	60	60	46
		0	5	10	22	40	55	60	60	46
		+ 1000	5	10	21	39	53	60	60	46
24	72	- 1000	6	12	33	49	60	60	49	29
		0	6	12	32	48	60	59	49	29
		+ 1000	6	12	31	47	59	58	49	29
36	108	- 1000	8	16	38	58	60	56	36	23
		0	8	16	37	57	60	55	36	23
		+ 1000	8	16	36	56	59	54	36	23
48	144	- 1000	11	21	46	60	60	50	29	21
		0	11	21	45	59	59	49	29	21
		+ 1000	11	21	44	58	57	48	29	21
60	180	- 1000	11	22	48	60	60	44	26	20
		0	11	22	47	60	59	43	26	20
		+ 1000	11	22	46	60	57	42	26	20

### Pressure Drop (PD)

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](#).

- Acceptable (0 - 0.35")
- Caution (>0.35") Pressure Drop may be too high for certain applications

DC Size (in.)	SO Dia. (in.)	SL (in.)	Weight (lbs)	Face Velocity (ft. per min)/Pressure Drop (in.w.g.)						
				500	1000	1500	2000	2500	3000	3500
12	20	24	87	0.02	0.09	0.20	0.36	0.57	0.82	1.11
		36	114	0.04	0.15	0.33	0.59	0.92	1.33	1.81
24	32	48	279	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		72	379	0.03	0.13	0.29	0.51	0.80	1.15	1.56
36	44	72	589	0.02	0.09	0.20	0.36	0.57	0.82	1.11
		108	798	0.03	0.12	0.27	0.48	0.74	1.07	1.46
48	56	96	1026	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		144	1416	0.03	0.10	0.23	0.42	0.65	0.94	1.28
60	68	120	1589	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		180	2232	0.03	0.10	0.23	0.40	0.63	0.90	1.23

### Generated Noise (GN)

@ 3 sq.ft. face area

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Generated Noise (dB re 10 <sup>-12</sup> watts)							
		63	125	250	500	1000	2000	4000	8000
All	- 1500	59	52	44	43	45	47	44	42
	- 1000	54	47	39	38	40	42	39	37
	+ 1000	53	46	39	37	37	39	37	35
	+ 1500	58	51	44	42	44	42	42	40

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