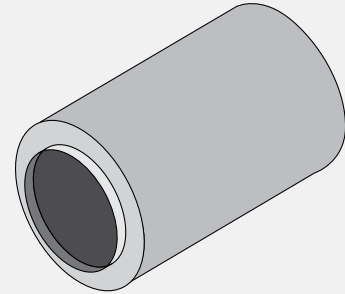


CFL-HV-F1

Circular Film Lined
High velocity silencer
(<5000 fpm)

How to Specify Example:

24 × **CFL-HV-F1** × **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	- 4000	4	7	10	14	20	27	25	9
		0	3	5	9	12	20	27	26	9
		+ 4000	1	4	8	11	19	27	27	9
24	48	- 4000	6	8	12	17	23	24	16	7
		0	4	7	12	16	23	24	17	7
		+ 4000	3	5	11	14	22	24	18	7
36	72	- 4000	7	10	15	20	22	19	14	6
		0	6	9	14	19	21	19	15	6
		+ 4000	4	8	13	17	20	19	16	6
48	96	- 4000	9	13	18	22	20	15	11	6
		0	7	12	17	21	19	15	12	6
		+ 4000	6	10	16	19	18	15	14	6
60	120	- 4000	9	13	19	22	17	14	11	6
		0	7	12	19	21	16	14	12	6
		+ 4000	6	10	18	19	16	14	14	6

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	- 4000	6	9	14	20	30	41	37	13
		0	4	8	13	19	29	41	38	13
		+ 4000	3	7	12	17	28	41	40	13
24	72	- 4000	7	12	19	27	36	36	25	11
		0	6	10	19	25	35	36	26	11
		+ 4000	4	9	18	24	34	36	27	11
36	108	- 4000	10	16	22	30	32	28	20	9
		0	9	14	21	28	31	28	21	9
		+ 4000	7	13	20	27	30	28	23	9
48	144	- 4000	11	20	27	32	29	23	17	9
		0	10	18	26	31	28	23	18	9
		+ 4000	9	17	25	30	27	23	19	9
60	180	- 4000	11	20	28	32	25	21	17	9
		0	10	18	27	31	24	21	18	9
		+ 4000	9	17	27	30	23	21	19	9

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.)						
				1000	2000	3000	4000	5000	6000	7000
12	28	24	120	0.01	0.03	0.08	0.14	0.22	0.31	0.43
		36	157	0.01	0.06	0.13	0.24	0.37	0.53	0.73
24	40	48	335	0.01	0.04	0.08	0.15	0.23	0.33	0.45
		72	450	0.02	0.07	0.15	0.27	0.42	0.60	0.82
36	52	72	655	0.01	0.04	0.08	0.15	0.23	0.33	0.45
		108	903	0.02	0.06	0.14	0.26	0.40	0.58	0.78
48	64	96	1090	0.01	0.04	0.08	0.15	0.23	0.33	0.45
		144	1501	0.02	0.06	0.14	0.25	0.39	0.55	0.75
60	76	120	1638	0.01	0.04	0.08	0.14	0.22	0.32	0.44
		180	2268	0.01	0.06	0.13	0.23	0.36	0.51	0.70

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

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Generated Noise (dB re 10 ⁻¹² watts)							
		63	125	250	500	1000	2000	4000	8000
All	- 5000	76	68	67	75	70	67	68	70
	- 3000	63	55	55	63	57	56	52	50
	+ 3000	62	54	55	62	54	53	50	48
	+ 5000	75	67	67	74	67	64	66	68

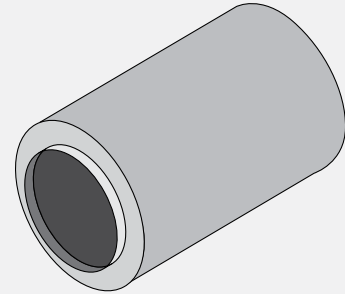
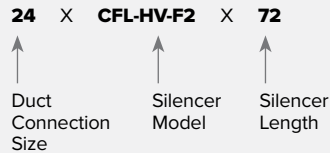
GN correction chart at right must be used to correct GN to other face areas. →

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

CFL-HV-F2

Circular Film Lined
High velocity silencer
(<5000 fpm)

How to Specify Example:



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	- 4000	3	4	8	14	20	27	25	9
		0	2	3	8	12	20	27	26	9
		+ 4000	1	3	7	11	19	27	27	9
24	48	- 4000	3	5	11	17	23	24	16	7
		0	3	4	10	16	23	24	17	7
		+ 4000	2	3	9	14	22	24	18	7
36	72	- 4000	4	7	13	20	22	19	14	6
		0	3	6	12	19	21	19	15	6
		+ 4000	3	5	12	17	20	19	16	6
48	96	- 4000	5	9	15	22	20	15	11	6
		0	4	8	15	21	19	15	12	6
		+ 4000	3	7	14	19	18	15	14	6
60	120	- 4000	5	9	17	22	17	14	11	6
		0	4	8	16	21	16	14	12	6
		+ 4000	3	7	15	19	16	14	14	6

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	- 4000	3	6	12	20	30	41	37	13
		0	3	5	12	19	29	41	38	13
		+ 4000	2	4	11	17	28	41	40	13
24	72	- 4000	4	8	17	27	36	36	25	11
		0	3	7	16	25	35	36	26	11
		+ 4000	3	6	15	24	34	36	27	11
36	108	- 4000	6	10	19	30	32	28	20	9
		0	5	10	18	28	31	28	21	9
		+ 4000	4	9	18	27	30	28	23	9
48	144	- 4000	7	13	23	32	29	23	17	9
		0	6	12	22	31	28	23	18	9
		+ 4000	5	11	22	30	27	23	19	9
60	180	- 4000	7	13	25	32	25	21	17	9
		0	6	12	24	31	24	21	18	9
		+ 4000	5	11	23	30	23	21	19	9

Pressure Drop (PD)

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				1000	2000	3000	4000	5000	6000	7000
12	20	24	82	0.01	0.03	0.08	0.14	0.22	0.31	0.43
		36	107	0.01	0.06	0.13	0.24	0.37	0.53	0.73
24	32	48	252	0.01	0.04	0.08	0.15	0.23	0.33	0.45
		72	341	0.02	0.07	0.15	0.27	0.42	0.60	0.82
36	44	72	520	0.01	0.04	0.08	0.15	0.23	0.33	0.45
		108	713	0.02	0.06	0.14	0.26	0.40	0.58	0.78
48	56	96	848	0.01	0.04	0.08	0.15	0.23	0.33	0.45
		144	1232	0.02	0.06	0.14	0.25	0.39	0.55	0.75
60	68	120	1362	0.01	0.04	0.08	0.14	0.22	0.32	0.44
		180	1892	0.01	0.06	0.13	0.23	0.36	0.51	0.70

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

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Generated Noise (dB re 10 ⁻¹² watts)							
		63	125	250	500	1000	2000	4000	8000
All	- 5000	76	68	67	75	70	67	68	70
	- 3000	63	55	55	63	57	56	52	50
	+ 3000	62	54	55	62	54	53	50	48
	+ 5000	75	67	67	74	67	64	66	68

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