CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

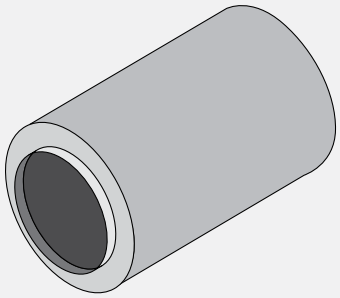
CFL-MV-F1

Circular Film Lined
Medium velocity silencer
(<3000 fpm)

How to Specify Example:

24 X **CFL-MV-F1** X **72**

- **24**: Duct Connection Size
- **CFL-MV-F1**: Silencer Model
- **72**: 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	- 2000	4	7	10	16	24	33	34	12
		0	4	7	10	15	23	33	35	13
		+ 2000	4	7	10	14	21	33	36	15
24	48	- 2000	4	8	14	19	29	34	25	9
		0	4	8	14	19	27	34	26	10
		+ 2000	4	8	14	18	26	34	27	11
36	72	- 2000	7	12	17	23	29	26	18	6
		0	7	12	17	22	27	26	19	7
		+ 2000	7	12	17	22	26	26	20	9
48	96	- 2000	9	14	20	25	27	22	15	6
		0	9	14	20	24	26	22	16	7
		+ 2000	9	14	20	24	24	22	17	9
60	120	- 2000	9	14	22	26	24	19	14	5
		0	9	14	22	25	23	19	15	7
		+ 2000	9	14	22	24	21	19	16	8

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	- 2000	6	9	15	23	36	49	52	18
		0	6	9	15	22	34	49	53	20
		+ 2000	6	9	15	22	33	49	54	21
24	72	- 2000	7	12	21	30	43	52	36	13
		0	7	12	21	30	41	52	37	14
		+ 2000	7	12	21	29	40	52	38	15
36	108	- 2000	10	17	26	35	42	39	28	10
		0	10	17	26	34	41	39	29	11
		+ 2000	10	17	26	33	39	39	31	13
48	144	- 2000	11	21	31	37	40	33	23	9
		0	11	21	31	37	38	33	24	11
		+ 2000	11	21	31	36	37	33	25	12
60	180	- 2000	13	22	33	38	36	28	20	9
		0	13	22	33	37	34	28	21	10
		+ 2000	13	22	33	37	33	28	23	11

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	1500	2000	2500	3000	3500	4000
12	28	24	123	0.02	0.05	0.10	0.15	0.21	0.29	0.38
		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
		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
		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
		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
		180	2457	0.03	0.07	0.12	0.18	0.26	0.36	0.47

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	- 3000	66	58	56	62	57	57	55	56
	- 1500	52	44	44	48	44	42	36	35
	+ 1500	51	43	44	47	41	39	34	33
	+ 3000	65	57	56	61	54	54	53	54

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

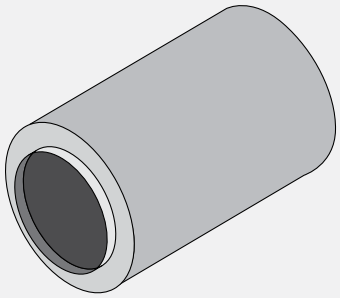
CFL-MV-F2

Circular Film Lined
Medium velocity silencer
(<3000 fpm)

How to Specify Example:

24 X **CFL-MV-F2** X **72**

- **24** — Duct Connection Size
- **CFL-MV-F2** — Silencer Model
- **72** — Silencer Length



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FV - Face Velocity (ft. per min)

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12	24	- 2000	3	4	8	16	24	33	34	12
		0	3	4	8	15	23	33	35	13
		+ 2000	3	4	8	14	21	33	36	15
24	48	- 2000	3	5	12	19	29	34	25	9
		0	3	5	12	19	27	34	26	10
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48	96	- 2000	5	10	18	25	27	22	15	6
		0	5	10	18	24	26	22	16	7
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60	120	- 2000	5	10	19	26	24	19	14	5
		0	5	10	19	25	23	19	15	7
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		0	7	14	27	37	38	33	24	11
		+ 2000	7	14	27	36	37	33	25	12
60	180	- 2000	8	15	28	38	36	28	20	9
		0	8	15	28	37	34	28	21	10
		+ 2000	8	15	28	37	33	28	23	11

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				1000	1500	2000	2500	3000	3500	4000
12	20	24	85	0.02	0.05	0.10	0.15	0.21	0.29	0.38
		36	111	0.04	0.09	0.16	0.24	0.35	0.48	0.63
24	32	48	270	0.02	0.05	0.10	0.15	0.21	0.29	0.38
		72	362	0.04	0.08	0.15	0.23	0.33	0.45	0.59
36	44	72	564	0.02	0.05	0.10	0.15	0.21	0.29	0.38
		108	770	0.03	0.07	0.13	0.20	0.29	0.40	0.52
48	56	96	972	0.02	0.05	0.09	0.14	0.20	0.28	0.36
		144	1334	0.03	0.07	0.12	0.19	0.28	0.38	0.49
60	68	120	1513	0.02	0.05	0.09	0.14	0.19	0.26	0.35
		180	2081	0.03	0.07	0.12	0.18	0.26	0.36	0.47

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	- 3000	66	58	56	62	57	57	55	56
	- 1500	52	44	44	48	44	42	36	35
	+ 1500	51	43	44	47	41	39	34	33
	+ 3000	65	57	56	61	54	54	53	54

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