

# CERTIFIED PERFORMANCE DATA

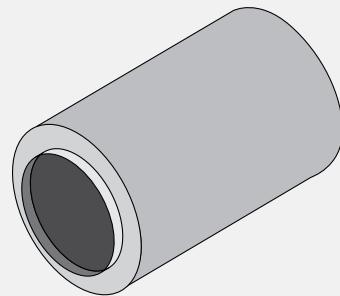
VIBRO-ACOUSTICS®  
A Swegon Group company

## CFMB-LV-F1

Circular Film MoldBlock  
Low velocity silencer  
(<1500 fpm)

### How to Specify Example:

**24** x CFMB-LV-F1 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**.

<b>DC Size</b> (in.)	<b>SL</b> (in.)	<b>FV</b> (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
<b>12</b>	24	- 1000	6	9	14	20	30	44	49	20
		+ 1000	6	9	12	19	27	42	49	20
<b>24</b>	48	- 1000	6	10	19	24	37	47	40	13
		+ 1000	6	10	18	23	34	45	40	13
<b>36</b>	72	- 1000	9	14	23	30	37	39	27	10
		+ 1000	9	14	21	28	34	37	27	10
<b>48</b>	96	- 1000	10	18	27	32	35	34	21	9
		+ 1000	10	18	26	31	32	32	21	9
<b>60</b>	120	- 1000	11	20	28	33	34	30	19	9
		+ 1000	11	20	27	32	30	28	19	9

<b>DC Size</b> (in.)	<b>SL</b> (in.)	<b>FV</b> (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
<b>12</b>	36	- 1000	7	13	20	30	44	60	60	30
		+ 1000	7	13	19	28	41	60	60	30
<b>24</b>	72	- 1000	9	16	29	35	49	60	55	19
		+ 1000	9	16	27	34	46	58	55	19
<b>36</b>	108	- 1000	11	21	34	42	49	56	41	15
		+ 1000	11	21	32	40	46	54	41	15
<b>48</b>	144	- 1000	16	27	41	43	48	50	33	14
		+ 1000	16	27	39	42	44	48	33	14
<b>60</b>	180	- 1000	16	29	43	45	48	44	29	13
		+ 1000	16	29	41	43	44	42	29	13

## 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.)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
			500	1000	1500	2000	2500	3000	3500
<b>12</b>	28	24	0.02	0.09	0.20	0.36	0.57	0.82	1.11
		36	0.04	0.15	0.33	0.59	0.92	1.33	1.81
<b>24</b>	40	48	0.02	0.09	0.22	0.36	0.57	0.82	1.11
		72	0.03	0.12	0.27	0.48	0.74	1.07	1.46
<b>36</b>	52	72	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		108	0.03	0.10	0.23	0.40	0.63	0.90	1.23
<b>48</b>	64	96	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		144	0.03	0.10	0.23	0.42	0.65	0.94	1.28
<b>60</b>	76	120	0.02	0.08	0.19	0.33	0.52	0.74	1.01
		180	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
<b>All</b>	- 1500	59	52	44	43	45	47	44
	- 1000	54	47	39	38	40	42	39
	+ 1000	53	46	39	37	37	39	37
	+ 1500	58	51	44	42	42	44	42

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

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

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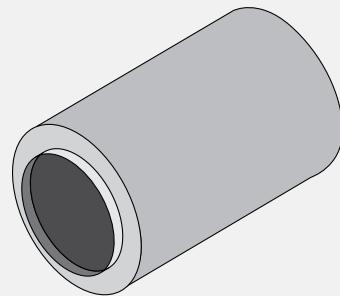
VIBRO-ACOUSTICS®  
A Swegon Group company

## CFMB-LV-F2

Circular Film MoldBlock  
Low velocity silencer  
(<1500 fpm)

### How to Specify Example:

**24** x CFMB-LV-F2 x **72**  
 ↑                   ↑                   ↑  
 Duct              Silencer            Silencer  
 Connection      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**.

<b>DC Size</b> (in.)	<b>SL</b> (in.)	<b>FV</b> (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
<b>12</b>	24	- 1000	3	6	12	20	30	44	49	20
		+ 1000	3	6	11	19	27	42	49	20
<b>24</b>	48	- 1000	3	7	17	24	37	47	40	13
		+ 1000	3	7	15	23	34	45	40	13
<b>36</b>	72	- 1000	5	10	20	30	37	39	27	10
		+ 1000	5	10	18	28	34	37	27	10
<b>48</b>	96	- 1000	6	12	24	32	35	34	21	9
		+ 1000	6	12	22	31	32	32	21	9
<b>60</b>	120	- 1000	7	13	25	33	34	30	19	9
		+ 1000	7	13	23	32	30	28	19	9

<b>DC Size</b> (in.)	<b>SL</b> (in.)	<b>FV</b> (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
			63	125	250	500	1000	2000	4000	8000
<b>12</b>	36	- 1000	4	9	18	30	44	60	60	30
		+ 1000	4	9	16	28	41	60	60	30
<b>24</b>	72	- 1000	5	10	25	35	49	60	55	19
		+ 1000	5	10	24	34	46	58	55	19
<b>36</b>	108	- 1000	7	14	29	42	49	56	41	15
		+ 1000	7	14	28	40	46	54	41	15
<b>48</b>	144	- 1000	9	18	35	43	48	50	33	14
		+ 1000	9	18	34	42	44	48	33	14
<b>60</b>	180	- 1000	9	19	37	45	48	44	29	13
		+ 1000	9	19	35	43	44	42	29	13

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		36	0.04	0.15	0.33	0.59	0.92	1.33	1.81
<b>24</b>	32	48	0.02	0.08	0.19	0.33	0.52	0.75	1.02
		72	0.03	0.13	0.29	0.51	0.80	1.15	1.57
<b>36</b>	44	72	0.02	0.09	0.20	0.36	0.57	0.82	1.11
		108	0.03	0.12	0.27	0.48	0.74	1.07	1.46
<b>48</b>	56	96	0.02	0.08	0.19	0.33	0.52	0.75	1.02
		144	0.03	0.10	0.23	0.42	0.65	0.94	1.27
<b>60</b>	68	120	0.02	0.08	0.19	0.33	0.52	0.75	1.02
		180	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
<b>All</b>	- 1500	59	52	44	43	45	47	44
	- 1000	54	47	39	38	40	42	39
	+ 1000	53	46	39	37	37	39	37
	+ 1500	58	51	44	42	42	44	42

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

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