CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

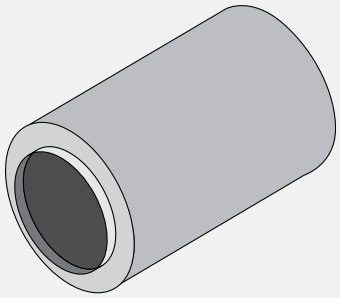
CFL-UHV-F1

Circular Film Lined
Ultra high velocity silencer
(<7000 fpm)

How to Specify Example:

24 X **CFL-UHV-F1** X **72**

- **24**: Duct Connection Size
- **CFL-UHV-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	- 6000	3	4	9	11	10	11	8	3
		0	1	3	7	9	12	13	9	5
		+ 6000	0	1	5	8	13	15	10	6
24	48	- 6000	6	9	12	14	10	6	7	2
		0	4	8	11	13	12	8	8	3
		+ 6000	3	7	9	12	13	10	9	5
36	72	- 6000	7	10	14	14	7	5	6	1
		0	6	9	12	12	9	7	7	3
		+ 6000	4	8	11	11	10	9	8	4
48	96	- 6000	9	13	16	13	4	4	5	1
		0	7	12	14	12	5	6	6	2
		+ 6000	6	10	12	10	7	8	7	3
60	120	- 6000	9	13	17	10	3	4	5	1
		0	7	12	15	9	5	6	6	2
		+ 6000	6	10	13	7	6	8	7	3

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	- 6000	4	5	12	16	16	17	14	6
		0	3	4	11	14	17	19	15	7
		+ 6000	1	3	9	13	19	21	16	9
24	72	- 6000	7	12	17	21	16	9	10	4
		0	6	10	15	19	17	11	11	5
		+ 6000	4	9	13	18	19	13	12	7
36	108	- 6000	10	16	21	19	11	8	9	3
		0	9	14	19	18	12	10	10	5
		+ 6000	7	13	18	17	14	12	11	6
48	144	- 6000	10	17	23	19	7	7	7	3
		0	9	16	21	17	9	9	8	4
		+ 6000	7	14	19	16	10	11	9	5
60	180	- 6000	11	20	24	14	6	7	7	1
		0	10	18	22	13	8	9	8	3
		+ 6000	9	17	20	12	9	11	9	4

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.)						
				2000	3000	4000	5000	6000	7000	8000
12	28	24	114	0.01	0.03	0.04	0.07	0.10	0.14	0.18
		36	149	0.02	0.04	0.07	0.11	0.15	0.21	0.27
24	40	48	307	0.01	0.02	0.04	0.06	0.08	0.11	0.15
		72	414	0.01	0.03	0.06	0.09	0.13	0.18	0.23
36	52	72	584	0.01	0.02	0.03	0.05	0.08	0.10	0.13
		108	810	0.01	0.03	0.05	0.08	0.12	0.16	0.20
48	64	96	965	0.01	0.02	0.03	0.05	0.07	0.10	0.13
		144	1340	0.01	0.03	0.05	0.08	0.11	0.15	0.19
60	76	120	1418	0.01	0.02	0.03	0.05	0.07	0.09	0.12
		180	1985	0.01	0.03	0.04	0.07	0.10	0.14	0.18

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	- 7000	84	76	75	81	78	77	66	67
	- 5000	74	66	65	71	68	67	56	57
	+ 5000	73	65	65	70	65	64	54	55
	+ 7000	83	75	75	80	75	74	64	65

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

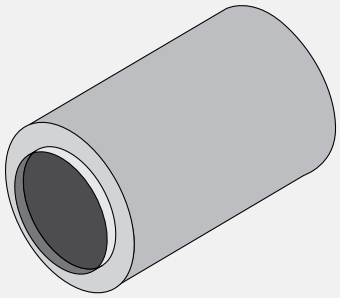
CFL-UHV-F2

Circular Film Lined
Ultra high velocity silencer
(<7000 fpm)

How to Specify Example:

24 X **CFL-UHV-F2** X **72**

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



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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	- 6000	2	3	8	11	10	11	8	3
		0	1	2	6	9	12	13	9	5
		+ 6000	0	1	5	8	13	15	10	6
24	48	- 6000	3	6	11	14	10	6	7	2
		0	3	5	9	13	12	8	8	3
		+ 6000	2	4	8	12	13	10	9	5
36	72	- 6000	4	7	12	14	7	5	6	1
		0	3	6	11	12	9	7	7	3
		+ 6000	3	5	9	11	10	9	8	4
48	96	- 6000	5	9	14	13	4	4	5	1
		0	4	8	12	12	5	6	6	2
		+ 6000	3	7	11	10	7	8	7	3
60	120	- 6000	5	9	15	10	3	4	5	1
		0	4	8	13	9	5	6	6	2
		+ 6000	3	7	12	7	6	8	7	3

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		0	3	7	13	19	17	11	11	5
		+ 6000	3	6	12	18	19	13	12	7
36	108	- 6000	6	10	18	19	11	8	9	3
		0	5	10	17	18	12	10	10	5
		+ 6000	4	9	15	17	14	12	11	6
48	144	- 6000	6	11	20	19	7	7	7	3
		0	5	10	18	17	9	9	8	4
		+ 6000	4	10	17	16	10	11	9	5
60	180	- 6000	7	13	21	14	6	7	7	1
		0	6	12	19	13	8	9	8	3
		+ 6000	5	11	18	12	9	11	9	4

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				2000	3000	4000	5000	6000	7000	8000
12	20	24	76	0.01	0.03	0.04	0.07	0.10	0.14	0.18
		36	99	0.02	0.04	0.07	0.11	0.15	0.21	0.27
24	32	48	228	0.01	0.02	0.04	0.06	0.08	0.11	0.15
		72	305	0.01	0.03	0.06	0.09	0.13	0.18	0.23
36	44	72	456	0.01	0.02	0.03	0.05	0.08	0.10	0.13
		108	618	0.01	0.03	0.05	0.08	0.12	0.16	0.20
48	56	96	766	0.01	0.02	0.03	0.05	0.07	0.10	0.13
		144	1047	0.01	0.03	0.05	0.08	0.11	0.15	0.19
60	68	120	1135	0.01	0.02	0.03	0.05	0.07	0.09	0.12
		180	1589	0.01	0.03	0.04	0.07	0.10	0.14	0.18

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	- 7000	84	76	75	81	78	77	66	67
	- 5000	74	66	65	71	68	67	56	57
	+ 5000	73	65	65	70	65	64	54	55
	+ 7000	83	75	75	80	75	74	64	65

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