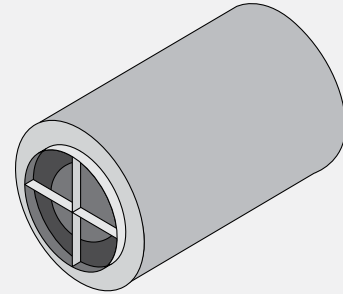


CD-UHV-F1

Circular Dissipative
Ultra high velocity silencer
(<7000 fpm)

How to Specify Example:

24 × **CD-UHV-F1** × **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)

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	5	12	15	13	11	7	5
		0	2	3	9	13	15	13	8	7
		+ 6000	0	2	7	11	17	15	9	9
24	48	- 6000	7	11	16	20	13	6	6	3
		0	5	9	14	18	15	8	7	5
		+ 6000	3	8	12	16	17	10	8	7
36	72	- 6000	8	12	18	19	9	5	5	2
		0	7	11	16	17	11	7	6	4
		+ 6000	5	9	14	15	13	9	7	6
48	96	- 6000	10	15	21	18	5	4	4	1
		0	8	14	18	16	7	6	5	3
		+ 6000	7	12	16	14	9	8	6	5
60	120	- 6000	10	15	22	14	4	4	4	1
		0	8	14	20	12	6	6	5	3
		+ 6000	7	12	17	10	8	8	6	5

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	5	6	16	22	20	17	12	9
		0	3	5	14	20	22	19	13	11
		+ 6000	2	3	12	18	24	21	14	13
24	72	- 6000	8	14	22	29	20	9	9	6
		0	7	12	20	27	22	11	10	8
		+ 6000	5	11	17	25	24	13	11	10
36	108	- 6000	12	18	28	27	14	8	8	5
		0	10	17	25	25	16	10	9	7
		+ 6000	8	15	23	23	18	12	10	9
48	144	- 6000	12	20	30	26	9	7	6	4
		0	10	18	28	24	11	9	7	6
		+ 6000	8	17	25	22	13	11	8	8
60	180	- 6000	13	23	31	20	8	7	6	2
		0	12	21	29	18	10	9	7	4
		+ 6000	10	20	26	16	12	11	8	6

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	
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	81	74	69	76	77	77	66	63
	- 5000	71	64	59	66	67	67	56	53
	+ 5000	70	63	59	65	64	64	54	51
	+ 7000	80	73	69	75	74	74	64	61

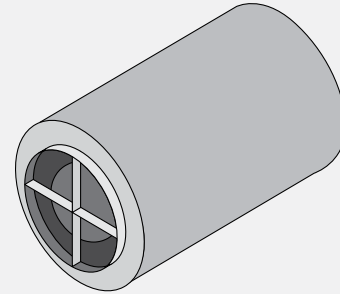
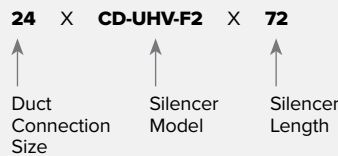
GN correction chart at right must be used to correct GN to other face areas. →

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

CD-UHV-F2

Circular Dissipative
Ultra high velocity silencer
(<7000 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)

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	2	3	10	15	13	11	7	5
		0	1	2	8	13	15	13	8	7
		+ 6000	0	1	6	11	17	15	9	9
24	48	- 6000	4	7	14	20	13	6	6	3
		0	3	6	12	18	15	8	7	5
		+ 6000	2	5	10	16	17	10	8	7
36	72	- 6000	5	8	16	19	9	5	5	2
		0	4	7	14	17	11	7	6	4
		+ 6000	3	6	12	15	13	9	7	6
48	96	- 6000	6	10	18	18	5	4	4	1
		0	5	9	16	16	7	6	5	3
		+ 6000	4	8	14	14	9	8	6	5
60	120	- 6000	6	10	19	14	4	4	4	1
		0	5	9	17	12	6	6	5	3
		+ 6000	4	8	15	10	8	8	6	5

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	3	4	14	22	20	17	12	9
		0	2	3	12	20	22	19	13	11
		+ 6000	1	2	10	18	24	21	14	13
24	72	- 6000	5	9	19	29	20	9	9	6
		0	4	8	17	27	22	11	10	8
		+ 6000	3	7	15	25	24	13	11	10
36	108	- 6000	7	12	24	27	14	8	8	5
		0	6	11	22	25	16	10	9	7
		+ 6000	5	10	20	23	18	12	10	9
48	144	- 6000	7	13	26	26	9	7	6	4
		0	6	12	24	24	11	9	7	6
		+ 6000	5	11	22	22	13	11	8	8
60	180	- 6000	8	15	27	20	8	7	6	2
		0	7	14	25	18	10	9	7	4
		+ 6000	6	13	23	16	12	11	8	6

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	
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	81	74	69	76	77	77	66	63
	- 5000	71	64	59	66	67	67	56	53
	+ 5000	70	63	59	65	64	64	54	51
	+ 7000	80	73	69	75	74	74	64	61

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