CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

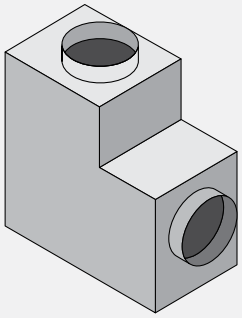
8 CENM-HV-F1

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

8 X **CENM-HV-F1** X **42**

- 8 — Duct Connection Size
- CENM-HV-F1 — Silencer Model
- 42 — 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
42	- 2250	15	23	37	16	14	14	11	8
	0	14	15	34	13	11	12	11	9
	+ 2250	12	19	38	18	14	15	12	10
54	- 2250	16	23	40	17	17	15	12	10
	0	16	17	35	14	12	14	13	11
	+ 2250	14	21	38	19	17	17	14	13
66	- 2250	16	22	44	19	19	17	14	12
	0	18	18	36	15	14	16	15	13
	+ 2250	16	22	39	21	19	19	17	15
78	- 2250	16	21	47	20	21	18	16	13
	0	21	19	37	15	15	18	17	14
	+ 2250	18	24	40	23	22	21	19	18

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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
8	30x30	42	124	0.08	0.12	0.16	0.21	0.27	0.33	0.40
		54	153	0.08	0.12	0.16	0.21	0.27	0.33	0.40
		66	182	0.08	0.12	0.16	0.21	0.27	0.33	0.40
		78	210	0.08	0.12	0.16	0.21	0.27	0.33	0.40

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 0.35 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	- 2250	55	51	47	47	49	49	45	36
	- 1750	54	49	43	43	44	42	35	32
	+ 1750	54	52	51	45	44	44	36	31
	+ 2250	57	58	57	51	48	50	47	37

CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

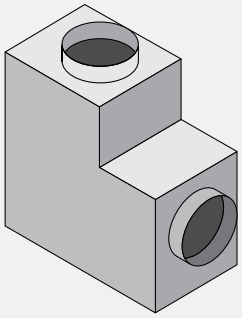
8 CENM-HV-F2

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

8 X **CENM-HV-F2** X **52**

- 8: Duct Connection Size
- CENM-HV-F2: Silencer Model
- 52: 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
52	- 2250	15	17	30	31	15	13	11	9
	0	14	12	29	21	11	12	12	10
	+ 2250	13	15	31	28	16	14	13	12
64	- 2250	16	18	32	32	17	14	12	8
	0	15	16	27	23	12	14	13	12
	+ 2250	14	19	31	32	18	16	15	13
76	- 2250	16	20	34	33	19	15	12	7
	0	17	19	26	26	14	15	15	13
	+ 2250	16	22	32	35	20	18	17	15
88	- 2250	17	21	36	34	21	16	13	5
	0	19	22	24	28	15	17	17	14
	+ 2250	18	26	32	38	21	20	19	17

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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
8	20x20	52	75	0.08	0.11	0.15	0.20	0.25	0.31	0.38
		64	94	0.08	0.12	0.16	0.21	0.26	0.32	0.39
		76	112	0.08	0.12	0.16	0.21	0.27	0.33	0.40
		88	130	0.08	0.12	0.16	0.21	0.27	0.34	0.41

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 0.35 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	- 2250	55	52	47	48	49	50	46	36
	- 1750	54	50	43	44	44	42	35	32
	+ 1750	54	52	50	46	44	43	35	31
	+ 2250	58	58	57	53	49	52	48	38

CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

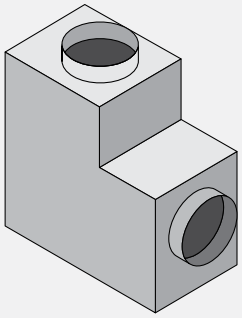
10 CENM-HV-F1

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

10 X **CENM-HV-F1** X **42**

- 10 — Duct Connection Size
- CENM-HV-F1 — Silencer Model
- 42 — 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
42	- 2250	14	20	32	15	14	12	9	9
	0	13	13	28	11	10	11	9	8
	+ 2250	11	17	33	17	14	13	10	9
54	- 2250	15	20	37	18	16	14	11	10
	0	14	14	32	12	11	13	12	10
	+ 2250	13	18	36	19	16	15	13	11
66	- 2250	16	20	42	20	18	16	13	11
	0	16	15	34	13	12	15	14	11
	+ 2250	14	19	39	20	19	18	16	14
78	- 2250	16	20	47	22	21	18	15	12
	0	17	15	37	14	13	17	17	13
	+ 2250	16	20	42	22	21	20	19	16

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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
10	30x30	42	125	0.09	0.13	0.17	0.23	0.28	0.35	0.43
		54	156	0.09	0.14	0.18	0.24	0.30	0.38	0.45
		66	185	0.10	0.14	0.20	0.26	0.32	0.40	0.48
		78	215	0.11	0.15	0.21	0.27	0.34	0.42	0.51

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 0.55 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	- 2250	56	53	51	49	51	52	50	39
	- 1750	55	51	46	45	45	44	39	35
	+ 1750	56	55	53	45	45	45	40	34
	+ 2250	59	60	59	51	50	53	52	40

CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

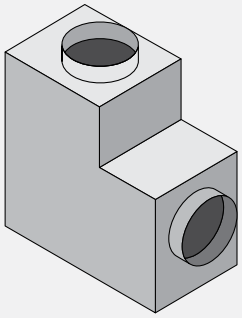
10 CENM-HV-F2

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

10 X **CENM-HV-F2** X **52**

- 10 — Duct Connection Size
- CENM-HV-F2 — Silencer Model
- 52 — 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
52	- 2250	13	15	25	31	16	13	10	9
	0	10	10	23	21	11	11	10	9
	+ 2250	10	13	25	29	16	13	11	10
64	- 2250	14	16	27	32	17	14	11	8
	0	12	13	23	24	12	13	12	10
	+ 2250	11	16	27	32	18	15	13	12
76	- 2250	15	18	30	34	19	15	12	8
	0	13	15	22	26	14	14	13	11
	+ 2250	12	19	28	36	20	16	14	13
88	- 2250	16	19	32	36	21	16	13	8
	0	15	18	22	28	15	15	15	12
	+ 2250	14	22	29	40	22	17	16	14

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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
10	20x20	52	78	0.07	0.10	0.13	0.18	0.22	0.27	0.33
		64	97	0.08	0.12	0.16	0.21	0.26	0.32	0.39
		76	115	0.09	0.14	0.18	0.24	0.30	0.38	0.45
		88	134	0.11	0.15	0.21	0.27	0.34	0.43	0.52

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 0.55 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	- 2250	56	54	50	50	50	52	49	39
	- 1750	54	51	45	45	45	44	38	34
	+ 1750	53	53	51	51	44	45	38	33
	+ 2250	57	60	57	57	50	54	52	41

CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

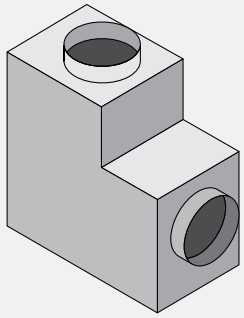
12 CENM-HV-F1

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

12 X **CENM-HV-F1** X **42**

- 12 — Duct Connection Size
- CENM-HV-F1 — Silencer Model
- 42 — 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
42	- 2250	13	17	26	15	14	11	8	10
	0	11	12	22	9	10	9	7	7
	+ 2250	11	16	28	16	14	11	8	8
54	- 2250	14	17	33	18	16	13	10	10
	0	12	11	27	10	10	11	10	9
	+ 2250	12	16	33	18	16	14	11	10
66	- 2250	15	18	41	21	18	15	12	10
	0	13	11	32	11	11	14	14	10
	+ 2250	13	15	38	20	18	16	15	12
78	- 2250	16	18	48	24	21	17	14	11
	0	14	11	38	12	11	16	17	12
	+ 2250	13	15	44	22	20	19	18	15

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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
12	30x30	42	128	0.09	0.14	0.18	0.24	0.30	0.38	0.45
		54	158	0.11	0.15	0.21	0.27	0.34	0.42	0.51
		66	188	0.12	0.17	0.23	0.30	0.38	0.47	0.57
		78	219	0.13	0.19	0.25	0.33	0.42	0.52	0.62

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 0.79 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	- 2250	58	56	54	52	53	56	55	42
	- 1750	57	53	49	46	45	46	44	38
	+ 1750	57	58	54	46	45	47	44	38
	+ 2250	60	62	61	52	51	56	57	42

CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

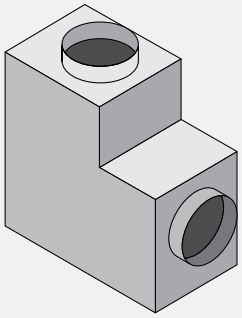
12 CENM-HV-F2

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

12 X **CENM-HV-F2** X **52**

- 12: Duct Connection Size
- CENM-HV-F2: Silencer Model
- 52: 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
52	- 2250	11	12	20	29	16	13	10	8
	0	6	8	17	21	11	11	9	9
	+ 2250	7	10	20	30	16	12	10	9
64	- 2250	13	14	23	32	18	14	11	9
	0	8	10	18	24	12	12	10	9
	+ 2250	8	13	22	33	18	13	11	10
76	- 2250	14	16	26	36	20	15	12	10
	0	10	12	19	26	13	12	11	9
	+ 2250	9	15	24	37	20	14	12	11
88	- 2250	15	18	29	39	21	15	13	11
	0	12	13	20	28	15	13	12	9
	+ 2250	10	18	27	41	22	15	14	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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
12	20x20	52	80	0.06	0.08	0.11	0.15	0.19	0.23	0.28
		64	99	0.08	0.12	0.16	0.21	0.27	0.33	0.40
		76	119	0.11	0.15	0.21	0.27	0.34	0.42	0.51
		88	138	0.13	0.19	0.25	0.33	0.42	0.52	0.62

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 0.79 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	- 2250	56	56	54	52	52	54	53	41
	- 1750	54	52	47	46	45	45	41	36
	+ 1750	53	54	51	46	44	46	41	34
	+ 2250	56	62	58	52	52	57	56	45

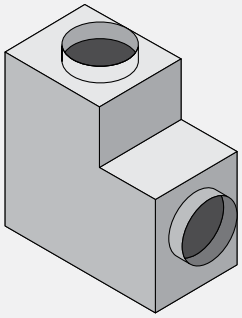
14 CENM-HV-F1

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

14 X **CENM-HV-F1** X **36**

- **14** — Duct Connection Size
- **CENM-HV-F1** — Silencer Model
- **36** — 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
36	- 2250	12	16	22	13	13	9	5	6
	0	8	11	17	9	9	8	6	6
	+ 2250	9	15	21	14	12	9	7	7
48	- 2250	12	18	30	16	15	11	7	7
	0	10	12	23	11	11	10	8	8
	+ 2250	10	17	29	16	14	11	9	8
60	- 2250	13	20	39	19	17	13	9	8
	0	11	13	29	13	12	12	10	9
	+ 2250	11	19	37	19	16	13	11	10
72	- 2250	14	22	48	22	19	15	10	9
	0	12	14	36	14	13	13	12	10
	+ 2250	12	22	44	22	18	15	13	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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
14	36x36	36	164	0.07	0.10	0.13	0.18	0.22	0.27	0.33
		48	202	0.07	0.10	0.14	0.19	0.24	0.29	0.35
		60	241	0.08	0.11	0.15	0.20	0.25	0.31	0.37
		72	279	0.08	0.12	0.16	0.21	0.26	0.32	0.39

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 1.07 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	- 2250	60	58	58	56	58	61	60	50
	- 1750	57	54	50	49	48	49	46	42
	+ 1750	59	60	54	48	47	48	46	41
	+ 2250	62	65	62	56	55	60	60	50

CERTIFIED PERFORMANCE DATA

VIBRO-ACOUSTICS®
A Swegon Group company

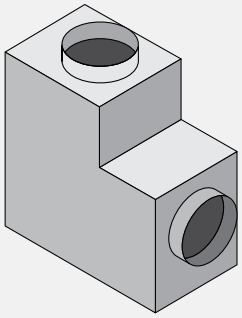
14 CENM-HV-F2

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

14 X **CENM-HV-F2** X **48**

- 14: Duct Connection Size
- CENM-HV-F2: Silencer Model
- 48: 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
48	- 2250	8	9	18	24	15	10	6	5
	0	5	7	15	16	10	9	7	7
	+ 2250	6	9	18	22	15	11	8	7
60	- 2250	11	12	21	25	16	12	7	6
	0	7	8	17	17	11	11	9	8
	+ 2250	8	11	20	24	16	12	9	9
72	- 2250	13	14	24	27	17	13	9	8
	0	10	10	19	19	12	12	10	9
	+ 2250	10	13	22	27	17	13	11	10
84	- 2250	15	17	27	28	18	15	10	9
	0	12	11	22	20	13	13	11	10
	+ 2250	12	15	25	29	17	15	12	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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
14	24x24	48	100	0.06	0.09	0.12	0.15	0.20	0.24	0.29
		60	124	0.08	0.11	0.15	0.20	0.25	0.31	0.37
		72	148	0.09	0.13	0.18	0.24	0.30	0.37	0.45
		84	172	0.11	0.16	0.21	0.28	0.35	0.44	0.53

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 1.07 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	- 2250	59	60	56	52	54	57	56	45
	- 1750	58	56	49	46	48	48	44	40
	+ 1750	58	60	53	47	48	50	46	41
	+ 2250	61	68	61	54	55	61	62	51

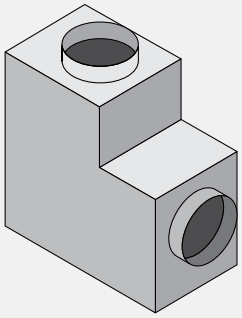
16 CENM-HV-F1

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

16 X **CENM-HV-F1** X **36**

- **16** — Duct Connection Size
- **CENM-HV-F1** — Silencer Model
- **36** — 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
36	- 2250	10	14	17	12	12	7	2	2
	0	6	11	11	9	9	7	5	5
	+ 2250	8	14	14	12	11	8	6	6
48	- 2250	11	18	28	15	14	9	4	4
	0	7	13	19	11	11	8	6	7
	+ 2250	9	19	25	15	13	9	6	6
60	- 2250	12	22	38	18	15	10	5	5
	0	9	15	26	14	13	10	7	8
	+ 2250	10	23	35	18	15	10	7	7
72	- 2250	12	25	48	20	17	12	6	7
	0	10	17	34	17	16	11	8	9
	+ 2250	12	28	45	22	17	11	8	8

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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
16	36x36	36	167	0.04	0.06	00.9	0.11	0.14	0.17	0.21
		48	205	0.04	0.06	0.08	0.10	0.13	0.16	0.19
		60	244	0.04	0.05	0.07	0.09	0.12	0.14	0.17
		72	283	0.03	0.05	0.06	0.08	0.10	0.13	0.15

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 1.40 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	- 2250	66	63	64	65	68	73	72	65
	- 1750	58	55	51	54	55	54	51	49
	+ 1750	62	62	53	53	51	51	48	48
	+ 2250	67	73	64	64	64	68	66	65

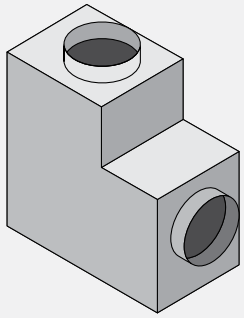
16 CENM-HV-F2

Circular Elbow No-Media
High velocity silencer
(<2250 fpm)

How to Specify Example:

16 X **CENM-HV-F2** X **48**

- 16: Duct Connection Size
- CENM-HV-F2: Silencer Model
- 48: 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)

See Silencer Selection Instructions.

Length (in.)	Face Velocity (ft. per min)	Octave Band - Hz/Dynamic Insertion Loss (dB)							
		63	125	250	500	1000	2000	4000	8000
48	- 2250	5	6	16	18	13	7	2	3
	0	4	5	14	10	9	8	6	6
	+ 2250	6	7	16	15	14	9	6	6
60	- 2250	8	9	19	18	14	10	4	4
	0	6	7	17	11	19	10	7	8
	+ 2250	8	8	18	16	14	11	8	7
72	- 2250	12	12	22	18	14	12	6	5
	0	9	8	20	12	10	11	9	10
	+ 2250	11	10	20	16	13	13	9	9
84	- 2250	15	15	25	18	15	15	8	6
	0	12	9	23	13	10	13	10	12
	+ 2250	13	11	22	16	12	15	11	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.

Duct Connect. Size (in.)	B x B (in.)	Silencer Length (in.)	Weight (lbs)	Face Velocity (ft. per min) / Pressure Drop (in.w.g.)						
				1250	1500	1750	2000	2250	2500	2750
16	24x24	48	102	0.06	0.09	0.12	0.16	0.20	0.25	0.30
		60	127	0.07	0.10	0.14	0.18	0.23	0.29	0.35
		72	152	0.08	0.12	0.16	0.21	0.26	0.32	0.39
		84	177	0.09	0.13	0.18	0.23	0.29	0.36	0.43

☐ Acceptable (0 - 0.35") ☐ Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN)

@ 1.40 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	- 2250	66	67	61	52	59	62	64	54
	- 1750	64	63	54	46	52	53	52	49
	+ 1750	67	72	59	50	55	57	58	54
	+ 2250	70	80	66	56	62	68	73	65