ArtUSA
Noise Control Products, Inc.

Elbow Attenuator - Model EMP

				Dynamic Insertion Loss (dB) Octave Band/Center Frequency (Hz)							
Model	Flow	Velocity fpm	Press Drop	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
EMP-36	Reverse Flow	-1500	0.42	8	15	19	21	22	18	17	14
		-1000	0.19	9	14	18	21	22	19	18	14
		0	0	8	14	17	20	22	19	18	14
	Forward Flow	1000	0.19	8	13	17	20	23	21	17	15
		1500	0.42	7	13	17	19	23	21	17	15
EMP-48	Reverse Flow	-1500	0.45	8	16	21	27	28	25	23	16
		-1000	0.20	9	15	20	26	27	24	22	16
		0	0	8	15	19	25	27	24	23	16
	Forward Flow	1000	0.20	8	12	19	25	28	26	23	17
		1500	0.45	7	13	19	26	28	26	24	18
EMP-60	Reverse Flow	-1500	0.49	11	15	23	30	32	28	25	18
		-1000	0.22	11	16	22	31	32	29	25	18
		0	0	9	16	21	30	32	29	26	18
	Forward Flow	1000	0.22	9	14	21	30	33	30	27	18
		1500	0.49	8	14	20	29	32	29	28	19
EMP-72	Reverse Flow	-1500	0.51	13	16	26	35	36	33	28	23
		-1000	0.23	13	17	25	36	37	34	28	23
		0	0	10	18	24	35	36	34	28	22
	Forward Flow	1000	0.23	10	17	24	35	36	34	28	24
		1500	0.51	10	17	23	34	35	33	30	25
EMP-84	Reverse Flow	-1500	0.54	13	19	32	39	38	35	28	23
		-1000	0.24	14	20	32	40	40	37	29	24
		0	0	11	21	31	39	39	37	29	23
	Forward Flow	1000	0.24	11	20	31	39	39	38	30	24
		1500	0.54	10	20	30	38	38	36	30	25

Model number indicates centerline length of unit in inches.
Forward Flow - characteristic of supply or discharge fan systems.
Reverse Flow - typical of return or intake fan systems.

Pressure Drop Calculation for Specific Velocity

Actual Velocity (fpm) = CFM x 144 ÷ [Height (in.) x Width (in.)]

$$\text{Pressure Drop} = \left(\frac{\text{Actual Velocity}}{1500}\right)^2 \times \text{Catalog Pressure Drop @ 1500 fpm}$$

Standard Construction

22 gauge galvanized casings
24 gauge perforated baffles
Acoustic quality Fiberglass media

Optional Features

Mylar or polyethylene liners
Fiberglass cloth liners
Stainless steel or aluminum construction

Computer program available which provides attenuator performance at actual job conditions.