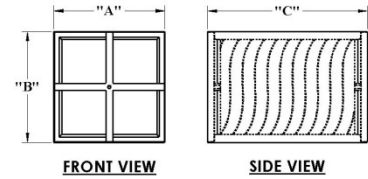




**CERTIFIED PERFORMANCE DATA**

**Testing Information:**

All acoustical performance and aerodynamic data is derived from NVLAP accredited laboratory tests in accordance with ASTM E477, the standard method for testing duct silencers. Published information originated from a 16" x 16" (406 x 406 mm) production unit, tested in forward flow (+, air/noise in same direction) and reverse flow (-, air/noise in opposite directions). If silencers are installed immediately before or after elbows, transitions, at the intake or discharge of the system or without a duct, allowance for such conditions must be included and compensated for when calculating the operating pressure through the silencer. Failure to make allowances for these conditions can add several velocity heads to the pressure loss of the system.



Model	Pressure Drop In.wg.(pa)	Face Velocity fpm	Insertion Loss (db)								Generated Noise Lw (dB re 10 <sup>-12</sup> Watts)							
			Octave Band Center Frequency (Hz)								Octave Band Center Frequency (Hz)							
			1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
1420-90	.41	-2000	17	21	25	33	35	40	54	56	54	41	41	42	42	41	25	28
	.10	-1000	17	21	25	33	34	39	54	56	54	41	41	42	42	41	25	28
	0	0	17	21	25	33	34	39	54	56	-	-	-	-	-	-	-	-
	.10	+1000	17	21	25	33	34	39	54	56	54	41	41	42	42	41	25	28
	.41	+2000	17	21	25	33	34	39	54	56	54	41	41	42	42	41	25	28
1420-180	.46	-2000	18	26	32	37	46	59	43	42	54	41	41	42	42	41	25	28
	.12	-1000	18	26	31	37	45	58	43	42	54	41	41	42	42	41	25	28
	0	0	18	26	31	37	45	58	43	42	-	-	-	-	-	-	-	-
	.12	+1000	18	26	31	37	45	58	43	42	54	41	41	42	42	41	25	28
	.46	+2000	18	26	31	37	44	58	43	42	54	41	41	42	42	41	25	28
1420-DUAL-90	1.09	-2000	24	37	48	56	59	59	55	56	54	41	41	42	42	41	25	28
	.27	-1000	24	37	48	55	58	58	55	56	54	41	41	42	42	41	25	28
	0	0	24	37	48	55	58	58	55	56	-	-	-	-	-	-	-	-
	.27	+1000	24	37	48	55	58	58	55	56	54	41	41	42	42	41	25	28
	1.09	+2000	24	37	48	55	58	58	55	56	54	41	41	42	42	41	25	28
1420-DUAL-180	1.67	-2000	28	38	52	58	60	60	59	58	54	41	41	42	42	41	25	28
	.42	-1000	28	38	52	57	59	59	59	58	54	41	41	42	42	41	25	28
	0	0	28	38	52	57	59	59	59	58	-	-	-	-	-	-	-	-
	.42	+1000	28	38	52	57	59	59	59	58	54	41	41	42	42	41	25	28
	1.67	+2000	28	38	52	57	59	59	59	58	54	41	41	42	42	41	25	28
2224-180	.41	-2000	14	23	27	35	45	56	42	41	54	41	41	42	42	41	25	28
	.10	-1000	14	23	27	35	44	55	42	41	54	41	41	42	42	41	25	28
	0	0	14	23	27	35	44	55	42	41	-	-	-	-	-	-	-	-
	.10	+1000	14	23	27	35	44	55	42	41	54	41	41	42	42	41	25	28
	.41	+2000	14	23	27	35	45	55	42	41	54	41	41	42	42	41	25	28
1414-90	.52	-2000	17	24	29	32	41	51	40	40	54	41	41	42	42	41	25	28
	.13	-1000	17	24	29	32	41	50	40	40	54	41	41	42	42	41	25	28
	0	0	17	24	29	32	41	50	40	40	-	-	-	-	-	-	-	-
	.13	+1000	17	24	29	32	41	50	40	40	54	41	41	42	42	41	25	28
	.52	+2000	17	24	29	32	41	50	40	40	54	41	41	42	42	41	25	28





**Standard Construction:**

- Maximum Differential Pressure: 10 in. wg.
- Outer casing: 18 gauge CR steel fully welded and Powder Coated after fabrication
- Attenuation materials: Fiberglass based acoustical insulation bonded to 26 gauge (0.016" thick) acoustical barrier. All exposed fiberglass face to be bonded with a fiberglass scrim cloth per **Oxel** 919 treatment to a minimum strength per square inch of 80 lbs. warp and 70 lbs. filler, packed under a minimum of 5% compression. Fiberglass based insulation is vermin and moisture proof with a flame-spread maximum of 25

Use the following formula to calculate pressure drop for intermediate velocities (in wg.)

**Formula:**

$$(\text{Job Velocity}/\text{Catalog Velocity})^2 \times \text{Catalog S.P.} = \text{P.D.}$$

**Example:**

$$(990/500)^2 \times 0.03 = 0.12 \text{ in w.g.}$$

**Options:**

- Aluminum Construction
- Stainless Steel Construction

**Aerodynamic Performance Data**

Face Velocity fpm & Pressure Drop in. wg.

Model	500	750	1000+	1250	1500	1750	2000+	2500	2750	3000+
1420-90	.03	.06	.10	.16	.23	.32	.41	.64	.77	.92
1420-180	.03	.07	.12	.18	.26	.36	.46	.72	.88	1.04
1420-DUAL-90	.07	.16	.27	.43	.62	.84	1.09	1.71	2.07	2.47
1420-DUAL-180	.10	.23	.42	.65	.94	1.28	1.67	2.60	3.15	3.75
2224-180	.03	.06	.10	.16	.23	.32	.41	.64	.77	.92
1414-90	.03	.07	.13	.21	.29	.40	.52	.81	.98	1.16

† Tested velocities

**Standard Module Weights and Dimensions**

Model	Width A	Height B	Length C	Face Flow	Net Weight
1420-90	16 in.	16 in.	23 in.	16 in. X 16 in.	40 lbs.
1420-180	16 in.	16 in.	23 in.	16 in. X 16 in.	40 lbs.
1420-DUAL-90	16 in.	16 in.	68 in.	16 in. X 16 in.	110 lbs.
1420-DUAL-180	16 in.	16 in.	68 in.	16 in. X 16 in.	110 lbs.
2224-180	24 in.	24 in.	27 in.	24 in. X 24 in.	89 lbs.
1414-90	16 in.	16 in.	17 in.	16 in. X 16 in.	35 lbs.

- Factory tolerances are +/- 1/16"
- When stacking modules please allow for run-out of tolerances
- Units bolt together using flanges and holes provided

**Ordering Information:**

To order, state Model #, Number of modules and assembled array size

**Example:**

MVA 1420-90-12 (3 x 4)

