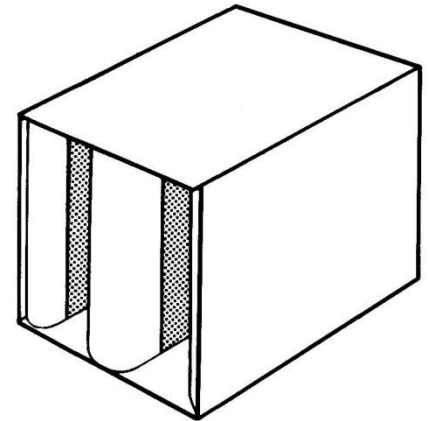


**CERTIFIED PERFORMANCE DATA**
**Testing Information:**

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 24"x24" (610mm x 610mm) production unit, tested in forward flow ("+" = air/noise in same direction) and reverse flow ("- " = air/noise in opposite direction). If silencers are installed immediately before/after elbows or transitions, at the intake/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	Face Velocity fpm	Insertion Loss (db)							
		Octave Band Center Frequency (Hz)							
		1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
<b>3BNF4</b>	-1500	5	8	15	20	27	14	9	9
	-1000	4	7	12	17	23	12	9	9
	+1000	3	4	11	17	23	13	11	9
	+2000	2	5	12	19	29	16	13	9
<b>6BNF4</b>	-1500	7	14	24	30	34	19	11	9
	-1000	6	11	19	26	30	17	11	9
	+1000	6	9	16	26	31	18	17	14
	+2000	5	10	18	28	34	20	17	14
<b>9BNF4</b>	-1500	10	19	32	31	39	25	13	12
	-1000	9	15	27	26	37	23	14	13
	+1000	7	11	22	25	36	23	19	17
	+2000	7	12	25	29	41	26	19	16

This table contains forward and reverse flow acoustic performance data based on testing to ASTM E477 testing standards. Copies of these tests can be furnished upon request.

**Standard Construction:**

- Maximum Differential Pressure: 8 in. wg.
- Outer casing: Minimum 22 gauge G90 galvanized steel
- Internal baffles: Minimum 24 gauge G90 galvanized steel
- Lock formed and mastic filled
- Attenuation materials: No acoustical fill



AIR FLOW RATINGS FOR THE 12"x12" SIZE, (SHADED), INDICATES CFM AND FACE VELOCITY IN FPM. USE THIS 12"x12" VALUES TO CALCULATE THE RATING FOR SILENCER SIZES NOT SHOWN AND FOR MULTIPLE MODULE SILENCER BANKS.

MODEL	3BNF4	0.12	0.23	0.35	0.47	0.64	0.73	0.85	0.96	1.14	1.26	1.39	1.51
	6BNF4	0.12	0.22	0.34	0.45	0.61	0.70	0.82	0.91	1.07	1.19	1.31	1.43
9BNF4	0.16	0.32	0.47	0.63	0.87	0.99	1.15	1.32	1.56	1.74	1.91	2.08	
SIZE W x H	FACE AREA	AIR FLOW IN CFM											
6 x 12	0.50	300	424	519	600	702	750	810	866	942	993	1042	1088
6 x 24	1.00	600	848	1038	1200	1404	1500	1620	1732	1884	1986	2083	2175
6 x 36	1.50	900	1272	1557	1800	2106	2250	2430	2598	2826	2979	3125	3263
<b>12 x 12</b>	<b>1.00</b>	<b>600</b>	<b>848</b>	<b>1038</b>	<b>1200</b>	<b>1404</b>	<b>1500</b>	<b>1620</b>	<b>1732</b>	<b>1884</b>	<b>1986</b>	<b>2083</b>	<b>2175</b>
12 x 24	2.00	1200	1696	2076	2400	2808	3000	3240	3464	3768	3972	4166	4350
12 x 30	2.5	1500	2120	2595	3000	3510	3750	4050	4330	4710	4965	5208	5438
12 x 36	3.00	1800	2544	3114	3600	4212	4500	4860	5196	5652	5958	6249	6525
12 x 48	4.00	2400	3392	4152	4800	5616	6000	6480	6928	7536	7944	8332	8700
24 x 24	4.00	2400	3392	4152	4800	5616	6000	6480	6928	7536	7944	8332	8700
24 x 30	5.00	3000	4240	5190	6000	7020	7500	8100	8660	9420	9930	10415	10875
24 x 36	6.00	3600	5088	6228	7200	8424	9000	9720	10392	11304	11916	12498	13050
24 x 42	7.00	4200	5936	7266	8400	9828	10500	11340	12124	13188	13902	14581	15225
24 x 48	8.00	4800	6784	8304	9600	11232	12000	12960	13856	15072	15888	16664	17400
36 x 30	7.50	4500	6360	7785	9000	10530	11250	12150	12990	14130	14895	15623	16313
36 x 36	9.00	5400	7632	9342	10800	12636	13500	14580	15588	16956	17874	18747	19575
36 x 42	10.50	6300	8904	10899	12600	14742	15750	17010	18186	19782	20853	21872	22838
36 x 48	12.00	7200	10176	12456	14400	16848	18000	19440	20784	22608	23832	24996	26100
48 x 42	14.00	8400	11872	14532	16800	19656	21000	22680	24248	26376	27804	29162	30450
48 x 48	16.00	9600	13568	16608	19200	22464	24000	25920	27712	30144	31776	33328	34800

SELF GENERATED SOUND POWER RATINGS (PWL) dB RE 10<sup>-12</sup> watts

OCTAVE BAND		1	2	3	4	5	6	7	8
[HZ]		63	125	250	500	1K	2K	4K	8K
MODEL	FACE VELOCITY [FPM]								
ALL LENGTHS	+2000	70	66	60	58	57	67	79	74
	+1000	53	49	43	45	51	60	57	46
	-1000	54	50	48	53	62	69	66	56
	-1500	60	57	55	58	63	71	77	70

SELF GENERATED SOUND RATINGS FACE AREA-ADJUSTMENT FACTORS

FACE AREA [FT <sup>2</sup> ]	.50	1	2	4	8	10	32	64	128
PWL ADJUSTMENT FACTOR, [dB]	-9	-6	-3	0	+3	+6	+9	+12	+15

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