

# TC Ventco

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## ***SOUND POWER LEVELS***

### **TYPE VFC, VBC**



Twin City Fan & Blower certifies that the Type VFC and VBC Fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Air performance ratings can be found in Bulletin 5200 and 5300

Sound power levels (Lw) have been determined by laboratory tests in accordance with AMCA Standard 300-05. The sound power levels shown are decibel (dB) levels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The AMCA certified Ratings Seal applies to 'A' Weight at inlet (LwiA) only. Procedure to obtain LwiA is shown below. We have listed inlet values for eight octave bands with frequency ranges as shown below.

OCTAVE BAND	1	2	3	4	5	6	7	8
FREQUENCY RANGE	45 to 90	90 to 180	180 to 355	355 to 710	710 to 1400	1400 to 2800	2800 to 5600	5600 to 11200
CENTER FREQUENCY	63	125	250	500	1000	2000	4000	8000

Lw for the fans can be easily obtained using the Twin City Fan Selector Program. LwiA can also be obtained using the specific sound power level method described below:

**Sound Power Level of a fan (Lw) =  
Specific Sound Power Level (L<sub>wk</sub>) + Capacity Fraction (M)**

Use of this method will be illustrated by the following example:

Calculate sound power levels for:  
 Size . . . . .VFC 8  
 CFM . . . . . 2,705  
 SP . . . . . 4.715 w.g.  
 RPM . . . . . 3000 RPM

**1. How to determine L<sub>wk</sub>**

We have published values for L<sub>wk</sub> at various speeds and operating points on pages 3 through 23 for the inlet of the fan.

The operating point is found by using a ratio of design CFM to the wide open volume (WOV) for a given RPM. The WOV can be calculated by multiplying fan RPM by the factors (Rf) shown in the table.

VFC		VBC	
FAN SIZE	FACTOR	FAN SIZE	FACTOR
8	1.803	8	0.530
9	2.576	9	0.755
10	3.531	10	1.036
11	5.435	11	1.456
12	7.728	12	2.235
14	11.120	14	3.207
16	15.889	16	4.669
18	21.909	18	6.641
20	29.994	20	9.113
22	42.236	22	12.802
25	60.055	25	17.522
28	70.137	28	25.097
32	100.000	32	35.885
36	142.613	36	51.112
40	195.750	40	70.164

Thus, WOV for 3000 RPM = 1.803 x 3000 = 5,409 CFM.

Therefore, the operating point falls at 50% WOV (2,706 ÷ 5,409 x 100%). Referring to the table on page 3 for Size VFC 8 the *specific* sound power levels can be read as follows:

Octave Band	1	2	3	4	5	6	7	8	'A' Weight
L <sub>wk</sub> inlet =	55	52	45	42	39	39	36	35	46

**2. How to determine M**

M can be calculated by:  $M = 10 \log_{10} (CFM) + 20 \log_{10} TP$ , where  $TP = ((CFM \div OA) \div 4005)^2 + SP = ((2,706 \div .694) \div 4005)^2 + 4.715 = 5.663$

Thus, for 2,706 CFM and 4.715" SP, M is 49.

**3. Combining L<sub>wk</sub> and M gives sound power levels.**

Octave Band	1	2	3	4	5	6	7	8	'A' Weight
L <sub>wk</sub> =	55	52	45	42	39	39	36	35	46
M =	49	49	49	49	49	49	49	49	49
Lw (Lwi) at inlet =	104	101	94	91	88	88	85	84	95 (LwiA)

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VFC 8

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
3200	70	51	51	49	46	43	44	44	43	451
	60	55	53	47	44	41	42	40	39	49
	50	55	53	45	43	39	39	36	35	47
	40	52	51	45	42	37	37	33	32	45
	30	49	49	46	43	37	37	34	31	45
3000	70	51	51	49	45	43	44	44	43	51
	60	55	53	47	44	41	42	40	39	49
	50	55	52	45	42	39	39	36	35	46
	40	52	50	45	41	37	37	33	32	45
	30	49	48	46	43	37	37	34	31	45
2800	70	51	51	48	45	44	44	44	42	51
	60	55	52	46	43	41	42	40	38	49
	50	55	51	45	42	39	39	36	35	46
	40	52	50	45	40	37	37	33	31	44
	30	49	48	46	42	37	37	33	31	45
2600	70	51	50	48	44	44	44	44	42	51
	60	55	51	46	43	41	42	40	38	48
	50	55	50	45	41	39	39	36	35	46
	40	52	49	44	40	37	37	33	31	44
	30	49	48	45	41	37	37	33	31	44
2400	70	51	50	48	44	44	44	44	42	51
	60	55	50	46	42	42	41	40	38	48
	50	55	49	44	41	39	38	36	34	46
	40	52	48	44	39	37	36	33	31	44
	30	49	47	45	40	37	36	33	30	44
2200	70	51	50	47	43	44	44	43	42	51
	60	55	49	45	41	42	41	39	38	48
	50	55	48	44	40	39	38	36	34	45
	40	52	47	44	38	37	35	33	30	43
	30	49	47	45	39	37	36	33	30	44
2000	70	51	50	47	43	44	44	43	41	50
	60	55	48	45	41	42	40	39	37	47
	50	55	47	44	39	39	37	36	34	45
	40	52	47	43	37	34	33	30	43	
	30	49	47	45	38	37	35	32	30	43
1900	70	51	49	46	42	44	44	43	41	50
	60	55	47	45	40	42	40	39	37	47
	50	55	45	43	38	39	37	36	34	45
	40	52	46	43	37	37	34	32	29	43
	30	49	46	44	37	37	34	32	29	43
1800	70	51	49	46	42	44	44	43	41	50
	60	55	47	45	40	42	40	39	37	47
	50	55	45	43	38	39	37	36	34	45
	40	52	46	43	37	37	34	32	29	42
	30	49	46	44	37	37	34	32	29	43
1600	70	51	49	46	43	44	44	43	40	50
	60	53	47	44	41	42	40	39	36	47
	50	53	45	43	39	39	36	35	33	44
	40	51	45	42	37	37	33	32	29	42
	30	49	46	43	37	37	34	31	29	43
1400	70	51	48	45	44	44	44	42	40	50
	60	52	46	43	41	42	40	38	36	47
	50	51	45	42	39	39	36	35	33	44
	40	50	45	40	37	37	33	31	28	42
	30	48	46	42	37	37	33	31	28	42
1200	70	50	48	44	44	44	44	42	39	50
	60	50	46	42	42	41	40	38	35	47
	50	49	44	41	39	38	36	34	32	44
	40	48	44	39	37	36	33	31	28	41
	30	47	45	40	37	36	33	30	28	41
1000	70	50	47	43	44	44	43	41	39	50
	60	48	45	41	42	40	39	37	35	46
	50	47	44	39	39	37	36	34	32	43
	40	46	43	37	34	33	30	27	40	
	30	47	45	38	37	35	32	30	27	41

## VFC 9

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2800	70	51	51	48	45	44	44	44	42	51
	60	55	52	46	43	41	42	40	38	49
	50	55	51	45	42	39	39	36	35	46
	40	52	50	45	40	37	37	33	31	44
	30	49	48	46	42	37	37	33	31	45
2600	70	51	50	48	44	44	44	44	42	51
	60	55	51	46	43	41	42	40	38	48
	50	55	50	45	41	39	39	36	35	46
	40	52	49	44	40	37	37	33	31	44
	30	49	48	45	41	37	37	33	31	44
2400	70	51	50	48	44	44	44	44	42	51
	60	55	50	46	42	42	41	40	38	48
	50	55	49	44	41	39	38	36	34	46
	40	52	48	44	39	37	36	33	31	44
	30	49	47	45	40	37	36	33	30	44
2200	70	51	50	47	43	44	44	43	42	51
	60	55	49	45	41	42	41	39	38	48
	50	55	48	44	40	39	38	36	34	45
	40	52	47	44	38	37	35	33	30	43
	30	49	47	45	39	37	36	33	30	44
2000	70	51	50	47	43	44	44	43	41	50
	60	55	48	45	41	42	40	39	37	47
	50	55	47	44	39	39	37	36	34	45
	40	52	47	43	37	37	34	33	30	43
	30	49	47	45	38	37	35	32	30	43
1800	70	51	49	46	42	44	44	43	41	50
	60	55	47	45	40	42	40	39	37	47
	50	55	45	43	38	39	37	36	34	45
	40	52	46	43	37	37	34	32	29	42
	30	49	46	44	37	37	34	32	29	43
1600	70	51	49	46	43	44	44	43	40	50
	60	53	47	44	41	42	40	39	36	47
	50	53	45	43	39	39	36	35	33	44
	40	51	45	42	37	37	33	32	29	42
	30	49	46	43	37	37	34	31	29	43
1400	70	51	48	45	44	44	44	42	40	50
	60	52	46	43	41	42	40	38	36	47
	50	51	45	42	39	39	36	35	33	44
	40	50	45	40	37	37	33	31	28	42
	30	48	46	42	37	37	33	31	28	42
1200	70	50	48	44	44	44	44	42	39	50
	60	50	46	42	42	41	40	38	35	47
	50	49	44	41	39	38	36	34	32	44
	40	48	44	39	37	36	33	31	28	41
	30	47	45	40	37	36	33	30	28	41
1000	70	50	47	43	44	44	43	41	39	50
	60	48	45	41	42	40	39	37	35	46
	50	47	44	39	39	37	36	34	32	43
	40	46	43	37	37	34	33	30	27	40
	30	47	45	38	37	35	32	30	27	41
800	70	49	46	43	44	44	43	40	38	49
	60	47	44	41	42	40	39	36	34	46
	50	45	43	39	39	36	35	33	31	42
	40	45	42	37	37	33	32	29	26	40
	30	46	43	37	37	34	31	29	26	40

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VFC 10

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2400	70	51	50	48	44	44	44	44	42	51
	60	55	50	46	42	42	41	40	38	48
	50	55	49	44	41	39	38	36	34	46
	40	52	48	44	39	37	36	33	31	44
30	49	47	45	40	37	36	33	30	44	
2200	70	51	50	47	43	44	44	43	42	51
	60	55	49	45	41	42	41	39	38	48
	50	55	48	44	40	39	38	36	34	45
	40	52	47	44	38	37	35	33	30	43
30	49	47	45	39	37	36	33	30	44	
2000	70	51	50	47	43	44	44	43	41	50
	60	55	48	45	41	42	40	39	37	47
	50	55	47	44	39	39	37	36	34	45
	40	52	47	43	37	37	34	33	30	43
30	49	47	45	38	37	35	32	30	43	
1900	70	51	49	47	43	44	44	43	41	50
	60	55	48	45	41	42	40	39	37	47
	50	55	46	44	39	39	37	36	34	45
	40	52	46	43	37	37	34	33	30	43
30	49	46	45	38	37	35	32	29	43	
1800	70	51	49	46	42	44	44	43	41	50
	60	55	47	45	40	42	40	39	37	47
	50	55	45	43	38	39	37	36	34	45
	40	52	46	43	37	37	34	32	29	42
30	49	46	44	37	37	34	32	29	43	
1600	70	51	49	46	43	44	44	43	40	50
	60	53	47	44	41	42	40	39	36	47
	50	53	45	43	39	39	36	35	33	44
	40	51	45	42	37	37	33	32	29	42
30	49	46	43	37	37	34	31	29	42	
1400	70	51	48	45	44	44	44	42	40	50
	60	52	46	43	41	42	40	38	36	47
	50	51	45	42	39	39	36	35	33	44
	40	50	45	40	37	37	33	31	28	42
30	48	46	42	37	37	33	31	28	42	
1200	70	50	48	44	44	44	44	42	39	50
	60	50	46	42	42	41	40	38	35	47
	50	49	44	41	39	38	36	34	32	44
	40	48	44	39	37	36	33	31	28	41
30	47	45	40	37	36	33	30	28	41	
1000	70	50	47	43	44	44	43	41	39	50
	60	48	45	41	42	40	39	37	35	46
	50	47	44	39	39	37	36	34	32	43
	40	46	43	37	37	34	33	30	27	41
30	47	45	38	37	35	32	30	27	41	
800	70	49	46	43	44	44	43	40	38	49
	60	47	44	41	42	40	39	36	34	46
	50	45	43	39	39	36	35	33	31	43
	40	45	42	37	37	33	32	29	26	40
30	46	43	37	37	34	31	29	26	40	
700	70	48	45	44	44	44	42	40	37	49
	60	46	43	41	42	40	38	36	34	45
	50	45	42	39	39	36	35	33	31	42
	40	44	40	37	37	33	31	28	25	39
30	46	42	37	37	33	31	28	25	39	

## VFC 11

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2500	70	41	41	49	45	41	42	41	40	49
	60	39	39	47	42	38	39	37	35	46
	50	39	39	46	41	36	37	35	33	44
	40	40	40	48	43	38	38	36	35	46
30	41	41	49	44	39	39	38	36	47	
2300	70	41	42	49	44	41	42	40	39	49
	60	39	40	47	42	38	39	36	35	46
	50	39	39	47	41	36	37	35	33	45
	40	40	40	48	42	38	38	36	34	46
30	41	41	49	43	39	39	37	36	47	
2100	70	41	43	48	44	41	42	40	39	49
	60	39	41	46	41	38	39	36	34	46
	50	39	40	46	40	36	37	35	32	44
	40	40	41	47	41	38	38	36	34	45
30	41	42	48	43	39	39	37	35	47	
1900	70	41	44	48	43	42	42	40	38	49
	60	39	42	46	40	38	39	36	34	45
	50	39	41	45	39	37	37	34	31	44
	40	40	42	46	41	38	38	36	33	45
30	41	44	47	42	39	39	37	35	46	
1700	70	41	45	47	43	42	42	40	37	48
	60	39	43	45	40	39	39	36	33	45
	50	39	43	44	38	37	37	34	31	44
	40	40	44	45	40	38	38	35	32	45
30	41	45	46	41	39	39	37	34	46	
1500	70	41	47	46	42	42	42	40	37	48
	60	39	45	44	39	39	38	36	32	45
	50	39	44	43	38	37	36	34	30	43
	40	40	45	44	39	38	37	35	31	44
30	41	47	45	41	39	39	37	33	46	
1300	70	41	48	45	41	42	41	40	36	48
	60	39	46	43	38	39	37	35	31	44
	50	39	46	42	37	37	35	33	29	43
	40	40	47	43	38	38	37	35	30	44
30	41	48	44	40	39	38	36	32	45	
1100	70	42	49	44	41	42	40	39	35	47
	60	40	47	41	38	39	36	35	30	44
	50	40	46	40	36	37	35	32	27	42
	40	41	47	42	38	38	36	34	29	43
30	42	49	43	39	39	37	36	31	45	
900	70	45	47	43	42	42	40	38	34	47
	60	43	45	40	38	39	36	33	29	43
	50	42	44	39	37	37	34	31	26	42
	40	43	46	40	38	38	36	33	28	43
30	44	47	42	39	39	37	34	29	44	
700	70	48	45	42	42	41	40	36	32	47
	60	46	43	39	39	37	35	32	27	43
	50	45	42	37	37	36	33	29	24	41
	40	46	44	39	38	37	35	31	26	43
30	48	45	40	39	38	37	32	27	44	
600	70	49	44	41	42	40	39	35	31	46
	60	47	42	38	39	37	35	31	26	42
	50	47	41	36	37	35	33	28	23	41
	40	48	42	38	38	36	35	30	25	42
30	49	43	39	39	37	36	31	26	43	

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VFC 12

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2200	70	41	42	49	44	41	42	40	39	49
	60	39	40	47	41	38	39	36	35	46
	50	39	40	46	40	36	37	35	32	44
	40	40	41	47	42	38	38	36	34	46
	30	41	42	49	43	39	39	37	36	47
2000	70	41	43	48	43	42	42	40	38	49
	60	39	41	46	41	38	39	36	34	46
	50	39	41	45	40	36	37	34	32	44
	40	40	42	47	41	38	38	36	33	45
	30	41	43	48	42	39	39	37	35	46
1800	70	41	45	47	43	42	42	40	38	49
	60	39	43	45	40	38	39	36	33	45
	50	39	42	44	39	37	37	34	31	44
	40	40	43	46	40	38	38	36	33	45
	30	41	44	47	42	39	39	37	34	46
1600	70	41	46	46	42	42	42	40	37	48
	60	39	44	44	39	39	38	36	33	45
	50	39	43	43	38	37	37	34	30	43
	40	40	45	45	40	38	38	35	32	45
	30	41	46	46	41	39	39	37	33	46
1400	70	41	47	45	42	42	41	40	36	48
	60	39	46	43	39	39	37	35	32	44
	50	39	45	42	37	37	36	33	29	43
	40	40	46	44	39	38	37	35	31	44
	30	41	47	45	40	39	38	37	32	45
1200	70	41	49	44	41	42	40	39	35	47
	60	39	47	42	38	39	37	35	31	44
	50	39	47	41	36	37	35	33	28	42
	40	40	48	42	38	38	36	35	30	44
	30	41	49	43	39	39	37	36	31	45
1000	70	43	48	43	42	42	40	38	34	47
	60	41	46	41	38	39	36	34	30	44
	50	41	45	40	36	37	34	32	27	42
	40	42	47	41	38	38	36	33	28	43
	30	43	48	42	39	39	37	35	30	44
800	70	46	46	42	42	42	40	37	33	47
	60	44	44	39	39	38	36	33	28	43
	50	44	43	38	37	37	34	30	25	41
	40	45	45	40	38	38	35	32	27	43
	30	46	46	41	39	39	37	33	28	44
600	70	49	44	41	42	40	39	35	31	46
	60	47	42	38	39	37	35	31	26	42
	50	47	41	36	37	35	33	28	23	40
	40	48	42	38	38	36	35	30	25	42
	30	49	43	39	39	37	36	31	26	43
500	70	48	43	42	42	40	38	34	30	45
	60	46	41	38	39	36	34	30	25	41
	50	45	40	36	37	34	32	27	22	39
	40	47	41	38	38	36	33	28	23	41
	30	48	42	39	39	37	35	30	25	42

## VFC 14

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2000	70	41	43	48	43	42	42	40	38	49
	60	39	41	46	41	38	39	36	34	46
	50	39	41	45	40	36	37	34	32	44
	40	40	42	47	41	38	38	36	33	45
	30	41	43	48	42	39	39	37	35	46
1800	70	41	45	47	43	42	42	40	38	49
	60	39	43	45	40	38	39	36	33	45
	50	39	42	44	39	37	37	34	31	44
	40	40	43	46	40	38	38	36	33	45
	30	41	44	47	42	39	39	37	34	46
1600	70	41	46	46	42	42	42	40	37	48
	60	39	44	44	39	39	38	36	33	45
	50	39	44	44	39	39	38	36	33	45
	40	39	43	43	38	37	37	34	30	43
	30	41	46	46	41	39	39	37	33	46
1400	70	41	47	45	42	42	41	40	36	48
	60	39	46	43	39	39	37	35	32	44
	50	39	45	42	37	37	36	33	29	43
	40	40	46	44	39	38	37	35	31	44
	30	41	47	45	40	39	38	37	32	45
1200	70	41	49	44	41	42	40	39	35	47
	60	39	47	42	38	39	37	35	31	44
	50	39	47	41	36	37	35	33	28	42
	40	40	48	42	38	38	36	35	30	44
	30	41	49	43	39	39	37	36	31	45
1000	70	43	48	43	42	42	40	38	34	47
	60	41	46	41	38	39	36	34	30	44
	50	41	45	40	36	37	34	32	27	42
	40	42	47	41	38	38	36	33	28	43
	30	43	48	42	39	39	37	35	30	44
800	70	46	46	42	42	42	40	37	33	47
	60	44	44	39	39	38	36	33	28	43
	50	44	43	38	37	37	34	30	25	41
	40	45	45	40	38	38	35	32	27	43
	30	46	46	41	39	39	37	33	28	44
600	70	49	44	41	42	40	39	35	31	46
	60	47	42	38	39	37	35	31	26	42
	50	47	41	36	37	35	33	28	23	40
	40	48	42	38	38	36	35	30	25	42
	30	49	43	39	39	37	36	31	26	43
500	70	48	43	42	42	40	38	34	30	45
	60	46	41	38	39	36	34	30	25	41
	50	45	40	36	37	34	32	27	22	39
	40	47	41	38	38	36	33	28	23	41
	30	48	42	39	39	37	35	30	25	42

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VFC 16

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1800	70	41	45	47	43	42	42	40	38	49
	60	39	43	45	40	38	39	36	33	45
	50	39	42	44	39	37	37	34	31	44
	40	40	43	46	40	38	38	36	33	45
30	41	44	47	42	39	39	37	34	46	
1600	70	41	46	46	42	42	42	40	37	48
	60	39	44	44	39	39	38	36	33	45
	50	39	43	43	38	37	37	34	30	43
	40	40	45	45	40	38	38	35	32	45
30	41	46	46	41	39	39	37	33	46	
1400	70	41	47	45	42	42	41	40	36	48
	60	39	46	43	39	39	37	35	32	44
	50	39	45	42	37	37	36	33	29	43
	40	40	46	44	39	38	37	35	31	44
30	41	47	45	40	39	38	37	32	45	
1200	70	41	49	44	41	42	40	39	35	47
	60	39	47	42	38	39	37	35	31	44
	50	39	47	41	36	37	35	33	28	42
	40	40	48	42	38	38	36	35	30	44
30	41	49	43	39	39	37	36	31	45	
1000	70	43	48	43	42	42	40	38	34	47
	60	41	46	41	38	39	36	34	30	44
	50	41	45	40	36	37	34	32	27	42
	40	42	47	41	38	38	36	33	28	43
30	43	48	42	39	39	37	35	30	44	
800	70	46	46	42	42	42	40	37	33	47
	60	44	44	39	39	38	36	33	28	43
	50	44	43	38	37	37	34	30	25	41
	40	45	45	40	38	38	35	32	27	43
30	46	46	41	39	39	37	33	28	44	
600	70	49	44	41	42	40	39	35	31	46
	60	47	42	38	39	37	35	31	26	42
	50	47	41	36	37	35	33	28	23	40
	40	48	42	38	38	36	35	30	25	42
30	49	43	39	39	37	36	31	26	43	
400	70	46	42	42	42	40	37	33	29	45
	60	44	39	39	38	36	33	28	24	41
	50	43	38	37	37	34	30	25	20	39
	40	45	40	38	38	35	32	27	22	40
30	46	41	39	39	37	33	28	23	41	

## VFC 18

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1600	70	41	41	43	39	43	41	40	38	48
	60	39	39	40	36	39	37	35	33	44
	50	37	37	37	34	37	33	30	28	41
	40	36	36	37	33	36	32	29	27	40
30	40	40	40	34	31	29	26	24	39	
1400	70	41	41	43	38	43	40	40	37	47
	60	39	39	40	35	39	35	35	33	43
	50	37	37	38	33	37	31	30	28	40
	40	36	36	37	32	36	30	29	27	39
30	40	40	40	32	31	27	25	23	37	
1200	70	41	41	42	41	43	40	40	36	48
	60	39	39	39	37	39	35	35	31	43
	50	37	37	36	34	37	30	29	26	40
	40	36	37	36	34	36	29	28	25	39
30	40	40	39	32	31	27	25	22	37	
1000	70	41	42	41	43	43	40	39	35	48
	60	39	39	38	39	39	35	34	30	43
	50	37	37	35	36	37	30	29	25	40
	40	36	37	35	35	36	29	28	24	39
30	40	40	37	31	31	26	24	21	36	
800	70	41	43	39	43	41	40	38	33	47
	60	39	40	36	39	37	35	33	29	42
	50	37	37	34	37	33	30	28	24	39
	40	36	37	33	36	32	29	27	23	38
30	40	40	34	31	29	26	24	19	35	
600	70	41	42	41	43	40	40	36	31	46
	60	39	39	37	39	35	35	31	26	41
	50	37	36	34	37	30	29	26	21	37
	40	37	36	34	36	29	28	25	20	37
30	40	39	32	31	27	25	22	17	34	
400	70	43	39	43	41	40	38	33	28	45
	60	40	36	39	37	35	33	29	24	40
	50	37	34	37	33	30	28	24	19	36
	40	37	33	36	32	29	27	23	18	35
30	40	34	31	29	26	24	19	14	32	

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VFC 20

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1300	70	41	41	43	39	43	40	40	37	48
	60	39	39	40	36	39	35	35	32	43
	50	37	37	37	33	37	30	29	27	40
	40	36	37	37	33	36	29	28	26	39
	30	40	40	40	32	31	27	25	23	37
1100	70	41	42	42	42	43	40	39	35	47
	60	39	39	39	38	39	35	34	31	43
	50	37	37	36	35	37	30	29	26	40
	40	36	37	36	35	36	29	28	25	39
	30	40	40	38	32	31	27	25	22	36
900	70	41	42	40	43	42	40	38	34	47
	60	39	40	37	39	38	35	34	29	43
	50	37	37	34	37	35	30	28	24	39
	40	36	37	34	36	34	29	27	23	38
	30	40	40	35	31	30	26	24	20	35
700	70	41	43	38	43	40	40	37	32	46
	60	39	40	35	39	35	35	33	28	42
	50	37	38	33	37	31	30	28	23	38
	40	36	37	32	36	30	29	27	22	37
	30	40	40	32	31	27	25	23	18	34
500	70	42	41	43	43	40	39	35	30	46
	60	39	38	39	39	35	34	30	25	41
	50	37	35	36	37	30	29	25	20	38
	40	37	35	35	36	29	28	24	19	37
	30	40	37	31	31	26	24	21	16	33
400	70	43	39	43	41	40	38	33	28	45
	60	40	36	39	37	35	33	29	24	40
	50	37	34	37	33	30	28	24	19	36
	40	37	33	36	32	29	27	23	18	35
	30	40	34	31	29	26	24	19	14	32
350	70	43	38	43	40	40	37	32	27	44
	60	40	35	39	35	35	33	28	23	40
	50	38	33	37	31	30	28	23	18	35
	40	37	32	36	30	29	27	22	17	34
	30	40	32	31	27	25	23	18	13	31

## VFC 22

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1200	70	41	41	42	41	43	40	40	36	48
	60	39	39	39	37	39	35	35	31	43
	50	37	37	36	34	37	30	29	26	40
	40	36	37	36	34	36	29	28	25	39
	30	40	40	39	32	31	27	25	22	37
1000	70	41	42	41	43	43	40	39	35	48
	60	39	39	38	39	39	35	34	30	43
	50	37	37	35	36	37	30	29	25	40
	40	36	37	35	35	36	29	28	24	39
	30	40	40	37	31	31	26	24	21	36
800	70	41	43	39	43	41	40	38	33	47
	60	39	40	36	39	37	35	33	29	42
	50	37	37	34	37	33	30	28	24	39
	40	36	37	33	36	32	29	27	23	38
	30	40	40	34	31	29	26	24	19	35
600	70	41	42	41	43	40	40	36	31	46
	60	39	39	37	39	35	35	31	26	41
	50	37	36	34	37	30	29	26	21	37
	40	37	36	34	36	29	28	25	20	37
	30	40	39	32	31	27	25	22	17	34
400	70	43	39	43	41	40	38	33	28	45
	60	40	36	39	37	35	33	29	24	40
	50	37	34	37	33	30	28	24	19	36
	40	37	33	36	32	29	27	23	18	35
	30	40	34	31	29	26	24	19	14	32
300	70	42	41	43	40	40	36	31	26	44
	60	39	37	39	35	35	31	26	21	39
	50	36	34	37	30	29	26	21	16	34
	40	36	34	36	29	28	25	20	15	33
	30	39	32	31	27	25	22	17	12	30

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

## Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

### VFC 25

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1000	70	41	42	41	43	43	40	39	35	48
	60	39	39	38	39	39	35	34	30	43
	50	37	37	35	36	37	30	29	25	40
	40	36	37	35	35	36	29	28	24	39
	30	40	40	37	31	31	26	24	21	36
900	70	41	42	40	43	42	40	38	34	47
	60	39	40	37	39	38	35	34	29	43
	50	37	37	34	37	35	30	28	24	39
	40	36	37	34	36	34	29	27	23	38
	30	40	40	35	31	30	26	24	20	35
800	70	41	43	39	43	41	40	38	33	47
	60	39	40	36	39	37	35	33	29	42
	50	37	37	34	37	33	30	28	24	39
	40	36	37	33	36	32	29	27	23	38
	30	40	40	34	31	29	26	24	19	35
700	70	41	43	38	43	40	40	37	32	46
	60	39	40	35	39	35	35	33	28	42
	50	37	38	33	37	31	30	28	23	38
	40	36	37	32	36	30	29	27	22	37
	30	40	40	32	31	27	25	23	18	34
600	70	41	42	41	43	40	40	36	31	46
	60	39	39	37	39	35	35	31	26	41
	50	37	36	34	37	30	29	26	21	37
	40	37	36	34	36	29	28	25	20	37
	30	40	39	32	31	27	25	22	17	34
500	70	42	41	43	43	40	39	35	30	46
	60	39	38	39	39	35	34	30	25	41
	50	37	35	36	37	30	29	25	20	38
	40	37	35	35	36	29	28	24	19	37
	30	40	37	31	31	26	24	21	16	33
400	70	43	39	43	41	40	38	33	28	45
	60	40	36	39	37	35	33	29	24	40
	50	37	34	37	33	30	28	24	19	36
	40	37	33	36	32	29	27	23	18	35
	30	40	34	31	29	26	24	19	14	32
300	70	42	41	43	40	40	36	31	26	44
	60	39	37	39	35	35	31	26	21	39
	50	36	34	37	30	29	26	21	16	34
	40	36	34	36	29	28	25	20	15	33
	30	39	32	31	27	25	22	17	12	30
250	70	41	43	43	40	39	35	30	25	43
	60	38	39	39	35	34	30	25	20	39
	50	35	36	37	30	29	25	20	15	34
	40	35	35	36	29	28	24	19	14	33
	30	36	31	31	26	24	21	16	11	30

### VFC 28

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
900	70	41	41	38	42	38	36	33	28	44
	60	41	41	37	40	35	33	30	24	41
	50	41	41	37	40	35	33	29	24	41
	40	41	41	37	40	35	33	29	24	41
	30	41	41	37	40	35	33	29	24	41
800	70	41	41	39	42	38	35	32	27	43
	60	41	40	38	40	35	33	29	23	41
	50	41	40	38	40	35	32	29	23	41
	40	41	40	38	40	35	32	29	23	41
	30	41	40	38	40	35	32	29	23	41
700	70	41	40	41	42	37	35	31	25	43
	60	41	40	39	40	35	32	28	22	41
	50	41	40	39	40	34	32	28	21	41
	40	41	40	39	40	34	32	28	21	41
	30	41	40	39	40	34	32	28	21	41
600	70	41	39	42	41	37	34	30	24	43
	60	41	39	40	39	34	31	27	20	40
	50	41	39	40	39	34	31	26	20	40
	40	41	39	40	39	34	31	26	20	40
	30	41	39	40	39	34	31	26	20	40
500	70	41	38	42	39	36	33	29	22	41
	60	41	38	40	37	34	30	25	18	39
	50	41	38	40	37	33	30	25	18	39
	40	41	38	40	37	33	30	25	18	39
	30	41	38	40	37	33	30	25	18	39
400	70	41	39	42	38	35	32	27	20	41
	60	40	38	40	35	33	29	23	16	38
	50	40	38	40	35	32	29	23	16	38
	40	40	38	40	35	32	29	23	16	38
	30	40	38	40	35	32	29	23	16	38
300	70	39	42	41	37	34	30	24	17	39
	60	39	40	39	34	31	27	20	13	37
	50	39	40	39	34	31	26	20	13	37
	40	39	40	39	34	31	26	20	13	37
	30	39	40	39	34	31	26	20	13	37
250	70	38	42	39	36	33	29	22	15	38
	60	38	40	37	34	30	25	18	11	36
	50	38	40	37	33	30	25	18	11	35
	40	38	40	37	33	30	25	18	11	35
	30	38	40	37	33	30	25	18	11	35

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.



# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VFC 32

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
800	70	41	41	39	42	38	35	32	27	43
	60	41	40	38	40	35	33	29	23	41
	50	41	40	38	40	35	32	29	23	41
	40	41	40	38	40	35	32	29	23	41
	30	41	40	38	40	35	32	29	23	41
700	70	41	40	41	42	37	35	31	25	43
	60	41	40	39	40	35	32	28	22	41
	50	41	40	39	40	34	32	28	21	41
	40	41	40	39	40	34	32	28	21	41
	30	41	40	39	40	34	32	28	21	41
600	70	41	39	42	41	37	34	30	24	43
	60	41	39	40	39	34	31	27	20	40
	50	41	39	40	39	34	31	26	20	40
	40	41	39	40	39	34	31	26	20	40
	30	41	39	40	39	34	31	26	20	40
500	70	41	38	42	39	36	33	29	22	41
	60	41	38	40	37	34	30	25	18	39
	50	41	38	40	37	33	30	25	18	39
	40	41	38	40	37	33	30	25	18	39
	30	41	38	40	37	33	30	25	18	39
400	70	41	39	42	38	35	32	27	20	41
	60	40	38	40	35	33	29	23	16	38
	50	40	38	40	35	32	29	23	16	38
	40	40	38	40	35	32	29	23	16	38
	30	40	38	40	35	32	29	23	16	38
300	70	39	42	41	37	34	30	24	17	39
	60	39	40	39	34	31	27	20	13	37
	50	39	40	39	34	31	26	20	13	37
	40	39	40	39	34	31	26	20	13	37
	30	39	40	39	34	31	26	20	13	37
200	70	39	42	38	35	32	27	20	13	37
	60	38	40	35	33	29	23	16	9	35
	50	38	40	35	32	29	23	16	9	34
	40	38	40	35	32	29	23	16	9	34
	30	38	40	35	32	29	23	16	9	34

## VFC 36

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
700	70	41	40	41	42	37	35	31	25	43
	60	41	40	39	40	35	32	28	22	41
	50	41	40	39	40	34	32	28	21	41
	40	41	40	39	40	34	32	28	21	41
	30	41	40	39	40	34	32	28	21	41
600	70	41	39	42	41	37	34	30	24	43
	60	41	39	40	39	34	31	27	20	40
	50	41	39	40	39	34	31	26	20	40
	40	41	39	40	39	34	31	26	20	40
	30	41	39	40	39	34	31	26	20	40
500	70	41	38	42	39	36	33	29	22	41
	60	41	38	40	37	34	30	25	18	39
	50	41	38	40	37	33	30	25	18	39
	40	41	38	40	37	33	30	25	18	39
	30	41	38	40	37	33	30	25	18	39
400	70	41	39	42	38	35	32	27	20	41
	60	40	38	40	35	33	29	23	16	38
	50	40	38	40	35	32	29	23	16	38
	40	40	38	40	35	32	29	23	16	38
	30	40	38	40	35	32	29	23	16	38
300	70	39	42	41	37	34	30	24	17	39
	60	39	40	39	34	31	27	20	13	37
	50	39	40	39	34	31	26	20	13	37
	40	39	40	39	34	31	26	20	13	37
	30	39	40	39	34	31	26	20	13	37
200	70	39	42	38	35	32	27	20	13	37
	60	38	40	35	33	29	23	16	9	35
	50	38	40	35	32	29	23	16	9	34
	40	38	40	35	32	29	23	16	9	34
	30	38	40	35	32	29	23	16	9	34

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

## Inlet L<sub>WK</sub> Values (Lw<sub>ki</sub>)

### VFC 40

RPM	% WOV	OCTAVE BAND								Lw <sub>kiA</sub>
		1	2	3	4	5	6	7	8	
600	70	41	39	42	41	37	34	30	24	43
	60	41	39	40	39	34	31	27	20	40
	50	41	39	40	39	34	31	26	20	40
	40	41	39	40	39	34	31	26	20	40
	30	41	39	40	39	34	31	26	20	40
500	70	41	38	42	39	36	33	29	22	41
	60	41	38	40	37	34	30	25	18	39
	50	41	38	40	37	33	30	25	18	39
	40	41	38	40	37	33	30	25	18	39
	30	41	38	40	37	33	30	25	18	39
400	70	41	39	42	38	35	32	27	20	41
	60	40	38	40	35	33	29	23	16	38
	50	40	38	40	35	32	29	23	16	38
	40	40	38	40	35	32	29	23	16	38
	30	40	38	40	35	32	29	23	16	38
300	70	39	42	41	37	34	30	24	17	39
	60	39	40	39	34	31	27	20	13	37
	50	39	40	39	34	31	26	20	13	37
	40	39	40	39	34	31	26	20	13	37
	30	39	40	39	34	31	26	20	13	37
200	70	39	42	38	35	32	27	20	13	37
	60	38	40	35	33	29	23	16	9	35
	50	38	40	35	32	29	23	16	9	34
	40	38	40	35	32	29	23	16	9	34
	30	38	40	35	32	29	23	16	9	34

## Inlet L<sub>WK</sub> Values (Lw<sub>ki</sub>)

### VBC 8

RPM	% WOV	OCTAVE BAND								Lw <sub>kiA</sub>
		1	2	3	4	5	6	7	8	
4900	80	70	65	54	53	53	48	46	42	58
	70	65	60	51	49	49	44	42	39	54
	60	62	58	50	47	47	42	40	37	52
	50	60	57	49	46	45	40	37	34	50
	40	60	56	48	46	44	40	38	34	50
4500	80	70	63	54	53	53	48	45	42	57
	70	65	59	50	49	49	44	41	38	53
	60	62	57	50	47	47	42	39	36	51
	50	60	55	49	45	45	40	37	34	50
	40	60	55	48	45	44	40	37	34	49
4100	80	70	60	54	53	52	48	45	41	57
	70	65	57	50	49	48	43	41	38	53
	60	62	55	49	47	46	42	39	36	51
	50	60	54	49	45	44	39	36	33	49
	40	60	53	48	44	44	39	37	34	49
3700	80	70	58	54	53	51	47	45	40	56
	70	65	55	50	49	47	43	41	37	52
	60	62	54	49	47	45	41	38	35	50
	50	60	53	49	45	43	39	36	33	49
	40	60	52	48	44	42	39	36	34	48
3300	80	70	55	54	53	50	47	44	39	56
	70	65	52	50	49	45	43	41	37	52
	60	62	52	48	47	44	41	38	35	50
	50	60	51	48	45	42	38	35	32	48
	40	60	50	48	44	41	39	35	33	47
2900	80	68	54	53	53	49	47	43	38	55
	70	63	51	49	49	44	42	40	36	51
	60	61	50	48	47	43	40	37	34	49
	50	59	50	47	45	41	38	35	32	47
	40	59	49	47	44	40	39	35	33	47
2500	80	65	54	53	53	48	46	42	37	54
	70	60	51	49	49	44	42	39	35	51
	60	59	50	47	47	42	40	37	33	49
	50	57	49	46	45	40	37	34	31	47
	40	57	49	46	44	40	38	34	32	46

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VBC 9

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
4600	80	70	63	54	53	53	48	46	42	57
	70	65	59	50	49	49	44	42	39	53
	60	62	57	50	47	47	42	39	36	51
	50	60	56	49	45	45	40	37	34	50
	40	60	55	48	45	44	40	37	34	49
4200	80	70	61	54	53	52	48	45	41	57
	70	65	57	50	49	49	43	41	38	53
	60	62	56	49	47	46	42	39	36	51
	50	60	54	49	45	45	39	36	33	49
	40	60	54	48	44	44	39	37	34	49
3800	80	70	59	54	53	51	47	45	40	56
	70	65	55	50	49	47	43	41	37	52
	60	62	54	49	47	45	41	39	35	50
	50	60	53	49	45	43	39	36	33	49
	40	60	52	48	44	43	39	36	34	48
3400	80	70	56	54	53	50	47	44	40	56
	70	65	53	50	49	46	43	41	37	52
	60	62	52	49	47	44	41	38	35	50
	50	60	51	48	45	42	38	35	32	48
	40	60	50	48	44	41	39	36	33	48
3000	80	69	54	53	53	49	47	44	39	55
	70	64	51	49	49	44	42	40	36	51
	60	62	51	48	47	43	41	38	34	49
	50	60	50	48	45	41	38	35	32	47
	40	59	49	47	44	40	39	35	33	47
2600	80	66	54	53	53	48	46	43	38	55
	70	61	51	49	49	44	42	39	35	51
	60	59	50	47	47	43	40	37	33	49
	50	57	49	47	45	40	37	34	31	47
	40	57	49	46	44	40	38	34	32	46
2200	80	62	54	53	53	48	45	41	36	54
	70	58	50	49	49	43	41	38	34	50
	60	56	49	47	47	42	39	36	32	48
	50	55	49	45	45	40	37	34	31	46
	40	54	48	45	44	40	37	34	32	46
2000	80	60	54	53	52	48	45	41	36	54
	70	56	50	49	48	43	41	38	34	50
	60	55	49	47	46	42	39	35	32	48
	50	54	49	45	44	39	36	33	30	46
	40	53	48	44	43	39	36	34	32	45

## VBC 10

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
4100	80	70	60	54	53	52	48	45	41	57
	70	65	57	50	49	48	43	41	38	53
	60	62	55	49	47	46	42	39	36	51
	50	60	54	49	45	44	39	36	33	49
	40	60	53	48	44	44	39	37	34	49
3700	80	70	58	54	53	51	47	45	40	56
	70	65	55	50	49	47	43	41	37	52
	60	62	54	49	47	45	41	38	35	50
	50	60	53	49	45	43	39	36	33	49
	40	60	52	48	44	42	39	36	34	48
3300	80	70	55	54	53	50	47	44	39	56
	70	65	52	50	49	45	43	41	37	52
	60	62	52	48	47	44	41	38	35	50
	50	60	51	48	45	42	38	35	32	48
	40	60	50	48	44	41	39	35	33	47
2900	80	68	54	53	53	49	47	43	38	55
	70	63	51	49	49	44	42	40	36	51
	60	61	50	48	47	43	40	37	34	49
	50	59	50	47	45	41	38	35	32	47
	40	59	49	47	44	40	39	35	33	47
2500	80	65	54	53	53	48	46	42	37	54
	70	60	51	49	49	44	42	39	35	51
	60	59	50	47	47	42	40	37	33	49
	50	57	49	46	45	40	37	34	31	47
	40	57	49	46	44	40	38	34	32	46
2100	80	61	54	53	52	48	45	41	36	54
	70	57	50	49	49	43	41	38	34	50
	60	56	49	47	46	42	39	36	32	48
	50	54	49	45	45	39	36	33	30	46
	40	54	48	44	44	39	37	34	32	46
1700	80	56	54	53	50	47	44	40	35	53
	70	53	50	49	46	43	41	37	33	49
	60	52	49	47	44	41	38	35	31	47
	50	51	48	45	42	38	35	32	29	44
	40	50	48	44	41	39	36	33	31	45

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

## Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

### VBC 11

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
4500	80	70	63	54	53	53	48	45	42	57
	70	65	59	50	49	49	44	41	38	53
	60	62	57	50	47	47	42	39	36	51
	50	60	55	49	45	45	40	37	34	50
	40	60	55	48	45	44	40	37	34	49
4100	80	70	60	54	53	52	48	45	41	57
	70	65	57	50	49	48	43	41	38	53
	60	62	55	49	47	46	42	39	36	51
	50	60	54	49	45	44	39	36	33	49
	40	60	53	48	44	44	39	37	34	49
3700	80	70	58	54	53	51	47	45	40	56
	70	65	55	50	49	47	43	41	37	52
	60	62	54	49	47	45	41	38	35	50
	50	60	53	49	45	43	39	36	33	49
	40	60	52	48	44	42	39	36	34	48
3300	80	70	55	54	53	50	47	44	39	56
	70	65	52	50	49	45	43	41	37	52
	60	62	52	48	47	44	41	38	35	50
	50	60	51	48	45	42	38	35	32	48
	40	60	50	48	44	41	39	35	33	47
2900	80	68	54	53	53	49	47	43	38	55
	70	63	51	49	49	44	42	40	36	51
	60	61	50	48	47	43	40	37	34	49
	50	59	50	47	45	41	38	35	32	47
	40	59	49	47	44	40	39	35	33	47
2500	80	65	54	53	53	48	46	42	37	54
	70	60	51	49	49	44	42	39	35	51
	60	59	50	47	47	42	40	37	33	49
	50	57	49	46	45	40	37	34	31	47
	40	57	49	46	44	40	38	34	32	46
2100	80	61	54	53	52	48	45	41	36	54
	70	57	50	49	49	43	41	38	34	50
	60	56	49	47	46	42	39	36	32	48
	50	54	49	45	45	39	36	33	30	46
	40	54	48	44	44	39	37	34	32	46
1700	80	56	54	53	50	47	44	40	35	53
	70	53	50	49	46	43	41	37	33	49
	60	52	49	47	44	41	38	35	31	47
	50	51	48	45	42	38	35	32	29	44
	40	50	48	44	41	39	36	33	31	45

### VBC 12

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
4000	80	49	45	40	50	47	42	39	33	51
	70	47	42	37	47	44	38	35	28	48
	60	44	39	34	44	41	34	31	25	45
	50	44	38	33	44	40	33	30	24	44
	40	45	40	33	45	41	32	29	24	45
3600	80	49	44	39	50	45	42	39	32	51
	70	47	41	36	47	41	37	34	27	47
	60	44	38	33	44	38	34	31	24	44
	50	44	37	32	44	37	33	29	24	43
	40	45	39	32	45	37	32	29	23	44
3200	80	49	43	39	50	42	42	38	30	50
	70	47	40	35	47	38	37	33	26	46
	60	44	37	32	44	35	34	30	23	43
	50	44	36	32	44	34	32	28	22	43
	40	45	37	31	45	33	32	28	22	43
2800	80	48	42	43	50	42	41	37	29	50
	70	46	39	40	47	38	36	32	25	46
	60	42	36	37	44	35	33	29	22	43
	50	42	35	36	44	33	32	27	21	43
	40	43	36	36	45	33	31	27	21	43
2400	80	46	41	48	50	42	40	35	27	50
	70	44	38	45	47	38	36	30	23	46
	60	41	35	42	44	35	32	27	20	43
	50	40	34	41	44	33	31	26	20	43
	40	42	35	42	45	33	30	25	20	43
2000	80	45	40	50	47	42	39	33	25	48
	70	42	37	47	44	38	35	28	21	45
	60	39	34	44	41	34	31	25	18	42
	50	38	33	44	40	33	30	24	18	41
	40	40	33	45	41	32	29	24	18	41
1600	80	43	39	50	42	42	38	30	23	47
	70	40	35	47	38	37	33	26	19	43
	60	37	32	44	35	34	30	23	16	40
	50	35	32	44	34	32	28	22	16	39
	40	37	31	45	33	32	28	22	16	39
1400	80	42	43	50	42	41	37	29	21	46
	70	39	40	47	38	36	32	25	18	42
	60	36	37	44	35	33	29	22	15	39
	50	35	36	44	33	32	27	21	15	38
	40	36	36	45	33	31	27	21	15	39

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VBC 14

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
3800	80	49	44	40	50	46	42	39	32	51
	70	47	42	36	47	43	37	34	28	47
	60	44	39	34	44	39	34	31	25	44
	50	44	38	32	44	39	33	29	24	44
	40	45	39	33	45	39	32	29	23	44
3400	80	49	43	39	50	43	42	38	31	50
	70	47	41	36	47	40	37	34	27	47
	60	44	38	33	44	37	34	30	24	44
	50	44	36	32	44	35	33	29	23	43
	40	45	38	32	45	35	32	28	23	44
3000	80	49	42	41	50	42	41	37	30	50
	70	46	40	37	47	38	37	33	25	46
	60	43	37	34	44	35	34	29	22	43
	50	43	35	34	44	33	32	28	22	43
	40	44	37	34	45	33	32	27	21	43
2600	80	47	42	45	50	42	41	36	28	50
	70	45	39	42	47	38	36	31	24	46
	60	42	36	39	44	35	33	28	21	43
	50	41	34	39	44	33	31	27	21	43
	40	43	35	39	45	33	31	26	20	43
2000	80	45	40	50	47	42	39	33	25	48
	70	42	37	47	44	38	35	28	21	45
	60	39	34	44	41	34	31	25	18	42
	50	38	33	44	40	33	30	24	18	41
	40	40	33	45	41	32	29	24	18	41
1800	80	44	39	50	45	42	39	32	24	48
	70	41	36	47	41	37	34	27	20	44
	60	38	33	44	38	34	31	24	17	41
	50	37	32	44	37	33	29	24	18	40
	40	38	32	45	37	32	29	23	17	40
1400	80	42	43	50	42	41	37	29	21	46
	70	39	40	47	38	36	32	25	18	42
	60	36	37	44	35	33	29	22	15	39
	50	35	36	44	33	32	27	21	15	38
	40	36	36	45	33	31	27	21	15	39
1200	80	41	48	50	42	40	35	27	20	46
	70	38	45	47	38	36	30	23	16	42
	60	35	42	44	35	32	27	20	13	39
	50	34	41	44	33	31	26	20	14	38
	40	35	42	45	33	30	25	20	14	39

## VBC 16

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
3200	80	42	42	40	53	52	42	39	33	55
	70	39	38	36	48	46	38	34	28	49
	60	37	36	34	45	44	36	32	26	47
	50	36	35	32	44	42	33	30	25	45
	40	43	41	38	42	41	32	29	26	44
2800	80	42	42	40	53	48	42	38	32	53
	70	39	38	36	48	43	38	33	27	48
	60	37	35	33	45	41	35	31	24	45
	50	36	34	32	44	39	33	29	24	44
	40	43	41	38	42	38	32	29	25	43
2400	80	42	42	40	53	44	42	37	31	52
	70	39	37	35	48	39	37	32	25	47
	60	37	35	33	45	37	35	30	23	44
	50	36	34	32	44	35	32	28	23	43
	40	43	40	37	42	34	31	28	24	41
2000	80	42	41	47	53	43	40	35	29	52
	70	39	37	42	48	39	36	31	24	47
	60	36	34	39	45	36	34	28	21	44
	50	35	33	38	44	34	31	27	22	43
	40	42	39	40	42	33	30	27	23	41
1600	80	42	40	53	52	42	39	33	27	51
	70	38	36	48	46	38	34	28	21	46
	60	36	34	45	44	36	32	26	19	44
	50	35	32	44	42	33	30	25	20	42
	40	41	38	42	41	32	29	26	21	41
1400	80	42	40	53	48	42	38	32	26	49
	70	38	36	48	43	38	33	27	20	45
	60	35	33	45	41	35	31	24	18	42
	50	34	32	44	39	33	29	24	19	40
	40	41	38	42	38	32	29	25	21	39
1200	80	42	40	53	44	42	37	31	25	48
	70	37	35	48	39	37	32	25	19	43
	60	35	33	45	37	35	30	23	16	41
	50	34	32	44	35	32	28	23	18	39
	40	40	37	42	34	31	28	24	20	38
1000	80	41	47	53	43	40	35	29	23	47
	70	37	42	48	39	36	31	24	17	43
	60	34	39	45	36	34	28	21	14	40
	50	33	38	44	34	31	27	22	17	39
	40	39	40	42	33	30	27	23	19	37

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VBC 18

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2800	80	42	42	40	53	48	42	38	32	53
	70	39	38	36	48	43	38	33	27	48
	60	37	35	33	45	41	35	31	24	45
	50	36	34	32	44	39	33	29	24	44
	40	43	41	38	42	38	32	29	25	43
2400	80	42	42	40	53	44	42	37	31	52
	70	39	37	35	48	39	37	32	25	47
	60	37	35	33	45	37	35	30	23	44
	50	36	34	32	44	35	32	28	23	43
	40	43	40	37	42	34	31	28	24	41
2000	80	42	41	47	53	43	40	35	29	52
	70	39	37	42	48	39	36	31	24	47
	60	36	34	39	45	36	34	28	21	44
	50	35	33	38	44	34	31	27	22	43
	40	42	39	40	42	33	30	27	23	41
1600	80	42	40	53	52	42	39	33	27	51
	70	38	36	48	46	38	34	28	21	46
	60	36	34	45	44	36	32	26	19	44
	50	35	32	44	42	33	30	25	20	42
	40	41	38	42	41	32	29	26	21	41
1400	80	42	40	53	48	42	38	32	26	49
	70	38	36	48	43	38	33	27	20	45
	60	35	33	45	41	35	31	24	18	42
	50	34	32	44	39	33	29	24	19	40
	40	41	38	42	38	32	29	25	21	39
1200	80	42	40	53	44	42	37	31	25	48
	70	37	35	48	39	37	32	25	19	43
	60	35	33	45	37	35	30	23	16	41
	50	34	32	44	35	32	28	23	18	39
	40	40	37	42	34	31	28	24	20	38
1000	80	41	47	53	43	40	35	29	23	47
	70	37	42	48	39	36	31	24	17	43
	60	34	39	45	36	34	28	21	14	40
	50	33	38	44	34	31	27	22	17	39
	40	39	40	42	33	30	27	23	19	37

## VBC 20

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2800	80	42	42	40	53	48	42	38	32	53
	70	39	38	36	48	43	38	33	27	48
	60	37	35	33	45	41	35	31	24	45
	50	36	34	32	44	39	33	29	24	44
	40	43	41	38	42	38	32	29	25	43
2400	80	42	42	40	53	44	42	37	31	52
	70	39	37	35	48	39	37	32	25	47
	60	37	35	33	45	37	35	30	23	44
	50	36	34	32	44	35	32	28	23	43
	40	43	40	37	42	34	31	28	24	41
2000	80	42	41	47	53	43	40	35	29	52
	70	39	37	42	48	39	36	31	24	47
	60	36	34	39	45	36	34	28	21	44
	50	35	33	38	44	34	31	27	22	43
	40	42	39	40	42	33	30	27	23	41
1600	80	42	40	53	52	42	39	33	27	51
	70	38	36	48	46	38	34	28	21	46
	60	36	34	45	44	36	32	26	19	44
	50	35	32	44	42	33	30	25	20	42
	40	41	38	42	41	32	29	26	21	41
1400	80	42	40	53	48	42	38	32	26	49
	70	38	36	48	43	38	33	27	20	45
	60	35	33	45	41	35	31	24	18	42
	50	34	32	44	39	33	29	24	19	40
	40	41	38	42	38	32	29	25	21	39
1200	80	42	40	53	44	42	37	31	25	48
	70	37	35	48	39	37	32	25	19	43
	60	35	33	45	37	35	30	23	16	41
	50	34	32	44	35	32	28	23	18	39
	40	40	37	42	34	31	28	24	20	38
1000	80	41	47	53	43	40	35	29	23	47
	70	37	42	48	39	36	31	24	17	43
	60	34	39	45	36	34	28	21	14	40
	50	33	38	44	34	31	27	22	17	39
	40	39	40	42	33	30	27	23	19	37

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

## VBC 22

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2600	80	42	42	40	53	46	42	37	31	52
	70	39	38	36	48	41	38	33	26	47
	60	37	35	33	45	39	35	30	24	45
	50	36	34	32	44	37	32	29	24	43
	40	43	40	38	42	36	31	28	24	42
2200	80	42	42	43	53	43	41	36	30	52
	70	39	37	38	48	39	37	31	25	47
	60	37	35	36	45	37	34	29	22	44
	50	36	33	35	44	35	32	28	23	43
	40	43	40	38	42	34	31	27	23	41
1800	80	42	41	51	53	43	40	34	28	52
	70	38	36	45	48	38	35	29	23	47
	60	36	34	43	45	36	33	27	20	44
	50	35	33	41	44	34	30	26	21	43
	40	42	39	41	42	33	30	26	22	41
1400	80	42	40	53	48	42	38	32	26	49
	70	38	36	48	43	38	33	27	20	45
	60	35	33	45	41	35	31	24	18	42
	50	34	32	44	39	33	29	24	19	40
	40	41	38	42	38	32	29	25	21	39
1200	80	42	40	53	44	42	37	31	25	48
	70	37	35	48	39	37	32	25	19	43
	60	35	33	45	37	35	30	23	16	41
	50	34	32	44	35	32	28	23	18	39
	40	40	37	42	34	31	28	24	20	38
1000	80	41	47	53	43	40	35	29	23	47
	70	37	42	48	39	36	31	24	17	43
	60	34	39	45	36	34	28	21	14	40
	50	33	38	44	34	31	27	22	17	39
	40	39	40	42	33	30	27	23	19	37
800	80	40	53	52	42	39	33	27	21	47
	70	36	48	46	38	34	28	21	14	41
	60	34	45	44	36	32	26	19	12	39
	50	32	44	42	33	30	25	20	15	37
	40	38	42	41	32	29	26	21	17	37

## VBC 25

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2200	80	43	42	45	48	41	40	36	29	48
	70	39	38	42	45	37	36	31	23	45
	60	37	36	39	43	35	33	28	20	43
	50	35	33	37	40	33	31	26	19	40
	40	35	34	38	41	33	31	26	20	41
1800	80	43	41	48	46	41	39	34	26	47
	70	39	37	45	43	37	35	29	21	44
	60	37	34	43	40	35	32	25	18	41
	50	35	32	40	38	32	30	24	17	39
	40	35	33	41	39	33	30	24	18	40
1500	80	43	40	48	43	41	38	32	24	46
	70	39	36	45	39	37	34	26	19	42
	60	37	33	43	36	35	31	23	16	40
	50	35	31	40	34	32	29	22	15	37
	40	35	32	41	35	33	29	22	16	38
1300	80	42	41	48	41	40	37	31	22	45
	70	39	37	45	37	37	33	25	18	42
	60	37	35	43	35	34	30	22	15	39
	50	34	33	40	33	32	28	20	14	37
	40	34	34	41	34	32	28	21	15	38
1100	80	42	45	48	41	40	36	29	20	45
	70	38	42	45	37	36	31	23	16	41
	60	36	39	43	35	33	28	20	13	39
	50	33	37	40	33	31	26	19	13	36
	40	34	38	41	33	31	26	20	14	37
1000	80	41	47	48	41	39	35	27	18	45
	70	37	44	45	37	36	30	22	15	41
	60	35	42	43	35	33	27	19	12	39
	50	33	39	40	32	30	25	18	12	36
	40	33	40	41	33	31	25	19	13	37
800	80	40	48	44	41	38	33	25	16	43
	70	36	45	41	37	34	27	20	13	39
	60	33	43	38	35	31	24	17	10	37
	50	32	40	36	32	29	22	16	10	34
	40	32	41	36	33	29	23	17	11	35
700	80	40	48	42	41	38	32	23	14	43
	70	36	45	38	37	34	26	18	11	39
	60	33	43	35	35	31	23	16	9	36
	50	31	40	33	32	29	21	15	9	34
	40	32	41	34	33	29	22	16	10	34

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

## Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

### VBC 28

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
2000	80	43	41	47	48	41	39	35	27	48
	70	39	38	44	45	37	36	30	22	45
	60	37	35	42	43	35	33	27	19	43
	50	35	33	39	40	32	30	25	18	40
	40	35	33	40	41	33	31	25	19	41
1800	80	43	41	48	46	41	39	34	26	47
	70	39	37	45	43	37	35	29	21	44
	60	37	34	43	40	35	32	25	18	41
	50	35	32	40	38	32	30	24	17	39
	40	35	33	41	39	33	30	24	18	40
1600	80	43	40	48	44	41	38	33	25	47
	70	39	36	45	41	37	34	27	20	43
	60	37	34	43	38	35	31	24	17	40
	50	35	32	40	36	32	29	22	16	38
	40	35	32	41	36	33	29	23	17	39
1400	80	43	40	48	42	41	38	32	23	46
	70	39	36	45	38	37	34	26	18	42
	60	37	33	43	35	35	31	23	16	40
	50	35	31	40	33	32	29	21	15	37
	40	35	32	41	34	33	29	22	16	38
1200	80	42	43	48	41	40	36	30	21	45
	70	39	40	45	37	37	32	24	17	42
	60	36	37	43	35	34	29	21	14	39
	50	34	35	40	33	31	27	20	14	37
	40	34	35	41	33	32	27	20	14	37
1000	80	41	47	48	41	39	35	27	18	45
	70	37	44	45	37	36	30	22	15	41
	60	35	42	43	35	33	27	19	12	39
	50	33	39	40	32	30	25	18	12	36
	40	33	40	41	33	31	25	19	13	37
800	80	40	48	44	41	38	33	25	16	43
	70	36	45	41	37	34	27	20	13	39
	60	33	43	38	35	31	24	17	10	37
	50	32	40	36	32	29	22	16	10	34
	40	32	41	36	33	29	23	17	11	35
600	80	43	48	41	40	36	30	21	12	41
	70	40	45	37	37	32	24	17	10	38
	60	37	43	35	34	29	21	14	7	35
	50	35	40	33	31	27	20	14	8	33
	40	36	41	33	32	27	20	14	8	33

### VBC 32

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1600	80	43	40	48	44	41	38	33	25	47
	70	39	36	45	41	37	34	27	20	43
	60	37	34	43	38	35	31	24	17	40
	50	35	32	40	36	32	29	22	16	38
	40	35	32	41	36	33	29	23	17	39
1400	80	43	40	48	42	41	38	32	23	46
	70	39	36	45	38	37	34	26	18	42
	60	37	33	43	35	35	31	23	16	40
	50	35	31	40	33	32	29	21	15	37
	40	35	32	41	34	33	29	22	16	38
1200	80	42	43	48	41	40	36	30	21	45
	70	39	40	45	37	37	32	24	17	42
	60	36	37	43	35	34	29	21	14	39
	50	34	35	40	33	31	27	20	14	37
	40	34	35	41	33	32	27	20	14	37
1000	80	41	47	48	41	39	35	27	18	45
	70	37	44	45	37	36	30	22	15	41
	60	35	42	43	35	33	27	19	12	39
	50	33	39	40	32	30	25	18	12	36
	40	33	40	41	33	31	25	19	13	37
800	80	40	48	44	41	38	33	25	16	43
	70	36	45	41	37	34	27	20	13	39
	60	33	43	38	35	31	24	17	10	37
	50	32	40	36	32	29	22	16	10	34
	40	32	41	36	33	29	23	17	11	35
600	80	43	48	41	40	36	30	21	12	41
	70	40	45	37	37	32	24	17	10	38
	60	37	43	35	34	29	21	14	7	35
	50	35	40	33	31	27	20	14	8	33
	40	36	41	33	32	27	20	14	8	33

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.



## Inlet L<sub>wk</sub> Values (L<sub>wki</sub>)

### VBC 36

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1400	80	43	40	48	42	41	38	32	23	46
	70	39	36	45	38	37	34	26	18	42
	60	37	33	43	35	35	31	23	16	40
	50	35	31	40	33	32	29	21	15	37
	40	35	32	41	34	33	29	22	16	38
1200	80	42	43	48	41	40	36	30	21	45
	70	39	40	45	37	37	32	24	17	42
	60	36	37	43	35	34	29	21	14	39
	50	34	35	40	33	31	27	20	14	37
	40	34	35	41	33	32	27	20	14	37
1000	80	41	47	48	41	39	35	27	18	45
	70	37	44	45	37	36	30	22	15	41
	60	35	42	43	35	33	27	19	12	39
	50	33	39	40	32	30	25	18	12	36
	40	33	40	41	33	31	25	19	13	37
900	80	41	48	46	41	39	34	26	17	44
	70	37	45	43	37	35	29	21	14	40
	60	34	43	40	35	32	25	18	11	38
	50	32	40	38	32	30	24	17	11	35
	40	33	41	39	33	30	24	18	12	36
800	80	40	48	44	41	38	33	25	16	43
	70	36	45	41	37	34	27	20	13	39
	60	33	43	38	35	31	24	17	10	37
	50	32	40	36	32	29	22	16	10	34
	40	32	41	36	33	29	23	17	11	35
700	80	40	48	42	41	38	32	23	14	43
	70	36	45	38	37	34	26	18	11	39
	60	33	43	35	35	31	23	16	9	36
	50	31	40	33	32	29	21	15	9	34
	40	32	41	34	33	29	22	16	10	34
600	80	43	48	41	40	36	30	21	12	41
	70	40	45	37	37	32	24	17	10	38
	60	37	43	35	34	29	21	14	7	35
	50	35	40	33	31	27	20	14	8	33
	40	36	41	33	32	27	20	14	8	33
500	80	47	48	41	39	35	27	18	9	41
	70	45	45	37	36	30	22	15	8	37
	60	42	43	35	33	27	19	12	5	34
	50	39	40	32	30	25	18	12	6	32
	40	40	41	33	31	25	19	13	7	32

### VBC 40

RPM	% WOV	OCTAVE BAND								L <sub>wkiA</sub>
		1	2	3	4	5	6	7	8	
1400	80	43	40	48	42	41	38	32	23	46
	70	39	36	45	38	37	34	26	18	42
	60	37	33	43	35	35	31	23	16	40
	50	35	31	40	33	32	29	21	15	37
	40	35	32	41	34	33	29	22	16	38
1200	80	42	43	48	41	40	36	30	21	45
	70	39	40	45	37	37	32	24	17	42
	60	36	37	43	35	34	29	21	14	39
	50	34	35	40	33	31	27	20	14	37
	40	34	35	41	33	32	27	20	14	37
1000	80	41	47	48	41	39	35	27	18	45
	70	37	44	45	37	36	30	22	15	41
	60	35	42	43	35	33	27	19	12	39
	50	33	39	40	32	30	25	18	12	36
	40	33	40	41	33	31	25	19	13	37
900	80	41	48	46	41	39	34	26	17	44
	70	37	45	43	37	35	29	21	14	40
	60	34	43	40	35	32	25	18	11	38
	50	32	40	38	32	30	24	17	11	35
	40	33	41	39	33	30	24	18	12	36
800	80	40	48	44	41	38	33	25	16	43
	70	36	45	41	37	34	27	20	13	39
	60	33	43	38	35	31	24	17	10	37
	50	32	40	36	32	29	22	16	10	34
	40	32	41	36	33	29	23	17	11	35
700	80	40	48	42	41	38	32	23	14	43
	70	36	45	38	37	34	26	18	11	39
	60	33	43	35	35	31	23	16	9	36
	50	31	40	33	32	29	21	15	9	34
	40	32	41	34	33	29	22	16	10	34
600	80	43	48	41	40	36	30	21	12	41
	70	40	45	37	37	32	24	17	10	38
	60	37	43	35	34	29	21	14	7	35
	50	35	40	33	31	27	20	14	8	33
	40	36	41	33	32	27	20	14	8	33
500	80	47	48	41	39	35	27	18	9	41
	70	45	45	37	36	30	22	15	8	37
	60	42	43	35	33	27	19	12	5	34
	50	39	40	32	30	25	18	12	6	32
	40	40	41	33	31	25	19	13	7	32

The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301.

The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Values shown are for inlet L<sub>wiA</sub> sound power levels for Installation Type B: free inlet, ducted outlet. Ratings do not include the effects of ducted outlet.

The AMCA Certified Ratings Seal applies to L<sub>wiA</sub> ratings only.

# M Capacity Fraction

CFM	TOTAL PRESSURE AT DENSITY																		
	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	6 1/2
100	8	11	14	16	18	19	20	22	24	26	28	30	31	32	33	34	35	36	36
150	10	13	16	18	19	21	22	24	25	28	30	31	33	34	35	36	37	37	38
200	11	14	17	19	21	22	23	25	27	29	31	33	34	35	36	37	38	39	39
300	13	16	19	21	22	24	25	27	28	31	33	34	36	37	38	39	40	40	41
500	15	18	21	23	24	26	27	29	31	33	35	37	38	39	40	41	42	43	43
750	17	20	23	25	26	28	29	31	32	35	37	38	40	41	42	43	44	44	45
1000	18	21	24	26	28	29	30	32	34	36	38	40	41	42	43	44	45	46	46
1500	20	23	26	28	29	31	32	34	35	38	40	41	43	44	45	46	47	47	48
2000	21	24	27	29	31	32	33	35	37	39	41	43	44	45	46	47	48	49	49
3000	23	26	29	31	32	34	35	37	38	41	43	44	46	47	48	49	50	50	51
5000	25	28	31	33	34	36	37	39	41	43	45	47	48	49	50	51	52	53	53
7500	27	30	33	35	36	38	39	41	42	45	47	48	50	51	52	53	54	54	55
10000	28	31	34	36	38	39	40	42	44	46	48	50	51	52	53	54	55	56	56
15000	30	33	36	38	39	41	42	44	45	48	50	51	53	54	55	56	57	57	58
20000	31	34	37	39	41	42	43	45	47	49	51	53	54	55	56	57	58	59	59
30000	33	36	39	41	42	44	45	47	48	51	53	54	56	57	58	59	60	60	61
50000	35	38	41	43	44	46	47	49	51	53	55	57	58	59	60	61	62	63	63
75000	37	40	43	45	46	48	49	51	52	55	57	58	60	61	62	63	64	64	65
100000	38	41	44	46	48	49	50	52	54	56	58	60	61	62	63	64	65	66	66
150000	40	43	46	48	49	51	52	54	55	58	60	61	63	64	65	66	67	67	68
200000	41	44	47	49	51	52	53	55	57	59	61	63	64	65	66	67	68	69	69

CFM	TOTAL PRESSURE AT DENSITY																		
	7	8	9	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
100	37	38	39	40	42	43	44	45	46	47	48	48	49	50	50	51	51	52	52
150	39	40	41	42	43	45	46	47	48	49	49	50	51	51	52	52	53	53	54
200	40	41	42	43	45	46	47	48	49	50	51	51	52	53	53	54	54	55	55
300	42	43	44	45	46	48	49	50	51	52	52	53	54	54	55	55	56	56	57
500	44	45	46	47	49	50	51	52	53	54	55	55	56	57	57	58	58	59	59
750	46	47	48	49	50	52	53	54	55	56	56	57	58	58	59	59	60	60	61
1000	47	48	49	50	52	53	54	55	56	57	58	58	59	60	60	61	61	62	62
1500	49	50	51	52	53	55	56	57	58	59	59	60	61	61	62	62	63	63	64
2000	50	51	52	53	55	56	57	58	59	60	61	61	62	63	63	64	64	65	65
3000	52	53	54	55	56	58	59	60	61	62	62	63	64	64	65	65	66	66	67
5000	54	55	56	57	59	60	61	62	63	64	65	65	66	67	67	68	68	69	69
7500	56	57	58	59	60	62	63	64	65	66	66	67	68	68	69	69	70	70	71
10000	57	58	59	60	62	63	64	65	66	67	68	68	69	70	70	71	71	72	72
15000	59	60	61	62	63	65	66	67	68	69	69	70	71	71	72	72	73	73	74
20000	60	61	62	63	65	66	67	68	69	70	71	71	72	73	73	74	74	75	75
30000	62	63	64	65	66	68	69	70	71	72	72	73	74	74	75	75	76	76	77
50000	64	65	66	67	69	70	71	72	73	74	75	75	76	77	77	78	78	79	79
75000	66	67	68	69	70	72	73	74	75	76	76	77	78	78	79	79	80	80	81
100000	67	68	69	70	72	73	74	75	76	77	78	78	79	80	80	81	81	82	82
150000	69	70	71	72	73	75	76	77	78	79	79	80	81	81	82	82	83	83	84
200000	70	71	72	73	75	76	77	78	79	80	81	81	82	83	83	84	84	85	85



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