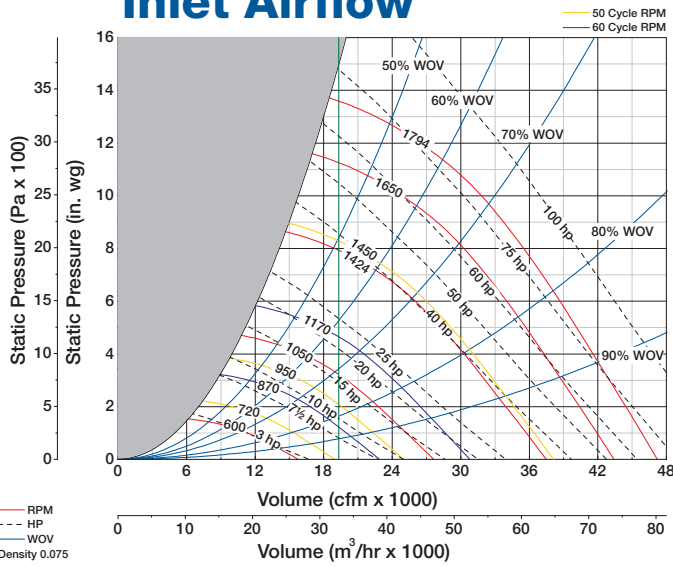


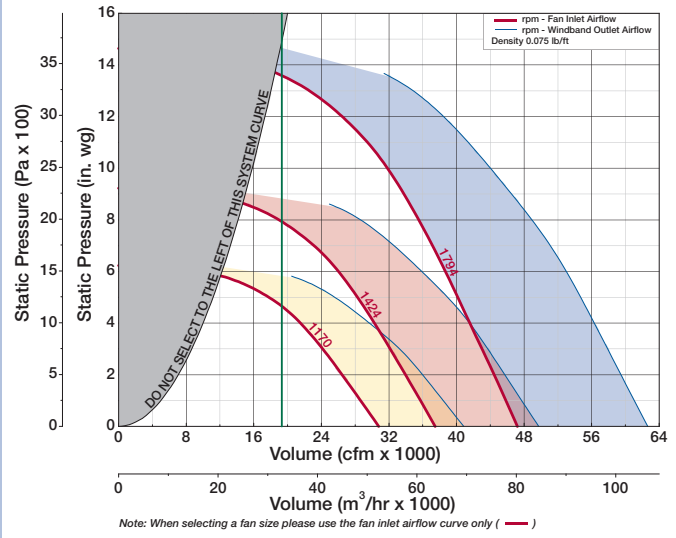
AIR DATA

LV
Low Velocity

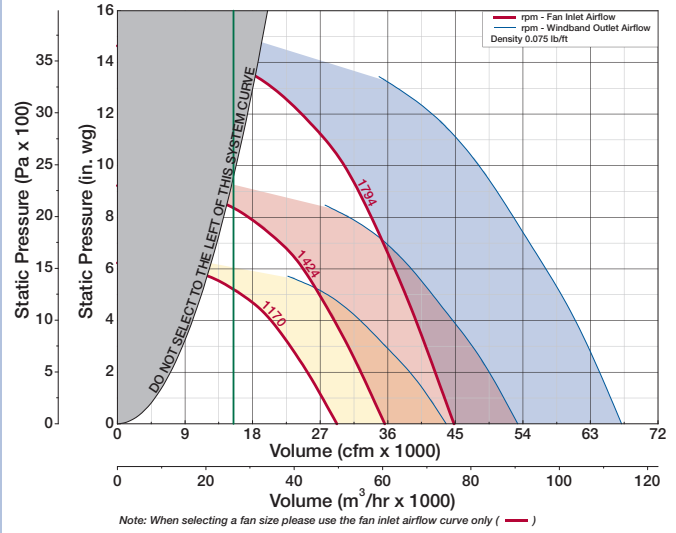
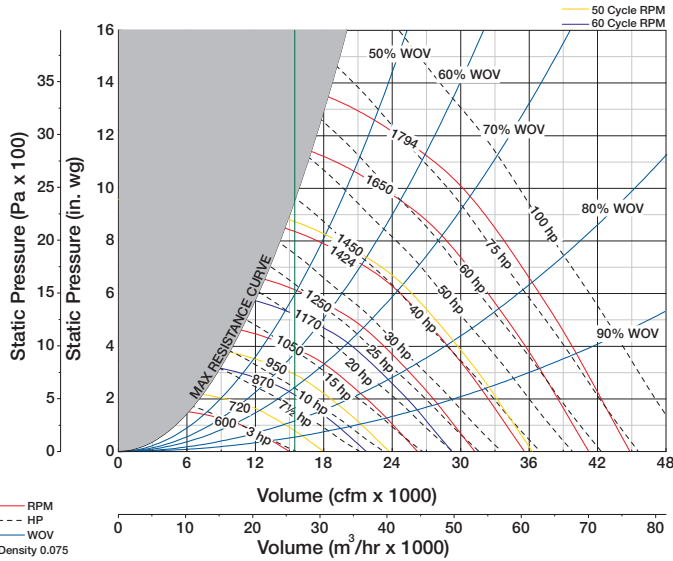
Inlet Airflow



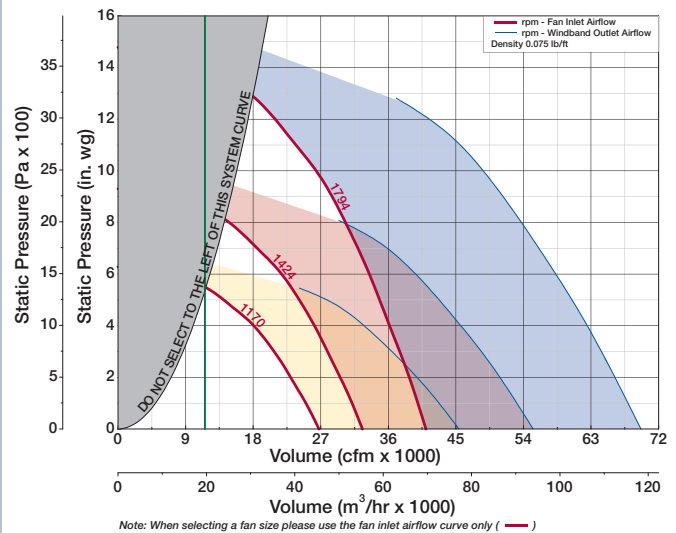
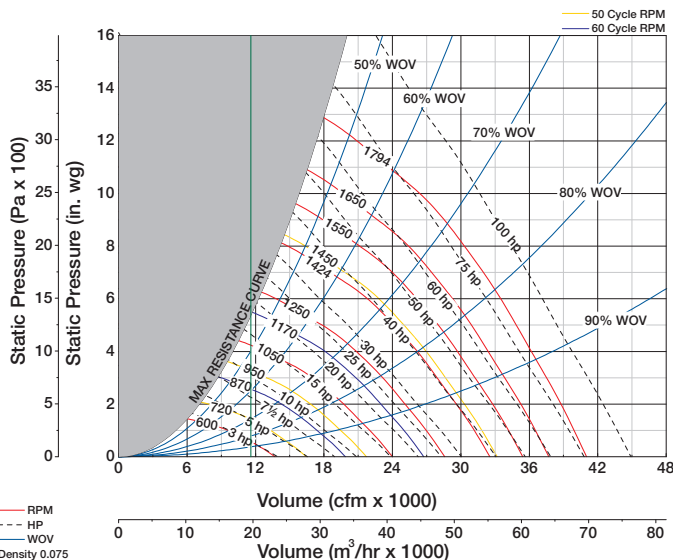
Outlet Airflow



MV
Medium Velocity



HV
High Velocity



Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (Bhp) do not include transmission losses. Performance ratings do not include the effects of cross winds.

Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The AMCA Certified Ratings Seal applies to induced flow fan air performance and sound (AMCA Standard 260).

100% Wheel Width
Windband Outlet Area = 12.31 ft ²
Class II Fan Max rpm = 1424
Class III Fan Max rpm = 1794
Effective Plume @ 10 mph Crosswind Height {ft}
$\frac{(3 * \text{Windband Outlet Volume} * 0.322)}{880} + 13.67$

Performance Data	LV	MV	HV
Nozzle Velocity {ft/min}	$\frac{\text{Fan cfm}}{6.44 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{5.15 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{3.86 \text{ ft}^2}$
% WOV	$\frac{\text{cfm} \times 100}{\text{rpm} \times 26.4}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 24.8}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 22.7}$
3000 fpm: Inlet Airflow Rate	19309 cfm	15447 cfm	11585 cfm

Vektor-CD Size 36 (HV Nozzle)

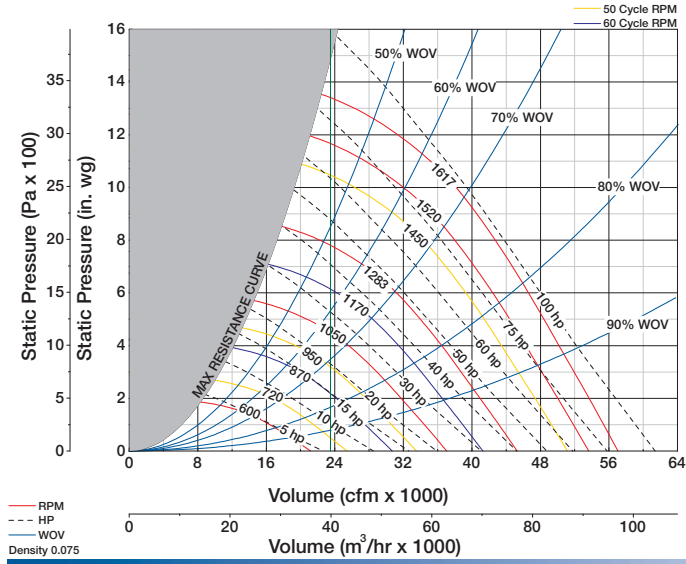
Sound Power by Octave Band																					
rpm	%WOV	Inlet Sound Power										Outlet Sound Power									
		1	2	3	4	5	6	7	8	LwA	dBA	1	2	3	4	5	6	7	8	LwA	dBA
450	100	85	82	74	68	65	59	54	45	72	61	84	81	73	71	66	60	54	44	73	61
450	80	85	81	73	67	64	57	53	43	71	60	81	80	71	70	63	57	52	42	71	60
450	60	82	78	72	66	63	57	53	43	70	58	82	80	70	70	63	57	52	41	71	59
450	50	83	79	72	66	61	56	52	42	70	58	81	80	70	70	62	56	51	41	71	59
450	40	83	79	72	66	61	55	52	42	69	58	81	80	71	69	61	55	50	41	70	59
650	100	88	94	83	76	74	71	65	60	82	71	86	88	81	77	75	72	65	58	81	69
650	80	86	92	82	75	73	68	64	57	81	69	86	86	80	76	74	69	63	55	79	68
650	60	85	89	80	73	72	68	64	57	79	67	86	85	78	74	72	68	63	55	78	66
650	50	87	89	79	73	71	67	63	56	78	67	89	85	78	75	71	67	63	55	78	66
650	40	89	89	81	74	71	66	63	56	79	67	90	85	79	76	71	66	62	54	78	66
900	100	90	101	93	85	83	82	76	70	91	79	90	95	90	87	83	82	76	69	90	78
900	80	88	99	91	83	81	80	74	69	89	77	89	94	88	84	82	79	73	67	88	76
900	60	89	97	89	82	81	78	74	69	88	76	89	92	85	82	81	78	73	67	86	75
900	50	92	97	89	81	80	77	73	68	87	76	94	93	86	82	80	77	72	67	86	74
900	40	96	98	91	83	80	76	72	67	88	77	99	95	88	84	80	76	71	66	87	75
1300	100	96	99	106	95	93	93	90	81	101	90	97	100	105	95	93	92	89	79	101	89
1300	80	96	98	104	94	92	90	88	79	99	88	94	99	102	94	92	90	85	77	98	87
1300	60	96	97	103	92	90	89	85	79	98	86	94	98	100	91	89	88	84	77	96	85
1300	50	100	100	102	92	90	87	84	79	97	86	100	101	100	91	89	87	83	77	96	85
1300	40	104	103	103	93	90	86	82	77	98	86	104	106	100	94	90	87	82	76	98	86
1794	100	101	107	113	104	101	99	100	91	109	97	100	109	112	103	101	99	98	90	108	97
1794	80	99	106	111	102	99	97	97	89	107	95	95	107	110	101	100	98	95	87	106	95
1794	60	99	106	110	100	98	96	94	88	105	94	96	106	109	99	98	96	94	87	105	93
1794	50	103	110	110	100	97	96	93	88	105	94	100	111	109	99	97	95	93	87	105	93
1794	40	106	114	111	102	97	95	92	86	106	95	103	116	110	102	99	95	92	86	107	95

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi}, L_{wi}A and outlet L_{wo}, L_{wo}A sound power levels for installation Type A: Free inlet, Free outlet. dBA levels shown represent sound pressure levels 5 feet from the fan in a hemispherical free field. dBA levels are not licensed by AMCA International.

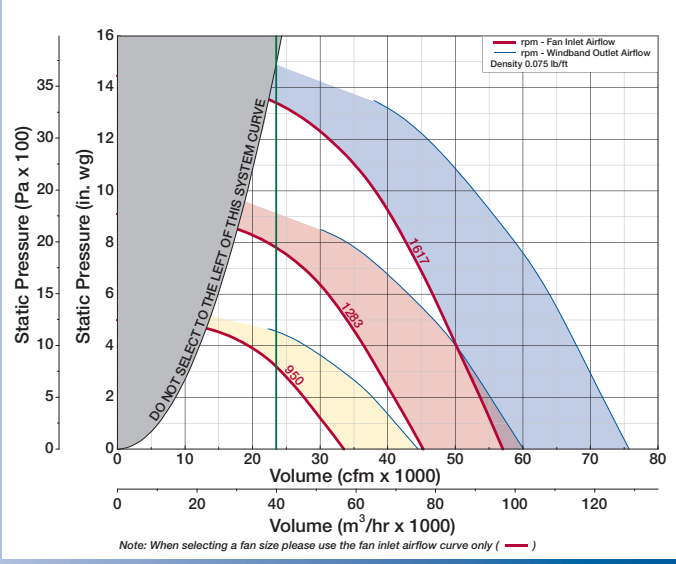
Vektor-CD Size 40

AIR DATA

Inlet Airflow

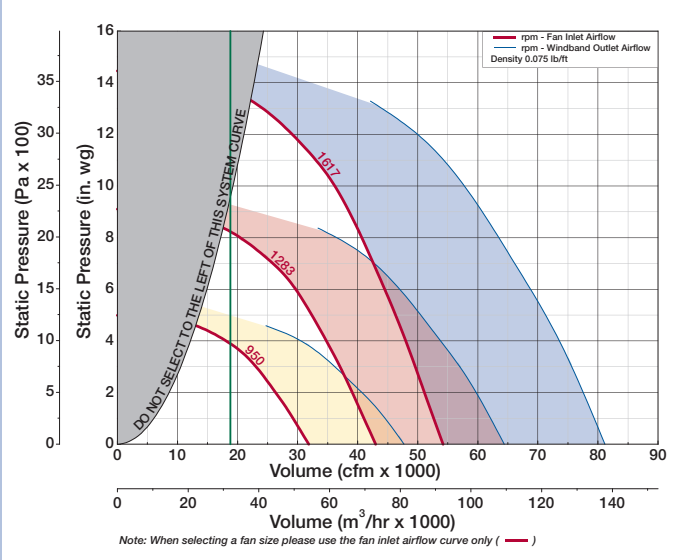
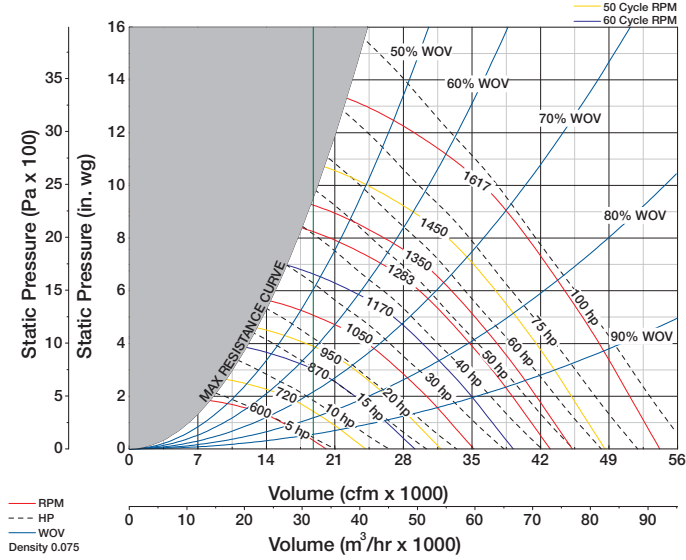


Outlet Airflow



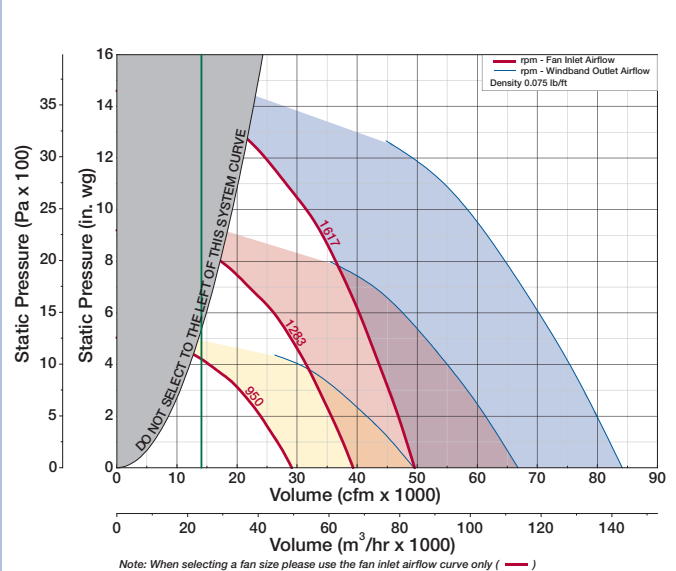
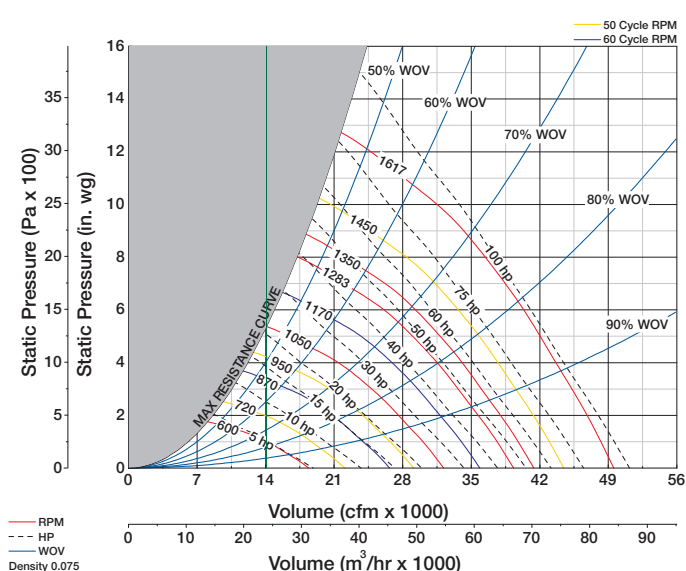
Note: When selecting a fan size please use the fan inlet airflow curve only (—)

LV
Low Velocity



Note: When selecting a fan size please use the fan inlet airflow curve only (—)

MV
Medium Velocity



Note: When selecting a fan size please use the fan inlet airflow curve only (—)

HV
High Velocity

Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (Bhp) do not include transmission losses. Performance ratings do not include the effects of cross winds.

Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The AMCA Certified Ratings Seal applies to induced flow fan air performance and sound (AMCA Standard 260).

100% Wheel Width
Windband Outlet Area = 14.92 ft ²
Class II Fan Max rpm = 1283
Class III Fan Max rpm = 1617
Effective Plume @ 10 mph Crosswind Height {ft}
$\frac{(3 * \text{Windband Outlet Volume} * 0.292)}{880} + 14.92$

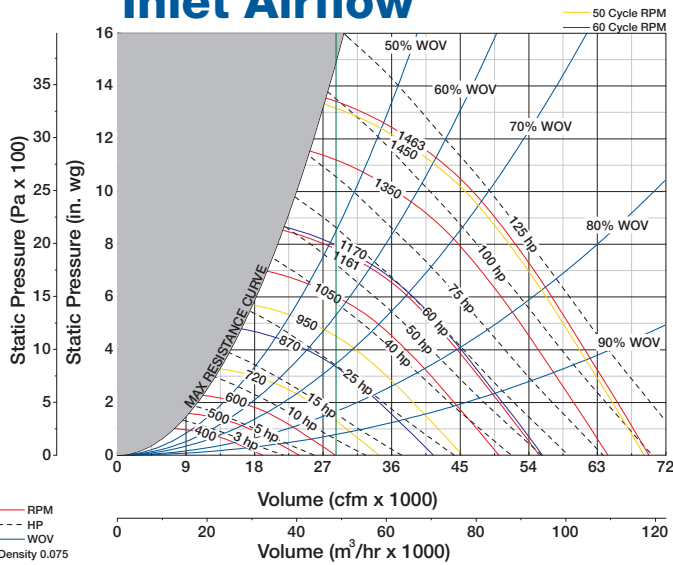
Performance Data	LV	MV	HV
Nozzle Velocity {ft/min}	$\frac{\text{Fan cfm}}{7.83 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{6.26 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{4.70 \text{ ft}^2}$
% WOV	$\frac{\text{cfm} \times 100}{\text{rpm} \times 35.3}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 33.5}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 30.7}$
3000 fpm: Inlet Airflow Rate	23483 cfm	18786 cfm	14090 cfm

Vektor-CD Size 40 (HV Nozzle)

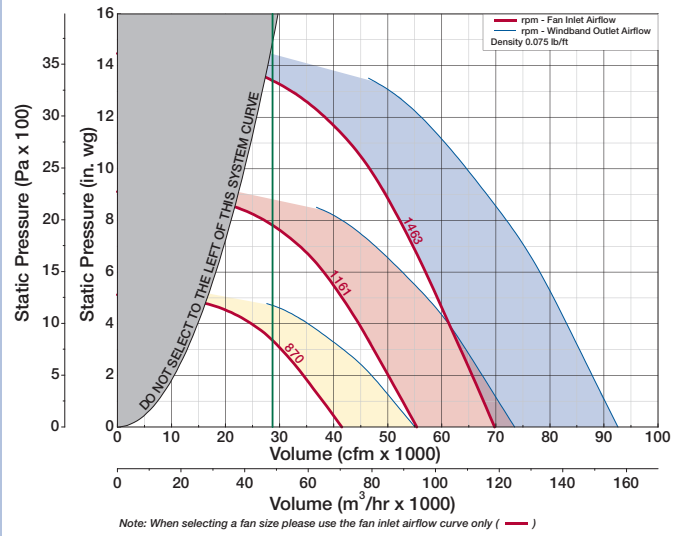
Sound Power by Octave Band																					
Inlet Sound Power											Outlet Sound Power										
rpm	%WOV	1	2	3	4	5	6	7	8	LwA	dBA	1	2	3	4	5	6	7	8	LwA	dBA
400	100	87	81	73	68	65	58	54	44	72	60	86	79	72	71	66	59	53	42	72	61
400	80	87	80	72	67	63	57	52	42	71	59	83	79	71	69	63	57	51	40	71	59
400	60	84	78	71	66	62	57	52	42	69	58	83	79	70	69	62	57	51	40	70	59
400	50	84	78	71	66	61	56	51	41	69	58	82	78	70	69	61	56	50	40	70	58
400	40	84	79	72	65	60	55	51	41	69	58	83	79	71	69	61	55	49	39	70	59
600	100	91	94	83	77	75	72	66	60	83	71	89	87	81	78	76	72	65	59	81	70
600	80	90	92	82	76	74	69	65	58	81	70	88	85	80	77	74	69	64	55	79	68
600	60	88	89	80	75	73	69	65	58	79	68	88	84	78	75	73	69	64	55	78	67
600	50	90	89	79	74	72	68	64	57	79	67	91	85	78	75	72	68	63	55	78	67
600	40	91	89	82	75	72	67	63	57	80	68	91	85	79	77	72	67	62	55	79	67
800	100	92	102	91	85	83	82	75	70	91	79	92	96	89	87	83	82	75	69	90	78
800	80	90	100	90	83	81	79	74	69	89	77	91	95	87	85	82	79	72	66	88	76
800	60	91	98	88	82	81	78	73	68	88	76	90	93	85	82	81	78	72	66	86	75
800	50	94	98	88	82	80	77	73	67	87	76	96	93	86	83	80	77	72	66	86	75
800	40	97	99	90	82	80	76	72	67	88	77	100	94	88	84	80	76	71	65	87	75
1100	100	96	104	101	94	92	93	87	79	99	88	98	103	98	94	91	91	86	77	98	86
1100	80	95	102	99	92	90	90	84	78	97	85	96	101	96	93	91	89	82	75	96	85
1100	60	95	101	97	91	89	88	82	78	95	84	96	100	94	90	89	87	81	75	94	83
1100	50	100	102	97	90	89	86	82	77	95	84	101	100	94	90	88	86	81	75	94	82
1100	40	103	103	98	91	88	85	80	76	95	84	106	103	97	93	89	85	80	75	96	84
1617	100	104	108	114	103	102	100	100	90	110	98	102	110	114	103	102	99	99	90	109	98
1617	80	103	107	113	101	100	98	97	89	108	96	98	108	112	102	101	98	95	87	108	96
1617	60	103	107	111	100	99	97	94	88	106	95	98	107	110	99	98	96	94	87	105	94
1617	50	107	111	111	100	98	96	93	88	106	95	103	112	110	99	98	95	93	87	106	94
1617	40	110	114	112	102	98	95	92	86	107	96	106	117	111	102	100	95	92	86	108	96

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi}, L_{wi}A and outlet L_{wo}, L_{wo}A sound power levels for installation Type A: Free inlet, Free outlet. dBA levels shown represent sound pressure levels 5 feet from the fan in a hemispherical free field. dBA levels are not licensed by AMCA International.

Inlet Airflow

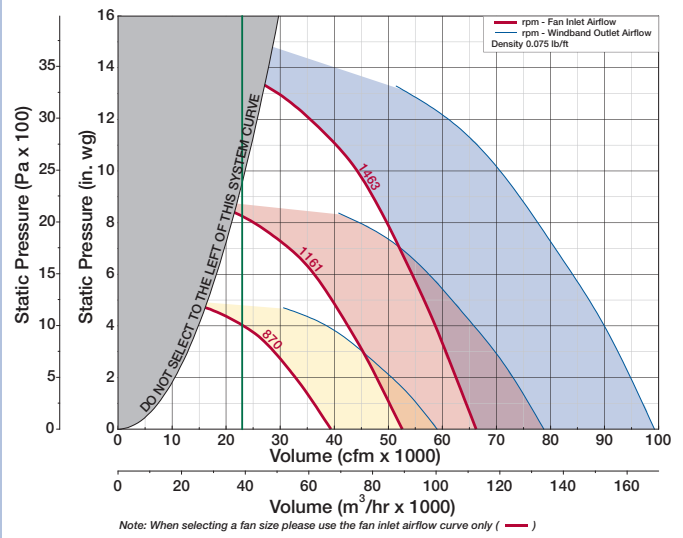
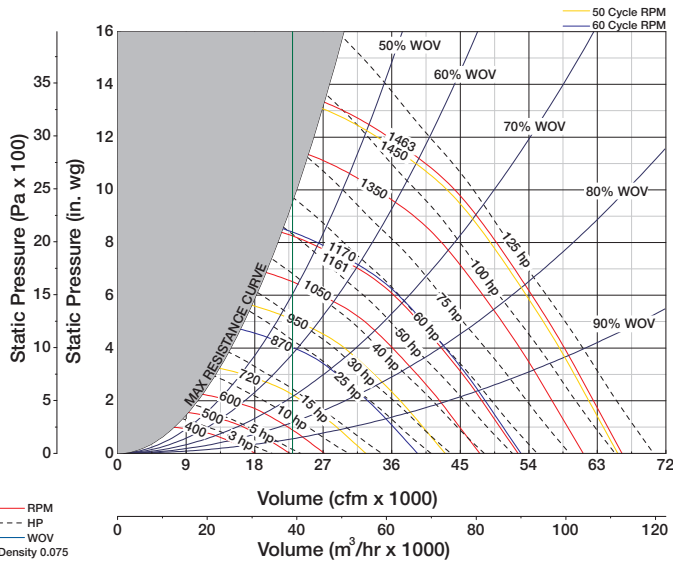


Outlet Airflow

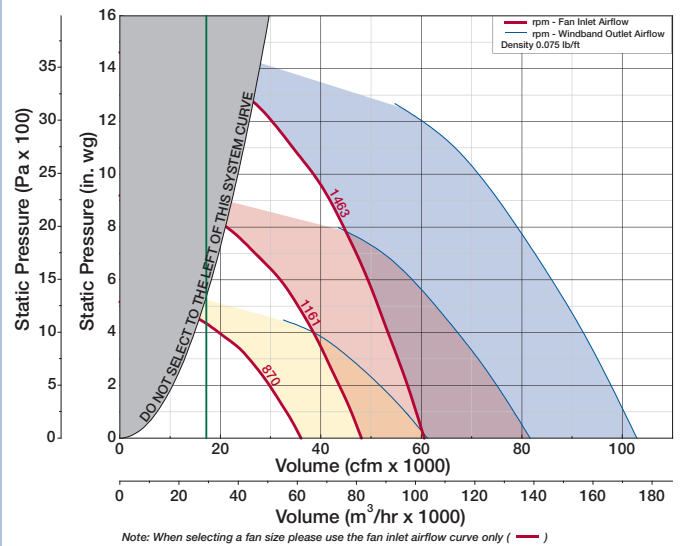
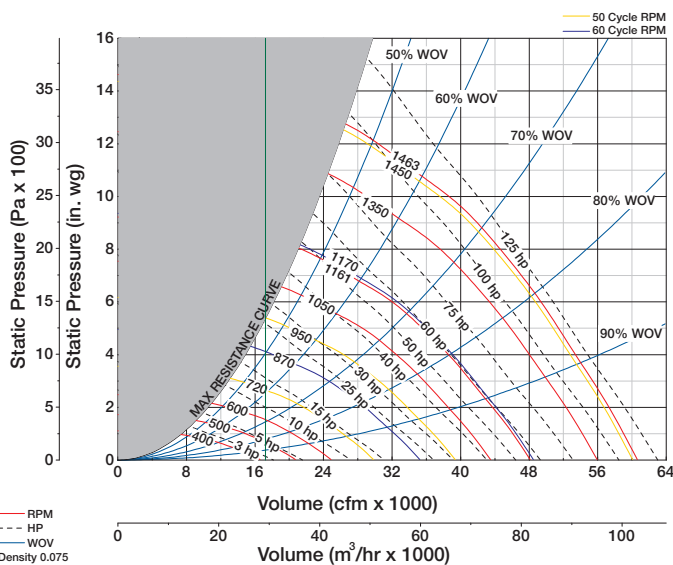


LV
Low Velocity

MV
Medium Velocity



HV
High Velocity



Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (Bhp) do not include transmission losses. Performance ratings do not include the effects of cross winds.

Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The AMCA Certified Ratings Seal applies to induced flow fan air performance and sound (AMCA Standard 260).

100% Wheel Width
Windband Outlet Area = 18.28 ft ²
Class II Fan Max rpm = 1161
Class III Fan Max rpm = 1463
Effective Plume @ 10 mph Crosswind Height {ft}
$\frac{(3 * \text{Windband Outlet Volume} * 0.264)}{880} + 16.33$

Performance Data	LV	MV	HV
Nozzle Velocity {ft/min}	$\frac{\text{Fan cfm}}{9.57 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{7.65 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{5.74 \text{ ft}^2}$
% WOV	$\frac{\text{cfm} \times 100}{\text{rpm} \times 47.7}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 45.3}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 41.4}$
3000 fpm: Inlet Airflow Rate	28703 cfm	22962 cfm	17222 cfm

Vektor-CD Size 44 (HV Nozzle)

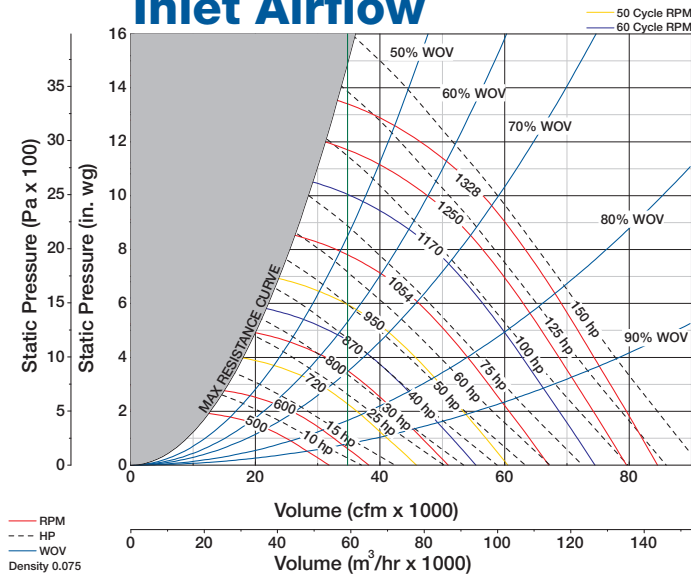
Sound Power by Octave Band																					
Inlet Sound Power												Outlet Sound Power									
rpm	%WOV	1	2	3	4	5	6	7	8	LwA	dBA	1	2	3	4	5	6	7	8	LwA	dBA
350	100	87	80	71	68	64	57	52	42	71	59	86	78	72	70	65	58	51	41	72	60
350	80	86	79	70	67	62	57	51	41	70	58	83	78	70	68	62	56	49	38	70	58
350	60	83	77	69	66	61	57	50	40	69	57	84	78	70	68	62	56	49	38	70	58
350	50	83	77	69	65	60	56	49	40	68	56	82	77	70	67	60	55	48	38	69	57
350	40	84	78	70	64	59	55	49	40	68	57	83	78	70	67	60	54	47	38	69	57
500	100	93	88	79	75	74	69	64	57	80	68	89	83	78	76	74	70	63	56	79	67
500	80	92	87	78	75	72	67	62	55	78	67	88	82	77	75	72	67	61	52	77	66
500	60	89	84	76	74	71	67	63	55	77	65	87	80	75	74	71	67	61	52	76	65
500	50	90	84	76	73	70	66	62	54	76	65	90	81	75	74	70	66	60	52	76	65
500	40	91	85	78	73	70	65	61	54	77	65	90	82	77	74	70	65	60	52	76	65
700	100	95	101	90	85	83	81	74	69	90	79	93	96	88	86	83	81	74	68	89	78
700	80	93	100	89	83	81	79	73	68	89	77	91	94	87	84	82	78	71	65	87	76
700	60	92	97	87	82	81	77	73	67	87	76	90	93	84	82	81	77	71	65	86	74
700	50	95	97	87	81	80	76	72	66	87	75	95	92	84	82	80	76	71	65	85	74
700	40	97	98	89	82	79	75	71	66	87	76	100	93	86	83	80	75	70	64	86	74
1000	100	98	105	99	94	93	94	86	79	100	88	100	104	98	95	92	92	85	78	99	87
1000	80	97	104	97	93	91	91	84	78	98	86	97	102	96	94	91	89	82	76	97	85
1000	60	97	102	95	91	90	88	82	78	96	84	97	100	93	91	89	87	81	75	94	83
1000	50	101	103	95	91	89	87	82	78	95	84	102	100	93	91	89	86	81	75	94	83
1000	40	105	103	97	91	89	85	81	76	95	84	107	102	96	93	89	86	80	75	96	84
1463	100	105	109	114	104	102	101	100	90	110	98	106	110	114	104	102	100	99	89	110	98
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1463	40	112	115	111	102	99	95	92	87	107	95	111	117	111	102	100	96	92	86	108	96

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi}, L_{wi}A and outlet L_{wo}, L_{wo}A sound power levels for installation Type A: Free inlet, Free outlet. dBA levels shown represent sound pressure levels 5 feet from the fan in a hemispherical free field. dBA levels are not licensed by AMCA International.

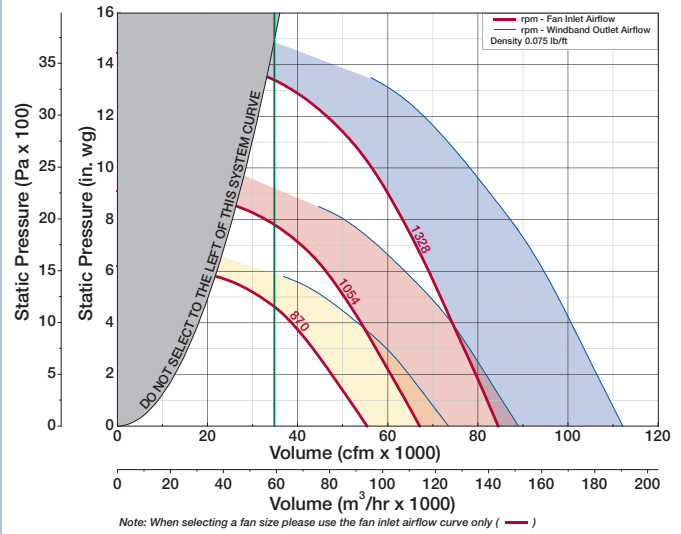
AIR DATA

LV
Low Velocity

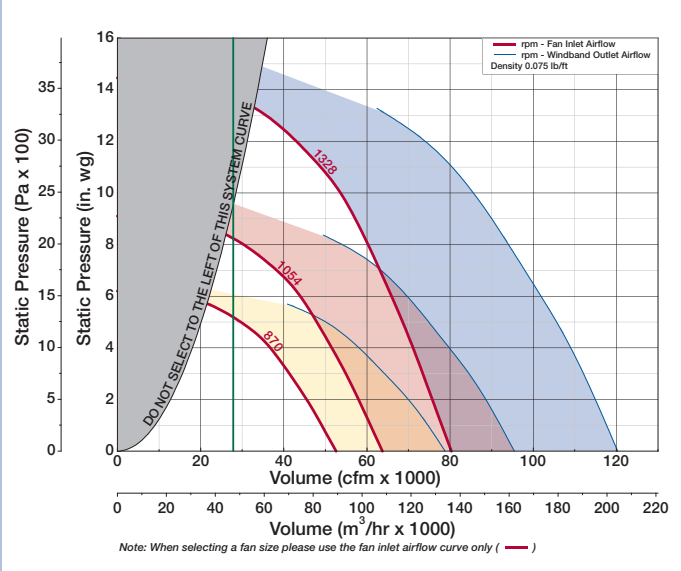
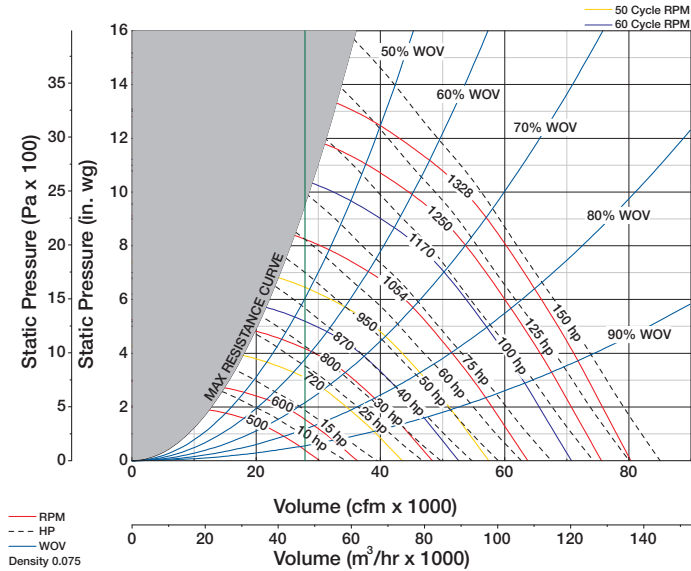
Inlet Airflow



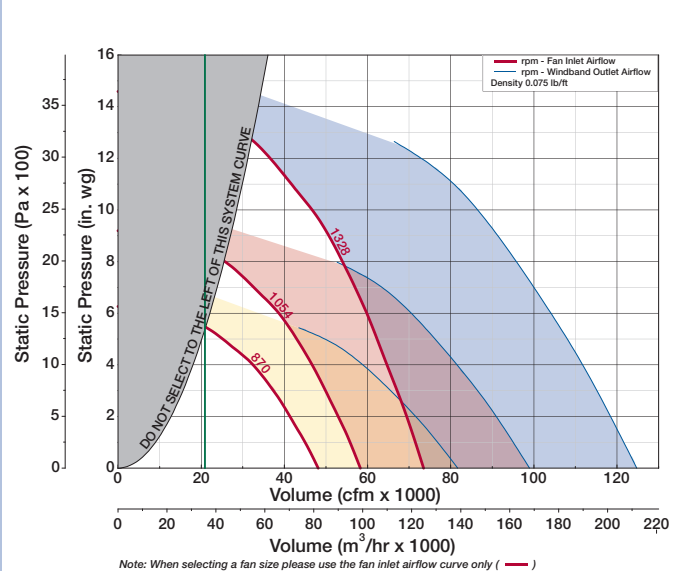
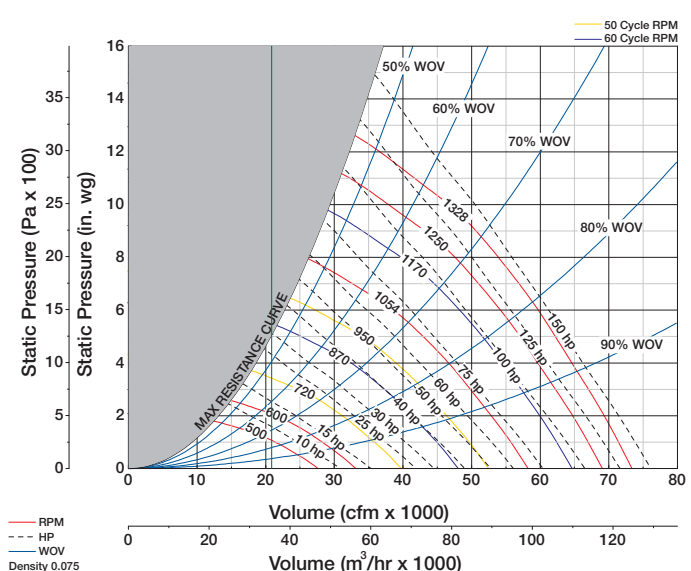
Outlet Airflow



MV
Medium Velocity



HV
High Velocity



Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (Bhp) do not include transmission losses. Performance ratings do not include the effects of cross winds.

Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The AMCA Certified Ratings Seal applies to induced flow fan air performance and sound (AMCA Standard 260).

100% Wheel Width
Windband Outlet Area = 22.13 ft ²
Class II Fan Max rpm = 1054
Class III Fan Max rpm = 1328
Effective Plume @ 10 mph Crosswind Height {ft}
$\frac{(3 * \text{Windband Outlet Volume} * 0.240)}{880} + 17.75$

Performance Data	LV	MV	HV
Nozzle Velocity {ft/min}	$\frac{\text{Fan cfm}}{11.60 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{9.28 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{6.96 \text{ ft}^2}$
% WOV	$\frac{\text{cfm} \times 100}{\text{rpm} \times 63.7}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 60.5}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 55.3}$
3000 fpm: Inlet Airflow Rate	34800 cfm	27840 cfm	20880 cfm

Vektor-CD Size 49 (HV Nozzle)

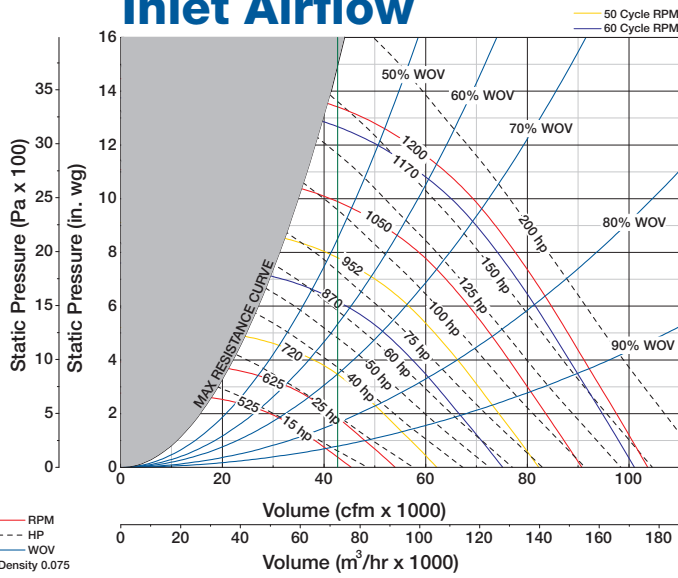
Sound Power by Octave Band																					
		Inlet Sound Power										Outlet Sound Power									
rpm	%WOV	1	2	3	4	5	6	7	8	LwA	dBA	1	2	3	4	5	6	7	8	LwA	dBA
350	100	90	83	74	71	67	60	55	45	74	62	89	82	75	73	68	61	54	44	75	63
350	80	90	82	73	70	65	60	54	43	73	61	86	82	73	71	65	59	52	41	73	61
350	60	87	81	72	69	64	60	53	43	72	60	87	81	73	71	64	59	52	41	73	61
350	50	87	81	72	68	63	59	52	43	71	60	86	80	73	70	63	58	51	41	72	60
350	40	87	81	73	67	62	58	52	43	71	60	86	81	73	70	63	57	50	41	72	60
500	100	97	92	82	78	77	72	67	60	83	71	93	86	81	79	77	73	66	59	82	70
500	80	95	90	81	78	75	70	65	58	81	70	91	85	80	78	75	70	64	55	80	69
500	60	93	87	79	76	74	70	65	58	80	68	91	84	78	77	74	70	64	55	79	68
500	50	93	87	79	75	73	69	65	57	79	68	93	85	78	77	73	69	63	55	79	68
500	40	94	89	81	76	72	68	64	57	80	68	93	86	80	77	72	68	63	55	79	68
700	100	98	105	93	88	86	84	77	72	94	82	96	99	92	89	86	84	77	71	92	81
700	80	96	103	92	86	84	82	76	71	92	80	94	98	90	87	85	80	74	68	90	79
700	60	96	101	90	85	83	80	76	70	90	79	94	96	87	85	84	80	74	68	89	77
700	50	98	101	90	84	82	79	75	69	90	78	99	96	87	85	83	79	74	68	88	77
700	40	101	102	92	85	82	78	74	69	91	79	103	97	89	86	82	78	73	67	89	77
900	100	99	105	97	95	93	94	85	80	99	88	101	104	97	95	92	92	84	78	98	87
900	80	98	104	96	93	91	91	83	78	97	86	98	102	95	94	92	89	81	76	97	85
900	60	97	102	94	92	90	88	82	78	96	84	98	101	92	92	90	88	81	75	95	84
900	50	102	103	94	91	89	87	82	78	95	84	103	101	92	91	89	87	81	75	95	83
900	40	105	103	96	92	89	86	80	77	95	84	108	102	96	93	89	86	80	75	96	84
1328	100	107	110	116	104	103	102	100	90	111	99	109	111	117	105	102	101	99	89	111	100
1328	80	107	109	114	103	101	100	97	89	109	98	105	110	114	104	101	100	94	87	109	98
1328	60	107	109	112	101	100	98	94	89	107	96	105	109	112	101	99	98	93	87	107	95
1328	50	111	112	112	101	99	97	94	88	107	96	111	113	112	100	98	97	93	87	107	95
1328	40	114	115	112	102	99	96	92	87	107	96	115	118	112	103	100	96	92	86	108	97

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi}, L_{wi}A and outlet L_{wo}, L_{wo}A sound power levels for installation Type A: Free inlet, Free outlet. dBA levels shown represent sound pressure levels 5 feet from the fan in a hemispherical free field. dBA levels are not licensed by AMCA International.

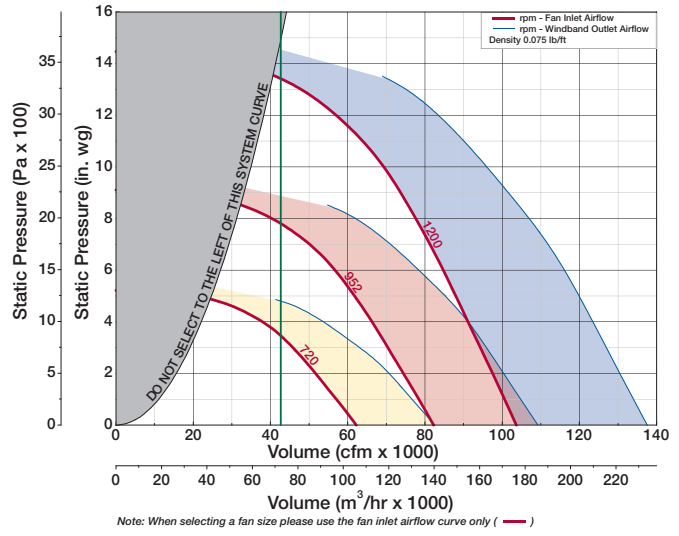
AIR DATA

LV
Low Velocity

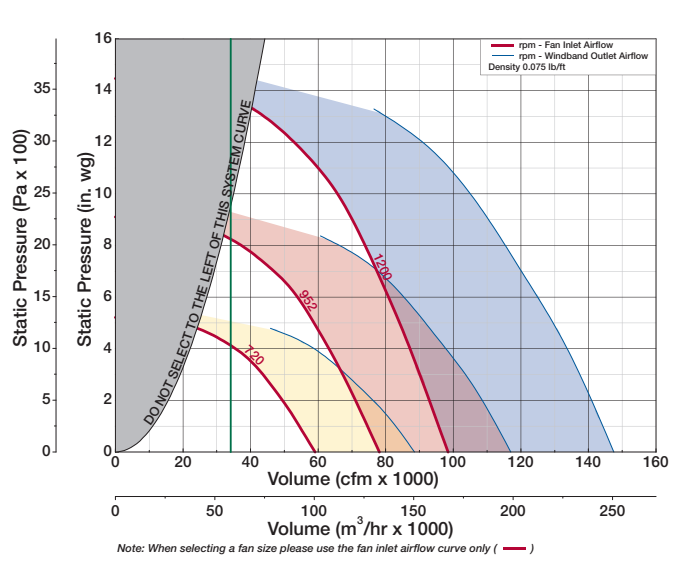
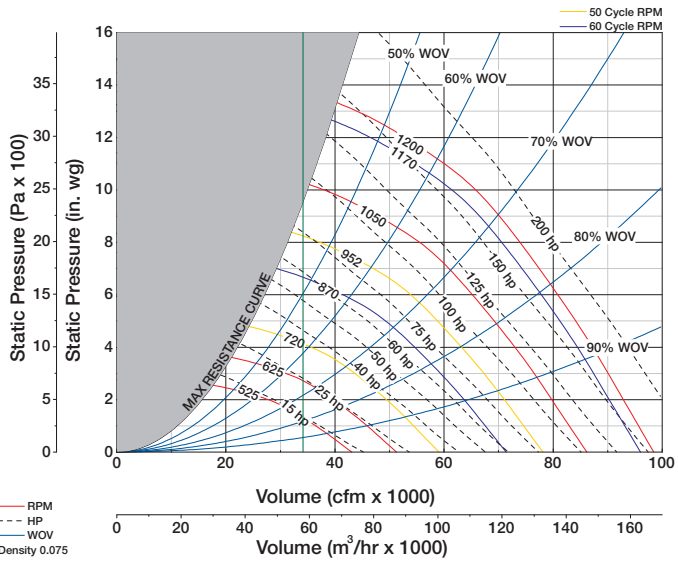
Inlet Airflow



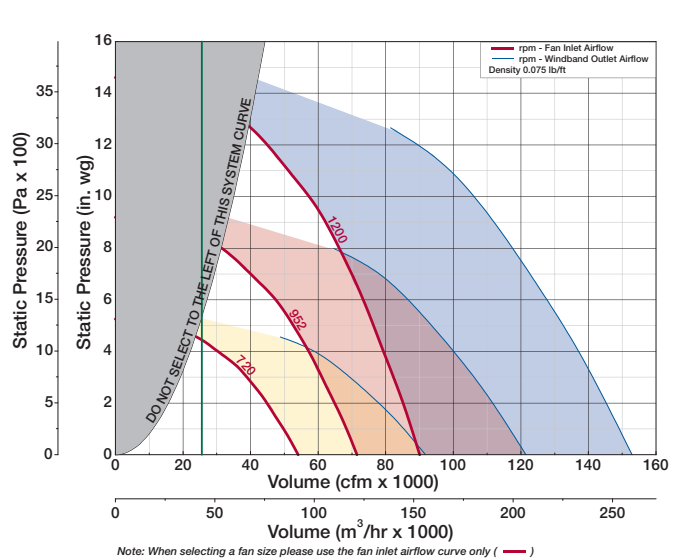
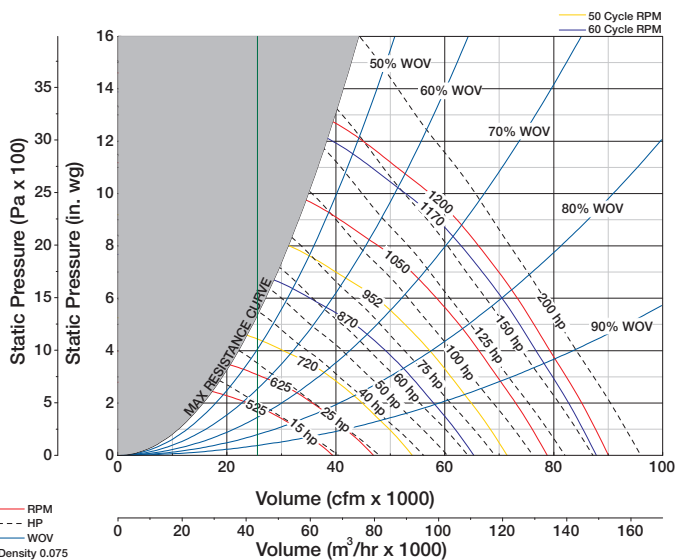
Outlet Airflow



MV
Medium Velocity



HV
High Velocity



Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (Bhp) do not include transmission losses. Performance ratings do not include the effects of cross winds.

Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The AMCA Certified Ratings Seal applies to induced flow fan air performance and sound (AMCA Standard 260).

100% Wheel Width
Windband Outlet Area = 27.11 ft ²
Class II Fan Max rpm = 952
Class III Fan Max rpm = 1200
Effective Plume @ 10 mph Crosswind Height {ft}
$\frac{(3 * \text{Windband Outlet Volume} * 0.217)}{880} + 19.5$

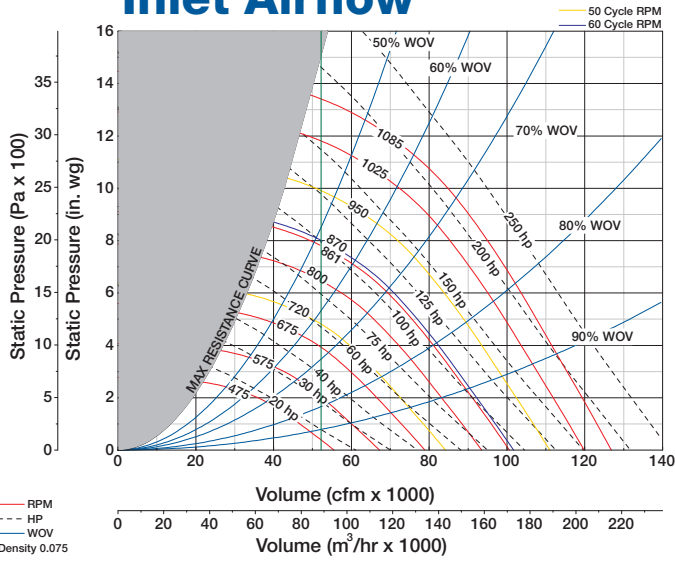
Performance Data	LV	MV	HV
Nozzle Velocity {ft/min}	$\frac{\text{Fan cfm}}{14.22 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{11.38 \text{ ft}^2}$	$\frac{\text{Fan cfm}}{8.53 \text{ ft}^2}$
% WOV	$\frac{\text{cfm} \times 100}{\text{rpm} \times 86.4}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 82.1}$	$\frac{\text{cfm} \times 100}{\text{rpm} \times 75.1}$
3000 fpm: Inlet Airflow Rate	42656 cfm	34140 cfm	25594 cfm

Vektor-CD Size 54 (HV Nozzle)

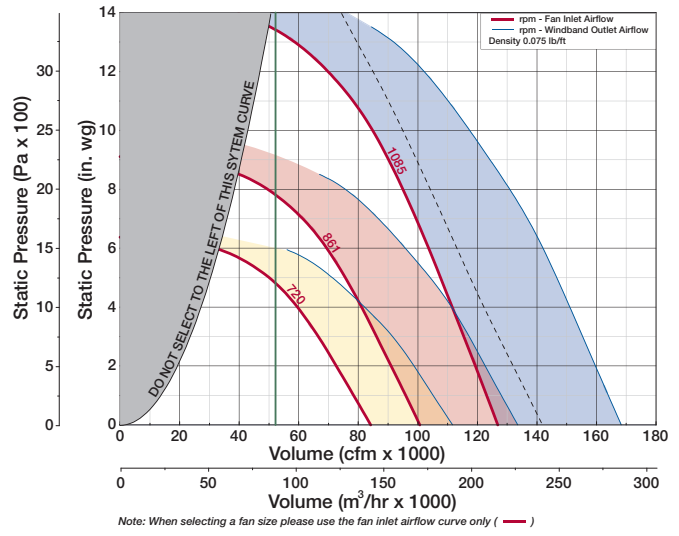
Sound Power by Octave Band																					
		Inlet Sound Power										Outlet Sound Power									
rpm	%WOV	1	2	3	4	5	6	7	8	LwA	dBA	1	2	3	4	5	6	7	8	LwA	dBA
300	100	89	81	72	70	65	59	53	43	72	61	88	79	74	71	66	59	52	42	73	61
300	80	89	80	71	69	63	59	51	42	71	60	86	78	73	69	63	58	50	39	71	60
300	60	85	78	70	68	62	59	51	41	70	58	87	77	73	68	63	58	49	39	71	59
300	50	85	78	70	66	61	58	49	41	69	58	85	77	73	68	62	57	48	39	70	59
300	40	86	79	71	66	61	57	49	41	70	58	86	78	73	68	61	56	48	39	70	59
400	100	95	86	78	76	74	68	63	57	79	68	90	83	79	76	75	68	62	55	79	68
400	80	93	84	77	76	72	67	61	54	78	67	88	82	78	76	72	66	60	51	78	66
400	60	91	82	75	74	71	67	61	55	77	65	87	80	76	75	71	66	60	51	76	65
400	50	91	82	74	73	69	66	60	54	76	64	90	81	76	74	70	66	59	51	76	65
400	40	91	84	76	73	69	65	60	54	76	64	89	82	78	74	69	65	58	51	76	65
600	100	101	102	91	87	86	82	75	71	92	80	97	97	90	88	86	83	75	69	91	80
600	80	100	101	89	85	84	80	74	69	90	79	96	95	89	86	84	79	73	66	89	77
600	60	98	98	87	84	83	79	74	69	89	77	95	93	86	85	83	78	73	66	88	76
600	50	100	98	87	84	82	78	74	68	88	77	98	93	86	84	82	78	73	66	87	76
600	40	101	99	89	84	81	77	73	67	89	77	102	94	87	85	81	77	72	65	87	76
850	100	101	108	98	97	95	96	86	81	101	90	103	107	98	97	94	94	85	79	100	89
850	80	100	106	97	95	93	93	84	80	99	88	101	105	97	96	93	90	83	77	99	87
850	60	100	105	95	94	92	90	84	80	98	86	101	104	94	93	91	89	82	77	97	85
850	50	104	105	95	93	91	89	83	80	97	85	105	103	94	93	91	88	82	77	96	85
850	40	107	106	97	93	90	87	82	78	97	85	111	104	97	95	91	87	82	76	97	86
1200	100	109	113	114	105	103	103	99	91	111	99	111	114	114	105	103	102	98	89	110	99
1200	80	108	112	112	104	102	101	97	89	109	97	108	112	111	104	102	100	94	87	108	97
1200	60	108	111	110	102	100	99	94	89	107	95	108	111	109	101	100	98	93	87	106	95
1200	50	112	113	110	102	100	98	94	89	107	95	113	113	109	101	99	97	93	87	106	95
1200	40	116	115	111	102	100	96	92	87	107	96	117	117	111	104	100	97	92	86	108	97

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi}, L_{wi}A and outlet L_{wo}, L_{wo}A sound power levels for installation Type A: Free inlet, Free outlet. dBA levels shown represent sound pressure levels 5 feet from the fan in a hemispherical free field. dBA levels are not licensed by AMCA International.

Inlet Airflow

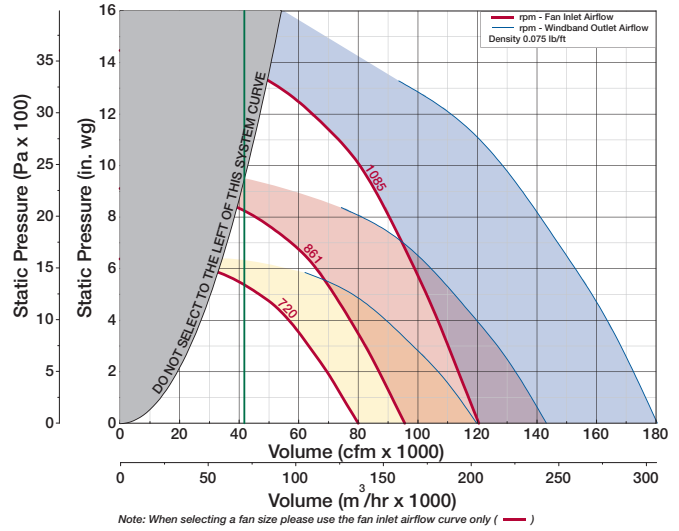
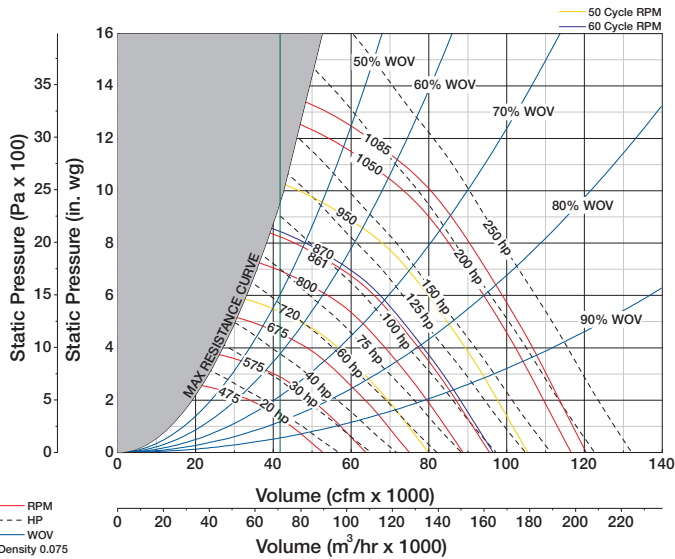


Outlet Airflow

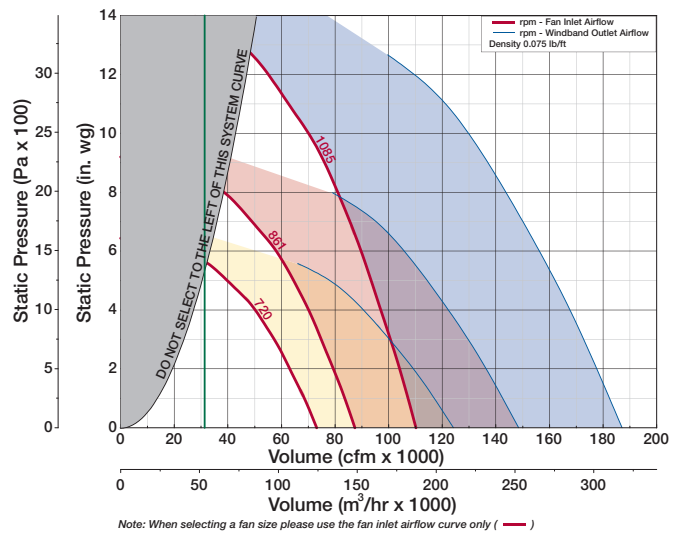
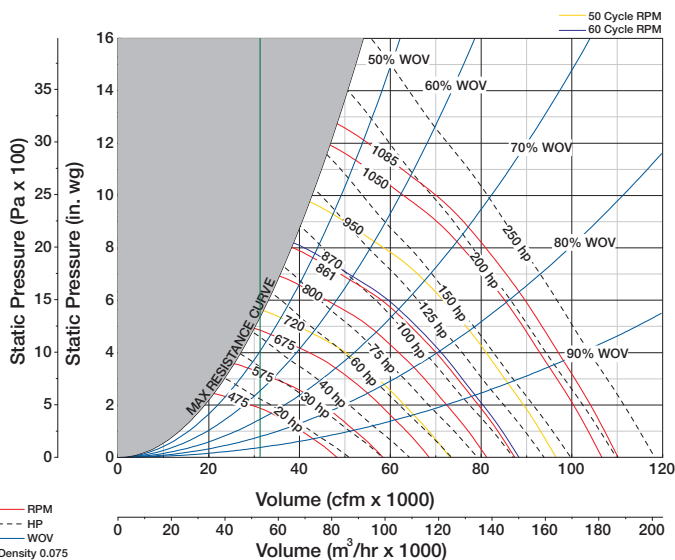


LV
Low Velocity

MV
Medium Velocity



HV
High Velocity



Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (Bhp) do not include transmission losses. Performance ratings do not include the effects of cross winds.

Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The AMCA Certified Ratings Seal applies to induced flow fan air performance and sound (AMCA Standard 260).

100% Wheel Width
Windband Outlet Area = 33.18 ft ²
Class II Fan Max rpm = 861
Class III Fan Max rpm = 1085
Effective Plume @ 10 mph Crosswind Height {ft}
$\frac{(3 * \text{Windband Outlet Volume} * 0.196)}{880} + 21.17$

Performance Data	LV	MV	HV
Nozzle Velocity {ft/min}	Fan cfm 17.39 ft ²	Fan cfm 13.91 ft ²	Fan cfm 10.44 ft ²
% WOV	cfm x 100 rpm x 117	cfm x 100 rpm x 111	cfm x 100 rpm x 102
3000 fpm: Inlet Airflow Rate	52178 cfm	41742 cfm	31307 cfm

Vektor-CD Size 60 (HV Nozzle)

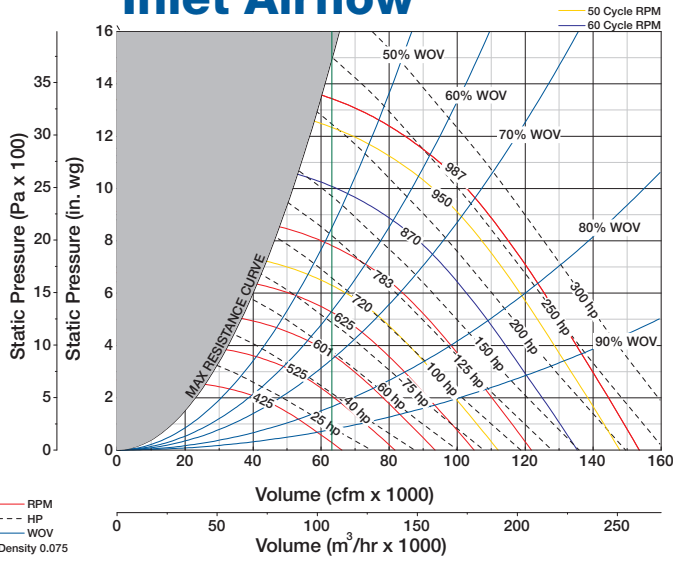
Sound Power by Octave Band																					
		Inlet Sound Power										Outlet Sound Power									
rpm	%WOV	1	2	3	4	5	6	7	8	LwA	dBA	1	2	3	4	5	6	7	8	LwA	dBA
300	100	93	84	75	73	68	62	56	46	76	64	92	83	78	74	69	62	55	45	76	65
300	80	92	84	75	72	66	62	54	45	75	63	90	82	76	72	66	61	53	42	74	63
300	60	89	82	73	71	65	62	54	44	73	62	90	81	76	72	66	61	52	42	74	63
300	50	89	82	73	70	64	61	53	44	73	61	89	80	76	71	65	60	51	42	73	62
300	40	89	82	74	69	64	60	52	44	73	61	89	82	76	71	64	59	51	42	73	62
400	100	99	89	81	79	77	71	66	60	82	71	94	86	82	80	78	71	65	58	82	71
400	80	97	88	80	79	75	70	64	57	81	70	92	85	81	79	75	69	63	54	81	69
400	60	94	86	78	78	74	70	64	58	80	69	91	84	79	78	74	69	63	54	80	68
400	50	94	85	78	76	73	69	63	57	79	67	94	84	79	77	73	69	62	54	79	68
400	40	95	87	79	77	72	69	63	57	79	68	93	85	81	77	72	68	61	54	79	68
600	100	105	106	94	90	89	85	78	74	95	84	101	101	93	91	89	86	78	72	94	83
600	80	103	105	92	88	87	83	77	73	94	82	100	99	92	89	87	82	76	69	92	81
600	60	102	102	90	88	86	82	77	72	92	81	99	97	89	88	86	81	76	69	91	79
600	50	103	102	90	87	85	81	77	71	92	80	102	97	89	87	85	81	76	69	90	79
600	40	105	102	92	87	84	80	76	70	92	80	106	98	91	88	84	80	75	68	91	79
800	100	103	111	100	98	97	97	87	82	103	92	105	109	100	98	96	95	86	80	102	90
800	80	102	109	98	97	95	94	85	81	101	89	103	107	98	97	95	91	84	78	100	88
800	60	102	107	96	96	94	91	85	81	99	88	102	105	96	95	93	90	84	78	98	87
800	50	106	107	97	95	93	90	84	81	99	87	107	105	95	94	92	89	83	78	98	86
800	40	109	108	98	95	92	88	83	80	99	87	112	106	99	96	92	89	83	78	99	87
1085	100	110	117	112	105	104	105	98	91	111	100	113	118	111	106	103	103	98	89	110	99
1085	80	110	116	110	104	102	102	96	89	109	98	110	115	109	105	102	100	94	87	108	97
1085	60	109	115	108	102	101	99	94	89	107	96	110	114	107	102	100	99	93	87	107	95
1085	50	114	115	108	102	100	98	94	89	107	95	115	114	107	102	100	98	93	87	106	95
1085	40	118	116	109	102	100	97	92	88	107	96	120	117	110	104	100	97	92	86	108	96

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi}, L_{wi}A and outlet L_{wo}, L_{wo}A sound power levels for installation Type A: Free inlet, Free outlet. dBA levels shown represent sound pressure levels 5 feet from the fan in a hemispherical free field. dBA levels are not licensed by AMCA International.

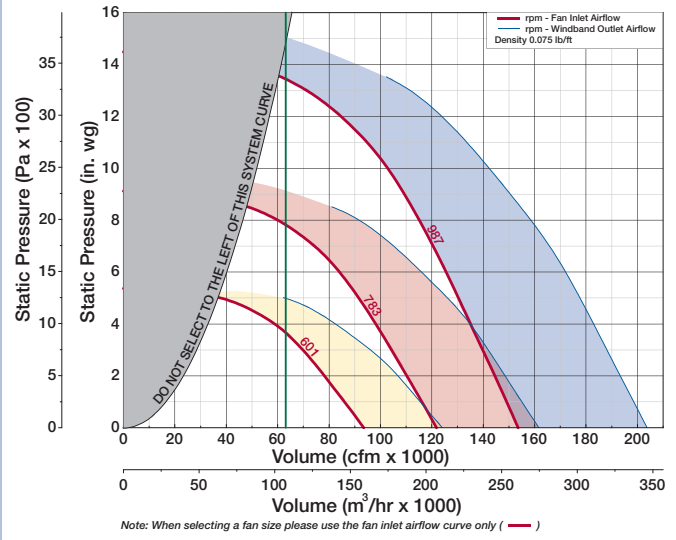
AIR DATA

LV
Low Velocity

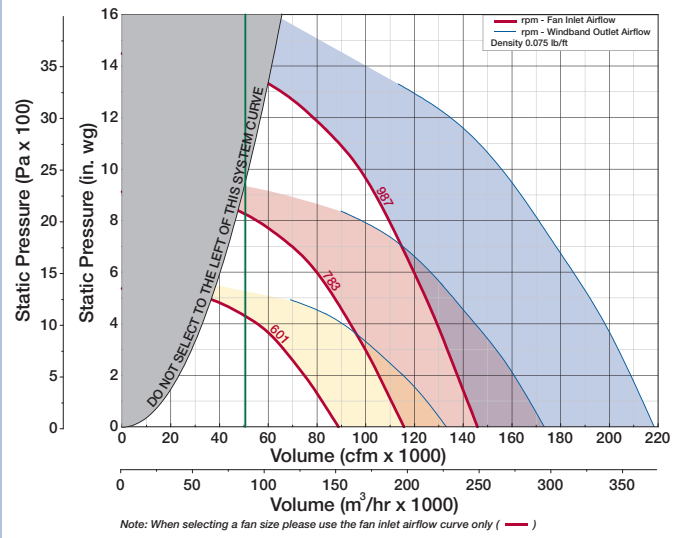
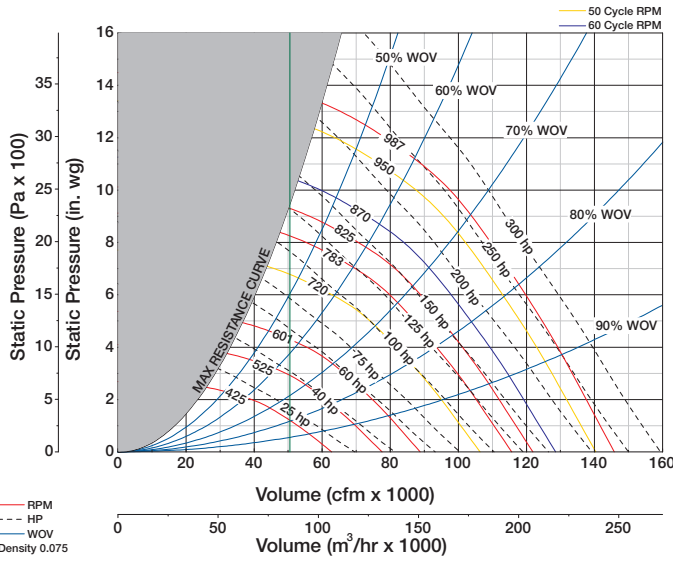
Inlet Airflow



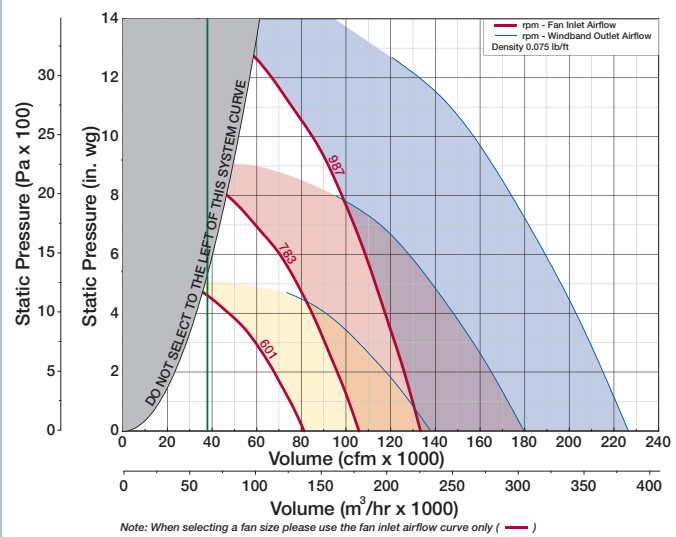
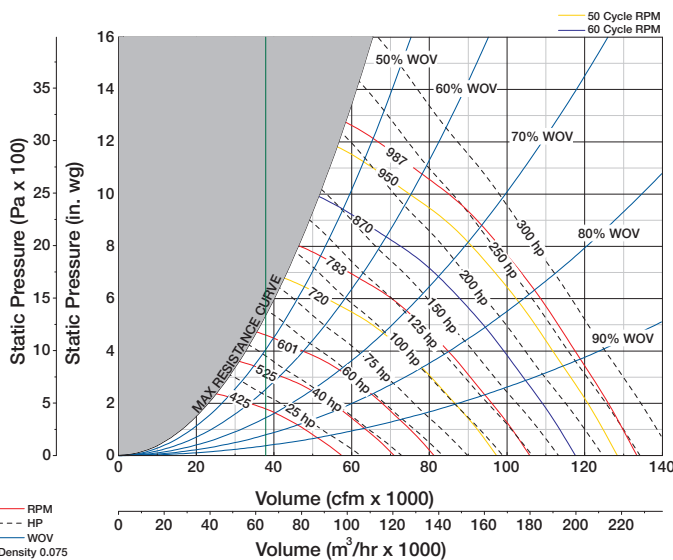
Outlet Airflow



MV
Medium Velocity



HV
High Velocity



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Performance certified is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The AMCA Certified Ratings Seal applies to induced flow fan air performance and sound (AMCA Standard 260).

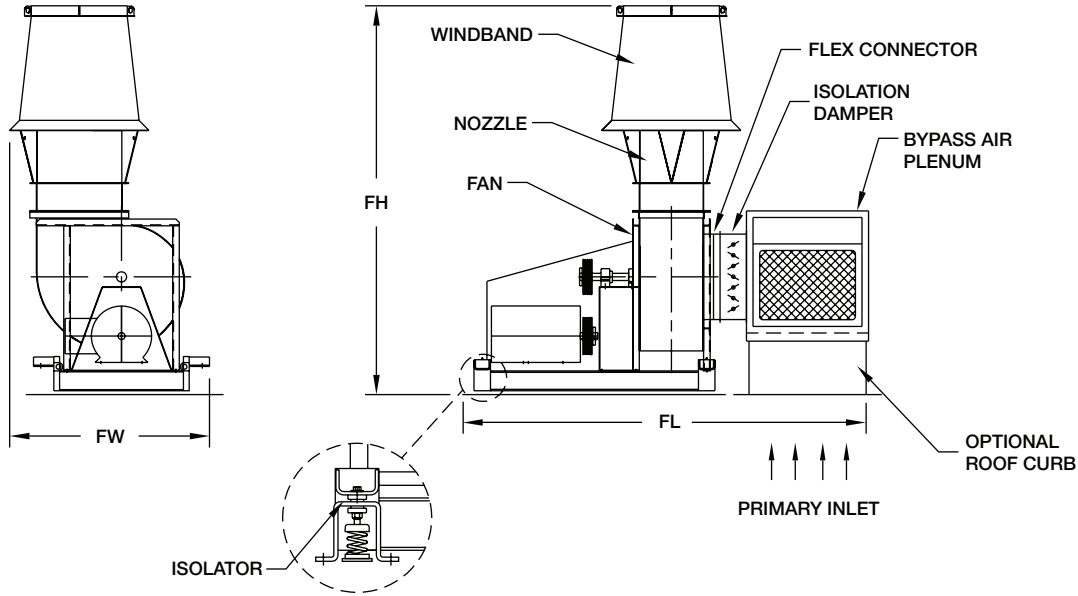
100% Wheel Width
Windband Outlet Area = 40.06 ft ²
Class II Fan Max rpm = 783
Class III Fan Max rpm = 987
Effective Plume @ 10 mph Crosswind Height {ft}
$\frac{(3 * \text{Windband Outlet Volume} * 0.178)}{880} + 23.25$

Performance Data	LV	MV	HV
Nozzle Velocity {ft/min}	Fan cfm 21.05 ft ²	Fan cfm 16.84 ft ²	Fan cfm 12.63 ft ²
% WOV	cfm x 100 rpm x 156	cfm x 100 rpm x 148	cfm x 100 rpm x 135
3000 fpm: Inlet Airflow Rate	63135 cfm	50508 cfm	37881 cfm

Vektor-CD Size 66 (HV Nozzle)

Sound Power by Octave Band																					
rpm	%WOV	Inlet Sound Power										Outlet Sound Power									
		1	2	3	4	5	6	7	8	LwA	dBA	1	2	3	4	5	6	7	8	LwA	dBA
250	100	89	80	73	71	65	60	52	43	73	61	89	79	76	72	66	60	51	42	74	62
250	80	87	79	72	70	63	59	50	42	71	60	87	77	75	69	63	58	49	38	72	60
250	60	85	78	71	69	63	60	50	41	71	59	87	76	75	69	63	58	48	38	71	60
250	50	85	78	71	67	62	59	49	41	70	58	86	76	75	68	62	57	48	38	71	59
250	40	85	78	71	67	61	58	49	41	70	58	86	77	75	68	61	56	47	39	71	59
350	100	98	88	80	79	76	70	65	59	82	70	93	86	82	79	77	70	64	57	82	70
350	80	96	87	79	78	73	69	63	56	80	69	91	85	80	78	74	68	61	53	80	68
350	60	94	85	78	77	73	69	63	57	79	68	90	83	79	77	73	68	61	53	79	67
350	50	94	84	77	76	72	68	62	56	78	67	91	83	79	76	72	68	60	53	78	67
350	40	94	86	79	76	71	68	61	56	79	67	90	84	80	76	71	67	60	53	78	67
500	100	106	100	90	89	87	82	76	72	92	81	101	96	92	89	88	82	75	70	92	81
500	80	105	99	89	87	85	81	75	70	91	79	100	94	90	88	85	79	73	66	90	79
500	60	102	96	87	86	84	80	75	69	89	78	98	92	87	86	84	79	73	66	89	77
500	50	103	96	87	85	83	79	74	69	89	77	99	93	87	86	83	78	73	66	88	77
500	40	104	97	88	85	82	78	73	68	89	77	101	94	89	86	82	77	72	66	88	77
700	100	103	109	99	98	97	96	86	81	102	91	104	108	100	98	96	94	85	80	101	90
700	80	102	108	98	96	95	93	84	80	100	89	102	106	99	97	95	90	83	77	100	88
700	60	102	106	96	95	93	90	84	80	98	87	102	105	96	94	93	89	82	77	98	86
700	50	105	106	96	94	92	89	84	80	98	86	106	104	95	94	92	88	82	77	97	86
700	40	108	107	97	94	91	88	82	79	98	86	111	105	98	95	92	87	82	77	98	86
987	100	112	118	110	106	105	105	98	91	111	100	114	118	110	106	104	104	97	89	111	99
987	80	111	116	109	104	103	102	95	90	109	98	111	115	108	105	103	101	93	87	109	97
987	60	111	115	107	103	102	100	94	90	108	96	111	114	105	103	101	99	93	87	107	95
987	50	115	115	107	103	101	99	94	89	107	96	116	114	105	102	100	98	93	87	106	95
987	40	119	116	108	103	100	97	92	88	107	96	121	116	109	105	101	97	92	86	108	96

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi}, L_{wf}, A and outlet L_{wo}, L_{wof}, A sound power levels for installation Type A: Free inlet, Free outlet. dBA levels shown represent sound pressure levels 5 feet from the fan in a hemispherical free field. dBA levels are not licensed by AMCA International.

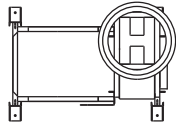


Note: Dimensions are subject to change. Contact your local Greenheck representative for detailed dimensional information.

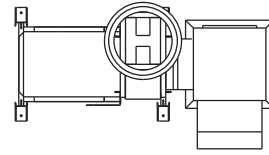
Size	FL (in.)	FW (in.)	FH (in.)
12	103	39	72*
15	106	43	82*
18	113	49	93*
22	122	57	111*
24	125	61	117
27	130	66	129
30	139	71	139
33	152	79	153
36	155	85	164
40	178	93	179
44	191	101	196
49	207	110	213
54	219	120	234
60	232	127	254
66	246	133	279

* Optional stack extensions available to meet NFPA 45 10 ft. minimum physical height guideline.

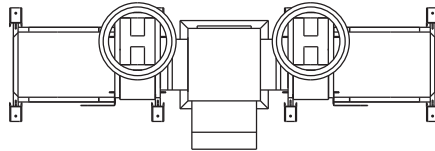
1. Dimensions are in inches. Dimensions are approximate, consult factory for detailed dimensions.
2. Inlet duct (by others) shall be sized so primary air enters plenum at 1500 fpm or less.
3. As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.



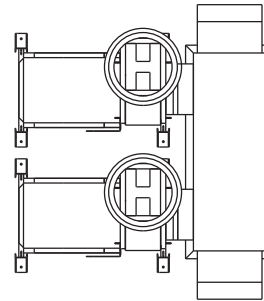
Vektor-CD
Single Fan System



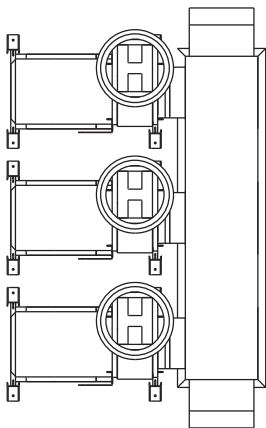
Vektor-CD
Single Fan System
with Plenum



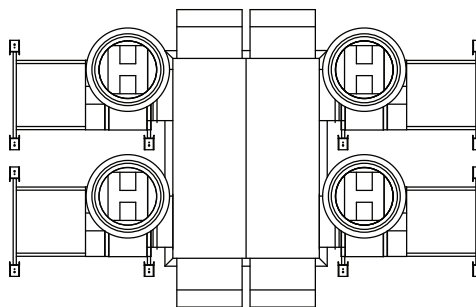
Vektor-CD
Opposed Fan System



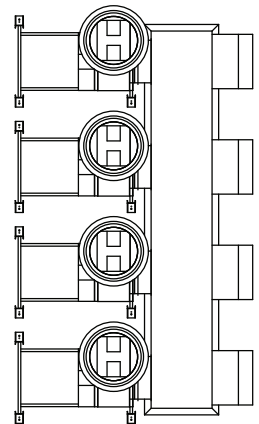
Vektor-CD
Dual Fan System



Vektor-CD
Triple Fan System



Vektor-CD
Opposed Dual Fan System

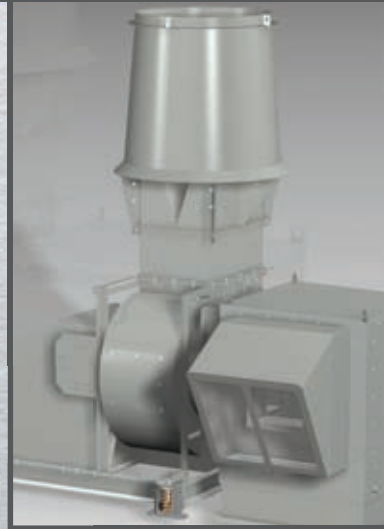


Vektor-CD
Quad Fan System

**AMCA
260
Tested**


Family of Lab Exhaust Systems

VEKTOR™



U.S. Patents:
7048499; 7320636
Mexico Patent:
243465, 258949
China (PR) Patent:
CN1294361 C
Singapore Patents:
124106, 124135
Other Patents
Pending

Singapore Patent:
124105
Other Patents
Pending

	Vektor-H	Vektor-MD	Vektor-CD
Housing Style	Inline Centrifugal	Inline Mixed Flow	Centrifugal
Stack Style	High Plume Nozzle	High Plume Dilution Nozzle	High Plume Dilution Nozzle
Min Flow	270 cfm (850 m ³ /hr)	1,500 cfm (2,550 m ³ /hr)	500 cfm (850 m ³ /hr)
Max Flow	24,000 cfm (40,750 m ³ /hr)	80,000 cfm (135,900 m ³ /hr)	140,000 cfm (237,870 m ³ /hr)
Max ESP	Up to 3.5 in. wg (875 Pa)	Up to 8 in. wg (2000 Pa)	Up to 14 in. wg (3500 Pa)
 US LISTED	Listed for Electrical 705 (File no. 40001) and Grease Removal 762 Power Ventilators for Restaurant Exhaust Appliances (File no. MH11745)	Listed for Electrical 705 (File no. 40001)	Listed for Electrical 705 (File no. 40001)
AMCA Certification	Sound and Air Performance	Induced Flow Fan Air and Sound Performance	Induced Flow Fan Air and Sound Performance
Warranty	1 Year	3 Years	3 Years

Our Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year (Vektor-H) or three years (Vektor-MD, Vektor-CD) from the shipment date. Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid. Should motors furnished by Greenheck prove defective during this period, they should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

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Prepared to Support
Green Building Efforts

