

# Air Circulators

## Air Circulator Selection Guide

### STEP 1: DETERMINE REQUIRED CIRCULATOR TYPE USING THE SELECTION CRITERIA BELOW

	Industrial Circulator	Washdown	Hazardous Location	Automotive Circulator
<b>Environment</b>	Dirty/Humid	Food Processing	Chemicals	Dirty/Humid
<b>Motor</b>	Totally Enclosed	Totally Enclosed	Totally Enclosed	Totally Enclosed
<b>Bearing</b>	Ball/Sleeve	Ball	Ball	Ball
<b>Switch</b>	Pull Chain	—	—	Rocker
<b>Color</b>	Industrial Gray	White/Zinc	Zinc/Gray	Safety Yellow
<b>Certifications</b>	UL/CSA/AMCA Air	UL/CSA/AMCA Air	AMCA Air	UL/CSA/AMCA Air
<b>Hinged Guard</b>	No	No	No	Yes
<b>Oscillating Available</b>	Yes	No	No	No

### STEP 2: DETERMINE THE AIR VELOCITY REQUIRED FOR YOUR APPLICATION

#### Light Activity

- Assembly, table work, customer service, etc.
- 200-400 FPM (Feet Per Minute)

#### Heavy Activity

- Manufacturing, warehouse, millwork, etc.
- 500-700 FPM (Feet Per Minute)

### STEP 3: DETERMINE THE DISTANCE BETWEEN THE FAN AND TARGET OF THE AIRFLOW

### STEP 4: SELECT THE CIRCULATOR USING THE CHART BELOW

Blade Dia. (In.)	HP	Distance From Fan (Ft.)			Velocity Profile	Stock No.
		20	40	60		
<b>Industrial Circulator</b>						
20	1/4	417/265	201/120	—/—	A	3IND20B1Q
20	1/4	417/265	201/120	—/—	A	3IND20B1R
20	1/4	417/265	201/120	—/—	A	3IND20B1E
24	1/4	517/313	187/167	132/49	B	3IND24B1Q
24	1/4	517/313	187/167	132/49	B	3IND24B1R
24	1/4	517/313	187/167	132/49	B	3IND24B1E
30	1/2	769/667	341/319	233/161	C	3IND30D1Q
30	1/2	769/667	341/319	233/161	C	3IND30D1R
30	1/2	769/667	341/319	233/161	C	3IND30D1E
<b>Industrial Oscillating Circulator</b>						
20	1/4	400/350	190/180	90/85	D	3IND20B1A
24	1/4	410/325	185/145	80/60	E	3IND24B1A
30	1/2	710/650	340/310	175/160	F	3IND30D1A
<b>3-Phase</b>						
24	1/4	585	275	155	H	3IND24B7G
30	1/2	750	310	180	J	3IND30D7G
<b>208 Volt</b>						
24	1/4	445	290	95	G	3SPC24B4G
30	1/2	750	310	180	I	3SPC30D4G
<b>277 Volt</b>						
24	1/4	445	290	95	G	3SPC24B5G
30	1/2	750	310	180	I	3SPC30D5G
<b>Washdown</b>						
20	1/4	580	240	155	U	3SPC20B2G
24	1/3	735	245	170	V	3SPC24C2G
30	1/2	750	310	180	J	3SPC30D2G
<b>Hazardous</b>						
24	1/4	520	280	200	W	3SPC24BLG
30	3/4	835	385	295	X	3SPC30ELG
<b>Premium Yellow Circulator</b>						
24	1/4	520/365	265/185	120/85	Y	3YLW24B1H
30	1/4	615/330	320	140	Z	3YLW30B1H

# Air Circulators

## Industrial Air Circulators — Oscillating and Non-Oscillating

Well-suited for air circulation and cooling of factories, foundries, warehouses, manufacturing facilities, garages, schools, auditoriums, hospitals, large offices and similar applications.

### Features and specifications

- All models two speed
- Pedestal Mounted Circulators (3IND20B1Q, 3IND24B1Q and 3IND30D1Q) and Wall/Ceiling Mounted Circulators (3IND20B1R, 3IND24B1R and 3IND30D1R) shipped with mounting accessories included in the box
- Circulator heads are shipped pre-wired and assembled for quick and easy installation
- 115V, 60 Hz, two speed totally enclosed air over (TEAO), ball bearing motors with automatic reset thermal protection
- Stamped aluminum propeller

- Polyester powder coated wire guards comply with OSHA Standard 1910.212, 1/2" max. opening requirement
- Factory wired 10 ft., 3-conductor cord with grounding type molded plug
- Optional mounting accessories: open pedestal base (3CAS02PB), adjustable floor pedestal (3CAS01PB), wall/ceiling bracket (3CAS02WB), suspension bracket (3CAS03SS), I-beam (3CAS01BM)
- Locking tilt adjustment to direct airflow
- Circulator is UL Listed and CSA Certified when used in conjunction with the recommended Air Circulator mounting accessories

### Accessories (available separately)

- For more information, see Air Circulator Accessories.
- Open and closed floor pedestal stand.
- Wall/ceiling bracket.
- Suspension bracket.
- I-Beam mount.

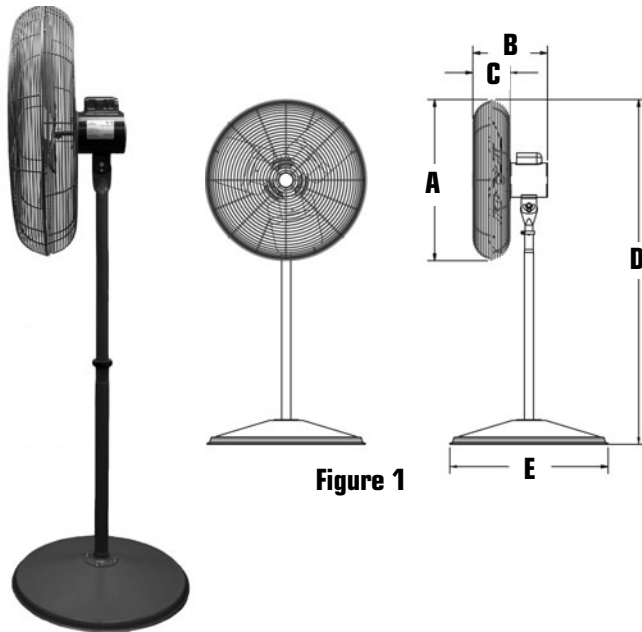


Figure 1

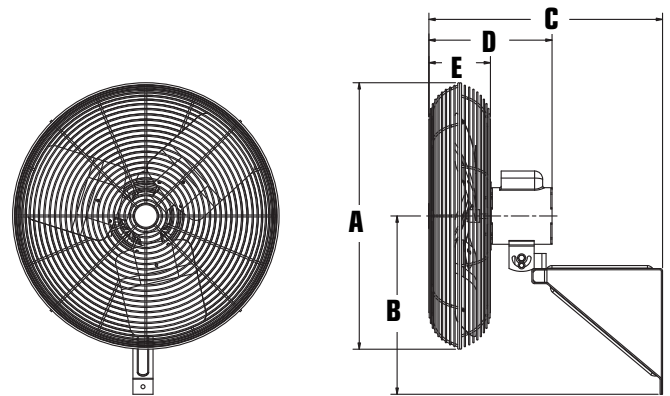


Figure 2



Fantech, Inc. and Systemair Mfg. Inc. certify that the Industrial Air Circulators — Oscillating and Non-Oscillating 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 comply with the requirements of the AMCA Certified Ratings Program.

Model No.	Prop. Dia. (In.)	Dimensions (In.)					Oper. Amps	Watts	Volts/Hz	Ship Wt. (lbs.)	Vel. Chart	Thrust	lb/watt
		A	B	C	D	E	CFM	HP	RPM				
<b>PEDESTAL MOUNTED INDUSTRIAL CIRCULATORS (dimensions refer to Figure 1)</b>													
3IND20B1Q	20	22-1/2	12-1/4	6-1/8	56-5/8 min 83-7/8 max	26	3899/3325	1/4	1130/986	1.4/1.3	183/147	115/60	83
3IND24B1Q	24	26-1/2	12-1/4	6-1/8	56-5/8 min 83-7/8 max	26	5494/3101	1/4	1060/633	1.9/1.6	218/156	115/60	87
3IND30D1Q	30	33	14-1/4	8-1/8	56-5/8 min 83-7/8 max	26	9820/7626	1/2	1131/870	4.2/4.0	488/385	115/60	96
<b>WALL/CEILING MOUNTED INDUSTRIAL CIRCULATORS (dimensions refer to Figure 2)</b>													
3IND20B1R	20	22-1/2	17-3/4	23-1/4	12-1/4	6-1/8	3899/3325	1/4	1130/986	1.4/1.3	183/147	115/60	24
3IND24B1R	24	26-1/2	17-3/4	23-1/4	12-1/4	6-1/8	5494/3101	1/4	1060/633	1.9/1.6	218/156	115/60	44
3IND30D1R	30	33	17-3/4	25-1/4	14-1/4	8-1/8	9820/7626	1/2	1131/870	4.2/4.0	488/385	115/60	53
<b>INDUSTRIAL CIRCULATOR HEADS (dimensions refer to Figure 2)</b>													
3IND20B1E	20	22-1/2	—	—	12-1/4	6-1/8	3899/3325	1/4	1130/986	1.4/1.3	183/147	115/60	24
3IND24B1E	24	26-1/2	—	—	12-1/4	6-1/8	5494/3101	1/4	1060/633	1.9/1.6	218/156	115/60	44
3IND30D1E	30	33	—	—	14-1/4	8-1/8	9820/7626	1/2	1131/870	4.2/4.0	488/385	115/60	37
3IND20B1A*	20	22-1/2	—	—	15-9/16	6-1/8	3615/3305	1/4	1161/1081	3.4/1.3	224/125	115/60	32
3IND24B1A*	24	26-1/2	—	—	16-5/8	6-1/8	5530/4460	1/4	1131/893	3.4/1.7	300/207	115/60	35
3IND30D1A*	30	33	—	—	19	8-1/8	9560/8870	1/2	1139/1047	4.5/3.4	474/385	115/60	57

(\* ) Oscillating models not UL.

**Note:** AMCA Certified Rating Seal applies to airflow rate at free delivery only. Speed (RPM) is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories).

# Air Circulators

## Industrial Air Circulators — Three Phase and 208 & 277 Volt

### Three Phase and 208 & 277 Volt Air Circulators

Designed to provide both spot and general cooling for a wide variety of applications including warehouses, factories, manufacturing facilities, garages, machine shops or offices where special voltages are required. The specially designed fan with a choice of either 208 or 277 volt motor is especially convenient for wiring in conjunction with lighting systems and offers reduced amp draw. 277 volt engineered for quick and economical installation in any facility with 480V, 3 phase, 4-wire WYE connected electrical service.

### Features and Specifications

- Circulator heads are shipped assembled for quick and easy installation
- Three phase units feature 208-230/460V, 60 Hz, totally enclosed single speed motor wired for 460V from the factory
- 208 & 277 volt units feature 60 Hz, Permanent Split Capacitor (PSC), totally enclosed air over (TEAO) single speed motor with automatic reset thermal protection
- Polyester powder coated wire guards comply with OSHA Standard 1910.212, 1/2" max. opening requirement

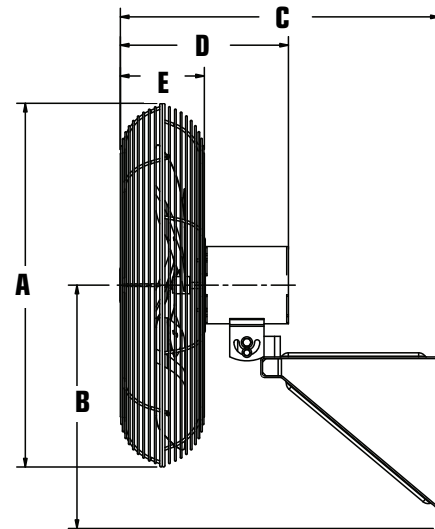
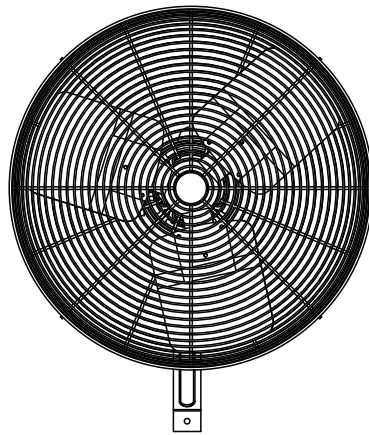
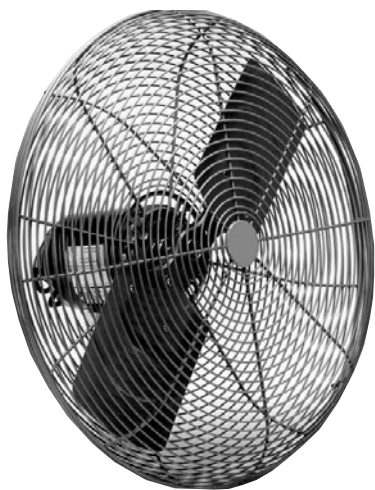
- Stamped aluminum propeller resists corrosion
- Circulator heads feature locking tilt adjustment for directional airflow
- Three-phase circulators are UL Listed when used in conjunction with the recommended Air Circulator mounting accessories. Optional mounting accessories include: wall/ceiling bracket (3CASO2WB), suspension bracket (3CASO3SS) and I-beam (3CASO1BM)
- 208 & 277 volt circulators are UL Listed and CSA Certified when used with the recommended Air Circulator mounting accessories; mountings comply with UL 507 requirements for static load. Supplied with wall/ceiling mounting bracket (3CASO2WB). Fan can be mounted to wall, post or ceiling; secondary support cable included

### Accessories (available separately)

- For more information, see Air Circulator Accessories.
- Wall/ceiling bracket.
- Suspension bracket.
- I-Beam mount.



Fantech, Inc. and Systemair Mfg. Inc. certify that the Industrial Air Circulators — 208 & 277 Volt 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 comply with the requirements of the AMCA Certified Ratings Program.



Model No.	Prop. Dia. (In.)	A	Dimensions (In.)					CFM	HP	RPM	Amps	Oper. Watts	Volts/Hz	Ship Wt. (lbs.)	Vel Chart	Thrust lbf/watt	
<b>THREE PHASE CIRCULATOR HEADS</b>																	
3IND24B7G*	24	26-1/2	17-3/4	23	12-1/4	6-1/8	4987	1/4	1751	0.47	238	208-230/460	60	32	H	2.56	0.011
3IND30D7G*	30	33	18-1/16	25-9/16	14-1/4	8-1/8	9326	1/2	1136	0.86	446	208-230/460	60	50	I	5.91	0.013
<b>208 AND 277 VOLT AIR CIRCULATORS</b>																	
3SPC24B4G	24	26-1/2	17-3/4	23	12-1/4	6-1/8	5200	1/4	1739	2.3	337	208/60		36	G	2.77	0.008
3SPC24B5G	24	26-1/4	17-3/4	23	12-1/4	6-1/8	5310	1/4	1735	1.9	334	277/60		38	G	2.77	0.008
3SPC30D4G	30	33	18-1/16	25-9/16	14-1/4	8-1/8	9360	1/2	1114	3.5	561	208/60		61	I	6.39	0.011
3SPC30D5G	30	33	18-1/16	25-9/16	14-1/4	8-1/8	9340	1/2	1116	2.4	563	277/60		62	I	6.54	0.012

(\* ) Not UL or CSA.

**NOTE:** AMCA Certified Rating Seal applies to airflow rate at free delivery only. Speed (RPM) is nominal. Performance is based on actual speed of test.

# Air Circulators

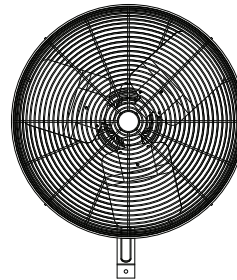
## Special Purpose Circulators

### Washdown Air Circulator Heads With Wall/Ceiling Mounting Bracket

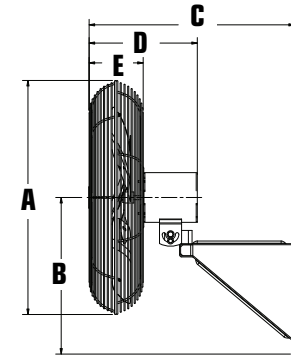
Designed to provide both spot and general cooling in food or beverage processing plants, this specialty fan is appropriate for use in washdown or other humid environments.

#### Features and specifications

- Motor complies with BISSC and NEMA Definition MG1-1.26.5 Standard for waterproof motors
- 115/230V, 60 Hz, permanent split capacitor (PSC), totally enclosed air over (TEAO) single speed motor with automatic reset thermal protection and double-sealed ball bearings
- Stamped aluminum propeller resists corrosion
- Zinc plated guards comply with OSHA Standard 1910.212, 1/2" max. opening requirement
- Circulator heads feature locking tilt adjustment for directional airflow
- Circulator passes UL 507 spray test
- Mountings comply with UL 507 requirements for static load
- Supplied with Wall/ceiling mounting bracket (3CAS02WB). Bracket has adjustable pivot, extends 13," and has (3) 13/32" mounting holes. Fan can be mounted to wall, post or ceiling; secondary support cable included
- Motor painting process uses both durable USDA-approved white epoxy primer and paint



Fantech, Inc. and Systemair Mfg. Inc. certify that the Special Purpose Circulators shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 230 and comply with the requirements of the AMCA Certified Ratings Program.



Model No.	Prop. Dia. (In.)	Dimensions (In.)					CFM	HP	RPM	Watts	Amps	Ship Wt. (lbs.)	Vel. Chart	Thrust	lbf/watt	Volts/Hz
		A	B	C	D	E										
3SPC20B2G	20	22-1/2	17-3/4	23	13-11/16	6-1/8	4036	1/4	1744	208	2.6	38	U	2.40	0.012	115/230/60
3SPC24C2G	24	26-1/2	17-3/4	23	13-11/16	6-1/8	6849	1/3	1714	389	4.0	38	V	4.73	0.012	115/230/60
3SPC30D2G	30	33	18-1/16	25-9/16	17-3/16	8-1/8	10001	1/2	1158	495	4.7	58	J	6.38	0.013	115/230/60

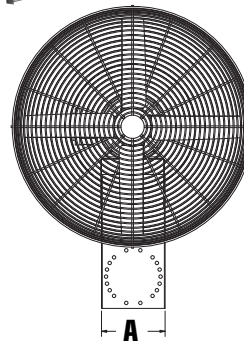
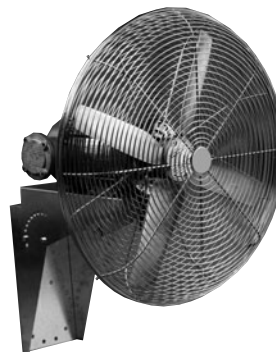
**NOTE:** AMCA certified rating seal applies to airflow rate at free delivery only. Speed (RPM) shown is nominal. Performance is based on actual speed of test.

### Hazardous Location Air Circulator Heads With Wall Mounting Bracket

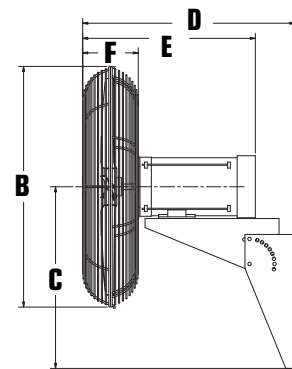
Designed to give maximum performance in hazardous environments. The motor on this specialty circulator is appropriate for uses in atmospheres containing flammable or explosive vapors or gases as defined under Article 500 of the National Electrical Code (NEC).

#### Features and Specifications

- 115/230V, 60 Hz, totally enclosed fan cooled (TEFC), single speed hazardous location, capacitor start ball bearing motor with automatic reset thermal protection. UL Listed conduit box supplied with motor
- Motors only are UL Listed and CSA Certified for Class I, Div. 1, Group D; and Class II, Div. 1, Groups E, F, and G hazardous locations
- Zinc plated steel guards comply with OSHA Standard 1910.212, 1/2" max. opening requirement
- Spark-resistant cast aluminum propeller
- Supplied with galvanized steel wall bracket for mounting to wall or post
- Mounting brackets allow adjustment for multi-directional airflow
- Secondary support cable included for overhead mounting
- Fan not appropriate for use where paint residue can accumulate on motor



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Model No.	Prop. Dia. (In.)	Dimensions (In.)						CFM	HP	RPM	Oper. Watts	Ship Wt. (lbs.)	No. of Blades	Vel. Chart	Thrust	lbf/watt	Volts/Hz	
		A	B	C	D	E	F											
3SPC24BLG	24	7	26-1/2	20	23-3/8	19	6-1/8	5486	1/4	1174	343	6.0/2.9	56	4	W	3.08	0.009	115/230/60
3SPC30ELG	30	7	33	20	25-1/8	21-3/4	7-8/9	10937	3/4	1149	701	7.0/3.5	68	6	X	7.56	0.011	115/230/60

**NOTE:** AMCA certified rating seal applies to airflow rate at free delivery only. Speed (RPM) shown is nominal. Performance is based on actual speed of test.

# Air Circulators

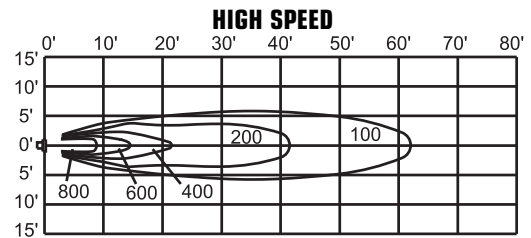
## Air Velocity/Axial Throw Profiles

The air velocity profiles shown below are graphical illustrations of how far a circulator will move the air and the speed of the airflow expressed in feet per minute (FPM).

### Industrial Air Circulators

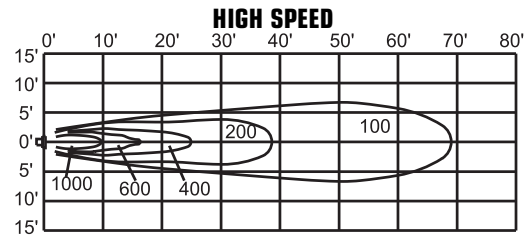
**Chart A**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	Distance from Fan (Ft.)		
			20	40	60	80
3IND20B1E	20"	High/Low	417/265	201/120	—/—	—/—
3IND20B1Q	20"	High/Low	417/265	201/120	—/—	—/—
3IND20B1R	20"	High/Low	417/265	201/120	—/—	—/—



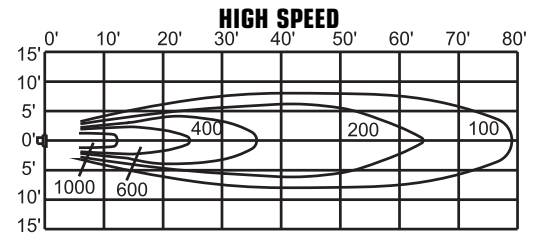
**Chart B**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	Distance from Fan (Ft.)		
			20	40	60	80
3IND24B1E	24"	High/Low	517/313	187/167	132/49	—/—
3IND24B1Q	24"	High/Low	517/313	187/167	132/49	—/—
3IND24B1R	24"	High/Low	517/313	187/167	132/49	—/—



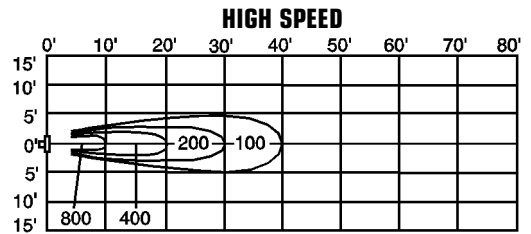
**Chart C**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	Distance from Fan (Ft.)		
			20	40	60	80
3IND30D1E	30"	High/Low	769/667	341/319	233/161	—/—
3IND30D1Q	30"	High/Low	769/667	341/319	233/161	—/—
3IND24D1R	30"	High/Low	769/667	341/319	233/161	—/—



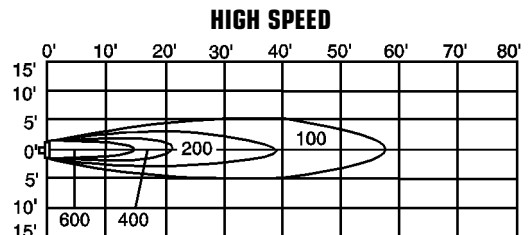
**Chart D**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	Distance from Fan (Ft.)		
			20	40	60	80
3IND20B1A	20"	High/Low	400/350	190/180	90/85	—/—



**Chart E**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	Distance from Fan (Ft.)		
			20	40	60	80
3IND24B1A	24"	High/Low	410/325	185/145	80/60	—/—



# Air Circulators

## Air Velocity/Axial Throw Profiles

The air velocity profiles shown below are graphical illustrations of how far a circulator will move the air and the speed of the airflow expressed in feet per minute (FPM).

### Industrial Air Circulators (Continued)

Chart F

Model No.	Prop. Dia. (in.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3IND30D1A	30"	High/Low	710/650	340/310	175/160	—/—

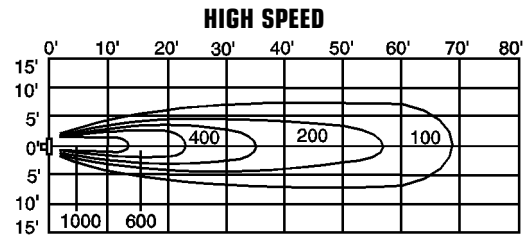


Chart G

Model No.	Prop. Dia. (in.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3SPC24B4G	24"	1725	445	290	95	—
3SPC24B5G	24"	1725	445	290	95	—

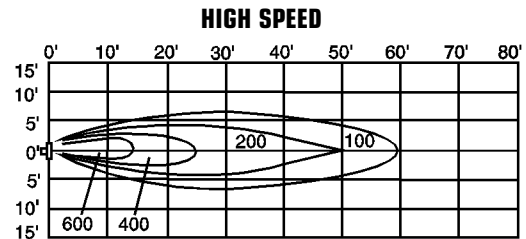


Chart H

Model No.	Prop. Dia. (in.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3IND24B7G	24"	1725	585	275	155	—

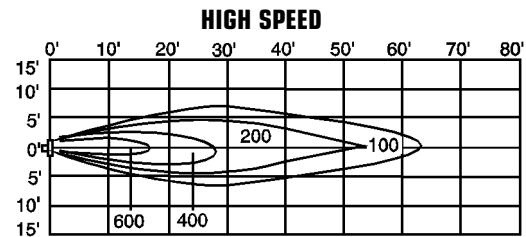


Chart I

Model No.	Prop. Dia. (in.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3SPC30D4G	30"	1075	750	310	180	—
3SPC30D5G	30"	1075	750	310	180	—

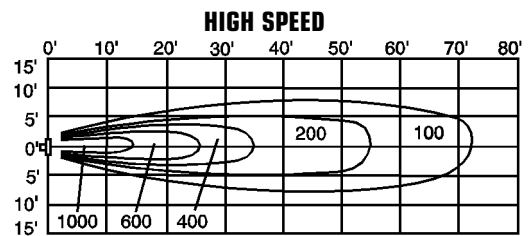
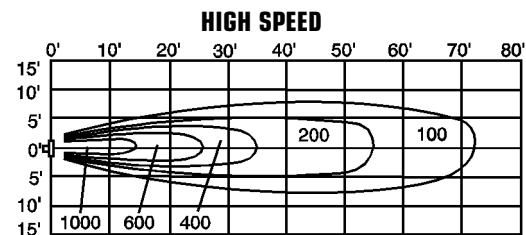


Chart J

Model No.	Prop. Dia. (in.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3IND30D7G	30"	1075	750	310	180	—
3SPC30D2G	30"	1075	750	310	180	—



# Air Circulators

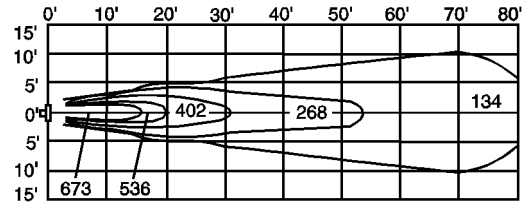
## Air Velocity/Axial Throw Profiles

The air velocity profiles shown below are graphical illustrations of how far a circulator will move the air and the speed of the airflow expressed in feet per minute (FPM).

### High Volume, High Velocity Air Cannons (Continued)

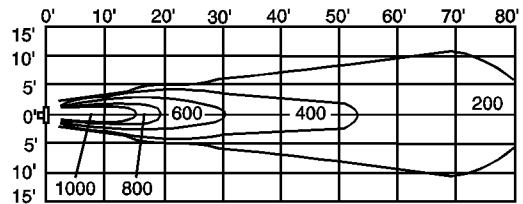
**Chart P**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3HV224C2F	24"	1140	530	350	240	140
3HV224C2C	24"	1140	530	350	240	140



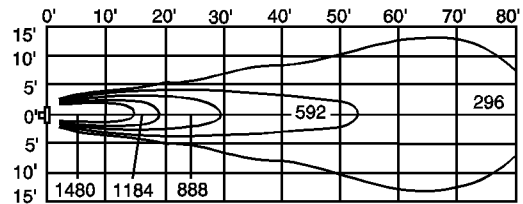
**Chart Q**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3HV224F2F	24"	1725	790	520	360	220
3HV224FYF	24"	1725	790	520	360	220
3HV224F2C	24"	1725	790	520	360	220
3HV224FYC	24"	1725	790	520	360	220



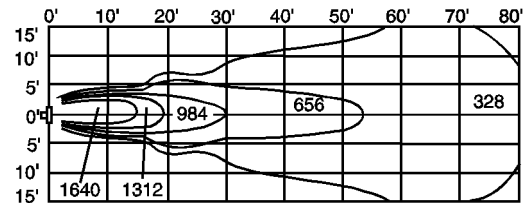
**Chart R**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3HV230H2F	30"	1725	1160	760	520	320
3HV230HYF	30"	1740	1160	760	520	320
3HV230H2C	30"	1725	1160	760	520	320
3HV230HYC	30"	1740	1160	760	520	320



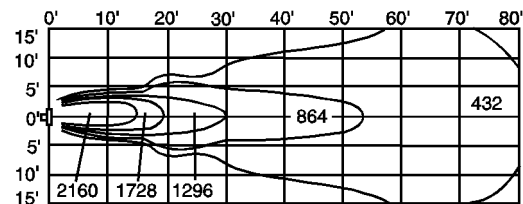
**Chart S**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3HV236F2F	36"	1140	1280	840	580	350
3HV236FYF	36"	1155	1280	840	580	350
3HV236FYC	36"	1155	1280	840	580	350
3HV236F2C	36"	1140	1280	840	580	350



**Chart T**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3HV236HYF	36"	1150	1690	1110	760	460
3HV236HYC	36"	1150	1690	1110	760	460



# Air Circulators

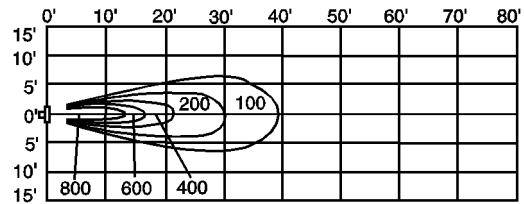
## Air Velocity/Axial Throw Profiles

The air velocity profiles shown below are graphical illustrations of how far a circulator will move the air and the speed of the airflow expressed in feet per minute (FPM).

### Special Purpose Circulators

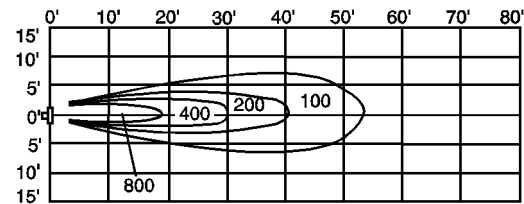
**Chart U**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3SPC20B2G	20"	1138	580	240	155	75



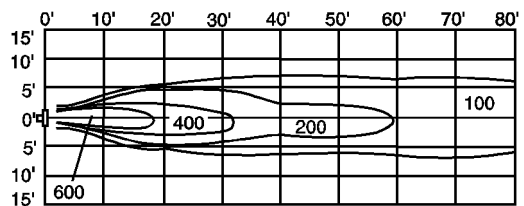
**Chart V**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3SPC24C2G	24"	1718	735	245	170	135



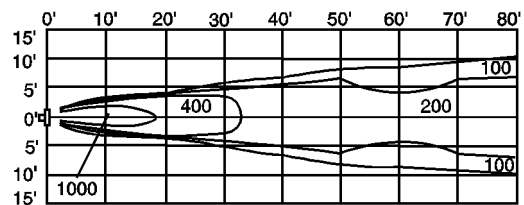
**Chart W**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3SPC24BLG	24"	1176	520	280	200	125



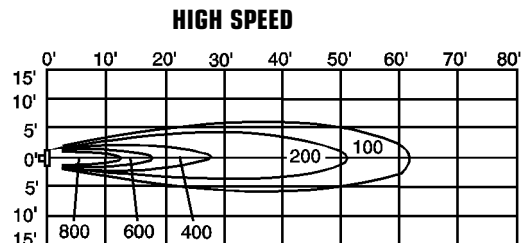
**Chart X**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3SPC30ELG	30"	1150	835	385	295	260



**Chart Y**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			10	20	40	60
3YLW24B1H	24"	High/Low	940/660	520/365	265/185	120/85



**HIGH SPEED**

# Air Circulators

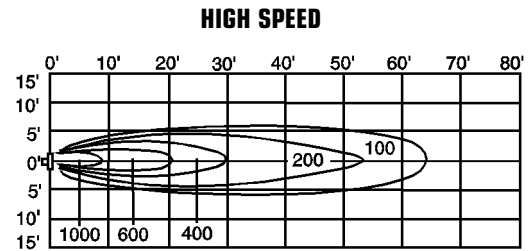
## Air Velocity/Axial Throw Profiles

The air velocity profiles shown below are graphical illustrations of how far a circulator will move the air and the speed of the airflow expressed in feet per minute (FPM).

### Special Purpose Circulators (Continued)

**Chart Z**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			10	20	40	60
3YLW30B1H	30"	High/Low	865/465	615/330	320/—	140/—



### High Volume, High Velocity Air Cannons

**Chart O**

Model No.	Prop. Dia. (In.)	Fan Speed	Air Penetration (FPM)			
			20	40	60	80
3HV218B2F	18"	1725	440	240	100	—
3HV218BYF	18"	1725	440	240	100	—
3HV218B2C	18"	1725	440	240	100	—
3HV218BYC	18"	1725	440	240	100	—

