

# AEROVENT

INDUSTRIAL VENTILATION SYSTEMS



**Direct Drive  
Ring Fan**



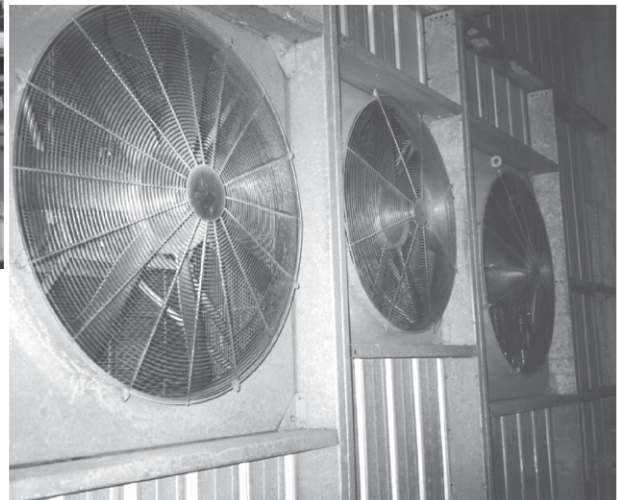
**Direct Drive  
Panel Fan**

## **PANEL AND RING FANS**

**Macheta® Airfoil Design Propellers**

**Direct Drive & Belt Driven**

**Sizes 9" thru 96"**



*Aerovent manufacturing facility*

*Raw product storage panel fan installation*

Aerovent has provided quality air moving and ventilation equipment for over seventy years and is a recognized leader in the industry. Aerovent maintains this status through continued research and development of innovative designs. One example of Aerovent’s commitment to development is the invention of the Macheta® tip on cast aluminum airfoil blades, featured on page 3 of this bulletin.

Pictured at right is a raw product storage facility, one of the many installations of Aerovent panel fans. A raw product storage facility stores and preserves harvested produce before it is transported to supermarkets. In storage, crops such as potatoes and onions continue to breathe. They produce carbon dioxide and moisture and need fresh air (i.e., oxygen) supplied to remain fresh. Without fresh air the carbon dioxide would suffocate the produce and the high moisture content would allow mold to grow, spoiling it. The conditions of the stor-

age area are critical for these crops to remain fresh and thus marketable. By supplying air with the Aerovent panel fans, the high content of carbon dioxide is removed and the humidity in the storage facility is reduced. For this high moisture application, the panel fans are manufactured in a direct drive arrangement, using cast aluminum wheels with hot-dipped galvanized housings.

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## Certification



Aerovent certifies that the Direct Drive and Belted Panel and Ring fans, and the Direct Drive and Belted Reversible Panel and Ring fans, shown on pages 10 through 22 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.

# Design Features

## Propeller Design

Aerovent's trademark propeller designs are suitable for a wide variety of applications. Each propeller is manufactured to withstand the punishing loads and high rotational speeds characteristic of fan operation.

All propellers and hubs are cast from 319 aluminum as standard. Propeller sizes 9" through 72" are cast solid. Sizes 84" and 96" are adjustable pitch with individual blades and hub. For specific applications such as high temperature environments (600°F maximum), cast solid propellers are available in 240 aluminum alloy and, for corrosive environments, propellers are available in Dura-Metal (aluminum bronze, 500°F maximum) alloy.

Aerovent's trademark Macheta® propeller design is the result of many years of research and development of cast aluminum airfoil propellers. Through this research, Aerovent developed the Macheta® tip on the trailing edge of each blade to increase the fan performance. The details below describe Types M, L and S propellers.

### Type M

Available in a six-blade design on sizes 9" and 12". The Type M propeller is the original Macheta® design with narrow blades and patented Macheta® tip on the trailing edge. This design offers quiet operation for small fans running at higher RPM levels, e.g., 1750 and 3450 RPM.

### Type L

Available in a two-blade design on sizes 24" through 96", and a four-blade design on sizes 14" through 96". The Type L propeller was designed from the Type M Macheta® propeller, but features wider blades to meet high volumes and low noise requirements at reduced speeds.

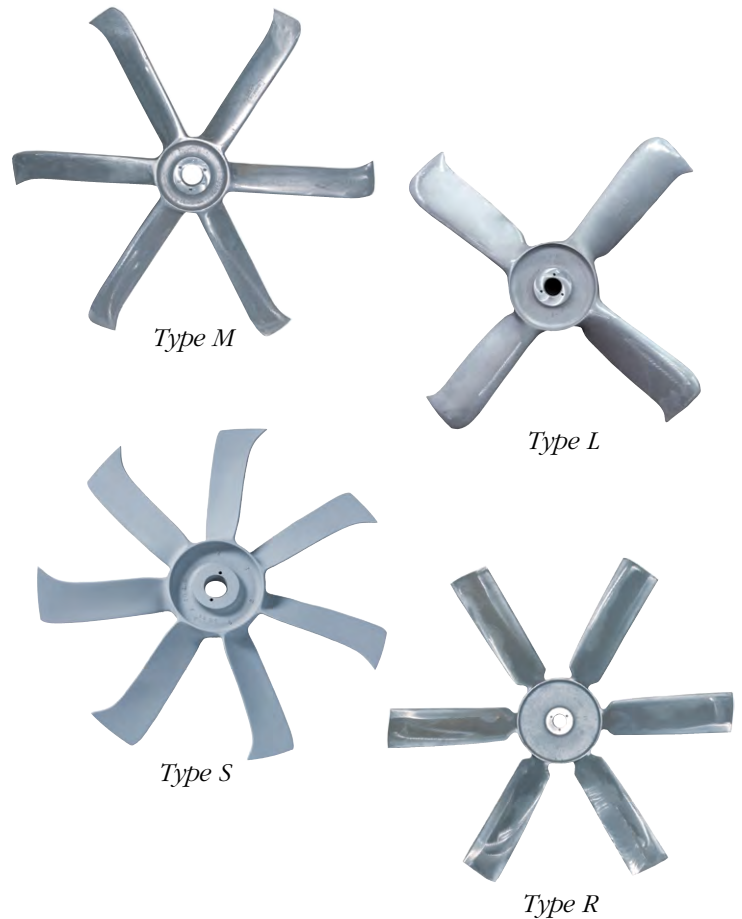
For a specified horsepower, the two-blade and four-blade designs have similar performance characteristics. Both the two-blade and four-blade designs offer quiet operation. However, the four-blade design is slightly quieter and should be used in applications where sound is critical. The two-blade configuration should be used when first cost is important.

### Type S

Available in a seven-blade design on sizes 14" through 72". The Type S propeller design increases the static pressure capabilities up to 1.50", yet maintains low brake horsepower requirements. The Type S propeller is recommended for applications requiring 0.75" static pressure and higher.

### Type R

Aerovent has designed and patented a truly reversible propeller designated as Type R. This blade design is capable of moving the same volume of air, at the same brake horsepower requirements, in either airflow direction. The Type R propeller design is used in both the Reversible Panel and Ring Fan, as well as in the Tu-WAY™ Roof Ventilator. (See Bulletin 615.)



The Type R propeller is available in a six-blade design on sizes 24" through 96". This propeller design is used for processes where conditions call for exhausting air during some periods and supplying air during others.

### Maximum Propeller RPM\*

SIZE	PROPELLER TYPE				
	M6	L2	L4	S7	R6
9	5000	—	—	—	—
12	5000	—	—	—	—
14	—	—	4911	4911	—
16	—	—	4684	4684	—
18	—	—	4456	4456	—
21	—	—	4002	4002	—
24	—	3501	3501	3501	3501
30	—	2674	2674	2674	2674
36	—	2228	2228	2228	2228
42	—	1819	1819	1819	1819
48	—	1432	1432	1432	1432
54	—	1273	1273	1273	1273
60	—	1146	1146	1146	1146
72	—	902	902	902	902
84	—	773	773	—	773
96	—	597	597	—	597

\*The "Maximum Propeller RPM" table is provided for informational purposes only. RPM's shown in this table are maximum propeller speeds, NOT maximum fan speeds. Use rating tables in this bulletin as a guide for maximum fan speeds.

## Standard Panel and Ring Fans

The Panel and Ring Fan housings are constructed of heavy-gauge steel with an integral deep spun orifice for greater airflow efficiency and maximum airflow capacity. If a sharp edged entrance is used, the flow is non-uniform when entering the fan, increasing the horsepower requirements and reducing the airflow capacity.

Both types of fans are also available in standard or reverse flow arrangements. A second orifice is added to convert the unit to reverse flow.

Aerovent's Panel and Ring Fans also feature an all-welded, triangulated, reinforced motor base plate to ensure the fan's long life in heavy-duty service.

Tip clearance is critical to the fan's performance and efficiency. Proper tip clearance ensures that the fan will perform according to the published performance tables. Strict quality standards are in place to maintain proper tip clearance between the propeller and the orifice.

All Panel and Ring Fans in this bulletin are licensed to bear the AMCA Seal for Air Performance. This rigorous testing procedure ensures that identical performance ratings are achieved for either housing type.

For special application requirements, Aerovent offers the following options:

- Hot dipped galvanized construction (fan housing only)
- All aluminum construction
- Various coatings and options applied directly to the fan and propeller.

All fans are furnished with standard NEMA frame motors, when motors are to be provided with the fan. This feature permits substitution to other manufacturers that use NEMA frame motors.

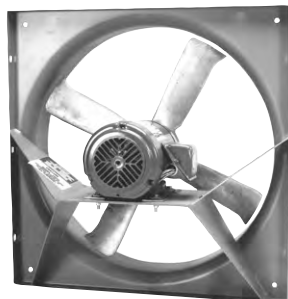
### Direct Drive

Aerovent's Direct Drive Panel and Ring Fans feature low maintenance needs due to minimal moving parts. There are no fan bearings, drive sheaves or belts to maintain.

The propeller on the Direct Drive Panel and Ring Fan is attached to the motor shaft with knurled cup point setscrews on fan sizes up to 16" diameter and split taper lock bushings on fan sizes 18" and larger. These mounting techniques ensure correct alignment and positive locking of the propeller to the shaft.



*Direct drive panel fan (propeller side)*



*Direct drive panel fan (motor side)*

### Belted

Aerovent's Belted Panel and Ring Fans offer performance flexibility. Belted units are available in sizes 24" to 96".

- Several fan sizes can be used for a given performance to meet an existing wall opening dimension.
- First costs can be reduced by using a more economical motor.
- Fan performance can be adjusted with a simple and inexpensive drive change if system performance changes after the fan has been installed.

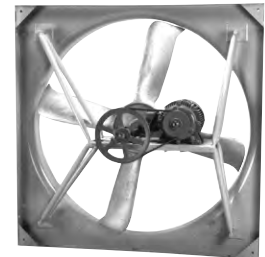
The Belted Panel and Ring Fans have the propeller secured to the fan shaft with a split taper lock bushing. Split taper lock bushings ensure correct alignment and positive locking of the propeller to the shaft.

Oversized bearings are used on Belted Panel and Ring Fans to ensure maximum bearing life for heavy-duty service.

All drive selections for Belted Panel and Ring Fans are designed with a 1.2 service factor as standard.



*Belted panel fan (propeller side)*



*Belted panel fan (motor side)*

### Applications

Direct Drive Panel and Ring Fans are designed for general ventilation applications such as:

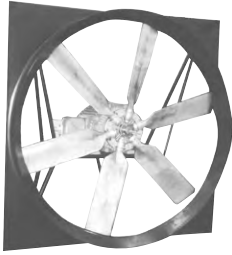
- Heat Transfer Devices
- Industrial Plants
- Raw Product Storage
- Process Equipment

Belted Panel and Ring Fans are designed for general ventilation and process cooling involving the movement of clean, ambient temperature air. Typical applications include:

- Air Filter Units
- Casting Cooling
- Cold Room Circulation
- Condensation Control
- Electrical Panel & Transformer Cooling
- Elimination of Heat Stratification
- Greenhouse Ventilation
- Non-Corrosive Fume Exhaust
- Parking Garages
- Washed Parts Drying

# Reversible Panel and Ring Fans

Aerovent's reversible blade design, defined as Type R, is a truly reversible cast aluminum propeller. It is capable of moving the same volume of air, at the same brake horsepower requirements, in either airflow direction.



*Direct drive  
reversible panel fan  
(propeller side)*

The Reversible Panel Fan is built with an integral deep spun double orifice on sizes 24" through 48". A fabricated double tapered orifice is supplied on sizes 54" through 96". The double orifice panel is constructed of heavy-gauge steel as standard. A double orifice design allows the air to flow into the fan uniformly in both airflow directions. A uniform flow permits the fan to move the maximum volume of air at the highest efficiency.

Aerovent's Reversible Panel and Ring Fans feature an all-welded, triangulated, reinforced motor base plate to ensure the fan's long life in heavy-duty service.

Reversal of the airflow direction is easily accomplished by the flip of a switch. In a three-phase application, a simple drum switch may be used to stop the motor and restart it in the opposite direction.

**IMPORTANT:** Allow the fan propeller to come to a complete stop before restarting the motor in the opposite direction.

Tip clearance is critical to the fan's performance and efficiency. Proper tip clearance ensures that the fan will perform according to the published performance tables. Strict quality standards are in place to maintain proper tip clearance between the propeller and the orifice.

The Reversible Panel and Ring Fans have the propeller secured to the motor shaft for Direct Drive, and to the fan shaft for Belted, with a split taper lock bushing. Split taper lock bushings ensure correct alignment and positive locking of the propeller to the shaft.

All Reversible Panel and Ring Fans in this bulletin are licensed to bear the AMCA Seal for Air Performance.

For special application requirements, various coatings can be applied to the fan, or the fan can be manufactured in an all-aluminum construction.

All fans are furnished with standard NEMA frame motors, when motors are to be provided with the fan. This feature permits substitution to other manufacturers that use NEMA frame motors.

## Direct Drive

Aerovent's Direct Drive Reversible Panel and Ring Fans feature low maintenance due to minimal moving parts. There are no fan bearings, drive sheaves or belts to maintain.

## Belted

Aerovent's Belted Reversible Panel and Ring Fans have similar characteristics to the Standard Flow Belted Panel and Ring Fans.

- Several fan sizes can be used for a given performance to meet an existing wall opening dimension.
- First costs can be reduced by using a more economical motor.
- Fan performance can be adjusted with a simple and inexpensive drive change, if system performance changes after the fan has been installed.

Oversized bearings are used on Reversible Panel and Ring Fans to ensure maximum bearing life for heavy-duty service.

All drive selections for Reversible Panel and Ring Fans are designed with a 1.2 service factor as standard.

## Applications

Aerovent's truly Reversible Panel and Ring Fans are an innovative design, benefiting many fan applications. They are designed for processes that need exhausting during some periods and supplying air during other periods.

For example, in foundry ventilation a reversible fan can provide better comfort ventilation by supplying air during the molding operations, and then be reversed to exhaust the smoke when the molds are poured. Using a Reversible Fan for this process saves on equipment costs. Without a Reversible Fan, two fans would be required to handle the operation: one to exhaust and one to supply air.

The development of this unique fan offers other processes this same advantage, for example:

- Arenas
- Foundry Ventilation
- Gymnasiums
- Heat Exchangers - Certain Types
- Lumber Drying Kilns
- Meat Processing Plants - Smoke Curing of Meat
- Quick-Freeze Rooms
- Special Testing Facilities

## General Application Guidelines

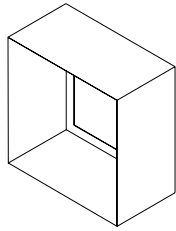
When installing Panel and Ring Fans, the following guidelines should be considered.

- Adequate make-up air is necessary to avoid excessive negative pressure.
- Two or more smaller fans may be more effective than one large fan, as two fans distribute the air better and provide the application flexibility.
- When exhausting air from heat producing equipment, locate the fan close to the equipment.
- When possible, locate the fans so they blow in the same direction as the wind.
- When supplying air to a work area, locate the fan so it blows across it.
- When supplying air into a building, locate the fan so clean outside air is being provided. It is not recommended to locate a supply fan right next to an exhaust fan.
- It is not recommended to locate fans across from each other in a confined area.

# Accessories

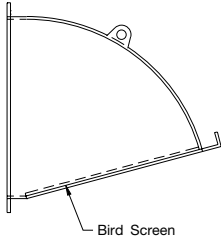
## Mounting Adaptor

An all welded, heavy-gauge, square wall box is designed for mounting the fan and its accessories (e.g., shutter, weatherhood, mounting plate and guards) to the wall.



## Weatherhood

The weatherhood protects the fan, shutter and inside the building against rain and snow. It can be sized to fit the mounting adaptor or the wall opening. It includes a bird screen.



## Wire Safety Guards

### Round OSHA Type – “PMS” Guard

A spiral type guard with electroplated zinc and special lacquer finish that meets Occupational Safety and Health Act Standards (OSHA). The guard is mounted on the propeller side of the Panel and Ring Fan for employee safety and protection of the fan propeller.

### Square OSHA Type – “WWII” Guard

The bolt together guard design comes in five pieces for quick assembly. The design meets Occupational Safety and Health Act Standards (OSHA). This guard is mounted on the motor-side of the Panel Fan for employee safety and protection of the motor and drives.



## Round Fabricated Wire Basket “WMF” Guard

The rugged “WMF” guard is used on Ring Fans only. It is fabricated of 1" x 1" wire mesh and reinforced with angle rings, for heavy duty service. An optional 1/2" x 1/2" mesh is also available. The “WMF” guard mounts directly to the wall and completely encloses the ring fan for added safety. The guard does not mount directly to the ring fan itself.



## Round Split Wire Guard

Specifically designed for Ring Fans, the Split Wire Guard provides easy access to the motor. It is mounted between the fan propeller and the motor, covering the propeller for employee safety, while still allowing the motor to be serviced.

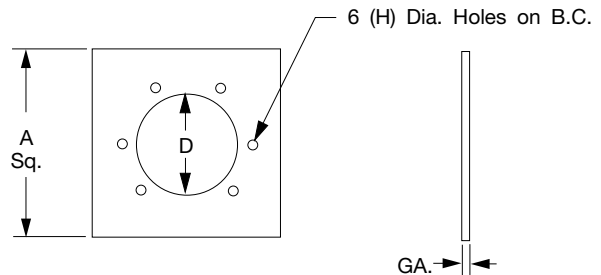


## Corrosion Resistant Construction

For handling corrosive fumes, etc., the fan housing can be constructed of hot dipped galvanized steel, stainless steel, aluminum, or protected with a wide variety of suitable coatings, such as Plasite or Heresite. Aerovent also manufactures fiberglass Panel Fans for corrosive environments. (See Bulletin 185.)

## Mounting Plate

The mounting plate is designed to mount the Ring Fan to the wall opening or to the mounting adaptor.



FAN SIZE	A	D	H	B.C.	GA
9	17	9	5/16	11 5/8	10
12	20	12	5/16	14 9/16	10
14	22	14	5/16	16 1 1/16	10
16	24	16	5/16	18 5/8	7
18	26	18	3/8	20 1/2	7
21	29	21	1/2	23 3/16	7
24	32	24	1/2	27 1/4	7
27	35	27	1/2	30 1/8	7
30	38	30	5/8	32 3/16	7
32	40	32	5/8	34 3/4	7
36	46	36	5/8	39 5/8	7
42	52	42	5/8	46	1/4
48	58	48	5/8	51 1/4	1/4
54	66	54	5/8	57 1/4	1/4
60	72	60	5/8	63 1/4	1/4
72	86	72	1 1/16	75 1/4	1/4
84	98	84	1 1/16	88 1/4	3/8
96	110	96	1 1/16	100 1/4	3/8

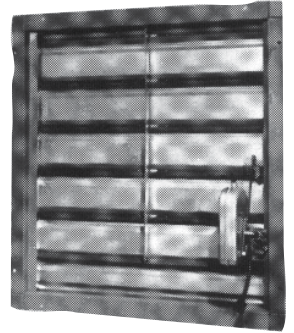
# Accessories

## Shutters

### Motor Operated

- a) The motor-operated, end pivoted shutter is for ex-haust only. It is constructed of welded steel frames, aluminum felt edge blades and drilled for easy mounting. This shutter can also be manufactured in an all-aluminum construction.
- b) The motor-operated, center pivoted shutter, manufactured by Aerovent, can be used for either supply or exhaust applications. It is constructed of:
  - 12-gauge galvanized steel frame
  - 16-gauge galvanized blades
  - stainless steel jamb seals
  - oil impregnated bronze bushings
  - 120V spring return damper actuator with end switch

*Motor operated end pivoted shutter*



*Motor operated center pivot shutter. Actuator includes end switch.*

### Gravity Operated

The automatic shutter is for exhaust only. It is constructed of welded steel frames, aluminum felt edge blades and drilled for easy mounting. This shutter can also be manufactured in all-aluminum construction.

*Automatic shutter*



## Fan Motor Options

ODP		TEFC		EXPLOSION PROOF	
SINGLE PHASE	THREE PHASE	SINGLE PHASE	THREE PHASE	SINGLE PHASE	THREE PHASE
115V	200/208V	115V	200/208V		200/208V
115/230V	230/460V	115/230V	230/460V	115/230V	230/460V
	380V		380V		380V
	460V		460V		460V
	575V		575V		575V

Fan motors are foot mounted NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque type. These motors are suitable for operation on voltage, phase and hertz, as listed above. Motor bearings have a minimum L-10 life as defined by AFBMA of at least 40,000 hours (200,000 hours average life). See factory for special motor requirements.



# Design Information

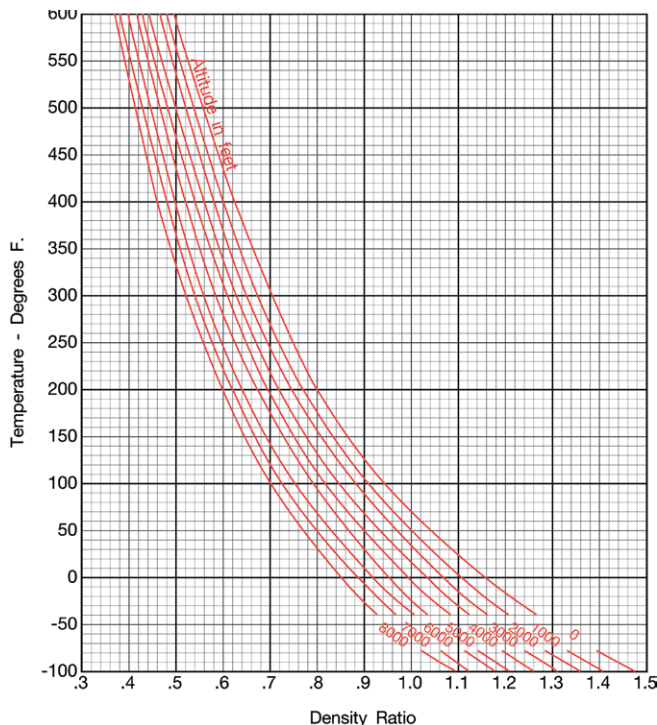
## Temperature and Altitude Correction

A fan with a given blade angle and speed is a constant volume machine. The CFM remains constant regardless of changes in temperature and altitude. The weight of air handled by the fan changes in proportion to the density. Standard air (70°F at sea level) weighs 0.075 pounds per cubic foot. The tables show fan performance for air of this density. For air of different weight the static pressure and horsepower change in direct proportion to the density.

Locate the operating condition in the Density Ratio Chart; for example, 50°F and 7,000 feet altitude. The density ratio is 0.8; therefore, the air would weigh  $0.075 \times 0.8 = 0.06$  pounds per cubic foot. The fan static pressure and horsepower as shown in the tables must be multiplied by this density ratio (0.8) to correct them to the specified conditions.

For example, the table on page 11 lists a Direct Drive Panel Fan, Model 24L420, 1750 RPM for 6,240 CFM at 1/2" SP, requiring 1.02 BHP. The actual performance at 50°F and 7,000 feet altitude would be 6,240 CFM at 0.4" SP, 1750 RPM, requiring 0.816 BHP. (Both horsepower and static pressure multiplied by the density ratio; other factors remain constant.)

## Density Ratio



## Recommended Air Changes

TYPE OF APPLICATION	MINUTES PER CHANGE
AUDITORIUMS	3 - 10
BAKERIES	1 - 3
BOILER ROOMS	1 - 3
CLEANING & DRYING	3 - 5
CREAMERIES - DAIRIES	3 - 6
ENGINE ROOMS	2 - 5
FACTORIES	4 - 10
FOUNDRIES	2 - 8
GARAGES	5 - 10
KITCHENS	2 - 3
LABORATORIES	5 - 10
LAUNDRIES	1 - 3
LOCKER ROOMS	4 - 30
MACHINE SHOPS	5 - 10
MILLS	5 - 8
OFFICES	5 - 12
PACKING HOUSE	3 - 5
PLATING ROOMS	1 - 5
PRINTING SHOPS	5 - 10
RESTROOMS	5 - 10
SCHOOLS	5 - 10
TRANSFORMER ROOMS	1 - 5
WAREHOUSES	5 - 10

To determine required fan capacity, divide the cubic content of the room by the interval of air change.

For example, 75 ft. (length) x 30 ft. (width) x 12 ft. (height) = 27,000 ÷ 3 (minutes per change) = 9,000 CFM (fan capacity).

## Temperature Limitations

PART	MIN. AMBIENT TEMP. (°F)	MAX. AMBIENT TEMP. (°F)
STANDARD BEARINGS & GREASE	- 30°F	140°F
CAST ALUMINUM PROPELLER	-100°F	275°F
MOTOR WITH CLASS B INSULATION	- 10°F	104°F
MOTOR WITH CLASS F INSULATION	- 10°F	149°F
MOTOR WITH CLASS H INSULATION	- 10°F	194°F
STANDARD PAINT	- 40°F	300°F

**NOTE:**

Due to motors operating directly in the airstream, Panel and Ring Fan temperature limitations are based on the motor insulation.



## Sound Level

Aerovent furnishes sound power level ratings by octave bands. These ratings are obtained by the testing method described in AMCA 300, *Reverberant Room Method For Sound Testing of Fans*, published in accordance with AMCA Standard 301, *Methods for Calculating Fan Sound Ratings From Laboratory Test Data*.

- AMCA 300 - Describes the test method for determining the sound levels of a fan.
- AMCA 301 - Describes the standard method of publishing sound ratings.

When discussing sound, two units of sound measurement are used. Their definitions are as follows:

**Sound Power Level** = The total amount of acoustical energy the fan develops, like a light bulb rating of 100 watts. This value is constant. It is not dependent on distance.

**Sound Pressure Level** = The sound that is heard or the loudness level of the sound, like the brightness level of the light bulb. This value varies with the distance from the sound source and the environment of the sound source.

The Sound Power Level rating is stated for eight frequency bands called octave bands. The single value for each band is the average of that frequency band. An overall value, called the Lwa, which is a mathematical summation of these eight octave bands converted to the A scale, permits comparison of noise levels.

In the present sound testing procedures, the accuracy in determining sound power levels is  $\pm 2$ dB, per AMCA 303-79. In other words, “when comparing different manufacturers, it is good practice to disregard differences of less than 4dB.”\* This is due to the fact that the human ear cannot distinguish a variation in noise until the difference in noise level between noise sources is greater than 3dB.

**Important Note:** It cannot be overemphasized that there is no such thing as dBA rating. If a rating is requested in a specification it must be in terms of octave band sound power.

\*“Application of Sound Power Level Ratings for Fans,” AMCA Publication 303-79

## Fan Performance Changes

There are many reasons why a fan’s performance may need to be changed.

- The process or room requires additional airflow (CFM).
- More ductwork is added which increases the system static pressure (SP).

It is important to understand how the fan’s performance is affected. The effect of a system change on the fan’s performance can be determined by using relationships known as “fan laws:”

$$CFM_2 = (RPM_2 / RPM_1) * CFM_1$$

$$SP_2 = (RPM_2 / RPM_1)^2 * SP_1$$

$$BHP_2 = (RPM_2 / RPM_1)^3 * BHP_1$$

**Note:** Subscript 1 describes the existing conditions.  
Subscript 2 describes the new conditions.

### Example

The system requires a fan operating at 15300 CFM at 0.125" SP. A Belted Panel Fan is required, per the specifications.

- a) Using Aerovent’s Bulletin 168, we select a 42L428 BP fan. This fan will operate at 580 RPM and 1.09 BHP, for 15300 CFM at 0.125" SP.
- b) After installing the fan, the plant manager wants to increase the airflow into the plant to 20,000 CFM. We must use the fan laws to determine how this fan will be affected.

### Known:

$$CFM_1 = 15,300 \text{ CFM}$$

$$CFM_2 = 20,000 \text{ CFM}$$

$$RPM_1 = 580 \text{ RPM}$$

$$SP_1 = 0.125" \text{ SP}$$

$$BHP_1 = 1.09 \text{ BHP}$$

### Unknown: RPM<sub>2</sub>, SP<sub>2</sub>, BHP<sub>2</sub>

- c) Using the fan laws, we solve for RPM<sub>2</sub>, SP<sub>2</sub> and BHP<sub>2</sub> :

$$RPM_2 = (20000 / 15300) * 580 = 758 \text{ RPM}_2$$

$$SP_2 = (758 / 580)^2 * 0.125" = 0.214" \text{ SP}_2$$

$$BHP_2 = (758 / 580)^3 * 1.09 = 2.43 \text{ BHP}_2$$

Therefore:

- 1) In order to use the same fan for an airflow of 20,000 CFM, the RPM must be increased to 758 RPM.
- 2) To move 20,000 CFM, this fan requires 2.43 BHP or a 3 HP motor. If the fan is increased to 758 RPM and the motor is not changed to a 3 HP motor, the original motor will overload or the controls monitoring the system will turn the fan off automatically.

**Important Note:** The new RPM should be checked to make sure it does not exceed the maximum allowable fan RPM. Use rating tables in this bulletin as a guide. If the new RPM exceeds the rating table, consult the factory.

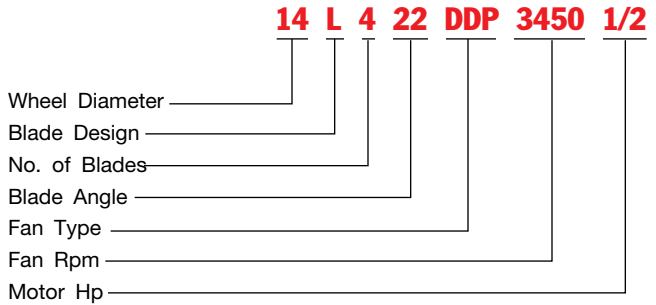
# Performance Data – Standard Panel & Ring Fans

To identify a specific fan for ordering or engineering specification, it is necessary to show the complete catalog number. All performance data is available in curve form upon request. All capacities shown in the performance tables below are for standard air conditions: 70°F at sea level (0.075 lbs./cu.ft. air density).



Aerovent certifies that the Direct Drive and Belted Panel and Ring Fans shown on pages 10 through 17 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.

## Catalog Number System



## Direct Drive Panel and Ring Fans

**DDP = Direct Drive Panel**  
**DDR = Direct Drive Ring**

### SIZE 9" (229 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
9M624	DDP	1750	1/6	495	.022	370	.022												
9M624	DDP	3450	1/3	977	.170	933	.170	875	.170	805	.170	710	.170						

### SIZE 12" (305 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
12M618	DDP	1725	1/6	1020	.040	890	.050	660	.050	410	.060	275	.060						
12M618	DDP	3450	1/2	2030	.350	1975	.360	1910	.370	1850	.390	1780	.400	1610	.440	1330	.420		

### SIZE 14" (356 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
14L432	DDP	1750	1/6	1940	.128	1660	.132	1290	.126										
14L422	DDP	3450	1/2	2980	.470	2850	.490	2725	.510	2600	.520	2460	.530	2140	.530	1600	.500		
14L428	DDP	3450	3/4	3540	.720	3440	.730	3310	.740	3170	.760	3025	.760	2700	.770	2280	.770		
14S728	DDP	1725	1/6	2100	.110	1910	.120	1690	.140	1300	.140								

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 16" (406 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
16L432	DDP	1160	1/3	1920	.074	1380	.075												
16L424	DDP	1750	1/6	2370	.135	2090	.170	1740	.180										
16L432	DDP	1750	1/4	2900	.250	2600	.262	2220	.262	1640	.236								
16S728	DDP	1725	1/4	3075	.200	2875	.220	2630	.240	2360	.250								

## SIZE 18" (457 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
18L432	DDP	1160	1/3	2750	.100	2125	.119												
18L419	DDP	1750	1/6	2765	.120	2425	.150	2040	.170	1550	.170								
18L425	DDP	1750	1/4	3500	.210	3130	.240	2730	.260	2270	.260								
18L430	DDP	1750	1/3	4000	.318	3610	.340	3150	.360	2625	.362								
18L432	DDP	1750	1/2	4170	.345	3770	.380	3340	.405	2850	.415								
18S728	DDP	1160	1/6	2875	.120	2475	.140	1800	.140										
18S728	DDP	1725	1/2	4360	.400	4100	.440	3800	.470	3490	.480	3070	.490						

## SIZE 21" (533 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
21L432	DDP	1160	1/4	4390	.220	3670	.250	2760	.260										
21L424	DDP	1750	1/2	5420	.430	5080	.470	4620	.510	4130	.550								
21L430	DDP	1750	3/4	6370	.690	5920	.720	5420	.760	4890	.780	4250	.800						
21L432	DDP	1750	1	6600	.750	6150	.810	5650	.850	5150	.880	4600	.900						
21S723	DDP	1725	3/4	6000	.630	5720	.670	5410	.720	5080	.750	4690	.790	3520	.820				
21S728	DDP	1750	1	6930	.880	6650	.930	6350	.980	6000	1.02	5620	1.04	4570	1.06				

## SIZE 24" (610 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
24L232	DDP	1160	1/3	6110	.350	5100	.350	3200	.310										
24L428	DDP	1160	1/2	6790	.460	6150	.500	5370	.510	4350	.510								
24L432	DDP	1160	3/4	7550	.610	6900	.610	6100	.600	5050	.620								
24L220	DDP	1750	1/2	7070	.530	6440	.570	5700	.570	4850	.580	3790	.560						
24L225	DDP	1750	3/4	8100	.800	7450	.820	6750	.830	5930	.820	4890	.800						
24L420	DDP	1750	1	8020	.870	7600	.930	7190	.970	6750	1.00	6240	1.02	4950	1.07				
24L230	DDP	1750	1	8950	1.09	8320	1.10	7650	1.10	6900	1.09	5710	1.02						
24L426	DDP	1750	1 1/2	9680	1.38	9350	1.41	8880	1.46	8450	1.50	7950	1.53	6700	1.57				
24L432	DDP	1750	2	11400	2.05	10950	2.05	10500	2.04	10000	2.04	9500	2.03	8300	2.07	6100	2.03		
24S726	DDP	1160	1/2	6410	.390	5920	.430	5340	.470	4480	.500								
24S728	DDP	1160	3/4	6710	.490	6220	.530	5620	.560	4800	.500								
24S719	DDP	1750	1	7440	.780	7150	.890	6820	.900	6480	.960	6100	1.01	5110	1.09	3350	1.08		

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 30" (762 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																	
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP		
30L418	DDP	870	1/3	7160	.287	6200	.323	4830	.343												
30L226	DDP	870	1/3	8000	.320	6300	.330														
30L424	DDP	870	1/2	8820	.430	7800	.500	6500	.500												
30L232	DDP	870	1/2	8950	.455	7220	.451														
30L432	DDP	870	3/4	11050	.800	9930	.800	8600	.800	6330	.810										
30L226	DDP	1160	3/4	10610	.750	9450	.780	8000	.770	5850	.740										
30L422	DDP	1160	1	11050	.920	10380	.960	9500	1.02	8570	1.07	7370	1.08								
30L232	DDP	1160	1	11930	1.08	10700	1.10	9350	1.05	7000	.980										
30L428	DDP	1160	1 1/2	13200	1.40	12500	1.47	11620	1.52	10650	1.57	9520	1.58								
30L432	DDP	1160	2	14700	1.85	13900	1.85	13050	1.85	12100	1.83	10900	1.84								
30L222	DDP	1750	2	14580	1.97	13900	2.02	13150	2.06	12220	2.08	11200	2.07	8700	2.02						
30L420	DDP	1750	3	15620	2.69	15180	2.80	14630	2.89	14100	2.96	13590	3.01	12190	3.10	10950	3.21	8900	3.22		
30L230	DDP	1750	3	17410	3.34	16700	3.36	15900	3.38	15050	3.38	14150	3.37	11700	3.19						
30S720	DDP	1160	1	10450	.780	9900	.870	9320	.970	8700	1.06	7930	1.14	5300	1.20						
30S718	DDP	1750	3	14300	2.15	13900	2.31	13600	2.47	13200	2.62	12820	2.77	12000	3.00	11050	3.18	9800	3.35	7900	3.37

## SIZE 36" (914 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																	
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
36L220	DDP	870	1/2	11600	.460	9700	.500	7200	.490												
36L418	DDP	870	3/4	12250	.700	11050	.750	9820	.780	8310	.820	5110	.750								
36L422	DDP	870	1	14200	.920	13050	1.00	11750	1.05	10200	1.07	8100	1.06								
36L428	DDP	870	1 1/2	16800	1.42	15550	1.47	14190	1.52	12610	1.57	10620	1.56								
36L214	DDP	1160	3/4	12400	.690	11000	.740	9370	.750	7300	.720	4170	.630								
36L218	DDP	1160	1	14500	.950	12950	.980	11500	1.02	9720	1.01	7230	.970								
36L224	DDP	1160	1 1/2	17200	1.50	15670	1.53	14100	1.55	12450	1.56	10200	1.51								
36L420	DDP	1160	2	17500	1.86	16600	1.95	15650	2.03	14750	2.12	13750	2.19	11300	2.20						
36L228	DDP	1160	2	18700	1.94	17350	1.98	15800	1.97	14000	1.94	11670	1.88								
36L426	DDP	1160	3	21200	2.85	20370	3.00	19450	3.10	18500	3.20	17450	3.26	14950	3.30	11000	3.22				
36L212	DDP	1750	2	16850	2.10	15850	2.12	14900	2.17	13970	2.18	12900	2.17	10200	2.10	6600	1.82				
36L217	DDP	1750	3	21100	3.03	20350	3.10	19500	3.16	18600	3.20	17550	3.22	15200	3.25	12300	3.18				
36L224	DDP	1750	5	25800	5.15	24800	5.22	24000	5.26	22800	5.30	21850	5.30	19650	5.30	17150	5.32	13500	5.00		
36S714	DDP	1160	1 1/2	13720	1.11	13100	1.21	12450	1.32	11780	1.41	11000	1.50	9050	1.65	6400	1.63				
36S720	DDP	1160	3	18100	2.08	17550	2.21	16900	2.36	16230	2.48	15500	2.62	13800	2.85	11400	2.97				
36S714	DDP	1750	5	20650	3.82	20250	4.00	19850	4.10	19400	4.27	19000	4.41	18100	4.70	17100	5.00	16000	5.30	14770	5.55
36S717	DDP	1750	7 1/2	24400	5.65	24100	5.82	23750	6.00	23150	6.20	22930	6.37	22100	6.70	21100	7.05	20100	7.33	18900	7.65
36S720	DDP	1750	10	27200	7.20	26800	7.30	26300	7.70	26000	7.75	25500	8.10	24650	9.00	23700	8.80	22800	9.20	21750	9.50

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
Performance ratings do not include the effects of appurtenances (accessories).



## SIZE 42" (1067 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
42L220	DDP	870	1	18400	1.02	16200	1.07	13750	1.08													
42L226	DDP	870	1 1/2	21450	1.54	19250	1.61	16550	1.63	13400	1.54											
42L421	DDP	870	2	21600	1.70	20350	1.95	18900	2.06	17300	2.13	15300	2.16									
42L427	DDP	870	3	26200	2.88	24900	2.98	23400	3.10	21700	3.18	19790	3.21	14400	3.12							
42L214	DDP	1160	1 1/2	19700	1.50	18150	1.58	16380	1.60	14300	1.60	11900	1.57									
42L217	DDP	1160	2	22250	1.92	20820	1.98	19220	2.02	17370	2.04	15100	2.05	8850	1.90							
42L223	DDP	1160	3	26500	3.10	24820	3.16	23200	3.21	21400	3.23	19400	3.22	13800	3.10							
42L422	DDP	1160	5	30000	4.62	29100	4.83	28000	5.00	27000	5.18	25750	5.30	23300	5.45	20450	5.50	15750	5.45			
42L428	DDP	1160	7 1/2	35500	7.19	34400	7.35	33400	7.45	32250	7.55	31000	7.65	28500	7.90	25550	8.01	21500	7.90			
42L214	DDP	1750	5	29600	5.18	28600	5.29	27600	5.40	26500	5.45	25250	5.50	22600	5.55	19700	5.41	16000	5.30	11100	4.90	
42L218	DDP	1750	7 1/2	34700	7.02	33400	7.15	34220	7.23	31000	7.37	30000	7.42	27800	7.60	25200	7.60	22000	7.42	18200	7.29	
42L223	DDP	1750	10	40000	10.7	38900	10.7	37700	10.9	36500	11.0	35500	11.0	33250	11.1	30700	11.2	28000	11.0	24500	10.8	
42L420	DDP	1750	15	41950	13.9	41200	14.2	40500	14.3	39850	14.4	39100	14.6	37600	15.1	36200	15.4	34800	15.7	33200	16.1	
42S718	DDP	695	1	16000	.780	14750	.910	13000	1.03	11700	1.12	9500	1.14									
42S714	DDP	870	1 1/2	16340	1.02	15400	1.14	14350	1.27	13200	1.37	11830	1.46	7960	1.52							
42S718	DDP	870	2	20000	1.54	19100	1.70	18070	1.86	17000	1.99	15700	2.13	12250	2.26	7400	2.16					
42S713	DDP	1160	3	20000	2.17	19300	2.31	18600	2.44	17900	2.57	17100	2.73	15380	2.97	13100	3.14	10200	3.13	6750	2.94	
42S718	DDP	1160	5	26600	3.65	25800	3.85	25000	4.09	24250	4.27	23500	4.45	21700	4.86	19700	5.20	17200	5.32	14200	5.33	
42S713	DDP	1750	10	30300	7.47	29900	7.65	29350	7.90	28900	8.10	28400	8.30	27350	8.73	26350	9.16	25250	9.55	24100	9.96	

## SIZE 48" (1219 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
48L220	DDP	695	1	21900	1.01	18850	1.07	15000	1.08													
48L226	DDP	695	1 1/2	25600	1.54	22400	1.60	18300	1.60	12100	1.47											
48L421	DDP	695	2	25800	1.80	24000	1.96	21650	2.08	19300	2.13	16500	2.15									
48L426	DDP	695	3	30100	2.62	28200	2.77	26100	2.90	23700	3.04	20600	3.03									
48L220	DDP	870	2	27430	1.97	25100	2.07	22400	2.11	19200	2.11	15200	2.00									
48L226	DDP	870	3	32100	3.00	29600	3.11	26700	3.17	23350	3.15	19600	2.97									
48L425	DDP	870	5	36650	4.72	34980	4.88	33300	5.19	31500	5.20	29500	5.32	25200	5.42							
48L214	DDP	1160	3	29350	2.95	27600	3.05	25700	3.15	23600	3.19	21150	3.15	15000	3.00							
48L221	DDP	1160	5	37700	5.12	35750	5.32	33900	5.48	31900	5.51	29750	5.50	25000	5.48	16750	5.12					
48L418	DDP	1160	7 1/2	38750	6.95	37500	7.20	36300	7.37	35000	7.50	33850	7.60	31350	7.79	26850	7.95	25200	8.18	18900	7.60	
48L227	DDP	1160	7 1/2	41350	7.82	41400	7.91	39600	8.00	37600	8.01	35300	7.95	30200	7.70	23100	7.43					
48L422	DDP	1160	10	45000	9.10	43800	9.40	42700	9.60	41500	9.80	40250	10.0	37550	10.4	34600	10.6	31400	10.6	27450	10.7	
48S720	DDP	870	5	32200	3.70	31000	4.00	29900	4.22	28700	4.50	27400	4.73	24600	5.10	20400	5.27	11600	4.85	7500	4.96	
48S718	DDP	1160	10	39600	7.20	38750	7.50	37750	7.90	37000	8.20	36000	8.50	34200	9.20	32100	9.70	30000	10.0	27400	10.3	

## SIZE 54" (1372 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
54L222	DDP	695	2	32850	2.11	29400	2.18	25550	2.18	20550	2.17											
54L418	DDP	695	3	33000	2.70	30750	2.86	28500	2.95	26200	3.02	23400	3.12									
54L228	DDP	695	3	37750	3.17	34350	3.22	30200	3.20	25200	3.10											
54L426	DDP	695	5	42850	4.67	40600	4.92	38400	5.15	35800	5.30	33000	5.42	25000	5.35							
54L416	DDP	870	5	37750	4.45	36200	4.63	34500	4.81	32750	4.97	30800	5.15	26400	5.30	18650	5.00					
54L225	DDP	870	5	44250	5.22	41600	5.29	38600	5.36	35350	5.40	31800	5.37	21000	5.00							
54L422	DDP	870	7 1/2	47900	6.90	46150	7.20	44500	7.43	42600	7.65	40550	7.85	36200	8.09	30900	8.12					
54L426	DDP	870	10	53600	9.20	51900	9.50	50100	9.78	48450	10.0	46350	10.7	42000	10.6	36500	10.6	28650	10.4			
54L213	DDP	1160	5	40000	4.78	38200	5.00	36000	5.10	22750	5.22	31300	5.27	25100	5.15	17450	4.62					
54L218	DDP	1160	7 1/2	49000	7.20	46500	7.35	44896	7.55	43360	7.71	40000	7.78	35150	7.80	28500	7.55	16750	6.85			
54L222	DDP	1160	10	55000	9.75	53000	10.0	50750	10.1	48600	10.3	46400	10.3	41400	10.3	35500	10.2	27500	9.80			
54S714	DDP	870	5	34670	3.57	33350	3.89	32150	4.13	30750	4.38	29400	4.61	26150	5.02	21850	5.34	16650	5.31			
54S718	DDP	870	7 1/2	42250	5.40	41000	5.72	39700	6.10	38300	6.46	36800	6.78	33850	7.42	30350	7.79	25700	7.93	19700	7.90	
54S716	DDP	1160	15	49600	10.3	48800	10.7	47900	11.2	46900	11.7	45800	12.0	44000	12.9	41800	12.7	39500	14.3	37100	14.8	

NOTES: Performance certified is for installation type A: Free inlet, free outlet.  
Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 60" (1524 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE									
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP	
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
60L228	DDP	580	3	43250 3.10	38600 3.20	33000 3.10	24750 2.90						
60L418	DDP	580	3	37750 2.60	34850 2.70	31800 2.90	28500 3.00	24250 3.10					
60L426	DDP	580	5	49100 4.50	46200 5.00	43100 5.10	39600 5.30	35350 5.25					
60L220	DDP	695	3	42750 3.10	39100 3.22	34900 3.30	29950 3.28	23400 3.12					
60L418	DDP	695	5	45150 4.55	42700 4.80	40250 4.97	37750 5.07	35000 5.18	27500 5.30				
60L228	DDP	695	5	51700 5.40	48000 5.49	43650 5.45	38800 5.39	32450 5.22					
60L424	DDP	695	7 1/2	55800 6.90	53600 7.10	51100 7.40	48300 7.60	45100 7.75	38500 8.00				
60L218	DDP	870	5	50250 5.18	46700 5.30	43650 5.43	40500 5.58	36800 5.59	26800 5.35				
60L414	DDP	870	7 1/2	46800 6.50	42500 6.80	43350 7.00	41500 7.20	39300 7.40	34850 7.55	29000 7.40	19450 7.00		
60L223	DDP	870	7 1/2	58100 7.75	54900 7.90	51600 8.00	48400 8.20	44750 8.25	35900 8.00				
60L418	DDP	870	10	56500 9.00	54450 9.60	52350 9.50	50500 9.70	48500 9.80	44200 10.2	39200 10.5	31150 10.2		
60L228	DDP	870	10	65000 10.6	62000 10.7	58750 10.9	55250 10.8	51450 10.6	42100 10.3				
60L424	DDP	870	15	70000 13.5	68000 13.8	66100 14.2	64000 14.5	61900 14.7	57000 15.4	51900 15.6	46150 15.7	37150 15.6	
60L428	DDP	870	20	77500 18.0	75900 18.3	73500 18.6	71500 18.8	69100 19.2	64200 19.7	59200 20.2	53150 20.2	44600 19.7	
60L212	DDP	1160	7 1/2	51300 7.90	49150 8.00	46850 8.10	44350 8.15	42000 8.15	36100 7.90	28800 7.70	19000 6.75		
60L215	DDP	1160	10	58600 10.2	57100 10.4	55000 10.5	53000 10.6	50500 10.7	44900 10.7	38000 10.6	26000 9.75		
60L220	DDP	1160	15	71500 14.2	69400 14.5	67000 14.7	64650 15.0	62400 15.1	57200 15.2	51100 15.3	44000 14.9	35000 14.3	
60L416	DDP	1160	20	69100 18.0	67900 18.3	66150 18.4	65000 18.9	63500 19.3	60400 19.9	57400 20.5	54100 21.0	50300 21.3	
60S716	DDP	870	10	51100 7.30	49750 7.78	48400 8.19	47000 8.60	45600 9.00	42500 9.80	38900 10.4	34400 10.6	28700 10.9	

## SIZE 72" (1829 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE									
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP	
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
72L228	DDP	580	7 1/2	74600 7.80	69200 7.90	63000 7.80	56000 7.80						
72L418	DDP	580	7 1/2	65200 6.70	61600 7.00	58100 7.20	54500 7.25	50600 7.40	40200 7.80				
72L220	DDP	695	7 1/2	74010 7.60	69940 7.99	65000 8.06	59990 8.20	54000 8.15	38150 7.55				
72L412	DDP	695	7 1/2	59100 7.37	56200 7.50	53120 7.75	50000 8.00	46900 8.06	39200 8.00	28000 7.50			
72L415	DDP	695	10	68990 8.76	66100 9.26	63200 9.60	60450 9.92	57100 10.0	50100 10.4	41100 10.5			
72L421	DDP	695	15	87000 14.1	84300 14.4	81200 14.8	78550 15.2	75200 15.5	67200 16.2	59200 16.4	48250 16.2		
72L425	DDP	695	20	98000 18.2	95000 18.7	92000 19.2	89000 19.6	85600 20.0	78500 20.7	70500 21.0	60600 21.0		
72L214	DDP	870	10	74400 9.40	71500 9.55	67850 9.90	63700 10.0	59000 10.0	48950 9.82	34950 9.15			
72L220	DDP	870	15	93020 15.0	89750 15.5	86000 15.6	82010 15.9	78000 16.0	69000 16.0	58000 15.6	42950 14.7		
72L412	DDP	870	15	74000 14.4	72000 14.6	69400 15.0	67010 15.3	64300 15.5	59010 16.0	53450 16.0	47000 15.6	37800 15.0	
72L415	DDP	870	20	86010 17.2	84000 17.9	81980 18.4	79800 18.8	77000 19.1	72130 19.6	66950 20.0	61000 20.5	53900 20.6	
72S718	DDP	695	15	79300 11.3	77300 12.0	75200 12.7	73000 13.3	70800 14.0	65900 15.2	60200 16.1	53400 16.7	44200 16.7	
72S720	DDP	695	20	86200 14.4	84100 14.8	82000 15.5	79600 16.2	77200 16.9	72200 18.1	66800 19.0	60000 19.7	51000 19.8	

\*L2 is a manually adjustable pitch prop.

## SIZE 84" (2134 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE									
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP	
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
84L220	DDR	580	10	98250 9.80	92000 10.0	85150 10.2	78000 10.3	69500 10.2	46000 9.40				
84L412	DDR	580	10	78300 9.10	74500 9.40	70000 9.80	65500 10.1	60900 10.2	50000 10.0	33000 9.20			
84L214	DDR	695	10	94590 10.4	89800 10.7	84000 11.0	78000 11.1	71000 11.1	54500 10.7	29000 9.30			
84L218	DDR	695	15	110540 14.1	105000 14.7	99800 15.1	94200 15.2	88350 15.3	73900 15.1	54100 14.3			
84L223	DDR	695	20	127000 21.4	122000 21.7	116000 21.9	110000 22.1	104000 22.2	91200 22.2	73900 21.6			
84L414	DDR	695	20	103090 17.8	100200 18.3	97200 18.9	94000 19.4	90500 19.8	83000 20.6	74150 20.7	63750 20.2	47200 19.2	

\*L2 and L4 are manually adjustable pitch props.

## SIZE 96" (2438 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE									
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP	
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
96L212	DDR	580	10	106000 10.4	98000 10.6	90500 10.7	82500 10.7	72350 10.5	46100 9.30				
96L217	DDR	580	15	133200 15.0	126900 15.4	119600 15.7	111700 15.8	103000 16.0	81000 15.7				
96L412	DDR	580	20	117000 18.0	112700 18.5	108000 18.9	103000 19.4	97900 19.7	86600 20.0	73800 19.6			
96L415	DDR	580	25	136000 21.2	131500 22.4	127100 23.2	122500 23.8	117700 24.8	107200 24.8	95650 25.5	80000 25.3		

NOTES: Performance certified is for installation type A: Free inlet, free outlet.  
Performance ratings do not include the effects of appurtenances (accessories).

\*L2 and L4 are manually adjustable pitch props.

# Belted Panel and Ring Fans

**BP = Belted Panel**  
**BR = Belted Ring**

## SIZE 24" (610 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
24L222	BP	1330	1/3	5530	.350	4725	.360	3690	.350													
24L428	BP	990	1/3	5800	.320	5000	.350	4050	.360													
24L222	BP	1522	1/2	6350	.530	5690	.540	4850	.550	3700	.520											
24L428	BP	1134	1/2	6640	.500	5950	.520	5190	.530	4180	.510											
24L222	BP	1742	3/4	7280	.790	6690	.815	6000	.820	5250	.820	4110	.780									
24L428	BP	1298	3/4	7600	.730	7000	.790	6360	.800	5670	.810	4610	.790									

## SIZE 30" (762 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
30L222	BP	917	1/3	7450	.350	5980	.360															
30L428	BP	683	1/3	7800	.330	6320	.360															
30L222	BP	1049	1/2	8620	.520	7250	.550	5530	.530													
30L428	BP	782	1/2	8920	.500	7660	.530	6180	.540													
30L222	BP	1201	3/4	9790	.790	8670	.820	7380	.820	5410	.780											
30L428	BP	895	3/4	10200	.750	9180	.800	7900	.800	6200	.790											
30L222	BP	1322	1	10790	1.05	9800	1.09	8650	1.10	7250	1.08	4600	1.00									
30L428	BP	985	1	11220	1.01	10300	1.05	9220	1.09	8000	1.09											
30L222	BP	1513	1 1/2	12320	1.58	11450	1.62	10520	1.65	9500	1.65	8240	1.60									
30L428	BP	1127	1 1/2	12850	1.50	12150	1.54	11100	1.60	10150	1.63	9075	1.62									

## SIZE 36" (914 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
36L222	BP	828	1/2	11400	.520	9500	.540	6800	.520													
36L428	BP	595	1/2	11400	.500	9450	.530	6600	.520													
36L222	BP	947	3/4	13000	.800	11400	.820	9500	.810	6400	.780											
36L428	BP	681	3/4	13050	.770	11400	.810	9500	.810													
36L222	BP	1043	1	14380	1.08	12850	1.10	11250	1.10	9050	1.07											
36L428	BP	749	1	14380	1.02	12830	1.06	11200	1.10	9000	1.08											
36L222	BP	1194	1 1/2	16400	1.60	15100	1.65	13760	1.66	12250	1.66	10200	1.60									
36L428	BP	858	1 1/2	16420	1.53	15100	1.60	13770	1.62	12240	1.65	10900	1.61									
36L222	BP	1314	2	18100	2.12	16900	2.19	15700	2.22	14400	2.21	12850	2.20	7800	2.03							
36L428	BP	944	2	18130	2.03	16900	2.10	15630	2.15	14400	2.20	12850	2.20									

## SIZE 42" (1067 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
42L222	BP	733	3/4	16050	.790	13450	.820	10150	.800													
42L428	BP	527	3/4	16050	.775	13450	.820	10180	.810													
42L222	BP	806	1	17610	1.08	15300	1.10	12700	1.10	8300	1.01											
42L428	BP	580	1	17610	1.02	15300	1.09	12700	1.10													
42L222	BP	923	1 1/2	20200	1.59	18150	1.63	16050	1.64	13350	1.62											
42L428	BP	663	1 1/2	20200	1.52	18200	1.60	16050	1.65	13400	1.63											
42L222	BP	1016	2	22200	2.10	20400	2.20	18550	2.20	16500	2.20	13500	2.10									
42L428	BP	730	2	22200	2.05	20500	2.15	18550	2.20	16500	2.20	13500	2.18									
42L222	BP	1163	3	25350	3.15	23750	3.20	22250	3.30	20600	3.30	18650	3.30	13000	3.00							
42L428	BP	836	3	25400	3.09	23850	3.18	22300	3.21	20600	3.30	18650	3.31									
42L222	BP	1379	5	30100	5.30	28750	5.40	27450	5.50	26000	5.50	24700	5.50	21500	5.40	16600	5.15					
42L428	BP	991	5	30150	5.17	28800	5.22	27500	5.33	26150	5.41	24750	5.48	21500	5.55	15500	5.25					

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
Power rating (BHP) includes transmission losses.  
Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 48" (1219 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
PROP	FAN TYPE	RPM	HP	0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
				CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
48L222	BP	646	1	21100 1.04	17800 1.10	13550 1.08						
48L428	BP	464	1	21000 1.02	17650 1.09	13500 1.09						
48L222	BP	739	1½	24200 1.60	21250 1.62	18200 1.62	13500 1.59					
48L428	BP	531	1½	24100 1.54	21200 1.61	18000 1.65						
48L222	BP	813	2	26550 2.12	24000 2.20	21250 2.20	17800 2.19	12500 2.03				
48L428	BP	584	2	26500 2.04	23850 2.12	21200 2.20	17750 2.19					
48L222	BP	931	3	30300 3.20	28150 3.29	25800 3.35	23400 3.35	20100 3.25				
48L428	BP	669	3	20400 3.09	28100 3.18	25750 3.27	23350 3.32	20050 3.00				
48L222	BP	1104	5	36000 5.30	34000 5.50	32200 5.50	30250 5.50	28250 5.55	22650 5.30			
48L428	BP	793	5	36000 5.15	34250 5.20	32200 5.35	30250 5.40	28150 5.50	22500 5.40			
48L222	BP	1264	7½	41250 8.00	38900 8.20	27750 8.25	36250 8.30	34500 8.30	30700 8.25	25500 8.00		
48L428	BP	908	7½	41200 7.70	39600 7.80	37950 8.00	36250 8.10	34500 8.20	30650 8.25	25100 8.10		
48L222	BP	1391	10	45400 10.7	43250 10.9	42350 11.0	40750 11.0	39350 11.1	36150 11.1	32350 11.0	27200 10.7	19500 10.2
48L428	BP	999	10	45500 10.2	44000 10.4	42400 10.5	40900 10.7	36100 10.7	32250 11.0	32250 11.0	26550 10.7	

## SIZE 54" (1372 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
PROP	FAN TYPE	RPM	HP	0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
				CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
54L222	BP	607	1½	28150 1.59	24300 1.62	19700 1.60						
54L428	BP	436	1½	28200 1.55	24300 1.60	19750 1.62						
54L222	BP	668	2	31000 2.10	27500 2.20	23700 2.20	18000 2.10					
54L428	BP	480	2	31150 2.02	27500 2.15	23700 2.20	17500 2.12					
54L222	BP	765	3	35500 3.20	32450 3.30	29250 3.32	25500 3.28	20300 3.15				
54L428	BP	550	3	35600 3.09	32500 3.20	29200 3.28	25650 3.30	19200 3.20				
54L222	BP	907	5	42000 5.30	39500 5.50	36900 5.50	33150 5.50	30550 5.50	22000 5.20			
54L428	BP	652	5	42150 5.15	39600 5.30	37000 5.40	34150 5.50	31150 5.50				
54L222	BP	1038	7½	48100 7.90	46000 8.10	43600 8.20	41200 8.25	39000 8.30	33000 8.10	24000 7.70		
54L428	BP	746	7½	48200 7.70	46100 7.80	43800 8.00	41300 8.20	39050 8.20	33050 8.20			
54L222	BP	1143	10	53000 10.7	51000 10.8	49000 11.0	46900 11.1	44800 11.1	40100 11.1	33750 10.7	24850 10.2	
54L428	BP	821	10	53050 10.3	51000 10.4	49000 10.6	47000 10.7	44850 10.9	40100 11.0	33850 10.9		

## SIZE 60" (1524 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
PROP	FAN TYPE	RPM	HP	0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
				CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
60L222	BP	561	2	35500 2.15	31100 2.20	26000 2.20						
60L428	BP	403	2	35700 2.05	31150 2.17	25750 2.20						
60L222	BP	642	3	40900 3.20	37000 3.30	32600 3.30	23200 3.20					
60L428	BP	461	3	41000 3.08	36800 3.20	32600 3.27	27000 3.25					
60L222	BP	761	5	48200 5.40	45000 5.50	41550 5.50	38000 5.50	33100 5.40				
60L428	BP	547	5	48600 5.15	45100 5.27	41600 5.40	37850 5.50	33150 5.45				
60L222	BP	871	7½	55200 8.00	52500 8.20	49450 8.30	46300 8.30	43100 8.30	34000 8.10			
60L428	BP	626	7½	55600 7.70	52760 7.80	49750 8.00	46600 8.20	43100 8.30	33850 8.10			
60L222	BP	959	10	61000 10.7	58300 10.8	55500 11.0	52900 11.1	50000 11.1	43200 11.0	33500 10.5		
60L428	BP	689	10	61200 10.3	58750 10.5	55850 10.6	53000 10.8	50050 10.9	43250 11.0			

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
 Power rating (BHP) includes transmission losses.  
 Performance ratings do not include the effects of appurtenances (accessories).



## SIZE 72" (1829 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
72L222	BP	474	3	52000	3.30	45500	3.30	38350	3.20										
72L428	BP	340	3	52100	3.10	45700	3.20	38100	3.30										
72L222	BP	562	5	61750	5.30	56200	5.50	50650	5.50	43500	5.30	33550	5.15						
72L428	BP	404	5	62000	5.20	56400	5.40	50250	5.50	43750	5.50								
72L222	BP	643	7 1/2	70600	8.00	66000	8.15	61000	8.35	56000	8.20	49350	8.10						
72L428	BP	462	7 1/2	71000	7.70	66150	7.90	61000	8.11	55800	8.30	49250	8.25						
72L222	BP	708	10	77900	10.8	73500	10.9	69000	11.0	64500	11.0	59650	11.0	45150	10.6				
72L428	BP	508	10	78000	10.2	73800	10.5	69100	10.7	64500	10.9	59550	11.0	43500	10.7				
72L222	BP	810	15	89000	16.0	85200	16.2	81300	16.3	77500	16.6	73200	16.6	64150	16.5	50800	15.4		
72L428	BP	582	15	89150	15.4	85500	15.7	81650	15.9	77700	16.2	73700	16.4	64100	16.5	48000	15.9		

\*L2 is a manually adjustable pitch prop.

## SIZE 84" (2134 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
84L222	BR	497	7 1/2	87000	7.90	79350	8.20	72000	8.25	63200	8.20	51000	7.80						
84L428	BR	357	7 1/2	87100	7.70	79500	7.90	72000	8.20	63200	8.25	49000	8.00						
84L222	BR	547	10	95700	10.6	89000	10.9	82100	11.0	75000	11.0	65750	10.9						
84L428	BR	393	10	96000	10.2	89000	10.5	82000	10.8	75000	11.0	65900	11.0						
84L222	BR	626	15	109600	15.9	103500	16.3	97750	16.5	91800	16.5	85200	16.5	67600	16.0				
84L428	BR	450	15	110000	15.4	103800	15.7	97800	16.0	91850	16.3	85200	16.5	67000	16.2				

\*L2 and L4 are manually adjustable pitch props.

## SIZE 96" (2438 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
96L222	BR	398	7 1/2	104000	7.90	93000	8.20	82000	8.25	67500	8.10								
96L428	BR	286	7 1/2	104200	7.70	93300	8.00			82100	8.25	67800	8.20						
96L222	BR	438	10	114000	10.5	104300	10.9	94500	11.1	83500	11.0	67500	10.6						
96L428	BR	315	10	114650	10.3	105000	10.6	95000	11.0	84000	11.0	66900	10.8						
96L222	BR	501	15	130500	15.9	122200	16.3	113650	16.5	105000	16.5	94500	16.4	63000	15.3				
96L428	BR	360	15	131150	15.4	122500	15.7	114000	16.2	105200	16.5	95000	16.5						

\*L2 and L4 are manually adjustable pitch props.

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
 Power rating (BHP) includes transmission losses.  
 Performance ratings do not include the effects of appurtenances (accessories).



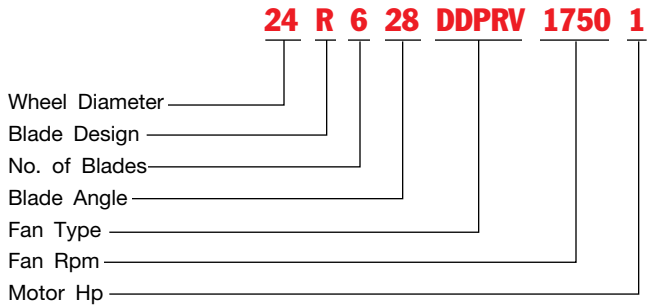
# Performance Data – Reversible Panel & Ring Fans

To identify a specific fan for ordering or engineering specification, it is necessary to show the complete catalog number. All performance data is available in curve form upon request. All capacities shown in the performance tables below are for standard air conditions: 70°F at sea level (0.075 lbs./cu.ft. air density).



Aerovent certifies that the Reversible Direct Drive and Belted Panel and Ring Fans shown on pages 18 through 22 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.

## Catalog Number System



## Direct Drive Reversible Panel and Ring Fans

**DDPRV = Reversible Direct Drive Panel Fan**  
**DDRRV = Reversible Direct Drive Ring Fan**

### SIZE 24" (610 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
24R638	DDPRV	870	1/4	5330	.192	4390	.242															
24R630	DDPRV	1160	1/3	5370	.232	4760	.282	4050	.340													
24R636	DDPRV	1160	1/2	6790	.390	6090	.452	5300	.512													
24R640	DDPRV	1160	3/4	7500	.533	6830	.598	5980	.670													
24R628	DDPRV	1750	1	7370	.570	7000	.690	6640	.800	6250	.880	5790	.950	4220	1.10							
24R634	DDPRV	1750	1 1/2	9610	1.12	9200	1.22	8730	1.32	8270	1.40	7760	1.48	6300	1.67							
24R638	DDPRV	1750	2	10800	1.53	10340	1.67	9890	1.78	9400	1.88	8830	1.98									

### SIZE 30" (762 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
30R632	DDPRV	870	1/2	8815	.342	7630	.439	6550	.510													
30R626	DDPRV	1160	3/4	8715	.400	8000	.520	7250	.640	6400	.740	4710	.830									
30R630	DDPRV	1160	1	10620	.730	9680	.820	8950	.920	8080	1.02	6620	1.11									
30R634	DDPRV	1160	1 1/2	12460	1.00	11660	1.11	10770	1.23	9800	1.35	8450	1.48									
30R640	DDPRV	1160	2	14600	1.62	13820	1.75	12470	1.89	11800	2.03											

### SIZE 36" (914 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE																		
PROP	FAN TYPE	RPM	HP	0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
36R630	DDPRV	690	1/2	10220	.250	8900	.380	7250	.500													
36R626	DDPRV	870	3/4	10720	.340	9730	.470	8570	.600	7100	.720											
36R630	DDPRV	870	1	12900	.500	11850	.680	10790	.820	9260	.970											
36R634	DDPRV	870	1 1/2	15100	.800	13950	.980	12790	1.12	11500	1.30											
36R638	DDPRV	870	2	17300	1.22	16050	1.42	14650	1.64	13150	1.80											
36R624	DDPRV	1160	1 1/2	13050	.670	12300	.850	11550	1.01	10700	1.15	9810	1.30	6750	1.58							
36R628	DDPRV	1160	2	15750	1.00	15250	1.20	14320	1.39	13500	1.58	12630	1.72	10100	2.10							
36R632	DDPRV	1160	3	18250	1.67	17620	1.81	17000	1.97	16250	2.19	15450	2.31	13220	2.82							
36R638	DDPRV	1160	5	23200	2.82	22220	3.10	21200	3.40	20150	3.75	19100	4.00	16600	4.40							

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
 Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 42" (1067 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
42R634	DDPRV	690	1½	18950	.870	17350	1.10	15600	1.30	13600	1.51				
42R638	DDPRV	690	2	21800	1.30	19900	1.58	17850	1.82	15350	2.02				
42R626	DDPRV	870	1½	17000	.750	15900	.950	14650	1.14	13220	1.33	11400	1.53		
42R634	DDPRV	870	3	23930	1.74	22650	2.01	21300	2.30	19950	2.55	18410	2.80		
42R630	DDPRV	1160	5	27250	2.50	26500	3.00	25500	3.30	24600	3.70	23650	4.00	21550	4.60

## SIZE 48" (1219 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
48R630	DDPRV	690	2	24250	1.10	22500	1.40	20700	1.69	18650	1.97	15550	2.20		
48R626	DDPRV	870	3	25400	1.50	24200	1.77	22750	2.04	21250	2.37	19650	2.63	14500	3.21
48R632	DDPRV	870	5	32550	2.90	31450	3.20	30250	3.60	28900	3.90	27500	4.25	23650	5.00
48R638	DDPRV	870	7½	41000	5.00	39400	5.60	37650	6.20	35750	6.70	33950	7.20	29550	7.80
48R622	DDPRV	1160	5	26550	2.30	25650	2.65	24550	2.90	23500	3.20	22400	3.50	20100	4.20
48R626	DDPRV	1160	7½	33900	3.50	33000	3.80	32000	4.20	30900	4.70	29850	5.10	27550	5.80

## SIZE 54" (1372 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
54R622	DDPRV	690	2	22500	.880	20600	1.12	18600	1.39	16200	1.67	12800	1.95		
54R628	DDPRV	690	3	31600	1.60	29900	2.00	28000	2.35	25750	2.73	23250	3.05		
54R634	DDPRV	690	5	40400	3.00	38250	3.56	36100	4.00	33950	4.42	31450	4.83		
54R626	DDPRV	870	5	36150	2.70	34750	3.10	33200	3.50	31600	3.80	29900	4.80	25850	5.20
54R630	DDPRV	870	7½	43500	3.70	42000	4.40	40500	5.00	38900	5.50	37150	6.00	33500	7.00
54R634	DDPRV	870	10	51000	6.00	49250	6.70	47550	7.35	45800	7.90	44150	8.40	40500	9.50

\*R6 is a manually adjustable pitch prop.

## SIZE 60" (1524 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
60R622	DDPRV	690	3	31000	1.50	28800	1.81	26600	2.19	24150	2.55	21200	2.93		
60R626	DDPRV	690	5	39300	2.25	37400	2.70	35150	3.20	32750	3.60	30200	4.10	21400	4.90
60R632	DDPRV	690	7½	50500	4.40	48650	4.90	46750	5.40	44750	5.90	42500	6.60	36200	7.60
60R636	DDPRV	690	10	59200	6.90	57000	7.30	54200	8.20	51500	8.80	48800	9.50	42000	10.8
60R626	DDPRV	870	10	49650	4.40	48000	5.00	46400	5.60	44500	6.20	42700	6.75	38700	7.90
60R632	DDPRV	870	15	63500	8.90	62150	9.60	60800	10.0	59200	10.7	57500	11.4	54000	12.9

\*R6 is a manually adjustable pitch prop.

## SIZE 72" (1829 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
72R622	DDPRV	580	5	45000	2.17	41750	2.67	38700	3.19	35200	3.72	30900	4.25		
72R628	DDPRV	580	7½	63000	4.00	60000	4.75	57000	5.50	54000	6.20	50300	7.00	40100	8.40
72R632	DDPRV	580	10	73200	6.50	70800	7.20	68000	7.90	65000	8.70	61750	9.70	52900	11.2
72R636	DDPRV	580	15	86000	10.0	82750	11.0	79000	12.0	75000	13.1	71000	14.0	61500	15.9
72R624	DDPRV	690	10	62100	4.50	59800	5.30	57000	6.20	54400	7.00	51800	7.70	45300	9.00
72R630	DDPRV	690	15	81700	8.30	79200	9.20	76600	10.3	74000	11.2	71200	12.3	65200	14.2
72R634	DDPRV	690	20	95600	12.7	93000	13.9	90000	15.2	87100	16.2	84350	17.3	78200	19.3

\*R6 is a manually adjustable pitch prop.

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 84" (2134 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
84R622	DDRRV	580	10	71300	4.65	67600	5.50	64000	6.40	60200	7.20	56150	8.00	46000	9.80
84R626	DDRRV	580	15	91000	6.90	87200	8.20	84000	9.20	80000	10.2	76150	11.3	67050	13.4
84R630	DDRRV	580	20	109400	10.2	105900	11.9	102150	13.2	98500	14.7	94800	15.9	86200	18.3
84R622	DDRRV	690	15	85000	7.70	82000	8.70	78750	9.80	75500	10.9	72500	11.7	65500	13.8

\*R6 is a manually adjustable pitch prop.

## SIZE 96" (2438 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
96R622	DDRRV	580	20	106700	9.00	102200	10.4	98000	11.7	94000	12.8	89750	14.1	80000	16.7
96R624	DDRRV	580	25	124000	11.0	120000	12.9	116000	14.5	111900	16.1	107400	17.7	98650	20.4

\*R6 is a manually adjustable pitch prop.

NOTES: Performance certified is for installation type A: Free inlet, free outlet  
Performance ratings do not include the effects of appurtenances (accessories).

## Belted Reversible Panel and Ring Fans

**BPRV = Reversible Belted Panel**  
**BRRV = Reversible Belted Ring**

## SIZE 24" (610 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
24R634	BPRV	1041	1/3	5320	.290	4650	.320								
24R634	BPRV	1191	1/2	6100	.440	5500	.500	4880	.530						
24R634	BPRV	1363	3/4	7000	.650	6450	.720	5940	.780	5310	.810				
24R634	BPRV	1501	1	7700	.870	7200	.960	6740	1.00	6220	1.06	5550	1.11		

## SIZE 30" (762 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
30R634	BPRV	717	1/3	7190	.290	5900	.340								
30R634	BPRV	821	1/2	8220	.430	7120	.500	5580	.560						
30R634	BPRV	940	3/4	9420	.650	8450	.740	7450	.800						
30R634	BPRV	1035	1	10400	.850	9500	.950	8620	1.00	7450	1.10				
30R634	BPRV	1184	1 1/2	11900	1.30	11100	1.40	10380	1.50	9520	1.63	8200	1.63		
30R634	BPRV	1304	2	13100	1.75	12200	1.88	11700	1.95	11000	2.08	10200	2.18		
30R634	BPRV	1492	3	15000	2.60	14400	2.75	13750	2.91	13150	3.05	12550	3.12	11000	3.33

## SIZE 36" (914 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE											
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1 1/4" SP	1 1/2" SP			
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
36R634	BPRV	532	1/3	9000	.220	7150	.310								
36R634	BPRV	609	1/2	10300	.350	8750	.440								
36R634	BPRV	697	3/4	11830	.510	10420	.620	8800	.770						
36R634	BPRV	768	1	13100	.700	11800	.800	10400	.960	8100	1.10				
36R634	BPRV	879	1 1/2	14900	1.10	13800	1.20	12690	1.35	11350	1.50				
36R634	BPRV	967	2	16400	1.42	15400	1.58	14450	1.70	13300	1.90	11950	2.10		
36R634	BPRV	1107	3	18800	2.12	17950	2.25	17100	2.40	16150	2.60	15200	2.85	12300	3.20
36R634	BPRV	1312	5	22250	3.50	21550	3.65	20830	3.82	20100	4.10	19300	4.25	17650	4.85

NOTES: Performance certified is for installation type A: Free inlet, free outlet.  
Power rating (BHP) includes transmission losses.  
Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 42" (1067 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
42R634	BPRV	471	1/2	12610 .350	10200 .490							
42R634	BPRV	539	3/4	14500 .510	12400 .640	9200 .810						
42R634	BPRV	594	1	16000 .700	14100 .850	11850 1.02						
42R634	BPRV	680	1½	18300 1.05	16700 1.19	14900 1.40	12390 1.60					
42R634	BPRV	748	2	20100 1.48	18600 1.50	17200 1.80	15300 2.10					
42R634	BPRV	856	3	23000 2.00	21750 2.30	20400 2.50	19000 2.75	17400 3.00	14700 3.30			
42R634	BPRV	1015	5	27250 3.50	26200 3.70	25000 4.00	24000 4.20	22800 4.40	20000 5.20			
42R634	BPRV	1162	7½	31300 5.20	30400 5.40	29450 5.60	28500 6.00	27500 6.40	25300 7.10	22600 7.80		

## SIZE 48" (1219 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
48R634	BPRV	432	3/4	17300 .520	14250 .680							
48R634	BPRV	475	1	19100 .700	16400 .820	12200 1.07						
48R634	BPRV	544	1½	21900 1.02	19500 1.21	16750 1.50						
48R634	BPRV	599	2	24100 1.40	21950 1.65	19700 1.85	16400 2.15					
48R634	BPRV	685	3	27500 2.00	25700 2.40	23750 2.50	21600 2.90	16900 3.30				
48R634	BPRV	813	5	32600 3.50	31200 3.70	29600 4.00	28000 4.45	26200 4.80	20000 5.50			
48R634	BPRV	930	7½	37400 5.40	36100 5.50	34700 5.80	33250 6.20	31800 6.70	28500 7.50			

## SIZE 54" (1372 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
54R634	BPRV	563	3	32100 2.10	29600 2.30	27000 2.85	23750 3.00					
54R634	BPRV	668	5	37200 3.50	26250 3.80	34000 4.20	31680 4.65	28870 5.10				
54R634	BPRV	764	7½	43650 5.30	42020 5.60	40100 6.00	38160 6.50	36070 7.00	30500 8.00			
54R634	BPRV	841	10	48100 7.00	46600 7.80	44920 8.30	43150 8.80	41300 9.40	27230 10.0	30400 11.0		
54R634	BPRV	963	15	55200 10.5	53880 10.9	52400 11.4	50840 11.9	49320 12.5	46080 13.7	42400 15.0	37000 16.2	

\*R6 is a manually adjustable pitch prop.

## SIZE 60" (1524 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
60R634	BPRV	560	5	43800 3.50	41280 3.85	38300 4.30	35060 4.80	30600 5.35				
60R634	BPRV	641	7½	50200 5.10	47950 5.65	45500 6.10	42800 6.70	39950 7.30				
60R634	BPRV	706	10	55400 7.00	53350 7.40	51100 7.90	48700 8.52	46200 9.20	40200 11.0			
60R634	BPRV	808	15	63400 10.5	61500 10.9	59600 11.6	57650 12.0	55500 12.9	51200 14.4	45500 15.9		
60R634	BPRV	889	20	70000 14.0	68200 14.5	66400 15.0	64500 15.8	62700 16.5	58900 18.0	54600 19.7	49100 21.2	

\*R6 is a manually adjustable pitch prop.

## SIZE 72" (1829 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE								
				0" SP	1/8" SP	1/4" SP	3/8" SP	1/2" SP	3/4" SP	1" SP	1¼" SP	1½" SP
PROP	FAN TYPE	RPM	HP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
72R634	BPRV	413	5	55700 3.50	50800 4.00	46500 4.80	40500 5.20					
72R634	BPRV	473	7½	64000 5.20	60350 5.80	56120 6.40	51520 7.20	45630 7.90				
72R634	BPRV	521	10	70400 7.00	67270 7.60	63500 8.25	59600 9.05	55060 9.95				
72R634	BPRV	596	15	81000 10.6	78000 11.1	74700 11.8	71460 12.7	67900 13.7	59500 15.5			
72R634	BPRV	656	20	89100 14.0	86500 14.6	83500 15.4	80400 16.4	77500 17.3	70800 19.4	61650 21.4		

\*R6 is a manually adjustable pitch prop.

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
 Power rating (BHP) includes transmission losses.  
 Performance ratings do not include the effects of appurtenances (accessories).

## SIZE 84" (2134 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
84R634	BRRV	320	5	69800	3.60	62000	4.20	54100	5.00										
84R634	BRRV	366	7 1/2	78800	5.20	72900	5.90	66500	6.80	59000	7.80								
84R634	BRRV	403	10	86750	7.10	81520	7.71	75770	8.63	69550	9.64	61000	10.6						
84R634	BRRV	461	15	99500	10.5	94890	11.3	89960	12.2	84850	13.3	79200	14.5						
84R634	BRRV	508	20	109900	13.9	105570	14.9	100940	15.9	96520	17.0	91700	18.3	80030	20.9				

\*R6 is a manually adjustable pitch prop.

## SIZE 96" (2438 mm)

CATALOG NUMBER				CUBIC FEET PER MINUTE & HORSEPOWER AT STATIC PRESSURE															
				0" SP		1/8" SP		1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP	
PROP	FAN TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
96R634	BRRV	293	7 1/2	94000	5.30	86000	6.10	76550	7.10	62000	8.10								
96R634	BRRV	322	10	103000	7.10	96000	7.90	88000	8.90	78000	10.2								
96R634	BRRV	369	15	118500	10.6	112070	11.4	105000	12.6	97460	14.1	88300	15.4						
96R634	BRRV	406	20	130300	14.2	124740	15.0	118270	16.3	111790	17.7	104350	19.3	78930	22.1				

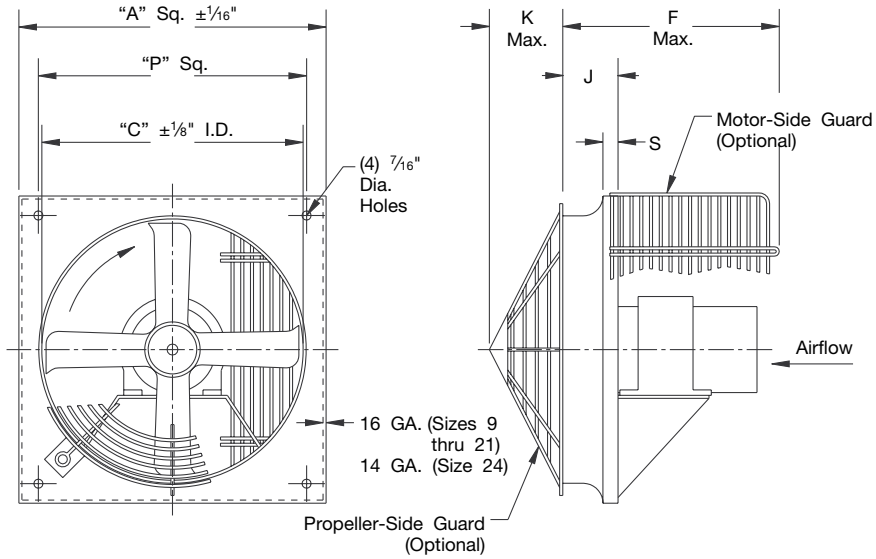
\*R6 is a manually adjustable pitch prop.

**NOTES:** Performance certified is for installation type A: Free inlet, free outlet.  
 Power rating (BHP) includes transmission losses.  
 Performance ratings do not include the effects of appurtenances (accessories).



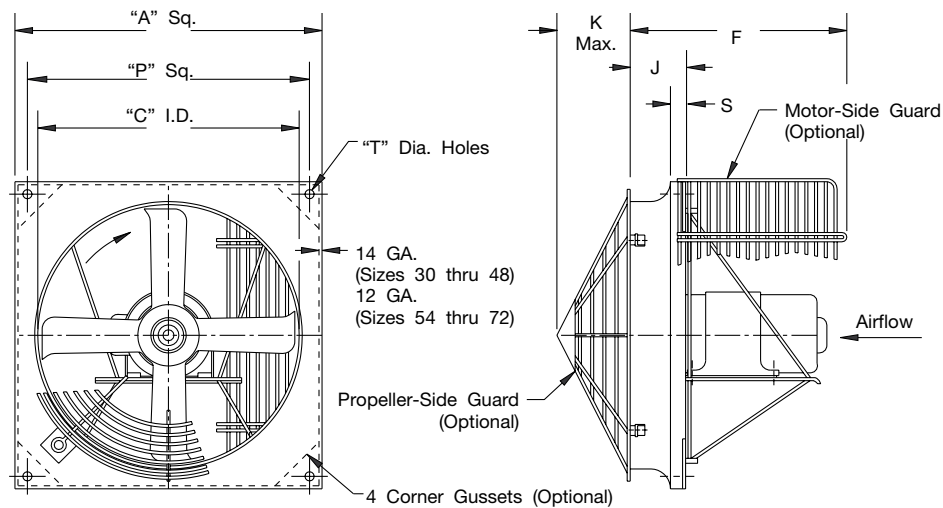
# Dimensional Data – Direct Drive Panel Fans

## Standard Flow (DDP)



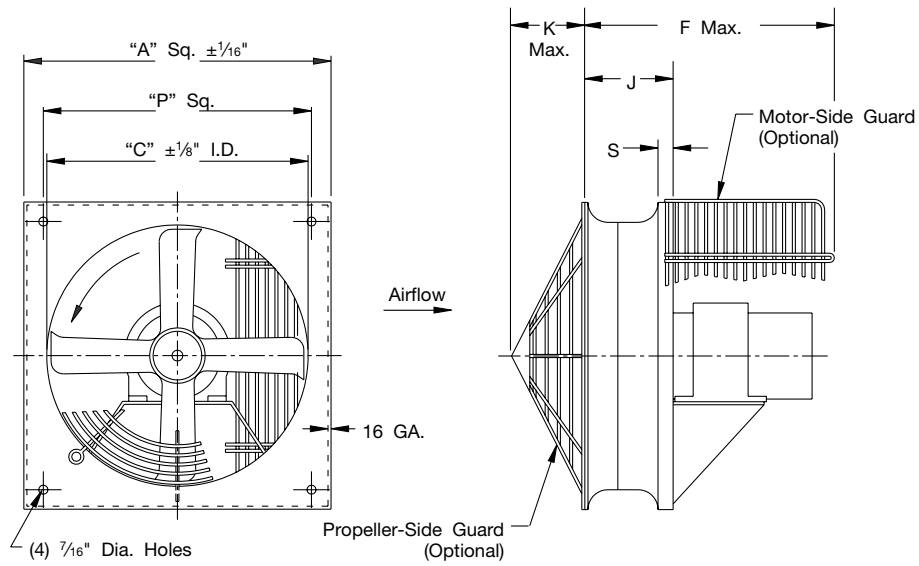
SIZE	A	C	F	J	K	P	S	MAX. FRAME
9	12	9	12 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>16</sub>	FLAT	9 <sup>1</sup> / <sub>4</sub>	1	56
12	16	12 <sup>1</sup> / <sub>8</sub>	17 <sup>3</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	FLAT	13 <sup>1</sup> / <sub>4</sub>	1	56
14	17	14 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>16</sub>	4	FLAT	14 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>8</sub>	145T
16	20	16 <sup>1</sup> / <sub>4</sub>	18 <sup>11</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>8</sub>	FLAT	17 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	145T
18	22	18 <sup>1</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>16</sub>	19 <sup>1</sup> / <sub>4</sub>	1 <sup>9</sup> / <sub>16</sub>	184T
21	25	21 <sup>1</sup> / <sub>4</sub>	16 <sup>15</sup> / <sub>16</sub>	5 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	22 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	184T
24	28	24 <sup>1</sup> / <sub>4</sub>	21 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	184T

## Standard Flow (DDP)



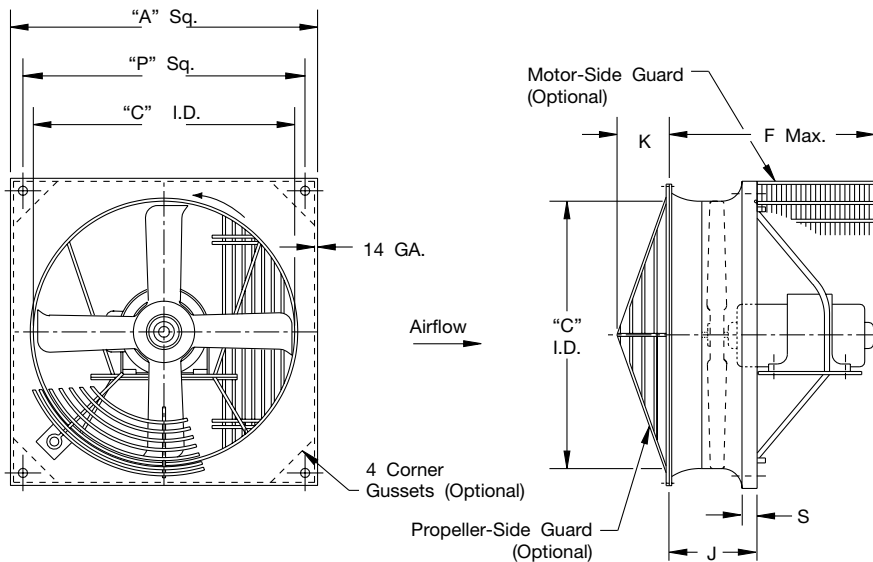
SIZE	A	C	F	J	K	P	S	T	MAX. FRAME
30	36	30 <sup>3</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>4</sub>	7 <sup>5</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>16</sub>	33 <sup>1</sup> / <sub>4</sub>	2	7 <sup>1</sup> / <sub>16</sub>	215T
36	42	36 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	7 <sup>9</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	256T
42	48	42 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	7 <sup>9</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>8</sub>	45 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	256T
48	54	48 <sup>3</sup> / <sub>8</sub>	28 <sup>5</sup> / <sub>32</sub>	8 <sup>3</sup> / <sub>4</sub>	4 <sup>7</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>16</sub>	286T
54	68	54 <sup>3</sup> / <sub>8</sub>	30 <sup>1</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	64 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>16</sub>	326T
60	75	60 <sup>3</sup> / <sub>8</sub>	33 <sup>1</sup> / <sub>8</sub>	10	6 <sup>1</sup> / <sub>16</sub>	71 <sup>3</sup> / <sub>4</sub>	4	9 <sup>1</sup> / <sub>16</sub>	365T
72	79	72 <sup>3</sup> / <sub>8</sub>	43	7 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	75 <sup>3</sup> / <sub>4</sub>	2	9 <sup>1</sup> / <sub>16</sub>	365T

## Reverse Flow (DDPRF)



SIZE	A	C	F	J	K	P	S	MAX. FRAME
9	12	9	12 $\frac{3}{4}$	4 $\frac{9}{16}$	FLAT	9 $\frac{1}{4}$	1	56
12	16	12 $\frac{1}{8}$	17 $\frac{1}{16}$	4 $\frac{3}{4}$	FLAT	13 $\frac{1}{4}$	1	56
14	17	14 $\frac{1}{4}$	17 $\frac{1}{16}$	6 $\frac{3}{8}$	FLAT	14 $\frac{1}{4}$	1 $\frac{1}{8}$	145T
16	20	16 $\frac{1}{4}$	19 $\frac{1}{16}$	7 $\frac{1}{4}$	FLAT	17 $\frac{1}{4}$	1 $\frac{1}{2}$	145T
18	22	18 $\frac{1}{4}$	16 $\frac{3}{4}$	7 $\frac{3}{4}$	2 $\frac{5}{16}$	19 $\frac{1}{4}$	1 $\frac{9}{16}$	184T
21	25	21 $\frac{1}{4}$	17 $\frac{5}{16}$	8 $\frac{1}{4}$	2 $\frac{1}{2}$	22 $\frac{1}{4}$	1 $\frac{1}{2}$	184T

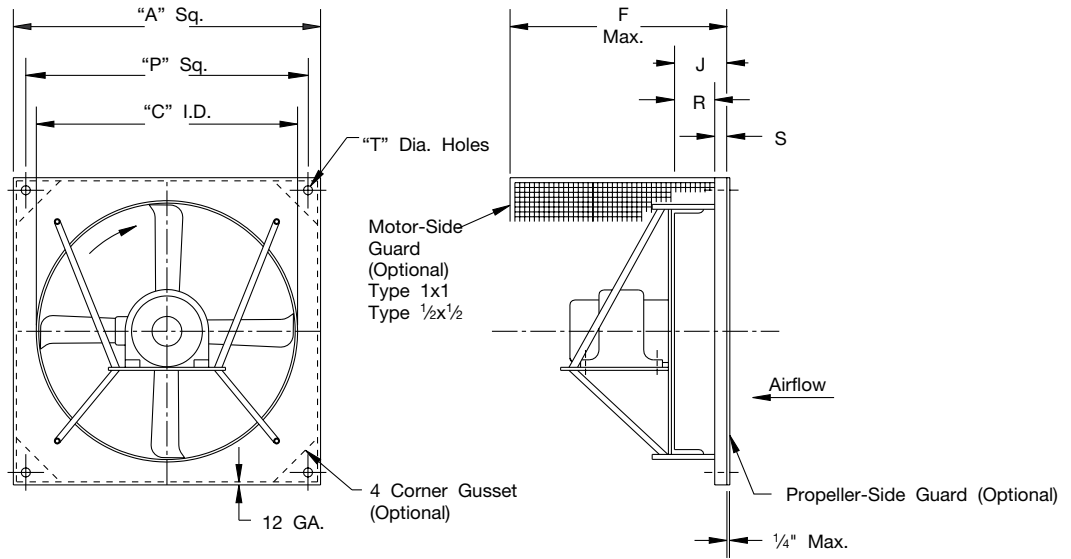
## Reverse Flow (DDPRF)



SIZE	A	C	F	J	K	P	S	MAX. FRAME
24	28	24 $\frac{1}{4}$	21 $\frac{3}{8}$	9 $\frac{1}{4}$	2 $\frac{11}{16}$	25 $\frac{1}{4}$	1 $\frac{1}{2}$	184T
30	36	30 $\frac{3}{8}$	23 $\frac{1}{4}$	10 $\frac{3}{8}$	3 $\frac{3}{16}$	33 $\frac{1}{4}$	2	215T
36	42	36 $\frac{3}{8}$	27 $\frac{9}{32}$	12 $\frac{3}{16}$	3 $\frac{3}{4}$	39 $\frac{1}{4}$	2 $\frac{1}{16}$	256T
42	48	42 $\frac{3}{8}$	27 $\frac{5}{32}$	12 $\frac{3}{16}$	4 $\frac{3}{8}$	45 $\frac{1}{4}$	2 $\frac{1}{16}$	256T
48	54	48 $\frac{3}{8}$	28	13 $\frac{3}{8}$	4 $\frac{7}{8}$	51 $\frac{1}{4}$	2 $\frac{3}{4}$	286T

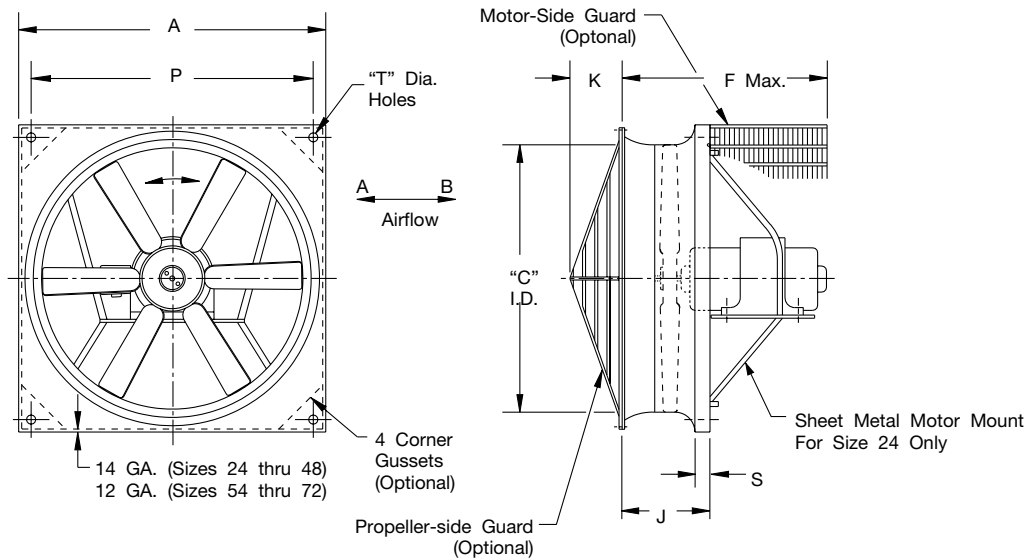


# Reverse Construction (DDPRC)



SIZE	A	C	F	J	P	R	S	T	MAX. FRAME
54	68	54 <sup>3</sup> / <sub>8</sub>	40	8 <sup>3</sup> / <sub>8</sub>	64 <sup>3</sup> / <sub>4</sub>	6	2 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	326T
60	75	60 <sup>3</sup> / <sub>8</sub>	42	10	71 <sup>3</sup> / <sub>4</sub>	6	4	<sup>9</sup> / <sub>16</sub>	365T
72	79	72 <sup>3</sup> / <sub>8</sub>	42	7 <sup>1</sup> / <sub>2</sub>	75 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	2	<sup>9</sup> / <sub>16</sub>	365T

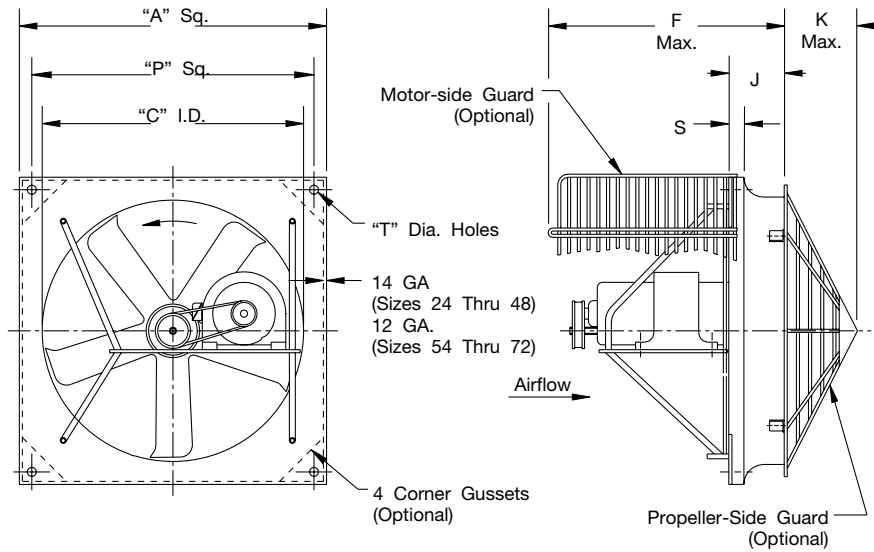
# Reversible (DDPRV)



SIZE	A	C	F	J	K	P	S	T	MAX. FRAME
24	28	24 <sup>1</sup> / <sub>4</sub>	21 <sup>3</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	<sup>7</sup> / <sub>16</sub>	184T
30	36	30 <sup>3</sup> / <sub>8</sub>	23 <sup>1</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>16</sub>	33 <sup>1</sup> / <sub>4</sub>	2	<sup>7</sup> / <sub>16</sub>	215T
36	42	36 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	<sup>7</sup> / <sub>16</sub>	256T
42	48	42 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>8</sub>	45 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	<sup>7</sup> / <sub>16</sub>	256T
48	54	48 <sup>3</sup> / <sub>8</sub>	28	13 <sup>3</sup> / <sub>8</sub>	4 <sup>7</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	<sup>7</sup> / <sub>16</sub>	286T
54	68	54 <sup>3</sup> / <sub>8</sub>	36 <sup>1</sup> / <sub>8</sub>	13 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>16</sub>	64 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	326T
60	75	60 <sup>3</sup> / <sub>8</sub>	40 <sup>3</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	71 <sup>3</sup> / <sub>4</sub>	4	<sup>9</sup> / <sub>16</sub>	365T
72	79	72 <sup>3</sup> / <sub>8</sub>	49 <sup>3</sup> / <sub>4</sub>	13 <sup>1</sup> / <sub>4</sub>	1	75 <sup>3</sup> / <sub>4</sub>	2	<sup>9</sup> / <sub>16</sub>	365T

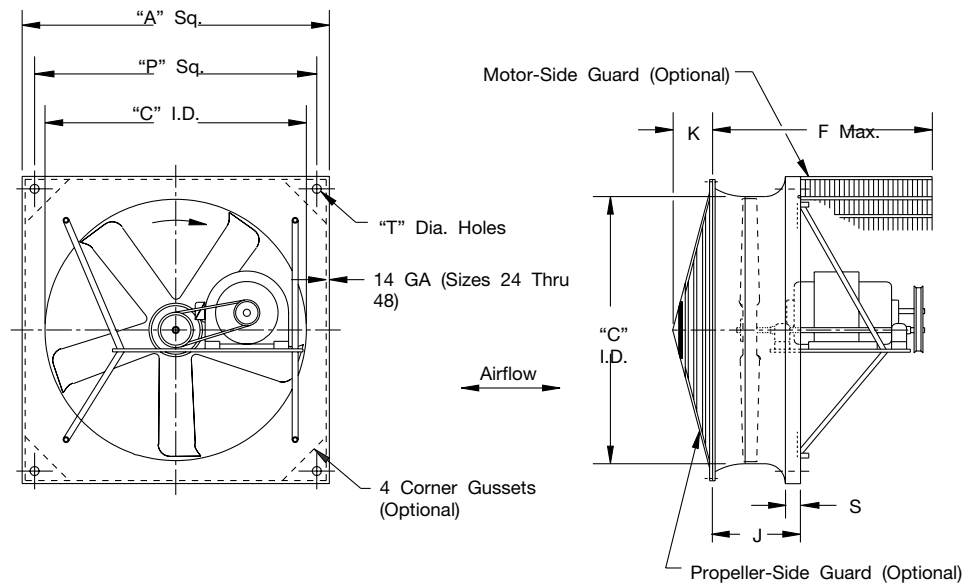
# Dimensional Data – Belted Panel Fans

## Standard Flow (BP)



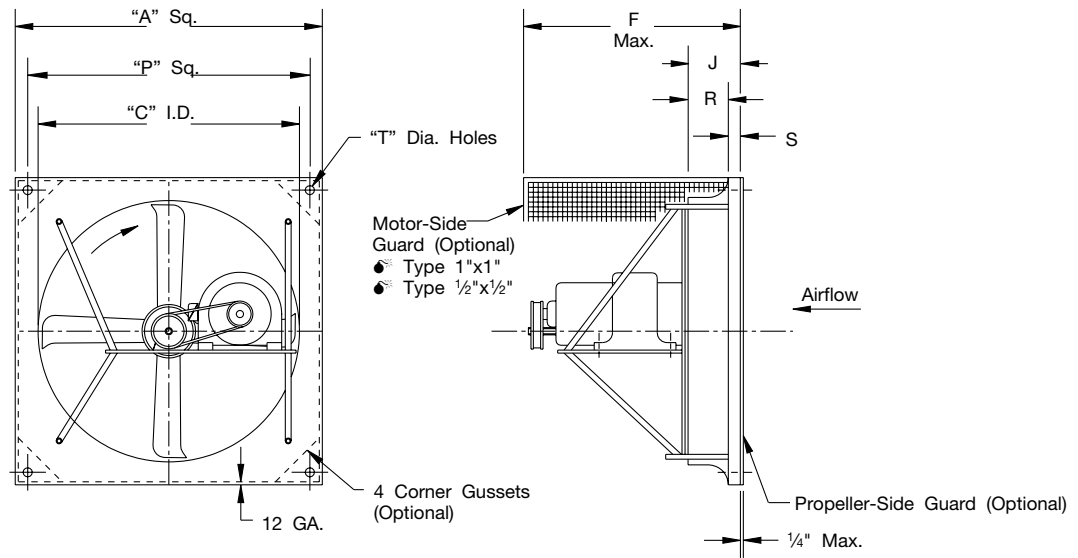
SIZE	A	C	F	J	K	P	S	T	MAX. FRAME
24	28	24 <sup>1</sup> / <sub>4</sub>	21 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	2 <sup>11</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>16</sub>	145T
30	36	30 <sup>3</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>4</sub>	7 <sup>5</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>16</sub>	33 <sup>1</sup> / <sub>4</sub>	2	7 <sup>1</sup> / <sub>16</sub>	184T
36	42	36 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	7 <sup>9</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	184T
42	48	42 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	7 <sup>9</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>8</sub>	45 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	215T
48	54	48 <sup>3</sup> / <sub>8</sub>	28 <sup>5</sup> / <sub>32</sub>	8 <sup>3</sup> / <sub>4</sub>	4 <sup>7</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>16</sub>	256T
54	68	54 <sup>3</sup> / <sub>8</sub>	29 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	64 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>16</sub>	256T
60	75	60 <sup>3</sup> / <sub>8</sub>	33 <sup>1</sup> / <sub>8</sub>	10	6 <sup>1</sup> / <sub>16</sub>	71 <sup>3</sup> / <sub>4</sub>	4	9 <sup>1</sup> / <sub>16</sub>	256T
72	79	72 <sup>3</sup> / <sub>8</sub>	43	7 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	75 <sup>3</sup> / <sub>4</sub>	2	9 <sup>1</sup> / <sub>16</sub>	256T

## Reverse Flow (BPRF)



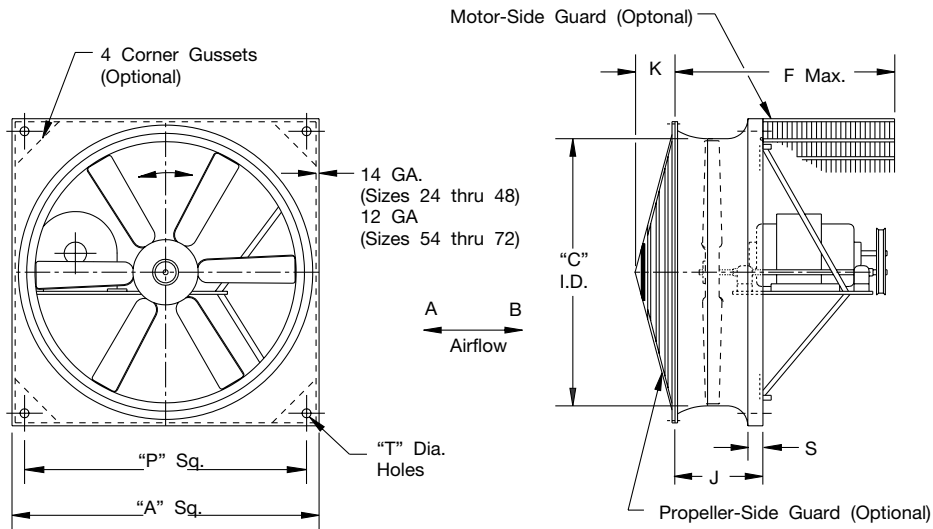
SIZE	A	C	F	J	K	P	S	T	MAX. FRAME
24	28	24 <sup>1</sup> / <sub>4</sub>	21 <sup>3</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>4</sub>	2 <sup>11</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>16</sub>	145T
30	36	30 <sup>3</sup> / <sub>8</sub>	23 <sup>1</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>16</sub>	33 <sup>1</sup> / <sub>4</sub>	2	7 <sup>1</sup> / <sub>16</sub>	184T
36	42	36 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	184T
42	48	42 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>8</sub>	45 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	215T
48	54	48 <sup>3</sup> / <sub>8</sub>	28	12 <sup>3</sup> / <sub>8</sub>	4 <sup>7</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>16</sub>	256T

# Reverse Construction (BPRC)



SIZE	A	C	F	J	P	R	S	T	MAX. FRAME
54	68	54 <sup>3</sup> / <sub>8</sub>	40	8 <sup>1</sup> / <sub>8</sub>	64 <sup>3</sup> / <sub>4</sub>	6	2 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	256T
60	75	60 <sup>3</sup> / <sub>8</sub>	42	10	71 <sup>3</sup> / <sub>4</sub>	6	4	<sup>9</sup> / <sub>16</sub>	256T
72	79	72 <sup>3</sup> / <sub>8</sub>	42	7 <sup>1</sup> / <sub>2</sub>	75 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	2	<sup>9</sup> / <sub>16</sub>	256T

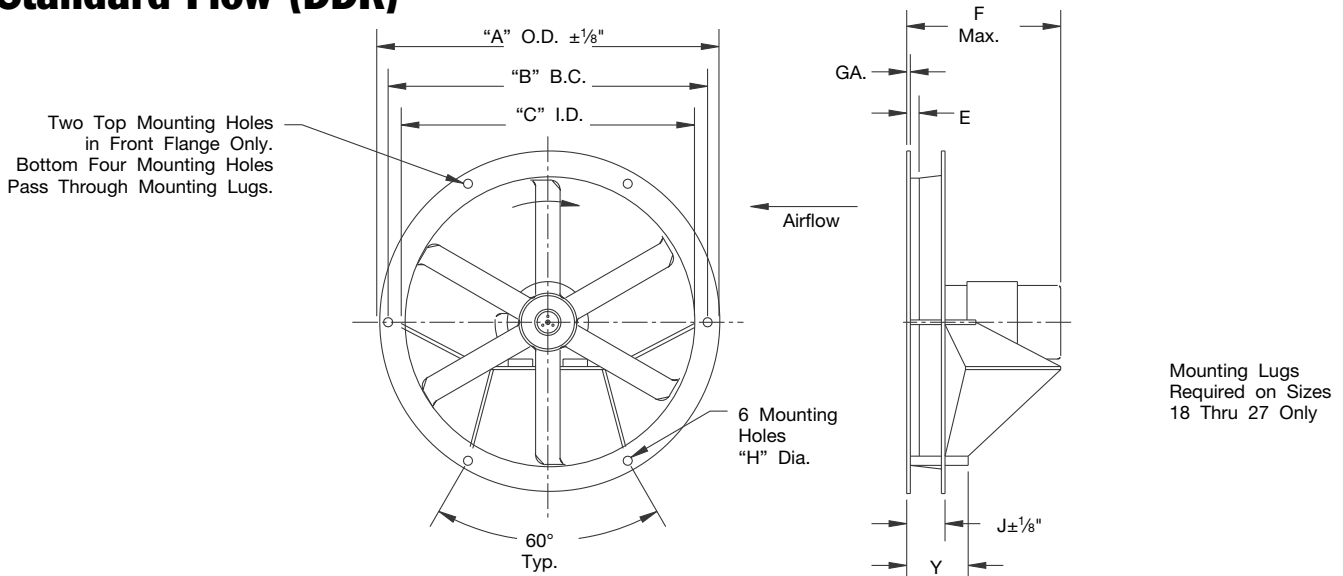
# Reversible (BPRV)



SIZE	A	C	F	J	K	P	S	T	MAX. FRAME
24	28	24 <sup>1</sup> / <sub>4</sub>	21 <sup>3</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>4</sub>	2 <sup>11</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	<sup>7</sup> / <sub>16</sub>	145T
30	36	30 <sup>3</sup> / <sub>8</sub>	23 <sup>1</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>16</sub>	33 <sup>1</sup> / <sub>4</sub>	2	<sup>7</sup> / <sub>16</sub>	184T
36	42	36 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	<sup>7</sup> / <sub>16</sub>	184T
42	48	42 <sup>3</sup> / <sub>8</sub>	27 <sup>9</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>8</sub>	45 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	<sup>7</sup> / <sub>16</sub>	215T
48	54	48 <sup>3</sup> / <sub>8</sub>	28	12 <sup>3</sup> / <sub>8</sub>	4 <sup>7</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	<sup>7</sup> / <sub>16</sub>	256T
54	68	54 <sup>3</sup> / <sub>8</sub>	36 <sup>1</sup> / <sub>8</sub>	13 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>16</sub>	64 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	256T
60	75	60 <sup>3</sup> / <sub>8</sub>	40 <sup>3</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	71 <sup>3</sup> / <sub>4</sub>	4	<sup>9</sup> / <sub>16</sub>	256T
72	79	72 <sup>3</sup> / <sub>8</sub>	49 <sup>3</sup> / <sub>4</sub>	13 <sup>1</sup> / <sub>4</sub>	1	75 <sup>3</sup> / <sub>4</sub>	2	<sup>9</sup> / <sub>16</sub>	256T

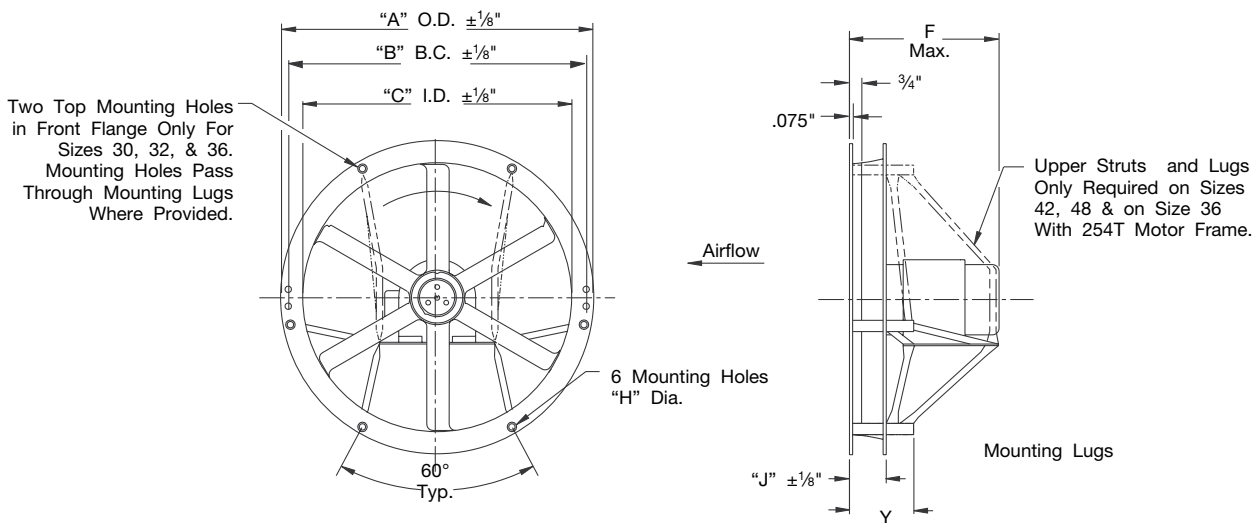
# Dimensional Data – Direct Drive Ring Fans

## Standard Flow (DDR)



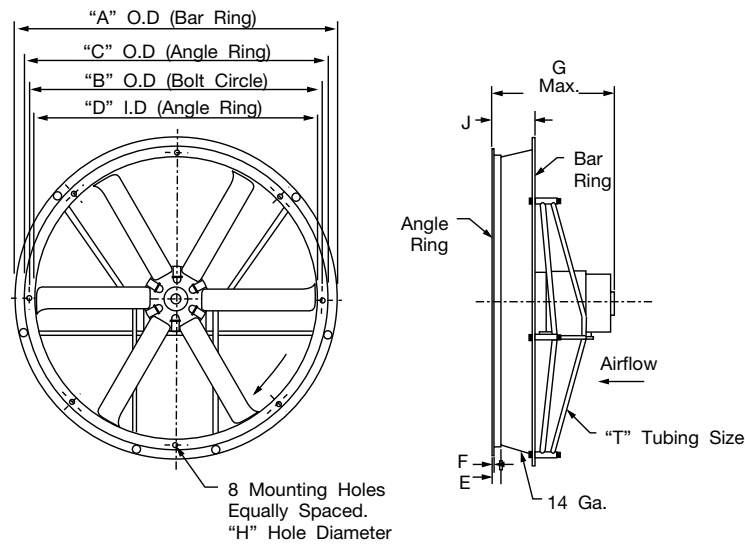
SIZE	A	B	C	E	F	H	J	Y	GA	MAX. FRAME
9	12¼	11⅝	9	⅝	13⅝	⅝	2⅞	N/A	16	48
12	15¼	14⅞	12	⅝	16⅞	⅝	2⅞	N/A	16	56
14	17¼	16⅞	14	⅝	16⅞	⅝	2⅞	N/A	16	145T
16	19¼	18⅝	16	⅝	17⅝	⅝	2⅞	N/A	16	145T
18	21¼	20½	18	⅝	19	⅝	2⅞	5	14	184T
21	24¼	23⅞	21	⅝	19	½	2⅞	5	14	184T
24	28	27¼	24	¾	19½	½	3¼	5	14	184T
27	31	30⅞	27	¾	20	½	3¼	5	14	184T

## Standard Flow (DDR)



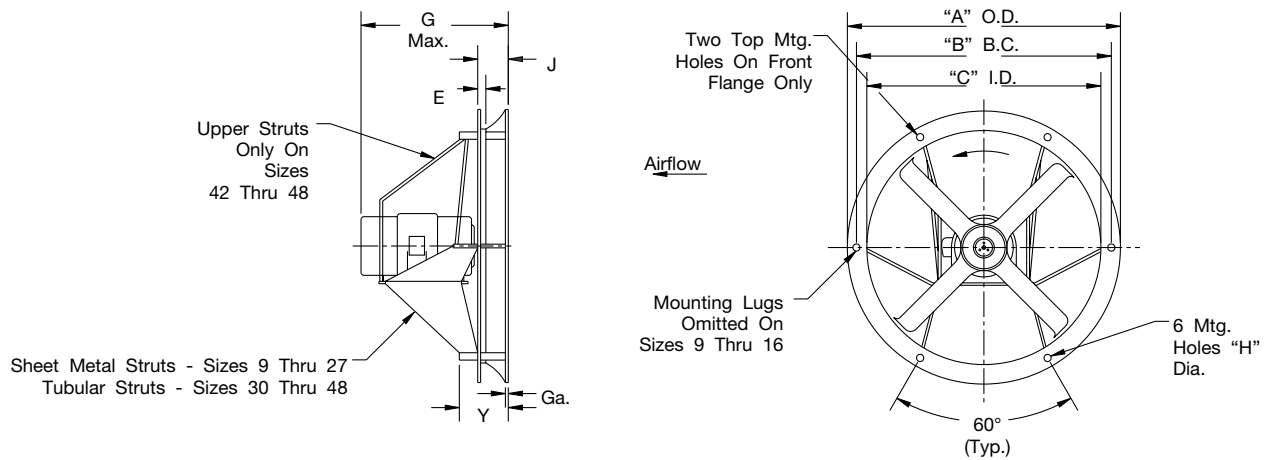
SIZE	A	B	C	F	H	J	Y	MAX. FRAME
30	34	32⅞	30	20½	⅝	3¼	7¼	184T
32	36	34¾	32	20½	⅝	3¼	7¼	184T
36	41¼	39⅝	36	22	⅝	5⅞	9⅞	215T
42	47¼	46	42	22	⅝	5⅞	9⅞	256T
48	53¼	51¼	48	27	⅝	5⅞	9⅞	256T

# Standard Flow (DDR)



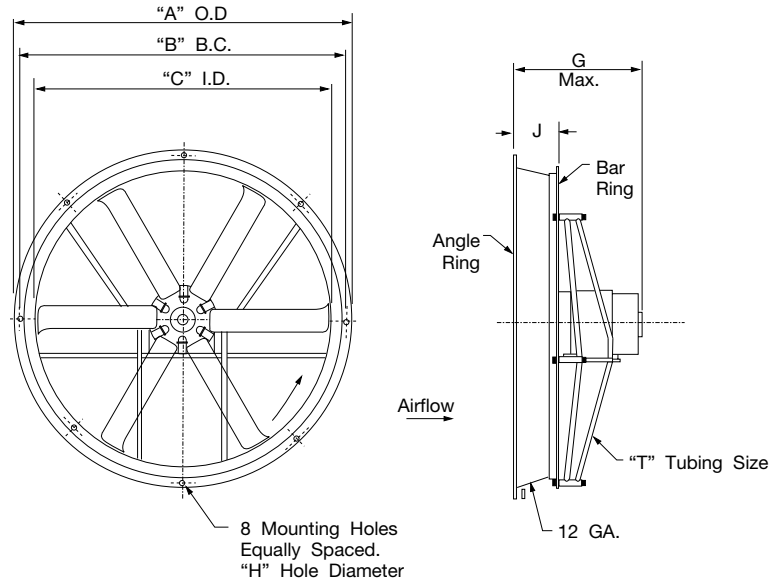
SIZE	A	B	C	D	E	F	G	H	J	T	MAX. FRAME
54	62	57¼	59	55	2	¼	30	⅝	6 <sup>1</sup> / <sub>16</sub>	1¼	286T
60	67¼	63¼	65	61	2	¼	30	⅝	6 <sup>1</sup> / <sub>16</sub>	1¼	286T
72	82	75¼	77	73	2	¼	33	1 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	1¼	326T
84	94	88¼	91	85	3	5 <sup>1</sup> / <sub>16</sub>	35	1 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>16</sub>	1¼	326T
96	106	100¼	103	97	3	5 <sup>1</sup> / <sub>16</sub>	37	1 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>16</sub>	1½	326T

# Reverse Construction (DDRRC)



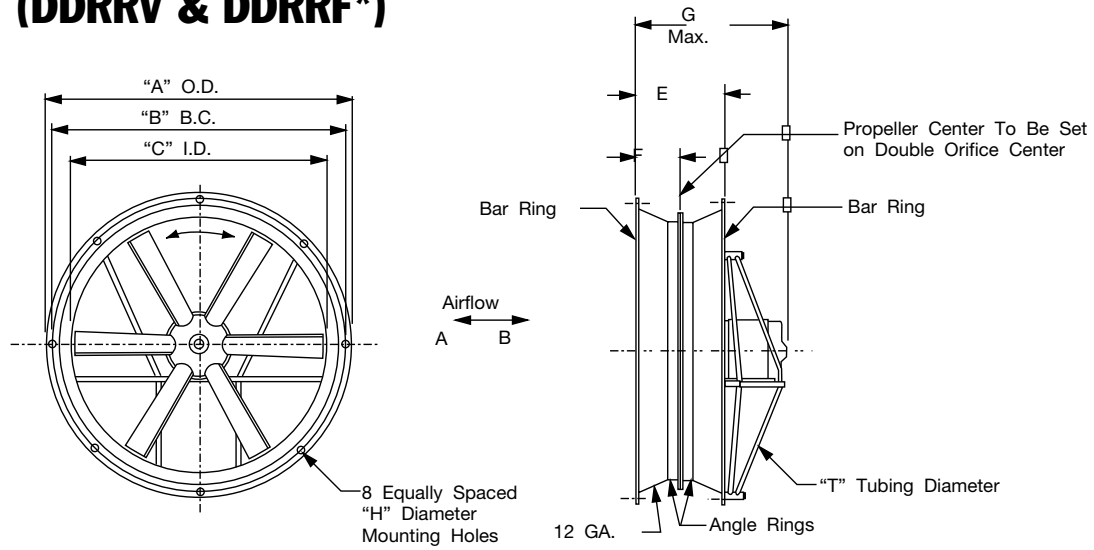
SIZE	A	B	C	E	G	H	J	Y	GA	MAX. FRAME
9	12¼	11⅝	9	⅝	13½	⅜	2⅞	N/A	16	48
12	15¼	14 <sup>9</sup> / <sub>16</sub>	12	⅝	17¾	⅜	2⅞	N/A	16	56
14	17¼	16 <sup>1</sup> / <sub>16</sub>	14	⅝	17¾	⅜	2⅞	N/A	16	145T
16	19¼	18⅝	16	⅝	17¾	⅜	2⅞	N/A	16	145T
18	21¼	20½	18	⅝	19¾	1 <sup>3</sup> / <sub>32</sub>	2⅞	5	14	184T
21	24¼	23 <sup>3</sup> / <sub>16</sub>	21	⅝	19¾	1 <sup>3</sup> / <sub>32</sub>	2⅞	5	14	184T
24	28	27¼	24	¾	20	1 <sup>3</sup> / <sub>32</sub>	3¼	5	14	184T
27	31	30⅝	27	¾	20	1 <sup>3</sup> / <sub>32</sub>	3¼	5	14	184T
30	34	32 <sup>3</sup> / <sub>16</sub>	30	¾	20	1 <sup>7</sup> / <sub>32</sub>	3¼	7¼	14	184T
32	36	34¾	32	¾	20	1 <sup>7</sup> / <sub>32</sub>	3¼	7¼	14	184T
36	41¼	39 <sup>5</sup> / <sub>8</sub>	36	¾	22½	1 <sup>7</sup> / <sub>32</sub>	5⅝	9⅝	14	215T
42	47¼	46	42	¾	27	1 <sup>7</sup> / <sub>32</sub>	5⅝	9⅝	14	256T
48	53¼	51¼	48	¾	27	⅞	5⅝	9⅝	14	256T

# Reverse Construction (DDRRC)



SIZE	A	B	C	G	H	J	T	MAX. FRAME
54	62	60	55	30	5/8	6 1/16	1	286T
60	67 1/4	65 1/4	61	30	5/8	6 1/16	1	286T
72	82	80	73	33	1 1/16	8 1/16	1 1/4	326T
84	94	92	85	35	1 1/16	9 3/16	1 1/4	326T
96	106	104	97	37	1 1/16	9 3/16	1 1/2	326T

# Reversible (DDRRV & DDRRF\*)

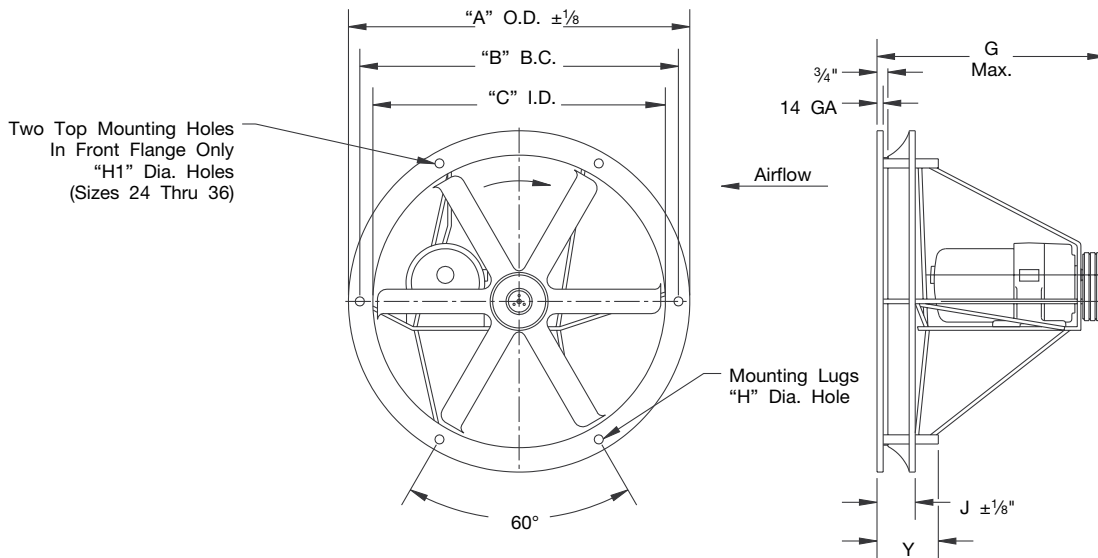


SIZE	A	B	C	E	F	G	H	T	BAR RING	ANGLE RING	MAX. FRAME
24	28	27 1/4	24	6 1/2	3 1/4	22 3/4	1/2	SHEET	14 GA	—	184T
30	34	32 3/16	30	6 1/2	3 1/4	23 3/4	5/8	SHEET	14 GA	—	184T
36	41 1/4	39 5/8	36	10 1/4	5 1/8	27 1/8	5/8	1 1/4	14 GA	—	215T
42	47 1/4	46	42	10 1/4	5 1/8	27 1/8	5/8	1 1/4	14 GA	—	256T
48	53 1/4	51 1/4	48	10 1/4	5 1/8	32 1/8	1	1 1/4	14 GA	—	256T
54	62	60	55	13 3/8	6 1/16	36 1/2	9/16	1 1/4	1 1/2 x 3/16	2 x 2 x 1/4	286T
60	67 1/4	65 1/4	61	13 3/8	6 1/16	27 1/2	9/16	1 1/4	1 1/2 x 3/16	2 x 2 x 1/4	286T
72	82	80	73	16 1/8	8 1/16	41	1 1/16	1 1/2	2 x 3/16	2 x 2 x 1/4	326T
84	94	92	85	18 3/8	9 3/16	44 3/4	1 1/16	1 1/2	2 x 3/16	3 x 3 x 5/16	326T
96	106	104	97	18 3/8	9 3/16	47	1 1/16	1 1/2	2 x 3/16	3 x 3 x 5/16	326T

\*DDRRF available in sizes 9 through 48 only.

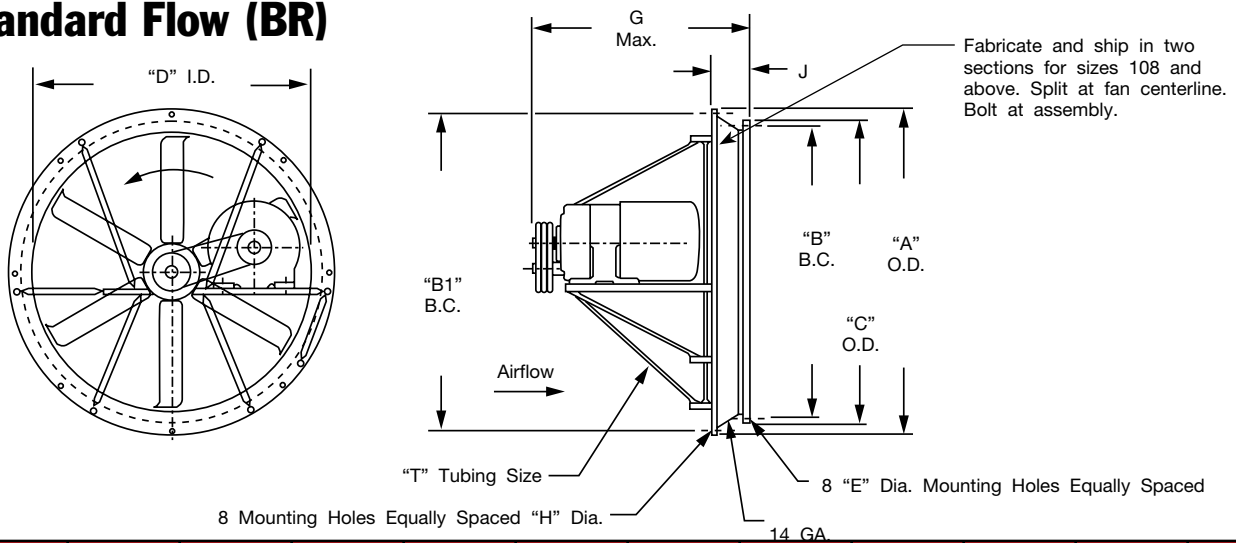
# Dimensional Data – Belted Ring Fans

## Standard Flow (BR)



SIZE	A	B	C	G	H1	H	J	Y	MAX. FRAME
24	28	27 1/4	24	19 3/4	7/16	1 3/32	3/4	5	145T
27	31	30 5/8	27	22 3/4	7/16	1 3/32	3/4	7 1/4	184T
30	34	32 3/16	30	22 3/4	9/16	1 7/32	3/4	7 1/4	184T
32	36	34 3/4	32	22 3/4	9/16	1 7/32	3/4	7 1/4	184T
36	41 1/4	39 5/8	36	23 1/2	9/16	1 7/32	5/8	9 5/8	184T
42	47 1/4	46	42	24 1/2	1 7/32	1 7/32	5/8	9 3/8	215T
48	53 1/4	51 1/4	48	30 1/2	5/8	5/8	5/8	9 7/8	215T

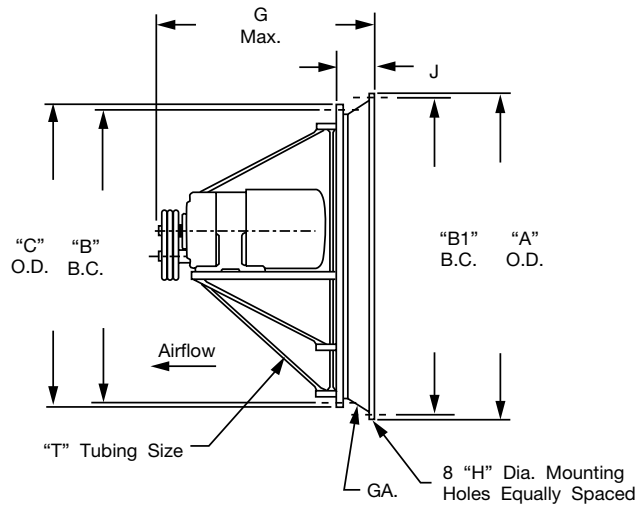
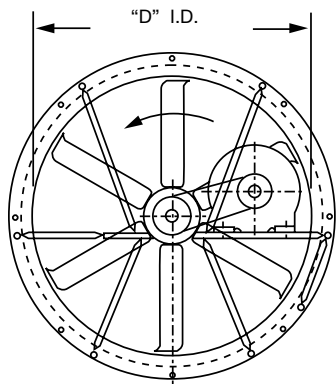
## Standard Flow (BR)



SIZE	A	B	B1	C	D	E	G	H	J	T	MAX. FRAME
54	62	57 1/4	60	59	55	5/8	32 1/2	9/16	6 11/16	1 1/4	256T
60	67 1/4	63 1/4	65 1/4	65	61	5/8	32 1/2	9/16	6 11/16	1 1/4	256T
72	82	75 1/4	80	77	73	1 1/16	33 1/2	1 1/16	8 3/16	1 1/4	256T
84	94	88 1/4	92	91	85	1 1/16	38	1 1/16	9 3/16	1 1/4	286T
96	106	100 1/4	104	103	97	1 1/16	38	1 1/16	9 3/16	1 1/2	286T
108	122 3/4	112 1/2	118 1/2	115 3/4	108 3/4	1 1/16	CF	1 1/16	12 5/16	1 1/2	CF
120	136	124 3/4	132 1/2	128	121	1 1/16	CF	3/4	12 5/16	1 1/2	CF
144	161	150	157	153	145	1 1/16	CF	3/4	15 5/8	1 1/2	CF

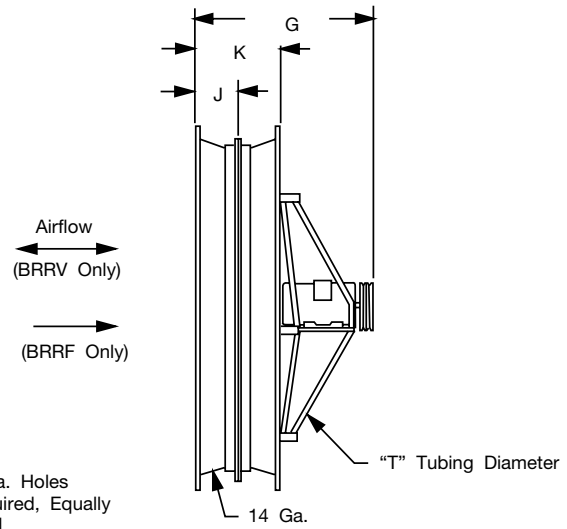
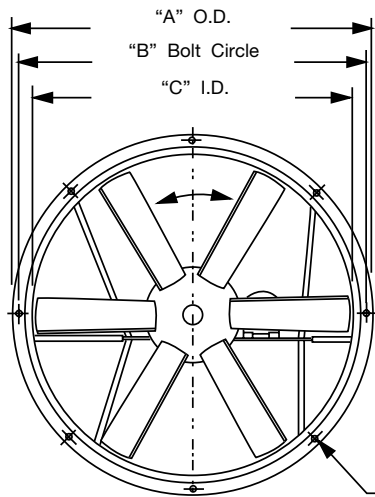
**NOTE:** Performance data for BR fans sizes 108-144 is not shown in this bulletin. For performance data please consult the factory. Performance data for BR fans sizes 108-144 is not AMCA certified.

# Reverse Construction (BRRC)



SIZE	A	B	B1	C	D	G	H	J	T	GA.	MAX. FRAME
24	28	27 <sup>1</sup> / <sub>4</sub>	27 <sup>1</sup> / <sub>4</sub>	28	24	19 <sup>1</sup> / <sub>2</sub>	1/2	3/4	SHEET	.075	145T
27	31	30 <sup>1</sup> / <sub>8</sub>	30 <sup>1</sup> / <sub>8</sub>	31	27	22 <sup>1</sup> / <sub>4</sub>	5/8	3/4	SHEET	.075	184T
30	34	32 <sup>3</sup> / <sub>16</sub>	32 <sup>3</sup> / <sub>16</sub>	34	30	22 <sup>1</sup> / <sub>4</sub>	5/8	3/4	SHEET	.075	184T
32	36	34 <sup>3</sup> / <sub>4</sub>	34 <sup>3</sup> / <sub>4</sub>	36	32	24 <sup>1</sup> / <sub>4</sub>	5/8	3/4	SHEET	.075	184T
36	41 <sup>1</sup> / <sub>4</sub>	39 <sup>5</sup> / <sub>8</sub>	39 <sup>5</sup> / <sub>8</sub>	41 <sup>1</sup> / <sub>4</sub>	36	24 <sup>1</sup> / <sub>4</sub>	5/8	5/8	SHEET	.075	184T
42	47 <sup>1</sup> / <sub>4</sub>	46	46	47 <sup>1</sup> / <sub>4</sub>	42	25 <sup>1</sup> / <sub>4</sub>	5/8	5/8	1/4	.075	215T
48	53 <sup>1</sup> / <sub>4</sub>	51 <sup>1</sup> / <sub>4</sub>	51 <sup>1</sup> / <sub>4</sub>	53 <sup>1</sup> / <sub>4</sub>	48	25 <sup>1</sup> / <sub>4</sub>	1	5/8	1/4	.075	215T
54	62	57 <sup>1</sup> / <sub>4</sub>	60	59	55	32 <sup>1</sup> / <sub>2</sub>	9/16	6 <sup>1</sup> / <sub>16</sub>	1/4	14	256T
60	67 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>4</sub>	65	61	32 <sup>1</sup> / <sub>2</sub>	9/16	6 <sup>1</sup> / <sub>16</sub>	1/4	14	256T
72	82	75 <sup>1</sup> / <sub>4</sub>	80	77	73	33 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	1/4	14	256T
84	94	88 <sup>1</sup> / <sub>4</sub>	92	91	85	38	1 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>16</sub>	1/4	14	286T
96	106	100 <sup>1</sup> / <sub>4</sub>	104	103	97	38	1 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>16</sub>	1/2	14	286T

# Reversible (BRRV & BRRF\*)



SIZE	A	B	C	G	H	J	K	T	MAX. FRAME
24	28 <sup>1</sup> / <sub>4</sub>	30	24	23	1/2	3/4	6 <sup>1</sup> / <sub>2</sub>	SHEET	145T
30	34	32 <sup>3</sup> / <sub>16</sub>	30	26	5/8	3/4	6 <sup>1</sup> / <sub>2</sub>	SHEET	184T
36	41 <sup>1</sup> / <sub>4</sub>	39 <sup>5</sup> / <sub>8</sub>	36	28 <sup>3</sup> / <sub>4</sub>	5/8	5/8	10 <sup>1</sup> / <sub>4</sub>	SHEET	184T
42	47 <sup>1</sup> / <sub>4</sub>	46	42	29 <sup>3</sup> / <sub>4</sub>	5/8	5/8	10 <sup>1</sup> / <sub>4</sub>	1/4	215T
48	53 <sup>1</sup> / <sub>4</sub>	51 <sup>1</sup> / <sub>4</sub>	48	35 <sup>3</sup> / <sub>4</sub>	1	5/8	10 <sup>1</sup> / <sub>4</sub>	1/4	215T
54	62	60	55	39 <sup>1</sup> / <sub>4</sub>	9/16	6 <sup>1</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>8</sub>	1/4	256T
60	67 <sup>1</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>4</sub>	61	39 <sup>1</sup> / <sub>4</sub>	9/16	6 <sup>1</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>8</sub>	1/4	256T
72	82	80	73	41 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>8</sub>	1/2	256T
84	94	92	85	47 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>16</sub>	18 <sup>3</sup> / <sub>8</sub>	1/2	286T
96	106	104	97	47 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>16</sub>	18 <sup>3</sup> / <sub>8</sub>	1/2	286T

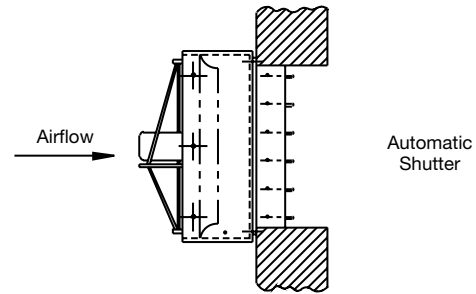
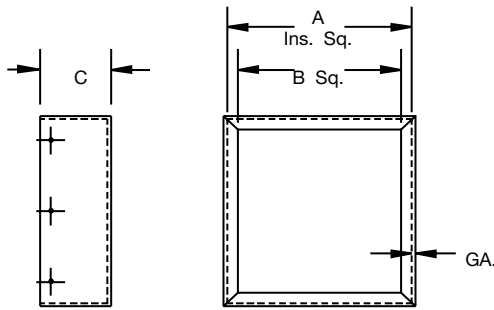
\*BRRF available in sizes 24-48 only.



# Dimensional Data – Accessories

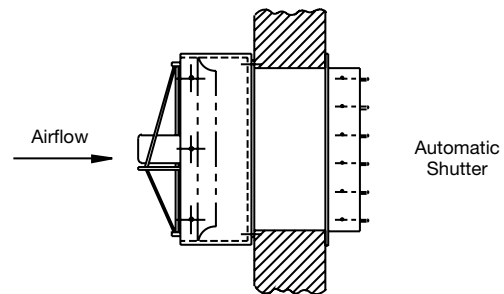
## Mounting Adaptors

### Standard or Reverse Construction – Type 1



STANDARD MOUNT

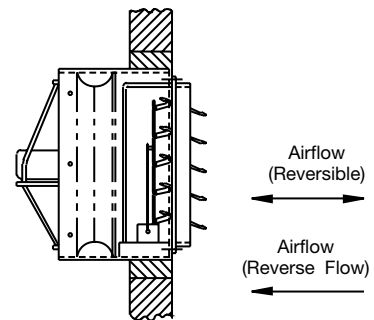
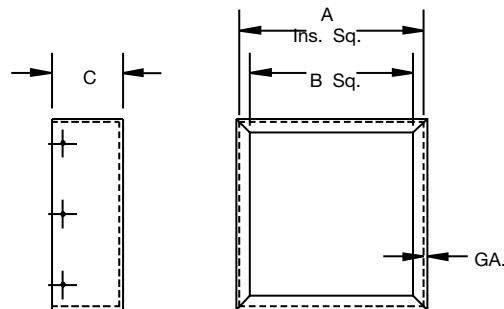
SIZE	A	B	C	GA.
9*	13½	12⅝	8	16
12	16⅝	12⅝	14	16
14	17⅝	14⅝	14¼	16
16	20⅝	16⅝	15	14
18	22⅝	18⅝	15	14
21	25⅝	21⅝	15	14
24	28⅝	24⅝	15	14
30	36⅝	30¾	16	12
36	42⅝	36¾	16	12
42	48⅝	42¾	16	12
48	54⅝	48¾	17½	12
54	68⅝	54¾	20	12
60	75⅝	60¾	20	12
72	79⅝	72¾	18	12



ALTERNATE MOUNT

\*Adaptor for Size 9 is flanged out.

### Reverse Flow or Reversible – Type 2



RECOMMENDED MOUNT

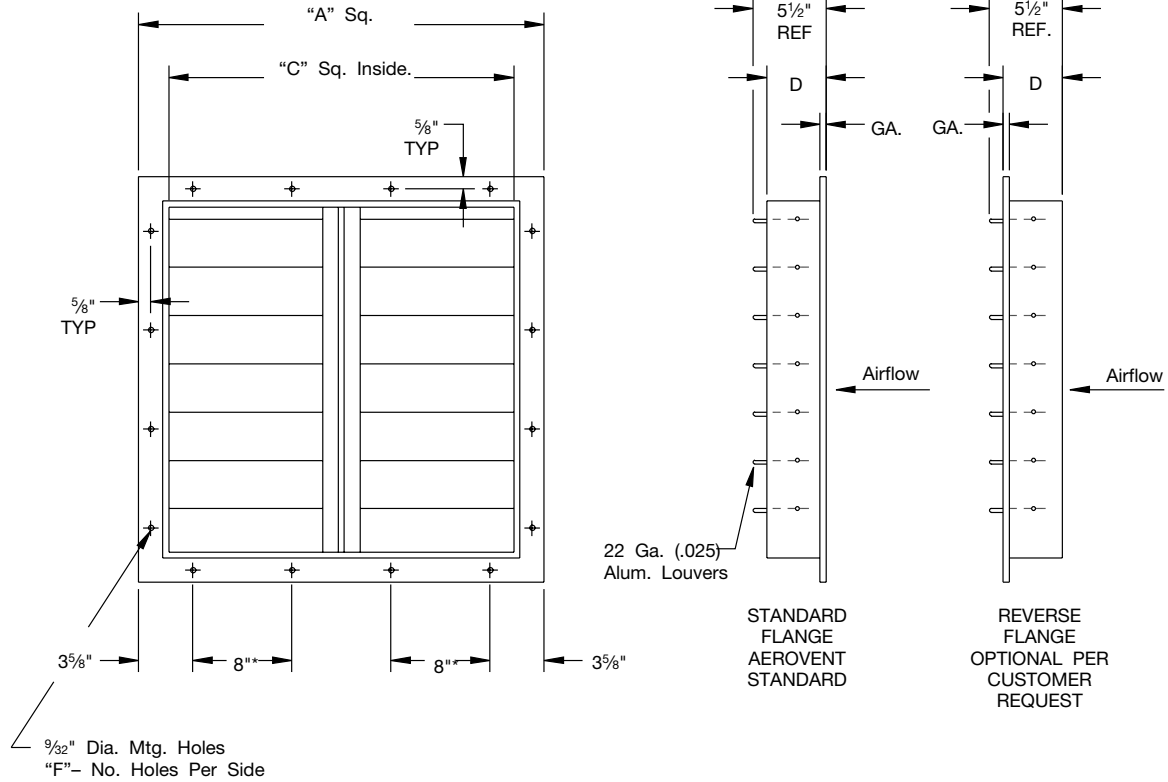
REVERSIBLE/REVERSE FLOW PANEL FAN AND MOTOR OPERATED CENTER PIVOTED DAMPER (REVERSE FLANGE)

SIZE	A	B	C	GA.
9	13½	12⅝	14	16
12	16⅝	12⅝	16⅝	16
14	17⅝	14⅝	18⅝	16
16	20⅝	16⅝	20	14
18	22⅝	18⅝	20½	14
21	25⅝	21⅝	20¾	14
24	28⅝	24⅝	23½	14
30	36⅝	30¾	25	12
36	42⅝	36¾	28¾	12
42	48⅝	42¾	28¾	12
48	54⅝	48¾	32½	12
54	68⅝	54¾	37⅝	12
60	75⅝	60¾	38¾	12
72	79⅝	72¾	34	12

# Dimensional Data – Accessories

## Shutters

### Automatic Shutter



\*Does not pertain to single panel.

#### NOTES:

1. These shutters are primarily used for exhaust only. For supply shutters, refer to reduction drawing #B17928-00.
2. Felt strips are clinched to louver blades to prevent noise when closing.

SIZE	A	C	D	F	NO. OF PANELS	STEEL GA.
10	13 1/4	10	3	2	1	.048
12	15 1/4	12	3	2	1	.048
14	17 1/4	14	3	2	1	.048
16	19 1/4	16	3	2	1	.048
18	21 1/4	18	3	2	1	.048
21	24 1/4	21	3	2	1	.048
24	27 1/4	24	3	2	1	.048
27	30 1/4	27	3	2	1	.048
30	33 1/4	30	3	2	1	.048
32	35 1/4	32	4 1/8	4	2	.048
36	39 1/4	36	4 1/8	4	2	.048
42	45 1/4	42	4 1/8	4	2	.048
48	51 1/4	48	4 1/8	6	2	.048
54	57 1/4	54	4 1/8	6	2	.075
60	63 1/4	60	4 1/8	6	2	.075
72	75 1/4	72	4 1/8	8	3	.075
84†	87 1/4	84	4 1/8	10	4	.075
96†	99 1/4	96	4 1/8	12	4	.075

† Sizes 84 and 96 are made in two sections joined together.

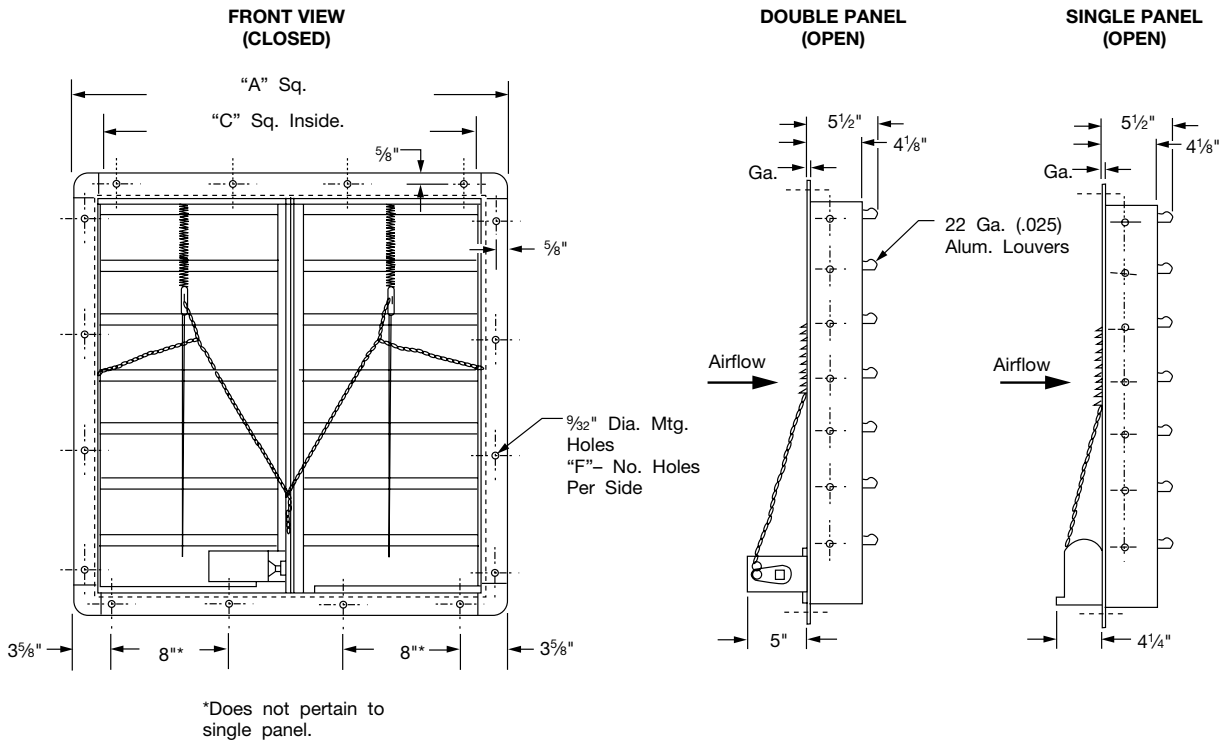
AIR VELOCITY IN FT. PER MIN. THROUGH SHUTTER	STATIC PRESSURE DROP IN INCHES W.G.
600	0.110
800	0.110
1000	0.075
1200	0.070
1500	0.100
1800	0.140
2000	0.180
2500	0.290
3000	0.390

#### Maximum Velocity for Aluminum Blade Units

DAMPER WIDTH	MAXIMUM FPM
8" TO 28"	3000 RPM
OVER 28" TO 32"	2500 RPM
OVER 32' TO 36'	1750 RPM

# Dimensional Data – Accessories

## Motor Operated End Pivot Shutter

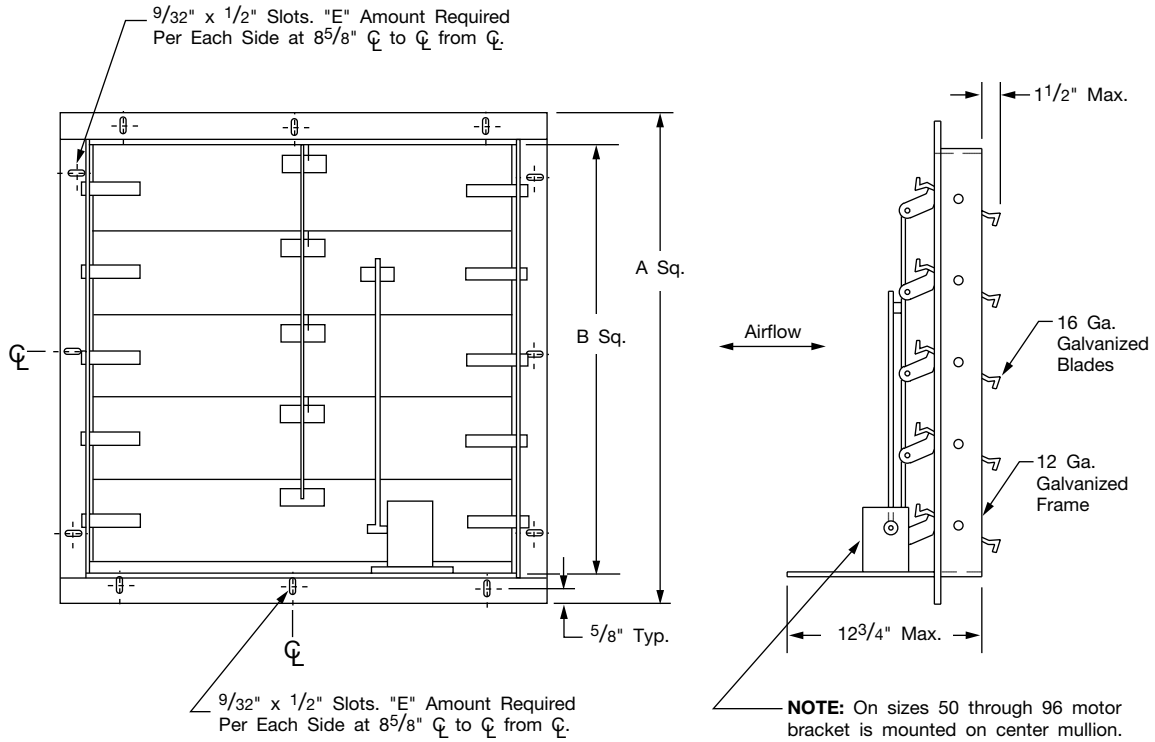


SIZE	A	C	F	NO. OF PANELS	STEEL GA.
10	13¼	10	2	1	.048
12	15¼	12	2	1	.048
14	17¼	14	2	1	.048
16	19¼	16	2	1	.048
18	21¼	18	2	1	.048
21	24¼	21	2	1	.048
24	27¼	24	2	1	.048
27	30¼	27	2	1	.048
30	33¼	30	2	1	.048
32	35¼	32	4	2	.048
36	39¼	36	4	2	.048
42	45¼	42	4	2	.048
48	51¼	48	6	2	.048
54	57¼	54	6	2	.075
60	63¼	60	6	2	.075
72	75¼	72	8	3	.075
84†	87¼	84	10	4	.075
96†	99¼	96	12	4	.075

† Sizes 84 and 96 are made in two sections joined together. Each section has a motor

# Dimensional Data – Accessories

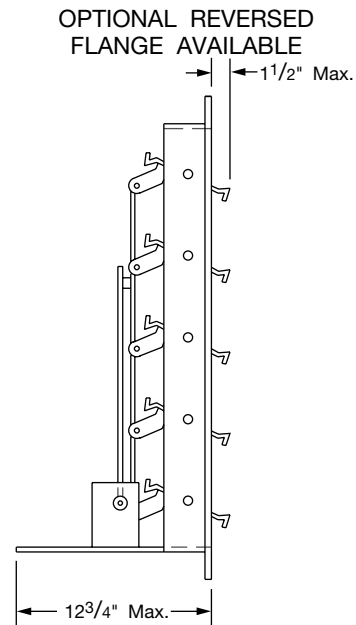
## Motor Operated Center Pivoted Dampers



SIZE	A	B	D	E
12	15	12	1	1
14	17	14	1	1
16	19	16	3	1
17	20	17	3	1
18	21	18	3	1
20	23	20	3	3
21	24	21	3	3
22	25	22	3	3
24	27	24	3	3
25	28	25	3	3
27	30	27	3	3
28	31	28	3	3
30	33	30	3	3
32	35	32	3	3
33	36	33	3	3
36	39	36	5	3
38	41	38	5	5
42	45	42	5	5
44	47	44	5	5
48	51	48	5	5
50	53	50	5	5
54	57	54	7	7
60	63	60	7	7
63 <sup>3/4</sup>	66 <sup>3/4</sup>	63 <sup>3/4</sup>	7	7
68	71	68	9	7
70 <sup>3/4</sup>	73 <sup>3/4</sup>	70 <sup>3/4</sup>	9	9
72	75	72	9	9
75	76	75	9	9
81	84	81	9	9
84 <sup>1/4</sup>	87 <sup>1/4</sup>	84 <sup>1/4</sup>	9	9
96	99	96	11	11

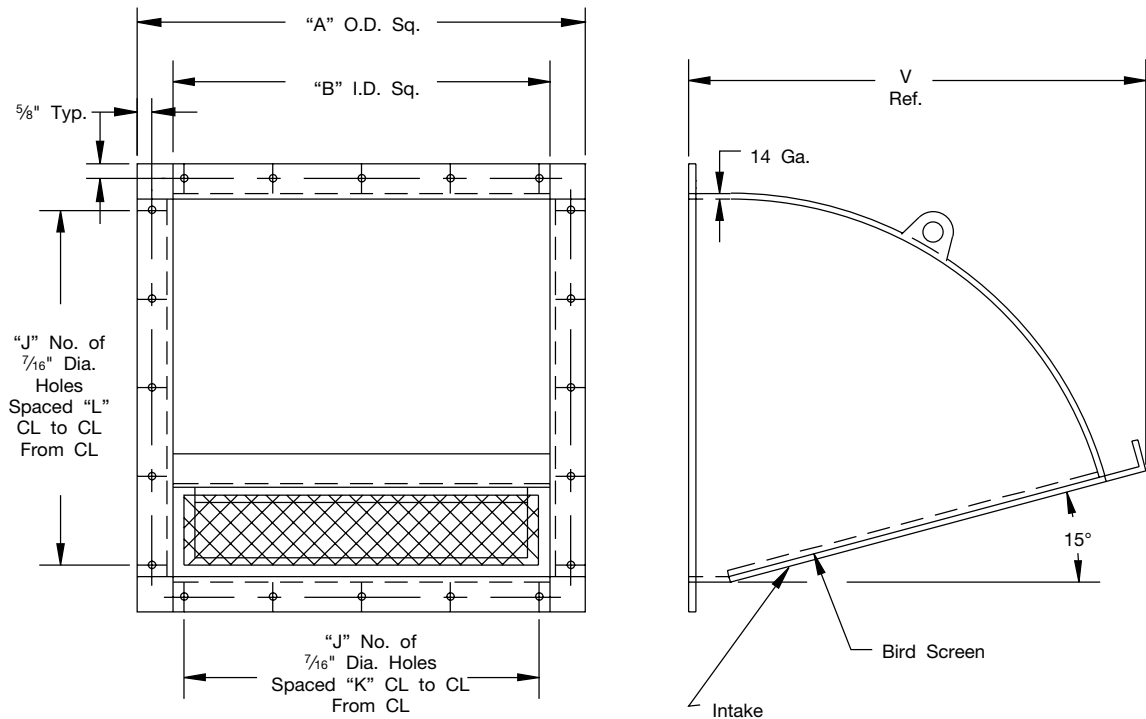
**NOTES:**

Other sizes between 12 x 12 and 96 x 96 also available on special request. Sizes above 48 have a center mullion.



# Dimensional Data – Accessories

## Weatherhood For Panel Fans

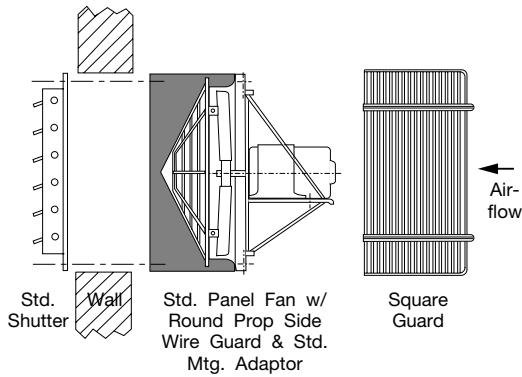


SIZE	A		B	J	K	V	INTAKE AREA (SQ. FT.)
	ADAPTOR MOUNT	WALL MOUNT					
12	15 <sup>1</sup> / <sub>4</sub>	19 <sup>3</sup> / <sub>8</sub>	13	3	5 <sup>5</sup> / <sub>8</sub>	16 <sup>5</sup> / <sub>8</sub>	0.91
14	17 <sup>1</sup> / <sub>4</sub>	20 <sup>3</sup> / <sub>8</sub>	15	3	5 <sup>5</sup> / <sub>8</sub>	18 <sup>9</sup> / <sub>16</sub>	1.25
16	19 <sup>1</sup> / <sub>4</sub>	23 <sup>3</sup> / <sub>8</sub>	17	3	8 <sup>5</sup> / <sub>8</sub>	20 <sup>1</sup> / <sub>2</sub>	1.59
18	21 <sup>1</sup> / <sub>4</sub>	25 <sup>3</sup> / <sub>8</sub>	19	3	8 <sup>5</sup> / <sub>8</sub>	22 <sup>7</sup> / <sub>16</sub>	1.99
21	24 <sup>1</sup> / <sub>4</sub>	28 <sup>3</sup> / <sub>8</sub>	22	3	8 <sup>5</sup> / <sub>8</sub>	25 <sup>5</sup> / <sub>16</sub>	2.67
24	27 <sup>1</sup> / <sub>4</sub>	31 <sup>3</sup> / <sub>8</sub>	25	3	8 <sup>5</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	3.44
30	36 <sup>1</sup> / <sub>8</sub>	39 <sup>3</sup> / <sub>8</sub>	33 <sup>1</sup> / <sub>8</sub>	5	8 <sup>5</sup> / <sub>8</sub>	33 <sup>1</sup> / <sub>8</sub>	5.40
36	42 <sup>1</sup> / <sub>8</sub>	45 <sup>3</sup> / <sub>8</sub>	39 <sup>1</sup> / <sub>8</sub>	5	8 <sup>5</sup> / <sub>8</sub>	38 <sup>3</sup> / <sub>8</sub>	7.68
42	48 <sup>1</sup> / <sub>8</sub>	51 <sup>3</sup> / <sub>8</sub>	45 <sup>1</sup> / <sub>8</sub>	5	8 <sup>5</sup> / <sub>8</sub>	44 <sup>11</sup> / <sub>16</sub>	10.40
48	54 <sup>1</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>8</sub>	7	8 <sup>5</sup> / <sub>8</sub>	50 <sup>1</sup> / <sub>2</sub>	13.44
54	68 <sup>1</sup> / <sub>8</sub>	72 <sup>3</sup> / <sub>8</sub>	65 <sup>1</sup> / <sub>8</sub>	7	8 <sup>5</sup> / <sub>8</sub>	64	22.23
60	74 <sup>1</sup> / <sub>8</sub>	79 <sup>3</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>8</sub>	9	8 <sup>5</sup> / <sub>8</sub>	69 <sup>3</sup> / <sub>4</sub>	26.64
72	79 <sup>1</sup> / <sub>8</sub>	83 <sup>3</sup> / <sub>8</sub>	76 <sup>1</sup> / <sub>8</sub>	9	8 <sup>5</sup> / <sub>8</sub>	74 <sup>1</sup> / <sub>2</sub>	30.21

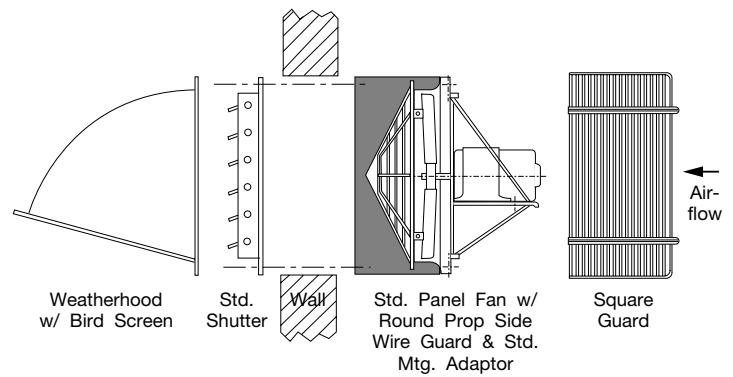
# Typical Panel Fan Installations

## Standard Flow

### Installation Layout 1

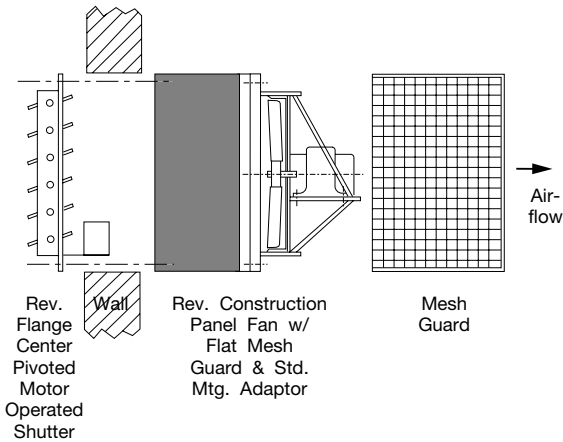


### Installation Layout 2

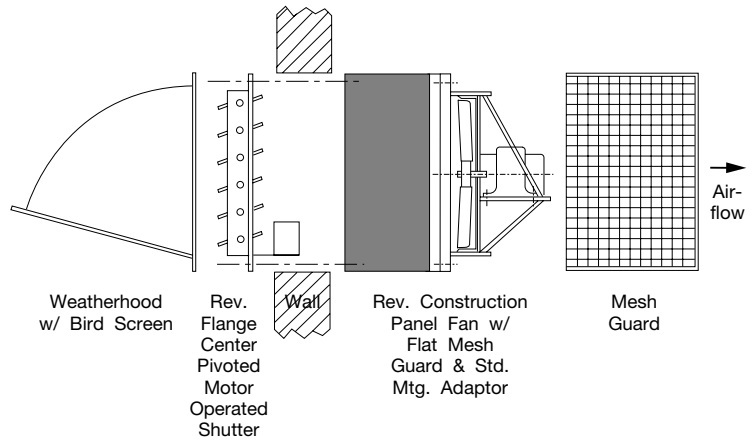


## Reverse Construction

### Installation Layout 1

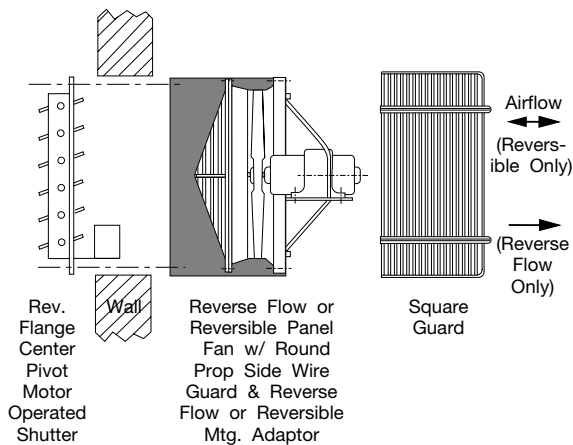


### Installation Layout 2

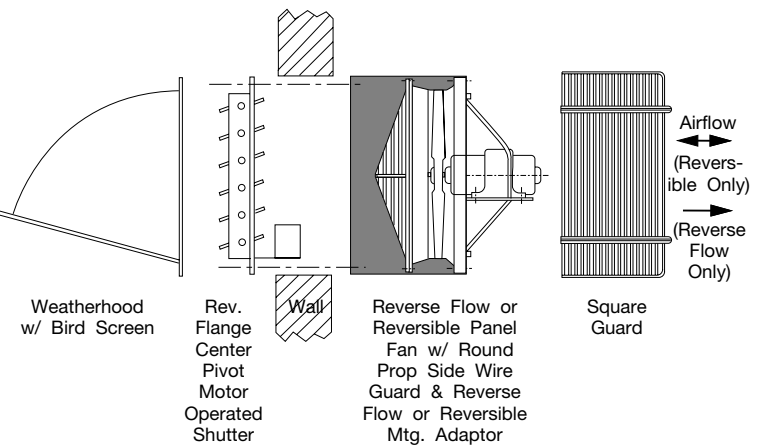


## Reverse Flow or Reversible

### Installation Layout 1



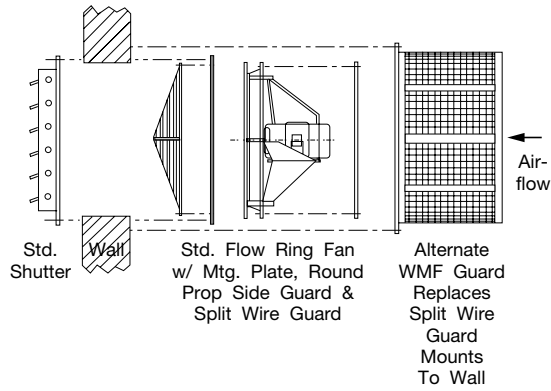
### Installation Layout 2



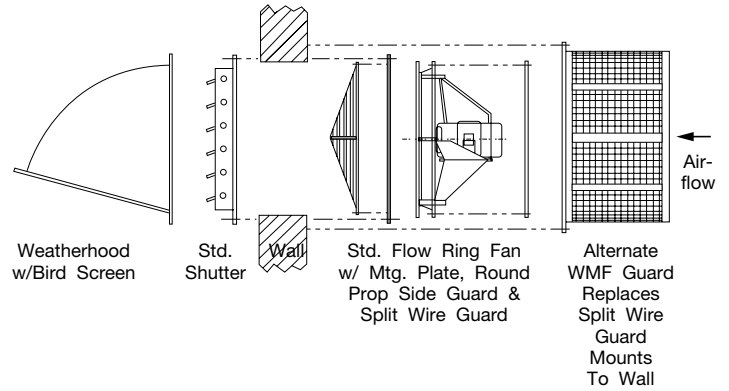
# Typical Ring Fan Installations

## Standard Flow

### Installation Layout 1

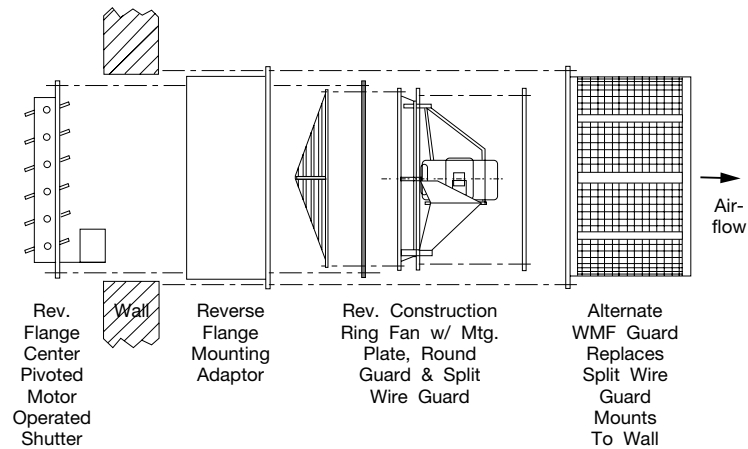


### Installation Layout 2



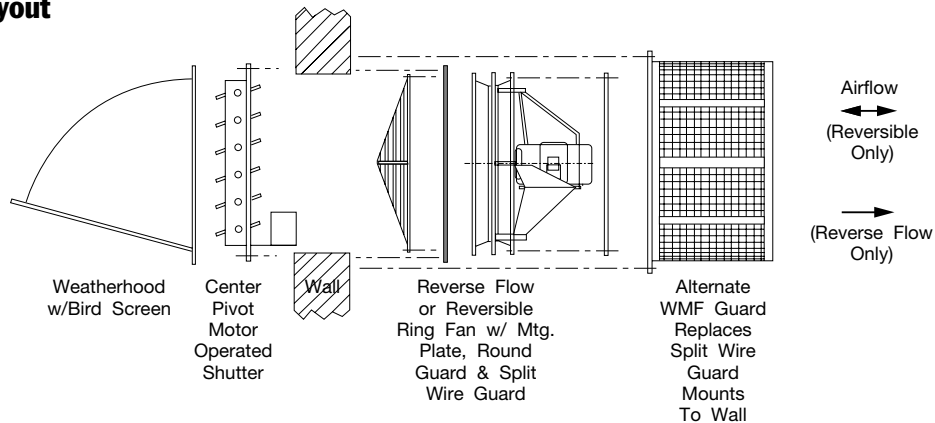
## Reverse Construction

### Installation Layout



## Reverse Flow or Reversible

### Installation Layout



# Typical Specifications

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## Direct Drive Panel and Ring Fans

Fans, where indicated on drawings and schedules, shall be Direct Drive Panel or Ring Fans as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity as indicated in the fan schedule. Direct Drive Panel and Ring Fans shall be tested and certified in accordance with ANSI/ASHRAE 51-1985 and ANSI/AMCA 210-85 test codes and guaranteed by the manufacturer to deliver at the rated published performance levels. In addition, each unit shall be factory run tested prior to shipment. Direct Drive Panel or Ring Fans shall be licensed to bear the AMCA Certified Rating Seal for Air Performance.

**CONSTRUCTION** — The fan casing shall be constructed of mild steel with an integral deep spun orifice.

- For Panel and Ring sizes through 21" the housing shall be 16-gauge.
- For Panel and Ring sizes 24" through 48" the housing shall be 14-gauge.
- For Panel sizes 54" through 72" and Ring sizes 54" through 96", the housing shall be 12-gauge.

Construction for Reverse Flow Panel Fans sizes 9" through 48" shall be accomplished by adding a half orifice to the outlet venturi.

Direct Drive Panel and Ring Fans shall be constructed with a welded reinforced motor base plate which is supported by a welded spider type frame. The reinforced motor base plate shall be welded to the leaving airside of the panel. This construction allows for mounting the unit from the flanged front entrance orifice.

**PROPELLERS** — The precision Macheta<sup>®</sup> tipped airfoil fan blades and hub shall be cast of 319 aluminum alloy. The propeller shall be mounted directly on the motor shaft with knurled cup point setscrews on sizes up to 16" diameter and split taper lock bushings on sizes 18" and larger.

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, direct drive fan propellers shall be balanced on the motor shaft after final assembly in the fan casing, in the manufacturing facility, to the following peak velocity values, filter-in, at the fan test speed:

Fan Application Category	Rigidly Mounted (In/Sec)	Flexibly Mounted (In/Sec)
BV-3	0.15	0.20

**MOTORS** — Fan motors shall be foot mounted NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque type suitable for operation on voltage, phase and hertz, as listed in the fan schedule. Motor bearings shall have a minimum L-10 life, as defined by AFBMA, of at least 40,000 hours (200,000 hours average life).

**FINISH** — The unit, after fabrication, shall be cleaned and chemically pretreated by a phosphatizing process and shall be painted inside and outside with an air dry enamel.

**OPTIONAL ACCESSORIES** — The fans shall be furnished complete with:

- Mounting Adapter
- Mounting Plate – Ring Fans only
- Reverse Flow Construction
- Weatherhood

### Shutters

- Automatic Shutter (steel/aluminum)
- Motor Operated Center Pivot Shutter (actuator includes end switch)
- Motor Operated End Pivoted Shutter (steel/aluminum)

### Guards:

- Round "PMS" Guard
- Square "WWIP" Guard
- Round Split Wire Guard – Ring Fans Only
- Round Fabricated Wire Basket "WMF" Guard – Ring Fans Only



# Typical Specifications

## Belted Panel and Ring Fans

Fans, where indicated on drawings and schedules, shall be Belted Panel or Ring Fans as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity as indicated in the fan schedule. Belted Panel and Ring Fans shall be tested and certified in accordance with ANSI/ASHRAE 51-1985 and ANSI/AMCA 210-85 test codes and guaranteed by the manufacturer to deliver at the rated published performance levels. In addition, each unit shall be factory run tested prior to shipment. Belted Panel or Ring Fans shall be licensed to bear the AMCA Certified Rating Seal for Air Performance.

**CONSTRUCTION** — The fan casing shall be constructed of mild steel with an integral deep spun orifice.

- For Panel and Ring sizes 24" through 48", the housing shall be 14-gauge.
- For Panel sizes 54" through 72", the housing shall be 12-gauge.
- For Ring sizes 54" through 96", the housing shall be a tapered orifice.

Construction for Reverse Flow Panel Fans sizes 24" through 48" shall be accomplished by adding a half orifice to the outlet venturi.

Belted Panel and Ring fans shall be constructed with a welded reinforced motor base plate which is supported by a welded spider type frame. This construction will allow for mounting the unit from the flanged front entrance orifice.

**PROPELLERS** — The precision Macheta® tipped airfoil fan blades and hub shall be of cast 319 aluminum alloy. The propeller shall be secured to the fan shaft with a split taper lock bushing. Compression holds the bushing in place and it is keyed to the shaft to prevent slipping or loosening.

**BEARINGS** — All Belted Panel and Ring Fans shall be supplied with sealed pillow block bearings. The bearings shall have a minimum L-10 life as defined by AFBMA of at least 20,000 hours (100,000 hours average life).

**DRIVES** — All drive selections on Belted Panel and Ring Fans shall be designed with a 1.2 service factor, unless otherwise specified. Sheaves shall be cast iron with static conducting belts. The adjustment of the belt tension is accomplished with an adjustable motor base.

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, belted fan propellers shall be balanced on the fan shaft after final assembly in the fan casing, in the manufacturing facility, to the following peak velocity values, filter-in, at the fan test speed:

Fan Application Category	Rigidly Mounted (In/Sec)	Flexibly Mounted (In/Sec)
BV-3	0.15	0.20

**MOTORS** — Fan motors shall be foot mounted NEMA Design B, standard industrial continuous duty, ball bearing (ODP, TEAO, TEFC, FCXP) variable torque type suitable for operation on voltage, phase and hertz as listed in the fan schedule.

**FINISH** — The unit, after fabrication, shall be cleaned and chemically pretreated by a phosphatizing process and shall be painted inside and outside with an air dry enamel.

**OPTIONAL ACCESSORIES** — The fans shall be furnished complete with:

- Mounting Adapter
- Mounting Plate – Ring Fans only
- Reverse Flow Construction
- Weatherhood

### Shutters

- Automatic Shutter (steel/aluminum)
- Motor Operated Center Pivot Shutter (actuator includes end switch)

Motor Operated End Pivoted Shutter (steel/aluminum)

### Guards:

- Round "PMS" Guard
- Square "WWIP" Guard
- Round Split Wire Guard – Ring Fans Only
- Round Fabricated Wire Basket "WMF" Guard – Ring Fans Only



# Typical Specifications

## Direct Drive Reversible Panel and Ring Fans

Fans, where indicated on drawings and schedules, shall be Direct Drive Reversible Panel or Ring Fans as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity as indicated in the fan schedule. Direct Drive Reversible Panel and Ring Fans shall be tested and certified in accordance with ANSI/ASHRAE 51-1985 and ANSI/AMCA 210-85 test codes and guaranteed by the manufacturer to deliver at the rated published performance levels. In addition, each unit shall be factory run tested prior to shipment. Direct Drive Reversible Panel or Ring Fans shall be licensed to bear the AMCA Certified Rating Seal for Air Performance.

**CONSTRUCTION** — For Panel and Ring Fans sizes 24" through 48" the fan casing shall be constructed of 14-gauge mild steel with an integral deep spun double orifice.

For Panel Fans sizes 54" through 72", the double tapered orifice shall be fabricated using 12-gauge mild steel and welded construction.

Reversible Flow Ring Fans sizes 54" through 96" shall utilize 12-gauge fabricated tapered rings.

Reversal of the airflow direction is accomplished by stopping the motor and restarting it in the opposite direction. No mechanical adjustment is necessary. **Important:** Allow the fan propeller to come to a complete stop before restarting the motor in the opposite direction.

Direct Drive Reversible Panel and Ring Fans shall be constructed with a welded reinforced motor base plate that is supported by a welded spider type frame.

**PROPELLERS** — Propellers shall be 319 cast aluminum alloy and shall be capable of moving the same volume of air in either airflow direction. A split taper lock bushing shall be used to mount the propeller directly on the motor shaft.

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, direct drive fan propellers shall be balanced on the motor shaft after final assembly in the fan casing, in the manufacturing facility, to the following peak velocity values, filter-in, at the fan test speed:

Fan Application Category	Rigidly Mounted (In/Sec)	Flexibly Mounted (In/Sec)
BV-3	0.15	0.20

**MOTORS** — Fan motors shall be foot mounted NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque type suitable for operation on voltage, phase and hertz, as listed in the fan schedule. Motor bearings shall have a minimum L-10 life, as defined by AFBMA, of at least 40,000 hours (200,000 hours average life).

**FINISH** — The unit, after fabrication, shall be cleaned and chemically pretreated by a phosphatizing process and shall be painted inside and outside with an air dry enamel.

**OPTIONAL ACCESSORIES** — The fans shall be furnished complete with:

- Mounting Adapter
- Mounting Plate – Ring Fans only
- Weatherhood

### Shutters

- Automatic Shutter (steel/aluminum)
- Motor Operated Center Pivot Shutter (actuator includes end switch)
- Motor Operated End Pivoted Shutter (steel/aluminum)

### Guards:

- Round "PMS" Guard
- Square "WWII" Guard
- Round Split Wire Guard – Ring Fans Only
- Round Fabricated Wire Basket "WMF" Guard – Ring Fans Only

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# Typical Specifications

## Belted Reversible Panel and Ring Fans

Fans, where indicated on drawings and schedules, shall be Belted Reversible Panel or Ring Fans as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity as indicated in the fan schedule. Belted Reversible Panel and Ring Fans shall be tested and certified in accordance with ANSI/ASHRAE 51-1985 and ANSI/AMCA 210-85 test codes and guaranteed by the manufacturer to deliver at the rated published performance levels. In addition, each unit shall be factory run tested prior to shipment. Belted Reversible Panel or Ring Fans shall be licensed to bear the AMCA Certified Rating Seal for Air Performance.

**CONSTRUCTION** — For Panel and Ring Fans sizes 24" through 48" the fan casing shall be constructed of 14-gauge mild steel with an integral deep spun double orifice. For panel sizes 54" through 72" the housing shall be 12-gauge.

For Panel Fans sizes 54" through 72, a fabricated half orifice shall be added to the panel venturi.

Reversible flow construction on Belted Panel Fans sizes 24" through 48" shall be accomplished by adding a spun half orifice to the outlet venturi.

Reversible Flow Ring Fans sizes 54" through 96" shall utilize 12-gauge fabricated tapered rings.

Reversal of the airflow direction is accomplished by stopping the motor and restarting it in the opposite direction. No mechanical adjustment is necessary. **Important:** Allow the fan propeller to come to a complete stop before restarting the motor in the opposite direction.

Belted Reversible Panel and Ring Fans shall be constructed with a welded reinforced motor base plate that is supported by a welded spider type frame.

**PROPELLERS** — Propellers shall be 319 cast aluminum alloy and shall be capable of moving the same volume of air in either airflow direction. A split taper lock bushing shall be used to mount the propeller on the fan shaft.

**BEARINGS** — All Reversible Belted Panel and Ring Fans shall be supplied with sealed pillow block bearings. The bearings shall have a minimum L-10 life as defined by AFBMA of at least 20,000 hours (100,000 hours average life).

**DRIVES** — All drive selections on Reversible Belted Panel and Ring Fans shall be designed with a 1.2 service factor, unless otherwise specified. Sheaves shall be cast iron with static conducting belts. The adjustment of the belt tension is accomplished with an adjustable motor base.

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, belted fan propellers shall be balanced on the fan shaft after final assembly in the fan casing, in the manufacturing facility, to the following peak velocity values, filter-in, at the fan test speed:

Fan Application Category	Rigidly Mounted (In/Sec)	Flexibly Mounted (In/Sec)
BV-3	0.15	0.20

**MOTORS** — Fan motors shall be foot mounted NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque type suitable for operation on voltage, phase and hertz, as listed in the fan schedule. Motor bearings shall have a minimum L-10 life, as defined by AFBMA, of at least 40,000 hours (200,000 hours average life).

**FINISH** —The unit, after fabrication, shall be cleaned and chemically pretreated by a phosphatizing process and shall be painted inside and outside with an air dry enamel.

**OPTIONAL ACCESSORIES** —The fans shall be furnished complete with:

- Mounting Adapter
- Mounting Plate – Ring Fans only
- Weatherhood

### Shutters

- Automatic Shutter (steel/aluminum)
- Motor Operated Center Pivot Shutter (actuator includes end switch)
- Motor Operated End Pivoted Shutter (steel/aluminum)

### Guards:

- Round "PMS" Guard
- Square "WWIP" Guard
- Round Split Wire Guard – Ring Fans Only
- Round Fabricated Wire Basket "WMF" Guard – Ring Fans Only



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