



# FIBERGLASS AXIAL FLOW FANS

**Model FDP / FRV / FBD / TFBD / VTFBD** 

# Fiberglass Axial Flow Fans Medium Pressure Vaneaxial Model VTFBD & Vane Section



Tubeaxial Model FBD



# **Models**

# FDP | FRV | FBD | TFBD | VTFBD

Aerovent axial flow FRP (Fiberglass Reinforced Plastic) fans are built in a variety of sizes and designs as shown in this catalog. Aerovent also builds an FRP single-width centrifugal model (shown in Catalog 745), an FRP high-pressure blower (shown in Catalog 950), and an FRP in-line centrifugal model (shown in Catalog 360). Corrosion resistance is the primary consideration when selecting a fiberglass fan. The standard resin used is selected for resistance to a large variety of corrosive agents. When a corrosion resistant fan is required to withstand chemicals which attack glass or polyester resin, special construction features can be supplied. For reference, a Corrosion Resistance Guide is included on page 5.

All models shown in this catalog have housings and fan wheels made of continuous glass lay-up using a combination of fabric-woven roving and mat.

#### **Belt Driven Models**

The bearing supports are integral with the housing and motor support flanges. The bearing bases are reinforced with cross-strutting, constructed out of glass and resin. Fan shafts are stainless steel. Bearing covers are sealed, but still allow for access to the bearings. Grease lines extend to outside the housing for ease of maintenance. The motor is located outside the airstream, with protective motor covers standard on all models.

#### **Advantages of Fiberglass Fans**

- Superior corrosion resistance to gases and vapors.
- Lower maintenance costs.
- More economical than stainless steel construction.
- Lighter weight than steel.

#### Model FBD - Type FG Tubeaxial

The Model FBD is the standard Aerovent FRP belt driven tubeaxial with many years of proven success in numerous and varied applications. It is furnished with the efficient semi-pressure type FG 7-bladed propeller on sizes up to 48 and the type FG 6-bladed propeller on sizes 54 and 60. For the medium performance range requirements, these fans generally run at a slightly higher speed than the type TF models, but have an economical advantage in many applications. Performance data for the Model FBD is shown on pages 7 and 8.

#### Sizes

14" to 60" wheel diameters

#### **Performance**

Airflow to 51,900 CFM Static pressure to 1.5 inches w.g.

# **Fiberglass Axial Flow Fans**

#### **Model TFBD - Type TF Tubeaxial**

The Model TFBD is the belt driven tubeaxial fiberglass axial flow fan utilizing the type TF, 7-bladed propeller. It fulfills the need for a corrosion resistant fan with more performance capability and lower noise level. The propeller, housing, bearing base and inner support structures are constructed of glass reinforced plastic. Performance data for the Model TFBD is shown on pages 9 through 11.

#### **Sizes**

12" to 60" wheel diameters

#### **Performance**

Airflow to 83,200 CFM Static pressure to 2.5" w.g.

#### **Model VTFBD - Type TF Vaneaxial**

Adding a vane section to the Model TFBD tubeaxial fiberglass axial flow fan converts it to a Model VTFBD vaneaxial fan for improved performance. Performance data for the Model VTFBD is shown on pages 12 through 14.

#### **Sizes**

12" to 60" wheel diameters

#### **Performance**

Airflow to 81,200 CFM Static pressure to 4" w.g.

#### **Model FRV - Type FG Roof Ventilator**

The same advantages of the Model FBD, TFBD, and VTFBD fans can be obtained in a roof ventilator assembly by adding a fiberglass stack cap, curb base and motor cover. See page 6 for details.

#### **Sizes**

14" to 60" wheel diameters

#### **Performance**

Airflow to 50,800 CFM Static pressure to 1.5" w.g.

#### **Model FDP - Type FG Direct Drive Panel Fan**

The type FG 7-bladed propeller is utilized in the Model FDP direct drive panel fan. The Model FDP panel fan is constructed from corrosion resistant plastic. See page 17 for details.

#### **Sizes**

12" to 48" wheel diameters

#### Performance

Airflow to 41,900 CFM Static pressure to 1" w.g.



**Tubeaxial Model TFBD** 



Tubeaxial Model FBD (Stack Cap & Curb Base)



Direct Drive Panel Fan Model FDP

# **Construction Features**

#### Shaft

The 316 stainless steel step shaft is machined and keyed with the end drilled and tapped. The propeller is held tightly against the shaft shoulder by a stainless steel retainer bolt and washer in the end of the shaft.

#### **Shaft Seal**

The bearing and shaft enclosures have covers that are sealed into place with an inert silicone sealant. The shaft is fitted with a rotating elastomeric seal that rides against a heavy Teflon wear plate.

#### **Bearings**

The bearings are sealed pillow block type with grease lines extending to the outside of the fan housing for ease of maintenance. The bearings, shaft and drive are enclosed to protect them from airstream contaminants.

#### **Motor Base**

A steel motor base with slide rail arrangement for belt adjustment is bolted between wide gussets integral with the flanges of the fan housing. The standard motor cover is made of fiberglass reinforced plastic and extends over the entire base, motor and drive assembly.

#### **Drives**

All belts and sheaves used on Aerovent fiberglass fans are manufactured by Browning and are selected to provide additional allowances of 1.3 to 2 times the normal satisfactory capacity.

#### **Corrosion Resistant**

All airstream parts of fiberglass reinforced plastic have resistance to most chemicals. The fiberglass propellers are standard with vinyl ester resin (optional on housing). See "Corrosion Resistance Guide" on page 5.

#### **Propeller**

The type TF and FG fan propellers are constructed using a resin transfer method (RTM). Glass cloth is cut to various template sizes to form laminations which are fitted into a mold. Glass is impregnated with "vinyl ester" in a low-pressure injection process. The fan wheel is cured under pressure in the mold, forming a monolithic structure.

#### Housing

The fan housing is polyester resin reinforced with cloth and mat with integral flanges. The bearing, base and drive enclosure is supported by gussets interlocked into and taped to the outer housing. These structural parts are all of laminated glass and resin.

#### **Product Finish**

All fiberglass parts are coated inside and outside with resin (with UV inhibitor), approximately 10 mils in thickness, to seal and provide protection from ultraviolet light. This results in a smooth finish. All steel parts are finished with light gray epoxy paint.

#### Vane Section

The vane section is of all laminated glass and resin construction with curved guide vanes interconnected with an inner and outer shell.

#### **Fire Retardant Resin**

Optional fire retardant resin reduces the resin's tendency to burn, attaining a flame spread rating of 25 or less.

# **Optional Construction**

#### **Special Fiberglass Materials**

Please contact the factory to ensure a suitable material is selected for the specific application.

- Vinyl Ester Provides increased corrosion resistance to stronger acids, chlorine and oxidizing agents. For use in industrial applications such as chemical and water treatment plants, and commercial applications where urban or salt air corrosion exists. Fiberglass propellers are standard with vinyl ester resin (optional on housing).
- Surface Veil Produces a smooth reinforced final surface with greater corrosion resistance and contains UV inhibitor.

#### **Spark Resistant Construction**

Spark resistant construction for fiberglass fans is recommended when the fan is handling explosive fumes. Although fiberglass is a non-sparking material, it can build and retain a static charge that can be potentially hazardous. With spark resistant construction, the fan is statically grounded by graphite impregnation to reduce a static charge build-up.



# **Corrosion Resistance Guide**

The corrosion resistance guide below provides data to identify the suitability of Aerovent's standard fiberglass fans based on the corrosive agent within the gas stream.

This data is based on a maximum gas stream temperature of 200°F.

Consult Aerovent for applications where the corrosive agent is not listed.

#### **Legend of Symbols**

S — Satisfactory Application

L — Limited Life or Life Tests Incomplete U — Unsatisfactory

APPLICATION	SATURATED VAPOR	DRY VAPOR	EXCESS DRY AIR	APPLICATION	SATURATED VAPOR	DRY VAPOR	EXCESS DRY AIR
ACIDS				ALKALINE SALTS	•		•
Acetic	L	S	S	Sodium Bicarbonate	L	S	S
Aqua Regia	U	U	L	Sodium Carbonate	L	S	S
Boric	S	S	S	Sodium Chloride	L	S	S
Butyric	S	S	S	Sodium Cyanide	L	S	S
Carbonic	S	S	S	Trisodium, Phosphate	L	L	S
Chromic	S	S	S	ALKALIS			
Citric	S	S	S	Ammonium Hydroxide	U	L	I s
Formic	L	S	S	Calcium Hydroxide	Ü	Ĺ	S
Hydrochloric	S	S	S	Potassium Hydroxide	Ü	Ĺ	s
Hydrocyanic	L	S	Š	Sodium Hydroxide	Ü	Ĺ	s
*Hydrofluoric	L	S	s	Sodium Hypochlorite	Ü	Ĺ	S
Hypochlorous	L	S	s	Ketones			<u> </u>
Lactic	S	S	Š	Acetone	U	ı	l s
Maleic	S	S	S	Methyl Ethyl Ketone	Ü	Ū	Ľ
Nitric	Ĺ	S	S	Methyl Isobutyl Ketone	Ü	Ü	1 [
Oleic	S	S	S	ESTERS			
Oxalic	S	S	S	Butyl Acetate	U	L	S
Perchloric	U	U	Ü	Ethyl Acetate	Ü	U	S
Phosphoric	S	S	S	Zinc Acetate	S	S	S
Picric	L	S	S	GASES			<u> </u>
Stearic	S	S	S	Ammonia	I 1	S	l s
Sulfuric	S	S	S	Bromine	Ū	Ü	Ü
Sulfurous	S	S	s	Carbon Dioxide	S	S	s
Tannic	S	S	Š	Carbon Disulfide	L	Ľ	s
Tartaric	S	S	S	Chlorine	L	S	S
SALTS, ACID & NEUT	RΔI			*Fluorine	L	S	S
Alum	S	S	S	*Hydrogen Fluoride	L	S	S
Aluminum Chloride	S	S	S	Hydrogen Sulfide	S	S	S
Aluminum Sulphate	S	S	Š	Sulfur Dioxide	Š	S	S
Ammonium Chloride	S	S	S	HYDROCARBONS	•		•
Ammonium Nitrate	S	S	S	Benzene	U	U	U
Ammonium Sulphate	S	S	S	Fuel Oil	S	S	S
Calcium Chloride	S	S	S	Gasoline	S	S	S
Calcium Sulphate	S	S	S	Kerosene	S	S	S
Copper Chloride	S	S	S	Lubricating Oil	S	S	S
Copper Sulphate	S	S	S	Mineral Oil	S	S	S
Ferric Chloride	S	S	S	Toluene	U	U	U
Ferric Nitrate	S	S	S	Vegetable Oil	S	S	S
Ferric Sulphate	S	S	S	Naphtha	S	S	S
Magnesium Salts	S	S	S	Methane	S	S	S
Nickel Salts	S	S	S	Butane	S	S	S
Potassium Chloride	S	S	S	Propane	S	S	S
Potassium Nitrate	S	S	S	Xylol	S	S	S
Potassium Sulphate	S	S	S	CHLORINATED SOLVENT	rs		
Sodium Chloride	S	S	S	Carbon Tetrachloride	L	S	S
Sodium Sulphate	S	S	S	Chlorobenzene	U	U	U
Sodium Sulphite	S	S	S	Chloroform	U	U	Ū
Stannous Chloride	s	S	S		U	U	L
				Perchlorethylene			+
Zinc Chloride	S	S	S	Trichlorethylene	U	U	L
Zinc Sulphate	S	S	S				
ALCOHOLS	S	S	S	GLYCOLS	S	S	S

<sup>\*</sup> Surface finished with Synthetic Surfacing Veil Required.

# **Design & Construction**

For roof mounted exhaust applications, the Model FBD tubeaxial fan can be converted into a roof ventilator (Model FRV) with the addition of a fiberglass stack cap and curb base. Performance data for the Model FRV is shown on page 15. For Model TFBD or VTFBD roof ventilator assembly data, add 1/8" for stack cap loss to the standard tubeaxial/vaneaxial performance ratings, or contact factory. Note: A minimum flow rate is required to fully open the stack cap damper blades (1700 FPM outlet velocity) Max 3100 FPM.

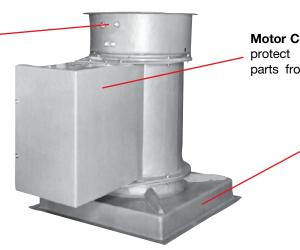
# **Model FRV**

#### **Roof Ventilator**

#### **Construction Features**

- The stack cap windband section is constructed from a one-piece mold with drain channels and drain holes to allow water to flow out.
- The stack cap damper blades are reinforced with a turned-down flange at the blade edge that seals the fan discharge when the fan is shut off.
- The stack cap damper rods are constructed of fiberglass with PVC bearings to offer a long service life.
- The curb base is constructed from a one-piece mold that offers a no-seam base, thus eliminating the chance of water leakage.
- The curb base is reinforced to offer additional support for a long service life to prevent sag, cracking, etc.

**Stack Caps** — Designed with backdraft dampers that protect the interior of the building from precipitation when the fan is shut off.



**Motor Covers** — Designed to protect the motor and drive parts from the weather.

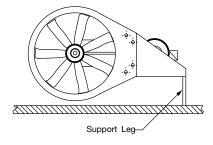
**Curb Bases** — Designed for mounting vertical fans on roof curbs and to provide easy installation of the unit.

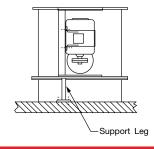
#### **Installing Fiberglass Reinforced Plastic (FRP) Fans**

The installation of FRP vaneaxial and tubeaxial fans requires some special considerations. The material is very strong, but it is more flexible than steel; therefore, large fans with heavy motors should not be expected to support themselves by the flange mounting alone. A fan mounted in the vertical position should not be mounted to support a heavy stack without some reinforcement. It is usually satisfactory to mount fans having motors up to 3 HP by the flanges alone. Match drill the flanges with the mating duct flange, using eight equally spaced holes,  $\frac{7}{16}$  diameter to accept a  $\frac{3}{6}$  bolt when bolting the fan to ductwork. Use a large washer under the head and nut to increase the bearing area, and do not tighten these to the point of crushing the flange. If the fan has a 5 HP or larger motor, it is good practice to attach a support leg or hanger rod to the outer edge of the motor base plate to take some of the weight. If the fan is to be mounted on the roof with a high discharge stack, brace the stack just above the fan so that not all of the stack weight is carried on the fan mounting flanges.

Accessibility for service and cleaning is a very important consideration in installing an FRP fan. They should be mounted for easy removal for cleaning and service. A removable section of duct on either side of the fan may be installed to provide access. Access doors are available as an option.

**Horizontal Mount** 





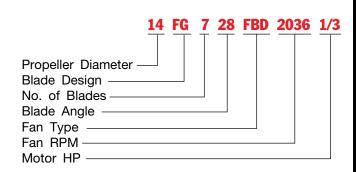
Vertical Mount

# Model FBD | Type FG Belt Driven Fiberglass Tubeaxial

#### **Catalog Numbering System**

To identify a specific fan for ordering or engineering specifications, it is necessary to show the complete information listed in the tables below under the 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).



#### FBD Type FG | Size 14

CATA	ALOG N	IUMBE	R					CUBI	C FEE	T PER	MINU	TE AN	ID HO	RSEP	OWER	AT S	TATIC	PRES	SURE				
PROP	FAN	RPM	HP	0"	SP	1/8"	SP	1/4'	' SP	3/8'	' SP	1/2'	'SP	5/8"	SP	3/4'	' SP	1"	SP	1 <sup>1</sup> /4'	SP	11/2"	' SP
PROP	TYPE	RPIVI	ПР	<b>CFM</b>	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	<b>BHP</b>
14FG728	FBD	2036	1/3	2032	0.32	1845	0.32	1629	0.33														
14FG728	FBD	2332	1/2	2327	0.48	2167	0.48	1991	0.49	1768	0.50												
14FG728	FBD	2669	3/4	2664	0.72	2525	0.72	2376	0.72	2216	0.73	2005	0.75										
14FG728	FBD	2938	1	2932	0.96	2807	0.96	2674	0.96	2534	0.97	2380	0.99	2169	1.01								

#### FBD Type FG | Size 16

CATA	LOG N	IUMBE	R					CUBIC	FEE	T PER	MINU	TE AN	ID HO	RSEP	OWER	AT ST	TATIC	PRES	SURE			
PROP	FAN	RPM	HP	0"	SP	1/8"	SP	1/4"	SP	3/8'	' SP	1/2'	SP	5/8'	SP	3/4'	SP	1"	SP	11/4	' SP	11/2" SP
PROP	TYPE	RPIVI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM BH
16FG728	FBD	1637	1/3	2439	0.33	2170	0.33	1819	0.34													
16FG728	FBD	1874	1/2	2792	0.49	2562	0.49	2304	0.50													
16FG728	FBD	2145	3/4	3196	0.73	2997	0.73	2781	0.74	2532	0.75											
16FG728	FBD	2361	1	3518	0.98	3339	0.97	3146	0.98	2941	0.99	2678	1.01	2169	1.01							

#### FBD Type FG | Size 18

	CATA	LOG N	UMBE	R					CUBIC	C FEE	T PER	MINU	TE AN	ID HO	RSEP	OWER	AT ST	TATIC	PRES	SURE				
	PROP	FAN	RPM	HP	0"	SP	1/8"	SP	1/4"	SP	3/8'	' SP	1/2'	SP	5/8"	SP	3/4'	SP	1"	SP	11/4	' SP	11/2	" SP
	RUP	TYPE	RPIVI	пг	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
18	3FG728	FBD	1633	1/2	3756	0.45	3480	0.47	3170	0.49	2721	0.50												
18	3FG728	FBD	1869	3/4	4299	0.68	4061	0.70	3801	0.72	3511	0.75	3068	0.75										
18	3FG728	FBD	2057	1	4731	0.91	4517	0.93	4286	0.95	4039	0.98	3746	1.00	3253	0.99								
18	3FG728	FBD	2335	11/2	5370	1.32	5183	1.35	4985	1.38	4775	1.41	4554	1.44	4299	1.46	3952	1.46						

#### FBD Type FG | Size 24

CATA	ALOG N	IUMBE	R					CUBIC	FEET	ΓPER	MINU	TE AN	D HO	RSEPO	WER	AT ST	ATIC	PRES	SURE				
DDOD	FAN	DDM	ш	0"	SP	1/8"	SP	1/4'	SP	3/8'	'SP	1/2'	SP	5/8"	SP	3/4'	'SP	1"	SP	11/4	'SP	1 <sup>1</sup> /2 <sup>1</sup>	" SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
24FG728	FBD	999	1/2	5667	0.45	5024	0.48	4221	0.50														
24FG728	FBD	1144	3/4	6490	0.67	5934	0.71	5346	0.74														
24FG728	FBD	1259	1	7142	0.90	6641	0.94	6117	0.98	5476	1.01												
24FG728	FBD	1586	2	8997	1.79	8604	1.84	8195	1.89	7779	1.94	7336	1.99	6732	2.01								
24FG728	FBD	1815	3	10296	2.68	9954	2.74	9602	2.80	9238	2.86	8876	2.91	8495	2.97	8024	3.01						

## FBD Type FG | Size 30

CATA	ALOG N	UMBE	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEPO	WER	AT ST	ATIC	PRES	SURE				
PROP	FAN	DDM	HP	0"	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/4'	SP	1"	SP	11/4"	SP	11/2"	SP
PRUP	TYPE	RPIVI	пг	CFM	BHP																		
30FG720	FBD	906	1/2	7476	0.35	6670	0.43	5732	0.48	4113	0.50												
30FG720	FBD	1142	1	9424	0.71	8797	0.80	8128	0.88	7378	0.95	6380	0.99										
30FG720	FBD	1439	2	11875	1.42	11384	1.54	10871	1.65	10338	1.75	9777	1.84	9136	1.91	8367	1.97						
30FG720	FBD	1647	3	13591	2.13	13164	2.27	12723	2.40	12267	2.52	11799	2.63	11312	2.73	10779	2.82	9468	2.97	7367	2.99		
30FG720	FBD	1953	5	16116	3.55	15758	3.72	15391	3.88	15016	4.03	14631	4.17	14239	4.31	13840	4.43	12987	4.66	11979	4.85	10677	4.99

# FBD Type FG | Size 36

CATA	ALOG N	IUMBE	R					CUBIC	333	PER	MINU	TE ANI	D HOI	RSEPO	WER	AT ST	ATIC I	PRESS	URE				
DDOD	FAN	DDM	ΗВ	0" 9	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/4"	SP	1"	SP	11/4"	SP	11/21	' SP
PROP	TYPE	RPIVI	пг	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
36FG720	FBD	1056	2	15458	1.43	14628	1.59	13739	1.72	12789	1.83	11636	1.92	10118	1.99	8128	2.01						
36FG720	FBD	1209	3	17697	2.15	16978	2.33	16221	2.50	15426	2.64	14582	2.75	13594	2.86	12386	2.95	9025	3.01				
36FG720	FBD	1433	5	20976	3.58	20374	3.80	19749	4.00	19101	4.19	18430	4.36	17737	4.50	16989	4.62	15146	4.87	12637	5.02	9400	5.00
36FG720	FBD	1640	71/2	24006	5.36	23482	5.61	22943	5.86	22390	6.08	21820	6.30	21234	6.49	20637	6.66	19345	6.95	17766	7.24	15782	7.46

# FBD Type FG | Size 42

CATA	LOG N	IUMBE	R					CUBIC	FEET	PER	MINU'	TE AN	о ног	RSEPO	WER	AT ST	ATIC	PRESS	URE				
PROP	FAN		HP	0" 9	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/4'	SP	1"	SP	11/4"	SP	11/2"	SP
PROP	TYPE	RPIVI	ПР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
42FG720	FBD	824	2	19154	1.47	17904	1.66	16552	1.82	15007	1.94	12912	2.04	9974	2.06								
42FG720	FBD	944	3	21943	2.21	20863	2.43	19713	2.63	18495	2.79	17094	2.92	15315	3.04	12987	3.11						
42FG720	FBD	1119	5	26011	3.68	25108	3.95	24164	4.20	23177	4.42	22153	4.60	21043	4.76	19742	4.92	16295	5.15	11561	5.15		
42FG720	FBD	1281	71/2	29777	5.52	28991	5.83	28180	6.13	27341	6.40	26472	6.65	25581	6.86	24644	7.05	22428	7.40	19515	7.69	15696	7.74
42FG720	FBD	1410	10	32775	7.36	32064	7.71	31333	8.04	30582	8.35	29809	8.64	29015	8.91	28205	9.14	26458	9.54	24327	9.93	21660	10.24

#### FBD Type FG | Size 48

CATA	ALOG N	IUMBE	R					CUBIC	133	PERI	MINU.	TE AN	D HO	RSEPO	WER	AT ST	ATIC	PRESS	URE				
DDOD	FAN	DDM	LID	0"	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2'	SP	5/8"	SP	3/4'	' SP	1"	SP	11/4	SP	11/21	' SP
PROP	TYPE	KPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
48FG720	FBD	751	3	26057	2.17	24496	2.43	22814	2.65	20962	2.82	18560	2.96	15277	3.05	11118	3.03						
48FG720	FBD	891	5	30915	3.62	29613	3.94	28239	4.23	26796	4.47	25247	4.66	23400	4.85	21125	5.00	14726	5.07				
48FG720	FBD	1020	71/2	35391	5.43	34260	5.80	33084	6.15	31856	6.46	30587	6.72	29247	6.94	27736	7.16	23871	7.53	18453	7.62		
48FG720	FBD	1122	10	38930	7.23	37905	7.64	36847	8.03	35752	8.38	34619	8.71	33457	8.98	32235	9.23	29350	9.70	25561	10.07	20592	10.14

# FBD Type FG | Size 54

CATA	LOG N	IUMBEI	R					CUBIC	FEET	PERI	MINU	TE ANI	D HO	RSEPO	WER	AT ST	ATIC I	PRESS	SURE				
PROP	FAN	DDM	HP	0"	_	1/8"	_	1/4"	_	3/8"		1/2"		5/8"		3/4"			SP	11/4	_	11/2"	
PROP	TYPE	RPM	ПР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
54FG618	FBD	895	5	35862	4.09	33575	4.33	31106	4.56	28392	4.80	25294	4.99										
54FG618	FBD	1020	71/2	40870	6.06	38881	6.32	36774	6.59	34529	6.87	32092	7.13	29379	7.35	26618	7.45	14726	5.07				
54FG618	FBD	1135	10	45478	8.35	45478	8.64	41839	8.94	39884	9.24	37820	9.55	35601	9.84	33173	10.09	29350	9.70	25561	10.07	20592	10.14

## FBD Type FG | Size 60

CATA	ALOG N	UMBE	R				(	CUBIC	1111	PER	MINU <sup>.</sup>	TE ANI	D HOF	RSEPO	WER	AT ST	ATIC I	PRESS	URE				
PROP	FAN	DDM	HP	0" 9	SP	1/8"	SP	1/4"	SP	3/8'	SP	1/2"	SP	5/8"	SP	3/4"	SP	1"	SP	1 <sup>1</sup> /4 <sup>1</sup>	'SP	11/2"	SP
PROP	TYPE	REW	ПР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
60FG618	FDB	747	5	41059	4.03	37996	4.30	34640	4.57	30824	4.83	26625	4.96										
60FG618	FDB	860	71/2	47270	6.15	44638	6.46	41824	6.77	38790	7.09	35401	7.37	31741	7.54								
60FG618	FDB	945	10	51942	8.16	49560	8.50	47045	8.84	44378	9.19	41512	9.53	38338	9.83	34999	10.01	29350	9.70	25561	10.07	20592 1	10.14

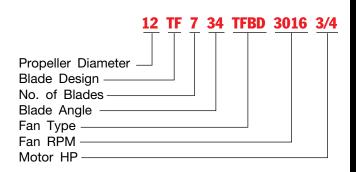


# Model TFBD | Type TF Belt Driven Fiberglass Tubeaxial

#### **Catalog Numbering System**

To identify a specific fan for ordering or engineering specifications, it is necessary to show the complete information listed in the tables below under the 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).



#### TFBD Type TF | Size 12

CATA	LOG N	UMBEF	₹				UBIC	FEET P	ER MIN	NUTE A	ND HO	RSEPO	WER A	T STAT	TIC PRI	ESSURI	E		
PROP	FAN	RPM	HP	1/4'	SP	1/2'	' SP	3/4'	' SP	1"	SP	11/4	' SP	11/2	' SP	2"	SP	21/2	" SP
PROP	TYPE	RPIVI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
12TF734	TFBD	3016	3/4	1979	0.75	1782	0.77												
12TF734	TFBD	3320	1	2212	1.00	2042	1.02	1829	1.04										
12TF734	TFBD	3800	11/2	2574	1.49	2433	1.52	2275	1.54	2078	1.56								
12TF734	TFBD		2	2859	1.99	2734	2.01	2598	2.04	2446	2.06	2256	2.08						

#### TFBD Type TF | Size 15

CAT	ALOG N	UMBEF	₹			C	UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	TIC PRI	ESSUR	E		
PROP	FAN	RPM	HP	1/4'	'SP	1/2'	SP	3/4'	' SP	1"	SP	11/4	" SP	11/2	" SP	2"	SP	21/21	' SP
PROP	TYPE	RPM	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	ВНР	CFM	BHP	CFM	ВНР	CFM	ВНР	CFM	BHP
15TF734	TFBD	1915	3/4	2577	0.70	2151	0.72												
15TF734	TFBD	2108	1	2903	0.93	2564	0.95												
15TF734	TFBD	2413	11/2	3402	1.38	3132	1.41	2788	1.44										
15TF734	TFBD	2656	2	3793	1.84	3556	1.87	3285	1.90	2910	1.91								
15TF734	TFBD	3041	3	4403	2.75	4204	2.78	3987	2.82	3743	2.86	3432	2.87						

#### TFBD Type TF | Size 18

CATA	LOG N	UMBEF	R				UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	TIC PRI	ESSUR	=		
PROP	FAN	RPM	HP	1/4'	' SP	1/2'	' SP	3/4'	' SP	1"	SP	11/4	' SP	11/2	" SP	2"	SP	21/21	' SP
PROP	TYPE	RPIVI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	ВНР	CFM	BHP
18TF734	TFBD	1370	1/2	3181	0.51														
18TF734	TFBD	1568	3/4	3800	0.75	3257	0.77												
18TF734	TFBD	1726	1	4276	0.99	3799	1.03												
18TF734	TFBD	1976	11/2	5011	1.46	4622	1.51	4180	1.55										
18TF734	TFBD	2175	2	5584	1.94	5244	1.99	4860	2.05	4457	2.07								
18TF734	TFBD	2490	3	6480	2.88	6193	2.95	5882	3.02	5539	3.07	5187	3.10	4787	3.08				

#### TFBD Type TF | Size 22

CATA	LOG N	UMBEF	₹				UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	IC PR	ESSUR	=		
DDOD	FAN	DDM	HP	1/4'	SP	1/2'	SP	3/4'	'SP	1"	SP	1 <sup>1</sup> /4 <sup>1</sup>	' SP	1 <sup>1</sup> /2	' SP	2"	SP	21/21	'SP
PROP	TYPE	RPM	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
22TF734	TFBD	984	1/2	3922	0.52														
22TF734	TFBD	1126	3/4	4781	0.77														
22TF734	TFBD	1239	1	5430	1.01	4582	1.04												
22TF734	TFBD	1419	11/2	6425	1.49	5717	1.55	4842	1.55										
22TF734	TFBD	1561	2	7188	1.97	6576	2.04	5893	2.08										
22TF734	TFBD	1787	3	8381	2.93	7875	3.02	7304	3.09	6706	3.12								
22TF734	TFBD	2119	5	10101	4.84	9692	4.95	9252	5.05	8772	5.14	8259	5.20	7756	5.21				

# TFBD Type TF | Size 25

CATA	LOG N	UMBEF	₹			С	UBIC	FEET P	ER MIN	NUTE A	ND HO	RSEPO	WER A	T STAT	IC PR	ESSUR	Ē		
PROP	FAN	RPM	HP	1/4"	SP	1/2"	SP	3/4"	SP	1"	SP	11/41	SP	11/2"	'SP	2"	SP	21/21	' SP
PROP	TYPE	RPM	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
25TF734	TFBD	1045	1	6962	0.94	5660	1.01												
25TF734	TFBD	1196	11/2	8244	1.38	7247	1.50												
25TF734	TFBD	1316	2	9232	1.80	8395	1.95	7358	2.02										
25TF734	TFBD	1507	3	10770	2.66	10099	2.82	9290	2.97	8356	3.03								
25TF734	TFBD	1786	5	12973	4.34	12441	4.54	11849	4.73	11168	4.92	10409	5.03	9461	5.01				
25TF734	TFBD	2045	71/2	14991	6.45	14542	6.68	14058	6.90	13530	7.12	12941	7.34	12288	7.50				
25TF734	TFBD	2251	10	16585	8.55	16183	8.80	15759	9.05	15306	9.29	14815	9.53	14277	9.77	13084	10.07		

# TFBD Type TF | Size 29

CATA	LOG N	UMBEF	₹			C	UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	IC PRI	ESSUR	Ξ		
PROP	FAN	DDM	HP	1/4"	SP	1/2"	SP	3/4"	SP	1"	SP	1 <sup>1</sup> / <sub>4</sub> '	SP	11/2	' SP	2"	SP	21/21	" SP
PROP	TYPE	RPM	ПР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
29TF734	TFBD	816	1	8187	0.97														
29TF734	TFBD	934	11/2	9815	1.41	8215	1.51												
29TF734	TFBD	1028	2	11054	1.84	9705	2.00												
29TF734	TFBD	1177	3	12961	2.70	11905	2.89	10602	3.03										
29TF734	TFBD	1395	5	15680	4.39	14864	4.63	13916	4.86	12809	5.02								
29TF734	TFBD	1597	71/2	18156	6.50	17473	6.78	16722	7.04	15869	7.31	14902	7.51	13874	7.57				
29TF734	TFBD	1758	10	20112	8.61	19505	8.92	18852	9.21	18138	9.51	17342	9.80	16458	10.01				
29TF734	TFBD	2012	15	23175	12.80	22658	13.15	22112	13.5	21534	13.83	20915	14.17	20242	14.51	18725	15.03	16981	15.11

# TFBD Type TF | Size 33

CATA	LOG N	JMBER	}			C	UBIC	FEET P	ER MIN	NUTE A	ND HO	RSEPO	WER A	T STAT	TIC PRI	ESSUR	Ε		
DDOD	FAN	DDM	ш	1/4'	SP	1/2"	SP	3/4"	SP	1"	SP	11/4	' SP	11/21	" SP	2"	SP	21/21	" SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
33TF734	TFBD	829	2	12871	1.87	10839	2.02												
33TF734	TFBD	949	3	15182	2.73	13590	2.96												
33TF734	TFBD	1125	5	18460	4.44	17264	4.72	15813	4.98	14106	5.04								
33TF734	TFBD	1287	71/2	21413	6.55	20423	6.87	19299	7.19	17986	7.47	16550	7.56						
33TF734	TFBD	1417	10	23755	8.66	22881	9.02	21922	9.37	20838	9.72	19608	9.99	18310	10.09				
33TF734	TFBD	1622	15	27417	12.86	26676	13.28	25885	13.68	25032	14.08	24093	14.48	23057	14.85	20783	15.14		
33TF734	TFBD	1785	20	30310	17.04	29646	17.50	28948	17.95	28210	18.40	27421	18.83	26564	19.28	24633	19.99	22478	20.16

## TFBD Type TF | Size 38

	<i>y</i> 1		_																
CATA	LOG N	UMBEF	₹			C	UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	IC PRI	ESSUR	Ē		
DDOD	FAN	RPM	HP	1/4'	SP	1/2'	'SP	3/4'	' SP	1"	SP	11/4	' SP	11/21	' SP	2"	SP	21/21	' SP
PROP	TYPE	RPIVI	ПР	CFM	BHP	CFM	ВНР	CFM	ВНР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
38TF734	TFBD	645	2	14751	1.92														
38TF734	TFBD	739	3	17577	2.82	15226	2.98												
38TF734	TFBD	876	5	21535	4.59	19739	4.83	17632	5.01										
38TF734	TFBD	1003	71/2	25108	6.78	23609	7.10	21947	7.32	20056	7.53								
38TF734	TFBD	1104	10	27909	8.96	26581	9.33	25143	9.62	23548	9.84	21789	10.08						
38TF734	TFBD	1263	15	32271	13.28	31141	13.72	29942	14.12	28668	14.43	27287	14.68	25783	14.94				
38TF734	TFBD	1390	20	35726	17.59	34714	18.09	33653	18.55	32538	18.96	31364	19.28	30105	19.55	27321	20.13		
38TF734	TFBD	1498	25	38650	21.92	37719	22.48	36751	22.99	35742	23.46	34688	23.86	33583	24.19	31140	24.77	28270	25.32

# TFBD Type TF | Size 43

CATA	LOG N	UMBEF	}			C	UBIC	FEET P	ER MIN	NUTE A	ND HO	RSEPO	WER A	T STAT	IC PRI	ESSURI			
PROP	FAN	RPM	HP	1/4"	SP	1/2"	SP	3/4"	' SP	1"	SP	11/4	' SP	11/21	' SP	2"	SP	21/21	' SP
PROP	TYPE	RPIVI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
43TF734	TFBD	526	2	16891	1.95														
43TF734	TFBD	603	3	20344	2.88	16865	3.06												
43TF734	TFBD	714	5	25080	4.66	22485	4.91	18990	5.07										
43TF734	TFBD	818	71/2	29373	6.89	27241	7.23	24781	7.47										
43TF734	TFBD	900	10	32700	9.08	30818	9.49	28741	9.79	26382	10.06								
43TF734	TFBD	1030	15	37905	13.44	36313	13.95	34606	14.38	32755	14.70	30696	14.99	28337	15.27				
43TF734	TFBD	1134	20	42027	17.81	40607	18.39	39103	18.91	37509	19.33	35792	19.66	33910	19.99				
43TF734	TFBD	1222	25	45495	22.18	44191	22.82	42824	23.4	41386	23.92	39871	24.32	38242	24.67	34634	25.41		

# TFBD Type TF | Size 48

CATA	LOG N	UMBEF	₹			C	UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	IC PRI	ESSURI	=		
DDOD	FAN	DDM	ш	1/4"	SP	1/2'	SP	3/4'	' SP	1"	SP	11/4	" SP	1 <sup>1</sup> /2 <sup>1</sup>	' SP	2"	SP	21/21	" SP
PROP	TYPE	RPM	HP	CFM	ВНР	CFM	BHP	CFM	ВНР	CFM	BHP	CFM	BHP	CFM	ВНР	CFM	ВНР	CFM	BHP
48TF734	TFBD	503	3	23062	2.93														
48TF734	TFBD	596	5	28694	4.75	25053	5.01												
48TF734	TFBD	682	71/2	33701	6.98	30765	7.35	27300	7.63										
48TF734	TFBD	751	10	37634	9.21	35063	9.67	32136	9.97	28617	10.26								
48TF734	TFBD	859	15	43695	13.60	41531	14.17	39179	14.62	36544	14.95	33618	15.32						
48TF734	TFBD	946	20	48521	18.01	46596	18.67	44538	19.24	42325	19.66	39864	20.03	37218	20.44				
48TF734	TFBD	1019	25	52541	22.39	50777	23.12	48912	23.77	46933	24.30	44806	24.72	42472	25.12				
48TF734	TFBD	1083	30	56050	26.78	54406	27.57	52679	28.28	50861	28.90	48940	29.40	46868	29.81	42241	30.71		
48TF734	TFBD	1192	40	61999	35.51	60523	36.40	58988	37.22	57388	37.98	55718	38.63	53969	39.17	50106	40.10	45656	41.03

# TFBD Type TF | Size 54

CATA	LOG N	JMBEF	₹			C	UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	IC PRI	ESSURI			
PROP	FAN	DDM	шъ	1/4"	SP	1/2"	SP	3/4'	' SP	1"	SP	11/4	" SP	11/21	' SP	2"	SP	21/21	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
54TF734	TFBD	412	3	26006	2.94														
54TF734	TFBD	488	5	32761	4.76	27470	5.05												
54TF734	TFBD	559	71/2	38760	7.00	34554	7.38												
54TF734	TFBD	615	10	43370	9.21	39730	9.69	35459	10.04										
54TF734	TFBD	704	15	50557	13.60	47521	14.23	44149	14.68	40313	15.10								
54TF734	TFBD	775	20	56209	17.97	53519	18.71	50606	19.30	47370	19.73	43800	20.21						
54TF734	TFBD	835	25	60946	22.34	58489	23.16	55860	23.87	53027	24.39	49873	24.85	46447	25.36				
54TF734	TFBD	887	30	65028	26.65	62740	27.55	60313	28.34	57733	28.97	54934	29.47	51889	30.00				
54TF734	TFBD	977	40	72055	35.40	70008	36.41	67863	37.34	65608	38.15	63232	38.8	60684	39.35	55047	40.52		

## TFBD Type TF | Size 60

CATA	LOG N	UMBEF	}			C	UBIC	FEET P	ER MIN	IUTE A	ND HO	RSEPO	WER A	T STAT	IC PRI	ESSUR	E		
PROP	FAN	RPM	HP	1/4'	SP	1/2"	'SP	3/4'	' SP	1"	SP	11/4	' SP	11/21	' SP	2"	SP	21/21	SP
PROP	TYPE	RPIVI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
60TF734	TFBD	413	5	37320	4.93														
60TF734	TFBD	473	71/2	44395	7.25	38632	7.66												
60TF734	TFBD	520	10	49772	9.50	44845	10.01	38668	10.40										
60TF734	TFBD	596	15	58273	14.06	54212	14.76	49568	15.24	43814	15.65								
60TF734	TFBD	656	20	64871	18.56	61285	19.40	57348	20.01	52879	20.52								
60TF734	TFBD	706	25	70317	22.98	67046	23.92	63511	24.66	59608	25.21	55304	25.81						
60TF734	TFBD	750	30	75080	27.42	72039	28.43	68786	29.3	65277	29.94	61369	30.51	57109	31.13				
60TF734	TFBD	826	40	83254	36.37	80540	37.53	77674	38.56	74640	39.42	71393	40.09	67823	40.71				

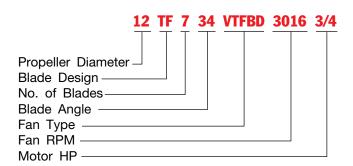


# Model VTFBD | Type TF Belt Driven Fiberglass Vaneaxial

#### **Catalog Numbering System**

To identify a specific fan for ordering or engineering specifications, it is necessary to show the complete information listed in the tables below under the 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).



#### VTFBD Type TF | Size 12

			•																							
	CATA	LOG N	JMBEF	1						Cl	JBIC F	EET PE	R MIN	UTE A	ND HO	RSEPO	WER /	AT STA	TIC PF	RESSU	RE					
Б	200	FAN	DDM	шп	1/4"	SP	1/2'	SP	3/4"	'SP	1"	SP	11/4	" SP	11/2	' SP	2"	SP	21/2	" SP	3"	SP	31/2	" SP	4"	SP
P	ROP	TYPE	RPINI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
12T	F734	VTFBD	3016	3/4	1977	0.73	1858	0.75	1721	0.75	1563	0.75														
12T	F734	VTFBD	3320	1	2198	0.97	2093	1.00	1977	1.00	1844	1.00	1696	1.00												
12T	F734	VTFBD	3800	11/2	2543	1.45	2454	1.48	2359	1.50	2255	1.51	2140	1.50	2015	1.50										
12T	F734	VTFBD		2	2815	1.93	2736	1.96	2652	1.99	2563	2.01	2467	2.01	2362	2.00	2128	2.01								

#### VTFBD Type TF | Size 15

	-	-																							
CATA	LOG N	JMBEF	1						Cl	JBIC F	EET PE	R MIN	UTE A	ND HO	RSEPO	WER /	AT STA	TIC PF	RESSU	RE					
DDOD	FAN	DD14		1/4"	SP	1/2'	SP	3/4'	'SP	1"	SP	11/4	" SP	11/2	" SP	2"	SP	21/2	" SP	3"	SP	31/2	" SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
15TF734	VTFBD	1915	3/4	2610	0.74	2380	0.75	2097	0.75																
15TF734	VTFBD	2108	1	2913	0.98	2714	1.00	2478	1.00	2185	1.00														
15TF734	VTFBD	2413	1½	3384	1.46	3219	1.50	3034	1.51	2820	1.50	2579	1.51												
15TF734	VTFBD	2656	2	3755	1.94	3609	1.98	3449	2.01	3272	2.01	3073	2.00	2853	2.01										
15TF734	VTFBD	3041	3	4337	2.89	4213	2.95	4081	2.99	3940	3.01	3786	3.01	3618	3.00	3236	3.02								

#### VTFBD Type TF | Size 18

CATA	LOG N	JMBEF	<b>₹</b>						Cl	JBIC F	EET PE	R MIN	UTE A	ND HO	RSEPO	WER A	AT STA	TIC PF	ESSU	RE					
DDOD	FAN	DD14		1/4'	SP	1/2'	SP	3/4'	SP	1"	SP	11/4	" SP	11/2	' SP	2"	SP	21/2	' SP	3"	SP	31/2	' SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
18TF734	VTFBD	1370	1/2	3287	0.48	2822	0.50																		
18TF734	VTFBD	1568	3/4	3870	0.72	3502	0.74	3032	0.75															1	
18TF734	VTFBD	1726	1	4325	0.95	4004	0.98	3629	1.00	3133	0.99													1	
18TF734	VTFBD	1976	11/2	5588	1.41	4763	1.45	4468	1.48	4130	1.51	3708	1.50											1	
18TF734	VTFBD	2175	2	5588	1.87	5349	1.92	5092	1.96	4813	1.99	4494	2.01	4108	2.00									1	
18TF734	VTFBD	2490	3	6459	2.80	6256	2.85	6041	2.89	5814	2.94	5572	2.98	5305	3.01	4648	2.99								

#### VTFBD Type TF | Size 22

CATA	LOG N	JMBEF	₹						Cl	JBIC FI	EET PE	R MIN	UTE A	ND HO	RSEPO	WER A	AT STA	TIC PF	ESSU	RE					
	FAN			1/4'	SP	1/2'	' SP	3/4"	SP	1"	SP	11/4	" SP	11/2	' SP	2"	SP	21/2	'SP	3"	SP	31/21	' SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
22TF734	VTFBD	984	1/2	4146	0.50	3189	0.50																		
22TF734	VTFBD	1126	3/4	4937	0.73	4249	0.76																		
22TF734	VTFBD	1239	1	5547	0.97	4967	1.01	4182	1.00																
22TF734	VTFBD	1419	11/2	6496	1.44	6019	1.49	5466	1.52	4734	1.51														
22TF734	VTFBD	1561	2	7231	1.90	6811	1.96	6345	2.01	5797	2.03	5085	2.00												
22TF734	VTFBD	1787	3	8386	2.84	8030	2.90	7649	2.96	7234	3.01	6762	3.04	6195	3.03										
22TF734	VTFBD	2119	5	10060	4.70	9769	4.77	9464	4.84	9142	4.91	8803	4.98	8437	5.04	7574	5.06								

# VTFBD Type TF | Size 25

CATA	ALOG N	UMBEF	₹						Cl	JBIC FI	EET PE	R MIN	UTE A	ND HO	RSEPO	OWER A	T STA	TIC PR	ESSU	RE					
DDOD	FAN	DD14		1/4"	SP	1/2"	SP	3/4"	SP	1"	SP	11/41	SP	11/21	' SP	2" :	SP	21/21	' SP	3"	SP	31/21	SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
25TF734	VTFBD	1045	1	6971	0.93	6175	1.00	5051	0.98																
25TF734	VTFBD	1196	11/2	8181	1.38	7516	1.46	6761	1.51	5675	1.46														
25TF734	VTFBD	1316	2	9126	1.81	8528	1.90	7896	1.99	7144	2.01														
25TF734	VTFBD	1507	3	10609	2.69	10094	2.79	9565	2.89	9003	2.99	8358	3.02	7528	2.97										
25TF734	VTFBD	1786	5	12744	4.44	12317	4.55	11878	4.67	11432	4.79	10972	4.91	10471	5.00	9260	5.00								
25TF734	VTFBD	2045	71/2	14706	6.62	14337	6.75	13960	6.89	13575	7.02	13185	7.16	12790	7.30	11927	7.52	10909	7.54	9311	7.15				
25TF734	VTFBD	2251	10	16257	8.79	15924	8.94	15585	9.09	15239	9.24	14888	9.38	14534	9.54	13807	9.85	12998	10.04	12069	10.06	10819	9.78		

# VTFBD Type TF | Size 29

CATA	ALOG N	JMBEF	₹						Cl	JBIC F	EET PE	R MIN	UTE A	ND HO	RSEPO	OWER A	AT STA	TIC PF	ESSU	RE					
DDOD	FAN	DD14	un	1/4"	SP	1/2"	SP	3/4"	SP	1"	SP	11/4	SP	11/21	' SP	2"	SP	21/21	'SP	3"	SP	31/21	SP	4" :	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
29TF734	VTFBD	816	1	8293	0.95	7023	1.01																		
29TF734	VTFBD	934	11/2	9798	1.39	8784	1.49	7461	1.50																
29TF734	VTFBD	1028	2	10972	1.83	10073	1.94	9051	2.01	7559	1.94														
29TF734	VTFBD	1177	3	12798	2.72	12025	2.84	11221	2.96	10295	3.02	9068	2.96												
29TF734	VTFBD	1395	5	15425	4.47	14786	4.61	14126	4.75	13450	4.90	12707	5.01	11866	5.03										
29TF734	VTFBD	1597	71/2	17829	6.65	17277	6.81	16710	6.97	16132	7.14	15544	7.32	14921	7.47	13473	7.55								
29TF734	VTFBD	1758	10	19731	8.83	19233	9.01	18724	9.19	18204	9.37	17678	9.56	17143	9.75	15977	10.04	14594	10.05						
29TF734	VTFBD	2012	15	22715	13.17	22283	13.38	21844	13.59	21397	13.79	20943	13.99	20484	14.20	19553	14.64	18546	15.00	17413	15.11	16009	14.95		

# **VTFBD Type TF | Size 33**

CATA	ALOG N	JMBER							С	UBIC F	EET P	ER MIN	UTE A	ND HO	RSEPO	OWER A	T STA	TIC PR	ESSUF	RE					
	FAN			1/4"	SP	1/2"	SP	3/4"	SP	1"	SP	11/4	SP	11/21	' SP	2"	SP	21/2	'SP	3"	SP	31/2	' SP	4"	SP
PROP	TYPE	RPM	HP	CFM	ВНР	CFM	BHP	CFM	ВНР	CFM	ВНР	CFM	BHP	CFM	ВНР	CFM	ВНР	CFM	ВНР	CFM	BHP	CFM	BHP	CFM	ВНР
33TF734	VTFBD	829	2	12840	1.86	11545	1.98	9893	2.00																
33TF734	VTFBD	949	3	15035	2.74	13934	2.89	12733	3.01	11191	3.00													1	
33TF734	VTFBD	1125	5	18188	4.50	17277	4.66	16339	4.84	15333	5.00	14168	5.04	12617	4.92									l	
33TF734	VTFBD	1287	71/2	21047	6.67	20262	6.86	19453	7.06	18630	7.26	17760	7.45	16787	7.54	14180	7.31							1	
33TF734	VTFBD	1417	10	23322	8.86	22615	9.07	21889	9.28	21148	9.50	20397	9.73	19605	9.93	17776	10.07	14973	9.58					1	
33TF734	VTFBD	1622	15	26885	13.21	26272	13.45	25648	13.70	25011	13.94	24364	14.19	23713	14.45	22341	14.92	20768	15.11	18764	14.89				
33TF734	VTFBD	1785	20	29703	17.55	29149	17.82	28586	18.09	28015	18.35	27433	18.62	26845	18.89	25654	19.47	24376	19.95	22939	20.13	21208	19.97	1	

# **VTFBD Type TF | Size 38**

		<i>,</i> 1																							
CATA	ALOG N	JMBEF	}						Cl	JBIC FI	EET PE	R MIN	UTE A	ND HO	RSEPO	OWER A	AT STA	TIC PF	RESSU	RE					
DDOD	FAN	DD14		1/4"	SP	1/2"	SP	3/4"	SP	1"	SP	11/4	SP	11/2	' SP	2"	SP	21/2	" SP	3"	SP	31/2	' SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
38TF734	VTFBD	645	2	14889	1.89	13081	1.98																		
38TF734	VTFBD	739	3	17515	2.79	16020	2.93	14323	3.01																
38TF734	VTFBD	876	5	21248	4.56	20026	4.77	18738	4.90	17306	4.99	15524	5.03												
38TF734	VTFBD	1003	71/2	24649	6.76	23603	7.03	22513	7.23	21376	7.37	20131	7.47	18762	7.55										
38TF734	VTFBD	1104	10	27327	8.94	26388	9.25	25414	9.51	24411	9.71	23363	9.84	22225	9.96	19454	10.05								
38TF734	VTFBD	1263	15	31512	13.27	30700	13.64	29867	13.97	29010	14.26	28135	14.49	27235	14.66	25276	14.93	22992	15.09						
38TF734	VTFBD	1390	20	34833	17.60	34101	18.02	33353	18.40	32588	18.75	31805	19.06	31009	19.30	29351	19.65	27527	19.94	25446	20.11				
38TF734	VTFBD	1498	25	37648	21.95	36972	22.41	36283	22.84	35581	23.23	34865	23.59	34134	23.91	32641	24.38	31052	24.71	29327	25.01	27350	25.17	23999	24.62

## VTFBD Type TF | Size 43

CATA	ALOG N	JMBEF	₹						Cl	JBIC F	EET PE	R MIN	UTE A	ND HO	RSEPO	OWER A	T STA	TIC PF	ESSU	RE					
DDOD	FAN	DD14		1/4"	SP	1/2"	SP	3/4"	SP	1"	SP	1 <sup>1</sup> /4 <sup>1</sup>	SP	11/2	' SP	2"	SP	21/21	'SP	3"	SP	31/2	' SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
43TF734	VTFBD	526	2	17242	1.93	14612	2.02																		
43TF734	VTFBD	603	3	20411	2.85	18285	2.98	15614	3.04																
43TF734	VTFBD	714	5	24847	4.62	23128	4.85	21263	4.97	19084	5.06														
43TF734	VTFBD	818	71/2	28917	6.85	27449	7.15	25913	7.36	24250	7.49	22400	7.59	19597	7.50										
43TF734	VTFBD	900	10	32088	9.05	30772	9.40	29401	9.67	27976	9.86	26425	9.99	24742	10.11										
43TF734	VTFBD	1030	15	37070	13.42	35937	13.85	34767	14.22	33562	14.52	32322	14.73	31010	14.90	28087	15.16								
43TF734	VTFBD	1134	20	41028	17.80	40007	18.29	38959	18.73	37883	19.11	36783	19.42	35655	19.65	33215	20.00	30456	20.26						
43TF734	VTFBD	1222	25	44362	22.19	43420	22.73	42456	23.22	41471	23.66	40462	24.04	39437	24.35	37296	24.79	34940	25.15	32211	25.35				
43TF734	VTFBD	1298	30	47233	26.52	46349	27.09	45448	27.63	44529	28.12	43590	28.56	42634	28.94	40672	29.50	38560	29.90	36274	30.26	33432	30.34		

# **VTFBD Type TF | Size 48**

CATA	ALOG N	UMBER	₹						CI	JBIC FI	EET PE	R MIN	UTE A	ND HO	RSEPO	WER A	AT STA	TIC PF	ESSU	RE					
	FAN			1/4'	SP	1/2'	SP	3/4"	SP	1":	SP	11/4	"SP	11/2	'SP	2"	SP	21/21	SP	3"	SP	31/2	'SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
48TF734	VTFBD	503	3	23320	2.89	20368	3.03																		
48TF734	VTFBD	596	5	28555	4.70	26224	4.93	23603	5.06	19634	5.02														
48TF734	VTFBD	682	71/2	33278	6.93	31289	7.26	29186	7.45	26832	7.59	23696	7.60												
48TF734	VTFBD	751	10	37015	9.17	35237	9.56	33379	9.84	31397	10.01	29206	10.16	26333	10.16										
48TF734	VTFBD	859	15	42803	13.56	41276	14.05	39689	14.45	38055	14.74	36334	14.94	34465	15.12	29611	15.17								
48TF734	VTFBD	946	20	47428	17.99	46054	18.55	44637	19.03	43178	19.43	41683	19.72	40118	19.94	36667	20.31	31523	20.12						
48TF734	VTFBD	1019	25	51289	22.39	50021	23.00	48720	23.54	47383	24.02	46017	24.41	44618	24.70	41594	25.14	38189	25.47						
48TF734	VTFBD	1083	30	54663	26.79	53474	27.45	52260	28.05	51016	28.58	49743	29.05	48449	29.42	45735	29.95	42744	30.39	39145	30.57				
48TF734	VTFBD	1192	40	60389	35.56	59316	36.30	58223	36.99	57109	37.62	55973	38.20	54815	38.71	52448	39.47	49935	40.01	47206	40.50	44126	40.79	39267	40.13

# VTFBD Type TF | Size 54

CATA	ALOG NU	JMBER								CUBIC	FEET I	PER MIN	NUTE A	ND HO	RSEPO	WER A	T STAT	IC PRE	SSURE						
	FAN			1/4"	SP	1/2"	SP	3/4"	'SP	1":	SP	11/4	"SP	11/2	'SP	2"	SP	2 <sup>1</sup> /2 <sup>1</sup>	'SP	3"	SP	31/2	' SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	ВНР	CFM	ВНР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	ВНР	CFM	BHP	CFM	ВНР	CFM	ВНР
54TF734	VTFBD	412	3	26623	2.90	22346	3.03																		
54TF734	VTFBD	488	5	32818	4.70	29540	4.93	25570	5.04																
54TF734	VTFBD	559	71/2	38437	6.95	35672	7.29	32642	7.47	28997	7.58														
54TF734	VTFBD	615	10	42797	9.15	40322	9.57	37713	9.83	34808	10.02	31163	10.07												
54TF734	VTFBD	704	15	49638	13.54	47520	14.08	45312	14.50	43006	14.77	40480	14.98	37695	15.13										
54TF734	VTFBD	775	20	55041	17.93	53139	18.55	51167	19.08	49135	19.46	47010	19.74	44704	19.97	39038	20.14								
54TF734	VTFBD	835	25	59581	22.31	57828	23.00	56021	23.60	54159	24.10	52250	24.46	50246	24.73	45816	25.19	38722	24.78						
54TF734	VTFBD	887	30	63500	26.64	61858	27.39	60172	28.06	58438	28.64	56666	29.09	54843	29.43	50873	29.97	46222	30.28						
54TF734	VTFBD	977	40	70256	35.41	68776	36.26	67263	37.04	65716	37.74	64132	38.35	62523	38.85	59168	39.56	55478	40.13	51254	40.47				

# VTFBD Type TF | Size 60

CAT	ALOG NI	JMBER								CUBIC	8831	PER MII	NUTE A	ND HO	RSEPO	WER A	T STAT	IC PRES	SSURE						
DDOD	FAN	DD14	un	1/4"	SP	1/2"	SP	3/4'	'SP	1":	SP	11/4	"SP	11/2	"SP	2"	SP	21/21	'SP	3"	SP	31/2	'SP	4"	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
60TF734	VTFBD	413	5	37620	4.87	33189	5.10	26589	5.09																
60TF734	VTFBD	473	71/2	44205	7.18	40527	7.53	36375	7.73	29257	7.55													ĺ	
60TF734	VTFBD	520	10	49266	9.43	45981	9.89	42446	10.14	38386	10.32														
60TF734	VTFBD	596	15	57331	14.00	54527	14.60	51595	15.02	48454	15.29	44977	15.51	40237	15.47										
60TF734	VTFBD	656	20	63626	18.50	61111	19.21	58494	19.77	55783	20.15	52859	20.42	49697	20.67									ĺ	
60TF734	VTFBD	706	25	68837	22.93	66519	23.72	64119	24.38	61646	24.88	59072	25.23	56286	25.52	49696	25.84							ĺ	
60TF734	VTFBD	750	30	73402	27.38	71233	28.23	68997	28.97	66692	29.58	64330	30.02	61847	30.36	56354	30.92	47287	30.32						
60TF734	VTFBD	826	40	81252	36.36	79298	37.33	77295	38.20	75239	38.97	73137	39.60	70990	40.08	66378	40.80	61242	41.36	53178	40.75			ĺ	

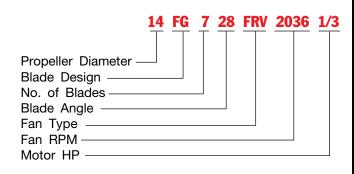


# Model FRV | Type FG Fiberglass Roof Ventilators

#### **Catalog Numbering System**

To identify a specific fan for ordering or engineering specifications, it is necessary to show the complete information listed in the tables below under the 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).



#### FRV Type FG | Size 14

CATA	LOG N	IUMBE	R					CUBIC	FEET	ΓPER	MINU	TE AN	D HO	RSEPO	OWER	AT ST	ATIC	PRES	SURE				
PROP	FAN	DDM	HP	0"	SP	1/8"	SP	1/4'	'SP	3/8'	SP	1/2'	'SP	5/8'	SP	3/4"	SP	1"	SP	11/4	' SP	11/21	' SP
PROP	TYPE	RPM	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
14FG728	FRV	2036	1/3	1990	0.32	1806	0.32	1586	0.33														
14FG728	FRV	2332	1/2	2279	0.48	2121	0.48	1949	0.49	1713	0.50												
14FG728	FRV	2669	3/4	2608	0.72	2472	0.72	2326	0.73	2166	0.74	1941	0.76										
14FG728	FRV	2938	1	2871	0.96	2748	0.96	2617	0.96	2480	0.98	2321	0.99	2093	1.01								

#### FRV Type FG | Size 16

CATA	ALOG N	IUMBE	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEP	OWER	AT ST	ATIC	PRES	SURE				
PROP	FAN	RPM	HP	0"	SP	1/8"	SP	1/4'	SP	3/8'	'SP	1/2'	' SP	5/8'	' SP	3/4'	'SP	1"	SP	11/4	' SP	11/2	" SP
PROP	TYPE	RPIVI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
16FG728	FRV	1637	1/3	2388	0.32	2124	0.33	1754	0.34														
16FG728	FRV	1874	1/2	2733	0.49	2506	0.49	2249	0.50														
16FG728	FRV	2145	3/4	3129	0.73	2933	0.73	2722	0.74	2463	0.76												
16FG728	FRV	2361	1	3444	0.97	3267	0.97	3079	0.98	2875	1.00	2594	1.02										

#### FRV Type FG | Size 18

CATA	ALOG N	UMBE	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEPO	OWER	AT ST	ATIC	PRES	SURE				
DDOD	FAN	DDM	ЦΒ	0"	SP	1/8"	SP	1/4'	' SP	3/8'	SP	1/2'	'SP	5/8'	SP	3/4'	SP	1"	SP	1 <sup>1</sup> / <sub>4</sub> <sup>1</sup>	' SP	11/2" S	SP
PROP	TYPE	RPM	HP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM B	3HP
18FG728	FRV	1633	1/2	3676	0.46	3403	0.48	3096	0.50	2585	0.49												
18FG728	FRV	1869	3/4	4207	0.69	3972	0.71	3717	0.73	3419	0.75												
18FG728	FRV	2057	1	4630	0.92	4418	0.94	4190	0.96	3946	0.99	3638	1.00										
18FG728	FRV	2355	1½	5301	1.38	5117	1.40	4923	1.43	4719	1.46	4502	1.49	4240	1.51	3874	1.50						

#### FRV Type FG | Size 24

ALOG N	IUMBE	R					CUBIC	FEE	Γ PER	MINU	TE AN	D HO	RSEPO	OWER	AT ST	ATIC	PRES:	SURE				
FAN	DDM	ЦΒ	0"	SP	1/8"	SP	1/4'	SP	3/8'	SP	1/2'	'SP	5/8"	SP	3/4'	SP	1"	SP	1 <sup>1</sup> /4 <sup>1</sup>	' SP	11/2"	' SP
TYPE	RPIVI	пР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
FRV	999	1/2	5530	0.45	4910	0.50	4047	0.50														
FRV	1144	3/4	6333	0.68	5793	0.75	5208	0.75														
FRV	1259	1	6970	0.91	6482	0.95	5977	0.99	5293	1.01												
FRV	1586	2	8780	1.82	8397	1.87	8001	1.91	7602	1.96	7137	2.01	6466	2.01								
FRV	1815	3	10048	2.73	9715	2.78	9372	2.84	9025	2.89	8674	2.95	8279	2.99	7775	3.02						
	FAN TYPE FRV FRV FRV	FAN TYPE RPM FRV 999 FRV 1144 FRV 1259 FRV 1586	FRV 999 1/2 FRV 1144 3/4 FRV 1259 1 FRV 1586 2	FAN TYPE         RPM         HP         0"           FRV         999         1/2         5530           FRV         1144         3/4         6333           FRV         1259         1         6970           FRV         1586         2         8780	FAN TYPE         RPM         HP         0" SP CFM         BHP           FRV         999         1/2         5530         0.45           FRV         1144         3/4         6333         0.68           FRV         1259         1         6970         0.91           FRV         1586         2         8780         1.82	FAN TYPE         RPM         HP         0" SP         1/8"           FRV         999         1/2         5530         0.45         4910           FRV         1144         3/4         6333         0.68         5793           FRV         1259         1         6970         0.91         6482           FRV         1586         2         8780         1.82         8397	FAN TYPE         RPM         HP         0" SP         1/8" SP           FRV         999         1/2         5530         0.45         4910         0.50           FRV         1144         3/4         6333         0.68         5793         0.75           FRV         1259         1         6970         0.91         6482         0.95           FRV         1586         2         8780         1.82         8397         1.87	FAN TYPE         RPM         HP         0" SP         1/8" SP         1/4" CFM         BHP         CFM         BHP         CFM         BHP         CFM         CFM         BHP         CFM         BHP         CFM         CFM         BHP         CFM         CFM         BHP         CFM         BHP         CFM         BHP         CFM         M047         CFM         CFM         BHP         CFM         A047         CFM         CFM         A047         A047	FAN TYPE         RPM         HP         0" SP         1/8" SP         1/4" SP           FRV         999         1/2         5530         0.45         4910         0.50         4047         0.50           FRV         1144         3/4         6333         0.68         5793         0.75         5208         0.75           FRV         1259         1         6970         0.91         6482         0.95         5977         0.99           FRV         1586         2         8780         1.82         8397         1.87         8001         1.91	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         3/8" CFM           FRV         999         1/2         5530         0.45         4910         0.50         4047         0.50           FRV         1144         3/4         6333         0.68         5793         0.75         5208         0.75           FRV         1259         1         6970         0.91         6482         0.95         5977         0.99         5293           FRV         1586         2         8780         1.82         8397         1.87         8001         1.91         7602	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP BHP         3/8" SP CFM         BHP CFM         CFM DFM         CFM DFM         CFM DFM	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP BHP         3/8" SP CFM         1/2" SP BHP         1/2" SP CFM         BHP         CFM BHP         BHP CFM         BHP CFM	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         8HP CFM         BHP CFM	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP GFM         3/8" SP BHP         1/2" SP CFM         5/8" SP CFM         HP CFM         BHP CFM <th>FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         3/8" SP BHP         1/2" SP SP BHP         5/8" SP CFM         BHP C</th> <th>FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         3/8" SP BHP         1/2" SP SF/8" SP SF/8" SP CFM         3/4" SP CFM         BHP CFM</th> <th>FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         BHP CFM</th> <th>FAN TYPE         RPM         HP         0" SP         1/8" SP         1/4" SP         3/8" SP         1/2" SP         5/8" SP         3/4" SP         1"           FRV         999         1/2         5530         0.45         4910         0.50         4047         0.50         8HP         CFM         8HP         CFM</th> <th>FAN TYPE         HP         0" SP         1/8" SP         1/4" SP         3/8" SP         1/2" SP         5/8" SP         3/4" SP         1" SP           FRV         999         1/2         5530         0.45         4910         0.50         4047         0.50         8HP         CFM         8HP</th> <th>FAN TYPE         HP         0" SP CFM BHP CFM</th> <th>FAN TYPE         HP         0" SP CFM BHP CFM</th> <th>FAN TYPE   RPM   HP   CFM   BHP   CFM   BH</th>	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         3/8" SP BHP         1/2" SP SP BHP         5/8" SP CFM         BHP C	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         3/8" SP BHP         1/2" SP SF/8" SP SF/8" SP CFM         3/4" SP CFM         BHP CFM	FAN TYPE         RPM         HP         0" SP CFM         1/8" SP BHP         1/4" SP CFM         BHP CFM	FAN TYPE         RPM         HP         0" SP         1/8" SP         1/4" SP         3/8" SP         1/2" SP         5/8" SP         3/4" SP         1"           FRV         999         1/2         5530         0.45         4910         0.50         4047         0.50         8HP         CFM         8HP         CFM	FAN TYPE         HP         0" SP         1/8" SP         1/4" SP         3/8" SP         1/2" SP         5/8" SP         3/4" SP         1" SP           FRV         999         1/2         5530         0.45         4910         0.50         4047         0.50         8HP         CFM         8HP	FAN TYPE         HP         0" SP CFM BHP CFM	FAN TYPE         HP         0" SP CFM BHP CFM	FAN TYPE   RPM   HP   CFM   BHP   CFM   BH

#### FRV Type FG | Size 30

CATA	ALOG N	IUMBE	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEPC	WER	AT ST	ATIC	PRES	SURE				
DDOD	FAN	DDM	НР	0"	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/4"	SP	1"	SP	11/4"	SP	11/21	' SP
PROP	TYPE	RPM	HP	CFM	BHP																		
30FG720	FRV	906	1/2	7353	0.37	6562	0.43	5626	0.48	4002	0.50												
30FG720	FRV	1142	1	9269	0.73	8653	0.82	7997	0.90	7245	0.96	6227	1.00										
30FG720	FRV	1439	2	11679	1.47	11197	1.58	10693	1.69	10171	1.78	9612	1.86	8968	1.93	8189	1.98						
30FG720	FRV	1647	3	13368	2.20	12948	2.33	12514	2.46	12067	2.57	11609	2.67	11125	2.76	10587	2.85	9259	2.98	7168	2.99		- 1
30FG720	FRV	1953	5	15851	3.68	15499	3.83	15139	3.98	14770	4.12	14392	4.25	14009	4.38	13616	4.49	12760	4.71	11748	4.88	10411	5.00

# FRV Type FG | Size 36

CATA	ALOG N	IUMBE	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEPO	WER	AT ST	ATIC	PRES:	SURE				
DDOD	FAN TYPE	DDM	HP	0"	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/4"	SP	1"	SP	11/4"	SP	11/2"	' SP
PROP	TYPE	RPIVI	пг	CFM	BHP																		
36FG720	FRV	1056	2	15184	1.49	14367	1.63	13495	1.75	12550	1.85	11380	1.94	9858	2.00	7912	2.01						
36FG720	FRV	1209	3	17384	2.23	16676	2.40	16676	2.40	15152	2.68	14307	2.78	13304	2.88	12094	2.97	8788	3.01				
36FG720	FRV	1433	5	20605	3.71	20012	3.92	19397	4.11	18759	4.28	18103	4.43	17415	4.55	16659	4.68	14801	4.90	12325	5.03	9206	5.00
36FG720	FRV	1640	7½	23582	5.57	23065	5.80	22535	6.03	21990	6.23	21428	6.43	20857	6.60	20268	6.75	18964	7.03	17369	7.29	15377	7.49

# FRV Type FG | Size 42

CATA	LOG N	UMBE	R					CUBIC	FEE	ΓPER	MINU	TE AN	D HO	RSEPO	WER	AT ST	ATIC	PRES	SURE				
PROP	FAN	DDM	HP	0" 5	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/4'	SP	1"	SP	1 <sup>1</sup> / <sub>4</sub> '	' SP	11/2	" SP
PRUP	TYPE	RPM	пР	CFM	BHP	CFM	BHP	CFM	BHP														
42FG720	FRV	824	2	18825	1.52	17593	1.70	16265	1.84	14705	1.95	12596	2.04	9717	2.06								
42FG720	FRV	944	3	21566	2.29	20501	2.50	19370	2.68	18169	2.82	16747	2.95	14962	3.05	12673	3.11						
42FG720	FRV	1119	5	29265	3.82	24673	4.07	23744	4.30	22776	4.50	21765	4.66	20645	4.82	19326	4.96	15891	5.17	11332	5.14		
42FG720	FRV	1281	71/2	29265	5.73	28491	6.02	27691	6.29	26864	6.54	26014	6.76	25136	6.95	24198	7.13	21951	7.46	19027	7.72	15290	7.74
42FG720	FRV	1410	10	32212	7.64	31511	7.96	30791	8.27	30050	8.55	29289	8.82	28514	9.05	27715	9.26	25954	9.65	23801	10.00	21121	10.28

# FRV Type FG | Size 48

CATA	ALOG N	IUMBE	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEPC	WER	AT ST	ATIC	PRES:	SURE				
PROP	FAN	RPM	HP	0"	SP	1/8"	SP	1/4'	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/4'	SP	1"	SP	1 <sup>1</sup> / <sub>4</sub> '	' SP	1 <sup>1</sup> /2 <sup>1</sup>	" SP
PROP	TYPE	RPIVI	пг	CFM	BHP	CFM	BHP	<b>CFM</b>	BHP														
48FG720	FRV	751	3	25606	2.25	24067	2.50	22417	2.69	20557	2.85	18143	2.98	14902	3.05	10906	3.03						
48FG720	FRV	891	5	30379	3.76	29096	4.06	27743	4.32	26328	4.53	24774	4.71	22901	4.89	20615	5.03	14386	5.07				
48FG720	FRV	1020	71/2	34777	5.64	33663	5.98	32504	6.30	31298	6.58	30053	6.81	28711	7.02	27174	7.23	23284	7.56	17972	7.62		
48FG720	FRV	1122	10	38255	7.51	37245	7.89	36203	8.24	35124	8.57	34016	8.86	32871	9.11	31647	9.33	28721	9.78	24917	10.11	20054	10.14

# FRV Type FG | Size 54

CATA	ALOG N	IUMBE	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEPC	WER	AT ST	ATIC	PRES	SURE				
DDOD	FAN	RPM	HP	0"	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/41	SP	1"	SP	11/41	' SP	1 <sup>1</sup> /2 <sup>1</sup>	' SP
PROP	TYPE	RPIVI	пР	CFM	BHP	<b>CFM</b>	BHP	CFM	BHP	CFM	BHP	<b>CFM</b>	BHP										
54FG618	FRV	895	5	35080	4.18	32839	4.40	30421	4.63	27746	4.85	24737	5.01										
54FG618	FRV	1020	71/2	39979	6.18	38030	6.43	35965	6.69	33764	6.96	31360	7.20	28715	7.39	26064	7.45						
54FG618	FRV	1135	10	44487	8.52	42744	8.80	40920	9.08	39006	9.38	36979	9.67	34787	9.93	32418	10.15						

# FRV Type FG | Size 60

CATA	LOG N	IUMBEI	R					CUBIC	FEE	T PER	MINU	TE AN	D HO	RSEPO	WER	AT ST	ATIC	PRES:	SURE				
PROP	FAN	RPM	μп	0" 9	SP	1/8"	SP	1/4"	SP	3/8"	SP	1/2"	SP	5/8"	SP	3/41	SP	1"	SP	11/41	SP	1 <sup>1</sup> /2 <sup>1</sup>	' SP
PROP	TYPE	RPM	ПР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP												
60FG618	FRV	747	5	40159	4.11	37157	4.37	33869	4.63	30112	4.86	26064	4.96										
60FG618	FRV	860	71/2	46234	6.27	43654	6.57	40900	6.87	37920	7.17	34584	7.42	31093	7.56								
60FG618	FRV	945	10	50803	8.32	48469	8.65	46005	8.97	43393	9.31	40569	9.62	37456	9.89	34283	10.02						



# **Model FDP | Type FG Direct Drive Fiberglass Panel Fan**

- Available in sizes 12" through 48".
- The standard housing is fabricated with an integral inlet side mounting flange and is constructed from corrosion resistant, reinforced plastic. It is provided with a solid FRP motor base that is reinforced with solid FRP support struts.
- The type FG propellers are high-efficient, one-piece airfoil, 7-blade FRP construction.
- Stainless steel setscrews and airstream hardware are provided for maximum corrosion resistance.
- Optional accessories include stainless expanded metal inlet and discharge guards, FRP shutter extension sleeve, FRP shutter and extra FRP mounting flange.



TYP

36

48

391/2

451/2

511/2

361/2

421/2

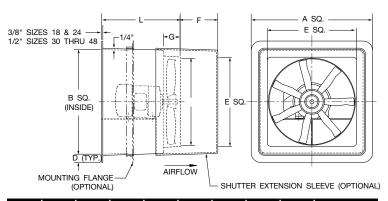


#### Performance (All capacities shown in the performance table below are for standard air conditions: 70°F at sea level (0.075 lbs./cu.ft. air density)

CAT	TALOG N	UMBER					С	UBIC FE	ET PER	MINUTE	AND HO	RSEPOW	ER AT S	STATIC P	RESSUF	₹E			
BBBB	FAN	DD14	HP	0"	SP	1/8'	'SP	1/4"	SP	3/8'	' SP	1/2"	SP	5/8'	' SP	3/4"	SP	1"	SP
PROP	TYPE	RPM	HP	CFM	ВНР	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
12FG728	FDP	1750	0.25	1267	0.13	1127	0.14	955	0.14	693	0.14								
14FG728	FDP	1160	0.25	1346	0.09	1083	0.09												
14FG728	FDP	1750	0.25	2030	0.3	1870	0.30	1689	0.31	1464	0.31	1164	0.31						
16FG728	FDP	1160	0.25	1922	0.06	1541	0.07												
16FG728	FDP	1750	0.333	2900	0.21	2672	0.22	2410	0.23	2028	0.23								
18FG728	FDP	1160	0.125	2656	0.08	2196	0.08												
18FG728	FDP	1750	0.50	4008	0.26	3735	0.27	3415	0.28	2962	0.28								
24FG728	FDP	860	0.25	4797	0.20	3941	0.23												
24FG728	FDP	1160	0.50	6470	0.50	5887	0.55	5158	0.57	3088	0.51								
24FG728	FDP	1750	2	9762	1.71	9393	1.79	8996	1.86	8566	1.91	8094	1.94	7464	1.93	5927	1.78		
30FG720	FDP	860	0.50	7400	0.35	6408	0.40	5036	0.42										
30FG720	FDP	1160	1	9982	0.86	9276	0.92	8497	0.98	7558	1.01	6290	1.02						
36FG720	FDP	860	1	12787	0.87	11630	0.95	10298	1.02	8439	1.03								
36FG720	FDP	1160	3	17248	2.14	16414	2.25	15520	2.36	14563	2.45	13468	2.51	12103	2.54	10454	2.54		
48FG720	FDP	860	5	30311	3.68	28809	3.88	27198	4.05	25469	4.21	23464	4.32	20962	4.36	17944	4.36		
48FG720	FDP	1160	10	40884	9.04	39787	9.30	38650	9.56	37467	9.80	36236	10.02	34961	10.24	33607	10.43	30382	10.66

<sup>\*</sup> Wide Blade Fiberglass Propeller

#### **Dimensional Data**



SIZE	Α	В	С	D	E	F	G	L	MAX. MTR. FRAME
12	19	16	12 <sup>1</sup> / <sub>16</sub>	11/2	12½	61/2	3	15 <sup>5</sup> /8	48
14	21	18	<b>14</b> ½16	11/2	141/2	61/2	4	<b>16</b> <sup>13</sup> / <sub>16</sub>	56
16	23	20	<b>16</b> ½16	11/2	16½	61/2	4	<b>16</b> <sup>13</sup> / <sub>16</sub>	56
18	257/16	22	18 <sup>1</sup> / <sub>16</sub>	1 <sup>23</sup> / <sub>32</sub>	18½	61/2	4	<b>16</b> <sup>13</sup> / <sub>16</sub>	145T
24	311/4	28	241/16	15/8	241/2	81/2	4	18¾	182T
30	39½	36	301/16	13/4	30½	10½	51/4	18¾	184T
36	45½	42	36 <sup>1</sup> / <sub>16</sub>	13/4	36½	12½	5 <sup>1</sup> / <sub>4</sub>	18¾	215T
42	52	48	42 <sup>1</sup> / <sub>16</sub>	2	421/2	141/2	5	25	256T
48	58	54	481/16	2	48½	16½	5	25	256T

R-13259-00-E

(For Exhaust Only) R-32183-00-A

2

1/8

23129

31359

40838

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION.

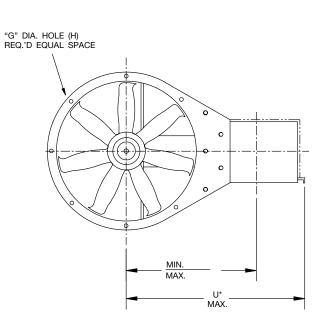
3

AIRFLOW

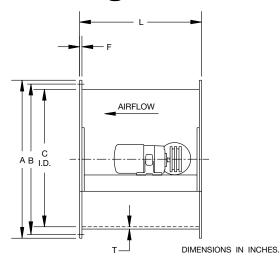
FRONT VIEW (CLOSED) ∠9/32 MTG. HOLES "F" NO. OF HOLES PER SIDE SIZE С THK 12 15½ 12½ 2713 3 121/2 3650 14 151/2 3 1/8 16 191/2 161/2 3 4726 18 211/2 181/2 3 2 1/8 5942 24 271/2 241/2 3 10421 30 331/2 301/2 3 1/8 16150

<sup>\*</sup>MINIMUM WALL OPENING REQUIRED FOR FACE MOUNTING.

# **Model FBD Type FG Belt Driven Fiberglass Tubeaxial**



<sup>\*</sup>U dimension based on maximum motor frame for each size

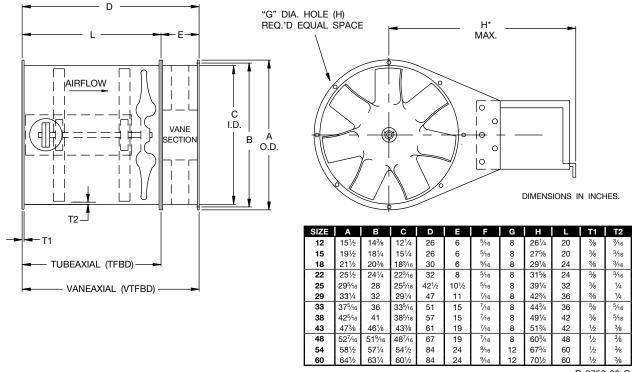


SIZE	Α	В	С	F	L	G	Н	Т	U*
14	18¾	15 <sup>7</sup> /8	14%	3/8	18%	5/16	8	3/32	231/8
16	20%	181/4	16%	3/8	18%	5/16	8	3/32	241/8
18	22 <sup>3</sup> /8	203//8	18¾	3/8	18¾	<sup>5</sup> /16	8	3/32	25½
24	283/8	261/16	24%	3/8	21	5/16	8	1/8	31%
30	341/2	33	30½	3/8	27¾	<sup>7</sup> /16	8	1/8	347/8
36	403/4	397/16	36¾	1/2	273/4	7/16	8	1/8	42
42	463/4	457/16	423/4	1/2	273/4	7/16	8	5/32	447/8
48	52 <sup>3</sup> / <sub>4</sub>	51 <sup>9</sup> ⁄16	48¾	1/2	32	<sup>7</sup> /16	8	<sup>3</sup> /16	47 <sup>7</sup> /8
54	591/4	571/4	54¾	1/2	36	9/16	12	9/32	54
60	65 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	603/4	1/2	36	9/16	12	3/8	57 <sup>3</sup> /8

R-2340-00-D R-10101-00

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION.

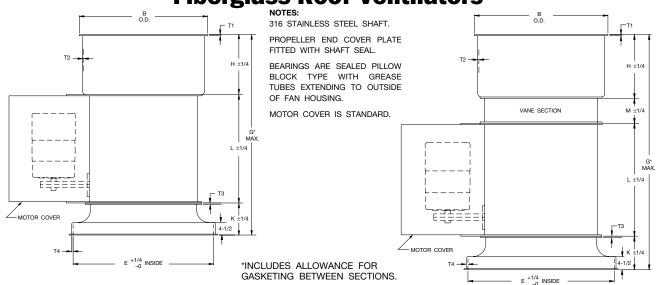
# Model TFBD Type TF Belt Driven Fiberglass Tubeaxial & Model VTFBD Type TF Belt Driven Fiberglass Vaneaxial



R-8756-00-G R-10101-00

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION.

# Fiberglass Roof Ventilators



**Model FRV & TFBD Roof Ventilator** 

**Model VTFBD Roof Ventilator** 

#### **FRV Type FG Fiberglass Roof Ventilator**

SIZE	CFM**			G*	н	к	L	STACK CAP		BASE	
SIZE		В	E					T1	T2	Т3	T4
14	1200	20½	247/8	331/4	6	81//8	18¾	1/4	3/32	5/16	5/32
16	2000	221/2	27 <sup>7</sup> /8	351/8	8	8	183/s	1/4	3/32	5/16	5/32
18	2700	241/2	291//8	351/8	8	8	183/s	1/4	3/32	3/8	3/16
24	4700	31	35 <sup>13</sup> / <sub>16</sub>	421/4	11	91/2	21	1/4	1/8	3/8	3/16
30	7600	39	4313/16	52½	14	10	273/4	1/4	1/8	3/8	3/16
36	11000	45	49 <sup>13</sup> ⁄16	56½	18	10	273/4	1/4	1/8	1/2	1/4
42	15000	51	55 <sup>13</sup> / <sub>16</sub>	61	21	111/2	273/4	1/4	1/8	1/2	1/4
48	19600	58	61 <sup>13</sup> / <sub>16</sub>	671/4	24	10½	32	1/4	1/8	1/2	1/4
54	24000	65	70	75½	27	11¾	36	1/4	1/8	1/2	1/4
60	29500	72	78	78½	30	113/4	36	1/4	1/8	1/2	1/4

DIMENSIONS IN INCHES.

R-13429-00-J

#### **TFBD Type TF Fiberglass Tubeaxial Roof Ventilator**

SIZE	CFM**	В	E	G*	н	<sub> </sub>	K L	STACK CAP		BASE	
SIZE	CFM	В	-	G.	П	Γ.		T1	T2	Т3	T4
12	1200	19%	237/8	35	6	81/4	20	1/4	3/32	5/16	5/32
15	1800	22½	27 <sup>7</sup> /8	36¾	8	8	20	1/4	3/32	<sup>5</sup> /16	5/32
18	2700	241/2	29 <sup>7</sup> / <sub>8</sub>	40¾	8	8	24	1/4	3/32	3/8	<sup>3</sup> / <sub>16</sub>
22	4700	29½	33 <sup>13</sup> / <sub>16</sub>	43¾	11	75//8	24	1/4	1/8	3/8	<sup>3</sup> / <sub>16</sub>
25	7600	331/4	37 <sup>13</sup> / <sub>16</sub>	54 <sup>3</sup> / <sub>4</sub>	12	10	32	1/4	1/8	3/8	<sup>3</sup> /16
29	7600	371/4	4313/16	59½	14	81/2	36	1/4	1/8	3/8	<sup>3</sup> /16
33	11000	411/4	46 <sup>13</sup> / <sub>16</sub>	641/4	17	10 <sup>1</sup> / <sub>2</sub>	36	1/4	1/8	3/8	1/4
38	15000	461/2	51 <sup>13</sup> / <sub>16</sub>	73	19	11 <sup>1</sup> / <sub>4</sub>	42	1/4	1/8	1/2	1/4
43	19600	51½	56 <sup>13</sup> / <sub>16</sub>	76½	22	11 <sup>3</sup> / <sub>4</sub>	42	1/4	1/8	1/2	1/4
48	19600	58	61 <sup>13</sup> / <sub>16</sub>	831/4	24	101/2	48	1/4	1/8	1/2	1/4
54	24000	65	70	991/4	27	113/4	60	1/4	1/8	1/2	1/4
60	29500	72	78	102½	30	11¾	60	1/4	1/8	1/2	1/4

DIMENSIONS IN INCHES.

R-13429-00-J

#### **VTFBD Type TF Fiberglass Vaneaxial Roof Ventilator**

					STACK CAP		BASE					
SIZE	CFM**	В	E	G*	н	K	L	М	T1	T2	Т3	T4
12	1200	195/8	237/8	411/4	6	81/4	20	6	1/4	3/32	5/16	5/32
15	1800	221/2	271//8	43	8	8	20	6	1/4	3/32	5/16	5/32
18	2700	241/2	297/8	47	8	8	24	6	1/4	3/32	3/8	3/16
22	4700	291/2	3313/16	51 <sup>5</sup> / <sub>8</sub>	11	75/8	24	8	1/4	1/8	3/8	3/16
25	7600	331/4	37 <sup>13</sup> ⁄16	66½	12	10	32	10½	1/4	1/8	3/8	3/16
29	7600	371/4	43 <sup>13</sup> / <sub>16</sub>	70½	14	81/2	36	11	1/4	1/8	3/8	3/16
33	11000	411/4	4613/16	79½	17	10½	36	15	1/4	1/8	3/8	1/4
38	15000	461/2	<b>51</b> <sup>13</sup> ⁄16	881/4	19	111/4	42	15	1/4	1/8	1/2	1/4
43	19600	51½	56 <sup>13</sup> /16	95¾	22	113/4	42	19	1/4	1/8	1/2	1/4
48	19600	58	61 <sup>13</sup> / <sub>16</sub>	102½	24	10½	48	19	1/4	1/8	1/2	1/4
54	24000	65	70	123¾	27	113/4	60	24	1/4	1/8	1/2	1/4
60	29500	72	78	126¾	30	113/4	60	24	1/4	1/8	1/2	1/4

DIMENSIONS IN INCHES.

R-13428-00-H

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION.

<sup>\*\*</sup>MINIMUM CFM REQUIRED FOR FULL OPEN DAMPER OPERATION

# **Model FBD** | Type FG Belt Driven | Fiberglass Tubeaxial Fans

Fiberglass fans, where indicated on drawings and schedules, shall be Model FBD Type FG Belt Driven Tubeaxial Fans as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity indicated in the fan schedule. Model FBD fans shall be tested in accordance with ANSI/ASHRAE 51 and ANSI/AMCA 210 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.

**CONSTRUCTION** — The fan housing shall be constructed of a polyester resin reinforced with fiberglass cloth and mat with integral flanges. The flanges are designed to ensure housing concentricity, housing strength and to permit duct mounting. Tapered gussets interlocked into the outer housing shall support the bearing base and drive enclosure. A shaft seal fitted with a rotary elastomeric seal that rides against a PTFE wear plate to protect the shaft and bearings, shall be supplied as standard. The motor base shall be constructed of mild steel and bolted between gussets integral with the fan housing flanges. The motor cover shall be constructed of fiberglass and shall be supplied as standard. The motor base shall be finished with a gray air dried epoxy paint.

Bearings and belts are enclosed in an air insulated fiberglass housing to protect them from the airstream gases, fumes and vapors.

**PROPELLER** — The Model FBD Type FG propeller shall be constructed using glass cloth impregnated with vinyl ester resin and shall be secured to a 316 stainless steel fan shaft by a stainless steel retainer bold and washer. Propellers shall be statically and dynamically balanced to ensure quiet operation.

**BEARINGS** — Model FBD belt driven fans shall be supplied with pillow block type bearings with lubrication lines extended to the outside of the fan housing for easy maintenance. Bearings shall have a minimum L-10 life as defined by AFBMA of at least 20,000 hours (100,000 hours average life). Bearings and belts shall be enclosed in an air-insulated fiberglass housing for protection.

**DRIVE** — All drive selections on Model FBD belt driven fans shall be designed with a 1.4 service factor, unless otherwise specified. Sheaves shall be cast iron with static conducting belts. Belt adjustment shall be accomplished with an adjustable motor slide rail base.

**MOTORS** — Belt driven fan motors shall be NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque and shall be provided with the enclosure type, voltage, phase and hertz as listed in the fan schedule. Unit shall be supplied with a bolt-on fiberglass motor cover.

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, belt driven fan propellers shall be balanced on their 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	Rigidly Mounted	Flexibly Mounted
Category	(in./s)	(in./s)
BV-3	0.15	0.20

**FINISH** — All fiberglass parts shall be coated inside and outside with resin (with UV inhibitor), approximately 10 mils in thickness, to seal the surface and provide a smooth finish. Optional resins and finishes include Vinyl Ester, fire-retardant and Surface Veil. All steel parts shall be finished with a gray air dried epoxy paint.

- Fiberglass Curb Base
- Companion Flanges (stainless steel/steel/aluminum)
- Fiberglass Stack Cap
- Stack Cap Bird Screen
- OSHA Type Inlet/Outlet Guard
- Bolted Inspection Door
- Horizontal Support Legs
- Spark Resistant Construction
- Exterior 316 Stainless Steel Hardware

# **Model TFBD/VTFBD** | Type TF Belt Driven | Fiberglass Fans

Fiberglass fans, where indicated on drawings and schedules, shall be Model TFBD Type TF (Tubeaxial) or VTFBD Type TF (Vaneaxial) Belt Driven Fans as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity indicated in the fan schedule. Model TFBD and VTFBD fans shall be tested in accordance with ANSI/ASHRAE 51 and ANSI/AMCA 210 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.

**CONSTRUCTION** — The fan housing shall be constructed of a polyester resin reinforced with fiberglass cloth and mat with integral flanges. The flanges are designed to ensure housing concentricity, housing strength and to permit duct mounting. Tapered gussets interlocked into the outer housing shall support the bearing base and drive enclosure. Straightening vanes (Model VTFBD Only) constructed of laminated glass and resin shall be interconnected to the inner and outer shell. A shaft seal fitted with a rotary elastomeric seal that rides against a PTFE wear plate to protect the shaft and bearings, shall be supplied as standard. The motor base shall be constructed of mild steel and bolted between gussets integral with the fan housing flanges. The motor cover shall be constructed of fiberglass and shall be supplied as standard. The motor base shall be finished with a gray air dried epoxy paint.

Bearings and belts are enclosed in an air insulated fiberglass housing to protect them from the airstream gases, fumes and vapors.

**PROPELLER** — The Model TFBD and VTFBD fiberglass Type TF, 7-bladed propeller shall be constructed using glass cloth impregnated with vinyl ester resin and shall be secured to a 316 stainless steel fan shaft by a stainless steel retainer bolt and washer. Propellers shall be statically and dynamically balanced to ensure quiet operation.

**BEARINGS** — Model TFBD and VTFBD belt driven fans are to be supplied with pillow block type bearings with lubrication lines extended to the outside of the fan housing for easy maintenance. Bearings shall have a minimum L-10 life as defined by AFBMA of at least 20,000 hours (100,000 hours average life). Bearings and belts shall be enclosed in an air-insulated fiberglass housing for protection.

**DRIVE** — All drive selections on Model TFBD and VTFBD belt driven fans shall be designed with a 1.4 service factor, unless otherwise specified. Sheaves shall be cast iron with static conducting belts. Belt adjustment shall be accomplished with an adjustable motor slide rail base.

**MOTORS** — Belt driven fan motors shall be NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque and shall be provided with the enclosure type, voltage, phase and hertz as listed in the fan schedule. Unit shall be supplied with a bolt-on fiberglass motor cover.

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, belt driven fan propellers shall be balanced on their 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	Rigidly Mounted	Flexibly Mounted			
Category	(in./s)	(in./s)			
BV-3	0.15	0.20			

**FINISH** — All fiberglass parts shall be coated inside and outside with resin (with UV inhibitor), approximately 10 mils in thickness, to seal the surface and provide a smooth finish. Optional resins and finishes include Vinyl Ester, fire-retardant and Surface Veil. All steel parts shall be finished with a gray air dried epoxy paint.

- Fiberglass Curb Base
- Companion Flanges (stainless steel/steel/aluminum)
- Fiberglass Stack Cap
- Stack Cap Bird Screen
- OSHA Type Inlet/Outlet Guard
- Bolted Inspection Door
- Horizontal Support Legs
- Spark Resistant Construction
- Exterior 316 Stainless Steel Hardware

# Model FDP | Type FG Direct Drive | Fiberglass Panel Fans

Fiberglass fans, where indicated on drawings and schedules, shall be Model FDP Type FG Direct Drive Panel Fans as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity indicated in the fan schedule. Model FDP fans shall be tested in accordance with ANSI/ASHRAE 51 and ANSI/AMCA 210 test codes and shall be guaranteed by the manufacturer to deliver at the rated published performance levels. In addition, each unit shall be factory run tested prior to shipment.

**CONSTRUCTION** — The fan housing shall be constructed of a polyester resin reinforced with fiberglass cloth, mat with integral flanges and constructed with a solid FRP motor base that is reinforced with solid FRP support struts. Stainless steel airstream hardware shall be used for maximum corrosion resistance.

**PROPELLER** — The Model FDP Type FG 7-bladed propeller shall be constructed using glass cloth impregnated with vinyl ester resin. Propellers shall be statically and dynamically balanced to ensure quiet operation.

**MOTORS** — Fan motors shall be foot-mounted NEMA Design B, heavy duty industrial, continuous duty, variable-torque and shall be provided with the enclosure type, voltage, phase and hertz as listed in the fan schedule. Unless otherwise specified, all motors shall be equipped with ball bearings for heavy duty performance. Motor bearings shall have a minimum L-10 life, defined by AFBMA, of at least 40,000 hours (200,000 hours average life).

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, belt driven fan propellers shall be balanced on their 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	Rigidly Mounted	Flexibly Mounted			
Category	(in./s)	(in./s)			
BV-3	0.15	0.20			

**FINISH** — All fans shall be coated inside and outside with resin (with UV inhibitor), approximately 10 mils in thickness, to seal the surface and provide a smooth finish. Optional resins and finishes include Vinyl Ester, fire-retardant and Surface Veil.

- Inlet Guard Square Motor Side Expanded Metal (304SS/316SS)
- Outlet Guard Round Prop Side Expanded Metal (304SS/316SS)
- FRP Shutter Extension Sleeve
- FRP Automatic Shutter
- Optional Mounting Flange
- Stainless Steel Mounting Adapter
- Stainless Steel Automatic Shutter



# Model FRV | Type FG Belt Driven | Fiberglass Roof Ventilator

Fiberglass fans, where indicated on drawings and schedules, shall be Model FRV Type FG Belt Driven Roof Ventilators as manufactured by Aerovent, Minneapolis, Minnesota, and shall be of the size and capacity indicated in the fan schedule. Model FRV fans shall be tested in accordance with ANSI/ASHRAE 51 and ANSI/AMCA 210 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.

**CONSTRUCTION** — The fan housing shall be constructed of a polyester resin reinforced with fiberglass cloth and mat with integral flanges. The flanges are designed to ensure housing concentricity, housing strength and to permit duct mounting. Fan shall include a fiberglass stack cap constructed with a one-piece wind band with drain channels and drain holes. Fan shall include a one-piece fiberglass curb base with seamless construction. Tapered gussets interlocked into the outer housing shall support the bearing base and drive enclosure. A shaft seal fitted with a rotary elastomeric seal that rides against a PTFE wear plate to protect the shaft and bearings, shall be supplied as standard. The motor base shall be constructed of mild steel and bolted between gussets integral with the fan housing flanges. The motor cover shall be constructed of fiberglass and shall be supplied as standard. The motor base shall be finished with a gray air dried epoxy paint.

Bearings and belts are enclosed in an air insulated fiberglass housing to protect them from the airstream gases, fumes and vapors.

**PROPELLER** — The Model FRV Type FG propeller shall be constructed using glass cloth impregnated with vinyl ester resin and shall be secured to a 316 stainless steel fan shaft by a stainless steel retainer bolt and washer. Propellers shall be statically and dynamically balanced to ensure quiet operation.

**BEARINGS** — Model FRV belt driven fans shall be supplied with pillow block type bearings with lubrication lines extended to the outside of the fan housing for easy maintenance. Bearings shall have a minimum L-10 life as defined by AFBMA of at least 20,000 hours (100,000 hours average life). Bearings and belts shall be enclosed in an air-insulated fiberglass housing for protection.

**DRIVE** — All drive selections on Model FRV belt driven fans shall be designed with a 1.4 service factor, unless otherwise specified. Sheaves shall be cast iron with static conducting belts. Belt adjustment shall be accomplished with an adjustable motor slide rail base.

**MOTORS** — Belt driven fan motors shall be NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque and shall be provided with the enclosure type, voltage, phase and hertz as listed in the fan schedule. Unit shall be supplied with a bolt-on fiberglass motor cover.

**BALANCING** — The propeller assembly shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. In addition, belt driven fan propellers shall be balanced on their 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	Rigidly Mounted	Flexibly Mounte		
Category	(in./s)	(in./s)		
BV-3	0.15	0.20		

**FINISH** — All fiberglass parts shall be coated inside and outside with resin (with UV inhibitor), approximately 10 mils in thickness, to seal the surface and provide a smooth finish. Optional resins and finishes include Vinyl Ester, fire-retardant and Surface Veil. All steel parts shall be finished with a gray air dried epoxy paint.

- Stack Cap Bird Screen
- Bolted Inspection Door

- Spark Resistant Construction
- Exterior 316 Stainless Steel Hardware

PROPELLER FANS | TUBEAXIAL & VANEAXIAL FANS | CENTRIFUGAL FANS & BLOWERS | ROOF VENTILATORS INDUSTRIAL AIR HANDLERS | AIR MAKE-UP | FIBERGLASS FANS | CUSTOM FANS





**WWW.AEROVENT.COM**