



# **Fiberglass Exhaust Fans**

### High performance from patented orifice and motor mount system

- Cone in/cone out orifice design provides excellent performance without the extra expense of a cone.
- Provides same enhanced performance as larger cones without the negative effects of wind against the cone.

### New design reduces maintenance cost

- Injected, smooth inside and out, self-draining, sloped housing design is quick and easy to clean.
- A corrosion resistant belt tensioner reduces maintenance and provides continuous, strong performance.
- Long lasting, high quality, rubber belt is easily accessible.
- New tie-bar shutter design provides smooth, quiet operation and cleans easily.

### Low cost installation

- Built in cone - no extra assembly costs.
- Optional cones available.
- Fan supplied completely assembled ready to mount in the wall.
- Single phase units supplied with 10 foot cord and molded plug.
- Every fan is bench tested prior to shipment.



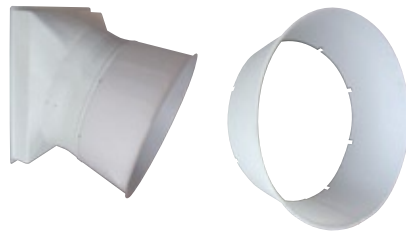
### Fiberglass Fans



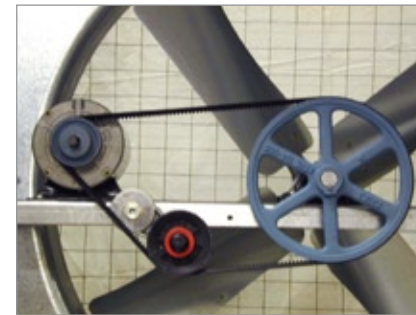
#### Features:

- The patented design provides excellent performance without a cone. Optional cone can be added if desired.
- All fans are supplied completely assembled and are tested before shipping.
- Smooth inside and out, self draining, sloped housing is quick and easy to clean reducing maintenance costs.
- 36" and 50" belt drive fans
- 36" direct drive fans
- 50" fans with die-cast aluminum or galvanized steel blades.

#### Cones



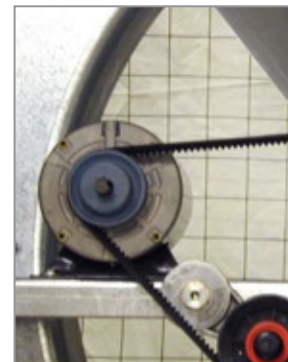
### Belt & Tensioner



#### Features:

- 36" and 50" sizes
- All belt-drive models use a high-end rubber belt with automatic rotary belt tensioner.

### Motors



#### Features:

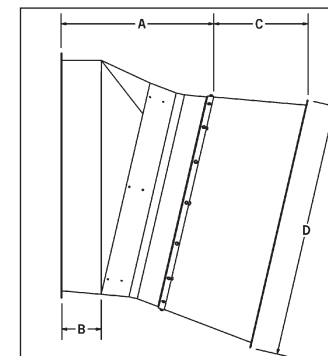
- Single phase, F class insulation, dual capacitor high efficiency, 115/230 dual voltage comes complete with a 10ft. 230 volt 3/14 SJT cord and 6-15P Plug.
- Three phase 60Hz motors are 208-230/460 dual voltage with F class insulation.
- Three phase 50 Hz motors are 220-240/380-415 volt with B class insulation.

### Tie-Bar Shutters



#### Features:

- New tie-bar, smooth and quiet shutters have a strong, durable 304 stainless steel shutter frame and aerodynamic PVC louvers with tie-bar.
- Top and bottom louvers are not tied, preventing problems with freeze-up and dirt build-up.



Fan Size	Fan		Cone		FRAMING DIMENSIONS	
	A	B	C	D	Width All Walls	Height 4" & 6" Wall
36"	34	9	21	47	43	43
50"	44	9	25	63	57	57



## Tested Performance:

Big Dutchman tests the performance of every model fan. All fans with test numbers should perform as indicated when properly maintained (reports are available upon request). Our fans are tested by BESS Labs or in our AMCA fig 15 test chamber. The test chamber was designed and built to exacting AMCA/ASHRE standards. A regimented calibration and verification schedule is followed. Be assured, Big Dutchman fans provide the performance you require.

		Specifications				Performance											
		Motor			Blade Material	RPM	Cone	0.00" SP		0.05" SP			0.10" SP		AFR	BESS #	
HP	Voltage	Phs	Hz	CFM				CFM/Watt	CFM	CFM/Watt	Amps @ 0.05" SP	CFM	CFM/Watt				
Belt Drive	50"	1.0	115/230	1	60	Cast Alum.	550	Y	25,600	25.1	24,000	22.1	4.81	22,100	19.4	0.72	02011
							N	24,300	22.8	22,800	20.3	4.92	21,000	17.8	0.72	02012	
		585	Y	27,200	23.0		25,500	20.2	2.10	23,600	17.7	0.76	02071				
			N	25,500	20.7		24,000	18.6	2.10	22,300	16.5	0.76	02015				
		565	Y	25,200	23.4		23,500	21.1	2.04	21,800	18.9	0.75	03043				
			N	23,600	21.3		22,000	19.2	2.09	20,300	17.3	0.76	03042				
	Galv. Steel	575	115/230	1	60	Galv. Steel	Y	28,000	25.2	26,500	22.1	5.50	24,800	19.5	0.78	00071	
							N	25,900	22.5	24,400	20.0	5.70	22,800	17.7	0.79	00072	
		580	Y	24,800	23.8		23,400	21.2	1.90	21,100	18.8	0.78	02197				
			N	23,800	22.0		22,300	19.6	1.90	20,800	17.4	0.78	02196				
		570	Y	24,700	24.2		23,100	21.8	1.96	20,800	18.7	0.76	03044				
			N	23,300	21.7		21,900	19.9	2.02	20,100	17.2	0.77	03045				
Direct Drive	36"	1/2	115/230	1	60	Galv. Steel	540	Y	11,200	22.5	10,000	18.5	3.16	8,800	15.2	0.38	03048
							N	10,700	20.5	9,600	17.1	3.24	8,400	14.2	0.39	03049	
		545	Y	11,300	25.0		10,300	21.4	1.68	9,100	17.7	0.39	03051				
			N	10,800	22.9		9,750	19.6	1.69	8,600	16.5	0.41	03050				
		540	Y	11,400	26.5		10,250	22.2	0.88	9,000	18.3	0.38	03047				
			N	10,800	24.2		9,800	20.5	0.91	8,600	17.2	0.38	03040				
	Galv. Steel	850	230	1	60	Galv. Steel	Y	17,000	18.5	16,200	17.1	4.15	15,400	15.6	0.83	02201	
							N	15,900	16.6	15,200	15.2	4.36	14,500	14.0	0.84	02200	
		830	Y	16,200	19.4		15,343	17.4	4.15	14,450	15.5	0.82	03060				
			N	15,400	17.5		14,700	15.8	4.23	13,900	14.4	0.82	03059				
		850	Y	12,300	26.1		11,300	22.5	2.47	10,500	19.5	0.66	00080				
			N	11,400	22.5		10,600	19.4	2.63	9,800	17.2	0.66	00075				
810	Y	11,600	25.9	10,700	21.9	2.08	9,700	18.6	0.67	03058							
N	11,200	24.2	10,300	20.6	2.11	9,350	17.5	0.69	03057								

**Notes:** AFR is the airflow ratio. Higher AFR indicates better performance under static pressure and against wind. It is calculated by dividing fan cfm at 0.20 static pressure by cfm at 0.05 sp. Test results are with shutters installed. All 60 Hz tests performed at 230 volts. All 50 Hz tests performed at 380 volts.



# Big Dutchman

**Germany**  
 P.O. Box 11 63 · D-49360 Vechta · Germany  
 tel +49 (0) 44 47 801 0 · fax +49 (0) 44 47 801 237  
 www.bigdutchman.com · big@bigdutchman.de

**Asia-Pacific**  
 No. 25 Jalan Pemberita (U1/49), Temasya Industrial Park  
 40150 Shah Alam · Selangor Darul Ehsan · Malaysia  
 tel +603 5569 2320 · fax +603 5569 5930  
 bdasia@bda.com.my

**USA**  
 P.O. Box 1017 · Holland, MI 49422-1017 · USA  
 tel +1 616 392 5981 · fax +1 616 392 6188  
 www.bigdutchman.com · bigd@bigdutchmanusa.com

**Brazil**  
 Caixa Postal 84 · Rua Victorio Milani, 125  
 Caxias do Sul, RS 95095-107 · Brasil  
 tel +55 (0) 54 226 2200 · fax +55 (0) 54 226 1424  
 www.bigdutchman.com.br · bigdutchmanbrasil@bigdutchman.com.br

In the interest of progress,  
 technical details are subject  
 to change.