

Belt Driven Propeller Fans

PropMaster™



SYMBOL OF
QUALITY

Quality and Service that will Blow you Away!

Industry Leadership

Founded in 1938, Acme Engineering and Manufacturing Corporation is known worldwide as a leader in the manufacture of fans, blowers, and ventilation equipment. Acme's growth over the past half century is a tribute to superior quality, customer loyalty, and dedicated employees and sales representatives.

Today, from its headquarters in Muskogee, Oklahoma, Acme serves customers worldwide with high quality air movement and control products.

Manufacturing

With approximately 350,000 square feet of manufacturing space, Acme produces one of the broadest lines of air moving equipment in the industry. State-of-the-art manufacturing equipment and a well trained, experienced workforce is the key to Acme's timely delivery of quality air moving products.

Research and Testing

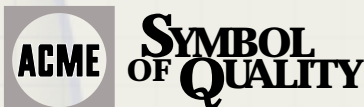
The Acme Research and Development Center operates both air and sound laboratories. The Center houses four wind tunnels with a data acquisition system, a reverberant sound room with the latest sound analyzer equipment, and a structural laboratory for stress and vibration analysis. Solid modeling, and finite element analysis support product research and development. The Center also houses a fully equipped prototype facility enabling Acme to develop and introduce new products to the market in the shortest time possible.

Sales & Service

A factory trained, knowledgeable sales organization addresses the needs of many diverse and distinct markets. Customers around the world are serviced by a complete system of sales representatives, equipment distributors and local dealers supported by nationwide distribution centers and backed by a staff of sales and marketing professionals.

Quality

A highly trained production staff sets the standard for dependable, quality air moving products. By using the latest computer techniques for research and design, and rigorous quality control standards Acme can offer one of the best warranty programs in the industry. Our exclusive 2/5 year limited warranty provides our customers with confidence...Year After Year.



CONSTRUCTION FEATURES

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For those air moving applications demanding unusual ruggedness and stable performance at higher static pressures.



Model K Series

All fans factory tested and shipped fully assembled.

FRAME

All welded construction. Deep rolled streamlined orifice for most efficient performance. Panel section of 42" thru 72" sizes reinforced with angle frame. Heavy wall steel tubing for greatest structural strength. *Designed to operate in any position.*

HEAVY-DUTY ALUMINUM PROPELLER

Circular-arc blades provide higher air flow capacity and smoother operation. Blades heavily reinforced. Propeller precision balanced on corrosion resistant coated shaft. Steel propeller available as option.

BEARINGS

Self-aligning unitary pillow-block ball bearings sized for high overload capacity and long trouble free operation. Pre-lubricated and double sealed requiring a minimum amount of maintenance.



MOTOR

Continuous duty type, shielded ball bearings. Mounted on rails for convenient belt adjustment. K fans should operate at 104° F (40° C) or less ambient temperature.

DRIVE

All fans furnished with heavy-duty static frequency oil and heat resistant V belts. Drives are 1 or 2 belt combinations depending on horsepower. Sheaves constructed of cast iron.

STANDARD FINISH

An acrylic epoxy is standard on the frame and orifice of all K fans and is optional on the aluminum propeller. It is a multi-purpose finish that provides resistance to many chemicals and corrosive agents. Metal surfaces are prepared prior to painting by an iron phosphate process (size 72 has a vinyl wash primer) for rust protection and bonding of the paint to the base metal.

ACRYLIC EPOXY COATING

Acrylic Epoxy finish is the standard finish for all K fans. Metal surfaces are prepared prior to painting by an iron phosphate process (72" has a vinyl wash primer).

WARNING! DO NOT use in HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials, unless unit is specifically built for hazardous environments.

OPTIONAL COATINGS

Painted Finishes Aluminum and galvanized components remain unpainted as a standard finish, but when required, are processed through the finishing system to apply decorative or special coatings. A high turbulence oven is used to produce a baked on finish for most special coatings. Decorative coatings are air dried.

Special Coatings Products receiving special coatings have components painted before assembly. Fasteners are not painted.

Acrylic Epoxy This product provides a more durable surface.

Carboline Sanitile (Eisenheiss) This air dry synthetic polyester forms a black coating that offers greater resistance to most organic and inorganic acids.

Heresite (Air Dry) A phenolic coating with greater resistance to most organic and inorganic acids.

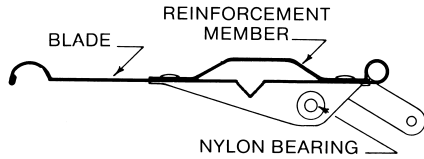
Note: For any coating selected, the user assumes the responsibility for the ultimate effect on the coating and equipment due the corrosive agent, its concentration, temperature and moisture content.

OPTIONAL ACCESSORIES

HEAVY DUTY WALL SHUTTERS

EXCEPTIONALLY QUIET Nylon bearings practically eliminate the rattle prevalent in ordinary shutters.

CONSTRUCTION Rigid corrosion resistant galvanized steel frame, double tie rods. Industrial weight aluminum blades reinforced with steel rods. Splash proof weather seal integral with frame. Counterbalanced blades open easier, permit higher fan capacity. Each blade has a formed reinforcement member providing triple strength and rigidity.



NYLON BEARINGS Utilizes rust resistant stainless steel hinge pins to insure easy positive blade action. Corrosion resistant, helps prevent shutter sticking. Suitable for dusty or humid applications. Tough, wear resistant, more years of trouble free operation.



Single Panel up to WAGH3737



Double Panel
WAGH4545 thru WAGH6060

Supply type fans utilizing a motorized wall shutter must have a time delay switch in the fan motor control circuit to allow the shutter to fully open before the fan is activated. A separate power relay is also needed to operate the fan motor. Order type WAGCH with motor operator for supply fans.

Fan Size	Model	AUTOMATIC SHUTTER DIMENSIONS					
		Ship Wt.		Shutter Opening Size		Overall Size	
		lbs.	kg	in	mm	in	mm
24"	WAGH3030	19	9	27 x 27	686 x 686	30 x 30	762 x 762
30"	WAGH3737	26	12	34 x 34	864 x 864	37 x 37	940 x 940
36"	WAGH4545	33	15	42 x 42	1067 x 1067	45 x 45	1143 x 1143
42"	WAGH5252	45	20	49 x 49	1245 x 1245	52 x 52	1321 x 1321
48"	WAGH6060	61	28	57 x 57	1448 x 1448	60 x 60	1524 x 1524
54"	WAGH6767	148	67	64 x 64	1626 x 1626	67 x 67	1702 x 1702
60"	WAGH7575	171	78	72 x 72	1829 x 1829	75 x 75	1905 x 1905
72"	WAGH9090	216	98	87 x 87	2210 x 2210	90 x 90	2286 x 2286

SAFETY GUARDS

Extruded aluminum framed guards model BA for back (motor side) and model FA for front of fan. Constructed of ½" x 1" mesh heavy gauge welded galvanized wire. Open on all sides for maximum air flow. Guards are shipped knocked down. Easily assembled with connecting clips. Bolts to fan frame. Easily removed for servicing fan. Guards are optional.



CAUTION! Guards must be installed when fan is within reach of personnel or within seven (7) feet (2.134 m) of working level or when deemed advisable for safety.



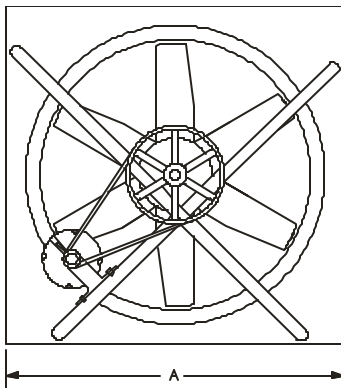
STEEL Channel quadrant frame ties four shutters together in a one piece assembly.

Quadrant Frame
WAGH6767 thru WAGH9090 (Shipped Knocked-Down)

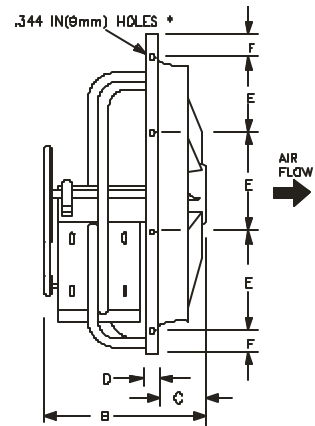
DIMENSIONS

EXHAUST FAN DIMENSIONS															
Fan Size	A		B		C		D		E*		F		Shaft Size in	Metal Gauges	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		Orifice	Blades in
24	30.00	762	20.25	514	4.00	102	1.75	44	8.00	203	3.00	76	1.00	16	.125
30	37.50	953	26.00	660	5.75	146	1.75	44	10.00	254	3.75	95	1.187	16	.125
36	45.00	1143	25.50	648	5.75	146	1.75	44	12.00	305	4.50	114	1.187	16	.125
42	52.50	1334	30.00	762	5.00	127	2.00	51	15.00	381	3.38	86	1.437	16	.125
48	60.00	1524	30.00	762	4.50	114	2.00	51	16.00	406	6.00	152	1.437	14	.125
54	67.50	1372	30.75	781	5.00	127	2.00	51	15.00	381	3.75	95	1.437	14	.125
60	75.00	1905	34.50	876	6.00	152	2.00	51	16.00	406	5.50	140	1.687	14	.125
72	90.00	2286	35.00	889	5.75	146	2.50	64	18.00	457	9.00	229	1.687	14	.125

* K42 through K48 - 4 holes; K54 through K72 - 5 holes.

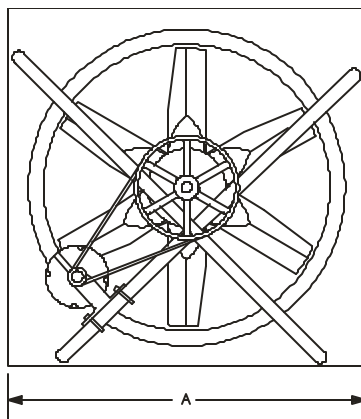


* .50 IN(13mm) HOLES DN 42 - 72

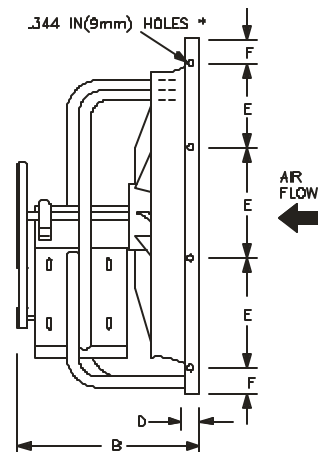


These are typical drawings for dimensional purposes only. They are correct within limits suitable for normal installation requirements and do not necessarily show actual construction.

SUPPLY FAN DIMENSIONS															
Fan Size	A		B		D		E		F		Shaft Size in	Metal Gauges			
	in	mm	in	mm	in	mm	in	mm	in	mm		in	mm	Orifice	Blades in
24	30.00	762	25.00	635	1.75	44	8.00	203	3.00	76	1.00	16	.125		
30	37.50	953	29.00	736	1.75	44	10.00	254	3.75	95	1.188	16	.125		
36	45.00	1143	31.50	800	1.75	44	12.00	305	4.50	114	1.188	16	.125		
42	52.50	1334	32.00	813	2.00	51	15.00	381	3.75	86	1.188	16	.125		
48	60.00	1524	33.00	838	2.00	51	16.00	406	6.00	152	1.438	14	.125		



* 5/8 IN(13mm) HOLES DN 42 AND 48



These are typical drawings for dimensional purposes only. They are correct within limits suitable for normal installation requirements and do not necessarily show actual construction.

TYPICAL SPECIFICATIONS

The all welded heavy duty wall exhaust fan shall be propeller belt drive type, designed to operate in any position.

The precision balanced **propeller** shall be all aluminum with die-formed circular-arc airfoil blades attached to a special die-formed spherical hub or to a special cylindrical hub.

The acrylic epoxy finish fan **housing** shall be constructed of heavy duty steel with heavy wall steel tubing structural frame and a deep rolled streamlined orifice for increased efficiency.

Pre-lubricated double sealed unitary pillow block bearings shall be used for accurate alignment and are rated at a L-50 life of 200,000 hours. Bearings shall have external lubrication fittings.

Sealed ball bearing **motors** shall be adjustable on the motor slide rail base for belt adjustment.

Drives shall be cast iron pulleys with static frequency oil and heat resistant belts and shall be designed for 1.5 service factor. The fan shaft shall have a coating for resistance against corrosion.

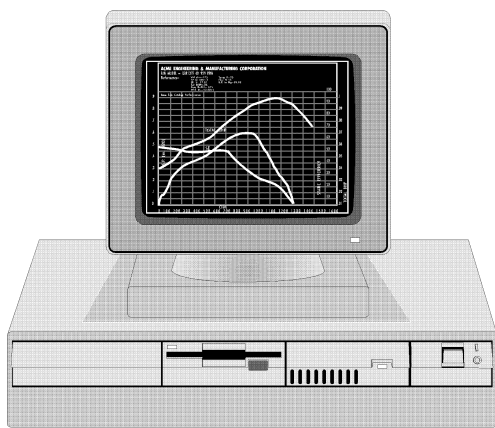
All fans shall bear the **AMCA Certified Ratings Seal** for sound and air performance.

Each fan shall have a permanently affixed manufacturer's **nameplate** containing the model number and serial number for future identification.

Thermal overload protectors shall be standard on all single phase ($\frac{1}{4}$ through $1\frac{1}{2}$ HP) totally enclosed and all EP (explosion resistant) motors.

Fans shall be model K as manufactured by Acme Engineering and Manufacturing Corporation of Muskogee, Oklahoma.

Because of constantly changing developmental research, Acme must reserve the right to change specifications without notice.



FANtastic!® Fan Selection Program

FANtastic!® is a Windows® based fan selection program with user friendly menus and full project management capabilities for over a dozen methods of reporting. FANtastic!® supports all Acme fan lines with performance and sound ratings. The user has the ability to plot performance curves to any graphics screen and to a wide variety of printers. If required, appurtenance derating factors for drive losses, etc. are available. Batch processing allows for printouts to be printed during off-hours. All data is available in any combination of

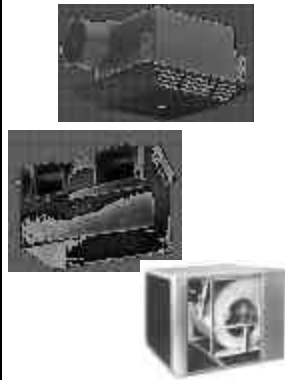
CENTRIFUGAL VENTILATION FANS



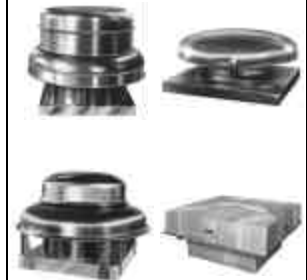
DUCT FANS PROPELLER AND INLINE CENTRIFUGAL



CEILING, INLINE AND CABINET FANS



CENTRIFUGAL & PROPELLER ROOF EXHAUST FANS



CENTRIFUGAL & PROPELLER ROOF SUPPLY FANS



CENTRIFUGAL AND PROPELLER UPBLAST ROOF EXHAUSTERS



CENTRIFUGAL INDUSTRIAL PROCESS FANS



CENTRIFUGAL HEAVY DUTY INDUSTRIAL FANS



CENTRIFUGAL AIR HANDLING FANS



CENTRIFUGAL AND PROPELLER WALL FANS



MAKE-UP AIR SYSTEMS



EXHAUST & SUPPLY VENTS



LIMITED WARRANTY Acme Engineering and Manufacturing Corporation warrants the products manufactured by Acme to be free from original defects in workmanship and material for two years subject to the terms and conditions of its published limited warranty. Warranties on purchased products are subject to the vendor's warranty. Refer to current Form MS149 for complete limited warranty terms and conditions.

WARNING Acme products are designed and manufactured to provide reliable performance but they are not guaranteed to be 100% free of defects. Even reliable products

will experience occasional failures and this possibility should be recognized by the User. If these products are used in a life support ventilation system where failure could result in loss or injury, the User should provide adequate back-up ventilation, supplementary natural ventilation or failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.

WARNING DO NOT use in HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments.

CAUTION Guards must be installed when fan is within reach of personnel or within seven (7) feet (2.134 m) of working level or when deemed advisable for safety.

DISCLAIMER The Company has made a diligent effort to illustrate and describe the products in this literature accurately; however, such illustrations and descriptions are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose, or that the products will necessarily conform to the illustrations or descriptions or dimension.



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Member Air Movement and Control Association