

MIXED-FLOW FANS

Model QBMX

**An inline mixed-flow fan
that utilizes both Axial and
Centrifugal advantages!**



Est. 1938

ACME ENGINEERING & MANUFACTURING CORPORATION / MUSKOGEE, OKLAHOMA

www.acmefan.com

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.

Engineering

The Acme Research and Engineering 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 engineering and production staff set 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.





Est. 1938

Mixed-Flow Fan Model QBMX



Model QBMX fan is a belt drive, mixed-flow, inline exhauster with the motor, drives and bearings located outside the airstream. This design exceeds the efficiency of comparably sized tubular centrifugal and vaneaxial fans, resulting in lower motor horsepower requirements and lower operating costs.

CAPACITIES
up to 60,349 CFM
up to 5" w.g. static pressure!



Model QBMX is Listed for (UL 762) File No. MH11542



Construction Features

Housing

- Heavy gauge, rolled steel construction and continuously welded to eliminate air leakage
- Straightening vanes are welded to the housing to ensure maximum efficiency and strength
- Standard coating is charcoal baked enamel

Access Door

- Bolted, over-sized access door with gasketing for servicing

Mixed-Flow Wheel

- Hybrid (centrifugal and axial) wheel
- Wheels are made of welded, high-strength steel
- Precision balanced for smooth, trouble-free operation
- Non-overloading design for high efficiency and minimal sound

Inlet

- Streamlined inlet optimally matched to the impeller

Bearings

- Lubricated unitary pillow block bearings with extended lube lines
- Rated at L₁₀ life of 40,000 hours
- 2 year limited warranty on unitary pillow block bearings

Shaft

- Corrosion resistant, coated steel shaft

Motor

- Continuous duty motors with sealed ball bearings
- Motors are located outside the airstream

Vibration Isolation

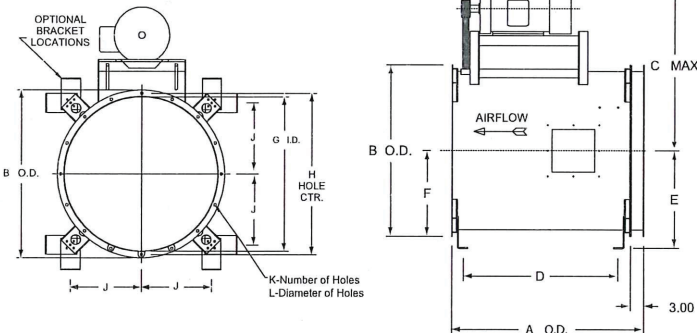
- Motors are isolated for extended life and quiet operation

Drive Assembly


- Cast iron drives sized for 150% of fan horsepower
- Static-free, oil, and heat resistant belts

Nameplate

- Permanently affixed manufacturer's nameplate containing the model number, serial number, CFM and static pressure (inches w.g.) for future identification



DIMENSIONS											
Fan Model	A	B	C	D	E	F	G	H	J	K	L
QBMX16	28.37	25.16	30.00	21.32	14.01	12.58	21.97	23.66	10.65	8	0.63
QBMX18	32.65	27.75	36.00	25.31	14.94	13.88	24.56	26.19	11.58	8	0.63
QBMX20	33.99	30.13	37.00	26.94	15.79	15.07	26.92	28.57	12.43	8	0.63
QBMX22	39.16	33.13	39.00	30.50	16.85	16.57	29.95	31.57	13.50	16	0.63
QBMX24	42.43	36.19	42.00	32.35	21.40	18.10	32.97	34.75	15.52	16	0.63
QBMX27	44.89	39.56	44.00	38.57	22.60	19.78	36.34	38.00	16.72	16	0.63
QBMX30	52.50	43.56	46.00	42.85	24.02	21.78	40.38	42.00	18.13	16	0.63
QBMX33	55.57	47.69	51.00	45.47	25.45	23.85	44.41	46.13	19.57	16	0.63
QBMX37	59.62	53.44	54.00	50.62	27.33	26.72	49.13	51.69	21.42	16	0.75
QBMX40	65.60	58.56	57.00	55.66	32.01	29.28	54.26	56.81	24.58	16	0.75
QBMX45	72.16	65.25	63.00	62.10	24.07	32.63	59.98	63.00	26.64	24	0.75
QBMX49	79.23	71.44	66.00	69.10	26.25	35.72	66.05	69.19	28.83	24	0.75



Acme Engineering & Manufacturing Corporation certifies that the models shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



Est. 1938

Options/Accessories

Disconnect Switch

- Nema 3R
- Factory wired and externally mounted (except explosion proof motors)

Inlet and Outlet Companion Flanges

- Heavy gauge, coated galvanized steel
- Factory mounted

Inlet and Outlet Screens

- Factory mounted, heavy gauge galvanized steel

Weather Cover

- Enclosed, removable motor and belt guard
- Factory mounted

Drain

- 1.5" Drain and drain plug

Isolators

- Hanging Spring
- Hanging Rubber
- Floor Spring
- Floor Rubber

Optional Wheel Material

- Aluminum wheel

Spark Resistant Construction

- AMCA B

Shaft Seal

- Factory mounted

Stainless Steel Tag

- 4" x 2" with model, order number, and tag information

Optional Coatings

- Acrylic Epoxy
- Decorative Coatings
- Heresite
- Insulmastic
- Special Coatings

Smoke Exhaust Option

The QBMX-SE mixed-flow inline smoke exhauster combines superior energy efficiency with emergency smoke management technology. Under severe temperatures, the QBMX-SE is designed to exhaust life-threatening smoke to provide extra evacuation time.

These power ventilators are intended for installation in buildings in accordance with requirements contained in the Recommended Practice for Smoke Control System, NFPA 92A; and are intended to be connected to and controlled by Listed Smoke Control System Equipment (UUKL).

QBMX-SE
Maximum Temperatures
500°F for 4 hours
1000°F for 15 minutes

QBMX16

RPM		Static Pressure (inches water gauge)																				
		0	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00
903	CFM	2597	2319	1887																		
	BHP	0.18	0.22	0.25																		
	LwA	69	67	65																		
990	CFM	2847	2600	2264	1672																	
	BHP	0.23	0.29	0.32	0.33																	
	LwA	71	70	67	67																	
1137	CFM	3270	3061	2806	2454	1888																
	BHP	0.35	0.42	0.46	0.50	0.49																
	LwA	74	73	72	70	70																
1302	CFM	3745	3565	3362	3116	2784	2314															
	BHP	0.53	0.60	0.67	0.71	0.75	0.75															
	LwA	78	78	76	75	74	73															
1433	CFM	4122	3961	3781	3577	3332	3009	2576														
	BHP	0.70	0.79	0.86	0.92	0.97	1.00	1.00														
	LwA	80	81	79	78	77	76	76														
1640	CFM	4717	4578	4427	4264	4080	3868	3614	3290	2884												
	BHP	1.05	1.15	1.24	1.32	1.38	1.43	1.48	1.50	1.49												
	LwA	84	85	83	82	81	80	80	79	79												
1805	CFM	5192	5066	4931	4788	4634	4462	4269	4043	3769	3444	3036										
	BHP	1.40	1.52	1.62	1.71	1.78	1.85	1.91	1.96	1.99	2.00	1.97										
	LwA	86	87	86	85	84	84	83	82	82	81	82										
2066	CFM	5942	5832	5720	5599	5471	5339	5192	5035	4861	4664	4436	4174	3873	3517							
	BHP	2.10	2.23	2.36	2.47	2.56	2.65	2.74	2.81	2.87	2.93	2.98	2.99	2.96	2.96							
	LwA	89	91	90	89	88	88	87	87	86	85	85	85	85	85							
2450	CFM	7047	6954	6861	6764	6662	6558	6447	6335	6211	6086	5949	5804	5648	5469	5273	5057	4821	4559	4264	3888	
	BHP	3.50	3.66	3.81	3.96	4.09	4.22	4.32	4.42	4.52	4.62	4.70	4.77	4.85	4.91	4.96	4.99	5.00	4.99	4.96	4.88	
	LwA	93	95	95	94	93	92	92	92	92	92	91	91	90	90	89	89	89	89	89	89	90

QBMX18

RPM	SP	Static Pressure (inches water gauge)																				
		0	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00
745	CFM	3024	2634	1933																		
	BHP	0.18	0.23	0.25																		
	LwA	67	65	63																		
818	CFM	3320	2977	2460																		
	BHP	0.23	0.29	0.33																		
	LwA	70	68	66																		
939	CFM	3811	3522	3154	2576																	
	BHP	0.35	0.42	0.48	0.50																	
	LwA	73	72	70	69																	
1075	CFM	4363	4116	3826	3454	2905																
	BHP	0.53	0.61	0.68	0.73	0.75																
	LwA	76	76	74	73	72																
1183	CFM	4802	4579	4330	4032	3645	3096															
	BHP	0.7	0.80	0.88	0.94	0.99	1.00															
	LwA	79	79	77	76	75	74															
1354	CFM	5496	5305	5096	4862	4595	4264	3835	3269													
	BHP	1.05	1.17	1.27	1.35	1.42	1.47	1.5	1.48													
	LwA	82	83	81	80	79	78	78	78													
1491	CFM	6052	5879	5695	5494	5273	5019	4716	4339	3873	3191											
	BHP	1.40	1.53	1.65	1.75	1.83	1.90	1.96	2.00	1.99	1.93											
	LwA	85	86	84	83	82	81	80	80	80	80											
1706	CFM	6924	6774	6617	6453	6273	6080	5867	5629	5355	5024	4640	4179									
	BHP	2.10	2.25	2.39	2.52	2.62	2.72	2.80	2.88	2.95	2.99	3.00	2.98									
	LwA	88	90	88	87	87	86	85	85	84	84	84	84									
2023	CFM	8211	8084	7957	7820	7683	7533	7381	7214	7039	6852	6641	6410	6148	5852	5522	5148	4707				
	BHP	3.50	3.68	3.87	4.02	4.17	4.29	4.41	4.53	4.63	4.73	4.82	4.90	4.96	4.98	4.99	4.97	4.91				
	LwA	92	94	93	92	91	91	91	90	90	89	89	88	88	88	88	88	88				

Performance certified is for Installation Type B: Free inlet, ducted outlet.
 Power rating (BHP) does not include transmission losses.
 Performance ratings do not include the effects of appurtenances (accessories).
 The A-weighted sound power ratings shown have been calculated per AMCA Standard 301.
 Values shown are for (Inlet LwA) sound power levels for: Installation Type B: free inlet, ducted outlet.



TERMS AND CONDITIONS OF SALE

ACCEPTANCE All orders and sales are subject to written approval and acceptance by an executive officer of Acme Engineering & Manufacturing Corporation at Muskogee, Oklahoma, (the "Company") and are not binding on the Company until so approved.

DELIVERY All shipping and delivery dates are estimated only. No delays in delivery will subject the Company to any costs, damages or fees for late delivery. Delivery of the products herein specified shall be made F.O.B. point of shipment, unless otherwise stated. The Company shall not be liable for delay due to causes beyond its reasonable control, such as Acts of God, acts of the purchaser, acts of civil or military authorities, priorities, fires, strikes, floods, epidemics, war, riots, delays in transportation, car shortages, and inability, due to reasons beyond its reasonable control, to obtain necessary labor, material, or manufacturing facilities. In the event of such a delay, the date of delivery shall be extended for a period equal to the time lost by reason of the delay.

TERMS OF PAYMENT If, in the judgment of the Company, the financial condition of the purchaser at any time does not justify continuation of manufacture or shipment on the terms of payment specified, the Company may require full or partial payment in advance.

Pro rata payments shall become due as shipments are made. Each shipment or delivery shall constitute a separate sale, and the default of any shipment or delivery shall constitute a separate sale, and the default of any shipment or delivery shall not vitiate the contract as to other shipments or deliveries.

SALES AND SIMILAR TAXES The Company's prices do not include sales, use, excise, or similar taxes. Consequently, in addition to the price specified herein, the amount of any present or future sales, use, excise, or other similar tax applicable to the sale of the product herein shall be paid by the Purchaser, or in lieu thereof

the Purchaser shall provide the Company with a tax exemption certificate acceptable to the taxing authorities.

CANCELLATION Any contract resulting from the Purchaser's order may be canceled by the Purchaser only by negotiations and upon payments of reasonable cancellation charges which will take into account expenses already incurred and commitments made by the Company.

DESIGN CHANGES The Company reserves the right to make changes in design, improvements and additions in and to its products any time without imposing any liability or obligations to itself to apply or install the same in any product manufactured by it.

TITLE The title and right of possession of the products sold herein shall remain with the Company and such products shall remain personal property until all payments herein (including deferred payments whether evidenced by notes or otherwise) shall have been made in full in cash and the Purchaser agrees to do all acts necessary to perfect and maintain such right and title in the Company.

PRICE ADJUSTMENTS Prices are subject to change upon notice by the Company. Prices on existing orders are subject to surcharges in the event of cost increases of metals and transportation. All complete component accessory material manufactured by others and furnished with the Company's products such as motors, drives, vibration equipment, controls or other completely assembled component structures, are subject to adjustment to the price at time of shipment regardless of the date of original order entry.

SAFETY ACCESSORIES The Company manufactures products designed to serve multiple applications and offers a wide range of safety equipment, including guards and other devices, as may be required to meet

customer specifications. Without exception, the Company recommends that all orders include applicable safety devices. Products ordered without applicable safety devices is clearly the responsibility of the Purchaser. Further, the Purchaser warrants that it has determined and acquired any and all safety devices required for products sold by the Company. Weather covers and guards for motor and V-belt drives, couplings, shafts and bearings, along with inlet and outlet screens, are optional accessories noted in the price list.

GOVERNING LAW The rights, obligations and remedies of Purchaser and the Company, the interpretation of these terms and conditions and the sale of products by the Company shall be governed by Oklahoma law, without regard to any principles of conflict of laws.

ARBITRATION Any dispute arising under or in connection with these terms and conditions or the sale of products shall be settled by binding arbitration administered by the American Arbitration Association under its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The dispute shall be resolved by one neutral arbitrator who shall have no affiliation with either Purchaser or the Company and shall be selected by the American Arbitration Association office in Dallas, Texas. The arbitration proceedings shall be held in Muskogee, Oklahoma.

APPLICABLE DOCUMENTS The agreement between the Company and the Purchaser relating to the products includes these terms and conditions of sale, any applicable installation and maintenance instructions provided by the Company and any terms appearing on the Company's quotation, sales order acknowledgment and invoice.

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 Purchaser and all End Users. If these products are used in a life support ventilation system where failure could result in loss or injury, the Purchaser and all End Users 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. Comply with all local and national safety codes including the National Electrical Code (NEC) and National Fire Protection Act (NFPA).

CAUTION Guards must be installed when fan is within reach of personnel or within eight (8) feet (2.5 m) of working level or when deemed advisable for safety.

DISCLAIMER The Company has made a diligent effort to illustrate and describe the products accurately in all Company literature; however such illustrations and descriptions are for the sole purpose of identification and do not express or imply any warranty.

LIMITED WARRANTY

WARRANTY AND DISCLAIMER: The Company extends this limited warranty to the original purchaser and warrants that products supplied by the Company, shall be free from original defects in workmanship and materials for two years from date of shipment (except for the warranty periods noted for products listed below), provided same have been properly handled, stored, installed, serviced, maintained and operated. This warranty shall not apply to products which have been altered or repaired without the Company's express authorization, or altered or repaired in any way so as, in the Company's judgment, to affect its performance or reliability, nor which have been improperly installed or subjected to misuse, negligence, or accident, or incorrectly used in combination with other substances. The Purchaser assumes all risks and liability for results of use of all products.

Evaporative cooling pads are warranted to be free of defects in materials and workmanship for a period of two years from date of shipment provided same have been properly handled, stored, installed, serviced, maintained and operated; and further, not subjected to excessive heat, corrosive agents or chemicals, or mechanical abuse that may cause tearing, crushing or undue deterioration, nor used on a system or in a manner other than that for which it was designed as explained in the product literature.

The following products are warranted to be free of defects in materials and workmanship for the periods shown from date of shipment: Acme's exclusive duplex split pillow block bearings and shaft five years, belts one year, Polyethylene tubing 90 days, AIR40 Heater warranty one year, AIR40 Emitter warranty three years and DDP fan lifetime warranty on its propeller, cone, and housing.

LIMITATION OF REMEDY AND DAMAGES: All claims under this warranty must be made in writing and delivered to P. O. Box 978, Muskogee, Oklahoma, 74402, within 15 days after discovery of the defect and prior to the expiration of two years from the date of shipment by the Company of the product claimed defective, and Purchaser shall be barred from any

remedy if Purchaser fails to make such claim within such period.

Within 30 days after receipt of a timely claim, the Company shall have the option either to inspect the product while in Purchaser's possession or to request Purchaser to return the product to the Company at Purchaser's expense for inspection by the Company. The Company shall replace, or at its option repair, free of charge, any product it determines to be defective, and it shall ship the repaired or replacement product to Purchaser F.O.B. point of shipment; provided, however, if circumstances are such as in the Company's judgment to prohibit repair or replacement to remedy the warranted defects, the Purchaser's sole and exclusive remedy shall be a refund to the Purchaser of any part of the invoice price, paid to the Company, for the defective product or part.

The Company is not responsible for the cost of removal of the defective product or part, damages due to removal, or any expenses incurred in shipping the product or part to or from the Company's plant, or the installation of the repaired or replaced product or part.

The warranties set forth above do not apply to any components, accessories, parts or attachments manufactured by other manufacturers; such being subject to the manufacturer's warranty, if any. To the extent not prohibited by the manufacturer's warranty, the Company shall pass through to Purchaser such manufacturer's warranty.

THE COMPANY'S WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED AND WAIVED. THIS WARRANTY CONSTITUTES THE COMPANY'S SOLE AND EXCLUSIVE WARRANTY FOR DEFECTIVE GOODS AND PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCTS.

No employee, agent, dealer, or other person is authorized to give any warranties on behalf of the Company or to assume for the Company any other liability in connection with any of its products except in writing and signed by an officer of the Company.

REPLACEMENT PARTS If replacement parts are ordered, purchaser warrants that the original components in which these replacement parts will be placed are in satisfactory working condition, and

when said replacement parts are installed, the resultant installation will operate in a safe manner, at speeds and temperatures for which the original product was purchased.

TECHNICAL ADVICE AND RECOMMENDATIONS, DISCLAIMER: Notwithstanding any past practice or dealings or any custom of the trade, sales shall not include the furnishing of technical advice or assistance or system design. Any such assistance shall be at the Company's sole option and may be subject to additional charge.

The Company assumes no obligation or liability on account of any recommendations, opinions or advice as to the choice, installation or use of products. Any such recommendations, opinions or advice are given and shall be accepted at Purchaser's and End User's risk and shall not constitute any warranty or guarantee of such products or their performance.

LIMITATION OF LIABILITY The cumulative liability of the Company to the Purchaser and any other persons for all claims in any way relating to or arising out of the products, including, but not limited to, any cause of action sounding in contract, tort, or strict liability, shall not exceed the total amount of the purchase price paid for those products which are the subject of any such claim. This limitation of liability is intended to apply without regard to whether other provisions of this agreement have been breached or have proven ineffective even if the Company has been advised of the possibility of such claims or demands. In no event shall the Company be liable to the Purchaser or any other person for any loss of profits or any incidental, special, exemplary, or consequential damages for any claims or demands brought by the Purchaser or such other persons.

INDEMNITY The Company's maximum liability to Purchaser and to any end user is as set forth above. The Company makes no warranty to anyone for any products not manufactured by the Company and shall have no liability for any use or installation of any products (whether manufactured by the Company or other manufacturers) not specifically authorized by this sale. Purchaser acknowledges various warnings by the Company regarding the products and its installation and use. If the Company incurs any claims, lawsuits, settlements, or expenses (including attorney fees) for any loss, injury, death or property damage including, but not limited to, claims arising out of the Purchaser's or any end user's installation or use of the products, the Purchaser shall indemnify and hold the Company harmless.



**ACME ENGINEERING AND
MANUFACTURING CORPORATION**
P.O. Box 978
Muskogee, Oklahoma 74402
Telephone 918/682-7791
Fax 918/682-0134
www.acmefan.com