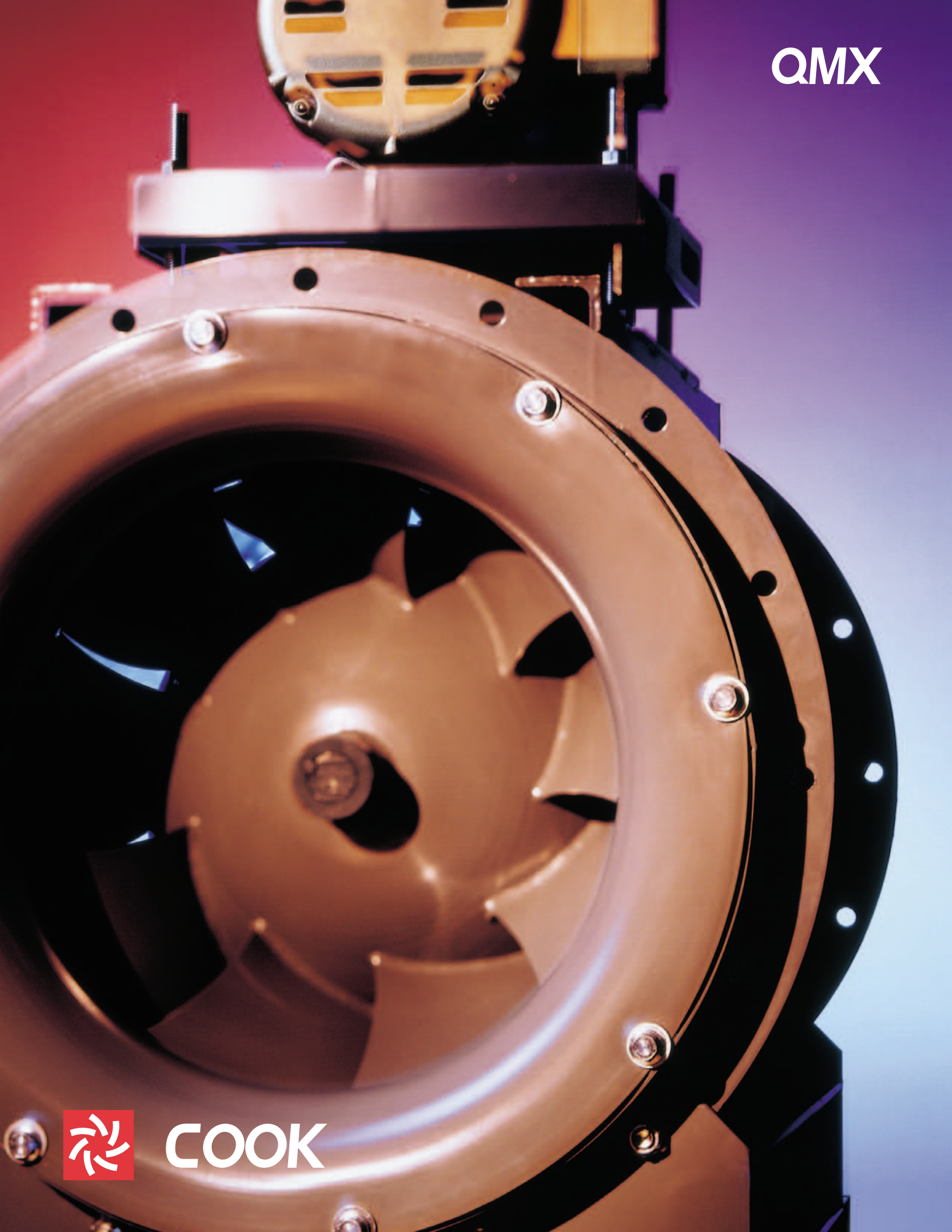


QMX



COOK

## Mixed-Flow Blowers

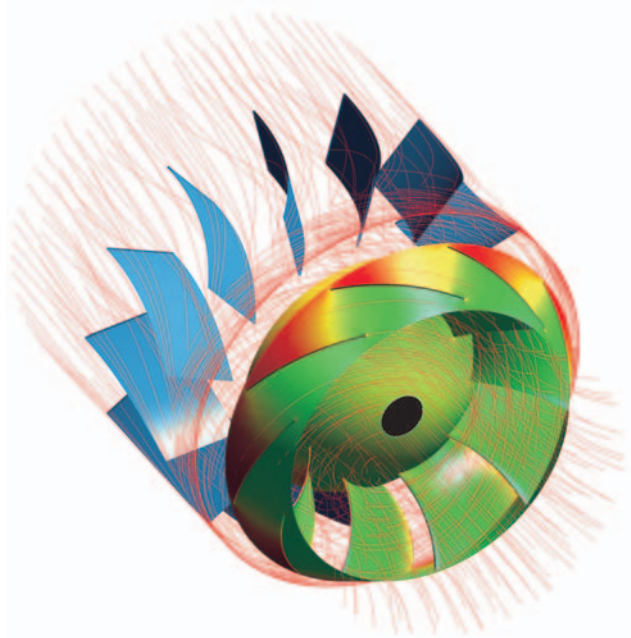


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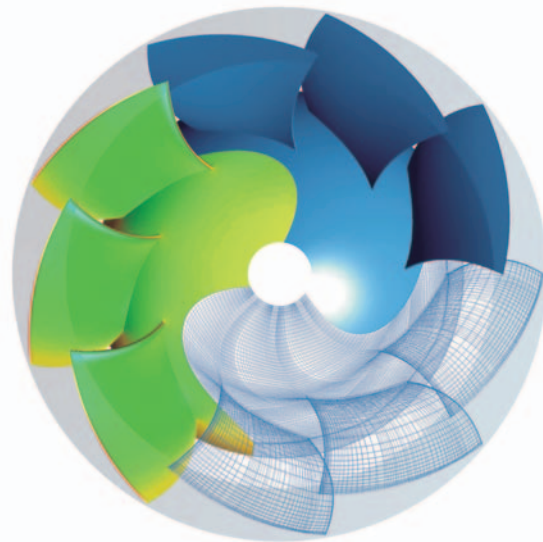
# Introduction

The QMX and QMX-HP are designed for supply, exhaust, or return air applications. Performance ranges from 500 to 119,500 CFM with static pressures to 9" w.g. The QMX is offered in 18 sizes from 90 to 600. With the Cook Contour™ axial-centrifugal hybrid impeller, these mixed-flow fans are more efficient than traditional centrifugal units. This provides you the opportunity to reduce motor horsepower and fan sound levels while using a smaller unit. The QMX will replace traditional tubular centrifugal and vane axial fans in most applications. The QMX is an ideal solution for critical applications where low sound, high efficiency, or compact size are requirements.

- UL/cUL 705 listing is standard on all QMX models.
- The Cook Contour™ mixed flow wheel combines the high airflow features of an axial fan with the pressure capabilities and static efficiency of a centrifugal blower.
- The QMX utilizes a relatively large diameter wheel in a small housing which results in slower wheel speeds and quieter operation.
- The QMX can be as many as two to three fan sizes smaller than an equivalent performing tubular inline blower resulting in significant space and cost savings.



The QMX was designed using the latest Computational Fluid Dynamics (CFD) software. This allowed our engineers to fully optimize the inlet, wheel and straightening vanes through over 200 design iterations. Once the design was optimized, physical prototypes verified the performance and durability of the design. The result is one of the quietest and most efficient fans in the industry.



## QMX/QMX-HP

### Mixed-Flow Inline Blower



- QMX and QMX-HP are licensed to bear AMCA Certified Ratings Seal for Sound (Inlet and Outlet) and Air Performance.
- UL/cUL 762 listing is available for restaurant applications and UL/cUL listing for “Power Ventilator for Smoke Control Systems” is available.
- Slip fit duct connections are standard on both the inlet and outlet providing easy attachment of flexible connections.
- Adjustable mounting feet on all horizontal units allows the motor position and floor/ceiling orientation to be easily adjusted in the field without additional parts or welding.
- Universal mounting brackets are included on both the inlet and discharge of vertical units to allow for ceiling or floor mounting in either an upblast or downblast configuration.
- Lifting lugs are provided at 120° locations around the perimeter of the fan to assist in handling, positioning and rotation of the fan in the field.
- Also available in reduced length, Arrangement 3, where space is limited.
- Access door is standard on Arrangement 3.

## QMXE/QMXS/QMXE-HP/QMXS-HP

### Mixed-Flow Exhaust/Supply Blower

(QMXS shown)



- QMXE and QMXE-HP are designed for roof top exhaust applications.
- QMXS and QMXS-HP are designed for roof top supply applications.
- Slip fit duct connection is standard on the inlet providing easy duct connections.
- QMXE, QMXS, QMXE-HP and QMXS-HP include a motor cover for weather protection; Access door and belt tunnel are also standard.



# Introduction

## QMXU/QMXU-HP

### Mixed-Flow Upblast Exhaust Blower



- QMXU and QMXU-HP are designed for roof top exhaust applications.
- UL/cUL 762 listing is available for restaurant applications.
- Slip fit duct connection is standard on the inlet providing easy duct connections.
- QMXU and QMXU-HP include motor cover for weather protection. Belt tunnel, access door and drain are also standard.
- Integral butterfly dampers are provided to prevent backflow into the building.

## QMXLE/QMXLE-HP

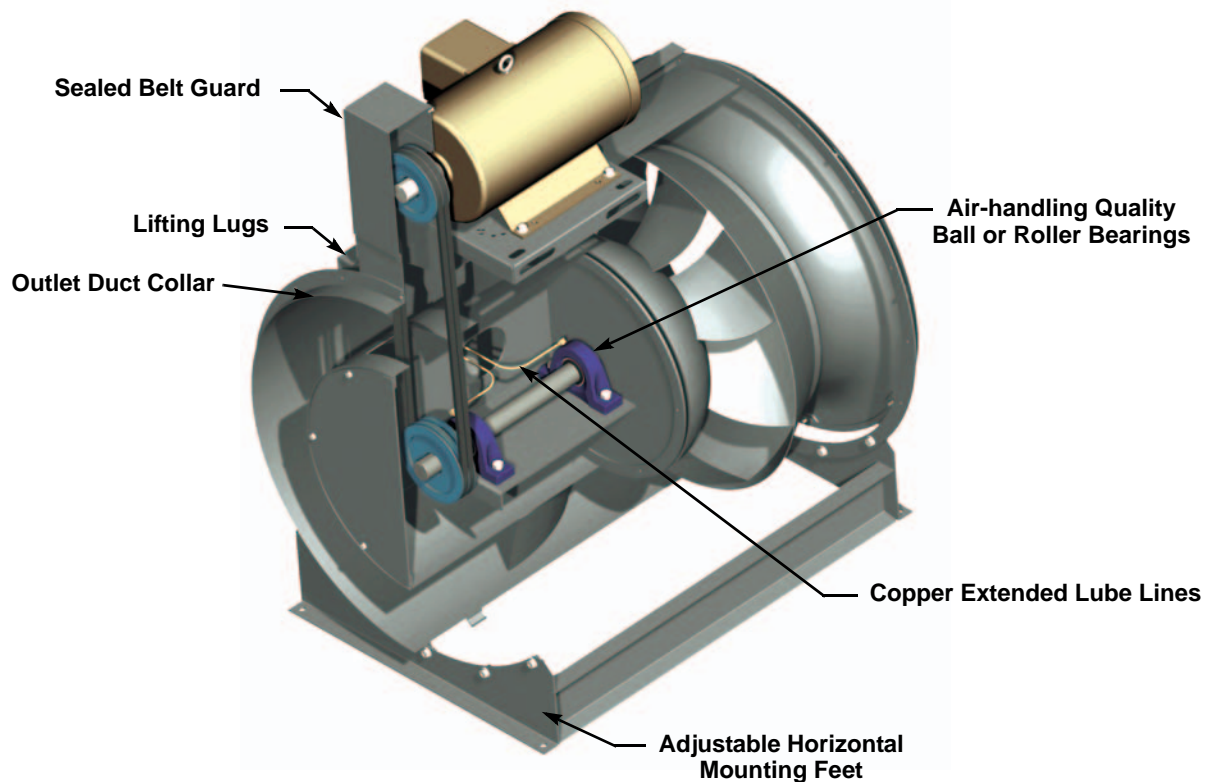
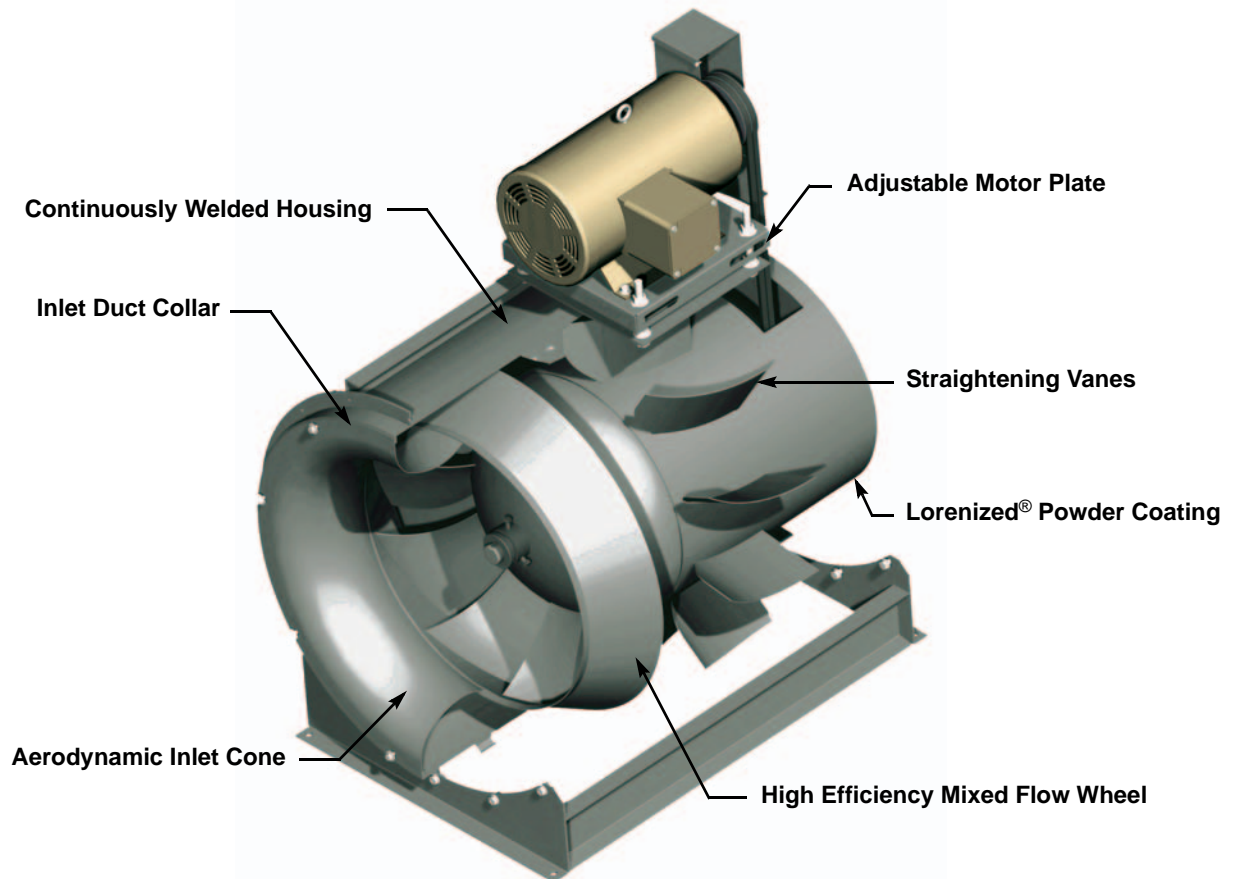
### Mixed-Flow Upblast Laboratory Exhaust Blower



- QMXLE and QMXLE-HP are designed for high velocity roof top exhaust applications where it is necessary to eject contaminated air away from the roof.
- UL/cUL 762 listing is available for restaurant applications.
- Available in sizes 90 to 490.
- Utilizes high velocity discharge nozzle with integrated backdraft damper to prevent backflow into the building.
- Discharge nozzles are available in various combinations to obtain desired discharge velocities. See page 17 for nozzle sizing information.
- Stack extension ensures a minimum discharge height of 10' above roof-line as recommended by AIHA Standard Z9.5 and NFPA Standard 45.
- Designed for easy connection to integral members of roof structure allowing freestanding use with no guy wires.
- QMXLE and QMXLE-HP include motor cover for weather protection. Belt tunnel, access door and drain are also standard.

## QMX/QMX-HP

### Mixed-Flow Inline Blower

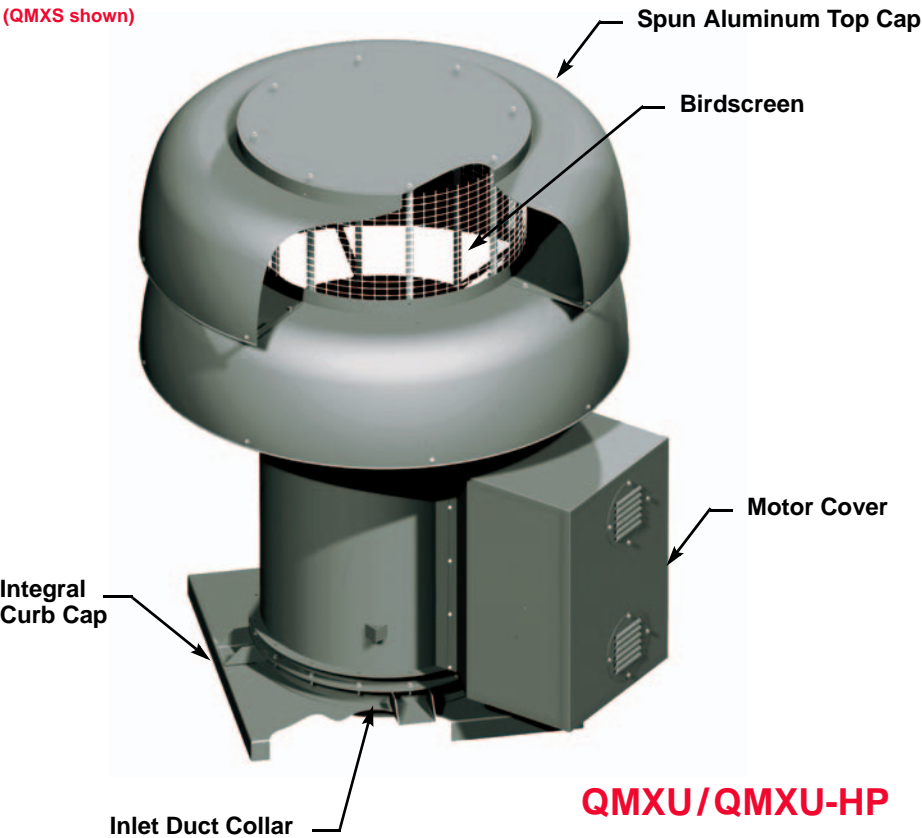


# Standard Construction Features

## QMXE/QMXS/QMXE-HP/QMXS-HP

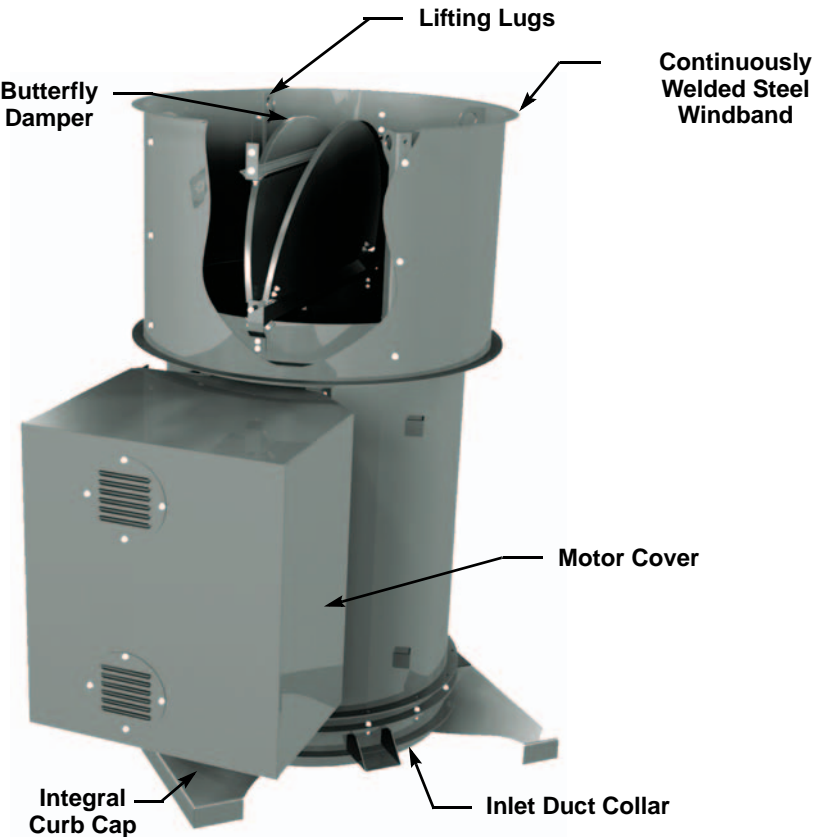
### Mixed-Flow Exhaust/Supply Blower

(QMXS shown)



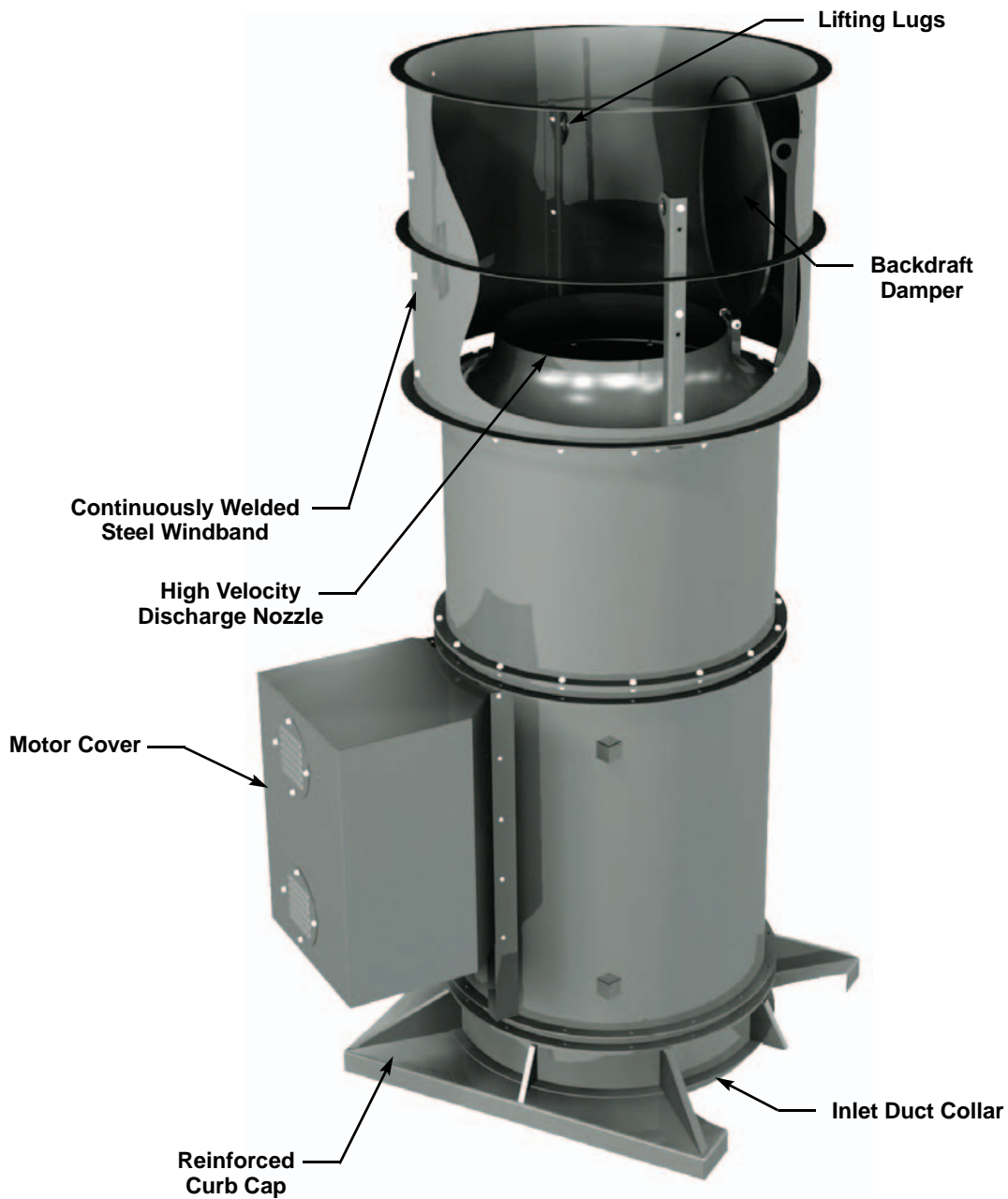
## QMXU/QMXU-HP

### Mixed-Flow Upblast Exhaust Blower



## QMXLE/QMXLE-HP

### Mixed-Flow Upblast Laboratory Exhaust Blower



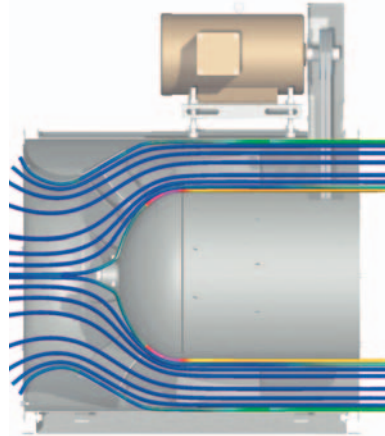
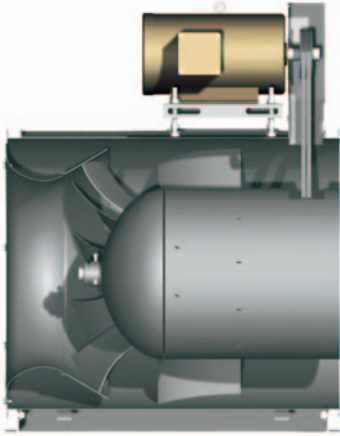


# Mixed-Flow Advantages

The Cook Contour™ mixed flow wheel combines the airflow advantages of an axial fan with the performance characteristics of a centrifugal blower. The result is an extremely efficient, quiet and compact tubular inline.

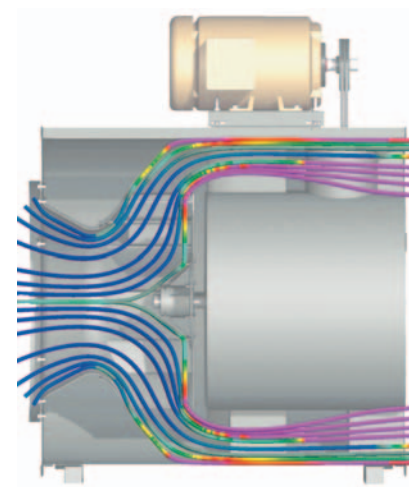
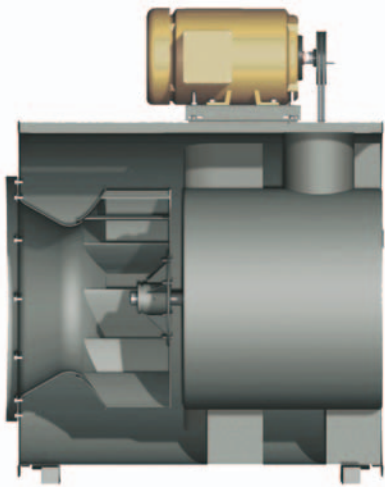
The illustrations below show cross sections of typical mixed-flow, tubular centrifugal and axial fans. Flow lines have been developed with CFD software and added to the illustrations to show the different air patterns in the three fans. Areas in red indicate high turbulence zones that result in loss of efficiency and excess noise. Characteristics of each fan type are also shown below for comparison.

## Mixed Flow



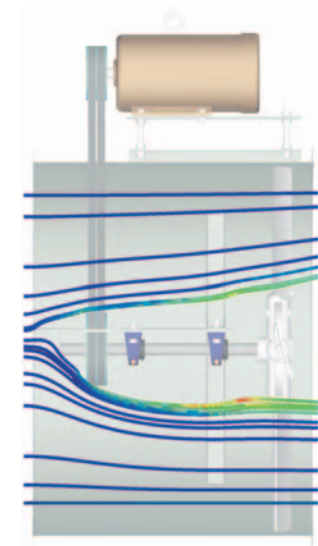
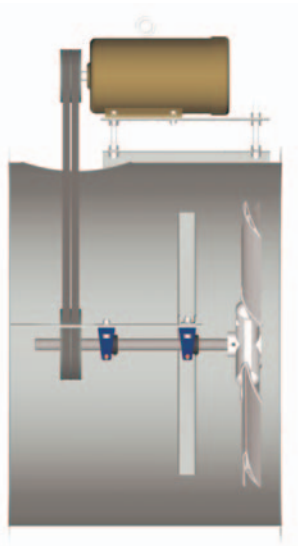
- Two gentle changes in airflow direction
- Lower RPM required for equal flow and pressure
- Highest static efficiency of inline fans
- Smallest diameter with equal performance
- Lowest sound levels of equal size units
- Large inlet opening yields low inlet velocities
- Design allows for close wall proximities when used in built-up air handlers.

## Centrifugal



- Two abrupt 90° changes in airflow directions
- High pressure capability
- Higher RPM required for equal flow and pressure
- Larger size required for equal performance

## Axial



- Airflow straight through with no direction changes
- High airflow volume in a relatively small diameter
- May require inlet bell and outlet cone

# Performance Comparisons

The QMX and QMX-HP are each designed for a specific performance range. The QMX will be the best selection for most applications. It has been optimized for typical Class-I pressures of 0.5" to 4" w.g. and provides the quietest, most efficient and compact fan possible. Where higher static pressures are present, the QMX-HP may be a better choice. The QMX-HP has been optimized for higher Class-II pressures of 4" to 9" w.g. and can provide excellent efficiencies at these higher pressures.

**QMX Wheel**



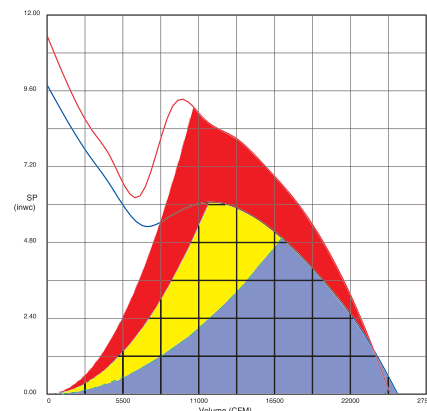
The QMX utilizes a contoured, single thickness blade with 3-D curvature to achieve maximum airflow and efficiency while maintaining low sound levels.

**QMX-HP Wheel**



The QMX-HP utilizes a true airfoil blade for maximum efficiency at higher static pressures.

**Performance Comparison**



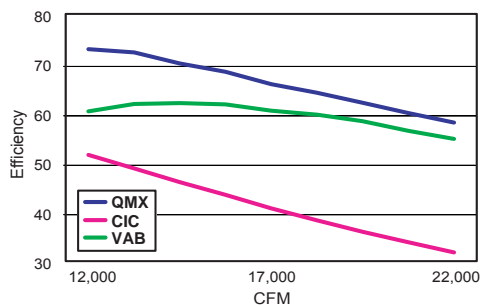
The curves above illustrate the performance limits of the size 270 QMX and QMX-HP. The red area indicates performance which requires the QMX-HP. Selections in the yellow area can be achieved with the QMX or QMX-HP depending on horsepower and sound criteria. The remaining blue area represents QMX selections.

**Performance Comparison**

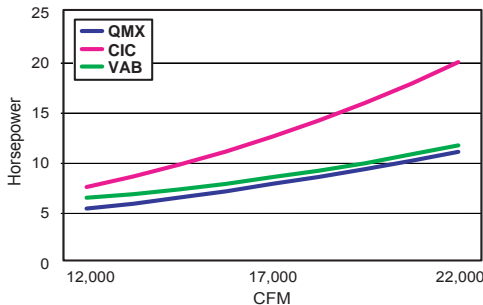
Performance	Size*	Static Efficiency			Horsepower			Sound Power (LwA)		
		QMX Mixed Flow	CIC Tubular Centrifugal	VAB Vane Axial	QMX Mixed Flow	CIC Tubular Centrifugal	VAB Vane Axial	QMX Mixed Flow	CIC Tubular Centrifugal	VAB Vane Axial
10,000 cfm @ 1.0 in. wg	225 QMX	55%	31%	52%	2.84	5.14	3.02	83	93	88
10,000 cfm @ 4.0 in. wg	225 QMX-HP	66%	57%	56%	9.57	11.00	11.30	91	97	101
40,000 cfm @ 3.0 in. wg	445 QMX	72%	52%	65%	26.40	36.60	29.00	88	98	104
40,000 cfm @ 6.0 in. wg	445 QMX-HP	74%	60%	50%	51.10	63.40	75.10	94	102	114

\*Sizes based on closest comparable tube diameter.

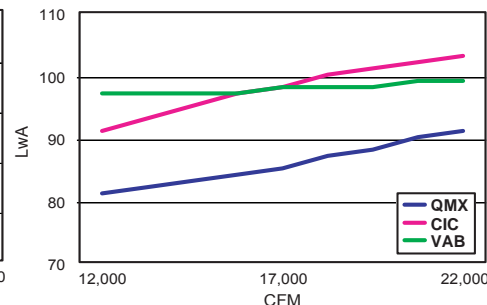
**Static Efficiency**



**Horsepower**



**Sound Power**



The charts above graphically illustrate the performance advantages of the 270 QMX over comparably sized CIC tubular centrifugal and VAB vane axial fans.

## Mixed-Flow Inline Blower Low Pressure



Loren Cook Company certifies that the QMX shown herein is 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.



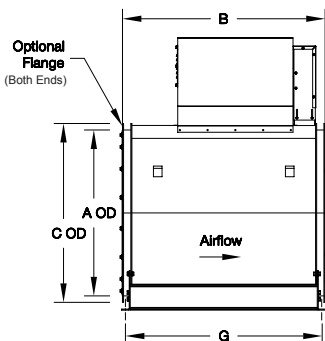
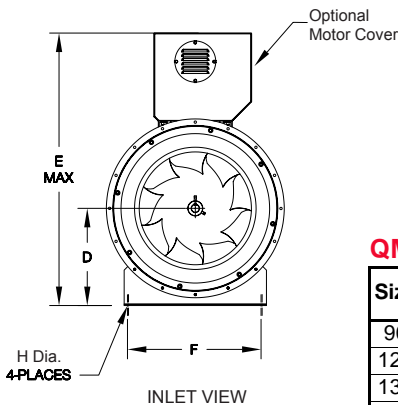
Type QMX is furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



Type QMX is available with UL 762 and cUL 762 listing (Power Ventilator for Restaurant Exhaust Appliances/Y2HW).



Type QMX is available with UL listing for "Power Ventilator for Smoke Control Systems."



**Description:** Fan shall be a belt driven, tubular mixed-flow inline blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada. For smoke control applications, fan shall be listed by Underwriters Laboratories (Power Ventilator for Smoke Control Systems) for US and Canada. Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance. Performance shall be licensed for both inlet and outlet sound.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet and outlet collars for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Adjustable mounting feet shall allow field adjustment of motor position. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Contoured single thickness blades shall incorporate 3-D curvature for maximum efficiency across the entire surface of the blade. Blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fan shall be model QMX as manufactured by Loren Cook Company of Springfield, Missouri.

### QMX Dimension Data (Arrangement 9)\*

Size	A	B	C	D	E	F	G	H	Shaft Dia.	Max. Mtr. Frame	Ship. Wt.
90	12-13/16	19-7/8	15-15/16	8-1/2	30	12-3/8	18-3/8	1/2	1	184T	127
120	17-1/16	24	20-1/16	10-1/2	36-1/2	15-1/2	22-1/2	1/2	1-3/16	213T	186
135	19-1/4	27	22-1/4	12	39-7/16	17-1/2	25-1/2	1/2	1-3/16	213T	253
150	21-3/8	30	24-3/8	13-3/16	42-1/16	18-3/4	28-5/8	1/2	1-3/16	215T	313
165	23-1/2	33	26-1/2	14-5/16	43-3/4	20-13/16	31-5/8	1/2	1-3/16	254T	367
180	25-5/8	35	28-5/8	15-1/2	46-1/4	22-13/16	33-5/8	9/16	1-3/16	254T	416
202	28-3/4	37-1/2	31-3/4	17-1/4	49-15/16	24-1/4	36-1/8	9/16	1-7/16	256T	513
225	31-15/16	41	34-15/16	19	55-13/16	26-15/16	39-5/8	9/16	1-7/16	284T	632
245	34-3/4	44-1/2	37-3/4	20-1/2	59	28-15/16	43-1/8	11/16	1-11/16	286T	744
270	38-5/16	47	41-5/16	22-7/16	62-7/8	31	45-5/8	11/16	1-15/16	286T	873
300	42-1/2	54	45-1/2	24-3/4	68-1/16	33-3/4	52-5/8	11/16	1-15/16	286T	1090
330	46-3/4	58-1/2	49-3/4	27	74-13/16	36-3/4	57-1/8	11/16	2-3/16	324T	1340
365	51-3/4	64	54-3/4	29-13/16	80-1/4	40-1/2	63-3/8	13/16	2-7/16	326T	1770
402	56-15/16	68-1/2	59-15/16	32-11/16	88-5/16	44	67-7/8	13/16	2-15/16	364T	2220
445	63-1/16	74	66-1/16	36	94-7/8	48-1/4	73-3/8	13/16	2-15/16	365T	2730
490	69-3/8	80-1/2	72-3/8	39-7/16	103-3/8	52-3/4	79-7/8	13/16	3-7/16	404T	3330
540	76-7/16	87	79-7/16	43-5/16	110-15/16	58	86-3/8	13/16	3-7/16	404T	3860
600	84-7/8	95-1/2	87-7/8	50	122-1/16	64	94-7/8	13/16	3-7/16	404T	4780

All dimensions in inches. Weights in pounds, less motor, in a horizontal configuration. \*For Arrangement 3, see page 19.



## Mixed-Flow Inline Blower High Pressure

**Description:** Fan shall be a belt driven, tubular mixed-flow inline blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada. For smoke control applications, fan shall be listed by Underwriters Laboratories (Power Ventilator for Smoke Control Systems) for US and Canada. Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance. Performance shall be licensed for both inlet and outlet sound.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet and outlet collars for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Adjustable mounting feet shall allow field adjustment of motor position. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Airfoil blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fan shall be model QMX-HP as manufactured by Loren Cook Company of Springfield, Missouri.



Loren Cook Company certifies that the QMX-HP shown herein is 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.



Type QMX-HP is furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

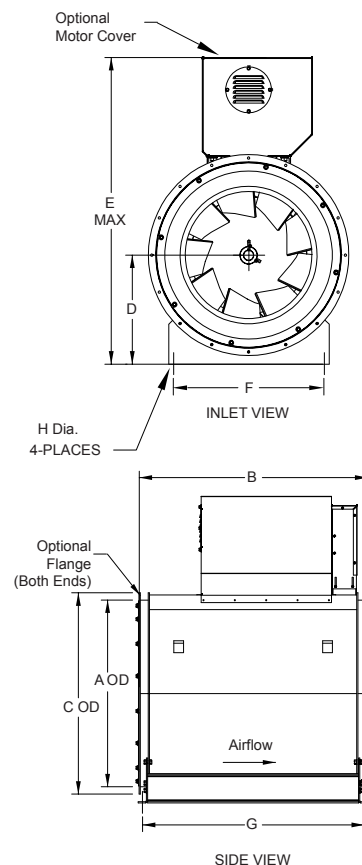
Type QMX-HP is available with UL 762 and cUL 762 listing (Power Ventilator for Restaurant Exhaust Appliances/Y2HW).

Type QMX-HP is available with UL listing for "Power Ventilator for Smoke Control Systems."

### QMX-HP Dimension Data (Arrangement 9)\*

Size	A	B	C	D	E	F	G	H	Shaft Dia.	Max. Mtr. Frame	Ship. Wt.
90	12-13/16	19-7/8	15-15/16	8-1/2	30	12-3/8	18-3/8	1/2	1-3/16	184T	132
120	17-1/16	24	20-1/16	10-1/2	36-1/2	15-1/2	22-1/2	1/2	1-3/16	213T	189
135	19-1/4	27	22-1/4	12	39-7/16	17-1/2	25-1/2	1/2	1-3/16	213T	251
150	21-3/8	30	24-3/8	13-3/16	42-1/16	18-3/4	28-5/8	1/2	1-3/16	215T	324
165	23-1/2	33	26-1/2	14-5/16	43-3/4	20-13/16	31-5/8	1/2	1-7/16	254T	392
180	25-5/8	35	28-5/8	15-1/2	46-1/4	22-13/16	33-5/8	9/16	1-7/16	254T	436
202	28-3/4	37-1/2	31-3/4	17-1/4	49-15/16	24-1/4	36-1/8	9/16	1-11/16	256T	535
225	31-15/16	41	34-15/16	19	55-13/16	26-15/16	39-5/8	9/16	1-15/16	284T	678
245	34-3/4	44-1/2	37-3/4	20-1/2	59	28-15/16	43-1/8	11/16	1-15/16	286T	785
270	38-5/16	47	41-5/16	22-3/8	62-7/8	31	45-5/8	11/16	2-3/16	286T	909
300	42-1/2	54	45-1/2	24-11/16	66-5/8	33-3/4	52-5/8	11/16	2-3/16	286T	1130
330	46-3/4	58-1/2	49-3/4	27-1/16	73-5/16	36-3/4	57-1/8	11/16	2-7/16	324T	1400
365	51-3/4	64	54-3/4	29-13/16	78-3/4	40-1/2	63-3/8	13/16	2-15/16	326T	1950
402	56-15/16	68-1/2	59-15/16	32-11/16	87-9/16	44	67-7/8	13/16	3-7/16	364T	2320
445	63-1/16	74	66-1/16	36	94-7/8	48-1/4	73-3/8	13/16	3-7/16	365T	2830
490	69-3/8	80-1/2	72-3/8	39-3/16	103-3/8	52-3/4	79-7/8	13/16	3-15/16	404T	3460
540	76-7/16	87	79-7/16	43-3/16	110-15/16	58	86-3/8	13/16	3-15/16	404T	4000

All dimensions in inches. Weights in pounds, less motor, in a horizontal configuration. \*For Arrangement 3, see page 19.





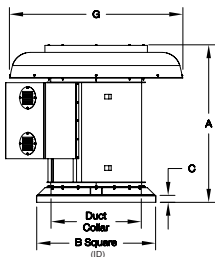
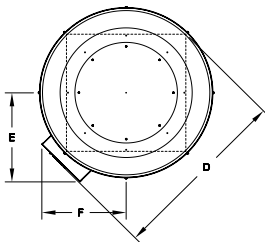
# QMXE/QMXS Specifications and Dimension Data

## Mixed-Flow Exhaust/Supply Blower Low Pressure

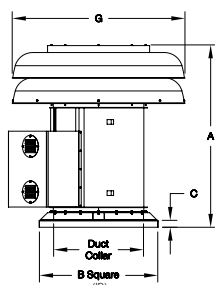
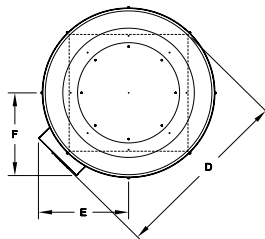


Type QMXE & QMXS are furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

### QMXE



### QMXS



**Description:** Fan shall be a belt driven, tubular mixed-flow exhaust (or supply) blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet collar for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Fan shall have spun aluminum top cap(s) constructed of minimum .064 thick marine alloy aluminum to prevent rain infiltration. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Contoured single thickness blades shall incorporate 3-D curvature for maximum efficiency across the entire surface of the blade. Blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fans shall be model QMXE or QMXS as manufactured by Loren Cook Company of Springfield, Missouri.

### QMXE/QMXS Dimension Data

Size	A		B	C	D	E	F	G	Duct Collar	Max. Mtr. Frame	Ship. Wt.	
	QMXE	QMXS									QMXE	QMXS
90	39-3/16	45-3/4	20	3	37-3/8	22-1/2	21-1/4	28-9/16	12-13/16	184T	230	251
120	39-5/8	46-11/16	24	3	53-5/8	25-3/8	24-3/8	32-13/16	17-1/16	213T	300	327
135	43-15/16	53-3/4	26	3	46-1/2	27-1/4	25-3/8	43-9/16	19-1/4	213T	376	418
150	46-15/16	56-3/4	30	3	51	28	26-1/8	43-9/16	21-3/8	215T	448	486
165	51-1/8	62-1/2	35	3	55	29-13/16	27-1/8	47-5/8	23-1/2	254T	531	587
180	57-3/4	71-13/16	37	3	57-3/4	30-3/4	28-1/8	52-5/8	25-5/8	254T	598	662
202	60-1/2	76-1/16	40	3	61-13/16	32-1/8	29-1/2	62-5/8	28-3/4	256T	721	805
225	64	79-9/16	43	3	68-1/8	35-1/2	33	62-5/8	31-15/16	284T	821	902
245	64-7/16	75-7/16	46	3	71-13/16	36-5/8	34-1/8	73-5/8	34-3/4	286T	994	1088
270	67-3/16	78-3/16	50	3	76-5/16	38	35-9/16	73-5/8	38-5/16	286T	1153	1238
300	74-1/2	85-9/16	54	3	82	40	37-5/8	73-5/8	42-1/2	286T	1349	1433

All dimensions in inches. Weights in pounds, less motor.

**Description:** Fan shall be a belt driven, tubular mixed-flow exhaust (or supply) blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet collar for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Fan shall have spun aluminum top cap(s) constructed of minimum .064 thick marine alloy aluminum to prevent rain infiltration. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Airfoil blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

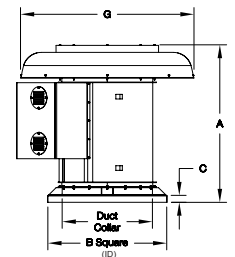
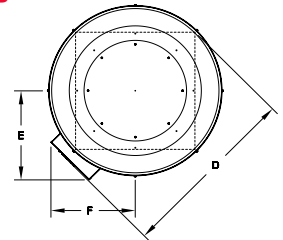
**Product:** Fans shall be model QMXE-HP or QMXS-HP as manufactured by Loren Cook Company of Springfield, Missouri.

## Mixed-Flow Exhaust/Supply Blower High Pressure

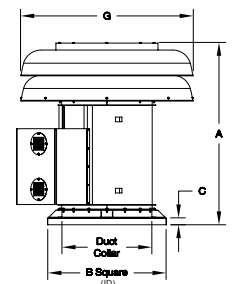
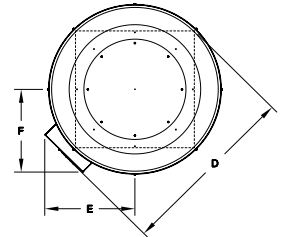


Type QMXE-HP & QMXS-HP are furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

### QMXE-HP



### QMXS-HP




### QMXE-HP / QMXS-HP Dimension Data


Size	A		B	C	D	E	F	G	Duct Collar	Max. Mtr. Frame	Ship. Wt.	
	QMXE-HP	QMXS-HP									QMXE-HP	QMXS-HP
90	39-3/16	45-3/4	20	3	37-3/8	22-1/2	21-1/4	28-9/16	12-13/16	184T	235	256
120	39-5/8	46-11/16	24	3	53-5/8	25-3/8	24-3/8	32-13/16	17-1/16	213T	303	330
135	43-15/16	53-3/4	26	3	46-1/2	27-1/4	25-3/8	43-9/16	19-1/4	213T	374	416
150	46-15/16	56-3/4	30	3	51	28	26-1/8	43-9/16	21-3/8	215T	459	497
165	51-1/8	62-1/2	35	3	55	29-13/16	27-1/8	47-5/8	23-1/2	254T	556	612
180	57-3/4	71-13/16	37	3	57-3/4	30-3/4	28-1/8	52-5/8	25-5/8	254T	618	682
202	60-1/2	76-1/16	40	3	61-13/16	32-1/8	29-1/2	62-5/8	28-3/4	256T	743	827
225	64	79-9/16	43	3	68-1/8	35-1/2	33	62-5/8	31-15/16	284T	867	948
245	64-7/16	75-7/16	46	3	71-13/16	36-5/8	34-1/8	73-5/8	34-3/4	286T	1035	1129
270	67-3/16	78-3/16	50	3	76-5/16	38	35-9/16	73-5/8	38-5/16	286T	1189	1274
300	74-1/2	85-9/16	54	3	82	40	37-5/8	73-5/8	42-1/2	286T	1389	1473

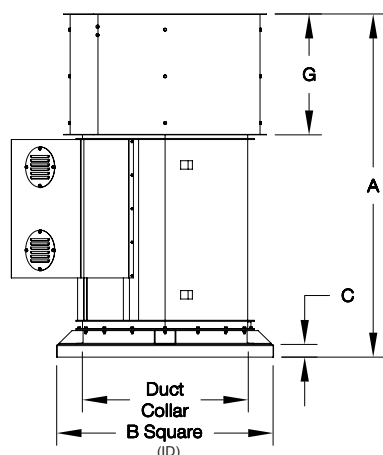
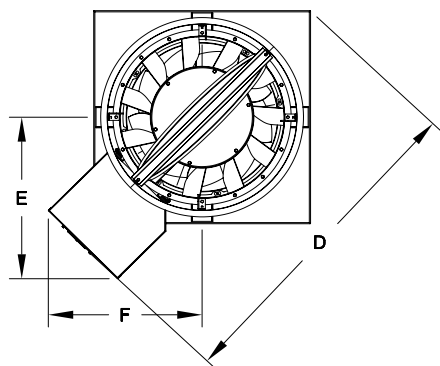
All dimensions in inches. Weights in pounds, less motor.

## Mixed-Flow Upblast Blower Low Pressure



 Type QMXU is furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

 Type QMXU is available with UL 762 and cUL 762 listing (Power Ventilator for Restaurant Exhaust Appliances/Y2HW).



**Description:** Fan shall be a belt driven, tubular mixed-flow upblast blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet collar for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Fan shall have hinged butterfly discharge dampers of aluminum or steel construction with a rain gutter to prevent rain infiltration. The damper assembly shall be protected by a continuously welded steel windband of minimum 18 gauge steel with flanges for maximum strength and rigidity. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Contoured single thickness blades shall incorporate 3-D curvature for maximum efficiency across the entire surface of the blade. Blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fan shall be model QMXU as manufactured by Loren Cook Company of Springfield, Missouri.

### QMXU Dimension Data

Size	A	B	C	D	E	F	G	Duct Collar	Max. Mtr. Frame	QMXU Weights
90	40-9/16	20	3	37-3/8	22-1/2	21-1/4	15	12-13/16	184T	263
120	45-11/16	24	3	43-5/8	25-3/8	24-3/8	17	17-1/16	213T	346
135	49-11/16	26	3	46-1/2	27-1/4	25-3/8	18	19-1/4	213T	421
150	54-11/16	30	3	51	28	26-1/8	20	21-3/8	215T	503
165	58-11/16	35	3	55	29-13/16	27-1/8	21	23-1/2	254T	589
180	61-11/16	37	3	57-3/4	30-3/4	28-1/8	22	25-5/8	254T	652
202	65-11/16	40	3	61-13/16	32-1/8	29-1/2	23-1/2	28-3/4	256T	773
225	70-11/16	43	3	68-1/8	35-1/2	33	25	31-15/16	284T	890
245	76-5/8	46	3	71-13/16	36-5/8	34-1/8	27	34-3/4	286T	1074
270	80-7/8	50	3	76-5/16	38	35-9/16	28-1/2	38-5/16	286T	1251
300	90-1/4	54	3	82	40	37-5/8	30-1/2	42-1/2	286T	1468
330	86-3/4	58	3	89-1/4	44-5/8	41-11/16	32-1/2	46-3/4	324T	1757
365	104-7/8	64	3	96-1/4	46-5/8	43-5/8	35	51-3/4	326T	2349
402	112-3/8	69	3	105	52	48-3/8	38	56-15/16	364T	2960
445	120-7/8	75	3	112-7/16	54-3/8	50-11/16	41	63-1/16	365T	3514
490	131-3/8	82	4	122-1/2	59-5/8	55-1/16	44	69-3/8	404T	4274
540	141-7/8	90	4	131-7/8	62-1/4	57-3/4	48	76-7/16	404T	4908
600	154-3/8	98	4	142	65-1/2	61	52	84-7/8	404T	5920

All dimensions in inches. Weights in pounds, less motor.

**Description:** Fan shall be a belt driven, tubular mixed-flow upblast blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet collar for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Fan shall have hinged butterfly discharge dampers of aluminum or steel construction with a rain gutter to prevent rain infiltration. The damper assembly shall be protected by a continuously welded steel windband of minimum 18 gauge steel with flanges for maximum strength and rigidity. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Airfoil blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fan shall be model QMXU-HP as manufactured by Loren Cook Company of Springfield, Missouri.

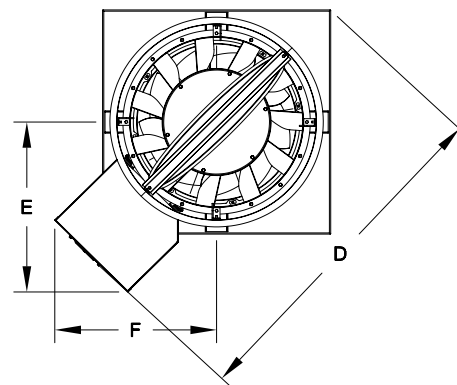
## Mixed-Flow Upblast Blower High Pressure



Type QMXU-HP is furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



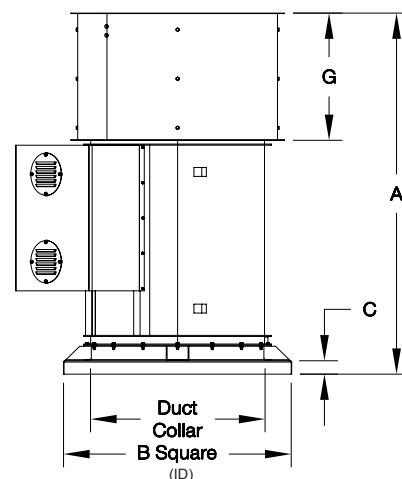
Type QMXU-HP is available with UL 762 and cUL 762 listing (Power Ventilator for Restaurant Exhaust Appliances/Y2HW).



**QMXU-HP Dimension Data**

Size	A	B	C	D	E	F	G	Duct Collar	Max. Mtr. Frame	Ship. Wt.
90	40-9/16	20	3	37-3/8	22-1/2	21-1/4	15	12-13/16	184T	268
120	45-11/16	24	3	43-5/8	25-3/8	24-3/8	17	17-1/16	213T	349
135	49-11/16	26	3	46-1/2	27-1/4	25-3/8	18	19-1/4	213T	419
150	54-11/16	30	3	51	28	26-1/8	20	21-3/8	215T	514
165	58-11/16	35	3	55	29-13/16	27-1/8	21	23-1/2	254T	614
180	61-11/16	37	3	57-3/4	30-3/4	28-1/8	22	25-5/8	254T	672
202	65-11/16	40	3	61-13/16	32-1/8	29-1/2	23-1/2	28-3/4	256T	795
225	70-11/16	43	3	68-1/8	35-1/2	33	25	31-15/16	284T	936
245	76-5/8	46	3	71-13/16	36-5/8	34-1/8	27	34-3/4	286T	1115
270	80-7/8	50	3	76-5/16	38	35-9/16	28-1/2	38-5/16	286T	1287
300	90-1/4	54	3	82	40	37-5/8	30-1/2	42-1/2	286T	1508
330	86-3/4	58	3	89-1/4	44-5/8	41-11/16	32-1/2	46-3/4	324T	1817
365	104-7/8	64	3	96-1/4	46-5/8	43-5/8	35	51-3/4	326T	2529
402	112-3/8	69	3	105	52	48-3/8	38	56-15/16	364T	3060
445	120-7/8	75	3	112-7/16	54-3/8	50-11/16	41	63-1/16	365T	3614
490	131-3/8	82	4	122-1/2	59-5/8	55-1/16	44	69-3/8	404T	4404
540	141-7/8	90	4	131-7/8	62-1/4	57-3/4	48	76-7/16	404T	5048

All dimensions in inches. Weights in pounds, less motor.





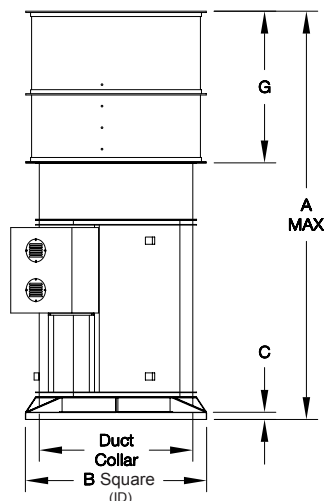
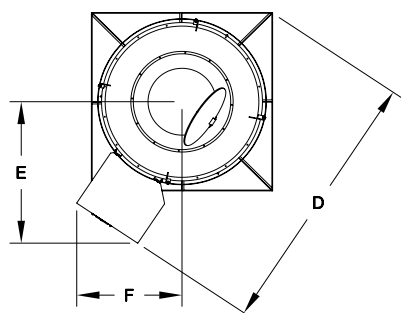
## Mixed-Flow Upblast Laboratory Exhaust Blower Low Pressure



Type QMXLE is furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



Type QMXLE is available with UL 762 and cUL 762 listing (Power Ventilator for Restaurant Exhaust Appliances/Y2HW).



**Description:** Fan shall be a belt driven, tubular mixed-flow upblast laboratory exhaust blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet collar for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Discharge nozzle shall be provided to efficiently increase discharge velocity to the specified requirement. Discharge nozzle shall have hinged discharge damper to prevent rain infiltration. The damper assembly shall be protected by a continuously welded steel windband of minimum 18 gauge steel with flanges for maximum strength and rigidity. A reinforced curb cap shall allow freestanding installation onto integral members of the roof structure without the use of guy wires. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Contoured single thickness blades shall incorporate 3-D curvature for maximum efficiency across the entire surface of the blade. Blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fan shall be model QMXLE as manufactured by Loren Cook Company of

### QMXLE Dimension Data

Size	A	B	C	D	E	F	G	Duct Collar	Max. Mtr. Frame	Ship. Wt.
90	120	28	3	42-7/8	23-7/8	18-5/8	15	12-13/16	184T	362
120	120	28	3	46-1/4	27	21-1/4	17	17-1/16	213T	456
135	120	28	3	47-1/2	28-5/8	21-11/16	18	19-1/4	213T	556
150	120	30	3	50-1/4	29-7/8	22-1/2	20	21-3/8	215T	641
165	120	32	3	52-1/8	31-3/8	23-5/8	21	23-1/2	254T	725
180	120	34	3	54-7/8	32-1/2	24-3/8	23	25-5/8	254T	794
202	120	38	3	59-5/8	34-1/8	25-7/16	25-1/2	28-3/4	256T	924
225	120	44	3	66-1/2	37-7/8	28-3/8	27-1/2	31-15/16	284T	1090
245	120	44	3	69-1/2	39-1/4	29-3/8	31-5/8	34-3/4	286T	1228
270	120	48	3	74-3/8	40-7/8	30-3/8	35	38-5/16	286T	1388
300	123-11/16	52	3	79-7/8	43-3/16	31-15/16	39-1/8	42-1/2	286T	1629
330	135-1/8	56	3	87-1/8	48	35-5/8	44	46-3/4	324T	1969
365	146-1/2	62	3	93-15/16	50-3/8	37-1/8	47-1/2	51-3/4	326T	2654
402	159-1/16	67	3	102-5/8	56	41-1/4	53-1/8	56-15/16	364T	3242
445	173-7/16	74	3	110-3/4	58-3/4	43	59-1/8	63-1/16	365T	3909
490	186	80	4	119-7/8	64-1/4	46-3/4	61-1/8	69-3/8	404T	4693

All dimensions in inches. Weights in pounds, less motor.

**Description:** Fan shall be a belt driven, tubular mixed-flow upblast laboratory exhaust blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized® steel with integral inlet collar for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Discharge nozzle shall be provided to efficiently increase discharge velocity to the specified requirement. Discharge nozzle shall have hinged discharge damper to prevent rain infiltration. The damper assembly shall be protected by a continuously welded steel windband of minimum 18 gauge steel with flanges for maximum strength and rigidity. A reinforced curb cap shall allow freestanding installation onto integral members of the roof structure without the use of guy wires. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Coating:** Steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Airfoil blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fan shall be model QMXLE-HP as manufactured by Loren Cook Company of

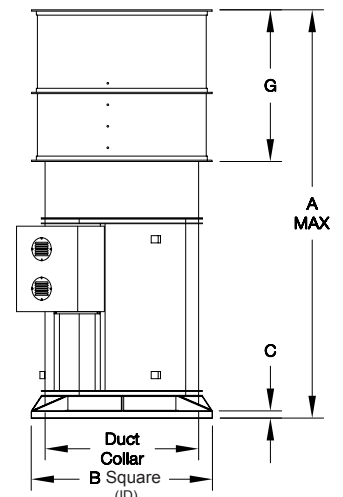
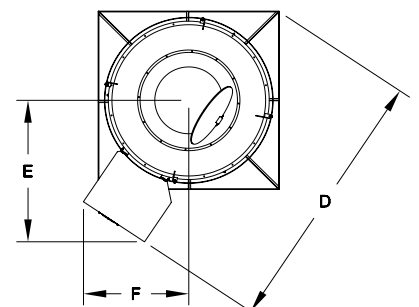
## Mixed-Flow Upblast Laboratory Exhaust Blower High Pressure



Type QMXLE-HP is furnished standard with UL 705 & cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



Type QMXLE-HP is available with UL 762 and cUL 762 listing (Power Ventilator for Restaurant Exhaust Appliances/Y2HW).



### QMXLE-HP Dimension Data

Size	A	B	C	D	E	F	G	Duct Collar	Max. Mtr. Frame	Ship. Wt.
90	120	28	3	42-7/8	23-7/8	18-5/8	15	12-13/16	184T	367
120	120	28	3	46-1/4	27	21-1/4	17	17-1/16	213T	459
135	120	28	3	47-1/2	28-5/8	21-11/16	18	19-1/4	213T	554
150	120	30	3	50-1/4	29-7/8	22-1/2	20	21-3/8	215T	652
165	120	32	3	52-1/8	31-3/8	23-5/8	21	23-1/2	254T	750
180	120	34	3	54-7/8	32-1/2	24-3/8	23	25-5/8	254T	814
202	120	38	3	59-5/8	34-1/8	25-7/16	25-1/2	28-3/4	256T	946
225	120	44	3	66-1/2	37-7/8	28-3/8	27-1/2	31-15/16	284T	1136
245	120	44	3	69-1/2	39-1/4	29-3/8	31-5/8	34-3/4	286T	1269
270	120	48	3	74-3/8	40-7/8	30-3/8	35	38-5/16	286T	1424
300	123-11/16	52	3	79-7/8	43-3/16	31-15/16	39-1/8	42-1/2	286T	1669
330	135-1/8	56	3	87-1/8	48	35-5/8	44	46-3/4	324T	2029
365	146-1/2	62	3	93-15/16	50-3/8	37-1/8	47-1/2	51-3/4	326T	2834
402	159-1/16	67	3	102-5/8	56	41-1/4	53-1/8	56-15/16	364T	3342
445	173-7/16	74	3	110-3/4	58-3/4	43	59-1/8	63-1/16	365T	4009
490	186	80	4	119-7/8	64-1/4	46-3/4	61-1/8	69-3/8	404T	4823

All dimensions in inches. Weights in pounds, less motor.

# Construction Information

## Material Gauges & Shaft Diameters

Unit Size	QMX/QMX-HP			
	Outer Housing		Shaft Dia.	Shaft Dia.
	Steel (ga.)	Alum. (in.)	QMX	QMX-HP
90	14	.125	1	1-3/16
120	•	•	1-3/16	1-3/16
135	12	.190	1-3/16	1-3/16
150	•	•	1-3/16	1-3/16
165	•	•	1-3/16	1-7/16
180	•	•	1-3/16	1-7/16
202	•	•	1-7/16	1-11/16
225	•	•	1-7/16	1-15/16
245	•	•	1-11/16	1-15/16
270	•	•	1-15/16	2-3/16
300	•	•	1-15/16	2-3/16
330	•	•	2-3/16	2-7/16
365	10	.25	2-7/16	2-15/16
402	•	•	2-15/16	3-7/16
445	•	•	2-15/16	3-7/16
490	•	•	3-7/16	3-15/16
540	•	•	3-7/16	3-15/16
600	•	•	3-7/16	-

## High Temperature Requirements

Temperature Range (°F)	Construction Requirements
-20° - 180°	Standard Construction
180° - 230°	Belt Tunnel Standard Bearings (Arr. 9) High Temp Bearings (Arr. 3)
231° - 300°	Arr. 9 Only Belt Tunnel High Temperature Paint High Temperature Bearings Motor Heat Shield RPM Limited to 96% of Max at 300° F Shaft Seal
301° - 500°	Arr. 9 Only Belt Tunnel High Temperature Paint High Temperature Bearings RPM Limited to 91% of Max for Each Class at 500° F Steel Wheel Construction Shaft Seal Shaft Cooler Ventilation Tube

## AMCA Spark Resistant Construction

Type	Description	Required Options
A	All parts of the Air Moving Device (AMD) in contact with the air or gas being handled shall be made of non-ferrous material.	All aluminum Construction Stainless Steel Shaft and Hardware Shaft Seal Enclosed Belt Tunnel Aluminum Dampers - QMXU Arrangement 9 Only
B	The AMD shall have an entirely non-ferrous wheel or impeller and non-ferrous ring about the opening through which the shaft passes.	Aluminum Wheel Rub Ring Shaft Seal Enclosed Belt Tunnel Arrangement 9 Only
C	The AMD shall be so constructed that a shift of the wheel or impeller or shaft will not permit two ferrous parts of the AMD to rub or strike.	Rub Ring Shaft Seal Enclosed Belt Tunnel Arrangement 9 Only

**NOTES:** (1) Bearings shall not be placed in the air or gas stream. (2) The user shall electrically ground all AMD parts.

## Wheel Weights And WK<sup>2</sup> For QMX Steel And Aluminum Wheels

Unit Size	Steel Wheel				Aluminum Wheel			
	QMX		QMX-HP		QMX		QMX-HP	
	Weight	WK <sup>2</sup>	Weight	WK <sup>2</sup>	Weight	WK <sup>2</sup>	Weight	WK <sup>2</sup>
90	10.7	0.8	11.2	0.8	4.0	0.3	4.2	0.3
120	17.4	2.4	19.2	2.7	6.6	0.9	7.1	1.0
135	22.5	4.1	23.9	4.4	8.2	1.5	8.9	1.6
150	30.9	7.2	32.7	7.6	11.3	2.7	11.9	2.8
165	37.1	10.5	42.6	11.3	13.6	3.9	15.5	4.2
180	46.7	16.4	50.0	20.2	16.1	5.5	18.2	5.9
202	73.5	32.3	75.3	33.3	25.4	11.0	26.6	11.7
225	89.8	49.3	99.1	51.1	31.0	16.8	35.0	18.6
245	110	74.4	117	71.9	36.2	23.6	41.3	25.2
270	148	121	146	117	50.4	40.3	51.1	40.5
300	156	162	156	155	53.7	55.0	54.6	53.6
330	228	305	239	296	82.2	112	83.9	105
365	288	456	304	444	104	167	107	158
402	358	673	361	655	129	246	127	232
445	536	1340	528	1280	189	472	182	437
490	645	1980	651	1880	226	693	224	642
540	777	2920	783	2770	272	1020	269	948
600	1130	5450	-	-	397	1910	-	-

## QMX Speed Limits (RPM)

Unit Size	QMX	QMX-HP
90	4943	5987
120	3707	4490
135	3295	3991
150	2907	3510
165	2633	3191
180	2423	2925
202	2152	2600
225	1937	2340
245	1780	2149
270	1623	1866
300	1465	1679
330	1332	1527
365	1207	1381
402	1081	1252
445	988	1132
490	897	1028
540	813	933
600	732	-

For proper motor selection you must give consideration to starting torque requirements along with operating BHP. The above chart lists the WK<sup>2</sup> factor for different wheel sizes. In some cases it may be necessary to provide a larger horsepower motor, even though it may not be indicated by operating BHP, in order to bring the fan to speed. The following formula can be applied to determine the required motor starting torque:

$$WK_M^2 = WK_F^2 \left( \frac{FRPM}{MRPM} \right)^2 (1.1)$$

WHERE: WK<sub>M</sub><sup>2</sup> - the moment of inertia required at the motor shaft, LB-Ft<sup>2</sup>.

WK<sub>F</sub><sup>2</sup> - the moment of inertia of the fan. LB-Ft<sup>2</sup>.

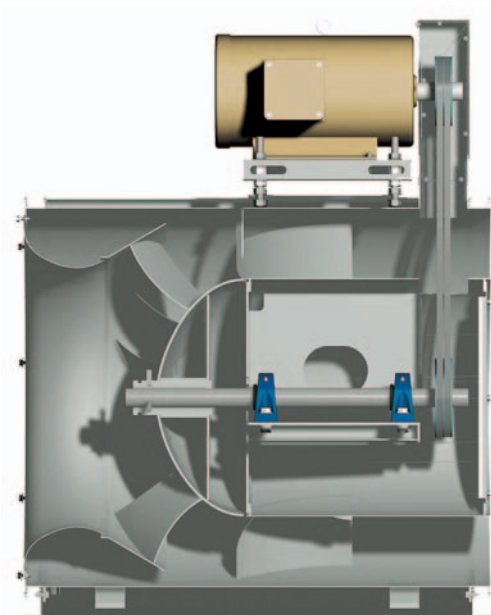
FRPM - fan RPM

MRPM - motor RPM

Motor starting torque can vary greatly among motor manufacturers, the available WK<sub>M</sub><sup>2</sup> at the motor should be obtained from the motor manufacturer.

Both the QMX and QMX-HP are available in Arrangement 9 and Arrangement 3 designs as shown below.

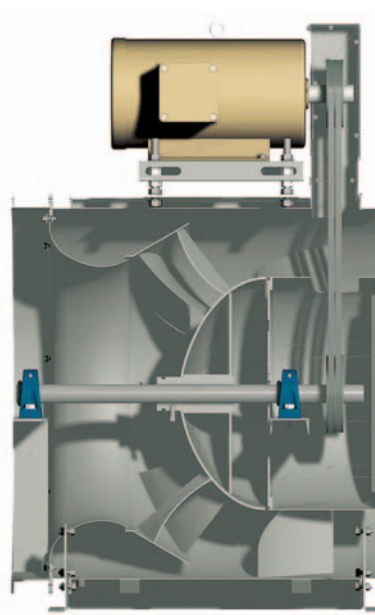
## Arrangement 9



### Arrangement 9 Advantages:

- Bearings are protected from the airstream.
- Contaminated and/or high temperature air can be more easily managed.

## Arrangement 3

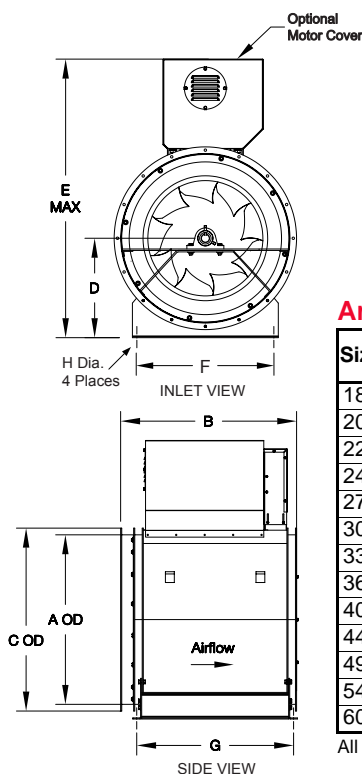


### Arrangement 3 Advantages:

- Significant inline length savings where space is limited.
- Smaller size reduces unit weight.
- Access door is standard.

## Arrangement 3 Length Savings

Size	180	202	225	245	270	300	330	365	402	445	490	540	600
Arrangement 9	35	37-1/2	41	44-1/2	47	54	58-1/2	64	68-1/2	74	80-1/2	87	95-1/2
Arrangement 3	29-1/4	31-13/16	33-13/16	35-13/16	38	37-13/16	40-1/8	44	47-15/16	52-9/16	57-15/16	64-3/8	70-15/16
Savings	5-3/4	5-11/16	7-3/16	8-11/16	9	16-3/16	18-3/8	20	20-9/16	21-7/16	22-9/16	22-5/8	24-9/16



## Arrangement 3 Dimension Data

Size	A	B	C	D	E	F	G	H	Shaft Dia.	Max. Mtr. Frame	Ship Weight	
											QMX	QMX-HP
180	25-5/8	29-1/4	28-5/8	15-1/2	46-1/4	22-13/16	24-3/8	9/16	1-3/16	254T	369	391
202	28-3/4	31-13/16	31-3/4	17-1/4	49-15/16	24-1/4	26-7/16	9/16	1-7/16	256T	455	478
225	31-15/16	33-13/16	34-15/16	19	55-13/16	26-15/16	28-1/2	9/16	1-7/16	284T	552	599
245	34-3/4	35-13/16	37-3/4	20-1/2	59	28-15/16	30-5/16	11/16	1-11/16	286T	661	704
270	38-5/16	38	41-5/16	22-7/16	62-7/8	31	32-1/2	11/16	1-15/16	286T	772	810
300	42-1/2	37-13/16	45-1/2	24-3/4	68-1/16	33-3/4	32-3/8	11/16	1-15/16	286T	884	921
330	46-3/4	40-1/8	49-3/4	27	74-13/16	36-3/4	34-5/8	11/16	2-3/16	324T	1078	1130
365	51-3/4	44	54-3/4	29-13/16	80-1/4	40-1/2	39-1/4	13/16	2-7/16	326T	1402	1564
402	56-15/16	47-15/16	59-15/16	32-11/16	88-5/16	44	43-3/16	13/16	2-15/16	364T	1740	1811
445	63-1/16	52-9/16	66-1/16	36	94-7/8	48-1/4	47-13/16	13/16	2-15/16	365T	2177	2243
490	69-3/8	57-15/16	72-3/8	39-7/16	103-3/8	52-3/4	52-11/16	13/16	3-7/16	404T	2695	2796
540	76-7/16	64-3/8	79-7/16	43-5/16	110-15/16	58	58-1/8	13/16	3-7/16	404T	3183	3291
600	84-7/8	70-15/16	87-7/8	50	122-1/16	64	64-11/16	13/16	3-7/16	404T	3964	-

All dimensions in inches. Weights in pounds, less motor, in a horizontal configuration.

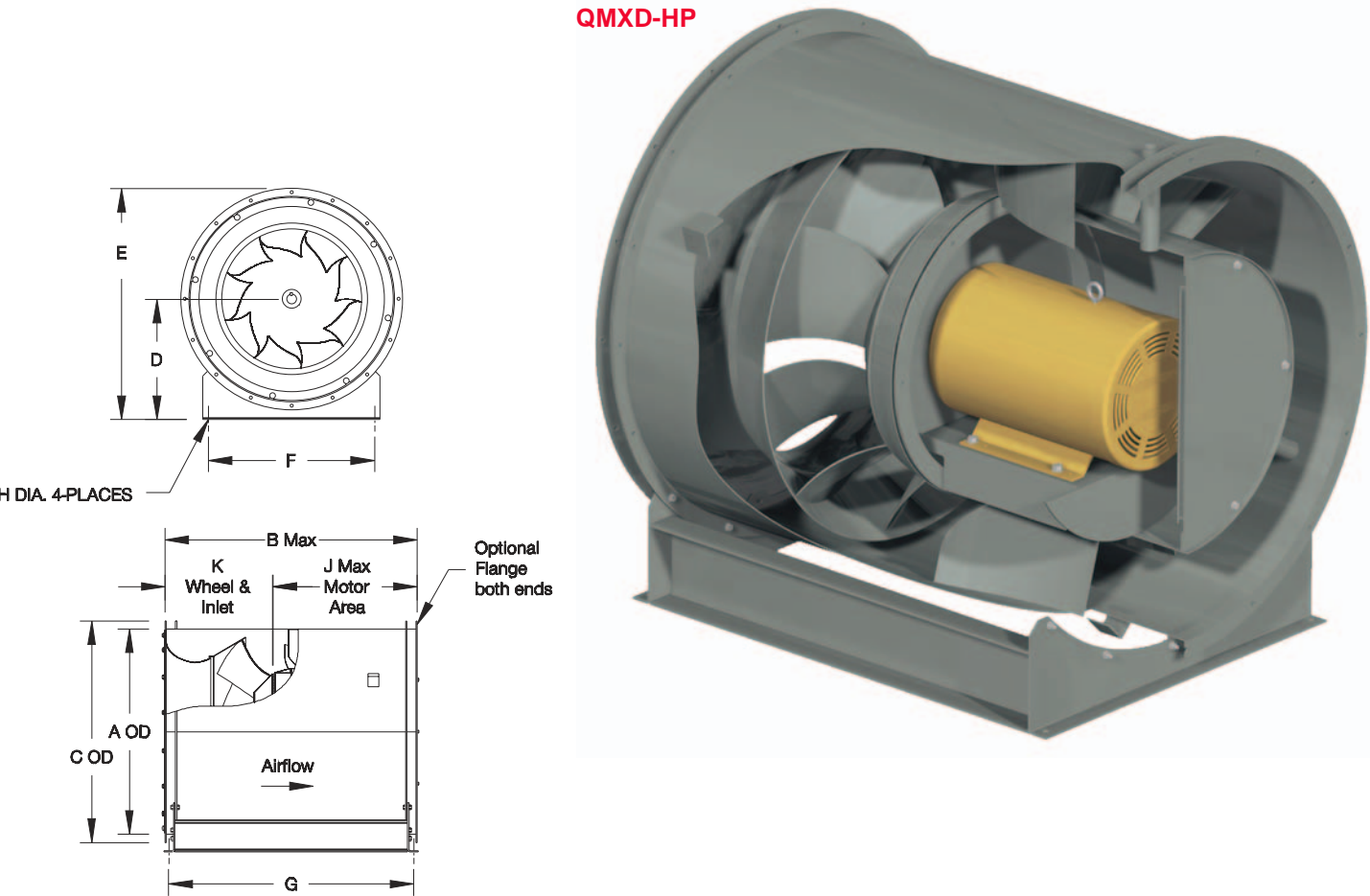


# Direct Drive QMXD-HP

QMXD-HP is the direct drive version of the QMX-HP. Performance ranges from 600 to 92,000 CFM with static pressures to 9" w.g. The QMXD-HP is available in 17 sizes from 90 to 540 and wheel widths from 60% to 100%. The charts on the following page represent the recommended selections for each available motor speed.

## Advantages

- Reduced unit length compared to Arrangement 9.
- Less maintenance due to elimination of belts, pulleys and bearings.

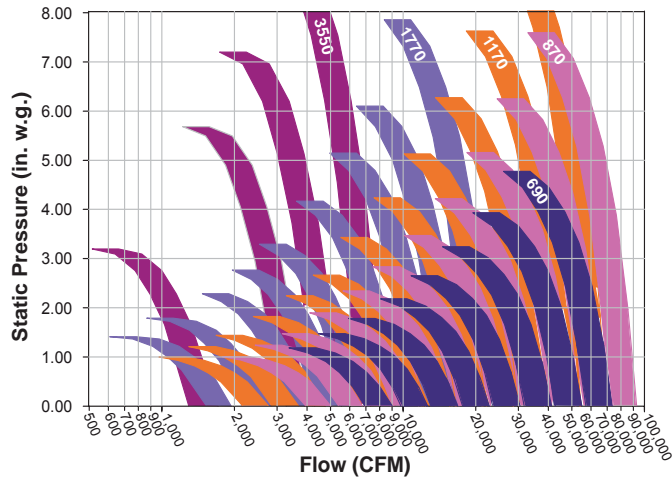


QMXD-HP Dimension Data

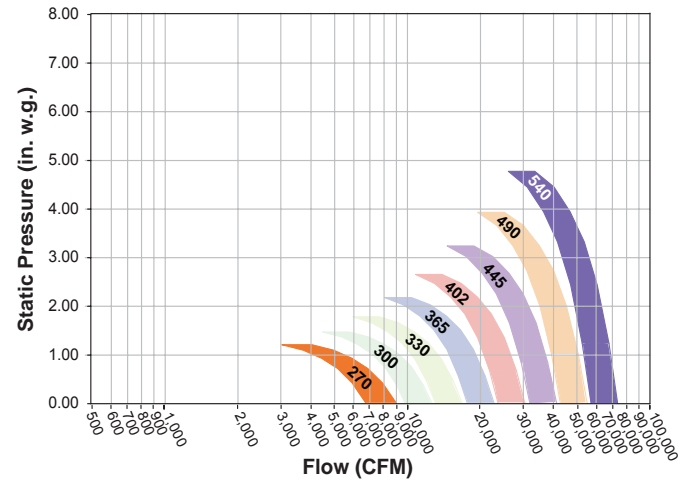
Size	A	B Max.	C	D	E	F	G	H	J Max.	K
90	12-13/16	19-3/16	15-15/16	8-1/2	16-1/2	12-3/8	17-11/16	1/2	11-3/4	7-7/16
120	17-1/16	25-13/16	20-1/16	10-1/2	20-9/16	15-1/2	24-5/16	1/2	16	9-13/16
135	19-1/4	23-3/4	22-1/4	12	23-1/8	17-1/2	22-1/4	1/2	12-5/8	11-1/8
150	21-3/8	25	24-3/8	13-3/16	25-3/8	18-3/4	23-5/8	1/2	12-5/8	12-3/8
165	23-1/2	29-3/4	26-1/2	14-5/16	27-9/16	20-13/16	28-3/8	1/2	16-1/8	13-5/8
180	25-5/8	31-3/8	28-5/8	15-1/2	29-13/16	22-13/16	30	9/16	16-5/8	14-3/4
202	28-3/4	34-1/8	31-3/4	17-1/4	33-1/8	24-1/4	32-3/4	9/16	17-7/16	16-11/16
225	31-15/16	39-1/16	34-15/16	19	36-1/2	26-15/16	37-11/16	9/16	20-1/2	18-9/16
245	34-3/4	44-3/4	37-3/4	20-1/2	39-3/8	28-15/16	43-3/8	11/16	24-5/8	20-1/8
270	38-5/16	42-3/4	41-5/16	22-7/16	43-1/8	31	41-3/8	11/16	20-1/2	22-1/4
300	42-1/2	46-5/16	45-1/2	24-3/4	47-1/2	33-3/4	44-15/16	11/16	24-5/8	21-11/16
330	46-3/4	50-7/16	49-3/4	27	51-7/8	36-3/4	49-1/16	11/16	26-3/4	23-11/16
365	51-3/4	55-3/16	54-3/4	29-13/16	57-3/16	40-1/2	54-9/16	13/16	28-7/8	26-5/16
402	56-15/16	57-7/8	59-15/16	32-11/16	62-11/16	44	57-1/4	13/16	28-7/8	29
445	63-1/16	64-7/8	66-1/16	36	69-1/5	48-1/4	64-1/4	13/16	32-7/8	32
490	69-3/8	73-3/8	72-3/8	39-7/16	75-5/8	52-3/4	72-3/8	13/16	38-1/8	35-1/4
540	76-7/16	76-15/16	79-7/16	43-5/16	83-1/16	58	76-5/16	13/16	38-1/8	38-13/16
600	84-7/8	89-5/8	87-7/8	50	93-15/16	64	89	13/16	46-1/2	43-1/8

All dimensions in inches. Weights in pounds, less motor.

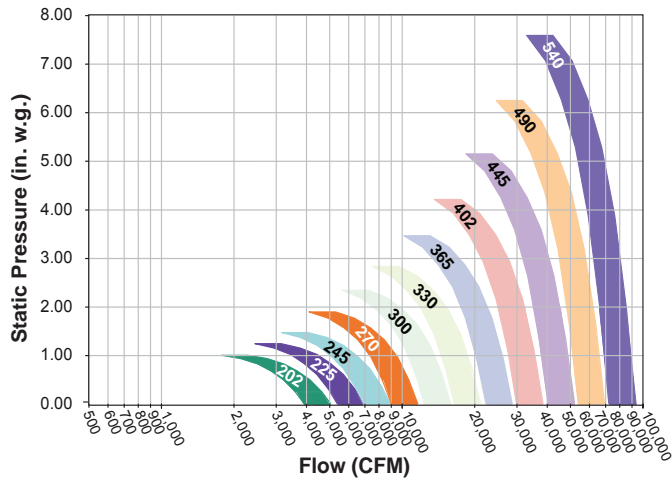
QMXD-HP Direct Drive Performance Ranges



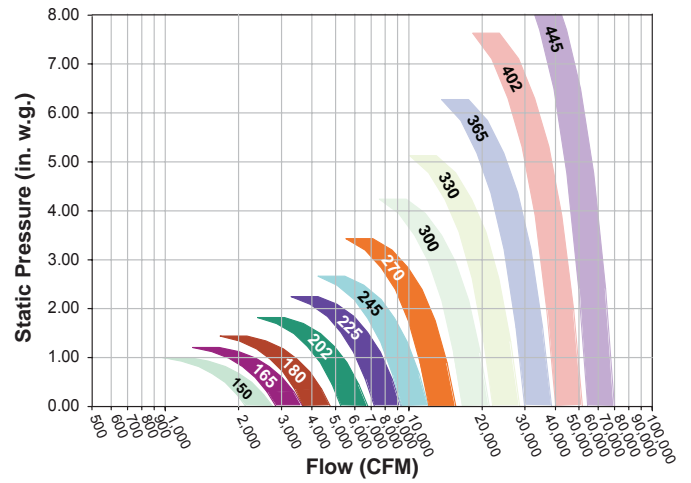
690 RPM



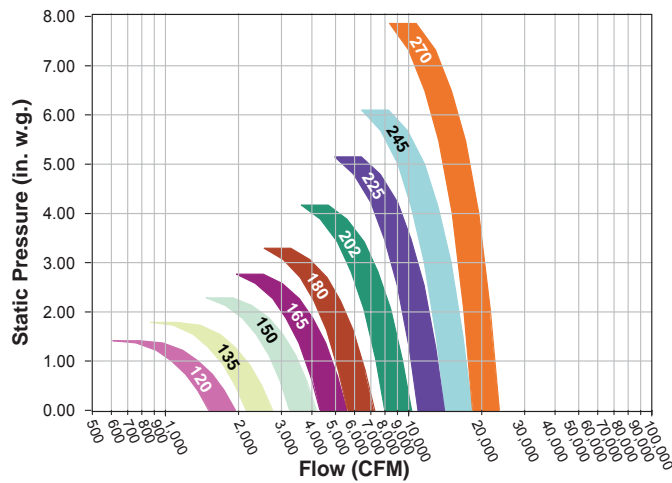
870 RPM



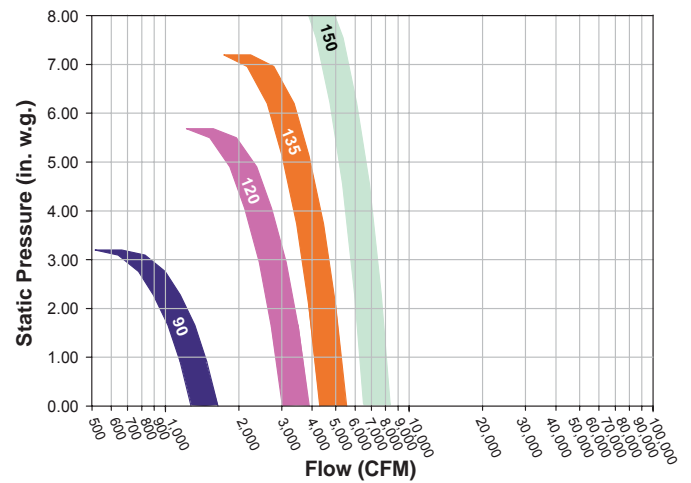
1170 RPM



1770 RPM



3550 RPM

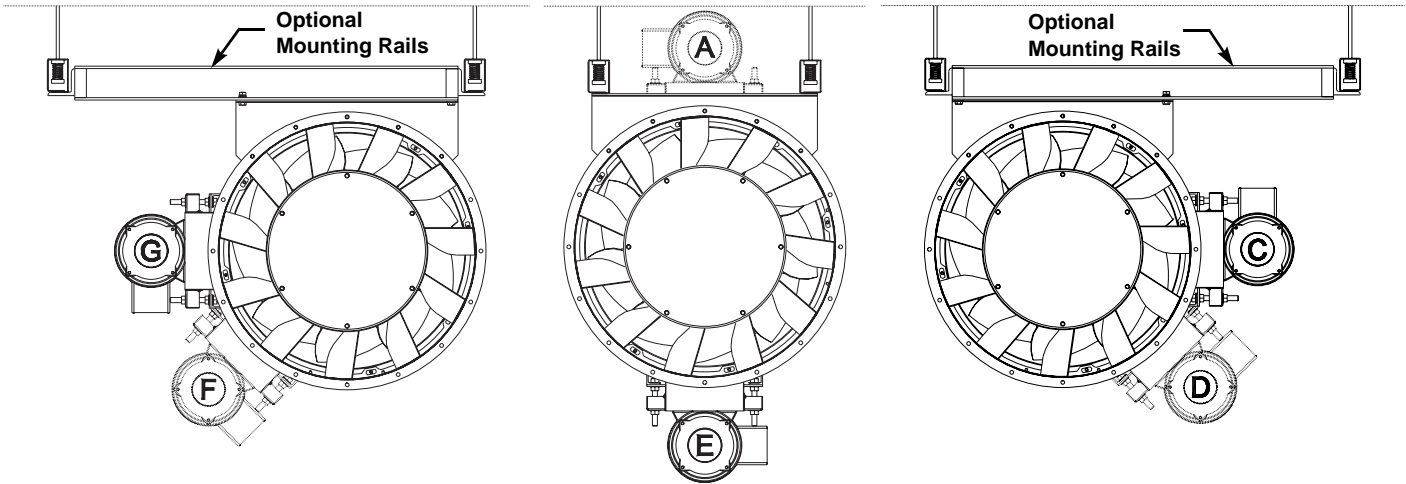


# Installation/Mounting

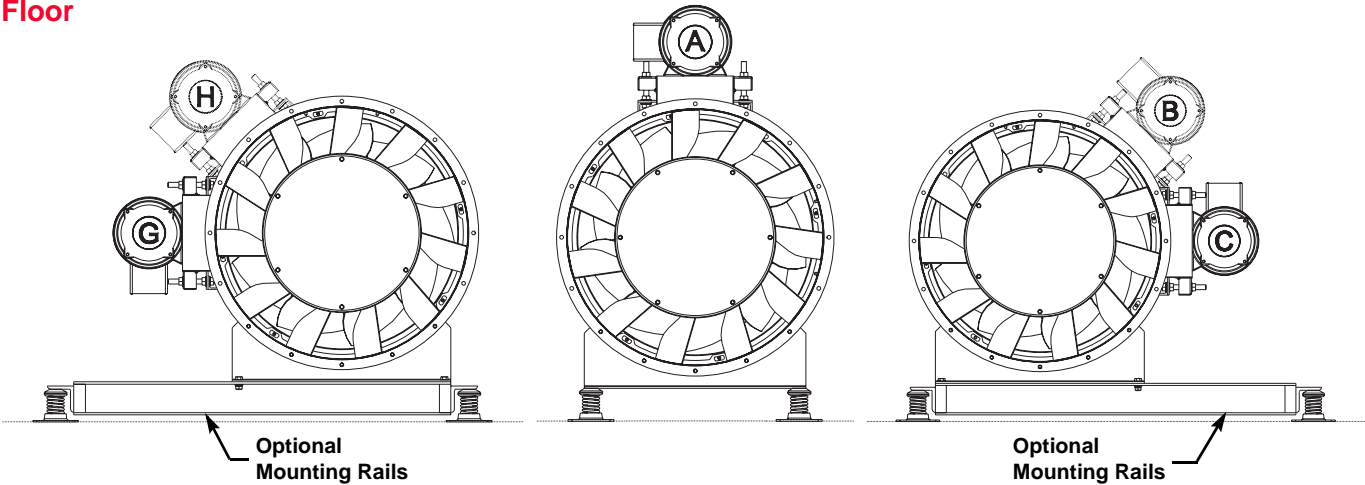
## Horizontal Mounting

Horizontal mounting configurations are provided with a standard support for both ceiling and floor applications. The mounting configurations and the motor position can be changed in the field. Lifting lugs are provided to assist in the installation. Mounting rails are recommended for horizontal configurations with motor positions B, C, D, F, G, and H with vibration isolation. Motor position is determined by viewing fan outlet.

### Ceiling



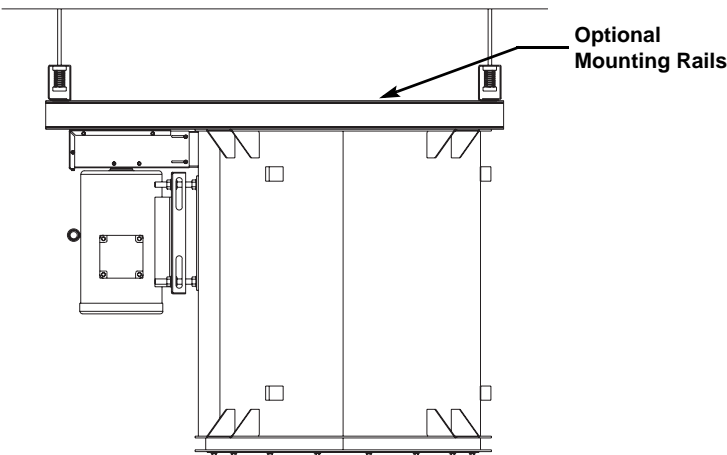
### Floor



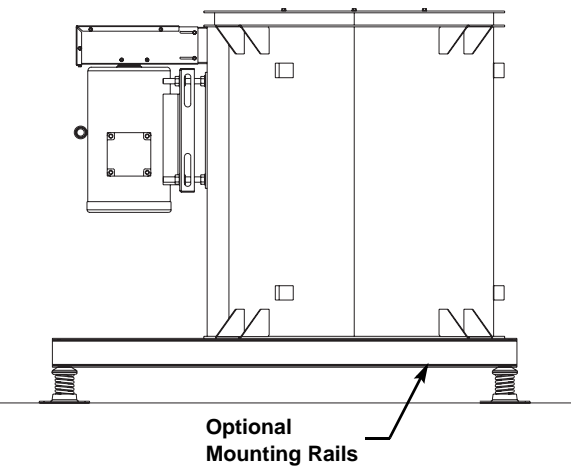
## Vertical Mounting

Vertical mounting configurations are provided with four heavy duty mounting brackets welded to each end. The brackets allow a unit to be installed in either ceiling or floor configuration in both upblast and downblast applications. Mounting rails are suggested for any vertical installation with vibration isolation. Figures below reflect an upblast configuration.

### Ceiling



### Floor



## UL 762 Listed for Restaurant Exhaust Appliances

Cook products, with UL 762 listing are designed to eject contaminated or grease-laden air. The products are UL listed to operate continuously at elevated temperatures, and continue operation during grease flare-up.

### Products UL Listed to Operate up to 300°F

QMX, QMX-HP, QMXU, QMXU-HP, QMXLE, QMXLE-HP

### Products UL Listed to Operate up to 500°F

QMX, QMX-HP

Available in Arrangement 9 only.

See page 29 for listing of required accessories.

All of the units are intended for installation in accordance with the Standard of the National Fire Protection Association for the installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment, NFPA 96.

## UL Power Ventilator for Smoke Control

The UL listing “Power Ventilator for Smoke Control Systems” is a test procedure and category which was initiated by Loren Cook Company and developed in a joint effort with UL in 1990. Several different sources were used in the definition of the test procedure. These sources include UL Standards 705, 762, 793, Southern Building Code Congress International (SBCCI) Standard Fire Prevention Code/1988, and Industrial Risk Insurers (IRI) Document E2. The requirements for the UL listing “Power Ventilator for Smoke Control Systems” are summarized as follows:

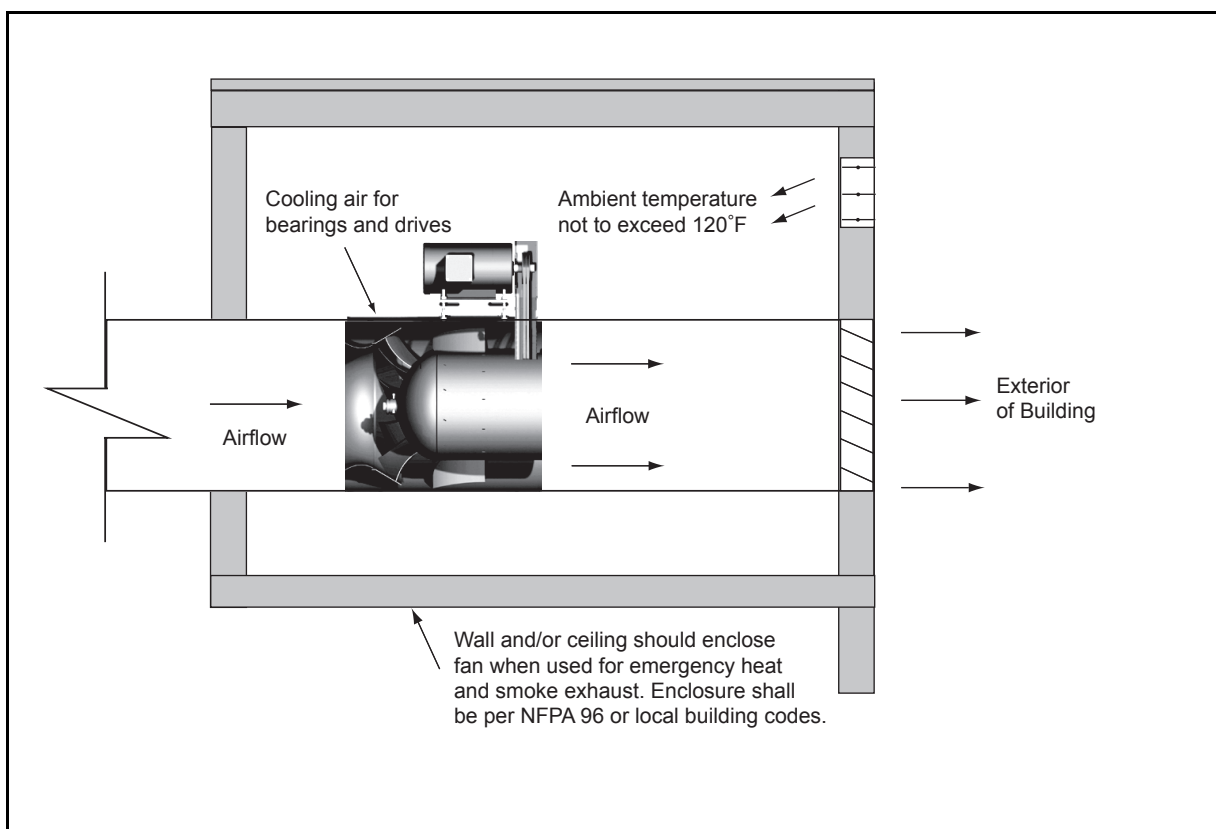
- The unit must withstand 500°F airstream temperature for a minimum of four hours (IRI) and withstand 1000°F for a minimum of 15 minutes (SBCCI).
- The unit must be listed under UL 705.

### Products UL Listed for Smoke Control

QMX, QMX-HP

Available in Arrangement 9 only.

See page 29 for listing of required accessories.





# Application Information

The QMXLE is an upblast version of the QMX that has been specifically designed for laboratory fume hood exhaust applications. The QMXLE features a stack extension and discharge nozzle that can be sized to specific outlet velocity and height requirements. The QMXLE is mounted on a reinforced curb cap that has been designed to support the fan without the use of guy wires when secured to integral members of roof structure.

## Selection Procedure

The performance of the QMXLE is based on QMX data that has been corrected to account for the additional loss of the required discharge nozzle.

To select the QMXLE:

1. Locate the desired discharge velocity in the top row of the adjacent table.
2. The value shown just below the velocity is the nozzle pressure loss.
3. Add the nozzle pressure loss to the fan external static pressure and select the fan as usual using the QMX or QMX-HP performance tables.

To determine the nozzle size:

1. Locate the desired discharge velocity in the top row of the adjacent table.
2. Move down this column until you locate the largest value that is less than or equal to your desired CFM.
3. The required nozzle size is indicated in the first column of this row.

## Nozzle Size Limits

Unit Size	Nozzle Size		Unit Size	Nozzle Size	
	Min	Max		Min	Max
90	5	6	245	13	22
120	6	10	270	13	24
135	7	11	300	15	28
150	8	13	330	16	30
165	9	15	365	18	34
180	10	16	402	20	38
202	11	18	445	22	44
225	12	21	490	24	48

## Nozzle Sizing Information

Nozzle Size	Nozzle Area	Discharge Velocity / Nozzle Pressure Loss / CFM						
		2000	2500	3000	3500	4000	4500	5000
		0.25	0.39	0.56	0.76	1.00	1.26	1.56
5	0.130	259	324	389	454	520	580	650
6	0.188	377	471	565	659	750	850	940
7	0.258	516	644	773	902	1030	1160	1290
8	0.338	676	846	1010	1180	1350	1520	1690
9	0.430	859	1070	1290	1500	1720	1930	2150
10	0.532	1060	1330	1600	1860	2130	2390	2660
11	0.645	1290	1610	1940	2260	2580	2900	3230
12	0.769	1540	1920	2310	2690	3080	3460	3850
13	0.904	1810	2260	2710	3160	3620	4070	4520
14	1.05	2100	2630	3150	3680	4200	4730	5250
15	1.21	2410	3020	3620	4220	4830	5430	6030
16	1.37	2750	3440	4120	4810	5500	6190	6870
17	1.55	3110	3880	4660	5440	6210	6990	7770
18	1.74	3490	4360	5230	6100	6970	7840	8710
19	1.94	3890	4860	5830	6800	7770	8740	9720
20	2.15	4310	5390	6460	7540	8620	9700	10800
21	2.38	4750	5940	7130	8320	9510	10700	11900
22	2.61	5220	6520	7830	9130	10400	11700	13000
23	2.85	5710	7130	8560	9990	11400	12800	14300
24	3.11	6220	7770	9330	10900	12400	14000	15500
26	3.65	7300	9130	11000	12800	14600	16400	18300
28	4.24	8480	10600	12700	14800	17000	19100	21200
30	4.87	9740	12200	14600	17000	19500	21900	24300
32	5.54	11100	13900	16600	19400	22200	24900	27700
34	6.26	12500	15600	18800	21900	25000	28200	31300
36	7.02	14000	17500	21100	24600	28100	31600	35100
38	7.82	15600	19600	23500	27400	31300	35200	39100
40	8.67	17300	21700	26000	30400	34700	39000	43400
42	9.56	19100	23900	28700	33500	38300	43000	47800
44	10.5	21000	26200	31500	36700	42000	47200	52500
46	11.5	23000	28700	34400	40200	45900	51700	57400
48	12.5	25000	31300	37500	43800	50000	56300	62500

## Plume Height Calculations

Effective plume height(h) is calculated using the following formula:\*

$$h=d(V/U)/352$$

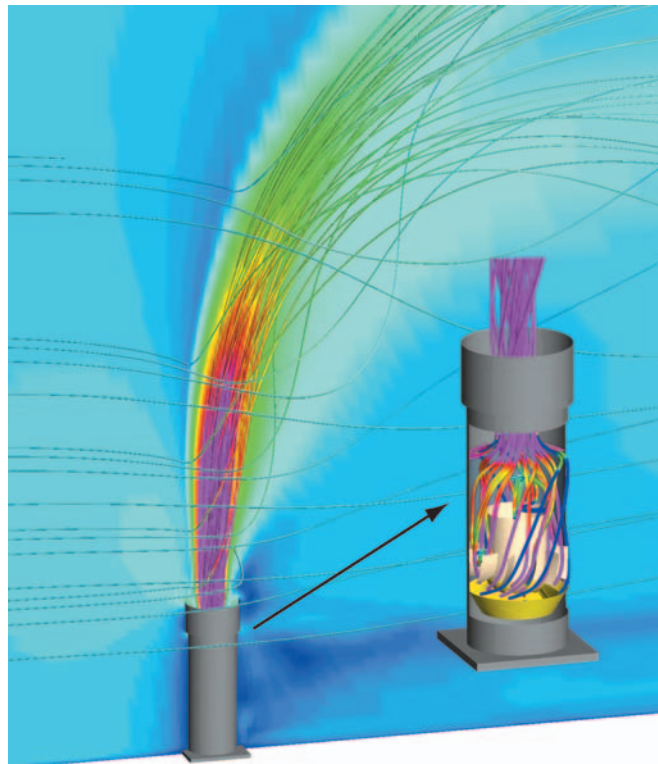
where:

- h** Plume rise of uncapped vertical exhaust jet (feet)
- d** Effective exhaust stack diameter (inches)
- V** Nozzle velocity (feet/min)
- U** Wind speed (mph)

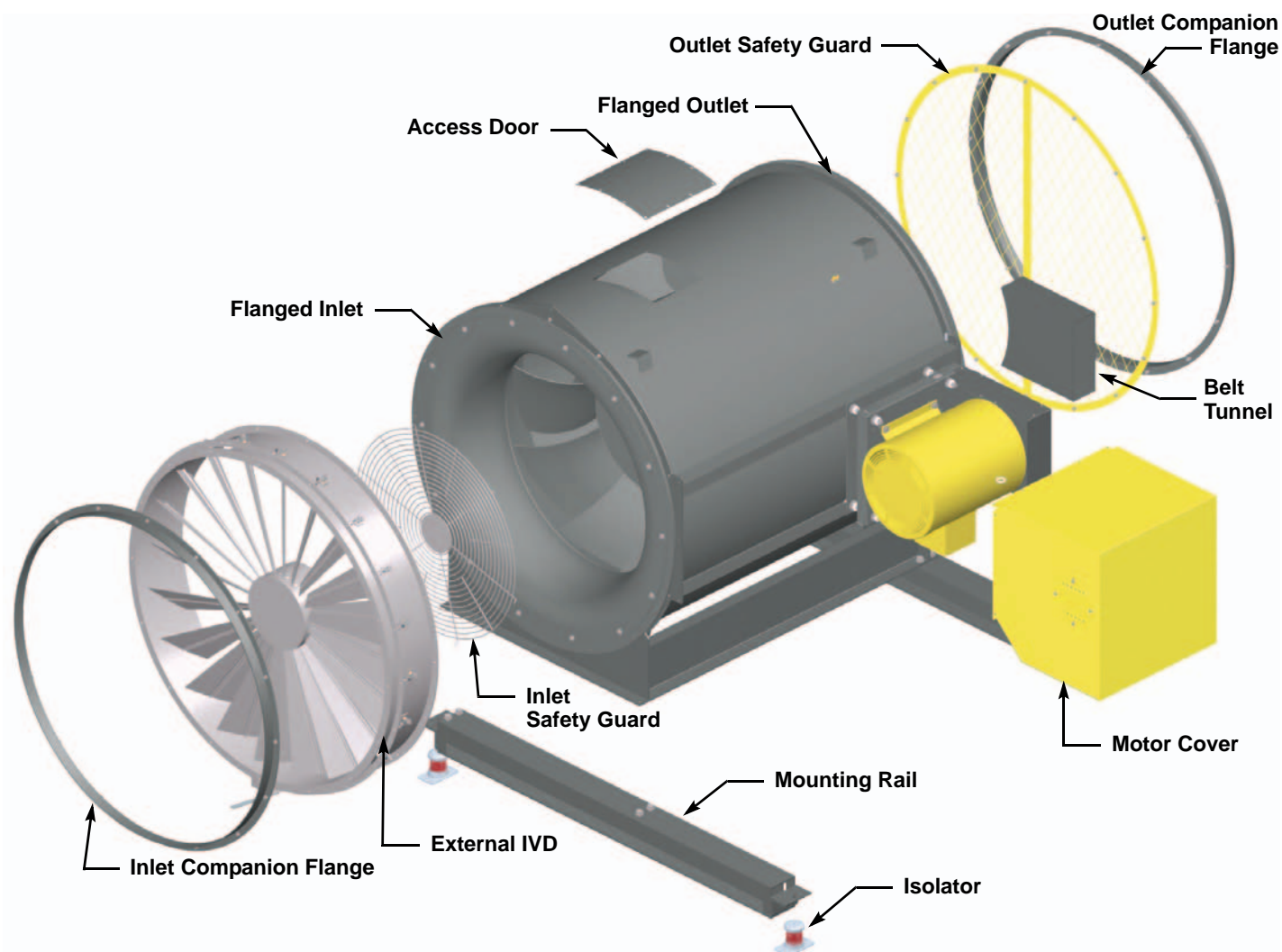
\*From 1999 ASHRAE Applications Handbook, Chapter 43, Equation 7.

## NOTE:

Many factors are involved in the proper design of a rooftop exhaust system. The calculation above only determines the additional rise of the plume as a result of the vertical momentum of the exhaust. Additional information on exhaust stack application and design can be found in the following ASHRAE handbooks: Fundamentals; HVAC Applications; and Systems and Equipment.



CFD flowfield for a typical lab exhaust application with a 5 mph wind.



## Access Door

An access door is available in a bolted or hinged configuration. The access door provides access to the wheel for cleaning and inspection. The access door is normally located 90° from the motor unless otherwise specified and is standard on QMXU, QMXU-HP, QMXLE, QMXLE-HP, QMXE, QMXS, QMXE-HP, QMXS-HP and on all Arrangement 3 units.

## Motor Cover

The motor cover encloses the motor and shields the motor from dirt, dust, moisture and other contaminants. The motor cover is factory installed. Available in optional safety yellow. Standard on QMXU, QMXU-HP, QMXLE, QMXLE-HP, QMXE, QMXS, QMXE-HP and QMXS-HP.

## Belt Tunnel

The belt tunnel encloses the belts and isolates the belts and drives from the airstream. Cataloged performance is based on fans without belt tunnel. The belt tunnel is standard on QMXE, QMXE-HP, QMXS, QMXS-HP, QMXU, QMXU-HP, QMXLE and QMXLE-HP.

## Drain

A drain coupling can be attached to the bottom of housing. The coupling is continuously welded to the housing and is threaded for a 3/4" pipe connection. The motor position must be defined in order to ensure proper placement. A drain is standard on QMXU, QMXU-HP, QMXLE and QMXLE-HP.

## Mounting Rails

Mounting rails are available for applications where the motor center of gravity is offset with respect to the fan center of gravity. The mounting recommendations are shown on page 20.

## Inlet/Outlet Safety Guards

Inlet/Outlet safety guards are available to protect personnel and prevent debris from entering the fan. Safety guards are constructed of either expanded metal or wound spiral rings and are factory installed. Available in optional safety yellow. Cataloged performance is based on fans without safety guards.

## Extended Life Bearings

Extended life bearings are available that provide L10 life in excess of 200,000 hours. Ratings are calculated per AFBMA Standards and based on maximum operating conditions.

## Shaft Seal

The shaft seal reduces air leakage around fan shaft in high pressure applications. It is constructed of aluminum and nitrile rubber. Requires belt tunnel.

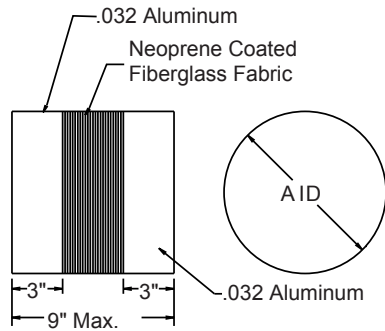
## Rub Ring

The rub ring lines the hole through which the shaft passes to prevent the shaft and wheel from contacting the inner drum of the QMX. The rub ring is constructed of aluminum.

# Accessories

## Flexible Duct Connector\*

The flexible duct connector provides a flexible connection between the fan and the attached ductwork. This flexible connection reduces the transmission of noise and vibration to the ductwork as well as allowing for slight misalignment and easy removal of the fan without disturbing the rigid ductwork. The connector is constructed of reinforced neoprene fabric and aluminum bands.



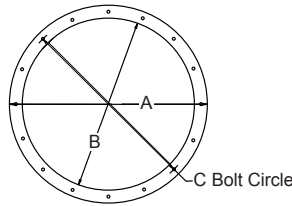
\*Not to be used for UL762 or smoke control units or temperatures in excess of 250°F.

Size	A
90	12-7/8
120	17-1/16
135	19-1/4
150	21-3/8
165	23-1/2
180	25-5/8
202	28-3/4
225	31-15/16
245	34-3/4
270	38-5/16
300	42-1/2
330	46-3/4
365	51-3/4
402	56-15/16
445	63-1/16
490	69-3/8
540	76-7/16
600	84-7/8

All dimensions in inches.

## Flanged Inlet/Outlet

Flanged inlet/outlet connections are available for applications requiring flanged duct connections.

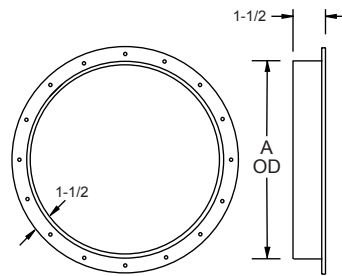


Size	A	B	C
90	15-7/8	12-7/8	14-3/8
120	20-1/16	17-1/16	18-9/16
135	22-1/4	19-1/4	20-3/4
150	24-3/8	21-3/8	22-7/8
165	26-1/2	23-1/2	25
180	28-5/8	25-5/8	27-1/8
202	31-3/4	28-3/4	30-1/4
225	34-15/16	31-15/16	33-7/16
245	37-3/4	34-3/4	36-1/4
270	41-5/16	38-5/16	39-13/16
300	45-1/2	42-1/2	44
330	49-3/4	46-3/4	48-1/4
365	54-3/4	51-3/4	53-1/4
402	59-15/16	56-15/16	58-7/16
445	66-1/16	63-1/16	64-9/16
490	72-3/8	69-3/8	70-7/8
540	79-7/16	76-7/16	77-15/16
600	87-7/8	84-7/8	86-3/8

All dimensions in inches.

## Inlet/Outlet Companion Flange

Inlet/outlet companion flanges are available for use in conjunction with the optional flanged inlet/outlet. The companion flanges are attached to the adjacent ductwork to provide an exact mate to the flanged connection on the fan.

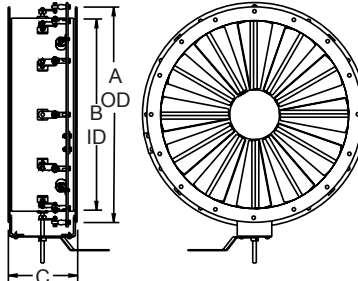


Size	A
90	13-1/4
120	17-1/2
135	19-5/8
150	21-3/4
165	23-7/8
180	26
202	27-1/8
225	32-5/16
245	35-1/8
270	38-11/16
300	42-7/8
330	47-1/8
365	52-1/8
402	57-5/16
445	63-3/8
490	69-3/4
540	76-13/16
600	85-5/16

All dimensions in inches.

## External IVD

An external inlet vane damper, IVD, is used to provide precise air volume control while maintaining maximum efficiency and stable operation at reduced load conditions. The IVD may be used with a maximum airstream temperature of 200° F. An external IVD is factory mounted and provided with an adjustment lever for manual or actuated control. The external IVD also requires the flanged inlet option.



Size	A	B	C
90	15-7/8	12-7/8	10
120	20-1/16	17-1/16	
135	22-1/4	19-1/4	
150	24-3/8	21-3/8	
165	26-1/2	23-1/2	
180	28-5/8	25-5/8	
202	31-3/4	28-3/4	
225	34-15/16	31-15/16	
245	37-3/4	34-3/4	
270	41-5/16	38-5/16	
300	45-1/2	42-1/2	12
330	49-3/4	46-3/4	
365	54-3/4	51-3/4	
402	59-15/16	56-15/16	
445	66-1/16	63-1/16	
490	72-3/8	69-3/8	
540	79-7/16	76-7/16	
600	87-7/8	84-7/8	

All dimensions in inches.

## Disconnect Switches

**NEMA 1** - Indoor general purpose.

**NEMA 1 (Lockable)** - Indoor general purpose with locking capability.

**NEMA 3R** - Exterior mount, rain-tight.

**NEMA 4** - Watertight and dust-tight.

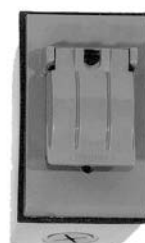
**NEMA 7 and NEMA 9** - Lockable, indoor, explosion proof.



**NEMA 1**



**NEMA 1  
(Lockable)**



**NEMA 3R**



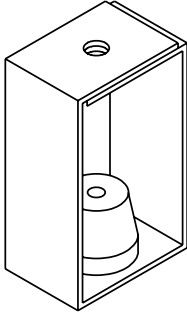
**NEMA 4**



**NEMA 7  
NEMA 9**

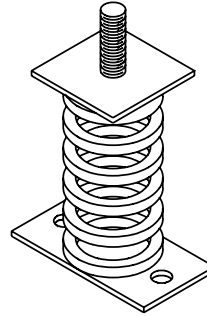
## Isolators

### Rubber-in-Shear- Ceiling Mounted



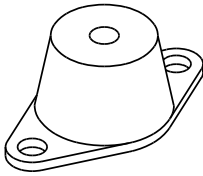
Unit	Rated Load
RC-75	75
RC-125	125
RC-175	175
RC-300	300
RC-450	450
RC-700	700
RC-1100	1100
RC-2000	2000

### Free Standing Spring - Floor Mounted



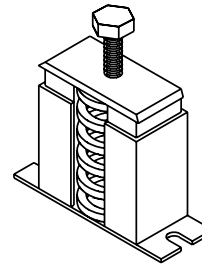
Unit	Rated Load	Spring Rate (lbs./in.)
SF-70	70	51
SF-120	120	98
SF-220	220	196
SF-370	370	366
SF-625	625	419
SF-1250	1250	1096
SF-1700	1700	1700

### Rubber-in-Shear - Floor Mounted



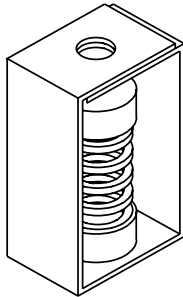
Unit	Rated Load
RF-55	55
RF-120	120
RF-220	220
RF-375	375
RF-600	600
RF-1100	1100
RF-2250	2250

### Housed Spring - Floor Mounted



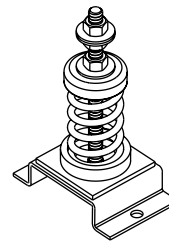
Unit	Rated Load	Spring Rate (lbs./in.)
HF-120	120	98
HF-220	220	196
HF-320	320	302
HF-370	370	366
HF-500	500	500
HF-700	700	700
HF-800	800	588
HF-1000	1000	826
HF-1250	1250	1098
HF-1700	1700	1700

### Spring - Ceiling Mounted



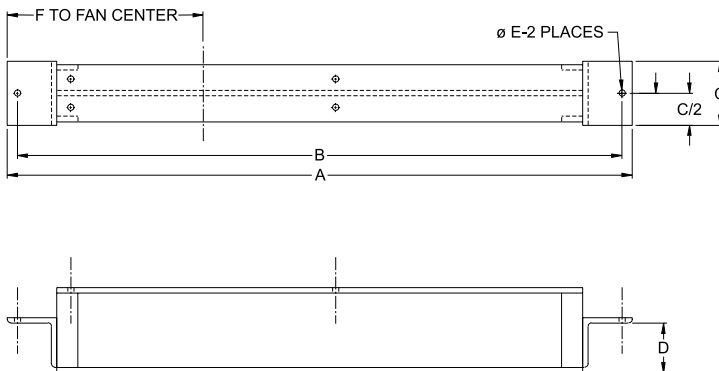
Unit	Rated Load	Spring Rate (lbs./in.)
SC-35	35	23
SC-70	70	51
SC-125	125	100
SC-245	245	206
SC-370	370	370
SC-500	500	500
SC-1000	1000	870
SC-1700	1700	1700

### Restrained Spring - Floor Mounted



Unit	Rated Load	Spring Rate (lbs./in.)
RS-70	70	51
RS-120	120	98
RS-220	220	196
RS-370	370	366
RS-625	625	419
RS-1250	1250	1096
RS-1700	1700	1700

## Mounting Rails



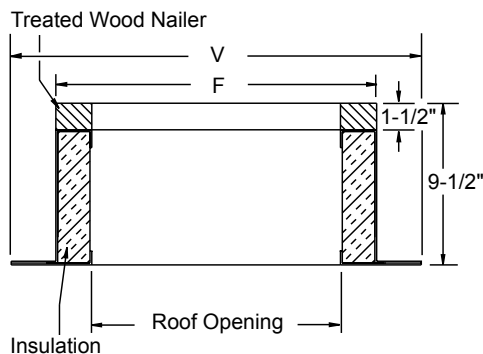
Unit Size	A	B	C	D	E	F
90	32-1/4	30-13/16	5-1/2	3-1/4	7/16	9-15/16
120	38-1/4	36-13/16	5-1/2	3-1/8	7/16	11-1/2
135	40-1/4	38-13/16	5-1/2	3-1/8	7/16	12-1/2
150	44-1/4	42-13/16	4-1/2	3-1/8	7/16	12-7/8
165	45-13/16	44-7/16	4-1/2	3-1/8	7/16	13-15/16
180	48-3/16	46-3/4	4-1/2	3-1/8	7/16	14-15/16
202	50-13/16	49-3/8	4-1/2	3-1/8	7/16	15-5/8
225	56-1/4	54-7/8	4-1/2	3-1/8	7/16	17
245	62	59-5/8	5-1/2	3-7/8	7/16	19-1/2
270	64-15/16	62-5/8	5-1/2	3-7/8	7/16	20-1/2
300	69-3/16	66-7/8	5-1/2	3-7/8	7/16	21-7/8
330	75-3/16	72-7/8	5-1/2	3-7/8	7/16	23-3/8
365	79-11/16	77-3/8	6-1/2	4	11/16	25-1/4
402	86-5/8	84-5/16	6-1/2	4	11/16	27
445	92	89-11/16	6-1/2	4	11/16	29-1/8
490	99-5/16	97	6-1/2	4	11/16	31-3/8
540	105-5/8	103-5/16	6-1/2	4-1/8	11/16	34
600	113	110-11/16	6-1/2	4-1/8	11/16	37



# Accessories

## Roof Curb - QMXU/QMXE/QMXS

Not to be used with QMXLE or QMXLE-HP



### Standard Construction Features

- Minimum 16 gauge galvanized steel.
- 1-1/2", 3 lbs. density thermal and accoustical insulation.
- Continuously welded corners.
- Wood nailer.

### Options

- No wood nailer (deduct 1-1/2" for actual height).
- 13-1/2" tall construction.

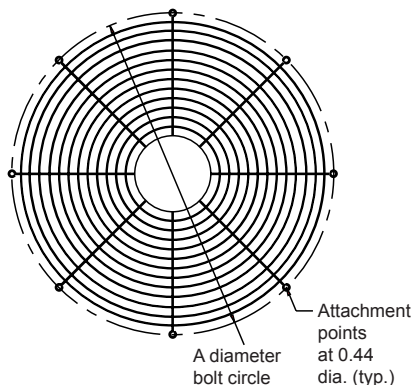
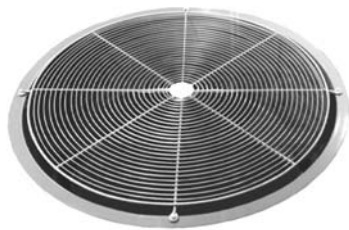
### Galvanized Steel Roof Curb Dimension Data

Unit	Catalog Number	F Sq.	V Sq.	Roof Opening
90	RCG-18	18-1/2	22-1/2	15-1/2
120	RCG-22	22-1/2	26-1/2	19-1/2
135	RCG-24	24-1/2	28-1/2	21-1/2
150	RCG-28	28-1/2	32-1/2	25-1/2
165	RCG-33	33-1/2	37-1/2	30-1/2
180	RCG-35	35-1/2	39-1/2	32-1/2
202	RCG-38	38-1/2	42-1/2	35-1/2
225	RCG-41	41-1/2	45-1/2	38-1/2
245	RCGH-44	44-1/2	48-1/2	41-1/2
270	RCGH-48	48-1/2	52-1/2	45-1/2
300	RCGH-52	52-1/2	56-1/2	49-1/2
330	RCGH-56	56-1/2	60-1/2	53-1/2
365	RCGH-62	62-1/2	66-1/2	59-1/2
402	RCGH-67	67-1/2	71-1/2	64-1/2
445	RCGH-73	73-1/2	77-1/2	70-1/2
490	RCGH-80	80-1/2	84-1/2	77-1/2
540	RCGH-88	88-1/2	92-1/2	85-1/2
600	RCGH-96	96-1/2	100-1/2	93-1/2

All dimensions in inches. When motor operated damper is used, a wood nailer is required.

## Discharge Guard - QMXU/QMXU-HP

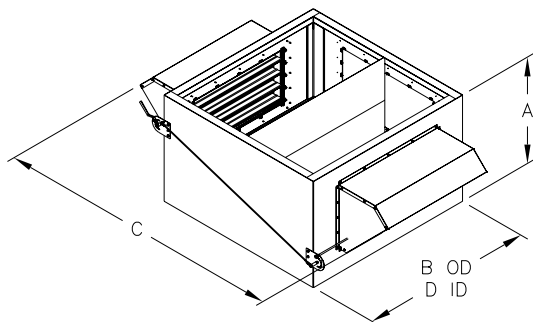
Discharge guards are available to protect personnel and prevent debris from entering the fan discharge. The guards are constructed using wound wire and are zinc coated as a standard.



Unit Size	A	Eyes and Supports
90	19-7/8	4
120	24-1/4	4
135	26-1/4	4
150	28-1/16	4
165	30-3/16	6
180	32-1/2	6
202	36-7/16	6
225	39-5/8	6
245	41-15/16	6
270	45-1/2	6
300	49-11/16	8
330	54-7/16	8
365	60-1/2	8
402	65-5/8	8
445	71-3/4	12
490	78-1/16	12
540	85-1/8	12
600	93-9/16	12

## Mixing Box - QMXLE/QMXLE-HP

A mixing box is available for use with the QMXLE and QMXLE-HP. The mixing box includes dampers to control the amount of fresh air to be mixed with the discharged air from the fan. The mixing box should be installed upon integral members of the roof structure.



**QMXLE / QMXLE-HP**

Unit Size	A		B	C	D	Unit Height with Mixing Box	
	QMXLE	QMXLE-HP				QMXLE	QMXLE-HP
90	24-1/4	24-1/4	27-3/4	50	27-3/4	120	120
120	24-1/4	24-1/4	27-3/4	50	27-3/4	120	120
135	25-3/4	24-1/4	27-11/16	53	27-11/16	120	120
150	26-3/4	24-3/4	29-11/16	57	29-11/16	120	120
165	27-1/2	25	31-11/16	60-1/2	31-11/16	120	120
180	28	25-1/2	33-11/16	63-1/2	33-11/16	120	120
202	32	29-1/4	37-11/16	66-11/16	37-11/16	120	120
225	33	30	41-11/16	74-1/8	41-11/16	120	120
245	34-1/4	31	43-11/16	78-5/8	43-11/16	131-3/8	128-1/8
270	34-3/4	30-3/4	47-11/16	76-1/2	47-11/16	143-3/8	134-3/8
300	36-1/4	31-3/4	51-11/16	83-1/2	51-11/16	151-1/2	147
330	37-1/2	32-3/4	55-11/16	90	55-11/16	169-7/8	165-1/8
365	39	33-3/4	61-5/8	99	61-5/8	182-3/4	177-1/2
402	44-1/4	37-1/2	66-5/8	110-1/2	66-5/8	200-1/2	193-3/4
445	48-3/4	41	73-5/8	127	73-5/8	219-5/8	211-7/8
490	54	44-1/2	79-5/8	143-1/2	79-5/8	236-1/2	227

## Standard Coatings

**Lorenized®** is an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Coating must exceed 1,000 hour salt spray under ASTM B117 test method.

## Optional Coatings

**Cook Epoxy Powder** is an electrostatically applied, baked epoxy powder coating. Final coating thickness is 2.5 – 3.5 mils. For outdoor applications an optional UV resistant topcoat is available to prevent cosmetic chalking of the coating.

**Cook High Temp Easy Clean Powder** is an electrostatically applied, baked modified epoxy silicone powder producing a high temperature (500°F Max) "non-stick" coating. Final coating thickness is 1.3 - 1.7 mils.

**Cook Phenolic Epoxy Powder** is an electrostatically applied, baked phenolic epoxy powder coating. Final coating thickness is 2 – 4 mils. For outdoor applications an optional UV resistant topcoat is required to prevent deterioration of the coating.

**Air Dry Phenolic (Heresite VR-504)** is a conventional spray applied phenolic resin coating. Final coating thickness is 4 – 6 mils. For outdoor applications an optional UV resistant topcoat (Heresite UC-5500) is required to prevent deterioration of the coating.

Refer to the corrosion resistance guide in the Compute-A-Fan software for a listing of the coatings above and their resistance to a variety of chemicals. Additional special coatings are available.

## Accessories for Optional UL Listings

### UL 762 Requires:

- Drain
- Access Door
- Flanged Inlet and Outlet
- Belt Tunnel
- Motor Heat Shield

### Power Ventilator for Smoke Control Systems Requires: (4 hours at 500° F -or- 30 minutes at 1,000° F)

- Only available on QMX and QMX-HP
- Belt Tunnel
- Motor Heat Shield
- Steel Wheel Construction

Additional accessories may be required based on operating temperature (see page 18).

## Alternate Construction Materials

Aluminum and stainless steel constructions are available. Contact factory for additional information.

# 90 QMX/QMX-HP Data

Effective Wheel Diameter = 9"

Maximum HP:

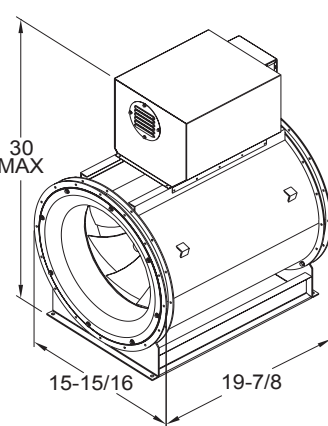
$$QMX = .021 (RPM/1000)^3$$

$$QMX-HP = .017 (RPM/1000)^3$$

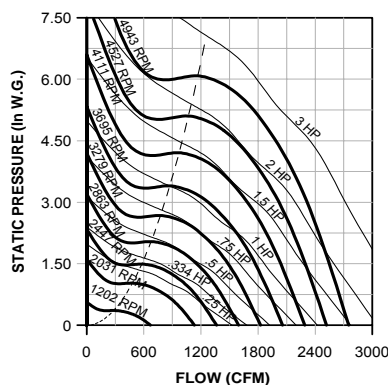
Inlet Area = 0.722 sq. ft.

Outlet Area = 0.878 sq. ft.

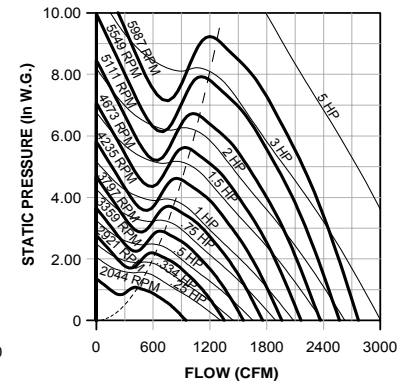
Outlet Velocity = CFM/0.878 fpm



90 QMX



90 QMX-HP



90 QMX

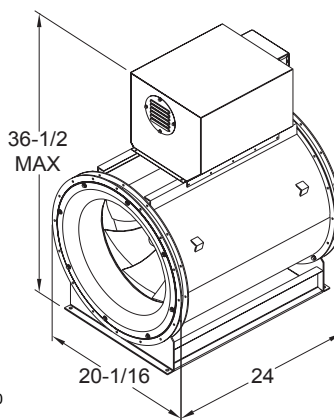
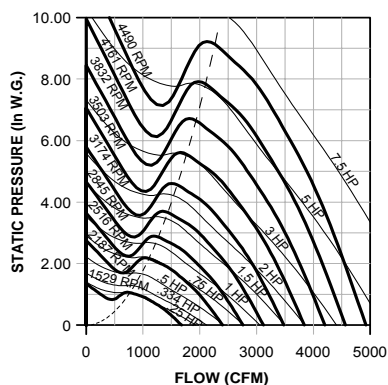
CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
500	693	1202	.04	1492	.07	1761	.11	2008	.16										
600	831	1330	.04	1582	.08	1818	.13	2043	.18	2457	.30								
700	970	1474	.06	1691	.10	1904	.15	2105	.20	2487	.32	2838	.46						
800	1109	1628	.08	1816	.11	2006	.17	2190	.22	2538	.34	2868	.48						
900	1247	1788	.10	1953	.14	2123	.19	2291	.25	2611	.38	2916	.52	3486	.86				
1000	1386	1951	.12	2100	.17	2251	.22	2404	.28	2702	.42	2984	.56	3521	.90	4016	1.30		
1100	1525	2119	.15	2253	.20	2389	.25	2527	.31	2804	.46	3068	.62	3571	.95	4045	1.35	4487	1.81
1200	1663	2288	.18	2411	.24	2535	.29	2660	.35	2915	.50	3165	.67	3636	1.01	4086	1.41	4512	1.87
1300	1802	2458	.22	2572	.28	2687	.34	2802	.40	3035	.55	3270	.73	3716	1.09	4141	1.48	4550	1.94
1400	1940	2630	.26	2737	.33	2843	.40	2948	.46	3164	.60	3383	.78	3807	1.18	4209	1.57	4598	2.02
1500	2079	2804	.31	2904	.39	3002	.46	3101	.53	3300	.67	3504	.85	3907	1.26	4290	1.68	4659	2.12
1600	2218	2976	.37	3070	.45	3163	.53	3256	.60	3443	.75	3632	.92	4013	1.35	4380	1.79	4733	2.24
1700	2356	3149	.43	3241	.52	3328	.60	3415	.68	3589	.84	3766	1.00	4126	1.43	4478	1.91	4816	2.38
1800	2495	3327	.50	3411	.59	3494	.68	3576	.77	3740	.93	3907	1.10	4245	1.52	4583	2.02	4908	2.52
1900	2634	3504	.58	3580	.67	3661	.77	3740	.86	3894	1.04	4052	1.21	4371	1.62	4692	2.13		
2000	2772	3681	.67	3755	.76	3828	.86	3903	.96	4052	1.15	4200	1.33	4501	1.73	4808	2.24		
2100	2911	3856	.76	3928	.86	4000	.97	4070	1.07	4212	1.27	4352	1.47	4637	1.87	4929	2.36		
2200	3050	4031	.87	4101	.97	4170	1.08	4238	1.19	4372	1.40	4506	1.61	4778	2.02				
2300	3188	4205	.97	4272	1.08	4338	1.20	4404	1.31	4536	1.54	4664	1.76	4922	2.18				
2400	3327	4379	1.09	4447	1.21	4512	1.33	4576	1.45	4700	1.69	4823	1.92						
2500	3465	4558	1.23	4625	1.36	4686	1.48	4746	1.60	4864	1.84								

90 QMX-HP

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
500	693	2044	.14																
600	831	2137	.17	2493	.26	2804	.37												
700	970	2264	.20	2581	.29	2885	.40												
800	1109	2407	.23	2696	.34	2972	.45	3485	.70										
900	1247	2556	.27	2833	.39	3083	.50	3569	.76	4005	1.07								
1000	1386	2715	.32	2977	.44	3216	.57	3660	.84	4088	1.14	4472	1.49						
1100	1525	2884	.37	3127	.50	3358	.64	3773	.92	4174	1.23	4556	1.57	4903	1.96				
1200	1663	3061	.43	3284	.56	3504	.71	3905	1.02	4274	1.34	4640	1.68	4987	2.06	5305	2.48	5608	2.95
1300	1802	3244	.49	3451	.64	3657	.79	4045	1.12	4395	1.46	4733	1.81	5070	2.19	5389	2.60	5686	3.05
1400	1940	3432	.57	3625	.72	3817	.88	4189	1.23	4528	1.59	4846	1.96	5162	2.35	5473	2.76	5770	3.20
1500	2079	3624	.66	3804	.81	3983	.98	4337	1.34	4669	1.72	4974	2.11	5269	2.52	5563	2.93	5853	3.37
1600	2218	3818	.75	3988	.92	4156	1.09	4491	1.47	4813	1.87	5111	2.28	5392	2.70	5668	3.13	5944	3.58
1700	2356	4014	.86	4176	1.03	4334	1.21	4650	1.60	4960	2.02	5253	2.45	5526	2.89	5788	3.34		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

## 120 QMX-HP



**Effective Wheel Diameter = 12"**  
**Maximum HP:**  
**QMX = .089 (RPM/1000)<sup>3</sup>**  
**QMX-HP = .073 (RPM/1000)<sup>3</sup>**  
**Inlet Area = 1.283 sq. ft.**  
**Outlet Area = 1.562 sq. ft.**  
**Outlet Velocity = CFM/1.562 fpm**

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
875	684	895	.06	1115	.12	1318	.20	1505	.29										
1050	821	988	.08	1180	.15	1359	.22	1529	.31	1842	.53								
1225	957	1094	.10	1259	.17	1420	.26	1573	.35	1862	.56	2128	.81						
1400	1094	1206	.13	1350	.20	1495	.29	1634	.39	1898	.60	2148	.86						
1575	1231	1324	.16	1450	.24	1580	.33	1708	.44	1950	.66	2182	.91	2612	1.52				
1750	1368	1444	.21	1557	.29	1673	.38	1790	.49	2016	.74	2230	.98	2637	1.59	3011	2.31		
1925	1505	1567	.25	1670	.35	1774	.44	1880	.55	2090	.81	2290	1.08	2671	1.67	3030	2.39	3364	3.20
2100	1642	1692	.31	1785	.41	1881	.51	1977	.61	2171	.88	2360	1.18	2717	1.78	3059	2.49	3380	3.31
2275	1779	1817	.38	1904	.49	1991	.59	2080	.70	2259	.96	2437	1.28	2775	1.91	3097	2.61	3407	3.43
2450	1915	1944	.45	2025	.57	2106	.69	2187	.80	2352	1.05	2519	1.37	2840	2.06	3146	2.76	3441	3.56
2625	2052	2072	.54	2148	.66	2223	.79	2298	.91	2451	1.16	2607	1.48	2913	2.21	3203	2.94	3484	3.73
2800	2189	2200	.63	2271	.77	2341	.90	2412	1.03	2555	1.30	2700	1.60	2990	2.36	3268	3.13	3536	3.93
2975	2326	2327	.73	2396	.88	2463	1.03	2528	1.17	2663	1.45	2798	1.74	3073	2.50	3340	3.34	3596	4.16
3150	2463	2458	.86	2522	1.01	2584	1.16	2648	1.32	2773	1.61	2901	1.91	3159	2.65	3416	3.54	3662	4.41
3325	2600	2589	.99	2647	1.15	2708	1.31	2768	1.48	2886	1.79	3006	2.09	3251	2.82	3496	3.73		
3500	2736	2719	1.14	2775	1.30	2831	1.47	2889	1.65	3002	1.98	3115	2.30	3346	3.02	3579	3.92		
3675	2873	2849	1.30	2903	1.48	2957	1.65	3011	1.83	3118	2.19	3226	2.53	3445	3.24	3667	4.13		
3850	3010	2978	1.47	3031	1.66	3083	1.85	3135	2.04	3237	2.41	3340	2.77	3548	3.49				
4025	3147	3107	1.66	3158	1.85	3208	2.05	3257	2.25	3356	2.64	3455	3.02	3653	3.77				
4200	3284	3235	1.86	3285	2.06	3335	2.27	3383	2.48	3478	2.90	3571	3.29						
4375	3421	3366	2.08	3416	2.31	3464	2.52	3510	2.74	3598	3.16	3690	3.59						

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
875	684	1529	.25																
1050	821	1596	.29	1865	.45														
1225	957	1687	.35	1928	.51	2157	.70												
1400	1094	1791	.41	2010	.59	2221	.78	2607	1.24										
1575	1231	1901	.47	2110	.67	2300	.88	2668	1.34	2996	1.89								
1750	1368	2017	.55	2216	.77	2396	.99	2734	1.47	3057	2.00	3345	2.63						
1925	1505	2141	.64	2325	.87	2500	1.11	2815	1.62	3119	2.16	3407	2.77	3668	3.47				
2100	1642	2271	.74	2441	.98	2608	1.24	2910	1.78	3191	2.35	3468	2.95	3729	3.63	3969	4.39		
2275	1779	2405	.85	2563	1.11	2719	1.38	3012	1.95	3277	2.55	3536	3.18	3790	3.84	4030	4.58	4253	5.39
2450	1915	2544	.98	2689	1.25	2835	1.53	3118	2.14	3374	2.77	3616	3.43	3856	4.11	4091	4.83	4315	5.62
2625	2052	2685	1.13	2821	1.40	2958	1.70	3227	2.34	3477	3.01	3708	3.69	3932	4.40	4156	5.14	4376	5.92
2800	2189	2828	1.29	2957	1.58	3084	1.89	3339	2.55	3583	3.25	3808	3.97	4021	4.71	4231	5.48	4441	6.26
2975	2326	2972	1.47	3095	1.77	3215	2.09	3455	2.78	3691	3.51	3912	4.27	4118	5.04	4317	5.83		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.



# 135 QMX/QMX-HP Data

Effective Wheel Diameter = 13.5"

Maximum HP:

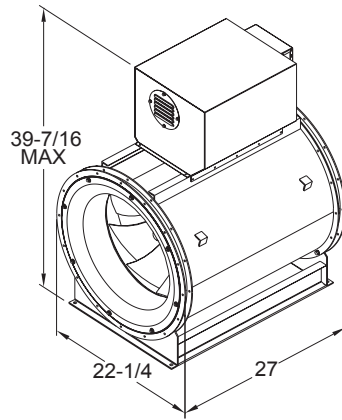
$$\text{QMX} = 0.16 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 0.13 (\text{RPM}/1000)^3$$

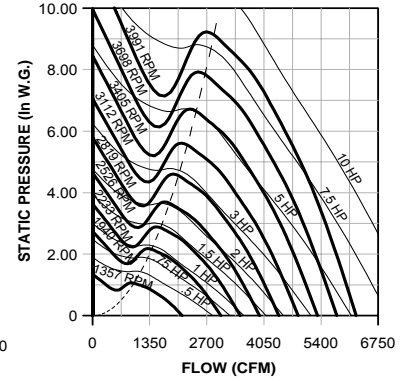
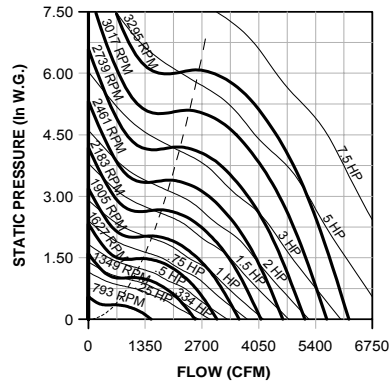
Inlet Area = 1.624 sq. ft.

Outlet Area = 1.976 sq. ft.

Outlet Velocity = CFM/1.976 fpm



## 135 QMX



## 135 QMX

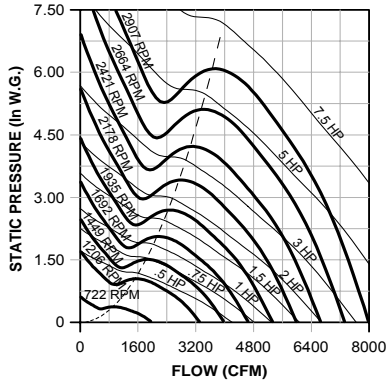
CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1100	677	793	.08	989	.15	1171	.25	1337	.36										
1325	816	877	.10	1047	.19	1207	.28	1359	.39										
1550	955	972	.13	1119	.22	1262	.33	1397	.44	1655	.71	1891	1.03						
1775	1093	1074	.16	1201	.25	1330	.37	1453	.50	1687	.76	1909	1.08						
2000	1232	1180	.21	1292	.30	1406	.42	1520	.56	1735	.84	1940	1.15	2322	1.92				
2225	1370	1289	.26	1389	.37	1491	.48	1594	.62	1794	.93	1984	1.25	2344	2.01	2676	2.92		
2450	1509	1400	.33	1491	.44	1582	.56	1676	.69	1861	1.03	2039	1.37	2376	2.12	2694	3.03	2990	4.06
2675	1648	1513	.40	1596	.53	1679	.65	1764	.78	1935	1.12	2102	1.50	2418	2.26	2721	3.16	3006	4.20
2900	1786	1626	.48	1703	.63	1780	.76	1857	.90	2015	1.23	2172	1.63	2471	2.43	2756	3.32	3030	4.35
3125	1925	1740	.58	1812	.73	1883	.88	1955	1.03	2100	1.35	2247	1.75	2531	2.63	2801	3.52	3061	4.53
3350	2064	1856	.69	1923	.86	1990	1.02	2056	1.17	2190	1.49	2327	1.89	2597	2.82	2853	3.75	3101	4.75
3575	2202	1971	.81	2034	.99	2097	1.16	2159	1.33	2285	1.67	2412	2.05	2668	3.01	2913	4.00	3149	5.01
3800	2341	2086	.95	2148	1.14	2207	1.33	2265	1.51	2382	1.86	2501	2.23	2743	3.20	2978	4.26	3204	5.31
4025	2479	2205	1.11	2261	1.31	2317	1.51	2372	1.70	2482	2.07	2594	2.45	2821	3.39	3047	4.52	3265	5.64
4250	2618	2323	1.29	2374	1.49	2428	1.70	2481	1.91	2585	2.31	2690	2.70	2905	3.62	3120	4.76		
4475	2757	2441	1.49	2490	1.69	2539	1.91	2590	2.13	2690	2.56	2789	2.97	2992	3.87	3196	5.01		
4700	2895	2558	1.69	2606	1.92	2654	2.15	2701	2.38	2796	2.83	2890	3.26	3082	4.17	3277	5.29		
4925	3034	2674	1.92	2721	2.16	2767	2.40	2813	2.64	2903	3.12	2993	3.58	3175	4.50				
5150	3173	2791	2.16	2835	2.41	2880	2.66	2923	2.91	3011	3.43	3098	3.92	3271	4.87				
5375	3311	2906	2.42	2951	2.69	2995	2.96	3038	3.23	3121	3.76	3203	4.27						
5600	3450	3025	2.72	3070	3.01	3111	3.29	3152	3.56	3230	4.10								

## 135 QMX-HP

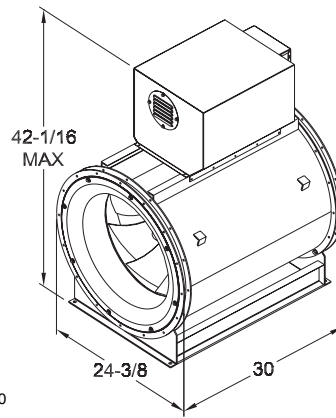
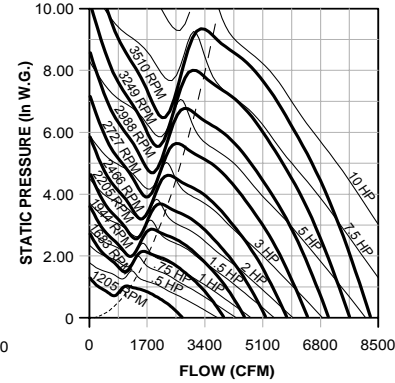
CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1100	677	1357	.32																
1325	816	1417	.37	1656	.57														
1550	955	1499	.44	1713	.65	1917	.89												
1775	1093	1594	.52	1788	.75	1974	.99	2317	1.57										
2000	1232	1693	.60	1878	.86	2046	1.12	2373	1.70	2664	2.39								
2225	1370	1798	.70	1974	.98	2134	1.26	2433	1.87	2719	2.54	2975	3.34						
2450	1509	1910	.81	2073	1.11	2228	1.42	2506	2.06	2776	2.75	3031	3.51	3262	4.39				
2675	1648	2027	.94	2178	1.25	2326	1.58	2593	2.27	2841	2.99	3087	3.76	3318	4.61	3531	5.57		
2900	1786	2149	1.09	2289	1.42	2427	1.76	2686	2.49	2920	3.25	3148	4.05	3374	4.90	3587	5.82	3784	6.84
3125	1925	2274	1.26	2403	1.60	2532	1.96	2782	2.74	3009	3.54	3222	4.37	3434	5.24	3642	6.16	3840	7.15
3350	2064	2402	1.45	2523	1.81	2643	2.18	2880	2.99	3102	3.84	3306	4.72	3504	5.62	3702	6.56	3896	7.54
3575	2202	2531	1.67	2645	2.03	2758	2.43	2983	3.27	3198	4.16	3397	5.08	3586	6.03	3770	6.99	3955	7.99
3800	2341	2661	1.90	2770	2.29	2876	2.69	3088	3.57	3296	4.50	3492	5.47	3674	6.45	3850	7.46		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

## 150 QMX



## 150 QMX-HP



Effective Wheel Diameter = 15"

Maximum HP:

$$\text{QMX} = 0.25 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 0.22 (\text{RPM}/1000)^3$$

Inlet Area = 2.008 sq. ft.

Outlet Area = 2.441 sq. ft.

Outlet Velocity = CFM/2.441 fpm

## 150 QMX

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	614	722	.09	885	.17	1032	.28	1178	.39										
1800	737	800	.11	948	.21	1077	.31	1199	.44										
2100	860	887	.14	1016	.25	1139	.36	1248	.49	1457	.78								
2400	983	980	.18	1092	.29	1205	.42	1309	.55	1497	.85	1680	1.19						
2700	1106	1077	.23	1175	.35	1276	.48	1375	.62	1553	.93	1718	1.28	2042	2.08				
3000	1228	1177	.29	1264	.41	1353	.55	1444	.71	1617	1.03	1770	1.39	2064	2.21	2357	3.14		
3300	1351	1279	.36	1357	.49	1437	.64	1519	.80	1682	1.14	1831	1.51	2103	2.35	2368	3.30		
3600	1474	1381	.44	1452	.58	1525	.73	1600	.90	1751	1.27	1896	1.65	2154	2.51	2399	3.49	2642	4.55
3900	1597	1487	.54	1551	.68	1617	.84	1685	1.02	1825	1.40	1963	1.81	2213	2.68	2442	3.68	2668	4.78
4200	1720	1591	.65	1650	.80	1710	.96	1774	1.15	1903	1.55	2033	1.98	2277	2.88	2495	3.89	2706	5.01
4500	1843	1695	.77	1752	.93	1808	1.10	1866	1.29	1985	1.71	2106	2.16	2342	3.10	2555	4.13	2754	5.26
4800	1966	1802	.91	1854	1.08	1907	1.26	1960	1.45	2071	1.88	2184	2.35	2409	3.34	2618	4.39	2810	5.54
5100	2089	1910	1.08	1956	1.25	2007	1.44	2057	1.64	2159	2.07	2265	2.56	2479	3.59	2684	4.68	2871	5.85
5400	2212	2016	1.26	2062	1.44	2108	1.63	2154	1.84	2249	2.28	2349	2.78	2551	3.86	2750	4.99		
5700	2334	2122	1.45	2166	1.65	2211	1.85	2255	2.07	2345	2.53	2436	3.02	2627	4.14	2818	5.31		
6000	2457	2227	1.66	2270	1.87	2312	2.08	2354	2.30	2439	2.78	2527	3.30	2707	4.44	2889	5.66		
6300	2580	2332	1.89	2374	2.11	2415	2.34	2456	2.57	2537	3.06	2618	3.58	2789	4.76				
6600	2703	2439	2.15	2482	2.40	2521	2.63	2559	2.87	2633	3.35	2713	3.91	2873	5.09				
6900	2826	2546	2.44	2589	2.71	2625	2.94	2660	3.18	2734	3.70	2807	4.24						
7200	2949	2655	2.76	2696	3.04	2729	3.27	2762	3.51	2834	4.05	2905	4.62						
7500	3072	2763	3.10	2803	3.39	2832	3.61	2868	3.89										

## 150 QMX-HP

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	614	1205	.38																
1800	737	1258	.43	1471	.69	1659	.95												
2100	860	1330	.50	1520	.76	1701	1.07												
2400	983	1412	.59	1585	.85	1750	1.16	2061	1.89										
2700	1106	1500	.68	1663	.97	1814	1.27	2102	2.03	2370	2.85								
3000	1228	1592	.79	1747	1.11	1889	1.42	2155	2.16	2410	3.05	2647	3.96						
3300	1351	1691	.91	1835	1.25	1970	1.60	2220	2.33	2457	3.23	2687	4.23	2901	5.22	3094	6.11		
3600	1474	1794	1.05	1927	1.41	2056	1.79	2294	2.55	2516	3.42	2731	4.44	2941	5.54	3139	6.63	3319	7.62
3900	1597	1901	1.22	2024	1.59	2145	1.99	2374	2.81	2584	3.67	2787	4.67	2985	5.80	3179	7.00	3362	8.18
4200	1720	2011	1.40	2125	1.79	2238	2.20	2458	3.09	2660	3.97	2852	4.95	3039	6.07	3223	7.30	3402	8.58
4500	1843	2125	1.61	2230	2.01	2336	2.44	2545	3.38	2740	4.32	2924	5.30	3102	6.39	3276	7.62	3447	8.93
4800	1966	2239	1.84	2337	2.25	2436	2.70	2634	3.67	2824	4.69	3001	5.70	3171	6.77	3336	7.97	3500	9.29
5100	2089	2354	2.08	2448	2.53	2541	2.99	2727	4.00	2910	5.07	3083	6.14	3246	7.22	3405	8.40		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

## 165 QMX/QMX-HP Data

**Effective Wheel Diameter = 16"**

**Maximum HP:**

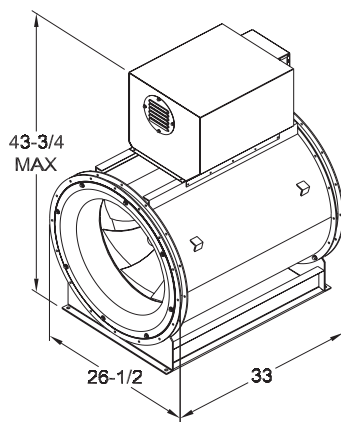
$$\text{QMX} = 0.41 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 0.35 (\text{RPM}/1000)^3$$

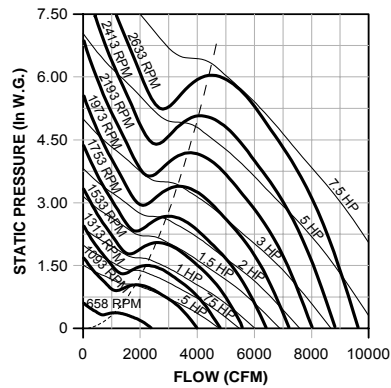
**Inlet Area = 2.426 sq. ft.**

**Outlet Area = 2.953 sq. ft.**

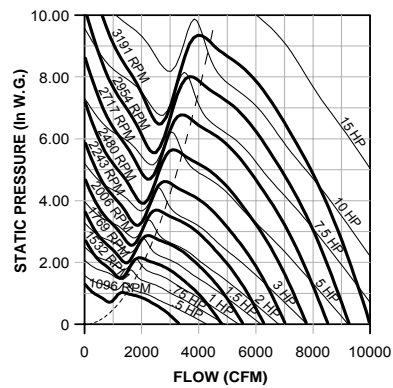
**Outlet Velocity = CFM/2.953 fpm**



## 165 QMX



## 165 QMX-HP



## 165 QMX

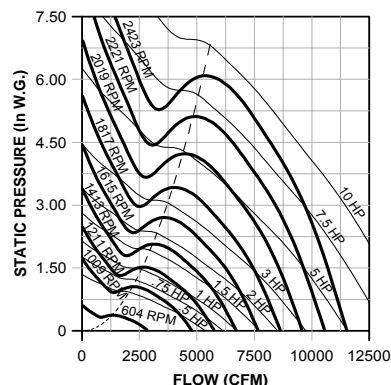
[illegible]

## 165 QMX-HP

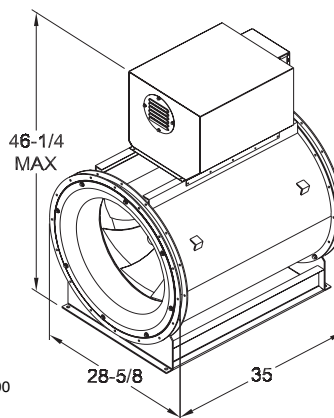
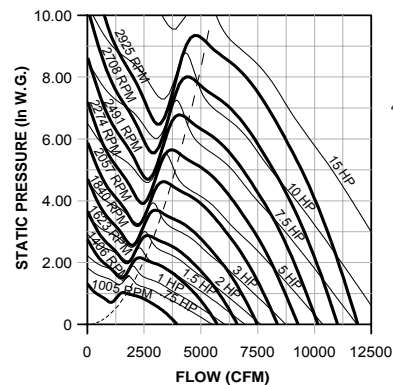
CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1825	617	1096	.46	1299	.72														
2200	744	1147	.52	1339	.84	1511	1.16												
2575	871	1216	.61	1386	.93	1550	1.31	1836	2.04										
2950	998	1294	.72	1450	1.04	1597	1.42	1878	2.31										
3325	1125	1376	.85	1524	1.20	1659	1.56	1918	2.48	2160	3.49	2370	4.38						
3700	1252	1464	.98	1603	1.37	1731	1.76	1970	2.65	2198	3.73	2413	4.86	2604	5.87				
4075	1379	1558	1.14	1686	1.56	1809	1.99	2032	2.87	2245	3.95	2451	5.18	2646	6.41	2822	7.54		
4450	1506	1656	1.32	1774	1.76	1890	2.23	2104	3.16	2303	4.21	2496	5.45	2683	6.79	2863	8.15	3028	9.42
4825	1633	1758	1.54	1866	1.99	1975	2.48	2180	3.49	2369	4.54	2550	5.75	2727	7.11	2900	8.57	3067	10.10
5200	1760	1862	1.77	1963	2.25	2063	2.75	2260	3.85	2442	4.94	2613	6.12	2780	7.46	2944	8.95	3105	10.50
5575	1887	1968	2.04	2062	2.54	2156	3.06	2342	4.21	2518	5.38	2683	6.58	2841	7.88	2996	9.35	3149	10.90
5950	2014	2077	2.34	2164	2.86	2252	3.40	2428	4.60	2598	5.86	2757	7.10	2909	8.40	3057	9.84		
6325	2141	2186	2.66	2268	3.21	2351	3.78	2516	5.01	2680	6.34	2835	7.67	2982	9.00	3123	10.4		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

## 180 QMX



## 180 QMX-HP



Effective Wheel Diameter = 18"  
 Maximum HP:  
 $QMX = 0.63 (RPM/1000)^3$   
 $QMX-HP = 0.54 (RPM/1000)^3$   
 Inlet Area = 2.885 sq. ft.  
 Outlet Area = 3.515 sq. ft.  
 Outlet Velocity = CFM/3.515 fpm

## 180 QMX

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2175	618	604	.13	739	.25	861	.40	982	.57										
2600	739	668	.16	791	.30	898	.45	1000	.63										
3025	860	739	.21	847	.36	949	.52	1040	.70	1214	1.12								
3450	981	815	.26	909	.42	1003	.60	1090	.79	1247	1.22	1400	1.71						
3875	1102	895	.33	977	.50	1061	.69	1144	.89	1293	1.34	1430	1.84	1702	2.99				
4300	1223	977	.41	1049	.59	1125	.79	1201	1.01	1345	1.48	1473	1.99	1719	3.18				
4725	1344	1061	.51	1126	.70	1192	.91	1262	1.14	1398	1.63	1523	2.16	1750	3.37	1973	4.75		
5150	1465	1144	.62	1204	.82	1265	1.04	1328	1.29	1455	1.81	1576	2.36	1791	3.59	1997	5.01	2201	6.54
5575	1585	1231	.76	1284	.96	1340	1.19	1397	1.45	1514	2.00	1630	2.58	1840	3.84	2031	5.27	2221	6.86
6000	1706	1316	.91	1366	1.13	1417	1.37	1470	1.63	1578	2.20	1687	2.82	1891	4.11	2074	5.57	2251	7.18
6425	1827	1401	1.08	1449	1.31	1497	1.56	1545	1.83	1645	2.43	1747	3.07	1945	4.42	2123	5.91	2290	7.54
6850	1948	1489	1.29	1533	1.53	1577	1.78	1622	2.06	1715	2.67	1810	3.34	2000	4.76	2175	6.28	2335	7.92
7275	2069	1577	1.51	1616	1.75	1659	2.03	1701	2.31	1787	2.94	1876	3.63	2056	5.11	2228	6.67	2384	8.34
7700	2190	1665	1.77	1703	2.02	1741	2.30	1780	2.59	1861	3.23	1945	3.94	2115	5.49	2282	7.10		
8125	2311	1752	2.04	1789	2.32	1826	2.60	1863	2.91	1939	3.57	2016	4.29	2177	5.88	2337	7.56		
8550	2432	1838	2.33	1874	2.63	1909	2.93	1944	3.24	2015	3.91	2090	4.66	2242	6.30	2395	8.05		
8975	2553	1924	2.65	1958	2.96	1993	3.28	2027	3.61	2096	4.32	2164	5.06	2308	6.74				
9400	2674	2012	3.01	2046	3.35	2080	3.69	2112	4.03	2175	4.73	2242	5.51	2376	7.20				
9825	2794	2099	3.40	2135	3.78	2165	4.12	2195	4.46	2257	5.20	2319	5.98						
10250	2915	2188	3.84	2223	4.24	2251	4.58	2278	4.91	2339	5.69	2399	6.50						
10675	3036	2277	4.32	2310	4.73	2336	5.06	2365	5.44	2420	6.20								

## 180 QMX-HP

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2175	618	1005	.55	1191	.86														
2600	739	1049	.62	1226	1.00	1384	1.38												
3025	860	1108	.71	1266	1.09	1418	1.55												
3450	981	1176	.84	1320	1.22	1457	1.67	1717	2.71										
3875	1102	1247	.98	1384	1.39	1510	1.83	1750	2.91	1974	4.09								
4300	1223	1323	1.13	1452	1.58	1571	2.04	1793	3.10	2007	4.39	2204	5.67						
4725	1344	1404	1.30	1524	1.79	1638	2.29	1846	3.34	2045	4.63	2237	6.07	2416	7.48	2575	8.73		
5150	1465	1488	1.50	1599	2.01	1708	2.56	1907	3.65	2093	4.91	2273	6.37	2448	7.95	2613	9.50	2763	10.90
5575	1585	1576	1.73	1679	2.26	1781	2.84	1972	4.01	2148	5.24	2318	6.70	2484	8.32	2646	10.00	2799	11.70
6000	1706	1666	1.99	1761	2.54	1857	3.14	2041	4.40	2209	5.67	2370	7.08	2527	8.70	2681	10.50	2831	12.30
6425	1827	1759	2.28	1847	2.85	1936	3.47	2112	4.81	2275	6.16	2429	7.56	2577	9.13	2723	10.90	2867	12.80
6850	1948	1852	2.59	1935	3.20	2018	3.83	2185	5.23	2344	6.68	2492	8.12	2634	9.67	2773	11.40	2909	13.30
7275	2069	1946	2.94	2025	3.58	2103	4.24	2260	5.68	2414	7.22	2558	8.74	2695	10.3	2828	12.0		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.



# 202 QMX/QMX-HP Data

Effective Wheel Diameter = 20"

Maximum HP:

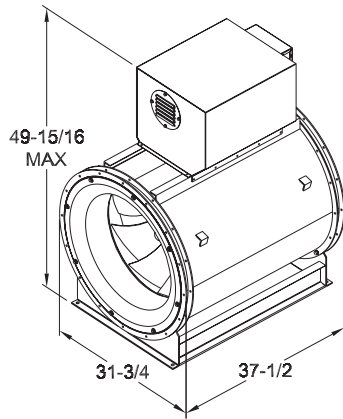
$$\text{QMX} = 1.12 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 0.97 (\text{RPM}/1000)^3$$

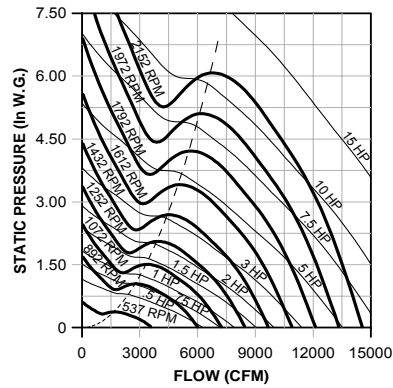
Inlet Area = 3.651 sq. ft.

Outlet Area = 4.451 sq. ft.

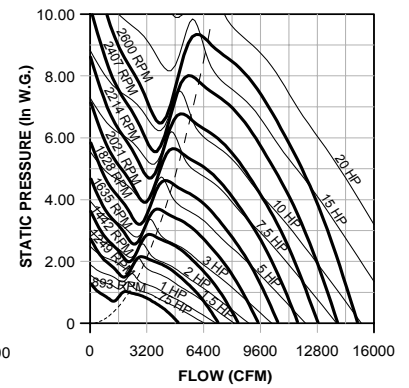
Outlet Velocity = CFM/4.451 fpm



202 QMX



202 QMX-HP



## 202 QMX

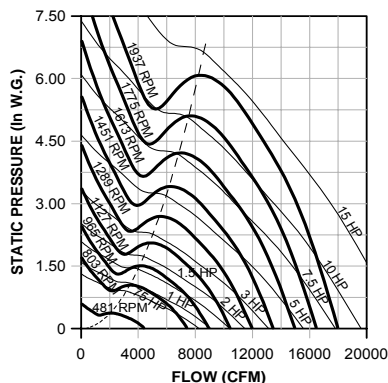
CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2750	617	537	.16	657	.32	765	.51	873	.72										
3300	741	595	.21	704	.38	799	.57	889	.80										
3850	864	660	.26	755	.45	845	.66	926	.89	1080	1.42								
4400	988	729	.33	812	.54	895	.77	972	1.01	1111	1.55	1246	2.18						
4950	1111	802	.42	874	.64	948	.89	1021	1.14	1153	1.71	1274	2.35	1513	3.80				
5500	1235	876	.53	940	.76	1006	1.02	1073	1.30	1200	1.89	1314	2.54	1530	4.04	1746	5.74		
6050	1359	953	.66	1009	.90	1068	1.17	1129	1.47	1250	2.10	1360	2.77	1560	4.31	1755	6.04		
6600	1482	1029	.81	1081	1.06	1134	1.35	1190	1.66	1301	2.33	1408	3.03	1598	4.59	1779	6.38	1958	8.33
7150	1606	1107	.99	1154	1.25	1203	1.55	1253	1.87	1356	2.58	1458	3.32	1643	4.92	1812	6.74	1978	8.75
7700	1729	1184	1.19	1229	1.47	1273	1.77	1320	2.11	1414	2.84	1510	3.63	1691	5.29	1852	7.13	2007	9.17
8250	1853	1262	1.42	1305	1.72	1346	2.04	1388	2.38	1476	3.14	1565	3.96	1740	5.70	1897	7.57	2043	9.63
8800	1976	1343	1.70	1381	2.00	1420	2.33	1458	2.68	1540	3.46	1623	4.32	1789	6.12	1944	8.05	2086	10.20
9350	2100	1423	2.00	1457	2.31	1494	2.65	1531	3.02	1606	3.82	1684	4.70	1842	6.60	1993	8.58	2131	10.70
9900	2223	1502	2.33	1536	2.67	1569	3.01	1603	3.39	1674	4.21	1747	5.12	1896	7.09	2042	9.15		
10450	2347	1581	2.69	1613	3.05	1646	3.42	1678	3.81	1745	4.65	1812	5.56	1953	7.61	2093	9.75		
11000	2470	1659	3.08	1691	3.46	1721	3.84	1752	4.25	1815	5.12	1880	6.07	2012	8.15	2146	10.40		
11550	2594	1737	3.50	1768	3.91	1799	4.33	1829	4.76	1888	5.64	1948	6.60	2074	8.75				
12100	2718	1817	3.99	1849	4.44	1877	4.87	1905	5.30	1960	6.19	2019	7.20	2137	9.37				
12650	2841	1897	4.52	1929	5.01	1955	5.44	1981	5.87	2035	6.82	2089	7.81						
13200	2965	1978	5.11	2008	5.62	2032	6.04	2057	6.49	2110	7.48								
13750	3088	2059	5.75	2088	6.28	2109	6.68	2136	7.20										

## 202 QMX-HP

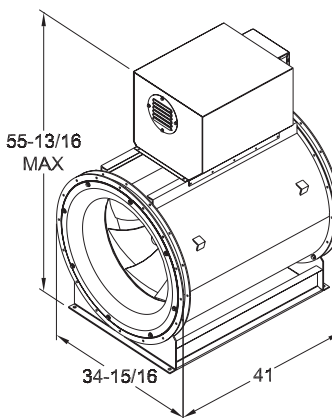
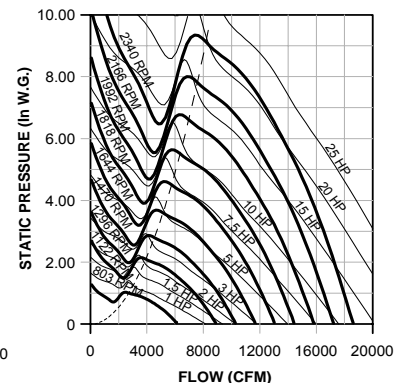
CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2750	617	893	.70	1058	1.09														
3300	741	934	.78	1090	1.27	1231	1.75												
3850	864	988	.91	1127	1.39	1261	1.96												
4400	988	1049	1.08	1177	1.55	1298	2.12	1528	3.45										
4950	1111	1114	1.25	1235	1.78	1346	2.33	1559	3.71	1757	5.21								
5500	1235	1184	1.45	1298	2.03	1403	2.61	1599	3.96	1787	5.59	1963	7.25	2117	8.71				
6050	1359	1258	1.68	1363	2.30	1464	2.94	1648	4.27	1823	5.90	1992	7.73	2151	9.56	2294	11.20		
6600	1482	1335	1.94	1432	2.59	1528	3.29	1703	4.68	1867	6.26	2026	8.12	2181	10.10	2327	12.10	2461	14.00
7150	1606	1415	2.24	1504	2.91	1594	3.65	1763	5.16	1918	6.72	2068	8.55	2214	10.60	2357	12.80	2493	15.00
7700	1729	1497	2.58	1580	3.28	1664	4.05	1826	5.67	1975	7.29	2117	9.08	2255	11.10	2390	13.30	2523	15.70
8250	1853	1581	2.96	1659	3.70	1736	4.48	1891	6.20	2035	7.93	2170	9.70	2302	11.70	2430	13.90	2556	16.30
8800	1976	1667	3.39	1739	4.16	1812	4.97	1958	6.76	2098	8.62	2229	10.50	2354	12.40	2476	14.60	2596	17.00
9350	2100	1753	3.85	1821	4.66	1890	5.51	2028	7.35	2162	9.31	2290	11.3	2410	13.3	2527	15.4		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

**225 QMX**



**225 QMX-HP**



Effective Wheel Diameter = 22"  
 Maximum HP:  
 QMX =  $1.92 (RPM/1000)^3$   
 QMX-HP =  $1.66 (RPM/1000)^3$   
 Inlet Area = 4.508 sq. ft.  
 Outlet Area = 5.492 sq. ft.  
 Outlet Velocity = CFM/5.492 fpm

**225 QMX**

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3375	614	481	.20	590	.39	688	.62	786	.88										
4050	737	533	.25	632	.46	718	.71	800	.98										
4725	860	591	.32	678	.56	759	.81	832	1.10	972	1.75								
5400	983	653	.41	728	.66	803	.94	873	1.24	998	1.91	1120	2.67						
6075	1106	718	.52	783	.78	850	1.08	917	1.40	1036	2.10	1145	2.88	1362	4.68				
6750	1228	785	.65	842	.93	902	1.25	963	1.59	1078	2.32	1180	3.12	1376	4.98	1571	7.06		
7425	1351	853	.81	904	1.10	958	1.43	1013	1.80	1122	2.57	1221	3.40	1402	5.29	1579	7.44		
8100	1474	921	.99	968	1.30	1017	1.65	1067	2.03	1168	2.86	1264	3.71	1436	5.64	1599	7.85	1761	10.2
8775	1597	991	1.21	1034	1.53	1078	1.89	1123	2.28	1217	3.16	1309	4.07	1476	6.05	1628	8.28	1778	10.7
9450	1720	1060	1.45	1100	1.79	1140	2.16	1183	2.58	1269	3.49	1355	4.45	1518	6.49	1664	8.77	1804	11.3
10125	1843	1130	1.73	1168	2.10	1206	2.49	1244	2.91	1323	3.84	1404	4.85	1562	6.98	1703	9.29	1836	11.8
10800	1966	1202	2.06	1236	2.43	1271	2.84	1307	3.27	1380	4.23	1456	5.29	1606	7.51	1746	9.89	1873	12.5
11475	2089	1273	2.43	1304	2.80	1338	3.24	1371	3.68	1440	4.67	1510	5.75	1653	8.09	1789	10.5	1914	13.2
12150	2212	1344	2.83	1375	3.24	1405	3.67	1436	4.13	1500	5.14	1566	6.26	1701	8.69	1833	11.2		
12825	2334	1415	3.27	1444	3.71	1474	4.17	1503	4.64	1563	5.68	1624	6.80	1752	9.32	1879	12.0		
13500	2457	1485	3.75	1513	4.21	1541	4.68	1569	5.18	1626	6.25	1685	7.42	1805	9.99	1926	12.7		
14175	2580	1555	4.26	1582	4.75	1610	5.26	1637	5.79	1691	6.89	1745	8.06	1859	10.7				
14850	2703	1626	4.85	1654	5.39	1680	5.92	1706	6.46	1756	7.56	1809	8.79	1915	11.5				
15525	2826	1697	5.48	1726	6.09	1750	6.62	1774	7.15	1823	8.32	1871	9.53						
16200	2949	1770	6.20	1797	6.83	1819	7.35	1842	7.90	1889	9.11	1937	10.4						
16875	3072	1842	6.97	1869	7.63	1888	8.13	1912	8.76										

**225 QMX-HP**

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3375	614	803	.86																
4050	737	839	.96	980	1.56	1106	2.14												
4725	860	887	1.12	1013	1.71	1134	2.41												
5400	983	941	1.32	1057	1.90	1167	2.62	1374	4.24										
6075	1106	1000	1.54	1109	2.18	1209	2.86	1401	4.56	1580	6.41								
6750	1228	1062	1.78	1164	2.49	1259	3.20	1436	4.86	1606	6.86	1765	8.91						
7425	1351	1127	2.05	1223	2.82	1314	3.60	1480	5.25	1638	7.26	1791	9.51	1934	11.7	2062	13.7		
8100	1474	1196	2.37	1284	3.17	1371	4.03	1529	5.73	1677	7.69	1821	9.99	1961	12.5	2093	14.9	2213	17.2
8775	1597	1267	2.73	1349	3.57	1430	4.47	1583	6.32	1723	8.25	1858	10.5	1990	13.1	2119	15.7	2242	18.4
9450	1720	1341	3.15	1416	4.01	1492	4.95	1639	6.95	1773	8.93	1901	11.1	2026	13.7	2148	16.4	2268	19.3
10125	1843	1416	3.61	1486	4.51	1557	5.49	1697	7.60	1827	9.72	1949	11.9	2068	14.4	2184	17.1	2298	20.1
10800	1966	1493	4.13	1558	5.07	1624	6.08	1756	8.27	1883	10.6	2001	12.8	2114	15.2	2224	17.9	2333	20.9
11475	2089	1569	4.68	1632	5.70	1694	6.74	1818	8.99	1940	11.4	2055	13.8	2164	16.3	2270	18.9		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

# 245 QMX/QMX-HP Data

Effective Wheel Diameter = 24"

Maximum HP:

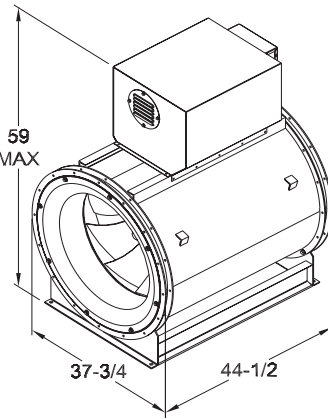
$$\text{QMX} = 2.94 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 2.54 (\text{RPM}/1000)^3$$

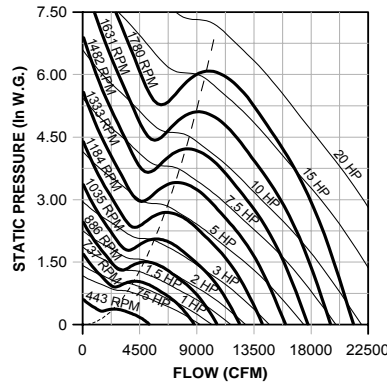
Inlet Area = 5.358 sq. ft.

Outlet Area = 6.512 sq. ft.

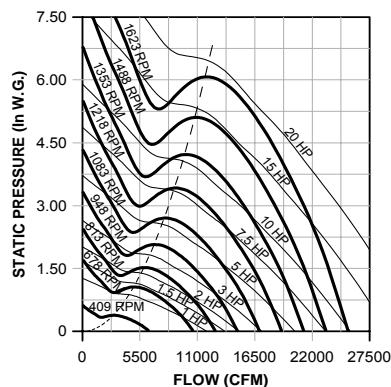
Outlet Velocity = CFM/6.512 fpm



## 245 QMX



## 270 QMX





# 300 QMX/QMX-HP Data

Effective Wheel Diameter = 30"

Maximum HP:

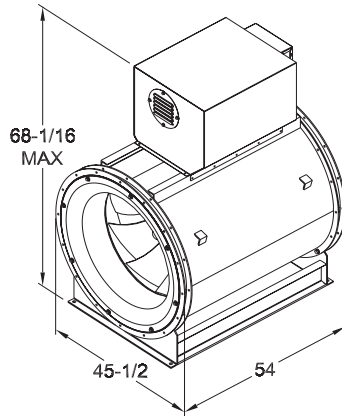
$$QMX = 7.58 (RPM/1000)^3$$

$$QMX-HP = 6.35 (RPM/1000)^3$$

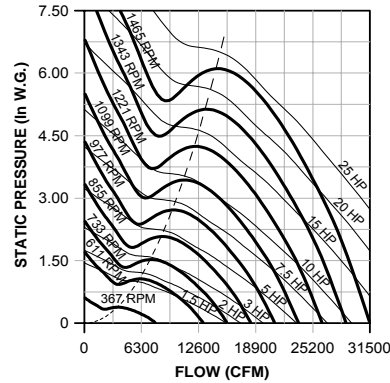
Inlet Area = 8.018 sq. ft.

Outlet Area = 9.764 sq. ft.

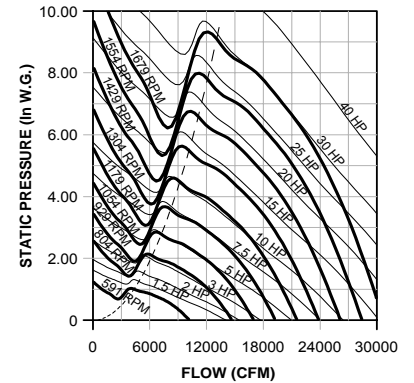
Outlet Velocity = CFM/9.764 fpm



300 QMX



300 QMX-HP



300 QMX

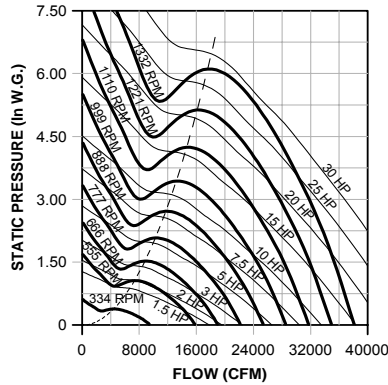
CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	614	367	.34	447	.67	520	1.05	593	1.52										
7175	734	408	.43	478	.79	543	1.21	604	1.65										
8350	855	452	.55	515	.93	573	1.38	629	1.88	734	2.95								
9525	975	498	.69	555	1.12	608	1.57	659	2.10	754	3.23	846	4.50						
10700	1095	547	.87	597	1.32	647	1.82	693	2.35	781	3.57	865	4.88	1028	7.96				
11875	1216	597	1.08	641	1.56	687	2.10	731	2.67	813	3.93	890	5.31	1039	8.36				
13050	1336	647	1.33	688	1.85	729	2.42	770	3.02	847	4.30	920	5.78	1058	8.92	1191	12.5		
14225	1456	699	1.63	735	2.17	773	2.77	812	3.42	885	4.77	953	6.25	1083	9.59	1207	13.2	1329	17.3
15400	1577	751	1.97	784	2.54	819	3.18	854	3.85	924	5.28	989	6.80	1112	10.3	1228	14.0	1342	18.0
16575	1697	804	2.37	834	2.97	866	3.63	899	4.34	964	5.84	1026	7.41	1143	11.0	1254	14.9	1361	19.0
17750	1817	856	2.81	885	3.45	914	4.14	944	4.87	1006	6.45	1065	8.09	1177	11.7	1283	15.8	1385	20.1
18925	1938	908	3.30	936	3.99	963	4.71	991	5.47	1049	7.12	1106	8.86	1213	12.5	1314	16.7	1411	21.2
20100	2058	963	3.90	988	4.60	1013	5.34	1039	6.13	1093	7.84	1147	9.64	1250	13.4	1347	17.7	1441	22.3
21275	2178	1016	4.54	1039	5.25	1064	6.06	1088	6.87	1138	8.61	1190	10.5	1289	14.5	1383	18.7		
22450	2299	1070	5.25	1092	6.01	1114	6.80	1137	7.66	1185	9.49	1233	11.4	1329	15.5	1419	19.9		
23625	2419	1123	6.02	1145	6.84	1166	7.67	1188	8.56	1232	10.4	1278	12.4	1370	16.7	1457	21.2		
24800	2539	1177	6.87	1197	7.71	1218	8.60	1238	9.50	1280	11.4	1323	13.5	1411	17.9				
25975	2660	1229	7.75	1249	8.64	1269	9.57	1289	10.5	1329	12.5	1370	14.6	1454	19.2				
27150	2780	1283	8.75	1303	9.72	1322	10.7	1341	11.7	1379	13.7	1418	15.9						
28325	2900	1336	9.83	1357	10.9	1375	11.9	1393	12.9	1428	15.0								
29500	3021	1390	11.0	1411	12.2	1427	13.2	1444	14.2										

300 QMX-HP

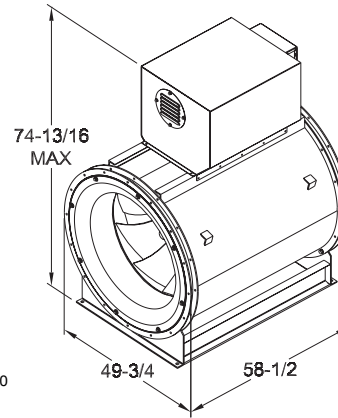
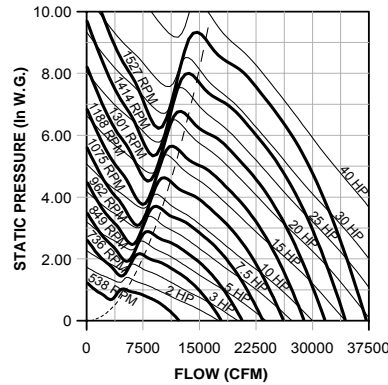
CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	614	591	1.31	701	2.14														
7175	734	622	1.53	721	2.37	814	3.36												
8350	855	658	1.79	750	2.68	833	3.66	988	5.98										
9525	975	697	2.10	784	3.05	862	4.07	1009	6.46	1138	9.13								
10700	1095	742	2.45	821	3.47	896	4.55	1031	6.96	1161	9.80	1273	12.8	1366	15.8				
11875	1216	791	2.85	862	3.95	932	5.09	1062	7.60	1180	10.4	1297	13.6	1399	17.0	1485	20.3		
13050	1336	842	3.28	907	4.49	971	5.70	1096	8.33	1208	11.2	1315	14.4	1421	18.0	1516	21.6	1597	25.2
14225	1456	896	3.76	955	5.07	1015	6.39	1132	9.14	1241	12.1	1341	15.3	1439	18.9	1537	22.8	1626	26.7
15400	1577	951	4.30	1006	5.70	1061	7.13	1170	10.0	1276	13.1	1373	16.4	1464	19.9	1555	23.8	1646	28.0
16575	1697	1008	4.93	1058	6.37	1109	7.90	1211	11.0	1312	14.2	1407	17.6	1496	21.3	1580	25.1	1664	29.2
17750	1817	1066	5.63	1112	7.12	1160	8.75	1255	12.0	1350	15.4	1442	18.9	1530	22.7	1611	26.6		
18925	1938	1124	6.39	1168	7.96	1212	9.64	1302	13.2	1390	16.6	1479	20.3	1564	24.2	1645	28.2		
20100	2058	1183	7.25	1225	8.89	1266	10.6	1350	14.3	1434	18.0	1517	21.8	1600	25.8				

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

**330 QMX**



**330 QMX-HP**



Effective Wheel Diameter = 33"  
 Maximum HP:  
 QMX = 12.2 (RPM/1000)<sup>3</sup>  
 QMX-HP = 10.2 (RPM/1000)<sup>3</sup>  
 Inlet Area = 9.707 sq. ft.  
 Outlet Area = 11.82 sq. ft.  
 Outlet Velocity = CFM/11.82 fpm

**330 QMX**

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7275	615	334	.41	406	.81	473	1.27	539	1.83										
8700	736	371	.52	435	.95	494	1.46	550	2.01										
10125	856	411	.66	469	1.14	522	1.68	572	2.27	667	3.56								
11550	977	454	.84	505	1.35	554	1.92	599	2.54	686	3.92	769	5.45						
12975	1098	498	1.06	544	1.61	589	2.22	631	2.86	711	4.34	787	5.91	934	9.62				
14400	1218	543	1.31	584	1.90	626	2.56	665	3.23	740	4.77	810	6.45	945	10.1				
15825	1339	589	1.61	626	2.24	664	2.94	701	3.66	771	5.22	837	7.00	962	10.8	1084	15.2		
17250	1459	637	1.98	670	2.64	704	3.37	739	4.15	805	5.78	867	7.58	985	11.6	1098	16.0	1209	21.0
18675	1580	684	2.39	714	3.09	746	3.86	778	4.68	841	6.41	900	8.25	1012	12.5	1117	16.9	1220	21.8
20100	1701	732	2.88	760	3.62	789	4.42	818	5.26	878	7.10	934	8.99	1040	13.3	1141	18.0	1238	23.0
21525	1821	780	3.42	806	4.20	832	5.02	860	5.92	916	7.84	970	9.84	1071	14.2	1167	19.1	1260	24.3
22950	1942	828	4.02	853	4.86	877	5.72	902	6.63	955	8.64	1007	10.8	1104	15.2	1196	20.3	1284	25.7
24375	2062	877	4.74	900	5.60	923	6.50	947	7.47	995	9.51	1044	11.7	1138	16.3	1226	21.4	1311	27.1
25800	2183	926	5.53	946	6.37	969	7.36	991	8.35	1036	10.5	1083	12.7	1173	17.5	1258	22.7		
27225	2304	975	6.40	995	7.32	1015	8.28	1036	9.32	1079	11.5	1123	13.9	1210	18.9	1292	24.2		
28650	2424	1023	7.32	1043	8.32	1062	9.33	1082	10.4	1122	12.7	1164	15.1	1247	20.3	1326	25.7		
30075	2545	1072	8.35	1091	9.39	1109	10.4	1128	11.6	1166	13.9	1205	16.4	1285	21.8				
31500	2666	1120	9.44	1138	10.5	1156	11.6	1174	12.8	1211	15.3	1248	17.8	1324	23.3				
32925	2786	1169	10.7	1187	11.8	1204	13.0	1221	14.2	1256	16.7	1291	19.3						
34350	2907	1218	12.0	1236	13.3	1252	14.5	1269	15.7	1301	18.2								
35775	3027	1267	13.4	1285	14.8	1300	16.0	1315	17.2										

**330 QMX-HP**

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7275	615	538	1.59	637	2.58														
8700	736	566	1.85	655	2.87	741	4.08												
10125	856	598	2.17	682	3.24	758	4.45	899	7.25										
11550	977	635	2.55	713	3.69	785	4.95	918	7.83	1035	11.1								
12975	1098	676	2.98	747	4.21	816	5.53	938	8.44	1056	11.9	1158	15.5	1243	19.1				
14400	1218	720	3.46	784	4.78	848	6.18	966	9.21	1073	12.6	1179	16.5	1272	20.5	1350	24.5		
15825	1339	767	3.99	826	5.45	884	6.92	997	10.1	1099	13.6	1196	17.4	1292	21.7	1379	26.2	1453	30.6
17250	1459	816	4.57	870	6.16	923	7.74	1030	11.1	1129	14.7	1220	18.6	1309	22.9	1398	27.6	1479	32.4
18675	1580	866	5.23	916	6.92	965	8.63	1065	12.2	1161	15.9	1249	19.9	1332	24.2	1414	28.8	1497	33.9
20100	1701	918	5.98	964	7.75	1010	9.60	1102	13.3	1193	17.2	1280	21.4	1361	25.8	1438	30.4	1514	35.4
21525	1821	971	6.84	1013	8.66	1056	10.6	1142	14.6	1228	18.7	1312	23.0	1392	27.5	1466	32.2		
22950	1942	1023	7.75	1063	9.65	1104	11.7	1185	16.0	1265	20.2	1346	24.7	1423	29.3	1497	34.2		
24375	2062	1078	8.83	1115	10.8	1153	12.9	1229	17.4	1305	21.9	1381	26.5	1456	31.3				

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

# 365 QMX/QMX-HP Data

Effective Wheel Diameter = 36"

Maximum HP:

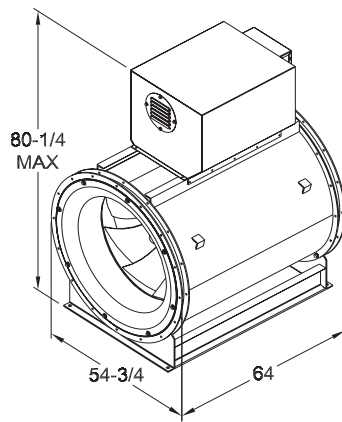
QMX = 20.2 (RPM/1000)<sup>3</sup>

QMX-HP = 16.9 (RPM/1000)<sup>3</sup>

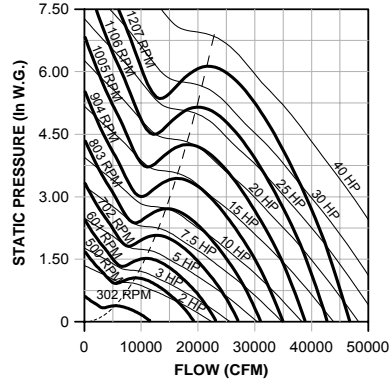
Inlet Area = 11.87 sq. ft.

Outlet Area = 14.46 sq. ft.

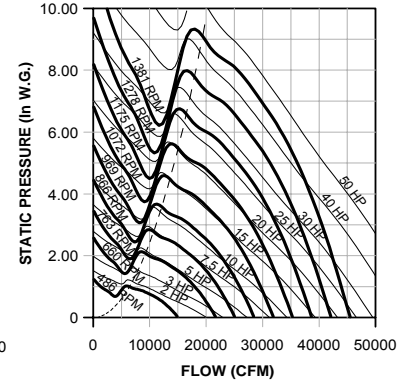
Outlet Velocity = CFM/14.46 fpm



365 QMX



365 QMX-HP



365 QMX

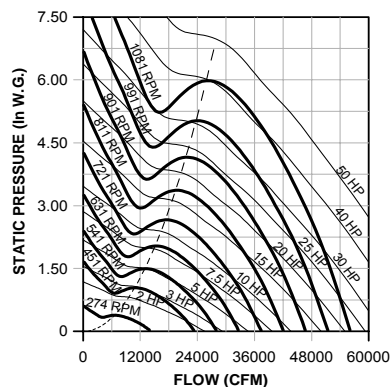
CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8900	615	302	.50	368	1.00	428	1.56	488	2.25										
10675	738	337	.65	394	1.17	447	1.79	498	2.47										
12450	861	373	.82	425	1.40	473	2.06	518	2.79	604	4.37								
14225	984	412	1.04	459	1.68	502	2.35	544	3.14	622	4.84	696	6.68						
16000	1106	453	1.31	494	1.99	535	2.74	573	3.53	645	5.36	713	7.28	846	11.8				
17775	1229	495	1.64	532	2.37	569	3.17	604	3.99	671	5.86	735	7.96	856	12.5	975	18.0		
19550	1352	538	2.03	570	2.79	604	3.64	638	4.55	701	6.47	760	8.65	873	13.4	981	18.6		
21325	1475	581	2.48	611	3.30	641	4.18	673	5.16	732	7.16	788	9.38	894	14.4	995	19.7	1094	25.8
23100	1597	625	3.01	652	3.88	680	4.81	709	5.83	765	7.95	818	10.2	918	15.4	1013	20.9	1106	26.9
24875	1720	669	3.63	694	4.53	720	5.52	746	6.57	799	8.81	850	11.2	945	16.4	1036	22.3	1123	28.4
26650	1843	713	4.31	736	5.26	760	6.29	785	7.41	834	9.74	883	12.2	974	17.6	1060	23.7	1143	30.0
28425	1966	757	5.08	780	6.13	802	7.20	824	8.32	871	10.8	917	13.4	1004	18.8	1087	25.1	1166	31.8
30200	2089	803	6.01	823	7.05	843	8.15	864	9.33	908	11.9	952	14.6	1036	20.3	1115	26.5	1191	33.5
31975	2211	848	7.01	866	8.06	886	9.26	906	10.5	946	13.1	988	15.9	1069	21.9	1145	28.2		
33750	2334	893	8.11	911	9.26	929	10.5	947	11.7	985	14.4	1025	17.4	1103	23.5	1176	30.0		
35525	2457	937	9.28	955	10.5	972	11.8	990	13.1	1026	15.9	1063	18.9	1137	25.3				
37300	2580	982	10.6	999	11.9	1015	13.2	1032	14.6	1066	17.5	1101	20.5	1172	27.1				
39075	2703	1026	12.0	1042	13.3	1058	14.7	1075	16.2	1107	19.2	1140	22.3						
40850	2825	1071	13.5	1087	15.0	1103	16.5	1118	17.9	1149	21.0	1180	24.3						
42625	2948	1116	15.2	1133	16.9	1147	18.3	1162	19.9	1191	23.0								
44400	3071	1162	17.1	1178	18.8	1191	20.3	1204	21.8										

365 QMX-HP

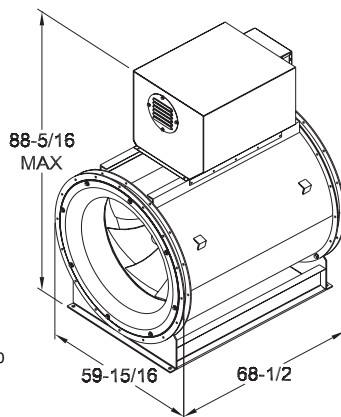
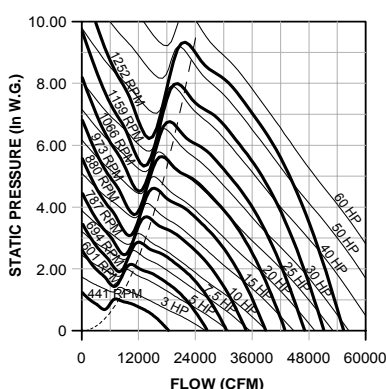
CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8900	615	486	1.94	577	3.17														
10675	738	513	2.28	593	3.52	670	4.98												
12450	861	542	2.67	618	3.99	686	5.45	814	8.90										
14225	984	576	3.14	647	4.56	711	6.08	831	9.62	937	13.6								
16000	1106	614	3.69	678	5.20	740	6.82	850	10.4	956	14.6	1049	19.1	1126	23.5				
17775	1229	655	4.29	713	5.94	770	7.64	876	11.4	973	15.6	1068	20.3	1153	25.3	1224	30.2		
19550	1352	698	4.94	751	6.76	803	8.57	905	12.5	997	16.8	1084	21.5	1170	26.7	1249	32.2	1317	37.7
21325	1475	743	5.68	792	7.65	840	9.62	935	13.7	1025	18.2	1107	23.0	1186	28.2	1266	33.9	1340	39.9
23100	1597	790	6.52	834	8.59	879	10.7	967	15.0	1054	19.7	1134	24.6	1208	29.8	1282	35.6	1356	41.8
24875	1720	837	7.46	879	9.66	920	11.9	1002	16.5	1084	21.3	1163	26.5	1235	31.8	1304	37.5	1372	43.6
26650	1843	886	8.54	924	10.8	963	13.2	1040	18.2	1117	23.2	1192	28.5	1264	34.1	1331	39.9		
28425	1966	935	9.73	971	12.1	1007	14.6	1079	19.8	1151	25.1	1223	30.6	1293	36.4	1359	42.3		
30200	2089	985	11.1	1019	13.5	1052	16.1	1121	21.7	1188	27.2	1256	32.9	1323	38.8				

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

## 402 QMX



## 402 QMX-HP



Effective Wheel Diameter = 40"

Maximum HP:

$$\text{QMX} = 32.7 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 27.4 (\text{RPM}/1000)^3$$

Inlet Area = 14.41 sq. ft.

Outlet Area = 17.58 sq. ft.

Outlet Velocity = CFM/17.58 fpm

## 402 QMX

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10800	614	274	.61	333	1.21	388	1.89	442	2.73										
12900	733	304	.78	356	1.41	405	2.18	451	2.99										
15000	853	336	.98	384	1.68	427	2.48	468	3.36	547	5.29								
17100	972	370	1.23	413	2.00	453	2.83	491	3.78	562	5.82	630	8.07						
19200	1092	406	1.55	444	2.37	481	3.26	516	4.23	582	6.43	644	8.74	766	14.3				
21300	1211	443	1.93	477	2.80	511	3.76	544	4.78	605	7.04	663	9.55	774	15.0				
23400	1331	481	2.38	511	3.30	542	4.32	573	5.41	631	7.74	685	10.4	788	16.0	888	22.5		
25500	1450	519	2.90	546	3.87	575	4.96	603	6.10	658	8.53	709	11.2	806	17.2	899	23.6	991	31.1
27600	1570	557	3.49	583	4.55	608	5.66	635	6.88	687	9.45	736	12.2	828	18.5	915	25.1	1000	32.4
29700	1689	597	4.22	619	5.28	643	6.47	668	7.75	717	10.5	763	13.3	851	19.7	934	26.7	1014	34.0
31800	1809	635	4.99	657	6.15	679	7.39	701	8.68	748	11.5	792	14.5	876	21.0	955	28.3	1031	35.9
33900	1928	674	5.86	695	7.11	715	8.39	736	9.75	779	12.7	822	15.8	902	22.4	978	30.0	1051	38.0
36000	2048	714	6.91	733	8.18	752	9.51	772	11.0	812	14.0	852	17.2	930	24.1	1002	31.6	1072	40.0
38100	2167	754	8.06	771	9.33	789	10.7	808	12.2	845	15.4	884	18.8	958	25.8	1028	33.5		
40200	2287	794	9.33	810	10.7	827	12.1	844	13.6	880	16.9	916	20.4	988	27.8	1055	35.6		
42300	2406	833	10.7	849	12.1	865	13.6	881	15.2	915	18.6	949	22.2	1018	29.8				
44400	2525	872	12.1	888	13.7	903	15.3	919	16.9	950	20.3	982	24.0	1049	32.0				
46500	2645	912	13.8	927	15.4	941	17.0	956	18.7	986	22.3	1017	26.1	1080	34.3				
48600	2764	951	15.5	966	17.2	980	19.0	995	20.8	1023	24.4	1052	28.3						
50700	2884	991	17.4	1006	19.3	1019	21.1	1033	22.9	1059	26.6								
52800	3003	1030	19.5	1046	21.6	1058	23.4	1071	25.2										

## 402 QMX-HP

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10800	614	441	2.36	523	3.85														
12900	733	464	2.75	537	4.26	607	6.04												
15000	853	490	3.22	559	4.82	621	6.59	736	10.7										
17100	972	519	3.76	584	5.47	642	7.30	752	11.6	848	16.4								
19200	1092	552	4.39	611	6.21	668	8.19	768	12.5	865	17.6	949	23.0						
21300	1211	588	5.10	641	7.06	694	9.14	791	13.6	879	18.7	966	24.5	1042	30.5	1106	36.4		
23400	1331	626	5.86	675	8.04	723	10.2	816	14.9	900	20.1	980	25.9	1059	32.3	1129	38.8	1190	45.3
25500	1450	666	6.73	710	9.06	755	11.4	842	16.3	924	21.7	999	27.5	1072	33.8	1145	40.8	1212	48.0
27600	1570	707	7.70	748	10.2	789	12.8	870	17.9	950	23.5	1022	29.4	1091	35.8	1159	42.8	1226	50.2
29700	1689	749	8.80	786	11.4	825	14.2	901	19.7	976	25.4	1048	31.7	1114	38.1	1177	45.0	1240	52.4
31800	1809	791	10.0	826	12.7	862	15.6	933	21.5	1004	27.5	1073	33.9	1139	40.7	1200	47.7		
33900	1928	834	11.4	867	14.2	901	17.3	967	23.5	1034	29.8	1100	36.4	1164	43.3	1224	50.5		
36000	2048	878	12.9	909	15.8	940	19.0	1003	25.6	1066	32.2	1129	39.1	1191	46.3	1250	53.7		

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.



# 445 QMX/QMX-HP Data

Effective Wheel Diameter = 44"

Maximum HP:

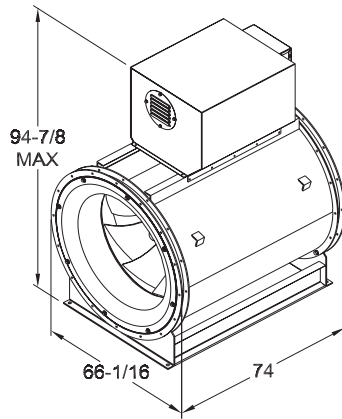
$$\text{QMX} = 54.4 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 45.6 (\text{RPM}/1000)^3$$

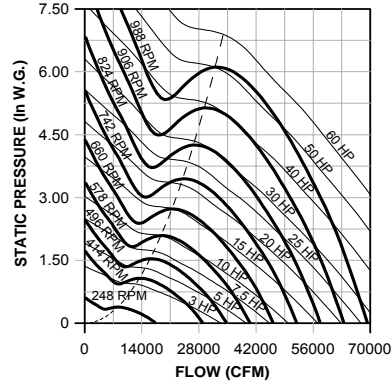
Inlet Area = 17.64 sq. ft.

Outlet Area = 21.49 sq. ft.

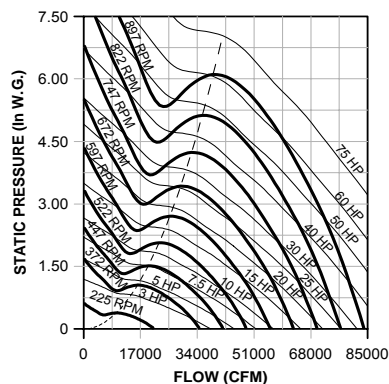
Outlet Velocity = CFM/21.49 fpm



## 445 QMX



## 490 QMX



# 540 QMX/QMX-HP Data

Effective Wheel Diameter = 54"

Maximum HP:

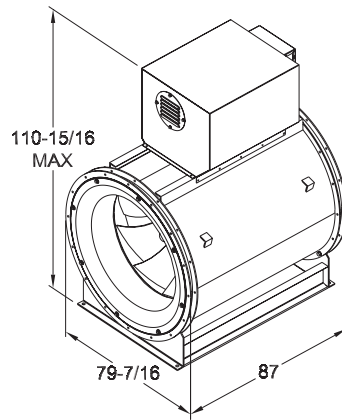
$$\text{QMX} = 143 (\text{RPM}/1000)^3$$

$$\text{QMX-HP} = 120 (\text{RPM}/1000)^3$$

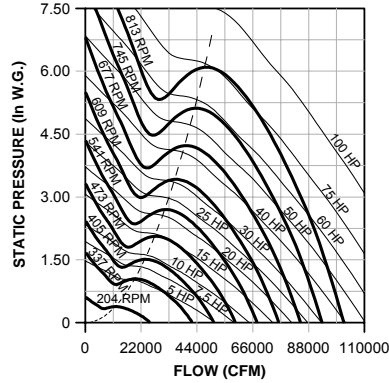
Inlet Area = 25.99 sq. ft.

Outlet Area = 31.64 sq. ft.

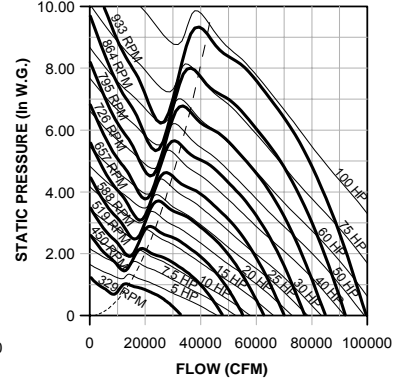
Outlet Velocity = CFM/31.64 fpm



540 QMX



540 QMX-HP



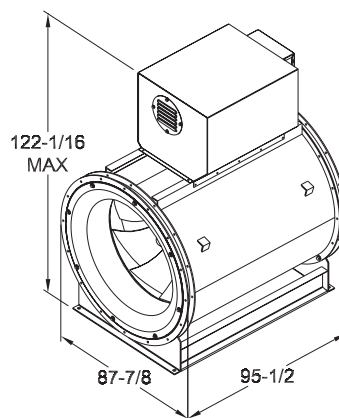
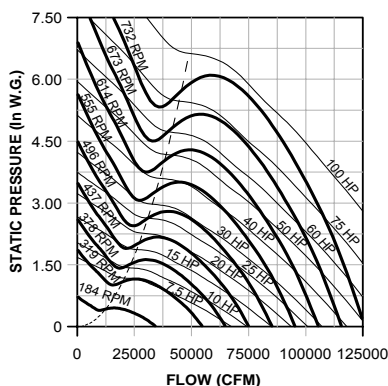
540 QMX

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19450	614	204	1.09	248	2.17	289	3.41	329	4.90										
23300	736	227	1.41	266	2.56	302	3.93	336	5.37										
27150	858	252	1.80	287	3.05	319	4.49	350	6.11	408	9.57								
31000	979	278	2.27	309	3.63	339	5.15	367	6.86	419	10.5	470	14.6						
34850	1101	305	2.85	333	4.33	360	5.93	386	7.67	435	11.7	481	15.8	571	25.8				
38700	1223	333	3.55	358	5.14	383	6.87	407	8.68	453	12.8	496	17.4	578	27.2				
42550	1344	362	4.39	384	6.06	407	7.92	430	9.91	472	14.0	512	18.8	589	29.1	662	40.6		
46400	1466	391	5.38	411	7.15	432	9.11	453	11.2	493	15.5	531	20.4	603	31.3	671	42.8	739	56.3
50250	1588	420	6.50	438	8.36	457	10.4	477	12.6	515	17.2	551	22.2	619	33.5	684	45.6	746	58.6
54100	1709	450	7.85	466	9.76	484	11.9	502	14.2	538	19.1	572	24.2	637	35.8	698	48.5	757	61.7
57950	1831	479	9.28	495	11.4	511	13.6	528	16.0	562	21.2	594	26.5	656	38.2	715	51.6	771	65.4
61800	1953	508	10.9	524	13.2	539	15.5	554	18.0	586	23.4	617	29.0	676	40.9	732	54.5	786	69.1
65650	2075	539	12.9	553	15.2	567	17.6	581	20.2	611	25.8	640	31.6	698	44.1	751	57.7	803	72.9
69500	2196	569	15.0	582	17.4	595	19.9	609	22.7	636	28.3	664	34.4	719	47.3	771	61.2		
73350	2318	599	17.4	611	19.9	624	22.5	636	25.2	662	31.1	689	37.5	742	51.0	792	65.2		
77200	2440	629	20.0	641	22.6	653	25.4	665	28.3	689	34.3	714	40.8	765	54.8	813	69.3		
81050	2561	659	22.7	670	25.5	682	28.5	693	31.4	716	37.6	740	44.4	788	58.7				
84900	2683	689	25.7	700	28.7	711	31.7	722	34.9	744	41.4	766	48.2	812	63.0				
88750	2805	719	29.1	730	32.3	740	35.4	751	38.7	772	45.4	793	52.4						
92600	2926	749	32.7	760	36.2	770	39.4	780	42.7	800	49.6								
96450	3048	779	36.6	790	40.4	800	43.7	809	47.0										

540 QMX-HP

CFM	VEL	1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP		6 SP		7 SP		8 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19450	614	329	4.27	389	6.90														
23300	736	346	4.96	401	7.72	453	10.9												
27150	858	366	5.83	417	8.70	463	11.9	549	19.4										
31000	979	388	6.83	436	9.90	480	13.3	561	21.0	633	29.7								
34850	1101	414	8.04	457	11.3	499	14.9	573	22.6	645	31.8	708	41.6	760	51.3				
38700	1223	441	9.31	480	12.9	519	16.6	591	24.8	656	33.8	721	44.3	778	55.2	826	65.9		
42550	1344	470	10.7	506	14.7	541	18.6	610	27.1	672	36.4	731	46.8	790	58.4	843	70.3	889	82.2
46400	1466	500	12.3	533	16.6	566	20.9	630	29.8	691	39.5	746	49.9	800	61.3	854	73.8	904	86.8
50250	1588	531	14.1	561	18.6	592	23.3	652	32.7	711	42.9	765	53.7	815	65.0	865	77.5	915	91.0
54100	1709	563	16.2	591	20.9	619	25.9	675	35.9	731	46.5	784	57.6	833	69.4	880	81.9	926	95.1
57950	1831	596	18.5	622	23.5	648	28.7	700	39.3	752	50.2	804	62.0	852	74.0	897	86.6		
61800	1953	628	21.0	653	26.2	677	31.6	726	43.0	775	54.4	824	66.4	871	78.9	916	92.0		
65650	2075	662	23.9	685	29.2	708	35.0	754	47.0	800	59.0	846	71.4	892	84.5				

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

**600 QMX**

Effective Wheel Diameter = 60"  
 Maximum HP:  
 $QMX = 243 (RPM/1000)^3$   
 Inlet Area = 28.88 sq. ft.  
 Outlet Area = 39.06 sq. ft.  
 Outlet Velocity = CFM/39.06 fpm

**600 QMX**

CFM	VEL	1/4 SP		1/2 SP		3/4 SP		1 SP		1-1/2 SP		2 SP		3 SP		4 SP		5 SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
24000	614	184	1.36	223	2.67	260	4.20	296	6.04										
28775	737	204	1.73	239	3.14	272	4.86	302	6.61										
33550	859	227	2.22	258	3.75	287	5.53	315	7.54	367	11.8								
38325	981	250	2.79	278	4.48	305	6.35	330	8.44	378	13.0	423	18.0						
43100	1103	275	3.53	300	5.36	325	7.38	348	9.52	392	14.5	433	19.6	514	31.9				
47875	1226	300	4.39	323	6.38	345	8.49	367	10.8	408	15.9	446	21.4	520	33.6				
52650	1348	326	5.43	346	7.50	367	9.82	387	12.2	425	17.3	462	23.4	530	35.9	596	50.2		
57425	1470	352	6.64	370	8.82	389	11.3	408	13.8	444	19.2	479	25.3	543	38.6	605	53.1	665	69.5
62200	1592	379	8.08	395	10.4	412	12.9	430	15.6	464	21.3	497	27.5	558	41.5	616	56.4	672	72.5
66975	1715	406	9.75	421	12.2	436	14.8	453	17.7	485	23.7	516	30.1	574	44.3	629	60.0	682	76.4
71750	1837	432	11.5	446	14.1	461	16.9	476	19.9	506	26.2	536	32.9	591	47.2	644	63.8	694	80.8
76525	1959	459	13.6	473	16.4	486	19.3	500	22.4	528	28.9	556	35.9	610	50.8	660	67.6	708	85.5
81300	2081	486	16.0	499	18.9	511	21.8	524	25.0	551	32.0	578	39.3	629	54.6	677	71.5	723	90.1
86075	2204	514	18.8	525	21.6	537	24.8	549	28.1	574	35.2	599	42.7	649	58.8	695	75.8		
90850	2326	541	21.7	552	24.8	563	28.0	574	31.4	598	38.8	622	46.7	669	63.2	714	80.7		
95625	2448	568	24.9	579	28.2	589	31.5	600	35.1	622	42.7	644	50.6	690	68.0				
100400	2571	595	28.3	605	31.7	615	35.3	626	39.1	646	46.7	668	55.2	711	72.9				
105175	2693	622	32.1	632	35.7	642	39.5	651	43.2	671	51.3	691	59.8						
109950	2815	649	36.2	659	40.2	669	44.2	678	48.1	696	56.2	716	65.2						
114725	2937	676	40.7	686	45.0	695	49.0	704	53.1	722	61.7								
119500	3060	704	45.8	714	50.5	722	54.4	730	58.4										

Performance shown is for Installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.



# QMX/QMX-HP Sound Data

## 90 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
1300	0.25	Inlet	66	62	61	59	57	56	50	42	62
		Outlet	78	63	60	53	54	52	50	40	60
2000	0.25	Inlet	72	67	65	62	64	66	59	51	70
		Outlet	82	66	67	62	64	66	59	51	70
	0.75	Inlet	72	67	64	61	62	62	57	50	67
		Outlet	82	66	67	61	61	60	57	49	67
2700	0.25	Inlet	75	77	74	72	71	73	70	61	78
		Outlet	87	80	73	72	70	72	69	62	78
	1.50	Inlet	78	78	73	71	68	68	65	60	75
		Outlet	88	80	73	71	67	66	64	59	74
3400	0.50	Inlet	80	85	81	80	75	78	77	69	84
		Outlet	92	90	78	79	74	76	76	69	83
	1.00	Inlet	83	87	81	79	74	76	75	68	83
		Outlet	92	90	77	79	73	75	75	68	83
	2.00	Inlet	81	86	81	79	73	74	73	67	82
		Outlet	92	90	77	79	72	73	71	66	81
4100	0.75	Inlet	84	92	87	83	78	81	83	75	88
		Outlet	95	98	82	83	78	80	82	76	88
	1.50	Inlet	86	94	87	83	78	80	81	74	88
		Outlet	95	98	81	82	77	79	80	74	88
	3.00	Inlet	85	93	87	82	77	78	78	73	86
		Outlet	95	98	81	82	76	77	76	72	87
4800	1.00	Inlet	86	94	92	88	84	84	86	80	92
		Outlet	98	101	89	86	83	83	85	80	92
	2.00	Inlet	89	97	93	88	84	83	84	79	92
		Outlet	98	101	89	85	83	82	84	79	91
	4.00	Inlet	87	95	93	87	83	82	81	78	91
		Outlet	98	101	88	85	82	80	80	77	90

## 120 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
1100	0.25	Inlet	67	66	63	62	61	58	51	43	66
		Outlet	75	67	63	58	59	57	51	41	64
1600	0.25	Inlet	75	71	70	67	69	68	60	52	74
		Outlet	81	70	71	67	69	68	61	52	73
	0.75	Inlet	75	70	69	66	66	65	59	51	71
		Outlet	80	70	71	65	65	63	58	50	70
2100	0.25	Inlet	82	79	76	73	76	77	70	62	81
		Outlet	92	77	77	73	74	76	71	62	81
	1.00	Inlet	84	79	75	72	72	72	67	60	78
		Outlet	92	76	76	71	71	70	67	59	77
2600	0.50	Inlet	86	86	83	80	79	81	77	69	86
		Outlet	96	87	81	80	78	80	77	69	85
	1.00	Inlet	89	87	83	80	78	79	76	68	85
		Outlet	96	86	81	79	77	79	75	68	84
	2.00	Inlet	88	87	82	79	77	77	74	67	84
		Outlet	96	86	81	79	75	75	73	66	83
3100	0.75	Inlet	90	93	88	86	82	85	82	75	91
		Outlet	99	95	85	86	81	83	82	75	90
	1.50	Inlet	92	94	88	86	81	83	81	74	90
		Outlet	99	94	84	85	80	82	81	74	89
	3.00	Inlet	91	93	88	85	80	81	79	73	88
		Outlet	99	94	84	85	79	79	77	72	87
3600	1.00	Inlet	92	98	93	90	85	88	87	80	94
		Outlet	101	101	88	89	84	86	87	80	94
	2.00	Inlet	95	100	93	90	84	86	86	79	94
		Outlet	102	101	87	89	83	85	85	79	93
	4.00	Inlet	93	99	92	89	84	84	83	78	92
		Outlet	101	101	87	89	82	83	81	77	92

## 90 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
2300	1.00	Inlet	76	71	69	66	65	64	59	50	70
		Outlet	82	71	70	64	65	64	60	53	70
3100	1.00	Inlet	81	83	77	77	72	72	69	62	79
		Outlet	87	83	76	76	71	72	69	64	79
	1.50	Inlet	81	83	77	77	71	71	68	61	79
		Outlet	87	84	76	76	70	72	69	63	79
3900	1.00	Inlet	83	90	84	82	78	78	76	72	86
		Outlet	91	93	80	82	77	79	76	73	86
	2.00	Inlet	85	92	84	82	77	77	76	70	85
		Outlet	91	93	80	81	75	78	75	71	85
	3.00	Inlet	85	92	84	82	76	76	75	69	85
		Outlet	92	94	80	81	72	77	75	71	85
4700	1.00	Inlet	84	92	90	87	84	83	81	78	91
		Outlet	94	97	87	86	83	83	81	79	90
	2.00	Inlet	88	96	91	87	83	82	81	76	91
		Outlet	94	97	87	85	82	82	81	77	90
	4.00	Inlet	88	97	91	87	83	81	80	75	90
		Outlet	95	98	87	85	80	80	80	76	89
5500	6.00	Inlet	91	99	97	92	88	84	83	79	95
		Outlet	98	101	94	88	86	82	83	80	93

## 120 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
1700	1.00	Inlet	77	72	72	67	67	64	58	48	71
		Outlet	82	71	73	64	67	65	60	52	72
2300	1.00	Inlet	86	82	79	76	74	74	69	60	80
		Outlet	90	80	78	74	75	74	70	62	80
	1.50	Inlet	87	82	79	75	74	73	68	59	80
		Outlet	91	80	78	73	74	73	69	62	79
2900	1.00	Inlet	88	90	86	84	80	80	77	70	87
		Outlet	94	90	83	83	80	80	77	71	87
	2.00	Inlet	91	91	86	84	79	79	75	68	86
		Outlet	95	90	83	82	78	79	76	70	86
	3.00	Inlet	90	91	86	84	79	78	75	67	86
		Outlet	95	90	83	82	77	78	75	70	85
3500	1.00	Inlet	90	95	91	90	85	85	83	78	92
		Outlet	98	98	87	89	84	85	83	79	92
	2.00	Inlet	94	98	91	90	84	84	82	75	92
		Outlet	97	97	87	88	83	84	82	77	91
	4.00	Inlet	94	99	91	90	83	83	80	74	92
		Outlet	98	98	87	88	80	83	81	76	91
4100	6.00	Inlet	96	104	96	92	86	86	85	79	96
		Outlet	101	104	90	91	82	87	85	81	95

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>Wi</sub>, L<sub>WA</sub> and outlet L<sub>Wo</sub>, L<sub>WA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.

**135 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>wA</sub>
			1	2	3	4	5	6	7	8	
950	0.25	Inlet	68	67	64	63	62	58	50	42	66
		Outlet	74	67	62	59	59	57	50	40	64
1400	0.25	Inlet	74	71	70	68	70	67	59	51	74
		Outlet	78	71	70	68	70	67	60	51	73
	1.00	Inlet	74	70	69	67	67	64	58	51	71
		Outlet	78	71	70	66	65	63	57	49	70
1850	0.25	Inlet	83	79	78	74	77	77	69	61	82
		Outlet	91	77	78	74	75	76	70	61	81
	1.50	Inlet	85	79	77	72	73	72	67	60	78
		Outlet	91	77	78	71	71	70	66	58	77
2300	0.50	Inlet	89	86	83	80	81	82	76	68	87
		Outlet	97	85	82	79	79	81	77	68	86
	1.00	Inlet	91	87	83	79	79	81	75	67	86
		Outlet	97	84	82	79	78	80	75	67	85
	2.00	Inlet	90	87	82	79	78	78	74	67	84
		Outlet	97	84	82	78	76	76	73	66	83
2750	0.75	Inlet	92	93	88	86	84	86	82	74	91
		Outlet	100	93	86	85	83	85	82	74	90
	1.50	Inlet	94	94	88	86	83	84	81	73	90
		Outlet	100	92	85	85	82	83	80	73	89
	3.00	Inlet	93	93	88	85	82	82	79	73	89
		Outlet	100	92	85	84	80	80	78	72	88
3200	1.00	Inlet	95	98	93	91	86	89	87	79	95
		Outlet	103	100	89	90	86	87	87	80	94
	2.00	Inlet	97	100	93	91	86	87	86	78	94
		Outlet	103	99	88	90	85	86	85	78	93
	4.00	Inlet	96	99	93	90	85	85	83	78	93
		Outlet	103	99	88	90	83	83	82	77	92

**150 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>wA</sub>
			1	2	3	4	5	6	7	8	
800	0.25	Inlet	56	60	65	62	57	52	44	35	63
		Outlet	62	63	66	62	56	51	45	37	63
1200	0.25	Inlet	66	67	73	74	69	66	60	51	75
		Outlet	72	70	73	77	68	64	60	51	76
	0.75	Inlet	72	73	75	76	68	64	57	49	75
		Outlet	77	72	73	76	67	62	57	49	75
1600	0.25	Inlet	76	72	77	75	74	72	70	61	79
		Outlet	77	72	77	78	75	70	69	61	80
	1.50	Inlet	77	77	78	76	73	69	65	57	78
		Outlet	82	76	77	78	73	68	64	59	79
2000	0.50	Inlet	78	77	79	79	77	75	74	70	83
		Outlet	81	78	81	83	80	76	73	70	85
	1.00	Inlet	77	77	79	78	77	75	72	68	82
		Outlet	81	78	81	83	80	75	72	68	85
	2.00	Inlet	77	79	80	79	76	74	71	66	82
		Outlet	83	79	81	82	79	74	71	67	83
2400	0.75	Inlet	79	79	84	82	80	78	77	75	86
		Outlet	84	82	86	88	85	80	78	76	89
	1.50	Inlet	78	79	84	81	79	77	75	73	85
		Outlet	84	81	86	88	85	80	76	74	90
	3.00	Inlet	80	83	85	82	80	78	75	72	86
		Outlet	87	83	86	86	83	79	76	74	88
2800	1.00	Inlet	82	83	87	84	84	82	81	79	89
		Outlet	87	86	88	90	89	85	82	80	93
	2.00	Inlet	81	83	87	84	83	81	79	77	88
		Outlet	87	85	88	91	89	85	81	78	93
	4.00	Inlet	82	87	88	85	84	82	79	76	89
		Outlet	90	87	88	88	87	83	80	77	91

**135 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts									L <sub>wA</sub>
			Octave Bands									
			1	2	3	4	5	6	7	8		
1600	1.00	Inlet	80	74	74	69	69	66	59	50	74	
		Outlet	82	74	74	68	69	67	61	54	74	
2100	1.00	Inlet	89	82	80	76	76	75	70	61	81	
		Outlet	92	80	80	75	77	75	71	63	82	
	1.50	Inlet	90	83	80	76	76	75	69	60	81	
		Outlet	93	80	80	73	76	74	71	63	81	
2600	1.00	Inlet	91	90	87	84	81	81	77	69	88	
		Outlet	96	89	85	83	82	81	78	71	88	
	2.00	Inlet	93	91	86	84	80	80	76	68	87	
		Outlet	96	89	84	82	80	80	77	70	86	
	3.00	Inlet	93	91	86	83	80	79	75	67	87	
		Outlet	97	89	84	81	79	79	76	70	86	
3100	1.00	Inlet	92	96	92	90	86	85	83	77	93	
		Outlet	99	96	89	90	85	86	83	78	93	
	2.00	Inlet	96	98	91	90	85	84	82	75	92	
		Outlet	99	96	88	89	84	85	82	76	92	
	4.00	Inlet	96	98	91	90	84	83	80	73	92	
		Outlet	100	96	88	88	82	84	81	75	91	
3600	6.00	Inlet	99	104	96	94	87	87	85	78	96	
		Outlet	103	103	91	92	83	87	85	80	95	

**150 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts									L <sub>WA</sub>
			Octave Bands									
			1	2	3	4	5	6	7	8		
1300	1.00	Inlet	70	71	73	72	66	60	55	47	72	
		Outlet	81	75	76	76	67	60	56	48	75	
1775	1.00	Inlet	73	75	78	76	74	72	67	59	79	
		Outlet	82	78	80	80	76	73	67	59	81	
	1.50	Inlet	73	75	78	76	73	69	65	57	78	
		Outlet	82	78	79	80	75	69	64	58	80	
2250	1.00	Inlet	78	79	82	81	79	78	77	69	85	
		Outlet	89	83	85	85	82	79	77	69	87	
	2.00	Inlet	80	80	82	81	78	76	74	69	84	
		Outlet	89	83	85	83	81	77	72	67	85	
	3.00	Inlet	82	82	83	81	79	77	74	71	85	
		Outlet	90	85	86	84	80	75	69	66	85	
2725	1.00	Inlet	82	84	86	85	84	82	83	76	90	
		Outlet	94	88	89	89	87	84	83	77	92	
	2.00	Inlet	83	84	86	84	83	82	81	75	89	
		Outlet	93	88	89	88	86	83	80	74	91	
	4.00	Inlet	87	87	87	85	83	81	79	76	89	
		Outlet	94	89	90	86	85	81	75	71	89	
3200	6.00	Inlet	90	92	92	88	88	86	84	82	93	
		Outlet	97	95	93	90	89	85	80	75	94	

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>wi</sub>, L<sub>wiA</sub> and outlet L<sub>wo</sub>, L<sub>woA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.

# QMX/QMX-HP Sound Data

## 165 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
700	0.25	Inlet	56	61	65	61	56	51	42	33	62
		Outlet	61	64	67	60	55	50	43	35	62
1060	0.25	Inlet	66	68	74	73	69	65	59	50	74
		Outlet	72	71	74	76	68	64	59	50	75
	0.75	Inlet	75	74	76	74	67	62	56	47	74
		Outlet	78	73	74	75	67	61	56	48	74
1420	0.25	Inlet	75	73	77	76	74	72	69	60	79
		Outlet	77	74	78	79	75	70	68	60	80
	1.00	Inlet	74	73	77	76	73	70	66	58	78
		Outlet	77	74	78	78	73	68	65	59	79
1780	0.50	Inlet	79	77	80	79	77	76	74	69	83
		Outlet	81	78	82	83	80	75	74	69	85
	1.00	Inlet	78	77	79	79	77	75	73	67	82
		Outlet	82	78	82	83	80	75	72	68	85
	2.00	Inlet	79	80	80	79	77	74	71	65	82
		Outlet	84	80	82	82	78	74	71	67	83
2140	0.75	Inlet	80	80	83	82	80	78	77	75	86
		Outlet	84	83	86	88	84	80	78	76	89
	1.50	Inlet	79	81	83	81	79	77	75	73	85
		Outlet	84	82	87	88	85	80	76	74	89
	3.00	Inlet	82	84	84	83	80	78	75	71	86
		Outlet	88	84	86	86	83	79	76	74	88
2500	1.00	Inlet	83	83	88	85	84	82	81	79	90
		Outlet	88	86	89	91	89	84	82	80	93
	2.00	Inlet	82	84	88	85	83	81	79	77	89
		Outlet	88	85	90	92	89	84	80	78	93
	4.00	Inlet	84	88	89	86	84	82	79	75	90
		Outlet	91	87	89	89	87	83	80	78	92

## 165 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
1200	1.00	Inlet	72	72	74	72	66	61	55	47	73
		Outlet	81	75	77	76	67	61	56	48	76
1625	1.00	Inlet	74	76	79	76	75	73	68	59	80
		Outlet	83	79	81	81	76	73	67	59	82
	1.50	Inlet	74	76	79	76	73	69	65	58	78
		Outlet	83	79	81	80	75	70	64	58	81
2050	1.00	Inlet	79	80	82	82	80	79	77	69	86
		Outlet	89	84	86	86	82	80	76	69	88
	2.00	Inlet	81	81	82	81	79	77	75	69	84
		Outlet	89	84	85	84	81	77	72	67	86
	3.00	Inlet	83	83	83	82	80	78	75	71	85
		Outlet	90	86	86	84	81	75	70	67	86
2475	1.00	Inlet	84	84	87	86	84	83	84	76	91
		Outlet	95	88	90	90	87	84	84	76	93
	2.00	Inlet	85	84	87	86	84	82	82	75	90
		Outlet	95	87	91	89	86	83	80	74	92
	4.00	Inlet	89	87	88	86	84	82	80	77	90
		Outlet	95	89	91	87	85	81	75	72	90
2900	6.00	Inlet	92	93	92	89	89	87	85	82	94
		Outlet	98	94	95	91	90	86	79	76	94

## 180 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
700	0.25	Inlet	59	64	68	64	59	54	46	37	65
		Outlet	64	66	69	63	58	54	46	38	65
1020	0.25	Inlet	69	71	75	75	70	66	60	51	76
		Outlet	73	73	76	77	69	65	60	51	76
	1	Inlet	86	80	79	75	69	63	56	48	76
		Outlet	85	77	76	77	68	63	56	48	76
1340	0.25	Inlet	77	75	78	76	75	73	69	61	80
		Outlet	77	75	79	80	75	71	68	61	81
	1.50	Inlet	78	79	79	77	73	70	65	57	79
		Outlet	82	78	79	78	74	69	65	59	79
1660	0.50	Inlet	80	78	80	80	78	77	75	70	84
		Outlet	82	79	83	84	81	76	75	70	86
	1.00	Inlet	80	79	80	79	78	75	73	68	83
		Outlet	82	79	84	84	80	75	73	69	85
	2.00	Inlet	81	80	81	80	77	75	72	66	83
		Outlet	84	80	83	83	79	75	72	68	84
1980	0.75	Inlet	80	82	83	83	81	79	78	76	87
		Outlet	85	84	87	88	85	81	79	77	90
	1.50	Inlet	80	82	83	82	80	78	76	74	86
		Outlet	85	84	88	89	85	80	77	75	90
	3.00	Inlet	83	85	84	83	81	79	76	72	86
		Outlet	88	85	86	86	83	79	76	75	88
2300	1.00	Inlet	85	84	89	86	85	83	82	80	90
		Outlet	89	86	90	92	89	85	82	81	94
	2.00	Inlet	84	85	89	86	84	82	80	78	89
		Outlet	89	86	91	93	90	85	81	79	94
	4.00	Inlet	86	89	89	87	84	82	80	76	90
		Outlet	92	87	90	90	88	83	80	78	92

## 180 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
1100	1.00	Inlet	72	73	75	73	66	61	55	47	73
		Outlet	81	76	78	76	67	61	56	48	76
1500	1.00	Inlet	75	77	80	77	75	74	68	59	80
		Outlet	83	80	82	81	77	74	67	59	82
	1.50	Inlet	75	77	80	77	74	70	65	58	79
		Outlet	83	80	81	81	75	70	65	58	81
1900	1.00	Inlet	80	81	82	82	81	80	77	69	86
		Outlet	89	85	87	86	83	81	77	69	88
	2.00	Inlet	82	82	82	82	80	78	75	70	85
		Outlet	89	85	85	85	81	77	73	68	86
	3.00	Inlet	84	84	83	83	81	78	76	72	86
		Outlet	90	87	86	85	81	76	70	67	86
2300	1.00	Inlet	86	86	88	87	85	84	85	76	92
		Outlet	96	89	91	91	88	85	85	77	94
	2.00	Inlet	86	86	88	87	84	83	82	76	91
		Outlet	95	88	92	91	87	84	81	75	93
	4.00	Inlet	90	88	88	87	84	82	80	77	90
		Outlet	96	89	92	88	86	81	75	73	91
2700	6.00	Inlet	94	93	93	90	89	87	85	82	95
		Outlet	99	95	96	92	90	86	80	77	95

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>Wi</sub>, L<sub>WA</sub> and outlet L<sub>Wo</sub>, L<sub>WA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.

**202 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>W</sub> A
			1	2	3	4	5	6	7	8	
600	0.25	Inlet	60	66	69	62	58	53	44	35	65
		Outlet	63	67	70	62	57	53	44	36	65
900	0.25	Inlet	70	73	76	75	70	66	59	50	76
		Outlet	74	74	77	76	69	65	59	51	76
	0.75	Inlet	74	75	78	75	69	64	57	48	76
		Outlet	77	75	77	75	68	63	57	49	75
1200	0.25	Inlet	77	77	79	77	76	74	69	60	81
		Outlet	78	77	80	80	76	72	68	61	81
	1.50	Inlet	79	80	80	77	74	71	65	57	79
		Outlet	81	79	80	79	74	69	65	60	80
1500	0.50	Inlet	81	81	82	81	79	78	76	70	85
		Outlet	83	82	85	85	81	77	75	71	87
	1.00	Inlet	81	81	81	80	79	76	74	69	84
		Outlet	83	82	85	85	81	76	74	70	86
	2.00	Inlet	82	82	82	81	78	76	73	67	83
		Outlet	84	82	84	84	80	76	73	69	85
1800	0.75	Inlet	82	84	84	84	82	81	79	77	88
		Outlet	86	86	89	89	86	82	80	79	91
	1.50	Inlet	82	84	83	83	81	79	77	75	87
		Outlet	86	86	89	90	86	81	78	76	91
	3.00	Inlet	84	87	84	84	82	80	77	73	87
		Outlet	88	87	87	88	84	80	78	76	90
2100	1.00	Inlet	87	87	89	88	86	84	83	81	92
		Outlet	90	89	92	93	90	86	84	82	95
	2.00	Inlet	86	87	89	87	85	83	81	79	91
		Outlet	90	88	92	94	90	86	82	80	95
	4.00	Inlet	87	90	90	88	85	83	81	77	91
		Outlet	92	89	91	92	89	85	82	79	94

**225 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>wA</sub>
			1	2	3	4	5	6	7	8	
500	0.25	Inlet	60	66	67	60	56	49	40	31	62
		Outlet	64	67	67	59	54	49	41	33	62
780	0.25	Inlet	70	74	77	74	70	65	58	48	75
		Outlet	74	75	78	74	69	65	58	49	76
	0.75	Inlet	77	76	78	74	68	62	55	46	75
		Outlet	78	75	78	74	67	62	55	47	75
1060	0.25	Inlet	77	78	79	78	76	74	68	59	81
		Outlet	77	78	81	80	75	73	68	60	82
	1.50	Inlet	81	82	81	78	74	70	64	56	80
		Outlet	82	80	81	79	74	69	65	59	80
1340	0.50	Inlet	81	82	83	81	80	78	76	70	85
		Outlet	83	83	86	85	81	78	75	71	87
	1.00	Inlet	81	82	82	81	79	77	74	69	84
		Outlet	83	83	86	85	81	77	74	70	87
	2.00	Inlet	83	83	83	81	79	76	72	67	84
		Outlet	84	84	85	84	80	76	73	69	85
1620	0.75	Inlet	83	86	84	85	83	81	80	78	89
		Outlet	87	88	90	90	86	83	81	79	92
	1.50	Inlet	83	86	83	84	82	80	78	76	87
		Outlet	86	88	91	90	86	82	79	77	92
	3.00	Inlet	85	88	84	85	82	80	77	74	88
		Outlet	88	88	88	88	84	81	78	76	90
1900	1.00	Inlet	88	89	89	89	87	85	84	82	93
		Outlet	91	90	93	94	90	87	85	83	96
	2.00	Inlet	87	89	89	88	86	84	82	80	92
		Outlet	90	90	94	94	91	86	83	81	96
	4.00	Inlet	89	92	89	88	86	84	81	78	92
		Outlet	93	91	92	92	89	85	82	80	94

**202 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts									L <sub>wA</sub>
			Octave Bands									
			1	2	3	4	5	6	7	8		
1000	1.00	Inlet	73	75	76	73	67	62	55	47	74	
		Outlet	81	78	79	76	68	62	56	48	76	
1350	1.00	Inlet	77	79	81	78	77	74	68	59	81	
		Outlet	84	82	83	82	78	74	67	59	83	
	1.50	Inlet	77	79	81	78	75	71	66	58	80	
		Outlet	84	82	83	81	76	71	65	59	82	
1700	1.00	Inlet	81	83	83	83	82	81	77	69	87	
		Outlet	89	87	87	87	83	81	77	69	89	
	2.00	Inlet	83	84	83	83	81	79	76	71	86	
		Outlet	89	87	85	85	82	78	73	68	87	
	3.00	Inlet	85	85	83	83	81	79	76	73	87	
		Outlet	90	88	85	85	81	76	71	68	86	
2050	1.00	Inlet	87	87	88	88	86	85	85	76	92	
		Outlet	95	90	92	92	89	86	85	76	94	
	2.00	Inlet	87	87	88	88	85	84	82	76	91	
		Outlet	95	90	92	91	88	85	81	75	93	
	4.00	Inlet	91	89	88	88	85	83	81	78	91	
		Outlet	96	91	91	89	86	82	76	73	91	
2400	6.00	Inlet	96	94	94	92	90	88	86	83	96	
		Outlet	101	95	97	93	91	86	80	77	96	

**225 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts									L <sub>WA</sub>
			Octave Bands									
			1	2	3	4	5	6	7	8		
950	1.00	Inlet	74	77	77	74	69	64	57	48	75	
		Outlet	80	80	81	77	70	64	57	49	78	
1250	1.00	Inlet	79	81	82	79	78	76	69	60	83	
		Outlet	84	84	85	83	79	75	68	60	84	
	1.50	Inlet	79	82	82	79	76	73	67	60	81	
		Outlet	84	84	84	82	77	72	66	60	83	
1550	1.00	Inlet	82	85	84	84	83	82	77	69	88	
		Outlet	89	88	89	88	84	82	77	69	90	
	2.00	Inlet	84	85	84	84	81	80	76	71	87	
		Outlet	90	89	87	86	83	79	74	69	88	
	3.00	Inlet	86	87	84	84	82	80	77	74	87	
		Outlet	91	90	86	86	82	76	72	69	87	
1850	1.00	Inlet	88	89	88	89	87	87	84	76	93	
		Outlet	95	92	92	92	89	87	84	76	95	
	2.00	Inlet	88	89	88	88	86	85	82	76	92	
		Outlet	95	92	92	92	88	85	81	75	94	
	4.00	Inlet	91	91	88	88	86	84	81	78	91	
		Outlet	96	92	90	89	86	82	77	74	91	
2150	6.00	Inlet	97	95	94	93	91	89	86	83	96	
		Outlet	101	96	97	94	91	86	80	78	96	

The sound power level ratings shown are in decibels referred to  $10^{-12}$  watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wI}$ ,  $L_{wIA}$  and outlet  $L_{wO}$ ,  $L_{wOA}$  sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.



# QMX/QMX-HP Sound Data

## 245 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
500	0.25	Inlet	63	68	69	63	59	52	43	34	65
		Outlet	66	70	70	62	57	52	44	36	65
740	0.25	Inlet	72	76	78	75	71	66	58	49	77
		Outlet	75	77	80	75	70	66	58	50	77
	0.75	Inlet	76	77	80	75	69	64	56	47	76
		Outlet	77	77	80	74	68	63	56	48	76
980	0.25	Inlet	77	80	80	79	77	75	68	59	82
		Outlet	77	80	82	81	75	73	68	60	82
	1.50	Inlet	81	83	81	78	74	71	64	56	80
		Outlet	82	81	82	79	74	70	65	60	80
1220	0.50	Inlet	81	84	83	82	80	79	75	70	86
		Outlet	83	84	87	85	81	78	75	71	87
	1.00	Inlet	81	84	83	81	79	77	74	69	85
		Outlet	83	85	87	85	81	77	74	70	87
	2.00	Inlet	83	85	84	81	79	76	72	66	84
		Outlet	84	85	86	84	80	76	73	69	86
1460	0.75	Inlet	83	87	85	85	83	82	80	78	89
		Outlet	86	89	91	90	86	83	81	79	92
	1.50	Inlet	83	87	84	84	82	80	78	76	87
		Outlet	86	89	91	90	86	81	79	77	92
	3.00	Inlet	87	89	85	85	83	80	77	73	88
		Outlet	88	89	89	88	84	81	78	77	90
1700	1.00	Inlet	87	90	88	89	87	85	84	82	92
		Outlet	90	91	94	94	90	86	84	83	95
	2.00	Inlet	87	90	87	88	86	84	82	80	91
		Outlet	90	91	94	94	90	86	83	81	95
	4.00	Inlet	90	92	88	89	86	84	81	77	92
		Outlet	92	92	92	92	88	85	82	80	94

## 245 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
850	1.00	Inlet	75	77	77	74	68	63	56	48	75
		Outlet	80	80	81	76	69	63	56	48	77
1125	1.00	Inlet	79	82	82	80	78	75	67	58	83
		Outlet	84	84	85	82	79	74	67	59	84
	1.50	Inlet	79	82	82	79	76	72	66	59	81
		Outlet	84	84	85	82	76	71	65	59	83
1400	1.00	Inlet	83	86	85	84	83	82	76	68	88
		Outlet	89	89	90	88	84	82	76	68	90
	2.00	Inlet	85	86	85	84	82	80	76	71	87
		Outlet	89	89	87	86	82	78	73	69	88
	3.00	Inlet	87	87	85	85	82	80	77	73	88
		Outlet	90	91	87	86	81	75	72	69	87
1675	1.00	Inlet	88	90	88	89	87	87	83	75	93
		Outlet	95	93	93	92	89	88	84	75	95
	2.00	Inlet	88	90	87	88	86	85	82	76	92
		Outlet	94	92	92	91	88	85	81	74	93
	4.00	Inlet	92	91	88	89	86	84	82	79	92
		Outlet	95	93	89	90	86	81	77	74	91
1950	6.00	Inlet	97	96	94	93	91	89	87	84	97
		Outlet	100	97	96	94	91	86	80	78	96

## 270 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
500	0.25	Inlet	66	65	66	66	62	57	49	42	67
		Outlet	75	83	75	69	65	59	51	45	72
720	0.25	Inlet	71	76	73	73	71	69	59	52	76
		Outlet	78	82	82	77	73	70	61	54	79
	1.00	Inlet	75	76	73	71	68	64	59	52	73
		Outlet	76	78	79	75	72	67	60	53	77
940	0.25	Inlet	75	81	80	78	76	78	69	60	82
		Outlet	81	86	84	83	79	78	71	61	85
	1.50	Inlet	77	79	77	76	73	69	65	59	78
		Outlet	78	81	81	80	77	73	67	62	82
1160	0.50	Inlet	78	85	85	82	80	82	78	67	87
		Outlet	85	87	90	88	84	83	80	68	90
	1.00	Inlet	78	85	84	81	79	79	74	66	85
		Outlet	83	87	90	88	84	81	76	67	90
	2.00	Inlet	78	83	83	79	78	74	70	64	83
		Outlet	82	86	89	87	83	78	72	68	88
1380	0.75	Inlet	81	87	89	86	85	85	84	73	92
		Outlet	88	90	94	92	89	87	85	74	95
	1.50	Inlet	81	87	88	85	84	83	80	71	90
		Outlet	86	90	94	92	89	85	81	73	94
	3.00	Inlet	82	86	86	84	82	79	75	70	87
		Outlet	85	89	92	91	87	82	78	74	92
1600	1.00	Inlet	84	87	95	90	89	87	90	78	96
		Outlet	91	90	99	96	94	90	91	79	99
	3.00	Inlet	85	86	93	88	87	84	82	75	92
		Outlet	89	90	98	95	93	88	85	79	97
	5.00	Inlet	87	88	91	89	86	82	80	75	92
		Outlet	88	91	96	93	91	85	81	79	95

## 270 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
700	1.00	Inlet	72	74	70	67	64	60	55	47	69
		Outlet	77	74	72	70	67	63	56	47	72
975	1.00	Inlet	77	83	82	77	75	74	67	58	81
		Outlet	83	83	83	79	77	74	67	59	82
	2.00	Inlet	80	81	79	75	72	69	65	59	78
		Outlet	84	83	81	79	76	72	66	61	81
1250	1.00	Inlet	84	87	90	85	79	83	79	68	89
		Outlet	90	88	92	87	82	82	78	69	90
	2.00	Inlet	82	85	88	83	78	76	73	66	85
		Outlet	88	88	91	86	81	78	73	68	88
	3.00	Inlet	85	85	87	82	78	74	71	66	84
		Outlet	90	88	90	86	82	78	72	70	88
1525	1.00	Inlet	88	89	97	91	86	84	86	79	94
		Outlet	94	92	96	93	89	85	86	81	95
	3.00	Inlet	84	86	94	89	84	80	78	72	91
		Outlet	92	93	96	91	88	82	79	77	93
	5.00	Inlet	89	88	91	87	84	79	76	72	90
		Outlet	93	94	94	90	88	83	79	79	93
1800	7.00	Inlet	92	91	96	92	89	84	80	76	94
		Outlet	95	97	98	94	92	88	83	83	97

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>Wi</sub>, L<sub>WA</sub> and outlet L<sub>Wo</sub>, L<sub>WA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.

**300 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
400	0.25	Inlet	66	62	66	64	59	54	45	40	65
		Outlet	75	84	69	65	62	55	48	42	71
600	0.25	Inlet	72	74	73	72	70	65	57	50	74
		Outlet	79	83	81	76	72	67	59	52	78
	0.75	Inlet	74	74	72	71	67	62	56	49	72
		Outlet	77	80	79	74	70	65	58	51	76
800	0.25	Inlet	76	82	79	78	75	77	65	58	82
		Outlet	82	86	83	82	78	77	68	59	84
	1.50	Inlet	79	79	77	75	72	68	63	57	77
		Outlet	79	81	80	79	76	72	66	60	81
1000	0.50	Inlet	80	85	84	82	81	81	75	64	87
		Outlet	85	88	89	87	84	82	76	66	90
	1.00	Inlet	79	84	83	81	79	78	71	64	84
		Outlet	84	88	89	87	83	80	73	65	89
	2.00	Inlet	80	83	82	79	77	73	69	64	82
		Outlet	83	86	87	85	82	77	72	69	87
1200	0.75	Inlet	82	89	89	86	84	86	82	70	91
		Outlet	88	91	94	92	88	87	84	72	95
	1.50	Inlet	82	88	88	85	83	83	78	70	89
		Outlet	87	91	94	92	88	85	80	71	94
	3.00	Inlet	83	87	86	83	82	78	74	69	87
		Outlet	86	90	92	90	86	81	77	74	92
1400	1.00	Inlet	84	89	94	90	89	89	88	76	95
		Outlet	91	92	98	96	93	90	89	77	99
	3.00	Inlet	86	88	92	88	87	84	81	74	92
		Outlet	89	92	97	95	92	87	83	78	97
	5.00	Inlet	87	89	91	89	86	82	79	75	91
		Outlet	89	92	95	92	89	85	81	80	95

**330 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
400	0.25	Inlet	69	66	68	67	62	56	48	42	68
		Outlet	78	85	72	69	65	57	50	44	73
580	0.25	Inlet	75	76	75	74	72	67	58	51	76
		Outlet	81	84	82	77	74	69	61	53	80
	1.00	Inlet	78	77	74	72	68	64	58	51	74
		Outlet	79	81	79	75	72	66	59	53	77
760	0.25	Inlet	78	83	80	79	78	78	67	59	83
		Outlet	84	88	85	83	80	79	69	60	86
	1.50	Inlet	80	80	78	77	73	69	64	58	78
		Outlet	81	83	83	81	77	73	67	62	83
940	0.50	Inlet	82	86	86	83	82	83	76	65	88
		Outlet	87	90	91	88	85	84	77	66	91
	1.00	Inlet	82	85	85	82	81	79	73	65	86
		Outlet	86	90	91	88	85	81	74	66	90
	2.00	Inlet	82	84	83	81	78	74	70	64	83
		Outlet	85	88	89	87	83	78	72	70	88
1120	0.75	Inlet	84	91	90	88	86	88	83	71	93
		Outlet	89	93	96	93	90	89	84	72	96
	1.50	Inlet	84	90	89	86	85	84	79	70	91
		Outlet	88	93	95	93	89	86	80	72	95
	3.00	Inlet	84	88	88	85	83	79	75	70	88
		Outlet	88	92	94	92	87	83	78	75	93
1300	1.00	Inlet	86	92	95	91	90	90	88	76	96
		Outlet	92	94	99	97	94	92	90	77	100
	3.00	Inlet	87	90	93	89	88	85	82	75	93
		Outlet	91	94	99	96	93	88	84	79	98
	5.00	Inlet	89	91	92	90	87	83	80	76	92
		Outlet	90	94	97	94	91	86	82	81	96

**300 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
600	1.00	Inlet	74	72	69	66	63	59	53	46	69
		Outlet	77	74	72	69	66	61	54	46	71
850	1.00	Inlet	78	84	80	76	75	73	65	56	80
		Outlet	83	83	82	79	76	74	65	57	82
	2.00	Inlet	82	81	79	75	72	68	64	58	78
		Outlet	86	83	81	78	76	71	66	60	81
1100	1.00	Inlet	86	88	90	85	80	84	77	66	89
		Outlet	90	89	92	87	82	82	76	67	90
	2.00	Inlet	83	86	88	82	77	75	72	65	85
		Outlet	88	89	91	86	81	77	72	67	88
	3.00	Inlet	86	86	87	82	78	74	71	66	84
		Outlet	90	89	90	86	82	78	72	70	88
1350	1.00	Inlet	88	91	96	91	86	86	86	78	94
		Outlet	94	93	97	93	88	86	86	80	95
	3.00	Inlet	85	89	93	88	83	80	77	71	90
		Outlet	92	94	96	91	87	82	79	77	93
	5.00	Inlet	90	90	91	87	84	79	76	72	90
		Outlet	94	94	94	91	87	83	79	79	93
1600	7.00	Inlet	94	92	96	91	89	84	80	77	94
		Outlet	97	98	99	94	92	88	83	84	97

**330 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
600	1.00	Inlet	75	76	72	69	66	62	55	47	72
		Outlet	78	76	74	72	69	64	56	48	74
825	1.00	Inlet	81	86	83	78	78	76	67	59	83
		Outlet	86	86	85	81	79	76	68	59	84
	2.00	Inlet	82	84	81	77	74	70	66	59	80
		Outlet	86	85	83	80	77	73	68	62	83
1050	1.00	Inlet	87	90	92	86	82	85	79	68	91
		Outlet	92	92	93	88	84	84	79	69	91
	2.00	Inlet	85	89	90	84	79	78	74	66	87
		Outlet	91	91	92	88	83	79	75	70	90
	3.00	Inlet	87	88	88	83	79	76	72	67	86
		Outlet	91	91	91	87	83	79	74	72	89
1275	1.00	Inlet	90	93	98	92	87	87	87	79	96
		Outlet	96	95	98	94	90	88	88	82	97
	3.00	Inlet	87	91	95	90	85	82	79	73	92
		Outlet	94	96	97	93	88	84	81	79	95
	5.00	Inlet	90	92	93	89	85	81	77	73	91
		Outlet	95	96	95	92	88	84	80	81	94
1500	7.00	Inlet	94	93	98	93	90	85	82	77	95
		Outlet	98	100	100	96	93	88	84	86	98

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>WA</sub>, L<sub>WA</sub> and outlet L<sub>WA</sub>. L<sub>WA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.

# QMX/QMX-HP Sound Data

## 365 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
400	0.25	Inlet	72	69	71	69	65	59	50	44	70
		Outlet	80	87	75	72	68	60	53	47	75
560	0.25	Inlet	77	79	77	75	75	69	60	53	78
		Outlet	83	85	83	79	76	70	62	55	81
	1.00	Inlet	79	77	75	73	69	65	59	52	75
		Outlet	80	82	80	77	73	68	61	54	79
720	0.25	Inlet	81	85	82	81	80	80	69	59	85
		Outlet	86	89	87	85	82	80	70	61	87
	1.50	Inlet	82	82	80	78	75	71	65	59	80
		Outlet	83	85	85	83	79	74	68	64	84
880	0.50	Inlet	85	87	87	85	84	84	77	65	90
		Outlet	89	92	92	90	87	85	78	66	92
	1.00	Inlet	85	86	86	84	83	81	74	66	87
		Outlet	88	92	92	90	86	82	75	66	92
	2.00	Inlet	83	85	85	82	80	76	71	65	85
		Outlet	87	91	91	89	84	79	73	70	90
1040	0.75	Inlet	86	92	91	89	88	89	83	71	94
		Outlet	91	95	97	95	91	90	84	72	97
	1.50	Inlet	86	92	90	88	86	86	80	71	92
		Outlet	90	95	97	94	90	88	81	72	96
	3.00	Inlet	86	90	89	86	84	80	76	71	89
		Outlet	89	94	95	93	89	84	79	76	94
1200	1.00	Inlet	88	94	96	93	91	92	88	75	98
		Outlet	93	97	101	98	95	94	90	77	101
	3.00	Inlet	88	93	94	91	89	87	83	76	94
		Outlet	92	97	100	97	94	90	85	80	99
	5.00	Inlet	90	93	94	91	88	84	81	77	93
		Outlet	92	96	98	95	92	87	83	81	97

## 365 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
500	1.00	Inlet	76	74	70	68	64	60	53	46	70
		Outlet	78	75	73	71	67	62	54	46	72
700	1.00	Inlet	82	85	81	77	76	73	64	56	81
		Outlet	85	85	83	80	77	73	65	57	82
	2.00	Inlet	84	83	79	76	73	69	64	58	78
		Outlet	86	84	82	79	76	71	66	60	81
900	1.00	Inlet	88	90	90	85	83	84	76	65	89
		Outlet	91	92	92	87	84	82	75	65	90
	2.00	Inlet	85	88	88	82	78	76	71	64	85
		Outlet	90	91	91	86	81	77	72	67	88
	3.00	Inlet	88	87	87	82	78	75	71	66	85
		Outlet	91	90	90	86	82	78	73	72	88
1100	1.00	Inlet	90	95	97	91	86	89	86	76	95
		Outlet	95	96	97	93	89	88	86	79	96
	3.00	Inlet	87	93	94	88	83	81	77	71	91
		Outlet	94	96	96	92	87	82	79	78	94
	5.00	Inlet	92	92	92	88	84	80	76	73	90
		Outlet	96	96	94	91	88	83	80	81	94
1300	7.00	Inlet	95	95	96	92	89	84	81	77	94
		Outlet	99	100	98	95	92	88	85	86	98

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>Wi</sub>, L<sub>WA</sub> and outlet L<sub>Wo</sub>, L<sub>WA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.

## 402 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
300	0.25	Inlet	67	67	68	65	60	53	46	40	66
		Outlet	82	80	70	67	61	54	48	43	70
440	0.25	Inlet	77	75	75	73	72	64	56	49	75
		Outlet	83	88	80	77	73	66	58	51	79
	0.75	Inlet	78	75	74	72	67	63	55	49	73
		Outlet	81	85	78	75	71	64	57	51	77
580	0.25	Inlet	81	83	80	78	78	73	64	56	82
		Outlet	86	87	85	82	80	75	66	58	84
	1.50	Inlet	82	80	78	76	72	68	63	57	78
		Outlet	81	82	81	80	76	71	65	59	81
720	0.50	Inlet	85	87	85	83	83	81	71	62	87
		Outlet	88	91	90	87	85	82	73	63	90
	1.00	Inlet	84	86	84	82	80	77	69	62	85
		Outlet	87	90	90	87	83	79	71	63	89
	2.00	Inlet	85	84	82	80	77	73	69	63	82
		Outlet	86	89	88	85	81	76	72	71	87
860	0.75	Inlet	87	90	89	87	86	86	78	67	92
		Outlet	91	95	95	92	89	87	79	68	95
	1.50	Inlet	87	89	88	86	84	82	75	68	89
		Outlet	90	95	95	92	88	84	77	69	93
	3.00	Inlet	87	86	86	84	81	78	74	69	86
		Outlet	89	93	93	90	85	80	78	78	91
1000	1.00	Inlet	88	95	93	91	89	91	84	72	96
		Outlet	92	98	99	97	93	92	85	73	99
	2.00	Inlet	88	94	92	90	88	87	81	72	93
		Outlet	92	98	98	96	92	89	83	75	98
	4.00	Inlet	89	92	91	89	85	82	78	74	91
		Outlet	92	96	96	94	90	85	82	80	95

## 402 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
500	1.00	Inlet	79	77	73	71	68	63	55	47	73
		Outlet	79	78	76	73	70	64	56	47	75
675	1.00	Inlet	85	88	83	79	79	75	66	58	84
		Outlet	87	88	85	82	80	76	67	59	85
	2.00	Inlet	84	85	81	78	74	71	66	59	80
		Outlet	87	87	84	81	78	73	68	63	83
850	1.00	Inlet	89	93	91	86	85	85	77	66	91
		Outlet	93	95	93	88	86	84	77	67	92
	2.00	Inlet	87	91	89	84	80	78	73	65	87
		Outlet	92	94	92	88	83	79	74	69	90
	3.00	Inlet	89	90	88	84	79	76	72	67	86
		Outlet	93	93	91	88	83	78	75	74	90
1025	1.00	Inlet	91	98	97	92	87	90	86	78	96
		Outlet	96	99	98	94	90	90	87	81	97
	3.00	Inlet	89	95	95	89	85	83	78	72	92
		Outlet	96	99	97	93	88	84	81	80	95
	5.00	Inlet	92	94	93	89	85	81	77	73	91
		Outlet	97	97	95	92	89	84	82	82	95
1200	7.00	Inlet	96	97	97	93	89	85	81	78	95
		Outlet	100	101	99	96	93	88	86	87	99

**445 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
300	0.25	Inlet	70	70	71	68	63	56	48	42	69
		Outlet	84	83	74	70	65	57	50	45	73
420	0.25	Inlet	80	77	77	75	74	65	57	50	77
		Outlet	85	88	82	78	75	67	59	52	80
	0.75	Inlet	79	75	76	73	68	64	56	50	74
		Outlet	82	86	80	76	72	66	58	51	78
540	0.25	Inlet	83	84	81	80	80	74	64	57	83
		Outlet	88	88	86	83	81	75	66	58	86
	1.50	Inlet	83	81	79	77	73	69	63	57	79
		Outlet	83	84	83	81	77	72	66	61	82
660	0.50	Inlet	87	88	86	84	84	81	71	62	88
		Outlet	90	93	91	88	86	83	73	63	91
	1.00	Inlet	86	87	84	83	82	77	70	62	86
		Outlet	89	92	91	88	84	79	71	63	90
	2.00	Inlet	86	85	83	81	78	74	69	63	83
		Outlet	88	90	89	86	82	77	73	72	88
780	0.75	Inlet	89	91	90	88	88	87	77	67	92
		Outlet	92	96	96	93	90	88	79	67	95
	1.50	Inlet	88	90	88	87	85	82	75	67	90
		Outlet	92	96	95	92	88	84	77	69	94
	3.00	Inlet	88	88	87	85	82	78	74	69	87
		Outlet	91	94	93	90	85	81	79	79	92
900	1.00	Inlet	89	96	93	92	90	92	83	71	96
		Outlet	93	100	99	97	93	93	84	72	99
	2.00	Inlet	89	95	92	91	88	88	80	72	94
		Outlet	93	100	99	97	92	89	82	74	98
	4.00	Inlet	90	93	91	89	86	83	78	74	91
		Outlet	93	98	96	94	89	85	82	81	96

**490 QMX**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
300	0.25	Inlet	74	73	73	70	65	58	50	44	71
		Outlet	86	85	77	73	67	60	53	47	75
400	0.25	Inlet	82	79	78	76	76	66	58	51	79
		Outlet	87	88	83	79	77	68	60	53	82
	1.00	Inlet	82	78	77	74	69	65	58	52	76
		Outlet	83	85	80	78	73	66	60	53	79
500	0.25	Inlet	85	85	83	81	82	74	65	57	85
		Outlet	90	89	87	84	83	76	67	58	87
	1.50	Inlet	84	82	80	78	74	70	64	58	79
		Outlet	85	86	84	82	78	72	67	62	83
600	0.50	Inlet	89	89	86	84	85	81	71	61	89
		Outlet	91	94	92	88	86	83	72	62	91
	1.00	Inlet	88	88	85	83	82	77	70	62	86
		Outlet	90	93	92	88	84	79	71	63	90
	2.00	Inlet	87	86	83	82	78	74	69	64	84
		Outlet	89	91	90	87	82	77	73	73	88
700	0.75	Inlet	91	92	90	88	88	86	76	66	92
		Outlet	93	97	96	93	90	87	77	66	95
	1.50	Inlet	90	91	88	87	85	82	74	67	90
		Outlet	93	97	95	92	88	84	76	68	94
	3.00	Inlet	89	88	87	85	82	78	74	69	87
		Outlet	92	95	93	90	85	81	79	81	92
800	1.00	Inlet	91	96	93	92	91	91	81	69	96
		Outlet	94	101	99	97	93	93	82	71	99
	2.00	Inlet	90	95	91	91	88	87	79	71	94
		Outlet	94	100	99	96	92	89	81	74	98
	4.00	Inlet	91	93	91	89	85	82	78	74	91
		Outlet	94	98	96	94	89	85	83	82	95

**445 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
400	1.00	Inlet	77	74	70	68	64	60	52	45	70
		Outlet	78	76	73	71	67	61	53	45	72
575	1.00	Inlet	85	86	81	79	78	72	64	55	82
		Outlet	86	87	84	81	79	73	64	56	83
	2.00	Inlet	85	84	80	77	73	70	64	58	79
		Outlet	87	86	83	80	77	71	66	60	82
750	1.00	Inlet	90	93	91	85	86	84	75	64	91
		Outlet	93	95	93	88	86	83	75	65	91
	2.00	Inlet	88	91	88	83	80	77	72	64	86
		Outlet	92	94	92	87	83	78	73	68	89
	3.00	Inlet	90	90	88	83	79	76	72	67	86
		Outlet	93	93	91	87	83	78	75	74	89
925	1.00	Inlet	92	100	97	92	88	91	86	77	97
		Outlet	96	100	98	94	90	91	87	81	98
	3.00	Inlet	89	97	94	89	85	83	78	72	92
		Outlet	97	100	97	93	88	84	81	80	95
	5.00	Inlet	93	95	93	89	85	81	77	74	91
		Outlet	98	98	96	93	89	84	83	83	95
1100	7.00	Inlet	96	99	98	94	90	86	82	78	96
		Outlet	101	103	100	97	93	88	87	89	99

**490 QMX-HP**

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
400	1.00	Inlet	81	76	73	71	67	62	54	46	73
		Outlet	80	79	76	74	70	63	55	46	75
550	1.00	Inlet	88	88	83	81	80	74	65	57	84
		Outlet	89	89	86	83	81	75	66	58	85
	2.00	Inlet	86	86	82	79	75	71	65	59	81
		Outlet	88	88	85	82	78	73	68	63	84
700	1.00	Inlet	92	95	92	86	88	86	76	65	92
		Outlet	94	97	93	89	87	85	76	66	93
	2.00	Inlet	90	93	89	84	82	79	73	65	88
		Outlet	94	96	93	88	84	80	75	70	90
	3.00	Inlet	91	92	88	84	80	77	72	68	87
		Outlet	94	95	92	88	84	79	76	75	90
850	1.00	Inlet	92	103	97	92	89	93	86	78	98
		Outlet	97	102	98	95	91	92	87	81	98
	3.00	Inlet	90	100	95	90	85	84	79	72	93
		Outlet	98	102	97	94	88	85	82	82	96
	5.00	Inlet	93	97	93	90	85	82	78	74	92
		Outlet	99	100	96	94	89	84	84	85	96
1000	7.00	Inlet	96	100	98	94	90	86	82	78	96
		Outlet	102	104	100	98	93	89	88	90	100

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>WI</sub>, L<sub>WA</sub> and outlet L<sub>WO</sub>, L<sub>WA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.



## 540 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
300	0.25	Inlet	77	76	75	73	68	60	53	46	74
		Outlet	87	86	79	76	70	62	55	49	78
400	0.25	Inlet	85	81	81	78	79	68	61	54	82
		Outlet	89	87	85	81	80	70	63	56	84
	1.00	Inlet	83	80	79	76	71	66	59	53	77
		Outlet	84	85	83	80	75	69	61	54	81
500	0.25	Inlet	88	88	85	84	85	78	68	58	88
		Outlet	92	92	90	87	86	80	69	59	90
	1.50	Inlet	86	85	83	81	76	72	66	60	82
		Outlet	88	90	88	85	80	75	70	66	87
600	0.50	Inlet	92	92	89	87	89	86	74	63	93
		Outlet	94	97	95	91	90	88	75	63	95
	1.00	Inlet	92	91	88	86	87	81	73	65	90
		Outlet	94	97	95	91	88	83	74	65	93
	2.00	Inlet	90	90	86	85	81	77	71	65	87
		Outlet	93	96	94	90	85	79	73	67	92
700	0.75	Inlet	93	96	93	91	92	91	79	67	96
		Outlet	96	101	99	96	93	92	81	68	99
	1.50	Inlet	93	95	92	91	90	86	78	69	94
		Outlet	96	100	99	96	92	88	79	70	97
	3.00	Inlet	92	93	90	89	85	82	76	71	91
		Outlet	95	99	97	94	89	84	81	80	96
800	1.00	Inlet	93	101	96	95	93	96	84	71	100
		Outlet	96	105	102	100	95	98	85	73	103
	3.00	Inlet	92	99	94	94	90	88	81	75	96
		Outlet	96	104	101	99	94	91	85	80	100
	5.00	Inlet	94	97	95	93	88	86	81	77	95
		Outlet	97	102	99	97	91	87	85	84	98

## 600 QMX

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts								
			Octave Bands								L <sub>WA</sub>
			1	2	3	4	5	6	7	8	
200	0.25	Inlet	68	72	70	65	60	52	46	41	67
		Outlet	89	75	71	68	61	54	48	43	70
300	0.25	Inlet	80	79	78	76	71	63	56	49	77
		Outlet	89	88	82	79	73	65	58	51	80
	0.75	Inlet	80	78	77	73	68	62	55	49	75
		Outlet	86	85	80	76	71	64	57	51	78
400	0.25	Inlet	88	85	83	81	83	71	64	56	85
		Outlet	92	89	88	84	83	74	65	57	87
	1.50	Inlet	85	83	81	78	74	69	63	57	80
		Outlet	87	86	85	82	77	72	66	61	83
500	0.50	Inlet	91	90	88	87	87	81	70	61	90
		Outlet	94	96	93	90	88	82	72	61	93
	1.00	Inlet	90	89	87	85	84	78	70	62	88
		Outlet	94	95	93	90	85	79	71	63	91
	2.00	Inlet	88	88	85	83	79	75	70	64	85
		Outlet	92	94	91	88	83	78	75	75	89
600	0.75	Inlet	95	95	92	90	92	88	77	65	95
		Outlet	97	100	98	95	93	90	78	66	98
	1.50	Inlet	94	94	91	89	89	84	76	68	93
		Outlet	97	100	98	94	91	86	77	69	96
	3.00	Inlet	93	93	89	88	84	80	75	71	90
		Outlet	96	99	96	92	87	83	80	82	94
700	1.00	Inlet	95	100	96	95	95	94	82	69	99
		Outlet	98	104	102	99	96	95	83	71	102
	3.00	Inlet	94	98	94	93	90	87	80	74	95
		Outlet	98	103	101	98	93	89	84	79	100
	5.00	Inlet	96	97	95	92	88	85	81	77	94
		Outlet	98	101	98	96	91	87	86	85	98

## 540 QMX-HP

RPM	SP	Condition	Sound Power re 10 <sup>-12</sup> Watts									L <sub>WA</sub>
			Octave Bands									
			1	2	3	4	5	6	7	8		
400	1.00	Inlet	85	79	76	74	71	65	56	47	76	
		Outlet	82	81	79	76	73	66	57	48	78	
525	1.00	Inlet	90	91	85	83	83	76	67	58	86	
		Outlet	91	92	88	85	83	76	67	59	87	
	2.00	Inlet	88	88	83	80	76	73	66	60	82	
		Outlet	90	90	87	83	79	74	69	65	85	
650	1.00	Inlet	94	97	92	87	90	87	76	66	94	
		Outlet	95	99	94	90	89	86	77	68	94	
	2.00	Inlet	92	95	90	85	83	81	73	66	89	
		Outlet	95	98	93	89	85	81	76	71	92	
	3.00	Inlet	92	94	89	85	81	78	73	68	88	
		Outlet	95	97	93	89	84	80	77	76	91	
775	1.00	Inlet	95	104	97	93	90	93	86	78	98	
		Outlet	98	103	99	95	92	93	88	82	99	
	3.00	Inlet	92	100	95	90	86	85	79	72	93	
		Outlet	99	103	98	94	89	85	83	82	96	
	5.00	Inlet	94	98	94	91	86	82	78	74	93	
		Outlet	100	101	97	94	89	85	85	86	96	
900	7.00	Inlet	97	102	98	95	90	86	82	79	97	
		Outlet	103	104	100	98	93	89	89	91	100	

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>Wi</sub>, L<sub>WiA</sub> and outlet L<sub>Wo</sub>, L<sub>WoA</sub> sound power levels for Installation Type B: Free inlet, Ducted outlet. Inlet ratings do not include the effects of duct end correction. Outlet ratings include the effects of duct end correction.



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