PENN BARRY™

DMX08

DOMEX

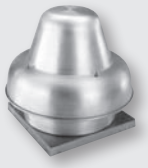
Model: DX
Centrifugal Roof Exhausters
Direct Drive and Belt Drive

MOVING YOUR WAY

Table of Contents

› Domex Direct Drive Series
Model: DX (V/S/R/Q/Q1/Q2)
- Static pressure up to 1.25 in. wg.
- Flow capacity up to 4,561 CFM
- High wind construction (-HW) option available.

› Domex Standard Duty Belt Drive Series
Model: DX (B)
- Static pressure up to 1.5 in. wg.
- Flow capacity up to 19,442 CFM
- High wind construction (-HW) option available.



› Domex High Capacity Belt Drive Series
Model: KB, JB, MB
- Static pressure up to 1.5 in. wg.
- Flow capacity up to 46,640 CFM

› Domex Direct & Belt Drive Fans
PennBarry certifies that the Domex direct drive and belt drive models shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and AMCA publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

› Domex High Capacity Belt Drive Fans
PennBarry certifies that the Domex high capacity models shown on pages 23 - 25 are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

› UL and CSA Certification
Domex fans carry the UL label, UL 705, (ZACT), File #E28413.

Domex exhausters are also certified by the Canadian Standard Association (File #LR13309).

PennBarry reserves the right to make changes at any time, without notice, to models, construction, specifications, options, availability, etc. This bulletin illustrates the appearance of PennBarry products at the time of publication. To view the latest updates, visit PennBarry at www.pennbarry.com.

Introduction

Belt Drive Domex

Direct Drive Domex

› Domex Series of Centrifugal Fans

Domex fans are ideal for general purpose exhaust applications including: bathrooms, garages, general kitchen areas, offices, churches, dormitories, factories, large warehouses and other relatively clean air applications.

They feature a weather-resistant, seamless spun aluminum housing which works in conjunction with a patented wheel design and deeply spun inlets to provide smooth quiet air flow through the ventilator. The centrifugal wheels are aluminum, nonoverloading, backward inclined, robotically welded, and dynamically balanced. The optional high wind construction makes Domex fans particularly suited for high wind hurricane zones.

› Domex Direct Drive Series

Model: DX (V/S/R/Q/Q1/Q2)

- Static pressure up to 1.25 in. wg.
- Flow capacity up to 4,561 CFM
- High wind construction (-HW) option available.

› Domex Standard Duty Belt Drive Series

Model: DX (B)

- Static pressure up to 1.5 in. wg.
- Flow capacity up to 19,442 CFM
- High wind construction (-HW) option available.

› Domex High Capacity Belt Drive Series

Model: KB, JB, MB

- Static pressure up to 1.5 in. wg.
- Flow capacity up to 46,640 CFM

Features & Benefits

› Motor Selection

Both direct drive and belt drive models are available with a wide range of voltages and enclosures (see Motor Selection for a complete listing). Standard belt drive Open Drip Proof (ODP) ball bearing motors are selected using a conservative portion of the NEMA service factor. Standard direct drive ODP motors have Class B insulation and internal thermal overload protection. Each size is carefully engineered to match the motor to the wheel capacity.

› Internal Wiring

All direct drive models with ODP motors feature a polarized disconnect plug between the motor and junction box. This provides a positive method of electric shut-off. Belt drive units with ODP motors are factory-wired between the motor and junction box. For either direct drive or belt drive models, an electric disconnect is available.

› Sound Performance

Units deliver outstanding air performance with minimal noise.

› Curb Caps (Base)

Curb caps for direct drive and standard duty belt drive models are available in galvanized steel (standard) or aluminum (optional). Curb caps for high capacity belt drive models are available only in aluminum. All curb caps have fully welded corners and are pre-punched to ensure both a leak-tight and easy installation.

› Forced Motor Cooling

Breather slots between the motor dome and discharge apron enable fresh air to be drawn into the motor housing during fan operation. This positive cooling promotes longer life for motor and drive components.

› Easy Maintenance Access

By removing the fasteners, the motor dome lifts off for complete access to all the drive train components.

› Structural Integrity

Durable housings of spun aluminum have a high strength-to-weight ratio and incorporate a rolled bead for additional strength. There are no welds to break or seams to leak. The heavy-gauge motor mounting platform provides positive rigidity between all components of the power train assembly.

› Solid Steel Shafts

Sized so the first critical speed is a minimum of 130% of maximum cataloged operating speed, shafts are precision ground and polished.

› Internal Bracing

Tri-Strut™ supports transfer the weight of the motor mounting platform directly to the curb mounting surface. The aluminum spun housing, therefore, is not used to support any weight.

› Self-Aligning Bearings

Heavy-duty bearings are sized for a minimum L50 life in excess of 200,000 hours of operation. 100% factory tested, they are designed for air handling applications.

› Drives and Belts

Pulleys are pre-set to the specified RPM. Cast iron variable pitch pulleys are adjustable, allowing for field balancing based on actual field conditions. All pulleys are sized for at least 150% of the driven horsepower.

› Vibration Isolators

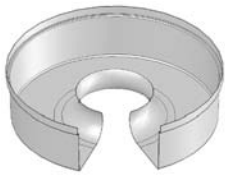
Multidirectional, rubber-in-shear vibration isolators mitigate residual vibration transmission from the unit to the building.

› Conduit

Both direct and belt drive units include a large 1” nominal conduit chase for easy installation of wiring from the motor dome to below the curb cap.

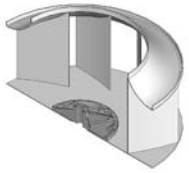
› Reverse Venturi

Reverse venturi reduces turbulence and improves distribution of the air as it enters the wheel inlet and is “captured” by the blades.



› Aluminum Wheels

Domex fans offer patented wheel designs. Carefully matched highly-tooled venturis enhance the performance of these backward inclined and non-overloading centrifugal wheels. Made of advanced alloys, the various wheel components provide superior strength and durability.



› Silent Wheel (Direct Drive)

- Blades’ highly curved leading edge provide unsurpassed low sound numbers with excellent air performance.
- Backplate and inlet are stamped for consistency, plus dynamic balancing assure smooth, vibration-free operation.
- Riveted and/or welded construction ensure superior dependability over other wheel designs.

› Standard Duty, All Welded Wheel

(Standard Duty and High Pressure Belt Drive)

- Blades are curved for improved air performance while increasing their strength and rigidity.
- Backplate and inlet are stamped for consistency. They include a perimeter rim which enhances strength and improves balancing.
- Wheel assembly is robotically welded to provide extremely durable and consistent performance.
- Wheel is dynamically balanced. Balancing weights are mechanically attached to the inside of the rims of both the backplate and wheel inlet. This allows a precise placement of the weights anywhere within a full 360º range on two separate planes, without the possibility of detachment.

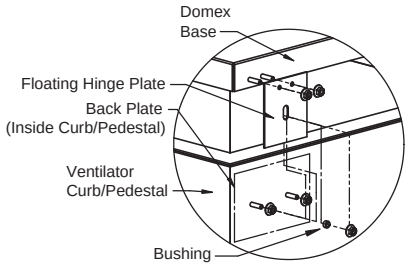
Options & Accessories

› Finishes
Coatings such as Polyester Powder Coat, Epoxy Powder Coat, Phenolic Epoxy Powder Coat, and others are available. See the coatings brochure for details.

› Mounting Pedestal
The 12” high mounting pedestal, available in aluminum or galvanized steel, incorporates a removable access panel for easy inspection and service of motor operated backdraft dampers. It provides solid ventilator support and a weather resistant seal that does not injure or disturb flashing. This item should not be used with Fatrap units.

› Hinged Sub-Base
Hinged sub-bases provide access to the curb well for damper service or clean out for grease applications. Constructed with a rust proof hinge arrangement and low height (3 ½”) the assembly is easily manipulated and reduces the impact on overall installation height. This accessory is available for use with most all models for either factory built or existing roof curbs.

› Floating Hinge Kit
A floating hinge kit is also available for field installation. This assembly connects the exhauster directly to the roof curb and provides the same level of access as the hinged sub-base.



› Aluminum Bird and Insect Screen
Bird screens are available for all direct and belt drive models. An aluminum insect screen with a smaller mesh than the standard bird screen is also available. However, please note that NFPA 96 installations do not allow the use of bird or insect screens. The requirements of local codes must be reviewed to determine if there are any conflicts.

› Backdraft Dampers
Backdraft dampers are available for either gravity or motorized operation (motor kit optional). Dampers feature square galvanized steel frame, multi-leaf, roll formed aluminum blades with nylon bearings. Backdraft dampers should not be used when venting kitchen hoods. NFPA 96 installations do not allow the use of dampers. The requirements of local codes must be reviewed to determine if there are any conflicts.

› Safety Disconnect Switch

Safety disconnect switches are available to allow positive electrical shut-off and safety. Switches are factory mounted when factory wiring is requested. Wiring is only run from the motor to the junction box. (Factory wiring of explosion proof applications is not available.) A wide range of Nema rated enclosures with disconnect switches are available for indoor, outdoor, and explosion proof installations. Disconnects are to be field wired by a licensed electrician.

› Firestat Switch

Firestat switch automatically disconnects the unit when the temperature of the air being exhausted exceeds a preset rating.

› Time-Delay Switch

(Selected direct drive models only) The Airminder Model AM12 switch is a UL recognized and CSA certified time-delay relay that operates both the fan and room light to ventilate an area even after the occupants depart. In the “On” position, the Airminder turns the light and fan on immediately. In the “Off” position, the light goes off immediately and the fan is in operation for a period of time as preset from 1 to 60 minutes. Suitable only for 1/3 HP maximum at 120/1/60.

› Speed Controllers

The Lektrol™ controller allows adjustment in speed to a maximum of 50% reduction, which results in a very cost effective means for system balancing. The device can be located under the fan dome to prevent unauthorized tampering or on the wall for ease of operation by the building occupants. (Available on direct drive units with ODP motors and some select TE motors. See reference table under Motor Availability)

› Automatic Belt Tensioner

The factory mounted Automatic Belt Tensioner accessory eliminates the need for re-tensioning the belt after start-up. It is constructed from 10 gage galvanized steel and incorporates five torsion springs to automatically position the motor and maintain proper belt tension. Additional benefits include reduced belt and pulley wear and simplified belt replacement without tools. The Automatic Belt Tensioner is available for Domex models DX11B, DX12B, and DX14B with 1/4, 1/2, 3/4 and 1 HP ODP motors. It can also be used with 1.5 HP, 3-phase ODP motors.

› Internal Wiring
Nema 3R wiring is available for both direct and belt drive models.

› Spark Resistant Construction
AMCA ‘B’ construction is available as standard construction on direct drive units and as an option on belt drive units. If required, an explosion proof motor and disconnect may be selected as options.

› Prefabricated Curb
A variety of sizes of prefabricated roof curbs are available. Galvanized steel unibeam curbs are the most popular. For a complete listing of all curb types and sizes available, please consult the latest PennBarry Curb brochure.

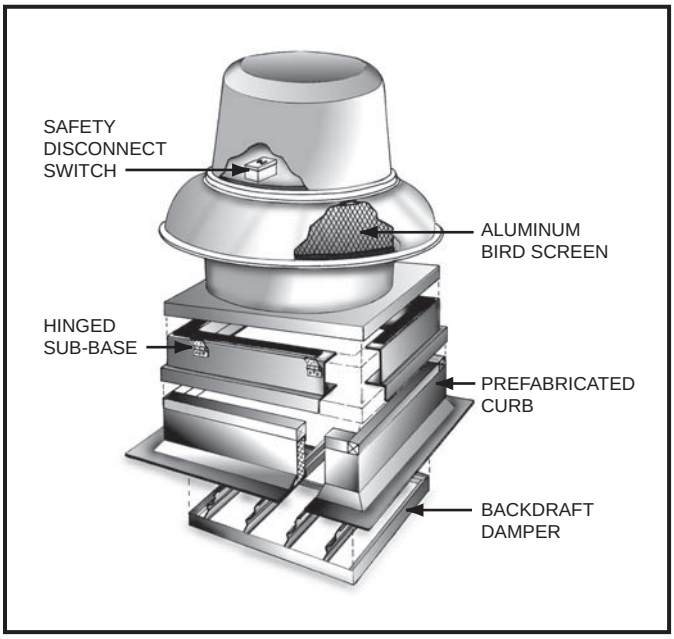
› High Wind Construction

High wind construction Domex fans are specifically designed for high wind hurricane zones (HWHZ). The Domex models are designed to withstand 150 MPH winds in accordance with Miami-Dade and Florida Building Code standards. The units are 3rd party tested and certified through a 3rd party Professional Engineer (P.E.) to meet these strict standards. Installation details are provided and since there are no tie downs or external braces required for attaching the unit to the roof or curb this makes installation simple and easy. A wide range is offered to meet all of your ventilation needs which includes all belt and direct drive sizes 36 and under.

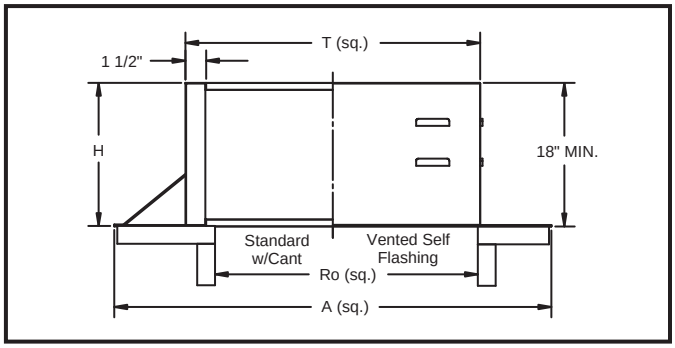
Product Certifications:

- Miami-Dade NOA # 08-1202.13
- Florida Product Approval # pending
- Texas Department of Insurance # pending

› Domex Exploded View



› Domex Curb Dimensional Drawings



› Domex Dimensional References

Model	E(4) SQ	T(2) SQ	A SQ	Ro(3) SQ	Damper Size SQ	Galv. Steel Gauge
DX06R	18.5	17	25	9	8.75	18
DX08S/R	18.5	17	25	9	8.75	18
DX10S/R	18.5	17	25	11.5	11.25	18
DX11V/S/R/Q	18.5	17	25	11.5	11.25	18
DX13V/S/R/Q	18.5	17	25	11.5	11.25	18
DX16V/S/R/Q1/Q2	20.5	19	27	16	15.75	18
DX18V	28.5	27	35	20	19.75	18
DX06B/DX08B	18.5	17	25	11.5	11.25	18
DX11B	20.5	19	27	16	15.75	18
DX12B/DX14B	24.75	23.25	31.25	16	15.75	18
DX16B/DX18B	28.5	27	35	20	19.75	18
DX24B	33.5	32	40	25	24.75	18
DX27B/DX30B	36.5	35	43	28	27.75	18
DX36B	44.5	43	51	36	35.5	18
KB420	52.5	51	59	44	43.5	18
JB48	59	57.5	65.5	50	49.5	18
MB542	63.5	62	70	55	54.5	18

(1)Standard heights "H" are 8", 12", and 18" including wood nailer. (2)"T" dimension of curb is 1 1/2" less than the dimension of inside base of fan ("E"). (3)"Ro" refers to Roof Opening. (4)"E" dimension is inside base of fan.

Motor Availability

› Nema Motor

This chart summarizes the largest allowable Nema frame sizes for motors used on belt drive models.

› Largest Available Nema Frame Size per Model

Model	Max. Frame Size
DX06B	42*
DX08B	42*
DX11B	56
DX12B	56
DX14B	56
DX16B	145T
DX18B	145T
DX24B	184T
DX27B/DX30B	184T
DX36B	213T
KB420	213T
JB48	215T
MB542	254T

Only available as 1/4 ODP, 115V.* ***At PennBarry's option, large frame motors may be removed after testing and shipped separately**. Contact the factory for special application motor availability.*

› Fixed Speed Motor Control

Two-speed motors, used in conjunction with external switches or sensors (gas concentration, odor, temperature), are used to quickly adjust the airflow through the ventilator by changing from one fixed speed to another. Normally, 2-speed motors operate at 1800 and 1200 RPM (2-speed, 2-windings). However, 1800/900 RPM (2-speed, 1 winding) motors are available for 3-phase power only. A single operating voltage must be specified because dual-voltage versions are not available in a 2-speed motor.

› Variable Speed Motor Control

PennBarry offers Lek-Trol™ solid state controllers to reduce the high speed of most direct drive motors by as much as 50%. If variable speed is required, check the Lek-Trol™ availability table below to verify that controllers exist for the fan model selected. Remember, Lek-Trol™ controllers are currently only available for direct drive motors including all standard Open Drip Proof (ODP) 60 Hz motors. Not all totally enclosed motors are currently available with variable speed control. Inverter rated motors suitable for use with variable frequency drives can be supplied for belt drive models. Contact your local PennBarry representative for availability.

› Available Lek-Trol™ Speed Controls

Model	60 Hz					50 Hz		
	ODP	Totally Enclosed				Totally Enclosed		
	115V	115V	200V	208V	230V	110V	220V	240V
DX06R	LT25	-	-	-	-	-	-	-
DX08S	-	-	-	-	-	-	-	-
DX08R	LT25	-	-	-	-	-	-	-
DX10S	-	-	-	-	-	-	-	-
DX10R	LT30	LT30	LT35	LT35	LT35	LT30	LT35	LT35
DX11V	-	-	-	-	-	-	-	-
DX11S	-	-	-	-	-	-	-	-
DX11R	LT30	-	-	-	-	-	-	-
DX11Q	LT50	-	-	-	-	-	-	-
DX13V	LT55	-	-	-	-	-	-	-
DX13S	LT30	-	-	-	-	-	-	-
DX13R	LT30	LT30	LT35	LT35	LT35	LT50	LT35	LT35
DX13Q	LT45	LT50	LT35	LT35	LT35	LT50	LT35	LT35
DX16V	LT55	-	-	-	-	-	-	-
DX16S	LT50	-	-	-	-	-	-	-
DX16R	LT50	-	-	-	-	-	-	-
DX16Q1	LT40	-	-	-	-	-	-	-
DX16Q2	LT75	-	-	-	-	-	-	-
DX18V	LT60	-	-	-	-	-	-	-

Lek-Trols™ indicated for multi-speed models (eg., FX16V/S/R) are applicable only for the high speed. Do not use on low or medium speed for multi-speed models. Items noted with (-) are not applicable.

Belt Drive
Domex Cutaway

Direct Drive
Domex Cutaway

› Belt Drive Motor Availability

The chart below lists horsepowers, voltages, and enclosure types. After selecting a model and horsepower that meets performance requirements, an engineer should verify that the desired voltage and enclosure are the same (or smaller) as the maximum NEMA motor frame shown for each model (see NEMA Motor Frame Size chart).

Model	1 Phase					200V, 230V, 460V OR 575V 3 Phase				
	ODP		Totally Enclosed	Explosion Proof	2 Speed 2 Winding	ODP	Totally Enclosed	Explosion Proof	2 Speed 2 Winding	2 Speed 2 Winding
	115V	230V	115V/230V							
1/4	48	48	48	48/56	48	48	48	48	56	-
1/3	48/56	48/56	56	56	56	56	56	56	56	-
1/2	48/56	48/56	56	56	56	56	56	56	143T	56
3/4	56	56	56	56	56	56	56	56	143T	56
1	56	56	56	56	56	56	56	56	143T	145T
1 1/2	56	56	145T	184T	-	56	56	56	145T	182T
2	145T	145T	182T	182T	-	56/145T	145T	145T	145T	182T
3	184T	184T	184T	215T	-	145T	182T	182T	184T	184T
5	-	-	-	-	-	184T	184T	184T	184T	215T
7 1/2	-	-	-	-	-	213T	213T	213T	-	215T
10	-	-	-	-	-	215T	215T	215T	-	256T
15	-	-	-	-	-	254T	254T	254T	-	284T

On horsepowers less than 1 1/2, motor frame sizes may change due to variations in voltage, special features and motor manufacturer. Motors shown are ball bearing, continuous duty and 1750 RPM or 1750/1140 RPM for two speed - two winding motors.

› Direct Drive Motor Availability

The following chart lists the various motor options available for each of the direct drive fan models. Once a fan model is selected, this chart can be used to determine if a suitable motor is available. (If not, another selection may have to be made from the fan performance charts). Look under the nominal RPM heading to determine which fans have 2-speed and 3-speed motors.

Model	Nominal RPM				1 Phase							
					115 Volts			200 - 240 Volts				
	1050 V	1300 S	1550 R	1725 Q	Open Drip Proof	Totally Enclosed	Explosion Proof	Open Drip Proof	Totally Enclosed	50 hz	50 C Ambient	Explosion Proof (4)
DX06R	-	-	x	-	yes	-	-	Use TE Motors	-	-	-	-
DX08S/R	-	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-
DX10S/R	-	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-
DX11V/S/R	x	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-
DX11Q	-	-	-	x	yes	yes	yes		yes	yes	yes	yes (5)
DX13V/S/R	x	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-
DX13Q	-	-	-	x	yes	yes	yes		yes	yes	yes	yes (5)
DX16V/S/R	x	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-
DX16Q1	-	-	-	x (3)	yes	-	-		-	-	-	-
DX16Q2	-	-	-	x	yes	yes	yes		yes	yes	yes	yes (5)
DX18V	x	-	-	-	yes	-	-		-	-	-	-

Model	Nominal RPM				3 Phase				
					200 - 460 Volts (2)				
	1050 V	1300 S	1550 R	1725 Q	Open Drip Proof	Totally Enclosed	50 hz	50 C Ambient	Explosion Proof (4)
DX06R	-	-	x	-	Use TE Motors	-	-	-	-
DX08S/R	-	x	x	-		-	-	-	-
DX10S/R	-	x	x	-		-	-	-	-
DX11V/S/R	x	x	x	-		-	-	-	-
DX11Q	-	-	-	x		-	-	-	yes (6)
DX13V/S/R	x	x	x	-		-	-	-	-
DX13Q	-	-	-	x		yes	yes	yes	yes (6)
DX16V/S/R	x	x	x	-		-	-	-	-
DX16Q1	-	-	-	x (3)		-	-	-	-
DX16Q2	-	-	-	x		yes	yes	yes	yes (6)
DX18V	x	-	-	-		-	-	-	-

(1) High speed only.; (2) 200 - 240, 380, 415, 460 V; (3) Nominal 1650 RPM; (4) Cls.I, Grp.D, Div. I / Cls. II, Grp.F & G, Div.I., Not available with 50 Hz.; (5) 230 V only. Not available in 200 or 208 V; (6) 230 V and 460 V only.

DX06, DX08, DX10, & DX11

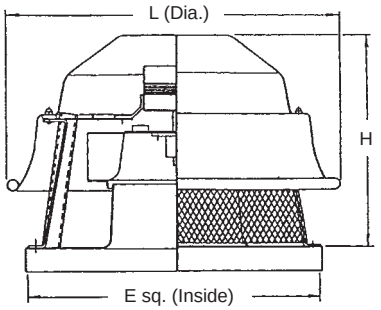
› Performance Data Overview

Domex direct drive models (except size 06) are available with single and multi-speed motors. Multi-speed motors are designated V (1050 RPM), S (1300 RPM), and R (1550 RPM). DX06R and DX18V are exceptions being single speed motors. Q, Q1, Q2 (1725/1760 RPM) are single speed motors. A single Domex fan may be suitable for several requirements by a simple wiring change. This feature provides flexibility for a variety of reasons, including energy savings, off-hours requirements, future expansion, or unexpected field variations. Domex direct drive models are available in seven sizes (6, 8, 10, 11, 13, 16 and 18). Capacities range from below 150 CFM to above 4500 CFM, with static pressures beyond 1 1/4".

By using Lek-Trol™ variable speed controllers, the high speed flow rate of most models can be reduced by as much as 50%. Do not use Lek-Trol™ on medium or low speed for multispeed models, unless a specific Lek-trol™ is shown to be available (see Lek-Trol™ Speed Controller Availability). When compared to belt drive models, Domex direct drive fans require less maintenance, have a simpler construction, cost less, and are lighter in weight. Performances in 50 Hz applications will be less than shown below; consult with local PennBarry representative.

› DX06 - DX11 Direct Drive Fan Dimensional Data

Model	Material Gages			Dimensions				Est. Ship Wt.
	Alum. Base	Galv. Base	Apron	L (Dia.)	H	E*	Ro	
DX06R	0.050"	16 ga.	0.050"	18 ⅞	12 ⅝	18 ½ x 18 ½	9 x 9	22 lbs
DX08S/R	0.050"	16 ga.	0.050"	20 ⅞	13 ⅜	18 ½ x 18 ½	9 x 9	26 lbs
DX10S/R	0.050"	16 ga.	0.050"	20 ⅞	13 ⅜	18 ½ x 18 ½	11 ½ x 11 ½	29 lbs
DX11V/S/R & Q	0.050"	16 ga.	0.050"	20 ⅞	13 ⅜	18 ½ x 18 ½	11 ½ x 11 ½	38 lbs
DX11Q	0.050"	16 ga.	0.050"	20 ⅞	13 ⅜	18 ½ x 18 ½	11 ½ x 11 ½	40 lbs



All dimensions are in inches.
**Outside dimension of curb should be 1 ½" less than "E" dimension.*

› DX06 - DX11 Direct Drive Fan Performance Data

Model	Nominal			Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.250" SP		1.250" SP	
	HP	Max Watts	RPM		CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
DX06R	1/100	52	1550	2841	146	4.3	100	3.6	69	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DX08S	1/50	44	1300	3361	237	1.5	161	2.2	114	3	69	3.8	-	-	-	-	-	-	-	-	-	-	-	-
DX08R	1/30	55	1550	4007	290	2.4	223	2.8	171	3.5	129	4.1	84	4.9	-	-	-	-	-	-	-	-	-	-
DX10S	1/25	82	1300	3361	385	3.9	316	3.5	257	4.8	207	5.1	168	5.2	129	5.6	82	6.1	-	-	-	-	-	-
DX10R	1/12	121	1550	4007	559	6.1	501	5.9	446	6.1	394	6.5	338	6.8	267	7	187	7.2	100	7.4	-	-	-	
DX11V	1/25	111	1050	3058	388	1.8	223	2.2	148	3.1	112	3.7	80	4.5	49	5.3	-	-	-	-	-	-	-	-
DX11S	1/11	142	1300	3786	503	3.4	397	3.6	320	4.3	262	5	201	5.5	149	6	104	6.5	-	-	-	-	-	-
DX11R	1/7	201	1550	4514	736	6.7	659	6.4	577	6.6	502	6.9	432	7.6	356	7.9	274	7.9	188	7.9	100	7.9	100	7.9
DX11Q	1/5	268	1725	5024	997	10.2	921	9.7	850	9.5	768	9.5	685	9.4	598	9.2	511	9	409	8.7	294	8.6	294	8.6

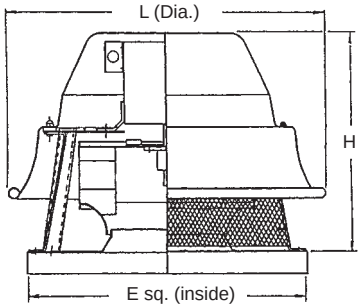
Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for Installation Type A: Free Inlet Fan Sone Levels. Performance ratings do not include the effects of appurtenances in the air stream.

Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

› DX13 Direct Drive Fan Dimensional Data

Model	Material Gages			Dimensions				Est. Ship Wt.
	Alum. Base	Galv. Base	Apron	L (Dia.)	H	E*	Ro	
DX13V/S/R & Q	0.050"	16 ga.	0.050"	21 7/16	14 ¾	18 ½ x 18 ½	11 ½ x11 ½	36 lbs
DX13Q	0.064"	16 ga.	0.050"	21 7/16	14 ¾	18 ½ x 18 ½	11 ½ x11 ½	43 lbs

All dimensions are in inches.
**Outside dimension of curb should be 1 ½" less than "E" dimension.*



› DX13 Direct Drive Fan Performance Data

Model	Nominal			Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.250" SP		1.250" SP	
	HP	Max Watts	RPM		CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
DX13V	1/20	92	1050	3221	661	4.4	479	3.1	341	2.8	262	3.6	207	4.3	161	5.1	115	5.9	79	6.6	44	7.4	-	-
DX13S	1/12	120	1300	3988	869	8	749	6.4	632	5.3	510	5.4	418	6	349	6.4	290	6.7	226	7	158	7.4	-	-
DX13R	1/6	201	1550	4755	1054	10.5	988	9.9	917	9.2	839	8.9	736	8.5	651	8.2	579	7.9	510	7.9	428	8	191	8.5
DX13Q	1/4	314	1725	5292	1280	16	1226	15.3	1170	14.6	1112	14	1053	13.4	995	13	936	12.5	868	12	796	11.5	630	11

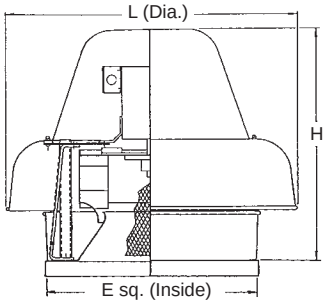
Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for Installation Type A: Free Inlet Fan Sone Levels. Performance ratings do not include the effects of appurtenances in the air stream.

Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

› DX16 - DX18 Direct Drive Fan Dimensional Data

Model	Material Gages			Dimensions				Est. Ship Wt.
	Alum. Base	Galv. Base	Apron	L (Dia.)	H	E*	Ro	
DX16V/S/R, Q1 & Q2	0.064"	16 ga.	0.064"	28 ½	22 ½	20 ½ x 20 ½	16 x 16	56 lbs
DX18V	0.080"	14 ga.	0.064"	39	31	28 ½	20	78 lbs

All dimensions are in inches.
**Outside dimension of curb should be 1 ½" less than "E" dimension.*



› DX16 - DX18 Direct Drive Fan Performance Data

Model	Nominal			Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.250" SP		1.250" SP	
	HP	Max Watts	RPM		CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
DX16V	1/6	453	1050	3788	1738	9.9	1489	8	1256	6.6	1032	6.1	884	6.6	772	7.1	682	7.9	598	9.9	529	10.1	392	10.2
DX16S	1/3	510	1300	4690	2021	12	1822	10.6	1637	9.5	1428	8.7	1256	8.4	1094	8.5	943	9.3	850	10.2	775	11	606	12.3
DX16R	1/2	574	1550	5592	2346	13.8	2176	12.8	2014	12	1853	11.3	1685	10.7	1532	10.4	1384	10.1	1247	10	1115	10.4	881	12.4
DX16Q1	1/2	688	1650	5953	2701	16.9	2576	16.4	2465	15.9	2352	15.5	2228	15	2096	14.4	1966	14	1839	13.6	1700	13.5	1401	13.5
DX16Q2	3/4	866	1725	6223	3016	17.7	2921	17.1	2829	16.7	2747	16.3	2665	15.9	2575	15.5	2484	15	2371	14.6	2256	14.2	2005	13.3
DX18V	3/4	964	1075	6029	4561	21	4395	19.8	4230	19.1	4053	18.5	3865	17.9	3671	16.9	3454	16.4	3237	16.4	2995	16.4	2405	16.4

Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for Installation Type A: Free Inlet Fan Sone Levels. Performance ratings do not include the effects of appurtenances in the air stream.

Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

Direct Drive Performance Data

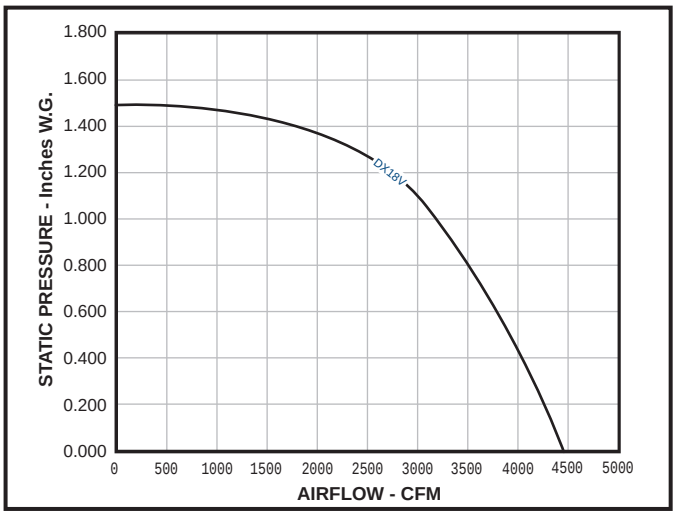
› Fan Curves

The fan curves illustrated here show the range of capacities available for direct drive units. Each graph shows the performance of several models at one particular nominal speed. Fan curves provide a quick method for selecting a fan unit based on design point requirements.

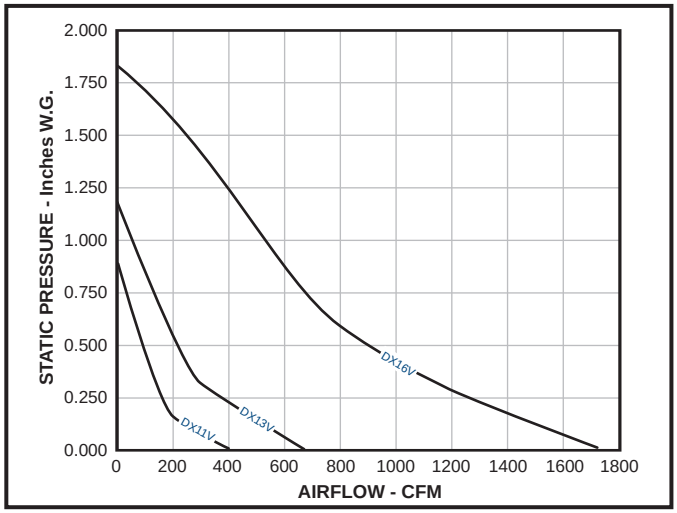
The direct drive performance chart on the previous page provides the tabular data (CFM and static pressure) used to plot the fan curves. In addition, the horsepower, tip speed and sones are tabulated. Since sound is normally an important factor in the selection of a fan, an engineer will usually want to select the "slowest" unit which meets CFM and SP requirements.

Please refer to the Motor Selection section to make sure the motor you select meets your electrical requirements.

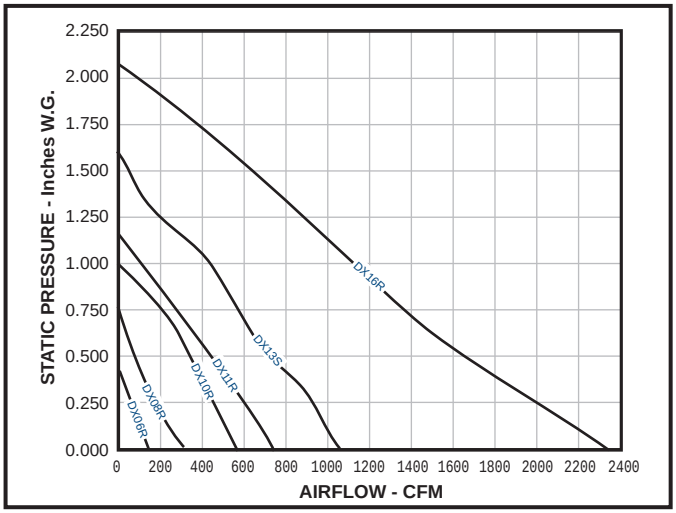
› Nominal 1075 RPM



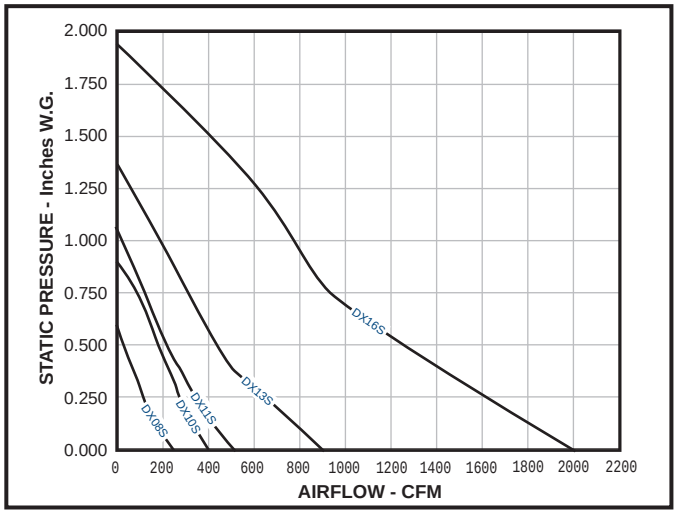
› Nominal 1050 RPM



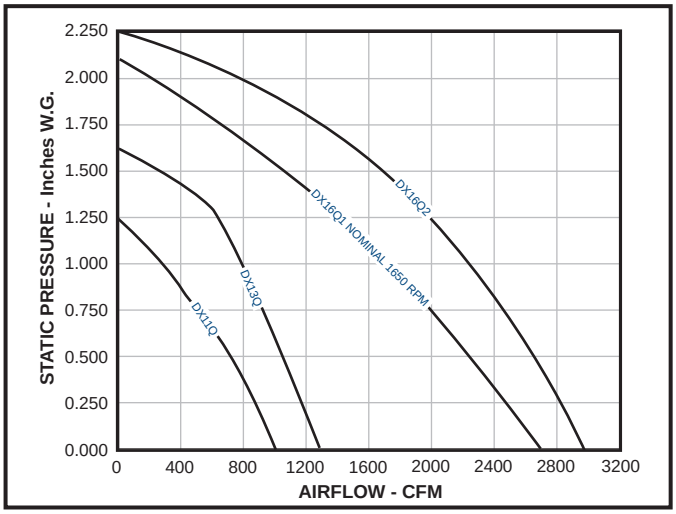
› Nominal 1550 RPM



› Nominal 1300 RPM



› Nominal 1725 RPM



Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

› Performance Data

The belt drive models shown on the following pages have sizes and capacities ranging from below 300 CFM to above 46,000 CFM, with static pressures from 0" to above 1 ½". All models are available with a wide range of horsepower sizes and RPM's. Two-speed motors are commonly used to enhance this flexibility.

The data provided for each belt drive model includes:

- Elevation Drawing Showing Overall Dimensions
- Fan Curve Graph
- Performance Chart

Each curve graphically displays the range of capacities available for each model, in most cases beyond the specifics shown in the tabular data. The maximum performance afforded by each horsepower is indicated by dashed lines and the RPM is indicated by solid lines.

Some models have graphs that show both shaded and unshaded areas. Selection should be made from the unshaded area only. Shaded areas reflect unstable performance ("surge"), a characteristic typical of backward inclined wheels, and should be avoided. These unstable regions are not shown in the tabular data.

The highest RPM shown for a specific horsepower in the tabular data is the maximum speed that for any point along the performance curve, the BHP will not exceed the available horsepower.

It is important to note that while it is common industry-wide practice to exceed a "nominal" horsepower by using a motor's service factor, PennBarry uses a conservative portion of the service factor, allowing half to remain a true "safety" factor.

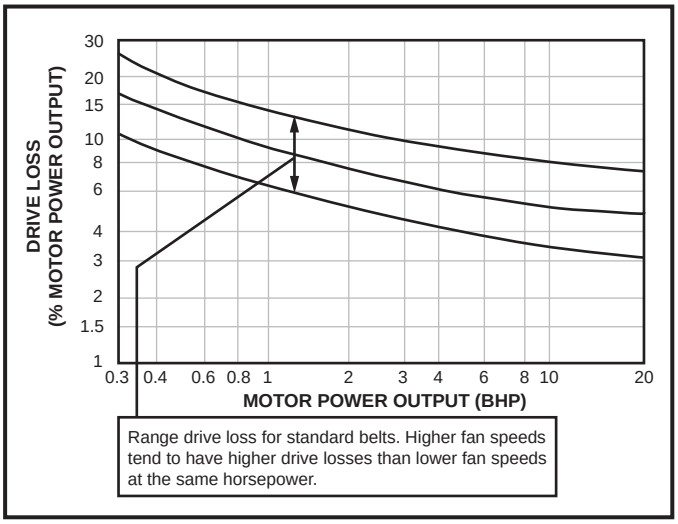
Use the Motor Availability chart (see Motor Selection) to select motor enclosures and voltages which can be installed in the fans.

Note: Domex fans are only one component of a total system. As such, performance is directly affected by the system. It is critical that system designers determine actual system losses to ensure that the actual flow is specified in the system range.

› Belt Drive Losses

The AMCA Review Committee has developed the chart shown below for the purpose of estimating belt drive losses. To calculate total BHP (including drive losses): Find the BHP of your operating point on the x-axis on the graph below. Follow the vertical line to the curves indicating the range of drive losses. Look at the y-axis on the left and find the drive loss percentage. Calculate the total BHP by adding the drive loss to the operating point BHP. For BHP's below 0.3, use 30%.

› Drive Loss Reference Chart



For totally enclosed, explosion proof, multi-speed and all 1.0 Service Factor motors, fan BHP plus drive losses should not exceed motor rated HP.

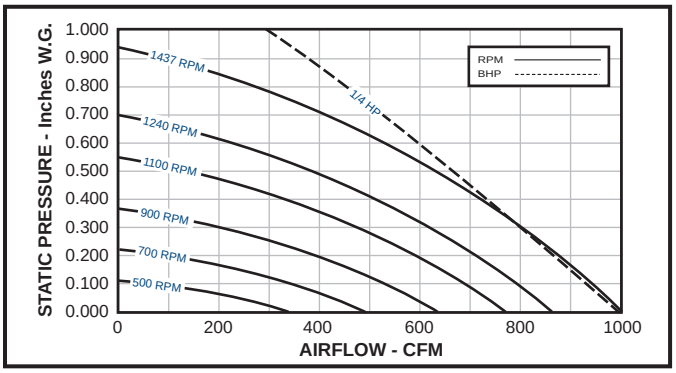
Graph reprinted from AMCA publication 203, with the express written permission from the Air Movement and Control Association, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.

Dimensional Information & Performance Data

Domex Centrifugal Fans | Belt Drive

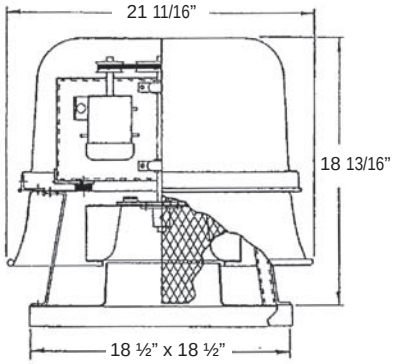
DX06B

› DX06B Belt Drive Fan Curves



› DX06B Belt Drive Fan Dimensional Data

Galv. Steel Base = 16 Gage
Aluminum Base = 0.064"
Discharge Apron = 0.050"
Roof/Wall Opening = 11 ½" SQ.
Damper Size = 11 ¼" SQ.
Max. Motor Frame Size = 42
Peak BHP = $(RPM/2232)^3$
Max. RPM = 1437 (1/4 HP)
Est. Ship Weight = 35 lbs.

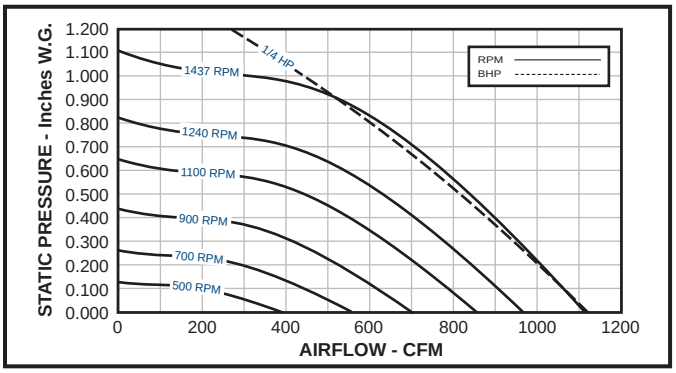


› DX06B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	375	1092	264	1.6 0.01	-	-	-	-	-	-	-	-	-	-
	430	1252	302	1.8 0.01	-	-	-	-	-	-	-	-	-	-
	475	1383	334	2.1 0.01	-	-	-	-	-	-	-	-	-	-
	520	1515	366	2.2 0.01	-	-	-	-	-	-	-	-	-	-
	565	1646	397	2.4 0.02	-	-	-	-	-	-	-	-	-	-
	610	1777	429	2.9 0.02	179	2.5 0.02	-	-	-	-	-	-	-	-
	655	1908	461	3.1 0.02	244	2.6 0.02	-	-	-	-	-	-	-	-
	700	2039	492	3.4 0.03	298	2.9 0.03	-	-	-	-	-	-	-	-
	745	2170	524	3.7 0.04	347	3.2 0.03	-	-	-	-	-	-	-	-
	790	2301	556	4.0 0.04	394	3.5 0.04	114	3.1 0.04	-	-	-	-	-	-
	835	2432	587	4.4 0.05	438	3.8 0.05	209	3.5 0.04	-	-	-	-	-	-
	880	2563	619	4.8 0.06	480	4.3 0.06	279	3.7 0.05	-	-	-	-	-	-
	925	2694	651	5.2 0.07	519	4.7 0.07	344	4.1 0.06	-	-	-	-	-	-
	970	2825	683	5.9 0.08	558	5.3 0.08	398	4.6 0.07	146	4.4 0.05	-	-	-	-
	1015	2956	714	6.4 0.09	597	5.8 0.09	450	5.2 0.08	243	4.8 0.07	-	-	-	-
	1060	3087	746	6.5 0.11	635	6.0 0.10	498	5.3 0.10	315	4.9 0.08	-	-	-	-
	1105	3218	778	6.8 0.12	674	6.3 0.12	544	5.7 0.11	382	5.1 0.10	131	4.9 0.07	-	-
	1150	3349	809	7.2 0.13	712	6.7 0.13	590	6.1 0.13	442	5.5 0.12	241	5.1 0.10	-	-
	1195	3480	841	7.7 0.15	749	7.2 0.15	634	6.5 0.14	496	5.9 0.13	318	5.4 0.12	-	-
	1240	3612	873	8.2 0.17	783	7.6 0.17	675	6.9 0.16	547	6.4 0.15	389	5.8 0.14	158	5.3 0.11
	1280	3728	901	8.4 0.19	814	7.9 0.18	710	7.3 0.18	590	6.7 0.17	447	6.3 0.16	256	5.9 0.13
	1320	3845	929	8.8 0.20	845	8.2 0.20	745	7.6 0.20	633	7.1 0.19	501	6.7 0.18	330	6.4 0.15
	1350	3932	950	9.1 0.22	868	8.5 0.22	771	8.0 0.21	664	7.4 0.20	537	7.0 0.19	378	6.8 0.17
	1390	4048	978	9.5 0.24	898	9.1 0.24	805	8.4 0.23	704	7.9 0.22	585	7.5 0.21	440	7.3 0.19
	1420	4136	999	9.9 0.25	921	9.4 0.25	830	8.8 0.25	734	8.3 0.24	619	7.8 0.23	484	7.8 0.21
	1437	4185	1011	10.1 0.26	933	9.5 0.26	845	9.1 0.25	750	8.5 0.25	638	8.0 0.24	509	7.9 0.22

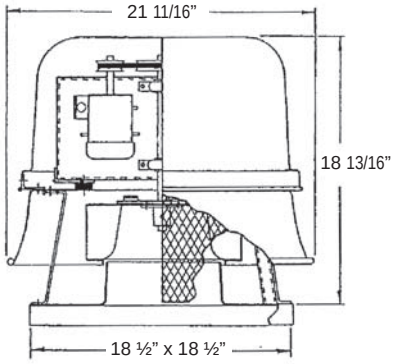
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

› DX08B Belt Drive Fan Curves



› DX08B Belt Drive Fan Dimensional Data

Galv. Steel Base = 16 Gage
Aluminum Base = 0.064"
Discharge Apron = 0.050"
Roof/Wall Opening = 11 ½" SQ.
Damper Size = 11 ¼" SQ.
Max. Motor Frame Size = 42
Peak BHP = $(RPM/2232)^3$
Max. RPM = 1437 (1/4 HP)
Est. Ship Weight = 35 lbs.



› DX08B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		1.375" SP		0.500" SP		0.625" SP		0.750" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	375	1150	289	1.4 0.01	-	-	-	-	-	-	-	-	-	-	-	-
	430	1319	331	1.7 0.01	-	-	-	-	-	-	-	-	-	-	-	-
	475	1457	366	2.0 0.01	-	-	-	-	-	-	-	-	-	-	-	-
	520	1595	401	2.2 0.01	155	1.7 0.01	-	-	-	-	-	-	-	-	-	-
	565	1733	435	2.5 0.02	242	1.9 0.02	-	-	-	-	-	-	-	-	-	-
	610	1871	470	3.1 0.02	301	2.4 0.02	-	-	-	-	-	-	-	-	-	-
	655	2009	505	3.4 0.02	351	2.7 0.02	-	-	-	-	-	-	-	-	-	-
	700	2147	540	3.8 0.03	399	3.1 0.03	-	-	-	-	-	-	-	-	-	-
	745	2285	574	4.3 0.03	444	3.5 0.04	247	3.0 0.03	-	-	-	-	-	-	-	-
	790	2424	609	4.6 0.04	487	3.9 0.04	330	3.3 0.04	-	-	-	-	-	-	-	-
	835	2562	644	5.0 0.05	530	4.2 0.05	393	3.6 0.05	-	-	-	-	-	-	-	-
	880	2700	678	5.5 0.06	571	4.7 0.06	446	4.0 0.06	207	3.6 0.05	-	-	-	-	-	-
	925	2838	713	6.0 0.07	611	5.2 0.07	496	4.5 0.07	329	4.0 0.07	-	-	-	-	-	-
	970	2976	748	6.7 0.08	651	5.9 0.08	543	5.2 0.08	408	4.5 0.08	-	-	-	-	-	-
	1015	3114	783	7.2 0.09	691	6.5 0.09	590	5.8 0.09	471	5.1 0.09	236	4.8 0.08	-	-	-	-
	1060	3252	817	7.5 0.10	730	6.8 0.10	635	6.2 0.11	526	5.6 0.11	364	5.2 0.10	-	-	-	-
	1105	3390	852	8.0 0.11	769	7.2 0.12	678	6.6 0.12	577	6.0 0.12	449	5.5 0.12	-	-	-	-
	1150	3258	887	8.8 0.13	808	7.9 0.13	720	7.3 0.13	626	6.7 0.13	514	6.2 0.13	309	5.8 0.12	-	-
	1195	3666	921	9.8 0.14	846	8.8 0.15	762	8.1 0.15	673	7.6 0.15	575	7.1 0.15	426	6.7 0.14	-	-
	1240	3804	956	10.4 0.16	885	9.4 0.16	803	8.6 0.17	719	8.1 0.17	626	7.7 0.17	509	7.4 0.16	279	6.8 0.14
	1280	3927	687	10.5 0.17	918	9.6 0.18	840	8.9 0.18	760	8.3 0.19	670	7.9 0.19	566	7.6 0.18	398	7.3 0.17
	1320	4049	1018	10.8 0.19	952	10.0 0.20	875	9.3 0.20	798	8.7 0.20	714	8.3 0.20	622	8.0 0.20	488	7.9 0.19
	1350	4141	1041	11.1 0.21	977	10.4 0.21	902	9.7 0.21	827	9.0 0.22	746	8.7 0.22	658	8.5 0.22	544	8.3 0.21
	1390	4264	1072	11.7 0.22	1010	11.1 0.23	937	10.3 0.23	865	9.7 0.23	787	9.1 0.24	704	9.1 0.24	603	9.0 0.23
	1420	4356	1095	12.3 0.24	1035	11.6 0.24	964	10.9 0.25	893	10.3 0.25	818	9.6 0.25	737	9.6 0.25	645	9.6 0.25
	1437	4408	1108	12.5 0.25	1049	11.8 0.25	979	11.1 0.26	909	10.5 0.26	836	9.9 0.26	756	9.8 0.26	669	9.8 0.26

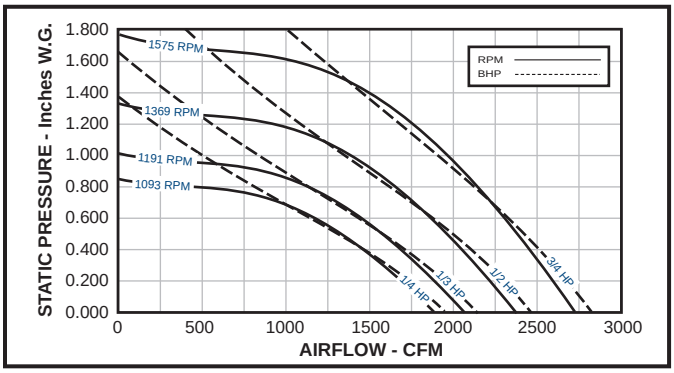
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

Dimensional Information & Performance Data

Domex Centrifugal Fans | Belt Drive

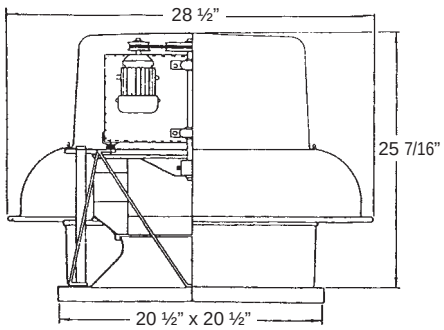
DX11B

› DX11B Belt Drive Fan Curves



› DX11B Belt Drive Fan Dimensional Data

Galv. Steel Base = 16 Gage
Aluminum Base = 0.064"
Discharge Apron = 0.050"
Roof/Wall Opening = 16" SQ.
Damper Size = 15 ¾" SQ.
Max. Motor Frame Size = 56
Peak BHP = (RPM/1700)^3
Max. RPM = 1810 (3/4 HP)
Est. Ship Weight = 55 lbs.

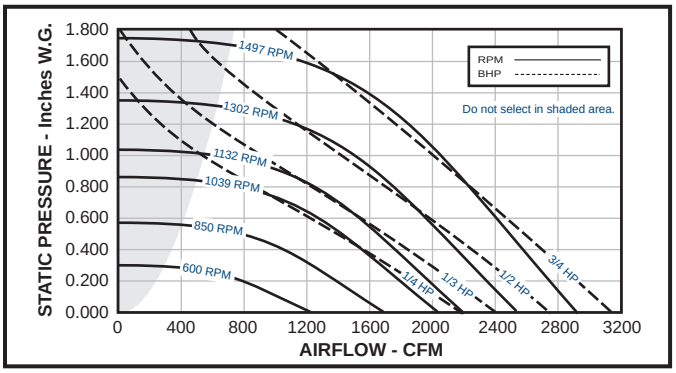


› DX11B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		1.125" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	650	2345	1120	4.7 0.05	905	4.1 0.05	535	3.4 0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	675	2435	1164	4.9 0.05	959	4.3 0.06	638	3.6 0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	700	2526	1207	5.1 0.06	1011	4.6 0.07	737	3.9 0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	725	2616	1250	5.5 0.07	1062	4.9 0.07	813	4.3 0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	750	2706	1293	5.8 0.07	1113	5.3 0.08	880	4.7 0.09	252	4.1 0.05	-	-	-	-	-	-	-	-	-	-	-	-
	800	2886	1379	6.6 0.09	1213	6.1 0.10	1007	5.5 0.10	672	5.0 0.10	-	-	-	-	-	-	-	-	-	-	-	-
	825	2976	1422	6.8 0.10	1263	6.3 0.10	1067	5.7 0.11	775	5.2 0.11	-	-	-	-	-	-	-	-	-	-	-	-
	850	3067	1465	7.0 0.11	1312	6.5 0.11	1126	5.9 0.12	874	5.4 0.12	-	-	-	-	-	-	-	-	-	-	-	-
	900	3247	1552	7.8 0.13	1407	7.2 0.13	1238	6.5 0.14	1028	6.0 0.15	665	5.7 0.13	-	-	-	-	-	-	-	-	-	-
	950	3427	1638	8.5 0.15	1502	7.9 0.16	1347	7.3 0.16	1159	6.7 0.17	884	6.3 0.17	-	-	-	-	-	-	-	-	-	-
	1000	3608	1724	9.2 0.17	1596	8.7 0.18	1451	8.0 0.19	1282	7.3 0.20	1080	7.0 0.20	706	6.8 0.18	-	-	-	-	-	-	-	-
	1050	3788	1810	9.7 0.20	1689	9.2 0.21	1553	8.5 0.22	1400	7.8 0.23	1217	7.4 0.23	939	7.1 0.22	-	-	-	-	-	-	-	-
	1075	3878	1853	10.0 0.21	1735	9.4 0.23	1603	8.8 0.23	1456	8.1 0.24	1284	7.7 0.25	1040	7.4 0.25	647	7.5 0.21	-	-	-	-	-	-
	1093	3943	1884	10.2 0.23	1768	9.6 0.24	1639	9.1 0.24	1496	8.3 0.26	1329	7.9 0.26	1111	7.7 0.26	758	7.7 0.23	-	-	-	-	-	-
1/3	1125	4059	1940	10.6 0.25	1827	10.0 0.26	1703	9.5 0.27	1566	8.8 0.27	1408	8.2 0.29	1227	8.0 0.29	924	8.1 0.27	-	-	-	-	-	-
	1150	4149	1983	11.0 0.26	1873	10.4 0.27	1753	9.8 0.28	1621	9.1 0.29	1469	8.5 0.31	1296	8.3 0.31	1028	8.3 0.29	489	8.4 0.21	-	-	-	-
	1191	4297	2053	11.5 0.29	1948	11.0 0.30	1834	10.5 0.31	1708	9.8 0.32	1568	9.0 0.34	1406	8.8 0.34	1193	8.6 0.34	883	8.6 0.31	-	-	-	-
1/2	1220	4402	2103	11.9 0.31	2001	11.4 0.33	1889	10.9 0.34	1767	10.2 0.34	1634	9.6 0.36	1481	9.2 0.37	1306	9.0 0.37	1019	8.9 0.34	-	-	-	-
	1250	4510	2155	12.4 0.34	2056	11.9 0.35	1947	11.4 0.36	1829	10.8 0.37	1700	10.0 0.38	1555	9.6 0.39	1393	9.4 0.39	1142	9.3 0.38	801	9.3 0.33	-	-
	1300	4690	2241	13.0 0.38	2147	12.6 0.39	2042	12.2 0.40	1930	11.6 0.41	1811	10.9 0.42	1677	10.2 0.44	1528	10.1 0.44	1342	9.9 0.44	1071	9.9 0.42	-	-
	1369	4939	2360	14.0 0.44	2271	13.6 0.46	2172	13.2 0.47	2069	12.8 0.48	1959	12.1 0.49	1838	11.4 0.51	1703	11.0 0.52	1556	10.8 0.52	1352	10.9 0.51	1095	10.9 0.48
3/4	1380	4979	2379	14.1 0.45	2290	13.8 0.47	2193	13.4 0.48	2091	13.0 0.49	1982	12.3 0.50	1862	11.6 0.52	1730	11.1 0.53	1585	10.9 0.53	1396	11.0 0.52	1141	11.1 0.50
	1410	5087	2431	14.6 0.48	2344	14.2 0.50	2249	13.8 0.51	2150	13.5 0.52	2044	12.8 0.53	1929	12.1 0.55	1803	11.5 0.56	1666	11.4 0.56	1513	11.4 0.57	1265	11.5 0.54
	1470	5304	2535	15.6 0.55	2451	15.2 0.56	2361	14.8 0.58	2268	14.5 0.58	2166	13.9 0.60	2061	13.2 0.61	1946	12.6 0.64	1818	12.3 0.64	1681	12.2 0.64	1505	12.3 0.63
	1500	5412	2586	16.1 0.58	2504	15.8 0.60	2416	15.4 0.61	2325	15.1 0.62	2227	14.5 0.63	2126	13.9 0.64	2014	13.2 0.67	1892	12.8 0.68	1761	12.7 0.68	1620	12.8 0.68
	1575	5682	2716	17.4 0.67	2638	17.2 0.69	2555	16.9 0.71	2468	16.6 0.72	2377	16.3 0.73	2282	15.6 0.74	2180	15.0 0.76	2073	14.4 0.78	1952	14.3 0.79	1825	14.3 0.79

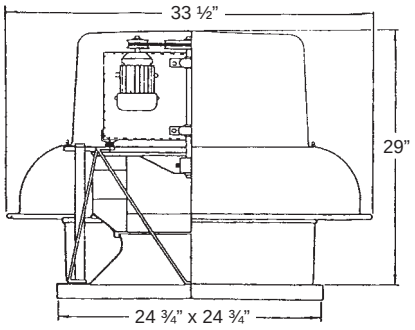
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

› DX12B Belt Drive Fan Curves



› DX12B Belt Drive Fan Dimensional Data

Galv. Steel Base = 16 Gage
Aluminum Base = 0.064"
Discharge Apron = 0.064"
Roof/Wall Opening = 16" SQ.
Damper Size = 15 ¾" SQ.
Max. Motor Frame Size = 56
Peak BHP = (RPM/1617)^3
Max. RPM = 2000 (1 ½ HP)
Est. Ship Weight = 98 lbs.



› DX12B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		1.250" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	400	1662	780	2.9 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	500	2078	975	4.9 0.02	654	4.2 0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	600	2494	1170	7.1 0.04	922	6.6 0.05	538	6.1 0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	700	2909	1365	9.4 0.06	1151	8.7 0.07	903	8.5 0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	800	3325	1561	11.0 0.09	1375	10.2 0.11	1182	10.0 0.12	929	9.6 0.12	-	-	-	-	-	-	-	-	-	-	-	-
	850	3533	1658	11.5 0.11	1485	10.8 0.13	1308	10.4 0.14	1084	10.2 0.14	769	9.6 0.12	-	-	-	-	-	-	-	-	-	-
	900	3740	1756	12.2 0.13	1595	11.5 0.15	1425	11.0 0.16	1232	10.8 0.17	985	10.3 0.17	-	-	-	-	-	-	-	-	-	-
	950	3948	1853	12.9 0.16	1703	12.3 0.17	1538	11.6 0.18	1371	11.4 0.19	1155	11.0 0.20	858	10.4 0.19	-	-	-	-	-	-	-	-
	1000	4156	1951	13.3 0.18	1811	12.8 0.20	1650	12.1 0.21	1499	11.7 0.22	1308	11.4 0.23	1076	11.1 0.23	553	10.1 0.19	-	-	-	-	-	-
	1039	4318	2027	13.7 0.21	1894	13.2 0.22	1737	12.6 0.24	1597	12.2 0.25	1422	11.7 0.26	1219	11.6 0.26	930	11.2 0.25	-	-	-	-	-	-
1/3	1055	4385	2058	13.8 0.21	1928	13.4 0.23	1774	12.8 0.25	1636	12.4 0.26	1468	11.9 0.27	1269	11.7 0.28	1011	11.5 0.27	-	-	-	-	-	-
	1075	4468	2097	14.1 0.23	1970	13.6 0.24	1819	13.1 0.26	1683	12.6 0.27	1525	12.2 0.28	1331	12.0 0.29	1094	11.8 0.29	524	10.8 0.23	-	-	-	-
	1100	4572	2146	14.5 0.24	2023	13.9 0.26	1875	13.4 0.28	1740	12.9 0.29	1591	12.5 0.30	1408	12.3 0.31	1197	12.2 0.31	855	11.7 0.29	-	-	-	-
	1132	4705	2208	15.0 0.27	2091	14.4 0.28	1946	13.9 0.30	1813	13.4 0.31	1673	13.0 0.33	1503	12.7 0.34	1316	12.6 0.34	1058	12.5 0.33	-	-	-	-
1/2	1150	4779	2244	15.3 0.28	2128	14.7 0.29	1986	14.2 0.31	1854	13.7 0.33	1719	13.3 0.34	1556	12.9 0.35	1373	12.9 0.36	1136	12.9 0.35	572	12.0 0.28	-	-
	1175	4883	2292	15.7 0.30	2180	15.2 0.31	2041	14.6 0.33	1910	14.2 0.35	1782	13.7 0.36	1629	13.3 0.37	1451	13.2 0.38	1239	13.3 0.38	906	12.9 0.35	-	-
	1200	4987	2341	16.3 0.32	2231	15.8 0.33	2096	15.2 0.35	1966	14.7 0.37	1844	14.3 0.38	1700	13.8 0.39	1527	13.7 0.40	1341	13.7 0.41	1076	13.6 0.39	-	-
	1250	5195	2439	17.2 0.36	2333	16.8 0.37	2206	16.2 0.40	2077	15.7 0.42	1963	15.1 0.43	1831	14.7 0.44	1676	14.4 0.45	1507	14.4 0.46	1300	14.5 0.45	-	-
	1275	5299	2488	17.7 0.38	2384	17.2 0.39	2260	16.7 0.42	2134	16.1 0.44	2021	15.5 0.45	1895	14.9 0.47	1749	14.5 0.48	1585	14.6 0.48	1402	14.7 0.48	-	-
	1302	5411	2540	18.1 0.40	2439	17.6 0.42	2319	17.1 0.44	2195	16.6 0.46	2082	16.0 0.48	1963	15.4 0.49	1827	14.7 0.51	1668	14.7 0.52	1503	14.9 0.52	869	14.5 0.45
3/4	1325	5507	2585	18.5 0.43	2486	18.0 0.44	2369	17.5 0.46	2247	17.0 0.49	2134	16.4 0.50	2021	15.8 0.52	1891	15.2 0.53	1736	14.8 0.54	1576	15.0 0.55	1106	15.1 0.51
	1350	5611	2634	18.9 0.45	2536	18.4 0.47	2423	17.9 0.49	2303	17.4 0.51	2190	16.8 0.53	2083	16.3 0.54	1956	15.7 0.56	1810	15.2 0.57	1654	15.1 0.58	1248	15.6 0.56
	1400	5818	2731	19.9 0.50	2637	19.4 0.52	2530	18.8 0.54	2414	18.3 0.57	2302	17.7 0.59	2201	17.2 0.60	2084	16.7 0.62	1955	16.1 0.63	1807	15.9 0.64	1463	16.2 0.64
	1425	5922	2780	20.0 0.53	2688	19.9 0.55	2584	19.3 0.57	2469	18.7 0.60	2357	18.2 0.62	2258	17.7 0.63	2147	17.2 0.65	2026	16.6 0.66	1882	16.2 0.67	1566	16.3 0.68
	1450	6026	2829	21.0 0.56	2738	20.0 0.58	2637	19.9 0.60	2524	19.3 0.62	2413	18.7 0.65	2315	18.2 0.66	2210	17.6 0.68	2092	17.1 0.69	1955	16.6 0.70	1663	16.6 0.72
	1497	6222	2921	22.0 0.61	2833	21.0 0.63	2737	21.0 0.65	2627	20.0 0.68	2520	19.7 0.71	2421	19.2 0.72	2327	18.7 0.74	2212	18.1 0.75	2091	17.5 0.77	1811	17.3 0.79

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

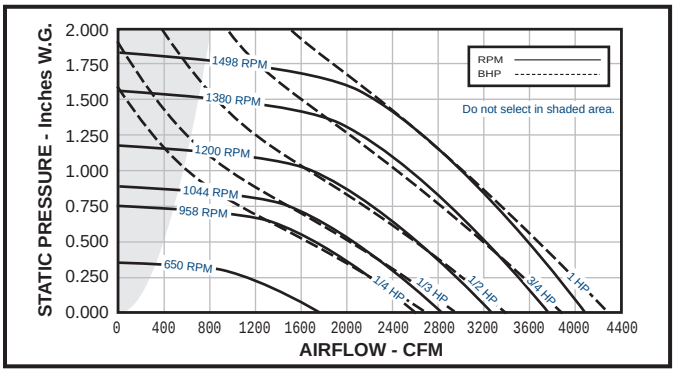
Dimensional Information & Performance Data

Domex Centrifugal Fans | Belt Drive

PENN BARRY™

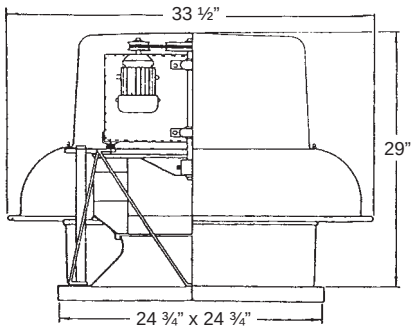
DX14B

› DX14B Belt Drive Fan Curves



› DX14B Belt Drive Fan Dimensional Data

Galv. Steel Base = 16 Gage
Aluminum Base = 0.064"
Discharge Apron = 0.064"
Roof/Wall Opening = 16" SQ.
Damper Size = 15 ¾" SQ.
Max. Motor Frame Size = 56
Peak BHP = (RPM/1493)^3
Max. RPM = 1793 (1 ½ HP)
Est. Ship Weight = 98 lbs.

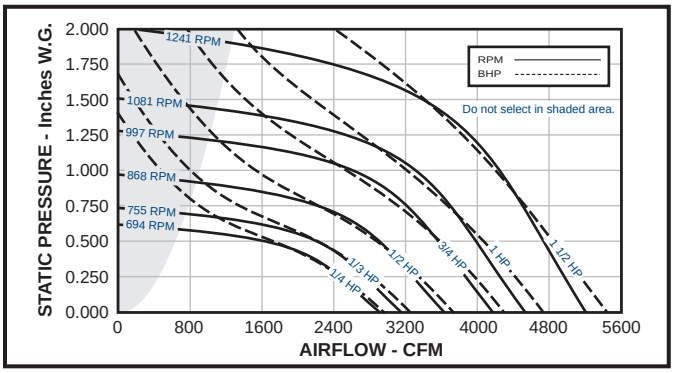


› DX14B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	350	1455	952		-		-		-		-		-		-		-		-		-	
			1.6	0.01	-		-		-		-		-		-		-		-		-	
	400	1662	1088		221		-		-		-		-		-		-		-		-	
			2.5	0.02	3.0	0.01	-		-		-		-		-		-		-		-	
	515	2140	1401		994		-		-		-		-		-		-		-		-	
			4.8	0.04	4.5	0.04	-		-		-		-		-		-		-		-	
	680	2826	1849		1582		1212		-		-		-		-		-		-		-	
			7.3	0.08	6.7	0.09	6.0	0.09	-		-		-		-		-		-		-	
	842	3499	2290		2077		1835		1522		1104		-		-		-		-		-	
			9.7	0.15	9.0	0.17	8.3	0.18	7.4	0.18	6.3	0.17	-		-		-		-		-	
	910	3782	2475		2276		2070		1793		1495		831		-		-		-		-	
			10.7	0.19	10.1	0.21	9.5	0.22	8.8	0.23	7.6	0.22	6.9	0.18	-		-		-		-	
	958	3982	2606		2415		2226		1977		1699		1355		-		-		-		-	
			11.8	0.23	11.2	0.24	10.6	0.26	10.0	0.26	8.8	0.26	7.6	0.25	-		-		-		-	
1/3	1000	4156	2720		2536		2360		2135		1870		1588		1033		-		-		-	
			12.6	0.26	12.0	0.27	11.4	0.29	10.8	0.30	9.8	0.30	8.5	0.29	7.9	0.25	-		-		-	
	1020	4239	2774		2593		2424		2208		1949		1684		1250		-		-		-	
			12.9	0.27	12.3	0.29	11.8	0.30	11.1	0.32	10.2	0.32	8.9	0.31	8.1	0.29	-		-		-	
	1044	4339	2840		2662		2499		2292		2044		1788		1445		-		-		-	
			13.1	0.29	12.6	0.31	12.1	0.33	11.4	0.34	10.7	0.34	9.4	0.34	8.4	0.32	-		-		-	
1/2	1060	4405	2883		2708		2549		2348		2106		1854		1561		-		-		-	
			13.4	0.31	12.8	0.32	12.4	0.34	11.7	0.35	11.0	0.36	9.8	0.35	8.7	0.34	-		-		-	
	1095	4551	2978		2809		2654		2469		2240		1998		1738		-		-		-	
			14.2	0.34	13.7	0.35	13.2	0.37	12.6	0.39	11.9	0.39	10.7	0.39	9.5	0.38	-		-		-	
	1130	4696	3074		2909		2758		2586		2373		2138		1901		610		-		-	
			15.2	0.37	14.6	0.39	14.1	0.41	13.6	0.42	12.8	0.43	11.9	0.43	10.5	0.43	9.3	0.25	-		-	
	1160	4821	3155		2995		2847		2683		2484		2257		2027		1251		-		-	
			16.0	0.40	15.5	0.42	15.1	0.44	14.5	0.46	13.8	0.47	12.9	0.47	11.5	0.46	9.8	0.40	-		-	
	1190	4946	3237		3081		2936		2780		2592		2373		2150		1556		-		-	
			17.0	0.44	16.4	0.45	16.0	0.47	15.5	0.49	14.8	0.50	14.0	0.51	12.6	0.50	10.4	0.47	-		-	
	1200	4987	3264		3109		2965		2812		2627		2412		2191		1629		-		-	
			17.3	0.45	16.8	0.46	16.3	0.48	15.8	0.50	15.1	0.52	14.4	0.52	12.9	0.52	10.6	0.49	-		-	
3/4	1218	5062	3313		3160		3018		2869		2690		2481		2263		1759		-		-	
			17.7	0.47	17.2	0.48	16.7	0.50	16.2	0.52	15.6	0.54	14.8	0.54	13.5	0.54	11.0	0.52	-		-	
	1285	5341	3495		3351		3213		3081		2921		2733		2528		2105		1072		-	
			18.5	0.55	18.0	0.56	17.5	0.58	17.1	0.61	16.5	0.63	15.8	0.64	15.1	0.40	12.6	0.62	11.8	0.47	-	
	1315	5465	3577		3435		3300		3173		3019		2844		2644		2238		1594		-	
			18.7	0.59	18.2	0.60	17.7	0.62	17.3	0.65	16.8	0.67	16.2	0.68	15.5	0.68	13.3	0.67	12.2	0.62	-	
	1345	5590	3659		3520		3387		3262		3116		2949		2759		2363		1845		-	
			19.0	0.63	18.5	0.65	18.1	0.67	17.7	0.69	17.2	0.71	16.6	0.73	16.0	0.73	14.0	0.72	12.5	0.69	-	
	1380	5735	3754		3619		3488		3367		3229		3071		2891		2507		2080		699	
			19.5	0.68	19.1	0.70	18.6	0.72	18.2	0.74	17.8	0.76	17.2	0.78	16.6	0.79	14.9	0.79	13.1	0.76	12.9	0.45
1	1400	5818	3808		3675		3546		3426		3293		3140		2966		2587		2178		939	
			19.9	0.71	19.4	0.73	19.0	0.75	18.6	0.77	18.2	0.79	17.6	0.81	17.0	0.82	15.5	0.82	13.6	0.80	13.2	0.53
	1425	5922	3876		3746		3617		3500		3372		3226		3059		2687		2298		1579	
			20.0	0.75	20.0	0.77	19.5	0.79	19.2	0.81	18.8	0.83	18.2	0.86	17.6	0.87	16.2	0.87	14.3	0.85	13.6	0.76
	1450	6026	3944		3816		3689		3574		3451		3309		3149		3786		2417		1848	
			21.0	0.79	21.0	0.81	20.0	0.83	19.7	0.85	19.3	0.87	18.8	0.90	18.2	0.91	16.8	0.91	15.0	0.90	14.0	0.85
	1475	6130	4012		3886		3761		3647		3530		3391		3236		2885		2523		2033	
			22.0	0.83	21.0	0.85	21.0	0.87	20.0	0.89	19.8	0.92	19.3	0.94	18.8	0.96	17.5	0.96	15.7	0.95	14.2	0.91
	1498	6226	4075		3951		3826		3714		3602		3465		3317		2974		2618		2200	
			22.0	0.87	22.0	0.89	21.0	0.91	21.0	0.93	20.0	0.96	19.8	0.98	19.3	1.00	18.1	1.01	16.3	1.00	14.6	0.97

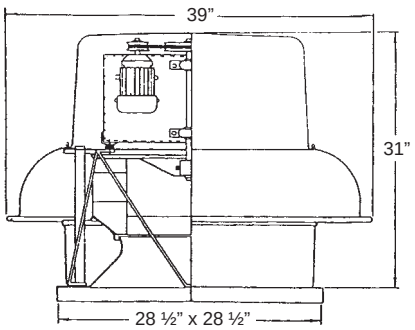
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

› DX16B Belt Drive Fan Curves



› DX16B Belt Drive Fan Dimensional Data

Galv. Steel Base = 14 Gage
Aluminum Base = 0.080"
Discharge Apron = 0.064"
Roof/Wall Opening = 20" SQ.
Damper Size = 19 ¾" SQ.
Max. Motor Frame Size = 145T
Peak BHP = $(RPM/1078)^3$
Max. RPM = 1631 (3 HP)
Est. Ship Weight = 131 lbs.



› DX16B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	300	1468	1248	3.1 0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	450	2202	1873	5.2 0.06	1531	4.5 0.07	511	4.4 0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	600	2936	2497	8.8 0.15	2250	8.3 0.16	1980	7.9 0.17	1465	7.4 0.16	-	-	-	-	-	-	-	-	-	-	-	-
	650	3180	2705	9.7 0.19	2478	9.1 0.20	2233	8.8 0.21	1935	8.5 0.22	1029	7.8 0.17	-	-	-	-	-	-	-	-	-	-
	694	3395	2889	10.4 0.23	2677	10.0 0.24	2450	9.7 0.26	2212	9.3 0.27	1707	8.8 0.25	-	-	-	-	-	-	-	-	-	-
1/3	715	3498	2976	10.9 0.25	2772	10.5 0.27	2552	10.1 0.28	2323	9.8 0.29	1948	9.2 0.29	8.9 0.20		-	-	-	-	-	-	-	-
	735	3596	3059	11.5 0.27	2861	11.0 0.29	2648	10.6 0.30	2426	10.2 0.31	2120	9.7 0.32	1302	9.2 0.26	-	-	-	-	-	-	-	-
	755	3694	3142	11.9 0.30	2950	11.6 0.31	2744	11.1 0.33	2528	10.7 0.34	2266	10.3 0.34	1620	9.7 0.31	-	-	-	-	-	-	-	-
1/2	775	3792	3226	12.3 0.32	3039	11.9 0.34	2839	11.6 0.35	2629	11.2 0.36	2397	10.7 0.37	1897	10.1 0.35	766	9.9 0.22	-	-	-	-	-	-
	800	3914	3330	12.8 0.35	3150	12.4 0.37	2957	12.0 0.38	2755	11.7 0.40	2546	11.3 0.41	2183	10.6 0.40	1334	10.3 0.40	-	-	-	-	-	-
	825	4036	3434	13.3 0.39	3259	12.9 0.40	3073	12.5 0.42	2878	12.2 0.43	2679	11.8 0.45	2396	11.2 0.45	1744	10.7 0.40	-	-	-	-	-	-
	850	4159	3538	13.8 0.42	3368	13.5 0.44	3188	13.1 0.46	3001	12.7 0.47	2808	12.3 0.49	2575	11.9 0.49	2091	11.2 0.46	-	-	-	-	-	-
	868	4247	3613	14.3 0.45	3447	13.9 0.47	3271	13.5 0.49	3088	13.2 0.50	2900	12.8 0.51	2690	12.3 0.52	2314	11.6 0.51	-	-	-	-	-	-
3/4	895	4379	3725	15.0 0.49	3564	14.6 0.51	3395	14.2 0.53	3218	13.9 0.55	3037	13.5 0.56	2850	13.0 0.57	2556	12.4 0.57	887	11.9 0.35	-	-	-	-
	925	4526	3850	15.8 0.54	3694	15.4 0.56	3531	15.0 0.58	3362	14.7 0.60	3187	14.3 0.62	3009	13.9 0.63	2778	13.3 0.63	1563	12.5 0.50	-	-	-	-
	950	4648	3954	16.5 0.59	3803	16.1 0.61	3644	15.8 0.63	3481	15.4 0.65	3311	15.0 0.66	3138	15.0 0.68	2941	14.2 0.69	1974	13.1 0.60	-	-	-	-
	975	4770	4058	17.1 0.64	3911	16.7 0.66	3757	16.4 0.68	3599	16.0 0.70	3433	15.7 0.71	3266	15.3 0.73	3090	14.8 0.74	2331	13.6 0.69	-	-	-	-
	997	4878	4150	17.4 0.68	4005	17.1 0.70	3856	16.7 0.72	3701	16.4 0.74	3540	16.0 0.76	3377	15.7 0.78	3212	15.2 0.79	2608	13.9 0.77	-	-	-	-
1	1025	5015	4266	17.9 0.74	4126	17.6 0.76	3982	17.2 0.78	3831	16.9 0.80	3676	16.5 0.82	3518	16.2 0.84	3357	15.8 0.85	2880	14.6 0.86	1573	14.1 0.65	-	-
	1055	5162	4391	18.5 0.81	4255	18.1 0.83	4116	17.8 0.85	3969	17.4 0.87	3820	17.1 0.89	3667	16.7 0.91	3511	16.3 0.93	3115	15.4 0.94	2100	14.4 0.81	-	-
	1081	5289	4500	18.9 0.87	4366	18.6 0.89	4231	18.3 0.92	4088	17.9 0.94	3943	17.6 0.96	3794	17.2 0.97	3643	16.8 0.99	3299	15.9 1.01	2484	14.7 0.93	-	-
1 1/2	1115	5455	4641	19.8 0.95	4512	19.4 0.98	4382	19.1 1.00	4244	18.7 1.02	4104	18.4 1.04	3960	18.1 1.06	3814	17.6 1.08	3504	16.7 1.11	2920	15.3 1.08	1562	15.1 0.80
	1150	5626	4787	21.0 1.04	4662	20.0 1.07	4536	20.0 1.10	4403	19.7 1.12	4268	19.3 1.14	4129	19.0 1.16	3989	18.6 1.18	3703	17.7 1.21	3256	16.5 1.21	2209	15.6 1.03
	1180	5773	4912	22.0 1.13	4790	21.0 1.16	4668	21.0 1.18	4538	21.0 1.21	4407	20.0 1.23	4273	19.8 1.25	4136	19.4 1.27	3858	18.6 1.30	3486	17.5 1.32	2664	16.2 1.19
	1210	5920	5037	22.0 1.22	4918	22.0 1.24	4798	22.0 1.27	4673	21.0 1.30	4546	21.0 1.32	4416	21.0 1.34	4282	20.0 1.36	4012	19.3 1.40	3698	18.4 1.42	3056	16.8 1.36
	1241	6072	5166	23.0 1.31	5050	23.0 1.34	4933	22.0 1.37	4812	22.0 1.39	4688	22.0 1.42	4563	21.0 1.44	4432	21.0 1.46	4170	20.0 1.50	3884	19.1 1.53	3398	17.8 1.51

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

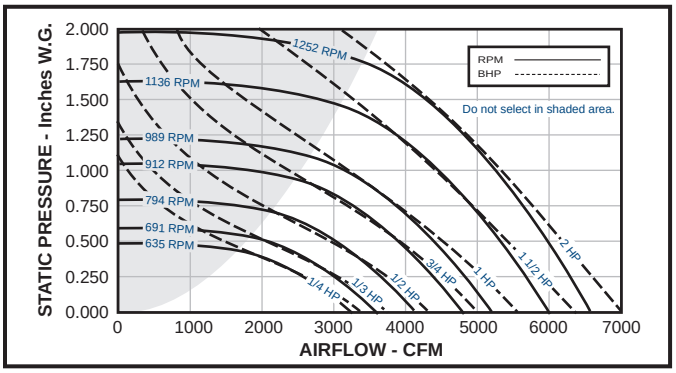
Dimensional Information & Performance Data

Domex Centrifugal Fans | Belt Drive

PENN BARRY™

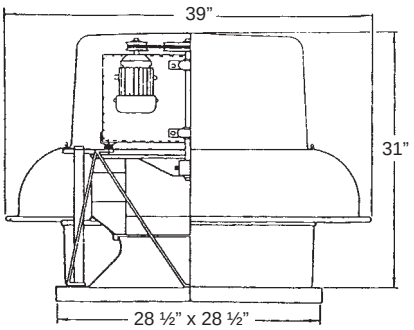
DX18B

› DX18B Belt Drive Fan Curves



› DX18B Belt Drive Fan Dimensional Data

Galv. Steel Base = 14 Gage
Aluminum Base = 0.080"
Discharge Apron = 0.064"
Roof/Wall Opening = 20" SQ.
Damper Size = 19 ¾" SQ.
Max. Motor Frame Size = 145T
Peak BHP = (RPM/986)^3
Max. RPM = 1326 (2 HP)
Est. Ship Weight = 132 lbs.

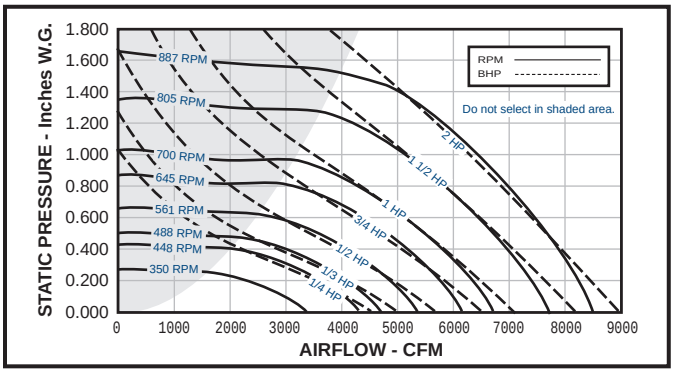


› DX18B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	375	1988	1975		1402		-		-		-		-		-		-		-		-	
			3.9	0.04	3.6	0.05	-		-		-		-		-		-		-		-	
	549	2910	2892		2531		2138		-		-		-		-		-		-		-	
			8.0	0.14	7.7	0.16	7.1	0.17	-		-		-		-		-		-		-	
	590	3128	3108		2774		2417		1746		-		-		-		-		-		-	
			8.9	0.18	8.5	0.20	7.9	0.21	7.4	0.20	-		-		-		-		-		-	
	635	3366	3345		3037		2711		2291		-		-		-		-		-		-	
			10.1	0.22	9.7	0.24	9.1	0.26	8.3	0.26	-		-		-		-		-		-	
1/3	655	3472	3450		3153		2838		2478		1493		-		-		-		-		-	
			10.4	0.24	10.0	0.26	9.4	0.28	8.7	0.29	8.2	0.24	-		-		-		-		-	
	675	3578	3555		3268		2963		2638		1913		-		-		-		-		-	
			10.7	0.26	10.3	0.29	9.8	0.31	9.1	0.32	8.4	0.30	-		-		-		-		-	
	691	3663	3640		3360		3062		2751		2162		-		-		-		-		-	
			10.9	0.28	10.5	0.31	10.1	0.33	9.3	0.34	8.5	0.34	-		-		-		-		-	
1/2	715	3791	3766		3497		3209		2911		2456		-		-		-		-		-	
			11.4	0.31	11.0	0.34	10.5	0.36	9.8	0.38	9.0	0.37	-		-		-		-		-	
	740	3923	3898		3639		3361		3075		2712		1852		-		-		-		-	
			12.1	0.35	11.7	0.37	11.2	0.39	10.4	0.41	9.7	0.42	9.1	0.37	-		-		-		-	
	770	4082	4056		3808		3542		3271		2974		2383		-		-		-		-	
			13.1	0.39	12.7	0.42	12.2	0.44	11.5	0.46	10.6	0.48	9.7	0.46	-		-		-		-	
	794	4209	4182		3943		3685		3424		3150		2684		1604		-		-		-	
			14.2	0.43	13.7	0.46	13.2	0.48	12.5	0.50	11.6	0.52	10.6	0.51	10.3	0.41	-		-		-	
3/4	825	4374	4345		4115		3868		3618		3357		3010		2313		-		-		-	
			15.2	0.48	14.8	0.51	14.2	0.53	13.7	0.56	12.6	0.58	11.6	0.58	10.8	0.54	-		-		-	
	855	4533	4503		4281		4045		3804		3555		3278		2763		-		-		-	
			15.5	0.53	15.1	0.57	14.6	0.59	14.1	0.62	13.2	0.64	12.2	0.65	11.2	0.64	-		-		-	
	885	4692	4662		4447		4220		3987		3750		3504		3107		-		-		-	
			16.3	0.59	15.9	0.63	15.4	0.65	14.9	0.68	14.1	0.70	13.3	0.72	12.3	0.71	-		-		-	
	912	4835	4804		4595		4376		4151		3923		3684		3376		1675		-		-	
			17.1	0.65	16.8	0.68	16.3	0.71	15.8	0.74	15.1	0.76	14.3	0.78	13.4	0.78	12.3	0.59	-		-	
1	930	4930	4899		4694		4480		4259		4036		3803		3536		2206		-		-	
			17.8	0.69	17.4	0.72	17.0	0.75	16.5	0.78	15.9	0.81	15.0	0.83	14.1	0.84	12.8	0.72	-		-	
	965	5116	5083		4886		4682		4469		4255		4034		3806		2875		-		-	
			18.9	0.77	18.7	0.81	18.3	0.84	17.8	0.86	17.3	0.89	16.5	0.92	15.7	0.94	13.8	0.90	-		-	
	989	5243	5209		5017		4819		4612		4403		4190		3969		3213		-		-	
			19.9	0.82	19.6	0.87	19.2	0.90	18.7	0.92	18.2	0.95	17.5	0.98	16.7	1.00	14.9	0.99	-		-	
1 1/2	1030	5460	5425		5241		5053		4853		4653		4451		4240		3671		2215		-	
			21.0	0.93	21.0	0.97	20.0	1.01	19.9	1.04	19.5	1.07	18.9	1.10	18.0	1.12	16.5	1.12	15.5	0.92	-	
	1065	5646	5610		5431		5251		5058		4865		4671		4470		4006		2984		-	
			22.0	1.03	21.0	1.07	21.0	1.12	21.0	1.14	20.0	1.17	19.5	1.20	18.7	1.23	17.3	1.25	15.9	1.17	-	
	1100	5832	5794		5621		5448		5262		5075		4887		4697		4291		3517		-	
			22.0	1.13	22.0	1.18	22.0	1.23	21.0	1.25	21.0	1.28	20.0	1.31	19.5	1.34	18.1	1.39	16.5	1.36	-	
	1136	6022	5984		5816		5649		5470		5289		5108		4925		4543		3945		2625	
			23.0	1.25	23.0	1.30	22.0	1.34	22.0	1.34	22.0	1.37	21.0	1.44	21.0	1.47	19.2	1.52	17.7	1.49	16.8	1.29
2	1175	6229	6189		6027		5865		5694		5520		5345		5169		4802		4336		3414	
			24.0	1.38	24.0	1.43	24.0	1.48	23.0	1.51	23.0	1.54	22.0	1.57	22.0	1.61	20.0	1.67	19.1	1.67	17.6	1.60
	1200	6362	6321		6162		6004		5838		5667		5495		5323		4967		4560		3786	
			25.0	1.47	25.0	1.52	24.0	1.57	24.0	1.61	23.0	1.64	23.0	1.67	23.0	1.71	21.0	1.77	20.0	1.80	18.3	1.77
	1225	6494	6453		6297		6142		5980		5813		5645		5477		5153		4763		4100	
			25.0	1.57	25.0	1.62	25.0	1.67	25.0	1.71	24.0	1.74	24.0	1.77	23.0	1.81	22.0	1.87	21.0	1.93	19.6	1.88
	1252	6637	6595		6443		6291		6134		5970		5806		5641		5307		4958		4399	
			26.0	1.67	26.0	1.73	26.0	1.78	26.0	1.82	25.0	1.85	25.0	1.88	24.0	1.92	23.0	1.99	22.0	2.05	21.0	2.00

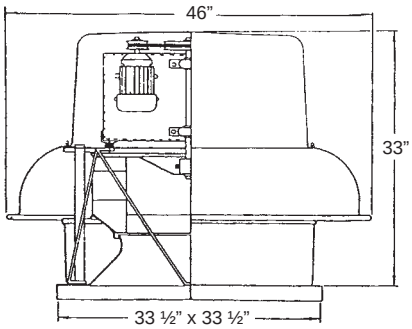
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

› DX24B Belt Drive Fan Curves



› DX24B Belt Drive Fan Dimensional Data

Galv. Steel Base = 14 Gage
Aluminum Base = 0.080"
Discharge Apron = 0.064"
Roof/Wall Opening = 25" SQ.
Damper Size = 24 ¾" SQ.
Max. Motor Frame Size = 184T
Peak BHP = (RPM/700)^3
Max. RPM = 1275 (5 HP)
Est. Ship Weight = 183 lbs.



› DX24B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	265	1719	2547	3.1 0.05	1450	1.4 0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	399	2589	3835	7.6 0.15	3315	7.0 0.18	2531	5.5 0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	430	2790	4133	8.2 0.19	3675	7.6 0.22	2998	6.9 0.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	448	2906	4306	8.6 0.22	3873	7.9 0.25	3251	7.3 0.26	2278	4.7 0.24	-	-	-	-	-	-	-	-	-	-	-	-
1/3	460	2984	4421	8.9 0.24	4003	8.2 0.27	3407	7.6 0.28	2534	5.2 0.27	-	-	-	-	-	-	-	-	-	-	-	-
	475	3082	4565	9.3 0.26	4164	8.7 0.29	3600	8.0 0.31	2837	6.1 0.30	-	-	-	-	-	-	-	-	-	-	-	-
	488	3166	4690	9.7 0.28	4303	9.1 0.32	3766	8.4 0.34	3087	6.9 0.33	-	-	-	-	-	-	-	-	-	-	-	-
1/2	520	3374	4998	10.6 0.34	4643	10.0 0.38	4163	9.3 0.40	3575	8.4 0.41	2688	5.9 0.38	-	-	-	-	-	-	-	-	-	-
	530	3438	5094	10.8 0.36	4749	10.2 0.40	4283	9.5 0.42	3721	8.8 0.43	2901	6.5 0.41	-	-	-	-	-	-	-	-	-	-
	540	3503	5190	11.0 0.38	4854	10.5 0.42	4402	9.7 0.45	3865	9.0 0.46	3107	7.0 0.43	-	-	-	-	-	-	-	-	-	-
	561	3640	5392	11.6 0.43	5075	11.0 0.47	4650	10.4 0.49	4142	9.6 0.51	3517	8.2 0.50	-	-	-	-	-	-	-	-	-	-
3/4	600	3893	5767	13.1 0.52	5473	12.6 0.57	5104	11.9 0.59	4642	11.2 0.62	4122	10.3 0.62	3399	8.2 0.59	-	-	-	-	-	-	-	-
	625	4055	6007	14.3 0.59	5726	13.7 0.64	5384	13.0 0.67	4955	12.3 0.70	4484	11.6 0.71	3890	9.9 0.69	2988	8.2 0.64	-	-	-	-	-	-
	645	4185	6200	14.5 0.65	5926	14.0 0.71	5601	13.4 0.73	5196	12.6 0.76	4747	11.9 0.78	4226	10.8 0.76	3466	8.8 0.73	-	-	-	-	-	-
1	663	4301	6373	14.7 0.71	6107	14.2 0.76	5795	13.7 0.79	5411	13.0 0.82	4980	12.3 0.85	4493	11.4 0.84	3838	9.7 0.80	-	-	-	-	-	-
	675	4379	6488	15.0 0.75	6227	14.5 0.80	5924	13.9 0.84	5553	13.1 0.86	5134	12.6 0.89	4669	11.8 0.89	4075	10.3 0.86	-	-	-	-	-	-
	685	4444	6584	15.2 0.78	6327	14.7 0.84	6031	14.1 0.87	5671	13.5 0.90	5261	12.8 0.93	4815	12.1 0.93	4268	10.8 0.90	-	-	-	-	-	-
	700	4541	6728	15.5 0.83	6477	15.0 0.89	6191	14.5 0.93	5847	13.9 0.96	5450	13.3 0.99	5031	12.6 1.00	4531	11.5 0.97	-	-	-	-	-	-
1 1/2	750	4866	7209	17.0 1.02	6974	16.6 1.09	6721	16.1 1.14	6425	15.5 1.16	6063	14.9 1.20	5680	14.3 1.22	5269	13.7 1.22	4113	11.1 1.15	-	-	-	-
	775	5028	7449	17.9 1.13	7222	17.5 1.19	6984	17.1 1.25	6697	16.5 1.27	6360	16.0 1.31	5998	15.4 1.34	5619	14.8 1.36	4619	12.4 1.30	-	-	-	-
	790	5125	7593	18.6 1.20	7370	18.2 1.26	7141	17.7 1.32	6860	17.2 1.34	6537	16.6 1.38	6186	16.0 1.42	5815	15.5 1.43	4910	13.4 1.39	-	-	-	-
	805	5223	7738	19.1 1.27	7519	18.6 1.33	7298	18.1 1.40	7022	17.6 1.42	6713	17.0 1.45	6374	16.5 1.50	6009	15.9 1.51	5182	14.1 1.48	3788	12.0 1.35	-	-
2	820	5320	7882	19.2 1.34	7667	18.8 1.41	7452	18.3 1.48	7183	17.8 1.50	6888	17.3 1.53	6556	16.7 1.58	6202	16.1 1.60	5407	14.6 1.57	4203	12.3 1.48	-	-
	850	5515	8170	19.6 1.49	7963	19.2 1.56	7756	18.8 1.63	7505	18.3 1.66	7235	17.8 1.69	6915	17.2 1.74	6583	16.7 1.77	5851	15.5 1.77	4836	13.5 1.69	-	-
	870	5644	8362	20.0 1.60	8160	20.0 1.67	7957	19.5 1.74	7718	19.0 1.78	7462	18.5 1.80	7152	17.9 1.85	6834	17.4 1.89	6142	16.3 1.91	5234	14.3 1.84	-	-
	887	5755	8526	21.0 1.69	8327	21.0 1.77	8129	20.0 1.84	7898	19.7 1.89	7648	19.2 1.91	7352	18.6 1.95	7046	18.1 2.00	6384	17.0 2.04	5561	15.3 1.97	4317	13.9 1.83

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

Dimensional Information & Performance Data

Domex Centrifugal Fans | Belt Drive

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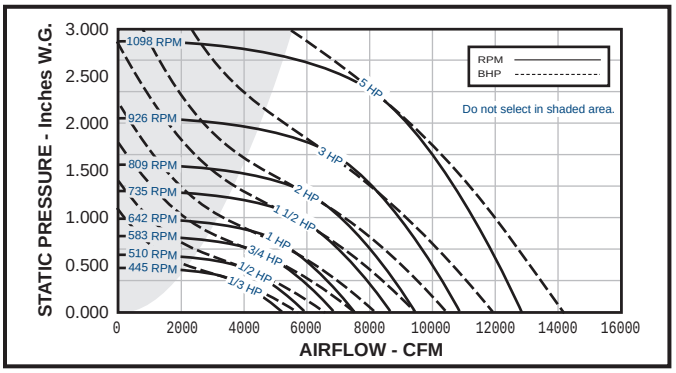
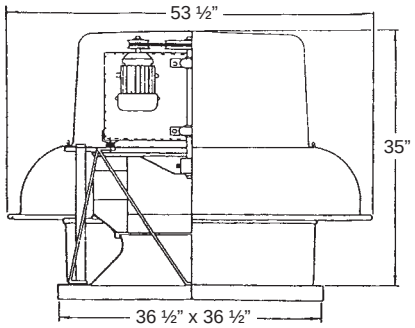
DX27B

› DX27B Belt Drive Fan Curves



› DX27B Belt Drive Fan Dimensional Data

Galv. Steel Base = 14 Gage
Aluminum Base = 0.102"
Discharge Apron = 0.080"
Roof/Wall Opening = 28" SQ.
Damper Size = 27 ¾" SQ.
Max. Motor Frame Size = 184T
Peak BHP = (RPM/642)^3
Max. RPM = 1210 (5 HP)
Est. Ship Weight = 210 lbs.

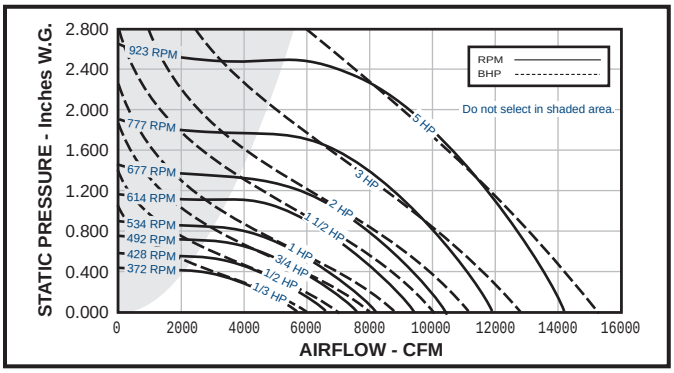


› DX27B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		2.000" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/3	445	3234	4748	8.1 0.29	4165	7.3 0.32	3314	6.8 0.33	-	-	-	-	-	-	-	-	-	-	-	-
1/2	475	3451	5124	9.2 0.34	4604	8.4 0.38	3947	7.7 0.40	-	-	-	-	-	-	-	-	-	-	-	-
	510	3703	5557	10.3 0.42	5102	9.5 0.46	4545	8.8 0.46	3731	8.4 0.50	-	-	-	-	-	-	-	-	-	-
3/4	530	3850	5808	10.9 0.47	5386	10.2 0.51	4866	9.5 0.54	4180	9.0 0.56	-	-	-	-	-	-	-	-	-	-
	560	4068	6178	12.1 0.55	5801	11.4 0.59	5321	10.6 0.63	4773	10.0 0.66	-	-	-	-	-	-	-	-	-	-
	583	4239	6466	13.3 0.62	6121	12.5 0.66	5664	11.6 0.70	5166	10.9 0.73	-	-	-	-	-	-	-	-	-	-
1	600	4359	6670	13.8 0.67	6345	13.1 0.71	5915	12.2 0.76	5430	11.4 0.79	3890	10.8 0.79	-	-	-	-	-	-	-	-
	620	4504	6912	14.4 0.73	6593	13.9 0.78	6188	13.0 0.83	5744	12.1 0.87	4473	11.3 0.90	-	-	-	-	-	-	-	-
	642	4666	7182	15.0 0.81	6875	14.5 0.86	6501	13.8 0.91	6079	12.9 0.95	4967	11.9 1.00	-	-	-	-	-	-	-	-
1 1/2	660	4795	7398	15.4 0.87	7099	15.0 0.93	6748	14.3 0.98	6340	13.5 1.02	5356	12.4 1.09	-	-	-	-	-	-	-	-
	685	4976	7701	16.2 0.97	7412	15.9 1.03	7093	15.3 1.08	6702	14.5 1.13	5830	13.1 1.20	4186	13.1 1.15	-	-	-	-	-	-
	710	5158	8003	17.2 1.08	7724	16.9 1.14	7434	16.4 1.19	7061	15.7 1.24	6253	14.2 1.33	5029	13.7 1.21	-	-	-	-	-	-
	735	5341	8306	18.3 1.19	8036	18.1 1.25	7775	17.7 1.31	7417	17.0 1.37	6654	15.6 1.46	5594	14.7 1.50	-	-	-	-	-	-
2	750	5449	8484	18.9 1.26	8220	18.7 1.33	7975	18.4 1.38	7624	17.7 1.44	6888	16.3 1.54	5921	15.2 1.64	-	-	-	-	-	-
	770	5594	8724	19.7 1.36	8467	19.5 1.43	8210	19.0 1.49	7901	18.5 1.55	7201	17.2 1.65	6339	15.9 1.72	4824	15.8 1.65	-	-	-	-
	790	5739	8964	20.0 1.47	8713	20.0 1.54	8463	19.9 1.60	8177	19.4 1.66	7497	18.0 1.77	6714	16.7 1.85	5514	16.3 1.99	-	-	-	-
	809	5877	9192	21.0 1.57	8947	21.0 1.64	8702	20.0 1.71	8437	20.0 1.77	7775	18.7 1.88	7046	17.4 1.97	5967	16.9 1.99	-	-	-	-
3	840	6102	9562	22.0 1.75	9326	22.0 1.83	9091	22.0 1.90	8856	21.0 1.96	8224	20.0 2.08	7543	18.9 2.18	6652	17.9 2.24	5163	18.1 2.13	-	-
	870	6320	9920	24.0 1.94	9692	23.0 2.02	9465	23.0 2.09	9238	23.0 2.16	8654	22.0 2.29	8016	21.0 2.40	7259	19.0 2.47	6171	19.0 2.49	-	-
	900	6538	10278	25.0 2.15	10057	25.0 2.23	9838	25.0 2.30	9618	24.0 2.37	9078	24.0 2.51	8476	22.0 2.63	7805	21.0 2.72	6843	20.0 2.75	-	-
	926	6727	10587	27.0 2.33	10373	27.0 2.42	10159	26.0 2.49	9946	26.0 2.56	9441	25.0 2.71	8858	24.0 2.84	8224	23.0 2.93	7414	21.0 2.99	-	-
5	960	6974	10992	29.0 2.59	10785	29.0 2.68	10579	28.0 2.76	10373	28.0 2.84	9910	27.0 2.98	9353	26 .0 3.12	8763	25.0 3.24	8082	23.0 3.27	5611	23.0 3.14
	1000	7265	11467	31.0 2.92	11268	30.0 3.02	11078	30.0 3.10	10872	30.0 3.18	10458	29.0 3.33	9927	28.0 3.48	9385	27.0 3.62	8778	25.0 3.71	7000	24.0 3.75
	1040	7555	11941	32.0 3.28	11750	31.0 3.38	11559	31.0 3.47	11369	31.0 3.55	10889	30.0 3.71	10493	29.0 3.87	9973	28.0 4.01	9416	27.0 4.13	7919	25.0 4.24
	1098	7977	12627	34.0 3.84	12447	34.0 3.95	12266	34.0 4.05	12086	33.0 4.14	11726	33.0 4.61	11299	32 .0 4.48	10812	31.0 4.63	10318	30.0 4.78	9135	27.0 4.98

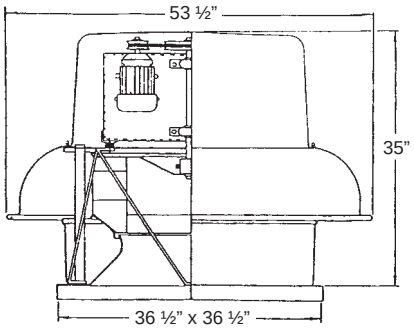
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

› DX30B Belt Drive Fan Curves



› DX30B Belt Drive Fan Dimensional Data

Galv. Steel Base = 14 Gage
Aluminum Base = 0.102"
Discharge Apron = 0.080"
Roof Opening = 28" SQ.
Damper Size = 27 ¾" SQ.
Max. Motor Frame Size = 184T
Peak BHP = (RPM/534)^3
Max. RPM = 999 (5 HP)
Est. Ship Weight = 210 lbs.



› DX30B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/3	225	1804	3480	2.9 0.06	2165	2.0 0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	300	2405	4640	5.8 0.14	3849	5.1 0.17	2423	4.3 0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	372	2983	5753	8.7 0.27	5164	8.0 0.30	4386	7.4 0.33	3184	6.6 0.32	-	-	-	-	-	-	-	-	-	-	-	-
1/2	405	3247	6264	9.7 0.35	5732	8.9 0.38	5073	8.2 0.42	4186	7.5 0.43	-	-	-	-	-	-	-	-	-	-	-	-
	428	3432	6619	10.4 0.41	6120	9.7 0.45	5514	9.0 0.49	4747	8.3 0.51	3627	7.4 0.49	-	-	-	-	-	-	-	-	-	-
3/4	460	3688	7114	11.7 0.51	6653	10.8 0.55	6114	10.0 0.59	5468	9.3 0.63	4618	8.5 0.63	-	-	-	-	-	-	-	-	-	-
	480	3848	7424	12.6 0.57	6985	11.5 0.62	6478	10.5 0.66	5897	9.9 0.71	5147	9.0 0.72	4103	8.4 0.70	-	-	-	-	-	-	-	-
	492	3945	7609	13.1 0.62	7183	12.1 0.67	6695	11.0 0.71	6136	10.3 0.76	5430	9.4 0.78	4490	8.7 0.76	-	-	-	-	-	-	-	-
1	520	4169	8042	14.1 0.73	7642	13.3 0.79	7195	12.4 0.83	6674	11.6 0.87	6071	10.8 0.91	5324	9.9 0.92	4225	8.9 0.87	-	-	-	-	-	-
	534	4281	8259	14.7 0.79	7871	13.9 0.85	7443	13.2 0.89	6939	12.4 0.94	6375	11.6 0.98	5691	10.6 1.00	4760	9.5 0.97	-	-	-	-	-	-
1 1/2	560	4490	8661	15.4 0.91	8295	14.8 0.98	7890	14.2 1.02	7427	13.4 1.06	6927	12.7 1.12	6303	11.8 1.14	5559	10.7 1.14	-	-	-	-	-	-
	580	4650	8971	16.1 1.01	8617	15.5 1.08	8229	14.9 1.13	7792	14.2 1.17	7315	13.5 1.23	6757	12.7 1.26	6115	11.7 1.28	-	-	-	-	-	-
	600	4811	9280	16.8 1.12	8938	16.2 1.19	8566	15.6 1.24	8153	15.0 1.29	7698	14.3 1.34	7192	13.5 1.39	6590	12.5 1.41	4847	10.4 1.33	-	-	-	-
	614	4923	9496	17.4 1.20	9162	16.9 1.27	8801	16.2 1.32	8405	15.6 1.37	7964	14.9 1.43	7493	14.2 1.49	6917	13.2 1.50	5412	10.9 1.47	-	-	-	-
2	640	5131	9899	18.4 1.36	9578	17.9 1.44	9234	17.3 1.49	8868	16.8 1.54	8452	16.1 1.59	8015	15.3 1.66	7504	14.5 1.69	6230	12.3 1.69	-	-	-	-
	660	5292	10208	19.1 1.49	9897	18.6 1.57	9567	18.1 1.63	9222	17.6 1.68	8820	17.0 1.73	8400	16.2 1.80	7937	15.4 1.85	6798	13.4 1.88	4544	11.5 1.62	-	-
	677	5428	10471	19.5 1.61	10168	19.0 1.69	9848	18.6 1.75	9513	18.2 1.80	9129	17.7 1.86	8724	16.9 1.92	8302	16.1 1.99	7235	14.2 2.03	5744	12.5 1.96	-	-
3	710	5693	10981	20.0 1.86	10692	19.9 1.94	10392	19.5 2.01	10073	19.1 2.06	9723	18.7 2.12	9346	18.1 2.18	8952	17.3 2.26	8011	15.6 2.32	6801	14.0 2.30	-	-
	735	5893	11368	21.0 2.06	11089	21.0 2.15	10802	20.0 2.22	10494	20.0 2.28	10169	19.6 2.33	9808	19.1 2.39	9431	18.3 2.47	8577	16.8 2.56	7519	15.0 2.59	5947	13.8 2.45
	760	6093	11755	22.0 2.28	11485	22.0 2.37	11210	21.0 2.45	10912	21.0 2.51	10611	21.0 2.56	10263	20.0 2.63	9905	19.4 2.70	9120	17.9 2.83	8163	16.3 2.87	6886	14.8 2.79
	777	6230	12018	23.0 2.44	11754	22.0 2.53	11488	22.0 2.61	11196	22.0 2.67	10905	21.0 2.73	10569	21.0 2.79	10224	20.0 2.86	9485	18.7 3.01	8564	17.1 3.06	7426	15.5 3.01
5	815	6534	12605	24.0 2.81	12354	24.0 2.91	12102	23.0 3.00	11827	23.0 3.06	11549	23.0 3.12	11249	23.0 3.19	10924	22.0 3.25	10244	21.0 3.42	9441	18.8 3.50	8513	17.2 3.55
	845	6775	13069	25.0 3.14	12827	25.0 3.23	12584	25.0 3.33	12323	25.0 3.40	12055	25.0 3.46	11781	24.0 3.53	11467	24.0 3.60	10819	23.0 3.76	10095	21.0 3.89	9237	18.5 3.94
	875	7015	13533	26.0 3.48	13299	26.0 3.58	13065	26.0 3.68	12817	26.0 3.76	12558	26.0 3.83	12299	26.0 3.89	12006	26.0 3.96	11389	24.0 4.12	10739	23.0 4.30	9937	20.0 4.34
	905	7256	13997	28.0 3.85	13771	28.0 3.96	13544	28.0 4.06	13308	27.0 4.15	13058	27.0 4.22	12808	27.0 4.28	12540	27.0 4.35	11952	26.0 4.50	11333	24.0 4.70	10610	22.0 4.79
	923	7400	14276	29.0 4.09	14054	29.0 4.19	13831	29.0 4.30	13603	28.0 4.39	13357	28.0 4.46	13112	28.0 4.53	12859	28.0 4.60	12284	27.0 4.75	11680	25.0 4.95	11001	23.0 5.07

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

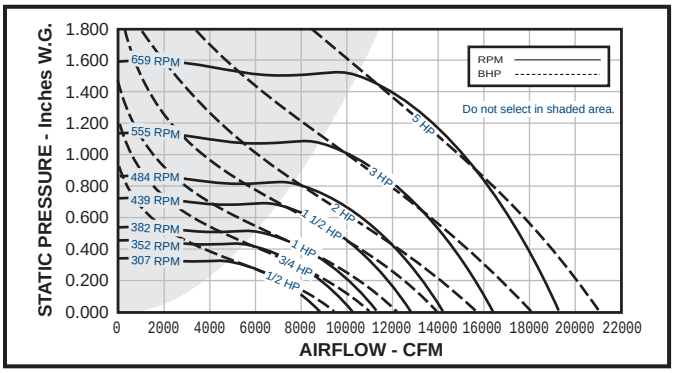
Dimensional Information & Performance Data

Domex Centrifugal Fans | Belt Drive

PENN BARRY™

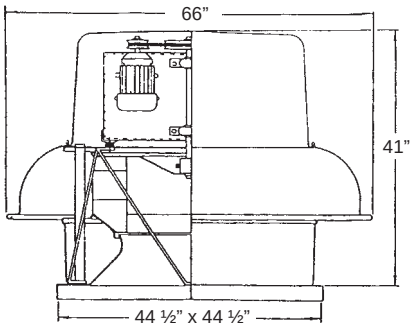
DX36B

› DX36B Belt Drive Fan Curves



› DX36B Belt Drive Fan Dimensional Data

Galv. Steel Base = 12 Gage
Aluminum Base = 0.102"
Discharge Apron = 0.080"
Roof Opening = 36" SQ.
Damper Size = 35 ½" SQ.
Max. Motor Frame Size = 213T
Peak BHP = (RPM/381)^3
Max. RPM = 810 (7 ½ HP)
Est. Ship Weight = 420 lbs.

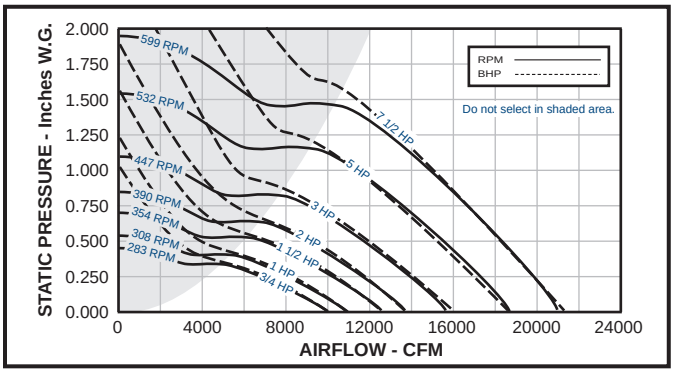


› DX36B Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/2	215	2093	6343		4855		-		-		-		-		-		-		-		-	
			3.9	0.13	3.7	0.18	-		-		-		-		-		-		-		-	
	261	2541	7700		6555		4707		-		-		-		-		-		-		-	
			5.9	0.24	5.6	0.30	5.6	0.31	-		-		-		-		-		-		-	
	307	2989	9057		8105		6994		-		-		-		-		-		-		-	
			8.0	0.39	7.7	0.46	7.6	0.51	-		-		-		-		-		-		-	
3/4	325	3164	9588		8714		7701		6101		-		-		-		-		-		-	
			9.0	0.46	8.6	0.53	8.3	0.60	7.9	0.61	-		-		-		-		-		-	
	340	3310	10031		9216		8248		6922		-		-		-		-		-		-	
			9.9	0.53	9.4	0.59	8.9	0.68	8.5	0.71	-		-		-		-		-		-	
	352	3427	10385		9613		8675		7497		-		-		-		-		-		-	
			10.6	0.58	10.2	0.65	9.5	0.74	9.1	0.79	-		-		-		-		-		-	
1	365	3553	10768		10037		9130		8086		6338		-		-		-		-		-	
			11.4	0.65	11.1	0.72	10.2	0.82	9.7	0.87	9.3	0.85	-		-		-		-		-	
	375	3651	11063		10362		9469		8523		7027		-		-		-		-		-	
			12.0	0.71	11.6	0.78	10.8	0.88	10.1	0.94	9.6	0.93	-		-		-		-		-	
	382	3719	11270		10589		9705		8809		7438		-		-		-		-		-	
			12.4	0.75	12.1	0.82	11.3	0.92	10.6	0.99	9.9	1.00	-		-		-		-		-	
1 1/2	400	3894	11801		11169		10314		9503		8351		-		-		-		-		-	
			13.5	0.86	13.3	0.93	12.5	1.04	11.7	1.11	10.9	1.16	-		-		-		-		-	
	415	4040	12243		11643		10821		10050		9052		7592		-		-		-		-	
			14.6	0.96	14.4	1.04	13.6	1.14	12.8	1.23	12.0	1.29	11.2	1.26	-		-		-		-	
	430	4186	12686		12115		11324		10586		9711		8478		-		-		-		-	
			15.5	1.06	15.4	1.15	14.8	1.26	14.0	1.35	13.2	1.42	12.3	1.42	-		-		-		-	
	439	4274	12951		12397		11627		10904		10089		8939		-		-		-		-	
			16.1	1.13	16.1	1.23	15.4	1.33	14.7	1.43	14.0	1.50	13.1	1.53	-		-		-		-	
2	455	4430	13423		12896		12168		11453		10719		9706		8341		-		-		-	
			17.0	1.26	17.0	1.36	16.5	1.46	15.7	1.57	15.0	1.65	14.3	1.71	13.2	1.66	-		-		-	
	470	4576	13866		13364		12671		11959		11271		10386		9229		-		-		-	
			17.9	1.39	17.9	1.50	17.5	1.58	16.8	1.71	16.0	1.80	15.4	1.87	14.5	1.86	-		-		-	
	484	4712	14279		13798		13139		12432		11778		10998		9945		-		-		-	
			18.8	1.52	18.8	1.63	18.6	1.71	18.0	1.85	17.2	1.95	16.5	2.02	15.8	2.06	-		-		-	
3	505	4916	14899		14449		13830		13143		12523		11839		10942		-		-		-	
			21.0	1.72	21.0	1.85	21.0	1.92	20.0	2.07	19.4	2.18	18.6	2.26	17.9	2.34	-		-		-	
	525	5111	15489		15061		14481		13814		13212		12584		11822		9607		-		-	
			22.0	1.94	22.0	2.07	22.0	2.14	21.0	2.29	20.0	2.42	19.6	2.51	19.0	2.58	17.1	2.55	-		-	
	540	5257	15931		15515		14968		14319		13718		13128		12449		10507		-		-	
			22.0	2.11	22.0	2.24	22.0	2.32	22.0	2.46	21.0	2.60	20.0	2.71	19.6	2.78	18.0	2.81	-		-	
	555	5403	16374		15969		15452		14826		14223		13662		13039		11292		-		-	
			23.0	2.29	23.0	2.43	23.0	2.50	22.0	2.65	22.0	2.80	21.0	2.91	20.0	3.00	18.9	3.09	-		-	
5	575	5598	16964		16573		16091		15498		14902		14364		13781		12252		9844		-	
			24.0	2.55	24.0	2.69	24.0	2.77	23.0	2.90	23.0	3.07	22.0	3.20	21.0	3.30	20.0	3.45	18.5	3.30	-	
	595	5793	17554		17177		16721		16166		15575		15043		14505		13160		11240		-	
			25.0	2.82	25.0	2.97	25.0	3.06	25.0	3.17	24.0	3.36	24.0	3.36	24.0	3.62	22.0	3.79	19.8	3.74	-	
	615	5987	18144		17779		17349		16824		16245		15715		15214		14033		12346		-	
			27.0	3.12	27.0	3.27	27.0	3.37	26.0	3.48	26.0	3.66	25.0	3.82	25.0	3.95	23.0	4.13	22.0	4.19	-	
	630	6133	18586		18230		17818		17314		16753		16225		15740		14630		13087		10793	
			28.0	3.35	28.0	3.51	28.0	3.62	28.0	3.72	27.0	3.90	27.0	4.07	26.0	4.21	24.0	4.41	23.0	4.53	21.0	4.34
	645	6279	19029		18681		18286		17801		17260		16733		16249		15218		13799		11892	
			29.0	3.59	29.0	3.75	29.0	3.87	28.0	3.97	28.0	4.14	27.0	4.32	27.0	4.48	25.0	4.69	24.0	4.87	22.0	4.74
	659	6416	19442		19101		18722		18255		17730		17205		16722		15732		14438		12737	
			29.0	3.83	29.0	4.00	29.0	4.13	29.0	4.22	28.0	4.38	28.0	4.57	27.0	4.74	26.0	4.97	24.0	5.17	23.0	5.10

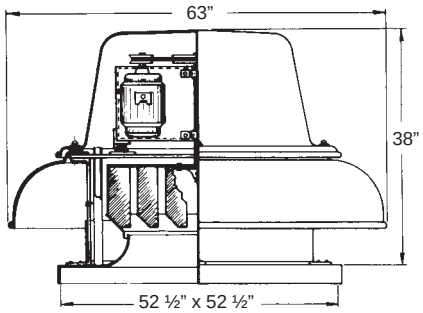
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

› KB420 Belt Drive Fan Curves



› KB420 Belt Drive Fan Dimensional Data

Galv. Steel Base = N/A
Aluminum Base = 0.125"
Discharge Apron = 0.080"
Roof Opening = 44" SQ.
Damper Size = 43 ½" SQ.
Max. Motor Frame Size = 213T
Peak BHP = (RPM/315)^3
Max. RPM = 600 (7 ½ HP)
Est. Ship Weight = 600 lbs.



› KB420 Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
3/4	240	2733	8452	6.2 0.48	6624	6.1 0.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	260	2961	9157	6.9 0.61	7503	6.7 0.61	5322	6.4 0.59	-	-	-	-	-	-	-	-	-	-	-	-
	283	3223	9967	7.6 0.77	8479	7.4 0.78	6607	7.1 0.77	-	-	-	-	-	-	-	-	-	-	-	-
1	295	3360	10389	8.0 0.87	8970	7.7 0.89	7252	7.4 0.88	-	-	-	-	-	-	-	-	-	-	-	-
	300	3416	10566	8.2 0.92	9173	7.9 0.93	7514	7.6 0.92	-	-	-	-	-	-	-	-	-	-	-	-
	308	3508	10847	8.4 0.99	9497	8.1 1.01	7905	7.8 1.00	5889	7.5 0.95	-	-	-	-	-	-	-	-	-	-
1 1/2	330	3758	11622	9.1 1.21	10376	8.7 1.23	8942	8.4 1.23	7177	8.0 1.19	-	-	-	-	-	-	-	-	-	-
	345	3929	12150	9.5 1.38	10959	9.1 1.40	9619	8.8 1.40	8005	8.3 1.37	-	-	-	-	-	-	-	-	-	-
	354	4031	12467	9.8 1.49	11307	9.4 1.51	10017	9.0 1.51	8492	8.6 1.49	6700	8.4 1.42	-	-	-	-	-	-	-	-
2	365	4157	12855	10.2 1.63	11729	9.9 1.65	10495	9.5 1.65	9078	9.1 1.64	7365	8.8 1.58	-	-	-	-	-	-	-	-
	380	4328	13383	10.8 1.84	12302	10.4 1.86	11139	10.0 1.86	9817	9.6 1.85	8229	9.2 1.80	-	-	-	-	-	-	-	-
	390	4441	13735	11.2 1.98	12682	10.7 2.01	11565	10.3 2.01	10299	10.0 2.00	8785	9.6 1.96	7013	9.5 1.86	-	-	-	-	-	-
3	420	4783	14792	12.2 2.47	13813	11.8 2.49	12800	11.3 2.51	11667	11.0 2.50	10405	10.7 2.48	8927	10.4 2.42	-	-	-	-	-	-
	430	4897	15144	12.6 2.65	14188	12.1 2.67	13205	11.6 2.69	12112	11.3 2.68	10908	11.1 2.67	9488	10.8 2.61	7987	10.8 2.51	-	-	-	-
	440	5011	15496	13.0 2.83	14562	12.5 2.86	13609	12.0 2.88	12549	11.6 2.87	11394	11.4 2.86	10040	11.2 2.81	8597	11.1 2.72	-	-	-	-
	447	5091	15743	13.2 2.97	14824	12.7 2.99	13889	12.2 3.01	12852	11.8 3.01	11732	11.6 3.00	10422	11.4 2.95	9019	11.3 2.87	-	-	-	-
5	460	5239	16201	13.6 3.23	15307	13.2 3.26	14409	12.7 3.28	13412	12.2 3.27	12342	12.0 3.27	11123	11.9 3.23	9775	11.7 3.16	-	-	-	-
	480	5466	16905	14.3 3.67	16049	13.8 3.69	15193	13.3 3.72	14263	12.7 3.72	13249	12.6 3.71	12158	12.5 3.69	10889	12.3 3.63	-	-	-	-
	500	5694	17610	14.9 4.14	16788	14.4 4.17	15966	13.9 4.20	15089	13.3 4.20	14138	13.1 4.19	13128	13.0 4.18	11976	12.9 4.13	9436	12.8 3.94	-	-
	520	5922	18314	15.5 4.65	17524	15.0 4.68	16733	14.4 4.71	15904	13.9 4.72	15007	13.6 4.71	14059	13.5 4.70	13033	13.4 4.68	10644	13.3 4.52	-	-
	532	6059	18737	15.9 4.97	17964	15.3 5.01	17192	14.8 5.04	16390	14.2 5.05	15523	13.8 5.04	14603	13.8 5.03	13621	13.7 5.02	11334	13.6 4.87	-	-
7 1/2	555	6320	19547	16.7 5.64	18806	16.1 5.68	18066	15.5 5.71	17313	14.9 5.73	16501	14.3 5.72	15631	14.3 5.71	14730	14.2 5.71	12614	14.2 5.59	10301	14.2 5.35
	570	6491	20075	17.2 6.11	19354	16.6 6.14	18633	16.0 6.18	17910	15.3 6.21	17122	14.7 6.20	16286	14.6 6.19	15417	14.5 6.18	13432	14.5 6.09	11218	14.5 5.88
	585	6662	20603	17.8 6.60	19901	17.2 6.64	19198	16.6 6.67	18496	16.0 6.71	17737	15.4 6.70	16935	15.1 6.69	16097	15.1 6.68	14238	15.1 6.61	12116	15.1 6.44
	599	6822	21096	18.5 7.08	20410	17.9 7.12	19724	17.3 7.16	19038	16.7 7.19	18306	16.1 7.19	17535	15.7 7.18	16725	15.7 7.17	14978	15.7 7.13	12909	15.7 6.95

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

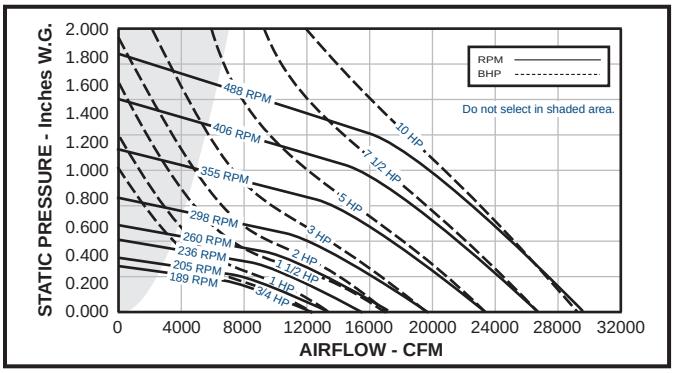
Dimensional Information & Performance Data

Domex Centrifugal Fans | Belt Drive

PENN BARRY™

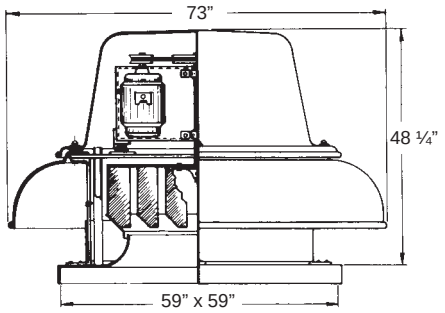
JB48

› JB48 Belt Drive Fan Curves



› JB48 Belt Drive Fan Dimensional Data

Galv. Steel Base = N/A
Aluminum Base = 0.125"
Discharge Apron = 0.102"
Roof Opening = 50" SQ.
Damper Size = 49 ½" SQ.
Max. Motor Frame Size = 215T
Peak BHP = (RPM/206)^3
Max. RPM = 449 (10 HP)
Est. Ship Weight = 775 lbs.

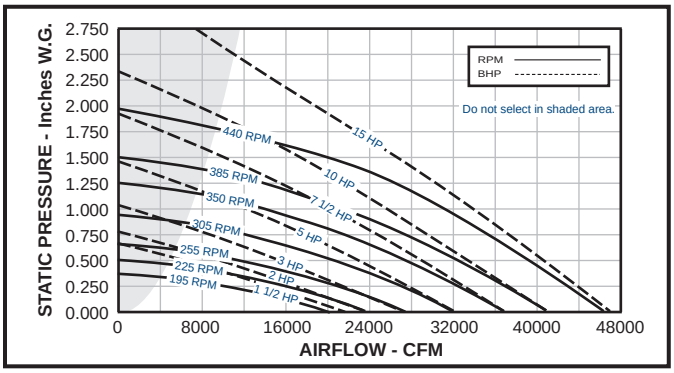


› JB48 Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
3/4	160	2105	11842		7937		-		-		-		-		-		-		-		-	
			4.6	0.47	4.4	0.42	-		-		-		-		-		-		-		-	
	175	2302	12953		9473		-		-		-		-		-		-		-		-	
			5.4	0.62	5.2	0.57	-		-		-		-		-		-		-		-	
	189	2486	13989		10828		5936		-		-		-		-		-		-		-	
			6.0	0.78	5.7	0.73	5.7	0.55	-		-		-		-		-		-		-	
1	195	2565	14433		11397		7183		-		-		-		-		-		-		-	
			6.3	0.85	6.0	0.81	5.9	0.66	-		-		-		-		-		-		-	
	200	2631	14803		11865		8089		-		-		-		-		-		-		-	
			6.5	0.92	6.2	0.88	6.0	0.75	-		-		-		-		-		-		-	
	205	2697	15173		12308		8799		-		-		-		-		-		-		-	
			6.8	0.99	6.4	0.95	6.2	0.83	-		-		-		-		-		-		-	
1 1/2	215	2828	15913		13183		9999		-		-		-		-		-		-		-	
			7.2	1.14	6.8	1.10	6.6	0.99	-		-		-		-		-		-		-	
	225	2960	16654		14046		11088		5724		-		-		-		-		-		-	
			7.6	1.31	7.2	1.26	6.9	1.16	6.8	0.80	-		-		-		-		-		-	
	236	3105	17468		14983		12267		8231		-		-		-		-		-		-	
			8.1	1.51	7.7	1.47	7.3	1.37	7.1	1.14	-		-		-		-		-		-	
2	245	3223	18134		15742		13155		9914		-		-		-		-		-		-	
			8.5	1.69	8.0	1.65	7.7	1.56	7.3	1.38	-		-		-		-		-		-	
	255	3355	18874		16577		14131		11319		5416		-		-		-		-		-	
			8.9	1.90	8.4	1.86	8.0	1.78	7.6	1.63	7.6	1.01	-		-		-		-		-	
	260	3420	19244		16992		14615		11878		6656		-		-		-		-		-	
			9.1	2.02	8.6	1.98	8.2	1.89	7.8	1.74	7.7	1.24	-		-		-		-		-	
3	270	3552	19984		17817		15572		12978		8983		-		-		-		-		-	
			9.5	2.26	9.0	2.22	8.6	2.14	8.1	1.99	7.9	1.66	-		-		-		-		-	
	280	3684	20725		18637		16515		14055		11032		4757		-		-		-		-	
			9.9	2.52	9.5	2.48	9.0	2.40	8.5	2.26	8.1	2.04	8.1	1.10	-		-		-		-	
	290	3815	21465		19457		17414		15124		12455		7271		-		-		-		-	
			10.5	2.80	10.0	2.77	9.6	2.68	9.2	2.55	8.6	2.36	8.6	1.70	-		-		-		-	
	298	3920	22057		20091		18116		15911		13468		9191		-		-		-		-	
			11.0	3.04	10.4	3.00	9.9	2.92	9.5	2.79	9.0	2.61	8.9	2.13	-		-		-		-	
5	315	4144	23315		21458		19589		17568		15336		12614		7315		-		-		-	
			11.8	3.59	11.3	3.55	10.8	3.47	10.2	3.36	9.8	3.18	9.5	2.93	9.5	2.06	-		-		-	
	330	4341	24425		22655		20871		19007		16935		14702		10848		-		-		-	
			12.6	4.13	12.0	4.09	11.4	4.00	10.9	3.90	10.5	3.73	10.1	3.53	10.0	3.00	-		-		-	
	345	4539	25536		23842		22138		20420		18461		16365		13809		-		-		-	
			13.4	4.72	12.7	4.68	12.1	4.59	11.6	4.49	11.1	4.33	10.8	4.13	10.6	3.84	-		-		-	
	355	4670	26276		24629		22975		21312		19437		17450		15230		6228		-		-	
			13.9	5.14	13.3	5.10	12.6	5.01	12.0	4.91	11.4	4.78	11.2	4.57	11.0	4.32	11.0	2.31	-		-	
7 1/2	370	4868	27386		25805		24222		22626		20891		19045		17054		9969		-		-	
			14.7	5.82	14.0	5.77	13.3	5.70	12.7	5.59	12.0	5.46	11.7	5.26	11.6	5.04	11.5	3.71	-		-	
	385	5065	28496		26976		25458		23923		22322		20569		18696		13361		-		-	
			15.3	6.56	14.7	6.51	14.0	6.44	13.4	6.33	12.7	6.20	12.2	6.01	12.1	5.80	11.9	4.94	-		-	
	395	5196	29237		27756		26276		24781		23263		21544		19772		15418		6502		-	
			15.8	7.08	15.1	7.03	14.5	6.96	13.8	6.85	13.1	6.73	12.5	6.57	12.4	6.34	12.3	5.70	12.3	3.00	-	
	406	5341	30051		28611		27181		25718		24263		22617		20941		17033		9283		-	
			16.3	7.69	15.6	7.64	14.9	7.59	14.3	7.46	13.6	7.34	12.9	7.18	12.8	6.95	12.6	6.39	12.6	4.36	-	
10	425	5591	31457		30084		28700		27320		25931		24440		22849		19444		13785		-	
			17.3	8.82	16.5	8.76	15.8	8.71	15.1	8.59	14.4	8.47	13.8	8.32	13.3	8.12	13.2	7.61	13.2	6.37	-	
	448	5894	33160		31860		30548		29239		27920		26602		25090		21961		18201		10947	
			18.5	10.33	17.8	10.27	17.2	10.22	16.7	10.10	16.1	9.98	15.6	9.85	15.1	9.67	14.9	9.17	14.9	8.47	14.9	6.18

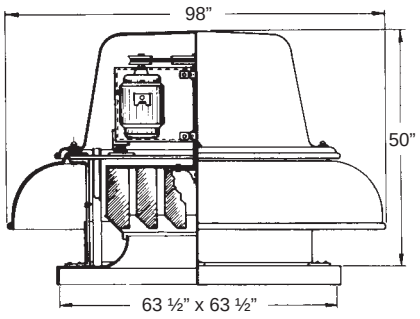
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

› MB542 Belt Drive Fan Curves



› MB542 Belt Drive Fan Dimensional Data

Galv. Steel Base = N/A
Aluminum Base = 0.125
Discharge Apron = 0.188"
Roof Opening = 55" SQ.
Damper Size = 54 ½" SQ.
Max. Motor Frame Size = 254T
Peak BHP = (RPM/182)^3
Max. RPM = 440 (15 HP)
Est. Ship Weight = 1500 lbs.



› MB542 Belt Drive Fan Performance Data

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1 1/2	165	2505	17490		12624		3878		-		-		-		-		-		-		-	
			6.0	0.77	5.8	0.72	5.4	0.49	-		-		-		-		-		-		-	
	175	2657	18550		14026		6748		-		-		-		-		-		-		-	
			6.6	0.92	6.3	0.89	5.9	0.68	-		-		-		-		-		-		-	
	185	2809	19610		15355		9323		-		-		-		-		-		-		-	
			7.1	1.08	6.8	1.07	6.4	0.87	-		-		-		-		-		-		-	
	195	2961	20670		16635		11589		-		-		-		-		-		-		-	
			7.6	1.27	7.3	1.26	6.9	1.11	-		-		-		-		-		-		-	
2	215	3265	22790		19135		15017		8447		-		-		-		-		-		-	
			8.6	1.70	8.2	1.71	7.8	1.54	7.5	1.23	-		-		-		-		-		-	
	220	3341	23320		19749		15820		9760		-		-		-		-		-		-	
			8.9	1.82	8.5	1.84	8.1	1.67	7.6	1.38	-		-		-		-		-		-	
	225	3416	23849		20359		16614		11025		-		-		-		-		-		-	
			9.1	1.95	8.7	1.97	8.3	1.80	7.8	1.55	-		-		-		-		-		-	
3	235	3568	24909		21569		18094		13452		6014		-		-		-		-		-	
			9.6	2.22	9.2	2.25	8.8	2.10	8.2	1.92	8.1	1.44	-		-		-		-		-	
	240	3644	25440		22170		18810		14419		7452		-		-		-		-		-	
			9.8	2.36	9.4	2.40	9.0	2.26	8.5	2.07	8.2	1.60	-		-		-		-		-	
	245	3720	25970		22768		19496		15357		8861		-		-		-		-		-	
			10.1	2.51	9.6	2.55	9.2	2.43	8.7	2.23	8.4	1.77	-		-		-		-		-	
	255	3872	27030		23958		20852		17032		11516		-		-		-		-		-	
			10.6	2.83	10.1	2.89	9.7	2.79	9.2	2.53	8.7	2.17	-		-		-		-		-	
5	265	4024	28090		25139		22150		18663		14018		7387		-		-		-		-	
			11.3	3.18	10.8	3.25	10.3	3.15	9.8	2.89	9.2	2.63	9.2	2.10	-		-		-		-	
	275	4176	29150		26311		23428		20259		16240		10205		-		-		-		-	
			11.8	3.55	11.3	3.63	10.8	3.54	10.3	3.29	9.8	3.10	9.6	2.52	-		-		-		-	
	295	4479	31270		28630		25940		23184		19758		15358		9427		-		-		-	
			13.0	4.39	12.4	4.49	11.8	4.40	11.3	4.21	10.9	3.92	10.4	3.60	10.4	2.98	-		-		-	
	305	4631	32330		29777		27177		24551		21390		17681		12202		-		-		-	
			13.6	4.85	13.0	4.96	12.3	4.88	11.7	4.72	11.4	4.40	11.1	4.20	10.9	3.53	-		-		-	
7 1/2	320	4859	33920		31488		29011		26541		23780		20452		16042		-		-		-	
			14.6	5.60	13.8	5.72	13.1	5.66	12.5	5.54	12.1	5.21	11.8	4.98	11.5	4.51	-		-		-	
	330	5011	34980		32623		30222		27827		25249		22120		18478		7756		-		-	
			15.2	6.14	14.4	6.26	13.7	6.22	13.0	6.10	12.6	5.80	12.3	5.49	12.0	5.24	11.9	3.92	-		-	
	340	5163	36040		33753		31423		29099		26683		23753		20505		10704		-		-	
			15.7	6.72	15.0	6.85	14.2	6.82	13.5	6.69	13.0	4.43	12.8	6.09	12.6	5.89	12.4	4.55	-		-	
	350	5315	37100		34879		32620		30360		28052		25357		22313		13496		-		-	
			16.3	7.33	15.6	7.46	14.8	7.45	14.0	7.33	13.4	7.12	13.3	6.74	13.1	6.51	12.8	5.27	-		-	
10	365	5542	38690		36561		34400		32230		30063		27653		24807		17395		-		-	
			17.2	8.31	16.4	8.46	15.5	8.47	14.8	8.35	14.0	8.20	13.8	7.80	13.7	7.46	13.4	6.53	-		-	
	375	5694	39750		37679		35579		33464		31355		29105		26431		19883		10514		-	
			17.8	9.01	16.9	9.16	16.0	9.20	15.3	9.08	14.5	8.93	14.2	8.58	14.1	8.20	13.8	7.47	13.8	5.95	-	
	385	5846	40810		38793		36752		34669		32636		30501		28031		22210		13344		-	
			18.4	9.75	17.5	9.91	16.6	9.96	15.7	9.84	15.0	9.69	14.5	9.40	14.4	8.99	14.2	8.44	14.1	6.79	-	
15	410	6226	43460		41568		39661		37716		35789		33860		31769		26747		19931		11292	
			19.8	11.78	18.9	11.95	17.9	12.06	17.0	11.95	16.1	11.80	15.3	11.63	15.1	11.20	15.1	10.50	15.0	9.34	15.0	7.75
	420	6377	44520		42674		40812		38916		37034		33860		31769		26747		19931		11292	
			20.0	12.66	19.4	12.85	18.5	12.96	17.5	12.86	16.6	12.72	15.7	12.55	15.4	12.18	15.4	11.34	15.4	10.53	15.4	8.74
	430	6529	45580		43778		41959		40110		38270		36431		34539		30034		24745		16894	
			21.0	13.58	20.0	13.78	19.2	13.90	18.3	13.82	17.4	13.68	16.5	13.51	15.9	13.22	15.9	12.32	15.9	11.76	15.9	9.84
	440	6681	46640		44879		43102		41299		39498		37701		35893		31641		26675		19521	
			22.0	14.55	21.0	14.75	20.0	14.88	19.1	14.82	18.2	14.68	17.3	14.51	16.5	14.31	16.5	13.35	16.5	12.80	16.5	11.05

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include drive losses. For further information on estimating belt drive losses and motor service factors see page 11. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

Engineering Specifications

› Model
DX = Downblast Roof Exhauster
KB = Downblast Roof Exhauster
JB = Downblast Roof Exhauster
MB = Downblast Roof Exhauster

› Unit Size
06 08 10 11 12 14 16
18 24 27 30 36 420 48
542

› Drive Type
D = Direct Drive
B = Belt Drive

› Motor Tap
Q = 1725 RPM
R = 1550 RPM
S = 1300 RPM
V = 1050 RPM
Q1 = 1650 RPM
Q2 = 1725 RPM

› Motor Speed
1 = Single Speed
2 = 2S2W Single & Three Phase
3 = 2S1W Three Phase

› Horse Power
1/100 1/50 1/30 1/25 1/20
1/12 1/11 1/7 1/6 1/5
1/4 1/3 1/2 3/4 1
1 1/2 2 5 5 7 1/2
10 15

› Enclosure
O = Open Drip Proof
T = Totally Enclosed
E = Explosion Proof
X = Special

› Voltage
A = 110V G = 230V N = 440V
B = 115V H = 240V P = 460V
C = 120V J = 277V Q = 480V
D = 200V K = 380V R = 575V
E = 208V L = 400V S = 600V
F = 220V M = 415V X = Special

› Phase
1 = Single
3 = Three

› Cycle
5 = 50 Hz
6 = 60 Hz

› Efficiency
S = Standard
H = High Efficiency

› Paint / Coating
Sizes 06 - 36
0 = None
F = Epoxy Powder Coat*
G = Epoxy Powder Coat with UV*
H = Hi-Temp Powder Coat*
J = Non-stick Powder Coat*
K = Phenolic Powder Coat*
L = Phenolic Powder Coat with UV*
N = Polyester Powder Coat
X = Special
** Not available with choice of color.*

Sizes KB, JB, & MB
0 = None
B = Epoxy*
C = Heresite
D = Heresite with UV*
Q = Enamel*
X = Special
** Not available with choice of color.*

› Color
0 = None
50 = Chrome Green
53 = Williamsburg Blue
55 = Pale Green
56 = Dove Gray
61 = White
63 = Oxford Beige
65 = Dover White
66 = Desert Tan
70 = Black
73 = Smoke Gray
77 = Brick Red
79 = Peppercorn
81 = Pale Brown
83 = Chocolate Brown
85 = Timeless Bronze
94 = Charcoal
X = Special

› AMCA Spark Rating
0 = None
C = Standard
B = Optional

› Damper
0 = None
BDD = Gravity Backdraft Damper
MD1 = Gravity Backdraft Damper 115V
MD2 = Gravity Backdraft Damper 230V
MD4 = Gravity Backdraft Damper 460V
ED1 = Explosion Proof Motor Operated Damper 115V

› Screen
0 = None
B = Bird Screen (Standard)
S = Insect/Bird Screen

› Roof Curb
0 = None K = UCA18 V = UG18
A = UCG8 L = UG12 W = URA12
B = UCG12 M = SA16 Y = URA18
C = UCG18 N = SFG12 1 = URG12
D = UCA8 P = SFG18 10 = SFA8
E = UCA12 Q = SG16 11 = USCG
F = SFA12 R = SRA16 12 = USCA
G = SFA18 S = SRG16 2 = URG18
H = SCG16 T = UA12 4 = UVA18
J = SCA16 U = UA18 5 = UVG18

› Slope
0 = None
S = Single
D = Double

› Metal Liner
0 = None
L = Metal Liner

› Damper Holding Plate
0 = None
P = Damper Holding Plate

› Neoprene Gasket
0 = None
G = Gasket

› No Wooden Nailer
0 = None
N = No Wooden Nailer

› Curb Paint/Coating
0 = None
B = Air Dried Epoxy
Q = Enamel

› Hinged Sub-base
0 = None
H = Hinged Sub-base

› Mounting Pedestal
0 = None
P = Mounting Pedestal

› Aluminum Base
0 = None
A = Aluminum Base

› Thermal Overload Protection
0 = None
P = Thermal Overload Protection

Continued, next page.

› Disconnect Switch
0 = None
1 = Nema 1 Disconnect Switch
3R = Nema 3R Disconnect Switch
4 = Nema 4 Disconnect Switch
7 = Nema 7 Disconnect Switch
9 = Nema 9 Disconnect Switch

› Internal Wiring
0 = None
1 = Nema 1 Internal Wiring
3R = Nema 3R Internal Wiring

› Transformer
0 = None
T = Transformer

› Speed Controller
0 = None
L = Loose
M = Mounted

› Firestat Switch
0 = None
F = Firestat Switch

› Wall Mount
0 = None
W = Wall Mount

› High Pressure Wheel
0 = None
H = High Pressure Wheel

› High Wind Construction
0 = None
M = Miami Dade Approved

› Belt Drive Fans
Belt driven centrifugal roof exhaust fan shall be Domex DX, KB, JB, MB manufactured by PennBarry, Richardson, TX 75081.

The housing shall be weatherproof, utilize heavygauge spun aluminum construction with a large rolled bead for strength, with galvanized (aluminum optional DX) base, and with rigid galvanized steel internal support structures. Housing shall not provide any of the internal structural support.Units shall be equipped with an oversized electrical conduit chase through the curb cap and into the motor compartment for ease of wiring (except Explosion Proof). Units shall be pre-wired to a junction box mounted in the motor compartment & equipped with an electrical disconnect device (except Explosion Proof).

Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and matched to deeply spun venturis. Motors shall be continuous duty, ball bearing design, permanently lubricated, mounted out of the main airstream, and furnished at the specified voltage, phase, and enclosure.

Shafts shall be turned, ground, polished, and rust protected. Heavy duty ball bearings are rated for a minimum L50 life exceeding 200,000 hours. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached, and sized for 150% of the horsepower at its rated maximum speed.

Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance (DX) or for Air performance (KB, JB, MB), and shall be UL and CSA listed.

› Direct Drive Fans
Direct drive centrifugal roof exhaust fan shall be Domex DX, manufactured by PennBarry, Richardson, TX 75081.

The housing shall be weatherproof, utilize heavy-gauge spun aluminum construction with a large rolled bead for strength, with galvanized (aluminum optional) base, and with rigid galvanized steel internal support structures. Housing shall not provide any of the internal structural support. Units shall be equipped with an oversized electrical conduit chase through the curb cap and into the motor compartment for ease of wiring (except Explosion Proof). Units shall be pre-wired to a junction box mounted in the motor compartment & equipped with an electrical disconnect device (except Explosion Proof).

Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and matched to deeply spun venturis. Motors shall be continuous duty, permanently lubricated, multi-speed (for applicable models), have thermal overload protection, mounted out of the main airstream, be easily accessible for service, and furnished at the specified voltage, phase.

Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance, and shall be UL and CSA listed.

› Product Configuration
Reference PennBarry's selection software to configure a Domex product today.

1-Year Limited Manufacturer Warranty

› Products Covered
PennBarry Fans and Ventilators (each, a "PennBarry Product")

› One Year Limited Warranty For PennBarry Products
PennBarry warrants to the original commercial purchaser that the PennBarry Products will be free from defects in material and workmanship for a period of one (1) year from the date of shipment.

› Exclusive Remedy
PennBarry will, at its option, repair or replace (without removal or installation) the affected components of any defective PennBarry Product; repair or replace (without removal or installation) the entire defective PennBarry Product; or refund the invoice price of the PennBarry Product. In all cases, a reasonable time period must be allowed for warranty repairs to be completed.

› What You Must Do
In order to make a claim under these warranties:
- You must be the original commercial purchaser of the PennBarry Product.
- You must promptly notify us, within the warranty period, of any defect and provide us with any substantiation that we may reasonably request.
- The PennBarry Product must have been installed and maintained in accordance with good industry practice and any specific PennBarry recommendations.

› Exclusions
These warranties do not cover defects caused by:
- Improper design or operation of the system into which the PennBarry Product is incorporated.
- Improper installation.
- Accident, abuse or misuse.
- Unreasonable use (including any use for non-commercial purposes, failure to provide reasonable and necessary maintenance as specified by PennBarry, misapplication and operation in excess of stated performance characteristics).
- Components not manufactured by PennBarry.

› Limitations
- In all cases, PennBarry reserves the right to fully satisfy its obligations under the Limited Warranties by refunding the invoice price of the defective PennBarry Product (or, if the PennBarry Product has been discontinued, of the most nearly comparable current product).
- PennBarry reserves the right to furnish a substitute or replacement component or product in the event a PennBarry Product or any component of the product is discontinued or otherwise unavailable.
- PennBarry's only obligation with respect to components not manufactured by PennBarry shall be to pass through the warranty made by the manufacturer of the defective component.

› General
The foregoing warranties are exclusive and in lieu of all other warranties except that of title, whether written, oral or implied, in fact or in law (including any warranty of merchantability or fitness for a particular purpose).

PennBarry hereby disclaims any liability for special, punitive, indirect, incidental or consequential damages, including without limitation lost profits or revenues, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, downtime, shutdown or slowdown costs.

The remedies of the original commercial purchaser set forth herein are exclusive and the liability of PennBarry with respect to the PennBarry Products, whether in contract, tort, warranty, strict liability or other legal theory shall not exceed the invoice price charged by PennBarry to its customer for the affected PennBarry Product at the time the claim is made.

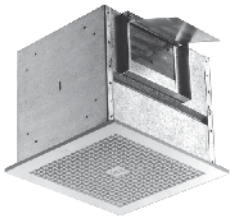
Inquiries regarding these warranties should be sent to: PennBarry, 1401 North Plano Road, Richardson, TX 75081

Other PennBarry Products

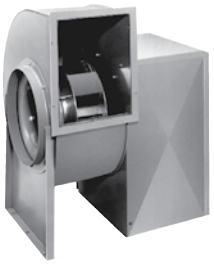
Centrifugal Products

› Domex
Centrifugal
Roof Exhausters

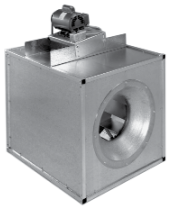
› Fumex Fatrap
Kitchen Hood Centrifugal
Roof Exhausters



› Zephyr
Ceiling and Inline Fans



› Dynamo
Centrifugal Blowers



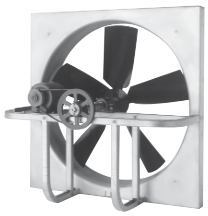
› Centrex Inliner
Centrifugal Inline Fan

› LC Dynafan
Low Contour Centrifugal
Roof Exhausters

› ESI
Efficient Silent
Inline Fan

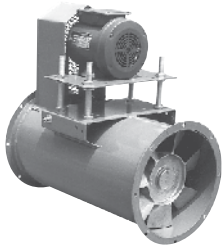
› Fume Exhaust
Curb Mounted
Centrifugal Fans

Axial / Gravity Products



› Breezeway
Propeller Wall Fan

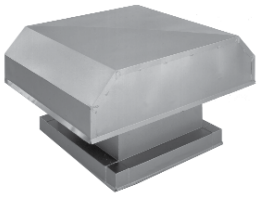
› Hi-Ex
Power Roof Ventilator



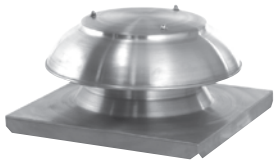
› Tubeaxial
Inline Fans

› Vaneaxial
Inline Fans

› Powered Airette
Axial Roof Ventilators



› Airette
Gravity Intake/Relief Hood



› Domex Axial
Axial Roof Ventilators

› Axcentrix
Bifurcator Fan

For more information, contact your local PennBarry Sales Manufacturer Representative or visit us at www.PennBarry.com.

PENN BARRY™