

BREEZEWAY

Wall Mounted Propeller Fans

PRODUCT GUIDE



PENNBARRY™

TABLE OF CONTENTS

INTRODUCTION	3-4
CERTIFICATIONS & LISTINGS	5
OPTIONS & ACCESSORIES	6-12
MOTOR AVAILABILITY	13
P-SERIES DIMENSIONS	14
BREEZEX BX DIMENSIONS	15
BC DIMENSIONS	16
BLL DIMENSIONS	17
BHM DIMENSIONS	18
BHH DIMENSIONS	19
BCH DIMENSIONS	20
BZW FAN SELECTIONS	21-22

INTRODUCTION

Breezeway Series Wall Mounted Propeller Fans

The Breezeway propeller fan line provides a variety of solutions to address the needs of wall mounted exhaust and ventilation applications such as garages, factories, warehouses, and other relatively clean air applications.

Whether steel or cast aluminum, all propellers in the Breezeway product line are statically and dynamically balanced to AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans, to ensure quiet and reliable operation.

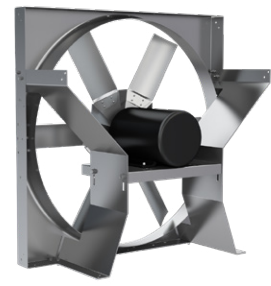
Breezeway fans have one of the broadest motor selections in the industry. All fans are fully assembled and factory tested prior to shipping; belt drive models are pre-set to the specified RPM.



P-Series



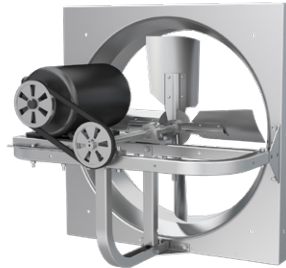
Breezex (BX)



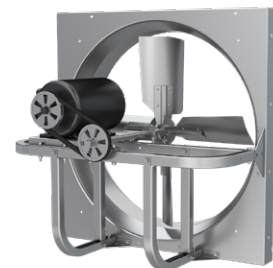
BC-Series



BLL-Series



BHM-Series



BHH-Series



BCH-Series

INTRODUCTION

BREEZEWAY DIRECT DRIVE SERIES

P-Series

- Static pressure up to 0.625 in. wg.
- Flow capacity up to 6,562 CFM.
- Exhaust or supply in light-duty applications.
- Stamped aluminum propeller with steel hub, zinc-coated wire guard/power assembly mounted on RIS vibration isolators attached to a steel venturi panel.
- Available sizes from 10" to 24".

Breezex (BX)

- Static pressure up to 0.375 in. wg.
- Flow capacity up to 4,720 CFM.
- Exhaust or supply in light-duty applications.
- Field reversible fan.
- Stamped aluminum propeller with steel hub, a fabricated power assembly and steel venturi panel.
- Base-mounted TE type motors.
- Explosion proof motors with less reversing switch.
- Available sizes from 10" to 24"

BC-Series

- Static pressure up to 0.75 in. wg.
- Flow capacity up to 43,437 CFM.
- Exhaust or supply in light-duty applications.
- Available sizes from 24" to 54".

BREEZEWAY BELT DRIVE SERIES

BLL-Series

- Static pressure up to 0.5 in. wg.
- Flow capacity up to 13,774 CFM.
- Exhaust in light-duty applications.
- Fabricated steel propeller, fabricated steel power assembly, and a steel venturi panel.
- Available sizes in 24" to 36".

BHM-Series

- Static pressure up to 0.5 in. wg.
- Flow capacity up to 34,446 CFM.
- Exhaust or supply in medium-duty applications.
- High-efficiency fabricated steel propeller, galvanized power assembly, and a fully developed venturi, integrally spun into a galvanized panel.
- Available size from 24" to 48".

BHH-Series

- Static pressure up to 1.0 in. wg.
- Flow capacity up to 58,413 CFM.
- Exhaust or supply in heavy-duty applications.
- High-efficiency fabricated steel propeller, a robust galvanized power assembly that can handle high horsepower motors, and a fully developed venturi integrally spun into a galvanized panel.
- Available sizes from 24" to 60".

BCH-Series

- Static pressure up to 1.0 in. wg.
- Flow capacity up to 68,172 CFM.
- Exhaust or supply in heavy-duty applications.
- High-efficiency cast aluminum airfoil propeller, a fabricated steel power assembly and a heavy gauge venturi panel.
- Available sizes from 24" to 60".

CERTIFICATIONS & LISTINGS



Breezeway Direct & Belt Drive Fans

PennBarry certifies that the Breezeway direct drive and belt drive models shown on 14 and 17-29 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.

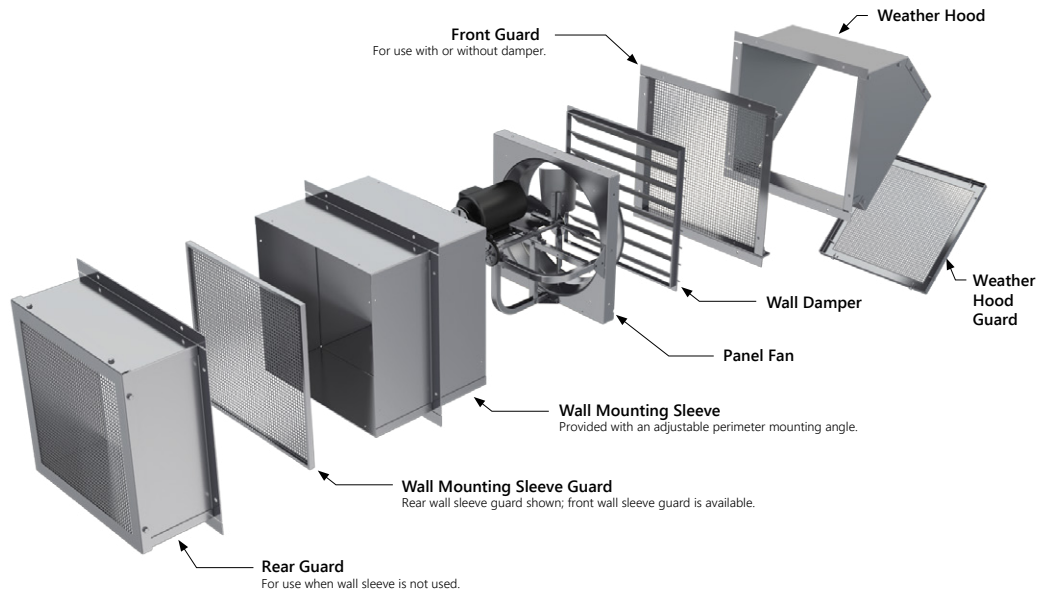


cULus Certification

Breezeway fans (models P, BLL, BHM, BHH and BCH) carry the UL label, UL705 (ZACT/ ZACT7), file #E28413.

OPTIONS & ACCESSORIES

Accessory Overview



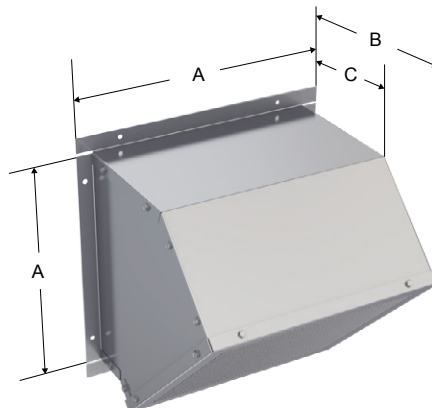
Protection that conforms to OSHA regulations should be installed when fans are located within seven (7) feet of floor and/or working level, or within reach of personnel. Review OSHA codes for specific details.

Weather Hood

Weather hoods are designed to divert rain and snow from exhaust and supply wall openings. They are designed to be surface mounted and can be installed in conjunction with wall dampers. Guards are provided. Standard construction is galvanized steel, painted upon request. In order to minimize shipping costs, the weather hood will be shipped knocked down for the BHM and BHH products, unless factory assembly is specified. Other models will be shipped factory assembled.

Use the tables below to help with space planning and sizing guidelines. Please note the maximum recommended intake (supply) CFM. This guideline will keep the intake CFM below 500 FPM. If the intake CFM exceeds the recommended volume, use the next larger fan.

Caution: When a Breezeway fan is selected for a supply application, face velocities greater than 500 FPM can pull water into the structure. We suggest that a PennBarry Weather Hood be selected in supply applications to help prevent water penetration when high velocity conditions cannot be avoided.



OPTIONS & ACCESSORIES

Size	P-Series						BLL* BCH BC						
	10	12	16	18	20	24	24	30	36	42	48	54	60**
Wo	15 3/4	17 3/4	23 1/2	25	27 1/2	33 1/4	28 3/4	34 3/4	40 3/4	46 3/4	55	61	67
A	15 1/4	17 1/4	23	24 1/2	27	32 3/4	28 1/4	34 1/4	40 1/4	46 1/4	54 1/4	60 1/4	66 1/4
B	18 3/8	19 11/16	23 3/4	24 13/16	26 9/16	30 1/2	27 3/8	31 3/4	36 5/8	41	45 3/4	49 5/8	54 5/8
C	12 1/8	13 1/8	15 1/2	16 1/8	17 1/4	19 1/2	17 5/8	20 1/4	23 3/8	25 7/8	28 3/8	31	34 1/4
Max. Rec. Supply CFM	10	12	16	18	20	24	24	30	36	42	48	54	60
	806	1033	1837	2084	2531	3724	2771	4073	5625	7427	10219	12604	15240

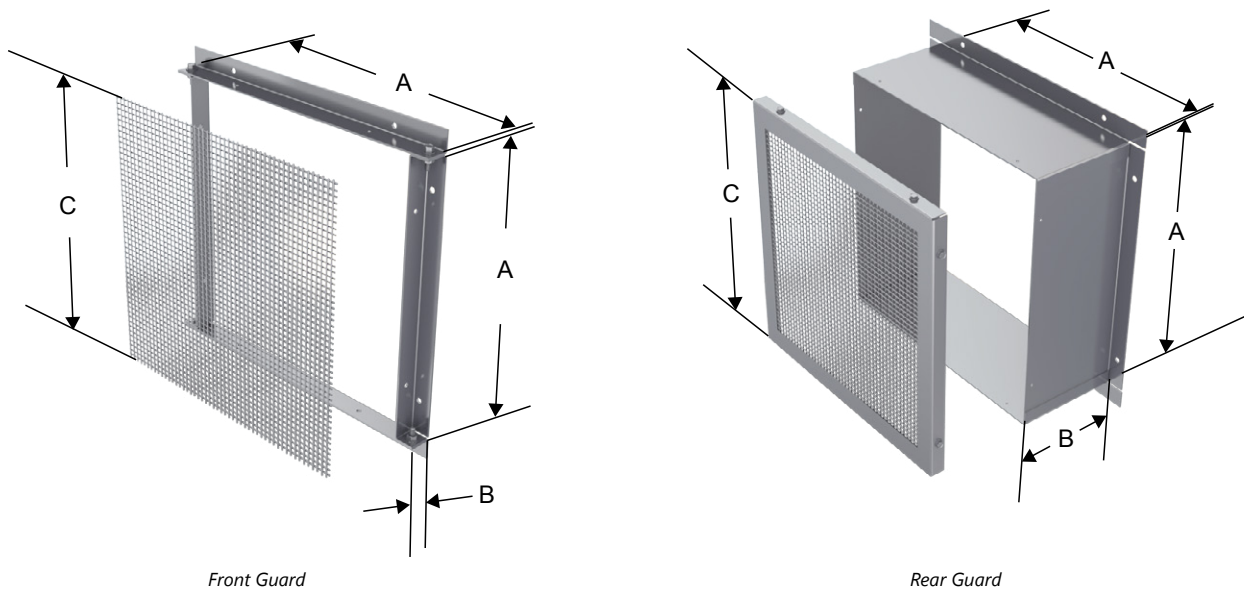
All dimensions in inches. *Not supply. **BCH only.

Size	BHM BHH							BX									
	24	30	36	42	48	54*	60*	12Q	14Q	16T	16Q	18T	18Q	20T	20Q	24T	24Q
Wo	32 3/4	38 3/4	44 3/4	50 3/4	57	63	69	15 1/4	17 1/4	19 3/4	19 3/4	21 3/4	21 3/4	23 3/4	23 3/4	27 3/4	27 3/4
A	32 1/4	38 1/4	44 1/4	50 1/4	56 1/4	62 3/8	68 3/8	15 1/4	16 1/4	19	19	21	21	23	23	27	27
B	28 1/4	32 1/2	36 3/4	41	45 1/4	49 3/8	53 3/8	17 7/8	19	20	20	22 3/8	22 3/8	23 1/4	23 1/4	26 1/8	26 1/8
C	17 1/4	19 3/4	22 3/8	24 3/4	27 1/4	29 3/8	32 1/8	12 3/8	12 3/4	13 7/8	13 7/8	14 1/4	14 1/4	15 1/2	15 1/2	17 1/4	17 1/4
Max. Rec. Supply CFM	24	30	36	42	48	54	60	-	-	-	-	-	-	-	-	-	-
	3611	5080	6799	8768	10986	13509	16233	-	-	-	-	-	-	-	-	-	-

All dimensions in inches. *BHH only.

Front & Rear Guards

Protection is available for both the rear motor side (rear guard) of the fan and the front face (front guard) of the fan. Both assemblies include a sheet metal sleeve with an attached guard. The rear guard is long enough to enclose the belt and pulleys. The front guard is surface mounted and long enough to enclose a wall damper, if provided. The guard for either is removable for maintenance. Standard shipment is knocked down for BHM and BHH, or optionally available as factory assembled. Shipment for other models is factory assembled only. The guards on both conform to OSHA specifications.



OPTIONS & ACCESSORIES

Protection that conforms to OSHA regulations should be installed when fans are located within seven (7) feet of floor and/or working level, or within reach of personnel. Review OSHA codes for specific details.

Size	P-Series*						BLL* BCH BC						
	10	12	16	18	20	24	24	30	36	42**	48**	54**	60***
A	-	-	-	-	-	-	28 3/16	34 3/16	40 3/16	46 3/16	54 1/4	60 1/4	66 1/4
B	-	-	-	-	-	-	13 1/2	16 1/2	16 1/2	20 1/2	25	25	25
C ^{sq}	15 1/2	17 1/2	23 1/4	24 3/4	27 1/4	33	28 5/8	34 5/8	40 5/8	46 5/8	54 3/4	60 3/4	66 3/4
SCREEN	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	2 Pieces	2 Pieces

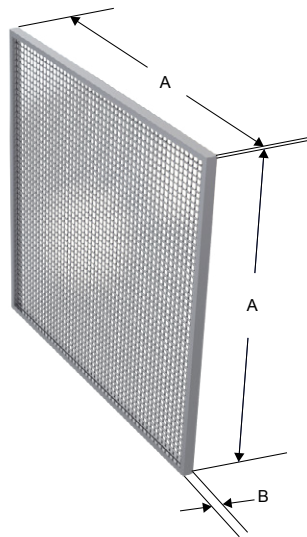
All dimensions in inches. *Motor side guard of concentric rings integral to unit. **BCH or BC only. ***BCH only.

Size	BHM BHH							BX					
	24	30	36	42	48	54*	60*	12	14	16	18	20	24
A ^{sq}	32 1/4	38 3/4	44 1/4	50 1/4	56 1/4	62 3/8	68 3/8	14 11/16	16 3/16	18 15/16	21 15/16	22 15/16	26 15/16
B Front	5	5	5	5	5	5	5	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
B Rear	20	20	20	22	22	27	27	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	13 1/2
C	32 3/8	38 3/8	44 3/8	50 3/8	56 3/8	62 1/2	68 1/2	15 1/8	16 5/8	19 3/8	21 3/8	23 3/8	27 3/8
Screen	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	2 Pieces	2 Pieces	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece

All dimensions in inches. *BHH only.

Wall Mounting Sleeve Guards and Weather Hood Guards

These guards are supplied with the Weather Hood and Wall Sleeve. They are fabricated from galvanized sheet and suitable for use for OSHA protection. (Note that guard may be attached to either front or rear of wall sleeve.)



Protection that conforms to OSHA regulations should be installed when fans are located within seven (7) feet of floor and/or working level, or within reach of personnel. Review OSHA codes for specific details.

OPTIONS & ACCESSORIES

Size	BC BLL BCH						
	24	30	36	42*	48	54	60*
A ^{SO}	29	34 5/8	40 5/8	46 5/8	54 3/4	60 3/4	66 3/4
B	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Screen	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	2 Pieces	2 Pieces

All dimensions in inches. *BCH only.

Size	BHM BHH						
	24	30	36	42	48	54*	60*
A ^{SO}	32 3/8	38 3/8	44 3/8	50 3/8	56 3/8	62 1/2	68 1/2
B	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Screen	1 Piece	1 Piece	1 Piece	1 Piece	1 Piece	2 Pieces	2 Pieces

All dimensions in inches. *BHH only.

Extended Lube Lines

Preloaded at the factory, lube lines allow bearing maintenance when easy access to the bearings is unavailable.

Spare Belt Options

An extra set of one or two spare belts is an available selection.

Stainless Steel Hardware

If another material is desired for the unit's hardware, stainless steel hardware is available for selection.

Stainless Steel Shaft

If another material is desired for the motor shaft, stainless steel shafts are available for selection.

Dampers

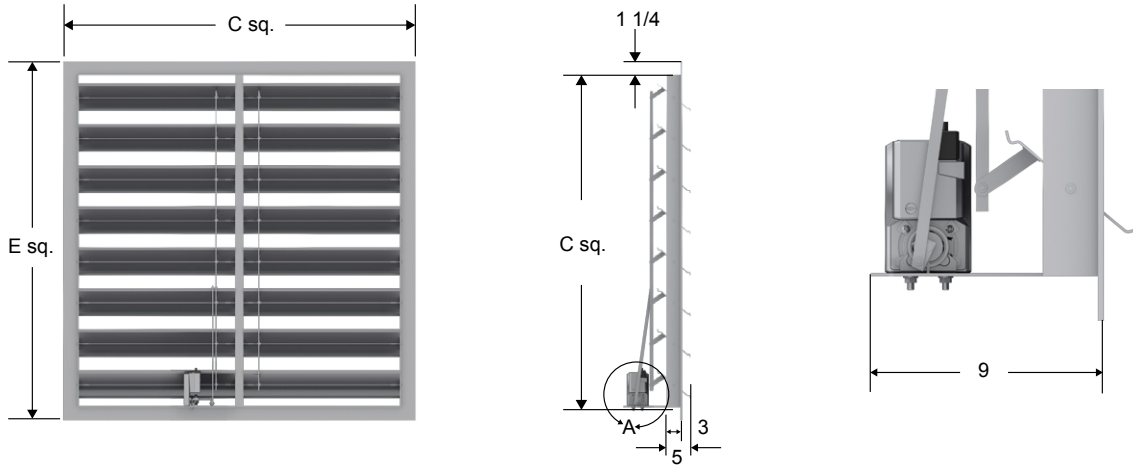
Type WSR recessed gravity dampers, which are the most popular form of backdraft protection, open when the fan starts and automatically close shut when the fan stops. These dampers are used for exhaust only and are enclosed within a heavy, steel frame that protects the roll-formed steel blades. Each blade pivots freely on nylon bearings. Blades are interconnected with one or more tie-rods for simultaneous operation. Consult factory for surface mount dampers, if required.

Type EBR is the motorized version of the gravity WSR. It includes all of the WSR features plus an enclosed actuator motor for positive opening and closing of the damper. The motor is field wired in parallel with the fan. Allow a minimum 7" between the fan and the damper when motorized. Larger actuators will be provided with a transformer for 460V.

Dampers required for supply applications are provided as motorized center-pivot type (not illustrated.) If a standard top-pivot damper is used for supply applications, a field supplied time delay relay is strongly recommended.

Caution: When a Breezeway fan is selected for a supply application, face velocities greater than 500 FPM can pull water into the structure. We suggest that a PennBarry Weather Hood be selected in supply applications to help prevent water penetration when high velocity conditions cannot be avoided.

OPTIONS & ACCESSORIES



Legend

1. Flanged Steel Frame
2. Self-Acting Steel Blades
3. Mounting Holes
4. Motor Mounting Assembly

Size	P-Series							BLL BCH BC					
	10	12	16	18	20	24	24	30	36	42*	48	54	60*
E ^{sq.}	17 1/2	19 1/2	25 1/4	26 3/4	29 1/4	34 3/4	30 1/2	36 1/2	42 1/2	48 1/2	56 1/2	62 1/2	68 1/2
C ^{sq.}	15	17	22 3/4	24 1/4	26 3/4	32 1/4	28	34	40	46	54	60	66
No. Panels	1	1	1	1	1	1	1	1	2	2	2	2	2

All dimensions in inches. *BCH only.

Size	BHM BHH							BX					
	24	30	36	42	48	54*	60*	12	14	16	18	20	24
E ^{sq.}	34 1/2	40 1/2	46 1/2	52 1/2	58 1/2	64 1/2	70 1/2	17 1/2	19 1/2	21 1/2	23 1/2	25 1/4	29 1/4
C ^{sq.}	32	38	44	50	56	62	68	15	17	19	21	22 3/4	26 3/4
No. Panels	1	1	2	2	2	2	2	1	1	1	1	1	1

All dimensions in inches. *BHH only.

Safety Service Switch

Safety service switches are available to allow positive electrical shut-off and safety. Switches are shipped loose for field mounting. (Factory wiring of explosion proof applications is not available.) A wide range of NEMA rated enclosures with service switches are available for indoor, outdoor, and explosion proof installations. Service switches are to be field wired by a licensed electrician.



Finishes

Coatings, such as Polyester Powder Coat, Epoxy Powder Coat, Phenolic Epoxy Powder Coat, and others are available. See the coatings brochure for details. for fan housing only (we cannot coat impellers)

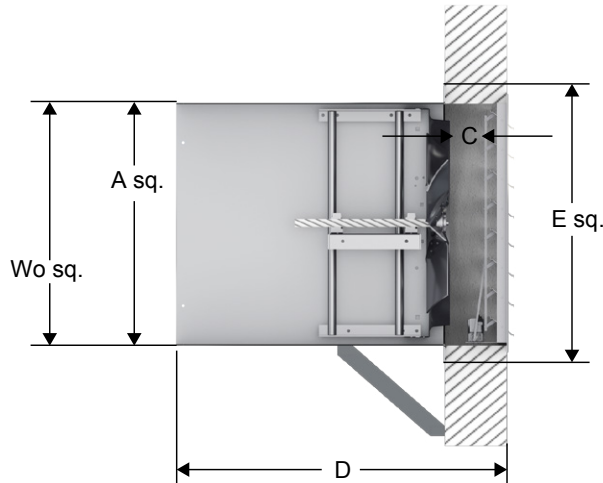
NOTE: Accessories are painted by request and those with moving parts are excluded, such as dampers.

OPTIONS & ACCESSORIES

Wall Sleeves

Wall Sleeves effectively add depth to the wall where the fan and several of its accessories will be installed. This provides more flexibility and convenience to secure these parts, as well as protection and a neat appearance. Standard construction is galvanized steel. Standard shipment is knocked down for BHM and BHH, or optionally available as factory assembled. Shipment for other models is factory assembled only. A guard is provided for either front or rear installation.

*Fan and wall damper shown for reference only.
E dimension includes flange.*



Size	P-Series						BC BLL BCH						
	10	12	16	18	20	24	24	30	36	42*	48	54	60*
Wo ^{sq.}	15 3/4	17 3/4	23 1/2	25	27 1/2	33	28 3/4	34 3/4	40 3/4	46 3/4	55	61	67
A ^{sq.}	15 1/4	17 1/4	23	24 1/2	27	32 1/2	28 1/4	34 1/4	40 1/4	46 1/4	54 1/4	60 1/4	66 1/4
C ^{MIN.}	4	4	4	4	5	5	6	6	6	6	7	7 1/2	7 1/2
D	18 3/4	18 3/4	22 3/4	23	24 3/4	30 3/4	30 3/4	35	38	44	47 1/2	48	48
E ^{sq.}	17 1/2	19 1/2	25 1/4	26 3/4	29 1/4	34 3/4	30 1/2	36 1/2	42 1/2	48 1/2	56 1/2	62 1/2	68 1/2

All dimensions in inches. *BCH only.

Size	BHM BHH							BX					
	24	30	36	42	48	54*	60*	12	14	16	18	20	24
Wo ^{sq.}	32 3/4	38 3/4	44 3/4	50 3/4	57	63	69	15 1/4	17 1/4	19 3/4	21 3/4	23 3/4	27 3/4
A ^{sq.}	32 1/4	38 1/4	44 1/4	50 1/4	56 1/4	62 3/8	68 3/8	14 3/4	16 3/4	19 1/4	21 1/4	23 1/4	27 1/4
C ^{MIN.}	6	6	6	6	7	7	7	4	4	4	4	4	4
D	36	39	41	41	41	48	48	23 1/2	23 1/2	24	24 1/4	25	25
E ^{sq.}	34 1/2	40 1/2	46 1/2	52 1/2	58 1/2	64 1/2	70 1/2	17 1/2	19 1/2	21 1/2	23 1/2	25 1/4	29 1/4

All dimensions in inches. *BHH only.

P-Series Slip-in Fan Pak

This provides a ventilation package in one convenient and compact assembly. The Fan Pak incorporates the Breezeway Type P direct drive fans with their integral back guards installed in a galvanized steel sleeve with a self-acting damper on the exterior face. (A motorized damper can be substituted for the standard damper when desired.)

A moveable angle frame is positioned on the perimeter of the sleeve. This adjusts to the wall thickness. When properly fastened, it secures the assembly in the wall opening. Anchor bolts, lag screws or other appropriate fasteners should be used to fasten the unit to the inside and outside face of the wall or mounting frame.

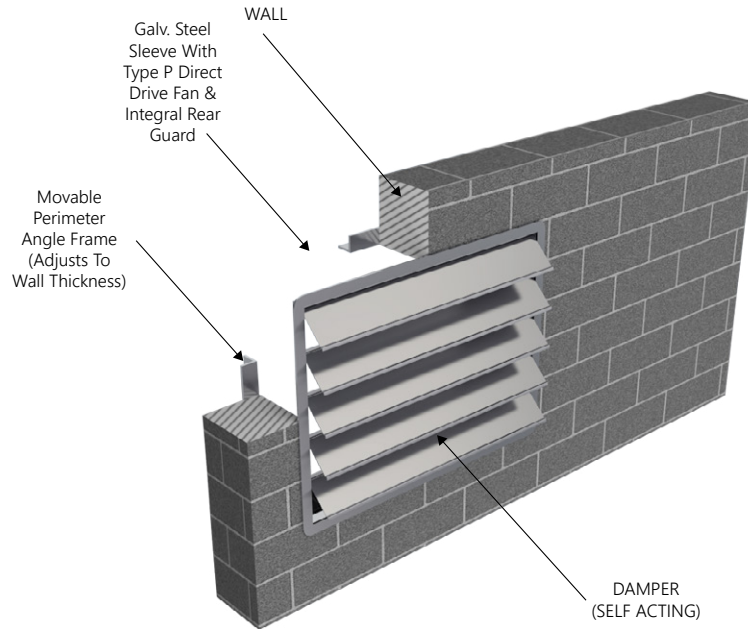
OPTIONS & ACCESSORIES

Variable Frequency Drives

Variable frequency drives (VFDs) are designed to meet performance requirements while increasing efficiency. By varying the fan motor input frequency and voltage, the VFD controls the motor speed and torque, helping to improve productivity and lower energy consumption. The VSC and VSA are ideal for both new and retrofit fan applications. Shipped loose and separately.

Firestat:

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



Variable Speed Motor Control

PennBarry Lek-Trol™ solid state controllers are an economical way to reduce the high speed of selected P-Series motors by as much as 50%. Check the Lek-Trol™ availability table below to verify suitability for the fan model selected.

Motors suitable for use with field supplied Frequency Inverters can be supplied for BLL, BHM, BHH, BC and BCH models. Contact your PennBarry representative.

P-Series Direct Drive Available Lek-Trol™ Speed Controls

Model	Nominal HP	RPM				Single Phase					
		1050	1300	1550	1650	115/1/60 ODP		230/1/60 ODP		TE 115/200/240	
						Avail.	Lek-Trol	Avail.	Lek-Trol	Avail.	Lek-Trol
P10VA	1/30	X	-	-	-	Yes	LT30	-	-	-	-
P10RA	1/12	-	-	X	-	Yes	LT30	Use TE	LT35	Yes (2)	LT30/35*
P12VA	1/12	X	-	-	-	Yes	LT30	-	-	-	-
P12RA	1/7	-	-	X	-	Yes	LT50	Use TE	LT35	Yes (2)	LT30/35*
P16VA	1/3	X	-	-	-	Yes	-	-	-	-	-
P16SA	1/2	-	X	-	-	Yes	LT50	-	-	-	-
P16RA	1/2	-	-	X	-	Yes	LT40	Use TE	-	Yes (2)	-
P16Q1A	3/4	-	-	-	X	Yes	LT60	Use TE	-	Yes (2)	-
P18VA	1/2	X	-	-	-	Yes	-	-	-	-	-
P18RA	3/4	-	-	X	-	Yes	-	-	-	-	-
P20TA	3/4	X (1)	-	-	-	Use TE	-	Use TE	-	Yes (2)	-
P24VA	3/4	X	-	-	-	Use TE	-	Use TE	-	Yes (2)	-

(1) Nominal 1140 RPM. (2) 50/60 Hz. *LT30 for 115V, LT35 for 200/240V.

MOTOR AVAILABILITY

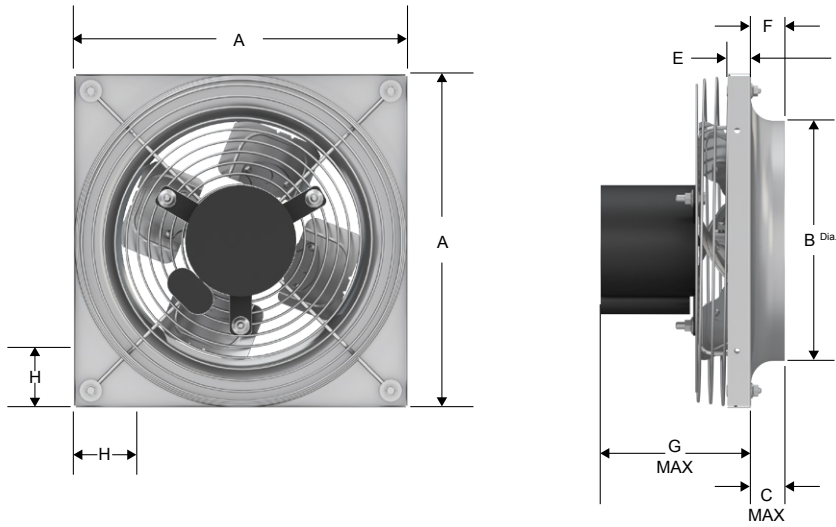
NEMA Motor

This chart lists the NEMA frame sizes for each combination of HP, phase, voltage, enclosure and speed configuration. Verify the NEMA frame size for the desired motor and compare to the maximum motor frame size listed on the individual fan data page in this brochure.

HP	Single Phase					220V, 230V, 460V, or 575V - Three Phase			
	ODP		TE	EXP	2S2W	ODP	TE	EXP	2S2W
	115V	230V	115/230						
1/4	48	58	56	48/56	48	48	48	48	-
1/3	48/56	48/56	56	56	56	56	56	56	-
1/2	48/56	48/56	56	56	56	56	56	56	56
3/4	56	56	56	56	56	56	56	56	56
1	56	56	56	56	56	145T	145T	145T	145T
1 1/2	56	56	145T	184T	-	145T	145T	145T	182T
2	145T	145T	182T	182T	-	145T	145T	145T	182T
3	184T	184T	184T	215T	-	145T	182T	182T	184T
5	-	-	-	-	-	184T	184T	184T	215T
7 1/2	-	-	-	-	-	213T	213T	213T	215T
10	-	-	-	-	-	215T	215T	215T	256T
15	-	-	-	-	-	254T	254T	254T	284T
20	-	-	-	-	-	256T	256T	256T	284T

On horsepower 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.

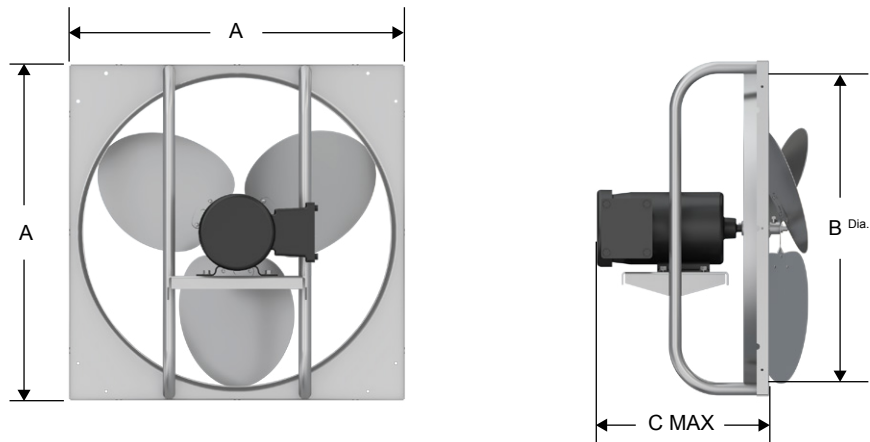
P-SERIES | DIMENSIONS



Model	A	B Dia.	C Max.	E	F	G Max.	H	Wall Opening Wo	Est. Ship Wt. (Lbs.)	Panel Gauge
P10	15	10 3/4	2 1/2	1	1 1/4	6 1/2	3/4	15 3/4	12	18
P12	17	12 1/4	3 1/4	1	1	7 1/2	1 7/8	17 3/4	14	18
P16	22 3/4	16 3/4	3 3/4	1	2 1/4	11 1/4	2 7/8	23 1/2	30	18
P18	24 1/4	18 3/4	3 3/4	1	2	9 1/8	3 5/8	25	40	18
P20	26 3/4	20 7/8	3 3/4	1	1 3/4	12 1/2	3 1/4	27 1/2	50	18
P24	32 1/4	25	4 1/4	2	2 3/8	12 7/8	4 11/16	33	76	18

All wire frames are 11 gauge. All dimensions are in inches.

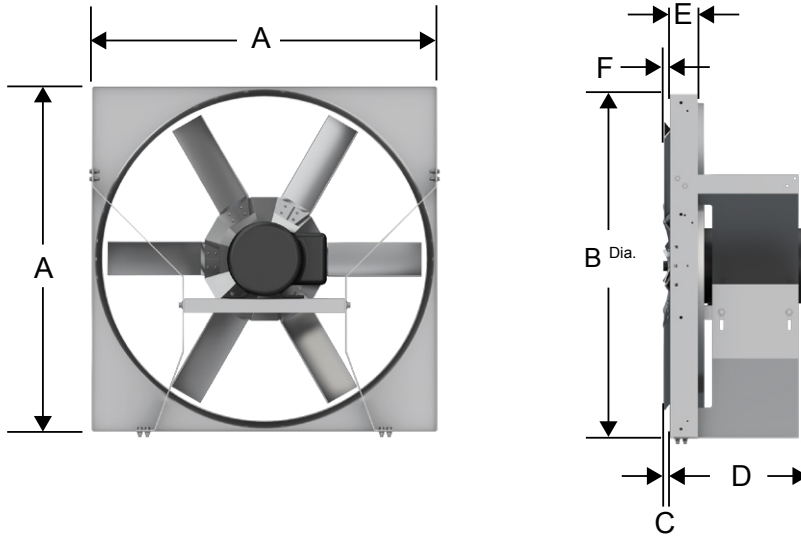
BREEZEX BX | DIMENSIONS



Model	A Sq.	B Dia.	C Max.	Wall Opening Wo	Est. Ship Wt. (LBS.)	Panel Gauge	Motor Plate Gauge
BX12Q	14 1/2	12 3/4	12	15 1/4	24	16	10
BX14Q	16 1/2	14 3/4	12	17 1/4	25	16	10
BX16T	19	16 3/4	12 1/2	19 3/4	29	16	10
BX16Q	19	16 3/4	12 1/2	19 3/4	29	16	10
BX18T	21	18 3/4	12 1/2	21 3/4	33	16	10
BX18Q	21	18 3/4	12 3/4	21 3/4	33	16	10
BX20T	23	20 3/4	13 1/2	23 3/4	35	16	10
BX20Q	23	20 3/4	12 1/2	23 3/4	35	16	10
BX24T	27	24 3/4	13 1/2	27 3/4	43	16	10
BX24Q	27	24 3/4	13 1/8	27 3/4	43	16	10

All dimensions are in inches.

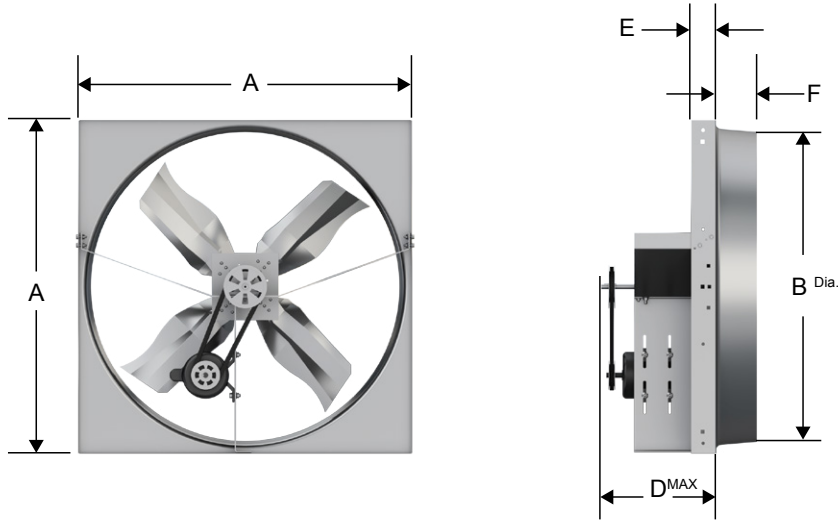
BC | DIMENSIONS



Model	A Sq.	B Dia.	C Max.	D Max.	E	F	Wall Opening Wo	Est. Ship Wt. (LBS.)	Panel Gauge	Web Gauge
BC24	28	25	4 1/2	15	3 1/8	3	28 3/4	80	16	12
BC30	34	31	4 1/2	16	2 5/8	3	34 3/4	100	16	12
BC36	40	37	5	16	3	4 3/4	40 3/4	180	14	10
BC42	46	43	5	18	3 13/16	3 1/2	46 3/4	260	14	10
BC48	54	49	5	23	2 3/4	3 1/2	54 3/4	310	14	10
BC54	60	55	5	24	3	5	60 3/4	340	14	10

All dimensions are in inches.

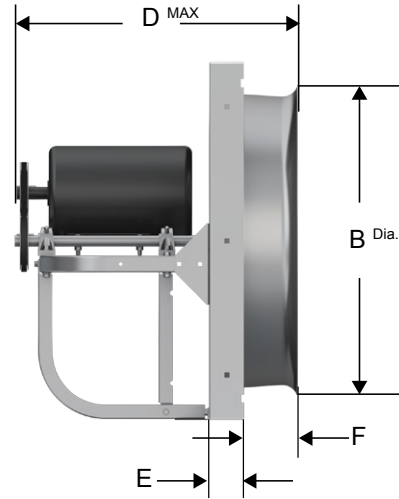
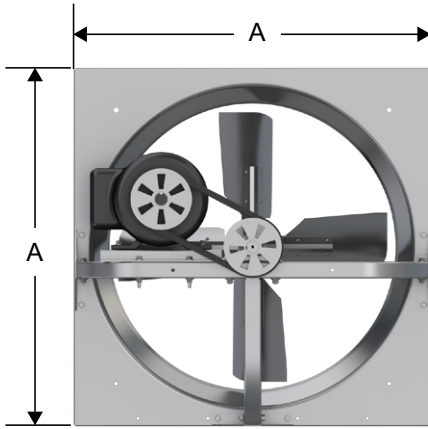
BLL | DIMENSIONS



Model	A	B Dia.	D Max.	E	F	Wall Opening Wo	Est. Ship Wt. (LBS.)	Damper OD	Max Motor Frame Size
BLL24	28	25	16	3	3	28 3/4	95	28" sq	56
BLL30	34	31	18	2 1/2	3	34 3/4	110	34" sq	56
BLL36	40	37	20	3	4 3/4	40 3/4	115	40" sq	56

All dimensions are in inches.

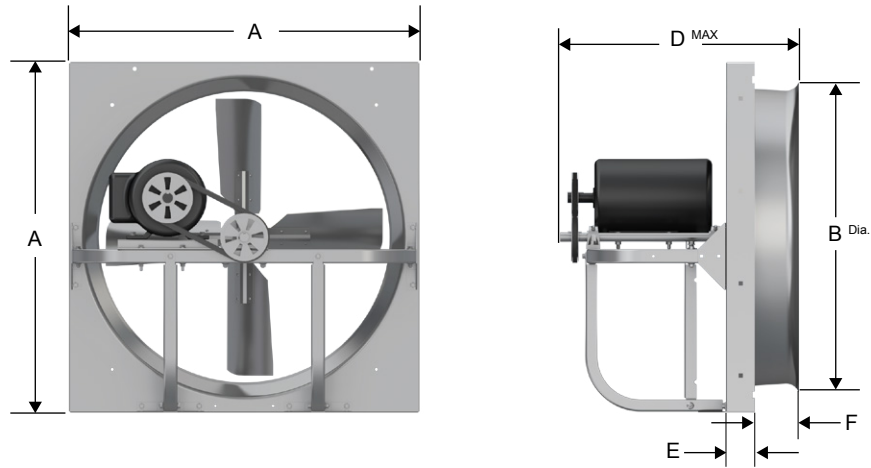
BHM | DIMENSIONS



Model	A Sq.	B Dia.	D Max.	E	F	Wall Opening	Est. Ship Wt. (LBS.)	Max Motor Frame Size
BHM24	32	25 1/2	26	3	5	32 3/4" sq.	120	184T
BHM30	38	31 1/2	26	3	5	38 3/4" sq.	140	184T
BHM36	44	37 1/2	27	3	5	44 3/4" sq.	180	215T
BHM42	50	43 1/2	27	3	5	50 3/4" sq.	225	215T
BHM48	56	49 1/2	27	3	5	57" sq.	235	215T

All dimensions are in inches.

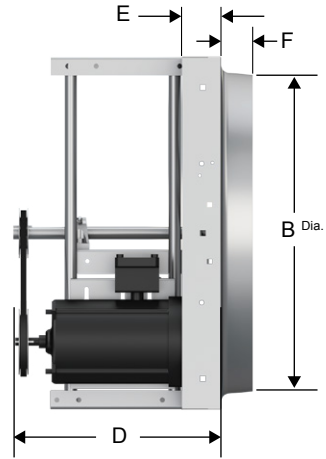
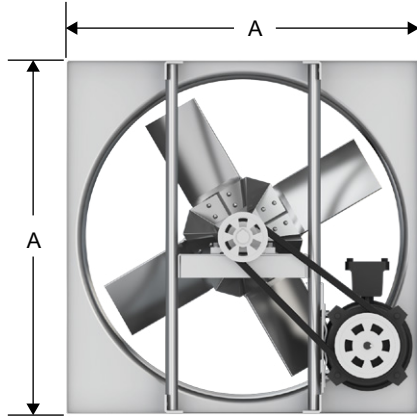
BHH | DIMENSIONS



Model	A	B Dia.	D Max.	E	F	Est. Ship Wt. (LBS.)	Wall Opening	Max Motor Frame Size
BHH24	32	25 1/2	26	3	5	130	32 3/4" sq.	184T
BHH30	38	31 1/2	26	3	5	150	38 3/4" sq.	184T
BHH36	44	37 1/2	27	3	5	190	44 3/4" sq.	215T
BHH42	50	43 1/2	27	3	5	245	50 3/4" sq.	215T
BHH48	56	49 1/2	27	3	5	255	57" sq.	215T
BHH54	62	55 1/2	27	3	5	430	63" sq.	284T
BHH60	68	61 1/2	27	3	5	460	69" sq.	284T

All dimensions are in inches.

BCH | DIMENSIONS



Model	A	B Dia.	D Max.	E	F	Damper OD	Est. Ship Wt. (LBS.)	Wall Opening	Max Motor Frame Size
BHH24	28	25	16	3	3	28" sq.	182	28 3/4" sq.	145T
BHH30	34	31	18	2 1/2	3	34" sq.	182	34 3/4" sq.	145T
BHH36	40	37	20	3	4 3/4	40" sq.	182	40 3/4" sq.	184T
BHH42	46	43	22	3 3/4	4 1/2	46" sq.	228	46 3/4" sq.	184T
BHH48	54	49	25	2 3/4	4 3/4	54" sq.	322	55" sq.	286T
BHH54	60	55	28	3	5	60" sq.	335	61" sq.	286T
BHH60	66	61	28	2 3/4	6	66" sq.	460	67" sq.	286T

All dimensions are in inches.

BZW FAN SELECTIONS

Model

P = P-Series Breezeway Direct Drive Fan
 BX = Breezex Breezeway Direct Drive Fan
 BC = BC-Series Breezeway Direct Drive Fan
 BLL = BLL-Series Breezeway Belt Drive Fan.
 BHM = BHM-Series Breezeway Belt Drive Fan.
 BHH = BHH-Series Breezeway Belt Drive Fan.
 BCH = BCH-Series Breezeway Belt Drive Fan.

Construction

Application	Drive Type	Unit Size
E = Exhaust / relief	B = Belt ^B	10 ^P
S = Supply / intake ^{DI^{MH}}	D = Direct ^D	12 ^{PX}
		14 ^X
		16 ^{PX}
		18 ^{PX}
		20 ^{PX}
		24
		30 ^{CB}
		36 ^{CB}
		42 ^{CI^{MH}}
		48 ^{CI^{MH}}
		54 ^{CI^H}
		60 ^{I^H}
Application Flow (CFM) <enter value>	Drive Kit Option	
	0 = None ^B	
	A = Adjustable drive kit ^B	
	L = Life safety ^B	
	X = Special ^B	
Application Static Pressure (inwg) <enter value>	Fan RPM	
	<####>	

Motor

Efficiency	Motors and Drives	Voltage/Phase/Cycle
P = Premium ^{XCB}	F = Factory mounted	B = 110V/1PH/50HZ*
S = Standard	L = Less motor and drive ^B	C = 115V/1PH/60HZ
	X = Special	D = 120V/1PH/60HZ*
		F = 208V/1PH/60HZ
		G = 208V/3PH/60HZ ^{CXB}
		H = 220V/1PH/50HZ*
		J = 220V/3PH/50HZ* ^{CB}
		K = 230V/1PH/60HZ
		L = 230V/3PH/60HZ ^{CXB}
		M = 240V/1PH/50HZ*
		N = 240/3PH/50HZ* ^B
		P = 277V/1PH/60HZ* ^{#CB}
		Q = 380V/3PH/50HZ* ^{CXB}
		R = 380V/3PH/60HZ* ^{CXB}
		S = 400V/3PH/50HZ* ^B
		T = 415V/3PH/50HZ* ^{CB}
		U = 440V/3PH/50HZ* ^{CB}
		V = 460V/3PH/60HZ ^{CB}
		W = 480V/3PH/60HZ* ^{CXB}
		X = Special
		Y = 575V/3PH/60HZ ^{CXB}
		* Non-standard offering subject to longer lead times and price adjustment
		# 277V applications require a transformer
Horsepower	Motor Enclosure	
0.033 = 1/30 ^P	0 = None	
0.083 = 1/12 ^P	1 = TE w/Overload	
0.143 = 1/7 ^P	2 = TE w/o Overload	
0.167 = 1/6 ^{CX}	3 = ODP w/Overload ^{CPB}	
0.250 = 1/4	4 = ODP w/o Overload ^{CPB}	
0.333 = 1/3	5 = EXP C2D1 ^{CXI}	
0.500 = 1/2	7 = TE w/ SGR	
0.750 = 3/4 ^{CPB}	X = Special	
01.00 = 1 ^{CPB}		
01.50 = 1 1/2 ^{CI^{MH}}	Motor Tap	
02.00 = 2 ^{CI^{MH}}	0 = None	
03.00 = 3 ^{CI^{MH}}	K = 1650 RPM (Q1, Q1A) ^P	
05.00 = 5 ^{CI^{MH}}	M = 690 RPM ^C	
07.50 = 7 1/2 ^{CI^{MH}}	Q = 1725 RPM (Q,Q2) ^{CX}	
10.00 = 10 ^{IMH}	R = 1550 RPM (RA) ^P	
15.00 = 15 ^{I^H}	S = 1300 RPM (SA) ^P	
20.00 = 20 ^I	T = 1140 RPM (T,TA,T1,T2) ^D	
X = Special	V = 1050 RPM (VA) ^P	
	W = 860 RPM (W,W1,W2,W2) ^C	

BZW FAN SELECTIONS

Electrical Accessories

Controllers

- 0 = None
 - 2 = Lek-Trol solid state speed controller (loose)^P
 - 7 = Provided by others^P
 - V = VFD^{CB}
- Note: VFD can be ordered separately

Service Switches and ITW*

- 0 = None
- 3 = NEMA 3R ITW only
- A = NEMA 1 - loose
- D = NEMA 3R - loose
- G = NEMA 4 - loose
- N = NEMA 7 - loose^{CXB}
- Q = NEMA 9 - loose^{CXB}

X = Special

* ITW - Internal wiring not provided on explosion proof motors

Switches / Sensors

- 0 = None
- F = Firestat switch

Options and Accessories

Construction Accessories

- 0 = None
- P = Fan pack^P
- Y = Wall mounting sleeve (assembled)
- Z = Wall mounting sleeve (knocked down)^{CB}

Extended Lube Lines (w/ assembled wall sleeve only)

- 0 = None^B
- L = Extended lube lines^B

Guard/Screen

- 0 = None
- F = Front guard
- G = Front and rear guard
- H = Rear guard

Paint/Coating

- 0 = None
- 1 = Fan & Acc - epoxy powder coat (light gray)
- 2 = Fan & Acc - epoxy powder coat with UV protection (gray)
- 3 = Fan & Acc - phenolic epoxy powder coat (gray)
- 4 = Fan & Acc - phenolic epoxy powder coat with UV protection (gray)
- 5 = Fan & Acc - polyester powder coat*
- F = Epoxy powder coat (light gray)
- G = Epoxy powder coat with UV protection (gray)
- K = Phenolic epoxy powder coat (gray)
- L = Phenolic epoxy powder coat with UV protection (gray)
- N = Polyester powder coat*

X = Special

* Colors - Only available in Polyester

Powder Coat

** Selections F, G, K, L, N are applicable to fan only

Paint Color*

- 00 = None
 - 50 = Chrome green
 - 55 = Pale green
 - 56 = Dove gray (PPC standard)
 - 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
- * Colors only available for polyester powder coat

Spare Belt(s)

- 0 = None
- 1 = 1 spare set^B
- 2 = 2 spare sets^B

Stainless Steel

- 0 = None
- B = Hardware and shaft^B
- H = Hardware
- S = 304SS Shaft^B

Transformer

- 0 = None
- B = 277Vx115V^P
- X = Special

Damper

- 0 = None
- D = Damper

Weather Hood

- 0 = None
- A = Weather hood with guard (assembled)
- B = Weather hood with guard (knocked down)^{CB}

^P = Applies to P-Series

^C = Applies to BC-Series

^X = Applies to BX-Series

^L = Applies to BLL-Series

^I = Applies to BCH-Series

^M = Applies to BHM-Series

^H = Applies to BHH-Series

^D = Applies to all direct drive units

^B = Applies to all belt drive units

No annotation indicates selection applies to all models.

PENNBARRY PRODUCT SOLUTIONS



Commercial

- Roof & wall exhaust centrifugal fans
- Ceiling, wall, & inline centrifugal fans
- Roof supply centrifugal fans
- Square & round centrifugal fans
- Wall mounted axial fans
- Hooded roof axial fans
- Upblast roof axial fans
- Gravity ventilators
- Roof curbs



Industrial

- Freestanding centrifugal fans
- Industrial & material handling fans
- Tubular centrifugal inline fans
- Mixed flow centrifugal fans
- Plug & plenum fans
- Wall mounted propeller fans
- Tube axial fans
- Vane axial fans
- Bifurcator fans
- Lab exhaust



Kitchen ventilation

- Make-up air units
- Exhaust fans



Energy recovery

- Outdoor units
- Indoor units

PennBarry is proud to be your preferred manufacturer of commercial and industrial fans and blowers. Learn how PennBarry can assist you in your next application by contacting your PennBarry Representative or visiting us on the web at www.pennbarry.com

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