

BSQ Centrifugal Inline Fan New Dimensions Supplement Belt Drive

BSQ Redesign

In early 2015, the BSQ was redesigned. The redesign changes some mounting dimensions of the fan for sizes 70 through 240. All BSQ fans ordered after July 20th, 2015 will be moving over to this new design, with two exceptions that will still utilize the old design:

1. Any orders placed with CAPS 4.17 software
2. Any orders for OSHPD seismic rated units.

Note: Refer to the current SQ/BSQ catalog for previous dimensions, performance and all other product information.

Contact your local sales representative for clarification on ordering information.

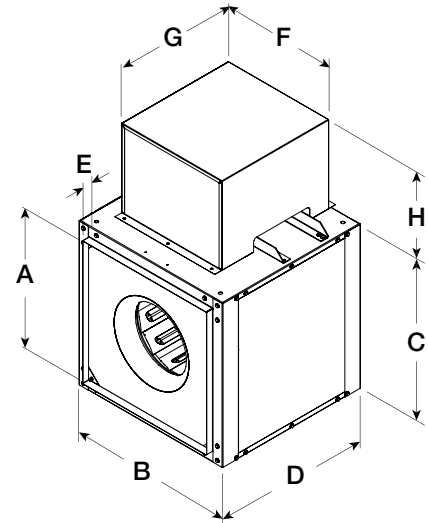


New BSQ Dimensions



New dimensions sizes 70-240										
Model Size	A	B	C	D	E	F	G	H	Damper Size	Weight*
70-90	11 7/8 (302)	17 1/8 (435)	17 1/8 (435)	21 (533)	1 1/2 (37)	13 (330)	17 3/4 (451)	13 1/4 (337)	12 (305)	106 (234)
100	13 3/8 (352)	17 1/8 (435)	17 1/8 (435)	21 (533)	1 1/2 (37)	13 (330)	17 3/4 (451)	13 1/4 (337)	14 (356)	107 (235)
120	15 7/8 (403)	19 1/8 (486)	19 1/8 (486)	21 (533)	1 1/2 (37)	17 (432)	20 (508)	13 1/4 (337)	16 (406)	124 (272)
130 (HP)	17 7/8 (454)	21 1/8 (537)	21 1/8 (537)	21 (533)	1 1/2 (37)	17 (432)	20 (508)	13 1/4 (337)	18 (457)	131 (289)
140 (HP)	19 7/8 (505)	23 1/8 (587)	23 1/8 (587)	22 (559)	1 1/2 (37)	17 (432)	20 (508)	13 1/4 (337)	20 (508)	146 (322)
160 (HP)	22 7/8 (581)	26 1/8 (664)	26 1/8 (664)	26 (660)	1 1/2 (37)	17 (432)	20 (508)	13 1/4 (337)	23 (584)	188 (413)
180 (HP)	23 7/8 (606)	27 1/8 (689)	27 1/8 (689)	28 (711)	1 1/2 (37)	17 (432)	20 (508)	13 1/4 (337)	24 (610)	195 (430)
200 (HP)	27 7/8 (708)	31 1/8 (791)	31 1/8 (791)	32 (813)	1 1/2 (37)	20 (508)	30 (762)	16 (406)	28 (711)	246 (541)
240 (HP)	34 7/8 (886)	38 1/8 (968)	38 1/8 (968)	34 (864)	1 1/2 (37)	20 (508)	30 (762)	16 (406)	35 (889)	350 (772)

All dimensions in Inches (millimeters) *Weight shown is largest cataloged Open Drip Proof motor



Filter Options				Filter Factor (F)			
				1 inch (25)		2 inch (51)	
Fan Size	Filter Box Weight	Filter Size	Filter Qty.	Aluminum	Paper Filters (MERV 7)"	Aluminum	Paper Filters (MERV 8)
70-100	120 (54)	16 x 20 (406 x 508)	2	8.72	14.91	11.77	14.21
120	144 (79)	16 x 25 (406 x 635)	2	5.58	9.54	7.53	9.1
130 - 130HP	140 (64)	20 x 20 (508 x 508)	2	5.58	9.54	7.53	9.1
140 - 140HP	181 (82)	20 x 25 (508 x 635)	2	3.57	6.11	4.82	5.82
160 - 160HP	294 (133)	20 x 20 (508 x 508)	4	2.09	3.57	2.82	3.41
180 - 180HP	344 (156)	20 x 25 (508 x 635)	4	1.34	2.29	1.81	2.18
200 - 200HP	441 (200)	12 x 25 (305 x 635)	3	0.77	1.32	1.04	1.26
		16 x 25 (406 x 635)	3	0.77	1.32	1.04	1.26
240 - 240HP	573 (260)	20 x 25 (508 x 635)	4	0.41	0.70	0.55	0.67
		16 x 25 (406 x 635)	4	0.41	0.70	0.55	0.67

Note: 24-inch side clearance is recommended for accessing and removing filters.
All dimensions in inches (millimeters) and weight in pounds (kilograms).

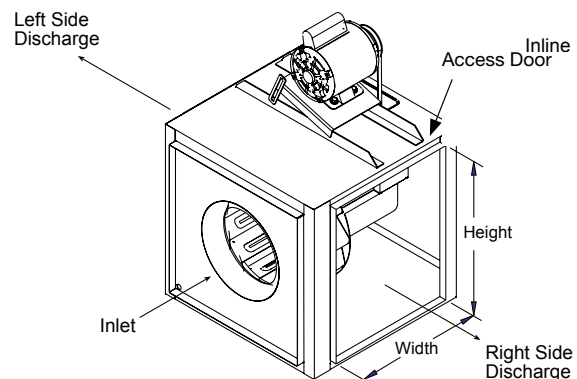
Model Selection Procedure

1. Calculate system pressure drop and cfm requirements (not including filters).
2. Make a preliminary model size selection.
3. Calculate a filter pressure drop (P) for the preliminary model size selected in step 2 using the equation:

$$P = F \times \left(\frac{\text{cfm}}{10,000}\right)^2$$
 - To determine the filter factor (F) refer to chart.
4. Add the filter pressure drop (P) to the system pressure drop and make a revised model size selection.

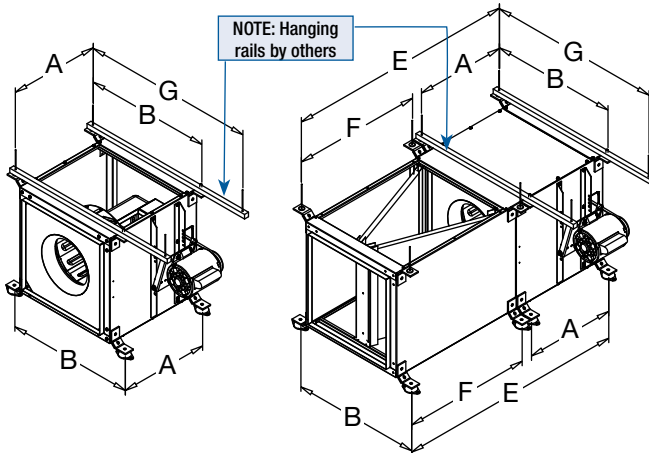
Discharge Duct Openings		
Unit Size	Width	Height
70-90	12 1/2 (317)	13 7/8 (352)
100	12 1/2 (317)	13 7/8 (352)
120	12 1/2 (317)	15 7/8 (403)
130-130HP	12 1/2 (317)	17 7/8 (454)
140-140HP	13 1/2 (342)	19 7/8 (505)
160-160HP	17 1/2 (444)	22 7/8 (581)
180-180HP	19 1/2 (494)	23 7/8 (606)
200-200HP	23 1/2 (596)	27 7/8 (708)
240-240HP	25 1/2 (647)	34 7/8 (886)

All dimensions in Inches (millimeters)



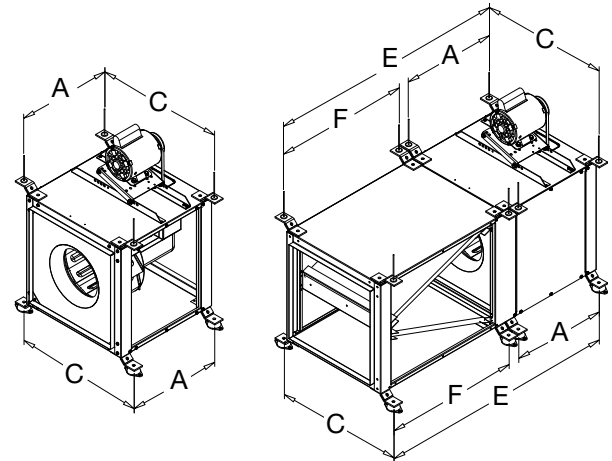
New BSQ Mounting Dimensions

BSQ fan models can be mounted horizontally, vertically or at an angle. For ease of installation, knockouts are provided at each location where mounting brackets are shown. Optional brackets are universally adjustable to mount in any of these locations.



Horizontal Hanging or Base Mount A

With either a hanging or base mount the motor may be located on either side. The base mount allows top access panels only.

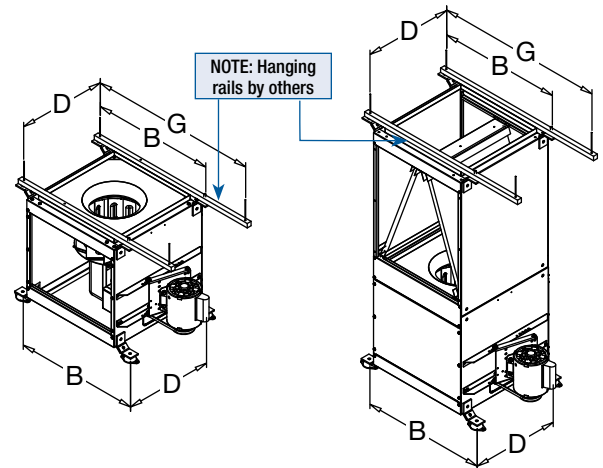


Horizontal Hanging or Base Mount B

With a hanging mount, the motor may be located on either top or bottom. The base mount allows top motor location only. Both options provide access panels on two sides.

Vertical Hanging or Base Mount

Mounting brackets are turned 90 degrees for vertical mounting. Access panels are located on the two sides adjacent to the motor.



Mounting Dimensions												
Model	A		B		C		D		E		F	G
70-100	18	(457)	21 13/16	(554)	19 14/16	(505)	14 1/8	(359)	50 14/16	(1292)	29 14/16	(758)
120	18	(457)	23 13/16	(605)	21 14/16	(556)	16 1/8	(410)	55 3/4	(1416)	34 3/4	(883)
130	18	(457)	25 13/16	(656)	23 14/16	(607)	18 1/8	(460)	50 1/4	(1276)	29 1/4	(743)
140	19	(483)	27 13/16	(707)	25 14/16	(657)	20 1/8	(511)	56	(1424)	34	(865)
160	23	(584)	31 3/16	(792)	29	(737)	23 1/8	(587)	55 3/4	(1416)	29 3/4	(756)
180	25	(635)	32 3/16	(817)	30	(762)	24 1/8	(613)	57 3/4	(1467)	29 3/4	(756)
200	29	(737)	36 3/16	(919)	34	(864)	28 1/8	(714)	66 3/8	(1686)	34 3/8	(873)
240	31	(787)	43 3/16	(1097)	41	(1042)	35 1/8	(892)	68 1/2	(1740)	34 1/2	(876)

Hanging rails not included. Supplied by others."

Hanging rails not included. Supplied by others."

All dimensions in Inches (millimeters)

New BSQ Base Mount or Hanging Isolators Dimensions

Isolator Dimensional Data						
Model	H	I	J*	J1**	K	L
BSQ 70-90	1 3/8 (35)	5 1/2 (140)	1 3/8 (35)	2 3/8 (60)	6 3/4 (171)	2 1/3 (59)
BSQ 100						
BSQ 120						
BSQ 130						
BSQ 140						
BSQ 160	1 3/8 (35)	5 1/2 (140)	1 3/8 (35)	2 1/2 (64)	6 3/4 (171)	2 5/8 (67)
BSQ 180						
BSQ 200						
BSQ 240						

Complete isolation kits are available with either neoprene or spring isolators and are sized to match the weight of the specified fan size. The base isolator support brackets are designed to permit mounting of the fan with the motor located on top or either side. The hanging isolator support brackets are designed to permit mounting of the fan with the motor located on top, bottom or side.

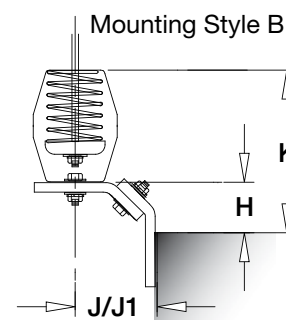
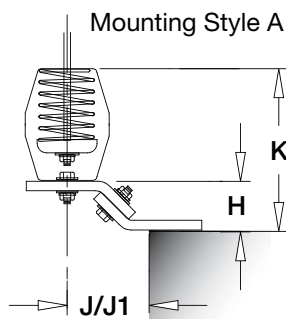
Note: Hanging rods to be supplied by others.

*Use dimension **J** while utilizing Mounting Style **A**.

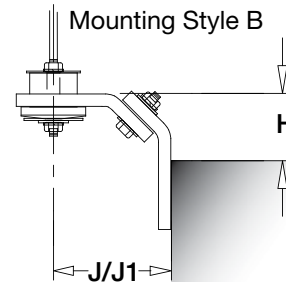
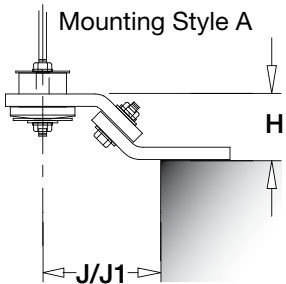
Use dimension **J1 while utilizing Mounting Style **B**.

All dimensions in inches (millimeters).

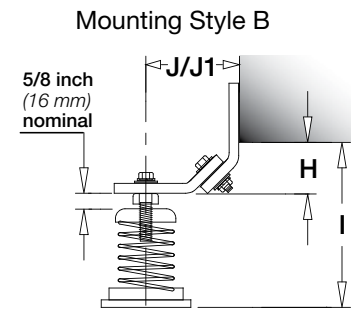
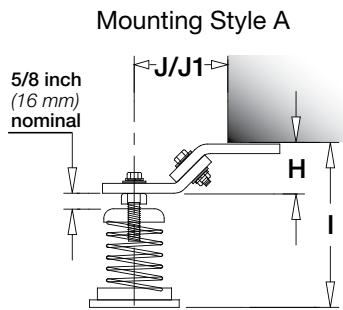
Hanging Spring Isolator



Hanging Neoprene Isolator



Standing Spring Isolator



Standing Neoprene Isolator

