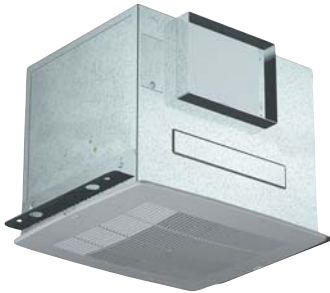


## Ceiling Exhaust - SP

Model SP Ceiling Exhaust fans are designed for clean air applications where low sound levels are desired. Low sound levels are achieved through quiet running forward curved wheels.



SP-A



SP-B



SP-C

SP FANS			STANDARD FEATURES
A	B	C	
✓	✓	✓	Backdraft Damper - Prevents unwanted backdrafts.
✓			Spring Loaded Aluminum Backdraft Damper - Eliminates rattling or unwanted backdrafts (sizes 110 and up).
✓			Outlet - Both square and round outlets are field rotatable from horizontal to vertical discharge.
✓	✓	✓	Round Outlet (4 or 6 in.) - up to size A90. Versatile for quick, easy connections.
✓	✓		Power Assembly - Removes quickly for maintenance.
✓			External Electrical Access - Eliminates removing motor pack, saving installation time.
✓	✓		Electrical Knockout - Eliminates drilling holes.
✓	✓	✓	Disconnect (Plug Type) - Servicing is quick and safe.
✓	✓		Electrical Junction Box - Large for easy wiring.
✓	✓		Attractive Designer Grille - Concealed attachment screws securely to fasten grille to housing for quiet, rattle free operation.
✓	✓	✓	Mounting Brackets - Fully adjustable for multiple installation types.
✓	✓		Housing - Embossed galvanized steel for rigidity and low profile for height restricted areas.
✓	✓	✓	PSC Compatible Motors - 50 cycle, 220v, and 240v options. 60 cycle, 115v, 208v, 220v, 230v, and 277v options. (Check factory for availability)
✓	✓	✓	3 Year Warranty
✓	✓	✓	UL listed for above showers w/ GFCI branch protected circuit

SERVICE CHART	IN STOCK	3 DAY	10 DAY
Standard Construction	✓	✓	✓
Speed Control, Mounted & Wired		✓	✓
Light, SP-A50, 70, 90, 110, 125 SP-B50, 80, 150		✓	✓
Light, SP-B70, 90, 110		✓	✓
Fan/CRD UL Listed Assembly		✓	✓
277 volt SP-A 110, 125, 190		✓	✓
277 volt SP-B 110, 150, 200		✓	✓
Contractor 4-Packs		✓	✓
Contractor Packs-Housings (sizes B70-B110) - Miami	✓	✓	✓
Motion Sensor - Grille Mounted			✓

### PERFORMANCE

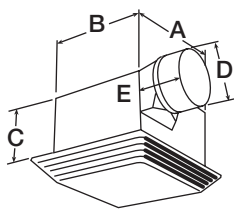
Models SP-A, SP-B, and SP-C are compact exhaust fans with performance capabilities of 29 cfm to 1600 cfm and up to 1 in. wg.

### OPTIONS AND ACCESSORIES

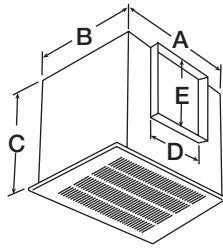
- Grilles
- Lights
- Ceiling radiation dampers (CRD)
- Vibration isolation kits
- Speed controls
- Motion detectors
- Time delays
- Roof discharge accessories
- Wall discharge accessories
- Transitions
- Filters
- Contractor paks

Note: See pages 36-39 for full stock accessory listing

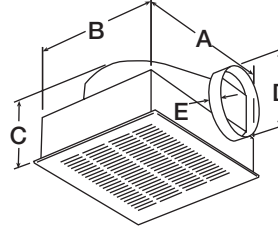
# Ceiling Exhaust - SP



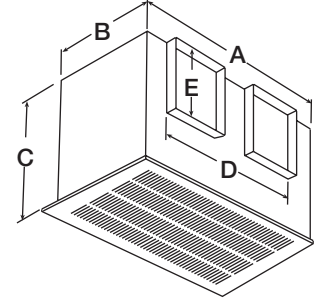
SP-C50



SP-A110 through SP-A510  
and SP-A710 & SP-A780



SP-B50 through SP-B200



SP-A700, SP-A900  
& SP-A1550

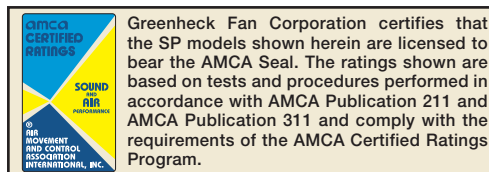
## SP PERFORMANCE & DIMENSIONAL DATA - IN STOCK

Order stock products online at [www.greenheck.com/qd](http://www.greenheck.com/qd)

MODEL	A	B	C	OUTLET		RPM	AMPS	WATTS	SONES @ 0 IN.	GRILLE SIZE	PERFORMANCE IN INCHES WG								
				D	E						0.00	.100	.125	.250	.375	.500	.625	.750	1.00
SP-C50-QD	7½	7¼	3⅝	3 dia.	x 1⅝	1680	0.80	46	2.9	9¼ x 9	52	49	48	46	43	37	29		
SP-B50-QD	13⅞	11½	6⅝	4 dia.	x ¾	625	0.50	38	1.7	14½ x 12¼	67	53	51	40	29				
SP-B70-QD	13⅞	11½	6⅝	4 dia.	x ¾	675	0.53	45	1.7	14½ x 12¼	77	70	68	57	49	39			
SP-B80-QD	13⅞	11½	6⅝	4 dia.	x ¾	900	0.60	54	2.9	14½ x 12¼	87	80	78	68	61	54	44	30	
SP-B90-QD	13⅞	11½	7⅝	6 dia.	x 1¼	700	0.65	50	1.9	14½ x 12¼	102	92	88	75	59	45	30		
SP-B110-QD	13⅞	11½	7⅝	6 dia.	x 1¼	950	1.14	80	2.0	14½ x 12¼	133	114	110	97	95	94	91	85	50
SP-B150-QD	13⅞	11½	7⅝	6 dia.	x 1¼	1050	1.70	129	3.0	14½ x 12¼	160	156	155	154	152	149	147	138	92
SP-B200-QD	13⅞	11½	7⅝	6 dia.	x 1¼	1100	2.20	173	4.4	14½ x 12¼	197	195	194	191	187	184	181	166	128
SP-A50-QD	13⅞	10⅝	11⅝	6 dia.	x 1	700	0.31	18	0.7	14¾ x 12¾	76	51	47	30					
SP-A70-QD	13⅞	10⅝	11⅝	6 dia.	x 1	850	0.27	20	1.1	14¾ x 12¾	83	70	66	42					
SP-A90-QD	13⅞	10⅝	11⅝	6 dia.	x 1	900	0.34	29	1.1	14¾ x 12¾	99	88	84	61	25				
SP-A110-QD	13¼	10⅝	10½	8	6	950	0.58	49	1.3	14¾ x 12¾	119	110	106	88					
SP-A125-QD	13¼	10⅝	10½	8	6	1100	0.62	53	1.4	14¾ x 12¾	135	123	121	104					
SP-A190-QD	13¼	10⅝	10½	8	6	1400	1.30	113	3.2	14¾ x 12¾	216	197	192	167	133				
SP-A200-QD	13⅞	11½	6⅝	8	8	900	0.43	48	2.0	14¾ x 12¾	247	225	220	196	172	142	105	67	
SP-A250-QD	14	11⅞	11½	8	8	1000	0.77	83	2.9	14¾ x 12¾	272	251	246	227	210	185	157	119	
SP-A290-QD	14	11⅞	11½	8	8	1050	0.72	81	3.2	14¾ x 12¾	315	293	287	257	231	207	175	124	
SP-A390-QD	14	11⅞	11½	8	8	1350	1.34	135	5.4	14¾ x 12¾	410	395	391	368	345	325	307	279	
SP-A410-QD	18	14⅜	14½	8	8	1000	1.74	121	4.1	19⅝ x 16⅝	443	413	405	351	305				
SP-A510-QD	18	14⅜	14½	8	8	1070	3.30	224	6.1	19⅝ x 16⅝	557	512	501	439	392	325			
SP-A700-QD	13⅞	11½	11⅝	19½	8	1100	3.20	350	1.9	25⅞ x 13½	757	729	723	700	679	649	613	560	396
SP-A710-QD	18	14⅜	14½	10	8	1080	4.40	285	7.4	19⅝ x 16⅝	752	714	701	653	588	485	320		
SP-A780-QD	18	14⅜	14½	10	8	1600	3.30	348	10.2	19⅝ x 16⅝	812	782	775	741	704	665	625	581	
SP-A900-QD	23¼	14⅜	14½	18¼	8	950	4.00	285	5.2	25 x 16⅝	955	907	896	841	773	701			
SP-A1050-QD	23¼	14⅜	14½	18¼	8	1095	6.30	420	7.2	25 x 16⅝	1125	1059	1043	964	885	796	662		
SP-A1410-QD	23¼	14⅜	14½	18¼	8	1450	7.40	786	11.6	25 x 16⅝	1455	1414	1404	1353	1307	1262	1218	1174	
SP-A1550-QD	23¼	14⅜	14½	18¼	8	1610	8.60	818	12.4	25 x 16⅝	1607	1568	1558	1506	1449	1407	1369	1323	

All dimensions in inches.

Performance certified is for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type B: free inlet sone levels. The AMCA Certified Ratings Sound Seal applies to sone ratings only.



For complete product information refer to catalog Model SP and CSP, or contact your local representative.

# Inline Cabinet Exhaust - CSP

Model CSP Inline Cabinet fans are designed for clean air applications where low sound levels are desired. Low sound levels are achieved through quiet running forward curved wheels.



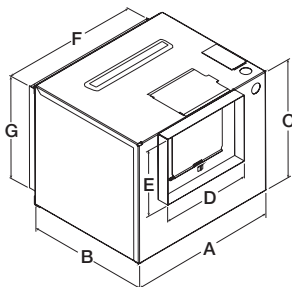
## PERFORMANCE

Models CSP-B110 through A3600 are duct mounted with performance capabilities of 77 cfm to 3,778 cfm and up to 1 in. wg of static pressure.

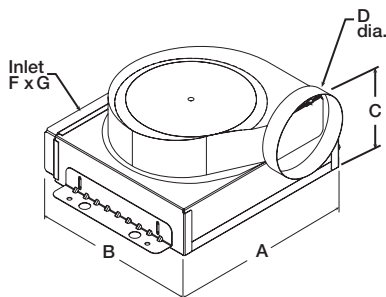
## OPTIONS AND ACCESSORIES

- Vibration isolation kits
- Speed controls
- Motion detectors
- Time delays
- Roof discharge accessories
- Wall discharge accessories
- Transitions

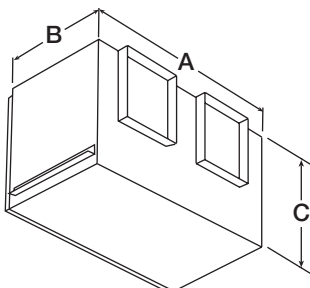
*Note: See pages 36-39 for full stock accessory listing*



**CSP-A**



**CSP-B**



**CSP-A -  
DOUBLE SCROLL**

SERVICE CHART	IN STOCK	3 DAY	10 DAY
CSP-B110 through -A1550 - 115 Volt Mtr Construction	✓	✓	✓
CSP-A1750 through -A3600		✓	✓
CSP-B110 through -A190 with 277 Volt Motor		✓	✓

CSP FANS		STANDARD FEATURES
A	B	
✓	✓	Aluminum Backdraft Damper- Prevents unwanted backdrafts.
✓		Spring Loaded Aluminum Backdraft Damper - Eliminates rattling or unwanted backdrafts.
✓	✓	Power Assembly - Removes quickly and is rotatable from horizontal to vertical discharge.
✓	✓	External Electrical Access - Eliminates removing motor pack, saving installation time.
✓	✓	Access Panel - Gain easy access to internal components once installed.
✓	✓	Mounting Brackets - Fully adjustable for multiple installation types.
✓	✓	Compatible with Speed Controllers
✓	✓	3 Year Warranty
✓	✓	UL listed for above showers w/ GFCI branch protected circuit.

# Inline Cabinet Exhaust - CSP

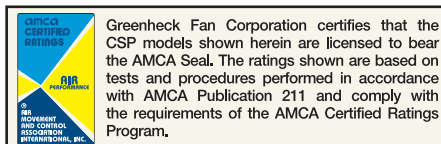
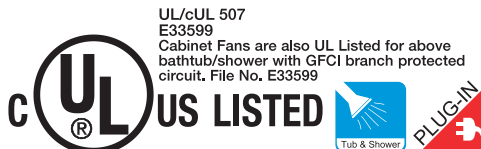
## CSP PERFORMANCE AND DIMENSIONAL DATA

Order stock products online at [www.greenheck.com/qd](http://www.greenheck.com/qd)

MODEL	A	B	C	D	E	F	G	RPM	AMPS	WATTS	WT	PERFORMANCE IN INCHES WG						
													0	.125	.25	.375	.5	.75
CSP-B110	13 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	7 <sup>15</sup> / <sub>16</sub>	6	1 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	950	1.14	80	10 <sup>1</sup> / <sub>4</sub>	CFM	103	99	98	97	96	86
												Sones	2.0	2.1	2.3	2.6	2.7	3.3
CSP-B150	13 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	7 <sup>15</sup> / <sub>16</sub>	6	1 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	1050	1.70	129	10 <sup>1</sup> / <sub>4</sub>	CFM	151	149	148	147	145	134
												Sones	2.5	2.7	2.9	3.1	3.4	3.9
CSP-B200	13 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	7 <sup>15</sup> / <sub>16</sub>	6	1 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	1100	2.20	173	10 <sup>1</sup> / <sub>4</sub>	CFM	186	183	182	180	178	169
												Sones	3.4	3.7	4.0	4.1	4.1	4.5
CSP-A110	13 <sup>3</sup> / <sub>4</sub>	10 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	8	6	12	9 <sup>1</sup> / <sub>4</sub>	950	0.62	51	16	CFM	124	110	102	77		
												Sones	1.1	1.1	1.3	1.3		
CSP-A125	13 <sup>3</sup> / <sub>4</sub>	10 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	8	6	12	9 <sup>1</sup> / <sub>4</sub>	1100	0.63	55	16	CFM	138	124	113	91		
												Sones	1.4	1.3	1.4	1.7		
CSP-A190	13 <sup>3</sup> / <sub>4</sub>	10 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	8	6	12	9 <sup>1</sup> / <sub>4</sub>	1400	1.10	100	16	CFM	215	198	180	159	121	
												Sones	2.3	2.2	2.7	2.9	3.0	
CSP-A200	14	10 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	8	8	12 <sup>7</sup> / <sub>8</sub>	10	900	0.43	48	23	CFM	254	225	203	177	145	70
												Sones	0.8	0.8	1.3	1.5	1.9	2.1
CSP-A250	14	10 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	8	8	12 <sup>7</sup> / <sub>8</sub>	10	1000	0.79	83	23	CFM	266	241	221	205	187	132
												Sones	1.3	1.5	2.3	3.3	3.4	3.0
CSP-A290	14	10 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	8	8	12 <sup>7</sup> / <sub>8</sub>	10	1050	0.71	80	23	CFM	318	292	265	248	229	144
												Sones	1.6	1.8	2.6	3.3	4.0	3.4
CSP-A390	14	10 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	8	8	12 <sup>7</sup> / <sub>8</sub>	10	1350	1.33	144	23	CFM	412	397	382	363	339	309
												Sones	2.8	2.8	3.2	3.7	4.7	6.5
CSP-A410	18	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	8	8	16 <sup>7</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	1000	1.87	139	36	CFM	447	403	364	316	217	
												Sones	2.2	2.2	2.5	2.7	2.7	
CSP-A510	18	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	8	8	16 <sup>7</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	1070	3.11	217	36	CFM	545	506	464	405	324	
												Sones	3.1	2.8	2.8	2.7	3.1	
CSP-A700	23 <sup>5</sup> / <sub>8</sub>	11 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	19 <sup>1</sup> / <sub>2</sub>	8	22 <sup>5</sup> / <sub>8</sub>	11 <sup>5</sup> / <sub>8</sub>	1100	3.20	350	34	CFM	766	752	739	726	702	635
												Sones	2.6	2.4	2.4	2.5	2.6	3.0
CSP-A710	18	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	10	8	16 <sup>7</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	1080	4.40	325	36	CFM	737	688	635	566	474	
												Sones	3.2	3.2	3.3	2.7	2.5	
CSP-A780	18	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	10	8	16 <sup>7</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	1600	3.77	405	36	CFM	813	776	741	707	671	603
												Sones	3.8	3.6	3.5	3.4	3.5	3.8
CSP-A900	23 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	18 <sup>3</sup> / <sub>4</sub>	8	22 <sup>5</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	950	4.87	328	39	CFM	908	840	782	714	631	
												Sones	1.9	2.0	2.3	2.6	2.9	
CSP-A1050	23 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	18 <sup>3</sup> / <sub>4</sub>	8	22 <sup>5</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	1095	6.65	455	39	CFM	1182	1093	1013	922	832	
												Sones	3.5	3.1	3.1	3.4	3.4	
CSP-A1410	23 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	18 <sup>3</sup> / <sub>4</sub>	8	22 <sup>5</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	1450	7.80	822	39	CFM	1584	1533	1483	1439	1395	1293
												Sones	4.2	4.0	4.1	4.2	4.3	4.6
CSP-A1550	23 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	18 <sup>3</sup> / <sub>4</sub>	8	22 <sup>5</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>4</sub>	1610	8.32	830	39	CFM	1672	1604	1542	1484	1427	1306
												Sones	5.8	5.3	5.4	5.4	5.1	5.2
CSP-A1750	35	14 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>4</sub>	28	6	32 <sup>3</sup> / <sub>4</sub>	13	1130	6.60	550	68	CFM	1842	1749	1619	1463	1283	771
												Sones	6.4	6.0	5.5	5.3	4.7	3.8
CSP-A2150	35	14 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>4</sub>	28	6	32 <sup>3</sup> / <sub>4</sub>	13	1100	7.80	735	68	CFM	2249	2156	2044	1900	1701	1114
												Sones	6.0	5.8	5.2	5.0	4.6	3.4
CSP-A3600	45 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>2</sub>	40	11	43 <sup>1</sup> / <sub>4</sub>	14 <sup>5</sup> / <sub>8</sub>	1100	7.10	1330	122	CFM	3778	3622	3460	3280	3091	2551
												Sones	6.4	6.1	5.7	5.4	5.1	4.7

All dimensions in inches.

Performance certified is for Model CSP inline for installation type D: Ducted inlet, Ducted outlet. Performance ratings include the effects of a backdraft damper. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) from the test inlet duct in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type D: Ducted inlet fan sone levels. Ratings do not include the effects of duct end correction. Ratings are based on 10 ft. of insulated duct. The AMCA Certified Ratings Seal applies to air performance only.



For complete product information refer to catalog Model SP and CSP, or contact your local representative.

## Lighted Grilles & Grille Accessories

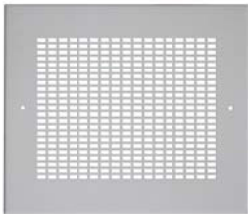
### SP Grilles



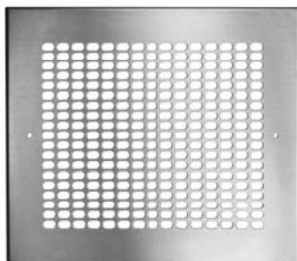
Standard Designer (B50-B200, A50-A390)  
(White Plastic Finish)  
(With and without motion detector/time delay)



Decorative (optional on B50-B200, A50-A390)  
(White plastic finish)  
(With and without motion detector/time delay)



Aluminum Grille (optional  
on B50-B200, A50-A390)  
(Standard on A410 and  
larger)  
(White enamel finish)



Stainless Steel (optional  
on B50-B200, A50-A390)  
(Polished stainless finish)

## Lighted Grilles

### PRISMATIC LENS



The prismatic lens design provides approximately 25% more light than a traditional frosted lens. The lens may be easily removed to replace light bulbs. *(Patent Pending)*

### FROSTED LENS



The frosted lens option is a traditional design which lets approximately 80% of light through the lens. The lens may be easily removed to replace light bulbs.

### COMPACT FLUORESCENT LAMPS (CFL)



- Quick start bulbs (1 or 2)
- Patent pending
- Reflective light box
- Produces 90% less heat
- Lower energy costs
- Two 13 watt CFL bulbs equals 100 watts of incandescent light (included)

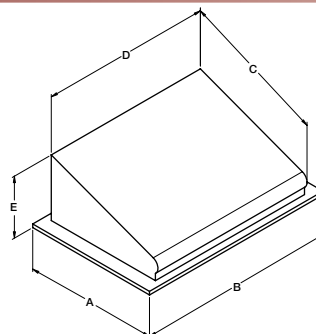
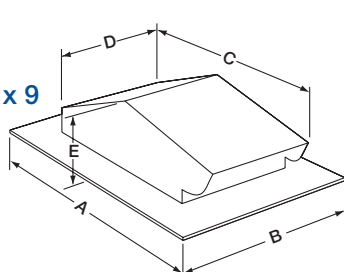
### INCANDESCENT LAMPS



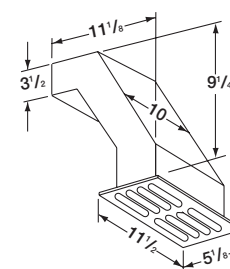
- Dimmable
- Patent pending
- Reflective light box
- Low first-cost light
- One bulb provides up to 100 watts of light (by others)

# Roof Discharge Accessories

RJ-4 & RJ-6 x 9



RJ-10 x 10



## MODEL RJ Pitched Roof Cap

- Steel construction with black enamel finish
- Integral flashing flange
- Built in birdscreen and damper

MODEL	FOR USE WITH SIZES	A	B	C	D	E	THROAT
RJ-4	C50, B50-B80	11	9 $\frac{1}{4}$	8 $\frac{1}{4}$	5 $\frac{5}{16}$	4 $\frac{1}{2}$	4 in. Dia.
RJ-6 x 9	B90-B200 A50-A390	18 $\frac{3}{4}$	14 $\frac{1}{4}$	14 $\frac{1}{2}$	10 $\frac{3}{8}$	6 $\frac{1}{2}$	6 x 9
RJ-10 x 10	A410-A1050	18 $\frac{1}{2}$	27 $\frac{1}{2}$	15 $\frac{3}{4}$	23 $\frac{5}{8}$	9 $\frac{1}{2}$	10 x 10

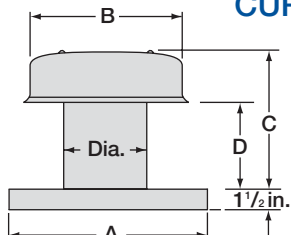
All dimensions in inches.

## MODEL EL - 10x3 Elbow Discharge with Grille

- Designed for installation under roof eaves
- Painted steel louvered grille
- Built in damper
- For SP/CSP sizes 50-290

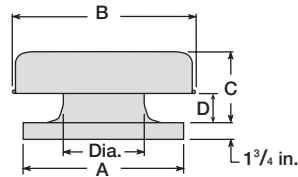
# Flat Roof Caps

## CURB CAP



### MODEL RCC-7

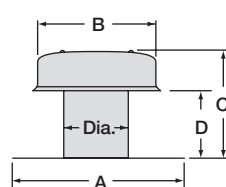
- Weathertight aluminum construction
- Integral birdscreen
- Built in curb cap
- Requires roof curb



### MODEL GRS

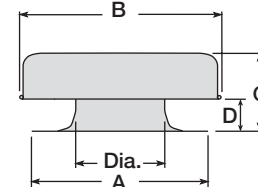
- All aluminum exterior construction
- Galvanized steel internal supports
- Integral birdscreen
- Built in curb cap
- Requires roof curb

## FLASHING FLANGE



### MODEL RFC-7

- Weathertight aluminum construction
- Integral birdscreen
- Built in flashing flange



### MODEL GRSF

- All aluminum exterior construction
- Galvanized steel internal supports
- Integral birdscreen
- Built in flashing flange

MODEL	FOR USE WITH SIZES	A	B	C	D	Dia.
RCC-7	50-390	15	12	10	6 $\frac{3}{8}$	7
GRS-10	410-710	19	20 $\frac{1}{2}$	6 $\frac{1}{4}$	3	10 $\frac{1}{4}$
GRS-12	780-1050	22	24 $\frac{3}{4}$	7 $\frac{7}{8}$	3 $\frac{1}{4}$	12 $\frac{1}{4}$
GRS-16	1410-2150	26	28 $\frac{5}{8}$	8 $\frac{3}{4}$	3 $\frac{3}{4}$	16 $\frac{5}{16}$
GRS-20	3600	30	35	9 $\frac{1}{4}$	4 $\frac{1}{4}$	20 $\frac{5}{16}$

All dimensions in inches.

MODEL	FOR USE WITH SIZES	A	B	C	D	Dia.
RFC-7	50-390	18	12	10	6 $\frac{3}{8}$	7
GRSF-10	410-710	23	20 $\frac{1}{2}$	6 $\frac{1}{4}$	3	10 $\frac{1}{4}$
GRSF-12	780-1050	26	24 $\frac{3}{4}$	7 $\frac{7}{8}$	3 $\frac{1}{4}$	12 $\frac{1}{4}$
GRSF-16	1410-2150	30	28 $\frac{5}{8}$	8 $\frac{3}{4}$	3 $\frac{3}{4}$	16 $\frac{5}{16}$
GRSF-20	3600	34	35	9 $\frac{1}{4}$	4 $\frac{1}{4}$	20 $\frac{5}{16}$

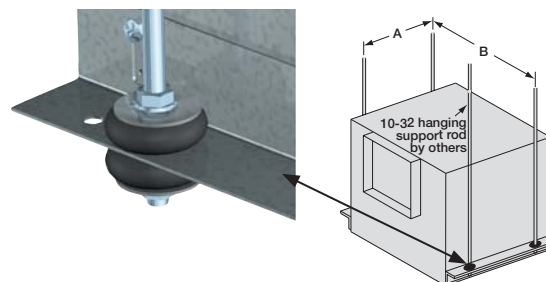
All dimensions in inches.

# HANGING VIBRATION ISOLATORS

Vibration isolator kits are available for suspended installations. Kits include all hardware necessary to mount one unit, with the exception of 10-32 threaded rod to be supplied by others. Fan mounting brackets include pre-punched mounting holes for ease of installation.

UNIT SIZE	A	B
B50-B200	4 $\frac{1}{2}$	15 $\frac{5}{8}$
A50-A190	5 $\frac{1}{2}$	14 $\frac{5}{8}$
A200-A390	6 $\frac{3}{4}$	15 $\frac{1}{2}$
A410, A510 A710, A780	9 $\frac{1}{4}$	19 $\frac{5}{8}$
A700	5 $\frac{1}{2}$	25 $\frac{1}{8}$
A900-A1050 A1410-A1550	9 $\frac{1}{4}$	25 $\frac{3}{8}$
A1750, A2150	9 $\frac{1}{4}$	36 $\frac{3}{4}$
A3600	9 $\frac{1}{4}$	48 $\frac{5}{8}$

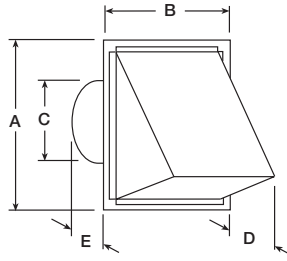
All dimensions in inches.



# Wall Discharge Accessories

## MODEL WC (Round Connection) Hooded Wall Cap

- Aluminum construction - aluminum finish
- For outside wall applications
- Built in birdscreen (*not available on WC-4*) and damper

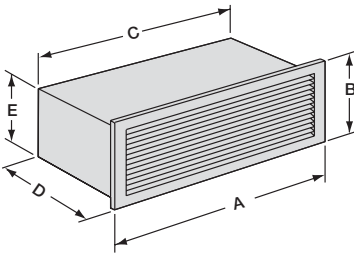


MODEL	FOR USE WITH SIZES	A	B	C	D	E
WC-4	C50, B50-B80	6½	6	4	2¾	8.5
WC-6	B90-B200 A50-A190	8	8	6	4⅛	8.5
WC-8	A200-A510	11	11	8	5⅞	8.5

All dimensions in inches.

## MODEL WL Wall Louvered Discharge

- Anodized aluminum grille
- Built in damper
- Not recommended for exterior applications exposed to severe weather conditions. An external wall louver is recommended for such applications.

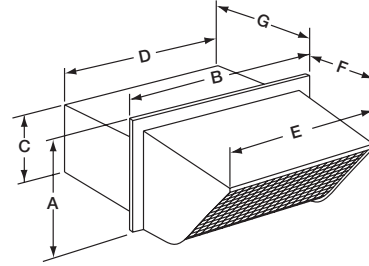


MODEL	FOR USE WITH SIZES	A	B	C	D	E
WL-10 x 3	50-290	12	5¼	10	7¾	3½
WL-18 x 6	390-1550	19¾	8	18	9	6

All dimensions in inches.

## MODEL WC (Square/Rectangular Connections) Hooded Wall Cap

- Steel construction with black enamel finish
- For outside wall applications
- Built in birdscreen and damper

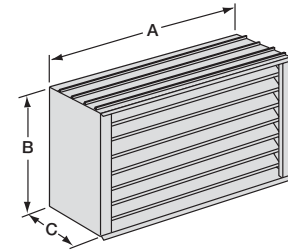


MODEL	FOR USE WITH SIZES	A	B	C	D	E	F	G
WC-10 x 3	50-290	5½	12¾	3½	10¼	11⅛	4¼	5
WC-8 x 8	200-510	10¼	10¼	8¼	8¼	8¼	6¾	5
WC-18 x 8	700-1550	10¼	20¼	8¼	18¼	18¼	6¾	5

All dimensions in inches.

## MODEL BVE Brick Vent

- Designed for installation in masonry walls
- Anodized aluminum construction
- Built in aluminum mesh insect screen

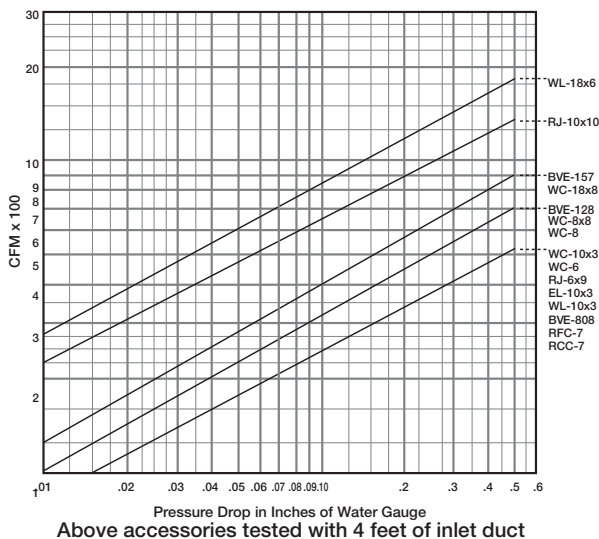


MODEL	FOR USE WITH SIZES	A	B	C
BVE808	50-290	8⅛	7¾	4
BVE128	390-510	12	7¾	4
BVE157	700-1050	15⅝	7¾	4

All dimensions in inches.

## ACCESSORY PRESSURE DROPS

The chart below can be used with all of the discharge accessories shown on these two pages. Specific pressure drop values for these accessories must be included in total system calculations for proper fan selection.

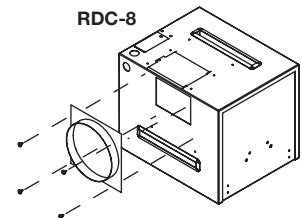
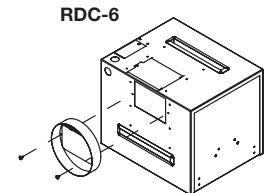


## MODEL RDC Round Duct Connector

- Replaces the standard square discharge duct-connector and damper.
- Uses existing mounting holes
- Galvanized steel construction
- RDC 6 includes a damper
- RDC 8 *does not* include a damper

MODEL	FOR USE WITH SIZES	DIA.
RDC-6	A110-A190	6
RDC-8	A200-A510	8

All dimensions in inches.

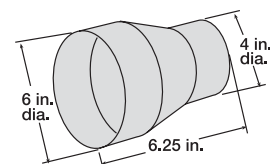


## MODEL TR 6x4 Transition Duct Reducer

- Reduces duct from 6 to 4 inches.
- Galvanized steel construction

MODEL	FOR USE WITH SIZES
TR 6 x 4	B50-B200
	A50-A90
	A110-A190*

\*Used in conjunction with RDC-6.  
All dimensions in inches.



# Accessories

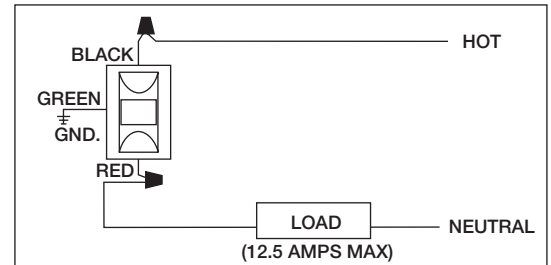
## MOTION DETECTORS



Motion detectors may be used with Models SP and CSP fans, or fan and light combinations. Motion detectors use a passive infrared motion detector that will automatically turn on the fan when a change in temperature is sensed. They have a viewing area of 180 degrees, however they must be placed in the line-of-sight. They also have an adjustable time delay shutoff setting of 1 to 20 minutes.

**Model MDW** - For use on fan or lights. Available shipped loose.

- Rated for 115V
- UL/cUL Listed
- Requires 2 x 4 handy box

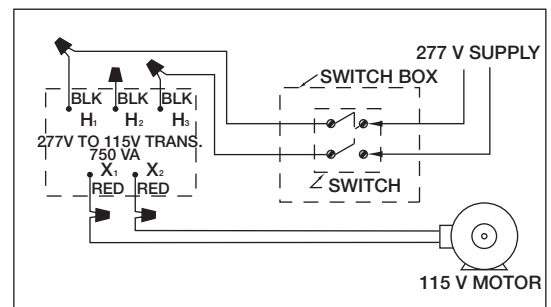


## TRANSFORMERS

Transformers are available for applications requiring voltage reduction. Selection is based on motor amperage. All transformers are shipped loose.



- Model T-2.0** - UL/cUL Listed
  - Rated for 230/277 to 115, 2 Amps
- Model T-4.3** - UL/cUL Listed
  - Rated for 230/277 to 115, 4.3 Amps
- Model T-6.5** - UL/cUL Listed
  - Rated for 230/277 to 115, 6.5 Amps
- Model T-8.6** - UL/cUL Listed
  - Rated for 230/277 to 115, 8.6 Amps



## CEILING RADIATION DAMPERS



The Greenheck SP-A and SP-B ceiling radiation dampers are UL/cUL Classified, rated at three to four hours fire resistance, and are available on all SP-A and SP-B fans and fan/light combinations. This design saves space by allowing the dampers to be mounted directly beneath the fan.

SP MODEL	CRD	LENGTH	WIDTH	HEIGHT
A50 - A190	310	13.38	11.13	3
B50 - B200 A200 - A390	320	14.38	12.25	3
A410 - A510 A710 - A780	350	18.44	14.81	3
A-700	700	24.19	12.31	3
A900 - A1550	360	24.19	14.81	3

All dimensions in inches.

## FILTERS

Fans used in most applications, even where air is not excessively dirty, will collect airborne dirt on wheels and motors over time. Accumulations of dirt on the fan wheel will sharply reduce performance and cause imbalance. Dirt buildup on the motor can cause it to overheat. All of these conditions will shorten the life of the fan. To help reduce this accumulation, washable aluminum mesh filters are available to trap dirt before it enters the fan. These filters should be regularly cleaned to maintain performance. Fig. A (Filter Loss Chart) shows the effect the filter will have on performance. To determine the added resistance, divide the desired cfm by the filter area (ft<sup>2</sup>). This will give FPM. Use this with the filter loss chart to get the added resistance.

In addition to reducing dirt accumulations on the motor and wheel, filters also reduce sound levels.

SP MODEL	DESIGNER GRILLE	FILTER MODEL	FILTER AREA (FT <sup>2</sup> )
SP-A50 - A190	F-200	F-210	.620
SP-B50 - B200, A200 - A390	F-200	F-220	.785
SP-A410 - A510 SP-A710 - A780	NA	F-250	1.319
SP-A900 - A1550	NA	F-260	1.797

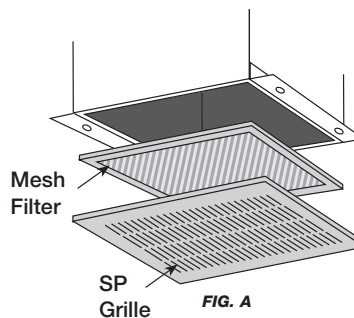
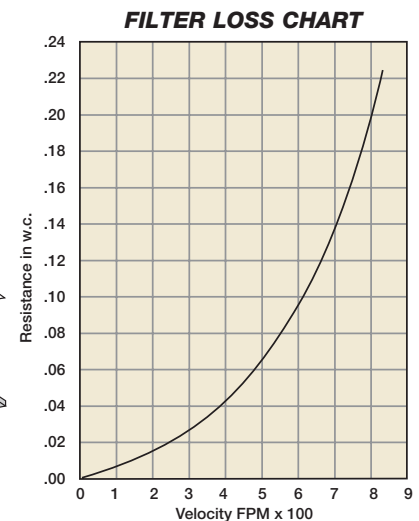


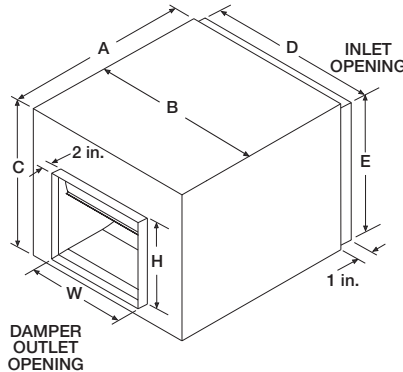
FIG. A





# Ceiling Exhaust Belt Drive - BDF

Model BDF are belt drive duct fans. These fans are designed for low sound levels in supply, exhaust or ducted return applications. Forward curved wheels provide high efficiency with low sound levels.



SERVICE CHART	3 DAY	10 DAY
BDF - All models and sizes	✓	✓

## PERFORMANCE

Performance capabilities range from 400 cfm to 17,000 cfm and up to 2.5 in. wg of static pressure.

## STANDARD CONSTRUCTION FEATURES

- Galvanized steel housing and forward curved wheel
- Side access panels
- Motor and drive frame isolated on shock mounts
- Inlet and outlet duct connection flanges
- Ball bearing motors
- Fan shafts mounted in ball bearings
- Adjustable motor pulley
- Fan shaft pulley
- Static resistant belts

## OPTIONS AND ACCESSORIES

- UL/cUL 705 Electrical
- Insulation
- Filter boxes
- Gravity and motorized dampers
- External isolators
- Dual drives
- Greenheck coatings (See coatings page 117)
- Top horizontal mounting arrangement

Note: See pages 44-45 for detailed accessory information

## BDF STANDARD PERFORMANCE & DIMENSIONAL DATA

MODEL	A	B	C	DAMPER OUTLET OPENING (WxH)	INLET OPENING (DxE)	MIN/MAX CFM	SONES @ .25 in.	PERFORMANCE IN INCHES WG				
								0	.25	.75	1.25	1.75
BDF-80	23 $\frac{3}{4}$	18 $\frac{1}{2}$	15 $\frac{7}{8}$	9 $\frac{3}{4}$ x 8 $\frac{7}{8}$	15 $\frac{3}{16}$ x 12 $\frac{11}{16}$	400	4.7	373	717			
						1100	10.8	1025	1183	1404	1660	
BDF-90	24 $\frac{1}{4}$	21 $\frac{1}{4}$	18 $\frac{3}{4}$	12 $\frac{1}{4}$ x 10 $\frac{1}{2}$	18 $\frac{1}{4}$ x 15 $\frac{7}{8}$	800	4.1	334	584			
						1850	11.4	771	884	1113	1318	1506
BDF-100	26 $\frac{1}{4}$	22 $\frac{3}{4}$	20 $\frac{3}{4}$	13 $\frac{3}{4}$ x 11 $\frac{7}{8}$	19 $\frac{3}{4}$ x 17 $\frac{7}{8}$	950	4.9	303	515			
						2150	11.0	686	747	960	1155	
BDF-120	33	27 $\frac{1}{4}$	22 $\frac{3}{4}$	16 x 13 $\frac{3}{8}$	24 $\frac{1}{8}$ x 19 $\frac{7}{8}$	1250	4.9	247	433			
						3050	13.3	604	645	815	985	
BDF-150	34 $\frac{1}{4}$	32 $\frac{5}{8}$	27 $\frac{3}{4}$	19 $\frac{1}{8}$ x 16 $\frac{3}{8}$	28 $\frac{5}{8}$ x 23 $\frac{7}{8}$	2200	5.7	289	382			
						4900	18.7	643	686	769	853	977
BDF-180	40 $\frac{1}{4}$	41 $\frac{3}{4}$	31 $\frac{3}{4}$	22 $\frac{1}{2}$ x 18 $\frac{7}{8}$	37 $\frac{1}{2}$ x 27 $\frac{7}{8}$	3000	5.7	189	321			
						7200	18.8	453	508	621	732	831
BDF-200	50 $\frac{1}{4}$	49 $\frac{1}{4}$	39 $\frac{3}{4}$	23 $\frac{1}{8}$ x 25 $\frac{1}{4}$	45 $\frac{1}{8}$ x 36	5000	12.5	222	310	464		
						17000	42	755	783			

All dimensions in inches.

Performance certified is for installation type D: Ducted inlet, Ducted outlet. Power rating (BHP/kW) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) from the test inlet duct in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type D: ducted inlet, ducted outlet. Ratings do not include the effects of duct end correction.

For complete product information refer to catalog Model BDF, or contact your local representative.



Greenheck Fan Corporation certifies that the BDF 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.



BDF Model is listed for Electrical (UL/cUL 705 with TEFC motor only. File no. E40001.)

## Cabinet Exhaust Belt Drive - BCF

Model BCF Cabinet fans are belt drive and are designed for low sound levels in supply, exhaust or ducted return applications. Designed in a low profile cabinet with heights ranging from 11 in. to 23 in. Fan wheels are galvanized steel, forward curved, centrifugal type.



SERVICE CHART	5 DAY	10 DAY
BCF-106 through 212	✓	✓

### STANDARD CONSTRUCTION FEATURES

- Galvanized steel housing
- Hinged access panel on sizes 106, 206, 107, 207 and bolted access panels on all larger sizes
- Motor and drive frame isolated on shock mounts
- Inlet and outlet duct connection flanges
- Ball bearing motors
- Fan shafts mounted in ball bearing pillow blocks
- Adjustable motor pulley
- Static resistant belts
- Corrosion resistant fasteners

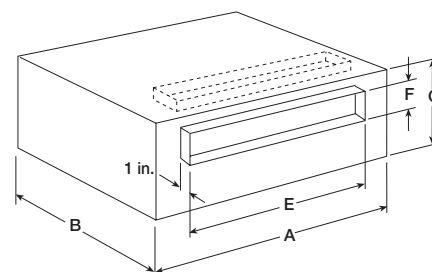
### OPTIONS AND ACCESSORIES

- Upblast discharge
- Fiberglass insulation
- Filter boxes and filters
- Mixing box
- Slide out filter box
- Side access doors
- Isolators
- UL/cUL 705 Electrical
- Dual drives
- Greenheck coatings (See coatings page 117)

Note: See pages 46-47 for detailed accessory information

### PERFORMANCE

Performance capabilities range from 170 cfm to 3,330 cfm for single fan models and 620 cfm to 5,875 cfm for double fan models and up to 1.5 in. wg of static pressure.



### BCF STANDARD CONDENSED PERFORMANCE RANGES & DIMENSIONAL DATA

MODEL	A	B	C	E	F	CFM	PERFORMANCE IN INCHES WG					
							.125	.25	.5	.75	1	1.5
BCF-106	20	22	11	12	6	170	743	988				
						490	1391	1499	1721	1923	2113	2468
						770	2086	2153				
BCF-107	23	29	13	15	8	360	596	726				
						1080	1419	1468	1561	1654	1744	1915
						1260	1642	1683				
BCF-108	26	32	16	18	10	650	537	660	868			
						1450	964	1022	1141	1259	1370	1578
						1850	1200	1247	1339			
BCF-110	32	36	19	24	12	860	490	593	755			
						2000	950	984	1070	1169	1262	1426
						2285	1077	1103	1173	1257		
BCF-112	36	42	23	28	14	930	413	495	639	764		
						2530	887	927	1004	1076	1144	1266
						3330	1146	1176	1237	1294		
BCF-206	34	22	11	26	6	620	1003	1171	1437			
						980	1397	1525	1754	1942	2110	2427
						1295	1777	1871				
BCF-207	38	29	13	30	8	760	623	742				
						1805	1202	1266	1385	1498	1600	1803
						2185	1429	1483	1587			
BCF-208	44	32	16	36	10	1150	541	669				
						2700	982	1048	1180	1299	1411	1619
						3475	1230	1281	1385			
BCF-210	48	36	19	40	12	1660	501	590	756			
						3940	975	1029	1120	1203	1280	1429
						4510	1100	1149	1235	1310		
BCF-212	58	42	23	50	14	2050	438	515	642	765		
						5110	919	954	1021	1085	1151	1271
						5875	1047	1078	1137	1193		

All dimensions in inches.

Performance certified is for installation type D: Ducted inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



UL/cUL 705  
E40001 - BCF with  
TEFC motors



Greenheck Fan Corporation certifies that the BCF 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 comply with the requirements of the AMCA Certified Ratings Program.

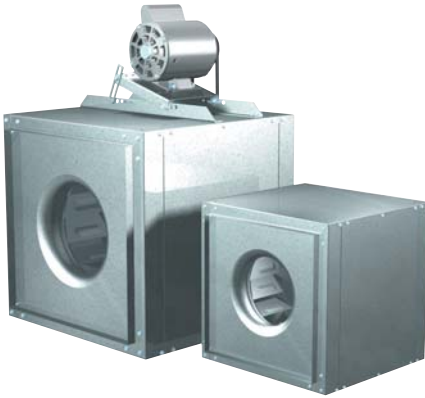
For complete product information refer to catalog Model BCF, or contact your local representative.

# Inline Direct Drive and Belt Drive - SQ/BSQ

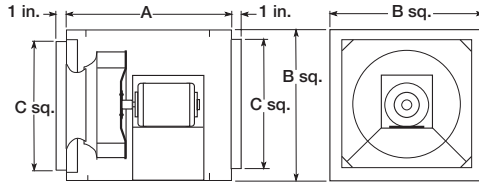
Models SQ and BSQ are the ideal selection for clean air applications (intake, exhaust, return, or make-up air systems) where space is a prime consideration. Fan wheels are centrifugal, backward inclined, and constructed of aluminum.

Model SQ Centrifugal Inline fans are direct drive. Maximum operating temperature is 130° F

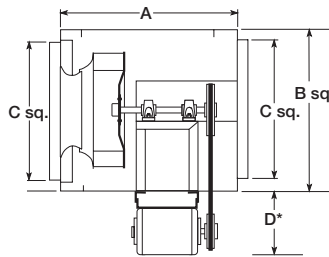
Model BSQ Centrifugal Inline fans are belt drive. Maximum operating temperature is 180° F.



## SQ



## BSQ



\* May vary depending on motor size.

## PERFORMANCE

SQ performance capabilities range from 80 cfm to 5,025 cfm and up to 1.75 in. wg of static pressure.

BSQ performance capabilities range from 62 cfm to 26,600 cfm and up to 3.5 in. wg of static pressure.

## SQ STANDARD CONDENSED PERFORMANCE RANGES & DIMENSIONAL DATA

■ Performance for available IN STOCK SIZES is shown on page 44

MODEL	A	B	C	DAMPER SIZE	IN STOCK SIZES (■)	MIN/MAX RPM	SONES @ 0 in.	PERFORMANCE IN INCHES WG								
								0	.125	.25	.5	.75	1	1.25	1.75	
SQ-60	13	12	8 <sup>7</sup> / <sub>8</sub>	9 x 9	■	1050	1.7	126								
						1550	4.0	186	145	105						
SQ-65	13	12	8 <sup>7</sup> / <sub>8</sub>	9 x 9	■	1050	2.1	154	79	105						
						1550	4.2	228	184	128						
SQ-70	13	12	8 <sup>7</sup> / <sub>8</sub>	9 x 9	■	1050	2.7	212	118							
						1550	5.6	313	252	189						
SQ-75	13	12	8 <sup>7</sup> / <sub>8</sub>	9 x 9	■	1050	3.6	241	146							
						1550	6.1	356	294	229						
SQ-80	16	15	11 <sup>7</sup> / <sub>8</sub>	12 x 12	■	1050	3.8	306	225	104						
						1550	7.3	451	394	342	201					
SQ-85	16	15	11 <sup>7</sup> / <sub>8</sub>	12 x 12	■	1050	4.0	357	272	142						
						1550	7.6	528	474	413	254					
SQ-90	16	15	11 <sup>7</sup> / <sub>8</sub>	12 x 12	■	1050	4.0	500	369	188						
						1550	7.6	738	654	564	334					
SQ-95	16	15	11 <sup>7</sup> / <sub>8</sub>	12 x 12	■	1050	4.9	623	475	274						
						1550	9.6	919	829	720	461					
SQ-100	21	17	13 <sup>7</sup> / <sub>8</sub>	14 x 14	■	860	4.8	725	611	410						
						1725	13.1	1454	1402	1349	1227	1077	830			
SQ-120	21	19	15 <sup>7</sup> / <sub>8</sub>	16 x 16	■	860	4.5	971	843	704						
						1725	14.7	1948	1883	1818	1692	1562	1416	1239		
SQ-130	21	21	17 <sup>7</sup> / <sub>8</sub>	18 x 18	■	860	6.3	1180	1048	890						
						1725	17.4	2368	2307	2247	2105	1961	1791	1559		
SQ-140	22	23	19 <sup>7</sup> / <sub>8</sub>	20 x 20	■	860	7.1	1637	1487	1316						
						1725	20	3283	3211	3139	2985	2825	2645	2424	1624	
SQ-160	26	26	22 <sup>7</sup> / <sub>8</sub>	23 x 23	■	860	8.9	2506	2334	2147	1605					
						1725	26	5027	4941	4856	4683	4504	4312	4094	3575	

All dimensions in inches.

Performance certified is for installation type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: free inlet fan sone levels. The AMCA Certified Ratings Seal applies to sone ratings only.

For complete product information refer to catalog Models SQ and BSQ or contact your local representative.



Greenheck Fan Corporation certifies that the SQ, BSQ 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.



UL/cUL 705  
E40001 - SQ/BSQ

# Inline Direct Drive and Belt Drive - SQ/BSQ

SERVICE CHART	IN STOCK	NEXT DAY	3 DAY	10 DAY
All SQ Models and Sizes		✓	✓	✓
SQ-75 through 100, 120 & 140	✓	✓	✓	✓
BSQ-70 through 180 & 240	✓	✓	✓	✓
BSQ-200, 300 through 420			✓	✓
All BSQ-HP Sizes			✓	✓

## OPTIONS AND ACCESSORIES

- Motor covers-standard and insulated
- Aluminum construction (5-Day)
- Inlet and outlet guards
- Filter boxes and filters
- Insulated fan housing
- Gravity and motorized Dampers (stock)
- Isolators (stock)
- Aluminum rub ring
- UL/cUL 705 Electrical
- Relubricatable bearings (Belt drive)
- Dual drives
- NEMA 3R and EXP disconnect switches
- Greenheck coatings (See coatings page 117)
- Side discharge

Note: See pages 44, 46 & 47 for detailed accessory information

## STANDARD CONSTRUCTION FEATURES

- Galvanized steel housing
- Non-overloading backward inclined aluminum wheel
- Side access panels
- Inlet and outlet duct connection flanges
- Ball bearing motors
- Adjustable motor pulley
- Adjustable motor plate
- Fan shaft mounted in ball bearing pillow blocks
- Static resistant belts
- Corrosion resistant fasteners

## BSQ STANDARD CONDENSED PERFORMANCE RANGES & DIMENSIONAL DATA

■ Performance for available IN STOCK SIZES is shown on page 45

MODEL	A	B	C	D*	DAMPER SIZES	IN STOCK SIZES (■)	MIN/MAX RPM	SONES @ .125 in.	PERFORMANCE IN INCHES WG						
									.125	.25	.5	.75	1.25	2.25	
BSQ-70	21	15	11 <sup>7</sup> / <sub>8</sub>	9	12 x 12	■	790	6.0	107						
							2486	25	521	504	468	426	334		
BSQ-80	21	15	11 <sup>7</sup> / <sub>8</sub>	9	12 x 12	■	790	6.0	239						
							2645	28	1065	1041	994	944	834	534	
BSQ-90	21	15	11 <sup>7</sup> / <sub>8</sub>	9	12 x 12	■	790	6.0	353						
							2691	28	1579	1549	1488	1420	1271	866	
BSQ-100	21	17	13 <sup>7</sup> / <sub>8</sub>	9	14 x 14	■	790	6.0	528						
							2556	26	2066	2029	1956	1882	1734		
BSQ-120	21	19	15 <sup>7</sup> / <sub>8</sub>	9	16 x 16	■	790	6.5	758	590					
							2490	31	2779	2736	2650	2563	2386	1984	
BSQ-130	21	21	17 <sup>7</sup> / <sub>8</sub>	9	18 x 18	■	790	6.9	914	676					
							2355	30	3111	3074	2970	2876	2659	1988	
BSQ-140	22	23	19 <sup>7</sup> / <sub>8</sub>	9	20 x 20	■	790	6.1	1341	1160					
							2135	30	4009	3958	3856	3741	3494	2861	
BSQ-160	26	26	22 <sup>7</sup> / <sub>8</sub>	11	23 x 23	■	590	6.1	1470	1101					
							2001	40	5713	5648	5519	5390	5103	4392	
BSQ-180	28	28	23 <sup>7</sup> / <sub>8</sub>	11	24 x 24	■	590	9.9	2153	1777					
							1645	29	6656	6565	6376	6178	5744	4450	
BSQ-200	32	32	27 <sup>7</sup> / <sub>8</sub>	13	28 x 28	■	390	10.0	1609						
							1375	27	7313	7191	6947	6677	6076		
BSQ-240	34	39	34 <sup>7</sup> / <sub>8</sub>	13	35 x 35	■	390	8.6	3271	2342					
							1225	41	11972	11801	11460	11070	10245	8149	
BSQ-300	38	46	41 <sup>7</sup> / <sub>8</sub>	13	42 x 42	■	375	9.6	6176	5271					
							967	33	17693	17396	16776	16124	14888	11047	
BSQ-360	42	52	47 <sup>7</sup> / <sub>8</sub>	13	48 x 48	■	300	10.1	7524	6149					
							811	33	22967	22607	21888	21011	19146	14128	
BSQ-420	50	58	53 <sup>7</sup> / <sub>8</sub>	13	54 x 54	■	325	7.6	12424	11253	7320				
							670	39	27237	26778	25749	24660	22322		

\*May vary with motor size. All dimensions in inches.

## BSQ HIGH PRESSURE PERFORMANCE & DIMENSIONAL DATA

MODEL	A	B	C	D*	DAMPER SIZE	MIN/MAX RPM	SONES @ .75 in.	PERFORMANCE IN INCHES WG								
								.15	.25	.75	1.25	2	2.5	3	3.5	
BSQ-130HP	21	21	17 <sup>7</sup> / <sub>8</sub>	9	18 x 18	790	6.2	513	392							
						2770	28	2184	2162	2056	1950	1750	1608	1421	1110	
BSQ-140HP	22	23	19 <sup>7</sup> / <sub>8</sub>	9	20 x 20	790	6.7	785	654							
						2641	33	3061	6036	2907	2768	2512	2319	2088	1759	
BSQ-160HP	26	26	22 <sup>7</sup> / <sub>8</sub>	11	23 x 23	690	5.4	1203	1029							
						2321	34	4614	4582	4411	4234	2918	3660	3351	3001	
BSQ-180HP	28	28	23 <sup>7</sup> / <sub>8</sub>	11	24 x 24	590	7.3	1433	1220							
						1913	32	5273	5243	5050	4816	4396	4058	3620	3006	
BSQ-200HP	32	32	27 <sup>7</sup> / <sub>8</sub>	13	28 x 28	390	9.4	984								
						1602	26	6025	5968	5659	5291	4669	4089	2894		
BSQ-240HP	34	39	34 <sup>7</sup> / <sub>8</sub>	13	35 x 35	400	9.5	2142	1599							
						1605	42	10464	10397	10066	9675	9007	8512	7987	7348	
BSQ-300HP	38	46	41 <sup>7</sup> / <sub>8</sub>	13	42 x 42	400	10.3	3869	3455							
						1196	30	12856	12751	12228	11681	10677	9853	8840	7545	
BSQ-360HP	42	52	47 <sup>7</sup> / <sub>8</sub>	13	48 x 48	300	13.8	3869	3205							
						1026	34	15458	15320	14631	13957	12806	11838	10796	8982	

\*May vary with motor size. All dimensions in inches.

Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: free inlet fan sone levels. The AMCA Certified Ratings Seal applies to sone ratings only.

# Inline Direct Drive and Belt Drive - SQ/BSQ

Order stock products online at [www.greenheck.com/qd](http://www.greenheck.com/qd)

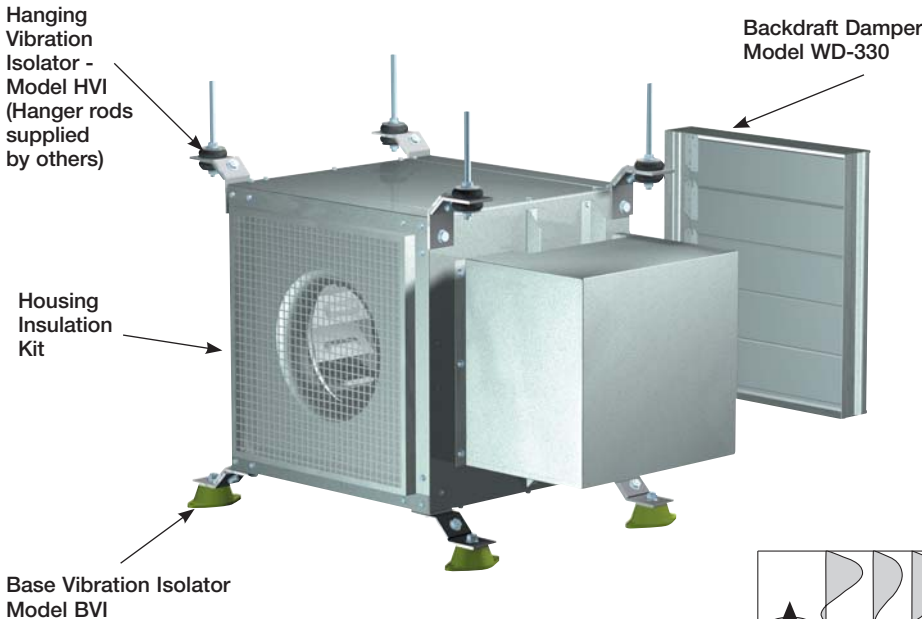
## SQ PERFORMANCE DATA - IN STOCK

Stock Model SQ fans include disconnect switch.  
Sizes 100 and above also include a motor cover and UL/CUL 705.

MODEL	HP	RPM	TS	SONES @ 0 IN.	MAX BHP	PERFORMANCE IN INCHES WG								
						0	.125	.25	.375	.5	.625	.75	1	1.25
SQ-75-DGEX-QD 3-Speed	1/90	1050	2233	3.6	0.011	241	146							
	1/45	1300	2765	4.1	0.210	298	224	133						
	1/25	1550	3297	6.1	0.035	356	294	229	137					
SQ-80-DGEX-QD 3-Speed	1/50	1050	2989	3.8	0.016	306	225	104						
	1/30	1300	3701	5.4	0.032	378	312	244	140					
	1/15	1550	4412	7.3	0.055	451	394	342	280	201				
SQ-85-DGEX-QD 3-Speed	1/140	1050	2989	4.0	0.017	357	272	142						
	1/30	1300	3701	5.5	0.033	442	377	298	185					
	1/15	1550	4412	7.6	0.057	528	474	413	343	254				
SQ-90-DGEX-QD 3-Speed	1/50	1050	2989	4.0	0.020	500	369	188						
	1/25	1300	3701	5.4	0.040	619	519	397	245					
	1/10	1550	4412	7.6	0.068	738	654	564	457	334				
SQ-95-DGEX-QD 3-Speed	1/30	1050	2989	4.9	0.031	623	475	274						
	1/15	1300	3701	7.6	0.059	771	659	522	352					
	1/8	1550	4412	9.6	0.100	919	829	720	603	461	276			
SQ-100-AX-QD	1/4	1725	5052	13.1	0.25	1455	1403	1350	1292	1227	1156	1078	831	
SQ-120-AX-QD	1/2	1725	5927	14.7	0.48	1948	1884	1819	1754	1692	1625	1563	1417	1240
SQ-140-BX-QD	1/3	1140	4346	10.8	0.30	2107	2061	1942	1818	1666	1447	1121		

Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP/kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: free inlet fan sone levels. The AMCA Certified Ratings Seal applies to sone ratings only.

## SQ & BSQ OPTIONS AND ACCESSORIES



### Side Discharge

The side discharge option provides several advantages, from removing a system effect problem, increasing performance, or even reducing installation labor.

The most notable is reducing system effects. Notice Fig. 1 how the air, when discharged into the corner, will take several duct lengths before becoming smooth again. This is not the case with a side discharge. Notice now in Fig. 2 as air comes into the fan/corner and leaves the fan/corner you have nice smooth airflow providing a more predictable system. (Remember the duct length prior to or following the installation location should be approximately two to three wheel diameters to achieve catalog performance).

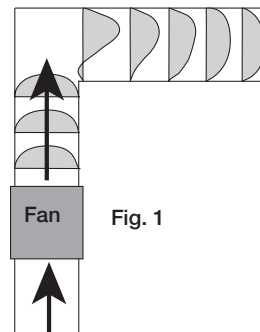


Fig. 1

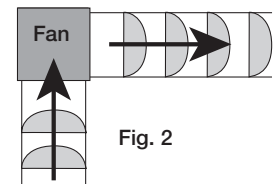


Fig. 2

# Inline Direct Drive and Belt Drive - SQ/BSQ



## BSQ PERFORMANCE DATA - IN STOCK

Stock Model BSQ fans include disconnect switch, motor cover UL/cUL 705.

Order stock products online at [www.greenheck.com/qd](http://www.greenheck.com/qd)

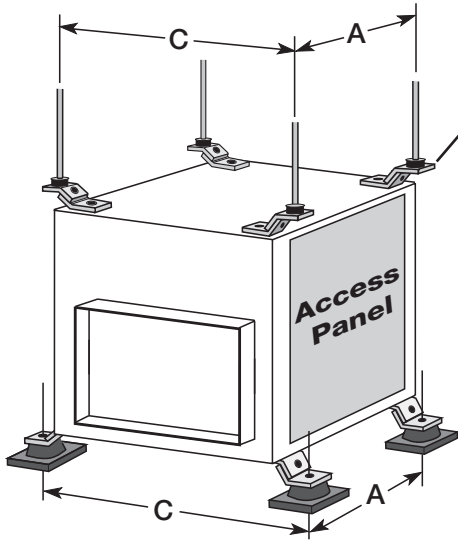
MODEL	HP	RPM	SONES @ 0 IN.	MAX BHP	PERFORMANCE IN INCHES WG										
					.125	.25	.375	.5	.625	.75	1	1.25	1.5	1.75	
BSQ-70-4X-QD 1368-1970 RPM 1/4 HP, 115/60/1 ODP	1/4	1370	11.8	0.088	265	227	186	140	90						
		1730	16.1	0.18	349	323	293	260	227	192	112				
		1970	19.1	0.26	404	383	358	330	301	272	211	141			
BSQ-80-4X-QD 1222-1835 RPM 1/4 HP, 115/60/1, ODP	1/4	1050	8.0	0.049	372	298	184								
		1835	17.2	0.26	721	688	651	614	571	525	426				
		1/3	1885	17.7	0.28	742	710	675	640	598	555	459	297		
BSQ-80-LMDX-QD 1050-2485 RPM	1/2	2100	21	0.39	834	805	775	743	711	674	595	508	367		
		3/4	2645	28	0.79	1065	1041	1018	995	970	945	894	835	773	705
		1	3190	35	1.19	1300	1276	1253	1230	1207	1184	1161	1138	1115	1092
BSQ-90-4X-QD 1168-1690 RPM 1/4 HP, 115/60/1 ODP	1/4	1050	8.0	0.061	547	443	290								
		1360	11.7	0.14	753	684	605	509	383						
		1695	16.0	0.26	966	915	859	798	730	655	439				
BSQ-90-LMDX-QD 1050-2690 RPM	1/3	1750	16.5	0.29	1000	951	898	841	776	708	528				
		1/2	1910	18.1	0.37	1100	1057	1009	958	904	845	705	517		
		3/4	2220	22	0.59	1291	1255	1216	1175	1132	1086	987	879	733	540
1	2690	28	1.05	1578	1548	1519	1487	1453	1419	1347	1270	1185	1097		
BSQ-100-4X-QD 1073-1610 RPM 1/4 HP, 115/60/1 ODP	1/4	1050	7.9	0.073	774	671	498								
		1265	9.8	0.13	966	893	798	683							
		1610	15.0	0.26	1266	1207	1149	1089	1004	917					
BSQ-100-LMDX-QD 1050-2555 RPM	1/3	1765	16.3	0.34	1398	1345	1292	1240	1179	1101	924				
		1/2	2030	19.7	0.52	1623	1577	1531	1484	1439	1396	1263	1120		
		3/4	2325	23	0.79	1872	1832	1791	1750	1710	1669	1593	1474	1360	1201
1	2555	26	1.05	2065	2028	1991	1954	1917	1880	1809	1732	1624	1521		
BSQ-120-4X-QD 923-1370 RPM 1/4 HP, 115/60/1 ODP	1/4	1000	7.7	0.102	1026	914	783								
		1370	11.0	0.26	1475	1396	1315	1230	1136	1026					
		1/3	1500	12.4	0.34	1629	1557	1484	1410	1331	1243	1010			
BSQ-120-LMDX-QD 1000-2490 RPM	1/2	1725	15.2	0.52	1893	1831	1768	1705	1641	1572	1425	1243			
		3/4	1974	19.7	0.785	2183	2129	2075	2020	1964	1908	1791	1663	1518	1307
		1	2170	23	1.05	2410	2361	2312	2262	2212	2161	2059	1951	1833	1709
1 1/2	2490	31	1.57	2779	2737	2694	2651	2607	2563	2475	2387	2294	2198		
BSQ-130-LMDX-QD 900-2355 RPM	1/4	900	7.7	0.087	1084	911	635								
		1293	11.9	0.26	1652	1563	1462	1328	1170	958					
		1/3	1424	13.7	0.35	1838	1754	1672	1568	1443	1299				
BSQ-130-LMDX-QD 900-2355 RPM	1/2	1630	16.2	0.52	2126	2050	1983	1908	1820	1714	1468	1121			
		3/4	1866	21	0.78	2448	2389	2324	2266	2202	2128	1949	1740	1462	1686
		1	2053	25	1.05	2702	2655	2592	2357	2484	2426	2286	2117	1926	2359
1 1/2	2355	35	1.58	3112	3074	3026	2971	2923	2877	2777	2659	2514			
BSQ-140-LMDX-QD 800-2135 RPM	1/4	800	6.3	0.11	1362	1185	860								
		1075	10.7	0.26	1925	1808	1679	1535	1307						
		1/3	1180	12.0	0.35	2132	2029	1916	1795	1651	1442				
BSQ-140-LMDX-QD 800-2135 RPM	1/2	1355	14.2	0.52	2474	2390	2295	2195	2092	1977	1631				
		3/4	1550	16.2	0.78	2852	2781	2702	2619	2532	2442	2246	1955	1429	
		1	1710	18.3	1.05	3161	3096	3030	2955	2880	2800	2638	2453	2181	1758
1 1/2	1960	24	1.58	3640	3584	3528	3469	3404	3338	3201	3059	2904	2718		
2	2135	30	2.04	3975	3923	3872	3821	3763	3703	3583	3454	3324	3181		
BSQ-160-LMDX-QD 650-2000 RPM	1/4	650	6.6	0.11	1671	1391									
		860	8.7	0.25	2333	2165	1966	1691							
		1/3	960	9.8	0.35	2637	2497	2331	2142	1883					
BSQ-160-LMDX-QD 650-2000 RPM	1/2	1100	12.3	0.52	3058	2941	2808	2662	2500	2296					
		3/4	1265	15.6	0.79	3550	3448	3346	3226	3101	2961	2629	2101		
		1	1390	18.0	1.05	3920	3827	3734	3638	3525	3412	3157	2830	2334	
1 1/2	1590	22	1.57	4509	4428	4347	4266	4184	4086	3887	3664	3397	3065		
2	1750	28	2.08	4979	4905	4831	4757	4683	4610	4431	4247	4044	3810		
3	2000	40	3.07	5710	5645	5581	5516	5451	5387	5256	5100	4943	4770		
BSQ-180-LMDX-QD 700-1645 RPM	1/3	700	10.0	0.24	2649	2387	2023								
		790	10.6	0.35	3046	2840	2569	2210	1499						
		1/2	905	12.2	0.52	3546	3366	3167	2928	2621	2175				
BSQ-180-LMDX-QD 700-1645 RPM	3/4	1035	14.5	0.78	4101	3947	3789	3606	3398	3166	2411				
		1	1140	16.5	1.04	4545	4408	4265	4122	3944	3755	3283	2510		
		1 1/2	1310	20	1.58	5259	5145	5021	4896	4772	4630	4302	3911	3365	
2	1440	23	2.07	5803	5699	5590	5476	5363	5250	4979	4678	4318	3838		
3	1645	29	3.14	6656	6566	6475	6377	6278	6179	5981	5744	5485	5216		
BSQ-240-LMDX-QD 500-1225 RPM	1/2	500	10.7	0.35	4518	4001	3325								
		570	12.3	0.53	5279	4845	4363	3704							
		3/4	650	14.3	0.78	6121	5757	5360	4933	4375					
BSQ-240-LMDX-QD 500-1225 RPM	1	715	16.1	1.04	6795	6476	6133	5757	5358	4847					
		1 1/2	820	19.4	1.56	7874	7616	7317	7016	6688	6349	5494			
		2	900	22	2.07	8689	8457	8198	7926	7646	7347	6713	5833		
3	1035	28	3.15	10058	9856	9653	9420	9184	8947	8433	7894	7234	6302		
5	1225	41	5.22	11973	11802	11631	11460	11270	11070	10671	10245	9804	9345		

Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP/kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: free inlet fan sone levels. The AMCA Certified Ratings Seal applies to some ratings only.

# Inline Fans Options & Accessories - BDF, BCF, SQ & BSQ

## HORIZONTAL MOUNTING

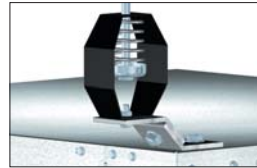
For ease of installation knockouts are provided at each location where mounting brackets are shown in diagram below. Universally adjustable brackets are available to mount the fan in hanging or base mounted positions.



**HANGING ISOLATORS** - Complete hanging isolator kits are available with either neoprene or spring isolators. The isolators are sized to match the weight of the fan. (Hanging rods supplied by others).



HANGING NEOPRENE



HANGING SPRING

**BASE ISOLATORS** - Complete base isolator kits are available with either neoprene or spring isolators and are sized to match the weight of the fan.



STANDING NEOPRENE



STANDING SPRING

## MULTI DISCHARGE POSITIONS

BDF fans have been designed for horizontal mounting and are standard with a Bottom Horizontal Discharge. Optional Top Horizontal Discharge is also available. BCF fans are available with either Top Horizontal or Upblast Discharge positions. SQ and BSQ fans are available with Right Side Discharge, Left Side Discharge, Inline Discharge positions, or a combination of Right, Left, and Inline positions.

BDF Discharge Positions	
Bottom Horizontal	Top Horizontal

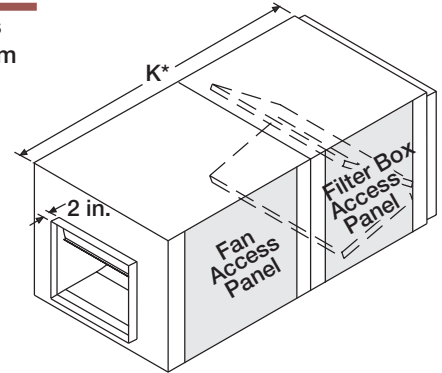
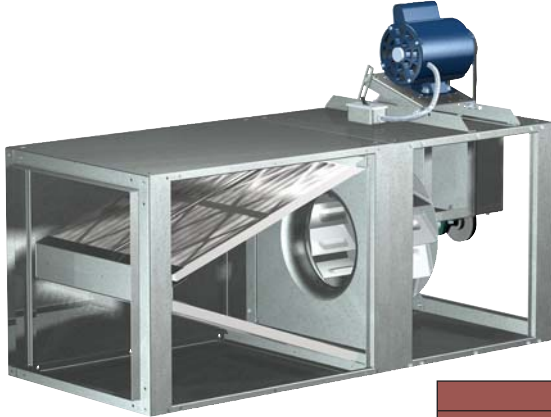
BCF Discharge Positions	
Top Horizontal	Upblast

SQ/BSQ Discharge Positions				
Right Side	Left Side	Inline	Combination	

## Inline Fans Options & Accessories - BDF, BCF, SQ & BSQ

### FILTER BOX

Filter boxes incorporate a vee bank design constructed of galvanized steel. Filters are available in 1 in. or 2 in. throwaway (pleated) or permanent (washable aluminum mesh). Side access panels are standard for easy maintenance.



SQ			
MODEL	K*	FILTER SIZE	NO. FILTERS
60-75	22 <sup>1</sup> / <sub>8</sub>	10 x 12	1
80-95	45 <sup>5</sup> / <sub>8</sub>	14 x 25	1
100	47 <sup>1</sup> / <sub>4</sub>	16 x 20	2
120	52 <sup>3</sup> / <sub>16</sub>	16 x 25	2
130	46 <sup>3</sup> / <sub>8</sub>	20 x 20	2
140	52 <sup>3</sup> / <sub>8</sub>	20 x 25	2
160	51 <sup>3</sup> / <sub>8</sub>	20 x 20	4

BSQ			
MODEL	K*	FILTER SIZE	NO. FILTERS
70 - 80 - 90	50 <sup>5</sup> / <sub>8</sub>	14 x 25	1
100	47 <sup>1</sup> / <sub>4</sub>	16 x 20	2
120	52 <sup>3</sup> / <sub>16</sub>	16 x 25	2
130 - 130HP	46 <sup>3</sup> / <sub>8</sub>	20 x 20	2
140 - 140HP	52 <sup>3</sup> / <sub>8</sub>	20 x 25	2
160 - 160HP	51 <sup>3</sup> / <sub>8</sub>	20 x 20	2
180 - 180HP	55 <sup>1</sup> / <sub>16</sub>	20 x 25	4
200 - 200HP	66 <sup>11</sup> / <sub>16</sub>	12 x 25	3
		16 x 25	3
240 - 240HP	68 <sup>7</sup> / <sub>8</sub>	20 x 25	4
		16 x 25	4
300 - 300HP	72 <sup>1</sup> / <sub>8</sub>	20 x 25	8
360 - 360HP	79 <sup>1</sup> / <sub>4</sub>	16 x 25	10
		20 x 25	5
		16 x 25	5
420	93 <sup>1</sup> / <sub>8</sub>	16 x 25	5
		20 x 25	10

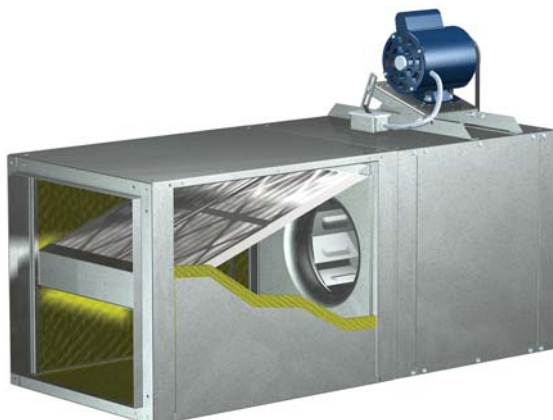
BCF						
MODEL		K*	FILTER SIZE		NO. FILTERS	
SINGLE FAN	DOUBLE FAN		SINGLE FAN	DOUBLE FAN	SINGLE FAN	DOUBLE FAN
106	206	44	16x20	20x20	1	1
107	207	52	16x20	16x20	1	2
108	208	56	16x20	16x20	2	4
110	210	61	20x20	20x20	2	4
112	212	65	16x20	20x25	4	4

BDF			
MODEL	K*	FILTER SIZE	NO. FILTERS
80	49 <sup>3</sup> / <sub>4</sub>	16 x 20	2
90	54 <sup>7</sup> / <sub>8</sub>	20 x 25	2
100	51 <sup>7</sup> / <sub>8</sub>	20 x 20	2
120	63 <sup>9</sup> / <sub>16</sub>	12 x 25	4
150	62 <sup>1</sup> / <sub>16</sub>	16 x 20	8
180	75 <sup>3</sup> / <sub>8</sub>	20 x 25	6
200	85 <sup>1</sup> / <sub>4</sub>	16 x 25	12

K\* is length of fan and filter box combined.  
All dimensions in inches.

### INSULATED HOUSINGS

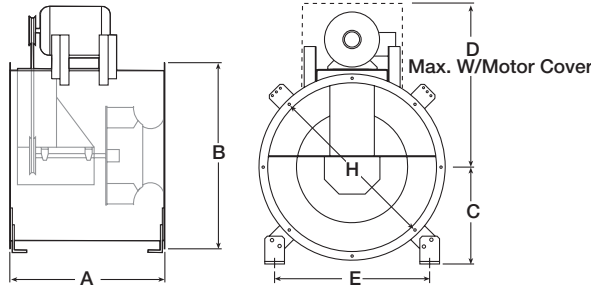
The interior of the fan housings and filter boxes can be lined with a fiberglass duct liner for noise reduction and condensation control. The duct liner can be utilized to reduce radiated noise from inline fan housings. It is recommended for applications when fans are placed in acoustically sensitive locations. The duct liner also reduces the noise radiating from the inlet and outlet of the fan.





# Centrifugal Belt Drive - TCB

Model TCB Centrifugal Inline fans are the ideal choice for installations with straight-through airflow in ducted systems. The centrifugal wheels used in this design provide higher efficiencies and lower sound levels than axial type inline fans when used in medium pressure ducted systems. These fans can be mounted horizontally or vertically. Also available in roof supply and roof exhaust configurations.



SERVICE CHART	10 DAY
TCB - All sizes	✓

## PERFORMANCE

Performance capabilities range from 360 cfm to 24,000 cfm and up to 4.5 in. wg of static pressure.

## STANDARD CONSTRUCTION FEATURES

- AMCA certified for sound and air performance
- Permatecor coating
- AMCA type B spark resistance
- Continuously welded steel housing
- Heavy duty, self-aligning pillow block bearings
- Backward inclined aluminum wheel
- Inlet and outlet flanges with mounting holes
- Aluminum rub ring

## TCB PERFORMANCE & DIMENSIONAL DATA

MODEL	A	B	C	D*	E	H	LEVEL	CFM	SONES @ .125 in.	PERFORMANCE IN INCHES WG								
										.125	.25	.5	1	2	3	4		
TCB-9	23	21 <sup>5</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	17 <sup>1</sup> / <sub>2</sub>	19%	1	360	5.3	846	1000	1260						
								840	11.0	1689	1753	1883	2143	2630				
							2	560	8.6	1379	1480	1686	2059	2672				
								1040	18.0	2431	2483	2590	2810	3251	3649	4027		
TCB-10	23	21 <sup>5</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	17 <sup>1</sup> / <sub>2</sub>	19%	1	480	4.9	858	1012	1253						
								960	9.7	1442	1542	1717	2024	2506				
							2	700	8.3	1359	1454	1631	1967	2560				
								1500	18.4	2754	2798	2883	3064	3398	3721	4027		
TCB-12	23	21 <sup>5</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	17 <sup>1</sup> / <sub>2</sub>	19%	1	700	6.2	854	958	1158	1519					
								1600	13.4	1729	1782	1887	2084	2437				
							2	900	5.8	1009	1120	1315	1648	2182				
								1650	13.6	1715	1768	1887	2128	2535	2904	3233		
TCB-13	24 <sup>1</sup> / <sub>2</sub>	23 <sup>5</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>4</sub>	23 <sup>1</sup> / <sub>2</sub>	19	21%	1	600	4.1	661	793	1020						
								1800	11.2	1553	1613	1729	1936	2294				
							2	1200	5.6	964	1049	1207	1480	1962				
								2000	12.8	1510	1565	1670	1868	2218				
TCB-16	28 <sup>1</sup> / <sub>2</sub>	27 <sup>5</sup> / <sub>8</sub>	15 <sup>1</sup> / <sub>4</sub>	25 <sup>1</sup> / <sub>2</sub>	21%	25%	1	1000	3.7	507	613	803						
								3750	18.5	1491	1530	1600	1725	1957				
							2	1800	6.7	777	843	970	1207	1617				
								3600	16.4	1456	1487	1553	1687	1940	2189	2416		
TCB-18	31	33 <sup>5</sup> / <sub>8</sub>	17 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>2</sub>	26 <sup>1</sup> / <sub>4</sub>	32	1	1500	4.3	486	568	724						
								4200	14.6	1140	1176	1244	1367	1600				
							2	2100	10.1	696	753	858	1045	1370				
								4200	19.9	1302	1331	1392	1505	1716	1907	2090		
TCB-22	35 <sup>1</sup> / <sub>2</sub>	39 <sup>5</sup> / <sub>8</sub>	21 <sup>1</sup> / <sub>2</sub>	34	30 <sup>1</sup> / <sub>2</sub>	38	1	1600	3.2	388	477							
								4400	10.9	831	870	944	1082	1339				
							2	3000	7.7	574	621	706	864	1127				
								5500	16.5	987	1016	1069	1168	1353	1526	1681		
TCB-24	42	45%	23 <sup>1</sup> / <sub>2</sub>	36 <sup>1</sup> / <sub>2</sub>	34 <sup>7</sup> / <sub>8</sub>	44 <sup>3</sup> / <sub>16</sub>	1	2500	3.3	356	417	537						
								7500	19.1	865	892	946	1045	1212				
							2	4900	10.2	520	556	623	744	950				
								8400	20	849	872	915	994	1145	1283	1407		
TCB-30	48 <sup>1</sup> / <sub>2</sub>	52%	28 <sup>1</sup> / <sub>2</sub>	42 <sup>1</sup> / <sub>2</sub>	42	50%	1	3750	4.4	294	344							
								9750	15.0	629	656	705	789	940				
							2	5600	8.1	427	462	528	643	844				
								10400	18.5	746	766	804	878	1017	1143	1259		
TCB-36	54	59%	30 <sup>1</sup> / <sub>2</sub>	45%	46%	57%	1	5600	5.4	274	312	379						
								12800	19.1	545	565	604	673	796				
							2	9600	12.9	397	420	468	557	721				
								15600	19.0	620	635	665	722	838	944	1046		

\* May vary depending on motor size. All dimensions in inches. Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: free inlet fan sone levels. The AMCA Certified Ratings Seal applies to sone ratings only.

For complete product information refer to catalog Model TCB, or contact your local representative.

Greenheck Fan Corporation certifies that the TCB 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.

UL/cUL - 705  
UL-762

# Tubular Centrifugal Fans - TCF

Tubular Centrifugal Fans are for use in commercial and industrial applications that demand quiet, efficient and reliable air movement. Models can be used in exhaust, supply, and return-air, clean or contaminated air ventilation installations with continuous airstream temperatures up to 200°F. Units may be ceiling hung, floor mounted or roof mounted.



## PERFORMANCE

Performance capabilities range from 1,600 cfm to 90,000 cfm for TCF Horizontal with up to 8½ in. wg of static pressure, and 1,600 cfm to 30,200 cfm for TCF Vertical with up to 5 in. wg of static pressure.

## SERVICE CHART

Tubular Centrifugal Fans All Models

10 DAY

✓

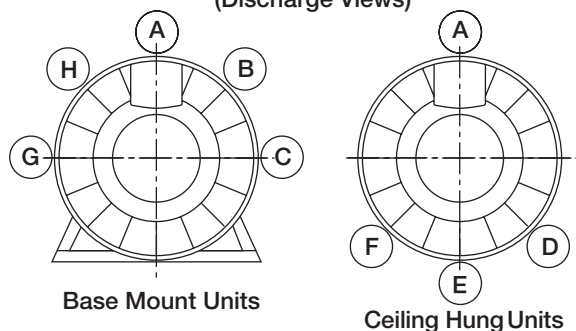
## OPTIONS AND ACCESSORIES

- Hinged access door
- Totally enclosed belt guard
- Companion flanges
- Drain connection
- Inlet and outlet guards
- Shaft seal - felt or neoprene
- Type C Construction (Arr. 9)
- Type B Construction (Arr. 9)
- Isolators - neoprene and spring (Motor positions A & E only)
- Motor cover
- UL/cUL-705 (Electrical)
- UL listed "Power Ventilators for Smoke Control Systems"
- Greenheck coatings (See coatings page 117)

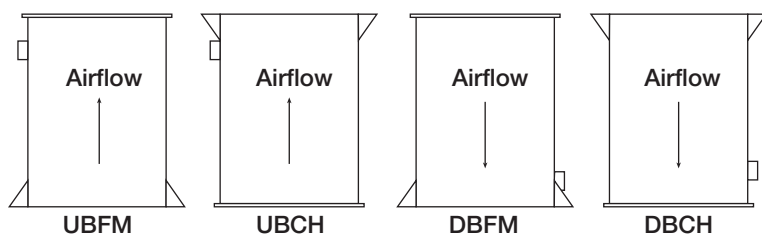
## STANDARD CONSTRUCTION FEATURES

- AMCA certified for air performance
- Permator coating
- Final assembly vibration analysis
- Minimum bearing life of L(10) 80,000 hours (Average life - L(50) of 400,000 hours)
- Continuously welded housing
- Airfoil blade steel wheel
- Inlet and outlet flanges with mounting holes
- Drive chamber and belt tube
- Straightening vanes
- Extended lube lines

Motor Positions for Horizontal Fans (Discharge Views)



ARRANGEMENT	MOUNTING	CLASS	MOTOR POSITION
3, 9	Horizontal Base Mount	I, II	A, B, C, G, H
	Horizontal Ceiling Hung	I, II	A, D, E, F
9	Vertical Base Mount	I	Not Applicable
	Vertical Ceiling Hung	I	Not Applicable



Optional Discharge and Mounting Bracket Locations for Vertical Fans



UL/cUL - 705

UL Listed "Power Ventilators for Smoke Control Systems"

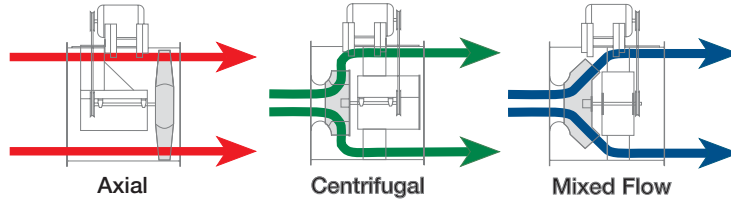


AMCA licensed air performance and complete product information can be found in Greenheck Catalog TCF 2 R.

For complete product information refer to catalog Model TCF, or contact your local representative.

# Mixed Flow - QEI

The QEI mixed flow fan is a low sound, highly efficient alternative for inline ventilation. The unique half-axial, half-centrifugal wheel design captures the highly efficient “straight-through” airflow of vane axials and the lower sound levels of tubular centrifugal fans to provide an energy efficient product that won't be a noise distraction in your ventilation system.



Flexible “Universal Mounting System” allows for field rotation of motor location.

All motors are mounted on adjustable pivot bases for easy adjustments.

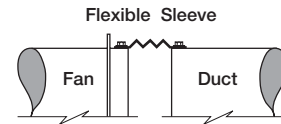
Sealed belt guard protects personnel and minimizes air leakage around motor shaft.

Permatecor coating is an industrial grade, electrostatic powder paint. Provides a durable, long lasting finish for interior or exterior applications.

Integral, spun inlet cone provides even airflow into the wheel in ducted or non-ducted applications and helps to reduce system effects associated with uneven duct velocity profiles.

Mixed flow wheels are designed with single-thickness, cambered blades to maximize free area and efficiency. Tight wheel to cone tolerances further improve the mechanical efficiency.

Extended collar on inlet and outlet allow for quick and easy slip-fit duct connections to ductwork or plenum wall.

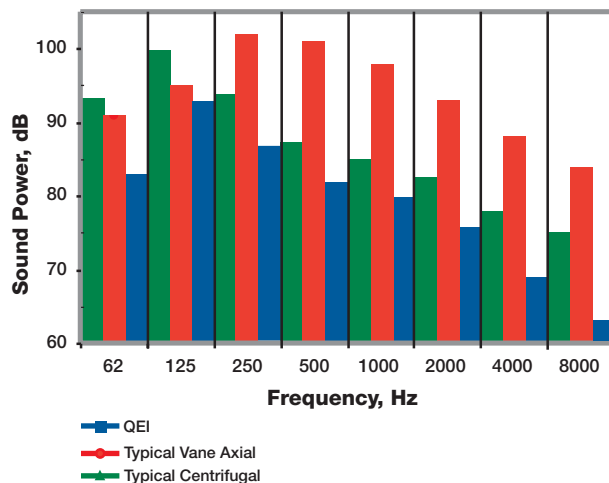


Cast flange mounted bearings are air-handling quality and use concentric bore locking systems for smooth operation. Bearings are selected for a minimum L(10) life in excess of 80,000 hours at the maximum fan class RPM. {Average life - L(50) of 400,000 hours}

Aerodynamically designed straightening vanes improve performance by converting kinetic energy of swirling air into useful static pressure.

## LOWER SOUND POWER, BETTER SOUND QUALITY

The sound quality of the QEI is as beneficial to low sound design as is the reduced overall sound power. The sound chart compares units of similar outer tube diameters at an operating point of 20,000 cfm with 1.5 inches wg of static pressure (Ps). Tubular centrifugals (green) have dominant tones in the 63 hz through 250 hz octave bands, while vane axials (red) have more mid to high frequency sound. The QEI does not have a dominant tone. A bystander would hear a more bland sound that is quieter than a tubular centrifugal or vane axial.



## Mixed Flow - QEI

Mixed Flow fans are for use in commercial and industrial applications that demand quiet, efficient and reliable air movement. Models can be used in exhaust, supply, and return-air, clean or contaminated air ventilation installations with continuous airstream temperatures up to 200°F. Units may be ceiling hung, floor mounted or roof mounted.



### PERFORMANCE

Performance capabilities range from 2,000 cfm to 95,000 cfm and up to 8½ in. wg of static pressure.

SERVICE CHART	10 DAY
QEI - Class I & II - All Sizes	✓

### STANDARD CONSTRUCTION FEATURES

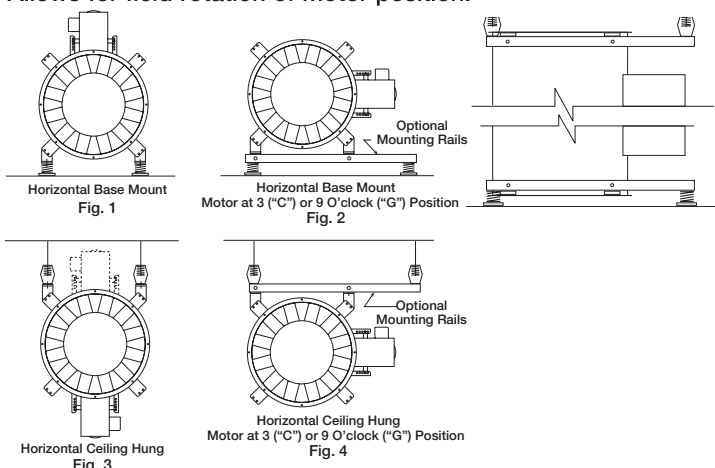
- AMCA certified for sound and air performance
- Permatector coating
- Final assembly vibration analysis
- Minimum bearing life of L(10) 80,000 hours {Average life - L(50) of 400,000 hours}
- Continuously welded housing
- Universal mounting system
- Slip-fit collar for duct connections
- Mixed flow wheel w/steel cambered blades
- Straightening vanes
- Extended lube lines
- Bolted inspection door

### TYPICAL APPLICATIONS

- Office Buildings
- Concert Halls
- Libraries
- Parking Garages
- Educational Facilities
- Dormitories

### MOUNTING FOR SIZES 15 - 27 (Viewed from discharge)

One configuration for horizontal and vertical applications. Allows for field rotation of motor position.

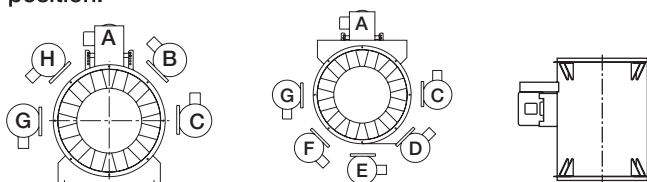


### OPTIONS AND ACCESSORIES

- Belt tube
- Companion flange
- Inlet and outlet guards
- Isolators - neoprene and spring
- Motor cover
- Mounting rails (Horizontal and all vertical applications)
- Copper lube lines
- UL/cUL-705 (Electrical)
- UL listed "Power Ventilators for Smoke Control Systems"
- Greenheck coatings (See coatings page 117)
- Roof upblast options available
- Totally enclosed belt guard or motor cover

### MOUNTING FOR SIZES 30 - 54 (Viewed from discharge)

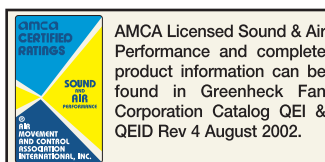
Available in horizontal and vertical configurations. Horizontal applications allow for field rotation of motor position.



### MODEL QEID

(Consult factory for Direct Drive availability)

UL/cUL - 705 US  
**UL Listed "Power Ventilators for Smoke Control Systems"**



**For complete product information refer to catalog Model QEI & QEID Mixed Flow Fans, or contact your local representative.**

# Tube Axial TDI/TBI-CA/TBI-FS



Model TDI direct drive tube axial fans are best suited for applications moving relatively clean, dry and cool air in commercial and industrial applications.

## APPLICATIONS

Clean Air • Fume Exhaust • Spark Resistant Construction

## PERFORMANCE

Capacities range from 2,100 cfm to 48,400 cfm and up to 0.875 in. wg of static pressure.



Model TBI-CA belt drive is a good selection where the motor must be mounted out of the airstream. Used with temperatures up to 200°F or contaminated air. Three levels of construction available.

## APPLICATIONS

Clean Air • Fume Exhaust • Spark Resistant Construction

## PERFORMANCE

Capacities range from 800 cfm to 96,000 cfm and up to 3.25 in. wg of static pressure.



Model TBI-FS belt drive fans have motors out of the airstream. They are a good choice for clean or contaminated airstreams with temperatures up to 400° F. Three levels of construction available.

## APPLICATIONS

High Temperature Process • UL/cUL Emergency Smoke • Industrial Space • Contaminated Air

## PERFORMANCE

Capacities range from 4,800 cfm to 76,000 cfm and up to 4 in. wg of static pressure.

## TDI STANDARD PERFORMANCE & DIMENSIONAL DATA

MODEL	A (I.D.)	B (O.D.)	C (B.C.)	D	MIN/MAX RPM	PERFORMANCE IN INCHES WG					
						0	.125	.25	.5	.75	.875
TDI-3-18	18 <sup>3</sup> / <sub>8</sub>	21 <sup>1</sup> / <sub>16</sub>	19%	18	1140	4190	3773	3189			
					1725	5873	5657	5417	4749	3919	
					1140	5336	4946	4454			
TDI-3-20	20 <sup>3</sup> / <sub>8</sub>	23 <sup>1</sup> / <sub>16</sub>	21%	19	1725	7018	6683	6355	5594	4443	
					860	6215	5391	4313			
					1140	9028	8399	7667			
TDI-3-24	24 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>16</sub>	25%	19	1725	12599	12226	11837	10922	9919	9380
					860	12478	11175	9659			
					1140	15600	14763	13793	11494		
TDI-3-30	30 <sup>3</sup> / <sub>8</sub>	33 <sup>9</sup> / <sub>16</sub>	32	21	1725	20634	19895	19175	17718	15819	14739
					860	21839	20153	18236			
					1140	26098	24952	23760	21096	17968	
TDI-3-36	36 <sup>3</sup> / <sub>8</sub>	39 <sup>9</sup> / <sub>16</sub>	38	21	1725	33394	32488	31582	29765	27577	26395
					860	24214	21392	18362			
					1140	27070	25358	23243	17850		
TDI-3-42	42 <sup>1</sup> / <sub>2</sub>	45 <sup>3</sup> / <sub>4</sub>	44 <sup>3</sup> / <sub>16</sub>	27	1140	40594	39128	37338	34109	29879	25360
					860	32194	28973	24774			
					860	38105	35525	32712	25851		
TDI-3-48	48 <sup>1</sup> / <sub>2</sub>	52 <sup>3</sup> / <sub>4</sub>	50%	27	1140	48408	46588	44919	41349	35525	32815

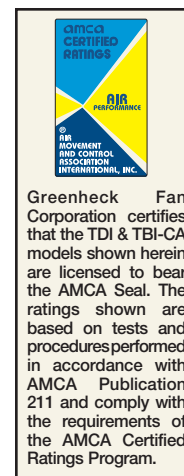
All dimensions in inches.  
Performance certified is for installation type D: Ducted inlet, Ducted outlet.  
Performance ratings do not include the effects of appurtenances (accessories).

Charts shown are for level 3 performance. For complete performance ratings for levels 3, 4 & 5, refer to the CAPS program or to catalogs Model TDI TBI-CA level 3 and Model TBI-CA level 4 & 5, or contact your local representative.

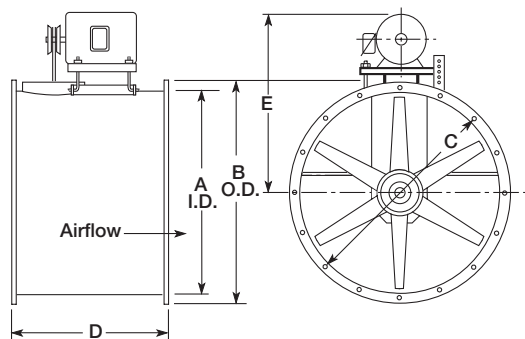
## TBI-CA STANDARD PERFORMANCE & DIMENSIONAL DATA

MODEL	A (I.D.)	B (O.D.)	C (B.C.)	D	E	MIN/MAX RPM	PERFORMANCE IN INCHES WG					
							.125	.25	.5	.75	1	1.25
TBI-CA-3L18	18 <sup>3</sup> / <sub>8</sub>	21 <sup>5</sup> / <sub>8</sub>	19%	22	21%	1890	1914	1659				
						3000	3225	3103	2825	2427	1868	1253
						1610	2171	1937				
TBI-CA-3H18	18 <sup>3</sup> / <sub>8</sub>	21 <sup>5</sup> / <sub>8</sub>	19%	22	21%	2710	3874	3758	3502	3209	2832	
						1189	2698	2331				
						2290	5583	5450	5152	4781	4358	
TBI-CA-3H20	20 <sup>3</sup> / <sub>8</sub>	23 <sup>5</sup> / <sub>8</sub>	21%	22	23%	1056	3126	2618				
						2225	7186	7032	6673	6234	5761	5483
						977	4931	4223				
TBI-CA-3H24	24 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>8</sub>	25%	23	26	1990	10858	10619	10085	9422	8718	7926
						848	7473	6405				
						1815	17648	17222	16278	15321	14327	13167
TBI-CA-3H30	30 <sup>3</sup> / <sub>8</sub>	33 <sup>5</sup> / <sub>8</sub>	32	24	29%	763	10388	8620				
						1710	25929	25301	23973	22609	21122	19364
						594	13266	10728				
TBI-CA-3H36	36 <sup>3</sup> / <sub>8</sub>	39 <sup>5</sup> / <sub>8</sub>	38	29	33%	1326	32585	31815	30334	28652	26506	23892
						490	16808	14083				
						1024	38804	37720	35371	33046	30421	25718
TBI-CA-3H42	42 <sup>1</sup> / <sub>2</sub>	45 <sup>3</sup> / <sub>4</sub>	44%	30	37%	476	27099	23391				
						910	56134	54567	51229	47707	42975	
						507	37656	33757				
TBI-CA-3H54	55	59%	57%	33	47%	970	76735	74906	71249	67412	62911	57746

All dimensions in inches.  
Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP/kW) does not include transmission losses.  
Performance ratings do not include the effects of appurtenances (accessories).



# Tube Axial TDI/TBI-CA/TBI-FS



SERVICE CHART	10 DAY
TDI - All sizes	✓
TBI-CA - All sizes	✓
TBI-FS - All sizes	✓

## STANDARD CONSTRUCTION FEATURES

TDI	TBI-CA	TBI-FS	STANDARD CONSTRUCTION FEATURES
■	■	■	Continuously Welded Housing
■	■		Cast Aluminum Hub and Blades
		■	Fabricated Steel Hub and Blades
■	■	■	AMCA Certified for Air Performance
		■	AMCA Certified for Sound
■	■	■	Permatecor Coating
■	■	■	Universal Mounting System
	■	■	Belt Tube and Bearing Cover
	■	■	Minimum Bearing Life of L(10) 80,000 Hrs
	■	■	Extended Lubrication Lines

## OPTIONS AND ACCESSORIES

TDI	TBI-CA / FS	OPTIONS AND ACCESSORIES
■	■	UL/cUL-705 (Electrical)
	■	Shaft Seal
	■	Belt Guard
■	■	Bolted or Hinged Access Door
	■	Motor Cover
■	■	Inlet and Outlet Guards
■	■	Inlet Bell
■	■	Companion Flanges
■	■	Isolators - Base, Hanging, and Spring
■	■	NEMA 1 & 3R Disconnect Switches
■	■	Greenheck Coatings (See page 117)
■	■	Inspection Section
	■	Mounting Rails
	■ (FS)	Continuous Duty High Temperature
	■ (ES)	UL Power Ventilators For Smoke Control

## TBI-FS INLINE PERFORMANCE & DIMENSIONAL DATA

MODEL	A	B	C (B.C)	D	E	MIN/MAX RPM	PERFORMANCE IN INCHES WG					
							.125	.5	1.5	2	3	4
TBI-FS-3H 24	24 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>4</sub>	23	26	971	5425					
						1988	9990	9416	6827			
						1122		5439				
TBI-FS-4H 24	24 <sup>3</sup> / <sub>8</sub>	27 <sup>5</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>4</sub>	28	28	2707		12829	11825	11228	9161	5907
						794	8256					
						1834	14545	13838	11006			
TBI-FS-3H 30	30 <sup>3</sup> / <sub>8</sub>	33 <sup>5</sup> / <sub>8</sub>	32	24	29 <sup>1</sup> / <sub>4</sub>	870	7653					
						2306	20075	18271	17201	13614	9546	
						660	11834					
TBI-FS-3H 36	36 <sup>3</sup> / <sub>8</sub>	39 <sup>5</sup> / <sub>8</sub>	38	29	33 <sup>3</sup> / <sub>4</sub>	1476	23800	22460	16514			
						782		11824				
						1824		27723	25857	24376	20432	13643
TBI-FS-3H 42	42 <sup>1</sup> / <sub>2</sub>	45 <sup>3</sup> / <sub>4</sub>	44 <sup>1</sup> / <sub>4</sub>	30	37 <sup>1</sup> / <sub>4</sub>	611	16553					
						1271	26614	25157	17430			
						689		15343				
TBI-FS-4H 42	42 <sup>1</sup> / <sub>2</sub>	45 <sup>3</sup> / <sub>4</sub>	44 <sup>1</sup> / <sub>4</sub>	39	40	1607		33454	30713	29526	24753	15561
						479	18483					
						1147	34369	31753	22055			
TBI-FS-3H 48	48 <sup>1</sup> / <sub>2</sub>	52 <sup>3</sup> / <sub>4</sub>	50 <sup>3</sup> / <sub>4</sub>	33	40 <sup>1</sup> / <sub>2</sub>	795	29849					
						1509		47501	44702	42568	37957	30148
						423	25121					
TBI-FS-3H 54	55	59 <sup>1</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>4</sub>	37 <sup>1</sup> / <sub>2</sub>	47 <sup>1</sup> / <sub>4</sub>	999	48511	46357	35171			
						675		39677				
						1337		61340	57710	56126	48925	36972

All dimensions in inches.

Performance certified is for installation type B: Free inlet, Ducted outlet. Power ratings (BHP/kW) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet LwA, sound power levels for installation type B: free inlet, ducted outlet. Ratings do not include the effects of end correction.

Greenheck Fan Corporation certifies that the TBI-FS 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.

**For complete product information on Greenheck's Tube Axial fans, please refer to the CAPS program or to catalogs TDI TBI-CA level 3, TBI-CA level 4 & 5, and TBI-FS, or contact your local representative.**

# Vane Axial Belt Drive - VAB

Model VAB fans feature the advantages of final system balancing, easier access to the motor, manually adjustable blade pitch, economical future upgrading, and the capability to operate in airstream temperatures up to 200° F. Fan sizes 18-48 are available on QB.



## PERFORMANCE

Capacities available on QB range from 2,000 cfm to 70,000 cfm and up to 7 in. wg of static pressure. Arrangement 9 belt drive.

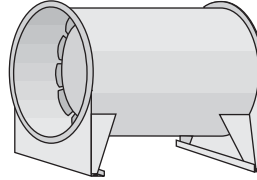
## SERVICE CHART

10 DAY

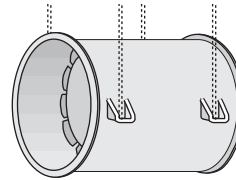
VAB - Sizes 18-48 - Class I



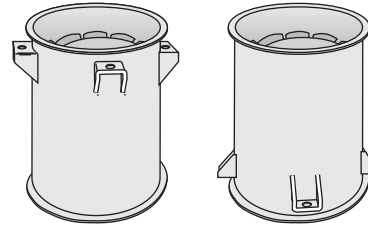
## MOUNTING OPTIONS



**HORIZONTAL MOUNTING LEGS**  
Heavy gauge steel support legs welded to the fan are punched to accept neoprene or spring vibration isolators.

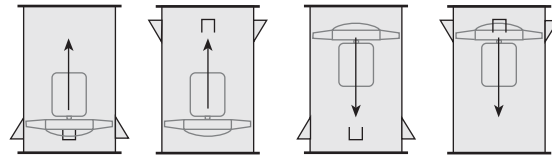


**HORIZONTAL SUSPENSION BRACKETS**  
Brackets welded to the fan housing for horizontal ceiling hung applications are punched to accept hanging neoprene or spring isolators.



## VERTICAL BASE OR SUSPENSION BRACKETS

Brackets welded to the fan housing for vertical base mount or vertical ceiling hung applications are punched to accept vibration isolators. Customer must specify one of the mounting arrangements shown below.



UBFBM

UBCH

DBFBM

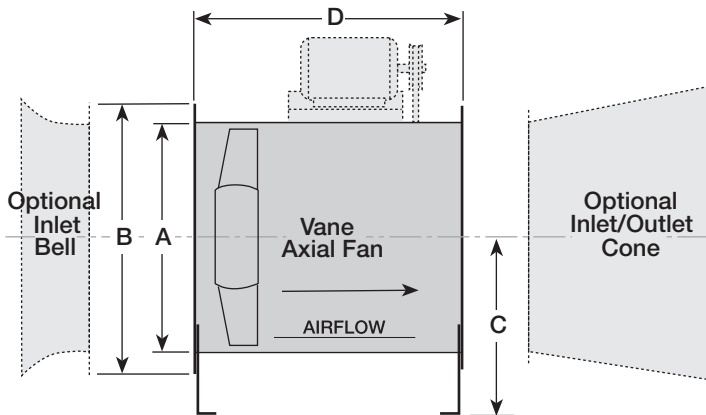
DBCH

## STANDARD CONSTRUCTION FEATURES

- AMCA certified for air performance
- Permator coating
- Final assembly vibration analysis
- Continuously welded housing
- Cast aluminum hub and blades
- Straightening vanes
- Extended copper lubrication lines

## OPTIONS AND ACCESSORIES

- Belt guard
- Motor cover
- Inlet bell
- Companion flanges
- Inspection section
- Inlet/outlet cone
- Safety screen for housings, inlet bell, and inlet/outlet cones
- Horizontal or vertical mounting options
- UL/cUL-705 (Electrical)
- Greenheck coatings (See coatings page 117)



## VAB DIMENSIONAL DATA

MODEL	A	B	C	D
VAB-18	18 <sup>3</sup> / <sub>8</sub>	21 <sup>1</sup> / <sub>4</sub>	13 <sup>1</sup> / <sub>2</sub>	32
VAB-20	20 <sup>3</sup> / <sub>8</sub>	23 <sup>3</sup> / <sub>4</sub>	15	32
VAB-24	24 <sup>3</sup> / <sub>8</sub>	27 <sup>3</sup> / <sub>4</sub>	17 <sup>1</sup> / <sub>2</sub>	36
VAB-30	30 <sup>3</sup> / <sub>8</sub>	33 <sup>3</sup> / <sub>4</sub>	21 <sup>1</sup> / <sub>4</sub>	40
VAB-36	36 <sup>3</sup> / <sub>8</sub>	39 <sup>3</sup> / <sub>4</sub>	25	40
VAB-42	42 <sup>1</sup> / <sub>2</sub>	47	29	44
VAB-48	48 <sup>1</sup> / <sub>2</sub>	53	34	48

All dimensions in inches.

*For complete product information, refer to the CAPS program or to the catalogs pertaining to the Vane Axial product line, or contact your local representative.*

