



Centrifugal Filtered Supply



KSFV • CSF • LSF

Belt Drive Centrifugal Filtered Supply Fans

Advancing Ventilation



MODEL FEATURES

- Supply air up to 12,600 CFM and static pressure capabilities to 2.5" w.g.
- Heavy-galvanized construction
- Belt drives permit easy performance adjustments when needed
- Forward curved centrifugal blower for efficient air flow at low sound levels
- Filters are washable and reusable

MODEL OVERVIEW

Model KSFV fans are roof curb or curb cap mounted filtered supply fans rated from 475 to over 12,000 CFM, static pressure capabilities to 2.5". They are specifically designed for filtered make-up air in kitchen hood applications. Model KSFV's rugged design with heavy-gauge galvanized construction provides maximum weather protection, long life and the utmost in performance efficiency. The forward curved centrifugal blower provides efficient air flow at low sound levels with static pressure capabilities to handle ducted air systems or hoods within a building. The filters are washable and are reusable to reduce maintenance costs.

The primary use of these fans is for filtered make-up air in kitchen hood applications but may also be specified for make-up air in commercial and industrial applications such as manufacturing and assembly areas.

Model KSFV is available in our Quickship program. Sizes 9-18 are available for next day or 3-day shipping from stock.



CONSTRUCTION/SPECIFICATION CHECKLIST

Blower

- Statically and dynamically balanced forward curved wheel.
- 12-gauge galvanized steel blower plate/discharge opening.
- 18-gauge galvanized steel housing.
- Pre-punched mounting holes.
- Conduit opening for wiring from below unit.

Motors

- 1 year warranty.
- Single speed open drip-proof are standard.
- Explosion-proof, totally enclosed and two-speed motors are available.
- All motors are rated for continuous duty.
- 182T and larger motors shipped unmounted for field installation.
- Disconnect switch standard with single speed drip-proof and totally enclosed motors.

Hood

- Heavy-gauge galvanized steel hood.
- 1 inch washable aluminum mesh filters.

Drives

- Adjustable motor pulleys are standard.
- Sized for minimum 150% of drive horsepower.
- Machined cast iron adjustable motor pulleys.
- Pivoting motor plate for belt tensioning.
- Nonstatic oil resistant V-belts.

Certifications

- AMCA Air and Sound Licensed.
- cULus Standard 705 Listed Power Roof Ventilator label assures electrical reliability.

All specifications are subject to change without notice unless approved in submittal by S&P.

OPTIONS/ACCESSORIES

Insulated Hood: High performance and ecologically friendly fiberglass free insulation only.

Intake Extension: Extensions are available for all size KSFV fans to provide NFPA required clearance from the exhaust fan on factory supplied common curbs. Extensions are made from heavy-gauge galvanized steel and require equipment supports on the intake end.

Roof Curb: Prefabricated heavy-gauge galvanized steel, welded construction, 12" high with 1-1/2" wood nailing. Options include single and double pitch construction and additional curb heights.



Motor Operated Damper: Motor operated aluminum damper for positive closure against backdraft.

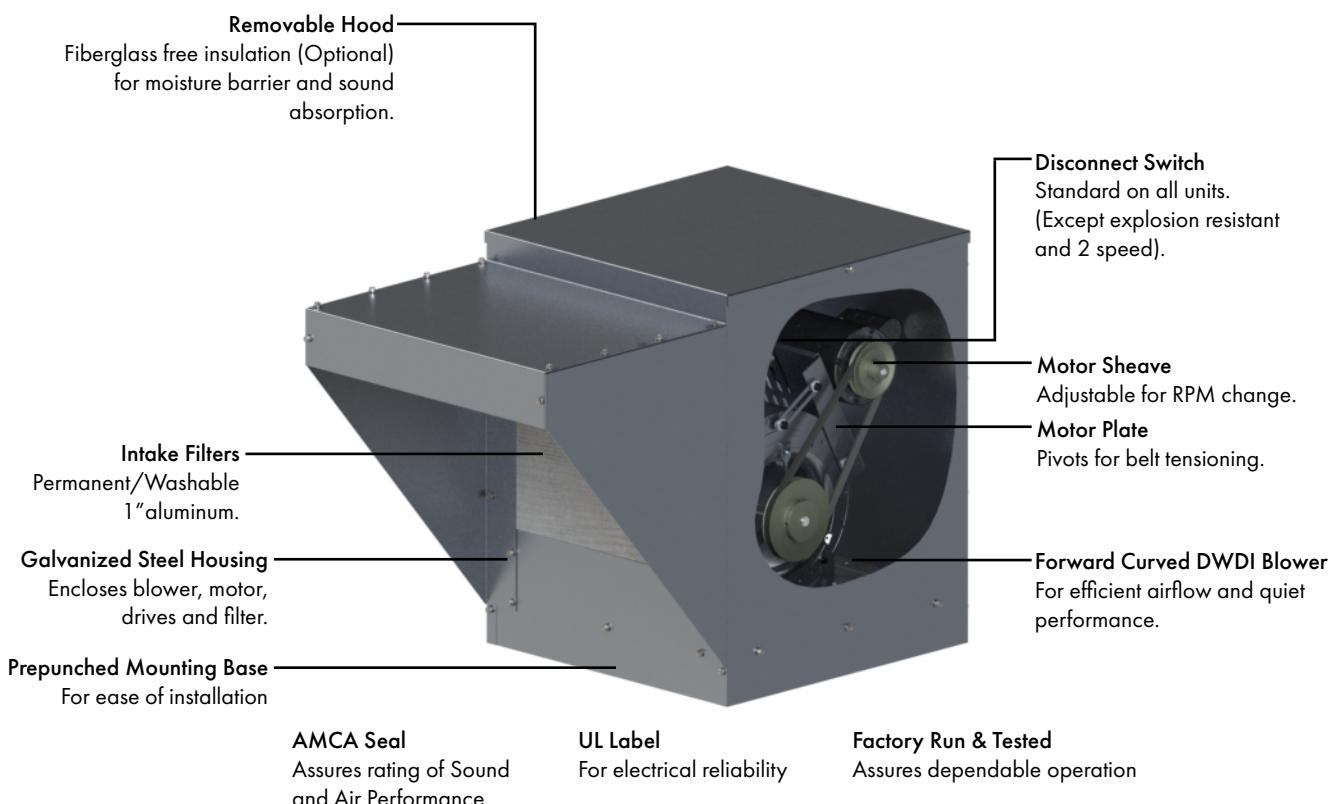


Automatic Damper: Automatic aluminum damper for ease in installation and effective backdraft protection (counter balanced).

Duct Adapter: For ease in connecting discharge duct to fan outlet.

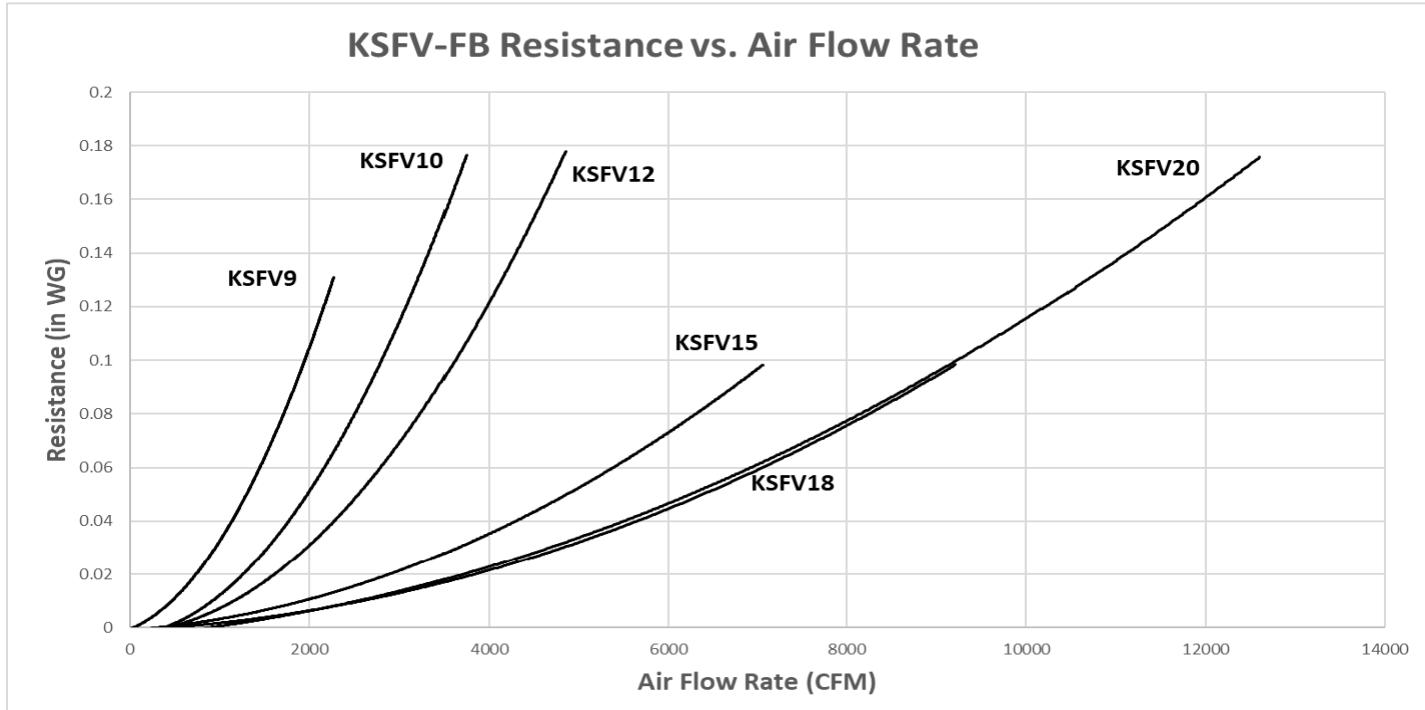
Common Curb: Designed to allow both the supply fan and exhaust fan to be mounted on the same curb. This curb requires only one roof opening and speeds installation time.

Special Coatings: For protective and decorative purposes. Available coatings include: Epoxy, Synthetic Resin, and Heresite (air-dried phenolic). Contact your S&P representative or the factory for more information on available coatings and colors.



KSFV-FB OPTION

Certain jurisdictions require MERV filter requirements, this optional filter bank incorporates MERV 13 filters behind the washable aluminum filters, allowing the products to meet these requirements.



Use the estimated resistance graphs to help select the proper fan that will deliver the desired airflow. Enter the graph from the bottom at the specified CFM and move vertically upward to the fan curve for the desired size, then horizontally to the left and read the estimated resistance resulting from the filter box. Add the resistance to the system design to obtain the total resistance to be used for the proper fan selection.

PERFORMANCE/DIMENSIONS

KSFV9

MODEL KSFV	CFM	OV	Static Pressure in Inches w.g.								
			1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2
475	534	RPM	466	-	-	-	-	-	-	-	-
		BHP	0.03	-	-	-	-	-	-	-	-
		SONES	6.4	-	-	-	-	-	-	-	-
575	646	RPM	503	-	-	-	-	-	-	-	-
		BHP	0.04	-	-	-	-	-	-	-	-
		SONES	8.0	-	-	-	-	-	-	-	-
675	758	RPM	541	661	-	-	-	-	-	-	-
		BHP	0.05	0.08	-	-	-	-	-	-	-
		SONES	9.8	16.5	-	-	-	-	-	-	-
775	871	RPM	578	697	-	-	-	-	-	-	-
		BHP	0.07	0.10	-	-	-	-	-	-	-
		SONES	11.9	19.3	-	-	-	-	-	-	-
875	983	RPM	623	735	826	-	-	-	-	-	-
		BHP	0.09	0.12	0.16	-	-	-	-	-	-
		SONES	15.0	22.2	27.2	-	-	-	-	-	-
975	1096	RPM	671	772	863	941	-	-	-	-	-
		BHP	0.12	0.15	0.19	0.23	-	-	-	-	-
		SONES	19.0	23.9	29.0	33.5	-	-	-	-	-
1075	1208	RPM	719	809	901	978	1047	-	-	-	-
		BHP	0.15	0.19	0.23	0.27	0.31	-	-	-	-
		SONES	23.8	26.1	30.9	35.3	39.7	-	-	-	-
1175	1320	RPM	762	851	939	1014	1083	1146	-	-	-
		BHP	0.18	0.23	0.27	0.32	0.36	0.41	-	-	-
		SONES	26.9	29.1	32.8	37.4	41.8	46.2	-	-	-
1275	1433	RPM	807	898	976	1052	1121	1182	-	-	-
		BHP	0.22	0.27	0.32	0.37	0.42	0.47	-	-	-
		SONES	30.0	32.5	34.9	39.6	44.1	48.6	-	-	-
1375	1545	RPM	857	948	1015	1091	1158	1219	1330	-	-
		BHP	0.27	0.33	0.37	0.43	0.48	0.54	0.64	-	-
		SONES	33.4	36.1	37.9	41.9	46.5	52.3	66.0	-	-
1475	1657	RPM	910	997	1059	1127	1196	1257	1366	1464	-
		BHP	0.33	0.39	0.44	0.49	0.56	0.61	0.72	0.83	-
		SONES	37.2	39.8	41.5	44.2	49.6	56.4	70.9	86.7	-
1575	1770	RPM	962	1041	1107	1166	1232	1295	1403	1500	1592
		BHP	0.40	0.46	0.51	0.57	0.63	0.69	0.81	0.93	1.05
		SONES	41.3	43.3	45.5	47.7	53.5	61.0	76.4	89.3	99.2
1675	1882	RPM	1016	1084	1156	1210	1270	1333	1441	1537	-
		BHP	0.47	0.53	0.60	0.65	0.71	0.78	0.91	1.04	-
		SONES	45.6	46.8	49.8	52.9	58.3	65.6	82.5	92.3	-
1975	2219	RPM	1177	1228	1294	1355	1401	1447	-	-	-
		BHP	0.75	0.81	0.89	0.97	1.03	1.10	-	-	-
		SONES	60.3	62.2	68.4	75.0	80.1	84.4	-	-	-
2075	2331	RPM	1232	1281	1338	1404	-	-	-	-	-
		BHP	0.86	0.93	1.00	1.09	-	-	-	-	-
		SONES	68.1	70.6	75.8	84.8	-	-	-	-	-
2175	2444	RPM	1286	1333	1383	-	-	-	-	-	-
		BHP	0.99	1.05	1.12	-	-	-	-	-	-
		SONES	77.2	80.3	84.9	-	-	-	-	-	-
2275	2556	RPM	1340	-	-	-	-	-	-	-	-
		BHP	1.12	-	-	-	-	-	-	-	-
		SONES	88.6	-	-	-	-	-	-	-	-



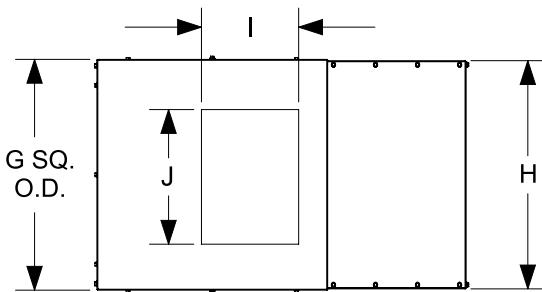
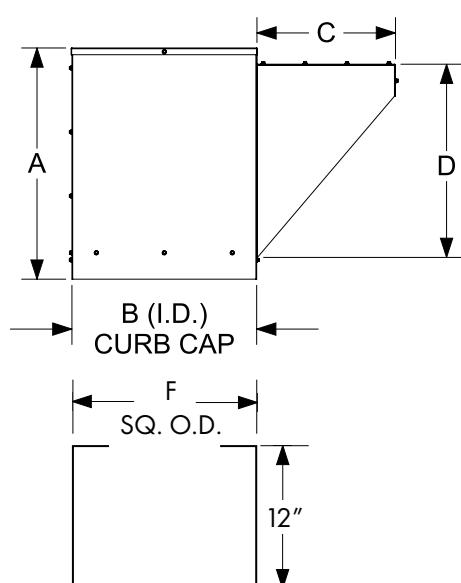
S&P USA Ventilation Systems, LLC, Div. of Soler & Palau Ventilation Group, certifies that the Models KSFV shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirement of the AMCA Certified Ratings Program.



STANDARD
705

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 a distance of 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for installation type B: ducted outlet hemispherical sone levels. Ratings do not include the effect of duct end correction.

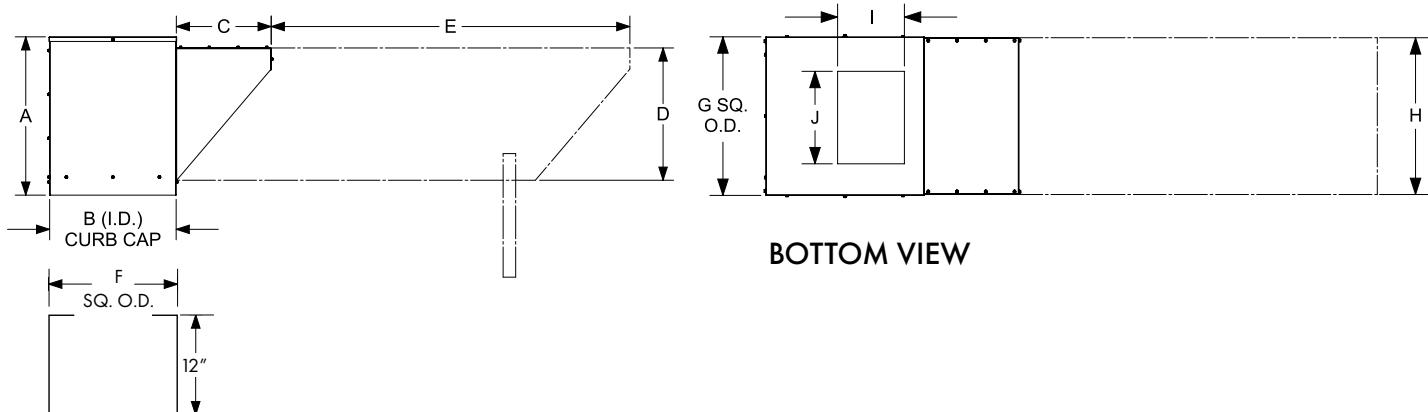
DIMENSIONS



BOTTOM VIEW

Model Size	A	B SQ.	C	D	F SQ.	G SQ.	H	I	J	Damper O.D.	Filters (QTY)
KSFV 9	30	23-7/8	18	25-1/8	22-1/2	24	24	10-3/8	12	18-1/2	20 X 20 (1)
KSFV 10	35	33-7/8	18	30-1/8	32-1/2	34	34	11-5/8	13-1/4	28-1/2	16 X 25 (2)
KSFV 12	35	33-7/8	18	30-1/8	32-1/2	34	34	13-5/8	15-3/4	28-1/2	16 X 25 (2)
KSFV 15	35	33-7/8	18	30-1/8	32-1/2	34	34	16-1/8	18-7/8	28-1/2	16 X 25 (2)
KSFV 18	43-1/8	41-7/8	18	30-1/8	40-1/2	42	42	19-1/8	22-1/8	36-1/2	20 X 25 (2)
KSFV 20	49-1/4	51-1/8	23	36-1/4	49	51-1/4	51-1/4	25	25-1/8	44-1/2	24 X 30 (2)

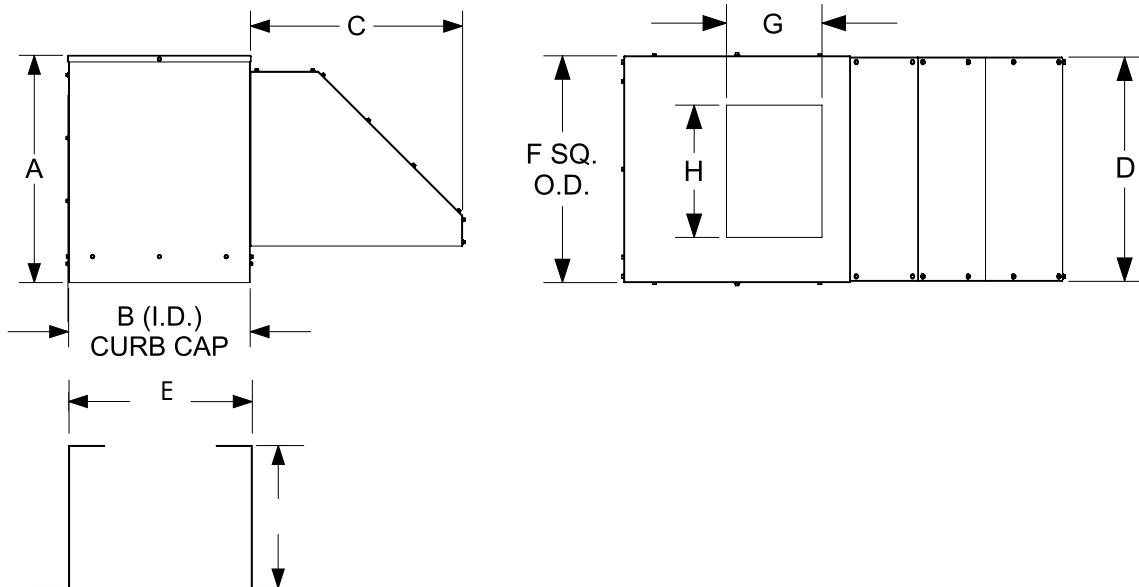
DIMENSIONS WITH OPTIONAL INTAKE EXTENSION



BOTTOM VIEW

Model Size	A	B SQ.	C	D	E	F SQ.	G SQ.	H	I	J	DAMPER O.D.	FILTERS (QTY)
KSFV 9	30	23-7/8	18	25-1/8	74-1/4	22-1/2	24	24	10-3/8	12	18-1/2	20 X 20 (1)
KSFV 10	35	33-7/8	18	30-1/8	74-1/4	32-1/2	34	34	11-5/8	13-1/4	28-1/2	16 X 25 (2)
KSFV 12	35	33-7/8	18	30-1/8	74-1/4	32-1/2	34	34	13-5/8	15-3/4	28-1/2	16 X 25 (2)
KSFV 15	35	33-7/8	18	30-1/8	74-1/4	32-1/2	34	34	16-1/8	18-7/8	28-1/2	16 X 25 (2)
KSFV 18	43-1/8	41-7/8	18	30-1/8	78-1/4	40-1/2	42	42	19-1/8	22-1/8	36-1/2	20 X 25 (2)
KSFV 20	49-1/4	51-1/8	23	36-1/4	78-1/4	49	51-1/4	51-1/4	25	25-1/8	44-1/2	24 X 30 (2)

LOW INTAKE DIMENSIONS



Model Size	A	B SQ.	C	D	E SQ.	F SQ.	G	H	Damper O.D.	FILTERS (QTY)
KSFV 9	30	23-7/8	28	24	22-1/2	24	10-3/8	12	18-1/2	20 X 20 (1)
KSFV 10	35	33-7/8	31-13/16	34	32-1/2	34	11-5/8	13-1/4	28-1/2	16 X 25 (2)
KSFV 12	35	33-7/8	31-13/16	34	32-1/2	34	13-5/8	15-3/4	28-1/2	16 X 25 (2)
KSFV 15	35	33-7/8	31-13/16	34	32-1/2	34	16-1/8	18-7/8	28-1/2	16 X 25 (2)
KSFV 18	43-1/8	41-7/8	33-15/16	42	40-1/2	42	19-1/8	22-1/8	36-1/2	20 X 25 (2)
KSFV 20	49-1/4	51-1/8	40-1/8	51-1/4	49	51-1/4	25	25-1/8	44-1/2	24 X 30 (2)

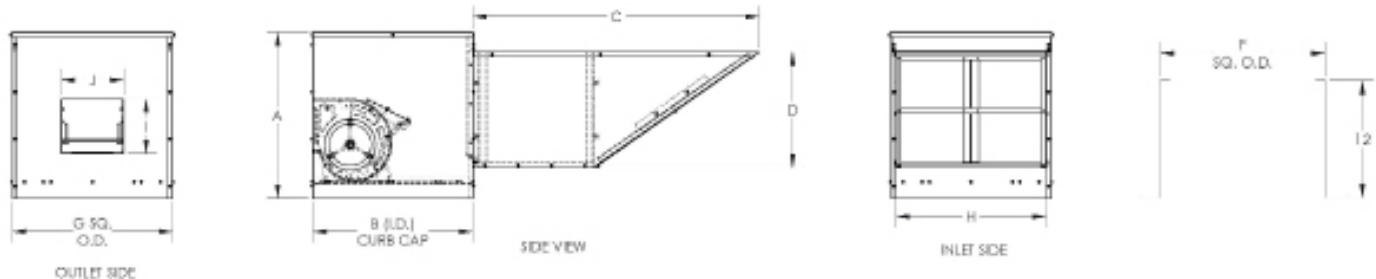
KSFV-FB OPTION



MODEL SIZE	A	B SQ.	C	D	F SQ.	G SQ.	H	I	J	DAMPER O.D.
KSFV09FB	30	23-7/8	45-5/8	24-5/8	22-1/2	24	24	10-3/8	12	18-1/2
KSFV10FB	35	33-7/8	60-5/8	24-5/8	32-1/2	34	34	11-5/8	13-1/4	28-1/2
KSFV12FB	35	33-7/8	60-5/8	24-5/8	32-1/2	34	34	13-5/8	15-3/4	28-1/2
KSFV15FB	35	33-7/8	70	31-1/4	32-1/2	34	34	16-1/8	18-7/8	28-1/2
KSFV18FB	43-1/8	41-7/8	63-1/2	31-1/4	40-1/2	42	42	19-1/8	22-1/8	36-1/2
KSFV20FB	49-1/4	51-1/8	82	40-1/4	49	51-1/4	51-1/4	25	25-1/8	44-1/2

MODEL SIZE	WASHABLE INLET FILTERS		MERV 13 FILTERS	
	QTY	SIZE	QTY	SIZE
KSFV09FB	2	16X20X1	3	20X25X2
KSFV10FB	4	16X20X1	5	25X25X2
KSFV12FB	4	16X20X1	5	25X25X2
KSFV15FB	4	16X25X1	12	16X25X2
KSFV18FB	2	20X20X1	16	16X25X2
	2	20X25X1		
KSFV20FB	4	25X32X1	8	16X25X2
			8	25X25X2

KSFV-FB SIDE DISCHARGE FILTERED UNITS



MODEL SIZE	A	B SQ.	C	D	F SQ.	G SQ.	H	I	J	DAMPER O.D.
KSFV09FB	30	23-7/8	45-5/8	24-5/8	22-1/2	24	24	10-3/8	12	18-1/2
KSFV10FB	35	33-7/8	60-5/8	24-5/8	32-1/2	34	34	11-5/8	13-1/4	28-1/2
KSFV12FB	35	33-7/8	60-5/8	24-5/8	32-1/2	34	34	13-5/8	15-3/4	28-1/2
KSFV15FB	35	33-7/8	70	31-1/4	32-1/2	34	34	16-1/8	18-7/8	28-1/2
KSFV18FB	43-1/8	41-7/8	63-1/2	31-1/4	40-1/2	42	42	19-1/8	22-1/8	36-1/2
KSFV20FB	49-1/4	51-1/8	82	40-1/4	49	51-1/4	51-1/4	25	25-1/8	44-1/2

MODEL SIZE	WASHABLE INLET FILTERS		MERV 13 FILTERS	
	QTY	SIZE	QTY	SIZE
KSFV09FB	2	16X20X1	3	20X25X2
KSFV10FB	4	16X20X1	5	25X25X2
KSFV12FB	4	16X20X1	5	25X25X2
KSFV15FB	4	16X25X1	12	16X25X2
KSFV18FB	2	20X20X1	16	16X25X2
	2	20X25X1		
KSFV20FB	4	25X32X1	8	16X25X2
			8	25X25X2

MODELS CSF & LSF

BELT DRIVE CENTRIFUGAL FILTERED SUPPLY FANS



Model CSF
Hooded Design



Model LSF
Louvered Penthouse Design

MODEL FEATURES

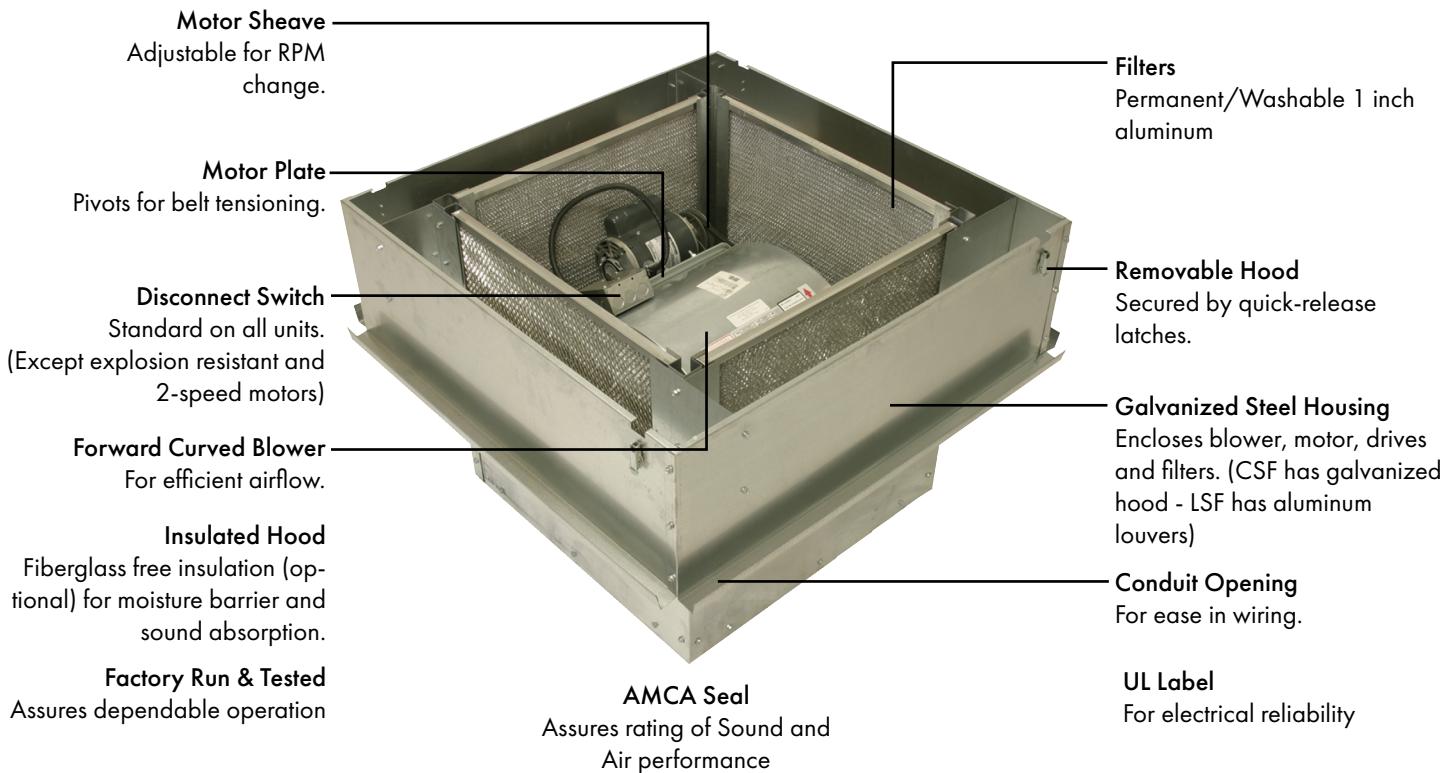
- Supply air to over 13,000 CFM in static pressure capabilities to 2" w.g.
- Heavy-galvanized construction
- Belt drives permit easy performance adjustments when needed
- Forward curved centrifugal blower for efficient air flow at low sound levels
- Filters are washable and reusable
- AMCA Air and Sound Licensed
- cULus 705 Listed

MODEL OVERVIEW

Models CSF and LSF units are roof mounted, filtered supply fans rated from 375 to over 13,000 CFM, with static pressure capabilities to 2". Model CSF's rugged, heavy-gauge galvanized hood and stack provide maximum weather protection and long life. Model LSF's architecturally pleasing, heavy-gauge aluminum louver design provides long life and the utmost in performance efficiency. All models are belt driven for easier performance adjustment and quieter operation. Adjustable motor pulleys further simplify fan speed changes.

S&P's Centrifugal Filtered Supply Fans are used to replace exhausted fumes, vapors and gases with fresh, filtered make-up air in commercial and industrial applications such as manufacturing and assembly areas, kitchens, athletic clubs and many others.

CONSTRUCTION FEATURES AND OPTIONS



Industry best 5 year fan housing warranty, 1 year motor warranty

All specifications are subject to change without notice unless approved in submittal by S&P.

CONSTRUCTION/SPECIFICATION CHECKLIST

Blower/Housing

- Statically and dynamically balanced forward curved wheel.
- 12-gauge galvanized steel blower plate/discharge opening.
- Heavy-gauge galvanized steel housing.
- Pre-punched mounting holes.
- Conduit opening for wiring from below unit.

Hooded/Louvered Top

- Heavy-gauge aluminum louvered design. (LSF)
- Heavy-gauge galvanized steel hood. (CSF)
- Quick-release latches for removal from housing.
- Insulated for sound absorption and moisture barrier.
- Oversized for weather protection.
- 1" washable aluminum mesh filters.
- Mitered cut and welded corners. (LSF)

Drives

- Adjustable motor pulleys are standard.
- Sized for minimum 150% of drive horsepower.
- Pivoting motor plate for belt tensioning.
- Non-static oil resistant V-belts.

Bearings

- Five year warranty.
- Heavy-duty ball bearing type.
- Prelubricated and permanently sealed.

Motors

- One year warranty.
- Brands are nationally recognized and locally serviced.
- Open drip-proof construction is standard.
- Disconnect switch standard with single speed drip-proof and totally enclosed motors.
- Optional motor enclosures and types can be specified.

Certifications

- AMCA Air and Sound Licensed.
- cULus Standard 705 Listed Power Roof Ventilator label assures electrical reliability.
- cULus label must be specified when needed.



MODELS CSF & LSF

BELT DRIVE CENTRIFUGAL FILTERED SUPPLY FANS



OPTIONS/ACCESSORIES

Roof Curb: Prefabricated heavy-gauge galvanized steel, welded construction, 12" high with 1-1/2" wood nailer. Options include burglar bars, single and double pitch construction, and additional curb heights.



Motor Operated Damper: Motor operated aluminum damper for positive closure against backdraft (counter balanced).



Automatic Damper: Automatic aluminum damper for ease in installation and effective backdraft protection (counter balanced).

Duct Adaptor: For ease in connecting discharge duct to fan outlet.

Side Discharge: For convenient connection to a supply duct when mounted on roof where the inside ceiling height is limited (CSF). Not available on CSF9.

Special Coatings: For protective and decorative purposes. Available coatings include: Epoxy, Synthetic Resin, and Heresite (air-dried phenolic). Contact your S&P representative or the factory for more information on available coatings and colors.

CSF18 Cont.

MODEL CSF	CFM	OV		Static Pressure in Inches w.g.									
				1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2
18	8550	2908	RPM	647	673	697	721	744	767	812	856	900	987
			BHP	3.81	4.07	4.31	4.55	4.79	5.03	5.51	6.01	6.51	7.58
			Sones	36	35	30	28	27	27	27	27	28	29
	8900	3027	RPM	672	696	720	743	766	788	831	874	916	-
			BHP	4.28	4.54	4.8	5.05	5.3	5.55	6.05	6.56	7.08	-
			Sones	39	39	34	30	29	29	29	29	29	-
	9250	3146	RPM	696	720	743	765	787	808	851	892	933	-
			BHP	4.78	5.06	5.33	5.59	5.85	6.11	6.63	7.15	7.69	-
			Sones	41	42	37	33	31	31	31	31	31	-
	9600	3265	RPM	721	744	766	788	809	829	870	910	-	-
			BHP	5.32	5.61	5.89	6.16	6.43	6.7	7.24	7.78	-	-
			Sones	44	45	41	37	34	34	34	34	-	-
	9950	3384	RPM	745	768	789	810	831	851	-	-	-	-
			BHP	5.9	6.2	6.49	6.78	7.06	7.34	-	-	-	-
				48	49	45	41	37	36	-	-	-	-
	10300	3503	RPM	771	796	819	840	862	-	-	-	-	-
			BHP	6.5	6.9	7.2	7.5	7.8	-	-	-	-	-
			Sones	52	53	51	46	42	-	-	-	-	-
	10650	3622	RPM	796	820	842	-	-	-	-	-	-	-
			BHP	7.3	7.6	7.8	-	-	-	-	-	-	-
			Sones	56	57	56	-	-	-	-	-	-	-



S&P USA Ventilation Systems, LLC, Div. of Soler & Palau Ventilation Group, certifies that the Model CSF shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirement of the AMCA Certified Ratings Program.



UL STANDARD 705

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 far sones at a distance of 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for installation type B: ducted outlet hemispherical sone levels. Ratings do not include the effect of duct end correction.



LSF PERFORMANCE

LSF 9

MODEL LSF	CFM	OV	Static Pressure in Inches w.g.							
			1/8	1/4	3/8	1/2	5/8	3/4	1	
9	475	540	RPM	431	-	-	-	-	-	-
			BHP	0.03	-	-	-	-	-	-
			Sones	4.1	-	-	-	-	-	-
	575	653	RPM	437	-	-	-	-	-	-
			BHP	0.04	-	-	-	-	-	-
			Sones	4.3	-	-	-	-	-	-
	675	767	RPM	455	-	-	-	-	-	-
			BHP	0.05	-	-	-	-	-	-
			Sones	4.9	-	-	-	-	-	-
	775	881	RPM	480	614	-	-	-	-	-
			BHP	0.06	0.1	-	-	-	-	-
			Sones	5.8	10.3	-	-	-	-	-
	875	994	RPM	509	628	-	-	-	-	-
			BHP	0.08	0.12	-	-	-	-	-
			Sones	6.9	11	-	-	-	-	-
	975	1108	RPM	540	647	755	-	-	-	-
			BHP	0.1	0.14	0.19	-	-	-	-
			Sones	8.3	11.9	15.2	-	-	-	-
	1075	1222	RPM	574	672	769	867	-	-	-
			BHP	0.13	0.17	0.22	0.27	-	-	-
			Sones	9.8	13	15.7	18.9	-	-	-
	1175	1335	RPM	610	700	789	878	-	-	-
			BHP	0.16	0.2	0.25	0.31	-	-	-
			Sones	11.7	14	16.4	19.3	-	-	-
	1275	1449	RPM	646	731	814	894	976	-	-
			BHP	0.2	0.24	0.29	0.35	0.41	-	-
			Sones	13.7	15.3	17.4	20	25	-	-
	1375	1563	RPM	683	763	840	915	991	1067	-
			BHP	0.24	0.29	0.34	0.4	0.46	0.53	-
			Sones	15.3	16.7	18.5	22	26	32	-
	1475	1676	RPM	721	796	868	939	1009	1080	1223
			BHP	0.29	0.34	0.39	0.45	0.52	0.59	0.75
			Sones	16.8	18.1	19.7	23	28	33	48
	1575	1790	RPM	759	832	899	965	1031	1098	1231
			BHP	0.34	0.4	0.46	0.52	0.58	0.65	0.81
			Sones	18.4	19.8	21	25	29	35	49
	1675	1903	RPM	797	867	931	994	1056	1118	1243
			BHP	0.41	0.47	0.52	0.59	0.65	0.72	0.88
			Sones	20	22	24	27	32	36	50
	1775	2017	RPM	837	903	965	1024	1084	1142	1259
			BHP	0.48	0.54	0.6	0.66	0.73	0.81	0.96
			Sones	22	24	26	30	34	39	52
	1875	2131	RPM	876	940	999	1056	1112	1168	1279
			BHP	0.55	0.62	0.68	0.75	0.82	0.9	1.06
			Sones	24	26	29	33	37	42	55
	1975	2244	RPM	915	978	1034	1089	1142	1195	-
			BHP	0.64	0.71	0.78	0.85	0.92	0.99	-
			Sones	26	29	32	36	40	45	-
	2075	2358	RPM	955	1015	1070	1123	1174	1224	-
			BHP	0.73	0.81	0.88	0.95	1.03	1.1	-
			Sones	29	32	36	40	44	49	-
	2175	2472	RPM	995	1053	1107	1157	-	-	-
			BHP	0.84	0.91	0.99	1.07	-	-	-
			Sones	33	36	39	44	-	-	-
	2275	2585	RPM	1035	1092	-	-	-	-	-
			BHP	0.95	1.03	-	-	-	-	-
			Sones	36	40	-	-	-	-	-
	2375	2699	RPM	1075	-	-	-	-	-	-
			BHP	1.07	-	-	-	-	-	-
			Sones	40	-	-	-	-	-	-



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UL STANDARD 705

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LSF 12

MODEL LSF	CFM	OV		Static Pressure in Inches w.g.							
				1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
12	1450	967	RPM	391	478	575	-	-	-	-	-
			BHP	0.14	0.2	0.28	-	-	-	-	-
			Sones	6.4	8	11.1	-	-	-	-	-
	1600	1067	RPM	414	492	576	-	-	-	-	-
			BHP	0.18	0.24	0.31	-	-	-	-	-
			Sones	7.5	8.6	11.2	-	-	-	-	-
	1750	1167	RPM	439	510	583	663	-	-	-	-
			BHP	0.22	0.28	0.36	0.46	-	-	-	-
			Sones	8.6	9.4	11.6	14.1	-	-	-	-
	1900	1267	RPM	465	530	596	667	742	-	-	-
			BHP	0.27	0.33	0.41	0.5	0.62	-	-	-
			Sones	9.8	10.5	12.4	14.5	16.8	-	-	-
	2050	1367	RPM	491	552	613	676	743	-	-	-
			BHP	0.33	0.4	0.47	0.56	0.67	-	-	-
			Sones	11.2	11.7	13.1	14.9	16.9	-	-	-
	2200	1467	RPM	518	576	632	689	749	813	-	-
			BHP	0.4	0.47	0.54	0.63	0.74	0.86	-	-
			Sones	12.7	13.1	13.9	15.3	17.2	20	-	-
	2350	1567	RPM	545	600	652	705	760	818	-	-
			BHP	0.47	0.55	0.63	0.72	0.82	0.94	-	-
			Sones	13.9	14.5	15.1	16.2	17.7	20	-	-
	2500	1667	RPM	573	625	675	724	775	827	938	-
			BHP	0.56	0.64	0.72	0.81	0.91	1.03	1.3	-
			Sones	15.4	15.7	16.2	17.3	18.6	21	26	-
	2650	1767	RPM	601	651	698	744	791	840	941	-
			BHP	0.65	0.74	0.82	0.92	1.02	1.13	1.39	-
			Sones	16.8	17.3	17.7	18.6	20	22	26	-
	2800	1867	RPM	629	677	722	766	810	855	949	1049
			BHP	0.76	0.85	0.94	1.04	1.14	1.25	1.51	1.82
			Sones	18.1	18.9	19.2	20	21	22	27	31
	2950	1967	RPM	657	703	747	789	830	873	960	1052
			BHP	0.87	0.97	1.07	1.17	1.27	1.38	1.63	1.94
			Sones	19.4	20	20	21	22	23	27	32
	3100	2067	RPM	685	730	772	812	852	892	973	1059
			BHP	1	1.11	1.21	1.31	1.42	1.53	1.78	2.07
			Sones	21	22	22	23	23	25	28	32
	3250	2167	RPM	714	758	798	836	874	912	989	-
			BHP	1.14	1.25	1.36	1.47	1.58	1.69	1.94	-
			Sones	22	23	24	24	25	26	29	-
	3400	2267	RPM	742	785	824	861	898	934	-	-
			BHP	1.3	1.42	1.53	1.64	1.75	1.87	-	-
			Sones	24	25	25	26	26	27	-	-
	3550	2367	RPM	771	813	850	886	921	956	-	-
			BHP	1.47	1.59	1.71	1.82	1.94	2.06	-	-
			Sones	25	26	27	27	28	29	-	-
	3700	2467	RPM	800	840	877	912	-	-	-	-
			BHP	1.65	1.78	1.9	2.02	-	-	-	-
			Sones	27	28	28	28	-	-	-	-
	3850	2567	RPM	829	868	904	-	-	-	-	-
			BHP	1.85	1.98	2.11	-	-	-	-	-
			Sones	28	29	30	-	-	-	-	-
	4000	2667	RPM	858	-	-	-	-	-	-	-
			BHP	2.06	-	-	-	-	-	-	-
			Sones	30	-	-	-	-	-	-	-



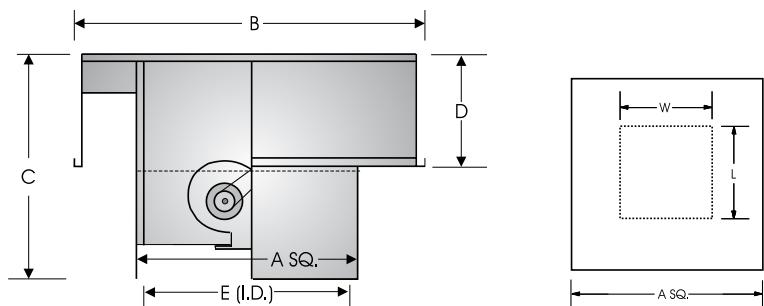
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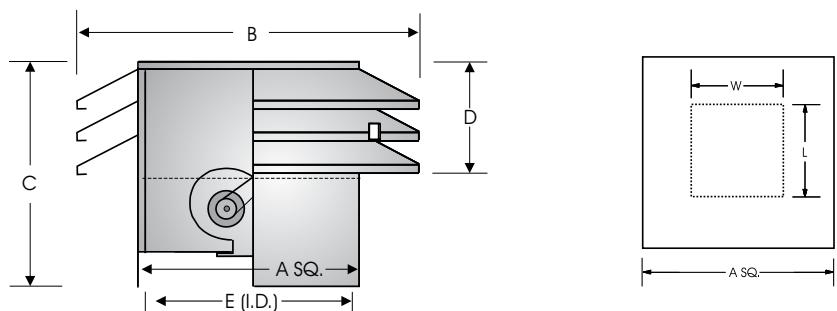
DIMENSIONS



CSF

Discharge Opening

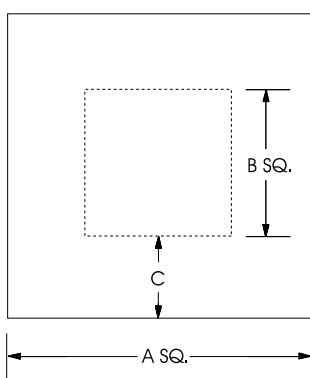
Model Size	A Housing OD	B Overall Width	C Overall Height	D Intake Height	Roof Opening	E Curb Cap ID	Damper OD	Discharge Opening	Filter Size/No.	No. Tiers	Avg. Ship Weight (lbs.)
CSF-9	24-1/2	37-1/2	23-1/2	16	19-1/2	24 X 24	16	12 X 10-1/2	16 X 20 X 1 (4)	N/A	265
CSF-10	28-1/2	43	23-1/2	16	23-1/2	28 X 28	20	13-1/4 X 11-5/8	16 X 25 X 1 (4)	N/A	290
CSF-12	28-1/2	43	30-1/2	16	23-1/2	28 X 28	20	15-7/8 X 13-5/8	16 X 25 X 1 (4)	N/A	340
CSF-15	32-1/2	50-1/2	32	16	27-1/2	32 X 32	24	18-7/8 X 16-1/4	16 X 25 X 1 (4)	N/A	380



LSF

Discharge Opening

Model Size	A Housing OD	B Overall Width	C Overall Height	D Intake Height	Roof Opening	E Curb Cap ID	Damper OD	Discharge Opening	Filter Size/No.	No. Tiers	Avg. Ship Weight (lbs.)
LSF-9	24-1/2	37-3/4	23-3/4	16-1/8	19-1/2	24 X 24	16	12 X 10-1/2	16 X 20 X 1 (4)	3	265
LSF-10	28-1/2	41-3/4	23-3/4	16	23-1/2	28 X 28	20	13-1/4 X 11-5/8	16 X 25 X 1 (4)	3	290
LSF-12	28-1/2	41-3/4	30-1/2	16	23-1/2	28 X 28	20	15-7/8 X 13-5/8	16 X 25 X 1 (4)	3	340
LSF-15	32-1/2	45-3/4	32	18	27-1/2	32 X 32	24	18-7/8 X 16-1/4	21-1/2 X 28 X 1 (4)	4	380
LSF-18	36-1/2	50	38-5/8	23	31-3/8	36 X 36	27	22-1/4 X 19	24 X 30 X 1 (4)	5	540



Duct Adaptor Dimensions

Model/Size CSF/LSF	A SQ.	B SQ.	C
CSF/LSF-9	18-1/2	14-1/2	2
CSF/LSF-10	22-1/2	18-1/2	2
CSF/LSF-12	22-1/2	18-1/2	2
CSF/LSF-15	26-1/2	20-1/2	3
CSF/LSF-18	30-1/2	24-1/2	3
CSF/LSF-20	45	30	7-1/2