



Fantech

Fan Guide Book

February 2004 – FB-0204



Air in Motion

FX Series FSD Series FRD Series FADE Series
RVF Series RE(C) Series CVS Series FR Series FKD Series



Find the Fan that Fits

Page by page, product by product, this Fantech Guide Book offers you ventilation solutions to meet a wide variety of residential and commercial requirements. Wherever you need air in motion – including kitchens, bathrooms, laundry rooms, hospitals, schools, office buildings, conference rooms and more – Fantech gives you whisper-quiet operation, solid dependability and true price-to-performance value. No matter the application, you're sure to find the fan that fits your project.



Index

<i>FR Series Fans</i>	2
<i>FX Series Fans</i>	4
<i>FKD Series Fans</i>	6
<i>Accessories Inlet/Outlet</i>	8
<i>FSD Series Fans</i>	10
<i>FRD Series Fans</i>	12
<i>Accessories Duct</i>	14
<i>RE(C) Series Fans</i>	16
<i>RVF Series Fans</i>	18
<i>Accessories Timers</i>	20
<i>CVS Series Fans</i>	22
<i>Accessories Miscellaneous</i>	24
<i>FADE Series Fans</i>	26



Fantech
Your Ventilation Solutions Company

Inline Centrifugal Fans for Round Duct

the ultimate in quality, quiet performance and cost efficiency



FR Series

FX Series

FKD Series



Fantech FR Series

Versatility and Value

Fantech's versatile FR Series fans feature a plastic housing constructed of UL-recognized, UV-protected thermoplastic resin. This tough protective shell allows the fan to be mounted in outdoor and wet locations.* Ideal for multiple point exhaust, dual bathroom exhaust, or new room additions, Fantech's FR Series fans are caulked at the motor screws, the wiring cables and along the seams of the fan to prevent moisture from entering the housing. Fantech's FR Series fans have long been the choice of residential builders and remodelers but now can be used for commercial projects with our recent UL commercial applications rating.

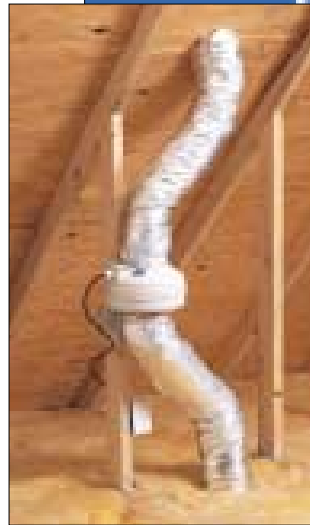
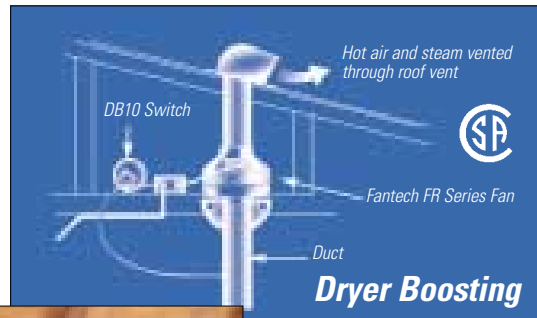
Easy to install

Loaded with features

- Prewired and supplied with a mounting bracket for easy installation
- Available singularly with bracket or in a variety of kits for specific applications. Each kit includes the appropriate fan and accessories
- Tested and approved by UL, CSA, or equals
- Approved for residential and commercial applications and for wet locations
- Suitable for airstream temperatures up to 140° F
- Easy connection using external wiring box with waterproof gasket
- 122-649 CFM
- 4" to 10" duct diameters
- 100% speed controllable
- Five-year factory warranty

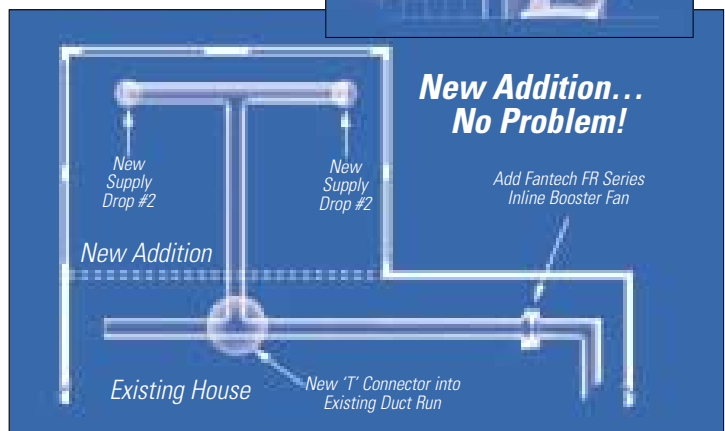
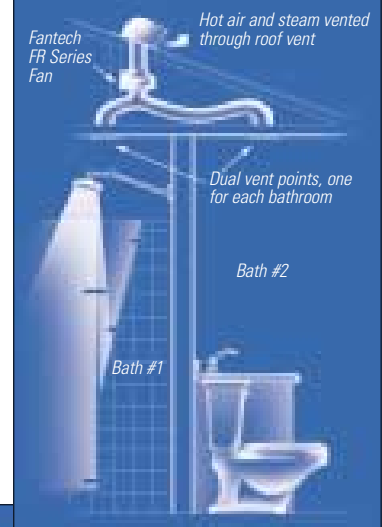
Kits are available for the following applications:

- Dryer Boosting Kit (DBF 110) for boosting clothes dryer installations with extended duct runs
- Regular Kits (REG 100 and REG 140) for single point exhaust applications
- Deluxe Kits (DLX 110, DLX 150, and DLX 200) designed for dual point exhaust applications
- Vent Light Kits (REG 100L, DLX 150L) for single and dual vent light exhaust applications



Typical attic installation

Two Baths... One Solution!



* The FR Series is not manufactured to operate with water running through the motor compartment, or to be used in applications where the fan would be buried underground. A UL-recognized waterproof conduit should be used for all outdoor applications to prevent moisture entry via knockout in wiring box.

FR Kits

Pictured from left to right: DBF110 – Dryer Boosting Kit; DLX150 – Dual Point Ventilation Kit; REG100L – Single Vent Light Kit. Additional kits (not pictured) are available.



DBF110



DLX150



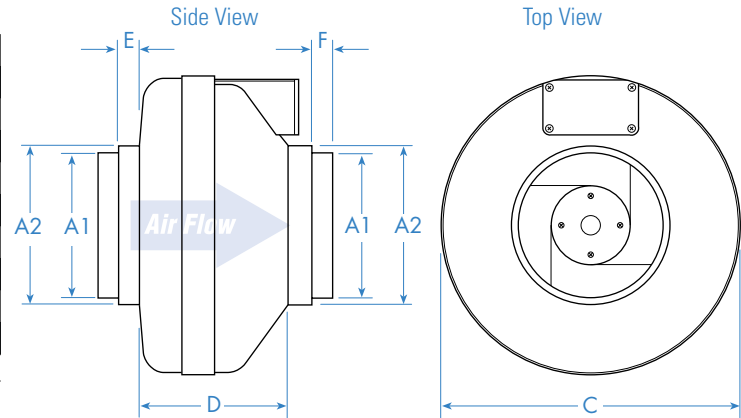
REG100L

Specifications

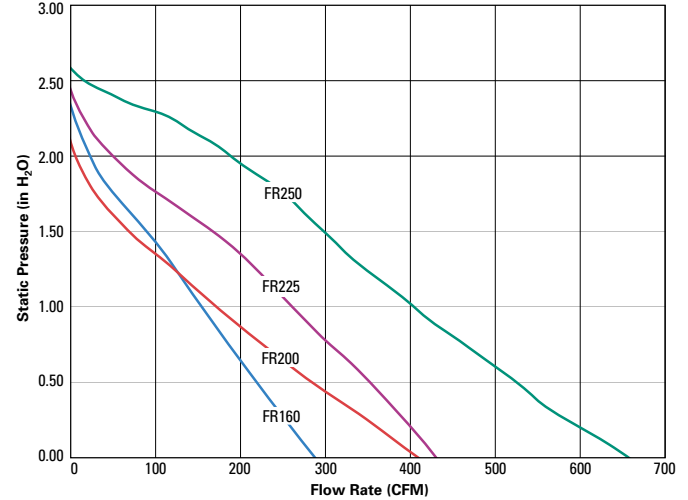
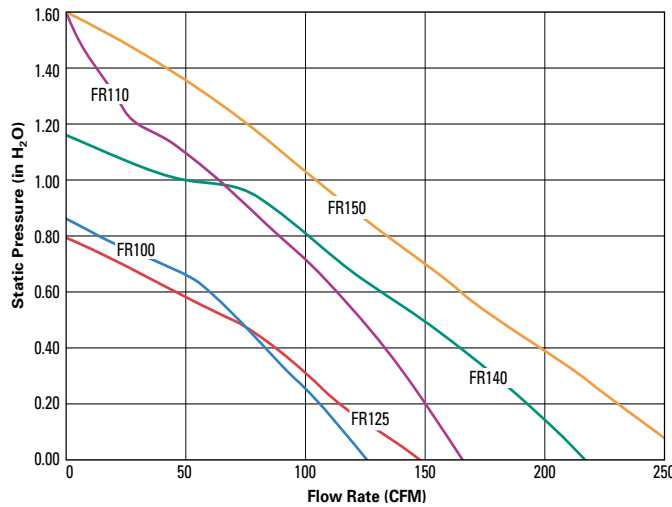
FR Series Dimensional Data

model	†A1	A2	C	D	E	F
FR 100	4	5	9½	6½	7⁄8	7⁄8
FR 110	4	5	9½	6½	7⁄8	7⁄8
FR 125	—	5	9½	6½	7⁄8	—
FR 140	6	6¼	11¾	57⁄8	1	7⁄8
FR 150	6	6¼	11¾	57⁄8	1	7⁄8
FR 160	6	6¼	11¾	63⁄8	1	7⁄8
FR 200	8	10	13¼	6¼	1½	1½
FR 225	8	10	13¼	6¼	1½	1½
FR 250	—	10	13¼	6¼	1½	—

All dimensions in inches. † Duct connections are 1/8" smaller than duct size.



FR Series Air Performance Graphs



FR Series Performance Data

Fan Model	Energy Star	RPM	Volts	Rated Watts	Wattage Range	Max. Amps	Static Pressure in Inches W.G.							Max. Ps	Duct Dia.
							0"	.2"	.4"	.6"	.8"	1.0"	1.5"		
FR 100	√	2900	115	19	13 – 19	0.18	122	100	78	55	15	—	—	0.87"	4"
FR 110	—	2900	115	80	62 – 80	0.72	167	150	133	113	88	63	4	1.60"	4"
FR 125	√	2950	115	18	15 – 18	0.18	148	120	88	47	—	—	—	0.79"	5"
FR 140	√	2850	115	61	47 – 62	0.53	214	190	162	132	99	46	—	1.15"	6"
FR 150	√	2750	120	71	54 – 72	0.67	263	230	198	167	136	106	17	1.58"	6"
FR 160	—	2750	115	129	103 – 130	1.14	289	260	233	206	179	154	89	2.32"	6"
FR 200	√	2750	115	122	106 – 128	1.11	408	360	308	259	213	173	72	2.14"	8"
FR 225	√	3100	115	137	111 – 152	1.35	429	400	366	332	297	260	168	2.48"	8"
FR 250	—	2850	115	241	146 – 248	2.40	649	600	553	506	454	403	294	2.58"	10"

FR Series performance is shown with ducted outlet. Per HVI's Certified Ratings Program, charted air flow performance has been derated by a factor based on actual test results and the certified rate at .2 inches WG.



Fantech FX Series

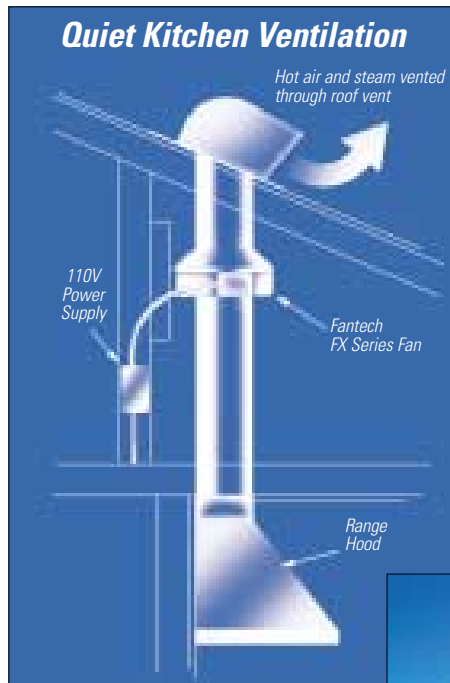
From Residential to Commercial

The Fantech FX Series' galvanized steel housing makes these fans ideal for various commercial code and residential applications. Home uses include range hood exhaust, duct boosting, bathroom exhaust and dryer boosting. Office applications include intake, exhaust, filtration, return or makeup air systems that require mounting versatility, high efficiency, low sound levels, and ease of service.

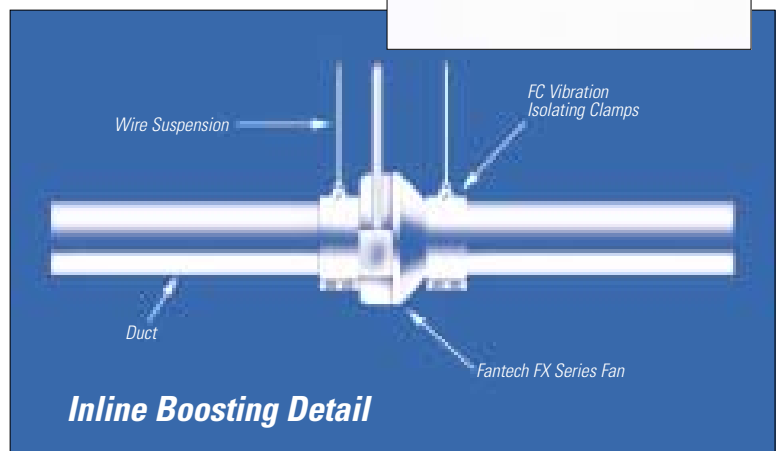
Fantech FX Series fans are a snap to install. Prewired and supplied with a mounting bracket, they can be mounted at any angle in any point along the ductwork. Straight-through airflow design also helps simplify installation. FX Series fans are designed to work with standard dimensions of spiral duct, eliminating the need for transition pieces.

Hard working. Long lasting. Here's why:

- Galvanized steel housing features baked powdercoat finish, perfect for commercial code applications
- Powered by external rotor motorized impeller for excellent heat dissipation, even at low RPM
- Tested and approved by UL, CSA, or equals
- Suitable for airstream temperatures up to 140° F
- 4" to 12" circular duct diameters
- Airflow from 117-801 CFM
- External rotor motor, Class B insulation for long and maintenance-free operation
- Automatic reset thermal overload protection
- Permanently lubricated sealed ball bearings
- True airfoil backward curved impeller
- External wiring box for ease of connection
- 100% speed controllable
- Five-year factory warranty



Fantech external rotor motor



FX Kits

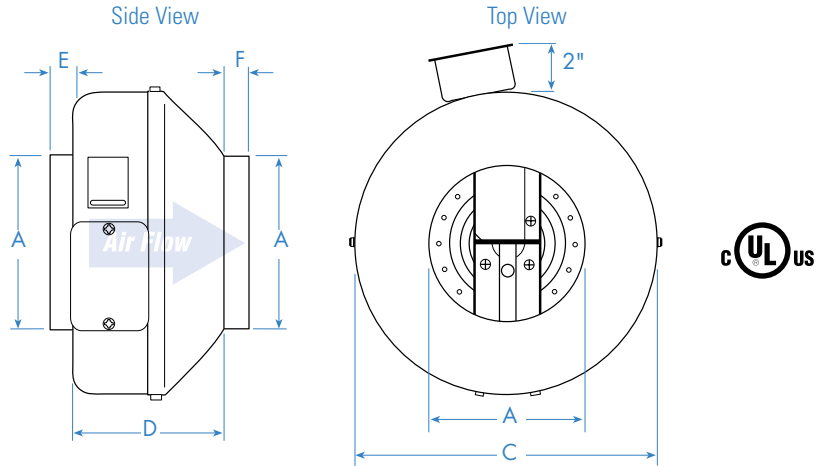
DBF4XL – Dryer Boosting fan kit. The perfect solution to dryer blues. For applications when an extended duct length is required.



Specifications

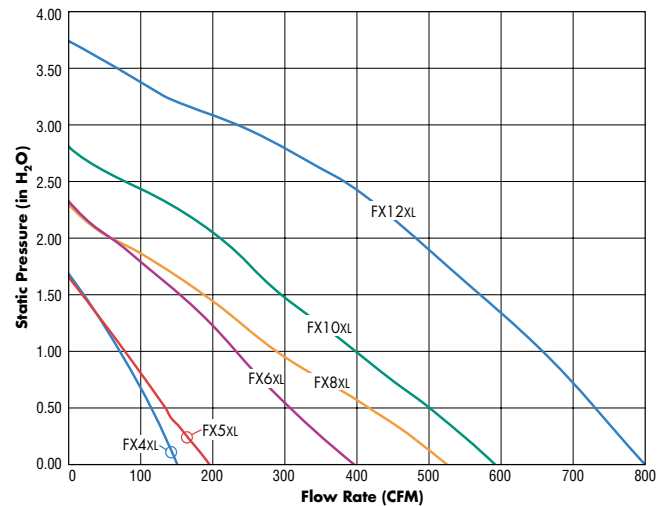
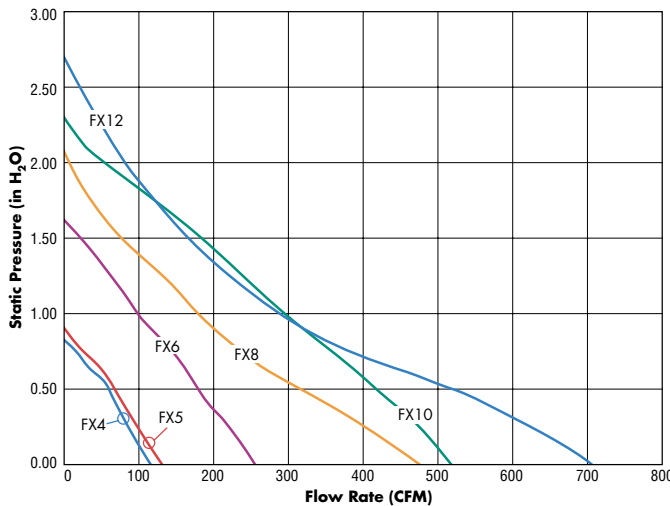
FX Series Dimensional Data

model	↑A	C	D	E	F
FX 4	4	8	5½	7⁄8	7⁄8
FX 4XL	4	9½	5½	7⁄8	¾
FX 5	5	8	5¼	7⁄8	7⁄8
FX 5XL	5	9½	5	7⁄8	1
FX 6	6	11½	6	¾	7⁄8
FX 6XL	6	13¼	6½	1	¾
FX 8	8	13¼	6¼	1	7⁄8
FX 8XL	8	13¼	6¼	1	7⁄8
FX 10	10	13¼	6¼	1	1¼
FX 10XL	10	13¼	6¼	1	1¼
FX 12	12	16	8¼	1	1¼
FX 12XL	12	16	8¼	1	1¼



All dimensions in inches. † Duct connections are 1/8" smaller than duct size.

FX Series Air Performance Graphs



FX Series Performance Data (For sound performance data refer to publication #FX-0799)

Fan Model	RPM	Volts	Max. Watts	Max. Amps	Static Pressure in Inches W.G.										Max. Ps	Duct Dia.
					0"	.125"	.25"	.375"	.5"	.75"	1.0"	1.25"	1.5"			
FX 4	2950	115	19	0.17	117	101	86	72	58	—	—	—	—	0.81"	4"	
FX 4XL	2800	115	83	0.73	148	139	130	120	111	90	68	42	—	1.65"	4"	
FX 5	2950	115	19	0.17	132	115	98	81	65	—	—	—	—	0.89"	5"	
FX 5XL	2650	115	87	0.76	191	175	161	146	131	102	75	45	—	1.61"	5"	
FX 6	2700	115	84	0.74	257	241	221	197	178	143	99	59	—	1.60"	6"	
FX 6XL	2950	115	147	1.26	392	368	346	326	305	263	228	191	150	2.27"	6"	
FX 8	2600	115	116	1.02	481	444	403	361	319	237	177	130	76	2.04"	8"	
FX 8XL	2950	115	152	1.31	521	496	469	440	411	345	282	231	180	2.29"	8"	
FX 10	3000	115	147	1.27	521	499	475	448	418	357	293	234	176	2.28"	10"	
FX 10XL	3000	115	242	2.11	590	565	541	519	496	442	394	339	290	2.79"	10"	
FX 12	2450	115	196	1.70	711	675	627	576	521	382	284	220	166	2.65"	12"	
FX 12XL	3250	115	373	3.21	801	783	765	747	729	692	655	611	566	3.69"	12"	



Fantech, Inc. certifies that the FX Series shown herein is 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.

Performance shown is for installation type D - Ducted inlet, Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream.

Fantech FKD Series

Inline Mixed Flow Duct Fans

With Fantech's FKD Series fans, "going with the flow" has never been easier. These fans are specifically designed to bridge the transition between centrifugal and axial by combining the high flow of axial designs with the higher pressure, non-overloading characteristics of backward curved impellers. Fantech's "The Straight Way" inline designs minimize system losses while being extremely compact.

The round inline design keeps air moving in ductwork sized from 8" to 20". 100% speed controllability gives extreme flexibility where there is need for varying airflow.

The lightweight, compact design FKD Series fans mount at any angle, at any point along the ductwork.

A balancing act that's easy to perform

With FKD Series fans, system balancing is achieved by measuring the system flow or pressure and adjusting the fan performance by "dialing in" or setting the fan speed using inexpensive solid state speed controls, transformers or VFDs. Direct drive eliminates the need for continuous belt alignment, tension adjustment and ongoing maintenance.

FYI:

FKD's performance features:

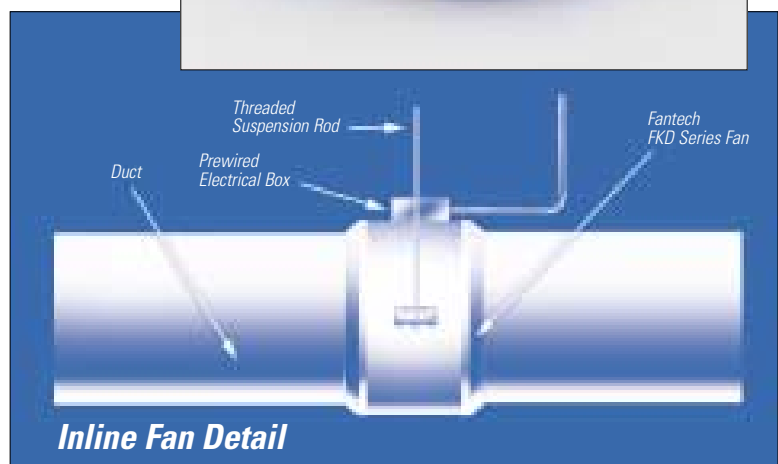
- Galvanized steel housing features baked powdercoat finish
- External rotor motor with built-in thermal overload protection and automatic reset
- Tested and approved by UL and CSA (or equals)
- Suitable for airstream temperatures up to 140° F
- Permanently lubricated sealed ball bearings
- 100% speed controllable for highly efficient and economical airflow
- Airflow up to 6291 CFM
- Terminal box with prewired electrical strip
- Mixed flow impeller
- Excellent heat dissipation to ensure long motor life
- Three-year warranty



Fantech's FKD external rotor motor – built to last.

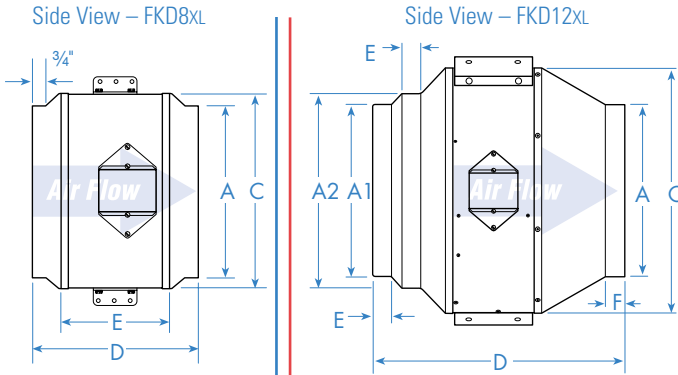
Fans pictured: Top—FKD12XL; Left—FKD10; and Bottom—FKD12S.

Transparent view of a FKD 10



Specifications

FKD Series Dimensional Data



model	A	C	D	E
FKD 8XL	8	12½	15½	7
FKD 10	10	12½	12½	7
FKD 10XL	10	14	15	8
FKD 12s	12	12½	10	7
FKD 12	12	14	12½	8
FKD 14s	14	14	†	8

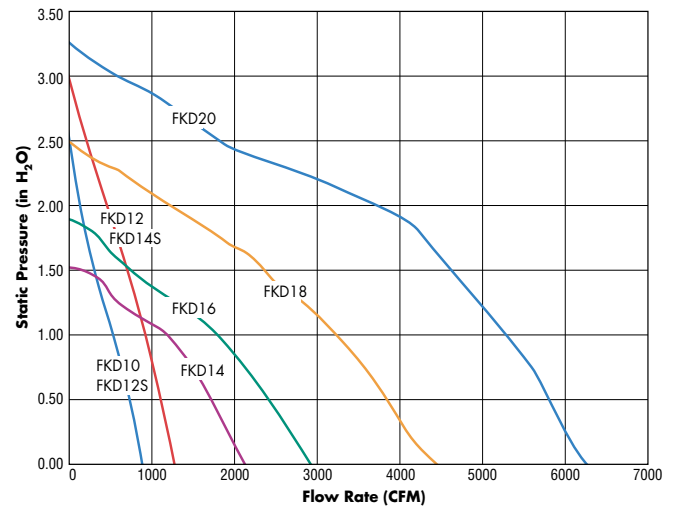
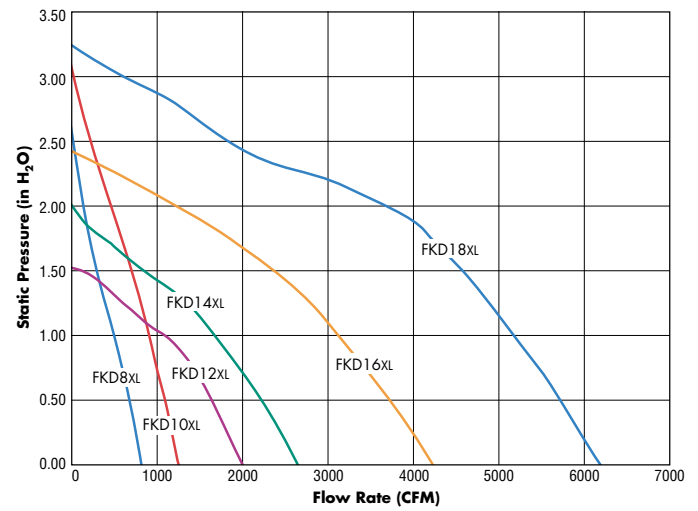
All dimensions in inches
† FKD 14s overall length is 8".

model	A	A1	A2	C	D	E	F
FKD 12XL	12	12	14	17⅞	18⅞	7⅞	1⅞
FKD 14	14	12	14	17⅞	17¼	1	1⅞
FKD 14XL	14	14	16	19¾	20¼	1½	1¼
FKD 16	16	14	16	19¾	18¾	1½	1⅞
FKD 16XL	16	16	18	22½	23¼	1¼	1⅞
FKD 18	18	16	18	22½	21¾	1¼	1⅞
FKD 18XL	18	18	20	28¼	29¼	2	1¾
FKD 20	20	18	20	28¼	27¼	2	1¾

All dimensions in inches



FKD Air Performance Graphs



FKD Series Performance Data (For sound performance data refer to publication #FKD-0803 and FKD-1100/2)

Fan Model	RPM	Volts	Max. Watts	Max. Amps	Static Pressure in Inches W.G.										Max. Ps.	Duct Dia.	'Sones
					0"	.125"	.25"	.375"	.5"	.75"	1.0"	1.25"	1.5"	2.0"			
FKD 8XL	2700	115	327	2.99 ¹	836	799	761	720	680	595	499	393	286	—	2.59"	8"	14.1
FKD 10	2700	115	329	3.01 ¹	910	873	836	795	752	653	547	432	342	—	2.60"	10"	15.3
FKD 10XL	2850	115	529	4.84 ²	1266	1226	1187	1147	1100	1006	911	810	696	460	3.08"	10"	21
FKD 12s	2700	115	323	2.95 ¹	930	889	848	804	758	657	550	443	343	—	2.54"	12"	15.2
FKD 12	2900	115	531	4.86 ²	1305	1266	1228	1189	1145	1054	948	833	712	479	3.08"	12"	23
FKD 12XL	1700	115	500	4.80 ²	2016	1920	1832	1746	1649	1423	1066	606	—	—	1.52"	12"	18.7
FKD 14s	2900	115	525	4.81 ²	1305	1261	1218	1174	1125	1025	923	814	703	469	3.12"	14"	23
FKD 14	1700	115	495	4.76 ²	2156	2061	1965	1868	1764	1520	1193	623	—	—	1.52"	14"	18.4
FKD 14XL	1550	115	738	7.12 ²	2619	2517	2416	2303	2180	1936	1662	1294	843	—	1.94"	14"	19.0
FKD 16	1600	115	742	6.39 ²	2952	2831	2707	2580	2445	2144	1804	1306	774	—	1.90"	16"	18.5
FKD 16XL	1600	115	1421	12.40 ³	4274	4144	4014	3880	3743	3452	3137	2794	2379	1242	2.42"	16"	25
FKD 18	1600	115	1411	12.04 ³	4448	4992	4130	3991	3871	3583	3239	2843	2380	1231	2.51"	18"	24
FKD 18XL	1700	460/3	2208	3.75	6236	6115	5995	5874	5754	5500	5199	4909	4602	3703	3.24"	18"	32
FKD 20	1750	460/3	2218	3.73	6291	6174	6054	5933	5829	5617	5307	4987	4667	3757	3.27"	20"	33



Fantech, Inc. certifies that the FKD Series shown herein is 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.

Performance shown is for installation type D - Ducted inlet, Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream. ¹ The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels. Ratings do not include the effect of duct end correction. All sone values shown are calculated at 0.5" (static pressure in inches W.G.).

Note: Three phase motors are wound for 230/460 volt. Motors are prewired for 460 volts but may be delivered as 230 volt or may be rewired in the field.
¹ Recommended speed control rating 5A. ² Recommended speed control rating 10A. ³ Recommended speed control rating 15A.

Inlet and Exhaust Accessories

*Adjustable Metal Grills—MGE
Adjustable Plastic Grills—PGE*



Designer Grills—DG



Adjustable Supply Grills—PGS



Soffit Vent—UEV



Roof Caps—RC



Vent Light Combination Grill—VLC



▲ *Intake Guards—IG*



Louvered Shutters—VK & HS

Inline Centrifugal Fans for Square and Rectangular Duct

the solid choice for commercial strength with economical operation



FSD Series

FRD Series



Fantech FSD Series

Their performance is a balancing act

Our FSD Series fans offer substantially quieter performance, simpler installation and easier system balancing than other arrangements. The mixed flow centrifugal type exhaust/supply fan is specifically designed to bridge the transition from axial to centrifugal by combining the high flow of axial designs with higher pressure, non-overloading characteristics of backward curved impellers. Fantech's "The Straight Way" inline designs minimize system losses while being extremely compact.

The square inline design keeps air moving in larger ductwork from 18" to 26" square duct dimensions. 100% speed controllability gives extreme flexibility where there is need for varying airflow.

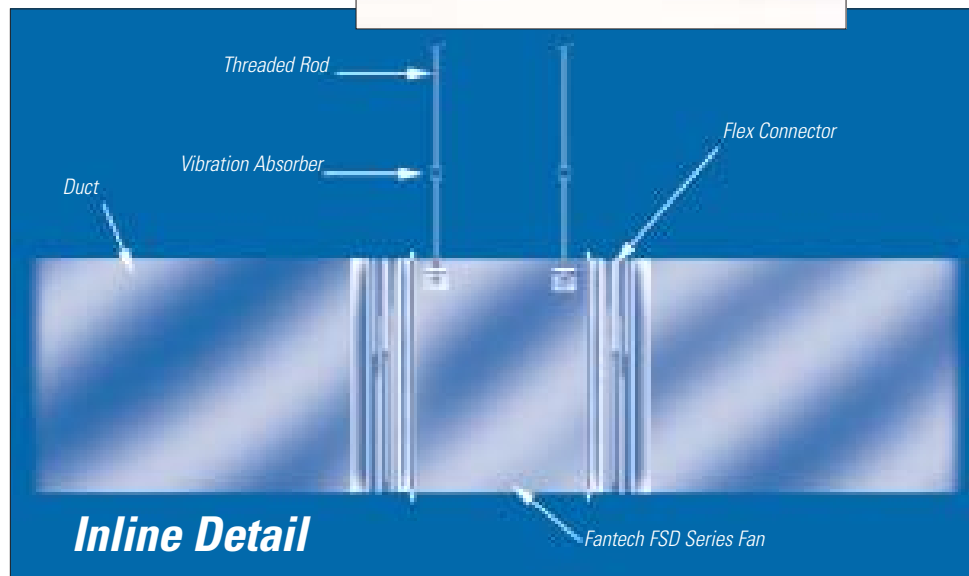
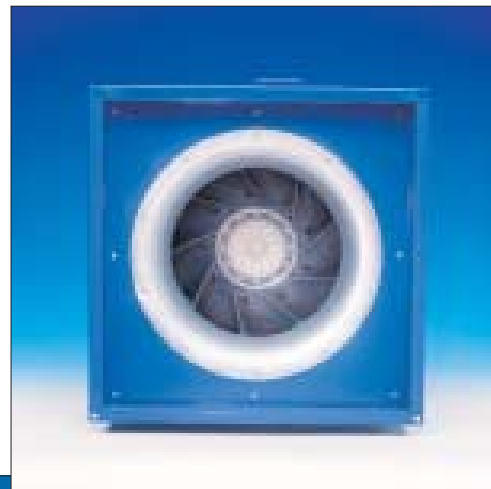
Total control for optimum results

With FSD Series fans, system balancing is achieved by measuring the system flow or pressure and adjusting the fan performance by "dialing in" or setting the fan speed using inexpensive solid state speed controls, transformers or VFDs. Direct drive eliminates the need for continuous belt alignment, tension adjustment and ongoing maintenance.

FSD fans are trouble-free Here are just a few reasons:

- Lightweight square design provides a larger discharge area and quieter operation
- Straight-through airflow design allows easy installation; no installation extras required. Can be mounted at any angle, anywhere along ductwork
- Galvanized steel housing features baked powdercoat finish
- Permanently lubricated sealed ball bearings
- 100% speed control for highly efficient and economical airflow
- Airflow up to 6993 CFM
- 18" to 26" square duct dimensions
- External rotor motor, Class B insulation. Sufficient service factor provided to ensure long and maintenance-free operation over maximum load conditions
- Automatic reset thermal overload protection
- Excellent heat dissipation, ensuring long motor life
- Terminal box with pre-wired electrical strip
- Mixed flow impeller design incorporates high flow with higher pressure, non-overloading characteristics and automatic reset thermal overload protection
- Suitable for airstream temperatures of up to 140° F
- Tested and approved by UL and CSA (or equals)
- Three-year warranty

FSD Series fan air intake view.



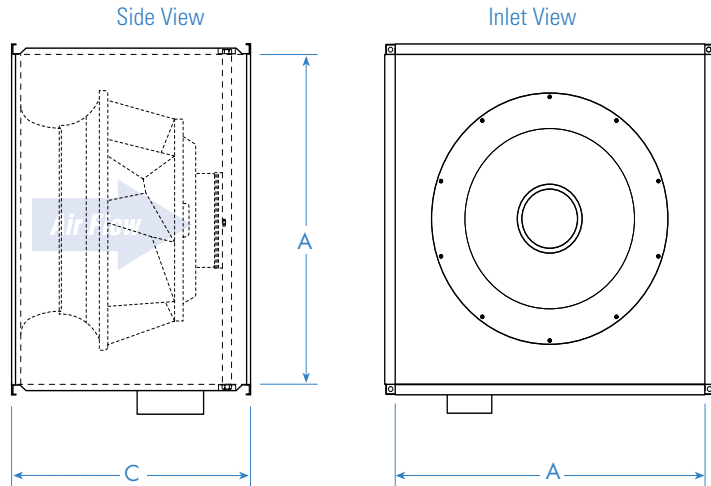
Inline Detail

Specifications

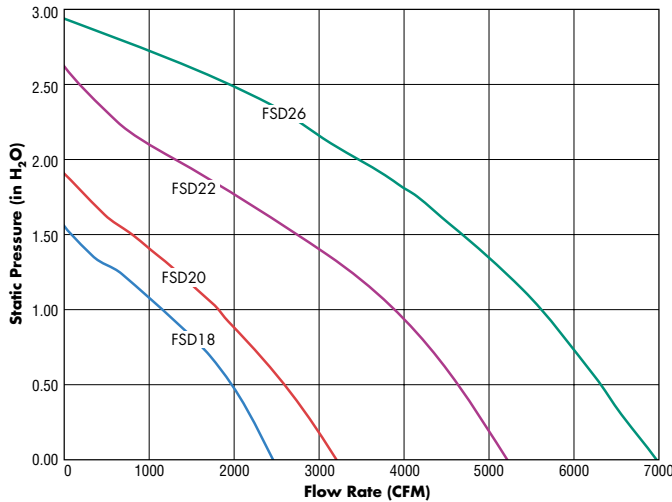
FSD Series Dimensional Data

model	A	C
FSD 18	17 $\frac{3}{8}$	15 $\frac{3}{4}$
FSD 20	19 $\frac{3}{4}$	17 $\frac{3}{4}$
FSD 22	21 $\frac{1}{2}$	19
FSD 26	26	20

All dimensions in inches.
Note: Flanges extend $\frac{7}{8}$ " beyond the A dimension.



FSD Air Performance Graph



Fantech, Inc. certifies that the FSD Series shown here-in is 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.



FSD Series Performance Data (For sound performance data refer to publication #FSD-0303)

Fan Model	RPM	Volts	Max. Watts	Max. Amps	Static Pressure in Inches W.G.										Max. Ps.	Duct Dim.*	†Sones	
					0"	.125"	.25"	.375"	.5"	.75"	1.0"	1.25"	1.5"	2.0"				2.5"
FSD 18	1700	115	517	4.80 ²	2463	2349	2237	2126	1987	1644	1180	658	—	—	—	1.57"	18"	12.4
FSD 20	1600	115	753	6.36 ²	3225	3073	2921	2766	2605	2241	1829	1341	815	—	—	1.92"	20"	14.1
FSD 22	1600	115	1554	15.00 ²	5223	5070	4918	4766	4605	4282	3865	3337	2716	1308	235	2.62"	22"	21
FSD 26	1700	460/3	2328	3.82	6993	6818	6644	6473	6317	5981	5608	5177	4681	3469	1937	2.94"	26"	27 [†]

Performance shown is for installation type A - Free inlet, free outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream.

* FSD Fans are square and duct dimensions are the same for width and height.

† The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet fan sone levels. All sone values are calculated at 0.5" (static pressure in inches W.G.).

‡ Sone Value at 0.75" (static pressure in inches W.G.).

Note: Three phase motors are wound for 230/460 volt. Motors are prewired for 460 volts but may be delivered as 230 volt or may be rewired in the field.

² Recommended speed control rating 10A. ³ Recommended speed control rating 15A.

External Rotor Motors

All FSD Series fans utilize our unique external rotor motors. The motor's totally enclosed design allows the fan to operate in high moisture, lint and dust laden air. The motors are a permanent split capacitor type, with automatic reset thermal overload protection and sealed ball bearings. These features ensure long life and maintenance free operation. All motors and impellers are designed as one integral unit, allowing for excellent motor heat dissipation, even at a low RPM.





Fantech FRD12-6, open view.

Maintenance made easy thanks to these FRD features:

- Galvanized steel housing features baked powdercoat finish
- Hinged door for service access
- External rotor motor for excellent heat dissipation even at low RPM, and built-in thermal overload protection with automatic reset.
- Suitable for airstream temperatures of up to 140° F
- Tested and approved by UL and CSA (or equals)
- Class B insulation and sufficient service factor provided to ensure long and maintenance free operation over maximum load conditions
- 100% speed controllable through voltage reduction, allowing for precision balancing of systems, and efficient, economical airflow
- Units can be provided with 115/1/60 or 208-230/1/60
- Permanently lubricated sealed ball bearings
- Airflow up to 2318 CFM
- Rectangular ductwork connections
- Terminal box with prewired electrical strip
- True airfoil backward curved impeller
- Excellent heat dissipation, ensuring long motor life
- Three-year warranty

Fantech FRD Series

Maximum power in a minimum of space

Limited space? No problem. Fantech's FRD Series centrifugal type exhaust/supply fans are specifically designed for large ventilation needs where space is at a premium, such as hospitals, schools, or office buildings. System balancing is easy. A simple speed adjustment equalizes all vents to compensate for hot or cold spots. And because the non-overloading backward-inclined wheels allow lint to pass through the blades, FRD Series fans are also ideally suited for use as duct booster fans in commercial dryer applications.

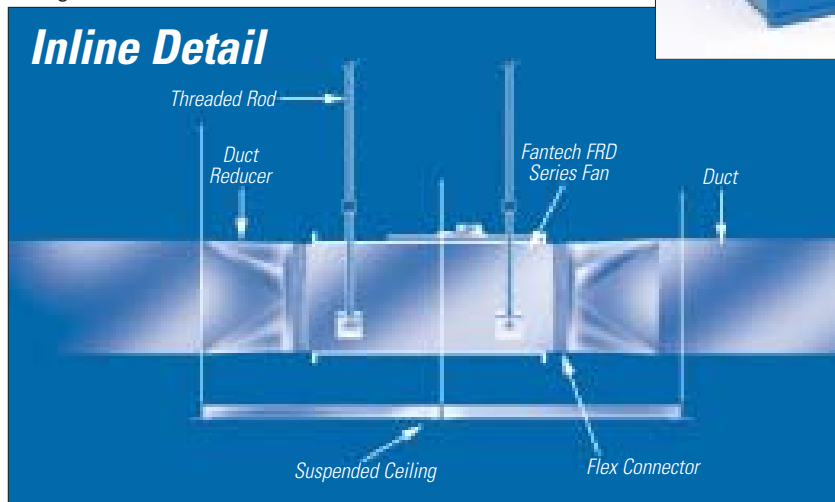
Direct-to-duct installation

The compact housing design of the FRD Series allows for installation directly within rectangular ductwork (ranging from 12"x 6" ducts to 24"x 14" ducts), without the need for large elbows or transitional sections.

FRD Series fans are simple to install; no extra materials are required. Simply mount the fan at any angle in any point in the ductwork. The motor is mounted on a hinged door—just swing the door out for easy access to the motor and wiring connections.



Fantech FRD24-14 open and closed views.



Specifications

FRD Series Dimensional Data

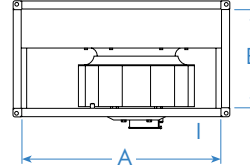
model	A	B	C	D
FRD 12-6	11 $\frac{7}{8}$	5 $\frac{7}{8}$	15 $\frac{3}{4}$	11
FRD 16-8	15 $\frac{3}{4}$	7 $\frac{3}{4}$	19 $\frac{3}{4}$	15
FRD 16-8XL	15 $\frac{3}{4}$	7 $\frac{3}{4}$	19 $\frac{3}{4}$	15
FRD 20-10	19 $\frac{5}{8}$	9 $\frac{3}{4}$	20 $\frac{5}{8}$	18
FRD 24-14	23 $\frac{5}{8}$	13 $\frac{3}{4}$	28 $\frac{1}{2}$	20



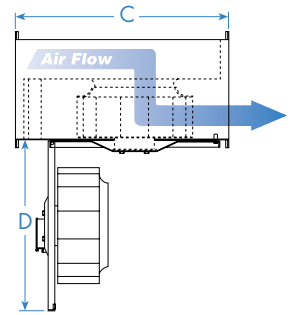
Fantech, Inc. certifies that the FRD Series shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

All dimensions in inches. Note: Flanges extend $\frac{7}{8}$ " beyond A dimension.

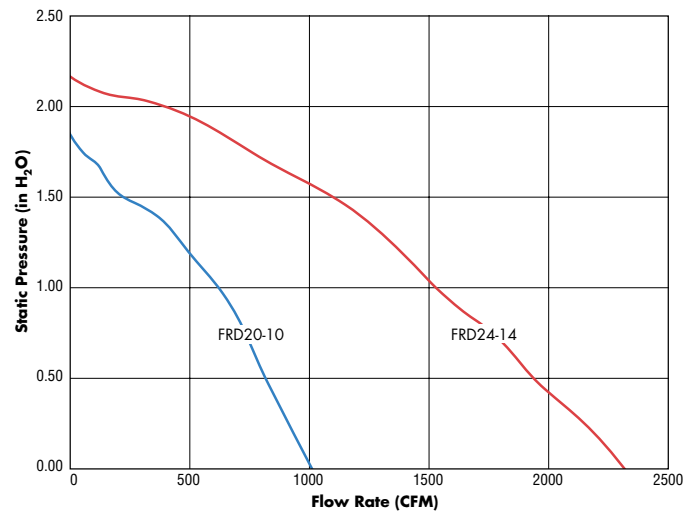
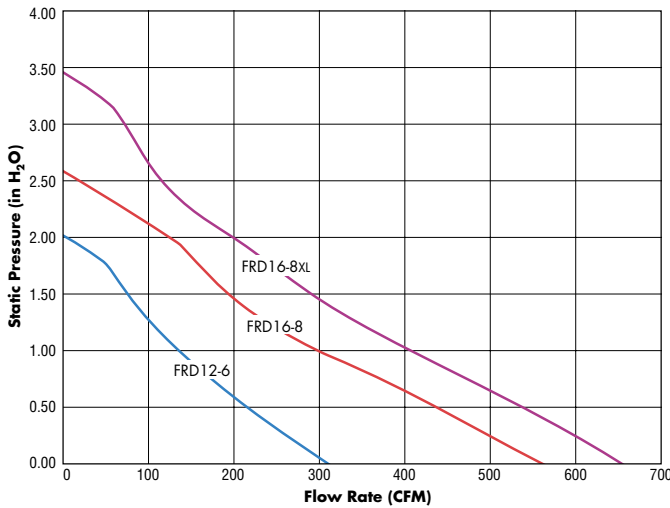
Exhaust View



Side View



FRD Air Performance Graphs



FRD Series Performance Data (For sound performance data refer to publication #FRD-0899)

Fan Model	RPM	Volts	Max. Watts	Max. Amps	Static Pressure in Inches W.G.										Max. Ps.	Duct Dimension	tSones	
					0"	.125"	.25"	.375"	.5"	.75"	1.0"	1.25"	1.5"	2.0"				2.5"
FRD 12-6	2550	115	84	0.74 ¹	309	287	262	238	214	171	133	101	75	—	—	2.01"	12" x 6"	8.0
FRD 16-8	2950	115	150	1.30 ¹	560	530	499	467	434	368	300	240	191	119	—	2.57"	16" x 8"	13.0
FRD 16-8XL	2800	115	264	2.32 ¹	658	629	599	568	535	471	406	346	290	196	114	3.44"	16" x 8"	±13.1
FRD 20-10	1650	115	191	1.68 ¹	1013	963	915	868	814	724	617	462	225	—	—	1.84"	20" x 10"	16.7
FRD 24-14	1650	115	597	5.18 ²	2318	2237	2149	2039	1939	1752	1527	1332	1090	377	—	2.16"	24" x 14"	±18.2

Performance shown is for installation type D - ducted inlet, ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream.

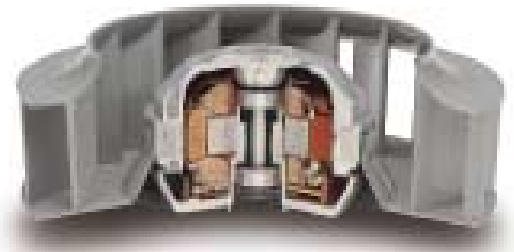
¹ The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels. Ratings do not include the effect of duct end correction. Sone values shown was calculated at 0.5". (static pressure in inches W.G.).

² Sone value shown was calculated at 0.75" (static pressure in inches W.G.).

¹ Recommended speed control rating 5A. ² Recommended speed control rating 10A.

External Rotor Motors

All FRD Series fans utilize our unique external rotor motors. The motor's totally enclosed design allows the fan to operate in high moisture, lint and dust laden air. The motors are a permanent split capacitor type, with automatic reset thermal overload protection and sealed ball bearings. These features ensure long life and maintenance free operation. All motors and impellers are designed as one integral unit, allowing for excellent motor heat dissipation, even at a low RPM.



Inline Duct Accessories



Duct Clamp—CB



Noise Reduction Clamps—FC



Duct Silencers—LD



Iris Dampeners—IR



Wye Connectors—FY



Duct Reducers—CKR



Flex Duct—FIDT

Backdraft Damper—RSK



Exterior-Mounted Centrifugal Fans for Wall and Roof

specific solutions for outdoor installations



RE Series

REC Series

RVF Series

Fantech RE Series

Roof/Wall Mounted Centrifugal Fans

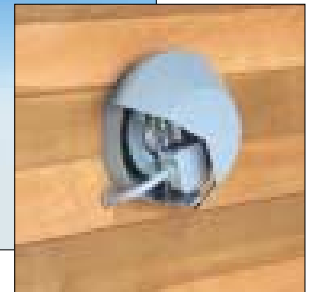
When space is tight, Fantech's RE Series is the solution. With a lightweight, low profile design, and duct diameters from 6" to 10", RE Series fans move a lot of air from one or more venting points. For roof mounting, these fans are available as either a flat plate or with a roof curb design. RE Series fans can also be mounted on an exterior wall when roof access is not suitable. An added benefit is whisper-quiet interior noise levels (depending on type of installation).



Fantech RE Series

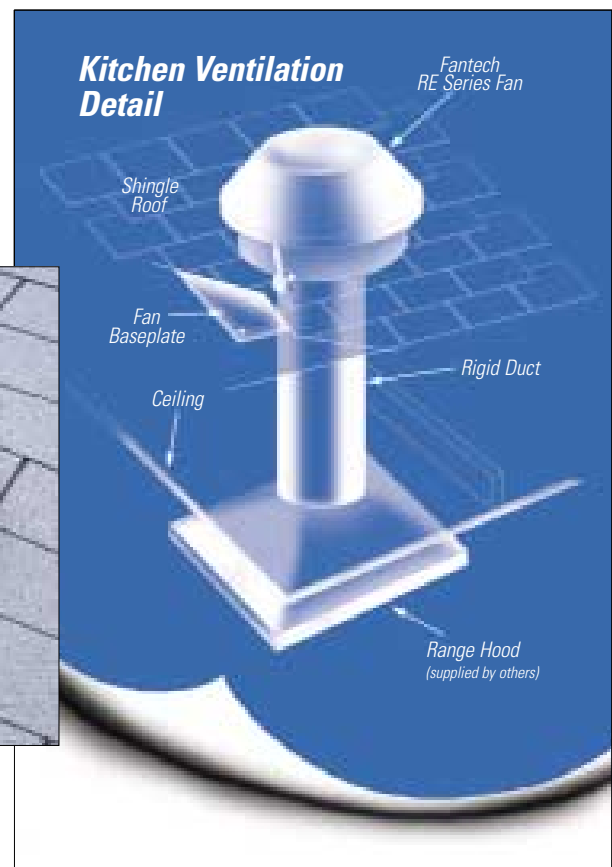


Fantech REC Series



Built tough inside and out:

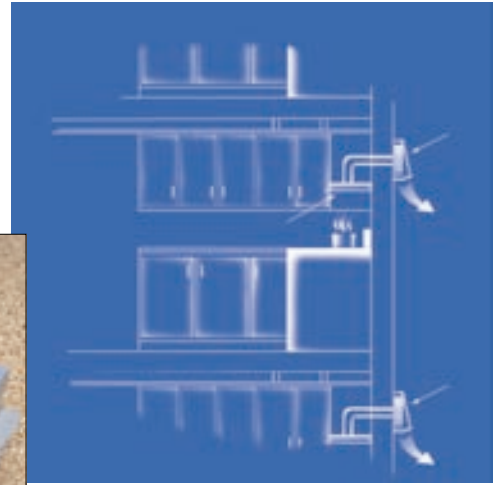
- Galvanized steel housing features baked powder-coat finish (can be painted to match decor)
- Unique external rotor motor has built-in thermal overload protection with automatic reset
- Permanently lubricated sealed ball bearings
- 100% speed control for highly efficient and economical airflow
- Excellent heat dissipation for long motor life
- Suitable for airstream temperatures of up to 140° F
- Tested and approved by UL and CSA (or equals)
- Five-year warranty





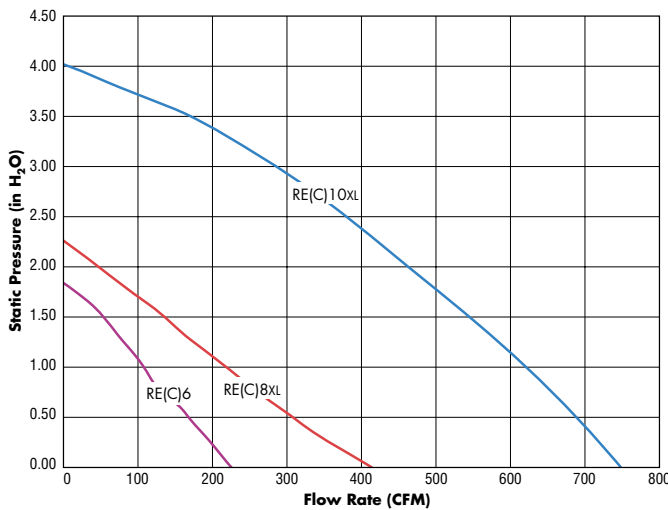
"RE" could stand for "Real Easy" installation

RE Fans are simple to install; no installation extras are required. Simply mount the fan on the roof or wall, then connect the electrical supply to the easily accessible terminal box. The top cover is removable for access to the motor and wiring connections.



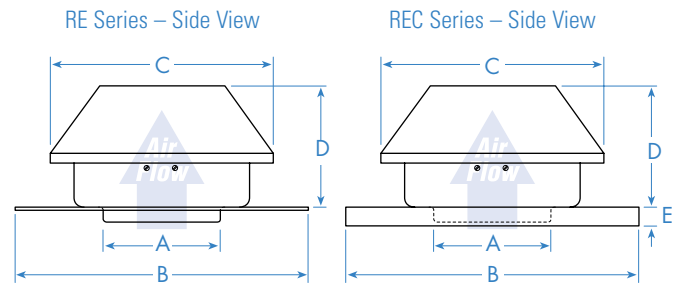
Specifications

RE(C) Series Air Performance Graph



Fantech, Inc. certifies that the RE & REC Series shown herein is 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.

RE(C) Series Dimensional Data



model	A	B	C	D	E
RE 6	6	15½	13¾	6½	—
REC 6	6	15½	13¾	6½	1½
RE 8XL	8	20	15¾	6	—
REC 8XL	8	20	15¾	6	1½
RE 10XL	10	20	19¾	11¾	—
REC 10XL	10	20	19¾	11¾	1½



All dimensions in inches. † Male duct connector is 1/8" smaller than duct size.

RE(C) Series Performance Data (For sound performance data refer to publication #RE/C-0799-4)

Fan Model	RPM	Volts	Max. Watts	Max. Amps	Static Pressure in Inches W.G.											Max. Ps.	Duct Dia.	†Sones
					0"	.125"	.25"	.375"	.5"	.75"	1.0"	1.25"	1.5"	2.0"	2.5"			
RE 6	2700	115	87	0.80	227	213	199	184	169	134	106	80	51	—	—	1.84"	6"	*7.5
RE 8XL	2800	115	153	1.48	409	382	356	331	307	259	212	170	130	43	—	2.23"	8"	*8.9
RE 10XL	3250	115	394	3.61	753	—	721	—	690	656	622	586	548	467	383	4.03"	10"	†16.4

Performance shown is for installation type A - Free inlet, Free outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream.

† The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A: free inlet fan sone levels.

* Sone value shown was calculated at 0.5" (static pressure in inches W.G.).

† Sone value shown was calculated at 0.75" (static pressure in inches W.G.).



Fantech RVF Series

*Free your interior space
Maximize your ventilation*

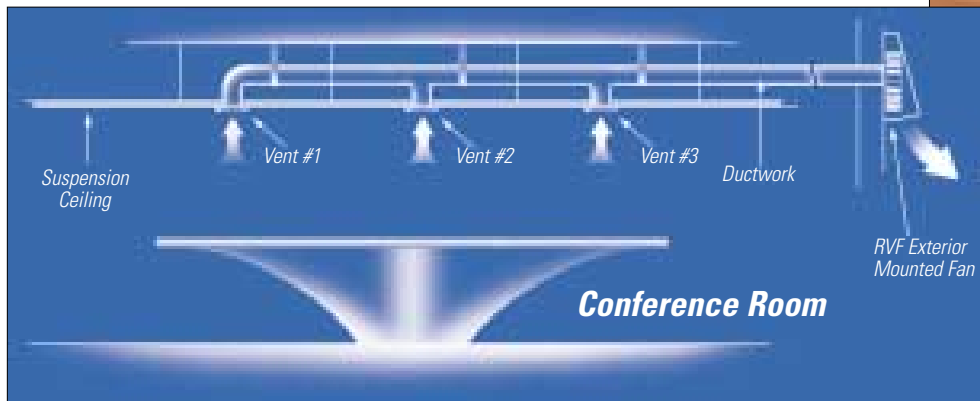
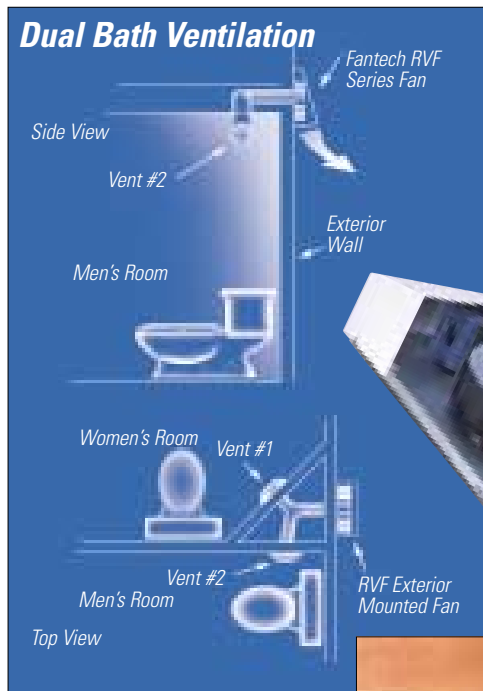
From conference rooms to bathrooms, RVF fans are the perfect way to free up valuable interior space. With duct diameters ranging from 4" to 8", Fantech's RVF Series fans move a lot of air while maintaining whisper quiet interior noise levels.

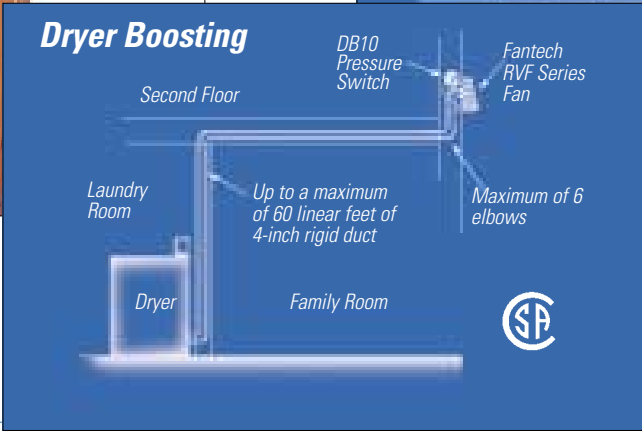
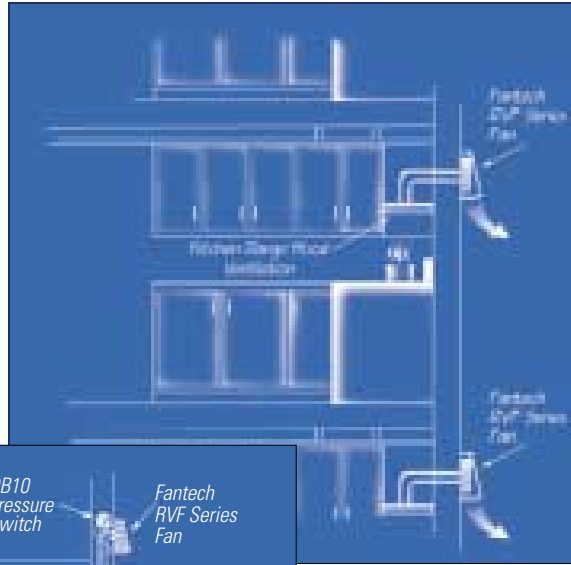
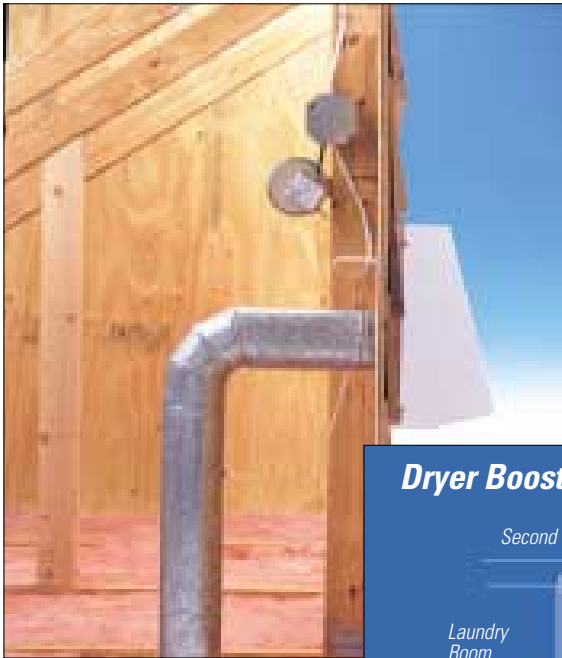
Get connected with ease

Fantech RVF Series fans are lightweight, compact, and simple to install. No installation extras are required. Just mount the fan to the wall and connect the electrical supply to the conveniently located terminal box. The housing is removable for immediate access to the motor and wiring connections.

Rugged features help RVF fans withstand the elements:

- Galvanized steel housing features baked powder-coat finish (can be painted to match decor)
- External rotor motor with totally enclosed design allows fans to operate in high moisture, lint and dust laden air
- Split capacitor motors feature automatic reset thermal overload protection and sealed ball bearings for long life and maintenance-free operation
- All motors and impellers are designed as one integral unit, allowing for excellent motor heat dissipation, even at low RPM
- Permanently lubricated sealed ball bearings
- Solid-state speed control for infinitely variable, highly efficient and economical airflow
- Excellent heat dissipation, ensuring long motor life
- HVI certified
- Suitable for airstream temperatures of up to 140° F
- Tested and approved by UL, CSA, or equals
- Five-year factory warranty

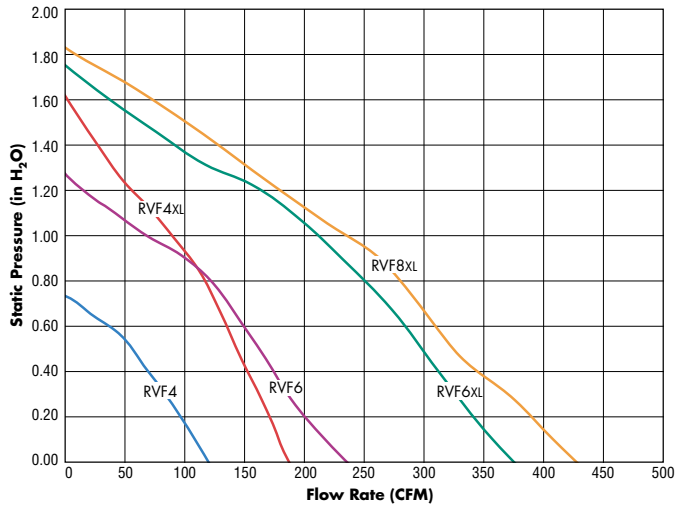




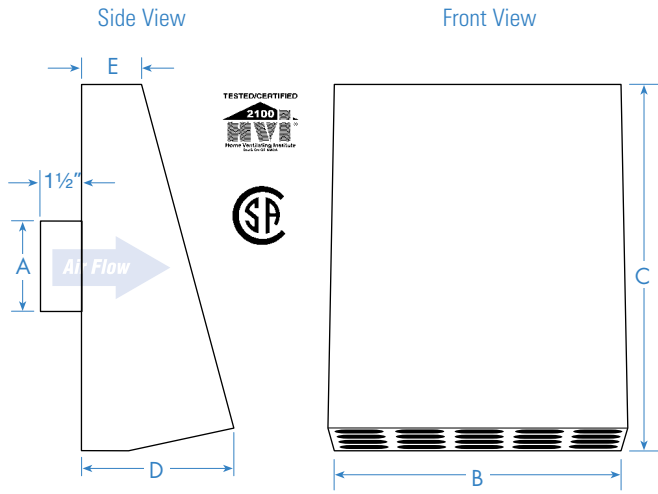
Versatile, efficient RVF Series fans are excellent choices for dryer boosting, bath and kitchen ventilation when space is an issue.

Specifications

RVF Series Air Performance Graph



RVF Series Dimensional Data



model	A ¹	B	C	D	E
RVF 4	4	10¼	13	6	2¾
RVF 4XL	4	10¼	13	6	2¾
RVF 6	6	10¼	13	6	2¾
RVF 6XL	6	14¼	17	6	2¾
RVF 8XL	8	14¼	17	6	2¾



All dimensions in inches. ¹Duct connection is 1/8" smaller than duct size.

RVF Series Performance Data

Fan Model	RPM	Volts	Rated Watts	Wattage Range	Max. Amps	Static Pressure in Inches W.G								Max. Ps	Duct Dia.
						0"	.1"	.2"	.4"	.6"	.8"	1.0"	1.5"		
RVF 4	2950	115	19	13 - 19	0.17	124	110	98	71	36	—	—	—	0.73"	4"
RVF 4XL	2700	115	92	73 - 92	0.84	193	180	172	154	136	118	91	—	1.61"	4"
RVF 6	2550	115	92	78 - 93	0.84	242	220	204	177	150	123	68	—	1.27"	6"
RVF 6XL	3000	115	149	145 - 157	1.46	381	360	346	315	285	258	213	64	1.74"	6"
RVF 8XL	2900	115	151	140 - 155	1.42	435	410	392	348	312	282	235	102	1.82"	8"

RVF Series performance is shown with ducted outlet. Per HVI's Certified Ratings Program, charted air flow performance has been derated by a factor based on actual test results and the certified rate at .1 inches WG.

Timers and Speed Controls

Pushbutton Timer—FD60EM



Speed Control—WC15 ▼



Humidistat—FH20 ▼



Attic Thermostat—FAT10 ▼



Fan Timer—FLD60 ▼



Speed Control—SCD5 ▲



Speed Control—RPE10



Manual Fan Timer—FD30M ▲



Speed Control—WC15H

Multi-Port Centrifugal Fans for Round Duct

when you need to exhaust many points to one



CVS Series



Top photo – 2-port model 275A. Right-hand photo 4-port models 300A and 400A.



Fantech CVS Series

Compact, quiet and dependable

Multi-unit housing makes incredible demands on ventilation. Fantech's CVS Series inline duct fans are designed to meet those challenges with ease.

These lightweight circular duct fans have been engineered for installation in areas with limited space, such as between floors in apartment buildings or high rise suites. The multi-port direct driven centrifugal fan can exhaust up to several points and multiple applications into one central point without the use of adapters or transitions. The motorized impeller is both statically and dynamically balanced as one integral unit, for vibration-free and whisper-quiet performance.

- Model CVS 275A allows for two ventilation points, delivering 220 CFM @ .2" WG
- Model CVS 300A and Model CVS 400A allow for four ventilation points, delivering 320 CFM @ .2" WG (CVS 300A), and 380 CFM @ .2" WG (CVS 400A)

Easy installation. All parts included.

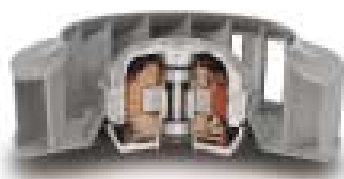
Fantech CVS fans are simple to install, with all parts included (ducted exhaust fan casing, motor assembly, cover, and sheet metal screws).

Simply select the fan mounting location, taking into account the type of application, service accessibility, and distance from exhaust point (to minimize fan operating noise). Next, fasten the mounting casing to the ceiling, using either threaded rod or wires to suspend the unit. Finally, connect the ductwork to inlet and outlet of the fan using CB or FC clamps or duct tape. Congratulations—you've just installed one of the world's finest multi-port fans.

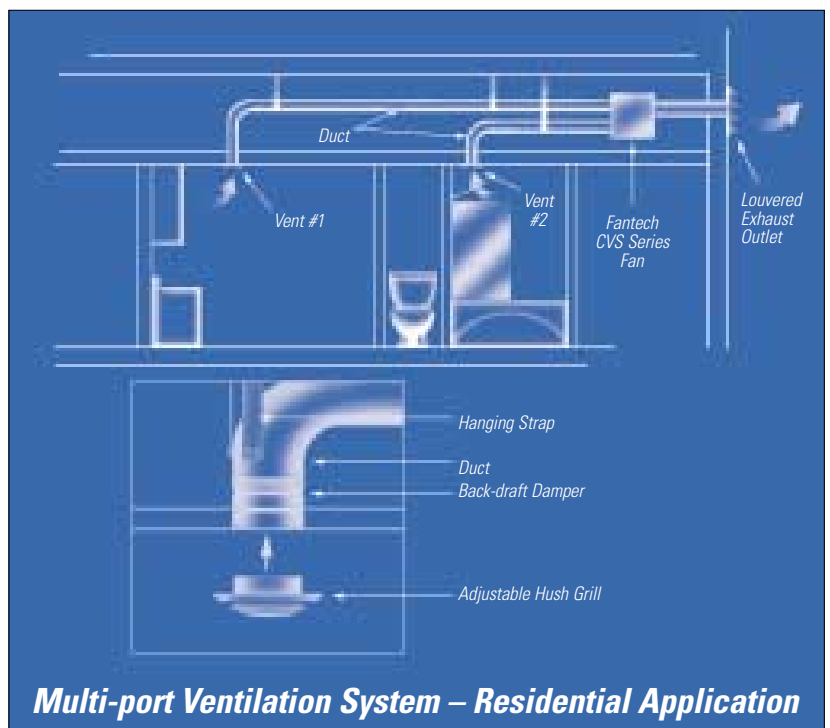
CVS Series Fans

For all these reasons... and more

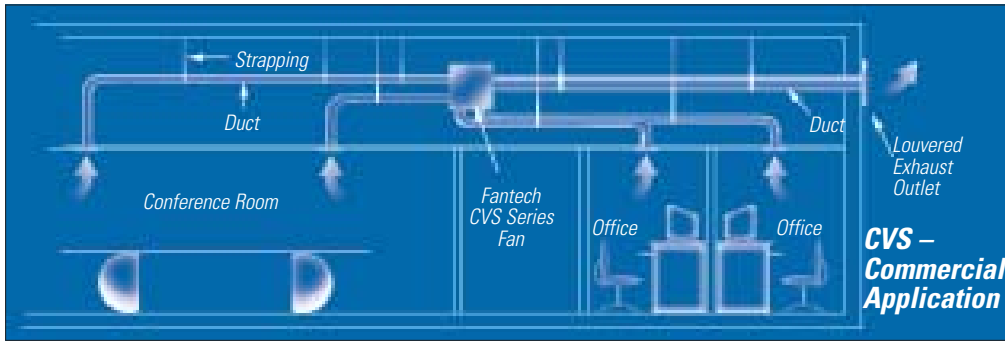
- Galvanized steel housing
- External rotor motor with backward-curved centrifugal fan wheel constructed of high-density polyamide, easily removable from housing for service without disturbing the installation
- Internal scroll for maximum air performance
- Well-designed inlet venturi for optimum efficiency
- Permanently lubricated sealed ball bearings
- 100% speed controllable for highly efficient and economical airflow
- Suitable for airstream temperatures up to 140° F
- Tested and approved by UL and CSA (or equals)
- Five-year warranty



Fantech's external rotor motor. Quiet, efficient and reliable.



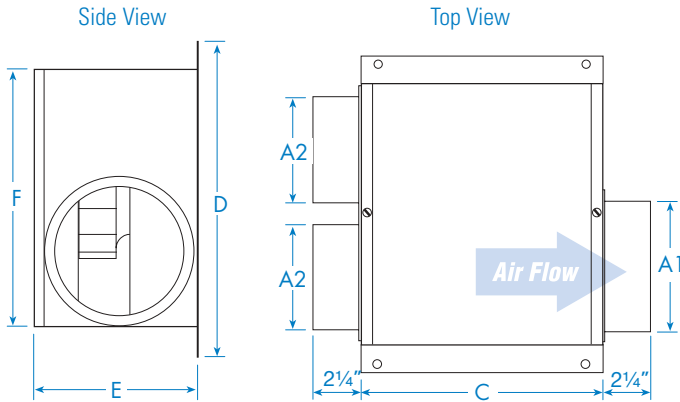
Multi-port Ventilation System – Residential Application



CVS400A and CVS300A multi-port ventilation fans are powerful, quiet and efficient. In the workplace or at home Fantech is "Your Ventilation Solutions Company".

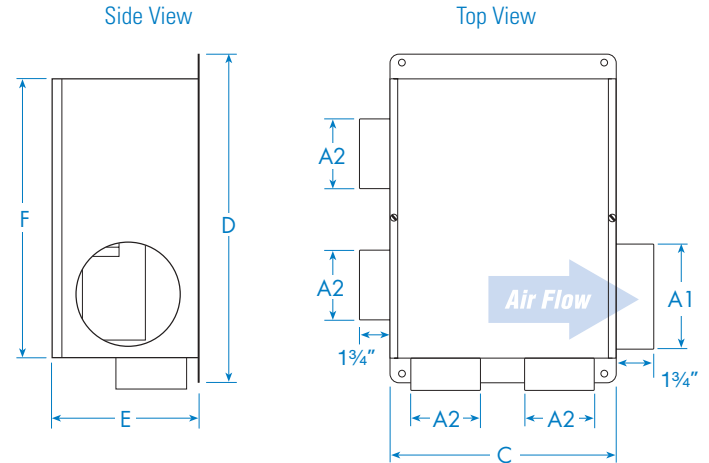
Specifications

CVS Series Dimensional Data



model	A1	A2	C	D	E	F
CVS275A	6	5	11	15	7 ⁷ / ₈	12

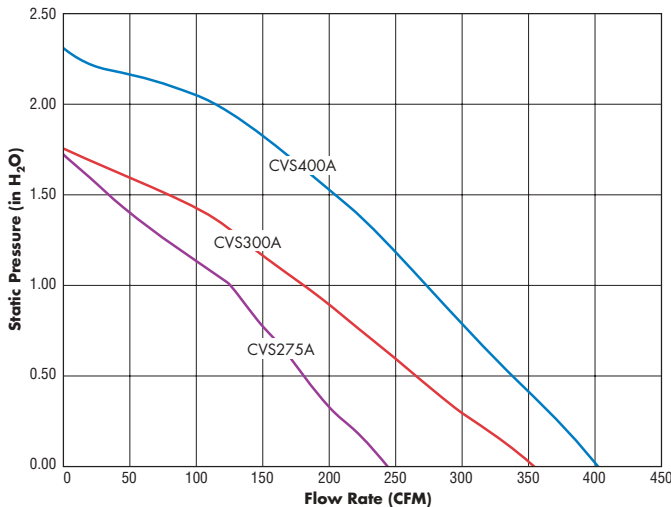
All dimensions in inches. ¹ Duct connections are 1/8" smaller than duct size.



model	A1	A2	C	D	E	F
CVS300A	6	4	13	18 ³ / ₄	8 ¹ / ₄	16
CVS400A	6	4	13	18 ³ / ₄	8 ¹ / ₄	16

All dimensions in inches. ¹ Duct connections are 1/8" smaller than duct size.

CVS Series Air Performance Graph



CVS Series Performance Data

Fan Model	RPM	Volts	Rated Watts	Wattage Range	Max. Amps	Static Pressure in Inches W.G							Max. Ps	Duct Dia.
						0"	.2"	.4"	.6"	.8"	1.0"	1.5"		
CVS275A	2550	115	92	78 - 93	0.79	245	220	192	171	147	126	34	1.72"	5"
CVS300A	2500	115	123	110 - 123	1.07	355	320	283	249	215	180	79	1.76"	4"
CVS400A	2950	115	156	130 - 158	1.41	404	380	352	324	299	274	204	2.30"	4"

CVS Series performance is shown with ducted outlet. Per HVI's Certified Ratings Program, charted air flow performance has been derated by a factor based on actual test results and the certified rate at .2 inches WG.

Specialty Accessories

Inline Lint Trap-DBLT



Fan Proving Switch-DB10



Roof Curb-IC



Stainless Steel Hood Liner-SHL



Vent Light Fixture-VLC64



Low Silhouette Axial Fans

the perfect solution when space is a problem



FADE Series



Fantech FADE Series

These fans handle major ventilation challenges – even large warehouses – effectively and quietly, without taking up a lot of valuable space.

FADE Series axial fans are designed for structural stability, with a slim profile for conservation of space and safety. All FADE Series fans combine aerodynamically designed propeller blades and motor rotor into one expertly integrated unit.

With fan sizes ranging from 8” to 25”, Fantech’s FADE Series fans move a lot of air, yet are statically and dynamically balanced for vibration-free operation. The external rotor motorized propeller provides excellent heat dissipation, even at low RPM.

Easy set-up. Hard to beat.

Fantech’s FADE Series is designed to conserve space while being acceptable for continuous duty. And FADE Series fans are simple to install;

no installation extras are required. Fans arrive fully assembled and ready for immediate installation. Simply mount the fan’s motorized propeller assembly directly to the wall panel. The housing is removable for access to the motor and wiring connections.



FADE ‘S’ickle type sidewall propeller fan

More FADE Series features:

- Permanently lubricated sealed ball bearings
- 100% speed controllable for highly efficient and economical airflow
- Suitable for airstream temperatures up to 100° F
- Tested and approved by UL and CSA (or equals)
- Airflow up to 7858 CFM
- Integral blades and external rotor for precision balancing
- Formed galvanized steel wall panel with venturi features baked powdercoat finish
- Shallow profile with no protruding motor
- Terminal box with prewired electrical strip
- Three-year warranty

FADE’s external rotor motor The strong and silent type

All FADE fans include motor-side guards as standard. FADE Series motors are a totally enclosed Class B direct driven external rotor type and are 100% speed controllable. To change the speed, simply decrease the voltage with either a solid state or transformer-type control.

FADE Series fans feature heavy gauge galvanized steel, baked powdercoat finish, and an external rotor motorized propeller. Propeller options are formed steel blades featuring an ‘S’ blade design, or die-cast aluminum with an ‘A’ blade design. Either blade option is integrally mounted to the motor.

The external rotor motor at the heart of FADE fans has automatic reset thermal overload protection, and is capable of operating in ambient air or airstream temperatures of up to 100° F.



FADE ‘A’irfoil type sidewall propeller fan

Specifications

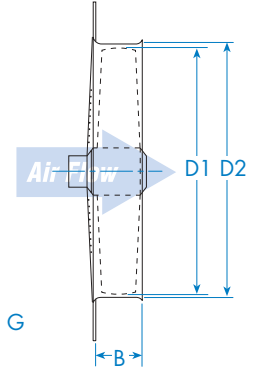
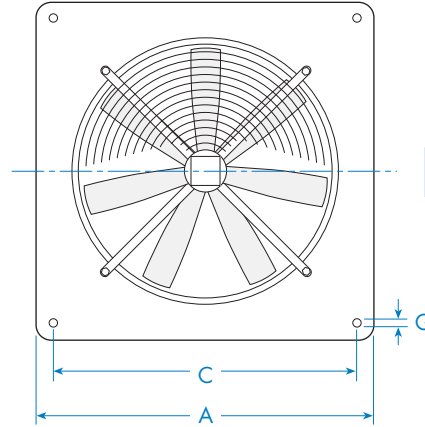
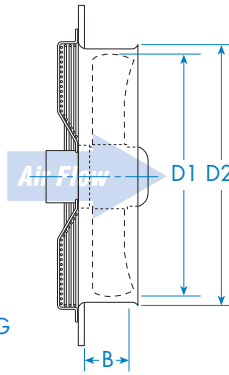
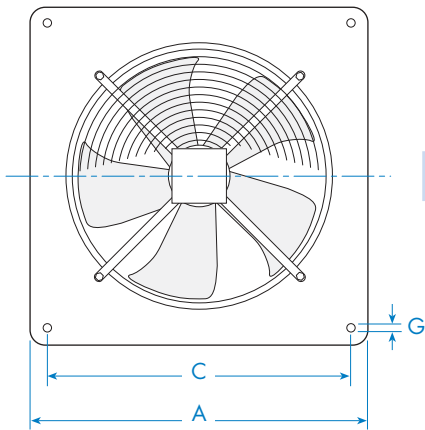
FADE Series Dimensional Data

FADE S-type Front View

FADE S-type Side View

FADE A-type Front View

FADE A-type Side View



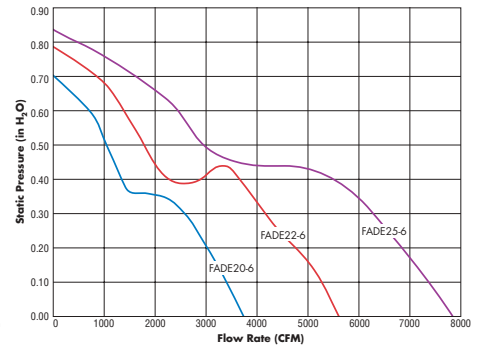
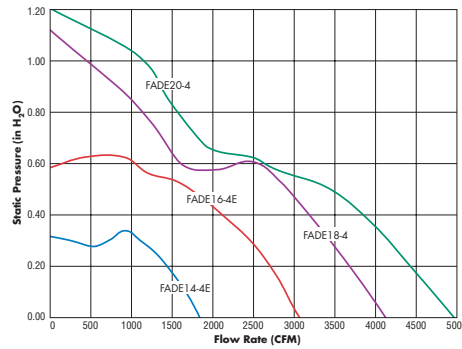
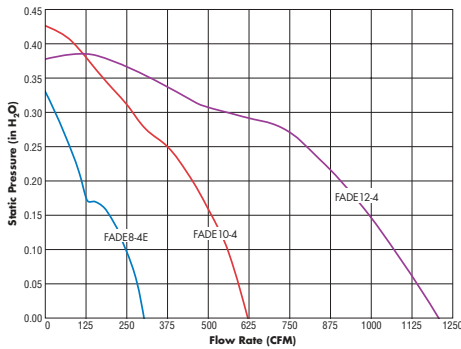
model	A	B	C	D1	D2	G	Blade Type
FADE 8	12 ⁵ / ₁₆	2	10 ¹ / ₄	7 ³ / ₄	8 ¹ / ₁₆	1/4	S
FADE 10	14 ⁹ / ₁₆	2	12 ⁵ / ₈	10	10 ⁵ / ₁₆	1/4	S
FADE 12	17	3	15	12	12 ⁷ / ₈	5/16	S
FADE 14	19 ⁹ / ₁₆	3 ¹ / ₈	17 ¹ / ₈	14	15 ³ / ₈	5/16	S
FADE 16	22 ³ / ₄	3 ¹ / ₂	21	16 ¹ / ₂	17 ¹ / ₄	3/8	S

All dimensions in inches.

model	A	B	C	D1	D2	G	Blade Type
FADE 18	22 ⁹ / ₁₆	4 ¹ / ₄	21	18	18 ¹ / ₂	3/8	A
FADE 20-6	25 ⁵ / ₁₆	4 ¹ / ₂	24 ¹ / ₄	20	20 ¹ / ₂	3/8	A
FADE 20-4	25 ⁵ / ₁₆	4 ¹ / ₂	24 ¹ / ₄	20	20 ¹ / ₂	3/8	A
FADE 22	28 ⁵ / ₈	5 ¹ / ₄	26 ⁹ / ₁₆	22	22 ¹ / ₂	3/8	A
FADE 25	31 ³ / ₄	6	29 ¹ / ₂	25	25 ¹ / ₂	3/8	A

All dimensions in inches.

FADE Series Air Performance Graphs



FADE Series Performance Data (For sound performance data refer to publication #FADE-0899)

Fan Model	RPM	Volts	Max. Watts	Max. Amps	Static Pressure in Inches W.G.						iSones
					0"	.100"	.125"	.25"	.375"	.5"	
FADE 8-4	1550	115	45	0.41 ¹	304	246	224	74	—	—	4.1
FADE 10-4	1500	115	68	0.62 ¹	624	558	533	377	132	—	7.9
FADE 12-4	1400	115	130	1.19 ¹	1208	1069	1030	797	—	—	9.4
FADE 14-4	1200	115	245	2.24 ¹	1839	1654	1599	1295	—	—	9.6
FADE 16-4	1400	115	458	4.19 ²	3054	2882	2839	2570	2198	1699	12.0
FADE 18-4	1550	115	698	6.39 ²	4115	3895	3840	3549	3239	2908	14.3
FADE 20-6	1100	115	435	3.98 ¹	3693	3368	3279	2775	1429	—	10.7
FADE 20-4	1450	115 ³	916	8.39 ²	4949	4682	4615	4274	3917	3445	16.4
FADE 22-6	1000	115 ³	756	6.92 ²	5629	5248	5153	4432	—	—	12.0
FADE 25-6	1000	115 ³	1134	10.38 ³	7858	7355	7230	6557	—	—	14.8



Fantech, Inc. certifies that the FADE Series shown herein is 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.

Performance shown is for installation type A - Free inlet, Free outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings include the effects of intake guard in the airstream.

¹ Also available with dual voltage 230/460 three phase motors.

² The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A: Free inlet fan some levels. All sone values shown are calculated at 0.1" (static pressure in inches W.G.).

³ Recommended speed control rating 5A. ² Recommended speed control rating 10A. ³ Recommended speed control rating 15A.



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