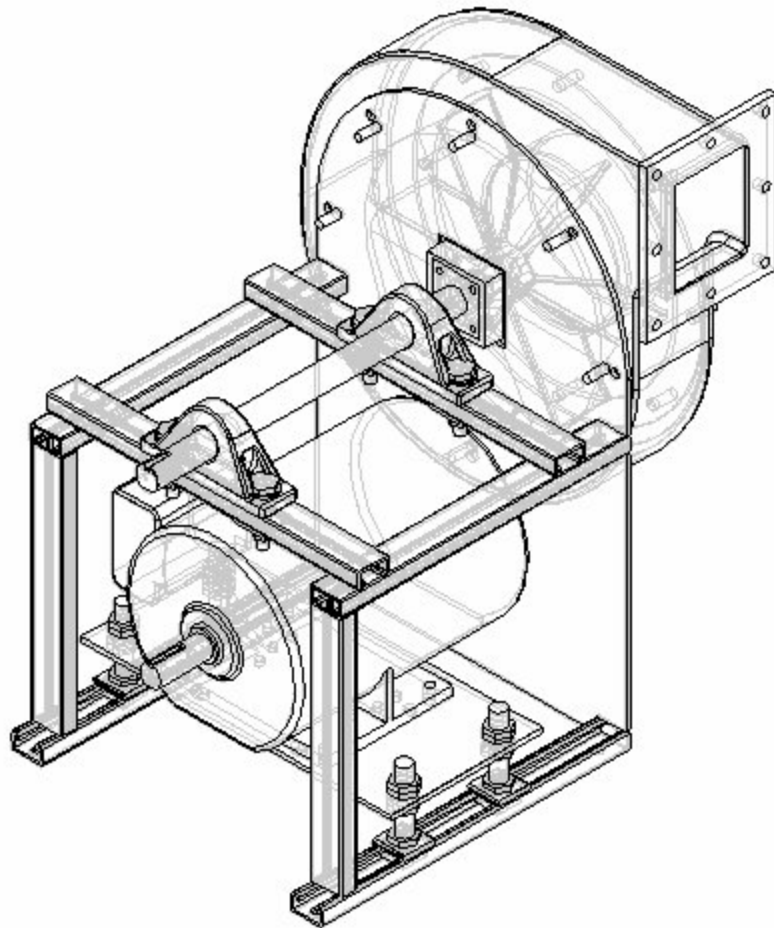




Universal Fan & Blower Ltd.

The Composite Fan Company

PRINT-006-MI
May 2006



Model FRBJ
Junior Composite Fans
Air Tables



Air Performance Data

Inlet Area = 0.196 sq.ft.

Wheel Diameter = 10 5/8" inches

Tip Speed = 2.782 x RPM

FRBJ-106

Static Pressure		1.00"		2.00"		3.00"		4.00"		5.00"		6.00"		7.00"		8.00"	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
70	750	1269	0.02	1777	0.05	2172	0.08	2506	0.12	2802	0.16						
94	1000	1293	0.03	1790	0.06	2180	0.09	2511	0.13	2804	0.18	3070	0.22	3316	0.27		
117	1250	1330	0.04	1811	0.07	2194	0.11	2521	0.15	2812	0.2	3076	0.25	3319	0.3	3547	0.35
141	1500	1378	0.05	1839	0.09	2215	0.13	2538	0.17	2825	0.22	3086	0.28	3328	0.33	3554	0.39
164	1750	1430	0.06	1877	0.1	2242	0.15	2559	0.2	2843	0.25	3102	0.31	3341	0.37	3565	0.43
187	2000	1481	0.07	1924	0.12	2276	0.17	2586	0.23	2866	0.28	3121	0.34	3358	0.41	3580	0.47
211	2250	1532	0.08	1975	0.14	2318	0.2	2619	0.26	2893	0.32	3145	0.38	3380	0.45	3599	0.52
234	2500	1584	0.1	2028	0.17	2367	0.23	2659	0.29	2926	0.36	3173	0.42	3405	0.49	3622	0.57
258	2750	1639	0.11	2079	0.19	2418	0.26	2705	0.33	2965	0.4	3207	0.47	3434	0.54	3648	0.62
281	3000	1699	0.13	2129	0.22	2471	0.3	2756	0.37	3010	0.45	3246	0.52	3468	0.6	3679	0.68
328	3500	1829	0.17	2232	0.27	2573	0.37	2860	0.46	3111	0.55	3340	0.64	3553	0.73	3754	0.82
375	4000	1973	0.22	2344	0.33	2674	0.45	2962	0.56	3216	0.67	3443	0.77	3652	0.87	3848	0.97
422	4500	2125	0.28	2467	0.4	2780	0.53	3063	0.66	3317	0.79	3547	0.91	3757	1.03	3951	1.15
468	5000	2283	0.36	2601	0.49	2895	0.63	3168	0.77	3419	0.92	3648	1.06	3860	1.2	4055	1.33
515	5500	2446	0.45	2744	0.59	3018	0.74	3279	0.89	3523	1.05	3750	1.21	3961	1.37	4157	1.52
562	6000	2612	0.55	2893	0.7	3151	0.86	3397	1.03	3632	1.2	3854	1.37	4062	1.55	4258	1.72

Static Pressure		9.00"		10.00"		11.00"		12.00"		13.00"		14.00"		15.00"		16.00"	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
70	750																
94	1000																
117	1250	3761	0.41	3963	0.47	4156	0.53										
141	1500	3766	0.45	3968	0.51	4160	0.58	4343	0.65	4520	0.71	4690	0.79				
164	1750	3776	0.49	3976	0.56	4167	0.63	4349	0.7	4525	0.77	4694	0.84	4857	0.92	5016	1
187	2000	3789	0.54	3988	0.61	4178	0.68	4359	0.75	4533	0.83	4702	0.91	4864	0.99	5022	1.07
211	2250	3807	0.59	4004	0.66	4192	0.74	4372	0.81	4545	0.89	4713	0.97	4874	1.06	5031	1.14
234	2500	3827	0.64	4023	0.72	4209	0.8	4388	0.88	4560	0.96	4727	1.04	4887	1.13	5043	1.22
258	2750	3851	0.7	4045	0.78	4230	0.86	4408	0.95	4578	1.03	4743	1.12	4903	1.21	5058	1.3
281	3000	3879	0.76	4071	0.85	4254	0.93	4430	1.02	4599	1.11	4763	1.2	4922	1.3	5076	1.39
328	3500	3947	0.91	4133	1	4311	1.09	4483	1.19	4650	1.28	4811	1.38	4967	1.48	5119	1.59
375	4000	4034	1.07	4213	1.17	4385	1.27	4552	1.38	4714	1.48	4871	1.59	5023	1.7	5172	1.81
422	4500	4134	1.26	4308	1.37	4475	1.48	4636	1.6	4792	1.71	4945	1.82				
468	5000	4238	1.46	4411	1.59	4575	1.72	4733	1.84								
515	5500	4342	1.68	4515	1.82												
562	6000	4443	1.89	4618	2.06												



Air Performance Data

Inlet Area = 0.267 sq.ft.

Wheel Diameter = 12 1/2" inches

Tip Speed = 3.273 x RPM

FRBJ-125

Static Pressure		1.00"		2.00"		3.00"		4.00"		5.00"		6.00"		7.00"		8.00"	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
101	750	1092	0.03	1542	0.06												
134	1000	1108	0.04	1543	0.08	1888	0.12										
168	1250	1139	0.05	1554	0.09	1891	0.14	2180	0.19	2438	0.25						
202	1500	1177	0.06	1576	0.11	1901	0.16	2185	0.22	2439	0.29	2670	0.35	2884	0.42	3083	0.49
235	1750	1229	0.08	1608	0.14	1921	0.19	2196	0.26	2445	0.32	2674	0.40	2885	0.47	3084	0.55
269	2000	1289	0.10	1644	0.16	1950	0.23	2216	0.29	2458	0.37	2682	0.44	2891	0.52	3087	0.60
303	2250	1355	0.12	1689	0.19	1984	0.27	2245	0.34	2479	0.42	2697	0.49	2901	0.58	3094	0.67
336	2500	1423	0.15	1743	0.23	2022	0.31	2277	0.39	2507	0.47	2719	0.55	2918	0.64	3107	0.73
370	2750	1491	0.18	1803	0.27	2068	0.35	2313	0.44	2540	0.53	2748	0.62	2942	0.71	3126	0.81
403	3000	1560	0.21	1868	0.31	2121	0.40	2355	0.50	2575	0.60	2781	0.70	2972	0.80	3152	0.89
471	3500	1698	0.29	2003	0.42	2242	0.53	2457	0.63	2660	0.74	2854	0.85	3040	0.97	3216	1.09
538	4000	1841	0.39	2139	0.54	2375	0.67	2579	0.79	2767	0.91	2947	1.04	3121	1.16	3289	1.29
605	4500	1990	0.50	2276	0.68	2511	0.84	2710	0.99	2890	1.12	3059	1.26	3221	1.39	3379	1.53
672	5000	2146	0.64	2416	0.84	2648	1.03	2846	1.20	3022	1.36	3184	1.51	3338	1.66	3486	1.81
739	5500	2308	0.82	2558	1.03	2785	1.25	2982	1.45	3157	1.63	3316	1.80	3465	1.97	3607	2.14
807	6000	2476	1.03	2704	1.24	2924	1.49	3119	1.72	3294	1.93	3452	2.13	3598	2.32	3736	2.50

Static Pressure		9.00"		10.00"		11.00"		12.00"		13.00"		14.00"		15.00"		16.00"	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
101	750																
134	1000																
168	1250																
202	1500																
235	1750	3270	0.62	3447	0.70												
269	2000	3272	0.69	3448	0.78	3616	0.86										
303	2250	3277	0.76	3451	0.85	3618	0.94	3777	1.04	3931	1.14	4079	1.24	4222	1.34	4360	1.44
336	2500	3287	0.83	3459	0.92	3623	1.02	3781	1.13	3934	1.23	4081	1.34	4223	1.45	4361	1.56
370	2750	3302	0.91	3471	1.01	3633	1.11	3789	1.22	3940	1.33	4086	1.44	4227	1.56	4364	1.67
403	3000	3324	1.00	3489	1.10	3648	1.21	3802	1.32	3950	1.43	4094	1.55	4234	1.67	4369	1.79
471	3500	3383	1.20	3542	1.32	3694	1.43	3842	1.55	3985	1.67	4124	1.79	4260	1.92	4392	2.05
538	4000	3451	1.43	3607	1.56	3757	1.70	3901	1.83	4039	1.96	4174	2.09	4304	2.22	4432	2.36
605	4500	3532	1.68	3681	1.82	3827	1.97	3968	2.12	4105	2.28	4237	2.43	4365	2.57	4489	2.72
672	5000	3631	1.97	3771	2.12	3909	2.28	4044	2.44	4177	2.61	4306	2.78	4432	2.95	4555	3.11
739	5500	3744	2.30	3877	2.47	4008	2.64	4136	2.81	4262	2.98	4385	3.16	4507	3.34		
807	6000	3868	2.68	3995	2.86	4120	3.04	4242	3.22	4361	3.41	4479	3.59				



Air Performance Data

Inlet Area = 0.349 sq.ft.

Wheel Diameter = 13 1/2" inches

Tip Speed = 3.535 x RPM

FRBJ-135

Static Pressure		1.00"		2.00"		3.00"		4.00"		5.00"		6.00"		7.00"		8.00"	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
202	750	1013	0.05	1423	0.12												
270	1000	1056	0.08	1426	0.14	1742	0.23										
337	1250	1102	0.1	1462	0.18	1749	0.27	2011	0.37	2249	0.48						
404	1500	1157	0.13	1509	0.24	1785	0.33	2025	0.43	2251	0.54	2463	0.66	2661	0.8		
472	1750	1217	0.16	1555	0.29	1832	0.41	2065	0.51	2274	0.62	2472	0.75	2662	0.88	2844	1.03
539	2000	1275	0.2	1608	0.35	1878	0.49	2112	0.62	2316	0.74	2504	0.86	2681	1	2853	1.14
607	2250	1334	0.24	1667	0.41	1926	0.57	2158	0.73	2364	0.87	2549	1.01	2719	1.15	2882	1.29
674	2500	1399	0.3	1727	0.47	1981	0.66	2204	0.84	2410	1.01	2596	1.17	2766	1.32	2924	1.47
741	2750	1471	0.36	1785	0.54	2040	0.75	2257	0.95	2456	1.15	2642	1.33	2813	1.51	2972	1.68
809	3000	1549	0.43	1843	0.62	2100	0.84	2314	1.07	2507	1.29	2688	1.5	2859	1.7	3019	1.9
944	3500	1711	0.6	1969	0.82	2217	1.06	2433	1.32	2621	1.58	2794	1.84	2955	2.09	3110	2.34
1078	4000	1876	0.82	2115	1.07	2337	1.33	2551	1.61	2741	1.9	2911	2.2	3068	2.5	3216	2.79
1213	4500	2045	1.09	2273	1.38	2471	1.65	2669	1.95	2858	2.27	3031	2.6	3188	2.93	3333	3.27
1348	5000	2219	1.41	2436	1.74	2621	2.05	2798	2.36	2976	2.7	3147	3.05	3307	3.42	3454	3.78
1483	5500	2399	1.8	2601	2.17	2780	2.52	2943	2.85	3104	3.2	3266	3.57	3422	3.96	3571	4.36
1617	6000	2583	2.26	2768	2.66	2943	3.06	3098	3.43	3246	3.79	3394	4.17	3542	4.58		

Static Pressure		9.00"		10.00"		11.00"		12.00"		13.00"		14.00"		15.00"		16.00"	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
202	750																
270	1000																
337	1250																
404	1500																
472	1750	3016	1.18														
539	2000	3019	1.29	3180	1.46	3334	1.63	3483	1.81								
607	2250	3038	1.44	3191	1.6	3339	1.77	3484	1.95	3625	2.14	3762	2.33				
674	2500	3075	1.63	3219	1.79	3360	1.95	3498	2.13	3633	2.32	3766	2.51	3895	2.71	4022	2.92
741	2750	3120	1.85	3261	2.01	3397	2.19	3528	2.36	3657	2.54	3783	2.73	3907	2.93	4029	3.14
809	3000	3168	2.08	3309	2.27	3442	2.45	3570	2.63	3695	2.82	3816	3.01	3934	3.21	4051	3.41
944	3500	3259	2.58	3401	2.81	3536	3.04	3665	3.26	3788	3.47	3905	3.68	4019	3.9	4129	4.11
1078	4000	3358	3.08	3495	3.37	3627	3.65	3756	3.92	3880	4.18	3999	4.44	4114	4.69		
1213	4500	3471	3.6	3602	3.93	3729	4.26	3852	4.59								
1348	5000	3590	4.15	3719	4.53												
1483	5500	3710	4.76														
1617	6000																



The Composite Fan Company

The Composite Fan Selector - Electronic Media that Saves time

Universal Composite Fan Selector v 2.24

Universal Fan & Blower Ltd 'The composite fan company'

Back Select

Centrifugal Range

Please click the fan model you wish to select...

FRBJ Radial Bladed Centrifugal Fan
 PFCX Fume Exhauster
 FRBX Radial Bladed Centrifugal Fan
 FBIX Backward Inclined Centrifugal Fan

Selection Requirements:

Volume: cfm

Pressure: inwg

Conditions: 70 °F @ sea level (0.075 lb/ft3)

Arrangement: Arr 10 36 CW

Motor Position : V

Motor and Drive

Supplied By: UFBL
 Mounted By: UFBL
 Supply: 460 / 3 / 60
 Enclosure: TEFC - EPACT
 Drive: 1 to 200 hp fixed

Features

Weathercover
 Drain assembly
 Motor Mount

Model	Design	Speed (rpm)	Velocity	TipSpeed	Absorbed	tatic Ef	Sound	Motor	Motor	Price
e Fan Selector v 2.24										
Universal Fan & Blower Ltd 'The composi										
Technical - Submittal Information										
Add to Proposal View Curve										
Conditions Specified										
Volume	567 cfm									
Inlet Pressure	0.00 inwg (Static)									
Outlet Pressure	8.00 inwg (Static)									
Density	0.075 lb/ft3									
Humidity	40 %									
Operating Temperature	70 °F									
Altitude	0 ft above sea level									
Selection										
Product Code	FRBJC-125-0V036									
Volume	567 cfm									
Pressure @ 0.075 Lb/ft3	8.00 inwg (Static)									
Power @ 0.075 Lb/ft3	1.39 bhp									
Fan Speed / Max Speed	3326 / 4584 rpm									
Wheel Tip Speed	10886 fpm									
Outlet Velocity	4216 fpm									
Efficiency	51 %									
Motor (right click for motor resize)										
Frame Size	145T									

Possible Solutions : 3

Model	Design	Speed (rpm)
FRBJ-135	C	2863
FRBJ-125	C	3326
FRBJ-106	C	4270

Sound Information

Sound Power Levels in dB re

Octave Bands (Hz)	63	125	250
Level at Inlet (dB)	93	102	112

Overall Sound Power (LWA)

Estimated Overall Sound Pres

Free field distance :

Notes :
Estimated sound pressure ba hemispherical radiation (Q = Sound Pressure levels of a fa acoustic properties of the sur installed and consequently dB guaranteed.
 Refer to AMCA Publication 30

Friday, 19th May 2006