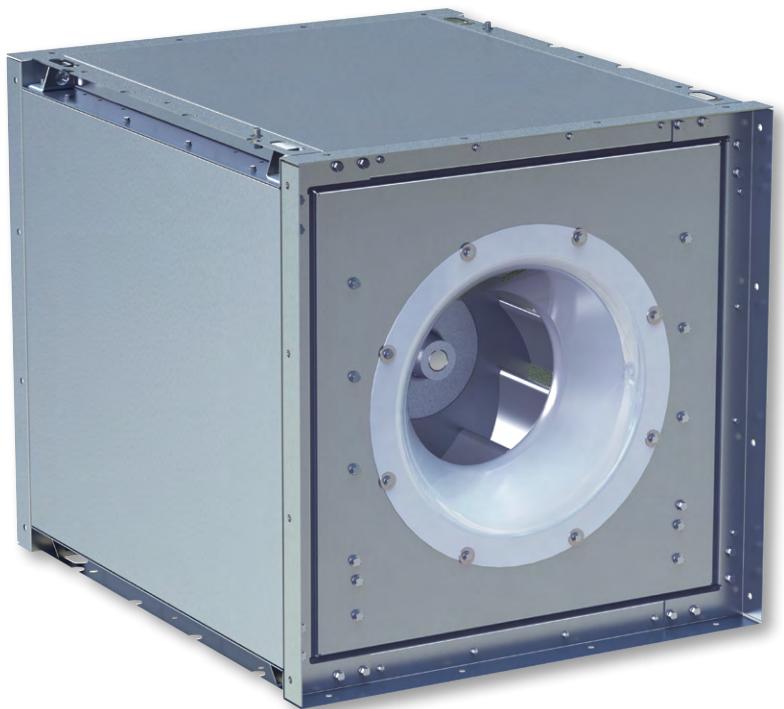




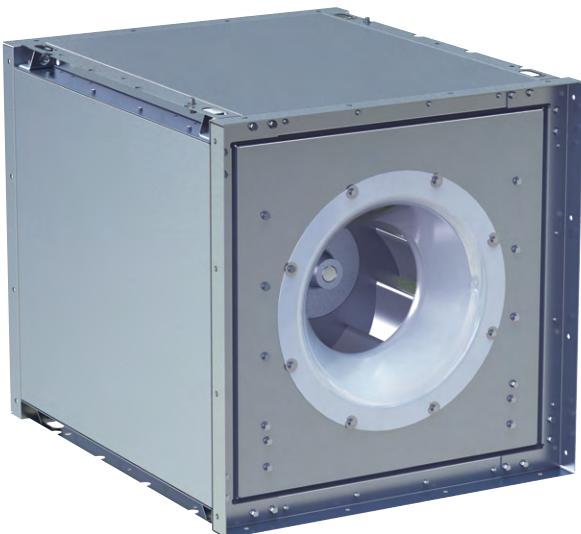
INDUSTRIAL PROCESS AND
COMMERCIAL VENTILATION SYSTEMS

MODULAR PLENUM FANS

MPLFN | MPLFS | MPLQN | MPLQS



PLENUM FANS



Inlet View



Drive End View



Twin City Fan & Blower certifies that the models MPLFN, MPLFS, MPLQN and MPLQS Modular Plenum Fans 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.

Refer to Twin City Fan & Blower Fan Selector® program for sound power levels.



Models

MPLFN | MPLFS | MPLQN | MPLQS

Twin City Fan & Blower offers its newest line of modular plenum fans with the MPLFN, MPLFS, MPLQN and MPLQS. The new modular plenum fans are AMCA licensed for sound and air.

Twin City Fan & Blower's models MPLFN, MPLFS, MPLQN and MPLQS incorporate a plenum fan mounted inside a newly design housing. These models offer many of the same performance and quality characteristics of the E-Series plenum, MPQN and MPQS modular plenum fans, but in a reduced weight, yet rigid design. The MPLFN, MPLFS, MPLQN, and MPLQS fans are suited for light to Class III medium duty applications with static pressures of up to 12" w.g.

The compact, arrangement 4 configuration offers space savings with a reduced fan footprint. The internally isolated fan units (wheel, inlet cone, motor, and pedestal) allow for units to be bolted together directly without the need for further isolation. Different performance points can be achieved either through wheel width reduction or varying motor speeds.

MPLFN and MPLFS

The MPLFN utilizes an acoustically insulated housing assembly. The MPLFS is a non-insulated, structure only version of the MPLFN fan. Both fans are offered in standard and compact size housings to provide the best blend of performance and overall size for sizes 182 to 365.

MPLQN and MPLQS

The MPLQN utilizes an insulated housing assembly. The MPLQS is a non-insulated, structure only version of the MPLQN fan. Both fans are offered in standard and compact size housings for sizes 182 to 365.

Sizes

12.25" to 36.5" wheel diameters

Performance

Airflow to 44,000 CFM
Static pressure to 12" w.g.

Classes

Class I & II available in sizes 122 to 365.
Class III available in sizes 165 to 365.

Models

MPLFN | MPLFS | MPLQN | MPLQS

Plenum fans are designed to operate inside of field-fabricated or factory-built air handling units. The fan pressurizes the surrounding air plenum in which the fan is installed, allowing air ducts from any direction to be directly connected to the air handling unit enclosure. This design generally saves space by eliminating the transitions and diffusers within the air handling unit.

Modular plenum fans have found acceptance in the air handling industry due to the versatility, adaptability, and simple, compact design. The modular plenum fan is ideal for retrofitting existing air handling units as well as new applications.

The MPLFN, MPLFS, MPLQN and MPLQS fans can be used as individual fans or in parallel to construct a multi-fan system. When using the modular fans in parallel, the system provides a more uniform airflow throughout the plenum with less axial length than a larger individual plenum fan. Modular plenum fans operating in parallel may also provide redundancy on critical applications.

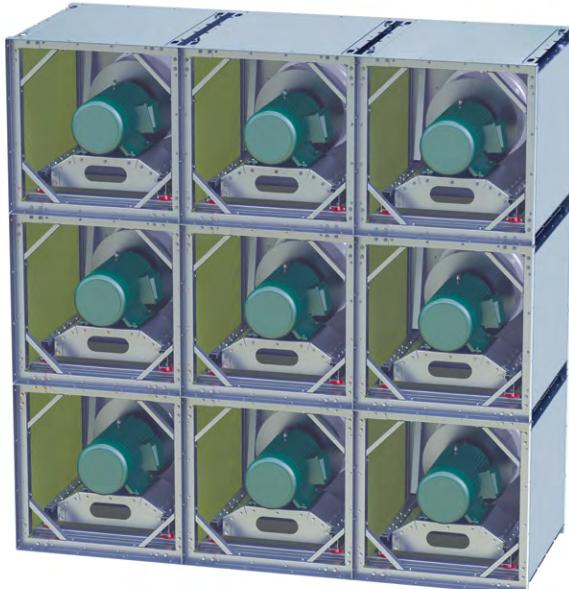
The MPLFN, MPLFS, MPLQN and MPLQS fans, when used in parallel, can offer further advantages over a single, larger plenum fan. The use of multiple modular fans in parallel, operating at higher speeds, can reduce low-frequency sound levels as compared to larger fans.

Configurations

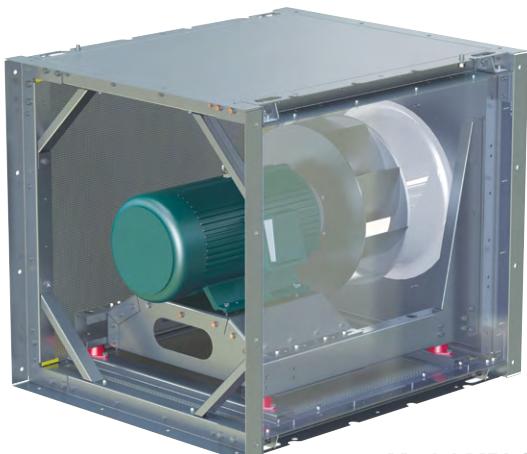
MPLFN, MPLFS, MPLQN and MPLQS fans can be configured in many different ways. All fans can be stacked on top of one another and bolted together side-by-side to build a multi-fan system. See chart below for stacking height available for the modular plenum fans.

FAN SIZE	MAXIMUM STACKING HEIGHT
122	4
150	4
165	4
182	3
200	3
222	3

FAN SIZE	MAXIMUM STACKING HEIGHT
245	3
270	2
300	2
330	2
365	2



CONSTRUCTION FEATURES



Model MPLQN



9-Bladed Airfoil
Wheel Design



12-Bladed Airfoil
Wheel Design

The MPLFN, MPLFS, MPLQN and MPLQS are comprised of a bare fan, consisting of a wheel, motor pedestal, inlet funnel and inlet plate mounted inside a structural housing. The fan assembly and housing structure are constructed of heavy-gauge, corrosion-resistant galvanized material for strength and rigidity where available. Enamel coated mild steel is supplied on components where galvanized material is not available.

Wheels

High efficiency, non-overloading airfoil aluminum wheels using extruded aluminum blades are standard.

The models MPLFN and MPLFS feature a highly efficient and cost-effective, 9-bladed airfoil wheel design.

The models MPLQN and MPLQS feature a 12-bladed airfoil wheel design that flattens the sound spectrum and reduces the dominance of pure tones.

Inlet Cones

Heavy-gauge, spun steel inlet cones are closely matched to the wheel intake rim to ensure efficient and quiet operation.

Housings

Each model includes a structural housing which allows the fans to be bolted together in several different configurations. All models receive an outer skin that directs the sound and air axially through the fan.

Two different housing sizes are available for the modular plenum fans. Sizes 182 and larger are available in compact configurations. The compact housings reduce the wheel-to-wall spacing for applications with space constraints. The standard housings are available on all sizes and closely track un-housed plenum fan performance and efficiencies.

Sound Insulation (MPLFN and MPLQN)

Models MPLFN and MPLQN housings are insulated to reduce sound power levels. The sheet metal module encloses insulation for sound attenuation. The insulation is protected with a vapor barrier for IAQ (indoor air quality) preventing insulation shedding on the air path side. Galvanized, perforated steel is located on the airstream side of the vapor barrier provides added protection without sacrificing air performance. The perforated steel is optimized for sound transmissibility, allowing the most sound energy to reach the sound absorbing fiberglass.

Isolation

Internal fan assemblies are isolated from the housings to achieve the least amount of transmitted vibration to the customer's air handling unit. Additionally, internal isolation allows for a more versatile installation with no required isolating accessories to mount on the air handling unit.

Partial Width Wheels

Wheels are available from 50% to 105% width.

Inlet Screen

Heavy-gauge barbecue grill style inlet screen that nests in the inlet funnel for personnel protection.

Outlet Guard

Removable outlet guard mounted on the outlet of the fan housing for personnel protection.

Inlet Damper

Backdraft damper mounted on the inlet of the fan to minimize airflow through the fan when a fan is shut down. Available for up to 5" w.g.

Outlet Damper

Backdraft damper mounted on the outlet of the fan to minimize airflow through the fan when a fan is shut down. Standard duty available for up to 5" w.g. Heavy duty available to 10" w.g.

Aluminum Perforated Housing Liner

Available on MPLFN and MPLQN fans, the aluminum substitutes the standard galvanized, perforated steel.

Shaft Grounding Ring (SGR)

Recommended for all modular fans, a shaft grounding ring is mounted to the motor providing motor bearing protection. By diverting variable frequency drive (VFD) induced stray voltages to ground through the shaft grounding ring instead of the motor bearings, motor life is extended.



FLOW MEASUREMENT SYSTEM

Piezometer Ring

(Airflow Measuring System)

A piezometer ring is available on plenum fans, as well as other Twin City Fan housed fans, as part of an airflow measuring system, based on the principle of a flow nozzle. The inlet cone of the fan is used as the flow nozzle. The flow can be calculated by measuring the pressure drop through the inlet cone. No tubes or sensors are inserted in the high velocity airstream which could obstruct airflow.

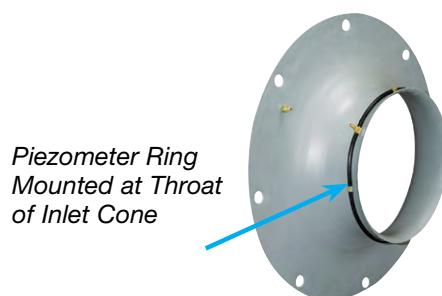
The system consists of a piezometer ring mounted at the throat and a static pressure tap mounted on the face of the inlet cone. A differential pressure transducer and digital display can also be provided.

The pressure drop is measured between the tap located on the face of the inlet cone and the tap connected to the piezometer ring in the throat. The inlet tap is connected to the high-pressure side of the transducer and the piezometer ring is connected to the low-pressure side.

Based on Twin City Fan laboratory tests, the system was determined to be accurate within +/-5%.

Refer to Twin City Fan Engineering Supplement ES-105.

NOTE: Twin City Fan does not recommend placement of flow measuring probes inside the fan inlet cone in the path of airflow. These devices create disturbances and unpredictable performance losses. Twin City Fan will not be responsible for loss of performance due to such devices.



Maximum RPM, Wheel Weights, & WR²

MPLFN & MPLFS

FAN SIZE	WHEEL DIA. (IN.)	CLASS I			CLASS II			CLASS III		
		MAX RPM (70°F)	WT. (LB)	WR ² (LB-FT)	MAX RPM (70°F)	WT. (LB)	WR ² (LB-FT)	MAX RPM (70°F)	WT. (LB)	WR ² (LB-FT)
122	12.25	3388	11	1.4	4000	11	1.4	n/a	n/a	n/a
150	15.00	3006	15	3	3909	15	3	n/a	n/a	n/a
165	16.50	2668	17	4.4	3468	17	4.4	4000	20	5.1
182 & 182C	18.25	2302	17	6.1	2930	18	6.1	3767	21	6.2
200 & 200C	20.00	2101	21	6.4	2674	21	7.4	3438	24	9.3
222 & 222C	22.25	1888	30	12	2403	30	12	3090	34	15
245 & 245C	24.50	1715	35	21	2183	35	21	2806	38	22
270 & 270C	27.00	1556	40	29	1981	40	29	2546	47	32
300 & 300C	30.00	1401	49	46	1783	54	51	2291	58	52
330 & 330C	33.00	1273	62	70	1620	67	76	2083	72	77
365 & 365C	36.50	1151	73	103	1465	79	112	1884	84	114

MPLQN & MPLQS

FAN SIZE	WHEEL DIA. (IN.)	CLASS I			CLASS II			CLASS III		
		MAX RPM (70°F)	WT. (LB)	WR ² (LB-FT)	MAX RPM (70°F)	WT. (LB)	WR ² (LB-FT)	MAX RPM (70°F)	WT. (LB)	WR ² (LB-FT)
122	12.25	3388	12	1.6	4000	12	1.6	n/a	n/a	n/a
150	15.00	3006	17	3.5	3909	17	3.5	n/a	n/a	n/a
165	16.50	2668	20	5.3	3468	20	5.3	4000	22	5.6
182 & 182C	18.25	2302	20	7.2	2930	20	7.2	3767	23	7.4
200 & 200C	20.00	2101	24	10	2674	24	8.4	3438	27	10
222 & 222C	22.25	1888	34	14	2403	34	14	3090	38	17
245 & 245C	24.50	1715	39	24	2183	39	24	2806	43	24
270 & 270C	27.00	1556	46	35	1981	46	35	2546	53	38
300 & 300C	30.00	1401	57	55	1783	61	59	2291	65	59
330 & 330C	33.00	1273	72	81	1620	77	87	2083	82	88
365 & 365C	36.50	1151	85	120	1465	91	129	1884	96	130

Bare Fan Weights

FAN SIZE	WHEEL DIA. (IN.)	WEIGHT (LB) *											
		MPLFN			MPLFS			MPLQN			MPLQS		
		CLASS I	CLASS II	CLASS III	CLASS I	CLASS II	CLASS III	CLASS I	CLASS II	CLASS III	CLASS I	CLASS II	CLASS III
122	12.25	250	250	n/a	216	216	n/a	251	251	n/a	217	217	n/a
150	15.00	306	306	n/a	263	263	n/a	308	308	n/a	265	265	n/a
165	16.50	336	336	339	274	274	277	339	339	341	277	277	279
182C	18.25	322	323	326	260	261	264	325	325	328	263	263	266
182	18.25	368	369	372	293	294	297	371	371	374	296	296	299
200C	20.00	380	380	383	305	305	308	383	383	386	308	308	311
200	20.00	434	434	437	343	343	346	437	437	440	346	346	349
222C	22.25	469	469	473	378	378	382	473	473	477	382	382	386
222	22.25	557	557	561	450	450	454	561	561	565	454	454	458
245C	24.50	507	507	510	416	416	419	511	511	515	420	420	424
245	24.50	676	676	679	544	544	547	680	680	684	548	548	552
270C	27.00	614	614	621	507	507	514	620	620	627	513	513	520
270	27.00	782	782	789	627	627	634	788	788	795	633	633	640
300C	30.00	747	752	756	615	620	624	755	759	763	623	627	631
300	30.00	947	952	956	763	768	772	955	959	963	771	775	779
330C	33.00	907	912	917	752	757	762	917	922	927	762	767	772
330	33.00	1104	1109	1114	906	911	916	1114	1119	1124	916	921	926
365C	36.50	1103	1109	1114	919	925	930	1115	1121	1126	931	937	942
365	36.50	1330	1336	1341	1104	1110	1115	1342	1348	1353	1116	1122	1127

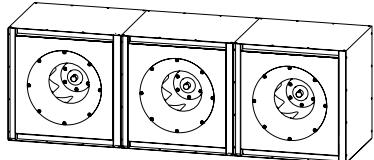
* Weight is for fan less motor weight.

MPLQN - 122C

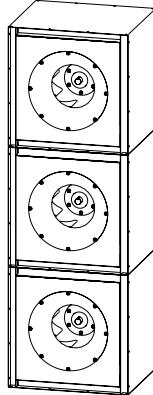
Model	<u>MPLFN, MPLFS</u> MPLQN, MPLQS
Wheel Type	F = 9-Bladed Airfoil Q = 12-Bladed Airfoil
Housing	N = Insulated S = Structure Only, Non-Insulated

Housing Size
C = Compact
No letter at the end of the fan size = Standard Housing

Wheel Diameter
12.25" to 36.5"



1 x 3 Horizontal Layout



3 x 1 Vertical Layout

Multi-fan layouts can be described by defining the quantity of fans stacked up by the the quantity of fans bolted together horizontally. See examples to the left.

PERFORMANCE DATA**122 MPLFN/MPLFS**

Wheel Diameter: 12.25"
Outlet Area: 3.97 ft²

Fan Efficiency Grade: FEG80
Max. BHP = 0.055 x (RPM / 1000)³

CFM	OV	0.5" SP		1" SP		1.5" SP		2" SP		2.5" SP		3" SP		3.5" SP		4" SP		5" SP		6" SP		7" SP		8" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP												
1000	252	1376	0.13	1620	0.23	1849	0.35	2077	0.47	2347	0.70	2539	0.86	2608	0.97	2770	1.14	2935	1.33	3289	1.88				
1200	302	1549	0.18	1770	0.29	1967	0.42	2158	0.55	2445	0.81	2608	0.97	2770	1.14	2935	1.33	3289	1.88	3616	2.52	3875	3.02		
1400	352	1726	0.23	1934	0.36	2115	0.50	2282	0.65	2576	0.93	2718	1.11	2861	1.29	3004	1.48	3289	1.88	3616	2.52	3875	3.02		
1600	403	1909	0.30	2106	0.45	2273	0.60	2429	0.76	2576	0.93	2718	1.11	2861	1.29	3004	1.48	3289	1.88	3616	2.52	3875	3.02		
1800	453	2096	0.39	2280	0.55	2441	0.72	2586	0.89	2724	1.07	2856	1.26	2983	1.46	3109	1.66	3363	2.08	3616	2.52	3875	3.02		
2000	503	2287	0.49	2459	0.67	2614	0.86	2752	1.05	2881	1.24	3006	1.44	3126	1.65	3241	1.86	3469	2.31	3698	2.77	3925	3.25		
2200	554	2480	0.61	2642	0.81	2789	1.01	2924	1.22	3047	1.43	3164	1.64	3277	1.86	3388	2.08	3598	2.55	3806	3.05				
2400	604	2676	0.75	2827	0.97	2967	1.19	3097	1.41	3217	1.63	3329	1.86	3436	2.09	3541	2.33	3743	2.83	3935	3.34				
2600	654	2873	0.91	3016	1.16	3149	1.39	3273	1.63	3390	1.87	3499	2.11	3602	2.36	3702	2.61	3894	3.12						
2800	705			3207	1.36	3333	1.62	3452	1.87	3565	2.13	3672	2.39	3772	2.65	3868	2.91								
3000	755			3399	1.59	3520	1.87	3634	2.14	3743	2.41	3846	2.69	3945	2.97										
3200	805			3594	1.85	3709	2.15	3818	2.44	3923	2.73														

MAXIMUM RPM: Class I = 3388 Class II = 4000

122 MPLQN/MPLQS

Wheel Diameter: 12.25"
Outlet Area: 3.97 ft²

Fan Efficiency Grade: FEG80
Max. BHP = 0.055 x (RPM / 1000)³

CFM	OV	0.5" SP		1" SP		1.5" SP		2" SP		2.5" SP		3" SP		3.5" SP		4" SP		5" SP		6" SP		7" SP		8" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP												
1000	252	1440	0.15	1662	0.24	1852	0.35	2039	0.47	2224	0.60	2483	0.84	2637	1.00	2802	1.17	3141	1.68	3464	2.27	3707	2.73		
1200	302	1627	0.20	1838	0.31	2015	0.43	2172	0.56	2330	0.70	2609	0.97	2744	1.14	2875	1.31	3235	1.86	3464	2.27	3707	2.73		
1400	352	1819	0.27	2023	0.40	2189	0.54	2339	0.67	2475	0.82	2766	1.13	2883	1.30	3001	1.48	3235	1.86	3464	2.27	3707	2.73		
1600	403	2020	0.36	2209	0.51	2371	0.66	2512	0.81	2645	0.97	2766	1.13	2883	1.30	3001	1.48	3235	1.86	3464	2.27	3707	2.73		
1800	453	2226	0.46	2398	0.63	2557	0.81	2694	0.98	2819	1.15	2938	1.32	3049	1.50	3155	1.69	3363	2.09	3572	2.51	3775	2.95	3982	3.43
2000	503	2436	0.59	2593	0.78	2744	0.97	2879	1.16	3000	1.35	3113	1.54	3221	1.73	3325	1.93	3517	2.35	3704	2.79	3894	3.25		
2200	554	2649	0.74	2792	0.95	2933	1.16	3066	1.37	3185	1.58	3295	1.79	3398	1.99	3498	2.20	3686	2.64	3860	3.10				
2400	604			2997	1.14	3127	1.37	3254	1.61	3372	1.84	3480	2.06	3581	2.29	3676	2.51	3858	2.97						
2600	654			3205	1.37	3325	1.62	3444	1.87	3559	2.12	3667	2.37	3766	2.61	3859	2.86								
2800	705			3415	1.62	3527	1.89	3638	2.16	3748	2.43	3854	2.70	3953	2.97										
3000	755			3628	1.91	3733	2.20	3837	2.48	3941	2.78														
3200	805			3842	2.23	3941	2.54																		

MAXIMUM RPM: Class I = 3388 Class II = 4000

Class I = First white section

Class II = Blue shaded section

Underlined figures indicate Maximum Static Efficiency

Performance certified is for installation Type A; Free inlet, Free outlet.

Power rating (BHP) does not include transmission losses.

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

PERFORMANCE DATA

150 MPLFN/MPLFS

Wheel Diameter: 15.00"
Outlet Area: 4.69 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 0.152 x (RPM / 1000)³

CFM	OV	0.5" SP		1" SP		1.5" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	426	1361	0.32	1534	0.51	1686	0.71	1827	0.93	2106	1.39	2420	2.10	2702	2.91	2930	3.59								
2250	480	1484	0.40	1650	0.61	1791	0.83	1923	1.06	2172	1.56	2480	2.31	2747	3.07	2920	3.77	3092	4.50	3265	5.26	3436	6.03	3608	6.86
2500	533	1610	0.50	1767	0.73	1902	0.96	2026	1.21	2256	1.74	2480	2.31	2702	2.91	2963	3.84	3168	4.57						
2750	586	1738	0.61	1887	0.86	2018	1.12	2135	1.38	2353	1.94	2556	2.54	2760	3.18	2963	3.84								
3000	640	1868	0.74	2009	1.01	2135	1.29	2248	1.57	2455	2.16	2647	2.79	2833	3.46	3020	4.16	3206	4.88	3393	5.66				
3250	693	2000	0.89	2133	1.18	2254	1.48	2365	1.78	2562	2.40	2747	3.07	2920	3.77	3092	4.50	3265	5.26	3436	6.03	3608	6.86	3784	7.76
3500	746	2132	1.05	2259	1.38	2375	1.70	2483	2.02	2674	2.68	2850	3.37	3017	4.10	3177	4.86	3337	5.66	3497	6.47	3656	7.30	3815	8.17
3750	799	2266	1.24	2387	1.59	2498	1.94	2602	2.28	2789	2.98	2957	3.70	3119	4.46	3272	5.25	3421	6.07	3570	6.93	3720	7.80	3868	8.68
4000	853	2401	1.46	2516	1.83	2622	2.20	2722	2.56	2905	3.30	3069	4.06	3223	4.84	3372	5.67	3514	6.52	3654	7.40	3794	8.31		
4250	906			2646	2.10	2748	2.49	2845	2.87	3023	3.65	3183	4.45	3332	5.27	3475	6.12	3613	7.00	3747	7.91	3878	8.85		
4500	959			2777	2.39	2875	2.80	2969	3.21	3142	4.03	3299	4.87	3444	5.73	3582	6.61	3716	7.51	3845	8.45				
4750	1013			2909	2.71	3004	3.15	3094	3.58	3262	4.44	3417	5.33	3558	6.22	3691	7.12	3821	8.07						

MAXIMUM RPM: Class I = 3006 Class II = 3909

150 MPLQN/MPLQS

Wheel Diameter: 15.00"
Outlet Area: 4.69 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 0.152 x (RPM / 1000)³

CFM	OV	0.5" SP		1" SP		1.5" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
2000	426	1433	0.37	1602	0.56	1740	0.75	1864	0.95	2095	1.39	2320	1.88	2559	2.46	2805	3.27									
2250	480	1567	0.47	1728	0.68	1862	0.89	1981	1.11	2192	1.57	2398	2.09	2597	2.64	2855	3.51	3038	4.18	3238	4.95					
2500	533	1706	0.58	1856	0.82	1987	1.06	2101	1.30	2306	1.79	2490	2.32	2676	2.91	2935	3.83	3098	4.50	3262	5.21	3435	5.99			
2750	586	1847	0.72	1985	0.98	2114	1.25	2225	1.51	2423	2.03	2599	2.59	2766	3.19											
3000	640	1990	0.88	2118	1.17	2241	1.46	2352	1.75	2543	2.31	2716	2.90	2873	3.52	3025	4.18	3180	4.88	3331	5.60	3480	6.35	3633	7.16	
3250	693	2135	1.07	2254	1.38	2370	1.69	2479	2.00	2666	2.61	2833	3.23	2988	3.89	3130	4.57	3271	5.28	3415	6.04	3555	6.81	3692	7.61	
3500	746	2281	1.28	2392	1.61	2501	1.95	2607	2.29	2792	2.95	2954	3.61	3105	4.29	3245	5.00	3377	5.74	3507	6.50	3641	7.31	3772	8.14	
3750	799			2533	1.88	2635	2.24	2735	2.60	2919	3.32	3078	4.02	3223	4.73	3362	5.47	3490	6.24	3614	7.03	3735	7.84	3859	8.70	
4000	853			2675	2.17	2771	2.56	2866	2.94	3046	3.71	3203	4.47	3345	5.22	3479	5.98	3607	6.78	3727	7.60	3843	8.44			
4250	906			2819	2.50	2910	2.91	2999	3.32	3174	4.14	3330	4.95	3469	5.74	3600	6.55	3725	7.37	3844	8.22					
4500	959			2964	2.87	3050	3.30	3135	3.73	3302	4.60	3457	5.46	3595	6.31	3723	7.15	3844	8.00							
4750	1013			3109	3.27	3192	3.72	3272	4.18	3432	5.09	3584	6.01	3722	6.92	3848	7.81									

MAXIMUM RPM: Class I = 3006 Class II = 3909

165 MPLFN/MPLFS

Wheel Diameter: 16.50"

Outlet Area: 6.14 ft²

Fan Efficiency Grade: FEG75

Max. BHP = 0.245 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	407	1422	0.64	1883	1.16	1929	1.74	2176	2.38	2453	3.50	2663	4.33												
3000	489	1598	0.87	1834	1.44	2044	2.08	2249	2.77	2456	4.04	2721	4.86	2897	5.74	3076	6.70	3288	8.41	3444	9.49				
3500	570	1778	1.14	1999	1.80	2192	2.49	2370	3.24	2546	4.04	2721	4.86	2897	5.74	3076	6.70								
4000	652	1965	1.48	2174	2.22	2352	2.98	2518	3.79	2674	4.65	2827	5.54	2982	6.47	3135	7.42	3288	8.41	3444	9.49	3646	11.53	3783	12.69
4500	733	2155	1.89	2352	2.71	2522	3.55	2676	4.42	2824	5.34	2963	6.29	3100	7.29	3237	8.31	3374	9.36	3510	10.42	3646	11.53	3783	12.69
5000	815	2349	2.38	2534	3.30	2698	4.22	2844	5.15	2982	6.13	3115	7.14	3242	8.19	3365	9.27	3488	10.39	3612	11.55	3735	12.70	3857	13.88
5500	896	2547	2.96	2719	3.97	2876	4.97	3019	5.99	3149	7.03	3274	8.10	3396	9.22	3513	10.36	3626	11.53	3738	12.74	3849	13.97	3962	15.24
6000	978	2746	3.63	2908	4.73	3058	5.83	3195	6.92	3322	8.04	3441	9.18	3556	10.36	3668	11.56	3777	12.79	3882	14.05	3985	15.34		
6500	1059	2947	4.40	3100	5.60	3242	6.79	3375	7.97	3499	9.18	3614	10.39	3724	11.63	3829	12.88	3933	14.18						
7000	1140			3295	6.59	3430	7.87	3557	9.14	3677	10.42	3790	11.72	3896	13.03	3998	14.36								
7500	1222			3491	7.69	3620	9.08	3742	10.44	3858	11.80	3968	13.18												

182 MPLFN/MPLFSWheel Diameter: 18.25"
Outlet Area: 7.83 ft²Fan Efficiency Grade: FEG75
Max. BHP = 0.422 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	383	1205	0.71	1480	1.37	1713	2.07	1926	2.83	2164	4.08	2390	5.56	2549	6.59	2459	6.19	2605	7.26	2745	8.37	2888	9.55		
3500	447	1312	0.87	1564	1.60	1785	2.39	1983	3.22	2230	4.60	2614	7.54	2751	8.78	2882	10.04	3010	11.35	3131	12.66	3246	13.98	3361	15.36
4000	511	1426	1.06	1656	1.87	1867	2.74	2055	3.65	2557	6.94	2698	8.24	2833	9.59	2960	10.94	3082	12.31	3201	13.72	3316	15.14	3426	16.58
4500	575	1544	1.28	1758	2.16	1954	3.11	2136	4.11	2302	5.13	2755	8.36	2882	9.81	3007	11.31	3128	12.84	3245	14.39	3358	15.98	3466	17.57
5000	638	1667	1.55	1867	2.50	2048	3.51	2221	4.59	2383	5.71	2533	6.85	2675	8.00	2812	9.20	2940	10.40	3066	11.65	3194	12.95		
5500	702	1792	1.85	1981	2.88	2151	3.96	2312	5.11	2467	6.30	2614	7.54	2751	8.78	2882	10.04	3010	11.35	3131	12.66	3246	13.98	3361	15.36
6000	766	1920	2.20	2097	3.30	2259	4.46	2410	5.67	2557	6.94	2698	8.24	2833	9.59	2960	10.94	3082	12.31	3201	13.72	3316	15.14	3426	16.58
7000	894	2180	3.03	2339	4.30	2487	5.61	2625	6.97	2755	8.36	2882	9.81	3007	11.31	3128	12.84	3245	14.39	3358	15.98	3466	17.57	3570	19.15
8000	1022	2447	4.10	2590	5.52	2725	6.99	2852	8.49	2973	10.04	3089	11.63	3202	13.26	3312	14.92	3421	16.63	3528	18.37	3632	20.14	3734	21.94
9000	1149	2717	5.41	2848	7.01	2971	8.63	3089	10.29	3202	11.99	3310	13.72	3415	15.49	3516	17.29	3616	19.14	3714	21.01				
10000	1277			3110	8.77	3224	10.56	3333	12.38	3438	14.22	3540	16.11	3639	18.03	3734	19.98								
11000	1405			3376	10.86	3482	12.82	3584	14.80	3682	16.80														

MAXIMUM RPM: Class I = 2302 Class II = 2930 Class III = 3767

182 MPLQN/MPLQSWheel Diameter: 18.25"
Outlet Area: 7.83 ft²Fan Efficiency Grade: FEG75
Max. BHP = 0.440 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
3000	383	1219	0.74	1471	1.40	1689	2.11																			
3500	447	1334	0.93	1566	1.66	1771	2.44	1956	3.28	2145	4.19	2360	5.68	2569	7.39	2716	8.58									
4000	511	1456	1.14	1671	1.95	1862	2.81	2038	3.72	2200	4.67	2428	6.29													
4500	575	1583	1.40	1782	2.28	1962	3.22	2127	4.21	2284	5.24															
5000	638	1713	1.71	1899	2.66	2068	3.68	2225	4.74	2372	5.84	2514	6.98	2646	8.15	2773	9.35	2901	10.60	3035	11.94					
5500	702	1846	2.06	2020	3.09	2180	4.18	2329	5.32	2470	6.50	2603	7.71	2732	8.96	2855	10.24	2972	11.54	3087	12.87	3204	14.27	3326	15.74	
6000	766	1981	2.46	2145	3.58	2297	4.74	2438	5.96	2573	7.22	2700	8.50	2822	9.82	2942	11.18	3057	12.56	3167	13.97	3273	15.40	3378	16.86	
7000	894	2256	3.45	2404	4.74	2540	6.05	2669	7.42	2792	8.83	2910	10.28	3023	11.75	3132	13.25	3238	14.78	3341	16.33	3443	17.93	3543	19.55	
8000	1022	2536	4.70	2670	6.17	2794	7.65	2912	9.16	3025	10.71	3134	12.31	3240	13.95	3342	15.61	3441	17.29	3538	19.01	3631	20.73	3723	22.49	
9000	1149			2942	7.90	3057	9.56	3165	11.23	3270	12.94	3371	14.67	3469	16.45	3564	18.26	3657	20.11	3748	21.98					
10000	1277			3218	9.97	3324	11.81	3426	13.66	3523	15.52	3617	17.41	3708	19.32											
11000	1405			3499	12.45	3597	14.45	3691	16.47																	

MAXIMUM RPM: Class I = 2302 Class II = 2930 Class III = 3767

182C MPLFN/MPLFSWheel Diameter: 18.25"
Outlet Area: 6.14 ft²Fan Efficiency Grade: FEG75
Max. BHP = 0.426 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	489	1212	0.73	1479	1.38	1708	2.07																		
3500	570	1320	0.90	1567	1.63	1783	2.41	1977	3.22	2171	4.13														
4000	652	1435	1.11	1664	1.91	1867	2.77	2052	3.67	2222	4.59	2389	5.59												
4500	733	1556	1.35	1788	2.23	1960	3.17	2135	4.15	2299	5.16	2451	6.19	2599	7.27	2750	8.45								
5000	815	1681	1.64	1878	2.59	2059	3.60	2225	4.66	2382	5.76	2530	6.88	2668	8.02	2802	9.19	2936	10.43	3072	11.75				
5500	896	1809	1.97	1993	3.00	2163	4.08	2322	5.21	2471	6.39	2613	7.60	2749	8.84	2877	10.08	3000	11.35	3121	12.66	3243	14.04	3367	15.50
6000	978	1939	2.35	2112	3.46	2272	4.61	2424	5.82	2567	7.07	2702	8.36	2832	9.68	2959	11.03	3078	12.38	3193	13.75	3305	15.14	3416	16.58
7000	1140	2205	3.28	2359	4.54	2503	5.86	2640	7.21	2771	8.61	2897	10.05	3018	11.52	3134	13.03	3246	14.55	3356	16.11	3463	17.69	3566	19.27
8000	1303	2477	4.47	2615	5.89	2746	7.36	2870	8.86	2991	10.42	3107	12.00	3220	13.62	3329	15.28	3434	16.95	3536	18.66	3636	20.40	3734	22.16
9000	1466			2878	7.53	2998	9.16	3112	10.82	3222	12.51	3330	14.25	3435	16.02	3537	17.83	3636	19.65	3733	21.51				
10000	1629			3146	9.50	3256	11.28	3362	13.10	3464	14.95	3563	16.83	3661	18.76	3756	20.70								
11000	1792			3418	11.83	3519	13.77	3617	15.74	3713	17.76														

PERFORMANCE DATA

200 MPLFN/MPLFS

Wheel Diameter: 20.00"
Outlet Area: 9.40 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 0.667 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
3000	319	1013	0.69	1283	1.38																					
4000	425	1164	0.98	1401	1.83	1606	2.74	1788	3.70	1963	4.73															
5000	532	1336	1.36	1541	2.35	1729	3.43	1899	4.56	2055	5.72	2200	6.92	2339	8.16	2482	9.50									
6000	638	1520	1.86	1703	3.00	1868	4.21	2026	5.51	2174	6.85	2310	8.21	2441	9.61	2565	11.03	2682	12.48	2797	13.97	2915	15.55			
7000	744	1711	2.49	1877	3.78	2027	5.14	2168	6.57	2305	8.07	2436	9.61	2559	11.18	2676	12.77	2789	14.38	2899	16.04	3004	17.71	3104	19.39	
8000	851	1908	3.27	2059	4.73	2198	6.24	2327	7.81	2450	9.43	2571	11.12	2688	12.85	2802	14.64	2910	16.44	3013	18.24	3114	20.08	3211	21.92	
9000	957	2109	4.24	2247	5.85	2375	7.51	2496	9.23	2611	11.00	2721	12.82	2829	14.69	2935	16.62	3039	18.59	3139	20.57	3237	22.61	3330	24.64	
10000	1063	2313	5.40	2440	7.18	2559	9.00	2672	10.86	2780	12.78	2884	14.75	2983	16.75	3081	18.81	3178	20.92	3273	23.07	3366	25.24			
11000	1170			2637	8.73	2748	10.72	2854	12.74	2956	14.80	3054	16.92	3148	19.07	3240	21.27	3329	23.49	3418	25.78					
12000	1276			2836	10.52	2940	12.67	3040	14.85	3136	17.07	3229	19.33	3319	21.63	3406	23.97									
13000	1382			3038	12.57	3136	14.89	3230	17.24	3321	19.61	3409	22.02													
14000	1489			3242	14.92	3334	17.39	3423	19.91																	

MAXIMUM RPM: Class I = 2101 Class II = 2674 Class III = 3438

200 MPLQN/MPLQS

Wheel Diameter: 20.00"
Outlet Area: 9.40 ft²

Fan Efficiency Grade: FEG71
Max. BHP = 0.695 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3000	319	1015	0.71	1265	1.40																						
4000	425	1181	1.03	1398	1.88	1590	2.80	1765	3.77																		
5000	532	1366	1.47	1557	2.47	1728	3.53	1885	4.65	2031	5.82	2170	7.04	2317	8.38												
6000	638	1562	2.05	1732	3.19	1887	4.42	2030	5.69	2164	7.01	2293	8.38	2414	9.78	2530	11.22	2647	12.73	2770	14.34						
7000	744	1765	2.78	1918	4.09	2059	5.46	2190	6.88	2315	8.37	2433	9.88	2546	11.43	2657	13.03	2763	14.67	2863	16.30	2963	18.01	3063	19.77		
8000	851	1973	3.71	2112	5.18	2241	6.70	2363	8.28	2478	9.91	2589	11.59	2695	13.30	2797	15.03	2896	16.81	2993	18.62	3089	20.49	3179	22.34		
9000	957	2184	4.84	2313	6.50	2431	8.17	2544	9.90	2651	11.67	2755	13.50	2854	15.36	2951	17.27	3045	19.21	3135	21.15	3224	23.15	3311	25.17		
10000	1063	2399	6.22	2517	8.04	2627	9.89	2732	11.77	2832	13.68	2929	15.66	3023	17.68	3114	19.73	3203	21.83	3290	23.96	3374	26.10				
11000	1170			2724	9.85	2828	11.89	2926	13.93	3020	16.00	3111	18.11	3200	20.28	3286	22.49	3370	24.73								
12000	1276			2935	11.97	3032	14.17	3124	16.38	3213	18.62	3298	20.87	3382	23.18												
13000	1382			3147	14.38	3238	16.76	3326	19.16	3410	21.57																
14000	1489			3362	17.16																						

MAXIMUM RPM: Class I = 2101 Class II = 2674 Class III = 3438

200C MPLFN/MPLFS

Wheel Diameter: 20.00"
Outlet Area: 7.83 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 0.674 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
3000	383	1015	0.70	1278	1.38																					
4000	511	1170	1.01	1401	1.85	1602	2.75	1786	3.71	2049	5.73	2195	6.92	2344	8.24											
5000	638	1345	1.42	1549	2.41	1730	3.47	1897	4.59																	
6000	766	1533	1.96	1713	3.11	1878	4.32	2030	5.59	2173	6.91	2308	8.26	2434	9.62	2556	11.03	2678	12.51	2803	14.11	2904	15.55	3094	17.00	
7000	894	1728	2.66	1889	3.95	2039	5.31	2180	6.74	2312	8.21	2437	9.72	2558	11.28	2674	12.86	2783	14.43	2889	16.04	2994	17.70	3098	19.42	
8000	1022	1929	3.53	2075	4.98	2211	6.49	2341	8.07	2464	9.68	2582	11.35	2694	13.05	2803	14.80	2908	16.57	3011	18.37	3109	20.17	3204	21.99	
9000	1149	2134	4.60	2267	6.21	2392	7.88	2511	9.59	2626	11.37	2737	13.19	2843	15.04	2946	16.94	3045	18.86	3141	20.82	3236	22.82	3328	24.83	
10000	1277	2342	5.90	2464	7.67	2580	9.50	2690	11.37	2797	13.29	2900	15.25	3001	17.26	3098	19.30	3193	21.39	3284	23.49	3373	25.62			
11000	1405			2665	9.39	2772	11.37	2875	13.39	2975	15.46	3072	17.58	3166	19.73	3258	21.92	3348	24.15	3436	26.42					
12000	1532			2863	11.39	2969	13.53	3066	15.71	3159	17.93	3250	20.19	3339	22.50	3426	24.84									
13000	1660			3075	13.68	3169	15.99	3260	18.33	3348	20.71	3433	23.11													
14000	1788			3283	16.30	3371	18.76																			

MAXIMUM RPM: Class I = 2101 Class II = 2674 Class III = 3438

Class I = First white section

Class II = Blue shaded section

Class III = Bolded section after blue section

Underlined figures indicate Maximum Static Efficiency

222 MPLFN/MPLFS

Wheel Diameter: 22.00"

Fan Efficiency Grade: FEG71

Max. BHP = $1.14 \times (\text{RPM} / 1000)^3$

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP					
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP				
5000	430	1052	1.22	1264	2.29	1447	3.42	1611	4.62	1766	5.89	1833	6.89	1964	8.33	2093	9.86	2273	12.95	2383	14.70	2496	16.56	2554	18.44	2650	20.40	2747	22.44
6000	516	1177	1.60	1364	2.80	1536	4.11	1690	5.47	1781	6.41	1915	7.98	2041	9.59	2161	11.26	2241	12.77	2350	14.63	2455	16.53	2554	18.44	2650	20.40	2747	22.44
7000	601	1308	2.07	1479	3.42	1634	4.86	1781	6.41	1915	7.98	2041	9.59	2161	11.26	2273	12.95	2383	14.70	2496	16.56	2554	18.44	2650	20.40	2747	22.44		
8000	687	1445	2.64	1602	4.13	1744	5.73	1878	7.40	2007	9.15	2128	10.96	2241	12.77	2350	14.63	2455	16.53	2554	18.44	2650	20.40	2747	22.44	2817	24.86		
9000	773	1586	3.32	1731	4.98	1863	6.71	1986	8.52	2106	10.42	2221	12.38	2331	14.38	2436	16.43	2535	18.47	2632	20.56	2726	22.69	2807	25.09	2895	27.41		
10000	859	1730	4.14	1864	5.95	1988	7.84	2104	9.80	2214	11.82	2321	13.92	2426	16.08	2528	18.31	2625	20.56	2717	22.80	2807	25.09	2895	27.41	2981	30.12		
11000	945	1876	5.10	2001	7.08	2117	9.11	2227	11.22	2330	13.38	2430	15.62	2528	17.92	2624	20.27	2718	22.69	2809	25.14	2897	27.64	2981	30.12	3072	32.90		
12000	1031	2023	6.22	2140	8.36	2250	10.56	2353	12.80	2452	15.12	2547	17.50	2638	19.92	2728	22.42	2817	24.97	2905	27.60	2990	30.24	3072	32.90				
13000	1117	2172	7.51	2282	9.82	2385	12.17	2484	14.58	2578	17.04	2668	19.56	2755	22.13	2840	24.76	2924	27.46	3006	30.19	3088	33.00						
14000	1203			2426	11.47	2523	13.97	2617	16.54	2707	19.16	2793	21.81	2877	24.55	2958	27.32	3037	30.14										
15000	1289			2571	13.31	2664	15.99	2753	18.72	2838	21.47	2921	24.29	3002	27.17	3080	30.10												
16000	1375			2718	15.37	2806	18.22	2891	21.11	2973	24.03	3052	26.99																

MAXIMUM RPM: Class I = 1888 Class II = 2403 Class III = 3090

222 MPLQN/MPLQS

Wheel Diameter: 22.00"

Fan Efficiency Grade: FEG71

Max. BHP = $1.19 \times (\text{RPM} / 1000)^3$

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP						
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP					
5000	430	1068	1.30	1262	2.35	1434	3.49	1589	4.70	1809	7.00	1939	8.50	2021	9.78	2132	11.45	2243	13.20	2361	15.09	2519	18.78	2619	20.86					
6000	516	1202	1.73	1377	2.93	1533	4.22	1677	5.59	1903	8.15	2021	9.78	2132	11.45	2243	13.20	2361	15.09	2519	18.78	2619	20.86	2777	25.26					
7000	601	1342	2.26	1501	3.62	1645	5.07	1777	6.57	1936	8.15	2021	9.78	2132	11.45	2243	13.20	2361	15.09	2519	18.78	2619	20.86	2777	25.26					
8000	687	1488	2.93	1633	4.43	1766	6.03	1890	7.70	2006	9.42	2117	11.20	2224	13.03	2325	14.89	2422	16.80	2519	18.78	2619	20.86	2777	25.26					
9000	773	1637	3.73	1771	5.40	1894	7.14	2010	8.97	2120	10.85	2224	12.78	2324	14.75	2421	16.78	2515	18.84	2605	20.95	2692	23.09	2777	25.26					
10000	859	1788	4.69	1913	6.55	2028	8.43	2136	10.39	2240	12.43	2338	14.51	2433	16.64	2525	18.82	2613	21.02	2700	23.28	2786	25.61	2867	27.92					
11000	945	1942	5.82	2058	7.84	2166	9.89	2268	12.01	2365	14.18	2459	16.43	2549	18.71	2637	21.06	2721	23.41	2803	25.81	2883	28.24	2962	30.73					
12000	1031	2097	7.14	2206	9.34	2307	11.55	2403	13.81	2496	16.15	2585	18.54	2671	20.99	2754	23.47	2835	26.00	2914	28.56	2990	31.13	3065	33.76					
13000	1117			2356	11.04	2452	13.44	2543	15.86	2630	18.33	2715	20.87	2797	23.47	2876	26.09	2954	28.79	3029	31.49									
14000	1203			2508	12.98	2599	15.55	2685	18.14	2768	20.76	2848	23.43	2927	26.18	3003	28.97	3077	31.79											
15000	1289			2661	15.15	2747	17.89	2830	20.67	2909	23.46	2985	26.26	3060	29.15															
16000	1375			2815	17.57	2897	20.49	2976	23.44	3052	26.41																			

MAXIMUM RPM: Class I = 1888 Class II = 2403 Class III = 3090

222C MPLFN/MPLFS

Wheel Diameter: 22.00"

Fan Efficiency Grade: FEG71

Max. BHP = $1.15 \times (\text{RPM} / 1000)^3$

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
5000	532	1052	1.27	1265	2.37	1425	3.47	1583	4.66	1826	6.88	1962	8.36	2153	11.25	2270	12.98	2389	14.85	2446	16.51	2548	18.46	2651	20.53	2757	22.72
6000	638	1184	1.67	1371	2.87	1536	4.15	1688	5.50	1914	8.04	2036	9.62	2153	11.25	2270	12.98	2389	14.85	2446	16.51	2548	18.46	2651	20.53	2757	22.72
7000	744	1319	2.18	1488	3.53	1641	4.97	1781	6.47	2009	9.27	2127	11.05	2239	12.85	2344	14.66	2446	16.51	2548	18.46	2651	20.53	2757	22.72	2807	24.83
8000	851	1459	2.81	1612	4.30	1754	5.89	1886	7.55	2009	9.27	2127	11.05	2239	12.85	2344	14.66	2446	16.51	2548	18.46	2651	20.53	2757	22.72	2807	24.83
9000	957	1602	3.56	1743	5.21	1874	6.95	1998	8.76	2114	10.63	2225	12.56	2331	14.53	2434	16.55	2532	18.57	2626	20.62	2717	22.70	2807	24.83		
10000	1063	1749	4.47	1879	6.28	2000	8.16	2116	10.12	2226	12.14	2332	14.23	2432	16.34	2529	18.51	2624	20.74	2716	22.99	2804	25.24	2889	27.50		
11000	1170	1898	5.54	2018	7.50	2132	9.55	2240	11.66	2344	13.83	2444	16.05	2540	18.32	2633	20.65	2723									

PERFORMANCE DATA

245 MPLFN/MPLFS

Wheel Diameter: 24.50"
Outlet Area: 14.11 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 1.84 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	354	858	1.13	1068	2.23	1244	3.40																		
6000	425	942	1.43	1134	2.67	1300	4.01	1448	5.41	1590	6.91														
7000	496	1034	1.78	1207	3.16	1365	4.67	1506	6.23	1635	7.84	1756	9.53	1880	11.35										
8000	567	1131	2.21	1290	3.73	1436	5.38	1571	7.12	1694	8.89	1811	10.73	1919	12.60	2024	14.55	2132	16.62						
9000	638	1231	2.71	1379	4.38	1513	6.16	1641	8.06	1760	10.01	1871	12.01	1976	14.03	2077	16.13	2172	18.25	2265	20.43	2360	22.72		
10000	709	1334	3.31	1472	5.12	1597	7.04	1715	9.05	1830	11.18	1938	13.36	2039	15.56	2136	17.81	2229	20.08	2319	22.42	2404	24.76	2488	27.18
11000	779	1438	3.99	1568	5.96	1687	8.03	1797	10.17	1904	12.43	2008	14.77	2107	17.16	2200	19.56	2290	22.01	2377	24.50	2461	27.00	2543	29.59
12000	850	1545	4.78	1667	6.91	1780	9.12	1884	11.41	1984	13.78	2082	16.26	2177	18.80	2269	21.40	2356	24.02	2440	26.67	2521	29.34	2600	32.04
14000	992	1763	6.73	1871	9.17	1972	11.66	2068	14.25	2159	16.91	2246	19.63	2331	22.44	2415	25.33	2497	28.26	2577	31.25	2655	34.30	2731	37.40
16000	1134	1984	9.20	2081	11.96	2174	14.79	2261	17.66	2345	20.60	2426	23.62	2504	26.71	2580	29.86	2654	33.05	2727	36.30	2800	39.65		
18000	1275			2296	15.37	2381	18.52	2461	21.69	2539	24.94	2614	28.23	2687	31.60	2758	35.04								
20000	1417			2515	19.47	2592	22.93	2667	26.44	2739	29.98														

MAXIMUM RPM: Class I = 1715 Class II = 2183 Class III = 2806

245 MPLQN/MPLQS

Wheel Diameter: 24.50"
Outlet Area: 14.11 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 1.91 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
5000	354	864	1.18	1057	2.26	1229	3.46																		
6000	425	956	1.51	1131	2.73	1286	4.06	1428	5.49																
7000	496	1054	1.91	1215	3.28	1358	4.76	1490	6.32	1611	7.94	1737	9.73												
8000	567	1157	2.39	1306	3.92	1439	5.54	1562	7.25	1679	9.04	1786	10.87	1892	12.79	2004	14.87								
9000	638	1264	2.98	1401	4.64	1526	6.42	1642	8.28	1751	10.20	1855	12.19	1953	14.23	2047	16.33	2142	18.53	2241	20.85				
10000	709	1373	3.67	1501	5.49	1618	7.40	1728	9.42	1831	11.49	1929	13.62	2024	15.82	2115	18.07	2201	20.36	2285	22.69	2370	25.13	2458	27.68
11000	779	1483	4.46	1604	6.45	1714	8.51	1818	10.67	1916	12.89	2009	15.16	2099	17.51	2186	19.90	2271	22.36	2352	24.86	2429	27.36	2506	29.95
12000	850	1596	5.39	1709	7.54	1813	9.74	1911	12.04	2005	14.42	2094	16.85	2180	19.34	2263	21.88	2343	24.45	2422	27.10	2499	29.80	2572	32.50
14000	992	1825	7.67	1925	10.15	2019	12.67	2108	15.26	2193	17.91	2275	20.65	2354	23.44	2431	26.30	2505	29.17	2577	32.09	2648	35.08	2717	38.09
16000	1134			2148	13.42	2233	16.27	2314	19.16	2392	22.10	2468	25.14	2541	28.22	2612	31.36	2681	34.55	2748	37.77				
18000	1275			2374	17.40	2452	20.59	2527	23.82	2599	27.08	2669	30.39	2736	33.72	2803	37.18								
20000	1417			2604	22.22	2676	25.76	2745	29.32																

MAXIMUM RPM: Class I = 1715 Class II = 2183 Class III = 2806

245C MPLFN/MPLFS

Wheel Diameter: 24.50"
Outlet Area: 9.40 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 1.86 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
5000	532	865	1.21	1055	2.28			1249	3.46																
6000	638	962	1.58	1130	2.79	1283	4.09	1428	5.51																
7000	744	1064	2.02	1217	3.39	1356	4.83	1486	6.36	1607	7.96														
8000	851	1170	2.55	1312	4.09	1439	5.69	1560	7.36	1674	9.10	1780	10.89	1891	12.83										
9000	957	1279	3.18	1412	4.89	1530	6.65	1641	8.47	1748	10.36	1851	12.31	1947	14.29	2040	16.33	2143	18.61						
10000	1063	1391	3.93	1515	5.81	1627	7.74	1730	9.72	1830	11.76	1926	13.84	2019	15.98	2109	18.20	2193	20.40	2278	22.71	2370	25.22		
11000	1170	1504	4.80	1621	6.85	1727	8.96	1825	11.10	1918	13.29	2008	15.53	2096	17.82	2182	20.17	2265	22.56	2345	25.00	2421	27.43	2498	29.97
12000	1276	1619	5.83	1729	8.03	1830	10.32	1924	12.64	2012	14.99	2096	17.36	2180	19.84	2261	22.32	2340	24.85	2417	27.42	2493	30.07	2565	32.71
14000	1489	1852	8.35	1951	10.88	2042	13.49	2128	16.16	2209	18.84	2287	21.58	2361	24.32	2434	27.12	2505	29.95	2576	32.85	2645	35.76	2713	38.71
16000	1701			2178	14.46	2261	17.38	2340	20.38	2415	23.42	2487	26.48	2557	29.59	2624	32.70	2689	35.84	2753	39.03				
18000	1914			2409	18.86	2485	22.10	2558	25.41	2628	28.80	2695	32.21	2760	35.65										
20000	2127			2643	24.19	2714	27.79	2781	31.40																

MAXIMUM RPM: Class I = 1715 Class II = 2183 Class III = 2806

Class I = First white section

Class II = Blue shaded section

Class III = Bolded section after blue section

Underlined figures indicate Maximum Static Efficiency

Performance certified is for installation Type A; Free

270 MPLFN/MPLFS

Wheel Diameter: 27.00"
Outlet Area: 17.14 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 3.03 x (RPM / 1000)³

MAXIMUM RPM: Class I = 1556 Class II = 1981 Class III = 2546

270 MPLQN/MPLQS

Wheel Diameter: 27.00"
Outlet Area: 17.14 ft²

Fan Efficiency Grade: FEG71
Max. BHP = 3.22 x (RPM / 1000)³

MAXIMUM RPM: Class I = 1556 Class II = 1981 Class III = 2546

270C MPLFN/MPLFS

Wheel Diameter: 27.00"
Outlet Area: 11.64 ft²

**Fan Efficiency Grade: FEG71
Max. BHP = 2.99 x (RPM / 1000)³**

MAXIMUM RPM: Class I = 1556 Class II = 1981 Class III = 2546

270C MPLQN/MPLQS

Wheel Diameter: 27.00"
Outlet Area: 11.64 ft²

Fan Efficiency Grade: FEG71
Max. BHP = 3.20 x (RPM / 1000)³

MAXIMUM RPM: Class I = 1556 Class II = 1981 Class III = 2546

Class I = First white section

Class II = Blue shaded section

Class III = Bolded section after blue section

Underlined figures indicate Maximum Static Efficiency

Performance certified is for installation Type A: Free inlet, Free outlet

Performance certified is for installation Type A; Free inlet, Power rating (BHP) does not include transmission losses.

Power rating (BHP) does not include transmission losses.
Performance ratings do not include the effects of appurtenances (accessories).

PERFORMANCE DATA

300 MPLFN/MPLFS

Wheel Diameter: 30.00"
Outlet Area: 21.16 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 5.13 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																
7500	354	692	1.67	866	3.29	1013	5.02	1179	8.00	1291	10.13	1429	14.05	1525	16.60										
9000	425	759	2.11	917	3.95	1056	5.94	1104	6.90	1222	9.22	1331	11.63	1472	15.90	1563	18.67	1647	21.44	1731	24.35				
10500	496	832	2.63	975	4.69	1104	6.90	1271	10.53	1374	13.16	1472	15.90	1563	18.67	1647	21.44	1731	24.35						
12000	567	910	3.27	1040	5.52	1160	7.97	1271	10.53	1374	13.16	1472	15.90	1563	18.67	1647	21.44	1731	24.35						
13500	638	991	4.02	1110	6.47	1221	9.13	1325	11.90	1424	14.81	1517	17.77	1605	20.79	1690	23.91	1769	27.02	1844	30.15	1918	33.37	1994	36.78
15000	709	1074	4.90	1184	7.55	1287	10.41	1385	13.42	1478	16.52	1567	19.74	1652	23.02	1733	26.35	1811	29.74	1887	33.23	1958	36.69	2026	40.16
16500	780	1158	5.91	1262	8.81	1358	11.86	1449	15.05	1537	18.38	1622	21.83	1703	25.34	1781	28.92	1856	32.54	1929	36.24	2000	40.01	2069	43.85
18000	851	1244	7.08	1342	10.22	1432	13.47	1518	16.88	1601	20.43	1681	24.07	1759	27.82	1834	31.64	1906	35.50	1977	39.47	2045	43.44	2111	47.46
21000	992	1417	9.91	1507	13.59	1587	17.25	1664	21.05	1739	25.02	1811	29.08	1881	33.23	1950	37.51	2017	41.84	2082	46.21	2146	50.69	2209	55.28
24000	1134	1594	13.52	1676	17.72	1750	21.89	1820	26.12	1887	30.44	1953	34.92	2017	39.49	2079	44.13	2141	48.92	2201	53.73	2261	58.69		
27000	1276			1848	22.73	1917	27.42	1982	32.14	2043	36.86	2103	41.71	2163	46.74	2220	51.77	2277	56.96						
30000	1418			2022	28.70	2087	33.94	2148	39.18	2205	44.37	2261	49.67												

MAXIMUM RPM: Class I = 1401 Class II = 1783 Class III = 2291

300 MPLQN/MPLQS

Wheel Diameter: 30.00"
Outlet Area: 21.16 ft²

Fan Efficiency Grade: FEG71
Max. BHP = 5.45 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																	
7500	354	702	1.80	854	3.40	1038	6.10	1151	8.15																	
9000	425	781	2.33	916	4.15	1038	6.10	1167	8.46	1265	11.00	1356	13.59	1438	16.20	1523	18.94									
10500	496	865	2.97	987	5.03	1100	7.22	1203	9.49																	
12000	567	953	3.77	1065	6.03	1167	8.46	1265	11.00	1356	13.59	1438	16.20	1523	18.94											
13500	638	1044	4.74	1147	7.19	1241	9.85	1331	12.62	1417	15.45	1500	18.39	1575	21.31	1647	24.27	1726	27.47							
15000	709	1135	5.86	1232	8.55	1321	11.42	1403	14.41	1484	17.51	1562	20.67	1637	23.89	1708	27.16	1773	30.39	1838	33.71	1909	37.26			
16500	780	1227	7.17	1320	10.13	1403	13.18	1481	16.40	1555	19.71	1628	23.11	1700	26.60	1769	30.12	1836	33.72	1898	37.28	1957	40.86	2015	44.44	
18000	851	1320	8.68	1410	11.93	1488	15.19	1562	18.60	1632	22.15	1700	25.79	1767	29.49	1833	33.27	1897	37.08	1959	40.94	2020	44.92	2076	48.79	
21000	992	1508	12.39	1592	16.22	1664	19.98	1730	23.77	1795	27.75	1856	31.81	1916	36.02	1974	40.25	2031	44.51	2088	48.87	2144	53.27	2200	57.80	
24000	1134	1698	17.11	1777	21.57	1845	25.89	1906	30.15	1965	34.53	2022	39.01	2077	43.60	2130	48.27	2182	53.05	2233	57.87	2284	62.80			
27000	1276			1963	28.05	2029	33.02	2087	37.83	2141	42.63	2193	47.49	2244	52.47											
30000	1418			2152	35.90	2214	41.45	2270	46.86																	

MAXIMUM RPM: Class I = 1401 Class II = 1783 Class III = 2291

300C MPLFN/MPLFS

Wheel Diameter: 30.00"
Outlet Area: 14.11 ft²

Fan Efficiency Grade: FEG71
Max. BHP = 5.06 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																
7500	531	706	1.77	881	3.41	1030	5.21	1199	8.30	1313	10.56														
9000	638	774	2.26	934	4.12	1073	6.14	1242	9.53	1352	12.03	1453	14.60	1551	17.31										
10500	744	849	2.86	994	4.95	1124	7.17																		
12000	850	929	3.57	1061	5.90	1182	8.36	1293	10.91	1397	13.61	1496	16.45	1589	19.37	1675	22.30	1760	25.37						
13500	957	1011	4.40	1133	6.98	1246	9.69	1351	12.49	1449	15.36	1543	18.40	1631	21.48	1717	24.73	1798	28.01	1875	31.34	1950	34.73	2028	38.38
15000	1063	1097	5.41	1208	8.20	1314	11.16	1413	14.20	1506	17.30	1595	20.50	1680	23.82	1762	27.25	1841	30.78	1917	34.37	1990	38.01	2059	41.66
16500	1169	1184	6.58	1288	9.62	1386	12.79	1479	16.06	1568	19.44	1653	22.87	1734	26.36	1812	29.97	1888	33.70	1961	37.48	2032	41.34	2102	45.35
18000	1275	1272	7.93	1370	11.20	1461	14.60	1549	18.12	1633	21.71	1714	25.40	1792	29.14	1867	32.93	1940	36.85	2011	40.87	2079	44.91	2146	49.08
21000	1488	1452	11.25	1539	15.00	1620	18.86	1698	22.85	1774	26.93	1848	31.10	1919	35.31	1989	39.65	2056	43.97	2122	48.39	2186	52.85	2248	57.37
24000	1701	1635	15.52	1713	19.74	1787	24.08	1857	28.52	1925	33.05	1992	37.68	2058	42.41	2122	47.19	2185	52.06	2246	56.96				
27000	1913			1891	25.56	1958	30.35	2023	35.28	2085	40.28	2146	45.38	2206	50.56	2265	55.80								
30000	2126		</																						

330 MPLFN/MPLFS

Wheel Diameter: 33.00"

Fan Efficiency Grade: FEG75

Max. BHP = 8.26 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																	
10000	391	659	2.28	810	4.38	941	6.65	1054	8.97	1195	13.36	1287	16.20													
12000	469	730	2.92	865	5.31	986	7.89	1096	10.60	1236	15.40	1327	18.59	1409	21.82	1488	25.14	1569	28.70							
14000	547	806	3.71	928	6.38	1039	9.25	1142	12.27	1238	15.40	1327	18.59	1421	23.70	1498	27.62	1572	31.63	1643	35.70	1712	39.89	1777	44.07	
16000	625	887	4.68	997	7.61	1099	10.76	1195	14.08	1286	17.55	1371	21.07	1452	24.68	1529	28.37	1601	32.08	1670	35.82	1739	39.71	1811	43.88	
18000	703	970	5.83	1071	9.03	1165	12.46	1254	16.06	1340	19.84	1421	23.70	1498	27.62	1572	31.63	1643	35.70	1712	39.89	1777	44.07	1838	48.17	
20000	781	1055	7.19	1148	10.67	1236	14.39	1319	18.28	1398	22.27	1475	26.44	1549	30.71	1620	35.05	1689	39.50	1755	43.96	1819	48.50	1881	53.09	
23000	898	1183	9.62	1270	13.64	1348	17.72	1424	22.04	1496	26.46	1566	31.03	1635	35.78	1701	40.56	1765	45.42	1828	50.43	1888	55.40	1948	60.57	
26000	1015	1314	12.63	1395	17.19	1467	21.74	1535	26.38	1602	31.26	1666	36.22	1729	41.35	1791	46.62	1851	51.93	1910	57.37	1967	62.84	2024	68.50	
29000	1133	1447	16.30	1522	21.38	1589	26.40	1655	31.54	1714	36.76	1774	42.17	1832	47.68	1889	53.33	1945	59.09	2000	64.94	2054	70.88			
32000	1250			1651	26.30	1715	31.88	1774	37.44	1831	43.10	1887	48.92	1941	54.81	1994	60.84	2046	66.99							
35000	1367			1781	31.97	1842	38.12	1898	44.18	1952	50.33	2003	56.45	2054	62.78											
38000	1484			1913	38.56	1970	45.19	2024	51.82	2075	58.43															

MAXIMUM RPM: Class I = 1273 Class II = 1620 Class III = 2083

330 MPLQN/MPLQS

Wheel Diameter: 33.00"

Fan Efficiency Grade: FEG71

Max. BHP = 8.78 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																	
10000	391	674	2.49	805	4.57	917	6.75	1071	10.78	1170	13.66	1216	15.79	1293	18.88											
12000	469	756	3.27	871	5.65	978	8.20	1071	10.78	1170	13.66	1278	18.88	1421	25.19	1489	28.78									
14000	547	843	4.26	947	6.93	1043	9.80	1133	12.75	1215	15.79	1344	20.98	1415	24.76	1484	28.67	1548	32.57	1607	36.43	1667	40.44	1735	44.87	
16000	625	933	5.49	1029	8.44	1115	11.58	1198	14.88	1275	18.28	1354	21.79	1421	25.19	1489	28.78									
18000	703	1025	6.97	1114	10.21	1195	13.66	1270	17.25	1344	20.98	1415	24.76	1484	28.67	1548	32.57	1607	36.43	1667	40.44	1735	44.87			
20000	781	1117	8.70	1202	12.31	1277	15.99	1348	19.90	1415	23.91	1482	28.06	1546	32.21	1609	36.50	1670	40.87	1727	45.23	1780	49.52	1833	53.89	
23000	898	1257	11.88	1337	16.05	1406	20.19	1471	24.48	1533	28.96	1592	33.53	1650	38.20	1707	42.92	1764	47.78	1819	52.65	1873	57.62	1925	62.60	
26000	1015	1399	15.83	1475	20.61	1539	25.23	1599	29.98	1655	34.78	1712	39.85	1765	44.97	1817	50.20	1868	55.47	1919	60.85	1969	66.25	2019	71.80	
29000	1133	1542	20.65	1613	25.99	1675	31.21	1731	36.39	1784	41.64	1836	47.06	1886	52.60	1935	58.32	1982	64.06	2028	69.85	2075	75.86			
32000	1250			1753	32.37	1813	38.21	1867	43.96	1917	49.68	1965	55.48	2012	61.41	2058	67.48									
35000	1367			1895	39.86	1952	46.28	2004	52.60	2052	58.86															
38000	1484			2037	48.47																					

MAXIMUM RPM: Class I = 1273 Class II = 1620 Class III = 2083

330C MPLFN/MPLFS

Wheel Diameter: 33.00"

Fan Efficiency Grade: FEG71

Max. BHP = 8.16 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																	
10000	583	673	2.44	824	4.54	956	6.87	1072	9.34	1215	13.87	1309	16.89													
12000	700	745	3.16	882	5.59	1003	8.17	1113	10.94	1258	15.91	1349	19.27	1433	22.67	1513	26.17	1596	29.97							
14000	817	823	4.05	947	6.80	1059	9.69	1162	12.72	1346	19.49	1426	23.54	1503	27.69	1577	31.94	1649	36.38	1717	40.83	1784	45.46	1848	50.10	
16000	933	905	5.13	1017	8.18	1121	11.40	1218	14.74	1308	18.17	1394	21.79	1475	25.49	1554	29.38	1627	33.25	1698	37.26	1769	41.43	1843	45.90	
18000	1050	991	6.44	1093	9.81	1189	13.34	1279	16.98	1365	20.74	1446	24.59	1524	28.61	1598	32.70	1670	36.94	1739	41.24	1806	45.67	1869	50.06	
20000	1167	1078	7.99	1172	11.66	1261	15.51	1346	19.49	1426	23.54	1503	27.69	1577	31.94	1649	36.38	1717	40.83	1784	45.46	1848	50.10	1911	54.90	
23000	1342	1211	10.83	1296	14.97	1376	19.30	1453	23.75	1527	28.31	1598	32.95	1667	37.69	1733	42.45	1798	47.37	1860	52.31	1921	57.42	1981	62.67	
26000	1517	1347	14.38	1424	18.97	1497	23.77	1567	28.71	1635	33.74	1701	38.87	1765	44.09	1827	49.37	1887	54.68	1946	60.09	2004	65.62	2060	71.18	
29000	1692	1485	18.73	1555	23.79	1623	29.07	1687	34.46	1749	39.95	1810	45.54	1870	51.26	1928	57.02	1985	62.88	2040	68.75					
32000	1867			1689	29.52	1751	35.21	1811	41.09	1868	47.01	1925	53.13	1980	59.25	2035	65.54									
35000	2042			1824	3																					

PERFORMANCE DATA

365 MPLFN/MPLFS

Wheel Diameter: 36.50"
Outlet Area: 31.32 ft²

Fan Efficiency Grade: FEG75
Max. BHP = 13.68 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																
12000	383	590	2.72	728	5.26	847	7.99	950	10.79																
14000	447	642	3.35	767	6.16	879	9.21	980	12.40	1070	15.66	1158	19.11												
16000	511	697	4.08	812	7.18	917	10.55	1012	14.03	1101	17.68	1182	21.37	1258	25.14	1337	29.25								
18000	575	755	4.95	861	8.32	958	11.95	1049	15.78	1134	19.75	1213	23.79	1288	27.95	1357	32.10	1425	36.42	1495	41.04				
20000	639	815	5.96	913	9.60	1004	13.52	1090	17.66	1171	21.95	1247	26.32	1320	30.83	1389	35.40	1454	40.01	1516	44.67	1577	49.46	1639	54.48
23000	734	907	7.75	996	11.83	1079	16.18	1157	20.71	1232	25.44	1304	30.32	1372	35.26	1438	40.34	1501	45.45	1563	50.77	1622	56.10	1678	61.42
26000	830	1002	9.96	1084	14.51	1159	19.22	1231	24.18	1300	29.32	1367	34.62	1432	40.09	1494	45.61	1555	51.32	1613	57.01	1670	62.84	1725	68.71
29000	926	1098	12.59	1174	17.62	1244	22.78	1310	28.10	1374	33.65	1437	39.44	1497	45.26	1556	51.26	1614	57.45	1669	63.58	1724	69.98	1776	76.24
32000	1022	1195	15.69	1267	21.27	1332	26.87	1394	32.63	1454	38.60	1512	44.74	1568	50.97	1623	57.36	1678	64.00	1731	70.66	1783	77.45	1833	84.23
36000	1149	1326	20.67	1392	26.93	1453	33.22	1510	39.56	1564	45.98	1618	52.69	1670	59.50	1721	66.48	1771	73.59	1820	80.79	1869	88.21		
40000	1277			1520	33.70	1577	40.68	1630	47.64	1680	54.62	1730	61.88	1778	69.19	1826	76.78	1872	84.37						
44000	1405			1649	41.62	1703	49.35	1753	56.99	1800	64.59	1846	72.34												

MAXIMUM RPM: Class I = 1151 Class II = 1465 Class III = 1884

365 MPLQN/MPLQS

Wheel Diameter: 36.50"
Outlet Area: 31.32 ft²

Fan Efficiency Grade: FEG71
Max. BHP = 14.54 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																
12000	383	602	2.96	722	5.46	824	8.08																		
14000	447	663	3.72	770	6.53	869	9.53	955	12.60																
16000	511	726	4.63	824	7.74	915	11.06	1000	14.53	1074	17.97														
18000	575	791	5.72	882	9.09	965	12.72	1045	16.51	1120	20.41	1187	24.30	1255	28.40										
20000	639	858	7.01	944	10.69	1021	14.62	1094	18.68	1165	22.89	1233	27.23	1295	31.58	1354	35.96	1419	40.72						
23000	734	960	9.34	1038	13.44	1110	17.82	1176	22.37	1240	27.05	1303	31.87	1364	36.80	1422	41.77	1476	46.75	1527	51.72	1579	56.84	1638	62.50
26000	830	1063	12.18	1137	16.84	1203	21.60	1264	26.54	1323	31.73	1380	37.01	1436	42.38	1491	47.87	1544	53.38	1596	59.05	1645	64.70	1691	70.30
29000	926	1167	15.60	1238	20.85	1299	26.05	1357	31.44	1412	37.03	1464	42.72	1515	48.55	1566	54.53	1616	60.56	1665	66.67	1713	72.87	1760	79.17
32000	1022	1272	19.67	1340	25.53	1398	31.23	1452	37.04	1504	43.02	1553	49.12	1601	55.44	1648	61.88	1694	68.38	1740	75.00	1785	81.64	1830	88.46
36000	1149	1413	26.21	1477	32.88	1532	39.32	1583	45.81	1630	52.27	1677	59.02	1722	65.89	1765	72.85	1807	79.94	1849	87.22				
40000	1277			1615	41.63	1668	48.90	1717	56.15	1761	63.22	1804	70.46												
44000	1405			1754	51.95	1805	60.05	1852	68.07																

MAXIMUM RPM: Class I = 1151 Class II = 1465 Class III = 1884

365C MPLFN/MPLFS

Wheel Diameter: 36.50"
Outlet Area: 21.16 ft²

Fan Efficiency Grade: FEG71
Max. BHP = 13.50 x (RPM / 1000)³

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP																	
12000	567	602	3.12	728	5.57	833	8.17																			
14000	662	672	3.94	778	6.77	877	9.71	965	12.73	1057	16.09															
16000	756	735	4.91	834	8.12	923	11.36	1009	14.77	1086	18.21	1163	21.87													
18000	851	801	6.09	894	9.61	976	13.27	1055	16.97	1130	20.76	1199	24.59	1266	28.56	1338	32.94									
20000	945	868	7.47	956	11.30	1033	15.33	1106	19.42	1176	23.51	1244	27.73	1308	32.02	1368	36.32	1429	40.85	1496	45.89					
23000	1087	970	9.97	1052	14.31	1124	18.80	1190	23.47	1254	28.20	1315	32.83	1375	37.57	1435	42.55	1490	47.40	1543	52.34	1595	57.36	1649	62.69	
26000	1229	1073	13.04	1151	17.93	1219	22.92	1281	28.06	1339	33.32	1396	38.68	1451	43.95	1505	49.26	1558	54.65	1610	60.14	1661	65.79	1708	71.25	
29000	1371	1178	16.79	1252	22.24	1316	27.72	1375	33.31	1430	39.07	1482	44.92	1533	50.86	1583	56.75	1633	62.74	1681	68.64	1728	74.57	1775	80.69	
32000	1512	1283	21.22	1354	27.26	1415	33.27	1471	39.35	1524	45.57	1574	51.95	1621	58.36	1668	64.95	1714	71.52	1759	78.01	1803	84.46	1847	91.03	
36000	1701	1425	28.41	1491	35.19	1549	41.92	1602	48.72	1652	55.62	1700	62.63	1745	69.72	1788	76.90	1830	84.19	1871	91.51					
40000	1890			1630	44.74	1686	52.30	1736	59.77	1783	67.32	1828	74.97	1871	82.65											
44000	2079			1770	56.05	1823	64.35	1872	72.66																	



Models

MPLFN | MPLFS

Fans shall be Model MPLFN or MPLFS centrifugal plenum (plug) type, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE — Performance ratings shall conform to AMCA Standard 205 (fan efficiency grade), 211 (air performance) and 311 (sound performance). Fans shall be tested in accordance with ANSI/AMCA Standard 210 (air performance) and 300 (sound performance) in an AMCA accredited laboratory. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air, and fan efficiency grade (FEG). Sound certification shall apply to both inlet and outlet sound power levels.

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the peak efficiency to ensure quiet and stable operation. Fans shall have a non-overloading design with self-limiting horsepower characteristics and shall reach a peak in the normal selection area. All fans shall be capable of operating over the minimum pressure class limits as specified in AMCA Standard 99.

CONSTRUCTION — Fans shall be designed without a scroll type housing and shall incorporate a non-overloading type backward inclined airfoil blade wheel. A housing structure consisting of low-weight, yet rigid, corrosion-resistant, galvanized steel frame and exterior panels shall house the rotating assembly. The structure shall be capable of supporting multiple fan assemblies stacked upon one another and side-by-side without isolation between the independent units.

INSULATION (MPLFN Only) — Fans shall be provided with a minimum of 2" acoustical insulation. Insulation shall be protected on the airstream side with a non-friable vapor barrier preventing insulation shedding for IAQ (indoor air quality). Galvanized, perforated steel shall be located on the airstream side of the vapor barrier providing additional protection without sacrificing air and sound performance.

ISOLATION — Rotating assemblies shall be internally isolated from the structural housing to achieve the least amount of transmitted vibration to the customer's air handling unit.

MOTOR PEDESTAL AND INLET PANEL — Motor pedestal and inlet panel shall be of reinforced, galvanized steel or enamel coated mild steel construction and integrated into a single, isolated assembly. Motor pedestal shall be designed to minimize vibration from the motor and wheel. The inlet panel incorporates a removable spun inlet cone designed for smooth airflow into the accompanying inlet retaining ring of the fan wheel. The inlet panel shall be isolated from the housing structure.

WHEEL — Wheels shall have a non-tapered style blade retaining ring on the inlet side to allow higher efficiencies over the performance range of the fan. Wheels shall have airfoil-shaped extruded aluminum blades. All hollow blade wheels shall be continuously welded around all edges. Wheels shall have nine (9) blades for high efficiency. Wheel diameters shall be easily discernible by the fan size. All wheels shall be statically and dynamically balanced on precision electronic balancers to a Balance Quality Grade G6.3 per ANSI/AMCA 204 or better.

FINISH AND COATING — Steel components shall be thoroughly degreased and deburred before application of a rust-preventative coating. All galvanized and aluminum components shall be unpainted.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Maximum vibration shall be within the limits of ANSI/AMCA 204 Fan Application Category BV-3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its MPLFN and MPLFS fans for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.



Models

MPLQN | MPLQS

Fans shall be Model MPLQN or MPLQS centrifugal plenum (plug) type, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE — Performance ratings shall conform to AMCA Standard 205 (fan efficiency grade), 211 (air performance) and 311 (sound performance). Fans shall be tested in accordance with ANSI/AMCA Standard 210 (air performance) and 300 (sound performance) in an AMCA accredited laboratory. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air, and fan efficiency grade (FEG). Sound certification shall apply to both inlet and outlet sound power levels.

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the peak efficiency to ensure quiet and stable operation. Fans shall have a non-overloading design with self-limiting horsepower characteristics and shall reach a peak in the normal selection area. All fans shall be capable of operating over the minimum pressure class limits as specified in AMCA Standard 99.

CONSTRUCTION — Fans shall be designed without a scroll type housing and shall incorporate a non-overloading type backward inclined airfoil blade wheel. A housing structure consisting of low-weight, yet rigid, corrosion-resistant, galvanized steel frame and exterior panels shall house the rotating assembly. The structure shall be capable of supporting multiple fan assemblies stacked upon one another and side-by-side without isolation between the independent units.

INSULATION (MPLQN Only) — Fans shall be provided with a minimum of 2" acoustical insulation. Insulation shall be protected on the airstream side with a non-friable vapor barrier preventing insulation shedding for IAQ (indoor air quality). Galvanized, perforated steel shall be located on the airstream side of the vapor barrier providing additional protection without sacrificing air and sound performance.

ISOLATION — Rotating assemblies shall be internally isolated from the structural housing to achieve the least amount of transmitted vibration to the customer's air handling unit.

MOTOR PEDESTAL AND INLET PANEL — Motor pedestal and inlet panel shall be of reinforced, galvanized steel or enamel coated mild steel construction and integrated into a single, isolated assembly. Motor pedestal shall be designed to minimize vibration from the motor and wheel. The inlet panel incorporates a removable spun inlet cone designed for smooth airflow into the accompanying inlet retaining ring of the fan wheel. The inlet panel shall be isolated from the housing structure.

WHEEL — Wheels shall have a non-tapered style blade retaining ring on the inlet side to allow higher efficiencies over the performance range of the fan. Wheels shall have airfoil-shaped extruded aluminum blades. All hollow blade wheels shall be continuously welded around all edges. Wheels shall have twelve (12) blades for better sound quality. Wheel diameters shall be easily discernible by the fan size. All wheels shall be statically and dynamically balanced on precision electronic balancers to a Balance Quality Grade G6.3 per ANSI/AMCA 204 or better.

FINISH AND COATING — Steel components shall be thoroughly degreased and deburred before application of a rust-preventative coating. All galvanized and aluminum components shall be unpainted.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Maximum vibration shall be within the limits of ANSI/AMCA 204 Fan Application Category BV-3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its MPLQN and MPLQS fans for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.



INDUSTRIAL PROCESS AND COMMERCIAL VENTILATION SYSTEMS

CENTRIFUGAL FANS | UTILITY SETS | PLENUM & PLUG FANS | INLINE CENTRIFUGAL FANS
MIXED FLOW FANS | TUBEAXIAL & VANEAXIAL FANS | PROPELLER WALL FANS | PROPELLER ROOF VENTILATORS
CENTRIFUGAL ROOF & WALL EXHAUSTERS | CEILING VENTILATORS | GRAVITY VENTILATORS | DUCT BLOWERS
RADIAL BLADED FANS | RADIAL TIP FANS | HIGH EFFICIENCY INDUSTRIAL FANS | PRESSURE BLOWERS
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TWIN CITY FAN & BLOWER
WWW.TCF.COM

5959 TRENTON LANE N | MINNEAPOLIS, MN 55442 | PHONE: 763-551-7600 | FAX: 763-551-7601

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