

cincinnati fan
OEM and Industrial Air Handling Specialist

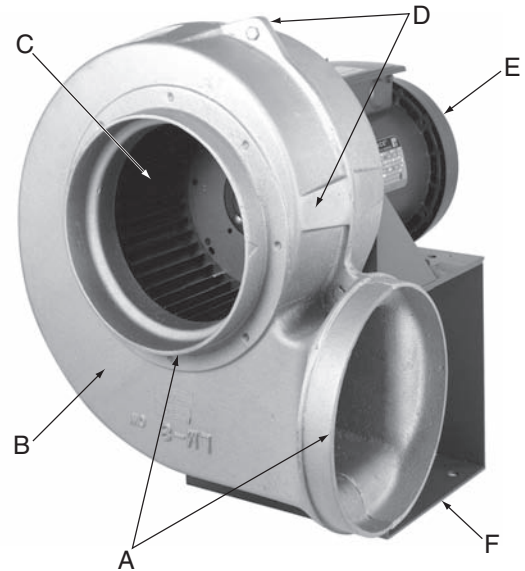


SERIES
LM &
LMF

CAST
ALUMINUM
VOLUME
BLOWERS

FEATURES

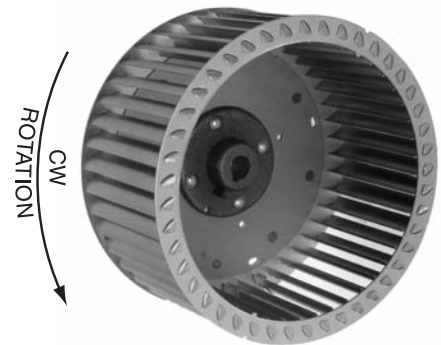
- A. Round inlets and outlets for convenient slip fit of duct work or hose.
- B. Commercial grade 319 cast aluminum housing for increased strength and AMCA Type C spark-resistance.
- C. Steel multivane wheels for high volume and low noise levels. Aluminum wheels available for AMCA Type B spark-resistance on all models except LM-6 or LMF-6 above 1800 RPM.
- D. Tapered housing lugs and stiffener pads for additional strength.
- E. Continuous duty, ball bearing, industrial motors are standard.
- F. All fan bases are minimum 12 gauge steel.
- G. All model LMF blowers (not shown here) have a discharge flange cast as an integral part of the housing for rigid support by the flange only. See pages 3 and 10.



BLOWER WHEELS



Standard wheels are steel. Some have internal hubs and some have external hubs. Aluminum wheels available on most sizes, but extended deliveries may occur. **For limitations, see chart on page 7.**



Standard steel wheel for LMF-3, LM-4, LMF-4, LM-6 and LMF-6. All LMF models are clockwise rotation only.

Standard steel wheel for LM-8 and LMF-8.

SPARK-RESISTANT CONSTRUCTION

AMCA Type A: All parts in contact with airstream are of nonferrous material. Please select a PB model.

AMCA Type B: With the addition of an aluminum wheel, the fan will be AMCA type "B" spark-resistant. **Maximum Temperature 150°F (66°C).** Not available on LM-6 or LMF-6 above 1800 RPM.

WARNING

The use of aluminum or aluminum alloys in the presence of steel which has been allowed to rust requires special consideration. Research by the U.S. Bureau of Mines and others has shown that aluminum impellers rubbing on rusty steel may cause high intensity sparking.

The use of the above Standard in no way implies a guarantee of safety for any level of spark resistance. Spark-resistant construction also does not protect against ignition of explosive gases caused by catastrophic failure or from any airstream material that may be present in a system.

9 STANDARD ARRANGEMENTS OF LM MODELS



Arrangement 4
(Foot & flange motor)



Arrangement 4
(Flange mount-footless motor)



Arrangement 4
(Foot mounted motor)



Arrangement 4HM
(Horizontal mount)
(See page 8)

Arrangement 4D
(Double blower unit)



Arrangement 8
(shown with optional
discharge flange)



Arrangement 2



Arrangement 1



Arrangement 9

4 SIZES OF LMF MODELS

NOTE: All LMF models are available in clockwise (CW) rotation, arrangement 4HM only.



LMF-3



LMF-6

LMF-4

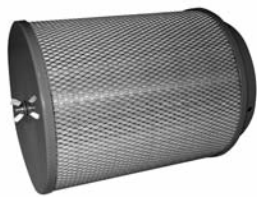


LMF-8



All LMF models include an integral cast discharge flange for mounting and a neoprene flange gasket. For discharge flange dimensions, see page 10.

OPTIONAL ACCESSORIES



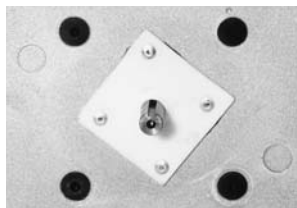
Inlet Filters

Many layered fine wire mesh. Pleated, paper media available on all sizes for LM and LMF fans.



Shaft and/or Heat Slinger Guard

Available on arrangement 1 and 9. Covers bearings and shaft between fan housing and belt guard. Has extended lube lines. Meets OSHA standards. **Painted safety yellow.**



Teflon Shaft Seal

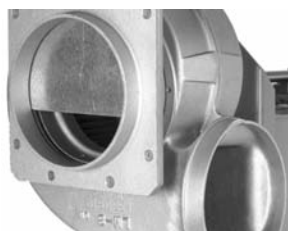
1/8" thick teflon shaft seal good to 300°F.



Inlet/Outlet Flange

Cast aluminum drilled to ANSI-125 pound flange bolt circle dimensions if requested. Dimensions on page 11.

Outlet flange not available in Down Blast configuration.



Slide Gate Damper

Available for 4, 5, 6 and 8 inch inlets or outlets. Cast aluminum frame, galvanized steel gate. Suitable for duct work. Dimensions on page 11. **Add inlet/outlet guard if not ducted. Not available on outlet for Down Blast discharge position.**



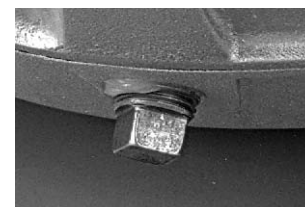
Inlet/Outlet Guard

Spiral guard with nickel/chrome/lacquer finish. OSHA type. Available on 4, 5, 6 and 8 inch inlets or outlets. **Required by OSHA on non-ducted inlet and/or discharge.**



Belt Guard – Standard Arr. 9

Bearing side is enclosed. Not available unless Cincinnati Fan mounts motor. **Painted safety yellow.**



Drain

1/2" drain with plug. Not required on bottom horizontal discharges.

HIGH TEMPERATURE CONSTRUCTION

Standard Construction: All arrangements suitable to 150°F (66°C).

151°-300°F. Construction: Standard fan with heat slinger and slinger guard on all arrangements. Arrangements 4, 4HM and 4D also includes a shaft extension.

Fan performance tables are developed using standard air which is 70°F., 29.92" barometric pressure and .075 lbs. per cubic foot. Density changes resulting from temperature or barometric pressure variations (such as higher altitudes) must be corrected to standard conditions before selecting a fan based on standard performance data.

Temperature and/or altitude conversion factors are used in making corrections to standard conditions.

TEMPERATURE - ALTITUDE CONVERSIONS

AIR TEMP. F°	ALTITUDE IN FEET ABOVE SEA LEVEL										
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
0°	.87	.91	.94	.98	1.01	1.05	1.09	1.13	1.17	1.22	1.26
40°	.94	.98	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.32	1.36
70°	1.00	1.04	1.08	1.12	1.16	1.20	1.25	1.30	1.35	1.40	1.45
80°	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.33	1.38	1.43	1.48
100°	1.06	1.10	1.14	1.19	1.23	1.28	1.33	1.38	1.43	1.48	1.54
120°	1.09	1.14	1.18	1.23	1.28	1.32	1.38	1.43	1.48	1.53	1.58
140°	1.13	1.18	1.22	1.27	1.32	1.37	1.42	1.48	1.54	1.58	1.65
160°	1.17	1.22	1.26	1.31	1.36	1.42	1.47	1.53	1.59	1.64	1.70
180°	1.21	1.26	1.30	1.36	1.41	1.46	1.52	1.58	1.64	1.70	1.75
200°	1.25	1.29	1.34	1.40	1.45	1.51	1.57	1.63	1.69	1.75	1.81
250°	1.34	1.39	1.45	1.50	1.56	1.62	1.68	1.74	1.82	1.88	1.94
300°	1.43	1.49	1.55	1.61	1.67	1.74	1.80	1.87	1.94	2.00	2.08

EXAMPLE:

Required fan performance is 800 CFM at 1" SP at 250°F., and 7000' altitude.

STEP 1. From the table, the conversion factor for 250° and 7000' is 1.74.

STEP 2. Correct static pressure is: $1.74 \times 1" \text{ SP} = 1.74" \text{ SP}$ at standard conditions.

STEP 3. Make fan selection from table on page 5. We select an LM-6, 6.3 x 2.5 wheel at 3450 RPM to provide 815 CFM at 1.75" SP and 1.16 BHP.

STEP 4. Correct the BHP for the lighter air: $1.16 \div 1.74 = .67 \text{ BHP}$. A 3/4 HP motor will suffice at 250°F., and 7000' altitude but not at standard conditions. Special motor insulation may be required above 3500' altitude. Also, BHP correction might need to be modified if blower will be subject to "cold starts", ie: starting at 70°F. at 7000 feet altitude.



LM & LMF SERIES DIRECT DRIVE RATING TABLES

CFM and BHP at Static Pressure Shown

Ratings at 70°F., .075 Density, Sea Level

MODEL NO.	NOMINAL WHEEL SIZE	FAN RPM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
LMF-3	4.7 x 2.4	3450	230	.08	214	.07	196	.07	175	.06	150	.05	118	.03				
LM-4 & LMF-4	4.3 x 2.9	1750	119	.02														
	4.7 x 2.9	1750	163	.04														
	4.3 x 2.9	3450	293	.16	273	.15	253	.15	232	.15	209	.14						
	4.7 x 2.9	3450	377	.34	356	.32	337	.31	319	.30	300	.29	280	.27	256	.26		
LM-6 & LMF-6 (See Note 1.)	6.3 x 2.5	1150	256	.04														
	6.3 x 3.5	1150	284	.04														
	6.3 x 2.5	1750	439	.16	405	.15	344	.12										
	6.3 x 3.5	1750	507	.18	452	.16	388	.14										
	6.3 x 2.5	3450	901	1.29	890	1.28	878	1.26	865	1.24	850	1.22	834	1.19	815	1.16	794	1.13
	6.3 x 3.5	3450	1072	1.50	1048	1.46	1023	1.42	996	1.38	970	1.34	942	1.30	913	1.25	884	1.21
LM-8 & LMF-8	8.3 x 1.5	1150	351	.10	209	.08												
	8.3 x 3.0	1150	534	.14	427	.12												
	8.3 x 4.1	1150	1044	.35	894	.25	688	.17										
	8.3 x 1.5	1750	611	.39	552	.37	490	.35	407	.32	203	.25						
	8.3 x 3.0	1750	913	.53	835	.49	766	.47	697	.44	620	.40	512	.35				
	8.3 x 4.1	1750	1704	1.44	1617	1.28	1525	1.12	1427	.97	1319	.84	1194	.71	1037	.59		

MODEL NO.	NOMINAL WHEEL SIZE	FAN RPM	2 1/4" SP		2 1/2" SP		2 3/4" SP		3" SP		3 1/4" SP		3 1/2" SP		3 3/4" SP	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
LM-6 & LMF-6 (See Note 1.)	6.3 x 2.5	3450	769	1.09	740	1.04	705	.99	664	.93						
	6.3 x 3.5	3450	853	1.17	821	1.13	788	1.09	753	1.05	714	1.01	672	.96	623	.91

NOTE 1: Aluminum wheels not available at 3450 RPM. See chart on page 7.

ROTATION & DISCHARGE POSITIONS

8 STANDARD POSITIONS AVAILABLE.* 45° DISCHARGE POSITIONS AT ADDITIONAL CHARGE.

Discharges shown are determined by viewing fan from motor or drive side.

CW-TH	CW-DB	CW-BH	CW-UB	CCW-TH	CCW-DB	CCW-BH	CCW-UB
Clockwise Top Horizontal Discharge	Clockwise Down Blast Discharge	Clockwise Bottom Horizontal Discharge	Clockwise Up Blast Discharge	* Counter-Clockwise Top Horizontal Discharge	* Counter-Clockwise Down Blast Discharge	* Counter-Clockwise Bottom Horizontal Discharge	* Counter-Clockwise Up Blast Discharge

* All LMF Models are available in clockwise (CW) rotation only.



LM SERIES BELT DRIVE RATING TABLES

CFM and BHP at Static Pressure Shown

Ratings at 70°F., .075 Density, Sea Level

LM-4 Wheel Size: 4.7 x 2.9

Outlet Area: .077 Sq. Ft.

Steel Wheel Max. Speed: 4000 RPM

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP		2 1/4" SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
100	1322	.01	1685	.03																
150	1656	.03	1921	.05	2168	.06	2409	.08	2645	.11	2877	.13			Max. speed for aluminum wheel is 3500 RPM					
200	2033	.06	2255	.08	2454	.10	2644	.12	2830	.14	3012	.17	3192	.20	3370	.23	3547	.26	3721	.29
250	2426	.11	2624	.13	2797	.15	2960	.18	3116	.20	3268	.23	3417	.25	3565	.28	3711	.32	3855	.35
300	2827	.18	3009	.21	3166	.23	3312	.26	3450	.29	3584	.31	3714	.34	3841	.37	3967	.40		
350	3233	.28	3403	.31	3549	.34	3683	.37	3810	.40	3931	.43								
400	3642	.41	3802	.44	3940	.48														

For ratings in bold italics, a direct drive fan is recommended.

LM-6 Wheel Size : 6.3 x 3.5

Outlet Area: .173 Sq. Ft.

Steel Wheel Max. Speed: 3500 RPM

CFM	1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
150	1182	.03																
200	1221	.04	1455	.06														
250	1297	.05	1502	.07	1693	.09	1873	.12	2044	.15								
300	1393	.07	1578	.09	1749	.11	1913	.14	2069	.17	2363	.23						
350	1503	.09	1671	.12	1828	.14	1977	.17	2120	.20	2392	.26	2648	.34				
400	1621	.12	1776	.15	1921	.17	2059	.20	2191	.24	2443	.30	2681	.38	2909	.46	3127	.54
450	1746	.16	1890	.19	2025	.22	2153	.25	2277	.28	2511	.35	2734	.43	2948	.51	3154	.60
500	1875	.20	2010	.23	2137	.27	2257	.30	2373	.33	2594	.41	2803	.49	3004	.57	3198	.66
550	2009	.26	2135	.29	2255	.32	2368	.36	2478	.39	2686	.47	2884	.55	3074	.64	3258	.73
600	2146	.32	2264	.36	2377	.39	2485	.43	2589	.47	2787	.55	2975	.63	3155	.72	3330	.82
650	2285	.39	2397	.43	2504	.47	2606	.51	2705	.55	2894	.64	3073	.72	3245	.82	3411	.92
700	2427	.48	2532	.52	2633	.56	2731	.60	2825	.65	3006	.73	3177	.83	3342	.92		
750	2570	.58	2670	.62	2766	.66	2859	.71	2949	.75	3122	.85	3287	.94	3445	1.04		
800	2715	.69	2809	.73	2901	.78	2990	.83	3076	.87	3242	.97	3400	1.07				
850	2861	.81	2951	.86	3038	.91	3123	.96	3206	1.01	3365	1.11						
900	3009	.95	3094	1.00	3177	1.05	3259	1.11	3338	1.16	3491	1.27						
950	3157	1.11	3238	1.16	3318	1.21	3396	1.27	3472	1.32								
1000	3306	1.28	3384	1.33	3460	1.39												
1050	3456	1.47																

For ratings in bold italics, a direct drive fan is recommended.

Max. speed for aluminum wheel is 1800 RPM

LM-8 Wheel Size: 8.3 x 4.1

Outlet Area: .317 Sq. Ft.

Steel Wheel Max. Speed: 1800 RPM

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
400	665	.03	881	.06	1067	.09										
500	722	.05	912	.08	1081	.11	1235	.14	1376	.18						
600	790	.08	959	.10	1112	.14	1254	.17	1387	.22	1512	.26	1629	.31		
700	865	.12	1017	.14	1156	.17	1287	.21	1410	.26	1528	.30	1640	.35	1746	.40
800	944	.17	1083	.19	1211	.22	1331	.26	1445	.31	1555	.35	1661	.41	1762	.46
900	1027	.23	1155	.26	1273	.29	1384	.33	1491	.37	1593	.42	1692	.47	1788	.53
1000	1112	.31	1231	.34	1340	.37	1444	.41	1544	.45	1640	.50	1733	.55		
1100	1119	.40	1310	.43	1413	.47	1510	.51	1604	.55	1694	.60	1781	.65		
1200	1288	.52	1391	.55	1488	.59	1580	.63	1668	.67	1753	.72				
1300	1378	.66	1475	.69	1566	.73	1653	.77	1737	.81						
1400	1469	.81	1560	.85	1647	.89	1729	.93								
1500	1560	.99	1647	1.03	1729	1.07										
1600	1653	1.20	1735	1.24												
1700	1746	1.43														

Max. speed for aluminum wheel is 1800 RPM

For ratings in bold italics, a direct drive fan is recommended.

NOTE: Drive losses are not included in BHP. For RPMs in italics, Direct Drive Blowers should be considered.

APPROXIMATE SHIPPING WEIGHT IN POUNDS ★

MODEL	ARR.1 (No motor)	ARR.2 (No motor)	ARR.4	ARR.4HM	ARR.8	ARR.9	Nominal Motor HP - WT
LMF-3	—	—	—	20	—	—	1/12 14
LM-4	59	37	33	29	92	90	1/3 20
LMF-4	—	—	—	29	—	—	1/3 20
LM-6	73	39	43	39	116	112	1 1/2 28
LMF-6	—	—	—	39	—	—	1 1/2 28
LM-8	82	54	59	51	127	117	1 30
LMF-8	—	—	—	51	—	—	1 30

★ ARRANGEMENT 4, 4HM, 8 AND 9 WEIGHTS INCLUDE NOMINAL HP AND CORRESPONDING MOTOR WEIGHT INDICATED IN COLUMN EIGHT. MAKE CORRECTIONS AS NECESSARY BY DEDUCTING NOMINAL WEIGHT AND ADDING WEIGHT OF ACTUAL MOTOR TO BE USED.

⚠ DANGER

All fans & blowers shown have rotating parts and pinch points. Severe personal injury can result if operated without guards. Stay away from rotating equipment unless it is disconnected from its power source.

Read operating instructions.



LM & LMF SERIES DIRECT DRIVE RATING TABLES

NOTE: THESE RATINGS ARE FOR 50 CYCLE MOTORS ONLY.

CFM and BHP at Static Pressure Shown

Ratings at 70°F., .075 Density, Sea Level

MODEL NO.	NOMINAL WHEEL SIZE	FAN RPM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
LMF-3	4.7 x 2.4	2850	184	.08	163	.08	137	.07	101	.06								
LM-4 & LMF-4	4.3 x 2.9	2850	234	.09	210	.08	185	.08										
	4.7 x 2.9	2850	303	.19	280	.18	257	.16	233	.16								
LM-6 & LMF-6 (See Note 1.)	6.3 x 3.5	950	195	.02														
	6.3 x 2.5	1425	345	.08	279	.07												
	6.3 x 3.5	1425	391	.09	315	.07												
	6.3 x 2.5	2850	740	.72	726	.71	710	.69	691	.67	668	.65	640	.62	604	.58	559	.53
	6.3 x 3.5	2850	877	.83	846	.80	814	.77	781	.73	746	.70	710	.67	672	.63	630	.60
LM-8 & LMF-8	8.3 x 1.5	950	250	.05														
	8.3 x 3.0	950	401	.07														
	8.3 x 4.1	950	807	.17	584	.10												
	8.3 x 1.5	1425	473	.21	398	.19	275	.16										
	8.3 x 3.0	1425	709	.27	623	.25	536	.23	413	.19								
	8.3 x 4.1	1425	1352	.73	1241	.60	1117	.49	969	.38	746	.28						

NOTE 1: Aluminum wheels not available at 2850 RPM. See wheel specification chart below.

DIMENSIONS and SPECIFICATIONS

NOTE: The table below contains blower housing dimensions common to all arrangements on pages 8 & 9.

DIMENSIONS IN INCHES ± 1/8"

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL NO.	C	D	J	M	N	O	P	R	S	T	AA ^③	DD ^{③④}
LM-4	1	3 ^{7/8}	2 ^{15/16}	2 ^{13/16}	1 ^{3/4}	3 ^{5/8}	4 ^{1/2}	5	4 ^{1/16}	1	5	4
LM-6	1	4 ^{13/16}	3 ^{3/8}	4 ^{1/4}	1 ^{3/4}	4 ^{3/16}	6 ^{1/4}	6 ^{1/2}	5 ^{9/16}	1	6	6
LM-8	1	6 ^{1/16}	4	5 ^{9/16}	1 ^{5/8}	5 ^{1/4}	7 ^{13/16}	8 ^{11/16}	6 ^{7/8}	1	8	8

③ LM-4 ONLY; INLET AND DISCHARGE FLANGE NOT AVAILABLE DUE TO INTERFERENCE.

④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

WHEEL SPECIFICATIONS

FAN MODEL	NOMINAL WHEEL SIZE	ACTUAL WHEEL DIAMETER & WIDTH	STANDARD STEEL		OPTIONAL ALUMINUM	
			Max. RPM	HUB	Max. RPM	HUB
LMF-3 ★	4.7 x 2.4 ●	4 ^{11/16} x 2 ^{7/16} ●	4000	INT.	4000	INT.
LM-4 & LMF-4	4.3 x 2.1	4 ^{1/4} x 2 ^{15/16}	4000	INT.	3500 ■	INT.
	4.7 x 2.9 ●	4 ^{11/16} x 2 ^{7/8} ●	4000	INT.	3500	INT.
LM-6 & LMF-6	6.3 x 2.5	6 ^{5/16} x 2 ^{1/2}	3500	EXT.	1800 ■	EXT.
	6.3 x 3.5 ●	6 ^{1/4} x 3 ^{1/2} ●	3500	INT.	1800	INT.
LM-8 & LMF-8	8.3 x 1.5	8 ^{1/4} x 1 ^{1/2}	1800	EXT.	1800 ■	EXT.
	8.3 x 3.0	8 ^{1/4} x 3	1800	INT.	1800 ■	INT.
	8.3 x 4.1 ●	8 ^{1/4} x 4 ^{1/8} ●	1800	INT.	1800	INT.

● These wheel sizes are the original wheel sizes for LM blowers prior to September, 1998.

■ Aluminum wheels in these sizes will extend delivery. Contact your local CF sales office for assistance.

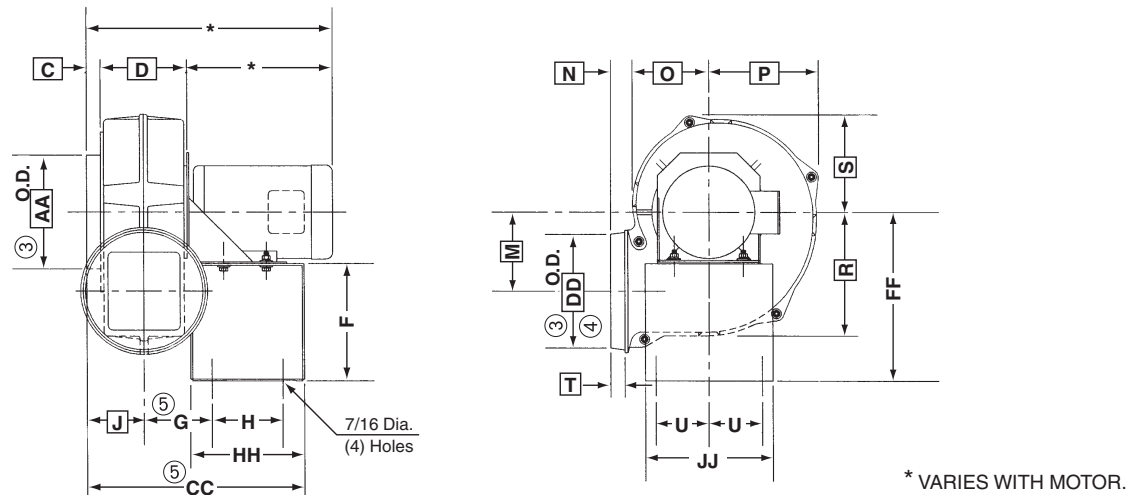
INT. = Internal hub EXT. = External hub

★ Available in CW rotation only.



DIMENSIONS and SPECIFICATIONS

Arrangement #4, Direct Drive



Note: For common boxed blower housing dimensions, see Page 7.

DIMENSIONS IN INCHES $\pm 1/8"$

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL NO.	MOTOR FRAME	F	G	^⑤ G▲	H	U	^⑤ CC	CC▲	FF	HH	JJ	^⑥ KK	^⑥ MM
LM-4	56	5	3 ¹ / ₄	—	5	2 ³ / ₄	12 ¹ / ₄	—	8 ⁹ / ₁₆	7 ¹ / ₈	7	1 ⁵ / ₁₆	3 ¹ / ₄
LM-6	56	5	3 ³ / ₄	4 ³ / ₁₆	5	2 ³ / ₄	13 ³ / ₁₆	13 ⁵ / ₈	8 ⁹ / ₁₆	7 ¹ / ₈	7	1 ⁵ / ₁₆	3 ¹¹ / ₁₆
LM-8	56	8 ¹ / ₄	4 ¹³ / ₁₆	5 ⁷ / ₈	5	3 ³ / ₄	15 ⁵ / ₁₆	16 ³ / ₈	11 ¹³ / ₁₆	8	9	1 ⁵ / ₁₆	4 ⁵ / ₁₆

③ LM-4 ONLY; INLET AND DISCHARGE FLANGE NOT AVAILABLE DUE TO INTERFERENCE.

④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

⑤ FOR DOWN BLAST DISCHARGE LM-6 & LM-8, SEE SPECIAL "G▲" AND "CC▲" DIMENSIONS.

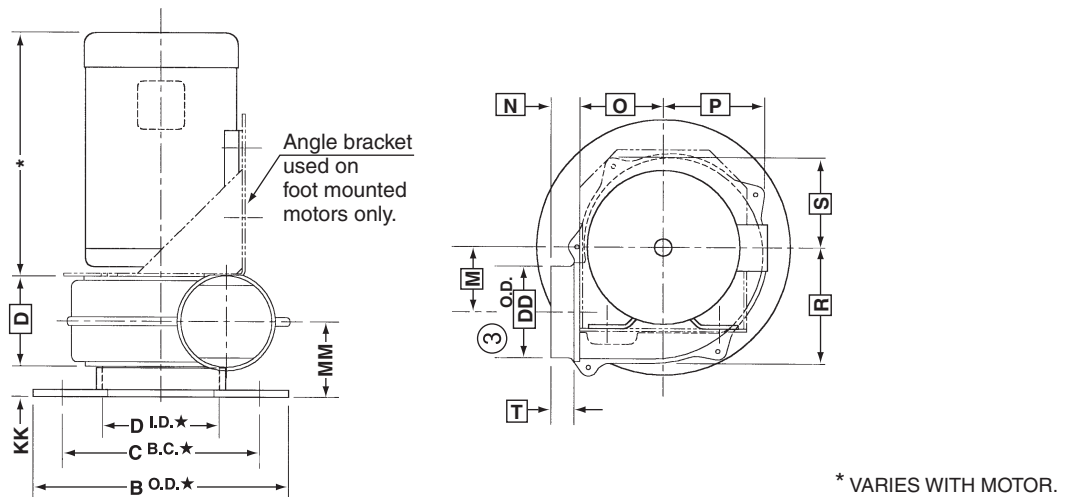
⑥ DIMENSIONS KK AND MM REFER TO ARRANGEMENT 4 HM BELOW.



DIMENSIONS and SPECIFICATIONS

Arrangement #4 HM, (Horizontal Mount) Direct Drive

NOTE: Inlet flange is optional on arrangement #4HM.



Note: For common boxed blower housing dimensions, see Page 7.

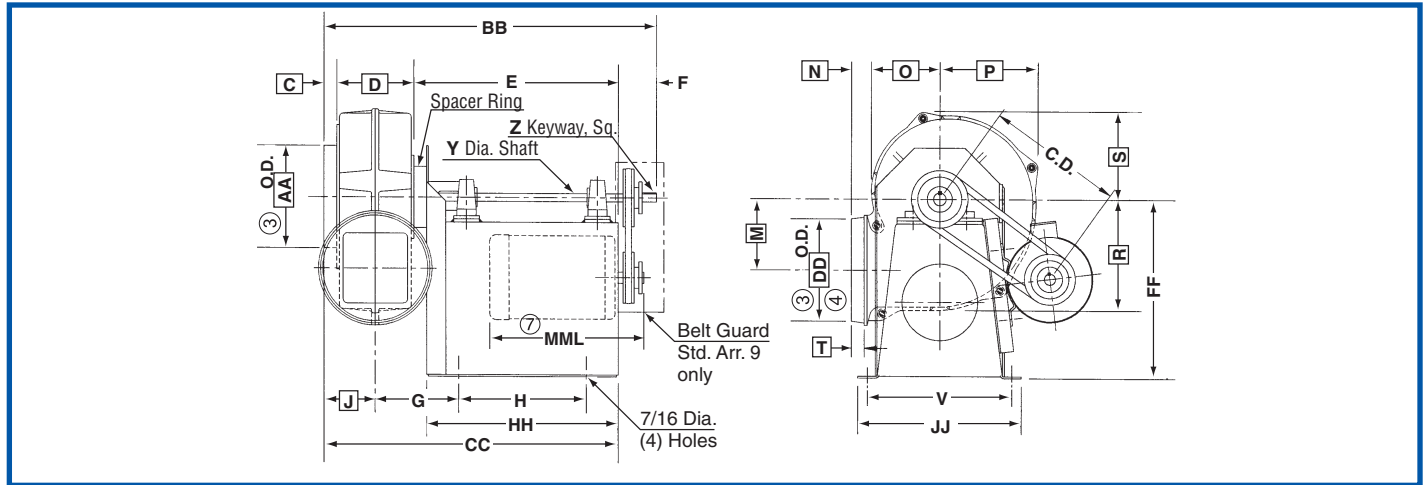
★ For inlet flange dimensions B, C and D above, see flange dimensions table on page 11 for corresponding A dimension. For KK and MM dimensions, see arrangement 4 dimension table above.



DIMENSIONS and SPECIFICATIONS

Arrangement #1 and #9, Belt Drive

NOTE: Arrangement 9 dimensions are the same as arrangement 1 with exception of dimensions C.D. and MML which are for arrangement 9 only.



Note: For common boxed blower housing dimensions, see Page 7.

DIMENSIONS IN INCHES $\pm 1/8"$

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL NO.	MOTOR FRAME	E	F	G	H	V	Y	Z	BB	CC	FF	HH	JJ	⑦ MML	C.D.	
															MIN.	MAX.
LM-4	56-145T	16 1/4	3	5 11/16	10	11 3/8	3/4	3/16	24 1/8	21 1/8	14	15	12 7/8	15	10 1/4	11 1/4
LM-6	56-145T	16 1/4	3	6 3/16	10	11 3/8	3/4	3/16	25 1/16	22 1/16	14	15	12 7/8	15	10 1/4	11 1/4
LM-8	56-145T	16 1/4	3	6 13/16	10	11 3/8	3/4	3/16	26 5/16	23 5/16	14	15	12 7/8	15	10 1/4	11 1/4

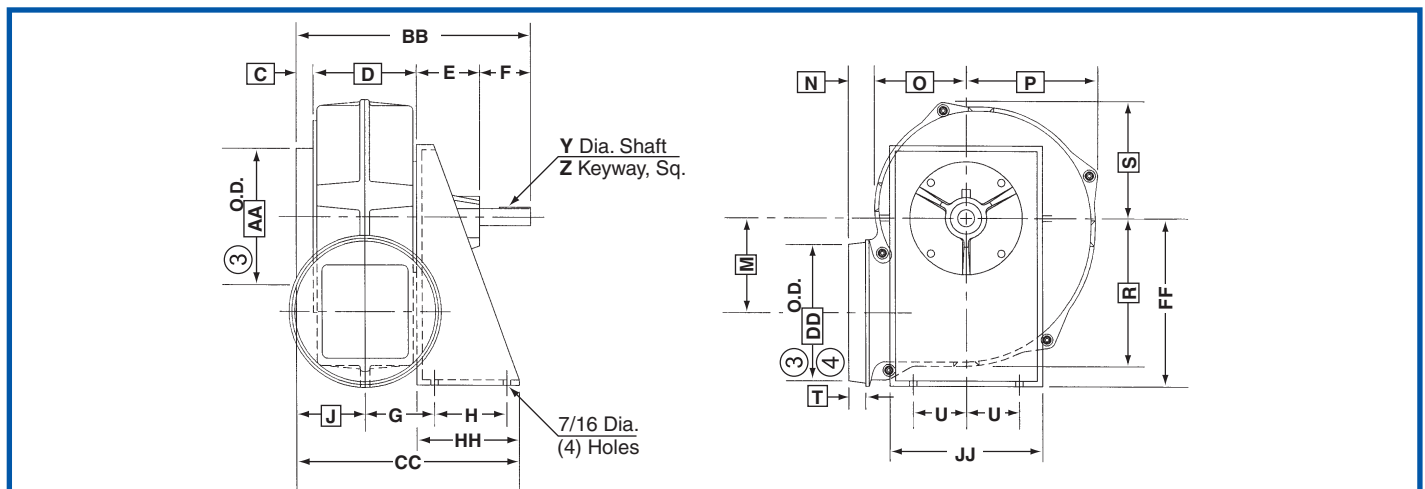
③ LM-4 ONLY; INLET AND DISCHARGE FLANGE NOT AVAILABLE DUE TO INTERFERENCE.

④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

⑦ MML IS MAXIMUM MOTOR LENGTH ON CUSTOMER-SUPPLIED MOTOR. MOTOR MANUFACTURER "C" DIMENSION CANNOT EXCEED MML.



Arrangement #2, Belt Drive



Note: For common boxed blower housing dimensions, see Page 7.

DIMENSIONS IN INCHES $\pm 1/8"$

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL NO.	E	F	G	H	U	Y	Z	BB	CC	FF	HH	JJ
LM-4	3 9/16	3	2 15/16	3 1/4	2 7/8	5/8	3/16	11 7/16	10	7 13/16	5 1/8	7 3/4
LM-6	3 5/8	3	3 7/16	3 1/4	2 7/8	5/8	3/16	12 7/16	10 15/16	7 13/16	5 1/8	7 3/4
LM-8	3 11/16	3	4 1/16	4 1/4	2 7/8	5/8	3/16	13 3/4	13 1/16	9 7/8	6	7 3/4

③ LM-4 ONLY; INLET AND DISCHARGE FLANGE NOT AVAILABLE DUE TO INTERFERENCE.

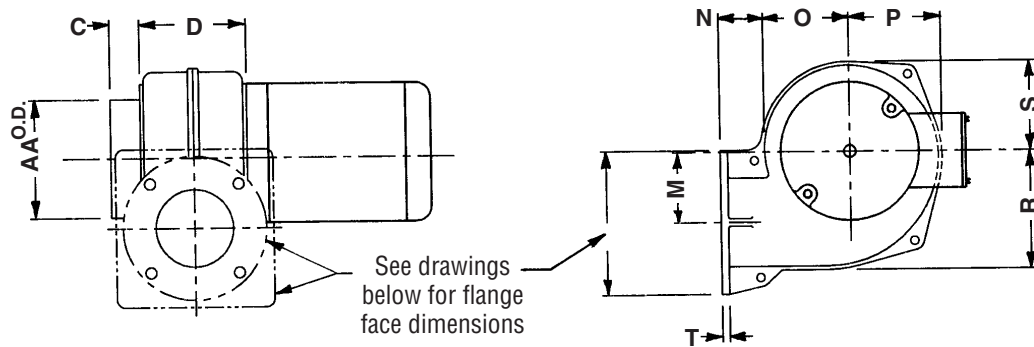
④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.



DIMENSIONS and SPECIFICATIONS

Model LMF, Arrangement #4 HM, (Horizontal Mount) Direct Drive

All LMF models are available in clockwise (CW) rotation only.



DIMENSIONS IN INCHES $\pm 1/8"$

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL NO.	MOTOR FRAME	C	D	M	N	O	P	R	S	T	AA
LMF-3	42CZ	1	3 ^{5/8}	2 ^{3/8}	1 ^{1/2}	2 ^{7/8}	3 ^{1/8}	4	3	1/4	4
LMF-4	56C	1	4	2 ^{13/16}	1 ^{7/16}	3 ^{7/16}	4 ^{5/8}	5	4 ^{1/16}	3/8	5
LMF-6	56C	1	4 ^{13/16}	4 ^{1/4}	1 ^{3/4}	4 ^{3/16}	6 ^{1/4}	6 ^{1/2}	5 ^{9/16}	3/8	6
LMF-8	56C	1	6 ^{1/16}	5 ^{9/16}	1 ^{3/4}	5 ^{1/4}	7 ^{13/16}	8 ^{11/16}	6 ^{7/8}	3/8	8

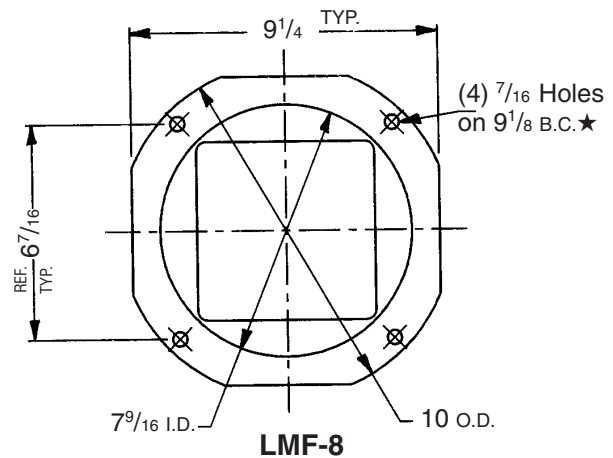
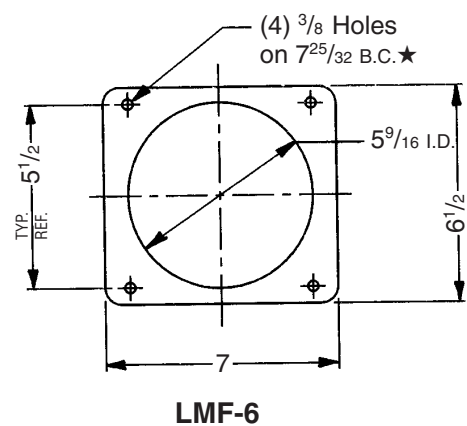
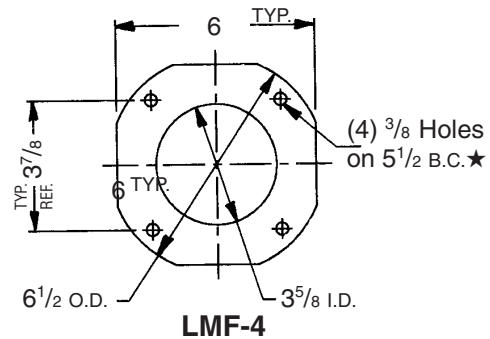
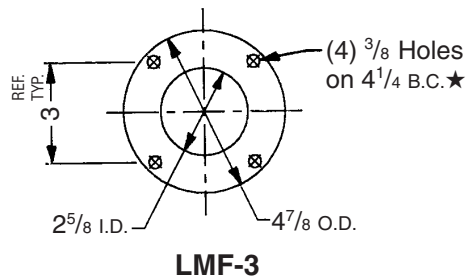


Model LMF, Flange Face Dimensions for Above

DIMENSIONS IN INCHES $\pm 1/8"$

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

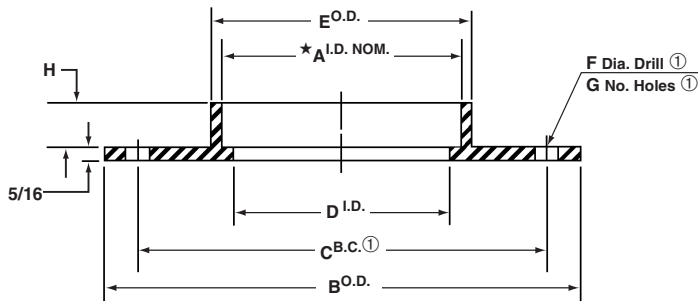
- ★ All bolt holes are cast into flanges so bolt circle cannot be changed.





DIMENSIONS and SPECIFICATIONS

INLET AND DISCHARGE FLANGE DIMENSIONS



Dimensions in inches

A★	B*	C*	D	E	F	G	H
4 ¹ / ₁₆	9	7 ¹ / ₂	3 ¹¹ / ₁₆	4 ⁹ / ₁₆	7 ⁷ / ₁₆	4	15 ¹⁵ / ₁₆
5 ¹ / ₁₆	11	8 ¹ / ₂	4 ⁹ / ₁₆	5 ⁹ / ₁₆	7 ⁷ / ₁₆	4	15 ¹⁵ / ₁₆
6 ¹ / ₁₆	11	9 ¹ / ₂	5 ¹ / ₂	6 ⁹ / ₁₆	7 ⁷ / ₁₆	4	1 ¹ / ₁₆
8 ¹ / ₁₆	13 ¹ / ₂	11 ³ / ₄	7 ¹ / ₂	8 ⁵ / ₈	7 ⁷ / ₁₆	8	1

★ "A" fits over inlet or outlet of blower, "AA" or "DD" dimension.

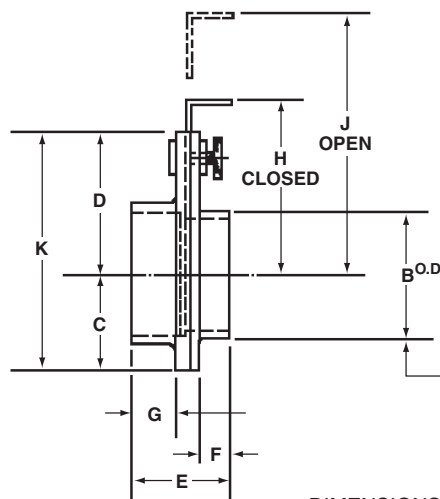
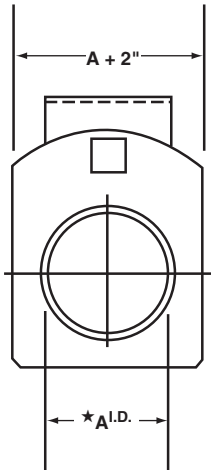
* Meet ANSI-125 pound flange dimensions.

- ① Holes will not be drilled unless customer specifies. If drilled per our standard, holes will be drilled on centerlines unless specified otherwise on order. Dimensions "C, F & G" can be made to customer specifications; at an additional charge.
- ② All dimensions are $\pm 1/8$ " except C & F.
- ③ All flanges are 319 cast aluminum.

◆ THESE DISCHARGE FLANGES ARE NOT AVAILABLE ON DOWN BLAST DISCHARGE POSITION OR ANY LMF DISCHARGES.

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

INLET AND DISCHARGE SLIDE GATE DIMENSIONS



◆ NOT AVAILABLE ON DOWN BLAST DISCHARGE POSITION OR ANY LMF DISCHARGES.

- ① Gate halves are 319 cast aluminum. Slide gate is 12 gauge galvanized steel. Aluminum slide gate available at additional charge.

Flange, filter or guard can be mounted over this O.D.

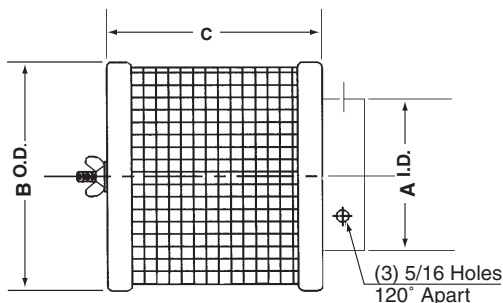
DIMENSIONS IN INCHES

MODEL	A★	B	C	D	E	F	G	H	J	K
FG-4	4 ¹ / ₁₆	3 ¹⁵ / ₁₆	3 ¹ / ₄	4 ¹ / ₂	2 ¹¹ / ₁₆	1	1 ¹ / ₁₆	5 ⁵ / ₈	9	7 ³ / ₄
FG-5	5 ¹ / ₁₆	4 ¹⁵ / ₁₆	3 ¹ / ₂	5 ¹ / ₂	2 ⁹ / ₁₆	1 ¹ / ₈	7 ⁷ / ₈	6 ¹ / ₈	10 ¹ / ₂	9
FG-6	6 ¹ / ₁₆	5 ¹⁵ / ₁₆	4	5 ¹ / ₂	2 ¹¹ / ₁₆	1 ¹ / ₁₆	1	6 ¹ / ₄	11 ¹ / ₂	9 ¹ / ₂
FG-8	8 ¹ / ₁₆	7 ¹⁵ / ₁₆	5	6 ³ / ₄	2 ¹³ / ₁₆	1	1 ³ / ₁₆	7 ³ / ₄	15	11 ³ / ₄

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

★ "A" FITS OVER INLET OR OUTLET OF BLOWER, "AA" OR "DD" DIMENSION

INLET FILTER DIMENSIONS FOR LM & LMF MODEL FANS



Filter Model Number		For Use on Fan Models	Dimensions			Filter Efficiency with Paper Media ①		
With Wire Media	With Paper Media		Nom. Fan Inlet Size A	B	C	1 Micron	2 Micron	10 Micron
F55SW	F55SP	LMF-3	4	5 ¹ / ₂	5 ⁷ / ₁₆	90%	99%	99.99%
F884SW	F884SP	LMF-3	4	8 ¹ / ₈	8 ¹¹ / ₃₂	90%	99%	99.99%
F885SW	F885SP	LM-4, LMF-4	5					
F10106SW	F10106SP	LM-6, LMF-6	6	9 ¹³ / ₁₆	11 ⁵ / ₈	90%	99%	99.99%
F10108SW	F10108SP	LM-8, LMF-8	8					

① No efficiency is quoted with wire media. Wire media is for above micron sizes such as leaves.