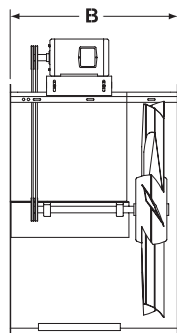
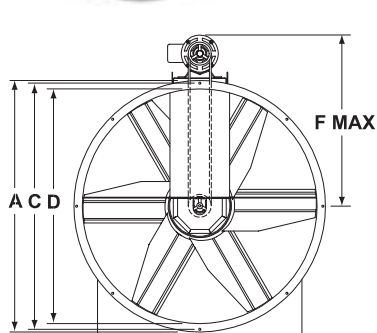




Belt Drive Tubeaxial Fan Model USA



Model USA fan is a belt drive, tubeaxial exhaustor with the motor, drives and bearings located outside the airstream. Capacities up to 63,845 CFM and up to 2 inch static pressure. The USA is designed to operate in any position and is furnished with mounting flanges on both ends for easy installation.



DIMENSIONS

Fan Model	A	B	C	D	F Max.	Access Door
USA12	14.56	12.00	13.44	12.22	17.00	None
USA16	18.50	16.50	17.38	16.10	19.00	None
USA18	21.00	16.50	19.75	18.48	20.50	None
USA21	23.88	18.00	22.50	21.25	22.41	None
USA24	26.88	18.00	25.75	24.44	24.00	None
USA30	33.64	24.00	32.12	30.60	29.00	None
USA36	39.76	29.00	38.26	36.60	32.19	None
USA42	45.78	32.00	44.28	42.60	37.00	12.00 x 17.00
USA48	51.78	36.00	50.28	48.60	42.00	12.00 x 17.00
USA54	57.78	39.00	56.28	54.60	45.00	15.00 x 17.00
USA60	64.28	43.34	63.03	60.57	49.00	16.00 x 18.00

Dimensions are shown in inches.



U.S. Fan International® certifies that the models 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.



U.L. 705 Listed



CSA Certified

Consult your U.S. Fan representative for availability.

Construction Features

Housing

- Constructed of heavy gauge rolled steel
- Rolled flange at each end for ease of mounting
- Standard acrylic epoxy finish provides a tough durable surface
- Gasketed access door for servicing on model sizes 42" - 60"
- Streamlined belt and bearing enclosure eliminates turbulence and air drag

Aluminum Propeller

- Heavy duty, all welded aluminum construction standard on all sizes except 54" which uses a high grade steel
- Circular-arc blades for high airflow capacity
- Precision balanced for smooth vibration free operation



Bearings

- Permanently lubricated in a duplex split pillow block housing
- Bearings are resiliently mounted in neoprene rings
- Rated at L₅₀ life of 200,000 hours
- 5 year** limited warranty on duplex split pillow block bearings
- Unitary pillow block bearings are standard on USA60

Drive Assembly

- Cast iron drives sized for 150% of drive horsepower
- Static free, oil and heat resistant belts

Motors

- Continuous duty motors located outside the airstream
- Motors shipped mounted to the fan

Options/Accessories

- Coatings
- Pillow Block Bearings
- Steel Propeller
- Mounting Base
- Companion Flange
- Weather Cover
- Inlet Bell
- Inlet/Outlet Guards
- Belt Guard
- SE Option U.L. Listed "Power Ventilator for Smoke Control Systems"

Fast Ship Program

USA12-36

Next Day

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10 Day

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Consult factory for specific motor availability.

PERFORMANCE DATA																	
Fan Model	RPM	Tip Speed	HP	CFM and Sones vs. Static Pressure												Max. BHP	Est. Ship Wt
				.000"		.125"		.250"		.375"		.500"		.625"			lbs.
				CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone		
USA12E	2090	6670	1/4	1780	24	1680	22	1560	21	1420	20					.25	48
USA12F	2320	7400	1/3	1970	30	1880	28	1790	26	1670	25	1520	25			.33	49
USA12G	2680	8540	1/2	2270	38	2200	36	2120	34	2030	33	1930	32	1800	31	.50	51
USA12H	3070	9780	3/4	2600	48	2540	46	2470	43	2400	41	2320	41	2230	40	.74	54
USA16E1	1570	6512	1/4	2379	21	2152	21	1820	23	1190	24					.21	66
USA16E2	1800	7466	1/4	2727	25	2530	26	2288	27	1938	29					.31	66
USA16F	1976	8196	1/3	2994	28	2814	30	2613	31	2353	33	1929	33			.41	67
USA16G	2267	9403	1/2	3435	34	3278	34	3121	35	2919	36	2683	38	2341	39	.60	69
USA16H	2600	10784	3/4	3940	44	3803	44	3666	47	3525	46	3337	44	3150	45	.88	72
USA16J	2855	11842	1	4326	50	4201	50	4077	62	3952	52	3806	49	3635	50	1.16	73
USA18E	1375	6660	1/4	3230	20	2970	19	2700	22	2350	25					.28	71
USA18F	1510	7310	1/3	3550	21	3320	21	3060	22	2770	25	2350	26			.38	72
USA18G	1730	8380	1/2	4060	25	3860	24	3660	24	3440	28	3160	34	2850	31	.58	74
USA18H	1980	9580	3/4	4640	31	4460	30	4270	30	4080	30	3880	34	3650	38	.82	77
USA18J	2180	10550	1	5120	36	4960	35	4800	34	4640	35	4450	37	4250	40	1.09	78
USA18K	2495	12100	1 1/2	5860	44	5720	45	5580	43	5450	43	5300	44	5150	47	1.85	88
USA21F	1200	6680	1/3	4320	22	3959	21	3482	22	2113	23					.59	99
USA21G	1355	7540	1/2	4878	26	4559	24	4173	23	3595	24	2273	29	1714	27	.85	101
USA21H	1580	8790	3/4	5688	32	5414	31	5137	30	4760	28	4243	29	2937	32	1.26	104
USA21J	1730	9620	1	6228	41	5978	39	5728	38	5417	36	5074	34	4525	35	1.48	105
USA21K	1980	11000	1 1/2	7128	58	6909	59	6691	54	6472	49	6179	44	5879	42	1.86	115
USA24G	1090	6950	1/2	5900	20	5470	20	5000	22	4430	27					.54	111
USA24H	1250	7980	3/4	6750	28	6370	28	5950	29	5520	31	5000	34			.85	114
USA24J	1375	8770	1	7450	32	7100	30	6750	32	6360	34	5910	35	5400	41	1.08	115
USA24K	1570	10000	1 1/2	8500	41	8200	38	7900	41	7600	43	7250	44	6880	45	1.61	125
USA24L	1730	11040	2	9350	48	9050	47	8800	49	8520	49	8250	48	7950	48	2.30	134
USA24M	1980	12600	3	10660	55	10450	52	10220	52	9970	52	9720	50	9470	49	3.20	151
USA30H	856	6830	3/4	9100	22	8450	22	7750	23	6850	29	4400	28			.79	228
USA30J	942	7520	1	10000	26	9450	26	8800	26	8050	28	7050	34			1.06	229
USA30K	1078	8600	1 1/2	11500	33	11000	31	10450	30	9850	30	9100	35	8250	40	1.60	239
USA30L	1187	9480	2	12600	42	12200	44	11750	43	11250	43	10650	41	9950	46	2.11	248
USA30M	1358	10850	3	14450	55	14100	49	13700	48	13250	47	12800	48	12300	49	3.17	265
USA30N	1610	12860	5	17120	69	16790	64	16440	61	16070	60	15680	59	15290	59	5.60	279
USA36J	698	6670	1	12700	27	11800	26	10700	25	9200	25					1.05	274
USA36K	799	7640	1 1/2	14550	29	13750	28	12900	30	11900	33	10400	40	6800	39	1.59	284
USA36L	880	8410	2	16050	38	15300	34	14500	34	13700	35	12650	41	11300	46	2.12	293
USA36M	1007	9620	3	18350	56	17700	57	17000	53	16300	52	15500	54	14600	58	3.18	310
USA36N	1193	11400	5	21750	71	21200	66	20600	61	20100	58	19400	58	18800	57	5.30	324
USA42K	620	6900	1 1/2	17850	28	16700	30	15250	37	13300	37	9400	31			1.60	555
USA42L	683	7600	2	19650	30	18700	31	17250	34	15750	37	13700	36	9000	35	2.12	564
USA42M	781	8690	3	22500	35	21500	37	20400	38	19250	41	17900	47	16400	46	3.17	581
USA42N	926	10300	5	26650	56	25800	56	25000	56	24000	57	23000	58	22000	60	5.28	595
USA42P	1060	11800	7 1/2	30500	69	29800	69	29100	69	28300	69	27600	71	26700	73	8.50	646
USA42R	1170	12980	10	33550	82	32910	81	32240	81	31520	81	30780	83	30040	85	11.00	666
USA48K	498	6320	1 1/2	21300	30	19500	28	17400	26	14300	31					1.59	596
USA48L	548	6960	2	23400	37	21800	36	20000	34	17800	36	12500	37			2.11	600
USA48M	627	7960	3	26800	48	25400	45	23800	45	22200	47	20100	48	16400	48	3.16	643
USA48N	743	9430	5	31800	73	30600	68	29500	64	28000	65	26700	67	25000	66	5.26	653
USA48P	851	10800	7 1/2	36400	92	35300	89	34300	86	33200	82	32000	77	30700	74	8.50	713
USA48R	936	11900	10	40000	124	39200	120	38200	116	37200	111	36200	107	35000	100	11.00	746
USA54K	416	5881	1 1/2	24057	20	21721	17.9	18858	18.0	11669	19.7					1.69	631
USA54L	458	6475	2	26486	24	24383	22	22000	21	18616	21					2.29	640
USA54M	524	7408	3	30303	29	28478	28	26527	26	24223	26	21023	30	13199	30	3.42	659
USA54N	603	8525	5	34871	38	33293	35	31656	34	29879	34	27813	34	25144	35	6.10	682
USA54P	711	10052	7 1/2	41117	52	39782	50	38423	47	37009	45	35501	45	33838	46	9.09	728
USA54R	783	11069	10	45281	60	44070	57	42844	54	41586	51	40275	51	38882	51	12.00	774
USA54S	870	12299	15	50312	73	49223	72	48125	68	47009	67	45864	63	44675	63	15.40	828
USA60M	416	6535	3	32709	24	30145	23	27251	22	23184	22	12696	23	6949	24	3.56	765
USA60N	458	7194	5	36011	29	33696	27	31193	26	28140	26	23645	28	11793	28	4.71	779
USA60P	585	8231	7 1/2	45997	44	44198	42	42349	41	40388	39	38217	39	35642	38	8.14	830
USA60R	621	9755	10	48828	50	47134	47	45404	46	43595	44	41643	44	39446	44	10.73	850
USA60S	750	11781	15	58971	69	57571	69	56157	65	54715	62	53227	59	51669	60	16.82	861
USA60T	812	12755	20	63845	81	62553	77	61252	74	59931	73	58581	72	57187	71	20.59	873

Performance shown is for Installation Type B: Free Inlet, Ducted Outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type B: Free Inlet fan sone levels.



PERFORMANCE DATA																	
Fan Model	RPM	Tip Speed	HP	CFM and Sones vs. Static Pressure												Max. BHP	Est. Ship Wt.
				.750"		1.000"		1.250"		1.500"		1.750"		2.000"			lbs.
				CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone		
USA12E	2090	6670	1/4													.25	48
USA12F	2320	7400	1/3													.33	49
USA12G	2680	8540	1/2	1660	35											.50	51
USA12H	3070	9780	3/4	2130	39	1870	44									.74	54
USA16E1	1570	6512	1/4													.21	66
USA16E2	1800	7466	1/4													.31	66
USA16F	1976	8196	1/3													.41	67
USA16G	2267	9403	1/2													.60	69
USA16H	2600	10784	3/4	2871	46											.88	72
USA16J	2855	11842	1	3463	54	2924	56									1.16	73
USA18E	1375	6660	1/4													.28	71
USA18F	1510	7310	1/3													.38	72
USA18G	1730	8380	1/2	2000	32											.58	74
USA18H	1980	9580	3/4	3370	39											.82	77
USA18J	2180	10550	1	4050	44											1.09	78
USA18K	2495	12100	1 1/2	4980	50	4600	55	4160	58	3000	60					1.85	88
USA21F	1200	6680	1/3													.59	99
USA21G	1355	7540	1/2													.85	101
USA21H	1580	8790	3/4	2343	35											1.26	104
USA21J	1730	9620	1	3211	41											1.48	105
USA21K	1980	11000	1 1/2	5462	42	3559	48	2718	49							1.86	115
USA24G	1090	6950	1/2													.54	111
USA24H	1250	7980	3/4													.85	114
USA24J	1375	8770	1	4650	33											1.08	115
USA24K	1570	10000	1 1/2	6450	47											1.61	125
USA24L	1730	11040	2	7630	47	6900	50	5000	53							2.30	134
USA24M	1980	12600	3	9200	51	8600	58	7950	66	7000	68					3.20	151
USA30H	856	6830	3/4													.79	228
USA30J	942	7520	1													1.06	229
USA30K	1078	8600	1 1/2	6700	39											1.60	239
USA30L	1187	9480	2	9150	48											2.11	248
USA30M	1358	10850	3	11700	51	10250	55	6800	56							3.17	265
USA30N	1610	12860	5	14890	60	13980	65	13010	75	11800	78	8200	84			5.60	279
USA36J	698	6670	1													1.05	274
USA36K	799	7640	1 1/2													1.59	284
USA36L	880	8410	2	7800	46											2.12	293
USA36M	1007	9620	3	13500	63	8000	72									3.18	310
USA36N	1193	11400	5	18100	59	16450	67	14000	76	7800	78					5.30	324
USA42K	620	6900	1 1/2													1.60	555
USA42L	683	7600	2													2.12	564
USA42M	781	8690	3	13800	46											3.17	581
USA42N	926	10300	5	20750	63	17700	64									5.28	595
USA42P	1060	11800	7 1/2	25900	76	23800	81	21200	82	13000	85					8.50	646
USA42R	1170	12980	10	29260	87	27530	92	25670	96	23500	97	17500	107	11250	119	11.00	666
USA48K	498	6320	1 1/2													1.59	596
USA48L	548	6960	2													2.11	600
USA48M	627	7960	3													3.16	643
USA48N	743	9430	5	23000	69											5.26	653
USA48P	851	10800	7 1/2	29300	74	26000	77	16400	81							8.50	713
USA48R	936	11900	10	34000	97	31300	96	28000	99	18200	100	12000	106			11.00	746
USA54K	416	5881	1 1/2													1.69	631
USA54L	458	6475	2													2.29	640
USA54M	524	7408	3													3.42	659
USA54N	603	8779	5	20322	37	8598	38									6.10	682
USA54P	711	10052	7 1/2	31899	45	26443	52	12679	52							9.09	728
USA54R	783	11069	10	37367	51	33634	60	27732	60							12.00	774
USA54S	870	12299	15	43426	63	40639	63	37125	67							15.40	828
USA60M	416	6535	3													3.56	765
USA60N	458	7194	5	7831	27											4.71	779
USA60P	585	8231	7 1/2	32356	44	16589	46									8.14	830
USA60R	621	9755	10	36799	44	25072	51	13068	51							10.73	850
USA60S	750	11781	15	50011	59	46178	60	41081	71							16.82	861
USA60T	812	12755	20	55733	71	52549	71	48692	72							20.59	873

Performance shown is for Installation Type B: Free Inlet, Ducted Outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type B: Free Inlet fan sone levels.