

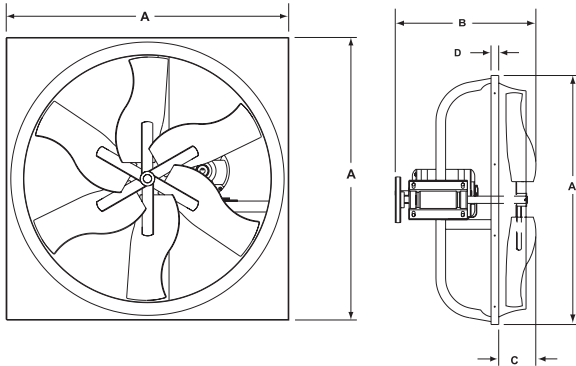


Belt Drive Propeller Wall Fans

Models USDC, USDK, USDH and USK



Models USDC, USDK, USDH and USK are belt drive propeller wall fans. Typical applications include manufacturing and assembly facilities, warehouses, parking garages, sports and agricultural facilities.



Construction Features

Model USDC

- Capacities up to 27,720 CFM
- Up to 3/8 inch static pressure
- Available for either exhaust or supply ventilation
- Precision balanced steel propeller with cambered twist blade design

Model USDK

- Capacities up to 73,080 CFM
- Up to 3/4 inch static pressure
- Available for either exhaust or supply ventilation
- Precision balanced aluminum propeller with cambered twist blade design
- Unitary pillow block bearings standard on USDK72

Model USDH

- Capacities up to 77,240 CFM
- Up to 1/4 inch static pressure
- Available for either exhaust or supply ventilation
- Precision balance heavy duty all welded steel propeller with cambered blades
- Unitary pillow block bearings standard on USDH72

Model USK

- Capacities up to 79,330 CFM
- Up to 1 1/4 inch static pressure
- Available for either exhaust or supply ventilation
- Precision balanced heavy duty all welded aluminum propeller with circular-arc blades
- Unitary pillow block bearings standard on all sizes

Other Features

Frame and Orifice

- Constructed of all welded heavy gauge steel with acrylic epoxy coating
- Deep rolled, streamlined orifice for efficient performance
- Heavy wall steel tube frame for extra strength
- Designed to operate in any position

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

Drives

- Cast iron drives sized for 150% of drive horsepower
- Static free, oil and heat resistant belts
- 1 or 2 belt combinations depending on horsepower

Motors

- Continuous duty type with sealed ball bearings

Finish

- Gray acrylic epoxy finish is standard on all steel parts

Options/Accessories

- Wall Box Package
- Disconnect Switches
- Safety Guards
- Dampers
- Coatings

	Fast Ship Program	Next Day	10 Day
USDC24-48	•	•	•
USDCK24-54	•	•	•
USDCH42-48	•	•	•

Consult factory for specific motor availability.

Fan Model	DIMENSIONS					
	A	B Max.		C		D
		Exhaust	Supply	Exhaust	Supply	
USDC24	28.00	16.50	18.62	7.00	1.00	1.00
USDC30	34.00	16.50	17.38	7.75	1.00	1.00
USDC36	40.00	15.44	17.38	6.75	1.00	1.00
USDC42	46.00	16.50	17.38	7.63	1.00	1.00
USDC48	54.00	16.50	18.62	7.38	1.50	1.50
USDC54	60.00	18.94	N/A	10.38	N/A	1.62
USDK24	28.00	20.25	20.50	4.67	0	1.12
USDK30	34.00	23.13	24.25	6.55	0	1.11
USDK36	40.00	23.13	24.25	5.32	0	1.12
USDK42	48.00	28.38	26.51	5.52	1.25	1.50
USDK48	54.00	28.38	26.51	5.84	6.00	1.50
USDK54	60.00	28.38	27.48	7.41	7.50	1.50
USDK60	68.00	33.37	30.53	5.16	5.00	2.06
USDK72	80.00	36.00	36.00	7.29	6.00	2.00
USDH42	48.00	26.13	28.38	4.00	2.13	1.50
USDH48	54.00	26.13	29.88	4.00	2.38	1.50
USDH54	60.00	26.13	28.38	4.00	2.63	1.50
USDH60	68.00	30.53	34.13	4.50	2.00	1.50
USDH72	80.00	33.25	33.25	6.00	2.50	2.00
USK24	30.00	20.25	25.00	4.00	0	1.75
USK30	37.50	26.00	29.00	5.75	0	1.75
USK36	45.00	25.50	31.50	5.75	0	1.75
USK42	52.50	30.00	32.00	5.00	0	2.00
USK48	60.00	30.00	33.00	4.50	0	2.00
USK54	67.50	30.75	N/A	5.00	NA	2.00
USK60	75.00	34.50	N/A	6.00	NA	2.00
USK72	90.00	35.00	N/A	5.75	NA	2.50

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.

USDC, USDK
U.L. 705 Listed

CSA Certified

Consult your U.S. Fan representative for availability.

Propeller Wall Fans

MODEL USDC (EXHAUST) OR USDC-R (SUPPLY) PERFORMANCE DATA														
Fan Model	HP	RPM	Sones @ 1/8"	CFM vs. Static Pressure									Max. BHP	Est. Unit Wt. lbs.
				.000"	.050"	.100"	.125"	.150"	.200"	.250"	.300"	.375"		
USDC24	1/4	622	10.9	5280	4950	4530	4230	3870					.26	51
USDC24	1/3	735	14.0	6240	5960	5660	5470	5260	4700	3840			.42	55
USDC24 †	1/2	820	17.2	6960	6710	6450	6310	6150	5750	5230	4520		.58	59
USDC24 †	3/4	949	27	8050	7840	7620	7510	7390	7120	6790	6380	5610	.90	64
USDC30	1/4	450	9.1	7210	6620	5770	5180						.26	57
USDC30	1/3	529	12.5	8480	7990	7400	7010	6560	5220				.42	63
USDC30 †	1/2	607	17.3	9720	9300	8840	8570	8250	7490	6430			.63	67
USDC30 †	3/4	686	18.6	10990	10620	10230	10020	9780	9220	8540	7710		.90	72
USDC30	1	757	26	12130	11790	11450	11260	11070	10630	10100	9480	8320	1.21	80
USDC36	1/3	431	11.3	10260	9570	8790	8300	7660					.39	66
USDC36 †	1/2	495	14.0	11790	11190	10560	10200	9800	8740				.59	71
USDC36 †	3/4	575	18.1	13680	13180	12650	12380	12080	11420	10580	9460		.92	75
USDC36	1	634	21	15090	14630	14160	13920	13670	13130	12500	11730		1.22	83
USDC42	1/3	342	10.7	12830	11810	10460	9700	7780					.42	97
USDC42 †	1/2	385	14.7	14440	13550	12490	11830	11110					.59	101
USDC42 †	3/4	442	16.5	16580	15820	14970	14470	13910	12750	10460			.90	110
USDC42	1	485	23	18200	17500	16760	16350	15890	14850	13800	11800		1.20	118
USDC48 †	1/2	308	11.8	17470	16220	14650	13630	12160					.61	133
USDC48 †	3/4	354	14.4	20080	19000	17790	17070	16220	13810				.93	158
USDC48	1	382	18.3	21670	20680	19600	18980	18290	16620				1.13	166
USDC48	1 1/2	444	22	25186	24337	23452	22979	22474					1.71	174
USDC54	1	311	19.2	25600	24300	22810	21990	20900	17880				1.22	190
USDC54	1 1/2	334	20	27720	26300	25770	25160	24420	22340	19220			1.72	198

MODEL USDH (EXHAUST) OR USDH-R (SUPPLY) PERFORMANCE DATA														
Fan Model	HP	RPM	Sones @ 1/8"	CFM vs. Static Pressure							Max. BHP	Est. Unit Wt. lbs.		
				.000"	.050"	.100"	.125"	.150"	.200"	.250"				
USDH42	1 1/2	524	28	19060	18410	17700	17320	16880	15650				1.75	188
USDH42	2	574	27	20880	20280	19660	19330	18970	18130	16770			2.30	188
USDH42	3	661	31	24040	23530	23000	22730	22440	21840	21120			3.45	231
USDH48	1 1/2	404	21	23890	23010	22010	21380	20510					1.76	225
USDH48	2	444	24	26260	25460	24600	24100	23530	21570				2.33	225
USDH48	3	509	33	30100	29410	28680	28300	27890	26900	25380			3.50	268
USDH48	5	603	47	35660	35080	34480	34170	33860	33190	32420			5.77	299
USDH54	1 1/2	332	19.8	27950	26740	25280	24180	21810					1.73	292
USDH54	2	366	23	30820	29720	28500	27750	26750					2.34	292
USDH54	3	419	28	35280	34330	33320	32770	32150	30480				3.51	319
USDH54	5	496	36	41760	40960	40140	39710	39270	38280	37060			5.79	350
USDH60	1 1/2	278	15.7	32110	30480	28320	26000						1.74	450
USDH60	2	306	19	35340	33880	32160	30960	28830					2.30	450
USDH60	3	350	24	40420	39160	37780	36990	36040	32460				3.45	477
USDH60	5	415	32	47930	46870	45770	45180	44560	43110	41000			5.76	508
USDH60	7 1/2	475	41	54860	53940	52990	52500	52000	50920	49680			8.59	630
USDH72	2	226	16.2	45100	42690	39330	34580						2.28	525
USDH72	3	259	19.9	51690	49620	47200	45590	42990					3.48	538
USDH72	5	307	27	61270	59540	57700	56670	55500	52140				5.79	574
USDH72	7 1/2	351	33	70050	68550	66980	66160	65290	63280	60490			8.64	696
USDH72	10	387	40	77240	75870	74480	73750	73000	71390	69480			11.54	733

† Maximum capacity of the two speed, 1/2 HP and 3/4 HP models is approximately 10% less than that shown in the table.

Performance shown is for Installation Type A - Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances in the airstream. Power rating (BHP) does not include drive losses. The brake horsepower capability of a fan motor is dependent on the degree of cooling the motor receives from the airstream moving over the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is within NEMA recommended limits. Therefore, it is not detrimental to the motor and is economically desirable. Model numbers shown are for Exhaust fans with standard direction of airflow (motor on intake side of propeller). To order Supply fans with direction of airflow reversed (motor on discharge side of propeller) add the letter "R" to the end of the model number. 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 A: Free Inlet fan sone levels.

When a supply type fan is used, a WAGC or WAGCH type shutter should be substituted for the WAG or WAGH recommended for the standard flow fan.



MODEL USDK (EXHAUST) OR USDK-R (SUPPLY) PERFORMANCE DATA												
Fan Model	HP	RPM	Sones @ 1/4"	CFM vs. Static Pressure							Max. BHP	Est. Unit Wt. lbs.
				.000"	.125"	.250"	.375"	.500"	.625"	.750"		
USDK24	1/4	772	14.8	5420	4470	2540					.33	50
USDK24	1/3	855	18.0	6000	5210	3390					.44	54
USDK24	1/2	985	21	6910	6270	5150	3440				.66	58
USDK24	3/4	1123	26	7880	7330	6610	5260	3850			.99	63
USDK24	1	1237	30	8680	8180	7600	6680	5260	4150		1.32	71
USDK30	1/3	587	13.9	8110	6440	3570					.43	66
USDK30	1/2	676	19.2	9330	8080	5130					.66	70
USDK30	3/4	771	24	10650	9610	7710	5150				.97	75
USDK30	1	849	27	11720	10800	9490	6960	5320			1.31	83
USDK30	1 1/2	958	30	13230	12430	11460	9790	7320	6080		1.87	91
USDK30	2	1054	35	14550	13830	13020	11910	10010	7740	6720	2.51	91
USDK36	3/4	550	17.8	12550	10870	7360					.85	80
USDK36	1	606	22	13830	12330	9980					1.14	88
USDK36	1 1/2	684	28	15610	14300	12770	9350				1.65	96
USDK36	2	752	31	17160	15970	14680	12680	9630			2.18	96
USDK36	3	861	40	19640	18610	17540	16320	14310			3.29	139
USDK42	1	471	17.2	16890	14610	9840					1.12	227
USDK42	1 1/2	532	23	19070	17100	14260					1.65	235
USDK42	2	585	28	20970	19190	17100	12460				2.20	235
USDK42	3	670	38	24020	22480	20820	18580	14110			3.30	278
USDK42	5	794	47	28470	27170	25830	24380	22550	18700		5.50	309
USDK48	1 1/2	426	21	22710	19850	13880					1.61	273
USDK48	2	470	24	25050	22500	18940					2.20	273
USDK48	3	537	33	28620	26410	23930	18630				3.27	316
USDK48	5	637	51	33950	32100	30170	27920	23750			5.48	347
USDK48	7 1/2	729	62	38860	37250	35600	33840	31790	28550		8.22	469
USDK54	1 1/2	351	18	26550	22580	14620					1.63	350
USDK54	2	386	21	29200	25670	18510					2.14	350
USDK54	3	442	27	33440	30400	26690	19050				3.29	377
USDK54	5	524	40	39640	37110	34390	30750	23380			5.48	408
USDK54	7 1/2	600	54	45390	43190	40900	38380	34900	27800		8.22	530
USDK54	10	661	69	50000	48010	45960	43800	41340	37780	30950	10.96	567
USDK60	2	325	19.9	33640	28910	19160					2.17	540
USDK60	3	372	25	38500	34480	28590					3.28	567
USDK60	5	440	33	45540	42180	38460	31470				5.41	598
USDK60	7 1/2	505	46	52270	49360	46300	42710	35540			8.25	720
USDK60	10	555	57	57440	54800	52070	49110	45320	37260		10.99	757
USDK72	3	275	21	49020	42350	28430					3.25	624
USDK72	5	326	27	58110	52630	45670	32350				5.51	660
USDK72	7 1/2	373	34	66480	61740	56530	47730	36610			8.15	762
USDK72	10	410	41	73080	68780	64230	58670	46270	39430		10.95	819

Performance shown is for Installation Type A - Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances in the airstream. Power rating does not include drive losses. The brake horsepower capability of a fan motor is dependent on the degree of cooling the motor receives from the airstream moving over the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is within NEMA recommended limits. Therefore, it is not detrimental to the motor and is economically desirable. Model numbers shown are for Exhaust fans with standard direction of airflow (motor on intake side of propeller). To order Supply fans with direction of airflow reversed (motor on discharge side of propeller) add the letter "R" to the end of the model number. 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 A: Free Inlet fan sone levels.

MODEL USK (EXHAUST) OR USK-R (SUPPLY) PERFORMANCE DATA

Fan Model	HP	RPM	CFM and Sones vs. Static Pressure																		Max. BHP	Est. Unit Wt. lbs.
			.000"		.125"		.250"		.375"		.500"		.625"		.750"		1.000"		1.250"			
			CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones		
USK24F	1/3	950	5300	17	4850	20	4210	22	2820	23											.39	111
USK24G	1/2	1090	6080	21	5700	23	5200	26	4500	29	3000	29									.58	115
USK24H	3/4	1250	6980	24	6640	27	6250	31	5760	33	5130	36	4060	37							.85	118
USK24J	1	1375	7670	26	7370	28	7020	32	6640	35	6170	38	5550	34	4570	40					1.12	136
USK30G	1/2	748	8220	19	7450	21	6430	24	4200	25											.56	150
USK30H	3/4	856	8780	23	8170	25	7270	27	5940	30											.83	153
USK30J	1	942	9660	25	9120	27	8430	32	7340	34	5930	38									1.09	171
USK30K	1 1/2	1078	11060	33	10590	37	10060	41	9320	43	8320	45	7170	48	5580	53					1.62	182
USK30L	2	1187	12170	35	11750	39	11300	44	10740	47	9940	49	9020	51	7970	54					2.15	188
USK36J	1	698	13150	20	12200	21	11000	24	9300	34											1.07	214
USK36K	1 1/2	799	15050	24	14250	26	13350	27	12150	33	10450	44									1.59	325
USK36L	2	880	16580	26	15950	25	15150	27	14200	32	12900	41	11200	50							2.13	300
USK36M	3	1007	18970	32	18400	32	17700	33	17000	35	16050	41	15000	48	13650	68					3.17	257
USK36N	5	1193	22480	43	22000	42	21450	42	20850	45	20200	47	19500	54	18800	59	1670	78	13600	88	5.24	277
USK42K	1 1/2	620	18440	29	17300	33	15750	30	13600	35											1.58	231
USK42L	2	683	20310	26	19200	27	17900	32	16250	37	13900	46									2.11	235
USK42M	3	781	23230	35	22350	34	21250	38	20000	44	18500	48	16500	50	13300	45					3.15	320
USK42N	5	926	27540	68	26750	60	25900	64	25000	69	24000	70	22800	65	21400	67	17300	71			5.23	340
USK48K	1 1/2	511	21550	29	19600	33	17100	32													1.60	265
USK48L	2	562	23700	34	21900	35	19800	34	17200	35											2.13	271
USK48M	3	643	27120	39	25600	39	23900	39	21800	39	19200	43									3.17	401
USK48N	5	763	32180	57	31100	61	29800	65	28400	66	26600	63	24600	64	21200	66					5.29	371
USK48P	7 1/2	874	36870	66	35900	66	34800	66	33700	65	32400	65	31000	65	29300	66	23000	76			7.94	502
USK54K	1 1/2	421	25200	24	22600	24	18900	25													1.60	376
USK54L	2	463	27710	28	25400	28	22300	28													2.12	382
USK54M	3	530	31720	35	29600	35	27400	35	24300	36											3.17	449
USK54N	5	628	37590	47	35700	47	33900	47	31800	47	29300	48	25900	53							5.27	472
USK54P	7 1/2	719	43030	60	41600	60	40100	60	38500	60	36400	60	34400	61	31700	63					7.91	529
USK54R	10	792	47400	71	46000	71	44800	71	43300	70	41800	70	40000	71	38000	71	31800	80			10.56	583
USK60L	2	389	31850	25	28600	25	24600	27													2.12	498
USK60M	3	445	36440	32	33700	32	30500	32	25900	35											3.16	525
USK60N	5	528	43230	43	41000	42	38500	42	35600	43	31900	46									5.26	545
USK60P	7 1/2	604	49450	54	47500	54	45500	54	43200	54	40700	55	37500	57							7.89	597
USK60R	10	665	54450	65	52700	65	50700	65	48700	65	46400	65	43800	66	41000	67					10.53	653
USK60S	15	761	62300	83	60800	83	59200	82	57500	82	55600	82	53800	82	51600	82	46800	85			15.77	724
USK72M	3	329	46360	27	42000	27	36000	29													3.15	715
USK72N	5	390	54950	36	51300	36	47500	36	41400	38											5.25	735
USK72P	7 1/2	447	62980	46	59700	46	56200	45	52200	46	47400	48									7.90	805
USK72R	10	492	69320	54	66300	54	63400	54	59900	54	55900	55	50800	58							10.52	842
USK72S	15	563	79330	70	76900	69	74200	69	71500	69	68200	70	64700	70	60700	72					15.77	916

Performance shown is for Installation Type A - Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances in the airstream. Power rating (BHP) does not include drive losses. 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 A: Free Inlet fan sone levels. The brake horsepower capability of a fan motor is dependent on the degree of cooling the motor receives from the moving air stream over the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is within NEMA recommended limits. It is therefore not detrimental to the motor and is economically desirable. Model numbers shown are for Exhaust Fans with standard direction of air flow (motor on intake side of propeller). To order Supply with direction of air flow reversed (motor on discharge side of propeller) add letter "R" to Model number. EXAMPLE: USK-R54L. USK54, 60 & 72 not available as supply type.

Propeller Wall Fans

