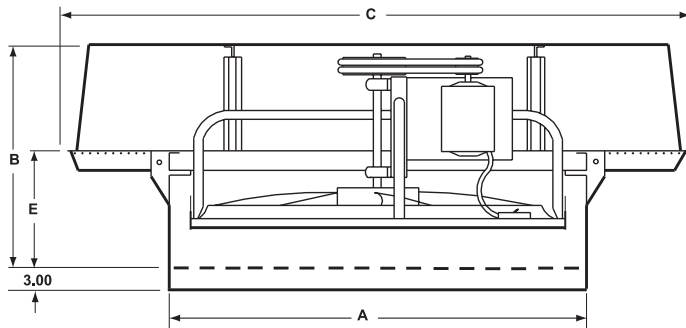




Belt Drive Propeller Roof Ventilators Models USC and USCH



Models USC and USCH are low silhouette belt drive propeller fans for exhaust or supply ventilation. Capacities up to 74,200 CFM and up to 7/8 inch static pressure. USC and USCH fans are designed for high capacity general ventilation. Typical applications include a wide range of commercial, industrial, and institutional facilities such as schools, hospitals, prisons, and assembly areas.



DIMENSIONS

Fan Model	A	B	B ■	C	C ■	E	Roof Opening*	Damper Model	Curb Model
USCH24	34.00	24.00	24.00	48.00	58.00	12.97	29.5 x 29.5	AR28	C32.5
USC30	40.00	24.25	25.75	58.00	68.00	13.75	35.5 x 35.5	AR34	C38.5
USC36	46.00	27.00	29.00	68.00	79.00	15.00	41.5 x 41.5	AR40	C44.5
USCH36	46.00	27.00	29.00	68.00	79.00	15.00	41.5 x 41.5	AR40	C44.5
USC42	54.00	28.50	33.50	79.00	90.00	17.50	49.5 x 49.5	AR48	C52.5
USCH42	54.00	31.00	33.50	79.00	90.00	17.50	49.5 x 49.5	AR48	C52.5
USC48	60.00	36.00	38.00	90.00	100.00	20.00	55.5 x 55.5	AR54	C58.5
USCH48	60.00	36.00	38.00	90.00	100.00	20.00	55.5 x 55.5	AR54	C58.5
USCH54	68.00	40.50	42.50	100.00	112.00	22.50	63.5 x 63.5	AR62	C66.5
USCH60	76.00	45.00	49.00	112.00	134.00	25.00	71.5 x 71.5	ARH70	C74.5
USCH72	88.00	54.00	N/A	134.00	N/A	30.00	83.5 x 83.5	ARH82	C86.5

■ For Supply Units with Filter Frames.

Dimensions are shown in inches.

*Recommended maximum.

Construction Features

Housing

- Hood and framework constructed of heavy gauge aluminum
- Hinged hood provides easy access to motor drive compartment
- Large hood provides full perimeter opening for efficient air flow and weather protection
- Steel fasteners are zinc dichromate plated
- Welded tubular steel frame supports motor, propeller and drive assembly
- Heavy gauge galvanized wire birdscreen

Aluminum Propeller

- All welded heavy gauge aluminum propeller
- Non-overloading design for safe operation
- Precision balanced for smooth vibration free operation

Disconnect Switch

- Mounted over knock-out in orifice plate allowing convenient wiring to power source

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 USCH72



Drive Assembly

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

Motors

- Continuous duty motors located in the airstream for cooler operation and longer life under continuous duty
- Motor compartment cooled by fins located on top of impeller

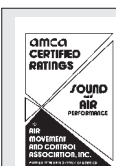
Options/Accessories

- Roof Curbs
- Dampers
- Coatings
- Filters, vertical and horizontal

Fast Ship Program	Next Day	10 Day
USC-S30	•	•
USCH24-48	•	•
USCH24-48-S	•	•

Consult factory for specific motor availability.

Propeller Roof Fans



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.

EXHAUST VENTILATORS

PERFORMANCE DATA																						
Fan Model	HP	RPM	Max. BHP	CFM and Sones vs. Static Pressure																		Est. Ship Wt.
				.000"		.100"		.125"		.250"		.375"		.500"		.625"		.750"		.875"		
				CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM
USCH24F	1/3	950	.39	4950	15.2	4480	15.2	4350	15.2	3460	16.4	2610	18.2									196
USCH24G	1/2	1091	.59	5680	19.2	5280	19.1	5180	19.1	4550	19.7	3610	25	2970	23							203
USCH24H	3/4	1248	.87	6500	24	6150	24	6060	24	5570	24	4930	25	4070	32	3500	30					206
USCH24J	1	1374	1.15	7160	27	6840	27	6760	27	6340	27	5830	28	5150	29	4380	37	3880	35			214
USC30E	1/4	434	.25	6230	8.4	4800	9.1															237
USC30F	1/3	508	.41	7290	11.1	6170	10.0	5830	10.7													240
USC30G	1/2	581	.60	8340	13.5	7370	13.1	7110	13.4	5080	14.5	3460	12.0									245
USC30H	3/4	665	.91	9550	15.5	8700	14.7	8490	14.6	7110	14.3	4880	15.2	3890	12.5							250
USC30J	1	732	1.21	10510	17.2	9740	16.4	9550	16.2	8520	16.1	6760	17.6	5030	17.2							256
USC36E	1/4	370	.26	7760	9.4	5810	9.1	5230	9.6													297
USC36F	1/3	431	.41	9040	11.3	7440	11.0	6990	11.6	4190	9.2											300
USC36G	1/2	495	.62	10380	14.6	9010	14.3	8640	14.1	6450	14.2	3880	10.8									307
USC36H	3/4	575	.97	12060	17.6	10890	18.5	10580	17.3	8940	18.5	6780	15.8	4650	15.2							311
USC36J	1	634	1.33	13300	21	12240	19.1	11970	20	10540	19.0	8830	22	6760	18.4							318
USCH36K	1 1/2	782	1.62	13670	25	12970	25	12790	25	11780	26	10550	28	9270	42	7990	38					411
USCH36L	2	861	2.16	15050	29	14410	29	14250	30	13380	30	12350	34	11190	41	10040	47	8880	38			427
USCH36M	3	987	3.24	17250	38	16700	38	16560	38	15830	38	15030	42	14100	47	13090	48	12080	47	11090	53	439
USC42F	1/3	342	.41	11400	8.5	8950	8.0	7800	8.5	3800	8.4											400
USC42G	1/2	385	.59	12820	10.7	10740	9.9	10170	10.0	6550	10.7											407
USC42H	3/4	442	.89	14720	14.2	12930	12.3	12460	12.3	9730	16.1	6420	13.2									411
USC42J	1	485	1.18	16150	15.5	14530	14.4	14110	14.2	11810	16.0	8780	16.5	5540	14.0							418
USCH42K	1 1/2	605	1.64	16690	18.8	15630	18.8	15350	18.9	13710	19.1	11790	26	9880	25							524
USCH42L	2	666	2.18	18380	22	17420	22	17170	22	15780	22	14100	23	12360	30	10580	26					521
USCH42M	3	763	3.27	21050	25	20220	26	20010	26	18880	27	17560	30	16060	32	14530	37	13040	35	11340	33	534
USCH42N	5	904	5.37	24940	36	24240	36	24070	35	23160	34	22170	36	21050	38	19810	43	18530	46	17240	52	548
USC48G	1/2	308	.59	15310	9.4	12300	10.6	11440	10.0	6160	8.7											556
USC48H	3/4	354	.89	17600	12.4	15030	12.6	14340	12.9	10010	11.6											560
USC48J	1	382	1.13	18990	15.5	16620	14.6	16000	14.2	12330	15.4	7980	12.7									567
USCH48K	1 1/2	485	1.62	19890	17.5	18360	18.5	17950	18.8	15460	21	12740	19.0									652
USCH48L	2	532	2.14	21810	21	20440	22	20070	22	17950	23	15460	29	12990	26							663
USCH48M	3	611	3.25	25050	28	23860	26	23560	26	21880	29	19850	31	17670	30	15540	27	13090	27			669
USCH48N	5	723	5.33	29640	33	28640	33	28390	34	27070	34	25570	34	23850	36	22020	42	20180	44	18390	43	683
USCH54J	1	347	1.08	20500	11.8	18000	13.9	17200	14.1	12900	16.9											795
USCH54K	1 1/2	398	1.61	23160	15.5	21040	16.5	20450	17.9	16870	19.8	13050	16.5									810
USCH54L	2	438	2.13	25480	18.4	23590	19.4	23080	19.4	20010	22	16620	26									810
USCH54M	3	502	3.21	29210	23	27570	25	27150	25	24730	27	21820	29	18880	30	15660	25					817
USCH54N	5	595	5.33	34620	30	33250	30	32900	30	31040	34	28870	35	26410	37	23890	43	21440	40	18640	33	831
USCH60J	1	292	1.09	23600	10.7	20200	12.5	19200	12.5	13400	10.9											906
USCH60K	1 1/2	334	1.59	26580	13.7	23750	15.7	22910	15.7	18060	19.5											916
USCH60L	2	368	2.13	29290	16.3	26760	17.6	26060	18.8	21820	21	17330	16.3									941
USCH60M	3	421	3.18	33510	21	31330	22	30760	22	27380	24	23450	29	19500	22							950
USCH60N	5	499	5.30	39720	28	37900	28	37430	29	34890	31	31840	32	28510	35	25250	36	21650	31			956
USCH60P	7 1/2	571	7.89	45450	34	43870	34	43460	34	41360	36	38970	39	36220	42	33320	44	30440	51	27580	46	1070
USCH60R	10	628	10.91	50800	40	49500	40	49100	40	47200	42	45100	45	42700	47	40100	50	37500	52	35900	52	1085
USCH72K	1 1/2	246	1.62	34400	11.5	29500	13.3	28100	13.2	19900	11.5											1275
USCH72L	2	271	2.15	37900	13.3	33700	15.5	32300	15.5	25100	19.5											1300
USCH72M	3	310	3.12	42460	16.7	38870	18.4	37870	19.9	31880	21	25520	23									1300
USCH72N	5	368	5.20	50400	23	47430	25	46650	25	42190	27	36860	30	31540	32							1320
USCH72P	7 1/2	421	7.77	57660	28	55080	28	54420	30	50840	33	46530	34	41820	37	37180	38					1400
USCH72R	10	464	10.89	64900	34	62600	34	62000	34	58800	36	55200	38	50800	42	46000	44	42400	49	37800	39	1430
USCH72S	15	531	16.38	74200	43	72400	43	71800	43	69100	43	66200	46	62900	49	59300	50	55400	54	51900	55	1510

Performance shown is for Installation Type A: Free inlet, Free 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 for Models USC, USC-S, and USCH, and USCH-S 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 name plate rating does not overheat the motor and is within NEMA recommended limits. It is therefore not detrimental to the motor and is economically desirable.

SUPPLY VENTILATORS

PERFORMANCE DATA																						
Fan Model	HP	RPM	Max. BHP	CFM and Sones vs. Static Pressure																		Est. Ship Wt.
				.000"		.100"		.125"		.250"		.375"		.500"		.625"		.750"		.875"		
				CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	
USCH-S24F	1/3	950	.36	4830	17.7	4450	18.8	4340	19.5	3320	21	2510	16.6									196
USCH-S24G	1/2	1091	.55	5550	21	5230	22	5140	22	4500	26	3500	24	2860	20							203
USCH-S24H	3/4	1248	.81	6350	27	6070	27	6000	27	5560	29	4800	32	3960	28	3370	25					206
USCH-S24J	1	1374	1.07	6990	31	6740	30	6670	31	6310	33	5790	36	4950	38	4260	32	3740	29			214
USC-S30E	1/4	434	.22	6130	11.1	3890	9.7	3440	9.4													237
USC-S30F	1/3	508	.36	7170	14.9	5500	13.4	4870	13.1	3010	12.0											240
USC-S30G	1/2	581	.52	8210	18.9	6910	17.4	6410	17.1	4340	16.0											245
USC-S30H	3/4	665	.80	9390	24	8350	22	8000	22	5730	21	4530	19.8									250
USC-S30J	1	732	1.08	10340	28	9430	26	9150	26	7200	24	5640	24	4550	23							256
USC-S36E	1/4	370	.22	7740	11.6	5190	9.9	4050	11.2													297
USC-S36F	1/3	431	.38	9020	14.1	7040	12.0	6410	11.8	3200	11.9											300
USC-S36G	1/2	495	.55	10360	18.9	8760	17.9	8230	18.1	4810	14.9											307
USC-S36H	3/4	575	.87	12030	26	10740	23	10340	23	7880	19.7	5160	17.8									311
USC-S36J	1	634	1.19	13270	28	12130	27	11800	26	9800	23	6680	20	5270	25							318
USCH-S36K	1 1/2	782	1.58	13570	34	12890	33	12710	32	11720	32	10340	31	8400	32	6690	30					411
USCH-S36L	2	861	2.10	14940	38	14320	37	14160	37	13310	36	12260	35	10780	36	8950	38	7410	37			427
USCH-S36M	3	987	3.08	17120	50	16590	47	16450	48	15750	48	14950	47	14000	46	12740	45	12210	47	9470	48	439
USC-S42F	1/3	342	.39	11400	13.4	8300	11.9	7100	10.7													400
USC-S42G	1/2	385	.58	12790	16.5	10260	14.8	9470	14.7	5100	13.0											407
USC-S42H	3/4	442	.89	14690	23	12640	19.7	11960	19.3	7330	15.5	4280	17.0									411
USC-S42J	1	485	1.13	16110	24	14320	23	13760	22	10230	20	6750	16.5									418
USCH-S42K	1 1/2	605	1.60	16570	30	15540	29	15260	28	13620	28	11020	28	8250	25							524
USCH-S42L	2	666	2.14	18240	36	17310	34	17070	33	15710	33	13780	32	11100	31	8880	29					521
USCH-S42M	3	763	3.28	20900	47	20900	46	19880	46	18780	46	17460	45	15650	44	13350	46	10890	45	9730	47	534
USCH-S42N	5	904	5.11	24760	61	24080	58	23910	56	23020	58	22060	56	20950	56	19580	55	17820	55	15850	57	548
USC-S48G	1/2	308	.55	15280	13.7	11510	11.4	10190	10.6													556
USC-S48H	3/4	354	.85	17560	16.8	14490	16.2	13510	15.4	7600	11.0											560
USC-S48J	1	382	1.05	18950	22	16220	19.3	15320	19.5	9230	13.6											567
USCH-S48K	1 1/2	485	1.54	19740	24	18260	23	17850	23	15180	23	10850	21									652
USCH-S48L	2	532	2.08	21650	28	20310	27	19960	27	17840	27	14480	25	10830	25							663
USCH-S48M	3	611	3.28	24870	34	23710	35	23410	34	21770	34	19600	35	16480	35	12990	32	11360	29			669
USCH-S48N	5	723	5.09	29430	54	28450	50	28210	52	26920	50	25450	48	23630	47	21170	48	18330	46	15370	42	683
USCH-S54J	1	347	1.02	20300	17.3	17800	16.8	17000	16.8	11000	15.2											795
USCH-S54K	1 1/2	398	1.59	22990	22	20930	21	20350	21	16050	19.3	11030	17.7									810
USCH-S54L	2	438	2.10	25300	25	23450	24	22950	24	19710	24	14430	23									810
USCH-S54M	3	502	3.22	28990	32	27400	31	26990	31	24610	31	21050	33	16220	29	13460	26					817
USCH-S54N	5	595	5.07	34370	42	33030	42	32690	42	30880	42	28710	41	25740	43	21950	41	17910	39			831
USCH-S60J	1	292	1.06	23500	15.7	20000	15.2	18900	15.2	11000	12.5											906
USCH-S60K	1 1/2	334	1.51	26390	19.3	23620	18.9	22800	18.9	16380	20											916
USCH-S60L	2	368	2.07	29080	23	26610	22	25930	23	21020	24	14470	23									941
USCH-S60M	3	421	3.11	33260	28	31150	27	30580	27	27190	27	21770	25	16340	24							950
USCH-S60N	5	499	5.28	39430	39	37660	39	37200	37	34720	38	31520	37	26900	34	21370	35	18500	31			956
USCH-S60P	7 1/2	571	7.59	45110	49	43580	49	43180	49	41140	47	38790	47	35820	47	31820	50	27240	47	22980	44	1070
USCH-S60R	10	628	10.93	50500	58	49100	58	48800	58	46800	55	44700	55	42400	56	39600	56	36100	59	31700	56	1085
USCH-S72K	1 1/2	246	1.57	34200	16.6	29300	15.9	27700	16.0	16300	12.9											1275
USCH-S72L	2	271	2.02	37600	18.9	33300	18.4	32100	18.4	22300	13.7											1300
USCH-S72M	3	310	3.01	42150	24	38650	23	37680	24	30840	26	21270	22									1300
USCH-S72N	5	368	5.00	50040	32	47140	32	46380	30	41960	31	35140	34	26420	29							1320
USCH-S72P	7 1/2	421	7.74	57240	41	54730	41	54090	39	50590	40	46120	40	39680	36	31850	32	27270	33			1400
USCH-S72R	10	464	10.49	64400	48	62200	48	61600	48	58400	46	54700	48	50100	46	43900	44	37100	39	31200	39	1430
USCH-S72S	15	531	16.26	73700	62	71800	62	71300	62	68700	60	65500	61	62700	61	58500	60	53500	63	47500	60	1510

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