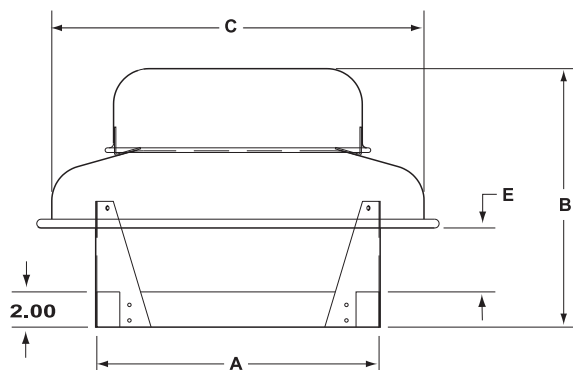




Direct Drive Centrifugal Roof Exhauster Model USR



Model USR direct drive fans are centrifugal power roof ventilators designed for exhausting clean air. Capacities up to 2770 CFM and up to 1 inch static pressure. The USR is a downblast exhauster suitable for all types of commercial and institutional buildings such as schools, hospitals, office buildings, and retail stores.



Construction Features

Housing

- Hoods constructed of heavy gauge aluminum, die formed with rolled bead for strength
- Curb base and inlet are one piece with continuous welded corners
- Steel fasteners are zinc dichromate plated
- Heavy gauge galvanized wire birdscreen
- Heavy gauge corner support brackets transmit motor and impeller weight to curb base
- Conduit post for ease of electrical wiring

Airfoil Centrifugal Wheel

- Aluminum construction with backward curved hollow airfoil blades
- Non-overloading design for safe operation
- Precision balanced for smooth vibration free operation
- Forward curved wheel standard on USR080



Motor

- Continuous duty motors located outside the airstream
- Motor compartment is ventilated by a "forced air" cooling system
- Factory wired with polarized disconnect plug (except explosion resistant motors)

DIMENSIONS

Fan Model	A	B	C	E	Roof Opening*	Est. Unit Wt.	Est. Ship Wt.	Damper Model	Curb Model	SSC
USR080	13.50	9.00	18.25	—	9 x 9	22	24	AR8.75	C12	3 AMP
USR100	16.00	13.25	21.12	3.81	11.5 x 11.5	23	25	AR11	C14.5	3 AMP
USR110	16.00	13.25	21.12	3.81	11.5 x 11.5	24	26	AR11	C14.5	3 AMP
USR118	21.00	16.38	27.75	4.81	16.5 x 16.5	37	42	AR16	C19.5	6 AMP
USR126	21.00	16.38	27.75	4.81	16.5 x 16.5	38	44	AR16	C19.5	6 AMP
USR135	21.00	16.38	27.75	4.81	16.5 x 16.5	44	51	AR16	C19.5	6 AMP
USR145	21.00	16.38	27.75	4.81	16.5 x 16.5	58	64	AR16	C19.5	6 AMP
USR163	24.00	18.12	31.63	5.56	19.5 x 19.5	66	75	AR18	C22.5	6 AMP
USR171	24.00	18.12	31.63	5.56	19.5 x 19.5	75	83	AR18	C22.5	6 AMP

Dimensions are shown in inches.

Weights are shown in pounds.

*Recommended maximum.



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.

Options/Accessories

- Roof Curbs
- Dampers
- Solid State Speed Controllers
- Coatings
- Disconnect Switch
- Aluminum Birdscreen

Fast Ship Program	Next Day	10 Day
USR080-171	•	•

Consult factory for specific motor availability.



U.L. 705 Listed



CSA Certified

Consult your U.S. Fan representative for availability.

PERFORMANCE DATA																		
Fan Model	HP	RPM	Tip Spd.	CFM and Sones vs. Static Pressure														Max. BHP
				.000"		.125"		.250"		.375"		.500"		.750"		1.000"		
				CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	
USR080-1	1/10	1550	3019	195	9.1	163	7.7	113	7.7									.071
USR080-2	1/10	1550	3019	295	11.0	255	8.2	200	8.2									.106
USR080-3	1/10	1550	3019	382	13.0	328	9.0	248	9.0									.170
USR100	1/10	1550	4058	770	6.8	690	6.2	610	5.8	520	5.3	380	5.3					.067
		1300	3403	650	5.3	550	4.6	450	4.0	280	4.0							
		1050	2749	520	3.8	410	6.0	210	3.0									
		860	2251	430	2.6	270	1.8											
USR110	1/10	1550	4464	1090	8.7	990	8.2	890	7.6	780	8.5	650	8.0	210	8.0			.100
		1300	3744	910	6.9	790	6.2	670	6.5	510	6.1	270	6.1					
		1050	3024	740	5.1	590	4.2	400	4.4									
		860	2477	600	3.7	420	2.7											
USR118E	1/4	1725	5329	1582	12.1	1489	11.9	1397	9.9	1305	9.8	1195	10.2	932	9.3	578	8.3	.182
		1300	4016	1192	7.0	1069	6.6	942	6.1	780	6.0	571	6.0					
		1100	3398	1009	4.8	864	4.6	691	4.1	442	4.0							
		860	2657	789	3.1	594	3.0	284	2.4									
USR126E	1/4	1625	5361	1760	13.0	1670	13.0	1560	12.0	1450	12.0	1320	12.0	1040	12.0	680	12.0	.253
		1300	4289	1410	10.0	1290	9.3	1150	9.0	980	9.0	800	8.5	270	8.5			
		1050	3464	1140	7.3	980	6.5	790	6.6	540	6.4	150	6.4					
USR135G	1/2	1725	5743	2160	15.9	2070	15.7	1970	15.0	1860	14.7	1740	14.4	1460	14.2	1090	13.2	.337
		1300	4594	1730	11.6	1610	11.1	1480	10.8	1320	10.2	1140	9.9	580	9.4			
		1050	3711	1390	8.7	1250	8.2	1060	7.7	810	6.8	430	6.8					
USR145G	1/2	1625	6168	2540	14.9	2420	15.2	2300	14.5	2180	14.6	2060	14.3	1780	13.9	1440	14.2	.453
		1300	4594	2030	10.8	1880	10.8	1730	10.7	1580	10.1	1400	10.7	920	10.1			
		1050	3986	1640	8.2	1460	7.8	1270	7.6	1030	7.4	710	7.2					
USR163F	1/3	1100	4694	2448	15.5	2259	15.1	2062	14.6	1851	14.3	1587	14.1	902	13.4			.254
USR171F	1/3	1075	4813	2770	15.0	2610	14.0	2430	14.0	2220	14.0	1960	13.0	1300	12.0			.328

Performances shown are for Installation Type A: Free Inlet, Free Outlet. 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 A: Free Inlet fan sone levels. Maximum RPM shown obtained with the standard one speed motor, for all other RPM's use solid state controller (SSC). Speed (RPM) shown is nominal for USR80-1, USR80-2, and USR80-3 only. Performance is based on actual speed of test. The brake horsepower capability of an exhauster motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.