

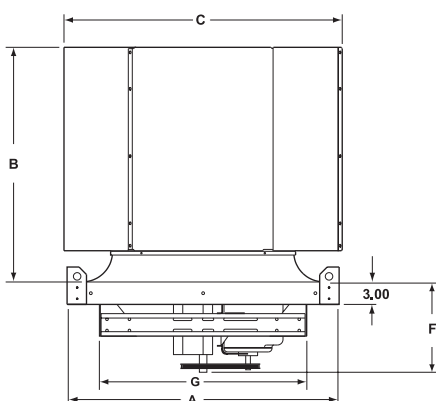


Belt Drive Upblast Roof Exhauster

Model USBG



Model USBG low silhouette belt drive exhausters are ideally suited for moving large volumes of air. Capacities up to 83,373 CFM and up to 3/4 inch static pressure. The USBG is a high velocity exhauster designed to discharge air up and away from the building. The USBG can operate continuously in temperatures up to 200°F. Typical applications include all types of commercial and industrial facilities such as warehouses, foundries, mills, and manufacturing plants.



DIMENSIONS

Fan Model	A	B	C	F	G	Roof Opening*	Est. Unit Wt.	Est. Ship Wt.	Curb Model
USBG24	36.00	31.40	37.18	12.07	27.72	31.5 x 31.5	157	245	C34.5
USBG30	42.00	38.08	43.14	13.95	34.25	37.5 x 37.5	230	332	C40.5
USBG36	48.00	39.37	49.12	13.95	41.89	43.5 x 43.5	273	396	C46.5
USBG42	54.00	38.49	56.11	14.59	47.65	49.5 x 49.5	326	452	C52.5
USBG48	60.00	45.72	62.21	20.45	53.65	55.5 x 55.5	473	602	C58.5
USBG54	66.00	52.96	69.31	22.07	59.73	61.5 x 61.5	612	744	C64.5
USBG60	72.00	58.09	79.15	22.03	65.84	67.5 x 67.5	874	824	C70.5
USBG72	90.00	63.25	95.68	29.34	79.61	85.5 x 85.5	828	1125	C88.5

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.

Construction Features

Windband

- Constructed of heavy gauge galvanized steel with die formed flange for extra strength
- Channel cross tie member provides lateral rigidity
- Removable panels for easy access to fan and dampers

Butterfly Dampers

- Constructed of heavy gauge aluminum
- Stainless steel hinge pins and nylon bearings provide quiet, low friction operation
- Dampers open and close against rubber bumpers for quiet operation
- Water trough under damper hinge provides drainage for rain, melting snow and ice

Aluminum Propeller

- Constructed of welded heavy gauge aluminum
- High efficiency circular arc airfoil blade design
- Precision balanced for smooth vibration free operation

Housing

- Heavy gauge galvanized steel base with deep drawn orifice
- Lifting eyes for ease of handling

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 USBG72

Drive Assembly

- Cast iron drives sized for 150% of drive horsepower
- Static free, oil and heat resistant belts
- Variable speed drives standard for 5 HP and smaller
- Fixed pitch drives for 7 1/2, 10, and 15 HP

Motor

- Continuous duty motors by nationally recognized manufacturers
- Prelubricated ball bearings requiring minimum maintenance

Options/Accessories

- Roof Curbs
- Disconnect Switches
- Outlet Guard
- Coatings
- Fusible Heat Release Damper Link
- Magnetic Latches

Fast Ship Program	10 Day
USBG24-60	

Consult factory for specific motor availability.



U.L. 705 Listed

Consult your U.S. Fan representative for availability.

PERFORMANCE DATA															
Fan Model	RPM	CFM vs. Static Pressure													
		.000"		.125"		.250"		.375"		.500"		.625"		.750"	
		Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP
USBG24	745	5059		3769								1/3 HP	1/2 HP	3/4 HP	1 HP
		13.5	0.30	13.5	0.31										
	780	5296		4175											
		14.7	0.35	14.6	0.36										
	896	6084		5175											
		17.3	0.53	17.1	0.54										
	1025	6960		6222											
		20	0.79	19.7	0.81										
1128	7659		6998		6145										
	24	1.05	24	1.08	24	1.08									
USBG30	593	8109		6543						1/2 HP	3/4 HP	1 HP	1 1/2 HP	2 HP	
		15.8	0.48	16.0	0.51										
	608	8314		6795											
		16.6	0.51	16.8	0.55										
	696	9517		8238											
		19.5	0.77	19.2	0.82										
	729	9968		8766											
		21	0.88	21	0.94										
766	10474		9351												
	24	1.02	22	1.08											
USBG36	503	11784		9343						3/4 HP	1 HP	1 1/2 HP	2 HP	3 HP	
		16.8	0.64	16.7	0.70										
	523	12253		9958											
		24	0.72	21	0.78										
	529	12393		10133											
		23	0.74	22	0.81										
	582	13635		11650											
		22	0.99	22	1.06										
USBG42	406	15263		12295						1 HP	1 1/2 HP	2 HP	3 HP	5 HP	
		15.2	0.70	14.9	0.79										
	447	16804		14152											
		18.1	0.94	17.8	1.04										
	500	18797		16480		13882									
		23	1.31	22	1.42	22	1.51								
	512	19248		16999		14462									
		23	1.41	22	1.52	23	1.61								
USBG48	563	21165		19160		16871						3 HP	5 HP		
		27	1.87	26	2.00	27	2.11								
	639	24022		22256		20319		18285							
		32	2.73	33	2.88	32	3.02	34	3.13						
	645	24248		22498		20585		18571							
		32	2.81	34	2.96	33	3.10	34	3.21						
	764	28721		27244		25750		24054		22354		20648			
		44	4.67	44	4.85	50	5.03	51	5.18	46	5.31	43	5.42		

Variable speed range shown by arrows. Performance shown is for Installation Type A: Free Inlet, Free Outlet. Performance ratings include the effects of the damper 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. Brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. 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.

PERFORMANCE DATA															
Fan Model	RPM	CFM vs. Static Pressure													
		.000"		.125"		.250"		.375"		.500"		.625"		.750"	
		Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP
USBG48	409	21976		18492											
		21	1.31	21	1.45						1 1/2 HP				
	420	22567		19177								2 HP			
		22	1.42	22	1.57										
	462	24824		21753		18275						3 HP			
		26	1.89	25	2.06	26	2.18								
	524	28155		25464		22649									
		32	2.76	32	2.98	30	3.10								
	530	28477		25818		23061									
USBG54		32	2.86	32	3.08	30	3.20								
	583	31325		28908		26438		23619							
		38	3.80	38	4.05	35	4.20	36	4.35						
	628	33743		31500		29218		26788							
		44	4.75	44	5.02	40	5.21	40	5.35						
	719	38633		36673		34704		32690		30504		27583			
		53	7.13	53	7.43	53	7.71	49	7.87	52	8.05	55	8.15		7 1/2 HP
	346	24877		20434											
		21	1.41	21	1.54						2 HP				
USBG60	388	27897		24016											
		25	1.99	24	2.16										
	414	29767		26190		21882						3 HP			
		27	2.42	26	2.59	27	2.66								
	444	31924		28659		24831									
		31	2.98	29	3.17	30	3.27								
	487	35015		32139		28697		24718							
		36	3.94	36	4.14	34	4.30	34	4.31						
	526	37819		35165		32037		28686							
USBG72		39	4.96	39	5.18	37	5.41	37	5.46						
	603	43356		41040		38487		35713		32696					
		52	7.47	52	7.72	47	7.98	48	8.17	48	8.23				7 1/2 HP
	664	47742		45639		43461		40918		38428		35553			10 HP
		59	9.97	59	10.25	59	10.53	53	10.83	57	10.92	58	11.01		
	322	33408		27995											
		22	2.09	22	2.27										
	362	37558		32901		25971									
		27	2.97	27	3.19	27	3.19								
USBG72	414	42953		38881		34284									
		32	4.45	32	4.70	31	4.88								
	429	44509		40580		36228									
		36	4.95	34	5.21	34	5.41								
	491	50941		47509		44040		39884							
		47	7.41	44	7.71	44	8.01	44	8.18						7 1/2 HP
	541	56129		53013		49898		46367		42292					10 HP
		52	9.91	52	10.24	48	10.58	48	10.82	48	10.97				
	207	37195													
USBG72		14	1.27												
	275	49413		41808											
		24	2.98	24	3.29										
	322	57858		51360		43496									
		32	4.79	32	5.21	31	5.52								
	368	66124		60386		54633		46908							
		40	7.15	40	7.68	40	7.95	39	8.25						7 1/2 HP
	406	72952		67723		62678		56237		49707					10 HP
		47	9.60	47	10.22	47	10.55	46	10.98	45	10.89				
USBG72	464	83373		78777		74343		69799		63709		57978		36954	15 HP
		59	14.32	59	15.07	59	15.57	58	15.87	58	16.45	58	16.42	58	15.57

Variable speed range shown by arrows. Shaded lines represent fixed speed for 7 1/2 HP, 10 HP and 15 HP. Performance shown is for Installation Type A: Free Inlet, Free Outlet. Performance ratings include the effects of the damper 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. Brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. 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.