

“A” Series Basic Blower

Product Specification Sheet Number: 316

Notes:

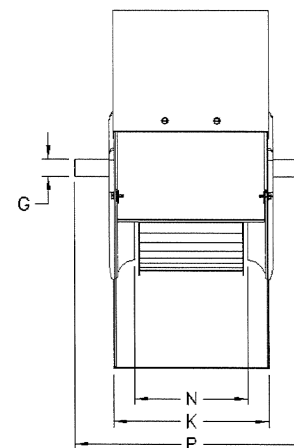
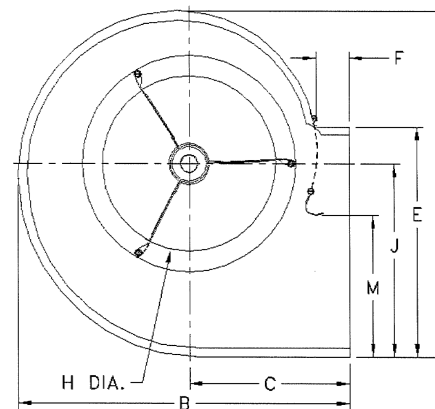
- Shaded areas indicate Lau preferred product. Selections in non -shaded areas and optional features may affect price and availability.
- Product weights may vary with bore size and hub style.
- Solid style hubs are available for most diameters. (Ref. spec sheet #500)
- Clamplok style hubs are available for most diameters. (Ref. spec sheet #500)
- Dimensions shown are for reference only. For certified product dimensions contact Lau Engineering.
- Contact Lau for application assistance.
- Outlet Velocity:

$$\text{FPM} = \frac{\text{CFM}}{\text{O. A.}}$$

- For wheel detail information see spec sheet #318.

DIMENSIONS IN INCHES

Model	Shaft Dia.	A	B	C	D	E	F	H	J	K	M	N	O.A Sq.Ft	Unit Wt.
A9-4A	0.75	15.44	14.94	7.19	10.25	10.25	1.5	7.81	8.62	6.81	6.31	5.00	0.48	11.60
A9-6A	0.75	15.44	14.94	7.19	11.75	10.25	1.5	7.81	8.62	8.25	6.31	6.44	0.58	12.44
A9-7A	0.75	15.44	14.94	7.19	12.62	10.25	1.5	7.81	8.62	9.19	6.31	7.38	0.65	13.90
A9-8A	0.75	15.44	14.94	7.19	14.00	10.25	1.5	7.81	8.62	10.50	6.31	8.69	0.75	14.93
A9-9A	0.75	15.44	14.94	7.19	15.25	10.25	1.5	7.81	8.62	11.81	6.31	10.00	0.83	16.2
A9-10A	0.75	15.44	14.94	7.19	16.5	10.25	1.5	7.81	8.62	13.12	6.31	11.31	0.93	17.35
A10-4A	0.75	17.38	16.56	7.94	10.25	11.38	1.5	8.81	9.69	6.81	7.00	4.75	0.53	13.35
A10-6A	0.75	17.38	16.56	7.94	11.75	11.38	1.5	8.81	9.69	8.25	7.00	6.19	0.65	14.82
A10-7A	0.75	17.38	16.56	7.94	13.00	11.38	1.5	8.81	9.69	9.69	7.00	7.62	0.77	16.38
A10-8A	0.75	17.38	16.56	7.94	14.00	11.38	1.5	8.81	9.69	10.50	7.00	8.44	0.81	17.03
A10-9A	0.75	17.38	16.56	7.94	16.00	11.38	1.5	8.81	9.69	12.25	7.00	10.19	0.97	18.72
A10-10A	0.75	17.38	16.56	7.94	16.50	11.38	1.5	8.81	9.69	13.12	7.00	11.06	1.02	19.66
A12-6A	1.00	20.38	19.38	9.13	12.81	13.44	1.5	10.38	11.50	8.81	8.38	6.50	0.82	22.46
A12-8A	1.00	20.38	19.38	9.13	14.75	13.44	1.5	10.38	11.50	10.75	8.38	8.44	1.00	24.16
A12-9A	1.00	20.38	19.38	9.13	16.38	13.44	1.5	10.38	11.50	12.25	8.38	9.94	1.13	26.28
A12-11A	1.00	20.38	19.38	9.13	18.69	13.44	1.5	10.38	11.50	14.69	8.38	12.38	1.37	29.37
A12-12A	1.00	20.38	19.38	9.13	19.75	13.44	1.5	10.38	11.50	15.62	8.38	13.31	1.44	30.76
A12-15A	1.00	20.38	19.38	9.13	22.75	13.44	1.5	10.38	11.50	18.62	8.38	16.31	1.74	35.30
A16-6A	1.00	24.25	22.69	10.5	13.44	15.88	1.5	12.62	13.56	9.19	9.69	6.44	1.02	30.17
A15-6A	1.00	24.25	22.69	10.5	16.88	15.88	1.5	12.62	13.56	12.81	9.69	10.06	1.41	36.55
A15-11A	1.00	24.25	22.69	10.5	18.69	15.88	1.5	12.62	13.56	14.69	9.69	11.94	1.59	39.18
A15-12A	1.00	24.25	22.69	10.5	19.75	15.88	1.5	12.62	13.56	16.00	9.69	13.25	1.76	41.05
A15-15A	1.00	24.25	22.69	10.5	23.00	15.88	1.5	12.62	13.56	18.62	9.69	15.88	2.01	47.15
A18-9A	1.00	29.19	27.00	12.38	19.88	18.88	1.5	15.50	16.31	12.88	11.75	9.50	1.68	54.66
A18-13A	1.00	29.19	27.00	12.38	24.38	18.88	1.5	15.50	16.31	17.38	11.75	14.00	2.28	67.58
A18-15A	1.00	29.19	27.00	12.38	25.88	18.88	1.5	15.50	16.31	18.88	11.75	15.50	2.47	72.43
A18-18A	1.00	29.19	27.00	12.38	28.88	18.88	1.5	15.50	16.31	21.88	11.75	18.5	2.87	77.31



“A” SERIES BASIC BLOWER SELECTION

There are a number of factors that need to be considered for specification of the proper "A" Series Basic Blower for your application. The following procedures outline the factors that need to be considered in the selection process.

PERFORMANCE:

Using the multispeed curves for the "A" Series Basic Blower, select the wheel diameter and width that provide the performance required. The selection should be made in the efficient operating range shown on the curves. From the curve determine the speed and brake horsepower required for the application. In no case should the point of operation exceed the maximum RPM and/or maximum horsepower of the component shown in the table below. The brake horsepower shown on the performance curves does not include drive losses. Add the drive loss to the brake horsepower required by the blower to determine the motor horsepower required.

BEARING LIFE:

The anticipated bearing life can be estimated for a given blower model by first determining the load on the bearings. These loads are based on specific application criteria (i.e.: blower speed and horsepower). Other factors which have an impact on bearing load are blower component shaft weight, wheel weight, blower pulley weight, relative position of these components and the angle through which the estimated belt pull is acting on the drive bearing.

Using the appropriate equation and guidelines of the Anti-Friction Bearing Manufacturer's Association (A.F.B.M.A.) and the determined bearing loading an estimate of the bearing life (L_{10} or L_{50}) can be obtained.

Typical Blower Construction						Maximum Limits	
Model	Shaft Dia.	Set Screw	Shaft Key	Brg. Brkt.		With Ball Brg.	
				3 PC.	1 PC.	RPM	HP
9"	3/4	2	NONE	YES	--	2200	1 ½
9"	3/4	1	.25x.25	YES	--	2200	3
10"	3/4	2	NONE	YES	--	2100	1 ½
10"	3/4	1	.25x.25	YES	--	2100	3
12"	1	2	NONE	YES	--	1900	1 ½
12"	1	1	.25x.25	YES	--	1400/1900	3
12"	1	1	.25x.25	--	YES	1400/1900	7 ½
15"	1	2	NONE	YES	--	1600	1 ½
15"	1	1	.25x.25	YES	--	1600	3
15"	1	1	.25x.25	--	YES	1600	10
18"	1	1	.25x.25	--	YES	1200	10

ACCESSORIES:

Various discharge and motor mounting arrangements are possible using the optional housing supports and motor mounting brackets shown below. Accessory maximum H.P. limits must not be exceeded.

OPTIONAL BLOWER SELECTION:

Based upon the accumulated design criteria, if the proper blower construction cannot be selected from the chart below or if "Class I" or "Class II" construction is specified refer to Lau Specification Sheet #319.

FEATURES:

BALANCE:

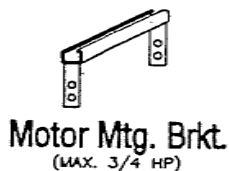
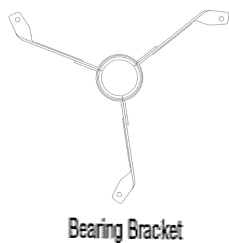
Lau "A" Series Basic Blower are statistically and dynamically balanced in accordance with 1989 ARI Guideline G and ANSI S2.19 – 1986.

FINISH:

Lau's "A" Series Basic Blower are finished with medium grey enamel paint. Contact Lau for other finishes.

ASSISTANCE:

Please feel free to contact Lau for assistance in selecting the "A" Series Basic Blower.



Accessories

