

TORQUE GUIDE CHART



Use for Lau Blower Wheels

DETERMINING MAXIMUM STARTING TORQUE BASED ON BORE SIZE

The hub bore size and type must be selected so that the starting torque experienced by the wheel does not exceed the maximum torque capability of the hub.

Based on the nominal motor horsepower selected for the application, calculate the fan starting torque at the hub by the following equation:

$$\text{Starting Torque (lb. ft.)} = \frac{\text{Motor Horsepower} \times 5252}{\text{Fan RPM}} \times Z$$

Arrangement	Direct Drive	Belt Drive		
	Shaded Perm. Split	Split Phase	Cap Start	Three Phase
Z=One wheel on shaft	0.6	1.4	2.2	3.0
Z=Two wheels on shaft	—	0.8	1.3	1.8
Z=Three wheels on shaft	—	0.6	0.9	1.2

After determining the lb./ft. starting torque, determine if you can use the standard wheels list this catalog.

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Indicates Welded Hub

		Maximum Allowable Starting Torque Lb.- Ft.																
		Direct Drive				Belt Drive												
		DD		DD	"A" Belt Drive						"H" Welded Belt Drive							
Bore	Description	9	10	11	12	9	10	12	15	18	20	20	22	25	27	30	33	36
0.50	(1) Setscrew	8 →																
	(2) Setscrews	13 →																
0.62	(1) Setscrew			10 →														
	(2) Setscrews			16 →														
	(1) Setscrew w/KYWY			106 →														
0.75	(1) Setscrew					12.5 →												
	(2) Setscrews					20 →												
	(1) Setscrew w/KYWY					60 →	96 →											
1.00	(1) Setscrew					17 →												
	(2) Setscrews					26.5 →												
	(1) Setscrew w/KYWY					60 →	168 →											
1.19	(1) Setscrew					20 →												
	(2) Setscrews					31.5 →												
	(1) Setscrew w/KYWY					60 →	250 →					200 →						
1.44	(1) Setscrew					32 →												
	(2) Setscrews					50.5 →												
	(1) Setscrew w/KYWY					80 →	460 →						400			→		
1.69	(1) Setscrew						37.5 →											
	(2) Setscrews						60 →											
	(1) Setscrew w/KYWY								540 →				850			→		
1.94	(2) Setscrews									67.5 →								
	(1) Setscrew w/KYWY									870 →				1000				→
2.19	(2) Setscrews									77 →								
	(1) Setscrew w/KYWY									980 →				1500				→
2.44	(2) Setscrews									86 →								
	(1) Setscrew w/KYWY									1355 →				2000				→
2.69	(2) Setscrews									95 →								
	(1) Setscrew w/KYWY									1495 →				2500				→
2.25	Clamplok Hub												97					→
3.00	Clamplok Hub												195					→
4.00	Clamplok Hub												245					→
4.50	Clamplok Hub												295					→

Specifications are subject to change without notice or obligation