

Key Rivet Design – Double Inlet

4.72 inch (120 mm) Diameter

Key Rivet™ blower wheels (also known as Fergas wheels) outperform competitors' tab-lock design by using a unique "key rivet" manufacturing technique that results in a wheel which is lighter and five times stronger than those made by traditional tab-lock methods.

The Key Rivet wheel, compared to a similar size tab-lock wheel, provides higher performance with a quieter and more efficient operation.

This wheel diameter is manufactured at Beckett Air. Existing tooling is available for several other diameters and widths.



Specifications

Configuration Number	Dia. "D"		Width "W"		No. of Blades	Max Rivet Hgt. "H"		Blade-to-Blade I.D. "K"		App. Wt. Steel		Max RPM**
	in.	mm	in.	mm		in.	mm	in.	mm	Lbs.	kg	
F120-51D	4.72	120	2.01	51	34	0.04	1.1	3.82	97	0.47	0.21	5000
F120-69D			2.72	69						0.55	0.25	4600
F120-85D			3.35	85						0.61	0.28	4300
F120-105D			4.13	105						0.65	0.29	4000
F120-125D			4.92	125						0.75	0.34	3600
F120-145D			5.71	145						0.79	0.36	3200

Maximum RPM is based on stationary installations and ambient operating temperatures. Please contact Beckett Air for information regarding applications outside these parameters.

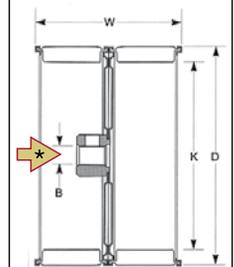
Options

Rotation ¹	Wheel Material ²		Secondary Coatings ³	Std. Hub Bores "B" ⁴		Hub Material ⁴	Other ^{5,6,7}
				In.	mm		
CW, CCW	Aluminum	Standard Option	Paint E-coating Nickel Plating	1/4 5/16 3/8 1/2	6.4 7.9 9.5 12.7	Aluminum, Nickel-Plated Steel, Plain Steel, Zinc-Plated	Housings, Asymmetrical Wheels, Balancing
	Aluminized Steel	Standard Option					
	Galvanized Steel	Standard Option					
	Galvalume	Custom Option					
	Galvanneal	Custom Option					
	Plain Steel	Custom Option					

Notes

- Rotation is defined by note on dimensional reference drawings.
- Materials listed as Standard Option are most commonly used in Key Rivet wheels but other materials listed as Custom Option are available.
- Secondary coatings are applied to fully assembled wheel.
- Standard hub has one set screw. Hubs with two screws and/or metric bore sizes are also available.
- For quoting purposes, Beckett Air will quote a standard housing for the wheel that is selected if required. Customers can also submit a specific engineered design for a final quotation.
- Asymmetrical Double Inlet Wheels: Double Inlet Wheels shown are made up with two wheels of the same width (for example, two single 34 mm wheels are combined to make one 69 mm double inlet wheel). Customer can also select two wheels with dissimilar widths (for example, one 62 mm and one 102 mm combined to make one double inlet 165 mm wheel).
- Rotating static balance to .040 ounce-inch (standard). Dynamic (two plane) balance and/or reduced static balance tolerances (optional).

Dimensional Reference

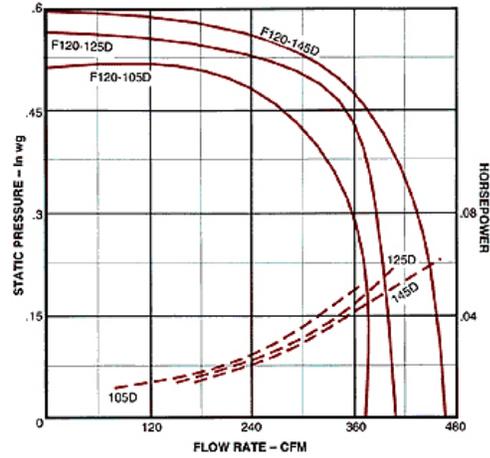
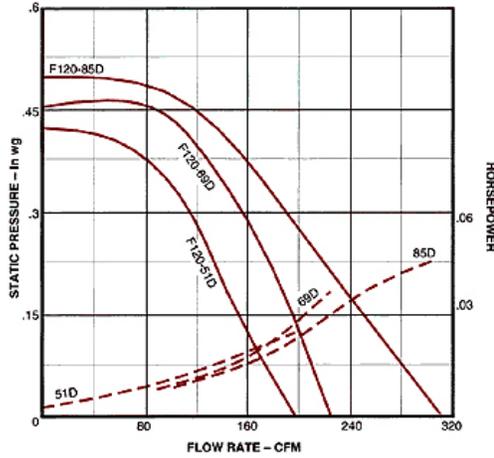


*Rotation for double inlet blower wheels is determined by viewing hub side.

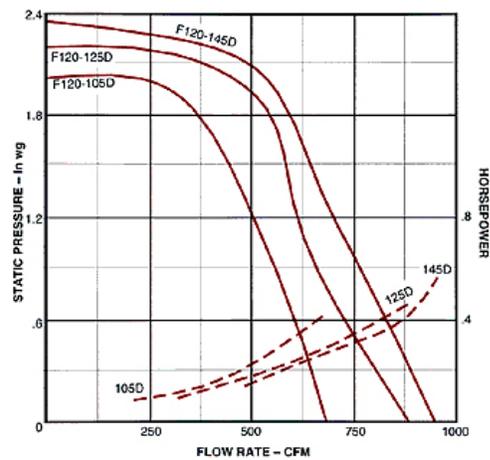
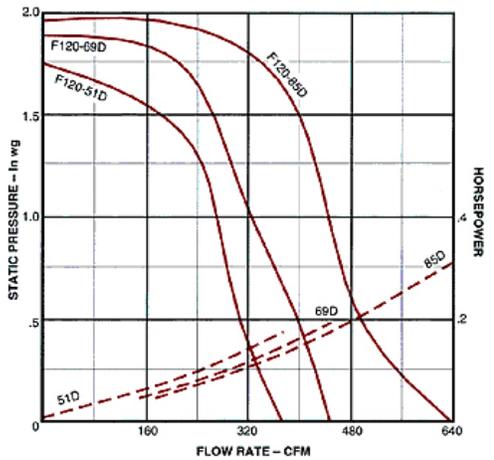
Airflow Characteristics

Performance charts below are for reference only. Actual airflow, static pressure and horsepower characteristics are dependent on application, motor used, inlet/outlet dimensions and other factors. Beckett Air can provide samples of wheels or perform testing on blower wheels as installed to confirm actual performance characteristics.

1725 RPM



3450 RPM



Typical Applications

HVAC	Household Appliances	Commercial Food Preparation	Electronics Cooling	Commercial Applications	Transportation Cooling / Heating
Central Heating	Water Heaters	Warming Cabinets	Server Enclosures	Air Doors / Curtains	Train
Air Conditioning	Bathroom Ventilation	Convection Ovens	Medical Devices	Clean Technology	Bus
Fan Coils	Range Hoods	Combi Ovens	Business Machines	Process Cooling	Truck
Exhaust Fans		Counter Top Ovens		De-Dusting Systems	Off Road
Hearth Products		Induction Cooktops		Elevator Exhaust Fan	Auto Vent & Heater
Convection Heaters		Ventilation Systems		Motor Cooling	
Radiant Heaters					

All data listed in this informational sheet is subject to change without notice.

For more information, go to www.beckettair.com or contact Beckett Air, Inc.

Mail: PO Box 1236, Elyria, Ohio 44036

Factory: 37850 Beckett Pkwy, North Ridgeville, Ohio 44036 T: +1 440 327 9999 F: +1 440 327 3569

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