

Key Rivet Design – Single Inlet

7.08 inch (180 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	
F180-25S	7.08	180	0.98	25	38	0.05	1.2	5.95	151	0.46	0.21	3100
F180-34S			1.34	34						0.50	0.23	3100
F180-52S			2.04	52						0.61	0.28	2800
F180-62S			2.44	62						0.66	0.30	2800
F180-75S			2.95	75						0.72	0.33	2800
F180-82S			3.23	82						0.75	0.34	
F180-88S			3.46	88						0.79	0.36	2200
F180-102S			4.02	102						0.86	0.39	2200

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

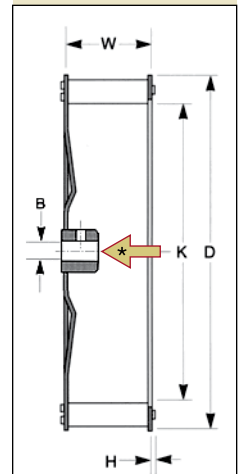
Options

Rotation ¹	Wheel Material ²		Secondary Coatings ³	Std. Hub Bores "B" ⁴		Hub Material	Other ^{5,6,7}
	In.	mm		In.	mm		
CW, CCW	Aluminum	Standard Option	Paint, E-coating, Nickel Plating	1/4,	6.4,	Aluminum, Nickel-Plated Steel, Plain Steel, Zinc-Plated	Housings, Backplates, Balancing
	Aluminized Steel	Standard Option		5/16,	7.9,		
	Galvanized Steel	Standard Option		3/8,	9.5,		
	Galvalume	Custom Option		1/2	12.7		
	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.
- Backplates used on the wheels listed in this category are flat but concave backplates are available in some diameters.
- Rotating static balance to .040 ounce-inch (standard). Dynamic (two plane) balance and/or reduced static balance tolerances (optional).

Dimensional Reference

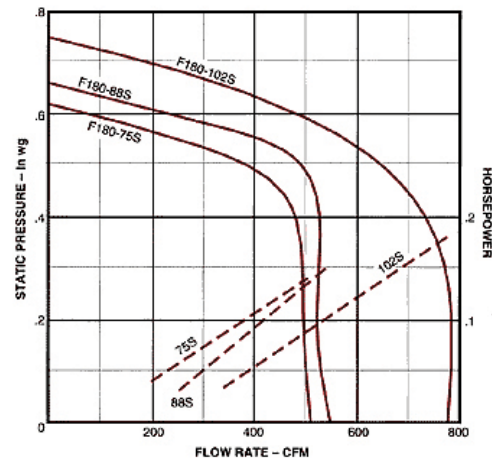
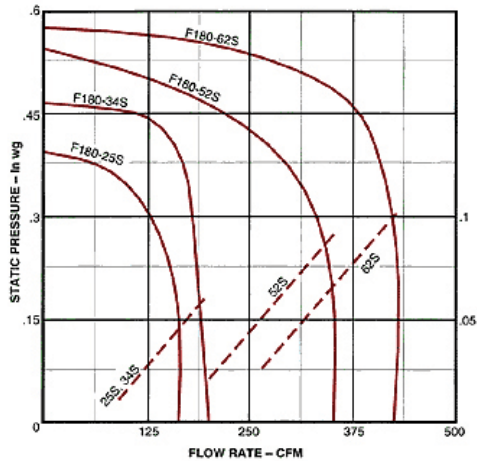


*Rotation for single-inlet blower wheels is determined by viewing the open end (inlet side).

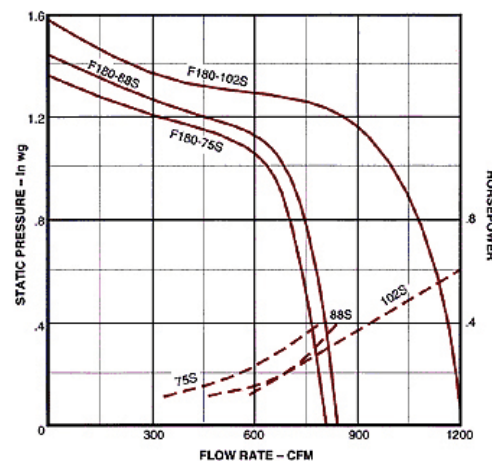
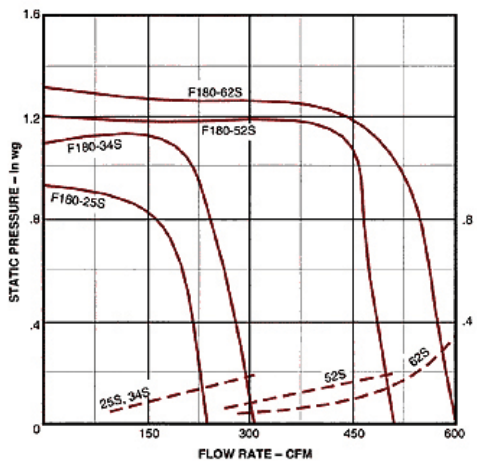
Airflow Characteristics

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.

1050 RPM



1550 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
Commercial Fan Coils	Range Hoods	Combi Ovens	Business Machines	Process Cooling & Drying	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.

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Ref. KR180S (12/2020)