

Tubular Backward Curved Centrifugal Fans



- Roof Top Mounting • Ten Sizes
- Industrial and Commercial Applications
- Static pressures up to 10" W.G. (2484 Pa)
- Volume Range 200 CFM (95 l/sec) up to 60,000 CFM (28,320 l/sec)



Plasticair

The Plasticair 800 V Series

Plasticair's 800 V Series of FRP Exhaust Fans have been specifically designed for exposure to gas streams containing corrosive fumes. The rugged backward curved impeller and robust housing offer favourable features such as corrosion resistant FRP construction for all gas contact parts, high efficiencies and quiet operation. Industries such as Waste Water Treatment, Pulp and Paper, Research Laboratories and Chemical Manufacturing can benefit from this product as it provides Industrial quality, and long life.

The 800 V Series is available in ten sizes and covers volume ranges of 200 CFM(95 l/sec) up to 70,000 CFM (33,040 l/sec), and the industrial heavy duty Class 2 construction allows for smooth operation up to 10" W.G. (2477 Pa).



Standard Features

Shaft and Teflon Seal:

This effective design has completely protected the polished ground 316 stainless steel shaft from the corrosive gas stream. The shaft is encapsulated with a solid FRP shaft sleeve, which protrudes out from the teflon disk shaft seal, located on the inner tube wall. The teflon seal and shaft sleeve are a machine fit for the best possible elimination of leaking gas.

FRP Housing Construction: Designed for industrial applications, the housing is solid FRP throughout. All FRP exposed to the corrosive gas stream is constructed with a resin rich corrosion barrier complete with C-veil. Airstream straightening blades are fixed into the housing from the bearing/shaft drive tube to the inner wall of the outer tube. The 316 stainless steel shaft, bearings and V-belt drive set are completely protected from the corrosive airstream by the FRP drive tube.

Shaft: The shaft is constructed of 316 stainless steel.

Bearings: Solid pillow block type rated for two hundred thousand hours

Fasteners: 316 stainless steel

Flanged outlet: Supplied as standard not drilled

Inlet connection: Slip type, supplied as standard (Flanged inlet available as option)

Wheel Construction: The 800 Series impeller is of a high efficiency non-overloading design. The backward curved wheel is constructed of solid vinyl ester resin and reinforcing glass. A sprocket and bushing are used for shaft attachment and are completely covered with a minimum 3/16" (5 mm) of FRP lay-up. All gas contact points are FRP, complete with corrosion barrier. Plasticair's commitment to quality ensures that only hand lay-up methods are utilized for fabrication. This Class 2 impeller is comfortably rated to handle 14,000 feet per minute (71 m/sec) tip speed.



Option for Roof Top Accessories

Roof Mounted

For Roof mounted applications Plasticair offers the roof top package complete with FRP Roof Curb Cap, FRP windband and Gravity operated Back Draft Dampers. The Roof Curb Cap can be sized for custom fit.



Option for Heavy Industrial Particulate Handling

Particulate Handling

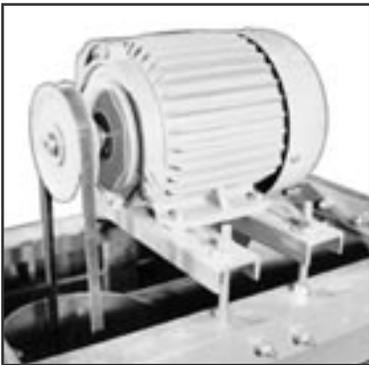
Plasticair offers the 800 Series with a Solid FRP radial impeller and a spray wash-down nozzle for periodical impeller cleaning. The impeller is designed to throw particulate by way of radial forces, however, in some applications, not all particulate will be removed by radial forces alone, this is when the wash-down can be utilized for diluting and breaking up attached particulate. Consult your local Plasticair Representative or the Factory for performance data.

Accessories



Access Door

The bolt-on access door is designed to be flush with the inner surface of the fan housing, therefore, the flowing gas stream encounters minimal turbulence when passing the access door. The door is fastened to the fan housing with 304 stainless steel hardware and is sealed air tight with neoprene gasket (exotic gasket is available upon request). The fastening bolts are encapsulated with full thickness FRP to give maximum corrosion resistance protection.



Threaded PVC Drains

Threaded PVC drains can be installed at the lowest point of the fan for horizontal and vertical installations.

Solid FRP Drains

Plasticair's PVC drain can be upgraded to a solid FRP drain and is supplied flanged and drilled to standard pipe flange specification.

Motor and V-Belt Drives

Plasticair offers a full range of motor and drive selections to meet all our customers needs. Advise your local representative for any special requirements.



Mounting Brackets

Epoxy coated steel brackets factory mounted, ideal for horizontal or vertical installations.

Flanged Inlet

An FRP flange may be supplied for the inlet of the fan. The flange is laminated directly to the spigot of the scroll and is supplied standard not drilled.



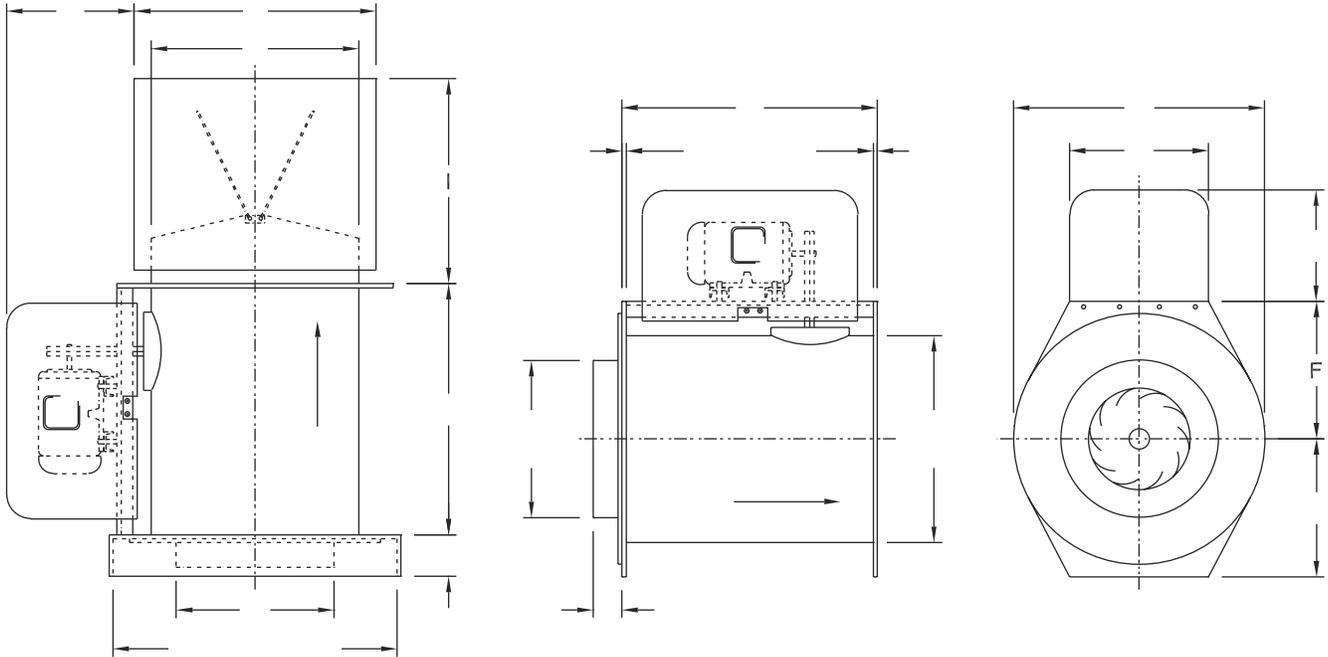
PVC Connections

PVC flexible inlet connections are available and are supplied complete with 316 stainless steel banding straps.

Outdoor Weather Guard

For outdoor installations Plasticair's FRP weather guard is designed for not only protecting the fan against outdoor elements but also serving as an OSHA rated belt guard.

Dimensional Data

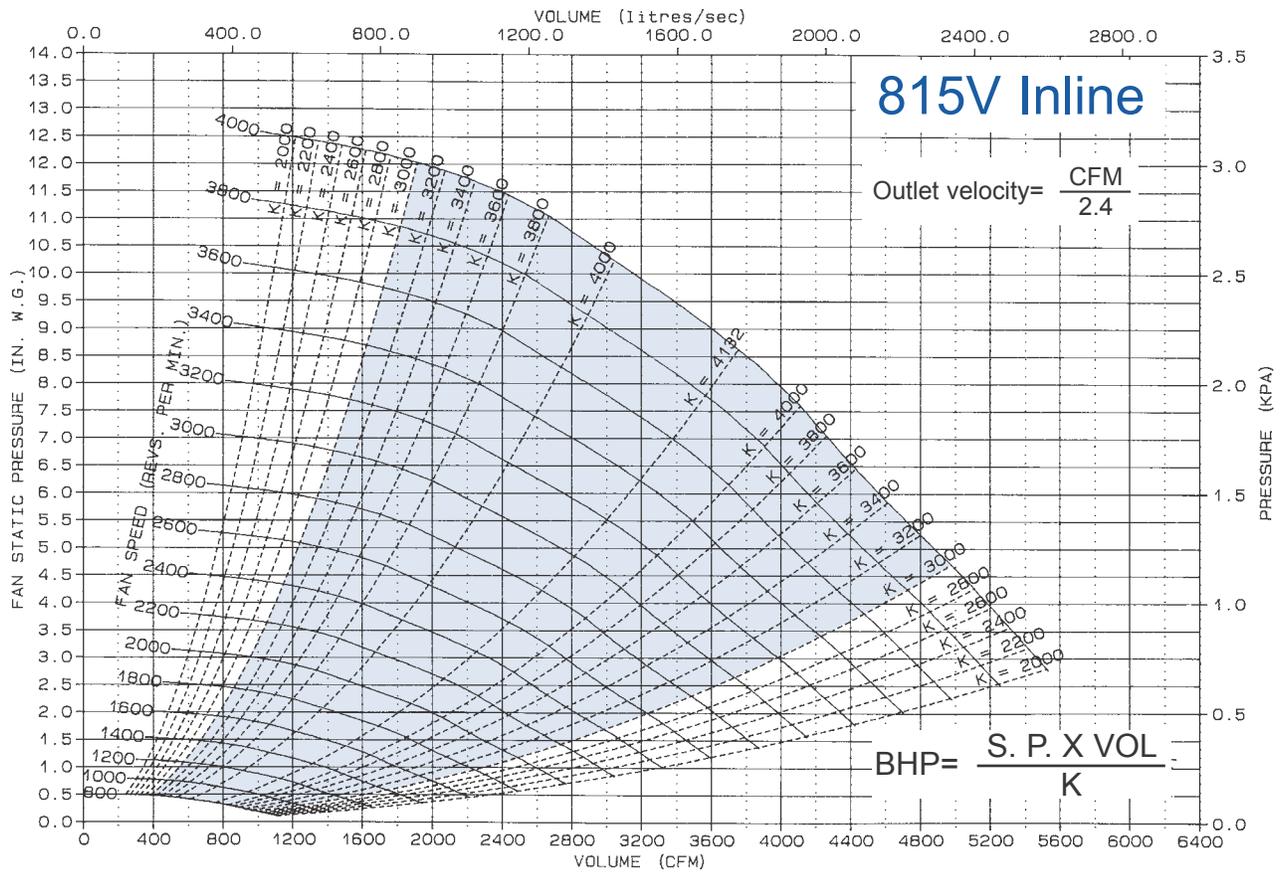


800V - DIMENSIONS: inches (mm)

FAN SIZE	815	819	822	827	830	833	836	840	844	849	854	860
Wheel dia.	15 3/4 (400)	19 1/2 (495)	22 1/2 (572)	27 (686)	30 (762)	33 (838)	36 (914)	40 1/2 (1029)	45 (1143)	49 1/2 (1257)	54 (1372)	60 (1524)
A	16 (406)	19 3/4 (502)	23 (584)	27 1/2 (699)	30 1/2 (775)	33 1/2 (851)	36 1/2 (927)	41 (1041)	45 1/2 (1156)	50 (1270)	55 (1397)	61 (1549)
B	24 (610)	32 (813)	27 3/4 (699)	33 1/4 (845)	37 (940)	40 1/2 (1029)	44 1/4 (1124)	50 (1270)	55 1/4 (1403)	61 (1549)	66 1/2 (1689)	74 (1880)
C	25 1/2 (648)	31 1/2 (800)	36 1/4 (921)	43 1/2 (1105)	48 1/2 (1232)	53 1/4 (1353)	58 1/4 (1480)	65 1/2 (1664)	72 3/4 (1848)	80 (2032)	87 1/4 (2216)	97 (2464)
D	14 (356)	17 3/8 (441)	20 (508)	24 (610)	26 3/4 (679)	29 1/2 (749)	32 (813)	36 (914)	40 (1016)	44 (1118)	48 (1219)	53 1/2 (1359)
E	VARIES WITH MOTOR SIZE						VARIES WITH MOTOR SIZE					
F	14 (356)	17 1/4 (438)	20 (508)	24 (610)	26 5/8 (676)	29 1/4 (743)	32 (813)	36 (914)	40 (1016)	44 (1118)	48 (1219)	53 1/4 (1353)
G	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	5/8 (16)	5/8 (16)	3/4 (19)	3/4 (19)	1 (25)	1 (25)	1 1/4 (32)	1 1/4 (32)
H	23 1/2 (597)	31 1/2 (800)	27 1/4 (692)	32 3/4 (832)	36 3/8 (924)	39 7/8 (1013)	43 1/2 (1105)	49 1/4 (1251)	54 1/4 (1378)	60 (1524)	65 1/4 (1657)	72 3/4 (1848)
I	17 1/2 (445)	20 (508)	22 (559)	26 (660)	28 (711)	30 (762)	32 (813)	35 (889)	38 (965)	43 (1092)	46 (1168)	50 (1270)
J	23 1/2 (597)	28 1/2 (724)	32 1/2 (826)	38 1/2 (978)	42 1/2 (1080)	46 1/2 (1181)	50 1/2 (1283)	56 1/2 (1435)	62 1/2 (1588)	68 1/2 (1740)	74 1/2 (1892)	82 1/2 (2096)
K	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)	3 1/2 (89)
L	21 (533)	26 (660)	30 (762)	36 (914)	40 (1016)	44 (1118)	48 (1219)	54 (1372)	60 (1524)	66 (1676)	72 (1829)	80 (2032)
M	3 (76)	3 5/8 (92)	4 3/16 (106)	5 (127)	5 9/16 (141)	6 1/8 (156)	6 3/4 (171)	7 1/2 (191)	8 3/8 (213)	9 1/4 (235)	10 (254)	11 1/4 (286)

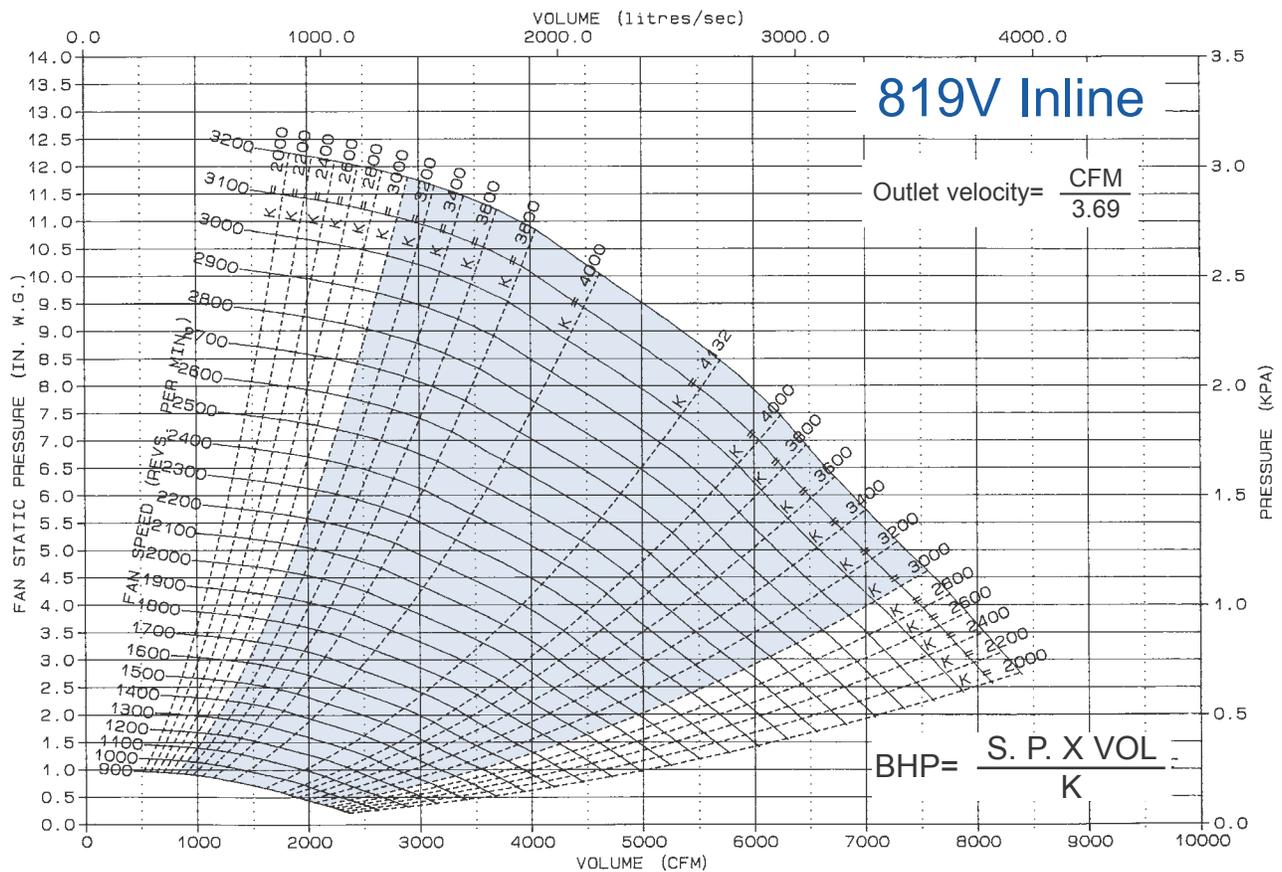
Outlet Area: 2.4 sq/ft

Wheel Diameter: 15.75"



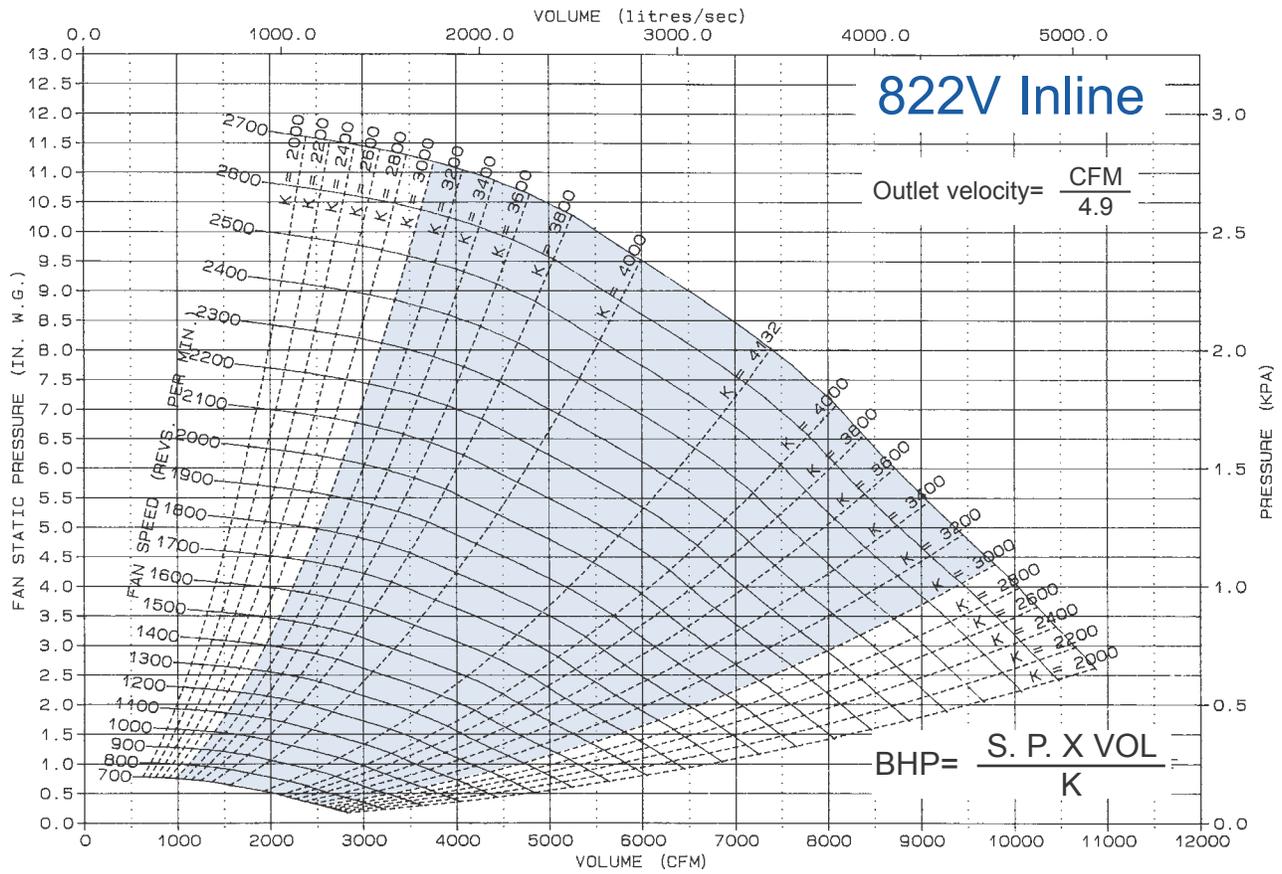
Outlet Area: 3.69 sq/ft

Wheel Diameter: 19.5"



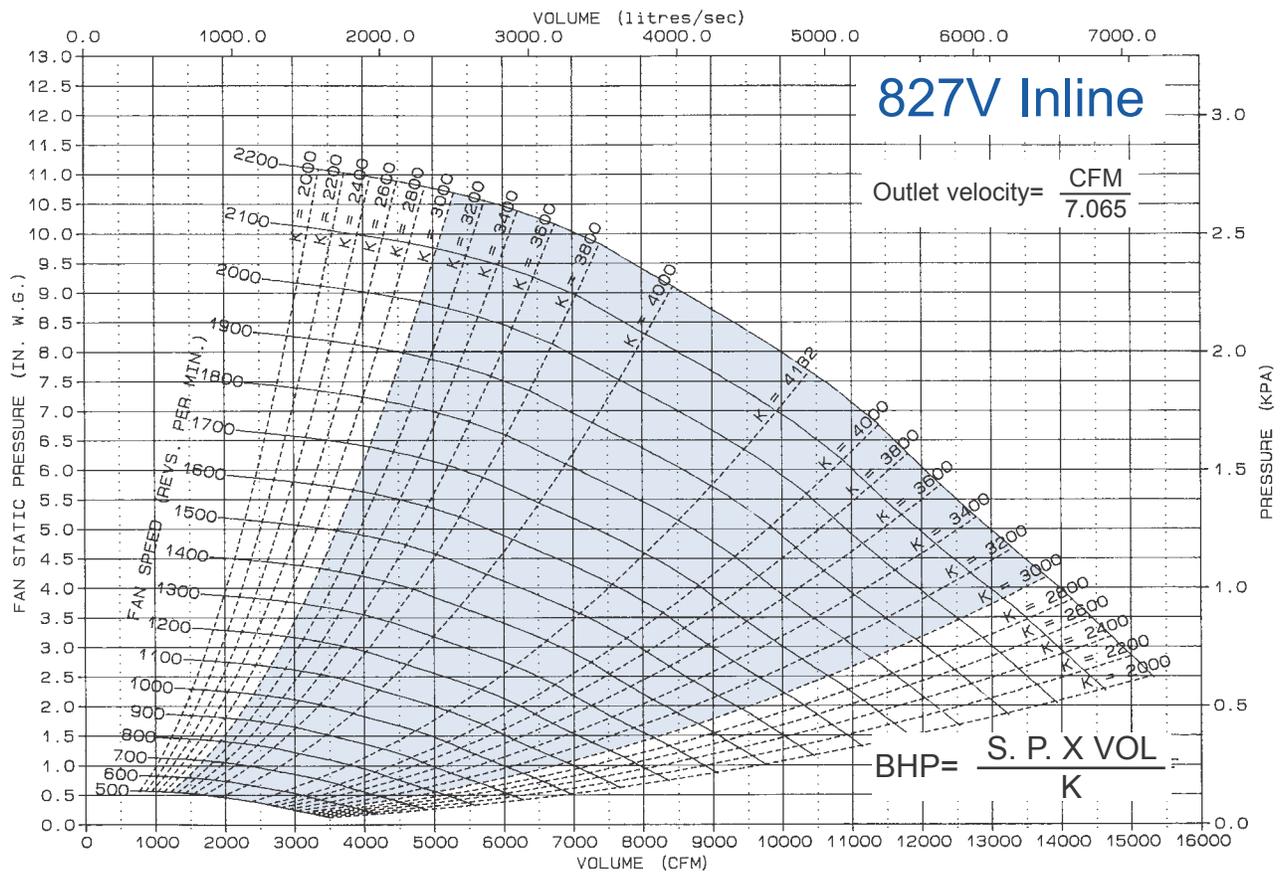
Outlet Area: 4.9 sq/ft

Wheel Diameter: 22.5"



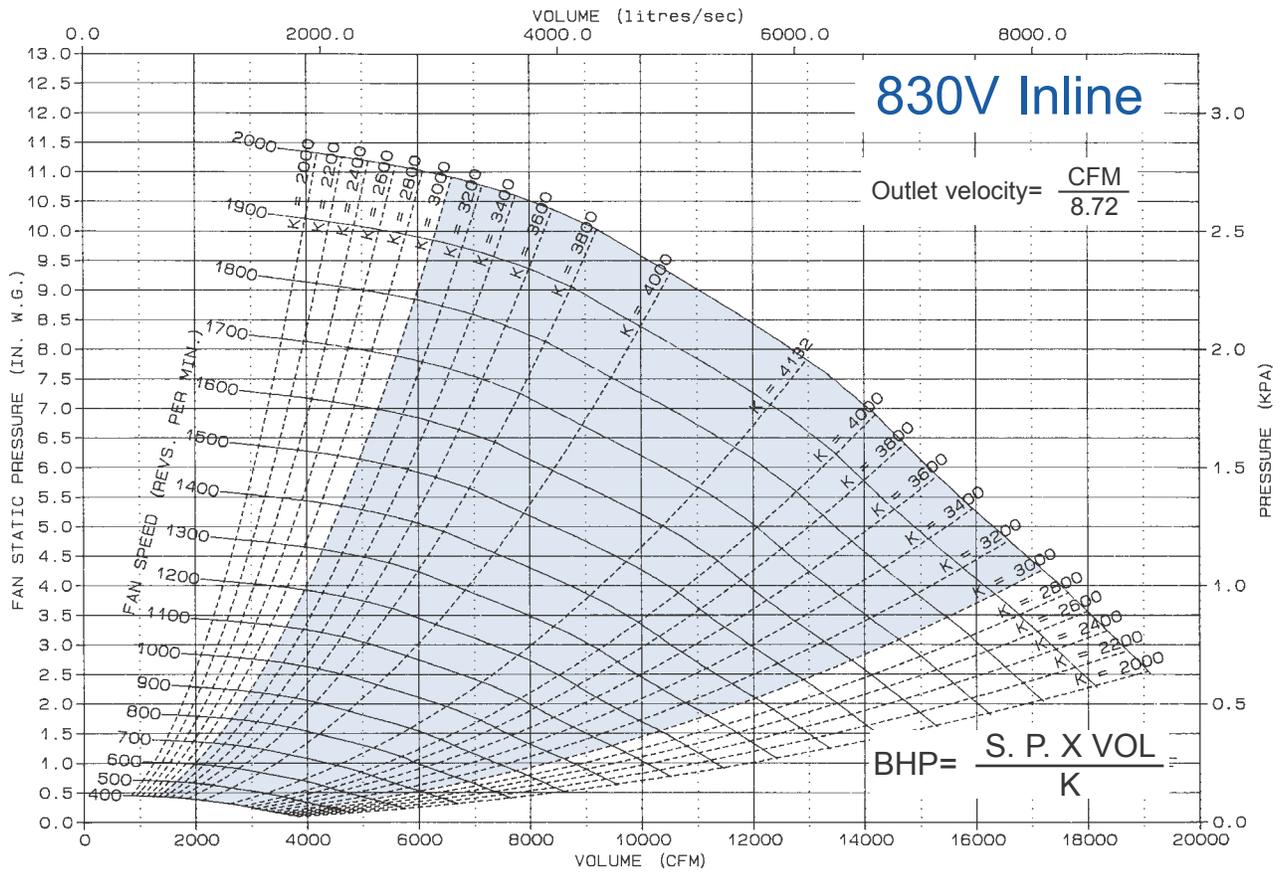
Outlet Area: 7.065 sq/ft

Wheel Diameter: 27.0"



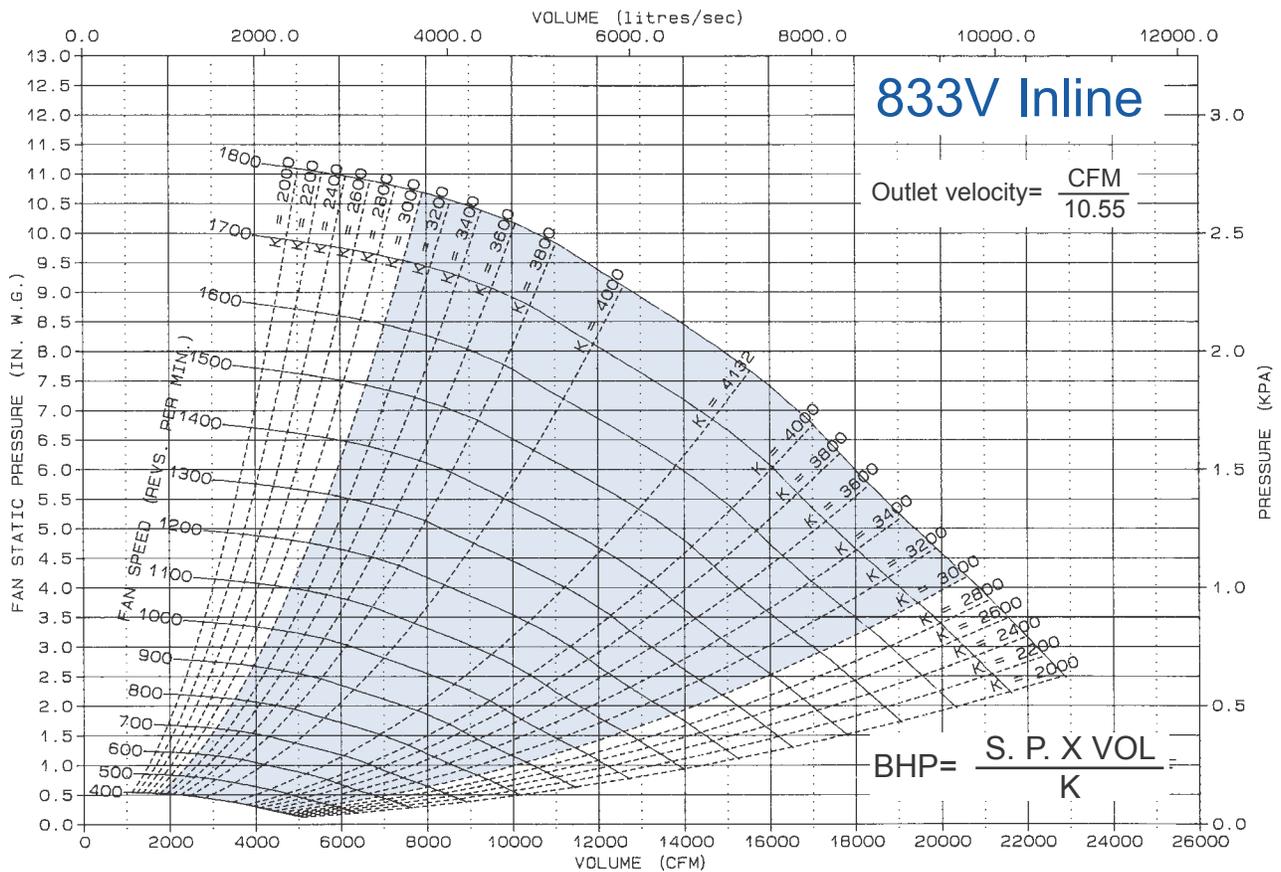
Outlet Area: 8.72 sq/ft

Wheel Diameter: 30.0"



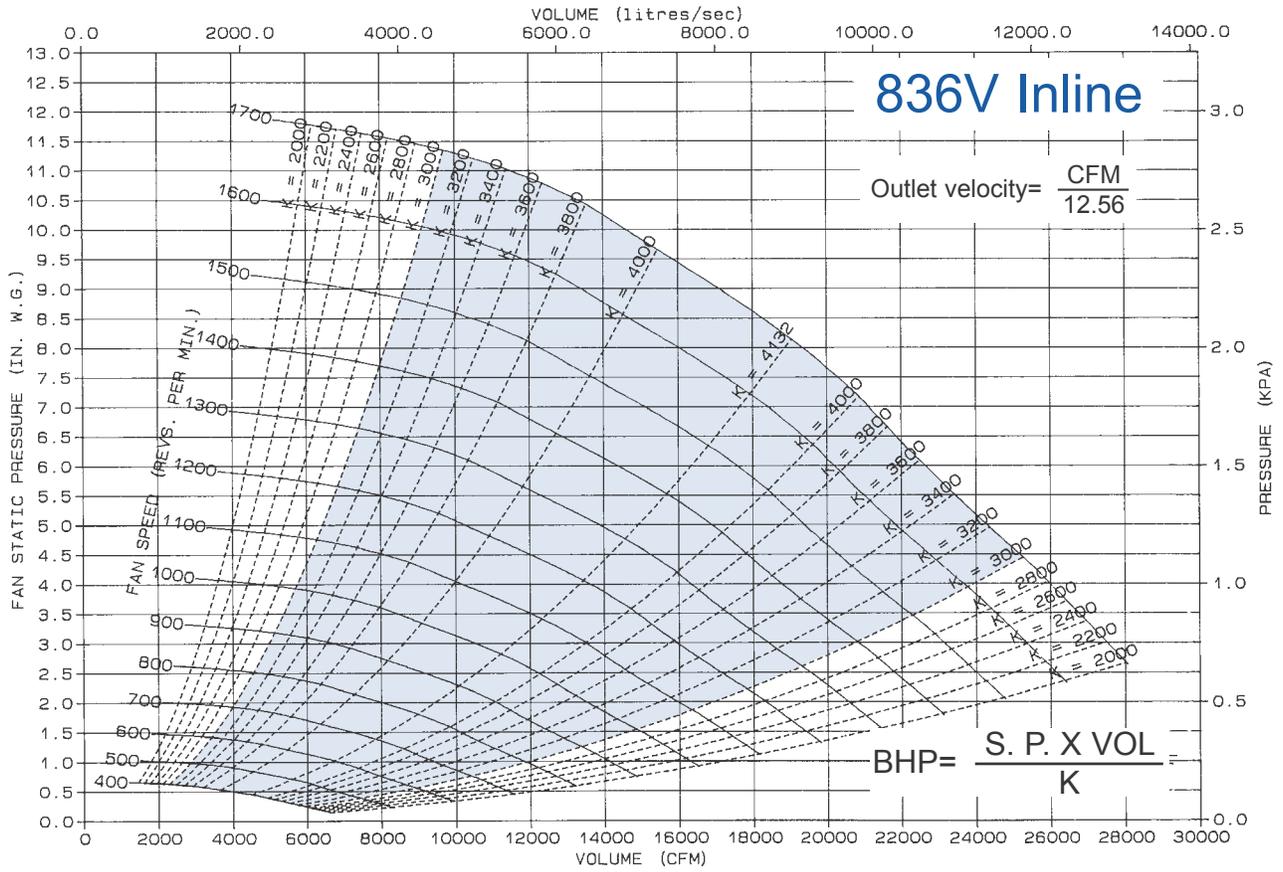
Outlet Area: 10.55 sq/ft

Wheel Diameter: 33.0"



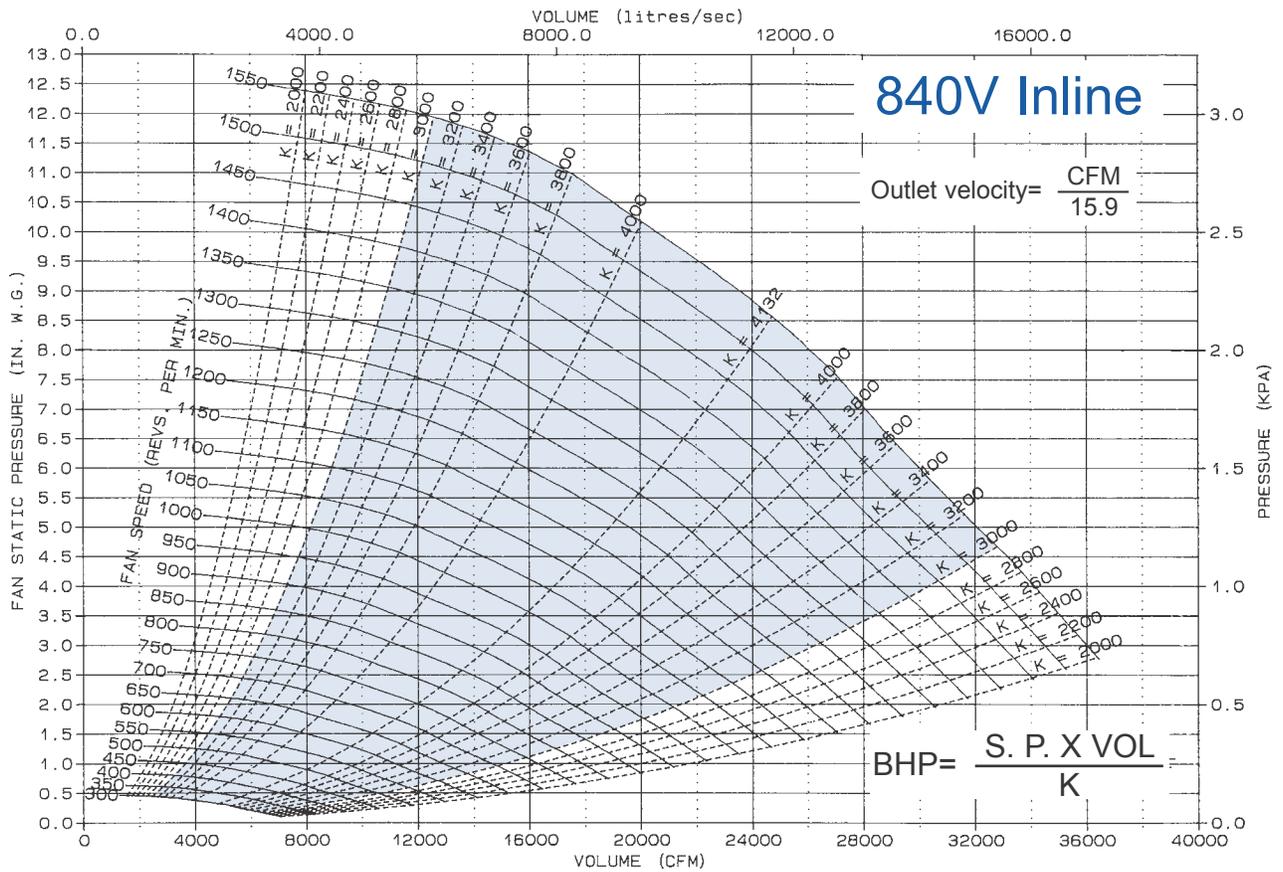
Outlet Area: 12.56 sq/ft

Wheel Diameter: 36.0"



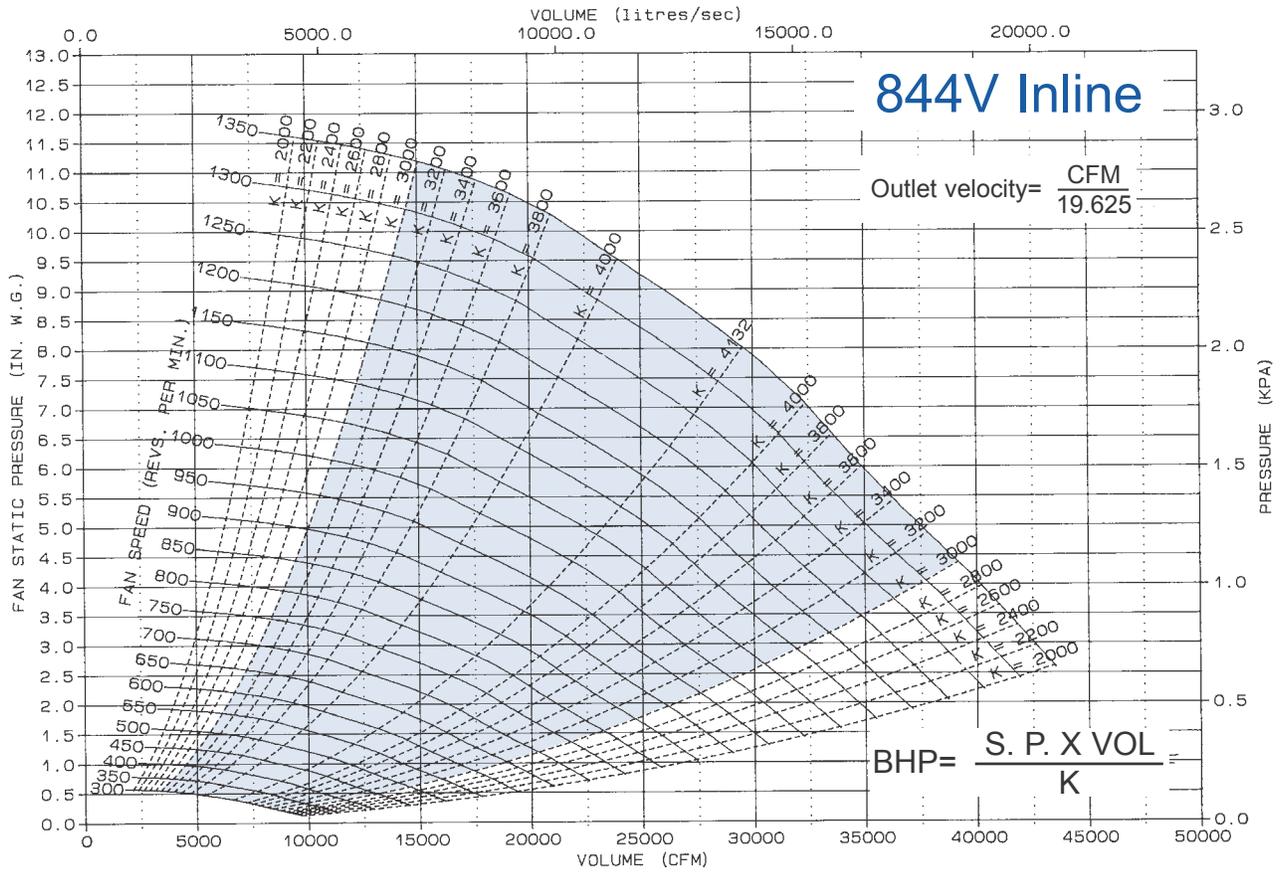
Outlet Area: 15.9 sq/ft

Wheel Diameter: 40.5"



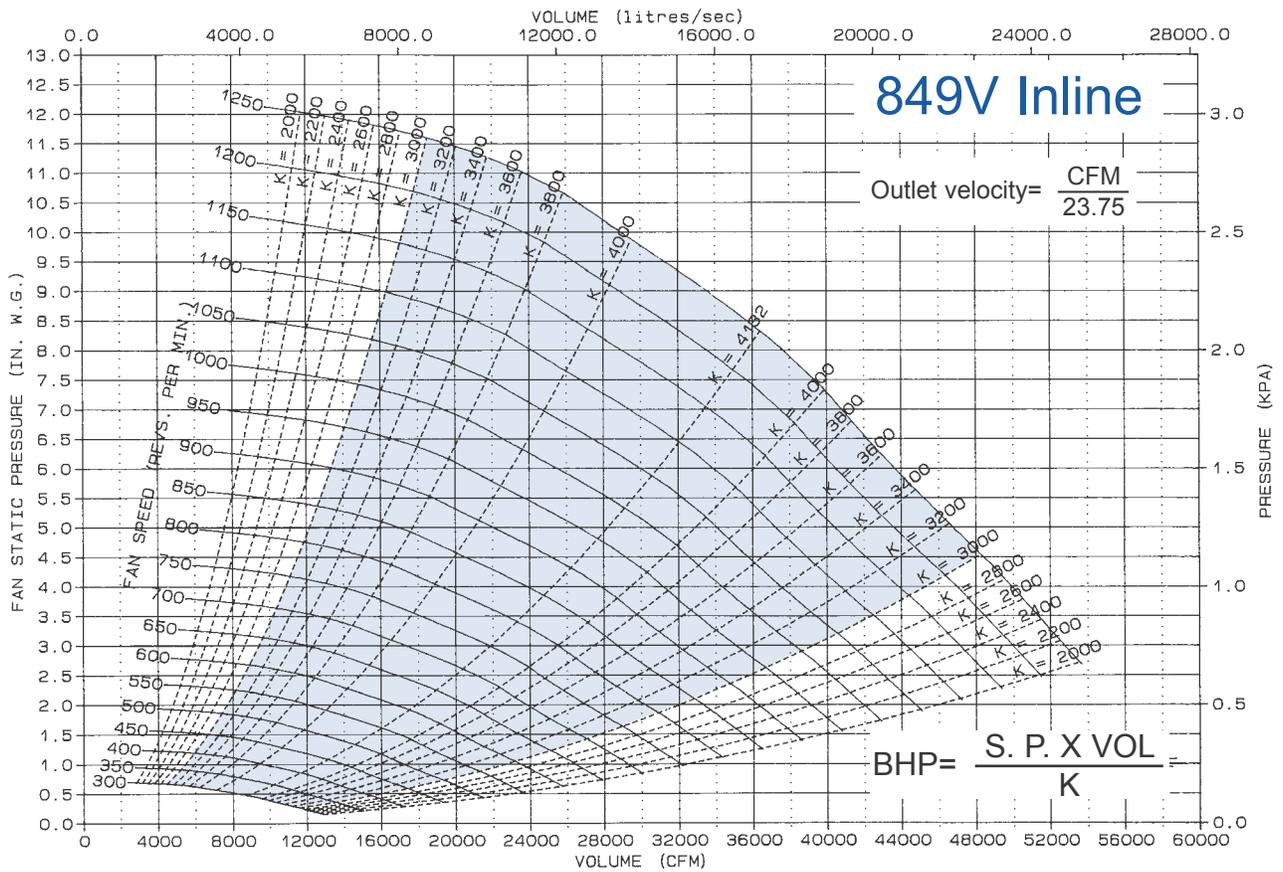
Outlet Area: 19.625 sq/ft

Wheel Diameter: 45.0"



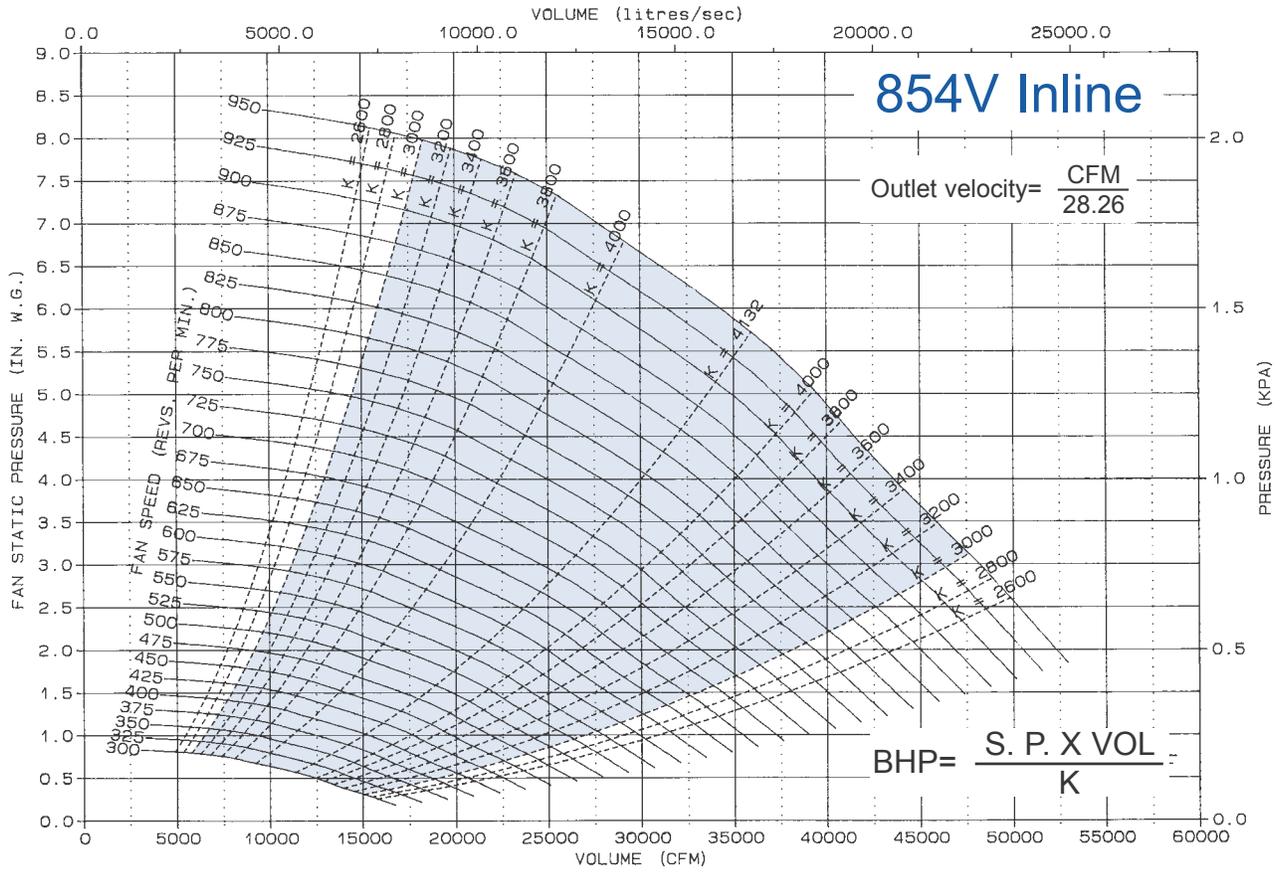
Outlet Area: 23.75 sq/ft

Wheel Diameter: 49.5"



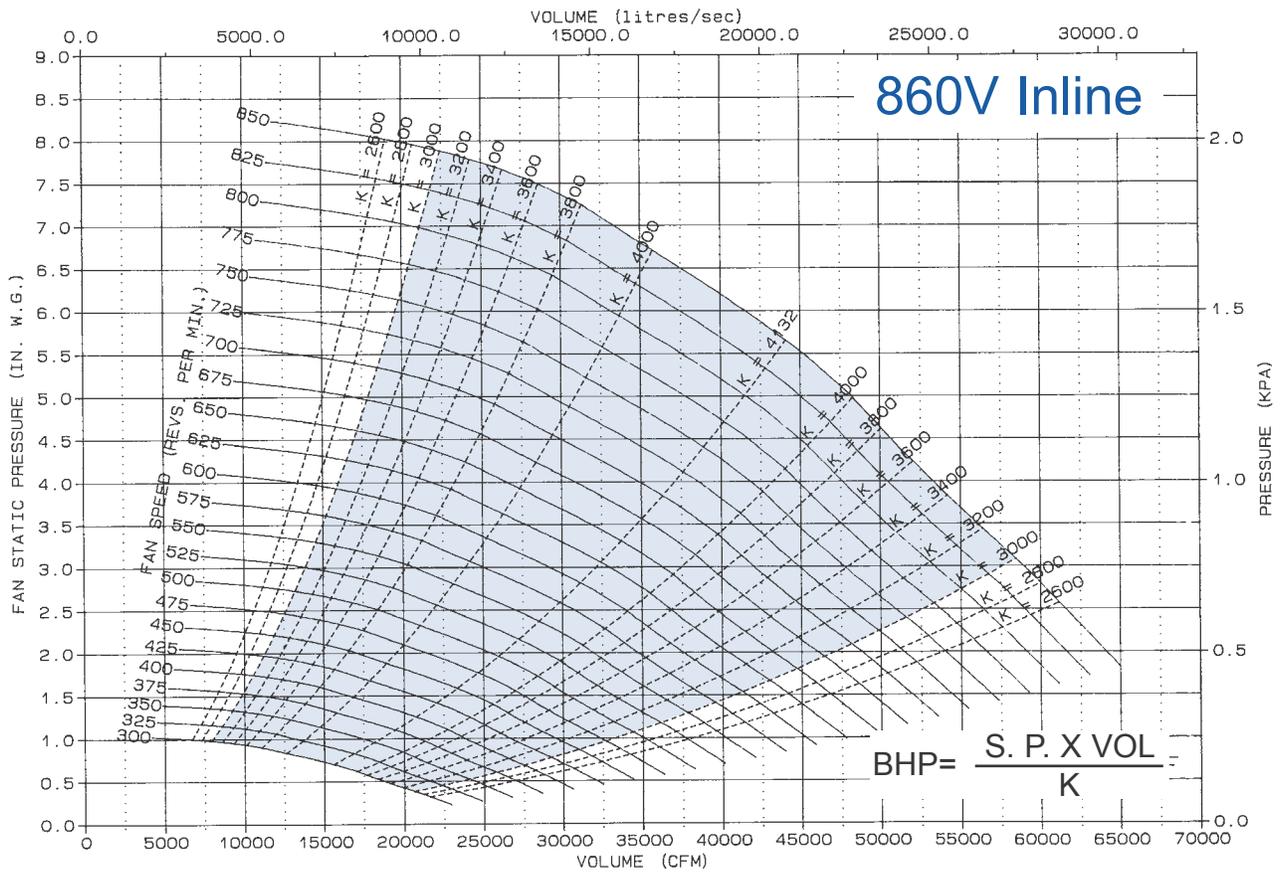
Outlet Area: 28.26 sq/ft

Wheel Diameter: 54.0"

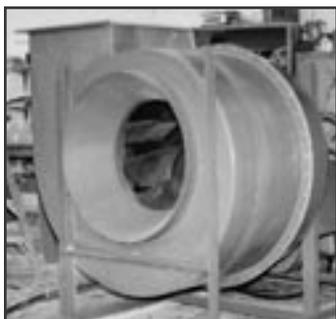


Outlet Area: 34.89 sq/ft

Wheel Diameter: 60.0"



Plasticair Inc., Servicing Industry



FRP Fans



Scrubbing Equipment



Laboratory Fumehoods

Plasticair Product List

Scrubbers:

Horizontal Packed Bed - Single/Double (HS-Series)

Vertical Packed Bed Towers (VS-Series)

Odour Control Scrubbers (HCS, VCS-Series)

Demisters - Vane Type (P-Series)

Demisters - Mesh Type (M-Series)

Demisters - Multiple Stage Type (E-Series)

Venturi Scrubbers (ECE-Series)

Laboratory Fume Hood Scrubbers (FHS-Series)

Scrubber Applications:

Oil/Air Separators

Chlorine Scrubbers

Micro Chip Manufacturing Scrubbers

Plating Plant Scrubbers

Pickling Line Scrubbers

Chromic Acid Scrubbers And Demisters

FRP Fans:

Axial Fans - Vane / Tube

Panel Fans - Wall Mount / Box Mount

Inline Centrifugal - Backward Curved

Laboratory Fans - B.I. Utility Sets / B.I. Tubular

High Pressure Fans - Radial Blade

Medium Pressure Fans - Radial Blade

Medium Pressure Fans - Backward Curved

Mini Industrial Vent Sets - Radial Blade / B.I.

Plasticair's Sales Forces are located in major cities around the world.



Contact the factory for the agent closest to you.

Your Local Plasticair Representative is:

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