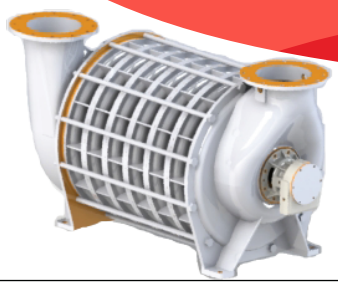
MULTISTAGE CENTRIFUGAL BLOWERS
MODEL BEC12

Berryman Equipment Company



Specifications

TECHNICAL DATA

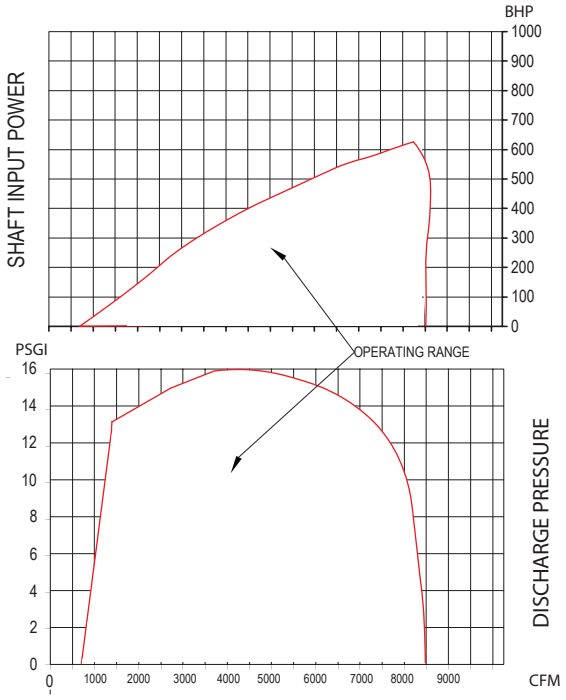
Number of Stages ..... 1 through 9 (10 to 60 Hz)
Inlet Connection ..... 12″ (304mm) flange, ANSI 125# drilling
Outlet Connection ..... 12″ (304mm) flange, ANSI 125# drilling
Operating Speed ..... 3550 RPM (60Hz) , 2960 RPM (50Hz)
Casing Pressure..... 25 PSIG (1.76 kg/cm^2)
Seals (air) ..... Carbon Ring or Labyrinth
Seals (gas) ..... Carbon Rings at each end with insert taps or Mechanical sealer
Bearings ..... Ball, 10-year minimum life per AFBMA L_{10} standard
Lubrication ..... Oil or grease
Impeller Diameter ..... 25.00 in (635 mm)
Impeller Tip Speed ..... 387 ft/s (118 m/s) @ 3550 RPM
First Critical Speed ..... 4552 RPM (9-stage)
Drive Type ..... Direct coupled or belt driven
Shaft End ..... 2.375 in (60.32 mm) diameter at coupling
Vibration Tolerence ..... .25 in/s (6.4 mm/s)
Rotor Balance ..... Individual impellers are statically balanced and rotating assembly dynamically balanced

MATERIALS

Casing ..... Cast iron ASTM A48 grade 25/30
Bearing Caps & Housings ... Cast iron ASTM A48 grade 25/30
Shaft ..... Carbon steel AISI 4140 (stainless steel available)
Impellers ..... Cast aluminum alloy or Fabricated AL
Seals (air) ..... Zinc-Alloy, ZA-12 or Fine Grain High Density Electro-Graphite
Seals (gas) ..... Cast aluminum ANSI AA319 stuffing box with braided packing
Interstage Baffle Rings ..... Stainless steel ASTM A240 304
Tie Rods ..... .75 in (19.1 mm) diameter, high strength steel
Blower Base ..... Welded structural steel ASTM A36 ASME/AWS D1.1 WPS's available
Motor Pedestal ..... Welded steel plate ASTM A36
Joint Sealing Compound ..... RTV silicone
Base Isolation Pads ..... Neoprene rubber
Finish ..... BEC standard

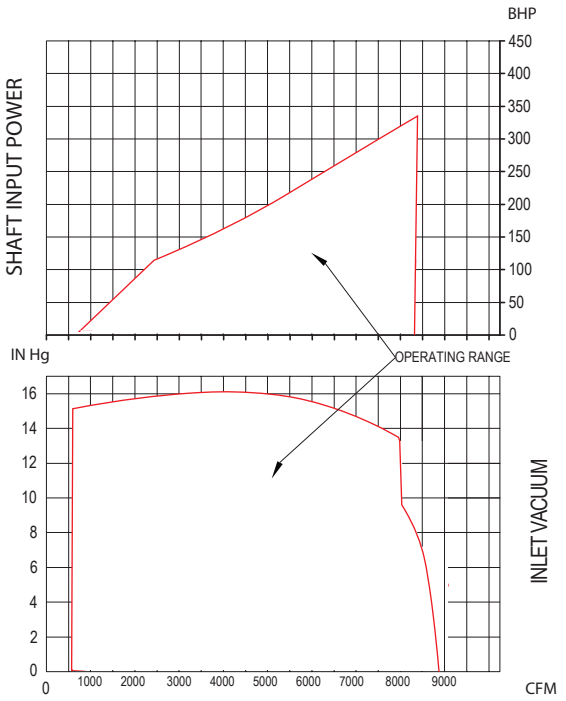
Performance

MODEL BEC12 BLOWER



INLET FLOW RATE

MODEL BEC12 EXHAUSTER



INLET FLOW RATE

Curves are based on atmospheric conditions of 1 Atm, 68F/20C, 36% RH, and 3550 rpm

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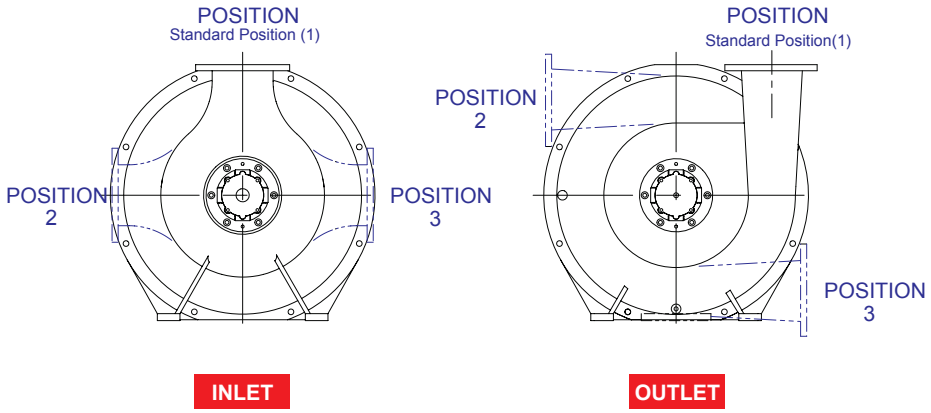
Inlet and Outlet Orientation Options

The orientation of the inlet and outlet is selectable from different positions, as shown below:

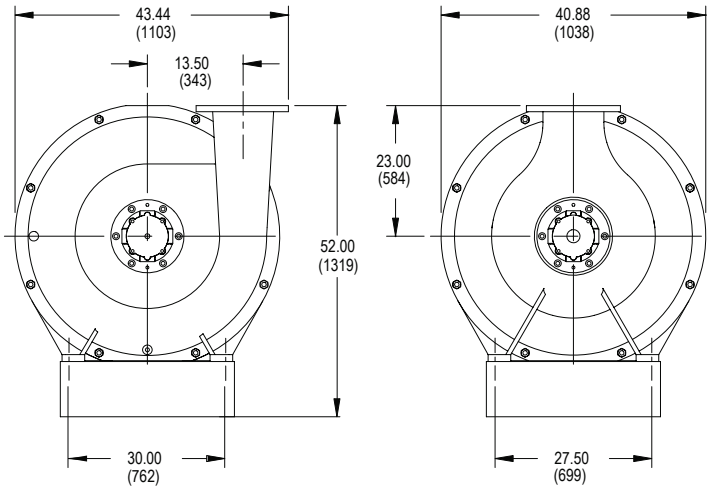


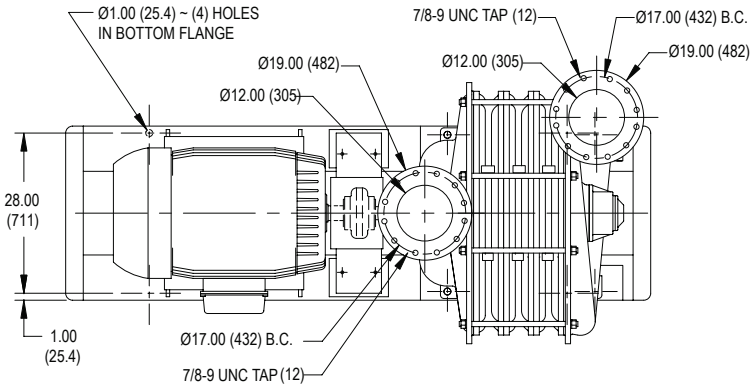
Weight

	CAST IRON		ALUMINIUM	
Model	lb	kg	lb	kg
BEC12-01	2150	975	-	-
BEC12-02	2700	1255	-	-
BEC12-03	3350	1520	-	-
BEC12-04	3900	1769	-	-
BEC12-05	4450	2018	-	-
BEC12-06	5100	2313	-	-
BEC12-07	5500	2495	-	-
BEC12-08	5950	2699	-	-
BEC12-09	5950	2696	-	-

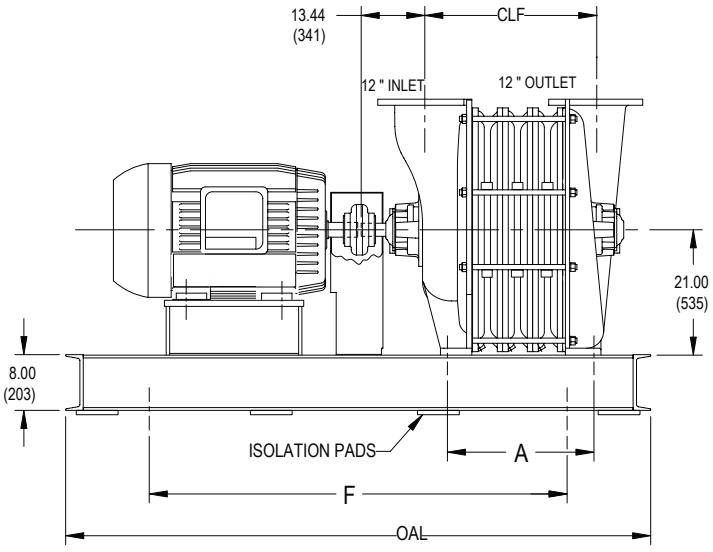
Note: Approximate weight of blower

General Arrangement





Model	Dimensions * A	CLF	F**	OAL**
BEC12-01	10.00	18.25 (464)	48	86” (2184)
BEC12-02	16.50	24.75 (629)	60	99” (2595)
BEC12-03	23.00	31.25 (794)	72	96” (2438)
BEC12-04	29.50	37.75 (959)	84	115” (2921)
BEC12-05	36.00	44.25 (1124)	96	130” (3302)
BEC12-06	42.50	50.75 (1289)	96	130” (3302)
BEC12-07	49.00	57.25 (1454)	108	144” (3658)
BEC12-08	55.50	63.75 (1619)	108	144” (3658)
BEC12-09	55.50	63.75 (1619)	108	144” (3658)



* Dimensions provided are approximate. Do not use for construction purposes.

** Dimension vary based on motor frame size.