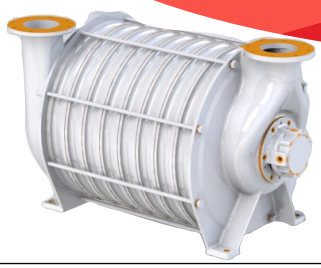
Berryman Equipment Company

MULTISTAGE CENTRIFUGAL BLOWERS
MODEL BEC6



Specifications

TECHNICAL DATA

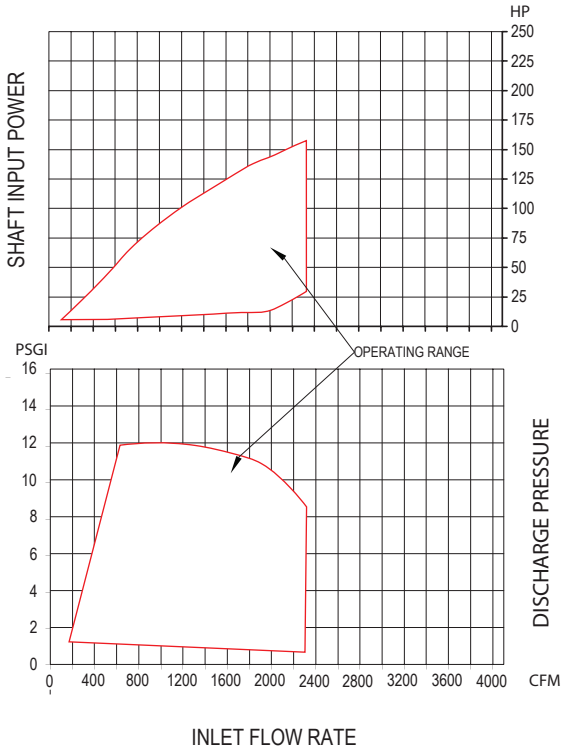
Number of Stages ..... 1 through 9 (10 to 50 Hz)
Inlet Connection ..... 6″ (152mm) flange, ANSI125# drilling
Outlet Connection ..... 6 ″ (152mm) flange, ANSI 125# drilling
Operating Speed ..... 3550 RPM
Casing Pressure..... 25 PSIG (1.76 kg/cm^2)
Seals (air) ..... Carbon Ring or Labyrinth
Seals (gas) ..... Carbon Rings at each end with insert taps
Bearings ..... Ball, 10-year minimum life per AFBMA L_{10} standard
Lubrication ..... Oil or grease
Impeller Diameter ..... 22.00 in (559 mm) or 24.00 in (610 mm)
Impeller Tip Speed ..... 341 ft/s or 372 ft/s
First Critical Speed ..... 4319 RPM (9-stage)
Drive Type ..... Direct coupled or belt driven
Shaft End ..... 1.625 in (41 mm) diameter at coupling
Vibration Tolerence ..... .28 in/s (7.1 mm/s)
Rotor Balance ..... Individual impellers are statically balanced and rotating assembly dynamically balanced

MATERIALS

Casing ..... Cast iron ASTM A48 grade 25/30 or ANSI AA319
Bearing Caps & Housings ... Cast iron ASTM A48 grade 25/30
Oil Reservoir ..... Cast aluminum ANSI AA319
Shaft ..... Carbon steel AISI 4140 (stainless steel available)
Impellers ..... Cast aluminum ANSI AA319
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

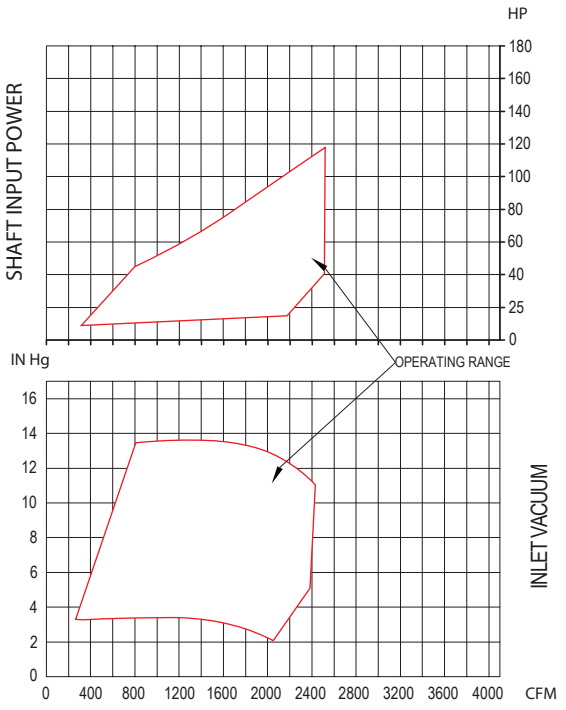
Performance

MODEL BEC6 BLOWER



INLET FLOW RATE

MODEL BEC6 EXHAUSTER



INLET FLOW RATE

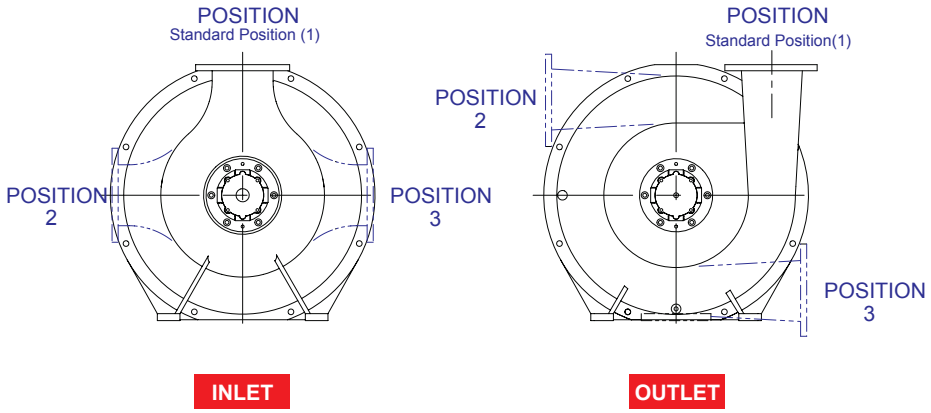
Curves are based on atmospheric conditions of 1 Atm, 68F/20C, 36% RH, and 3550 rpm

Berryman Equipment Company

MODEL BEC6

Inlet and Outlet Orientation Options

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

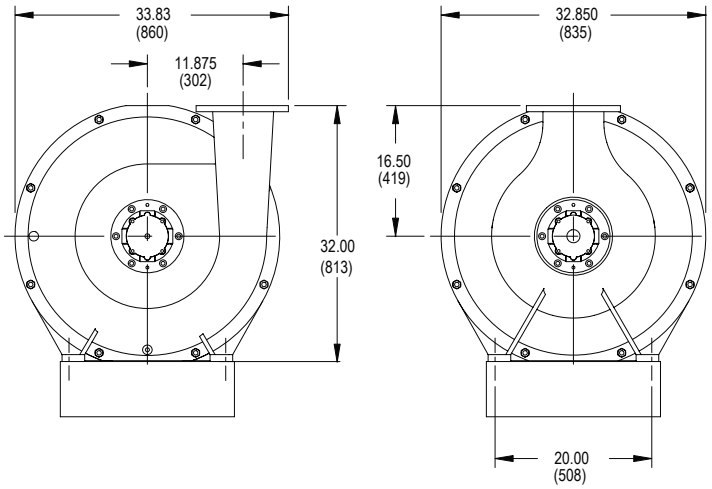


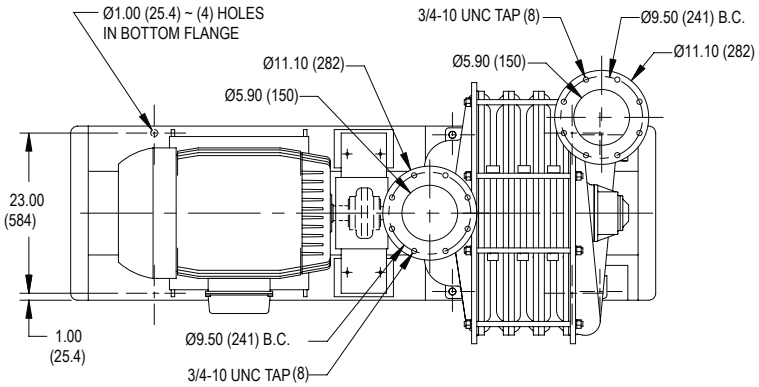
Weight

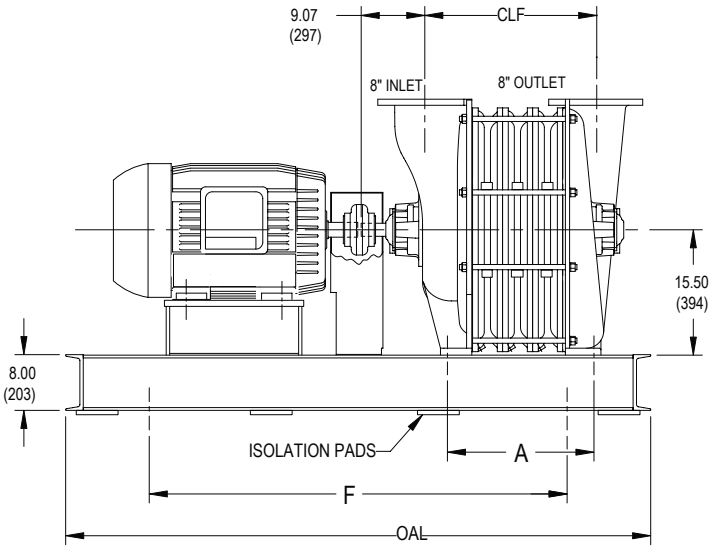
	CAST IRON		ALUMINIUM	
Model	lb	kg	lb	kg
BEC6-01	1250	567	499	226
BEC6-02	1400	635	560	253
BEC6-03	1550	703	620	281
BEC6-04	1945	882	778	352
BEC6-05	2120	962	848	384
BEC6-06	2375	1077	950	430
BEC6-07	2520	1143	1008	456
BEC6-08	2700	1225	1080	489
BEC6-09	2880	1306	1152	522

Note: Approximate weight of blower

General Arrangement







Model	Dimensions * A	CLF	F**	OAL**
BEC6-01	6.75	9.25 (235)	24	48" (1219)
BEC6-02	10.37	12.875 (327)	36	60" (1524)
BEC6-03	14.00	16.50 (419)	36	60" (1524)
BEC6-04	17.62	20.125 (511)	48	72" (1829)
BEC6-05	21.25	23.75 (603)	48	72" (1829)
BEC6-06	24.87	27.375 (695)	60	84" (2134)
BEC6-07	28.50	31 (787)	60	84" (2134)
BEC6-08	32.12	34.625 (880)	60	84" (2134)
BEC6-09	35.75	38.125 (968)	60	84" (2134)

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

** Dimension vary based on motor frame size.