

Model 61

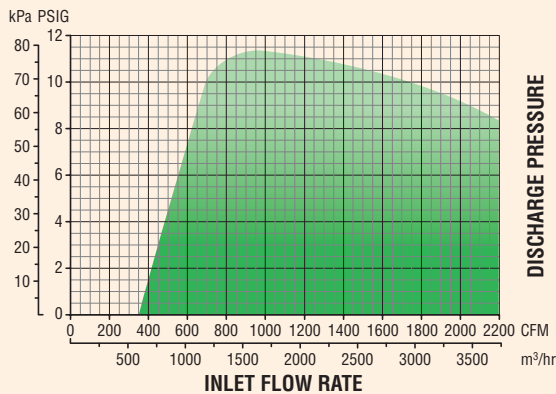
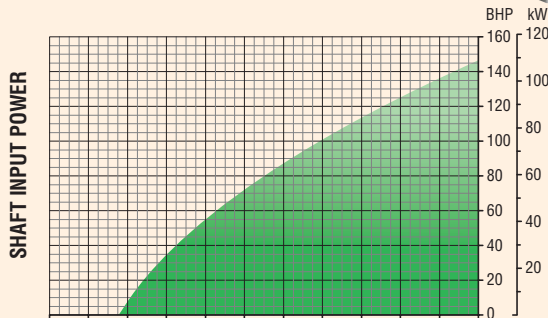
HSI MULTISTAGE CENTRIFUGAL BLOWERS



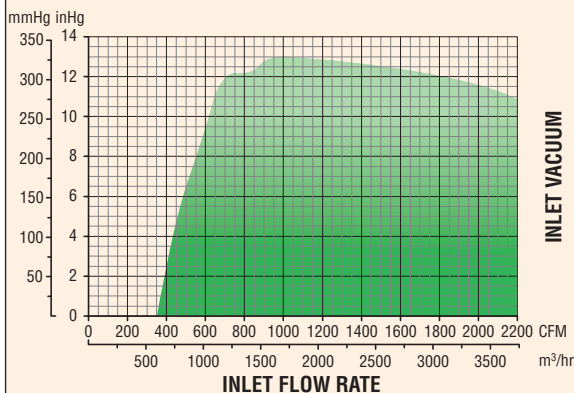
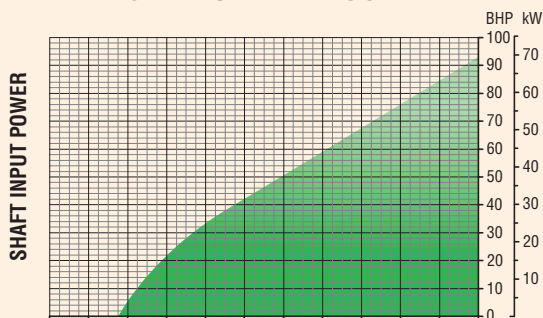
General Performance

Specifications Standard

MODEL 61 BLOWER



MODEL 61 EXHAUSTER



TECHNICAL DATA

- Number of Stages 1 through 10
- Inlet Connection 6" (152.4 mm) flange, ASA 125# / ANSI 150# drilling
- Outlet Connection 6" (152.4 mm) flange, ASA 125# / ANSI 150# drilling
- Operating Speed..... 3550 RPM (60 Hz), 2960 RPM (50 Hz)
- Casing Pressure..... 20 PSIG (1.41 kg/cm²)
- Seals (air)..... Labyrinth type
- Seals (gas)..... Stuffing box type/custom available
- Bearings..... Ball, 10-year minimum life per AFBMA L₁₀ standard
- Lubrication..... Grease (oil available)
- Impeller Diameter..... 22.00 in (558.8 mm)
- Impeller Tip Speed 341 ft/s (104 m/s) @ 3550 RPM
- First Critical Speed 4560 RPM (9-stage)
- Drive Type Direct coupled or Belt driven, Inlet driven (standard) or Outlet driven
- Shaft End 1.875 in (47.63 mm) diameter at coupling
- Vibration Tolerance25 in/s (6.4 mm/s) ISO overall specification, 1.25 mils (0.03 mm) peak to peak
- Rotor Balance..... Military standard 167-1. Individual impellers statically and rotating assembly dynamically balanced

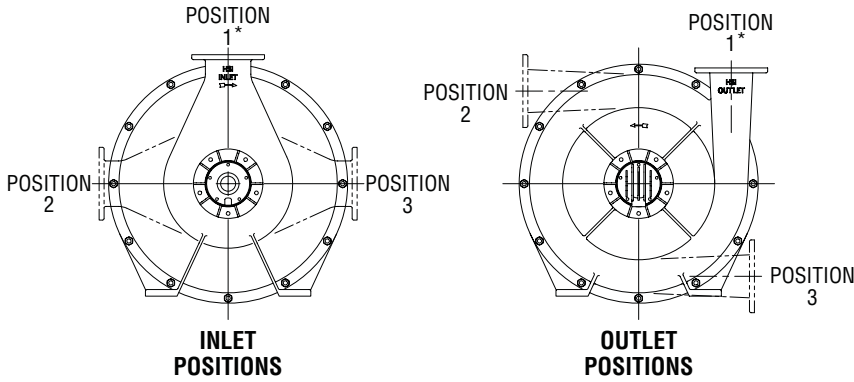
MATERIALS OF CONSTRUCTION

- Casing Cast iron ASTM A48 grade 25/30
- Bearing Caps & Housings ... Cast iron ASTM A48 grade 25/30
- Oil Reservoir Cast iron ASTM A48 grade 25/30
- Shaft Carbon steel AISI 4140 (stainless steel available)
- Impellers Cast aluminum ANSI AA319/356 or fabricated aluminum ANSI AA6061 with cast Al AA356 hub stainless steel/custom alloys available
- Seals (air)..... Cast iron ASTM A48 grade 30 with lead babbitt insert Zinc-Alloy, ZA-12
- Seals (gas)..... Cast aluminum ANSI AA319 stuffing box with braided packing
- Tie Rods75 in (19.1 mm) diameter, high strength steel ASTM A193-B7/B7M available
- 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 HSI standard

MODEL 61 MULTISTAGE CENTRIFUGAL BLOWER

Inlet and Outlet Orientation Options

The orientation of the inlet and outlet is selectable from any of three different positions, as viewed when facing the exterior of the part:



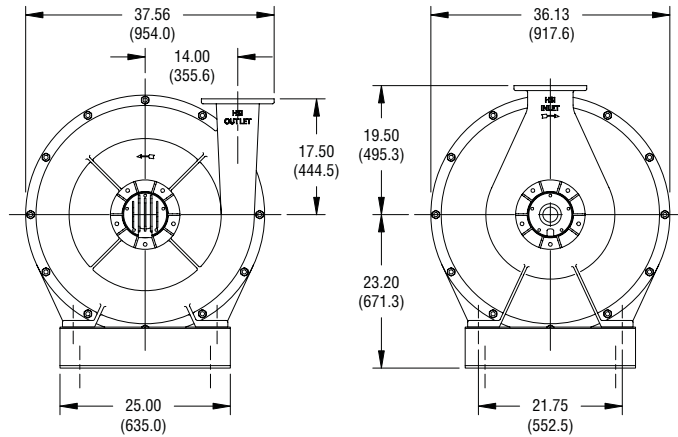
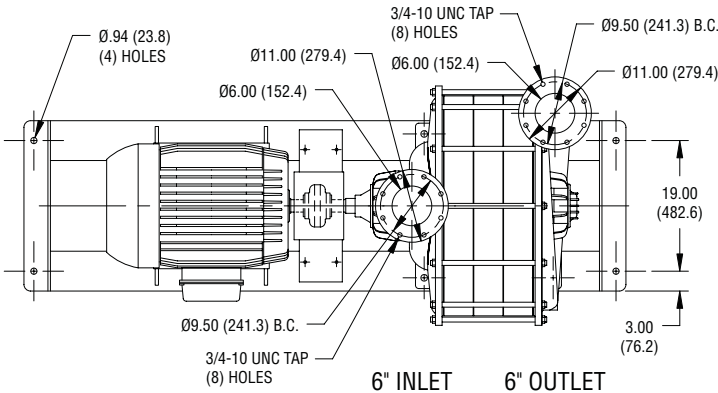
*Standard configuration.

Weight and Inertia

Model	Weight*		Wk ²	
	lb	kg	lb-ft ²	kg-m ²
6101	870	395	8	0.35
6102	1120	508	16	0.68
6103	1370	621	24	1.02
6104	1620	735	32	1.35
6105	1870	848	40	1.68
6106	2120	962	48	2.02
6107	2370	1075	56	2.35
6108	2620	1188	63	2.68
6109	2895	1313	71	3.02

*Approximate weight for blower only.

General Arrangement



Model	Dimensions*			
	A	B	F [†]	L [†]
6101	6.00 (152)	8.13 (206)	63 (1600)	66 (1676)
6102	10.50 (267)	12.63 (321)	63 (1600)	66 (1676)
6103	15.00 (381)	17.13 (435)	75 (1905)	78 (1981)
6104	19.50 (495)	21.63 (549)	75 (1905)	78 (1981)
6105	24.00 (610)	26.13 (664)	88 (2235)	91 (2311)
6106	28.50 (724)	30.63 (778)	88 (2235)	91 (2311)
6107	33.00 (838)	35.13 (892)	88 (2235)	91 (2311)
6108	37.50 (953)	39.63 (1006)	99 (2515)	102 (2591)
6109	42.00 (1067)	44.13 (1121)	99 (2515)	102 (2591)

*Dimensions in inches and (millimeters) and are approximate. Do not use for construction purposes.

[†]Dimension may vary depending on motor frame size.



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