



Multistage Centrifugal Blower 1400 Series

Hoffman and Lamson present state-of-the-art technology in Multistage Centrifugal Blowers. This model offers a wide range of design features and incorporates energy efficiency improvements, complying with the strictest operational requirements of a variety of applications. Multistage blowers are ideally suited for operations where a variable flow at constant pressure is required. Hoffman and Lamson are worldwide leaders in Multistage Centrifugal Blower technology with thousands of units installed around the globe.

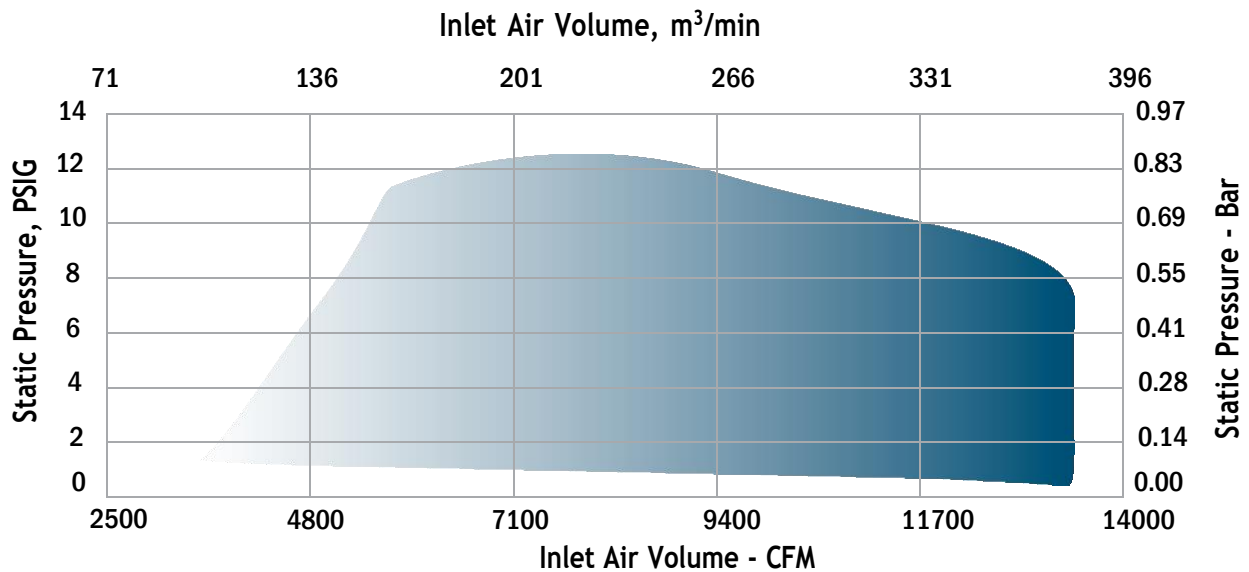
Technical Data

- Number of Stages: 1-7 (60Hz) 1-8 (50 Hz)
- Inlet Connection: 18" Flange, ANSI 125# Drilling
- Outlet Connection: 14" {16"} Flange Adapter, ANSI 125# Drilling
- Operating Speed: 3550 RPM (60 Hz), 2925 RPM (50 Hz)
- Casing Pressure: 25 PSIG (1.73 bar)
- Air Seals: Labyrinth Type - Carbon Ring Optional
- Bearings: Anti-friction, designed for extended L10 life
- Lubrication: AEON® CF Oil
- Impeller: 26.0 inches (660 millimeters) Diameter (statically balanced)
- Impeller Tip Speed: 405 feet/second (123 meters/second)
- Drive: Type Direct Coupled (Inlet drive is standard)
- Drive Shaft Diameter 1-2 Stage: 1.8745 inches (47.63 millimeters) 3-9 Stage: 2.8745 inches (69.85 mm)

Material Standard

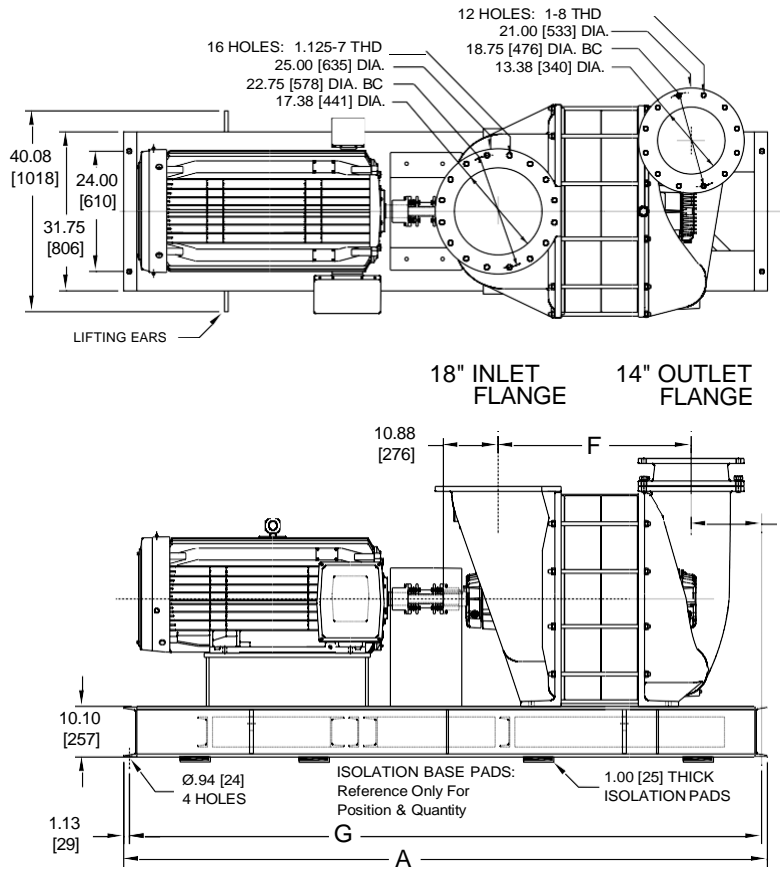
- Casing: ASTM A48 Class 30 Cast Iron - HT200 equivalent
- Bearing Housings: ASTM A48 Class 30 Cast Iron
- Tie Rods: ASTM F1554 GR.36 Zinc Plated Steel (1-4 Stg) ASTM A108 C1045 Steel (5-9 Stage)
- Labyrinth Seal: ASTM B86 Z35631 Alloy Zinc Aluminum 12
- Carbon Ring Seal Optional: ASTM C695 Fine Grain Molded Graphite
- Joint Sealing: RTV Silicone Compound
- Baffle Rings: ASTM A240 Grade 304 Stainless Steel
- Shaft: ASTM A322 Grade 4140CT HRS Stainless Steel Optional
- Impeller: ASTM SC64C Sr-319 Cast Aluminum
- Base & Motor Pedestal: ASTM A36 Hot Rolled Structural Steel
- Isolation Base Pads: Suitable Resilient Material
- Finish: Universal Primer - Acrylic Topcoat

Performance Air Map

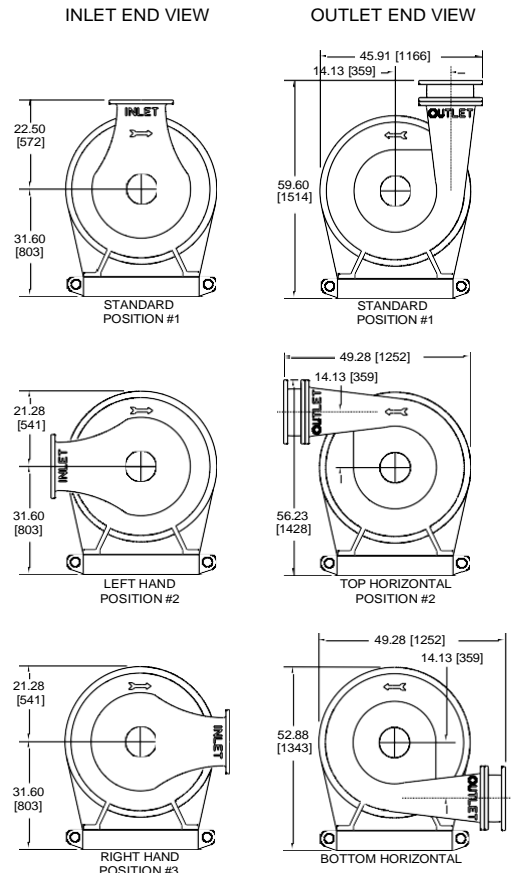


STANDARD CONDITIONS: 14.7 PSIA [1 Bar], 68°F [20°C], 36% RH, Speed: 3550 RPM

General Arrangement



Flange Orientation



Dimensional Data - inches [millimeters]

FRAME	A	F	G	R
1401	98.25 [2496]	23.81 [605]	96.00 [2438]	14.00 [356]
1402	114.25 [2902]	31.06 [789]	112.00 [2845]	14.00 [356]
1403	128.25 [3258]	38.31 [973]	126.00 [3200]	14.00 [356]
1404	128.25 [3258]	45.56 [1157]	126.00 [3200]	14.00 [356]
1404	142.25 [3613]	45.56 [1157]	140.00 [3556]	14.00 [356]
1405	142.25 [3613]	52.81 [1341]	140.00 [3556]	14.00 [356]
1405	154.25 [3918]	52.81 [1341]	152.00 [3861]	14.00 [356]
1406	154.25 [3918]	60.06 [1526]	152.00 [3861]	14.00 [356]
1406	162.25 [4121]	60.06 [1526]	160.00 [4064]	14.00 [356]
1407	154.25 [3918]	67.31 [1710]	152.00 [3861]	14.00 [356]
1407	162.25 [4121]	67.31 [1710]	160.00 [4064]	14.00 [356]
1407	172.25 [4375]	67.31 [1710]	170.00 [4318]	14.00 [356]

Weight – lb [kg] & Inertia – lb-ft² [kg-m²]

FRAME	PKG. LESS MOTOR	BARE UNIT	WK2
1401	3170 [1438]	1770 [803]	22 [0.93]
1402	3770 [1710]	2370 [1075]	44 [1.84]
1403	4370 [1982]	2970 [1347]	65 [2.74]
1404	4970 [2254]	3570 [1619]	87 [3.65]
1404	4970 [2254]	3570 [1619]	87 [3.65]
1405	5720 [2595]	4170 [1891]	108 [4.55]
1405	5720 [2595]	4170 [1891]	108 [4.55]
1406	6370 [2889]	4770 [2164]	131 [5.48]
1406	6370 [2889]	4770 [2164]	131 [5.48]
1407	6970 [3162]	5370 [2436]	152 [6.39]
1407	6970 [3162]	5370 [2436]	152 [6.39]
1407	6970 [3162]	5370 [2436]	152 [6.39]

Product Notes

- Information is approximate, subject to change without notice, and not for construction use unless certified
- Position #1 is standard inlet & outlet orientation
- A and G dimensions may vary depending on motor frame size
- Performances noted are typical and not job specific
- Consult authorized sales representative for job specific blower or exhauster performance sizing
- Factory ASME PTC-10 test offered for performance verification
- For components that exceed 4,000 lb., machined pads are used. Height of the components on the base frame increase by 0.88 inches due to the use of machined pads



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