



Multistage Centrifugal Blower 742 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.

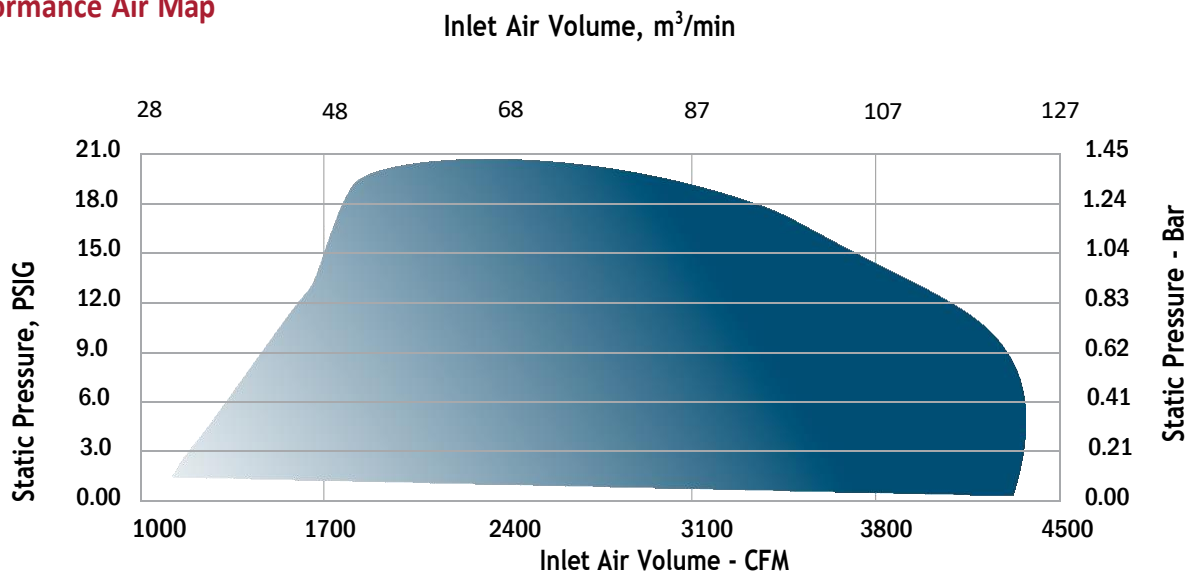
Technical Data

- Number of Stages: 1-11 (60 Hz) 1-12 (50 Hz)
- Inlet Connection: 10" Flange, ANSI 125# Drilling
- Outlet Connection: 8" Flange, ANSI 125# Drilling
- Operating Speed: 3550 RPM (60 Hz), 2960 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 Grease – Oil Optional
- Impeller: 24.0 inches (610 millimeters) Diameter (statically balanced)
- Impeller Tip Speed: 372 feet/second (113 meters/second)
- Drive Type: Direct Coupled (Inlet drive is standard)
- Drive Shaft: 2.25 inches (57.15 millimeters) Diameter
- Vibration: .235 in/sec. (5.97 mm/sec.) Peak Velocity
- Rotor: Balanced Per ISO 1940, ANSI S2.19

Material Standard

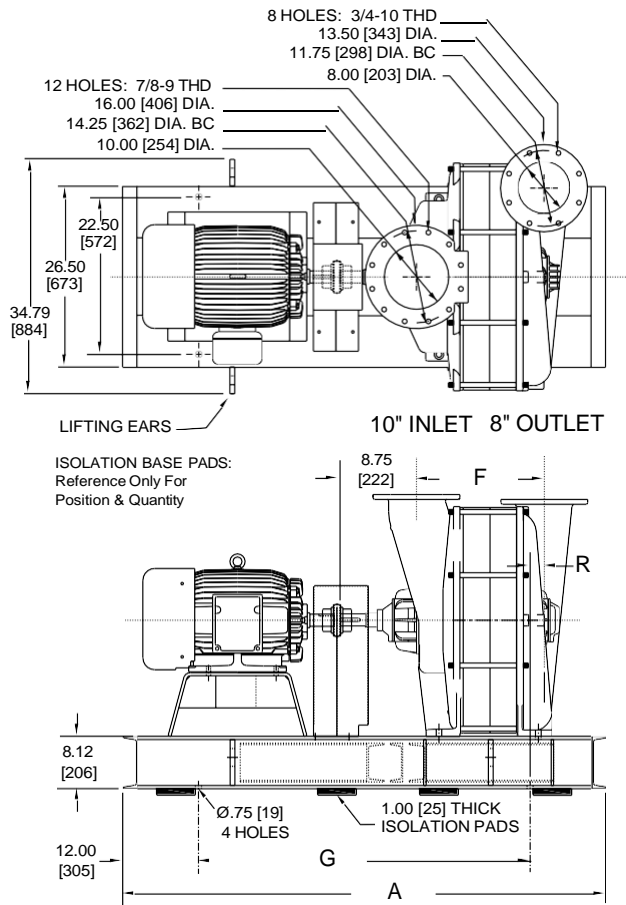
- Casing :ASTM A48 Class 30B Gray Cast Iron - HT200 equivalent
- Bearing Housings: ASTM A48 Class 30 Gray Cast Iron
- Bearing Cap: ASTM A48 Class 30 Gray Cast Iron
- Tie Rods: ASTM F1554 GR.36 Zinc Plated Thrd. Rod
- Labyrinth Seal: ASTM B86 Z35631 Alloy Zinc Aluminum 12
- Carbon Ring Seal Optional: ASTM C695 Fine Grain Molded Graphite
- Joint Sealing: RTV Silicone Compound
- Baffle Rings: ASTM A240 Grade 304 Stainless Steel
- Balance Piston: ASTM A356-T5 Cast Aluminum (7-12 Stage)
- Shaft: ASTM A108 Grade 1045 HRS - Stainless Steel Optional
- Impeller: ASTM SC64C Sr-319 Cast Aluminum
- Blower Base: ASTM A36 Hot Rolled Structural Steel
- Motor Pedestal: ASTM A36 Hot Rolled Structural Steel
- Isolation Base Pads: Suitable Resilient Material
- Finish: Universal Primer - Acrylic Topcoat

Performance Air Map

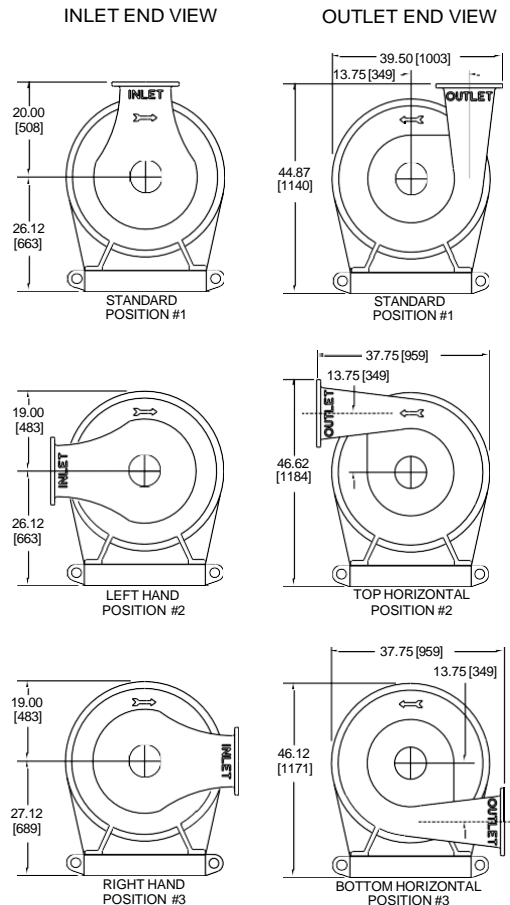


STANDARD CONDITIONS: 14.7 PSIA [1 Bar], 68°F [20°C], 36% RH, Speed: 3550 RPM

General Arrangement



Flange Orientation



Dimensional Data - inches [millimeters]

FRAME	A	F	G	R
74201	72.75 [1848]	13.25 [337]	48.75 [1238]	4.32 [110]
74202	72.75 [1848]	17.56 [446]	48.75 [1238]	4.32 [110]
74203	84.75 [2153]	21.88 [556]	60.75 [1543]	4.32 [110]
74204	96.75 [2457]	26.19 [665]	72.75 [1848]	4.32 [110]
74205	96.75 [2457]	30.50 [775]	72.75 [1848]	4.32 [110]
74206	108.75 [2762]	34.81 [884]	84.75 [2153]	4.32 [110]
74207	108.75 [2762]	39.13 [994]	84.75 [2153]	4.32 [110]
74208	120.75 [3067]	43.44 [1103]	96.75 [2457]	4.32 [110]
74209	120.75 [3067]	47.75 [1213]	96.75 [2457]	4.32 [110]
74210	126.75 [3219]	52.06 [1322]	102.75 [2610]	4.32 [110]
74211	126.75 [3219]	56.38 [1432]	102.75 [2610]	4.32 [110]

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

FRAME	PKG. LESS MOTOR	BARE UNIT	WK2
74201	1948 [884]	1119 [508]	10 [0.42]
74202	2122 [963]	1522 [690]	21 [0.89]
74203	2525 [1145]	1925 [873]	32 [1.34]
74204	3128 [1419]	2328 [1056]	43 [1.82]
74205	3795 [1721]	2895 [1313]	54 [2.28]
74206	4298 [1950]	3298 [1496]	65 [2.74]
74207	4801 [2178]	3701 [1679]	76 [3.21]
74208	5370 [2436]	4170 [1891]	88 [3.68]
74209	5773 [2619]	4573 [2074]	99 [4.14]
74210	6576 [2983]	4976 [2257]	110 [4.61]
74211	6750 [3062]	5150 [2336]	120 [5.04]

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



200 Simko Blvd.
Charleroi, PA 15022
USA
HOFFMANandLAMSON.com