



# Multistage Centrifugal Blower 741 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.

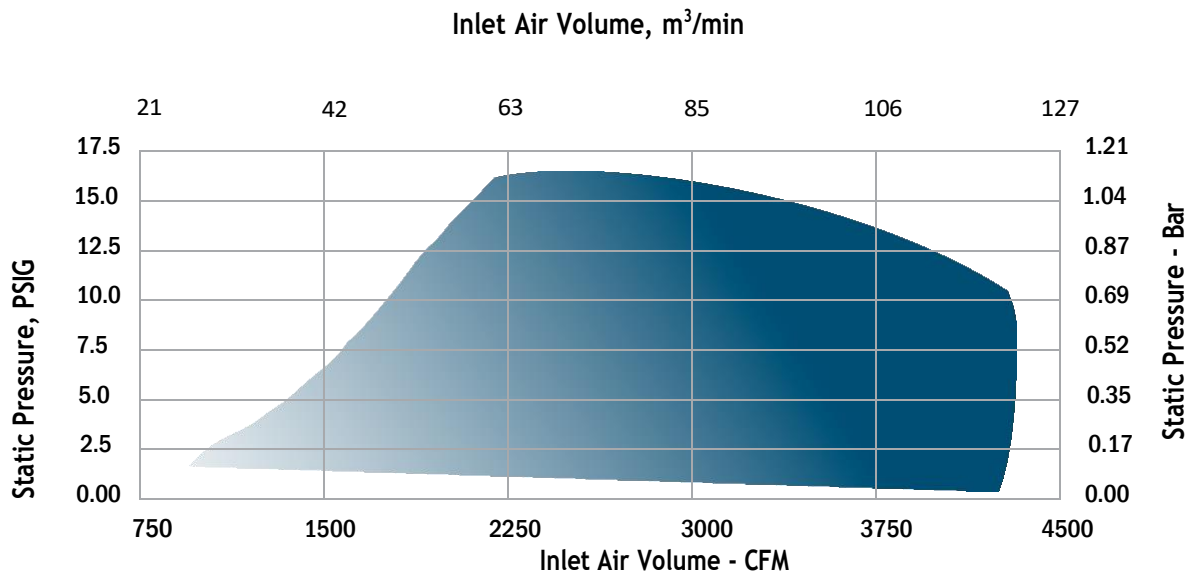
### Technical Data

- Number of Stages: 1-9 (60 Hz) 1-10 (50 Hz)
- Inlet Connection: 8" 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 Type, 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: 1.875 inches (47.63 millimeters) Diameter
- Vibration: .235 in/sec. (5.97 mm/sec.) Peak Velocity
- Rotor: Balanced Per ISO 1940, ANSI S2.19

### Material Standard

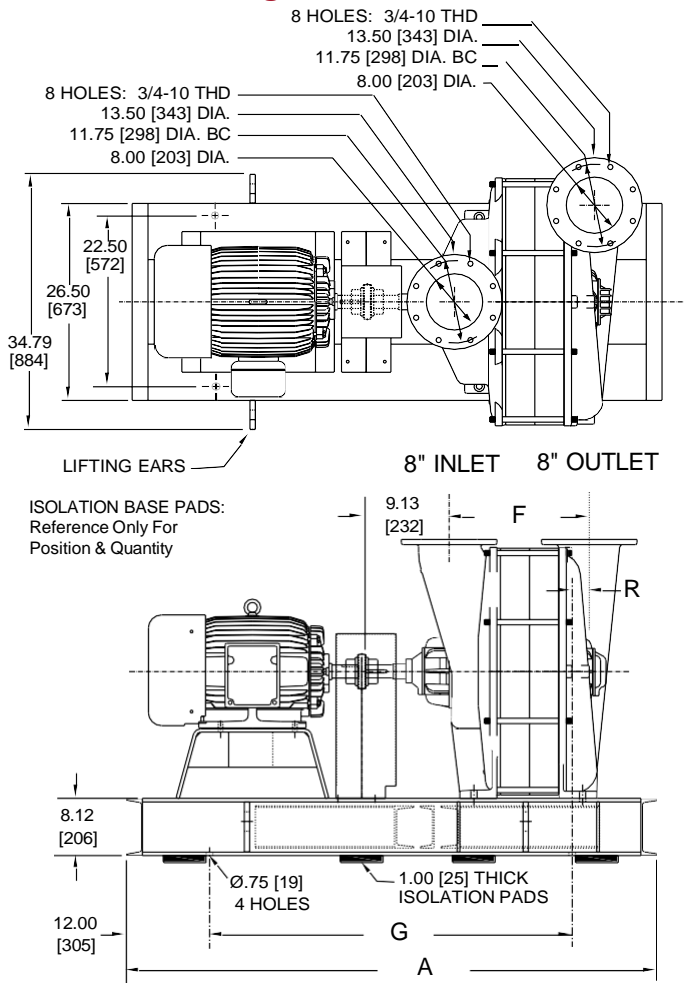
- Casing: ASTM A48 Class 30B Gray Cast Iron - HT200 equivalent
- Bearing Housings: ASTM A48 Class 30 Gray Cast Iron
- Bearing Cap: ASTM A48 Class 30 Gray Cast Iron
- Tie Rods: ASTM F1554 GR.36 Zinc Plated Thrd. Rod
- Labyrinth Seal: ASTM B86 Z35631 Alloy Zinc Aluminum 12
- Carbon Ring Seal Optional: 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 (8-10 Stage)
- Shaft: ASTM A108 Grade 1045 HRS - Stainless Steel Optional
- Impeller: ASTM SC64C Sr-319 Cast Aluminum or ASTM 6061-T6 Fabricated 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

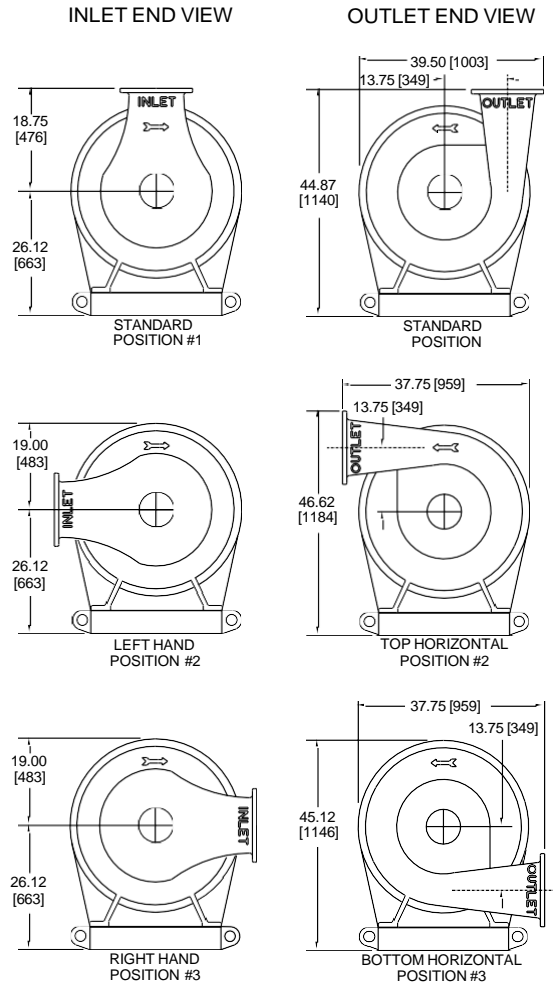


STANDARD CONDITIONS: 14.7 PSIA [1 Bar], 68°F [20°C], 36% RH, Speed: 3550 RPM

## General Arrangement



## Flange Orientation



## Dimensional Data - inches [millimeters]

FRAME	A	F	G	R
74101	60.75 [1543]	11.75 [298]	36.75 [933]	4.25 [108]
74102	72.75 [1848]	16.06 [408]	48.75 [1238]	4.25 [108]
74103	72.75 [1848]	20.38 [518]	48.75 [1238]	4.25 [108]
74104	84.75 [2153]	24.69 [627]	60.75 [1543]	4.25 [108]
74105	84.75 [2153]	29.00 [737]	60.75 [1543]	4.25 [108]
74106	96.75 [2457]	33.31 [846]	72.75 [1848]	4.25 [108]
74107	96.75 [2457]	37.63 [956]	72.75 [1848]	4.25 [108]
74108	108.75 [2762]	41.94 [1065]	84.75 [2153]	4.25 [108]
74109	108.75 [2762]	46.25 [1175]	84.75 [2153]	4.25 [108]

## Weight – lb [kg] & Inertia– lb-ft<sup>2</sup> [kg-m<sup>2</sup>]

FRAME	PKG. LESS MOTOR	BARE UNIT	WK2
74101	2000 [907]	1400 [635]	11 [0.46]
74102	2210 [1002]	1610 [730]	21 [0.88]
74103	2420 [1098]	1820 [826]	31 [1.30]
74104	2830 [1284]	2030 [921]	42 [1.76]
74105	3140 [1424]	2240 [1016]	54 [2.25]
74106	3450 [1565]	2450 [1111]	64 [2.70]
74107	3760 [1705]	2660 [1207]	75 [3.16]
74108	4150 [1882]	2950 [1338]	85 [3.58]
74109	4400 [1996]	3200 [1451]	96 [4.04]

## Product Notes

1. Information is approximate, subject to change without notice, and not for construction use unless certified
2. Position #1 is standard inlet & outlet orientation
3. A and G dimensions may vary depending on motor frame size
4. Performances noted are typical and not job specific
5. Consult authorized sales representative for job specific blower or exhauster performance sizing
6. Factory ASME PTC-10 test offered for performance verification



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