



Multistage Centrifugal Exhauster 741 Series

Hoffman and Lamson present state-of-the-art technology in Multistage Centrifugal Exhauster. 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 vacuum is required. Hoffman and Lamson are worldwide leaders in Multistage Centrifugal Blower technology with thousands of units installed around the globe.

Technical Data

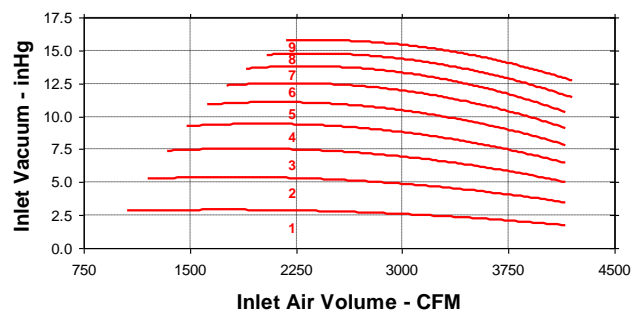
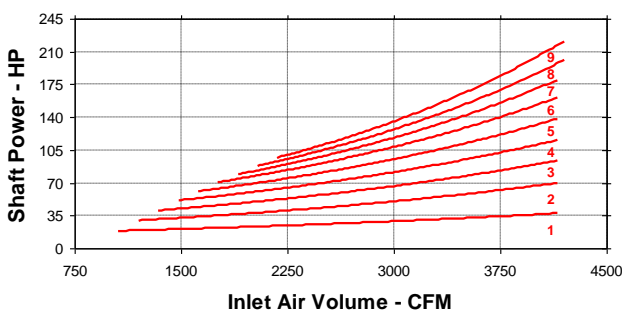
- Number of Stages: 1-9 (60 Hz) 1-10 (50 Hz)
- Inlet Connection: 8" Flange, ANSI 125# Drilling
- Outlet Connection: 8" Flange, ANSI 125# Drilling
- Operating Speed: 3550 RPM (60 Hz), 2960 RPM (50 Hz)
- Casing Pressure: 25 PSIG (1.73 bar)
- Air Seals: Labyrinth Type - Carbon Ring Optional
- Bearings: 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

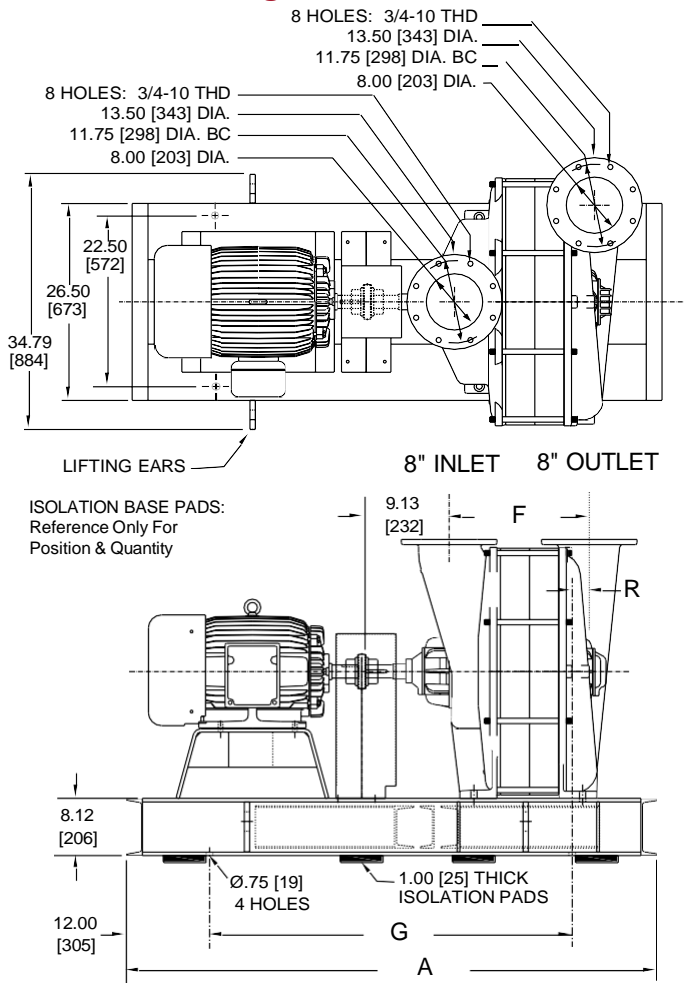
VACUUM PERFORMANCE

29.9 inHg [1 Bar], 68°F [20°C],
36% RH, Speed: 3550 RPM

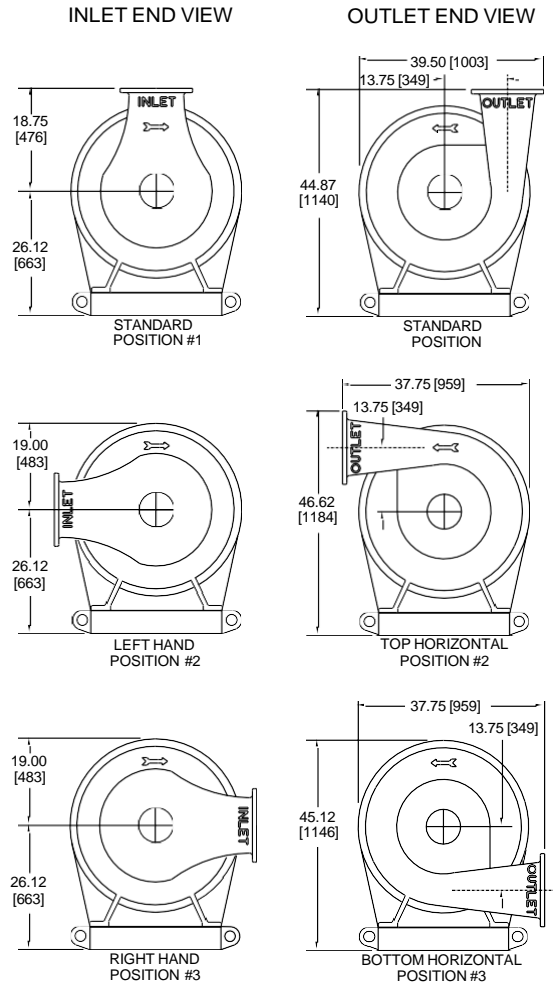


STANDARD CONDITIONS: 14.7 PSIA [1 Bar], 68°F [20°C], 36% RH, Speed: 3550 RPM

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-ft² [kg-m²]

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

- 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

