



## Multistage Centrifugal Blower 42 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.

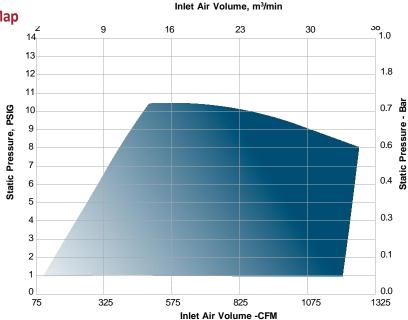
#### **Technical Data**

- Number of Stages: 1-8 (60 & 50 Hz)
- Inlet Connection: 6" Flange, ANSI 125# Drilling
- Outlet Connection: 6" Flange, ANSI 125# Drilling
- Operating Speed: 3550 RPM (60 Hz), 2925 RPM (50 Hz)
- Casing Pressure: 25 PSIG (1.73 bar)
- Air Seals: Carbon Ring Type
- 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: 1.625 inches (41.28 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
- Carbon Ring Seal: ASTM C695 Fine Grain Molded Graphite
- Joint Sealing: RTV Silicone Compound
- 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

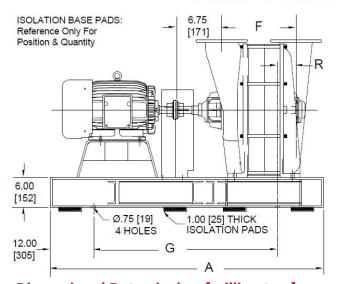
#### **Performance Air Map**



#### **General Arrangement**

# 8 HOLES: 3/4-10 THD 11.00 [279] DIA. 9.50 [241] DIA. BC 6.00 [152] DIA. 9.50 [241] DIA. BC 6.00 [152] DIA.

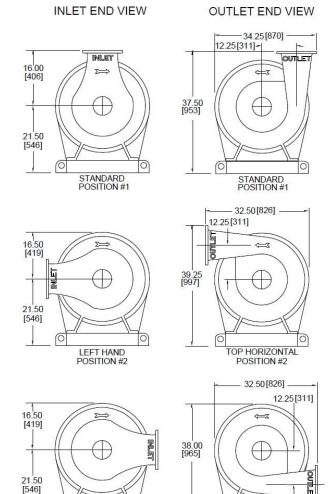
#### 6" INLET 6" OUTLET



#### **Dimensional Data - inches [millimeters]**

FRAME	Α	F	G	R
4201	48.75 [1238]	9.25 [235]	24.75 [629]	4.50 [114]
4202	60.75 [1543]	12.69 [322]	36.75 [933]	2.00 [51]
4203	60.75 [1543]	16.13 [410]	36.75 [933]	4.50 [114]
4204	72.75 [1848]	19.56 [497]	48.75 [1238]	2.00 [51]
4205	72.75 [1848]	23.00 [584]	48.75 [1238]	2.00 [51]
4206	72.75 [1848]	26.44 [672]	48.75 [1238]	4.50 [114]
4207	84.75 [2153]	29.88 [759]	60.75 [1543]	2.00 [51]
4208	84.75 [2153]	33.31 [846]	60.75 [1543]	2.00 [51]

#### **Flange Orientation**



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

POSITION #3

•	- 0-		
FRAME	PKG. LESS MOTOR	BARE UNIT	WK2
4201	749 [340]	590 [268]	9 [0.38]
4202	925 [420]	760 [345]	18 [0.76]
4203	1103 [500]	930 [422]	27 [1.14]
4204	1294 [587]	1100 [499]	36 [1.53]
4205	1494 [678]	1300 [590]	46 [1.91]
4206	1666 [756]	1470 [667]	55 [2.29]
4207	1836 [833]	1640 [744]	64 [2.67]
4208	2035 [923]	1810 [821]	73 [3.06]





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#### **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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BOTTOM HORIZONTAL