



# Multistage Centrifugal Blower 550 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.

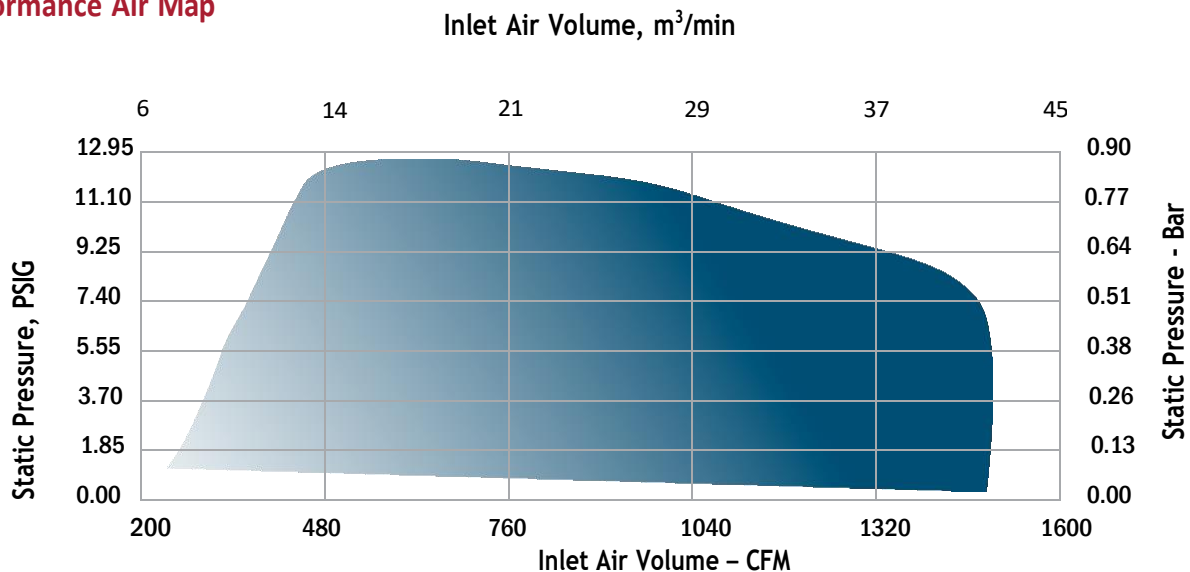
## Technical Data

- Number of Stages: 1-9 (60 Hz) 1-10 (50 Hz)
- Inlet Connection: 6" Flange, ANSI 125# Drilling
- Outlet Connection: 5" Flange, 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 Grease – Oil Optional
- Impeller: 22.0 inches (559 millimeters) Diameter (statically balanced)
- Impeller Tip: Speed 338 feet/second (103 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

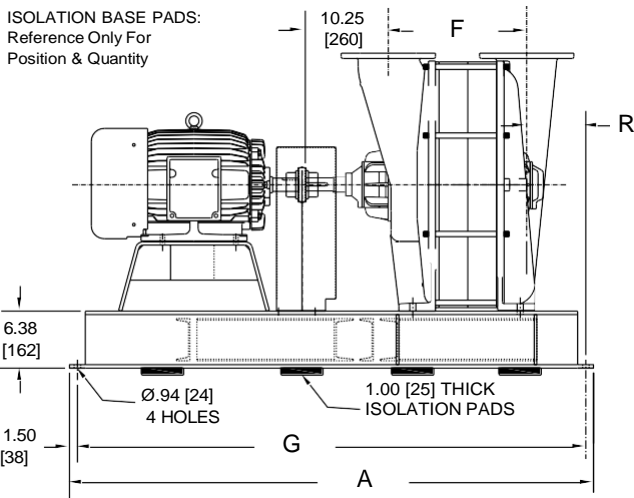
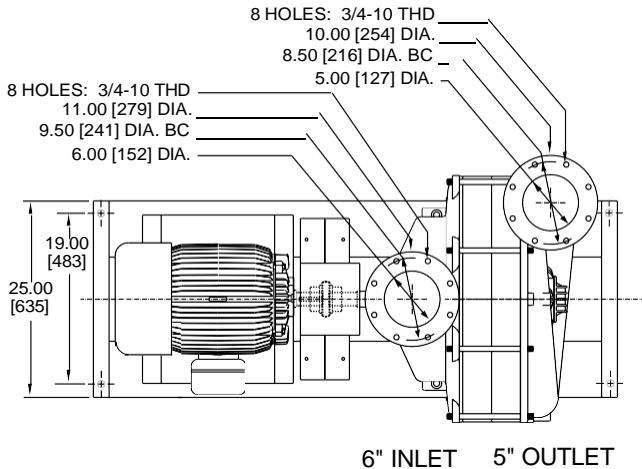
- Casing: ASTM A48 Class 30B Gray Cast Iron - HT200 equivalent
- Bearing Housings: ASTM A48 Class 30 Cast Iron
- Bearing Cap: ASTM A48 Class 30 Cast Iron
- Tie Rods: ASTM F1554 GR.36 Zinc Plated Thrd. Rod
- Labyrinth Seal: ASTM B86 Z35631 Alloy Zinc Aluminum 12
- Carbon Ring Seal Optional: ASTM C695 Fine Grain Molded Graphite
- Joint Sealing: RTV Silicone Compound
- Baffle Rings: ASTM A240 Grade 304 Stainless Steel
- Shaft: ASTM A322 Grade 4140CT Hot Rolled Steel - 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 Top Coat

## Performance Air Map

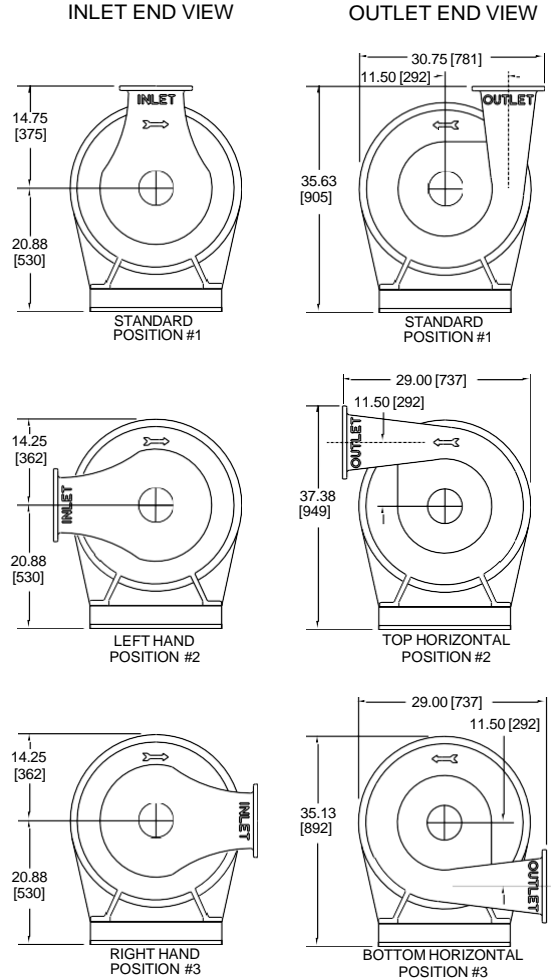


STANDARD CONDITIONS: 14.7 PSIA [1 Bar], 68°F [20°C], 36% RH, Speed: 3550 RPM

## General Arrangement



## Flange Orientation



## Dimensional Data - inches [millimeters]

FRAME	A	F	G	R
551	53.00 [1346]	8.50 [216]	50.00 [1270]	7.19 [183]
552	59.00 [1499]	11.75 [298]	56.00 [1422]	7.19 [183]
553	67.00 [1702]	15.00 [381]	64.00 [1626]	10.44 [265]
554	67.00 [1702]	18.25 [464]	64.00 [1626]	7.19 [183]
555	76.00 [1930]	21.50 [546]	73.00 [1854]	10.44 [265]
556	76.00 [1930]	24.75 [629]	73.00 [1854]	7.19 [183]
557	84.00 [2134]	28.00 [711]	81.00 [2057]	10.44 [265]
558	84.00 [2134]	31.25 [794]	81.00 [2057]	7.19 [183]
559	94.00 [2388]	34.50 [876]	91.00 [2311]	10.44 [265]
5510	94.00 [2388]	37.75 [959]	91.00 [2311]	7.19 [183]

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

FRAME	PKG. LESS MOTOR	BARE UNIT	WK2
551	869 [395]	480 [218]	6 [0.25]
552	1042 [474]	630 [286]	12 [0.49]
553	1220 [555]	780 [354]	18 [0.74]
554	1370 [632]	930 [422]	23 [0.98]
555	1577 [717]	1080 [490]	29 [1.23]
556	1727 [785]	1230 [558]	35 [1.47]
557	1897 [862]	1380 [626]	41 [1.72]
558	2047 [930]	1530 [694]	47 [1.96]
559	2299 [1045]	1680 [762]	53 [2.21]
5510	2449 [1113]	1830 [830]	58 [2.45]

## 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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