



Multistage Centrifugal Exhauster 850 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

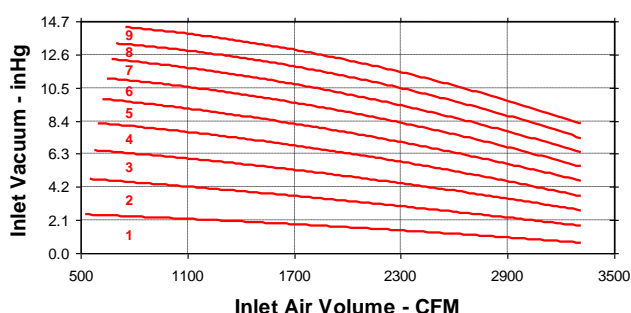
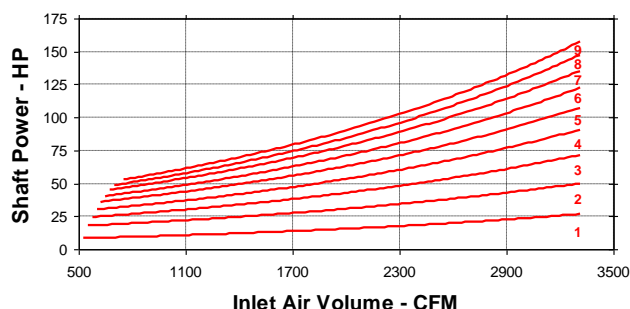
- Number of Stages: 1-9 (60 & 50 Hz)
- Inlet Connection: 8" Flange, ANSI 125# Drilling
- Outlet Connection: 8" Flange, ANSI 125# Drilling
- Operating Speed: 3550 RPM (60 Hz), 2925 RPM (50 Hz)
- Casing Pressure: 25 PSIG (1.73 bar)
- Air Seals: Labyrinth Type - Carbon Ring Optional
- Bearings: Anti-friction, designed for extended L10 life
- Lubrication: AEON® CF Grease – Oil Optional
- Impeller: 24.1 inches (612 millimeters) Diameter (statically balanced)
- Impeller Tip Speed: 373 feet/second (114 meters/second)
- Drive Type: Direct Coupled (Inlet drive is standard)
- Drive Shaft: 1.875 inches (47.63 millimeters) Diameter
- Vibration: .235 in/sec. (5.969 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 Topcoat

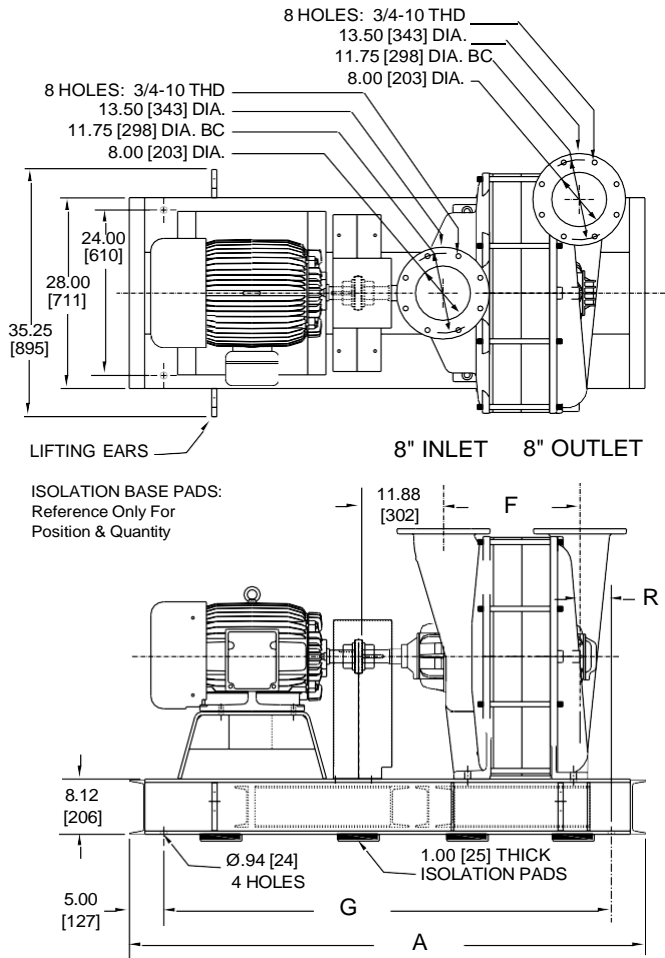
VACUUM PERFORMANCE

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

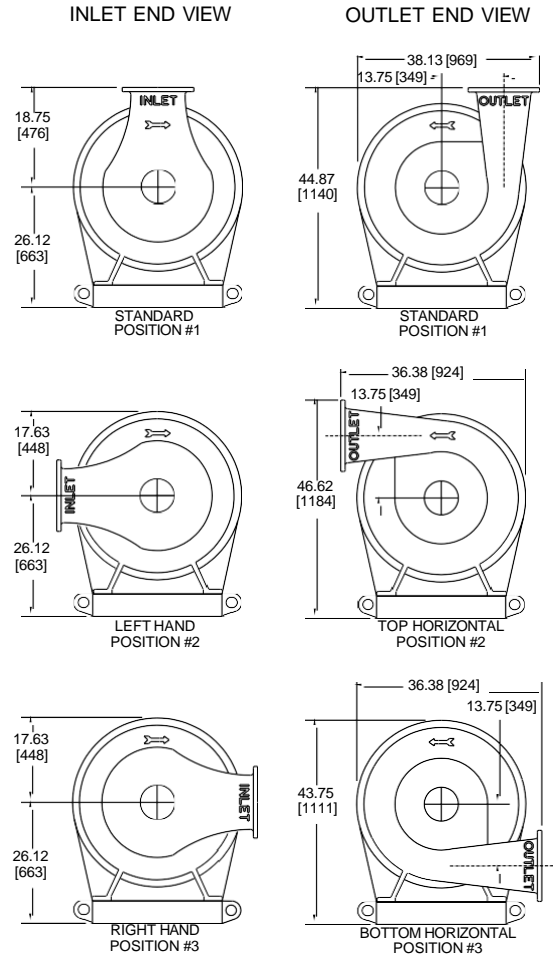


STANDARD CONDITIONS: 14.7 PSIA [1 Bar], 68°F [20°C], 36% RH, Speed: 3550 RPM

General Arrangement



Flange Orientation



Dimensional Data - inches [millimeters]

FRAME	A	F	G	R
851	62 [1574]	11.56 [294]	52 [1321]	4.56 [116]
852	68 [1727]	15.69 [399]	58 [1473]	4.56 [116]
853	75 [1905]	19.81 [503]	65 [1651]	4.56 [116]
854	88 [2235]	23.94 [608]	78 [1981]	8.69 [221]
855	88 [2235]	28.06 [713]	78 [1981]	4.56 [116]
856	102 [2591]	32.19 [818]	92 [2337]	8.69 [221]
857	102 [2591]	36.31 [922]	92 [2337]	4.56 [116]
858	117 [2972]	40.44 [1027]	107 [2718]	8.69 [221]
859	117 [2972]	44.56 [1132]	107 [2718]	4.56 [116]

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

FRAME	PKG. LESS MOTOR	BARE UNIT	WK2
851	1320 [599]	790 [358]	11 [0.45]
852	1630 [739]	1065 [483]	21 [0.90]
853	1945 [882]	1340 [608]	32 [1.35]
854	2295 [1041]	1615 [733]	43 [1.80]
855	2570 [1166]	1890 [857]	54 [2.25]
856	3025 [1372]	2165 [982]	64 [2.70]
857	3300 [1497]	2440 [1107]	75 [3.15]
858	3680 [1669]	2715 [1232]	85 [3.59]
859	3955 [1794]	2990 [1356]	97 [4.05]

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

