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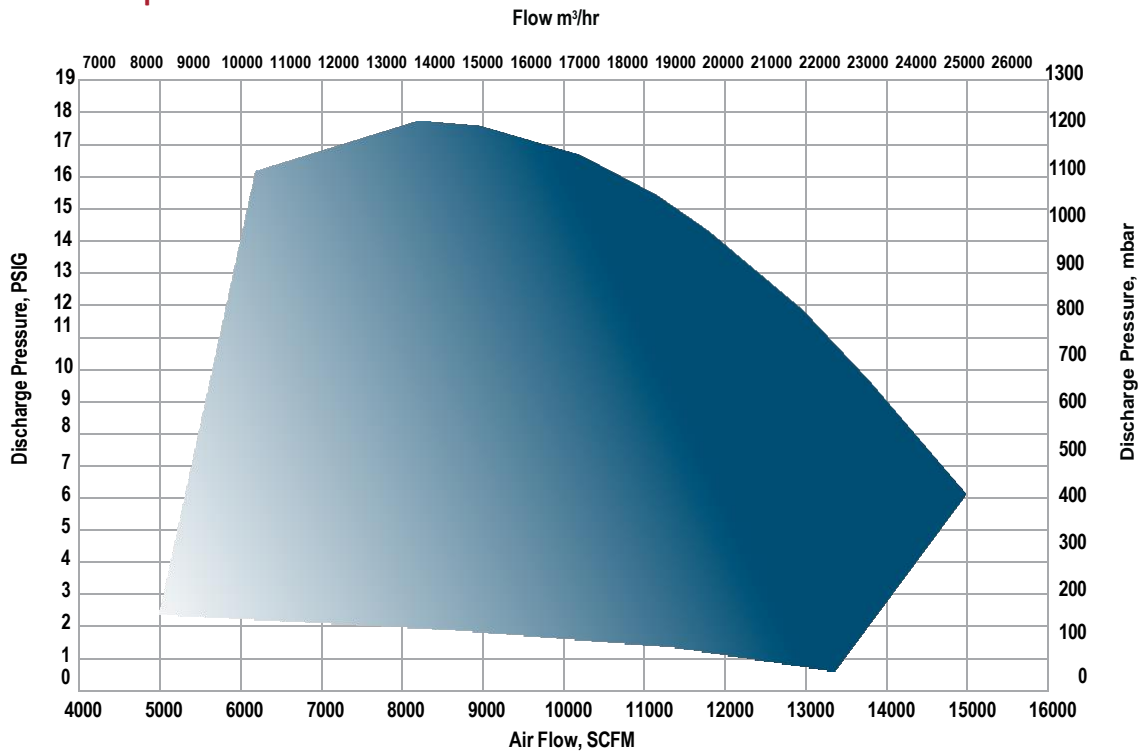
Multistage Centrifugal Blower 450 Series

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

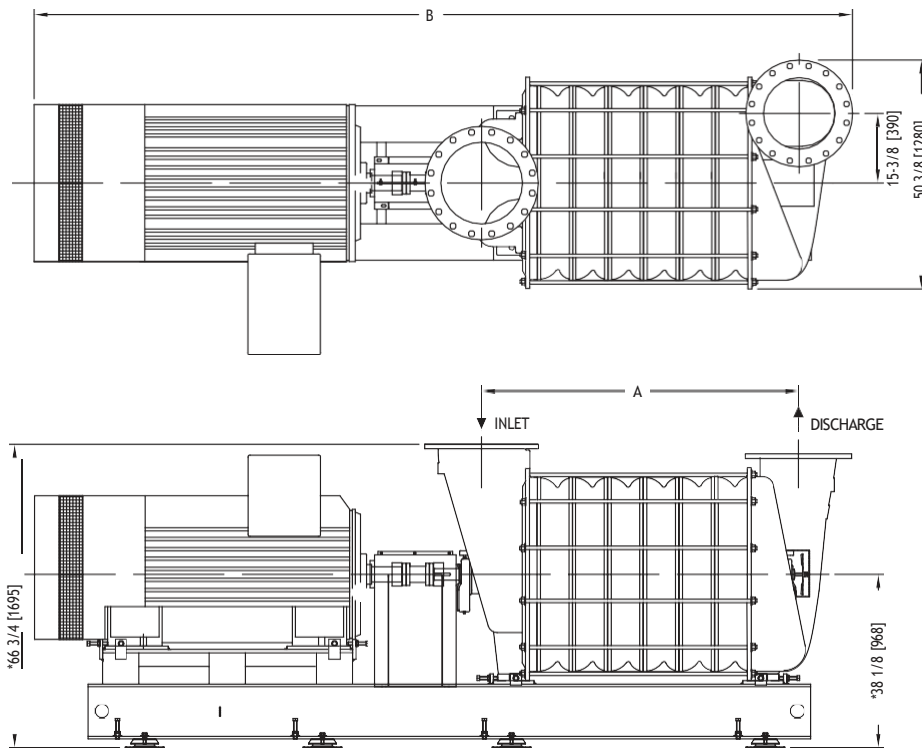
- Number of stages: 1 through 8
- Inlet connection: 18" (457 mm), Flange ANSI 125# drilling
- Outlet connection: 16" (406 mm), Flange ANSI 125# drilling
- Operating speed: up to 4300 RPM
- Shaft seals: Carbon rings
- Bearings: Long life, balls, single row, AFBMA B-10 std
- Lubrication: Oil
- Max casing pressure: 25 PSIG (1.7 bar)
- Impeller diameter: 28" (711.2 mm)
- Impeller tip speed: 436 FPS (132.7 m/s) at 3570 RPM
- Drive: Direct or gear increaser
- Shaft end: 2 1/2" (63.5 mm) / square key 1/2" (13 mm)
- Rotor balance: Each impeller & complete rotating assemblies are dynamically balanced as per ISO G2.5
- Casing drainage: 1/4" NPT (heads & sections)
- Cooling: Fan (if needed)
- Balance piston: If needed
- Jacking bolts: Standard for motor and blower alignment
- Machine mounting pads: Standard for blower and motor
- Impeller eye seal: Radial labyrinth type for improved efficiency

Performance Air Map



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

General Arrangement



Material Standard

- Casing ASTM A48 Class 30B Gray Cast Iron - HT200 equivalent
- Bearing housing: Cast Iron ASTM A48 class 30B
- Tie rods: High strength carbon steel ASTM A193-B7
- Section seals (O-rings): Fluorocarbon
- Shaft: Carbon steel AISI 1045 (Std) or Stainless (Option)
- Impellers: Cast Aluminum
- Baffle rings: Stainless steel 304
- Base: Structural carbon steel

Dimensional Data - inches [millimeters]

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

MODEL	A	B	ROTOR WK ² lb. ft ² (kg. m ²)	WEIGHT (Blower only)	
	INCH (mm)	INCH (mm)		lb	kg
450.02	30.8 (782)	Consult factory	72 (3.408)	2650	1205
450.03	38.6 (981)		85 (4.027)	3400	1545
450.04	46.5 (1180)		115 (5.421)	4150	1886
450.05	54.3 (1379)		145 (6.815)	4900	2227
450.06	62.2 (1579)		171 (8.055)	5650	2568
450.07	70 (1778)		200 (9.449)	6400	2909
450.08	77.8 (1977)		230 (10.84)	7150	3250

Product Notes

1. Information is approximate, subject to change without notice, and not for construction use unless certified
 2. Position shown is standard inlet & outlet orientation
 3. Performances noted are typical and not job specific
 4. Consult authorized sales representative for job specific blower or exhauster performance sizing
 5. Factory ASME PTC-10 test offered for performance verification
 6. For components that exceed 4,000 lb., machined pads are used. Height of the components on the base frame increase by 0.88 inches due to the use of machined pads
- * The package height might change slightly due to the vibration isolator selection.



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