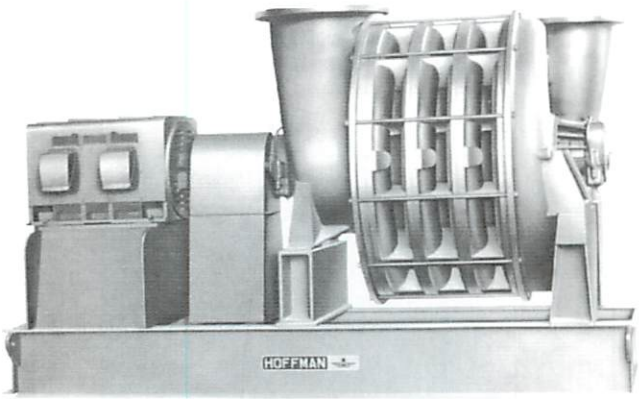
HOFFMAN®
AIR & FILTRATION SYSTEMS
ISO 9001 REGISTERED

791 SPECIFICATIONS



TECHNICAL DATA

Number of stages: 1 through 5 (6 for 50 Hz).
Inlet connection: 24" (610mm) flange, ANSI 125# drilling.
Outlet connection: 18" (457mm) or 20" (508mm) flange, ANSI 125# drilling.
Operating speed: 3570 RPM.
Seals (air): Two carbon rings each end.
Seals (gas): Four carbon rings each end with inert gas injection taps.
Bearings: Ball, 10 year minimum life per AFBMA L_{10} standards.
Lubrication: Dual reservoir oil system.
Impeller diameter: 34" (864mm).
Impeller tip speed: 530 FPS (135m/sec).
First critical speed: 4330 RPM (5 stage).
Direct drive: Yes, also available for gear drive.
Vibration tolerance: 0.28"/sec (7.1mm/sec).
Shaft end: 3-5/8" (92mm) diameter, drive through inlet end standard.
Balance piston: Supplied on 3 stage and above units.
Rotor balance: Impellers are statically balanced individually. Complete rotating assemblies are dynamically balanced.
Maximum casing pressure: 25 PSIG.

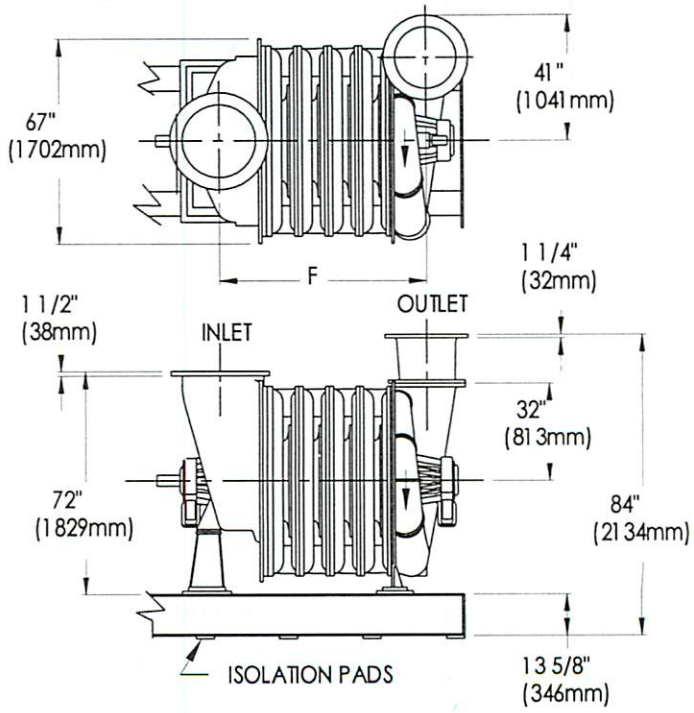
DIMENSIONS

MODEL	F Inches (mm)	WEIGHT LBS	WEIGHT KG	ROTOR WK² (lb. ft.²)
79101B	26-3/4" (680)	10580	4799	74
79102B	36-13/16" (935)	12680	5752	126
79103B	46-7/8" (1191)	14830	6727	179
79104B	56-15/16" (1446)	17280	7838	232
79105B	67" (1702)	18880	8564	284

Information is approximate, subject to change, and not to be used for construction purposes.

MATERIALS OF CONSTRUCTION

Casing: Heads, Sections and Bearing Housing: Cast Iron ASTM A48, Class 30.
Tie rods: 7/8" (22mm) diameter cold drawn steel.
Joint sealing compound: RTV silicone.
Shaft: Carbon steel, AISI 4150 (stainless steel available).
Impellers: Fabricated aluminum (cast hub). Fabricated stainless steel or other alloy construction and special coatings available.
Base: Structural steel.
Motor pedestal: Welded steel plate.
Finish: Blue enamel over rust inhibitive primer.
Base pads: Korfund Elasto-rib (or equal).
Interstage baffles: AISI 300 Series Stainless Steel.



BTR Environmental

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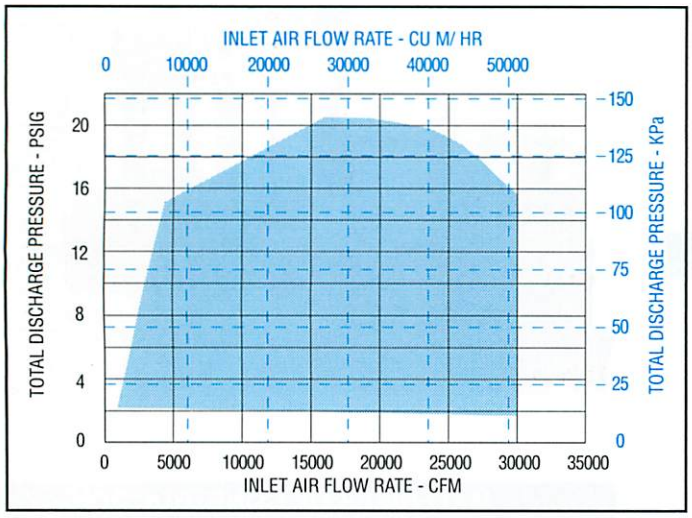
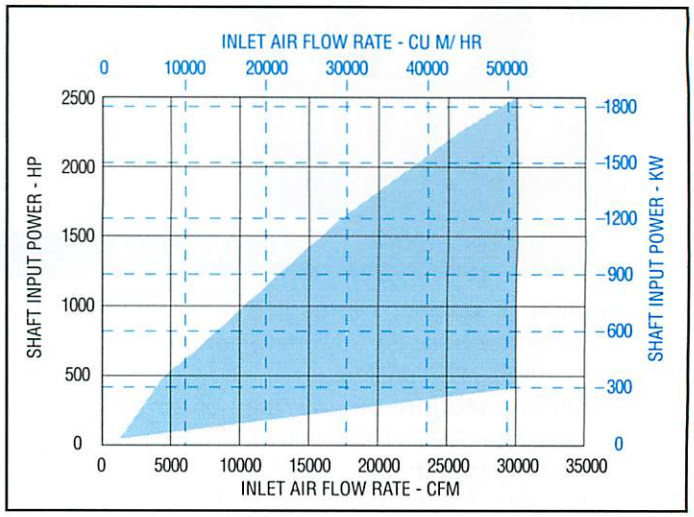
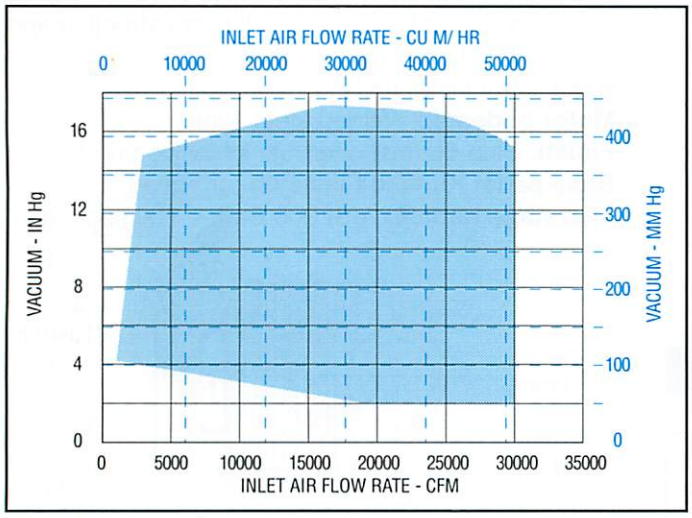
APPROXIMATE BLOWER PERFORMANCE

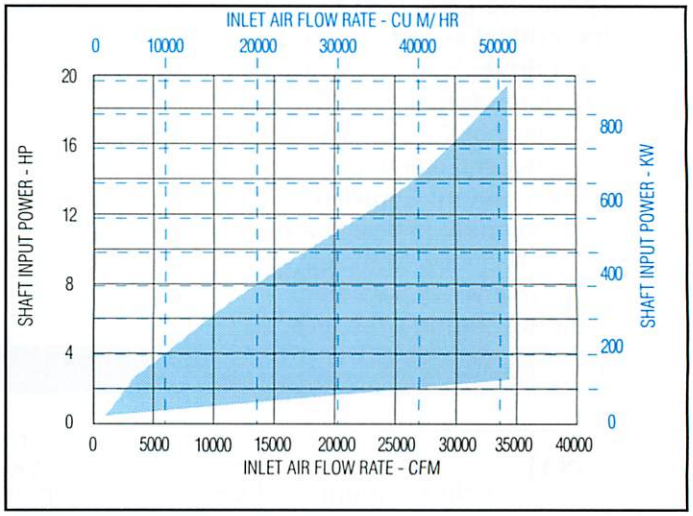




Inlet conditions: 14.7 PSIA (101.4 KPa), 68˚F (20˚C), 36% RH. Speed: 3570 RPM.

APPROXIMATE EXHAUSTER PERFORMANCE





Atmospheric conditions: 29.9" Hg (760 mm Hg), 68˚F (20˚C), 36% RH. Speed: 3570 RPM.

HOFFMAN®

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