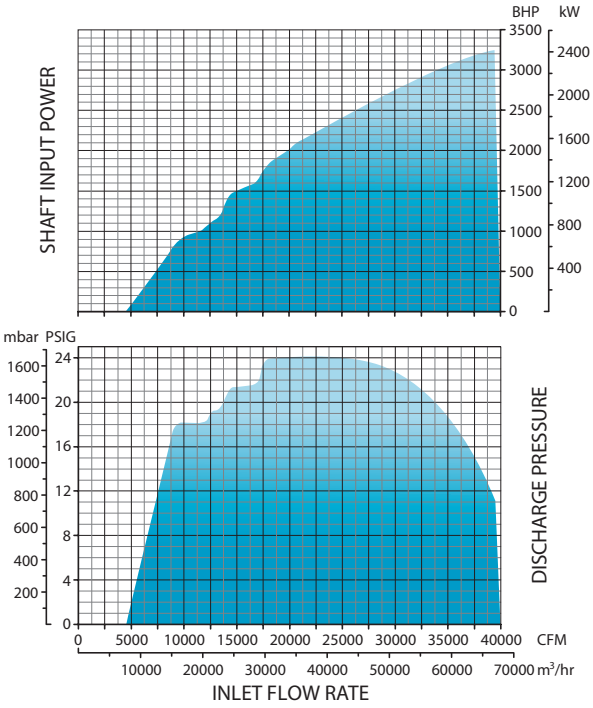
ZM 246

Atlas Copco

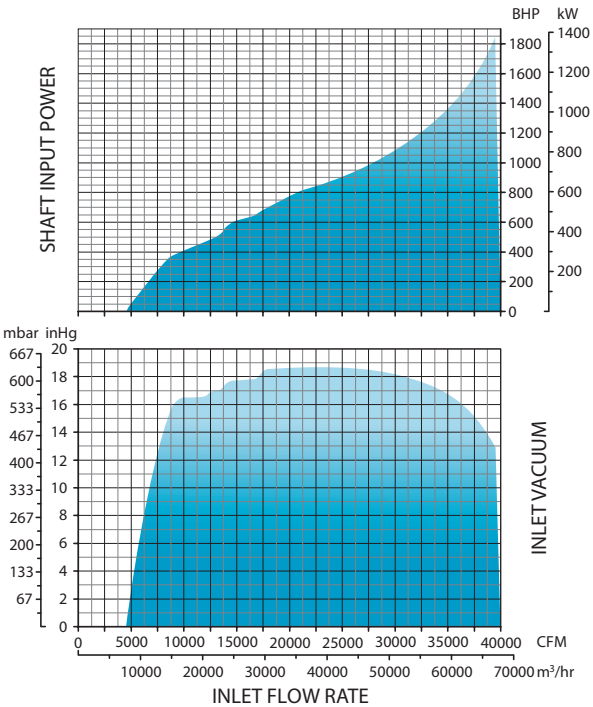
MULTISTAGE CENTRIFUGAL BLOWERS

General Performance

ZM 246 Blower



ZM 246 Exhauster



Specifications Standard

Technical Data

Number of Stages	1 to 5 (60 Hz), 1 to 6 (50 Hz)
Inlet Connection	30" flange, ASA 125# / ANSI 150# drilling Optional DIN 800 adapter flange
Outlet Connection	24" flange, ASA 125# / ANSI 150# drilling Optional DIN 600 adapter flange
Operating Speed	Fixed speed 3550 RPM (60 Hz), 2960 RPM (50 Hz) Variable speed option available
Casing Pressure	25 PSIG (1.7 bar)
Seals (air)	Labyrinth type
Seals (gas)	OPTi Seal/ Carbon ring type/ Custom available
Bearings	Ball, 10-year minimum life per AFBMA L_{10} standard
Lubrication	Oil
Impeller Diameter	37.00 in (939.8 mm)
Impeller Tip Speed	576 ft/s (176 m/s) @ 3550 RPM
First Critical Speed	4356 RPM (6-stage)
Drive Type	Direct coupled, Inlet driven (standard) or Outlet driven
Shaft End	3.625 in (92.08 mm) diameter at coupling
Vibration Tolerance	.25 in/s (6.4 mm/s) ISO overall specification, 1.25 mils (0.03 mm) peak to peak
Rotor Balance	Military standard 167-1. Individual impellers and rotating assembly dynamically balanced

Materials of Construction

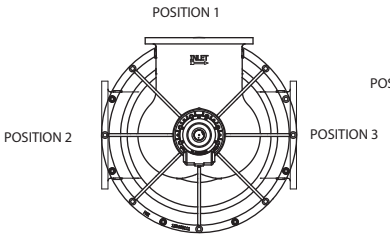
Casing	Cast iron ASTM A48 grade 25/30
Bearing Caps & Housings	Cast iron ASTM A48 grade 25/30
Oil Reservoir	Cast iron ASTM A48 grade 25/30
Shaft	Carbon steel AISI 4140 (stainless steel available)
Impellers	Fabricated aluminum ANSI AA6061 with cast Al AA356 hub (stainless steel/custom alloys available)
Seals (air)	Cast Iron ASTM A48 grade 30 with lead babbitt insert Zinc-Alloy, ZA-12
Seals (gas)	Stainless Steel with Viton Elastomer, isostatically molded high density fine grain electro-graphite
Interstage Baffle Rings	Stainless steel ASTM A240 304
Tie Rods	1.25 in (31.75 mm) diameter, high strength steel ASTM A193-B7/B7M available
Blower Base	Welded structural steel ASTM A36 ASME/AWS D1.1
Motor Pedestal	Welded steel plate ASTM A36
Joint Sealing Compound	RTV silicone
Base Isolation Pads	Neoprene rubber
Finish	Standard 2 part epoxy, 7011 Atlas Copco Dark Gray

Curves are based on atmospheric conditions of 1 Atm, 68F/20C, 36% RH, and 3550 rpm

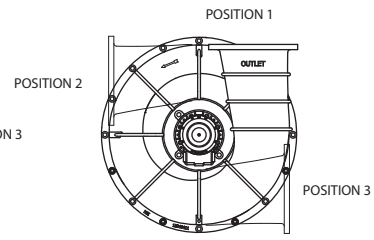
ZM 246 MULTISTAGE CENTRIFUGAL BLOWER

Inlet and Outlet Orientation Options

The orientation of the inlet and outlet is selectable from any of three different positions, as viewed when facing the exterior of the part:



INLET POSITIONS



OUTLET POSITIONS

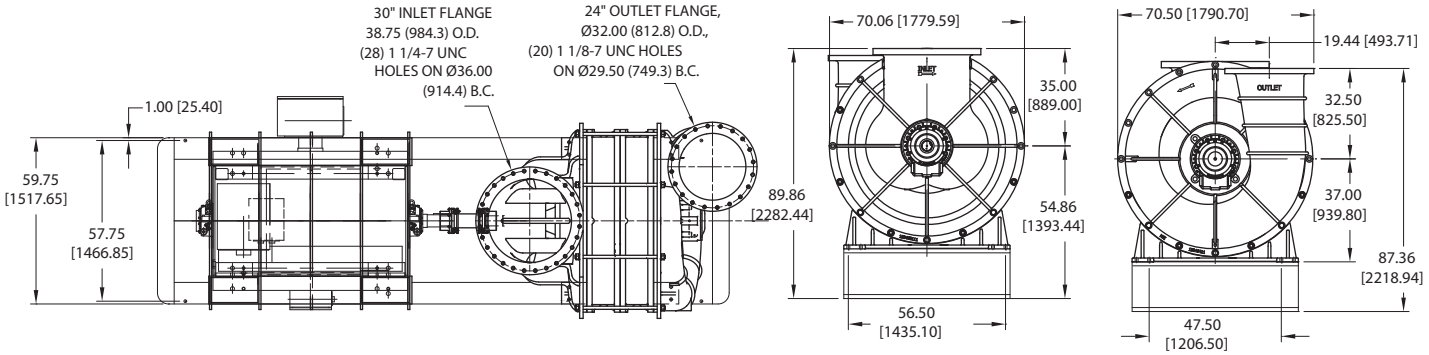
*Standard configuration.

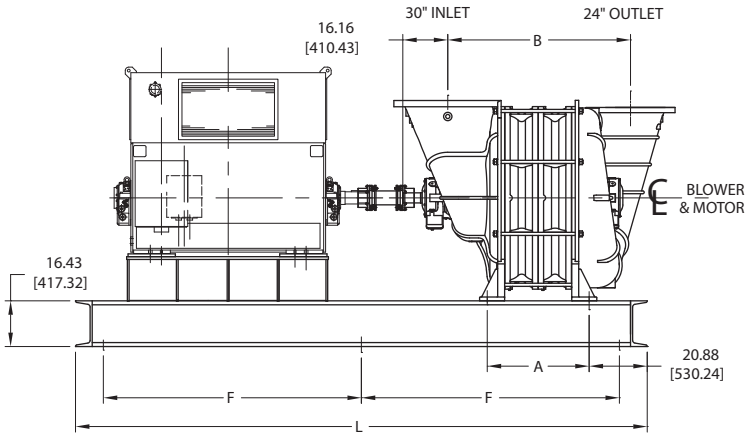
Weight and Inertia

Model	Weight* lb	Weight* kg	Wk^2 lb-ft^2	Wk^2 kg-m^2
24601	6,288	2,852	161	6.79
24602	9,014	4,089	255	10.73
24603	11,740	5,325	348	14.68
24604	14,466	6,562	442	18.63
24605	17,192	7,798	536	22.58
24606	19,918	9,035	629	26.53

*Approximate weight for blower only.

General Arrangement





Model	A	B	F†	L†
24601	12.63 (321)	42.00 (1067)	Dimensions F-L depend on motor and coupling type selected	
24602	24.63 (626)	54.00 (1372)		
24603	36.63 (930)	66.00 (1676)		
24604	48.63 (1235)	78.00 (1981)		
24605	60.63 (1540)	90.00 (2286)		
24606	72.63 (2286)	102.00 (2591)		

Dimensions*

*Dimensions in inches and (millimeters) and are approximate. Do not use for construction purposes.

†Dependent on motor and coupling type selected.

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