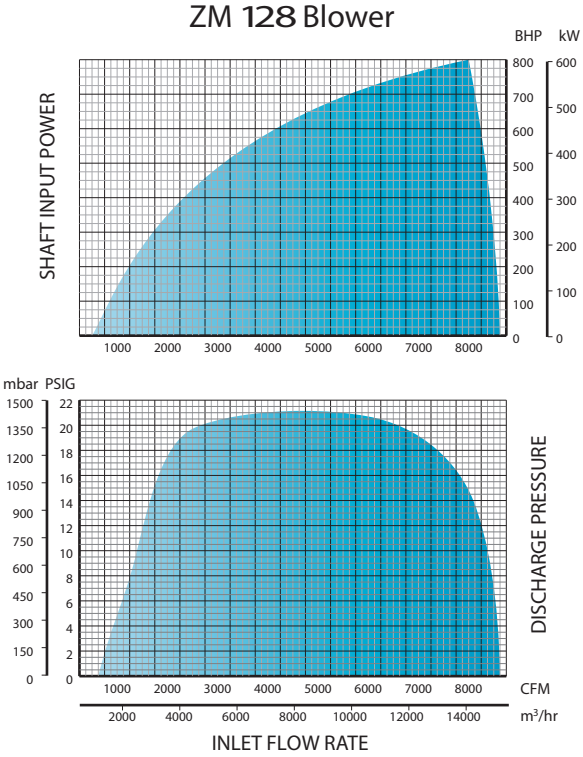
ZM 128

Atlas Copco

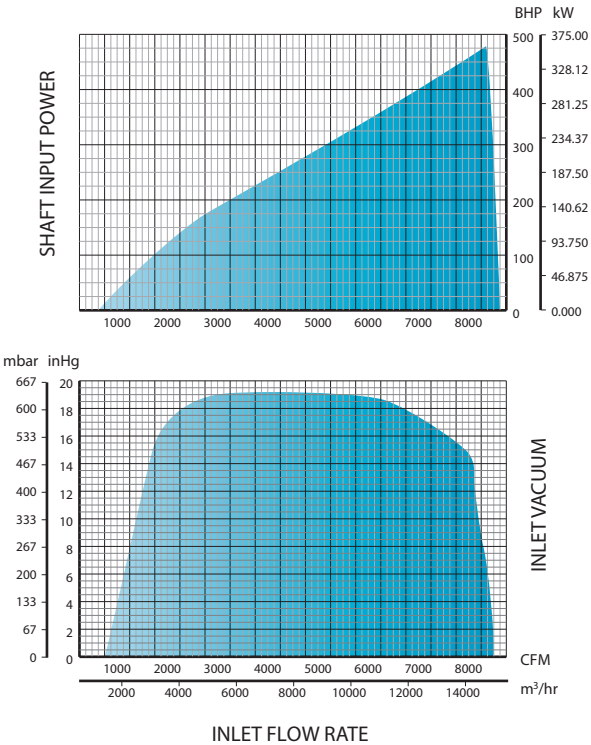
MULTISTAGE CENTRIFUGAL BLOWERS

General Performance

ZM 128 Blower



ZM 128 Exhauster



Specifications Standard

Technical Data

Number of Stages	1 to 8 (60 Hz), 1 to 9 (50 Hz)
Inlet Connection	16″ flange, ASA 125#/ANSI 150# Drilling Optional DIN 400 adapter flange
Outlet Connection	12″ (304.8 mm) flange, ASA 125# / ANSI 150# drilling Optional DIN 300 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/ Stuffing box type/ Carbon ring type/ Custom Available
Bearings	Ball, 10-year minimum life per AFBMA L_{10} standard
Lubrication	Oil
Impeller Diameter	25/26 in (635/660.4 mm)
Impeller Tip Speed	387 ft/s (118 m/s) @ 3550 RPM
First Critical Speed	4552 RPM (8-stage at 60 Hz)
Drive Type	Direct coupled, Inlet driven (standard) or Outlet driven
Shaft End	2.375 in (60.32 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

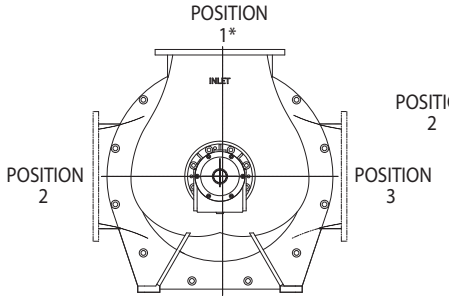
Casing	Cast iron ASTM A48 grade 25/30
Bearing Caps & Housings	Cast iron ASTM A48 grade 25/30
Oil Reservoir	Cast iron ASTM A48 grade 25/30
Shaft	Carbon steel AISI 4140 (stainless steel available)
Impellers	Cast aluminum ANSI AA319/356 (stainless steel/custom alloys available)
Seals (air)	Cast Iron ASTM 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	.75 in (19.1 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. Specifications can change without notice.

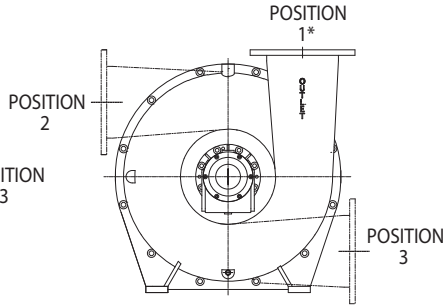
ZM128 MULTISTAGE CENTRIFUGAL BLOWER

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.

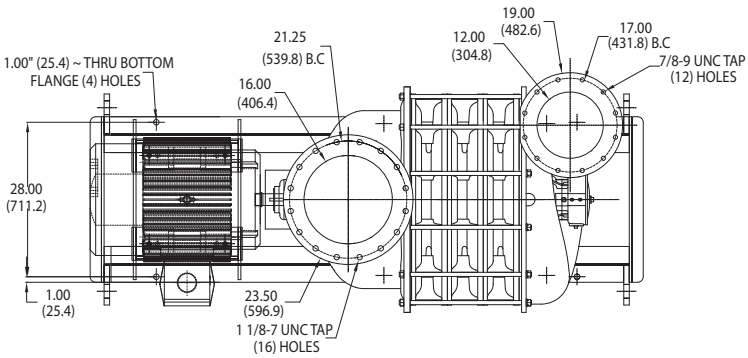
Weight and Inertia

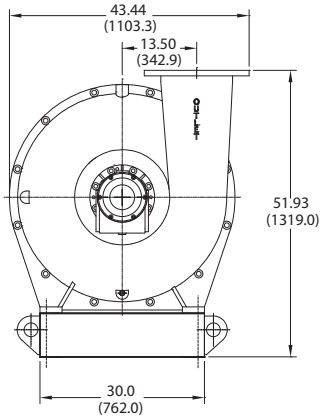
Model	Weight* lb	Weight* kg	$Wk^{2\dagger}$ $lb\text{-}ft^2$	$Wk^{2\dagger}$ $kg\text{-}m^2$
12801	2340	1061	7	0.29
12802	2890	1311	13	0.55
12803	3540	1606	19	0.80
12804	4090	1855	25	1.05
12805	4640	2105	31	1.31
12806	5290	2400	37	1.56
12807	5690	2581	43	1.81
12808	6140	2785	49	2.06
12809	6540	2966	54	2.28

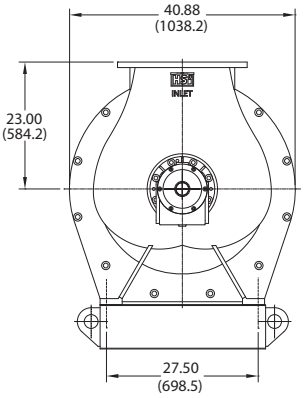
*Approximate weight for blower only.

† Inertia based on fabricated impellers.

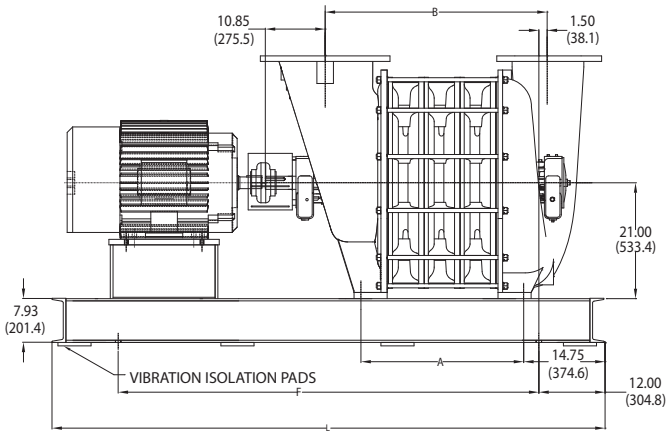
General Arrangement







16″ INLET 12″ OUTLET



Model	A		B		$F^{\dagger}$		$L^{\dagger}$	
12801	10.00	(245)	20.86	(530)	62	(1575)	86	(2184)
12802	16.50	(419)	27.36	(695)	62	(1575)	86	(2184)
12803	23.00	(584)	33.86	(860)	75	(1905)	99	(2515)
12804	29.50	(749)	40.36	(1025)	91	(2311)	115	(2921)
12805	36.00	(914)	46.86	(1190)	91	(2311)	115	(2921)
12806	42.50	(1080)	53.36	(1355)	106	(2692)	130	(3302)
12807	49.00	(1245)	59.86	(1520)	106	(2692)	130	(3302)
12808	55.50	(1410)	66.36	(1686)	120	(3048)	144	(3658)
12809	62.00	(1575)	72.86	(1851)	129	(3277)	153	(3886)

Dimensions*

*Dimensions are shown in inches and millimeters and are approximate.
Dimensions vary with motor size
Do not use for construction purposes

†Dimension may vary depending on motor frame size.

Atlas Copco

www.atlascopco.us
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