Spencer.

Power Mizer® Series 5000 Cast Multistage Centrifugal Blowers and Exhausters

TECHNICAL DATA SHEET



Rugged, energy efficient multistage blowers and exhausters

The Power Mizer[®] Series 5000 employs proven Spencer technology to meet heavy-duty air and gas handling requirements at peak energy efficiency.

Spencer's multistage centrifugal blowers and exhausters have a long track record of performance. The product line can be paired with Spencer's variable frequency drives (VFD), operator interface, a variety of control system options, and blower protection devices for optimum energy efficiency. It is ideal for maximum uptime in demanding environments.

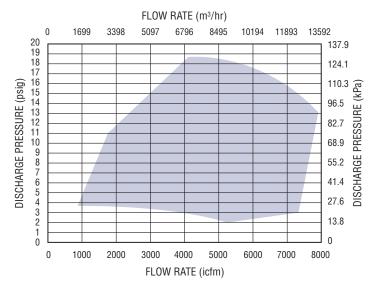
Applications include petrochemical refineries/sulfur recovery; mining/ flotation; chemical/combustion air or process air; and municipal and industrial wastewater treatment/aeration.

Spencer's specially engineered aerodynamic components mean smoother, more efficient airflow from blower inlet to discharge. The Power Mizer Series 5000 is a cost-effective solution providing long-term power savings.

Performance Range

Performance at Standard Density

(Air at 68°F, Relative Humidity of 36%, Inlet Pressure 14.7 psia) 3550 rpm



Product Features

Technical Data

Number of stages: 2-8

Operating speed: 3550 rpm

Casing design pressure: 25 psig

Inlet connection: 16" (406mm) flange 125lb/150lb ANSI drilled and tapped

Outlet connection: 14" (356mm) flange 125lb/150lb ANSI drilled and tapped

Seals: labyrinth (single and double carbon ring available) Bearings: 7312/6312 ball, minimum L10 bearing life of ten years per AFBMA

Lubrication: oil

Drains: 3/8 NPT with plugs

Impeller diameter: 25.5" (648mm)

Impeller tip speed: 395 ft/sec (120 m/sec)

First critical speed: 4286 rpm for maximum stages

Vibration: 0.23 in/sec

Accessories

Full line of standard and custom electrical control panels for packaged systems – UL and CUL Listed available

Dissolved oxygen control system

Flexible sleeve connectors and expansion joints

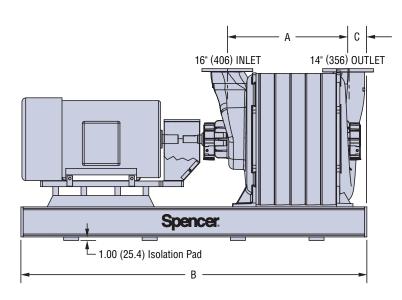
Filters and silencers

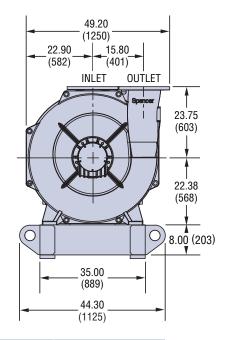
Butterfly valves and check valves

Note: Specifications may vary and change without notice.

Materials of Construction

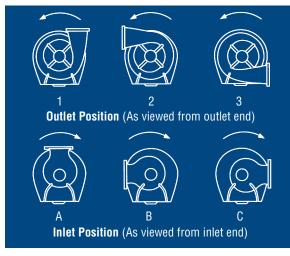
- Casing and heads: cast iron Class 30
- Tie rods: AISI 1035 carbon steel
- Interstage sealing: silicone rubber
- Shaft: AISI 1144 carbon steel
- Impellers: ASTM A356.0 cast aluminum
- Base: A36 structural steel
- Finish: epoxy primer with urethane topcoat
- Isolation pads: synthetic rubber and cork





Model Number	No. of Stages	Dimensions						Average Weight	
		А		В		С		Blower and Base (without motor)	
		inches	mm	inches	mm	inches	mm	lb	kg
C52	2	27.97	710	94.25	2394	7.32	186	3852	1747
C53	3	34.16	868	94.25	2394	1.14	29	4518	2049
C54	4	40.34	1025	114	2896	13.5	343	5344	2424
C55	5	46.53	1182	114	2896	7.3	185	6010	2726
C56	6	52.71	1339	114	2896	1.14	29	6676	3028
C57	7	58.89	1496	126	3200	7.3	185	7542	3421
C58	8	65.07	1653	126	3200	1.14	29	8208	3723

Direction of Rotation



Spencer may make improvements and dimensional changes to equipment designs based on market trends and requirements.

For product selection assistance, please email marketing@spencer-air.com or visit our website at www.spencerturbine.com to locate the Spencer representative in your area.

Power Mizer® is a registered trademark of The Spencer Turbine Company.

Blowers & Vacuum Systems with an Engineering Edge

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