

### TECHNICAL DATA SHEET



#### Rugged, energy efficient multistage blowers and exhausters

The Power Mizer® Series 3500 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.

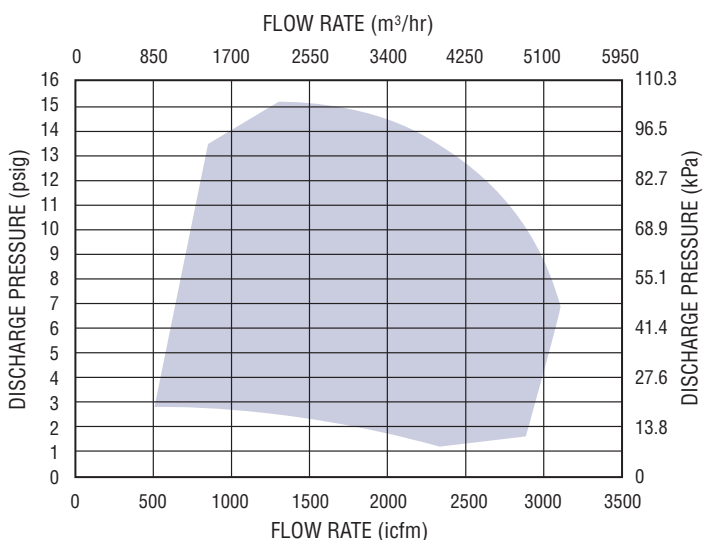
Applications include petrochemical refineries/sulfur recovery; mining/flotation; chemical/combustion air or process air; and municipal and industrial wastewater treatment/aeration.

Spencer's specially engineered aerodynamic components mean smoother, more efficient airflow from blower inlet to discharge. The Power Mizer Series 3500 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: 2-9
Operating speed: 3550 rpm
Casing design pressure: 25 psig
Inlet connection: 8" (203mm) flange 125lb/150lb ANSI drilled and tapped
Outlet connection: 8" (203mm) flange 125lb/150lb ANSI drilled and tapped
Seals: labyrinth (single carbon ring available)
Bearings: 6312/6312 ball, minimum L10 bearing life of ten years per AFBMA
Lubrication: grease (standard) or oil (optional)
Drains: 3/8 NPT with plugs
Impeller diameter: 24" (610mm)
Impeller tip speed: 372 ft/sec (113 m/sec)
First critical speed: 4150 rpm for maximum stages
Vibration: 0.23 in/sec

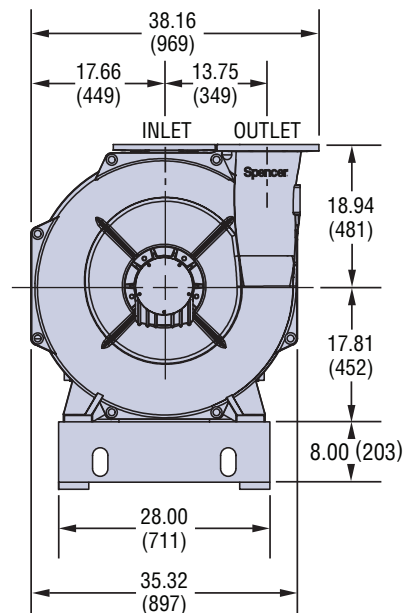
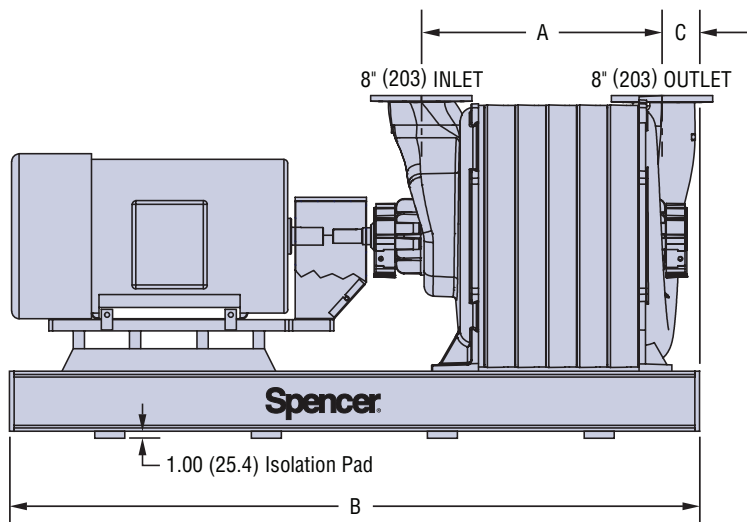
##### Accessories

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.

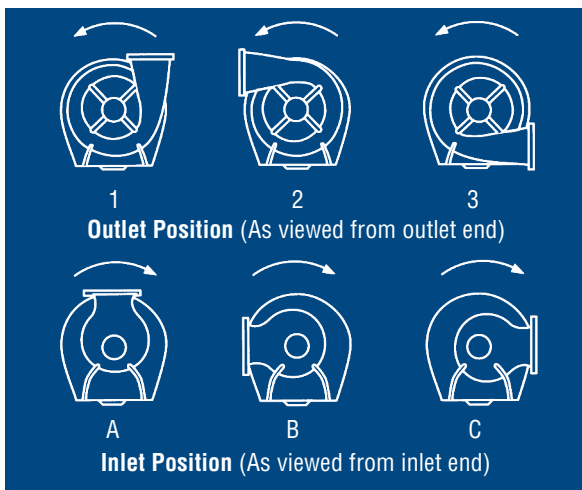
#### Materials of Construction

- Casing and heads: cast iron Class 30
- Tie rods: AISI 1035 carbon steel
- Interstage sealing: silicone rubber
- Shaft: AISI 1144 carbon steel
- Impellers: ASTM A319 cast aluminum
- Base: A36 structural steel
- Finish: epoxy primer with urethane topcoat
- Isolation pads: synthetic rubber



Model Number	No. of Stages	Dimensions						Average Weight	
		A		B		C		Blower and Base (without motor)	
		inches	mm	inches	mm	inches	mm	lb	kg
CS32	2	15.69	399	72	1829	9.17	233	1980	898
CS33	3	19.81	503	72	1829	5.07	129	2319	1052
CS34	4	23.94	608	92	2337	13.27	337	2823	1281
CS35	5	28.06	713	92	2337	9.17	233	3162	1434
CS36	6	32.19	818	92	2337	5.07	129	3501	1588
CS37	7	36.31	922	112	2845	13.27	337	4019	1823
CS38	8	40.44	1027	112	2845	9.17	233	4358	1977
CS39	9	44.56	1132	112	2845	5.07	129	4697	2131

**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](mailto:marketing@spencer-air.com) or visit our website at [www.spencerturbine.com](http://www.spencerturbine.com) to locate the Spencer representative in your area.**

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

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