

TECHNICAL DATA SHEET



Rugged, energy efficient multistage blowers and exhausters

The Power Mizer® Series 4000 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.

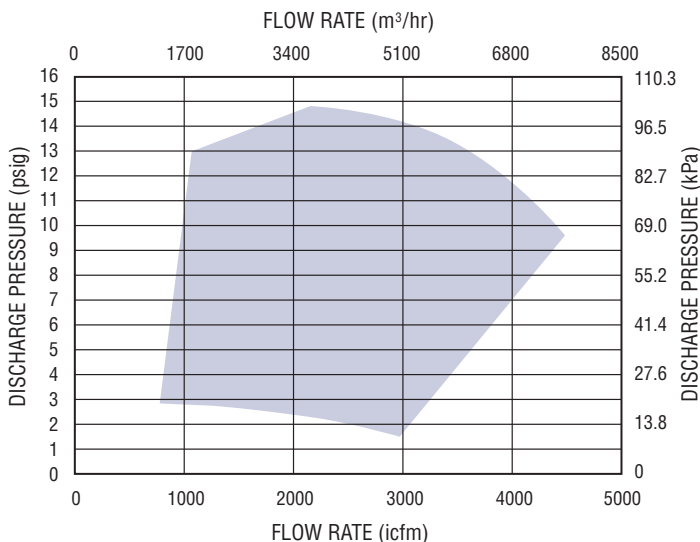
Applications include petrochemical refineries/sulfur recovery; mining/flotation; chemical/combustion air or process air; and municipal and industrial wastewater treatment/aeration.

Spencer's specially engineered aerodynamic components mean smoother, more efficient airflow from blower inlet to discharge. The Power Mizer Series 4000 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: 12" (305mm) flange 125lb/150lb ANSI drilled and tapped |
| Outlet connection: 10" (254mm) flange 125lb/150lb ANSI drilled and tapped |
| Seals: labyrinth (single and double carbon ring available) |
| Bearings: 6310/7310 ball, minimum L10 bearing life of ten years per AFBMA |
| Lubrication: oil (standard) or grease (option) |
| Drains: 3/8 NPT with plugs |
| Impeller diameter: 24" (610mm) |
| Impeller tip speed: 372 ft/sec (113 m/sec) |
| First critical speed: 4266 rpm for maximum stages |
| Vibration: 0.23 in/sec |

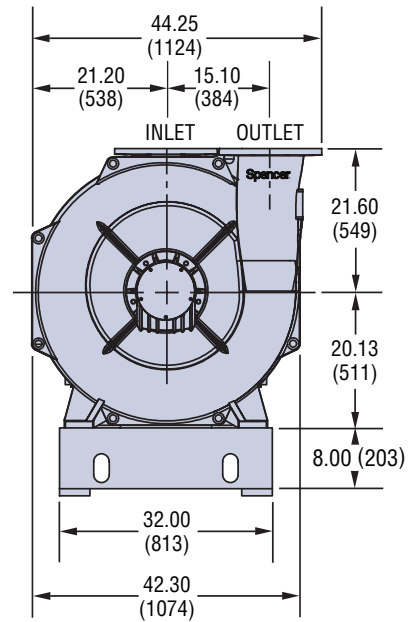
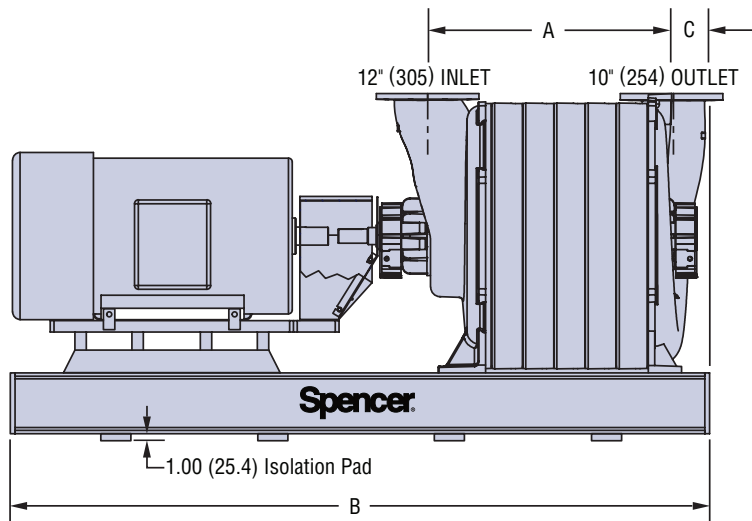
Accessories

| |
|---|
| 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.

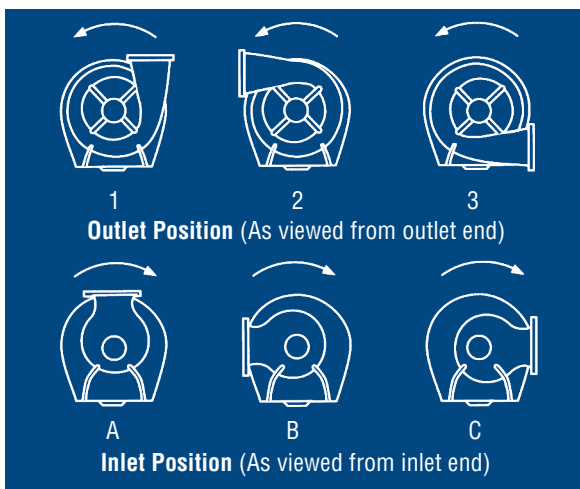
Materials of Construction

- 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 | |
|--------------|---------------|------------|------|--------|------|--------|-----|---------------------------------|------|
| | | A | | B | | C | | Blower and Base (without motor) | |
| | | inches | mm | inches | mm | inches | mm | lb | kg |
| C42 | 2 | 20.88 | 530 | 82 | 2083 | 11.45 | 291 | 2630 | 1194 |
| C43 | 3 | 25.13 | 638 | 82 | 2083 | 7.20 | 183 | 3058 | 1389 |
| C44 | 4 | 29.38 | 746 | 82 | 2083 | 2.95 | 75 | 3487 | 1584 |
| C45 | 5 | 33.63 | 854 | 99 | 2514 | 7.20 | 183 | 4115 | 1868 |
| C46 | 6 | 37.88 | 962 | 99 | 2514 | 2.95 | 75 | 4544 | 2063 |
| C47 | 7 | 42.13 | 1070 | 108 | 2743 | 7.20 | 183 | 4997 | 2269 |
| C48 | 8 | 46.38 | 1178 | 108 | 2743 | 2.95 | 75 | 5425 | 2463 |

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.

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