

### TECHNICAL DATA SHEET



Shown with optional Belly Wrap™ and API machine base.

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

The Power Mizer® Series 8000 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.

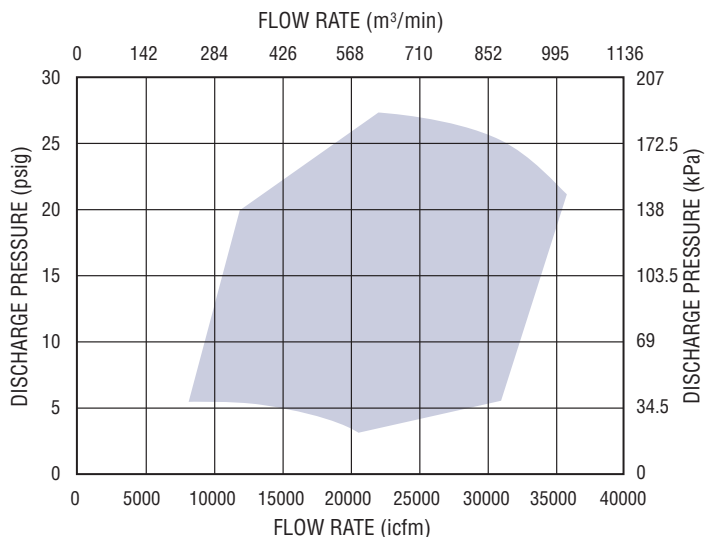
Applications include petrochemical refineries/sulfur recovery; mining/flotation; chemical/combustion air or process air; and municipal and industrial wastewater treatment/aeration.

Spencer's specially engineered aerodynamic components mean smoother, more efficient airflow from blower inlet to discharge. The Power Mizer Series 8000 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) 3570 rpm



#### Product Features

##### Technical Data

|   |
|---|
| Number of stages: 1-6 (60 Hz)   |
| Operating speed: 3570 rpm   |
| Casing design pressure: 30 psig   |
| Inlet connection: 24" (610mm) flange 125lb/150lb ANSI drilled and tapped  |
| Outlet connection: 20" (508mm) flange 125lb/150lb ANSI drilled and tapped |
| Seals: labyrinth (carbon ring available)                                  |
| Bearings: 6320/6320 ball, minimum L10 bearing life of ten years per AFBMA |
| Lubrication: oil  |
| Drains: 1/2 NPT with plugs  |
| Impeller diameter: 35"  |
| Impeller tip speed: 545 ft/sec  |
| First critical speed: 4350 rpm for maximum stages                         |
| Vibration: 0.23 in/sec  |

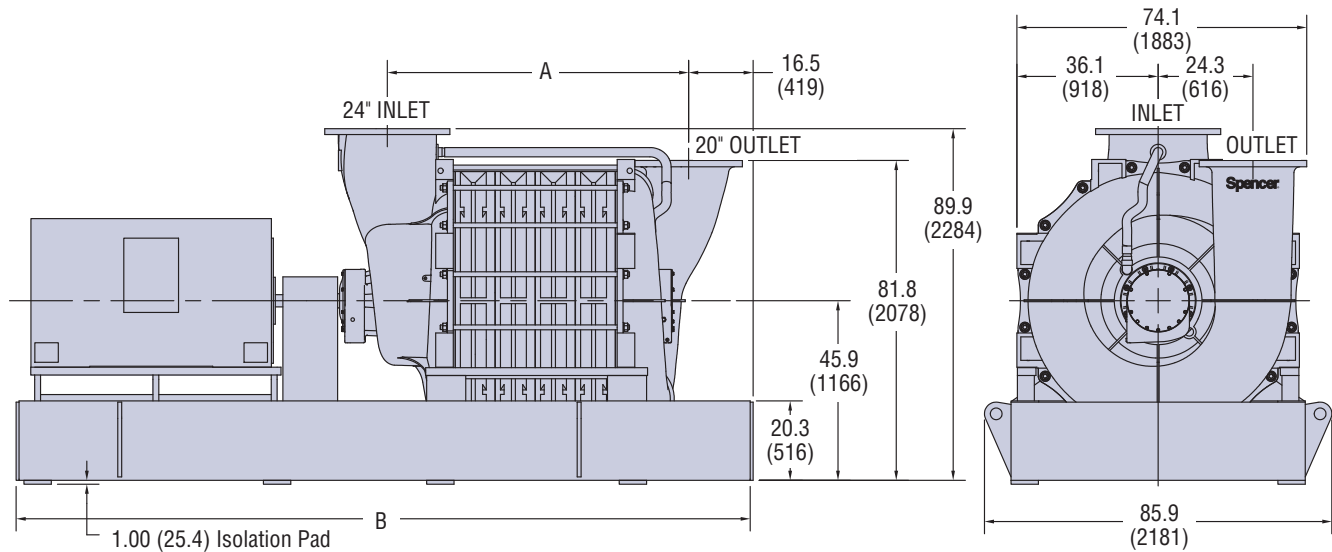
##### Accessories

|   |
|---|
| 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

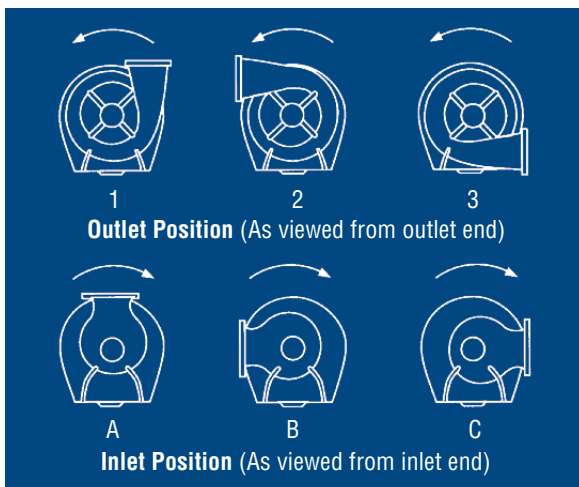
- Casing and heads: cast iron Class 30
- Tie rods: AISI 1035 carbon steel
- Interstage sealing: silicone rubber
- Shaft: AISI 1144 carbon steel
- Impellers: ASTM A356.0-T6 cast aluminum
- Base: A36 structural steel
- Finish: epoxy primer with urethane topcoat
- Isolation pads: synthetic rubber and cork



| Model No. | No. of Stages | Dimensions |      |        |      | Average Weight (without motor) |       |
|-----------|---------------|------------|------|--------|------|--------------------------------|-------|
|           |               | A          |      | B*     |      | lb                             | kg    |
|           |               | inches     | mm   | inches | mm   |                                |       |
| C81       | 1             | 36.1       | 917  | 130    | 3302 | 14500                          | 6577  |
| C82       | 2             | 46.4       | 1177 | 155    | 3937 | 18000                          | 8165  |
| C83       | 3             | 56.6       | 1438 | 171    | 4343 | 21500                          | 9752  |
| C84       | 4             | 66.9       | 1698 | 181    | 4597 | 25000                          | 11340 |
| C85       | 5             | 77.1       | 1958 | 191    | 4851 | 28500                          | 12927 |
| C86       | 6             | 87.4       | 2219 | 201    | 5105 | 32000                          | 14515 |

\*May vary depending on motor size

**Direction of Rotation**



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

**In Australia, for product selection and sales assistance, please contact:**

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