

Power Mizer®

Series 3000

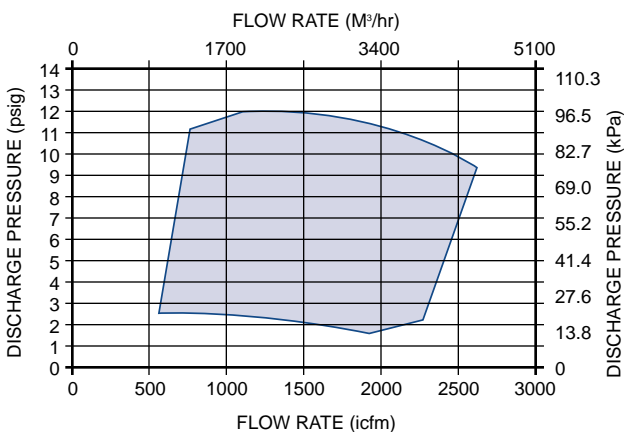
Cast Blowers & Exhausters

Rugged, high efficiency multi-stage blowers for heavy-duty applications

Continuing the more than 100-year tradition of Spencer innovation in air and gas handling equipment, the *Power Mizer* Series 3000 presents a new level of efficiency and performance in multi-stage centrifugal blowers and exhausters. Based on modern engineering concepts and casting technology, these blowers were rigorously tested in the laboratory and in the field to confirm their superior aerodynamic characteristics and reliability. With their rugged cast components, Series 3000 blowers are suitable for the most severe applications from sulphur recovery and wastewater treatment aeration to felt dewatering in the pulp and paper industry. Corrosion resistant coatings and special materials available.

Performance Range Series 3000 Blowers

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



Technical Data

- Number of stages: 2-8
- 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 and double
carbon ring available)
- Bearings: 7309/6309 ball, minimum L10
bearing life of ten years per AFBMA
- Lubrication: oil
- Drains are 1/2 NPT with plugs
- Impeller diameter: 23.5" (597mm)
- Impeller tip speed: 365 ft/sec (120 m/sec)
- First critical speed: 4450 rpm for maximum
number of stages
- Vibration: 1.0 mils maximum peak to peak

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

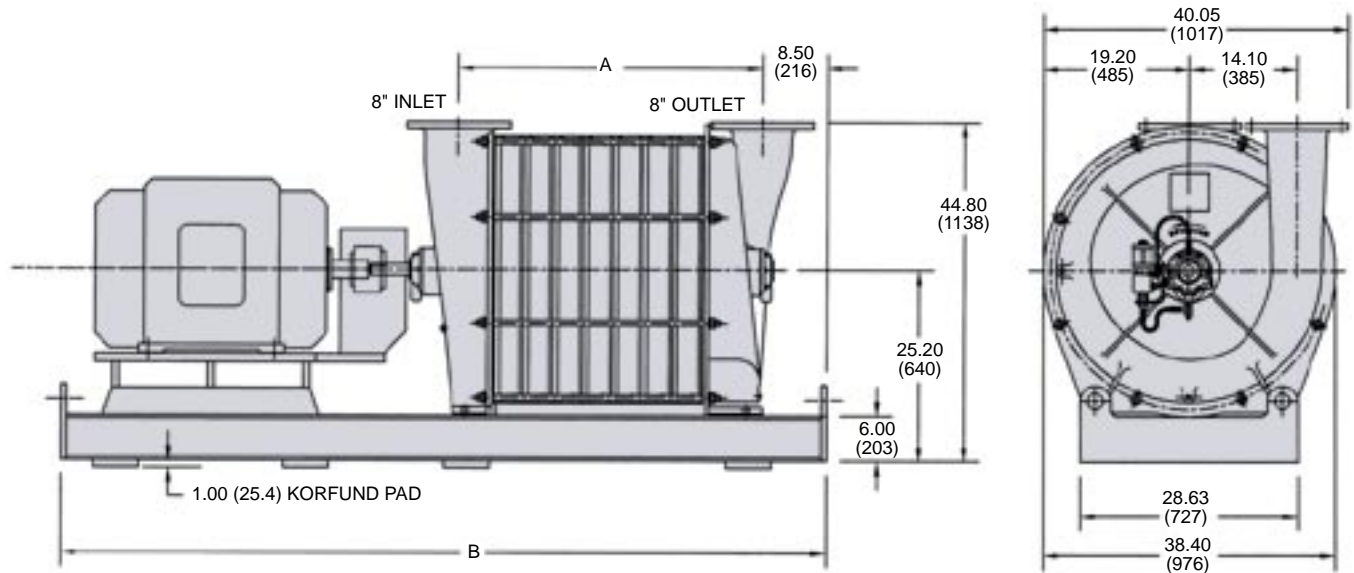
- Casing and heads: cast iron ASTM A48 Class 30
- Tie rods: zinc plated 1035 steel
- Interstage sealing: silicone rubber
- Shaft: AISI 1144 carbon steel
- Impellers: ASTM A356.0 cast aluminum
- Base: A36 structural steel
- Finish: epoxy primer with urethane topcoat
- Base pads: 1" thick cork and synthetic rubber

Series 3000

Dimensions

Inches
(mm)

Dimensions are approximate
and intended for reference only.



| Model No. | No. of Stages | Dimensions | | | | Weight without motor | |
|-----------|---------------|------------|------|--------|------|----------------------|------|
| | | A | | B* | | lb | kg |
| | | inches | mm | inches | mm | | |
| C32 | 2 | 16.47 | 418 | 76 | 1930 | 1917 | 870 |
| C33 | 3 | 20.34 | 517 | 76 | 1930 | 2225 | 1009 |
| C34 | 4 | 24.22 | 615 | 83 | 2108 | 2596 | 1178 |
| C35 | 5 | 28.09 | 713 | 95 | 2413 | 2928 | 1328 |
| C36 | 6 | 31.97 | 812 | 95 | 2413 | 3285 | 1490 |
| C37 | 7 | 35.84 | 910 | 111 | 2819 | 3688 | 1673 |
| C38 | 8 | 39.72 | 1009 | 111 | 2819 | 4004 | 1816 |

*May vary depending on motor size

Spencer manufactures and markets a complete line of multi-stage centrifugal blowers and exhausters with cast or fabricated construction. For selection assistance, contact your local Spencer representative or The Spencer Turbine Company.

