Gardner Denver

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LAMSON

LAMSON CENTRIFUGAL BLOWERS, 1 Lamson St., P.O. Box 4857 Syracuse, NY 13221,(315) 433-5500,
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# LAMSON PRODUCT DATA

*CENTRIFUGAL AIR SYSTEMS*

*BLOWER EXHAUSTERS*

# TECHNICAL DATA
# 2000 SERIES

## DESIGN

Air or gas
Number of stages ..... 1–7 (60 Hz), 1–8 (50 Hz)
Inlet or outlet driven ..... Inlet standard
Inlet connection ..... 20" flange, matches 125# ANSI
Outlet connection .. 18" flange, matches 125# ANSI
Operating speed ..... 3,570 RPM (60 Hz)
2,975 RPM (50 Hz)
Maximum casing pressure ..... 25 PSIG (1.72 bar)
Seals (air) ..... Labyrinth, carbon ring available
Seals (gas) ..... Carbon ring type
Bearings ..... Ball, life per AFBMA spec #B-10
Lubrication ..... Oil
Impeller diameter ..... 30.5 (774.7)
Impeller tip speed ..... 28,506 FPM (8,689 m/min)
Direct drive ..... Shaft diameter at coupling
1–2 stage: 2.375 (60.33)
3–5 stage: 2.875 (73.03)
6–8 stage: 3.375 (85.73)
Vibration tolerance ... 1.25 mils measured in vertical plane at top of bearing housing (.032 mm)

| Unit Weights & Inertia Data | | | |
|---|---|---|---|
| | Weight | | |
| Stage | Bare Machine | Base & Motor Pedestal | $WK^2$ |
| 1 | 4,170 (1,891) | Consult Factory | 62 (2.6) |
| 2 | 5,730 (2,599) | | 99 (4.2) |
| 3 | 7,290 (3,307) | | 136 (5.7) |
| 4 | 8,850 (4,014) | | 173 (7.3) |
| 5 | 10,410 (4,722) | | 210 (8.8) |
| 6 | 11,970 (5,430) | | 247 (10.4) |
| 7 | 13,530 (6,137) | | 284 (12.0) |
| 8 | 15,090 (6,845) | | 321 (13.5) |

## CAPACITIES

Blower ..... 5,000–24,000 SCFM, 19.0 PSIG max
8,500–40,800 $Sm^3/H$, 1.31 bar
Exhauster ..... 5,000–24,000 ICFM, 17.0" Hg max
8,500–40,800 $Im^3/H$, 432 mm Hg

## MATERIALS OF CONSTRUCTION

Casing ..... Cast iron ASTM A48 grade 25/30*
Bearing housings ..... Cast iron with bronze insert
Bearing caps & oil reservoirs ..... Cast iron
Tie rods ..... Steel
Carbon ring seals ..... Carbon-graphite rings with steel housing (stainless steel is optional)
Labyrinth seals ..... Cast iron, with babbitt insert
Joint sealing compound ..... RTV-Silicone rubber
Baffle rings ..... Electroless nickel plated steel standard. Special material available
Shaft ..... Hot rolled carbon steel
Impellers ..... Cast aluminum alloy
Base & pedestal ..... Steel

## MISCELLANEOUS

Finish ..... See page 25.10.16
Base pads ... Molded synthetic rubber 0.5 (13) thick; see page 25.23.09

Notes:
1. Dimensions given in inches and (mm). Weights given in lbs and (kg). $WK^2$ given in $lb\text{-}ft^2$ and $(kg\text{-}m^2)$.
2. Specifications subject to change without notice.
3. *Under Meehanite License.