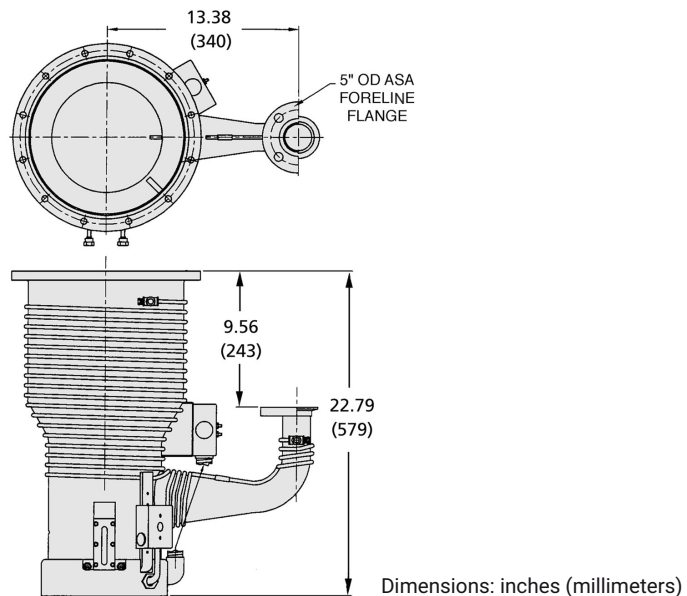


VHS-250 Oil Diffusion Pump



Download 3d drawings [here](#).

The VHS-250 diffusion pump has a pumping speed of 2,125 L/s and has a stainless steel body and flanges allowing easy cleaning. There is also a sight glass/fill and drain assembly for continuous monitoring and easy maintenance of pump fluid. The patented Bulge Contour increases gas capture and maintains lower pressure. Finned boilers increase surface area, prolonging pumping fluid life.

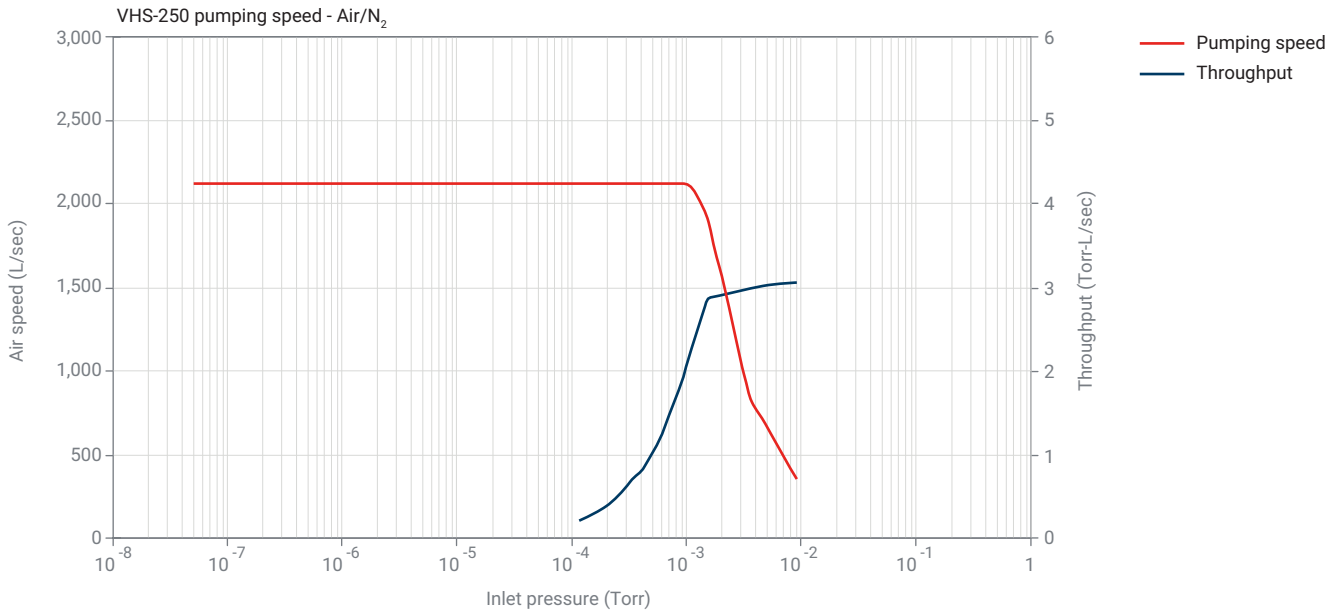
This diffusion pump is a perfect fit for high vacuum and industrial applications such as vacuum furnace, heat treatment, metallizing, and coating processes for optical lenses, electronics, and protective film layers.

Technical specifications

| | |
|---------------------------------------|--|
| Pumping Speed, Operating Range | 2,125 L/s air, 2,660 L/s He and H ₂ |
| Pumping Speed, AVS 4.1 (1963) | 3,700 L/s air |
| Maximum Throughput | 2.6 T-L/s (3.5 mbar-L/s) in operating range, 3.5 T-L/s (4.5 mbar L/s) at 0.01 Torr |
| Operating Range | 1.2×10^{-3} to $< 5 \times 10^{-9}$ Torr (1.6×10^{-3} to $< 6.5 \times 10^{-9}$ mbar) |
| Maximum Forepressure | No load: 0.65 Torr (0.85 mbar) Full load: 0.55 Torr (0.72 mbar) |
| Recommended Backing Pump | ≥ 17 cfm (29 m ³ /hr) |
| Backstreaming Rate, Standard Cold Cap | $< 5.0 \times 10^{-4}$ mg/cm ² /min |
| Warmup Time | 10 minutes |
| Cooldown Time | 10 minutes (with quick cool coil) |
| Fluid Charge | 500 cc – exact fluid charge available |
| Electrical Requirements | 1 ph, 50/60 Hz, 120/208/240 VAC |
| Pump Power | 2,200 watts |
| Cooling Water Requirements | 0.25 gpm (57 L/hr) at 60 to 80 °F (15 to 26 °C) |
| Water Connections | $\frac{1}{8}$ in FPT Tee |
| Recommended Holding Pump* | DS40M Rotary Vane Pump |

* Recommended holding pump sizes are based on estimates; assuming good vacuum practice in system design and operation. Results may vary from system to system.

Performance specifications based on tests done with DC704.



Ordering information

| Description | Voltage | Weight kg (lb) | Part Number |
|--------------------------------|---------|-------------------|-------------|
| VHS-250 Pump | | | |
| VHS-250 with Standard Cold Cap | 120 V | 34.0 (75.0) | K0543301 |
| VHS-250 with Standard Cold Cap | 208 V | 34.0 (75.0) | K0543306 |
| VHS-250 with Standard Cold Cap | 240 V | 34.0 (75.0) | K0543302 |

| Description | Weight kg (lb) | Part Number |
|---|-------------------|-------------|
| Accessories | | |
| Santovac 5 Diffusion Pump Fluid, 500 cc (Exact Pump Charge) | 1.1 (2.5) | 695405005 |
| Replacement Parts (One Heater Required Per Pump) | | |
| 2200 W, 120 V Heater | 0.5 (1.0) | 647306125 |
| 2200 W, 208 V Heater | 0.5 (1.0) | 647306175 |
| 2200 W, 240 V Heater | 0.5 (1.0) | 647306225 |
| Heater Clamping Assembly (Includes Clamping Plate, Cover Plate, Insulator) | | 86643301 |
| Heater Cover Plate (One Required Per Pump) | 1.0 (2.0) | 86088001 |
| Heater Insulator (One Required Per Pump) | 0.2 (0.5) | 86087001 |
| Heater Clamping Plate (One Required Per Pump) | 0.5 (1.0) | 86086301 |
| VHS-6/250 Heater Wire, 10 AWG, 36 Inches (Three Per Pump Required) | 0.5 (2.0) | X3901-68002 |
| Replacement O-Ring Kit (Kit Contains: 3 Inlet Flange O-Rings, 3 Foreline Flange O-Rings, Sight Glass O-Ring and Gasket, 10 Fill and Drain O-Rings) | 0.5 (1.0) | K0377178 |
| Thermal Switch (set at 300 °F – 147 °C) | 0.5 (1.0) | 642906025 |
| Sight Glass Repair Kit | | L8908301 |

- Inlet flange: DN 250 ISO-F (bolted, O-ring seal).
- Foreline flange: ASA with 5 in od.

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you can chat live with a vacuum expert.



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