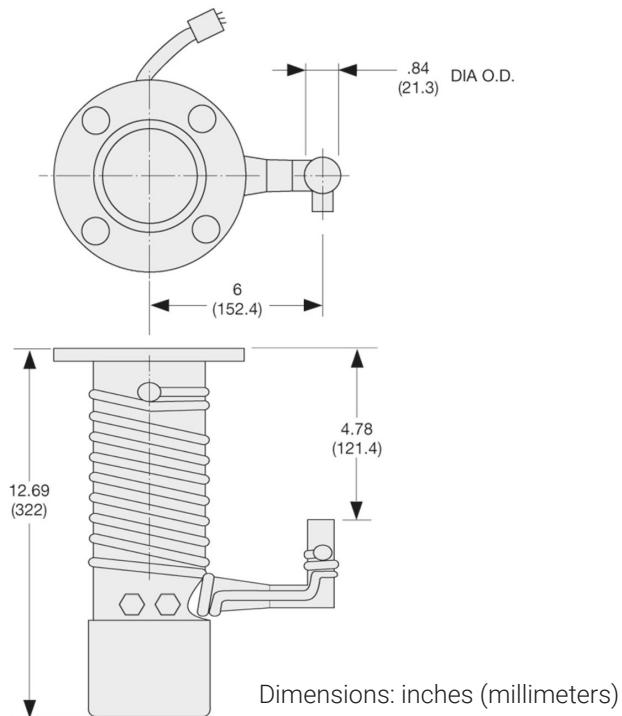


## HS-2 Oil Diffusion Pump



[Download 3d drawings here.](#)

The Agilent HS-2 oil diffusion pump provides high throughput and high pumping speeds of 160 L/s for air and 200 L/s for He and H<sub>2</sub>. With its fully optimized vapor jet and robust boiler design, the pump will run without any maintenance for years. It is available with an ASA inlet flange and with 120 V or 240 V.

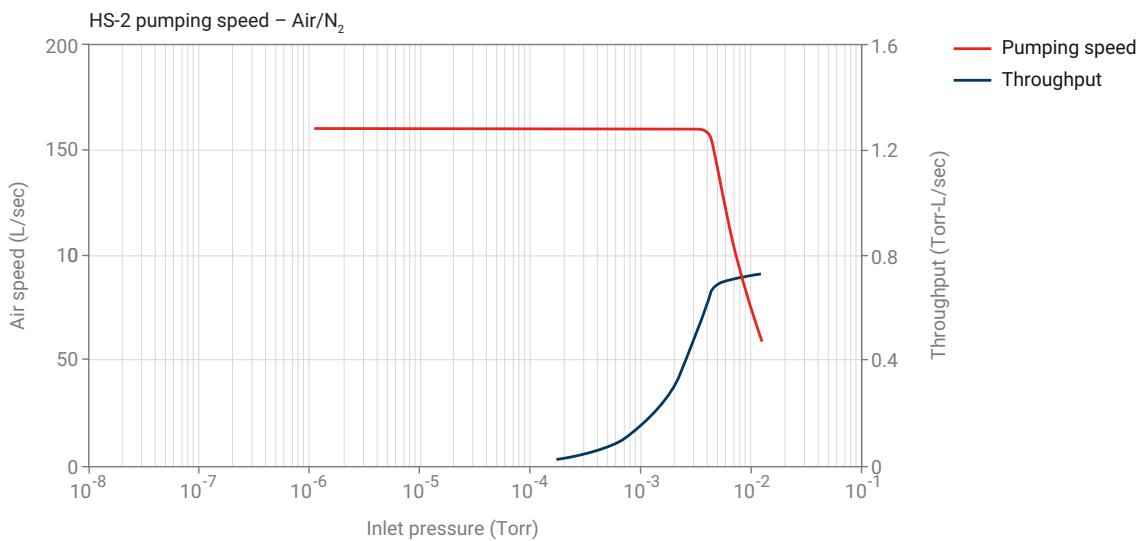
This diffusion pump is an excellent fit for instrumentation applications such as gas chromatography mass spectrometry (GC/MS), short path distillation systems, and centrifuges.

## Technical specifications

Pumping Speed, Operating Range	160 L/s air, 200 L/s He and H <sub>2</sub>
Pumping Speed, AVS 4.1 (1963)	285 L/s air
Maximum Throughput	0.60 T-L/s (0.80 mbar-L/s) in operating range, 0.70 T-L/s (0.93 mbar-L/s) at 0.01 Torr
Operating Range	$3.7 \times 10^{-3}$ to $< 5 \times 10^{-8}$ Torr ( $4.9 \times 10^{-3}$ to $< 6.5 \times 10^{-8}$ mbar)
Maximum Forepressure	No load: 0.55 Torr (0.71 mbar) Full load: 0.40 Torr (0.52 mbar)
Recommended Backing Pump	$\geq$ 5 cfm (8.5 m <sup>3</sup> /hr)
Backstreaming Rate, Standard Cold Cap	$< 1 \times 10^{-3}$ mg/cm <sup>2</sup> /min
Warmup Time	15 minutes
Cooldown Time	10 minutes (with quick cool coil)
Fluid Charge	100 cc
Electrical Requirements	1 ph, 50/60 Hz, 120/240 VAC
Pump Power	450 watts
Cooling Water Requirements	0.1 gpm (23 L/hr) at 60 to 80 °F (15 to 26 °C)
Water Connections	$\frac{1}{8}$ in FPT
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	Weight kg (lb)	Part Number
<b>ASA</b>		
HS-2 with Standard Cold Cap, 120 V	20.0 (9.0)	82906301
HS-2 with Standard Cold Cap, 240 V	20.0 (9.0)	82906302
<b>Santovac 5 Diffusion Pump Fluid, 500 cc</b>		
	2.5 (1.1)	695405005
<b>Replacement Parts (One Heater Required Per Pump)</b>		
450 W, 120 V Heater	1.0 (0.5)	647302125
450 W, 240 V Heater	1.0 (0.5)	647302150
Heater Block (One Required Per Pump)	1.0 (0.5)	82920001
Heater Platen (One Required Per Pump)	1.0 (0.5)	82918301
Replacement O-Ring Kit, (Five Inlet Flange O-Rings)	1.0 (0.5)	K0377159

– Inlet flange: nominal 2 in ASA flange with 6 in od.

– Foreline: 0.84 in diameter tube.

## Contact information

### Americas

Agilent Technologies  
121 Hartwell Avenue,  
Lexington, MA 02421 USA  
Toll free: +1 800 882 7426  
vpl-customercare@agilent.com

### Europe, Middle East, Africa, India

Agilent Technologies Italia SpA  
Via F.Ili Varian 54,  
10040 Leini (Torino), Italy  
Tel: +39 011 9979 111  
Toll free: 00 800 234 234 00  
vpt-customercare@agilent.com

### China

Beijing Office Agilent Technologies  
(China) Co. Ltd.  
No.3, Wang Jing Bei Lu,  
Chao Yang District,  
Beijing, 100102, China  
Toll free: 800 820 6778  
Contacts.vacuum@agilent.com

For more information, please contact  
your Agilent representative or visit  
[www.agilent.com/chem/vacuum](http://www.agilent.com/chem/vacuum) where  
you can chat live with a vacuum expert.



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