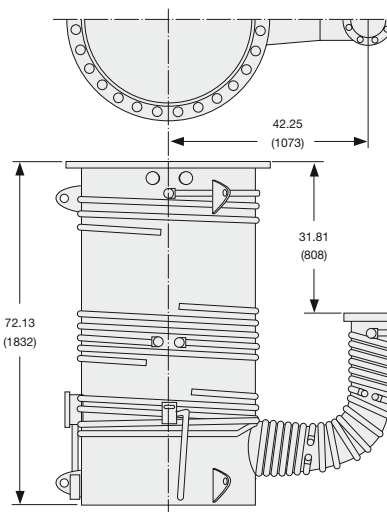
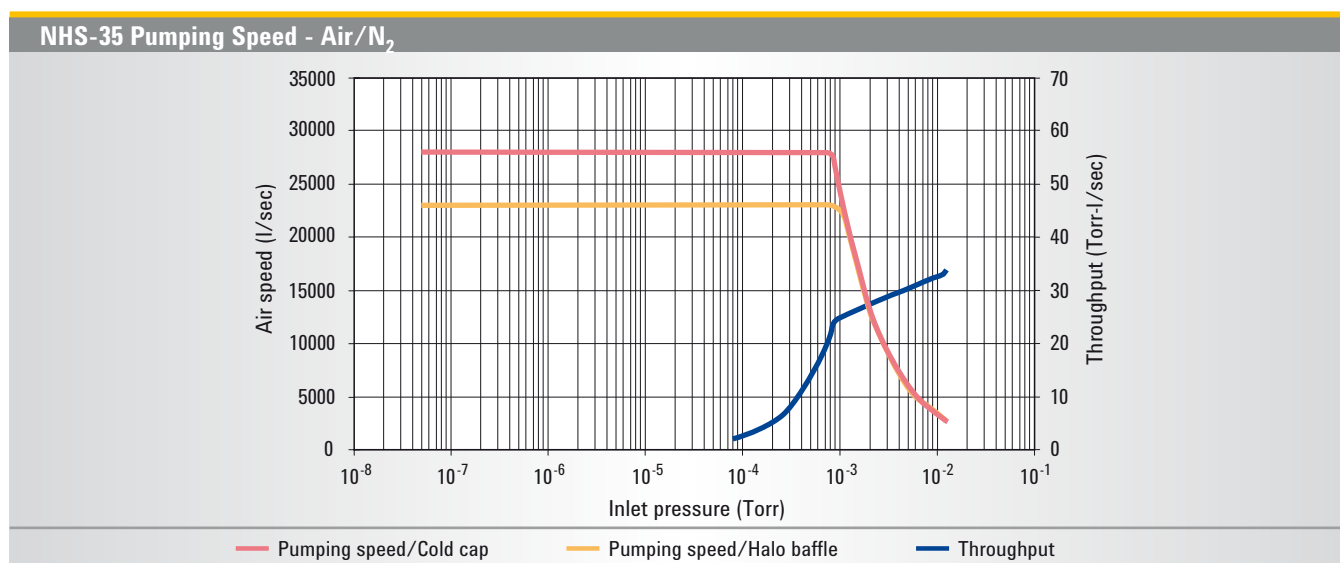


PUMP MODELS

▶ Agilent NHS-35



Dimensions: inches (millimeters)



Technical Specifications

Pumping speed, operating range	28,000 l/s air, 35,000 l/s He and H ₂
Pumping speed*, AVS 4.1 (1963)	50,000 l/s air
Maximum throughput	25 T-l/s (33 mbar l/s) in operating range, 35 T-l/s (45 mbar-l/s) @ 0.01 Torr
Operating range	9 x 10 ⁻⁴ to < 5 x 10 ⁻⁸ Torr (1.2 x 10 ⁻³ < 6.5 x 10 ⁻⁸ mbar)
Maximum forepressure	No load – 0.55 Torr (0.71 mbar), Full Load – 0.40 Torr (0.52 mbar)
Recommended backing pump	≥300 cfm (510 m ³ /hr)
Backstreaming rate**, standard cold cap	<5 x 10 ⁻⁴ mg/cm ² /min
Warmup time	60 minutes
Cooldown time	180 minutes
Fluid charge	3 U.S. gallons (11.3 liters)
Electrical requirements	3 ph, 50/60 Hz, 240/415/480 VAC
Pump power	24,000 watts
Cooling water requirements	4 gpm (800 l/hr) at 60-80 °F (15-26 °C)
Recommended fluid	DC-704 or equivalent (see page 30)

* For an explanation of pumping speed measurements, please see page 34.

** Refer to page 32 for a description of test methods.

DIFFUSION PUMPS

Ordering Information

Description	Voltage	Weight kg (lbs)	Part Number	
			ASA	ISO
NHS-35 Pump				
NHS-35 with standard cold cap	240 V	680.0 (1,550.0)	F1730308	L5924308
NHS-35 with halo baffle	240 V	680.0 (1,550.0)	F1730318	L5924318
NHS-35 with standard cold cap	415 V	680.0 (1,550.0)	F1730326	L5924326
NHS-35 with halo baffle	415 V	680.0 (1,550.0)	F1730336	L5924336
NHS-35 with standard cold cap	480 V	680.0 (1,550.0)	F1730309	L5924309
NHS-35 with halo baffle	480 V	680.0 (1,550.0)	F1730319	L5924319
Accessories				
Water-cooled halo baffle	31	20.0 (45.0)	K1857335	
Quick cool coil – must be installed in the factory, can not ship separately			Factory Special	
Centering ring for ISO foreline flange, 200K		0.5 (1.0)	IC200SV	
O-ring, ISO Inlet flange		0.5 (1.0)	78536002	
Installation and Operation Manual (download from www.agilent.com/chem/vacuum)			699901140	
Replacement Parts (six heaters required per pump)				
Heater 4000 W, 240 V/480 V with leads		0.5 (1.0)	647335010	
Heater 4000 W, 240 V/480 V no leads – used on pumps built before May '90		0.5 (1.0)	647235248	
Heater, 4000 W, 200 V		0.5 (1.0)	647335020	
Heater, 4000 W, 400 V		0.5 (1.0)	L6383010	
Heater, 4000 W, 440 V		0.5 (1.0)	L6383011	
Heat shield (reusable)		0.5 (1.0)	L6370001	
Heater clamping plate (six required per pump)		4.0 (8.0)	F1749001	
Heater insulator (one required per pump)		0.5 (1.0)	L9699001	
HS-32/35 heater wire, 10 AWG, 196 inches (2 per heater required)		1.0 (0.4)	X3900-68003	
Replacement o-ring kit for ASA pumps (kit contains: 1 inlet flange o-ring (buna 78536001), 1 foreline flange o-ring (butyl 2-267), sight glass o-ring and gasket, 8 fill and drain o-rings (Viton 2-213))		0.5 (1.0)	K0377169	
Sightglass service kit (pumps built before Oct. '95)		1.5 (3.0)	F6097301	
Upper (water) thermal switch (set at 200 °F/93 °C)		0.5 (1.0)	K9050005	
Lower (boiler) thermal switch (set at 600 °F/316 °C)		0.5 (1.0)	K9050006	
Cold cap gasket/grommet (kit of 4)		0.5 (1.0)	L8839301	
Cold cap nut and follower (2 each)		0.5 (1.0)	L8840301	

- NOTE**
- Inlet flange 35 in. ASA, foreline flange 6 in. ASA
 - Inlet flange ISO 1000F (bolted), foreline flange ISO 200K (clamped)
 - Not recommended for use with Santovac 5
 - ASA pump versions include o-rings for both inlet and foreline flanges
 - ISO pump versions include inlet flange o-ring, but does not include foreline flange centering ring

Please note that this item is controlled for export by the Nuclear Suppliers Group. Accordingly, you may be required to obtain export licenses, including from US government authorities prior to exporting this diffusion pump from the United States. Please contact Agilent Vacuum Products, and the U.S. Export Administration regulations ECCN 2B231 for further guidance.