



Varian 938-41

Technical Specifications

MINIMUM DETECTABLE SIGNAL/SENSITIVITY IN ACCORDANCE WITH AVS STANDARD 2.1:

2×10^{-10} atm cc/sec for helium, or

8×10^{-11} atm cc/sec for air

Note: 938-41 sensitivity is influenced by the speed of the system's mechanical pump. The above specifications are obtained with a normal 7 cfm pump. Minimum detectable signal is registered as one segment when tuned for direct readout on the lowest leak rate range.

RESPONSE TIME

2 seconds for helium in accordance with AVS Standard 2.1

AMPLIFIER DRIFT

Less than 2% of most sensitive scale in accordance with AVS Standard 2.1

NOISE LEVEL

Less than 2% of full scale, peak-to-peak, in accordance with AVS Standard 2.1

LEAK INDICATOR

50-segment bar graph. Three sets of direct reading sensitivity ranges comprised of four decades in each range:

10^{-9} to 10^{-6}

10^{-8} to 10^{-5}

10^{-7} to 10^{-4}

WEIGHT

50 pounds (approximate)

Shipping weight — 60 pounds (approximate)

DIFFUSION PUMP

90 l/s stainless steel, air-cooled pump developed for the leak detector application. This pump is designed for stable pressure ratio performance for helium. Uses oxidation resistant polyphenyl fluid and is equipped with an optically dense baffle for maintaining system cleanliness.

MANUAL VALVES

O-ring sealed, spring-loaded (75 lb. force), cam-operated roughing and foreline valves incorporated into a valve block design that ensures their proper sequencing.

VACUUM GAUGES

Cold cathode gauge measures high vacuum in the 1 milliTorr to 10^{-5} range in the spectrometer tube. Thermocouple gauge in port manifold monitors the roughing and test pressure.

TEST PORT

1 $\frac{1}{8}$ " ID quick coupling is provided.

POWER REQUIREMENTS

115V (230V) 50/60 Hz single-phase power

5 (2.5) amps without mechanical pump

10 (5) amps with 7 cfm pump

15 (7.5) amps with 11 cfm pump

CABINET

8" x 13 $\frac{1}{2}$ " x 19 $\frac{1}{2}$ " cabinet with a hinged door provides easy access to spectrometer tube and electronics.

Dimensions, Overall

Cart-mounted unit
Optional drawer

21" wide by 40 $\frac{3}{4}$ " high by 18" deep
12 $\frac{3}{4}$ " wide by 3" high by 7 $\frac{3}{4}$ " deep

Weight (approx.)

Cart-mounted unit

142 lbs.

Power Requirements

Cart-mounted unit

Same as for basic unit with mechanical pump.



PROVAC

SALES

PHONE: 831-462-8900

FAX: 831-462-3536

WWW.PROVAC.COM

Varian 938-41

Technical Specifications cont.

Varian SD-200, SD-300

	SD-200	SD-300
Free Air Displacement l/m, at 60Hz (50Hz)	195 (170)	310 (250)
CFM @ 60Hz	7	11
M ³ /hr at 50Hz	10	15
Stages	2	2
Ultimate Vacuum	<10 ⁻⁴ Torr	<10 ⁻⁴ Torr
Water Vapor Capacity, at 30°C gm/hr	100	150
Motor Rating, HP at 60Hz	1/2	3/4
Oil Capacity, qt (l)	1 (1)	0.85 (0.81)
Inlet Port	NW25	NW25
Electrical Rating	1 Phase 115/208-230 50/60Hz	



PROVAC
SALES

PHONE: 831-462-8900

FAX: 831-462-3536

WWW.PROVAC.COM

Varian 938-41

Features & Benefits

- high sensitivity testing at high test port pressures
- low operating costs (no liquid nitrogen required)
- handles high gas load without throttling
- easy to operate & maintain
- unique valve block design
- light and portable

Applications

- nuclear • aerospace • medical electronics
- refrigeration & air- conditioning • chemical plants & refineries • semiconductors
- automotive • drug & food packaging
- research & development • metallizers
- thin film evaporators • electron beam microscopes/welders • space simulation chambers • tube processing stations
- linear accelerators • freeze dryers
- coaters • ion implanters • vacuum furnaces
- degassing • heat treating & brazing
- power plant steam condenser systems
- cryogenic piping

