

## VARIAN, HS-16 SPECIFICATIONS:

### Technical Specifications

<b>Pumping speed, operating range</b>	<b>6,000 l/s air, 7,500 l/s He and H<sub>2</sub></b>
<b>Pumping speed*, AVS 4.1(1963)</b>	10,000 l/s air
<b>Maximum throughput</b>	8,100 W – 9.5 T-l/s (12.7 mbar l/s) in operating range 13.5 T-l/s (18.0 mbar l/s) in operating range 9,600 W – 12.0 T-l/s (16 mbar l/s) in operating range 11.5 T-l/s (15.3 mbar l/s) in operating range
<b>Operating range</b>	2 x 10 <sup>-3</sup> to <5 x 10 <sup>-8</sup> Torr at 9,600 W (1.3 x 10 <sup>-3</sup> to <6.5 x 10 <sup>-8</sup> mbar)
<b>Maximum forepressure</b>	No load – 0.65 Torr (0.85 mbar), Full Load – 0.55 Torr (0.72 mbar)
<b>Pump power</b>	8100/9600 watts
<b>Recommended backing pump</b>	≥ 80 cfm (136 m <sup>3</sup> /hr)
<b>Backstreaming rate**, standard cold cap</b>	<1.5 x 10 <sup>-3</sup> mg/cm <sup>2</sup> /min
<b>Warmup time</b>	30 minutes
<b>Cooldown time</b>	48 minutes (30 minutes with optional quick cool coil)
<b>Fluid charge</b>	3 quarts (2.8 liters)
<b>Electrical requirements</b>	3 ph, 50/60 Hz, 240/415/480 VAC
<b>Cooling water requirements</b>	1.5 gpm (300 l/hr) at 60-80 °F (15-26 °C)
<b>Water connections</b>	1/4 in. FPT Tee
<b>Recommended fluid</b>	DC-704 (see page 30 of catalog)