



# Varian TV-1000HT

## Technical Specifications

Pumping speed	N <sub>2</sub> : 950 l/s He: 870 l/s H <sub>2</sub> : 900 l/s
Compression ratio	N <sub>2</sub> : >1 x 10 <sup>10</sup> He: 5 x 10 <sup>7</sup> H <sub>2</sub> : 2 x 10 <sup>6</sup>
Base pressure*	minimum with recommended mechanical forepump: < 1 x 10 <sup>-10</sup> mbar (< 1 x 10 <sup>-10</sup> Torr) minimum with recommended diaphragm forepump: 2 x 10 <sup>-9</sup> mbar (1.5 x 10 <sup>-9</sup> Torr)
Inlet flange	CFF 10" O.D. ISO 200
Foreline flange	KF 40 NW
Rotational speed	38000 RPM
Start-up time	< 4 minutes
Recommended forepump	mechanical: Varian SD 450 diaphragm: Varian MD 60
Operating position	any
Cooling requirements	Forced air or water
Operating ambient temperature	+ 5° C to + 35° C

Coolant water	minimum flow: 200 l/h (0.89 GPM) temperature: + 10° C to + 20° C pressure: 3 to 5 bar (45 to 75 Psi)
Bakeout temperature	120° C max. at inlet flange (CF flange) 80° C max. at inlet flange (ISO flange)
Vibration level (displacement)	< 0.01 μm at inlet flange
Noise level	≤ 45 dB (A) at 1 meter
Input	56 Vac, three phase, 633 Hz
Lubricant	permanent lubrication
Storage temperature	- 20° C to + 70° C
Weight kg (lbs)	ISO 200: 19 (41.8) CFF 10": 26 (57.2)

\* According to standard DIN 28 428, the base pressure is that measured in a leak-free test dome, 48 hours after the completion of test dome bake-out, with a Turbopump fitted with a ConFlat flange and using the recommended pre-vacuum pump.



