



# Varian TV-700HT

## Technical Specifications

Pumping speed	N <sub>2</sub> : 690 l/s He: 620 l/s H <sub>2</sub> : 510 l/s
Compression ratio	N <sub>2</sub> : >1 x 10 <sup>9</sup> He: 1 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 25 NW
Rotational speed	42000 RPM
Start-up time	< 5 minutes
Recommended forepump	mechanical: Varian SD 450 diaphragm: Varian MD 60
Operating position	any
Cooling requirements	Natural air convection Forced air or water optional

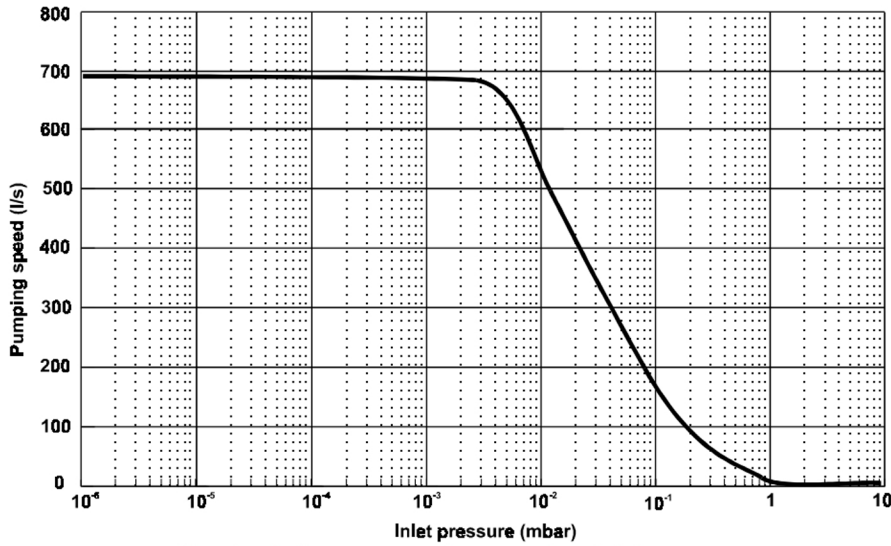
Operating ambient temperature	+ 5° C to + 35° C
Coolant water	flow: 200 l/h (0.89 GPM) temperature: + 10° C to + 30° C pressure: 3 to 5 bar (45 to 75 Psi)
Bakeout temperature	120° C at inlet flange max. (CF flange) 80° C at inlet flange max. (ISO flange)
Vibration level (displacement)	< 0.01 µm at inlet flange
Noise level	≤ 45 dB (A) at 1 meter
Input	56 Vac, three phase, 700 Hz
Lubricant	permanent lubrication
Storage temperature	- 20° C to + 70° C
Weight kg (lbs)	ISO: 14 (31) CFF: 20.1 (42.2)

\* 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.





## Varian TV-700HT Pumping Curves



Graph of nitrogen pumping speed vs inlet pressure

## Dimensions

