



# Varian TV-701 SEM

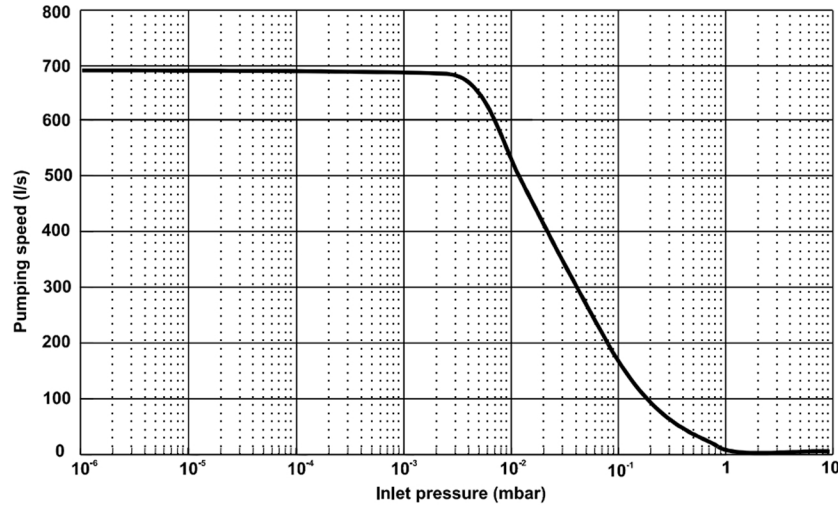
## Technical Specifications

CHARACTERISTIC	TV 701 SEM
Pumping speed (with inlet screen)	ISO200:
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>	1 x 10 <sup>6</sup>
Base pressure (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)	with minimum recommended mechanical pump:  < 1 x 10 <sup>-10</sup> mbar (< 1 x 10 <sup>-10</sup> Torr) with minimum recommended diaphragm pump:  2 x 10 <sup>-9</sup> mbar (1.5 x 10 <sup>-9</sup> torr)
Inlet flange	ISO 200
Foreline flange	KF 25 NW
Rotational speed	42840 rpm
Start-up time	< 6 minutes
Recommended forepump	
Mechanical	Agilent DS 302
Diaphragm	Agilent SH 100
Operating position	Any
Operating ambient temperature	+5 °C to +35 °C
Cooling requirements	Forced air or water cooling (use water with electrical conductivity ≤ 500 μS/cm)

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Cooling 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 (when water cooled) (Data measured with an indicated bearing temperature of 20 °C: see vibration graph in the following figure)	bearing peak: < 45 mm/sec <sup>2</sup> residual unbalance: < 350 mm/sec <sup>2</sup>
Lubricant	permanent lubrication
Noise level	<45 dB(A) at 1 meter
Power supply:	
Input voltage:	100 to 240 Vac
Input freq.:	50/60 Hz
Max input power:	500 VA
Stand-by power:	30 to 35 W
Max operating power:	350 W (water cooling) 250 W (air cooling)
Protection fuse	1 x 6.3 A
Compliance with:	UNI EN 292-1 UNI EN 292-2 EN-CENELEC 55011 IEC 1000-4-2 (ex 801-2) IEC 1000-4-3 (ex 801-3) IEC 1000-4-4 (ex 801-4) EN 61010-1 (IEC 1010-1) EN 1012-2
Installation category	II
Pollution degree	2
Power cable	With European or NEMA plug 3 meters long (optional)



## Varian TV-701 SEM Pumping Curves



Graph of nitrogen pumping speed vs inlet pressure (with inlet screen)

## Dimensions

