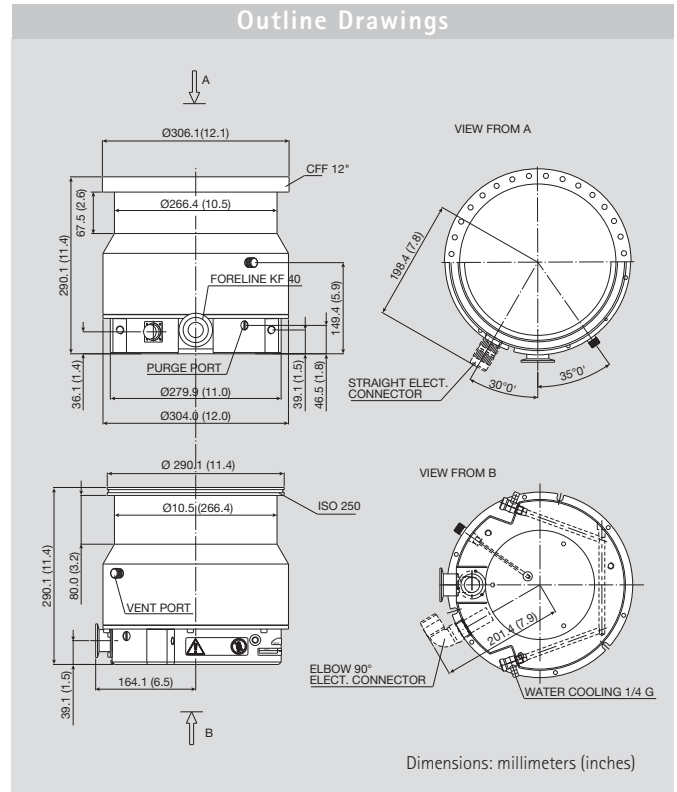


Turbo-V 2000HT

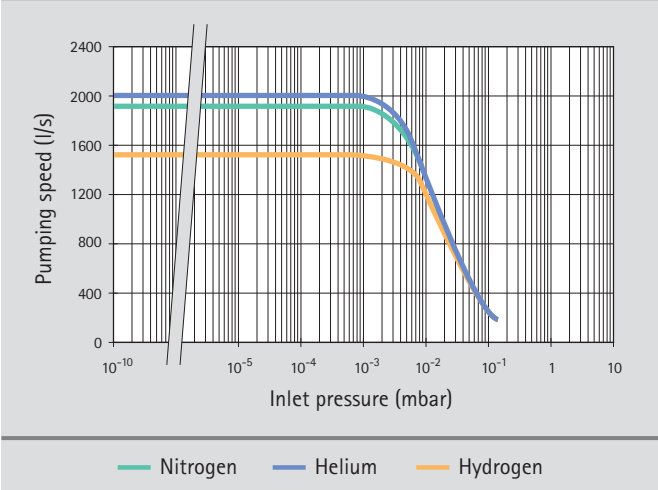


Technical Specifications

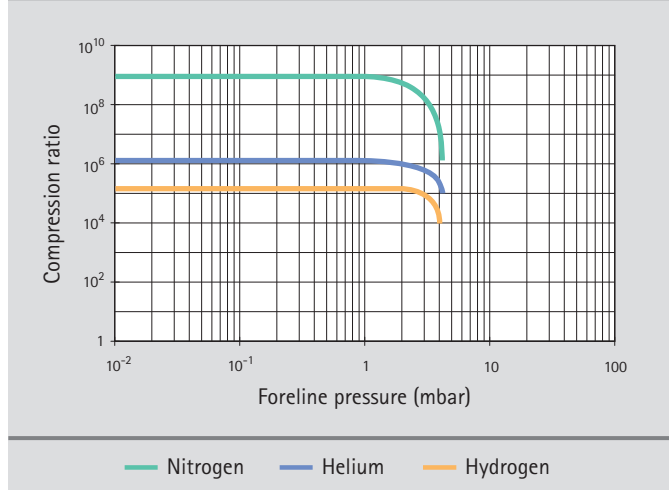
Pumping speed	N ₂ : 1,950 l/s	He: 2,000 l/s	H ₂ : 1,500 l/s
Compression ratio	N ₂ : >1 x 10 ⁹	He: 2 x 10 ⁶	H ₂ : 2 x 10 ⁵
Base pressure* (minimum with recommended mechanical forepump)	1 x 10 ⁻¹⁰ mbar (7.5 x 10 ⁻¹¹ Torr)		
Inlet flange	CF 12"	ISO 250	
Foreline flange	KF 40		
Rotational speed	33,000 rpm		
Startup time	10 minutes		
Recommended forepump	Mechanical: Varian DS 602 Dry scroll: Varian TS600		
Operating position	Any		
Cooling requirements	Water		
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		
Weight kg (lbs)	ISO 250: 44 (96.8) CF 12": 55 (121.0)		

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

Nitrogen Pumping Speed vs Inlet Pressure (DN 250 only)



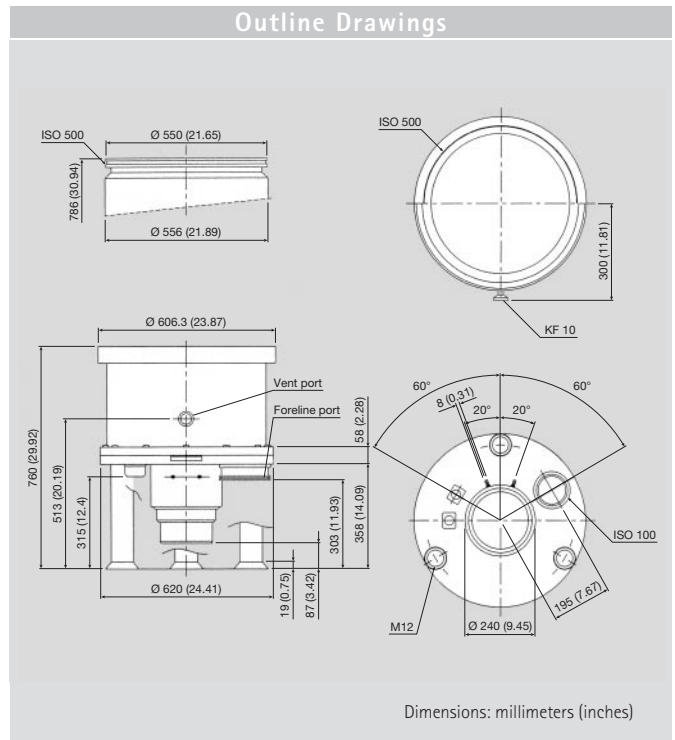
Compression Ratio vs Foreline Pressure



Ordering Information

Description	Weight kg (lbs)	Part Number
Pumps		
Turbo-V 2000HT, ISO 250 flange	44.0 (96.8)	9699085
Turbo-V 2000HT, 12" CF flange	55.0 (121.0)	9699084
Controllers		
Turbo-V 2000HT controller, 220 V	19.0 (42.0)	9699462
Turbo-V 2000HT controller, 120 V	19.0 (42.0)	9699562
Accessories		
Inlet screen, DN 250	1.0 (2.0)	9699350
Water cooling kit	0.5 (1.0)	9699338
Plastic water cooling kit	0.5 (1.0)	9699348
Vent flange, NW 10 KF / M8	0.5 (1.0)	9699108
Vent valve with fixed delay time	2.0 (4.0)	9699843
Vent device with adjustable delay time	2.2 (5.0)	9699831
Heavy duty vent valve	2.2 (5.0)	9699842
Purge valve 10 SCCM NW16KF - M12	0.2 (0.5)	9699239
Purge valve 10 SCCM 1/4 Swagelok - M12	0.2 (0.5)	9699240
Purge valve 20 SCCM NW16KF - M12	0.2 (0.5)	9699241
Purge valve 20 SCCM 1/4 Swagelok - M12	0.2 (0.5)	9699242
Purge valve 10 SCCM 1/4 Swagelok - 1/4 Swagelok	0.2 (0.5)	9699232
Purge valve 20 SCCM 1/4 Swagelok - 1/4 Swagelok	0.2 (0.5)	9699236

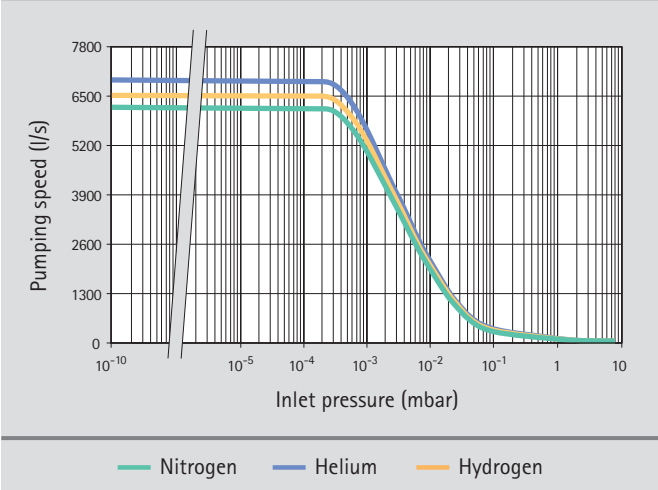
Turbo-V 6000



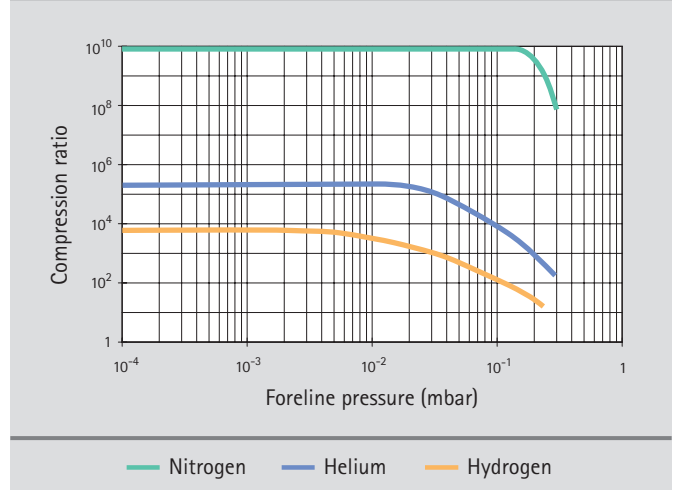
Technical Specifications

Pumping speed l/s	N ₂ : 6,000	He: 7,000	H ₂ : 6,500
Compression ratio	N ₂ : > 1 x 10 ¹⁰	He: 2.3 x 10 ⁵	H ₂ : 8 x 10 ³
Base pressure with recommended mechanical pump:	< 1 x 10 ⁻¹⁰ mbar (< 1 x 10 ⁻¹⁰ Torr)		
Inlet flange	ISO 500		
Foreline flange	ISO 100		
Rotational speed	14,000 rpm		
Startup time	30 minutes		
Recommended forepump	Varian DS 1602		
Operating position	Vertical ±10°		
Cooling requirements	Water		
Bakeout temperature	80 °C at inlet flange (ISO version)		
Vibration level (displacement)	≤ 0.05 µm at inlet flange		
Weight kg (lbs)	250 (550)		
Lubricant	Varian T.A. oil (charge 1,000 cm ³)		

Nitrogen Pumping Speed vs Inlet Pressure (DN 500 only)



Compression Ratio vs Foreline Pressure



Ordering Information

Description	Weight kg (lbs)	Part Number
Pump		
Turbo-V 6000 pump with ISO 500 inlet flange	282.0 (620.0)	9699081
Controllers		
Turbo-V 6000 controller, 120 V	50.0 (110.0)	9699591
Turbo-V 6000 controller, 220 V	50.0 (110.0)	9699491
Accessories		
Inlet screen, DN 500	10.0 (22.0)	9699308
Vent valve with fixed delay time	2.0 (4.0)	9699843
Vent device with adjustable delay time	2.2 (5.0)	9699831
Replacement Parts		
Varian T.A. oil, 100 cm ³	0.5 (1.0)	9699901
Varian T.A. oil, 1000 cm ³	1.4 (3.0)	9699902