



# Agilent TwisTorr 804FS

## Technical Specifications

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<b>Pumping speed</b>	ISO200K-F	ISO250K-F CFF10
N <sub>2</sub>		720 L/s
He		660 L/s
H <sub>2</sub>		485 L/s
Ar		690 L/s
<b>Max Gas Throughput (*)</b>	Air Cooling (25°C ambient temperature)	Water Cooling (15°C water temp. / 25°C ambient temp.)
N <sub>2</sub>	4.3 mbar L/s 255 SCCM	6.2 mbar L/s 367 SCCM
He	7.9 mbar L/s 467 SCCM	10.4 mbar L/s 615 SCCM
Ar	1.5 mbar L/s 89 SCCM	3.3 mbar L/s 195 SCCM
(*) Backing pump 11.6 m <sup>3</sup> /hr		
<b>Compression ratio and foreline tolerance**</b>		
N <sub>2</sub>	> 1 x 10 <sup>11</sup>	10 mbar
He	2 x 10 <sup>6</sup>	10 mbar
H <sub>2</sub>	3 x 10 <sup>6</sup>	>4 mbar
Ar	> 1 x 10 <sup>11</sup>	8.5 mbar
(**) Foreline Tolerance defined as the pressure at which the turbopump still produces a compression of 100 and estimated in water cooling mode		
<b>Base pressure with recomm. forepump</b>	< 1 x 10 <sup>-10</sup> mbar (< 1 x 10 <sup>-10</sup> Torr)	
<b>Inlet flange</b>	ISO 200K, ISO 200F, ISO 250K, ISO 250F, CFF 10"	
<b>Foreline flange</b>	NW25 or NW40	
<b>Rotational speed</b>	Auto setting from 40'800 RPM to 49'500 RPM	
<b>Start-up time</b>	< 5 minutes	

Technical Specifications		
<b>Recommended forepump</b>	Agilent DS302 Rotary Vane Pump Agilent IDP-10 Dry Scroll Pump Agilent IDP-15 Dry Scroll Pump	
<b>Operating position</b>	Any	
<b>Oper. ambient temp.</b>	+5 °C to +35 °C	
<b>Rel. humidity of air</b>	0 to 90% (not condensing)	
<b>Bakeout temp.</b>	ISO pump: 80°C at inlet flange CFF pump: 120°C at inlet flange	
<b>Lubricant</b>	Permanent lubrication	
<b>Cooling requirements</b>		
<b>Air cooling</b>	Air temperature from +5°C to 35°C	
<b>Water cooling</b>	Water temperature from +15°C to +25°C Water flow min. 100L/h	
<b>Noise Pressure Level (at 1m at full speed)</b>	43dB(A)	
<b>Storage temp.</b>	-40 °C to +70 °C	
<b>Max altitude</b>	3000 m	
<b>Weight kg (lbs)</b>	ISO200K ISO200F ISO250K ISO250F CFF 10"	20.7 kg (45.5) 23.6 kg (51.9) 23.3 kg (51.2) 27.6 kg (60.9) 22.1 kg (48.6)
<b>Conformity to norms</b>		
<b>EMC (Control Units)</b>	61326-1	
<b>Safety (CE/CSA)</b>	61010-1	
<b>Machinery Directive</b>	DIR 2006/42/CE	
<b>Low Voltage Directive</b>	DIR 2014/35/EU	
<b>EMC Directive (Control Units)</b>	DIR 2014/30/EU	
<b>ROHS</b>	DIR 2011/65/EU	



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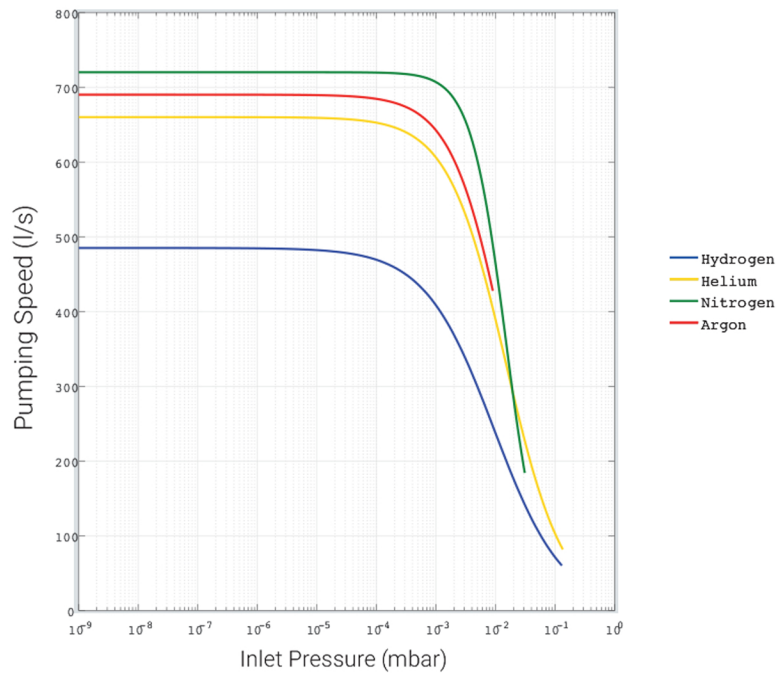
## SALES

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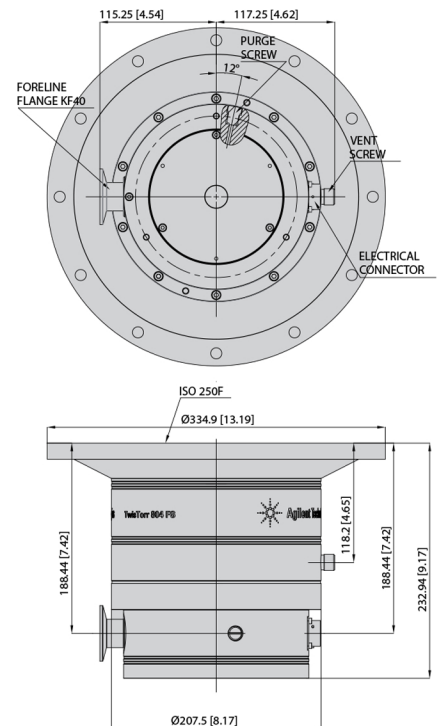
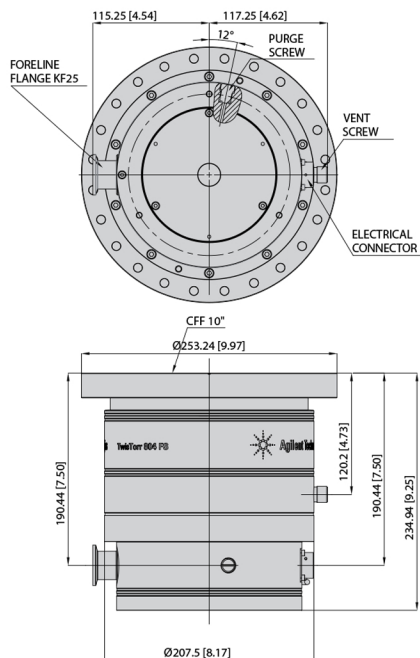
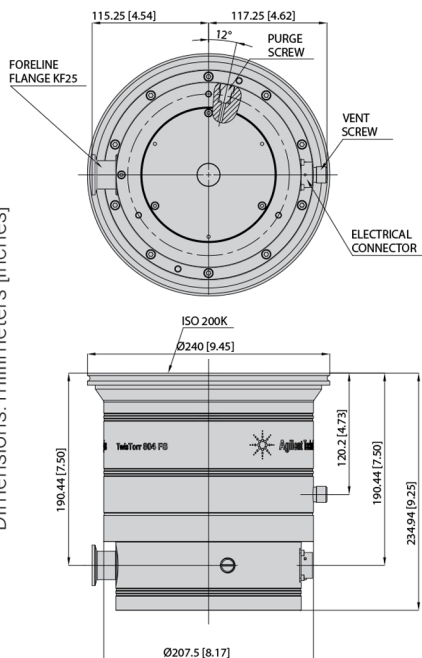
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# Agilent TwisTorr 804FS Pumping Curves



## Dimensions

Dimensions: millimeters [inches]





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## S A L E S

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## Agilent TwisTorr 804FS

### Features & Benefits

- reduced cost of ownership and system down-time
- highest pumping speed for gases
- compact, reliable, energy efficient
- plug & play
- floating suspension
- operation in any position
- quiet and low vibration
- oil free, permanent lubrication
- ceramic ball bearings
- suitable for high gas load applications
- thermal efficiency & temperature control



### Applications

- academic research • surface analysis • electron microscopes • analytical instruments • industrial • semiconductor • mass spectrometry