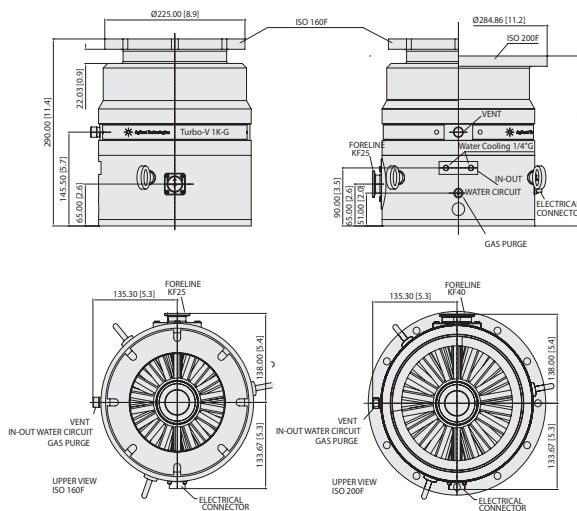


# AGILENT TURBO PUMP MODELS

## ▶ Agilent Turbo-V 1K-G



Dimensions: millimeters (inches)

### Turbo-V 1K-G

- Application-specific pumping solution designed for thin film deposition equipment
- High pumping speed and high gas throughput
- Rugged design and highly efficient cooling system for continuous operation
- Gas Purge for bearings protection

### Advanced Electronics

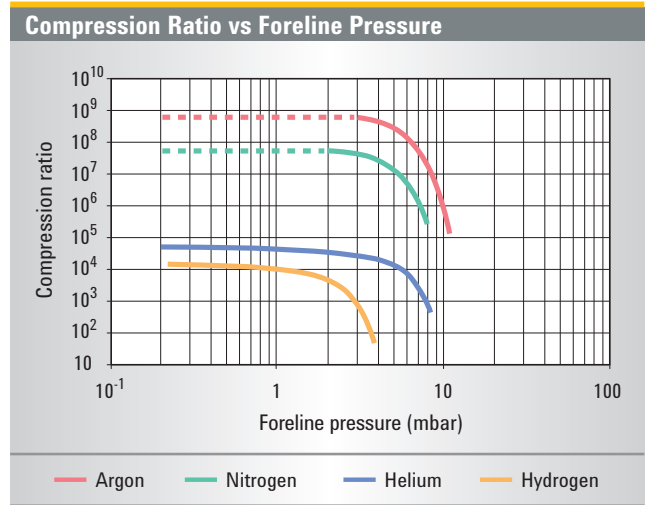
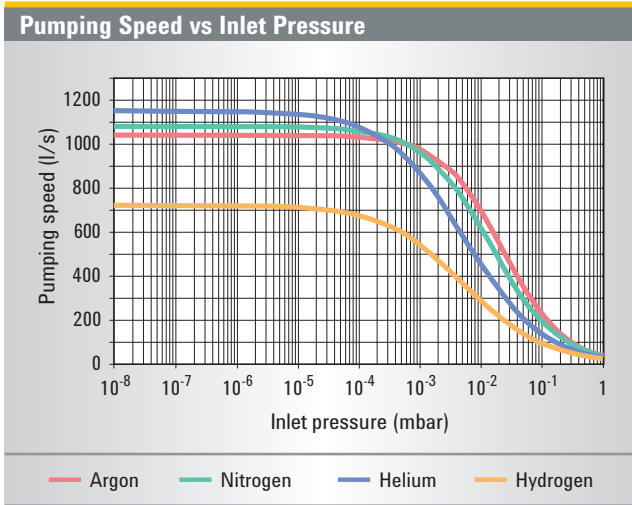
- Rack type or Navigator on board controllers
- Versatile electronics interface with easy to use control Software
- Analog I/O signals and RS232 / RS485 interface as standard Agilent Profibus interface as option

### Technical Specifications

<b>Pumping speed:</b>	ISO 160:	Ar: 750 l/s	N <sub>2</sub> : 810 l/s	He: 950 l/s	H <sub>2</sub> : 680 l/s
	ISO 200:	Ar: 1,040 l/s	N <sub>2</sub> : 1,080 l/s	He: 1,150 l/s	H <sub>2</sub> : 730 l/s
<b>Compression ratio:</b>		Ar: > 5 x 10 <sup>8</sup>	N <sub>2</sub> : > 5 x 10 <sup>7</sup>	He: > 4 x 10 <sup>4</sup>	H <sub>2</sub> : 1.5 x 10 <sup>4</sup>
<b>Base pressure*</b> (with recommended forepump)		< 1 x 10 <sup>-10</sup> mbar			
<b>Inlet flange</b>		ISO 160 F, ISO 200 F			
<b>Foreline flange</b>	ISO 160:	KF 25 NW			
	ISO 200:	KF 40 NW			
<b>Nominal rotational speed</b>		45,500 rpm			
<b>Start-up time</b>		< 5 minutes			
<b>Minimum recommended forepump</b>		> 20 m <sup>3</sup> /h (TriScroll 600, DS 602)			
<b>Operating position</b>		Any			
<b>Operating ambient temperature</b>		+5 °C to +35 °C			
<b>Bakeout temperature</b>		80 °C at inlet flange max. (ISO flange)			
<b>Vibration level</b> (displacement)		< 0.01 μm at inlet flange			
<b>Cooling requirements</b>		Water			
<b>Power supply</b>	Input voltage: 100-240 Vac	Input freq.: 50 - 60 Hz	Max input power: 600 VA	Stand-by power: 30 to 35 W	
	Max operating power: 400 W using Nitrogen and lighter gases (water cooling setting)				
	260 W using Argon (air cooling setting)				
<b>Protection fuse</b> (Navigator controller)		1 x 6.3 A			
<b>Serial communication</b> (Navigator Kit)		RS232 cable with a 9-pin D type male connector and a 9-pin D type female connector, and Navigator software (optional)			
<b>Storage temperature</b>		-20 °C to +70 °C			
<b>Weight</b>		26.8 kg (59.1 lbs)			

\* According to standard DIN 28 428.

# TURBO PUMPS



## Ordering Information

Description	Part Number
<b>Pumping Systems</b>	
Turbo-V 1K-G ISO160 F	8698961R002
Turbo-V 1K-G ISO200 F	8698962R001
<b>Controllers</b>	
Turbo-V 1K-G Navigator controller, 120-220 V	9698978M005
Turbo-V 1K-G Rack controller, 100-240 V	X3501-64005
<b>Accessories</b>	
Mains cable NEMA Plug, 3 m long	9699958
Mains cable European Plug, 3 m long	9699957
Serial cable and Navigator Software	9699883
Inlet screen ISO 160	9699304
Inlet screen ISO 200	9699316
Water cooling kit (hose tail G ¼)	9699825
Water cooling kit (Inox G ¼)	9699826
Vent flange, NW 10 KF / M8	9699108
Vent device with adjustable delay time for standard rack controller	9699831
Vent valve for standard rack controller	X3501-68002
Vent valve for Navigator controller	9699834
Purge valve KF16-M12 20 SCCM	9699241
Purge valve 7/16-M12 20 SCCM	9699242
<b>Recommended Forepump</b>	
Rotary Vane pump DS 602, with 1 ph, worldwide motor	9499335
Rotary Vane pump DS 602, with 3 ph, worldwide motor	9499336
Rotary Vane pump HS 452, with 1 ph, worldwide motor	9499360
Rotary Vane pump HS 652, with 1 ph, worldwide motor	9499365
Dry pump TriScroll 600, with 1 ph, worldwide motor	PTS06001UNIV
Dry pump TriScroll 600, with 3 ph, worldwide motor	PTS06003UNIV
Dry pump TriScroll 600 inverter, with 1 ph, worldwide motor	PTS06001INV