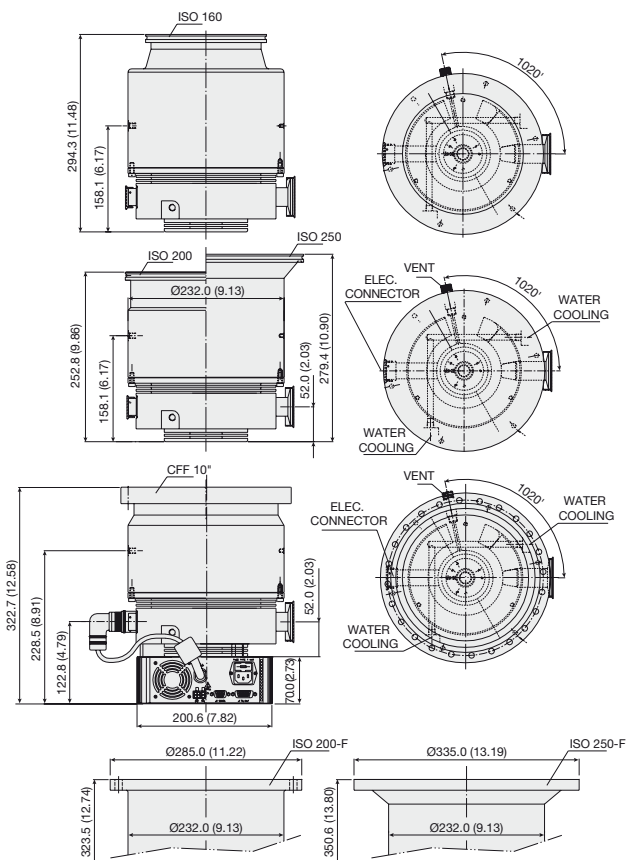


AGILENT TURBO PUMP MODELS

▶ Agilent Turbo-V 1001 Navigator



Dimensions: millimeters (inches)

Technical Specifications

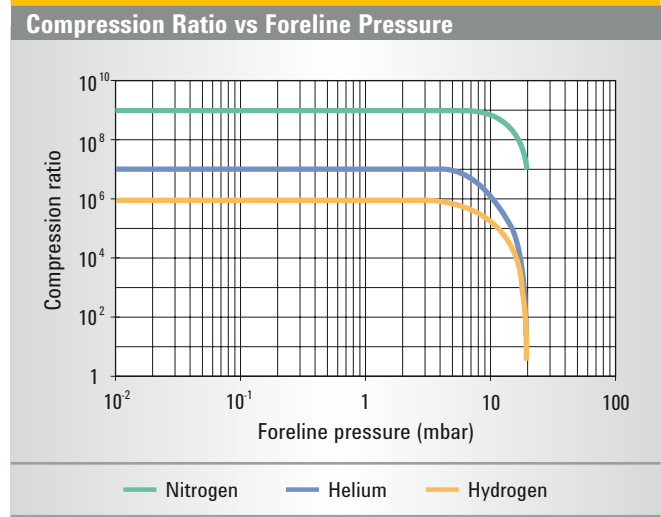
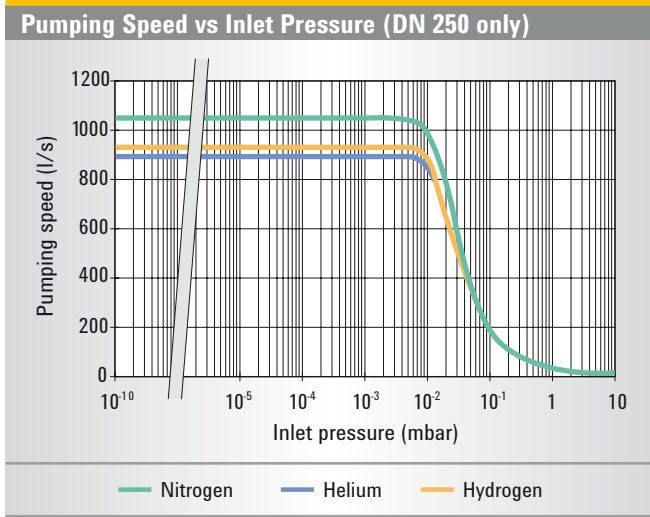
Pumping speed:	ISO 160:	N ₂ : 790 l/s	He: 820 l/s	H ₂ : 860 l/s
	CFF 10" or ISO 200:	N ₂ : 950 l/s	He: 870 l/s	H ₂ : 900 l/s
	ISO 250:	N ₂ : 1,050 l/s	He: 900 l/s	H ₂ : 920 l/s
Compression ratio:	ISO 160	N ₂ : 1 x 10 ⁹	He: 1 x 10 ⁷	H ₂ : 1 x 10 ⁶
	CFF 10"/ISO 200 - ISO 250	N ₂ : 1 x 10 ⁹	He: 1 x 10 ⁷	H ₂ : 1 x 10 ⁶
Base pressure* (with recommended forepump)	< 1 x 10 ⁻¹⁰ mbar (< 1 x 10 ⁻¹⁰ Torr)			
Inlet flange	ISO 160	ISO 200	ISO 200-F bolted	CFF 10" ISO 250 ISO 250-F bolted
Foreline flange	KF 40			
Rotational speed	38,000 rpm			
Start-up time	< 4 minutes			
Recommended forepump	Mechanical: Agilent DS 402 Dry scroll: Agilent TS300, IDP-15			
Operating position	Any			
Cooling requirements	Forced air or water			
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			
Weight kg (lbs):	ISO 160 flange	19 (41.8)		
	ISO 200 flange	19.4 (43.0)		
	CF 10" flange	25.5 (54.2)		
	ISO 250 flange	21.2 (46.6)		
	ISO 200-F and 250-F bolted flange, CF 10" flange	25.5 (54.2)		

* According to standard DIN 28 428.

NOTE • The pump is available with On-board Navigator controller, ½ Rack controller or PCB controller; for information on controllers see also following pages.

SEM version available on request

TURBO PUMPS



Ordering Information

Description	Weight kg (lbs)	Part Number
-------------	--------------------	----------------

Complete Systems

Turbo-V 1001 Navigator complete system, ISO 160 flange	24.4 (53.8)	9698840
Turbo-V 1001 Navigator complete system, ISO 200 flange	24.8 (55.0)	9698838
Turbo-V 1001 Navigator complete system, ISO 200-F bolted flange	30.9 (66.2)	9698844
Turbo-V 1001 Navigator complete system, 10" CF flange	30.9 (66.2)	9698839
Turbo-V 1001 Navigator complete system, ISO 250 flange	26.6 (58.6)	9698841
Turbo-V 1001 Navigator complete system, ISO 250-F bolted flange	30.9 (66.2)	9698845

Complete system includes: Pump, Inlet screen, Controller mounted on the bottom, 2 Mains cables (NEMA plug and European plug).

Pumps

Turbo-V 1001 Navigator pump, ISO 160 flange	19.0 (41.8)	9698933
Turbo-V 1001 Navigator pump, ISO 200 flange	19.4 (43.0)	9698931
Turbo-V 1001 Navigator pump, ISO 200-F bolted flange	25.5 (54.2)	9698946
Turbo-V 1001 Navigator pump, 10" CF flange	25.5 (54.2)	9698932
Turbo-V 1001 Navigator pump, ISO 250 flange	21.2 (46.6)	9698934
Turbo-V 1001 Navigator pump, ISO 250-F bolted flange	25.5 (54.2)	9698947

Controllers (See following pages for specifications)

Turbo-V 1001 Navigator controller 120/220 V - 50/60 Hz	5.4 (12.0)	9698978
Turbo-V 1001 Rack controller, 100-240 V	15.7 (35.0)	X3501-64003

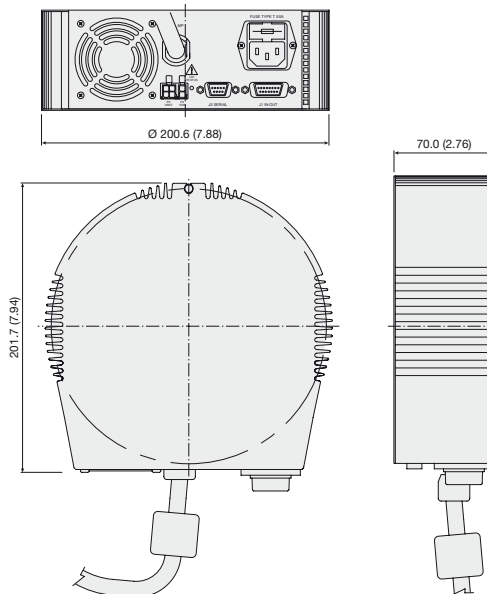
Description	Weight kg (lbs)	Part Number
-------------	--------------------	----------------

Pump Accessories

Mains cable NEMA plug, 3 m long		9699958
Mains cable European plug, 3 m long		9699957
Serial cable and T-plus Software (previous release Navigator 2.2 included in the CD)		9699883
Inlet screen DN 160		9699304
Inlet screen DN 200		9699316
Inlet screen DN 250		9699350
Water cooling kit		9699337
Plastic water cooling kit		9699347
Air cooling kit for use with Navigator controller		9699297
Air cooling kit for use with standard rack controller		X3501-68001
Bracket for Navigator controller side routing		9699298
Vibration damper ISO 160	4.0 (9.0)	9699345
Vibration damper, ISO 200	5.0 (10.0)	9699346
Vibration damper, CFF 10"	5.0 (10.0)	9699336
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 10 SCCM NW16KF - M12		9699239
Purge valve 10 SCCM ¼ Swagelok - M12		9699240
Purge valve 20 SCCM NW16KF - M12		9699241
Purge valve 20 SCCM ¼ Swagelok - M12		9699242
Purge valve 10 SCCM ¼ Swagelok ¼ Swagelok		9699232
Purge Valve 20 SCCM ¼ Swagelok ¼ Swagelok		9699236

AGILENT TURBO PUMP CONTROLLERS

▶ Agilent Turbo-V 1001 Navigator Controller



The Turbo-V 1001 Navigator controllers are microprocessor-controlled frequency converters, fully controllable through PC software, with self-diagnostic and protection features that ensure the highest degree of reliability. They can be mounted on board, either on the bottom or on the side of the pump, offering outstanding flexibility and simplicity.

Technical Specifications

Input voltages	100/120/220/240 VAC
	50/60 Hz, 1 ph
Maximum input power	850 VA
Output voltage	54 VAC, 3 ph
Output frequency	640 Hz
Operating temperature	0 °C to +40 °C
Storage temperature	-20 °C to +70 °C

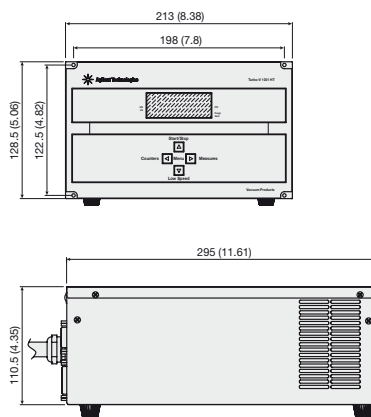
Ordering Information

Description	Weight kg (lbs)	Part Number
Controllers		
Turbo-V 1001 Navigator controller 120/220 V - 50/60 Hz	3.0 (6.0)	9698978
Accessories		
Mains cable NEMA plug, 3 m long	0.5 (1.0)	9699958
Mains cable European plug, 3 m long	0.5 (1.0)	9699957
Serial cable and T-plus Software <i>(previous release Navigator 2.2 included in the CD)</i>	0.5 (1.0)	9699883
External "TMP Profibus gateway"	0.4 (0.8)	9699261

Dimensions: millimeters (inches)

TURBO PUMPS

▶ Agilent Turbo-V 1001 Rack Controller



Dimensions: millimeters (inches)

These controllers are microprocessor-controlled frequency converters with self diagnostic and protection features that ensure the highest degree of reliability. The compact, ½ rack unit has a multifunction alphanumeric display for pump status and error code diagnostics. The front panel has a two-line dot matrix LCD display with back lighting. It displays rotational speed as the pump starts up and indicates when full speed is reached. At any time during the operation of the pump, the speed, current, power, and bearing temperature can be displayed. Additionally, the microprocessor acts as a pump

cycle log, and can display the number of vacuum cycles, the cycle time for the current cycle, and the total operating hours on the pump. Remote operation can be accomplished with logic level contact closures and with optional computer interfaces.

PCB controllers are available. Please contact Agilent for details.

Technical Specifications

Input voltages	100-240 V 1 ph, 50/60 Hz
Maximum input power	800 VA
Output voltage	56 VAC, 3 ph
Output frequency	633 Hz
Maximum output power*	450 W
Startup power	450 W
Operating temperature	+5 °C to +45 °C
Storage temperature	-20 °C to +70 °C

* Data valid for nitrogen.

Ordering Information

Description	Weight kg (lbs)	Part Number
Controller		
Turbo-V 1001 Rack controller, 100-240 V	15.7 (35.0)	X3501-64003
Accessories		
Mains cable (European plug, 3 m long)		9699957
Mains cable (American plug, 120 V, 3 m long)		9699958
Options		
Rack adapter for controller	2.0 (4.0)	9699191
Controller to pump extension cable (5 m extension) for Turbo-V 1001	1.0 (2.0)	9699948M001
Controller to pump extension cable (12 m extension) for Turbo-V 1001	2.0 (4.0)	9699951S029
Controller to pump extension cable (20 m extension) for Turbo-V 1001	4.0 (8.0)	9699948M002
External "TMP Profibus gateway"	0.4 (0.8)	9699261