



# Tisch Vacuum Pump - Product Manual

## Model VP-300

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## Package

➤ **Oil Free Pump**                      **1 set**

Voltage pressure    110V/60HZ      220V/50HZ

(Note that the two voltage options are different models and are ordered as options on our website)

➤ **Product manual**                      **1 piece**

## Introduction

Thank you for using our Oil Free Pumps. Please be sure to read and observe the following precautions carefully while using the instrument.

## Features

- Build-in coating, resistance to acids and alkali
- Piston-powered, oil-free pump, no pollution
- No need of lubricant, regular oil changes , maintenance free
- Innovative motor design makes the pump quiet and low vibration
- Compact design

## International Safety Certifications

- CE marker
- CSA certification

## Specifications

Model	VP-300	
Voltage pressure (two different models to choose from)	110V/60Hz	220V/50Hz
Power(W)	70	
Max.Vacuum (mmHg)	680	
Max. Flow Rate (L/min)	22	18
HP	0.1	
Noise Level(dB)	58	
Weight(kg)	4	
Dimensions (L*W*H)(cm)	20*15*19	

PS: 1 mmHg  $\approx$  0.1333kPa  $\approx$  1.333 mbar

### Important Precaution

- Please read the product manual carefully before using this instrument.
- User is not permitted to modify this instrument. Any unauthorized modification will void the warranty

1. Please make sure the voltage of this instrument matches your local standards.

2. Use the instrument in a clean, free of dust and well ventilated environment with room temperature below 40°C.

3. We recommend the use of our Vent Filters to avoid any liquid being drawn into pump and causing damage.

<https://scientificfilters.com/disk-filters>

In the event that liquid be drawn into the pump, please shut off immediately and contact us for service.

4. The pump should be stationed on a smooth and level surface.

5. Turn off the power during installation or disassemble.

6. The pump has a built-in thermal protection device that will shut off the pump automatically when overheated. In this event, allow to cool then resume usage.

7. It is typical for the pump to heat up during normal usage. To avoid excessive heat it is recommended that the pump be used for short periods of time and then shut off. Extensive use will create a very

hot surface. Be careful at this point to not touch the pump in order to avoid skin burns.

8. Do not use any lubricants.

9. Do not apply any flammable or toxic substances to the pump.

10. If the power line is damaged, inform the distributor or manufacturer as soon as possible to avoid any risk.

## Product Diagram



- ① Power
- ② Air inlet
- ③ Pressure valve
- ④ Pressure gage
- ⑤ Handle
- ⑥ Thermal protection device

## Operation Method

1. Make sure all connections and tubing are secure, then turn on the switch to operate the pump.
2. Adjust the vacuum pressure via the regulating valve.

## Troubleshooting

Trouble	Causes /Handling Methods
Motor fails to start	<b>Check your power input to make sure it matches the requirement of the pump</b>
	<b>Check for a blown fuse in your power supply</b>
	Change fuses as required
	<b>Check if the system is pulling a vacuum</b>
Failure to adjust the max. vacuum	Reset the voltage pressure first then start
	<b>Power failure/Internal wiring loosen</b>
	Change out power cord
Weak pumping rate	<b>Pressure gauge failure</b>
	Contact Tisch Scientific for replacement
Weak pumping rate	<b>Pressure-regulating valve failure/Internal wiring loosen</b>
	Change/send to the Tisch Scientific for maintenance
	Adjust the pressure valve.
Weak pumping rate	Assure that all the connectors are securely tightened.
	Assure that there are no leaks in your filtration system

## Warranty

Tisch Scientific warrants this product to be free of defects in materials and workmanship for one year after shipment from Tisch Scientific facility. The liability of Tisch Scientific is limited to servicing or replacing any defective parts after returning to the factory by the original purchaser. All service traceable to defects in original material or workmanship is considered warranty service and is performed free of charge. The expense of warranty shipping charges to and from our facility will be borne by Tisch Scientific. Service performed to rectify a malfunction caused by abuse, acts of god or neglect, and service performed after the one year warranty period will be charged to the customer at the current prices for labor, parts, and transportation. Tisch Scientific reserves the right to make changes in construction, design specifications, and prices without prior notice.

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