

# Vacuum Pump VP-3 for Suction Type Screwdrivers

## INSTRUCTION MANUAL

(as of August 2018) NO.ET-E014 18A

### <Functionality>

This vacuum pump generates negative pressure in combination with the HIOS Suction Screwdriver to vacuum a screw to the tip of the bit, saving on workload to pick up each screw.

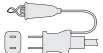
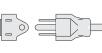
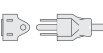
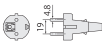
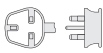
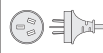
#### ■ Precautions About Installation Location

- Installation location should be free from water or oil.
- Always use the input voltage specified by the specifications.
- Always attach a ground leakage breaker and safety breaker to the commercial power to be used.
- Always use a working environment controlled with proper humidity and temperature.
- Do not put or pile weight on the main body of this product.
- Do not keep any objects near the exhaust vent. Also, avoid installing the product in a place where the exhaust vent will be blocked.
- Do not put flammable material near the main body.
- Avoid installing the product in a place with high-pressure equipment or noise.
- The installation location should be stable with no vibrations.

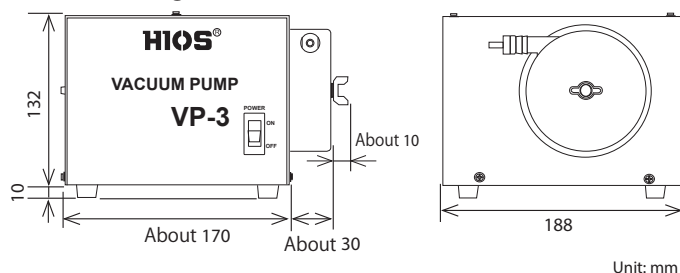
#### ■ Specifications

Primary input power	AC100V, 120V, 220-240V $\pm 5\%$
Maximum power consumption	39W $\pm 20\%$
Ultimate vacuum	-350mm Hg
Air capacity	25L/min
Dimensions (WxDxH)	200 × 188 × 142mm For details, refer to the external drawing.
Weight	3.8kg

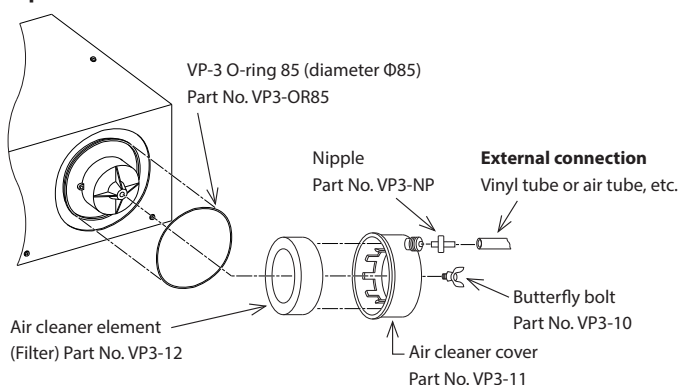
##### ● Plug type

100V	120V	220-240V			
Type A-1	Type A-2	Type A-3	Type C	Type BF	Type S
					

#### ■ External Drawing



#### ■ Replacement of the Air Filter



##### (Caution)

Parts other than those mentioned in the above figure are subject to repair instead of replacement.

#### ■ Precautions for Safe Handling

- Do not let the product vacuum or exhaust liquid, oil or water, etc.
- Irregular rotation, abnormal noise or excess heat, etc., might be a sign of the product malfunctioning. If you notice any such signs, immediately stop using the product and send it for repair.
- Avoid using the product in places with high-temperature, high-humidity or corrosive gas.
- Periodic inspection is recommended for safe use.  
In case of malfunction, please contact our service department.
- Do not disassemble the product by yourself beyond the scope of replacement of maintenance parts or optional parts.

#### ■ How to Replace the Air Filter

1. Remove the VP-3 plug from the socket and make sure that the power is off.
2. Remove the vinyl tube from the air cleaner cover.
3. Loosen the butterfly bolt.
4. Pull out the air cleaner cover from the main body by rocking it gently left and right.
5. Remove the filter inside the air cleaner cover and replace it with the new filter.  
Also, when cleaning the filter, do not wash it with water. Just remove any dust and dirt with the vacuum cleaner, etc.
6. Put the parts back again by taking the steps above in reverse.

##### (Caution)

The vacuum pump vacuums dust or dirt in the air and it becomes difficult to maintain its performance if too much dust or dirt is accumulated in the air filter. Therefore, regularly replace or clean the air filter before you notice any abnormality.

#### ■ Before You Decide the Product Is Broken...

Symptom	Cause and troubleshooting
Screw cannot be vacuumed	<ul style="list-style-type: none"><li>● Check if the POWER SW is OFF. → Turn ON the POWER SW.</li><li>● Check if the vinyl tube is dislocated. → Vinyl tube is connected between the VP-3 and a suction attachment of the screwdriver; therefore, check the connection. Also, if the tube is not inserted deep enough, a screw cannot be vacuumed. Check if it is inserted properly.</li><li>● Check if the vinyl tube is bent. → Make the tube straight.</li><li>● Check if dust is accumulated inside the element, vinyl tube or exhaust vent, etc. → Remove the dust and dirt. Also, replace the element with the new one.</li><li>● After replacing the air filter, check if all parts of the element are reassembled properly. → Reassemble the parts correctly while conforming the replacement procedure.</li><li>● Check if the air cleaner cover is damaged. → Replace it if damaged.</li><li>● Check if the O-ring is damaged. → Replace it if damaged.</li></ul>

If there is any problem other than those mentioned in the above table, please contact your dealer or our after-sales service department.