

# **Suction Pump SIP-32L**

### **Operation Manual**

This is a diaphragm type suction pump, used for measurements of work environment and air. This pump runs quietly, and is lightweight for easy transport. A buffer is built into the suction mechanism to minimize suction pulsations. It can also be used as a discharge pump. Be sure to carefully read this operation manual before using the product.



# ▲ Before Using the Product (Be sure to read this, and handle this product with due care.)

- Install this product horizontally at a stable location.
- Be sure to ground this product.
- This product is not explosion-proofed, so do not use it in the vicinity of combustible or flammable substances.
- [Modifications and Repairs Are Prohibited] Never disassemble or modify this product, as doing so will void the warranty with Sibata. Doing so may also result in an unforeseen fault or accident.
- If a fault occurs, request repairs immediately. Never leave the fault as is or attempt your own repairs, as subsequent use may result in an unforeseen accident.
- If this product starts to emit smoke, becomes abnormally hot, or is making strange noises, immediately stop using the product, turn OFF the power, and remove the plug from the electrical outlet. Then request repair of the product.
- •When removing the power plug from the outlet, hold the cord by the power plug to avoid pulling on the power cord. Be sure your hands are dry before handling the power cord. Otherwise, there is a risk of electric shocks.
- Do not bend, stretch, or twist the cord. Do not connect it to a different cord.
- If you notice that the cord has become damaged or broken or that the plug does not connect properly, stop using it immediately and request repairs.
- A breakdown will result if the pump sucks in dust or water. Prevent this by using filters or traps.
- Do not allow this product to be directly splashed with water.

# ■ Specifications

Item code	080800-32
Model	SIP-32L
Suction flow rate	40 L/min (with no load)
Suction pressure	27 kPa (max.)
Hose connection port	External diameter: φ11 mm
Power supply	100 VAC 50/60 Hz 1 A
Dimensions	Approx. W150 × D205 × H177 mm
Weight	Approx. 5 kg
Usage conditions	Use it indoors for 0.5 hours to 72 hours at a time, for a total annual period of 3,000 hours max.  (Ensure that the pump unit is placed on a level surface.)

Note: Due to product improvements, the product shape, dimensions, specifications, and other product information are subject to change without notice, to the extent that they do not affect product applicability or functionality.

# ■ Warranty

If a Sibata product fails within one year from date of purchase, it will be repaired free of charge. To request repairs, be sure to contact the distributor where you purchased the product. Be sure to provide the item code, product name, model number, serial number, a description of the problem, and other relevant information. The warranty excludes consumable parts included with the product, products without the purchase date or distributor information recorded, and products for which warranty information was revised. A repair service fee is charged in the following cases.

- (1) Failures or damage caused by usage methods
- (2) Failures or damage resulting from repairs or modifications not performed by Sibata
- (3) Failures caused by abuse or inadequate maintenance
- (4) Failures or damage resulting from fires, earthquakes, acts of nature, or other unavoidable events
- (5) Failures or damage due to transportation, relocation, falling, vibration, or other such events after purchase
- (6) Failures or damage resulting from using consumables not specified by Sibata

# ■ Troubleshooting

If you think there has been a breakdown, check the following points.

Problem	Cause	Remedy	
There is no suction. There is no running noise.	The power is not ON.	Connect it to the power supply.	
	The coil temperature protection has tripped.	The safety thermal cutoff has tripped due to an internal temperature increase. This occurred because air was not delivered due to damage to the diaphragm. Please buy a new pump.	
The pump makes a running noise, but there is no suction.	The diaphragm or valves are damaged.	Replace the chamber block set and L-tube as per Fig. 3.	
	The L-tube is damaged.		

## Composition

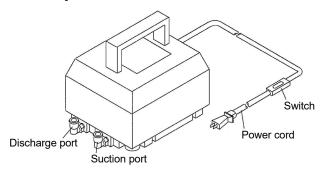


Fig. 1

### ■Instructions for Use

- (1) Install the pump on a level surface.
- (2) Check that the power switch is OFF. Then plug the power plug into the outlet.
- (3) Check the connections to the pump, and then turn it ON.
- Be sure to connect the grounding terminal prior to use.

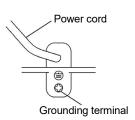


Fig. 2

# ■ Maintenance and Inspections

Replace the chamber block every 3 years. The replacement procedures are explained below and in Fig. 3.

- (1) Remove the screws at the four corners of the cover over the base fastening stand. Then insert a screwdriver between the suction exhaust port and the cover, and remove the cover.
- (2) Loosen the four screws attaching the casing, and remove the casing.
- (3) Remove the lock nut at the center of the diaphragm. The diaphragm stand can now be pulled forward.
- (4) Reassemble as before with the new part. Assemble the opposite side similarly.
- (5) Also, replace the L-tube connecting the casing and the base plate.
- (6) When the replacements are finished, put the cover back on, and tighten it with the four screws.

# Chamber block set Rod Diaphragm stand Diaphragm Lock nut Casing Metal washer Base fastening stand

Fig. 3 Exploded View

### If Rust Turns the Whole Surface Red

If the diaphragm is damaged, the permanent magnet in the rod may rub against the iron core in the electromagnet, resulting in fine iron powder scattering. Blow this away using an air source, or wipe it away with a clean cloth before replacing the chamber block.

### If the Rod Breaks

If the pump continues to operate with the diaphragm damaged, the rod will ultimately break and the permanent magnet will be dislocated. In this case, exchange the rod for a new one, and replace the chamber block.

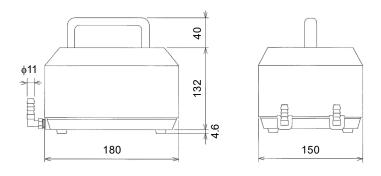


Fig. 4 External Dimension Diagram

# ■ Spare Parts (Please purchase them separately.)

Item code	Product Name
080800-3201	Hose Adapter with Elbow for SIP-32L
080800-3202	Chamber Block Set New Type for SIP-32L 2pcs.
080800-3203	Rod New Type for SIP-32L



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