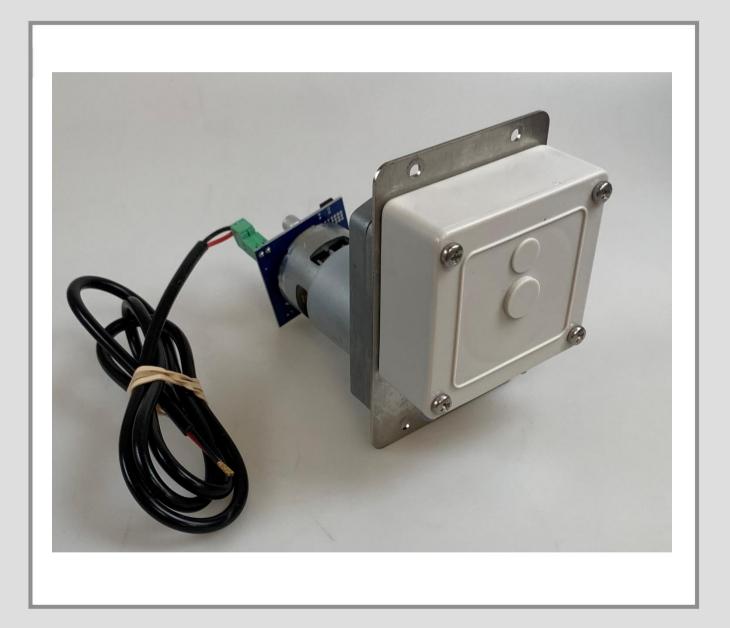


## Low Volume Metal Gear DC Peristaltic Pump – Variable Speed



# **OPERATING INSTRUCTIONS**

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## Introduction

The Low Volume Variable Speed Peristaltic Pump with metal gears is supplied as standalone pump. Pumps are supplied as either of two voltages: 12 & 24 V DC. The delivery output will be dependent upon the motor speed and the size of the tube size that is fitted to the pump, as well as the viscosity of the liquid being pumped. Five different speed motors and three tubes sizes (3.2, 4.6 and 6.3mm Bore Santoprene) are available. This pump is ideal for intermittent use.

## Safety

CAUTION: Wear protective clothing and eyewear when dispensing chemicals or any other materials. Observe safety handling instructions (MSDS) of chemical manufacturers.

CAUTION: To avoid severe or fatal shock, always disconnect main power when servicing the unit.

## **Specifications**

**Pump delivery** – These are <u>nominal</u> figures using Water at room temperature with a one metre suction and delivery tube:

		Tube Size & Delivery Rate		
Output	RPM	3.2 Bore ml/min	4.6 Bore ml/min	6.3 Bore ml/min
Variable	62 94 125 156 188	20-70 25-110 50-150 60-190 70-240	40-130 60-230 90-290 110-340 140-480	60-200 90-320 130-470 170-560 210-790

## Installation

#### Pump

The pump will turn clockwise during operation. Liquid intake (suction) is on the left-hand spigot and delivery (feed) is on the right-hand spigot. Ensure that the correct sized suction and delivery tubes are used. Secure the suction and feed tube with Jubilee clips.

#### Mounting

The pump is designed to be fitted to a suitable plastic, or metal enclosure with the correct cut out. If the pump is fitted with a mounting plate, fixing holes are provided for M4 screws. A speed control PCB is fitted to the back of the motor, DC power should be connected to the PCB using wire supplied.

#### Power

12/24V DC, with minimum of 2A start up current, is required. The pump should be connected to the supply voltage via a terminal block or push-on crimps, as per your requirements. Any loose wires inside the enclosure should be clamped to the solid surface. The red wire should be connected to the positive and the black wire connected to the negative of the DC supply.

## Operation

The pump will run in response to application of a 12/24V DC supply at the speed that has been set, and stop on removal of the supply. There are no other controls.

## Pump Maintenance

The peristaltic pump tube should be checked regularly for wear. It should also be kept clean and lubricated with silicone grease. We also recommend that the tube be changed at regular intervals, depending upon how long the pump has been in use and the type of fluid being pumped through it.

The information in this leaflet is for general information and guidance only. Ambic Equipment Ltd does not provide any warranty on the application of Pumps or Pump Assemblies. It is recommended that customers carry out life tests for their particular application to determine suitability prior to use. The information provided is given in good faith and believed to be current and correct at the time of publication. Ambic Equipment Ltd cannot accept responsibility for any errors or omissions contained in this document.

## Troubleshooting

Fault	Cause	Remedy
Pump does not work	Pump is not connected to the supply.	Check that pump is connected to supply voltage.
	The supply is Switched OFF.	Switch the supply ON.
	Pump is drawing current but not running.	Check the power supply is capable of supplying the required current.
No pump output delivery	Pump is not running.	Connect the power to the pump.
	Spinner assembly is running anticlockwise.	Reverse the supply connections.
	Inlet tube is not connected to the left-hand spigot.	Connect the inlet (suction) tube to the left-hand spigot.
	Suction tube assembly is not properly inserted into chemical drum – use a suitable Non return valve.	Insert the suction tube into the drum.
	Stiffener not fitted to the suction tube.	Fit a stiffener tube; this will help with keeping the suction tube to the bottom of the drum.
	Kinks in the suction and/or delivery tube.	Remove the kink and make sure it does not happen in the same place again.
Pump does not lift the liquid	Peristaltic tube needs replacing.	Replace the tube with correct size bore, spigot and shore hardness as supplied through the manufacturer or their recognized agent.
Chemical seems to lift and then drop back.	Peristaltic tube needs replacing. Air getting inside the tube.	Replace the tube with correct size bore, spigot and shore hardness, as supplied through the manufacturer or their recognized agent.
		Check if the suction and delivery tubes are fitted tightly onto the spigot and that a jubilee clip has been fitted.

## Parts Listing

The following spare parts are available to order separately:

ALP/101-SA625-PP	ALP/101-SI635	
Santoprene Peristaltic Tube	Silicone Peristaltic Tube	
6.3mm bore Tubes with other bore sizes available upon request	6.3mm bore	
ALP/103	ALP/102	
Pump Block and Cover	Roller Assembly	
ALP/115	ALP/100-12, ALP/100-24	
Silicone Grease	DC Motor (12 or 24V)	



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