

AMBIC[®]

HIGH VOLUME Dispensing System



OPERATING INSTRUCTIONS

leading best practice in livestock health management

Ambic Equipment Ltd – High Volume Dispensing System Operating Notes

Introduction

The High Volume Dispensing System features a single industrial-type pump. Final delivery volume is dependent upon the tube type that is fitted to the pump. Please note that two sizes are available.

Safety

This unit must be connected to an isolator with at least 3mm separation in all poles.
This unit must be earthed.



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

Specifications

Pump delivery: The measurements below were obtained with water at room temperature using Santoprene peristaltic tube.

Tube Bore	Delivery Rate (per hour)
9.7mm	98 litres
12.6mm	160 litres

Fuse rating 6.3AT

Installation

Pump

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

Mounting


The enclosure is designed to be fitted to a suitable vertical flat surface such as a wall. However, it is unsuitable for mounting on hot surfaces. Mounting points are provided at the corners of the enclosure. Mount at a maximum height of 2m from the drum.

The lid and pump assembly are removable for installation.



CAUTION: *To avoid severe or fatal shock, always disconnect main power when servicing the unit. Access to LIVE PARTS is possible whilst the lid is removed.*

Power

The internal connections for the mains supply are marked 110V 60Hz. Termination is made via a pluggable terminal block. Three terminals are provided on a plug mounted within the unit. The socket part should be attached to the incoming power lead so that the connections align with those marked L for the Live connection, N for the Neutral connection, and  for the Earth connection.

Please note that this unit is supplied with the power lead fitted.

A mains power switch is provided.

Ambic Equipment Ltd – High Volume Dispensing System Operating Notes

Operation

The pump will run in response to application of a mains supply and will stop on removal of the mains supply. There are no other controls.

Pump Maintenance

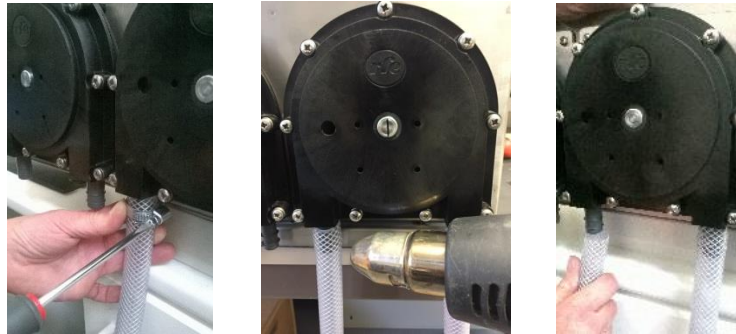
The pump is self-priming and will give long, trouble free, efficient operation. It is recommended that the peristaltic tube is lubricated with silicone grease, through the hole in the front of the pump and is replaced regularly.

Replacing the peristaltic tube

WARNING – Face mask and gloves must be used for protection from chemical contact.

1. If possible drain the chemical from the Pump Tube.
2. Switch the Pump OFF.
3. Remove the inlet (suction) and outlet (delivery) tube / hose. You may need to use a heat gun to warm the tube first, twist and pull back.

Warning – A sudden pull on the tube may splash residual chemicals from the tube.

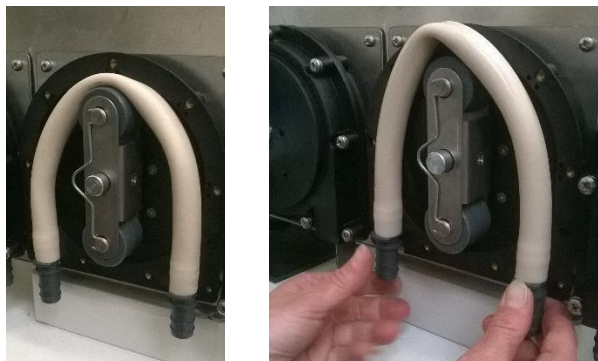


4. Remove the nine screws holding the cover, and remove the cover slowly.



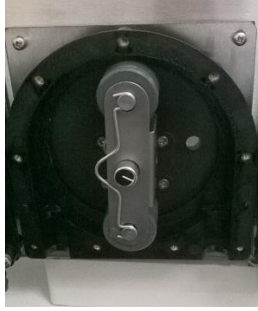
5. Gently pull the tube from the Pump housing and discard safely.

Warning – Residual chemical could splash from the tube.



Ambic Equipment Ltd – High Volume Dispensing System Operating Notes

6. Turn the roller assembly so that it is at the 12 o' clock position, if not already in that position.



1. Apply a pea-sized amount of silicone grease to the new tube before fitting it. Fit the tube spigots to the pump block so that the spigot ridges are in the correct place.



2. Pinch the centre of tube and push it between the roller and pump housing at the 12 o'clock position. Note: the spigots may come out from the base of the pump block. If this happens push them back into place to re-fit.



3. Fit the cover and secure using the nine screws and washers.



Ambic Equipment Ltd – High Volume Dispensing System Operating Notes

4. Fit the inlet (suction) and outlet (delivery) tube / hose. It may be necessary to slightly warm the tube using a heat gun. Fit Jubilee clips if required.



Ambic Equipment Ltd – High Volume Dispensing System Operating Notes

Troubleshooting

Fault	Cause	Remedy
Pump does not work	<p>Pump is not connected to the supply.</p> <p>The supply is Switched OFF.</p> <p>Pump is drawing current but not running.</p>	<p>Check that pump is connected to supply voltage.</p> <p>Switch the supply ON.</p> <p>Check the supply is capable of supplying the required current.</p>
No pump output delivery	<p>Pump is not running.</p> <p>Spinner assembly is not running clockwise.</p> <p>Inlet tube is not connected to the left hand spigot.</p> <p>Suction tube assembly is not properly inserted into chemical drum.</p> <p>Stiffener not fitted to the suction tube.</p> <p>Kinks in the suction and/or delivery tube.</p>	<p>Connect the power to the pump.</p> <p>Reverse the supply connections.</p> <p>Connect the inlet (suction) tube to the left hand spigot.</p> <p>Insert the suction tube into the drum.</p> <p>Fit a stiffener tube; this will help with keeping the suction tube to the bottom of the drum.</p> <p>Remove the kink and make sure it does not happen in the same place again.</p>
Pump does not lift the liquid	<p>Peristaltic tube needs replacing.</p>	<p>Replace the tube with correct size bore, spigot and shore hardness.</p>
Chemical seems to be lift and then dropping back.	<p>Peristaltic tube needs replacing.</p> <p>Air getting inside the tube.</p>	<p>Replace the tube with correct size bore, spigot and shore hardness.</p> <p>Check if the suction tube is fitted tight on the spigot and if necessary fit a jubilee clip.</p>

Parts Listing

The following spare parts are available to order separately:

<p>AHP/100-SA-12 12.7mm Peristaltic Tube</p>	<p>AHP/100-SA-09 9.6mm Peristaltic Tube</p>
	
<p>AHP/103 Pump Block and Cover</p>	<p>AHP/102 Roller Assembly</p>
	
<p>ALP/115 Silicone Grease</p>	<p>ELU5241 AC Motor</p>
	



Ambic Equipment Limited,
1 Parkside, Avenue Two, Station Lane,
Witney, Oxfordshire, OX28 4YF. England
Tel: +44 (0)1993 776555 Fax: +44 (0)1993 779039
www.ambic.co.uk