

DRIFTON

THE SCIENCE OF DISPENSING

Drifton Double Syringe Liquid Dispenser

Operation Manual (GB)

Drifton 206-DAB

Drifton 206-DAB-ES 1201 (1:1)	
Drifton 206-DAB-ES 1202 (2:1)	
Drifton 206-DAB-ES 1203 (4:1)	
Drifton 206-DAB-ES 1204 (10:1)	



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Introduction

You have selected a reliable, high quality double syringe liquid dispenser from Drifton A/S. The dispenser will provide you with years of trouble-free, productive service. This operation manual will help you maximize the usefulness of your new dispenser.

Please spend a few minutes to become familiar with the controls and features. Follow our recommended testing procedures. Review the helpful information we have included, which is based on more years of industrial dispensing experience.

Most questions you will have are answered in this Operation Manual. However, if you need assistance, please do not hesitate to contact Drifton A/S at telephone 0045-5372 8090 or info@drifton.dk or an authorized distributor

Our goal is to build not only the finest equipment and components, but also to build long-term customer relationships founded on superb quality, service, value and trust.

Drifton A/S
The science of dispensing

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Product Safety Statement

Intended Use

Use of Drifton equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property. Some examples of unintended use of equipment include:

- Using incompatible materials
- Making unauthorized modifications
- Removing or bypassing safety guards or interlocks
- Using incompatible or damaged parts
- Using unapproved auxiliary equipment
- Operating equipment in excess of maximum ratings
- Operating equipment in an explosive atmosphere

Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Drifton equipment will be voided if instructions for installation, operation and service are not followed.

Qualified Personnel

Equipment owners are responsible for making sure that Drifton equipment is installed, operated and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

Personal Safety

To prevent injury, follow these instructions:

- Do not operate or service equipment unless you are qualified
- Keep clear of moving equipment. Before adjusting or servicing moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Make sure dispensing areas and other work areas are adequately ventilated.
- Know where emergency stop buttons, shutoff valves and fire extinguishers are located.
- Clean – Remove all electrical and mechanical connections to unit. Apply a small amount of light detergent onto a moist cloth and wipe surface of unit lightly, cleaning any stains or spilled adhesive.
- Maintain – Only use clean dry air and regulated power supply to unit. Equipment does not require any other regular maintenance.
- Test – Verify operation of features and performance of equipment using the ‘Testing and installation’ sections within this Operation manual. If necessary, refer to the ‘Trouble Shooting Guide’ elsewhere in this user guide. A faulty or defective unit should be returned to Drifton or representative for refurbishment.

Caution: Use replacement parts that are designed for use with original equipment, so that our dispenser will work according to specifications.

Started

First: Unpack and see the packlist enclosed with the Dispenser, then check all items. If there is any discrepancy, please call us immediately.

a. Controller	1pcs
b. Drifton-ES 120x valve	1pcs (x = type of valve, see front page)
c. Foot pedal	1pcs
d. Plug	1pcs
e: Air tube	2pcs
f. Double barrel with piston	3set
g. Mixer nozzle (short)	2pcs

Second: Power and compressed plant air should be available where the dispenser is to be set up. Be certain your plant air is properly filtered and dry and a regulated, constant air pressure is supplied to the dispenser.

We have organized this operation manual to provide setup and testing procedures for the double syringe dispensers.

Please see different content for the different dispensers

Next: We will tell you how to dispense low viscosity fluid using the vacuum control and how to dispense high viscosity liquid.

Principles

Drifton double liquid dispenser series quotes air pressure to control liquid fluid dispensing through high-precision timing of pressure pulse control, which ensures that the correct amount of fluid is applied every time, on every part, to every item. Time is more precise quantitative and will also be more prospective. A Solenoid Valve provides higher response rate, and dispensing speed will be soon.

Drifton dispenser components:

Barrel, pistons, nozzle, high-precision tip, 1000J valve adapter, high precision controller (timing, pressure), it is easy to operate and has a small volume. Only uses a little electricity and pressure. Maximum pressure is 7bar. It can be used for fluid materials of different viscosities. It has vacuum suction to prevent of liquid down flow.

Dispenser Hookup

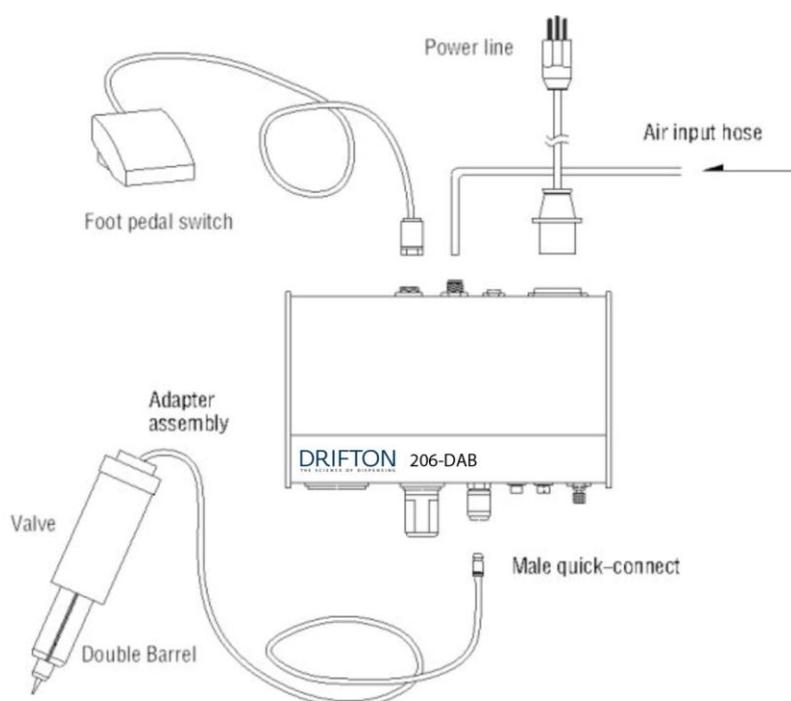
1. Connect the air input hose to a plant air source. Set plant air supply within 80 to 100 psi.
2. Attach the air input hose coupling to the dispenser.
3. Plug in the polarized foot pedal connector. Connect the foot pedal to the back of the dispenser
4. Check the voltage label on the input voltage selector cartridge. Connect the power cord into the back of the dispenser. Connect the power cord into your local power source (AC110V-220V / 50Hz).
5. Insert the tube end of the valve to the dispenser. The other tube assembly into the front of the dispenser.
6. Take the liquid material and fill the barrel. Insert the piston down into the barrel.
7. Take the barrel and attach the valve, fixate it, and then attach the mixing Nozzle. If you want to have a small volume, you can connect the needle.
8. Note: Always use the lowest possible pressure and the largest possible tip size. The combination of the lowest possible output pressure + largest possible tip size + longest possible dispense duration = most consistent and accurate deposits.
9. During the initial testing, you will not use the vacuum control. Keep this control shut off (turned completely clockwise—do not force).

Drifton 206-DAB Double Syringe Dispenser

Specifications

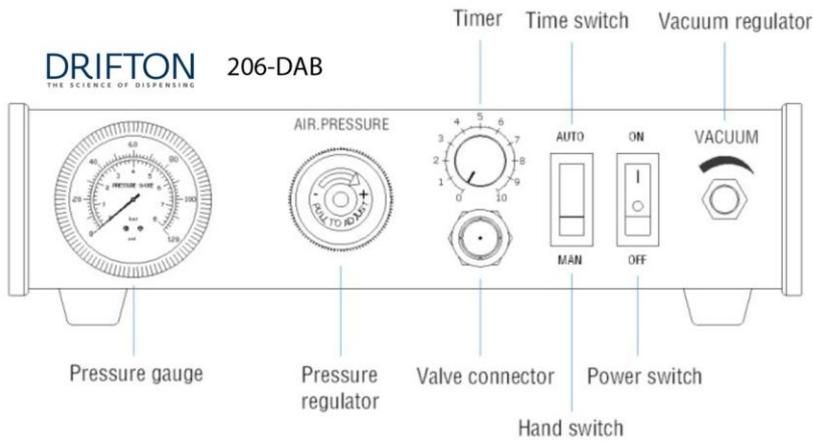
Liquid ratio:	1:1 - 10:1
Mixing way:	Static mixer
Dispensing time:	0.01S - 1S, 0.1S - 10S, 0.2S - 20S
Air Input:	7 KgF/cm ² Dry air without lubrication
Air Output:	0.1–7KgF/cm ²
Repeatability tolerance:	± 0.5%
Min depot:	0.05ml
Input Voltage:	110V/220V ± 10% 50Hz
Output Voltage:	24V
Power:	< 15W

Connections drawing

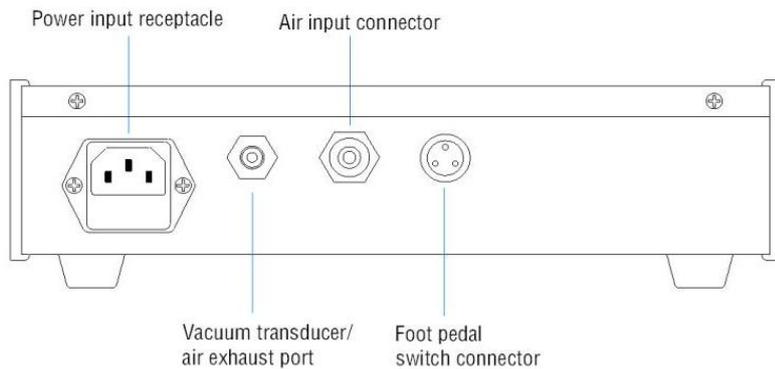


- | | | |
|---------------------|----------------------|------------------|
| ① Foot pedal switch | ② Power line | ③ Air input hose |
| ④ Adapter assembly | ⑤ Male quick-connect | ⑥ Valve (1000J) |
| ⑦ Double barrel | | |

Controls Panel



- ① Pressure gauge
- ② Pressure regulator
- ③ Timer
- ④ Barrel connector
- ⑤ Time switch
- ⑥ Hand switch
- ⑦ Power switch
- ⑧ Vacuum regulator

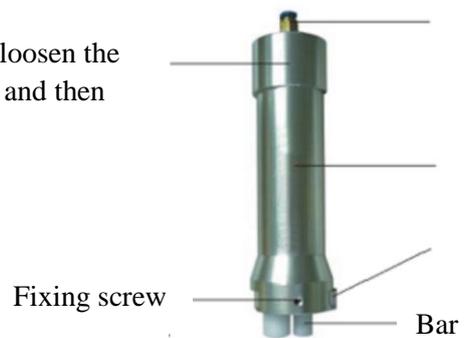


- ① Power input receptacle
- ② Air input connector
- ③ Foot pedal switch/finger switch
- ④ Air exhaust port

Valve

Installation of the double barrel

Using the vacuum suction function recover the piston rod-cylinder, loosen the fixing screws and unloaded ring, put the double barrel into the ring, and then insert the valve, tightening the screws with fix.



Setup for Testing

When you begin testing, the Power switch should be off.

The amount of material dispensed in each cycle depends on the combination of **air pressure, time of air pulse, viscosity of material and dispensing tip size.**

The first step is to remove the tip cap from the prefilled barrel of test material, Replace it with a 14 gauge tapered dispensing tip. Press the tip on and twist clockwise to lock.

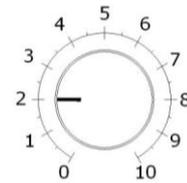
Second: Pull out air pressure regulator knob until it "clicks" into the unlocked position. Turn clockwise to adjust the air pressure to 30 psi (2.1 bar) for the initial tests.

Always set the pressure desired by turning the air regulator knob clockwise. To reduce the pressure, turn the knob counterclockwise until the gauge reads a lower pressure than desired. Then increase and stop at desired pressure. Push knob in to lock.

Pressure regulator:

Turn clockwise – increase pressure

Turn counterclockwise – decrease pressure



Third: Press power switch to turn on the dispenser.

Fourth: Press the “Auto/Man” button to choose the “Man”, then set the dispensing time at “0000S”. Step on the foot pedal switch and liquid will flow out. When you stop stepping on the foot pedal, it will stop dispensing glue.

Fifth: Press the “Auto” button, Turn the Timer knob clockwise, Adjusting range: 0.01~1.00s.0.1-10s, 0.2s-20s

Sixth: Be sure barrel vacuum control is turned off. The vacuum volume should be “0” when testing.

If you want to test vacuum suction, take some water in the barrel first and fasten the tip, then adjust the vacuum regulator. When your turn it counterclockwise, you will find that the water does not drip. If the vacuum suction is too high, the water will rise into the barrel.

Suggestions on Settings

1. To ensure smooth fluid flow and to make consistent deposits, keep the dispense tip at a 45° angle to the work surface.
2. To reduce air pressure, turn the knob counterclockwise until the display reads at a lower-than – needed pressure setting. Then turn clockwise to increase pressure until you reach the correct setting.
3. Avoid high pressure settings with very small deposit settings. The ideal setup matches air pressure and tip size to create a “workable” flow rate – no splashing, but not too slow either.
4. There are three core variables to the dispenser: dispense time, pressure and vacuum. Adjust just one of these at a time, in small increments, to achieve the correct deposit.

Troubleshooting Guide

A Drifton Customer Service or Technical Services representative is always available to assist you with any question you may have about your Dispensing System. Please feel free to call or email us at the addresses on the front cover of this manual book.

Trouble	Solution
No fluid being dispensed	Check the power supply connection and DC power supply to the unit.
	Check the main air supply and primary regulator.
	Check to make sure that the main air supply is connected to the back of the unit and has not come loose.
	Check to make sure that the regulator is turned off (fully counterclockwise)
	If dispensing high viscosity materials, try increasing output air pressure slightly.
	Vacuum level is set to high.
	Barrel adapter safety clip may be clamped shut.
Inconsistent dispense output	Check the dispensing tip, barrel and material for possible contamination or clogs.
	Note: Dispensing System Components are disposable. Do not attempt to reuse.
	Check for air supply pressure fluctuation.
	Air bubbles in the fluid path and entrapped air within the fluid may cause inconsistency. For best dispensing results, remove all entrapped air before dispensing.
	Vacuum level is set to high.
	Barrel adapter safety clip may be clamped shut.
Material suck-back	Always use an appropriate piston to prevent material from being drawn back into the dispenser.

Guarantee

Thank you for selecting a Drifton dispenser.

Warranty

1. Warranty duration: 1 year from the date of purchasing (Doesn't include the free items and consumables)
2. Warranty cards should be filled and sealed by the sales agent.
3. Sales agent should perform the obligations of warranty and maintenance.

In no event shall any liability or obligation of Drifton arising from this warranty exceed the purchase price of the equipment. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith.

Drifton makes no warranty whatsoever of merchantability or fitness for a particular purpose. In no event shall Drifton be liable for incidental or consequential damages

The following situations are not in the scope of warranty; users should pay the maintenance costs:

1. The mistake of operation or transport causes damage to the machine by the user;
2. Replace the components or repair the machine by a repairer which is not designated by the manufacturer or sales agent.
3. The machine is damaged by lightning, flood, fires and other natural disasters;
4. Beyond the warranty time;
5. The machine is damaged by the stability of voltage;
6. Users connect the dispenser with inferior power devices.

Maintain Card			
Item		NO:	
Company name		Invoice NO:	
Sales unit	(stamp)	Date	
Repair records			
Date	Detail of the problem	checker	Note

Note: The information contained in this manual is subject to change without notice.