

# NCM5000 Jetting Pump

## for High Speed Dispensing

*Applications: SMT Glue, Fluxes, UV Curables, LED Encapsulants, and more*

The NCM5000 simplifies jetting to its basic elements - this means easy set up, cleaning, and maintenance for you. The drive system is designed for reliable pneumatic operation at high speeds up to 300 Hz, and you can adjust drop size  $\pm 20\%$  from the normal size. Smallest shot size dispensed is 2 nl.

### Easy Set Up

The NCM5000 has 3 primary parts:

#### Main Body

- Contains pneumatic controls to operate the pump
- Houses the standard heater used to optimize the dispense process

#### Flexible Diaphragm with Ball



- Key to pump operation; houses the impact ball
- Diaphragm is available in various materials for fluid compatibility

#### Nozzle Plate



- Amount of fluid to prime is 0.1 cc
- Houses the interchangeable nozzle
- Nozzle is made of carbide or ceramic, and ranges in size from 0.075 mm to 0.2 mm
- Captures the diaphragm

### Easy Cleaning & Maintenance

Disassembly and cleaning couldn't be simpler, and material loss is kept to a minimum because only a small volume of fluid is needed to prime the pump.

Simply remove two screws to disassemble the pump - this releases the nozzle plate, diaphragm, and syringe from the pump. Because the screws are accessible from the top, the pump can remain in place during the cleaning process.

The nozzle plate and diaphragm can be cleaned in an ultra-sonic cleaner with an appropriate solvent. Very easy cleaning process!



### Dispense Range

The NCM5000 is compatible with a wide range of fluids: UV curables, SMT Glue, Underfills and LED encapsulants to name a few.

### Adjustments for Optimizing Dispense Process

When not used on a GPD Global platform, the offline controller can be used to control the pump on a benchtop or from an external control system.



**Pump Operation Pressure** - controls the force of fluid exiting the pump

**Pump Open Time** - adjusts fluid volume of a single shot

**Reservoir Pressure** - controls reservoir fill speed

**Pump Dispense Dwell** - controls droplet frequency

**Nozzle Temperature** - compensates for temperature fluctuations within the facility and enhances compatibility of fluid characteristics for jetting



**GPD Global**  
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