

# DispenseMate® D-593/D-595 Series

## Dispensing Power in a Fully Integrated Package

### Features and Benefits

- Benchtop platform, ideal for batch production, new product introduction and labs
- Integrated, closed-loop Pattern Recognition vision system for finding workpiece fiducials to reliably locate dispensing sites and correct for misalignment
- Programmable, closed-loop needle heater control for a more robust dispensing process
- Equipped with Nordson ASYMTEK's industry-proven Fluidmove® dispensing software
- Integrated mechanical height sensor, laser height sensor option available for non-contact dispense height measurement
- Optional, closed-loop CPJ process control for highly repeatable fluid dispensing

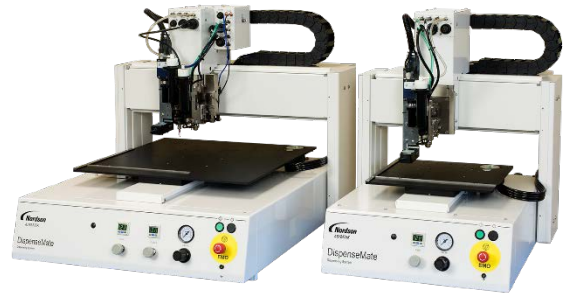
The DispenseMate series brings dispensing power and fully integrated, closed-loop process control to a benchtop package. Many of today's advanced automated dispensing features are included with the basic platform.

Two models are available with different X-Y travel dimensions: the D-593 model is 325 x 325 mm, the D-595 model is 525 x 525 mm.

The DispenseMate system provides dispense control technology based on Nordson ASYMTEK's most advanced, in-line dispensing systems, including closed-loop DC servo motion control, Jet-on-the-Fly jet dispense capability and Fluidmove software for user-intuitive programming.

Other standard features include an integrated mechanical height sensor and vision system for automatic pattern recognition with programmable lighting for automatic correction of workpiece misalignment. Also included are programmable, closed-loop nozzle and needle heat control with software-programmable setpoints and data logging, as well as dynamic dispense control which enables closed-loop process control of small-dot dispensing.

The D-595 model offers optional closed-loop process control with patented Calibrated Process



D-595

D-593

Jetting (CPJ) for jet dispensing. CPJ uses weight control to ensure precise volumetric repeatability. For valve dispensing, patented Mass Flow Calibration (MFC) uses weight-controlled dispensing and automatic calibration to continuously deliver consistent fluid amounts. Offline MFC/CPJ is a standard capability of both the D-593 and D-595 models, accomplished by weighing samples on a user's own scale and manually inputting the measurements into Fluidmove for automatic flow rate computation.

Dual-action dispensing capability can be added to the D-595 system for applications requiring two different fluids.

You can easily ramp production as your business grows. Fluidmove programs are upward-compatible with and easily transferred to other Nordson ASYMTEK in-line systems, including the Spectrum™ II and Quantum® platforms. In addition, Fluidmove software provides SPC data-logging for process traceability and optional CAD import capability.

From batch through full-scale production, you are supported by our experienced worldwide engineering, applications development and technical service network.

# DispenseMate® D-593/D-595 Series Specifications

## Motion System

Type:	Brushless DC servo motors with closed-loop encoder feedback
Encoder resolution:	10 microns
X-Y positional accuracy:	± 75 µm (0.003 in.)
X-Y placement accuracy:	±100 µm (0.004 in.), 3 sigma
X-Y acceleration:	0.25 g peak with S-curve jerk control
X-Y repeatability:	± 25 µm (0.001 in.)
Z-axis repeatability:	± 25 µm (0.001 in.)
Z-travel:	75 mm (3.0 in.)
X-Y max travel:	
D-593:	325 x 325 mm (12.8 x 12.8 in.)
D-595:	525 x 525 mm (20.7 x 20.7 in.)

## Vision and Lighting

Vision:	Vision system with Automatic Pattern Recognition
Lighting:	Programmable, on-axis, red/blue LED, 256 steps

## Computer

Windows®-based laptop with mouse

## Software

User environment:	Fluidmove® software
Operating system:	Windows® OS

## Fluid Delivery Methods

DispenseJet® Jet:	DJ-9500
NexJet® Jetting System:	NJ-8
Heli-Flow® Pump:	DV-7000, DV-8000
Dispense Valve:	DV-01, DV-02, DV-03, DV-05, DV-07 and DV-09

## Payload

Tool (z-axis):	3 kg (6.6 lbs)
Workpiece <sup>(1)</sup> :	
D-593:	5 kg (11 lbs)
D-595:	3 kg (6.6 lbs)

(1) Maximum Y payload is 7 kg (15.4 lbs) including tooling plate assembly.

## Dispense Area (non-vacuum tooling plate assembly)

(Includes service station, mounted camera, valve, and height sensor)

D-593:	225 x 275 mm (8.9 x 10.8 in.)
D-595:	
Without scale:	425 x 475 mm (16.7 x 18.7 in.)
With scale:	225 x 275 mm (8.6 x 10.8 in.)

## Facilities Requirements

System footprint (without laptop PC)

D-593:	567 x 764 x 664 mm (w x d x h) (22.3 x 30.1 x 26.1 in.)
D-595:	767 x 1073 x 664 mm (w x d x h) (30.2 x 42.2 x 26.1 in.)
Air supply:	85 liters/min, 620 kPA (3 CFM @ 90 psi) <i>Note: may be higher depending upon application</i>
Power:	100-240 VAC, 5 amps, 50/60 Hz, single phase
Weight:	
D-593:	45 kg (99.2 lbs)
D-595:	70 kg (154.3 lbs)

## Standards Compliance

CE; SEMI-S2; SEMI-S8; WEEE/RoHs compliance

## Standard Features

Dynamic Dispense Control (DDC)  
Closed-loop, integrated mechanical height sensor  
Closed-loop needle/nozzle heat control  
Jet-on-the-Fly (JOF)  
Low air pressure alarm with adjustable set point  
Low fluid software  
Precision air regulators  
Service station: integrated vacuum purge/needle tactile sensor  
Software-based, offline MFC/CPJ

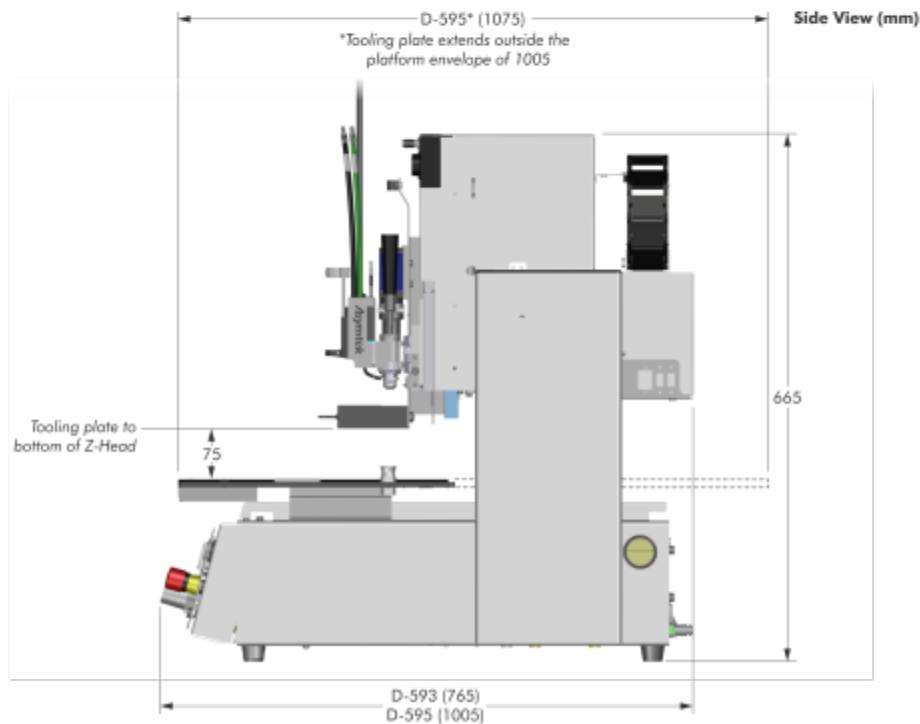
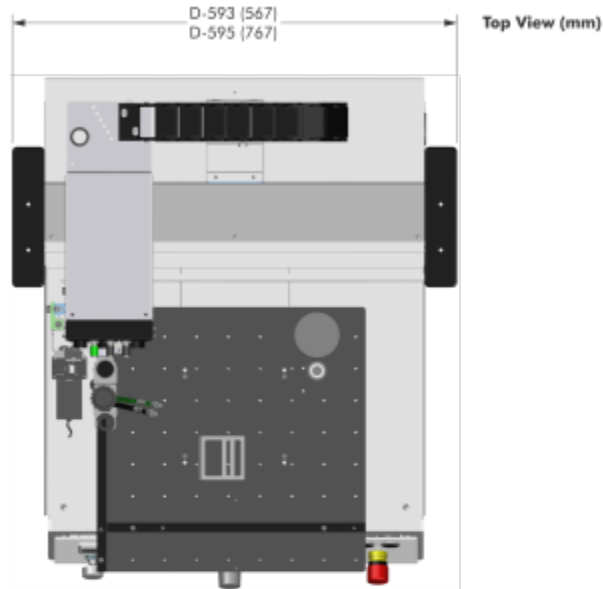
## Options

CPJ/MFC integrated scale (D-595 only)  
Dual-action dispensing (D-595 only)  
Laser height sensor  
Low fluid sensor hardware and software  
Needle heater assembly (compatible with DV series valves)  
Single-axis tilt (D-595 only): ±10°; ±20°; or ±30° in X or Y axis  
Software: CAD Import  
Software: SECS/GEM interface  
System enclosure with external control box  
Tooling plate assembly: non-vacuum or vacuum

Additional options are available; contact Nordson ASYMTEK for further information.

# DispenseMate® D-593/D-595 Series Dimensions

Dimensions are in millimeters



For more information,  
visit our website to  
locate your local  
representative or  
contact your regional  
office:

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Singapore

## Korea

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**Published 2018-03-21 Updated**