



ALLDROP[®]

nanoDispenser

Nanoliter printhead

High precision dispensing & consistent volumes
by automated in-line dispense control (IDC)

The ALLDROP® is a nanoliter OEM printhead with an integrated optical imaging system for simultaneous droplet analysis during a dispense operation. The installed pressure controlled reservoir (SmartReservoir) maximises process precision by controlling the system pressure to constant conditions.

In-line dispense control (IDC) automatically sets dispense and pressure parameters to get most reliable and robust results even for complex liquid types and long production runs.

How IDC works

Every dispensed droplet is imaged during a dispense process by the integrated SmartDrop system. The image processing instantly provides the volume of each individual droplet and further determines droplet quality. The software algorithm identifies a volume drift and autonomously adapts dispense parameters just before the next droplet is dispensed. Such closed loop control keeps droplet volumes consistent and guarantees highest reproducible dispensing performance even for difficult liquids.

1 - SmartReservoir

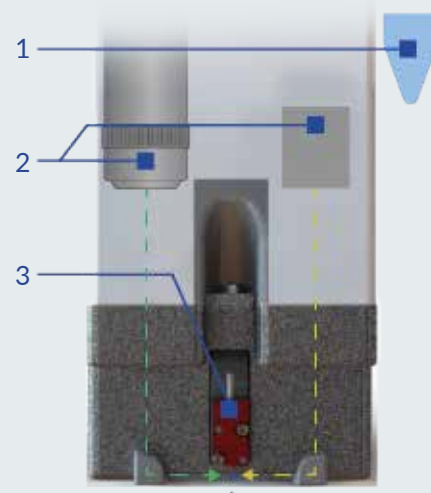
Enables precise control of pressure conditions ensuring stable dispensing results at high frequency.

2 - SmartDrop

Automated volume calibration and verification tool enabling in-line control of droplet volume and quality.

3 - PipeJet®

Non-contact, drop-on-demand dispenser for nanoliter droplets.



100% process control

Full documentation of all process parameters and volume tracking for each dispensed droplet



GMP prepared

IDC to meet requirements of GMP compliant processes in diagnostic, pharma or medical market.



Traceability

All process data are saved for full documentation and tracking of each production run.



Non-contact dispensing

Drop-on-demand dispensing of nanoliter droplets.



OEM printhead

Nanoliter printhead for integration into production lines or small scale automation platforms.



Independent of liquid type

Handling of a wide range of liquid types by integrated volume calibration system (SmartDrop).



Repeatability

Minimal droplet volume variation by constant regulation of dispense parameters and system conditions.

OEM solution designed for life science, diagnostic and pharma industries, especially:



Diagnostic manufacturing



Precision medicine



BioFluidix provides ultra-low volume dispensing solutions for the automation of liquid handling workflows in life science, diagnostic, medical and the pharmaceutical market. Our flexible liquid handling automation platforms, printheads, OEM components and consulting services match standard and highly customized applications.

Learn more on
www.biofluidix.com



BioFluidix GmbH - Engesserstraße 4 - 79108 Freiburg - Germany
www.biofluidix.com info@biofluidix.com