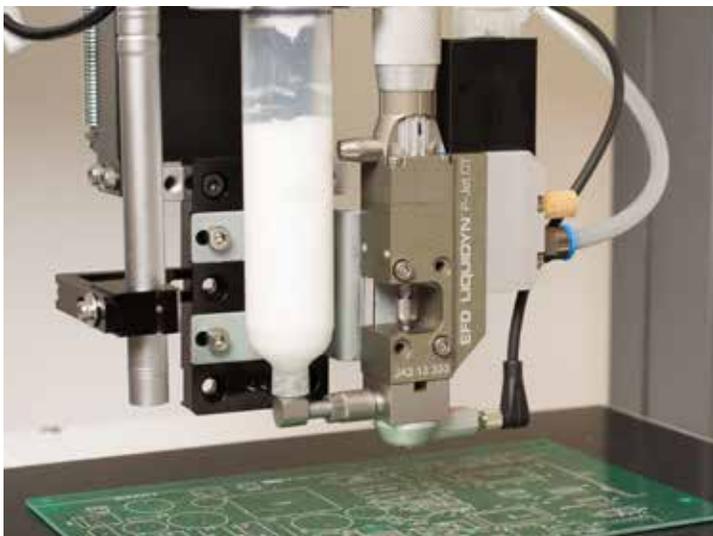


# Liquidyn P-Jet CT Pneumatic Jet Valve

High-precision micro-dispensing: stable, accurate, fast and flexible



The high-performance Liquidyn P-Jet CT valve provides both non-contact and contact dispensing capability.



Material can be heated at the nozzle for improved dispensing results.

The Liquidyn P-Jet CT is a high performance jet valve designed for the non-contact micro-dispensing of low- to medium-viscosity fluids, including oils, greases, glues, flux and filled products. The Liquidyn P-Jet CT valve can produce micro-deposits as small as 3 nL at dispensing frequencies of up to 280Hz, for a faster production process. The valve can also dispense larger fluid volumes and is capable of both dot and line dispensing.

The Liquidyn P-Jet CT valve's fluid-carrying components are separate from the actuator and are available in both stainless steel and plastic, allowing them to be quickly and easily exchanged. This modular design makes the valve capable of dispensing a wide variety of materials and also makes fluid-type changeout and component replacement fast and easy.

Electro-pneumatically operated by a low voltage trigger, the Liquidyn P-Jet CT features an adjustable pulse signal. The valve can be operated using either a V100 valve controller or a customer-supplied high-level controller, such as a PLC. Valve open time can start at 2 ms. The dispensing tappet remains open until the trigger signal ends.

Even the most demanding or delicate processes — whether due to product complexity or positional tolerances — are easy to implement with Liquidyn P-Jet CT valve non-contact dispensing.

## Features

- Suitable for low- to medium-viscosity fluids
- Dispensing volume starting at 3 nL
- Dispensing frequencies as high as 280Hz
- Bead or line dispensing capability
- Low voltage operation (24 VDC)
- Modular design
- 3D dispensing

## Benefits

- High repeatability and high accuracy provide very consistent dispensing results for higher productivity.
- Interchangeable components mean quick changeout of fluid types and easy service and maintenance.
- Highly abrasive mediums, in addition to low-viscosity fluids, can be dispensed.
- IP65-compliant construction makes the valve dust-proof and wash-down friendly.

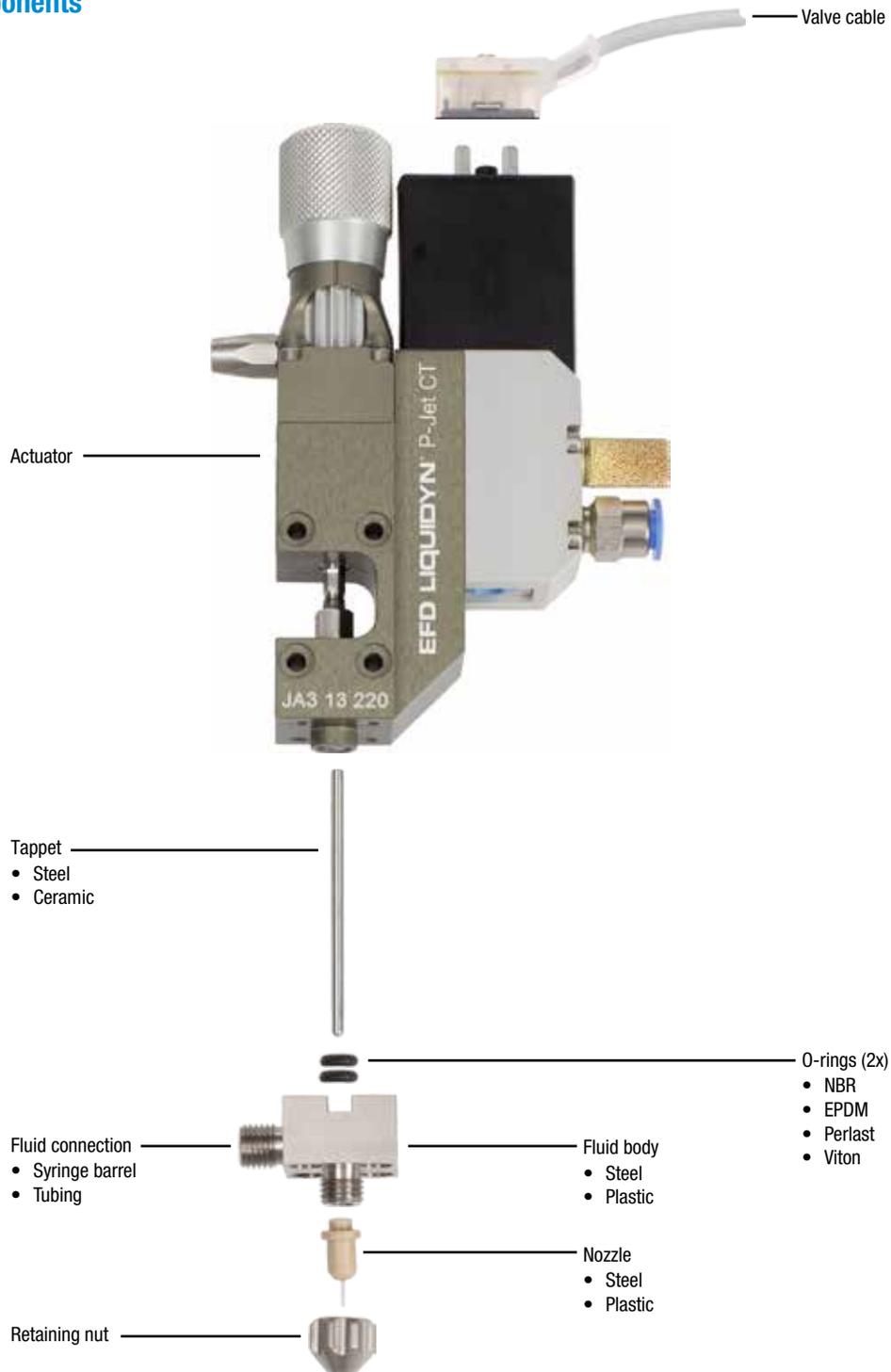


more info

## Configure your modular Liquidyn P-Jet CT micro-dispensing valve

The Liquidyn P-Jet CT micro-dispensing valve can be uniquely configured to achieve the best dispensing result for your material and application. A Nordson EFD application specialist will help select the best valve system components for optimal jetting performance.

### Select the components



If the material needs to be heated for better dispensing, select a nozzle heater.

Partial listing of component selections. Consult EFD for full listing of available components



### Actuator

P/N	Description
7825004	Liquidyn P-Jet CT Actuator



### Basic Components

P/N	Description
7825024	Steel tappet Liquidyn P-Jet CT (Standard)
7825028	Ceramic tappet
7825037	Steel fluid body
7825038	Plastic fluid body
7825182	2.5 m (8.2 ft) M8 valve cable
7825188	Gasket EPDM
7825189	Gasket NBR
7825190	Gasket Viton



### Nozzles

P/N	Description
7825042	Hexagon retaining nut
7825044	Knurled retaining nut for plastic nozzles with tip
7825063	Steel flat nozzle, 150 µm
7825075	Steel needle nozzle, 150 µm
7825094	Plastic needle nozzle with steel, 150 µm
7825100	Plastic needle nozzle with PTFE tip, 200 µm



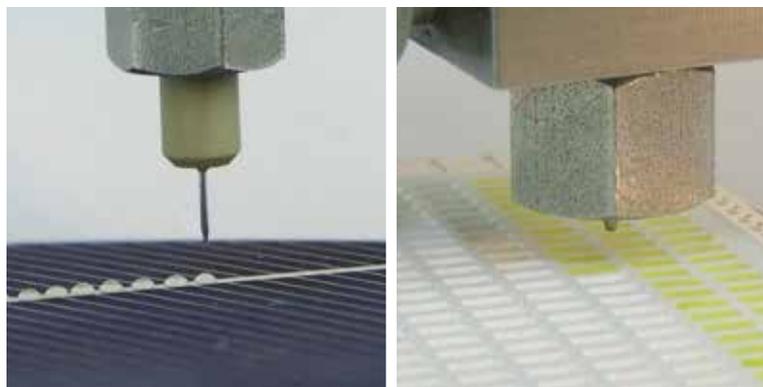
### Fluid Supply

P/N	Description
7825120	Steel luer lock adapter for syringe barrels
7825121	Plastic luer lock adapter for syringe barrels
7825136	Plastic tube connector for 3.2 mm OD tubing
7825137	Steel tube connector for 4 mm OD tubing

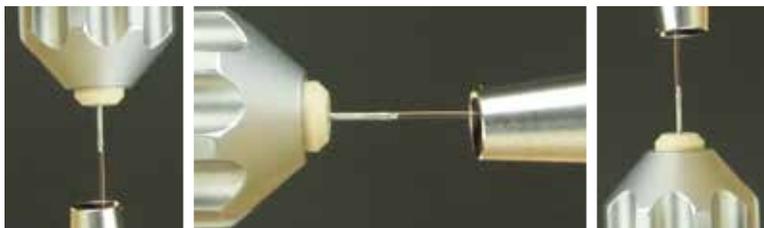
The optimum valve configuration will be determined through an initial dispensing test.

## Specifications

Item	Specification
Size	20W x 138.5H x 78.5L mm (0.8"W x 5.5"H x 3"L)
Weight	270 g (9.5 oz)
Maximum fluid pressure	100 bar (1,450 psi)
Fluid inlet thread	M8 x 1, flat sealing
Mounting	M3 x 25
Maximum operating frequency	280Hz
Pulse time	Starting at 2 ms
Input voltage	24 VDC, PLC compatible
Power consumption	0.5 Amp (peak 5.0 Amp)
Maximum valve heating temperature	90° C (194° F)
Operating air pressure	3–8 bar (44–116 psi)
Maximum operating temperature	40° C (104° F)
Humidity	10–80%
Storage temperature	-5–60 °C (23–140° F)
Dispensing volume	From 3 nl (1 oz) per cycle
Viscosity range	0.5–10,000 mPas (thixotropic)
Dispensing accuracy	> 97% (dispensing tolerance < 3%)
Service life	>100,000,000 cycles
Product classification	IP65 Installation category II
Compressed air quality class	Pollution degree DIN ISO 8573-1, class 5
Approvals	CE



Non-contact micro-dispensing of beads and fills onto delicate surfaces is easy and repeatable.



Jet lines or beads onto uneven surfaces from any direction.

## Flexible Mounting Options

The Liquidyn P-Jet CT valve provides three-dimensional (3D) dispensing for jetting into difficult-to-access areas and onto uneven or unusual surfaces. This mounting flexibility, along with a small footprint, makes it ideal for installation into tight spaces.

## Valve Control

Valve open time is the primary control of deposit size. The valve can be operated using a Nordson EFD Liquidyn valve controller or directly by the customer via a 24V input (for example, from a customer-supplied controller or a PLC). Using a Nordson EFD controller offers the following advantages:

- Easy deposit size control.
- Increased production output.
- End user convenience.
- On-the-fly adjustability.
- Maximum machine efficiency.

## Request a Process Evaluation

Contact Nordson EFD to configure a complete P-Jet CT valve non-contact dispensing system that meets your specific needs, with:

- A detailed process evaluation by experienced fluid dispensing experts at one of our full-service Global Application Labs.
- Samples processed for customer evaluation and approval prior to purchase.



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to [www.nordsonefd.com](http://www.nordsonefd.com).

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