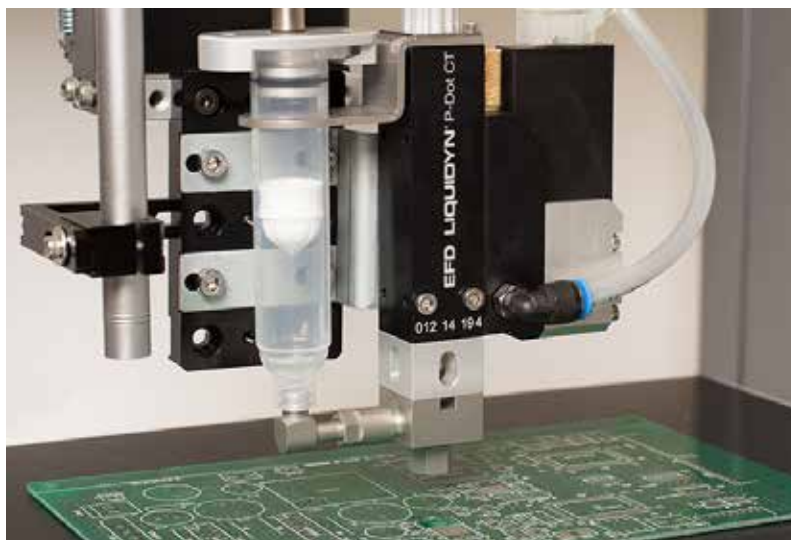


Liquidyn P-Dot CT Pneumatic Jet Valve

High-precision micro-dispensing: reliable, fast and user-friendly



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



High repeatability and high accuracy provide very consistent dispensing results.

The Liquidyn P-Dot CT is a high performance jet valve designed for the non-contact micro-dispensing of medium- to high-viscosity fluids, including oils, greases, adhesives, silicones, lacquers, fluxes, and medical and chemical substances. Depending on the material, the valve can dispense dot diameters ranging in size from 0.3 to 5 mm. The distance between the valve and the substrate is usually between 2 and 10 mm.

The Liquidyn P-Dot CT valve's fluid-carrying components are separate from the actuator, allowing them to be quickly and easily exchanged. This modular design makes fluid-type changeout and component replacement fast and easy.

Electro-pneumatically operated by a low voltage pulse signal, the valve can be operated using either a Nordson EFD Liquidyn valve controller or a customer-supplied high-level controller, such as a PLC. The valve switches below 1 ms and automatically closes after each trigger signal. The valve is closed when idle (NC: normally closed).

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

Features

- Suitable for highly viscous fluids
- Dispensing volume starting at 3 nL
- Dispensing frequencies as high as 150Hz
- 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.
- IP65-compliant construction makes the valve dust-proof and wash-down friendly.



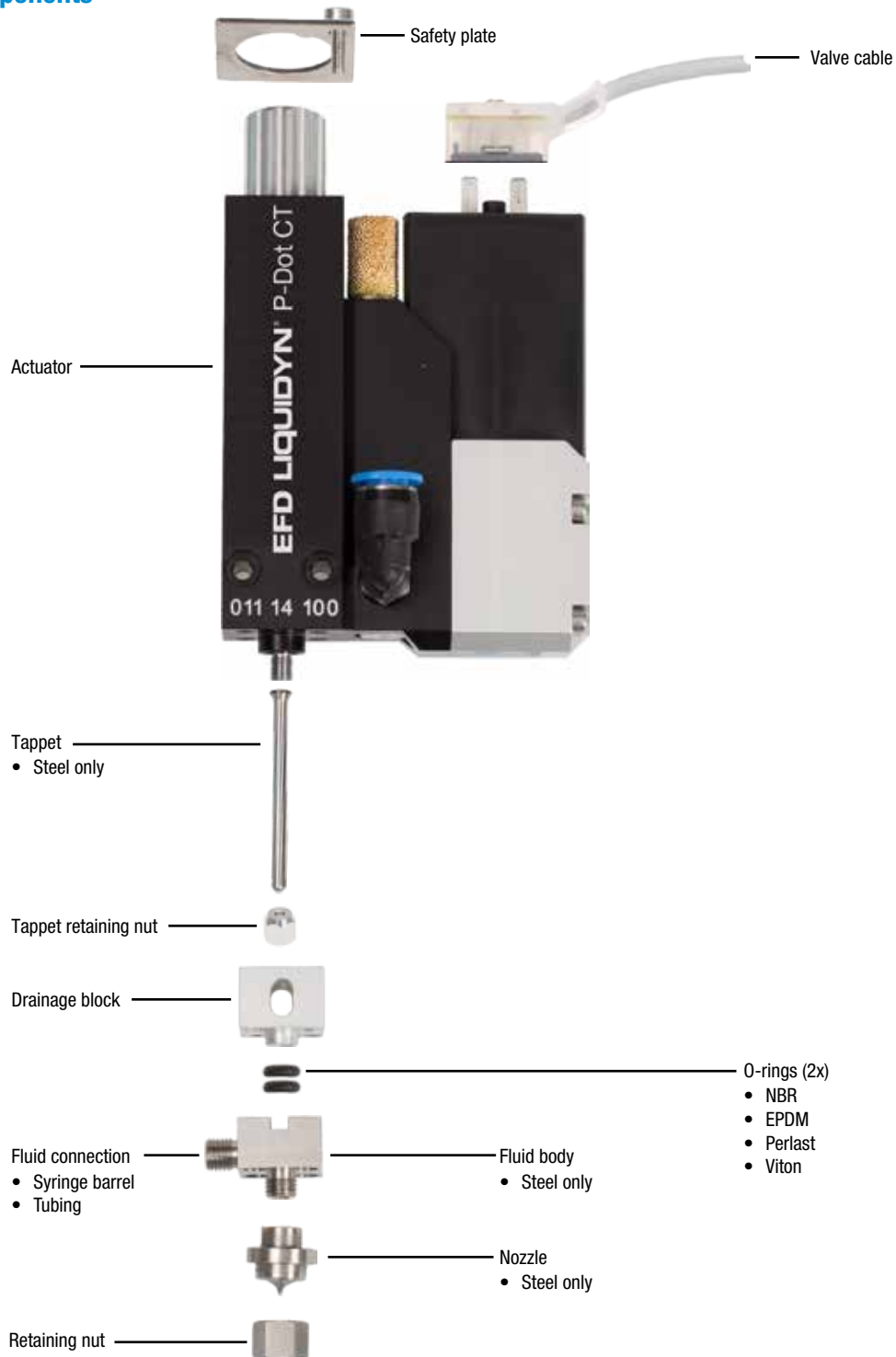
more info



Configure your modular Liquidyn P-Dot CT micro-dispensing valve

The Liquidyn P-Dot 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
7825002	Liquidyn P-Dot CT Actuator



Basic Components

P/N	Description
7825008	Drainage block
7825011	Safety plate
7825033	Tappet P-Dot CT 27L x 2.0D mm, steel
7825034	Tappet nut P-Dot CT
7825037	Steel 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
7825063	Steel flat nozzle, 150 µm
7825075	Steel needle nozzle, 150 µm



Fluid Supply

P/N	Description
7825120	Steel luer lock adapter for syringe barrels
7825137	Steel tube connector for 4 mm OD tubing
7825138	Steel tube connector for 6 mm OD tubing

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

Specifications

Item	Specification
Size	38.6W x 126.7H x 61L mm (1.5"W x 5"H x 2.4"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	150Hz
Pulse time	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	2–5 bar (29–73 psi)
Maximum operating temperature	40° C (104° F)
Humidity	10–80%
Storage temperature	-5–40° C (23–104° F)
Dispensing volume	3–200 nL (1–6.8 oz) per cycle
Viscosity range	50–200,000 mPas (thixotropic)
Dispensing accuracy	> 99% (dispensing tolerance < 1%)
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

Flexible Mounting Options

The Liquidyn P-Dot 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

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:

- Increased production output.
- End user convenience.
- On-the-fly adjustability.
- Maximum machine efficiency.

Request a Process Evaluation

Contact Nordson EFD to configure a complete Liquidyn P-Dot 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.



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



Jet lines or beads onto uneven surfaces from any direction.



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com.

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