



DELO-DOT PN3

Pneumatic
Microdispensing Valve

DELO



DELO-DOT PN3 – Precise, Fast and Robust



DELO-DOT PN3 Precise, fast and robust

The new microdispensing jet valve from DELO

DELO-DOT PN3 sets new standards regarding service life, application range, and user friendliness.

Especially developed for media that are hard to dispense, the valve impresses with increased jet performance. This is made possible by the optimized geometry of the fluid system and different piston types for variable drop sizes. In addition, the microdispensing valve can be set up very easily, since the stroke of the piston is adjustable by means of a simple rotary wheel used to select one of five

different locking positions without any additional tool. The respective position is indicated by an LED.

The newly developed nozzle heater has no open electric contacts and is screwed onto the valve, which facilitates disassembly for cleaning and maintenance. Combined with the pneumatic actuator, separated from the fluid system, this forms an extremely robust and reliable system with long service life.



Like all DELO products, DELO-DOT PN3 is developed and produced in Germany. This ensures highest quality.



DELO-DOT PN3 breaks new ground with increased jet performance and improved handling. This will enable our customers to further increase efficiency in their production processes.

Robert Saller, International Sales Manager at DELO





*Accurate and bubble-free adhesive dispensing
with DELO-DOT PN3 and DELO FLEXCAP,
curing within seconds with DELOLUX 202*

DELO-DOT PN3 Benefits at a glance

Installation

- Perfectly suited for integration in production systems thanks to its compact design
- Low weight, ideal for high traverse speeds
- Plug & play
- Positionable media supply allows flexible adjustment to different installation spaces
- Easy handling: fast setting of optimal jet parameters

Operation

- Variable drop sizes depending on stroke and pulse time
- Nozzle heater for controlled heat input, thus allowing a reproducible drop size
- High flexibility through a dispensing task-specific fluid system
- Extremely long actuator service life: typically > 1 billion cycles
- Precise dispensing ensures minimal rejection rates

Maintenance

- Low maintenance due to highly resistant, fluid-transporting components
- Modular design: fast exchange of single components for an efficient maintenance
- Clear separation of actuator and fluid system
- Completely exchangeable fluid system
- Individual components can be obtained separately (drive with piston, fluid system components, heater)
- All parts in contact with adhesives are entirely accessible for easy cleaning

Flexibility through modular design

*Modular design
provides for easy
cleaning of the
fluid system*

*Metal
luer-lock
adapter*

*Media-resistant,
high-performance
elastomer seal*

Processing of diverse media

Removable heating plate

Easy-to-clean surface,
no open electric contacts

Fluid system made of stainless steel

Robust and resistant to chemical attack;
variably positionable media supply

Technical data

- Actuator service life: typically > 1 billion cycles
- Max. dispensing frequency: 330 Hz (drops per second)
- Typical dispensing volumes: 2 – 5,000 nl
- Dispensing precision: > 97 %
- Media viscosity: from aqueous to 500,000 mPas
- Heating range of nozzle heater: up to +100 °C
- Activation: 24V, also possible via PLC
- Actuator pressure: 6 bar
- Media pressure: up to 6 bar
- Media supply positionable in steps of 90 degrees
- 5-stage stroke adjustment with visual indication
- Different piston diameters
- Dispensing task-specific fluid system
- Weight: 349 g

Dispensing
piston

Adjustable stroke

Flexibility through
variable drop sizes

Innovative pneumatic actuator

Typical service life > 1 billion cycles
(patent pending)

Actuator separated from fluid system

Variable assembly options

Integrated heater

Compressed air
connection



Dimensions

Minimum dimensions:
20.5 mm × 153 mm × 62 mm



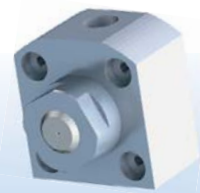


Stroke

- Five different locking positions ensure high reproducibility
- Easy and tool-free stroke adjustment
- Clear visual indication on the valve

Fluid system

- Quick adjustment to customer-specific dispensing requirements
- Ideally suited for various types of media and different dispensing volumes



Nozzle heater

- Easy cleaning of the removable heating plate
- No additional heater required





Media supply



DELO-CONTROL PN3
with product hose

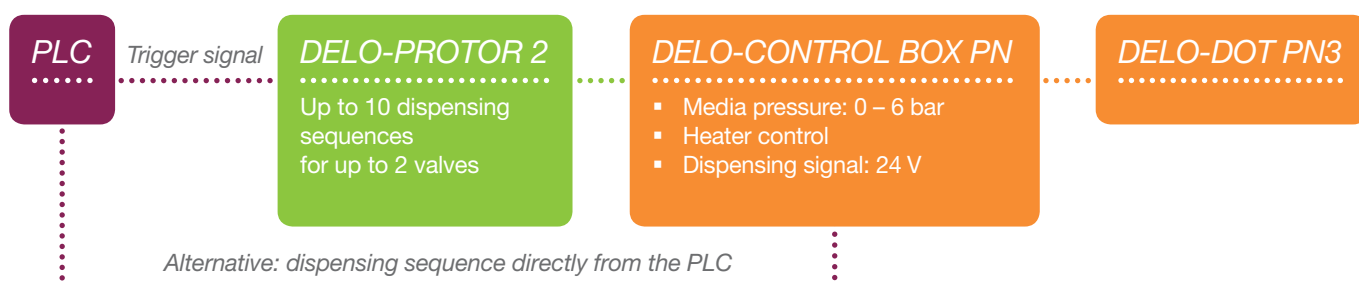


DELO-CONTROL PN3 with
DELO-XPRESS pressure tank
for DELO FLEXCAP



DELO-CONTROL PN3
with small cartridge

Activation





CONTACT

Headquarters

DELO Industrial Adhesives

► **Germany** · Windach / Munich
Phone +49 8193 9900-0
info@DELO.de
www.DELO.de

► **China** · Shanghai
Phone +86 21 2898 6569
china@DELO-adhesives.com
www.DELO-adhesives.com/cn

► **Japan** · Yokohama
Phone +81 80 1579 2794
japan@DELO-adhesives.com
www.DELO-adhesives.com/en

► **Malaysia** · Kuala Lumpur
Phone +65 6807 0800
malaysia@DELO-adhesives.com
www.DELO-adhesives.com/en

► **Singapore**
Phone +65 6807 0800
singapore@DELO-adhesives.com
www.DELO-adhesives.com/en

► **South Korea** · Seoul
Phone +82 31 450 3038
korea@DELO-adhesives.com
www.DELO-adhesives.com/en

► **Taiwan** · Taipei
Phone +886 2 6639 8248
taiwan@DELO-adhesives.com
www.DELO-adhesives.com/cn

► **Thailand** · Bangkok
Phone +66 2737 6420 Ext. 59
thailand@DELO-adhesives.com
www.DELO-adhesives.com/en

► **USA** · Sudbury, MA
Phone +1 978 254 5275
usa@DELO-adhesives.com
www.DELO-adhesives.com/us

The technical data are for informational purposes only. Specific values can be found in the user manual. It is the user's responsibility to test the suitability of the device for the intended purpose by considering all specific requirements. If you need support in using the devices, please feel free to ask your contacts in our Engineering Department.

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Adhesives

Dispensing

Curing

Consulting

DELO