

DELO



DELO-DOT® PN3 – Precise, Fast and Robust



DELO-DOT® PN3

Pneumatic
Microdispensing Valve



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

Media-resistant, high-performance elastomer seal

Processing of diverse media

Metal luer-lock adapter

Removable heating plate

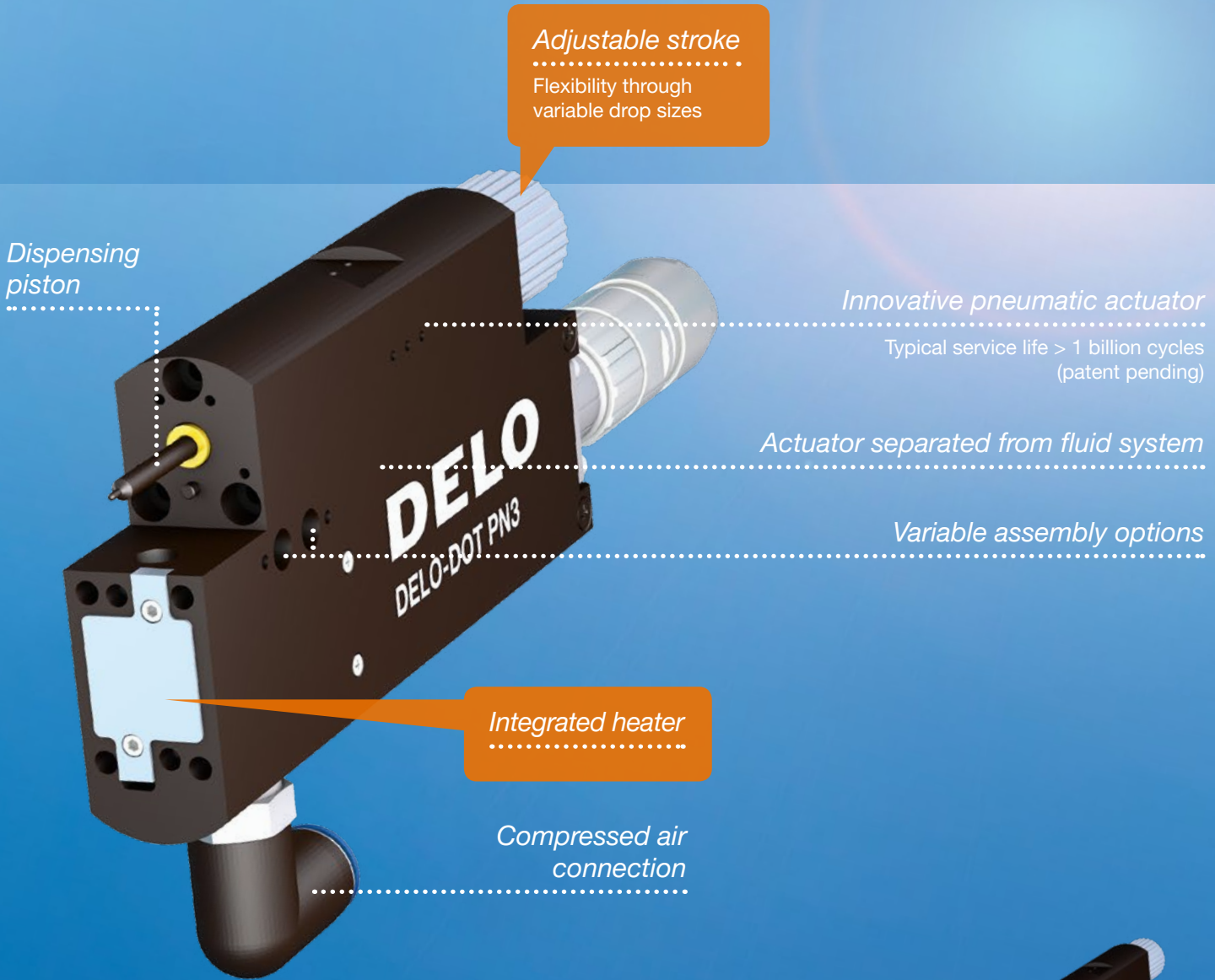
Easy-to-clean surface, no open electric contacts

Fluid system made of stainless steel

Robust and resistant to chemical attack; variably positionable media supply

Technical data

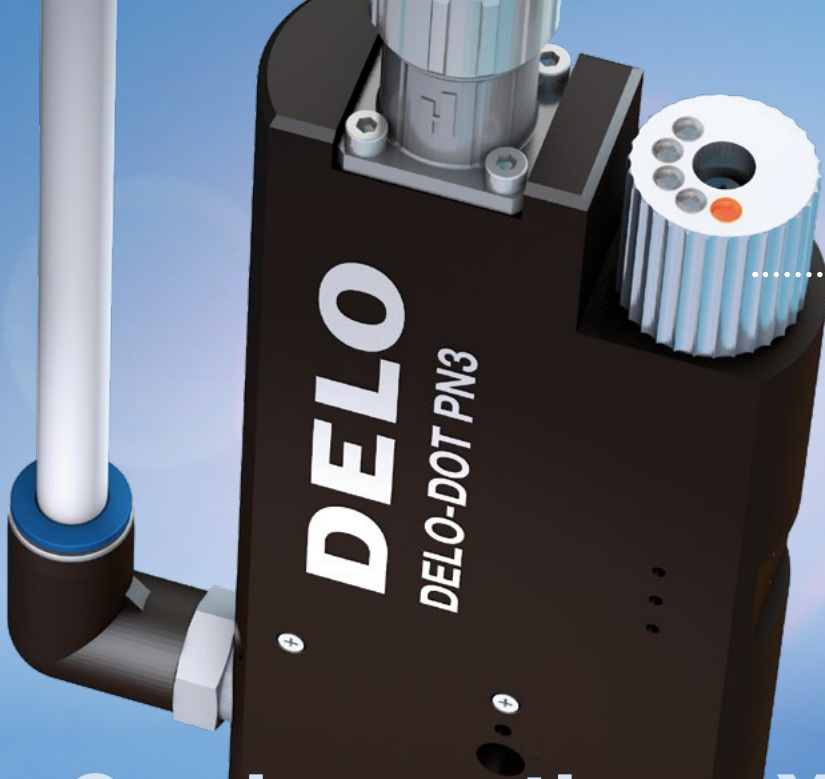
- Actuator service life: typically > 1 billion cycles
- Max. dispensing frequency with permanent dispensing: 140 Hz (drops per second)
- Typical dispensing volumes: 2 – 5,000 nl
- Dispensing precision: > 97 %
- Media viscosity: from aqueous to 500,000 cP (= mPa·s)
- Heating range of nozzle heater: up to +212 °F (+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



Dimensions

Minimum dimensions:
 0.81 in × 6.02 in × 2.44 in
 (20.5 mm × 153 mm × 62 mm)





Five possible locking positions

LED indicators



Our innovation – Your benefit

Stroke

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

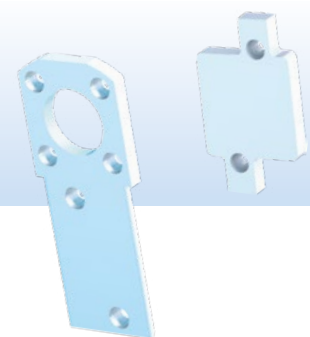
Fluid system

- 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 positionable at 90 degrees for easy integration into production systems

Systemized jetting

Media supply



DELO-DOE® PN3 with product hose

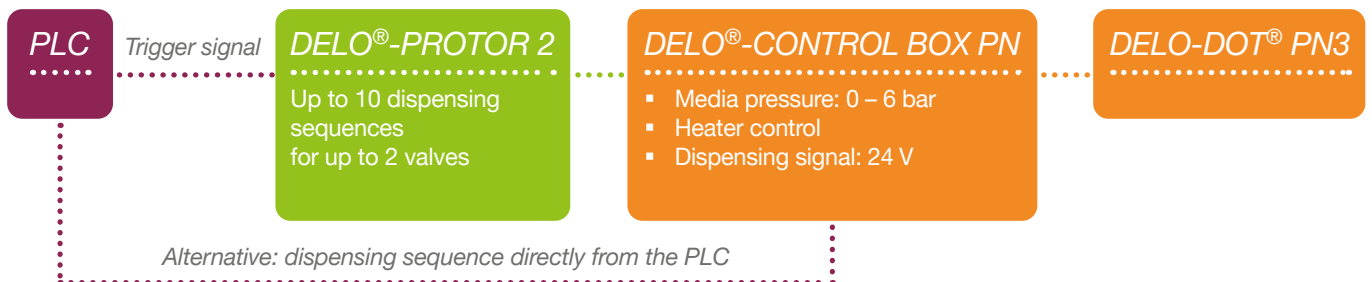


DELO-DOE® PN3 with DELO®-XPRESS pressure tank for DELO® FLEXCAP®



DELO-DOE® PN3 with small cartridge

Activation





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..... www.DELO-adhesives.com

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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