

Your specialist in microdispensing

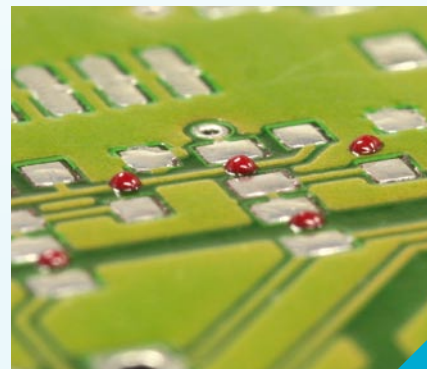
## MDS 3010A/MDS 3020A

- ▲ precise, fast, versatile
- ▲ Vermes Mikrodosiersysteme for lower to medium viscosity media 0-ca. 8,000 mPas

### Typical Applications

Because of its modular design the Vermes MDS 3010A/MDS 3020A can be used for a wide spectrum of applications:

- ▲ **Life Science, medical diagnostics:**  
Water based cell and protein solutions
- ▲ **Glues:**  
UV Glues, cyanacrylate, anaerobe glues
- ▲ **Other electronics:**  
solder flux, selective coating  
Oiling and greasing –  
fine mechanics, watch industry



### Modularity

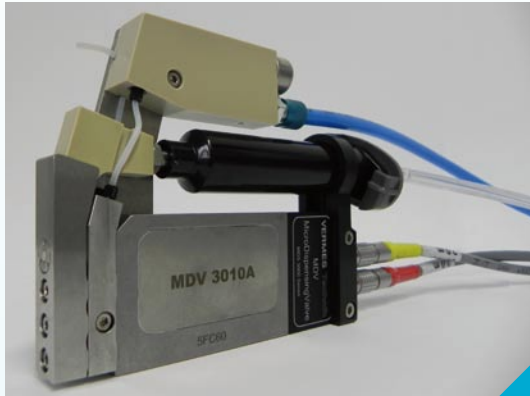
The modular design of Vermes MDS 3020A/MDS 3010A allows user defined configurations for various applications. Even for Low Volume High Mix Applications the user can adjust the same MDS 3020A to very different process and fluid parameters:

- ▲ Different nozzle sizes and shapes for different fluids and droplet sizes
- ▲ Different tappet geometries for achieving optimum performance
- ▲ Virtually unlimited media compatibility – all components in contact with the medium can be chosen from a list of different materials, one meeting your requirements

## MDS 3010A/MDS 3020A

### Selection of media supply:

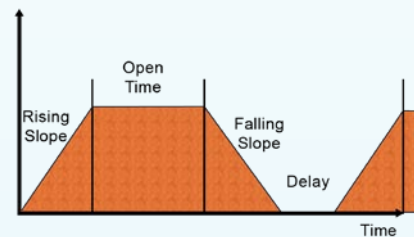
- ▲ 3 ml to 55 ml cartridge directly at the valve
- ▲ Pressure tank 0.25 l to 4 l
- ▲ Customer defined through hose interface
- ▲ Nozzle heating – can also be retrofitted



Special fluid boxes for particular application, e.g. cyanacrylate

### Flexible Parameter settings

- ▲ Flexible setting of tappet movement
- ▲ Highly precise setting of opening point



Micro Dispensing System	MDS 3010A / MDS 3020A	
Recommended media	Alcohol like media, agents, watery chemical solution, low viscous adhesives (for example cyanos)	
Dispensing quantity	min. 5 nl per pulse	
Dynamic viscosity	Low- mediumviscous media until about 7 000 mPas	
Tappet version	Ceramics	
Supply pressure	0-6 bar (rel.)	
Max. dispensing frequency	450 Hz	
Average Dispensing frequency	250 Hz	
Operating temperature range	10°C to 50 °C	
Dimensions (basic version)	Valve: 103 x 39,5 x 10 mm	Control unit: 101,6 mm x 173 mm x 128,4 mm für 19"-Rack (3 HE, 20 TE)
Weight	Valve: ca. 210 g, Controller: 1 350 g	
Valve position at current less state	closed, no energy consumption (Normally Closed)	
Resistance	to all aqueous media, organic solvents, weak acids and bases	
Heating systems (optional)	MDH 3071 (regulated nozzle heating: 80°C)	
Supply units (optional)	MDX (fluid pressure reservoir, configurable) MDX-CC (cartridge connection, Luer-Lock)	
Parameter memory	internally: 10; extern: unlimited	
Standard Schnittstellen	RS232C; 24V / 5V PLC, other interfaces possible at request	