MDS 3250+ Next Generation of High Viscosity Dispensing

VERMES
HIGH SPEED PIEZO TECHNOLOGY,
WITH JET VALVE QUICKADJUST & MAXIMUM DROP PRECISION

MicroDispensing Systems with Piezo Technology
NEXT GENERATION OF HIGH VISCOSITY DISPENSING

- Next generation high speed jet valve MDV 3250+ incorporating highly efficient Piezo actuator
- Higher stroke and force makes it especially suited for higher viscosity fluids

HIGH SPEED PIEZO TECHNOLOGY

- High speed Piezo technology accelerates dispense cycle

TOP ADJUST DESIGN: “QUICKADJUST”

FAST CONFIGURATION WITH QUICKADJUST

- Extremely fast opening and closing of valve
- New top adjust design “Quickadjust” minimizes time for tappet and nozzle insert pairing

REduced costs

- Free pairing of tappets and nozzle units and new or used accessories reduce costs
- Modular valve design with separation of wet and dry area allow the quick and save change of wetted parts and lowers maintenance costs
- Easy cleaning and easy part replacement reduce critical downtime

REPRODUCIBLE DISPENSING RESULTS

- System allows for extremely high reproducible proportioning of identical single dots (min. 0.5 nl) or beads
- Coefficient of Variation (CV) is as low as 1%

ULTRA-PRECISE CONTACTLESS DISPENSING

- Designed for ultra-precise contactless dispensing of fluids in a large range of viscosity (up to 2,000 Pas)
- The consistent light weight construction for maximum accuracy drops

INCREdiBLE APPLICATION FLEXIBiLiTy

- Modular MDS 3250+ design enables users to define a high variety of applications in which the systems can be used
- Customer specific cable design reduces space requirements

HIGHLY EXTENDED VALVE MEMORY

- Fourfold extended memory compared to MDV 3200A
- Multiple archiving capacity of relevant application data

FULL COMPATIBILITY

- Compatible with all VERMES Microdispensing fluid box
- Also supports older xy dispensing systems

SELECT PINS/SCENARIO MODE

- Select pin or scenario mode, both allow an immediate change of drop size and speed at any time while dispensing
- Support of scenario programmable functions on nearly all application requirements

Recommended media

- SMT adhesives (also filled conductive glues with high solid content), silicones, LED-phosphor, underfill materials, hot-melts, solder pastes etc.

Type of tappets

- Monolithic ceramics, carbide metal, different shapes

Dispensing quantity

- Minimum 0.5 nl per pulse (depending on medium)

Minimum droplet diameter

- 300 µm

Dispensing viscosity

- Medium-, high- and highest viscous media up to 2,000 Pas

Supply pressure

- 0.1 – 8 bar (rel.), max. 100 bar

Dispensing pressure

- 1 – 1000 bar (adjustable)

Frequency

- > 3000 Hz

Additional functionality

- Several pattern scenarios can be saved from real-time experience

Valve operating modes

- Burst Mode: predefined burst after trigger signal
- Single Shot Mode: path length dependent triggering
- Infinite Mode: number of shots controlled by external trigger
- External Mode: application controlled definable drop volume setting

Optional heating system

- Regulated nozzle heating: 120° C, (higher upon request)

Memory for parameter sets

- Internally: 40; extern: unlimited

Standard interface

- RS-232C; 24V/5 V PLC, AUX

Dimensions

- Valve MDV 3250+: 92.1 mm H x 41.5 mm W x 36.5 mm D (incl. air cooler)
- Control unit MDC 3200+: 128 mm H x 102 mm W x 173 mm D (without cable) for installation into 19" racks

Weight

- Valve: 250 g, Controller: 1350 g

Power connection

- 110/240 V AC, 50/60 Hz power socket (back side)