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MDS 3280 Series – for ultra-precise high viscosity dispensing

HIGHLY FLEXIBLE DISPENSING SOLUTION FOR SUPREME INTEGRATION

- FAST AND COMFORTABLE CONFIGURATION WITH TOP ADJUST
- EFFORTLESS HANDLING AND EASY CLEANING
- UNIQUE BAYONET FLUID BOX BODY WITH INTEGRATED HEATING
- ULTRA-PRECISE CONTACTLESS DISPENSING
- PEERLESS INTEGRATION INTO TIGHTEST SPACES
- HIGH SPEED PIEZO TECHNOLOGY
- INCREDIBLE APPLICATION FLEXIBILITY

Micro Dispensing Systems with Piezo Technology

ULTRA-PRECISE DISPENSING SOLUTION

High-volume, and cost-effective productivity with ultra-precise dispensing results on up to 2,000 Pas viscosity media

FAST CONFIGURATION VIA TOP ADJUST

Top adjust for quick configuration and fastest tappet and nozzle insert pairing

UNIQUE BAYONET FLUID BOX BODY DESIGN FOR REDUCED SET-UP COST AND TIME

- Fluid Box Body with unique bayonet connector design, integrated heater and nozzle unit
- One-click, screw-less fluid box removal (no need of tools)

ERM

BAYONET



Recommended media SMT adhesives incl. filled conductive glues, solder pastes, solder fluxes, silicones, LED-phosphor, underfill materials, hot melts, etc. Type of tappets Monolithic ceramics, carbide metal, different shapes Dispensing quantity Minimum 0.5 nl per pulse (depending on medium) Minimum droplet diameter 150 um Medium-, high- and highest viscous media up to 2,000 Pas **Dispensing viscosity** 0.1 - 8 bar (rel.), max. 100 bar Supply pressure > 3000 Hz Frequency Additional functionality Realtime behavior at: Scenarios -> pre-programmable volume change Select Pins -> operation controlled volume change Valve operating modes predefined burst after trigger signal Burst Mode: 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: 180° C (higher upon request) Memory for parameter sets Internal: 40; extern: unlimited Standard interface RS-232C; 24V/5 V PLC, AUX Dimensions Valve MDV 3280: Control unit MDC 3290+: 92.1 mm H x 41.5 mm W x 36.5 mm D 128 mm H x 102 mm W x 173 mm D (incl. air cooler) (without cable) for installation into 19" racks Weight Valve: 250 g, Controller: 1350 g 110/240 V AC, 50/60 Hz power socket (back side) Power connection

- Easy and fast tappet change while valve remains in operating position
- Easy cleaning and part replacement reduces critical operating downtime
- Quick and swift operator training

INTEGRATED FLUID BOX HEATER

- Flawless control and regulation of integrated nozzle heater
- Ensures constant and perfect process temperature

MINIMIZED DISPENSING ERRORS AND PERFECTLY REPRODUCIBLE **DISPENSING RESULTS**

- System allows for extremely high reproducible proportioning of identical single dots (min. 0.5 nl) or beads
- The consistent light weight design maximizes drop accuracy

FLEXIBLE MULTIPLE DIRECTION DISPENSING

- Totally flexible Fluid Box Body Positioning
- 180 degree rotation of the Fluid Box Body for a fully customizable adjustment to the required dispensing direction
- Allowing supreme and peerless integration in even tightest spaces

HIGH SPEED PIEZOELECTRIC JETTING

- High speed piezoelectric technology accelerates dispense cycle
- Extremely fast opening/closing of valves

INCREDIBLE APPLICATION FLEXIBILITY

The perfect design of the MDS 3280 Series enables highest variety of user-defined applications such as SMA applications, Corner Bond Attachment, Die Stacking, Flip Chip, etc. etc.

HIGHLY EXTENDED VALVE MEMORY

- The MDV 3280 has a fourfold extended memory compared to MDV 3200A
- The MDC 3290⁺ offers multiple storage capacity for relevant application data



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