

Product information

Dosing system in the lab · LiquiDoS



Description

LiquiDoS® is the comfortable and versatile dosing system for analysis, research and development. The compact system is configured with its fluidic components according to customer requirements and delivered operationally ready. The intuitive graphical user interface of the mzs-Touch Control allows easy programming of fluidic requirements and reproducible results, as well as fast changes between manual and automated dosing tasks.

Advantages

- Smallest volume 0.25 µl
- Flow from 1.5 µl/min up to 72 ml/min
- Precise dosing in the microliter and milliliter range
- Self-priming micro pump
- Operation via touch screen
- External start signal
- Gentle, bubble-free dosing
- Low-shear dosing of the medium
- Short fluid connections, optimal dead volume
- Media-resistant material combinations
- Easy emptying and rinsing
- Fast change of media
- Effective use of reagents
- Cost and time saving

Applications

- Research and development
- Analytical instrumentation
- Microreaction technology
- Biotechnology
- Diagnostics
- Laboratory automation
- Analyses in the life science sector

Technical data

| | |
|---------------------------------|---|
| Flow rate | pump-specific 0,015 - 72 * ml/min |
| Smallest dosage volume | 0.25 µl |
| Differential pressure range | pump- and valve-specific 0 – 5 bar * |
| Maximum inlet pressure | 1 bar |
| Operating temperature range | -20 ... +60 °C |
| Viscosity range | 0.3 ... 100 mPas |
| Internal volume | 450 µl |
| Fluid connection | 1/4"–28 UNF |
| Filter | mesh wire filter with screw thread mesh size 10 µm, filter area 1.3 cm ² |
| Valve | 2/2-, 3/2-way valve NC or without valve *, pressure range 0 – 3 bar, power supply 24 V DC, power input 1 W |
| Wetted parts | filter: stainless steel 1.4404; static seals: FPM, optional: FFPM, EPDM; manifold: stainless steel 1.4404; valve: PEEK™, FFKM, PPS, EPDM, FKM |
| Operation | Touch Display 4.3" |
| Pump connector (just Type H) | 8-pole socket (DIN 45326) |
| Motion Controller (just Type N) | integrated 16-Bit microcontroller |
| Power supply connection | 24 V DC, 3-pole socket |
| Analog interface | 0 – 10 V, 5-pole socket |
| Digital outputs | Open Collector, 24 V, 0,5 A |
| Power supply | Power adapter 100 – 240 V AC / 24 V D/3 A |
| Dimensions (L x W x H) | 252 x 170 x 137 mm |
| Weight | approx. 2100 g |
| Remarks | * depending on the respective configuration. Customized solutions on request. |

Notice

Even if single parameters are within the indicated performance range of technical data, certain parameter combinations may not be achievable. Single parameters may exceed their indicated performance range under adequate circumstances. For detailed evaluation please contact HNP Mikrosysteme. Actual performance may vary. Specifications are subject to change without notice. This document is subject to change without notice.

Accessories

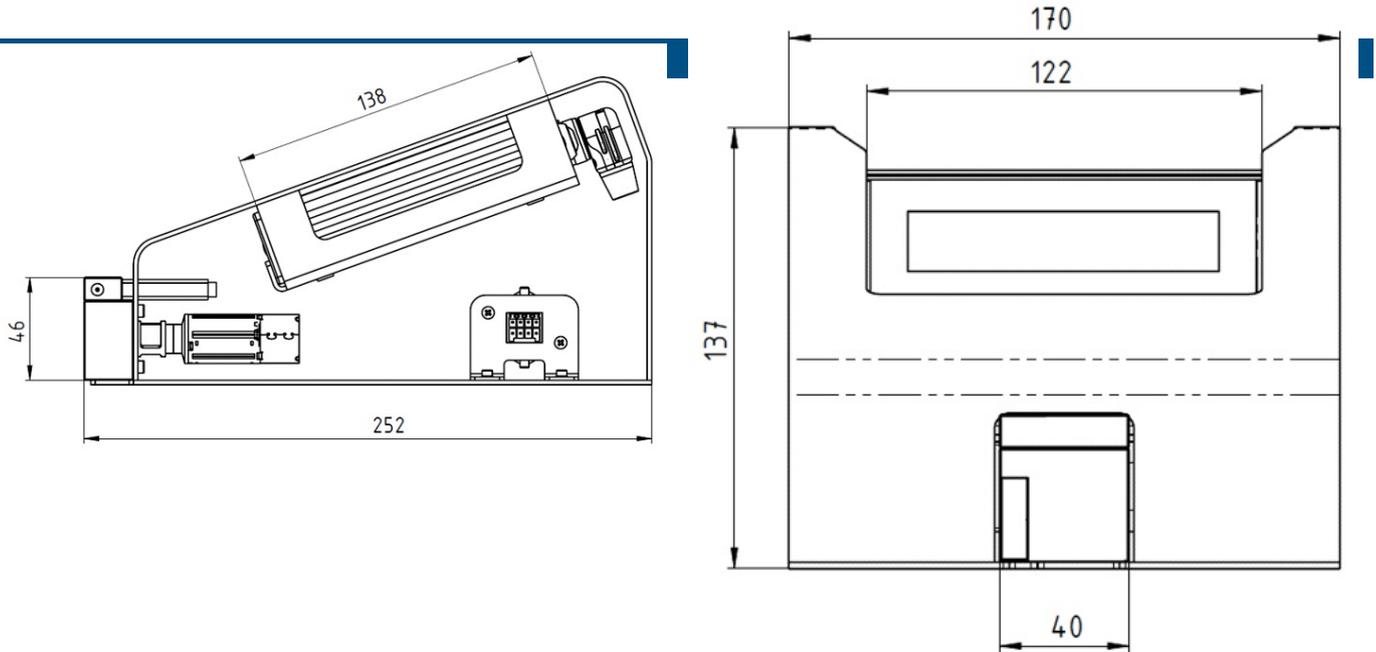
- Filter-pump-valve functional module F-P-V
- mzr-Touch Control

Typical liquids

- Organic and inorganic solvents
- Nutrient solution
- Buffer solutions
- Water solutions
- Low viscosity oils

Components

- Micro annular gear pump
- Filter and valve
- Mounting block
- Control system
- mzi-Touch Control
- Component carrier



Patents and trademarks

Micro annular gear pumps (and housings) are protected by assigned patents: EP 1 354 135 B1; US 7,698,818 B2; DE 10 2011 001 041 B4; CN 103 348 141 B; US 10,012,220 B2; CN 103 732 921 B; US 9,404,492 B2; US 6,520,757 B1.

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