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 mzr-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 cm²
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

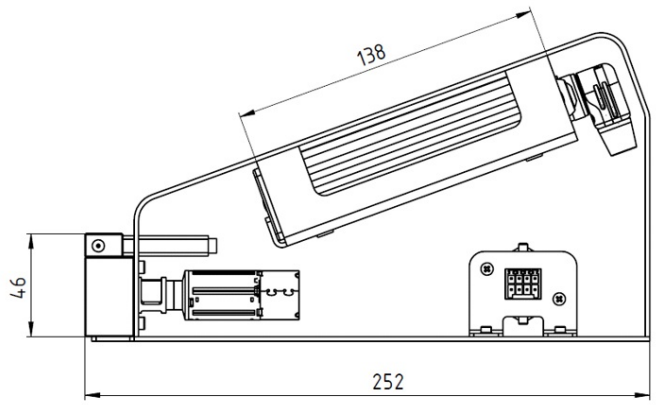
- Filter-pump-valve functional module F-P-V
- mzr-Touch Control

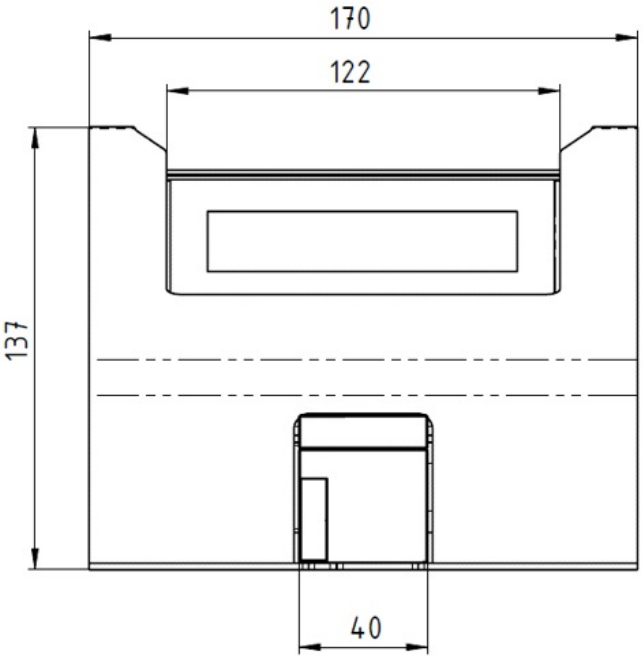
Typical liquids

- 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
- mzr-Touch Control
- Component carrier





Patents and trademarks

Our products are protected by the following national and international patents: DE 10 2018 129 631.2 B3; EP 3 884 162; CN 113 302 399 B; DE 10 2018 129 633.9 B3; EP 3 884 160; CN 113 272 553 B; DE 10 2018 129 634.7 B3; EP 3 884 527; DE 10 2018 129 635.5 B3; EP 3 762 165; DE 10146 793.1; EP 1 354 135 B1; US 7,698,818 B2; DE 10 2011 051 486 B4; EP 2 726 740 B1; US 9,404,492 B2; CN 103 732 921B; EP 2 640 977 B1; US 10,012,220 B2; CN 103 348 141 B; HK 1 185 648 B.
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Last update 2026/04