Bartels Mikrotechnik GmbH

Company presentation
Bartels Mikrotechnik: 25 years of microfluidic expertise

Located in Dortmund, Germany

Supplier and distributor of micropumps, microvalves and microfluidic accessories

One of the world’s largest series manufacturer of plastic micropumps suitable for liquids and gases

Worldwide distribution

Our business segments

- **microComponents**
- **microfluidicSolutionMaker**
- **microEngineering**

with passion for microfluidics
General industry situation in microfluidics

Three main aspects of fluid movement to ensure the proper function of a fluidic system:

- pressure
- flow/volume
- direction

Source: YOLE Report 2017
Main markets for microfluidics

- Biotechnology
- Microfluidics
- Life Science
  - Diagnostics
  - Pharma
  - Medical
  - Environmental technology
- Energy
- Safety technology
- Automotive
- Consumer/White goods
Market Situation

Microfluidic products market ($M)

CAGR_{2019-2025} = 14.0%

Source: Yolé, 2020
**mp6 micropump: Overview**

<table>
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<tr>
<th>Double piezo pump</th>
<th>Simple functionality</th>
<th>Easy set-up</th>
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<td>Promoting gases &amp; liquids</td>
<td>Small &amp; low-weight</td>
<td>100% tested</td>
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<td>Full microfluidic system</td>
<td>High accuracy</td>
<td>Big batch production possible</td>
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<td>German Engineering</td>
<td>RoHS and REACH certified</td>
<td>Easy-to-use software</td>
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<td>5,000 hours lifetime guaranteed</td>
<td>Many sterilization options</td>
<td>Cyclic test (IEC 60068-2-38)</td>
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Partner components

BMT
FLUID CONTROL SOLUTIONS

memetis

Honeywell

microfluidic ChipShop

SENSIRION
System solution – mp-Multiboard

- Microfluidic evaluation board
- Compatible with partner components
- Easy access via app
- Flexibility due to open source code
Forward Integration – mpSmart series

Intelligent micropump and partner component combination

For liquids & gases

AI - Regulated Systems

Software interface
Find the right microfluidic kit for you!

Shop now at: www.bartels-mikrotechnik.shop
Our offer: A complete, application-oriented, adaptable liquid handling system

Complete
Full system with partner components

Application-oriented
We see the problem and develop the solution

Adaptable
Individual components for a flexible system
Our engineering expertise

- Fluidic system design
  - Droplet-based fluid systems
  - Dosing & micro spraying
  - Flowrate & pressure control systems

- Software engineering

- Computer Aided Engineering
  CAD, CAM

- Electronic engineering
  coupling microfluidic components to best fitting electronics

- Simulation
  Fluid Dynamics and Structural Mechanics

- Full Inhouse Prototyping
  Laser welding, laser & mechanical cutting, 3D printing

From prototyping to full system integration