MFCS™-EZ
Microfluidic Flow Control System

The MFCS™-EZ is a pressure-based flow controller for micro-fluidic and nano-fluidic applications

THE BEST PERFORMANCE FOR YOUR SCIENCE

Easy to install and use

Easy to automate

Fast and stable

Field proven technology

The best service

EASY TO INSTALL AND USE
Get started instantaneously and focus on your science
• Fast and easy connections to any device
• Intuitive MAESFLO™ software platform for accurate pressure control

FAST AND STABLE
Get the best results the easy way
• Reach your targets in the blink of an eye
• Benefit from excellent stability over the entire pressure ranges

EASY TO AUTOMATE
Save experimental time! Let the MFCS™-EZ take care of your set-up for you
• Automate experiments with our powerful script module
• Easy integration with any set-up using our Software Development Kit

FIELD PROVEN TECHNOLOGY AND EXPERTISE
Benefit from our expertise and experience to accelerate your research work and publish more!
• >100 man-years of experience in microfluidics with world-class scientific and engineering backgrounds
• Strong track-record and proven reliability with over 9+ years of products in the field
• More than 200 peer-reviewed scientific publications citing our products worldwide

THE BEST SERVICE AT CRITICAL TIMES
We assist you from the idea through set-up, design and results
• Advice provided to design your fluidic set-up and to build the best solution
• Product delivery within 2 weeks
• Support for installation available (offline or online)
• Turn-key retrofits and upgrades
• Flexible: 715 possible configurations

FOR ANY FURTHER INQUIRY, PLEASE CONTACT US AT:
FLUIGENT SA || WWW.FLUIGENT.COM || CONTACT@FLUIGENT.COM || +33 177 01 82 68
SUBJECT TO MODIFICATIONS WITHOUT NOTICE || SEPT 2016
FLUIGENT has developed the patented FASTAB™ technology: a pressure driven technology including an advanced feedback control algorithm with no mechanical part involved. These features allow a pulseless flow as well as a greater responsiveness. Based on the FASTAB™ technology, our MFCS™-EZ (Microfluidic Flow Control Systems) series are compatible with any microfluidic application.

**GREATER RESPONSIVENESS**

![Graph showing flow rate vs. time for MFCS and syringe pump]

**HIGHER STABILITY**

![Graph showing flow rate vs. time for MFCS and high precision syringe pump]

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**SOME APPLICATIONS**

- Droplets
- Lab on Chip
- Organ on Chip
- Cell handling
- Bead manipulation
- Volume control: injection of a selected volume in your chip

**SPECIFICATIONS & BENEFITS**

<table>
<thead>
<tr>
<th>Pressure ranges</th>
<th>0-25 mbar</th>
<th>0-69 mbar</th>
<th>0-345 mbar</th>
<th>0-800 mbar</th>
<th>0-1000 mbar</th>
<th>0-2000 mbar</th>
<th>0-7000 mbar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Pressure</td>
<td>Push</td>
<td>Push</td>
<td>Push</td>
<td>-</td>
<td>Push</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Negative Pressure</td>
<td>Pull</td>
<td>Pull</td>
<td>Pull</td>
<td>Pull</td>
<td>-</td>
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<tr>
<td>Excellent Output Pressure Stability</td>
<td>Highly monodispersed droplet size - No oscillation</td>
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<tr>
<td>Fast System Settling Time</td>
<td>No transitory regime - Reagent savings - Stop-flows</td>
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<tr>
<td>Pressuring gas</td>
<td>Non corrosive or explosive gas (air, N₂, Ar, O₂, ...)</td>
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<tr>
<td>Size / Weight</td>
<td>16 x 23 x 6.5 cm³ (6.3 x 9 x 2.5 inch³) / 2.0 kg (4.4 lbs) - Compact controller</td>
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<tr>
<td>Output connectors</td>
<td>Female Luerlock</td>
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<tr>
<td>Volumes</td>
<td>Wide range of volume can be controlled - No compromise between volume and stability</td>
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<tr>
<td>Flexibility</td>
<td>Any mix of pressure ranges is available, even on one MFCS™-EZ - Highly customizable</td>
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