FLUIGENT
MICROFLUIDICS MADE EASY™

# 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!**

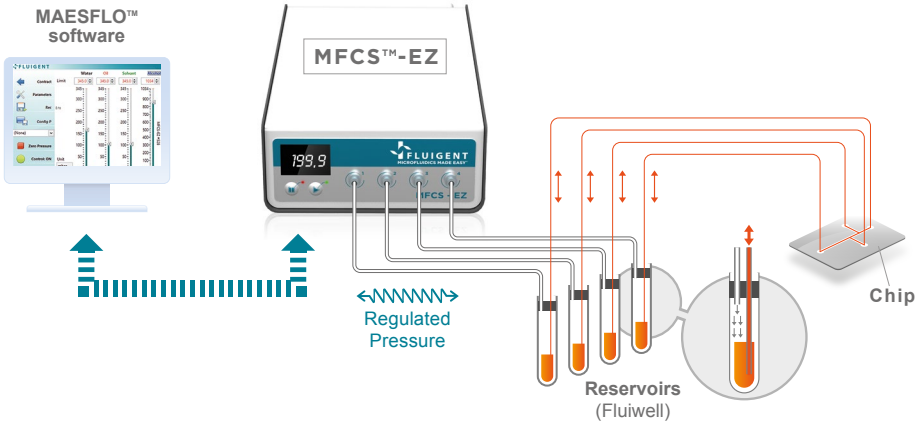
- >100 man-years of experience in microfluidics with world-class scientific and engineering backgrounds
- Strong track-record and proven reliability with over 9+ years of products in the field
- More than 200 peer-reviewed scientific publications citing our products worldwide

### THE BEST SERVICE AT CRITICAL TIMES

**We assist you from the idea through set-up, design and results**

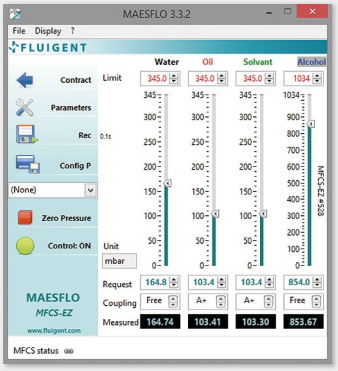
- Advice provided to design your fluidic set-up and to build the best solution
- Product delivery within 2 weeks
- Support for installation available (offline or online)
- Turn-key retrofits and upgrades
- Flexible: 715 possible configurations

# FASTAB™ TECHNOLOGY




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.**



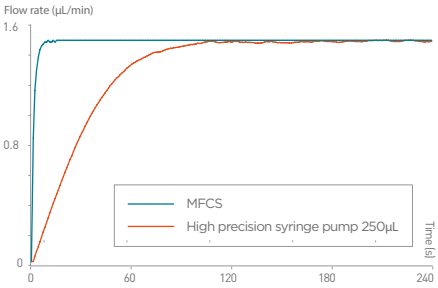

## Fluigent Software platform

- MAESFLO™
- Flow Rate Control Module (FRCM)**
- Script Module
- Software Development Kit (SDK)

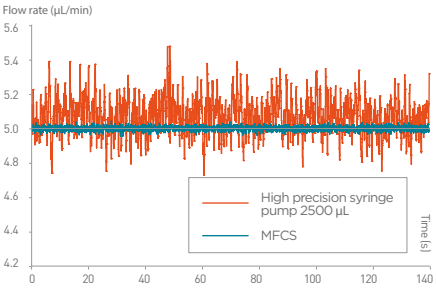
- User-friendly interface with effective data visualization
- Real time control & regulation
- Full automation including complex experiment profiles (sine, triangle, etc)
- Data recording

**requires flow unit – ask for documentation

## GREATER RESPONSIVENESS




## HIGHER STABILITY




## SOME APPLICATIONS

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

**requires flow unit – ask for documentation

# SPECIFICATIONS & BENEFITS

| Pressure ranges | 0-25 mbar | 0-69 mbar | 0-345 mbar | 0-800 mbar | 0-1000 mbar | 0-2000 mbar | 0-7000 mbar |
|---|---|---|---|---|---|---|---|
| **Positive Pressure** | Push | Push | Push | - | Push | Push | Push |
| **Negative Pressure** | Pull | Pull | Pull | Pull | - | - | - |
| **Excellent Output Pressure Stability** | Highly monodispersed droplet size - No oscillation | | | | | | |
| **Fast System Settling Time** | No transitory regime - Reagent savings - Stop-flows | | | | | | |
| **Pressuring gas** | Non corrosive or explosive gas (air, $N_2$, Ar, $O_2$, ...)<br>No contamination between the MFCS™-EZ and the solutions and between the solutions | | | | | | |
| **Size / Weight** | 16 x 23 x 6.5 $cm^3$ (6.3 x 9 x 2.5 $inch^3$) / 2.0 kg (4.4 lbs) - Compact controller | | | | | | |
| **Output connectors** | Female Luerlock | | | | | | 4mm OD tube connectors |
| **Volumes** | Wide range of volume can be controlled - No compromise between volume and stability | | | | | | |
| **Flexibility** | Any mix of pressure ranges is available, even on one MFCS™-EZ - Highly customable | | | | | | |


HEADQUARTERS

FLUIGENT SA
1, mail du professeur Mathé, 94800 Villejuif, FRANCE
contact@fluigent.com || +33 1 77 01 82 68

IN NORTHEASTERN EUROPE

FLUIGENT DEUTSCHLAND GmbH
Carl-Zeiss-Platz 3, D-07743 Jena, DEUTSCHLAND
kontakt@fluigent.de || +49 3641 277 652

IN NORTH AMERICA

FLUIGENT INC.
600 Suffolk Street, M2D2 Lowell, MA 01854, USA
fluigentinc@fluigent.com || +1 978 934 5283