



mitos

standard microfluidic
products

syringe pump

versatile pumps for
extra smooth flow control



Innovators in microfluidic solutions

Why choose the Syringe Pumps from Dolomite?

Dolomite's Syringe Pumps offer a versatile microfluidic pumping solution providing extremely smooth flow. A wide range of accessories and choice of flow modes allow simple or complex flow control.

Mitos Duo XS-Pump

The Mitos Duo XS-Pump (Part No. 3200057) has been specifically developed for microfluidic applications where **smooth flow** is required. The microfluidic pumping system achieves this through its **advanced drive electronics** that minimize the pulsation from the stepper motor.

Easy to use, the pump features two independent syringes and two multi-port valves allowing it to be **configured in a number of ways**. It can deliver up to 10 different fluids sequentially (when using the 6-port valves) to one input channel of a chip, or the same fluid sequentially to 10 different input channels, or provide just one continuous smooth flow of fluid.

Modes of operation

- **Dual Dosing Mode:** each of the two syringes is operated entirely independently as a refilling single syringe pump allowing to dose a volume, pump at a specific flow rate or dose from one source to many reactors
- **Continuous Mode:** the two syringes working together to produce one continuous flow, i.e. one is refilling while the other syringe is dispensing
- **PC Control Mode:** Dual dosing and continuous mode can be controlled via PC software

Operating over a wide **pressure range (up to 6bar)** and **flow range (0.1 μ l to 10ml/min)**, the Mitos Duo XS-Pump can be easily controlled via and **intuitive twist and click knob** and large display. The pump can be used with the Sample Injection Valve (Part No. 3200037) allowing small liquid samples to be injected into microfluidic systems.

Mitos Quad XS-Pump

Providing **ultra smooth flow**, the Mitos Quad XS-Pump (Part No. 3200056) offers **two continuous flows** with **in-line pressure sensing** for each channel.

The compact module is **extremely chemically resistant** and operates over a wide **flow range (0.1 μ l to 10ml/min)** and **pressure range up to 20bar**.

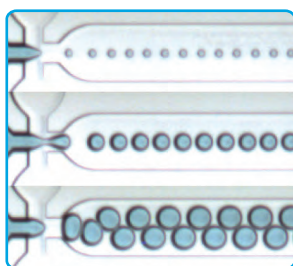
The Mitos Quad XS-Pump features valve modules, syringes and pressure sensors which can be easily removed or replaced.

Applications

Quick and easy to use, Dolomite's Syringe Pumps benefit a wide range of application areas including drug discovery, droplet generation and microreactor experiments.

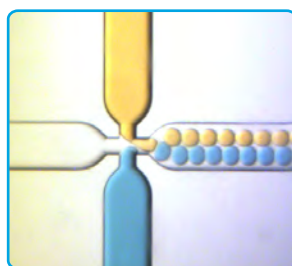
Dolomite offers the following Syringe Pump accessories:

Syringe Pump Starter Kit	3200058
Mitos Duo XS-Pump Port Valves	3000244-47
Mitos Duo XS-Pump Syringes	3000248-54
Mitos Duo XS-Pump PC Software	3600001
Mitos Quad XS-Pump Valve Block	3200010
Mitos Quad XS-Pump Syringes	3200004-07



Left: Mitos Duo XS-Pump (Part No. 3200057)

Above: Droplet formation using the Mitos Duo XS-Pump as part of the Syringe-based Droplet Starter System



Right: Mitos Quad XS-Pump (Part No. 3200056)



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ISO 9001:2008 certified



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