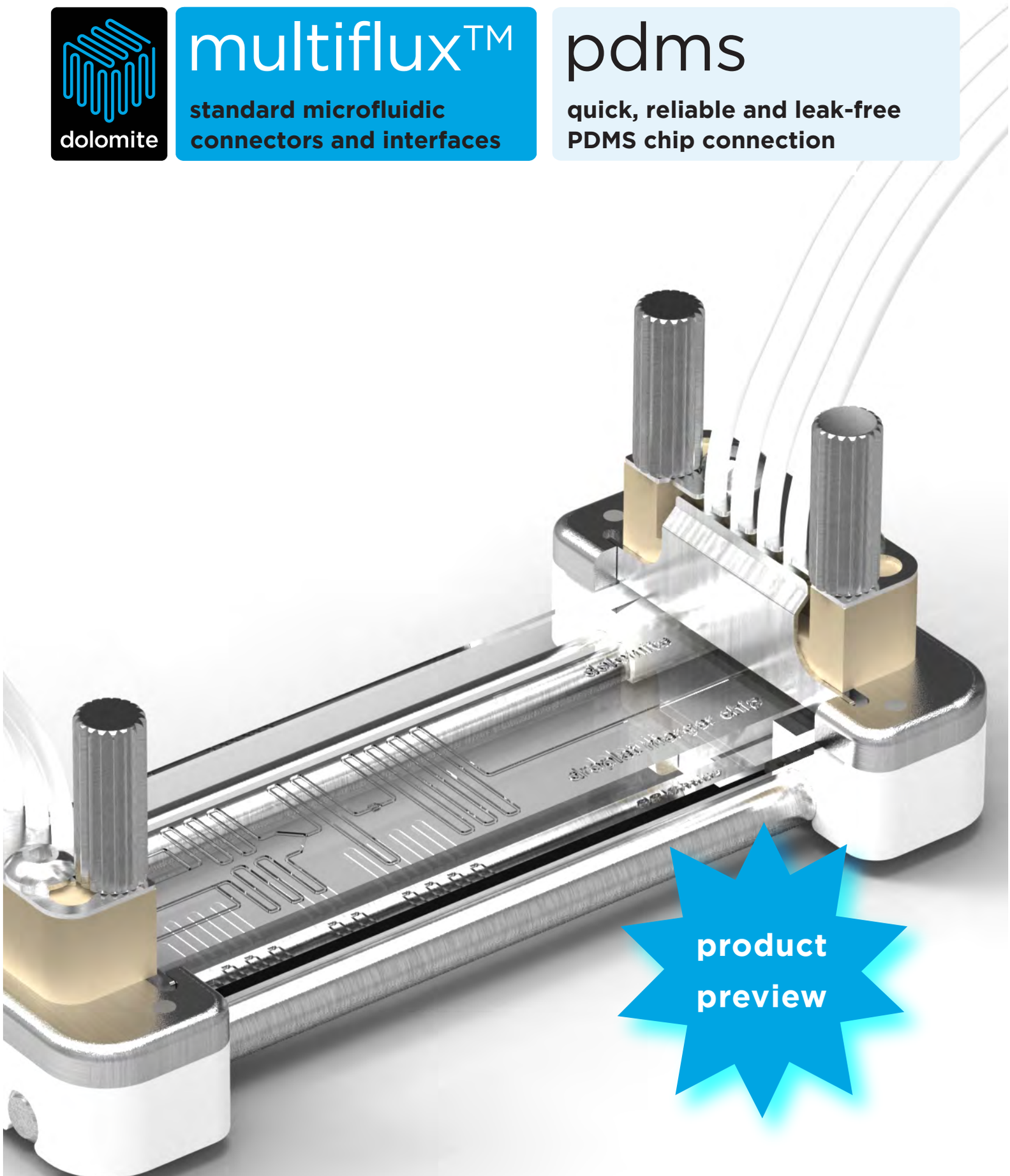
dolomite

multiflux™

standard microfluidic connectors and interfaces

pdms

quick, reliable and leak-free PDMS chip connection



product preview

Innovators in microfluidic solutions

Leading the way in microfluidic connections

Fluidic systems for manipulation, analysis and control of small amounts of material are becoming increasingly sophisticated. Dolomite has extended its industry leading Multiflux™ range to include a PDMS interface which brings standardisation and simplicity to PDMS chip connections.

PDMS Interface

PDMS chips are frequently used for academic work due to their low cost and short development time. However, it is often difficult and time consuming to make a reliable fluidic connections to these devices.

As part of its world leading Multiflux™ range, Dolomite is developing a new PDMS Chip Interface which provides a **flexible** and **time-efficient solution for PDMS chip connections**.

The PDMS Interface is easy to use and no technical experience is needed to connect and disconnect. Chip lifetimes are also extended as the connection can be made multiple times without damage to the chip.

The interface provides a **robust solution** for the chip to be used outside the lab which widens applications for PDMS chips beyond research and the opportunity for **greater collaboration between research labs**.

Main benefits

- Quick to connect and disconnect
- Reliable seal
- High density of connections
- Good microscope access
- Accommodates wide range of PDMS device heights
- Thin layer glass slide option
- Fast fabrication, no hole punching necessary

Compatible PDMS Chips

The PDMS Chip Interface accommodates a **wide range of PDMS device heights** making it easy for customers to design and fabricate a PDMS chip using current methods and equipment.

Two PDMS replicas with up to 4 fluidic connections can be bonded to the Dolomite glass slide. This requires a single PDMS Chip Interface and Multiflux™ Linear Connector 4-way. For more complex designs, there will be one chip per slide with two interfaces.

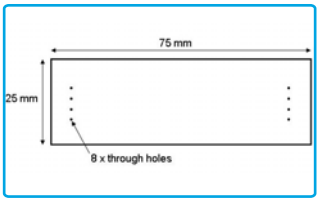
The new PDMS Interface will also be compatible with **Dolomite's upcoming range of PDMS chips** including droplet generation and droplet collection.

Save time and get results faster

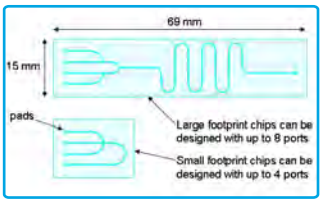
Reliable sealing performance is a key feature of the PDMS Chip Interface. As a result, there is less downtime due to leakage issues, which increases the time available for experiments.

The ability to quickly make and break connections allows **rapid changeover between different chip** designs to further increase productivity.

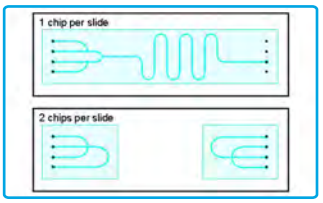
How it works



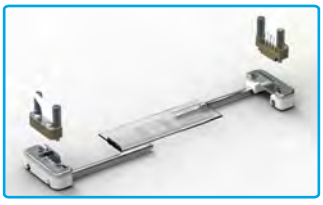
Step 1
Dolomite supplies glass slides with the required port layout



Step 2
Design channel layout with Ø 0.5 to 1mm pads at each inlet and outlet port



Step 3
Bond the PDMS replica to the glass slide ensuring that the pads are aligned with the holes



Step 4
PDMS Chip connected to a PDMS Chip Interface and Linear Connector 4-way

For more information contact us or see the Multiflux™ flyer.

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ISO 9001:2008 certified

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