

PRODUCTS  
**FLOW CONTROL  
SYSTEMS**



# MUX SERIES FLOW SWITCH MATRICES

ELVEFLOW.COM/MICROFLUIDIC-FLOW-CONTROL-PRODUCTS/FLOW-CONTROL-SYSTEM/FLOW-MULTIPLEXER

## 3 UNIQUE FLOW SWITCH MATRICES TO AUTOMATE FLOW HANDLING

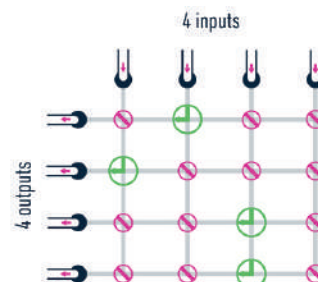
- ✓ CONTROL UP TO 16 VALVES INDEPENDENTLY
- ✓ SMALL FOOTPRINT



### MUX CROSS CHIP

Stop the flow in microfluidic devices

- > Rocker peek valves
- > Plug & play programmable flow stop
- > Complete equilibrium, stops flow in 100ms
- > Ultra low volume injection
- > Internal/external trigger
- > Fluidic connector: 10-32 UNF



**APPLICATIONS:** Instantaneous stop flow, small sample injection & sample premixing  
**WETTED MATERIAL:** POM, Viton, PEEK, FKM



### MUX FLOW SWITCH

Drug switch into microdevices

- > Rocker peek valves & PEEK manifold
- > Plug & play usb software
- > No samples cross-contamination & no backflow
- > Flexible: from 4 to 256 valves
- > Internal/external trigger
- > Fluidic connector: 1/4-28 UNF



**APPLICATIONS:** Drug, reagent & cell medium switch for cell biology and flow chemistry  
**WETTED MATERIAL:** PEEK, FKM



### MUX QUAKE VALVE

Open & close bilayer PDMS valves

- > Plug & play programmable valve sequence
- > Fast valve switch
- > Fine valve position tuning
- > Flexible: from 16 to 256 peek valves
- > Internal/external trigger
- > Fluidic connector: 10-32 UNF



\*basic example

**APPLICATIONS:** PDMS microvalves & micropumps and cell confinement device control  
**WETTED MATERIAL:** POM, Viton, PEEK, FKM

MUX SERIES		CROSS CHIP	FLOW SWITCH MATRIX	QUAKE VALVE
Performances	Valves actuation time	20 ms		
	Max. supported pressure	2 bar (29 PSI)		
Power supply	Input voltage range, AC	100 V to 240 V		
	AC supply frequency	50 Hz to 60 Hz		
	Input current, AC	1 A		
	Power consumption	35 W		
	Safety	IEC/EN 61010-1: 2001		
	Shutting down power supply	disconnect AC/DC adapter		
	Mechanical specifications	Valve type	2/2-way solenoid valve	
Input/output connectors		10-32 UNF	1/4-28 UNF	10-32 UNF
Wetted materials		POM, Viton, PEEK, FKM	PEEK, FKM	POM, Viton, PEEK, FKM
Operating temperature		10 °C to 40 °C		
Operating humidity		20 to 80 %		
Software	Computer specifications	USB 2.0 port, Intel Pentium II 500 MHz, 1 Go Hard Disk space, 2 Go RAM Windows XP and newer, 32/64 bit. LabVIEW® 2011 is required when using LabVIEW® libraries.		
	Connection type	USB		
	Provided elements	C++, Python, MATLAB® and LabVIEW® libraries		

Non-contractual information, may be changed without notice.

**MUX SERIES DIMENSIONS** without connectors (length x width x height): 220 x 130 x 130 mm **TTL TRIGGER:** input/output 5 V