

MUX RECIRCULATION 6-PORT/2-POSITION VALVE

ELVEFLOW.COM/MICROFLUIDIC-PRODUCTS/MICROFLUIDICS-FLOW-CONTROL-SYSTEMS/MUX-RECIRCULATION/

Included in our
RECIRCULATION PACK

ELVEFLOW.COM/MICROFLUIDIC-PRODUCTS/MICROFLUIDICS-APPLICATION-PACKS/
ONE-WAY-RECIRCULATION/



MAKE LONG-TERM EXPERIMENTS EASIER AND MORE RELIABLE



The Recirculation Valve is a **6-port/2 position** microfluidic valve allowing to perform switches between two setup configurations. Applications are: **stable unidirectional fluid recirculation** and **sample injection**.

✓ **PRECISE VOLUME INJECTION**

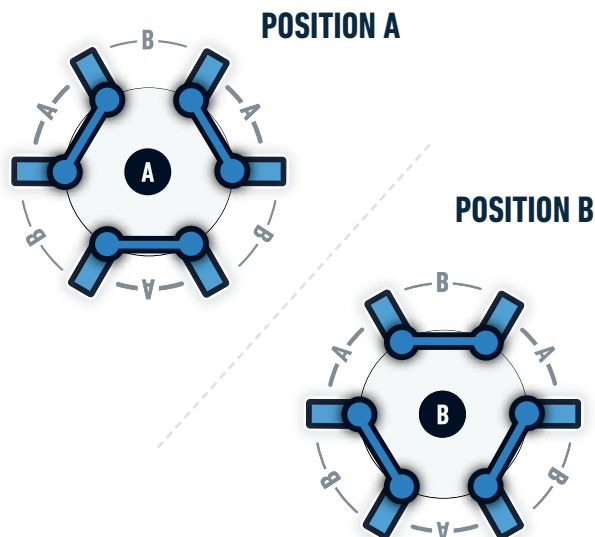
✓ **LONG RUN RECIRCULATION**

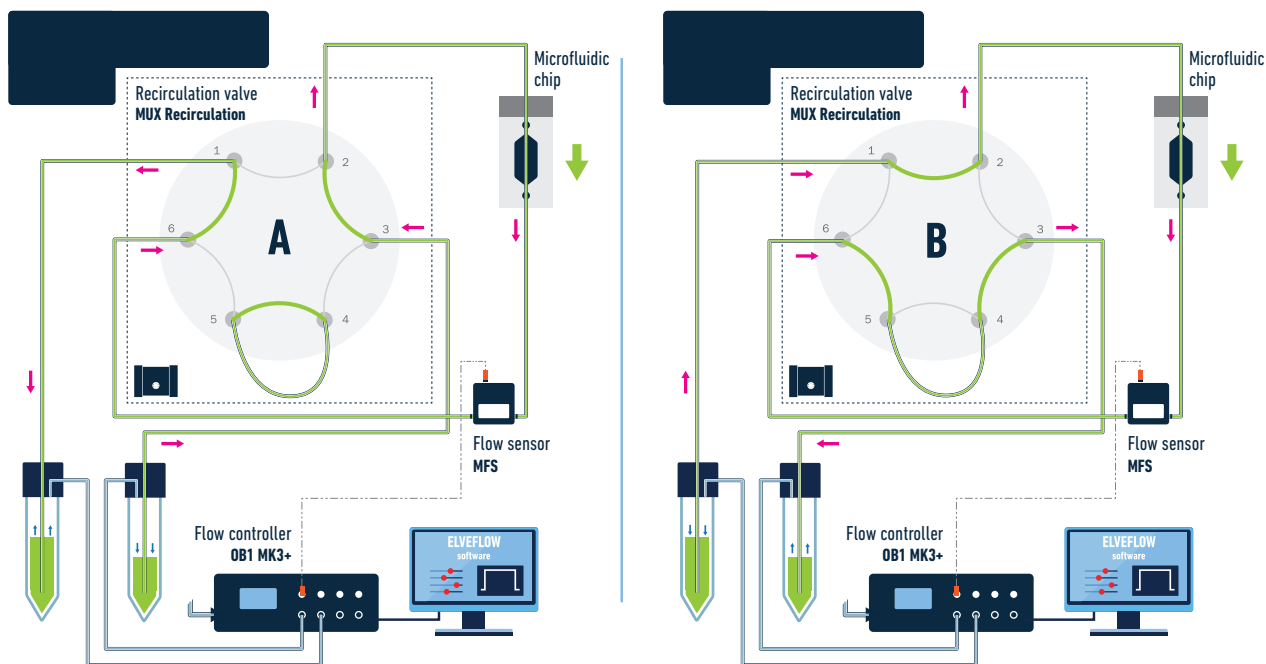
UNIQUE PERFORMANCES

- > Recirculate a fluid in a **closed loop**
- > Port-to-port switching time: **180 ms**
- > **High chemical compatibility** (wetted materials: PCTFE and PTFE)
- > No sample **cross-contamination** & no **backflow**

APPLICATIONS

- > Cell culture on chip
- > Drug screening
- > Toxicity tests
- > Stem cells assays
- > Organ on chip
- > SPR or TIR imaging coupled with microfluidics
- > Heat sink experiment





TECHNICAL SPECIFICATIONS

MUX RECIRCULATION		SPECIFICATIONS
Performances	Port to port switching time (ms)	180 ms
	Max. recommended pressure	7 bar
	Internal diameter	0.5 mm
Power supply	Input voltage range, AC	100 V to 240 V
	AC supply frequency	50 Hz to 60 Hz
	Max current consumption	2A peak
	Power consumption (max)	36 W
	Power supply voltage	18-24V DC
Mechanical specifications	Valve type	6 ports / 2 positions rotative valve
	Fluidic connector	Standard 1/4-28 UNF, flat-bottom
	Operating temperature	5 °C to 40 °C
	Operating humidity	20 to 70 % condensing
	Wetted materials	PCTFE and PTFE
	Dead volume ⁽¹⁾	None
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

(1) Volume that is stuck in the system (dead end), which is not clearly swept and relies on diffusion to clear out