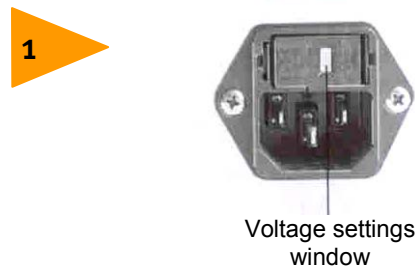


Q-Sense E4 Flow System Setup, with IPC-N Pump

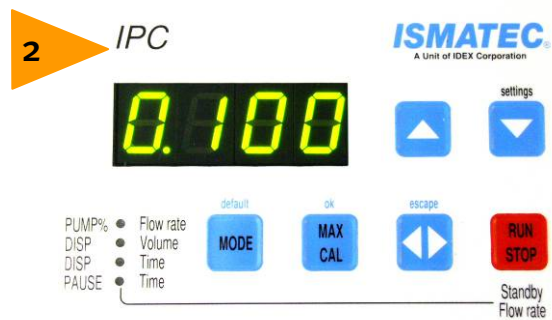
Part 1 – Ismatec IPC-N Pump

Before switching the pump on, check the voltage setting and fuse on the backside:

220-240V: use 250mA fuses
110-120V: use 500mA fuses



Keep the “SETTINGS” button pressed while switching the pump on. This makes the pump start in settings mode (the blue words above the buttons are active).



Cycle through the settings, using the up/down arrows, until “TUBE” is shown, select by pressing “OK”.

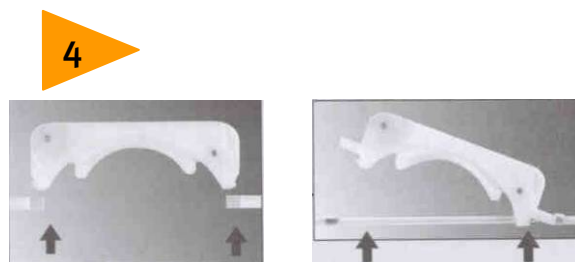
Select inner diameter **0.64** mm, (double-check with numbers given on the tubing itself!). Press “OK” to confirm.




Press “ESCAPE” to save settings.

Attach the adaptors on each cassette, and then the tubing.

Ready to go!



Typical flow rates: for filling the system 100-400 $\mu\text{l}/\text{min}$; for experiment 25-100 $\mu\text{l}/\text{min}$.

 50 $\mu\text{l}/\text{min}$

 100 $\mu\text{l}/\text{min}$

For details and calibration function, see supplier's manual.

Part 2 –Tubing connectors

The ferrule forms a tight seal as it is deformed when being screwed into the flow module. Place the ferrule and threaded connector as shown before attaching them.

5



Note that the arrows on the top of the module indicate the *direction* of the flow for correct sample temperature equilibration.

Use the brown adapter (the perifit) to connect to the soft pump tubing (expanding the narrow bore of the pump tubing with a pipette tip may help). If 1.5-2mL tubes are used, the white lids can be used to guide the tubing. *Note* that the lid needs to be vented to work properly.

6



Place the pump and sample holder so that the samples are drawn through the E4 system. This setup will reduce the need for pump tubing cleaning and prevent from leakage accidents.

7



For details, please check the E4 Operator Manual.