Concentration and Flow Rates

The event rate will approach maximums stated in the column header when samples of stated concentrations are run at the flow rates below.

When acquiring large event files (i.e files with > 10^6 events), plot parameters should not be changed while recording.

Sample flow rate	***Fastest*** **(35,000 ev/sec)** ***maximum*** **sample concentration**	***Accurate counts*** **(8,000 ev/sec) maximum sample concentration**	**Cell size and flow rate recommendation**
1000 µL/ minute	2.1 x 10^6 cells/mL	0.48 x 10^6 cells/mL	- Particles > 4 µm - Predominantly acoustic focusing
500 µL/ minute	4.2 x 10^6 cells/mL	0.96 x 10^6 cells/mL	- Particles > 2 µm - Predominantly acoustic focusing
200 µL/ minute	6.7 x 10^6 cells/mL	1.5 x 10^6 cells/mL	
100 µL/ minute	1.3 x 10^7 cells/mL	3 x 10^6 cells/mL	
25 µL/ minute	5.4 x 10^7 cells/mL	1.2 x 10^7 cells/mL	- Small particles < 2 µm - Predominantly hydrodynamic focusing - Smallest sample core - Best resolution from background for dimly positives assays
12.5 µL/ minute	1.0 x 10^8 cells/mL	2.4 x 10^7 cells/mL	

Let your biology and data quality be your guide. *If good data is obtained while running at 2-8,000 ev/sec, adjust the sample concentration and flow rate to maintain that.*

Note: Higher flow rates may show some loss of sensitivity