

SONY

# MA900 CELL SORTER

## Sample Flow Rate and Volume Consumption 100um nozzle

Sample Pressure	Sample Rate	250 $\mu$ L	500 $\mu$ L	750 $\mu$ L	1,000 $\mu$ L	1,500 $\mu$ L	2,000 $\mu$ L	2,500 $\mu$ L	3,000 $\mu$ L	3,500 $\mu$ L	4,000 $\mu$ L
1	150 $\mu$ L/h	1:40	3:20	5:00	6:40	10:00	13:20	16:40	20:00	23:20	26:40
2	400 $\mu$ L/h	0:38	1:15	1:53	2:30	3:45	5:00	6:15	7:30	8:45	10:00
3	750 $\mu$ L/h	0:20	0:40	1:00	1:20	2:00	2:40	3:20	4:00	4:40	5:20
4	1,000 $\mu$ L/h	0:15	0:30	0:45	1:00	1:30	2:00	2:30	3:00	3:30	4:00
5	1,500 $\mu$ L/h	0:10	0:20	0:30	0:40	1:00	1:20	1:40	2:00	2:20	2:40
6	2,000 $\mu$ L/h	0:08	0:15	0:23	0:30	0:45	1:00	1:15	1:30	1:45	2:00
7	2,500 $\mu$ L/h	0:06	0:12	0:18	0:24	0:36	0:48	1:00	1:12	1:24	1:36
8	3,000 $\mu$ L/h	0:05	0:10	0:15	0:20	0:30	0:40	0:50	1:00	1:10	1:20

# Relationship between Sample Pressure and Sample Flow/Event Rate

## 100 µm sorting chip

[Sample Pressure]	1	2	3	4	5	6	7	8	9	10	
Flow rate (µl/min)	6	11	16	21	27	37	47	58	68	89	
Event rate (eps)	Sample concentration (1e6/ml)	60	160	260	350	450	650	840	1,000	1,200	1,600
	Sample concentration (1e7/ml)	600	1,300	2,100	2,800	3,600	5,100	6,600	8,100	9,600	12,600

## 130 µm sorting chip

[Sample Pressure]	1	2	3	4	5	6	7	8	9	10	
Flow rate (µl/min)	1	3	7	10	16	22	28	34	40	50	
Event rate (eps)	Sample concentration (1e6/ml)	10	30	100	150	250	400	500	600	700	900
	Sample concentration (1e7/ml)	100	600	1,200	2,000	2,800	3,600	4,500	5,400	6,500	8,000

## 70 µm sorting chip

[Sample Pressure]	1	2	3	4	5	6	7	8	9	10	
Flow rate (µl/min)	8	18	28	42	62	80	100	120	140	168	
Event rate (eps)	Sample concentration (1e7/ml)	1000	2200	3500	5300	7700	10000	12500	15000	17500	21000

The values above are reference values. Values may vary depending on the environment.