SONY MA900 NOZZLE GUIDE

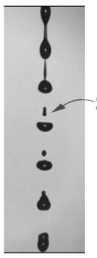
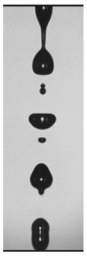
PART #	LE-C3207	LE-C3210	LE-C3213
NOZZLE SIZE	70 um	100 um	130 um
ANALYSIS *70,000 EVENTS / SEC FOR ALL CHIP SIZES 0.5 um small particle resolution*			

Mode		Standard	Targeted	
NOZZLE SPEED *(EMPTY DROPS / SECOND)*	~50K drops/sec	~30K drops/sec	~22K drops/sec	~12K drops/sec
SORT SPEED *(TOTAL EVENTS / SECOND)*	10-12K eps	6K eps	<4K eps	2.5K eps
DROP VOLUME	1.5 nL	3.5 nL		7.9 nL
SORTED EVENTS / 1mL *(OF SORTED VOLUME)*	~700K	~300K		~130K

For any nozzle, aim for <1 cell every 5 empty drops for good sort efficiency

NOZZLE APPLICATION			
	• Fastest sort speed • Limited to small particles • Runs at highest pressure	• Most common nozzle for various cell types • Targeted Mode reduces side-stream fanning & improves targeting precision of larger cells with uneven geometry into tubes or multi-well plates	• Gives best cell viability • Runs at lowest pressure • Slowest sort speed • Can sort any cell size under 30um
	E. Coli, Yeast	Lymphocytes, PBMC	Bone Marrow, CHO, HEK-293T; Osteosarcoma (U2OS), Cervical Cancer (SiHa), Fibroblasts (TIG-1), Megakaryocytes, Plant protoplasts, Squamous Cell Carcinoma (SSC-25), Melanoma (HT20), Primary Neurons, HeLa
Approximate FSC Gain	10-16	4-16	0.5-16	0.5-16
PARTICLE SIZE *(Nozzle size must be 5 to 7x larger than particle size)*	<10um	<18um	<25um	<30um

MA900 Software auto-calibrates optimal settings for each individual chip

PRESSURE	40 psi	20 psi		9 psi
FREQUENCY / CLOCK	~40-52 kHz	~27-31 kHz	~21-23 kHz	12 kHz
AMPLITUDE / DRIVE	30-50%	10-20%	30-50%	30-50%
SATELLITE MERGE	Fast	Regular	Fast	Fast

STREAM EXAMPLES