

MA900 Fluorochrome Guide: For 4-laser, 12-color models LE-MA900F/FP

488		561		
FL1 525/50	FL2 585/30	FL3 617/30	FL4 695/50	FL5 785/60
● EGFP	● PE	● PE-Texas Red®	● 7-AAD	● PE-Cy™7
● CFSE	● mOrange	● PE/Dazzle™ 594	● PE-Cy™5	
● FITC	● tdTomato	● PI	● PerCP	
● Alexa Fluor® 488	● DsRed/mRFP	● LIVE/DEAD® Red	● PE-Cy™5.5	
● SYBR® Green		● Zombie Red™	● PerCP-Cy5.5	
● EYFP		● mCherry	● PerCP-eFluor® 710	
● mVenus		● Alexa Fluor® 594	● mPlum	
● mCitrine		● mKate		
● LIVE/DEAD® Green				
● Zombie Green™				

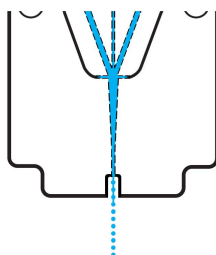
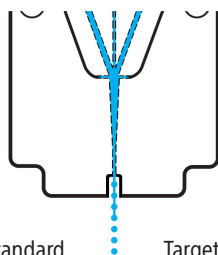
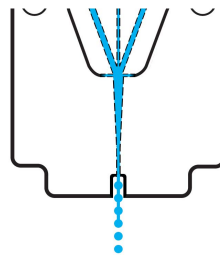
405		638				
FL6 450/50	FL7 525/50	FL8 585/30	FL9 617/30	FL10 665/30	FL11 720/60	FL12 785/60
● BV421	● AmCyan	● BV570	● BV605	● BV650	● BV711	● BV785
● Alexa Fluor® 405	● BV510	● Zombie Yellow™		● APC	● APC-Cy5.5	● APC-Cy7
● Zombie Violet™	● T-Sapphire	● LIVE/DEAD® Yellow		● Cy5	● Alexa Fluor® 700	● APC-Alexa Fluor® 750
● LIVE/DEAD® Violet	● Pacific Orange™			● Alexa Fluor® 647		● APC/Fire™ 750
● DAPI	● Zombie Aqua™			● LIVE/DEAD® Far Red		● Zombie NIR™
● Pacific Blue™	● LIVE/DEAD® Aqua					● LIVE/DEAD® NIR
● mCFP						
● BFP						
● SYTOX™ Blue						
● Hoechst 33342						

Legend:

The MA900 cell sorter can be equipped with up to four lasers and two beam spots. Each beam spot is spatially separated and contains two lasers (model dependent).

The 488- and 561-nm lasers are on Spot 1, while the 405- and 638-nm lasers are on Spot 2. For panel design, select one dye from each FL channel of each beam spot. Dyes from the same FL channel cannot be run together. Each dye's circle label indicates its excitation laser. FSC and BSC scatter is detected with the 488-nm laser. Use the Compensation Wizard for determining the fluorescence spillover compensation.

SH800 and MA900 Sorting Chip Guide

Part number	LE-C3207		LE-C3210		LE-C3213	
Nozzle size	70 μm		100 μm		130 μm	
						
Mode			Standard	Targeted		
Drop frequency (Empty drops/second)	~50 K		~30 K	~22 K	~12 K	
Max suggested* event rate (Total events/second)	12 K		6 K	<4 K	2.5 K	
	*When sorting for purity, do not exceed the indicated event rate.					
Drop volume	1.5 nL		3 nL	4 nL	7.9 nL	
Sorted events/1 mL (of sorted volume)	~700 K		~333 K	~250 K	~40-125 K	
Application	<ul style="list-style-type: none">• Fastest sort speed• Limited to small particles• Runs at highest pressure		<ul style="list-style-type: none">• Most common nozzle for various cell types• Targeted Mode improves targeting precision of larger cells with uneven geometry into tubes or multi-well plates		<ul style="list-style-type: none">• Provides best viability• Runs at lowest pressure• Slowest sort speed• Can sort any cell size under 25 μm	
Cell type examples	<div><div><i>E. Coli</i></div><div>RBC</div><div>Yeast</div><div>Spleen</div></div>		<div><div>Bone Marrow</div><div>CHO</div><div>Macrophages</div><div>Cultured Stem Cells</div></div>		<div><div>ES cells</div><div>Neurons</div><div>Hybridoma</div><div>K562</div><div>HeLa</div><div>Fibroblasts</div><div>HEK-293T</div></div>	
FSC gain	16 8		4		0.5-1	
Particle size (Nozzle size must be 5 to 7x larger than particle size)	<10 μm		<18 μm		<25 μm	
	Cell Sorter software autocalibrates optimal settings for each individual chip					
Pressure	40 psi		20 psi		9 psi	
Frequency (clock)	40-52 kHz		27-31 kHz	21-23.5 kHz	10-12 kHz	
Droplet profile	