

# BD FACSAria II User's Guide

**bdbiosciences.com**  
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## Cytometer Supplies

### Optical Components

The following filters and mirrors are mounted on the BD FACSAria II cytometer. Use these part numbers if you need to order any replacement components. See Using Custom Optical Filters on page 222 for instructions.

Detector Array (Laser)	PMT	LP Mirror BP Filter	Replacement Part No.	Intended Dye
Octagon (488-nm blue laser)	A	735	343787	
		780/60	343788	PE-Cy7
	B	655	343789	
		695/40	343790	PerCP-Cy5.5 or PI
		675/20	343791	PerCP
	C	610	640879	
		616/23	640880	PE-Texas Red®
	D	556	343794	
		585/42	343796	PE or PI
	E	502	343797	
		530/30	343798	FITC
	F	488/10	343799	SSC
		1.0 ND filter	53-10057-01	
Trigon (633-nm red laser)	A	735	343787	
		780/60	343788	APC-Cy7
	B	660/20	343800	APC

The following filters and mirrors are provided with the violet-laser option.

Detector Array (Laser)	PMT	LP Mirror BP Filter	Replacement Part No.	Intended Dye
Trigon (405-nm violet laser)	A	502	343797	
		530/30	343798	Alexa Fluor® 430
	B	450/40	343801	Cascade Blue®, Pacific Blue™, Hoechst, DAPI, Alexa Fluor® 405

The FSC photodiode is provided with a 1.0 ND filter. Other filters are available as options. Use the following part numbers to replace the filter.

Detector	ND Filter	Replacement Part No.
FSC photodiode	0.5	33710407
	1.0	33710807
	1.5	338651
	2.0	338652

To order a filter holder, use the following part numbers.

Holder	Part No.
Mirror holder	336103
Mirror retainer	345662
Mirror backup spring	344979
Filter holder	336102
Filter retainer	333830

## Accessory Kit

The cytometer is shipped with an accessory kit containing the following items. Use these part numbers if you need to order any replacements.

Item	Part No.
1-mL microtube holder	333457
12 x 75-mm test tube holder	333456
15-mL centrifuge tube holder	333430
Four-way 1.5-mL Eppendorf collection tube holder	644349
Four-way 12 x 75-mm collection tube holder	641454
Two-way 12 x 75-mm collection tube holder	641613
Two-way 15-mL collection tube holder	641612
Universal top section for collection tube holders	644353
O-ring for collection-tube holder (3)	337897
Integrated nozzles:	
• 70 micron	643940
• 85 micron	643941
• 100 micron	643942
• 130 micron (not included - can be ordered as an option)	643943
• Closed-loop	644395
Nozzle locking lever (spring and plunger included)	643686
Standard nozzle O-rings	333084
Magnifying glass	337599
Sample injection tubing (12-inch lengths)	641059
Sample injection tubing (7-inch lengths)	641475
Ferrule	335108

<b>Item</b>	<b>Part No.</b>
Ferrule-removal tool	335690
Collet	19-66455-00
Collet nut	19-66456-00
Pinch valve tubing	641900
Sample line filters (35 micron)	643152
Sample line filters (50 micron)	643153
Sheath fluid filter (also used for ethanol shutdown tank filter)	331394
Fluid filter (for DI water, bleach, and ethanol tanks)	643687
Air filter, inline, 3 micron	641913
Disposable waste tank caps (pack of 12)	338854
Cap for 5-L container (5)	335916
Lubricant for O-rings	347306
O-ring pick tool	331430
Deflection plate removal tool	643197
Allen wrench set	98-10004-00
Wrench, 11/16-inch, for sheath probe	646889
Adapter tray for microscope slides	335630
Power cords:	
• Main power cord	• 333694
• Cordset for continental Europe	• 334140
• Cordset for UK	• 334141
• Cordset for Australia/Asia	• 334175

## Other Replacement Parts

The following items are not included in the accessory kit, but you can use the indicated part numbers to order spare or replacement parts.

Item	Part No.
Autoclavable 10-L container	340261
Auxiliary 5-L container	333504
Sheath sensor probe	642012
Waste sensor probe (6-level)	334915
Auxiliary sensor probe (non-ethanol)	343835
Auxiliary sensor probe (ethanol)	642874
Air filter for cabinet (side door)	334351
Air filter for ACDU cabinet (set of 3)	334821
ULPA filter and tubing replacement kit (set of 3, for use with the AMO)	334822
Four-way 1-mL collection tube holder	641614

## Consumables

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### Cytometer Setup Particles

Particle	Supplier	Catalog No.
BD Calibrite™ beads <ul style="list-style-type: none"> <li>• Two-color kit (unlabeled, FITC, PE)</li> <li>• Three-color kit (unlabeled, FITC, PE, PerCP)</li> <li>• PerCP beads</li> <li>• PerCP-Cy5.5 beads</li> <li>• APC beads</li> </ul>	BD Biosciences	<ul style="list-style-type: none"> <li>• 349502</li> <li>• 340486</li> <li>• 340497</li> <li>• 345036</li> <li>• 340487</li> </ul>
Fluoresbrite® Yellow-Green 2-µm beads (for the 405-nm laser)	Polysciences Inc. (800) 523-2575	18604
SPHERO Rainbow Calibration Particles, 3.0–3.4 µm	BD Biosciences	<ul style="list-style-type: none"> <li>• 559123 (8 peaks)</li> <li>• 556286</li> <li>• 556291 (brightest peak in 556286)</li> </ul>
BD FACS Accudrop beads	BD Biosciences	345249
BD Cytometer Setup and Tracking (CS&T) beads	BD Biosciences	641319 (1 vial) 642412 (3 vials)

## Reagents

Reagent	Supplier	Catalog No.
BD FACST <sup>Flow</sup> sheath fluid	BD Biosciences	340398 (US and Latin America) 342003 (other countries)
BD <sup>TM</sup> FACS <sup>Rinse</sup> detergent	BD Biosciences	340346
BD FACS <sup>Clean</sup> solution	BD Biosciences	340345
Ethanol	Various	—
Chlorine bleach (5% sodium hypochlorite)	Clorox® or other major supplier (to ensure that the bleach is at the correct concentration and free of particulate matter)	—
Monoclonal antibodies	BD Biosciences	— <sup>a</sup>
Dyes and fluorochromes	Molecular Probes (800) 438-2209  Sigma (800) 325-3010	—
BD FACS <sup>TM</sup> lysing solution <sup>b</sup>	BD Biosciences	349202

a. See the BD Biosciences Immunocytometry Products Catalog or the BD Biosciences website (bdbiosciences.com).

b. US Patent Nos. 4,654,312; 4,902,613; 5,098,849



## Labware

Item	Supplier	Catalog No.
1-mL microtubes	Bio-Rad Laboratories (800) 424-6723	223-9391 (1,000 per box)
1.5-mL Eppendorf tubes	Various	–
5-mL polystyrene test tubes, 12 x 75-mm (BD Falcon™) <ul style="list-style-type: none"> <li>• Uncapped, 125 per bag</li> <li>• Capped, 125 per bag</li> <li>• Capped, 25 per bag</li> <li>• With cell-strainer cap, 25 per bag</li> </ul>	BD Biosciences	<ul style="list-style-type: none"> <li>• 352052</li> <li>• 352054</li> <li>• 352058</li> <li>• 352235</li> </ul>
15-mL conical centrifuge tubes (BD Falcon) <ul style="list-style-type: none"> <li>• Polypropylene, 50/bag</li> <li>• Polypropylene, 125/bag</li> <li>• Polypropylene, 50/rack</li> <li>• Polystyrene, 125/bag</li> <li>• Polystyrene, 50/rack</li> </ul>	BD Biosciences	<ul style="list-style-type: none"> <li>• 352196</li> <li>• 352096</li> <li>• 352097</li> <li>• 352095</li> <li>• 352099</li> </ul>

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