Optima Series Tabletop Rotors

Accelerating discoveries.

At Beckman Coulter, total system design extends beyond instrumentation. Our Optima Series tabletop rotors are made to be the perfect complement for our Optima tabletop ultracentrifuges. Designed for researchers with smaller samples, Optima Series tabletop rotors handle sample volumes from as little as 175 µL up to 32.4 mL and race through run cycles at up to 150,000 rpm and greater than 1,000,000 x g.

Because we understand the rapidly changing world of life science research, every innovative component of our rotors has been created to meet your evolving demands—including lower k factors for faster separation of subcellular particles, proteins, viruses and more.

Accelerating your scientific discovery process starts with accelerating the rate at which you can perform. Our exclusive Optima Series rotors allow you to fine-tune your research for more rapid, accurate results.



Optima Series Tabletop Rotors

Extraordinary performance. Optimum safety.

Coupled with our innovative labware and accessories, Optima Series rotors offer extraordinary performance, ease, and functionality.

In addition, all Beckman Coulter instruments, rotors, and labware are designed, manufactured, and tested as a system. Multi-layered BioSafety* features, overspeed protection, and our exclusive Field Rotor Inspection Program ensure optimum safety and a full, useful lifetime for your investment.

*BioSafe and BioSafety are terms intended to describe the enhanced biocontainment features of our products.



BECKMAN COULTER We're better together

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B2012-12947-7K-LC

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PRINTED IN U.S.A.

Optima Series Tabletop Rotors

The perfect complement to our ultracentrifuges.







Capac (mL	ty Name/ Features	Part Number	Max Speed (rpm)	Max Force (x g)	k Factor	No. Tubes x Volume (mL)	Tube Vol. Range w/g-Max (mL)
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FIXED-ANGLE ROTORS

MLA-150 393490 150,000 1,003,000 10.4[‡] 8 x 2.0

1.0 - 2.0 Highest speed, for rapid differential sedimentation (pelleting) of small particles, such as subcellular organelles and viruses.

10 x 2.0



Rapid differential sedimentation (pelleting) of small particles, such as subcellular organelles and viruses.

0.8 TLA-110 366735 110,000	657,000	13	8 x 5.1	1.5 - 5.1

130,000 1,019,000 8.7

Moderate volume differential sedimentation (pelleting) of subcellular organelles and viruses.

18.0	TLA-55	366725	55,000	186,000	66	12 x 1.5	1.5
BIOC	Rapid pelle	ting of nucl	eic acid precip	oitates in 1.5 ml	_ tubes.		1

A91774 50,000 233,000 6 x 32.4 4.0 - 32.4 MLA-50 92

> Perfect for large volume applications. Unsurpassed combination of capacity and performance.

SWINGING BUCKET ROTORS

8.8	TLS-55	346134	55,000	259,000	50	4 x 2.2	0.2 - 2.
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BIOC RNA pelleting in 2-3 hours; subcellular fractionation and protein separations in sucrose gradients.

20.0 367280 50,000 268,000 71 4 x 5.0 0.8 - 5.0 MLS-50

> Rate-zonal separations of subcellular organelles; pelleting and isopycnic separations of RNA.

NEAR-VERTICAL TUBE ROTORS

9.6 TLN-120 357683 120,000 585,000 7 8 x 1.2 1.2

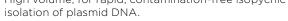
Highest speed, for plasmid DNA separations in 1.5 hours.

TLN-100 357614 100.000 450.000 14 3.3 - 3.9

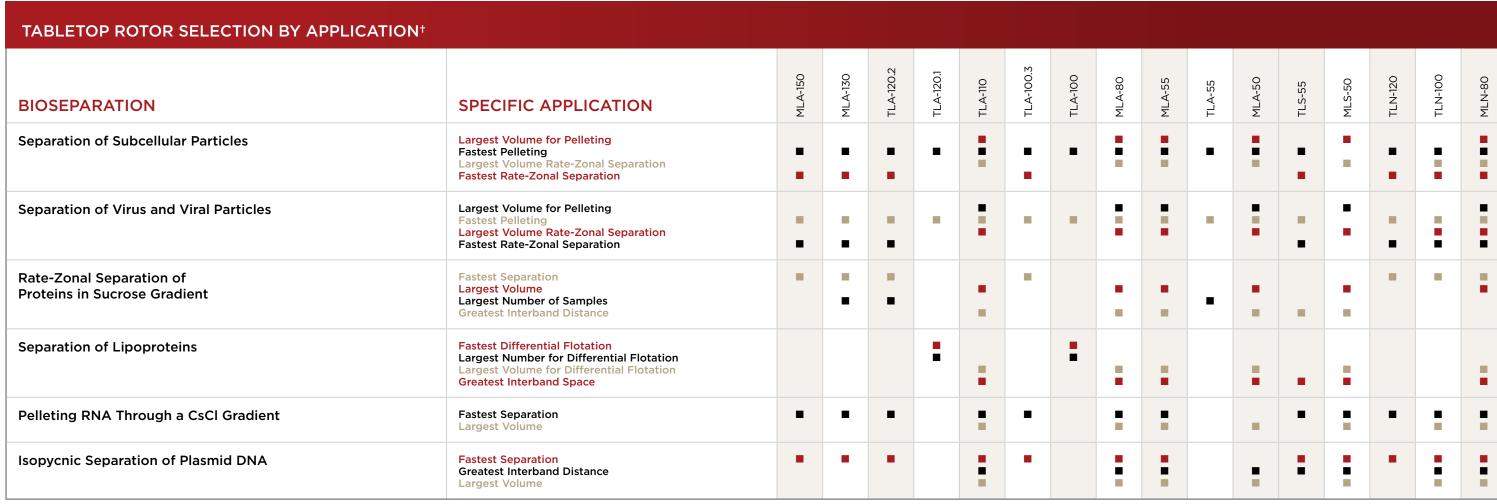
Highest speed and volume, for plasmid DNA separation in 4 hours.

64.0	MLN-80	367100	80.000	389,000	20	8 x 8.0	4.2 - 8.0
04.0	I-ILIN-00	30/100	80,000	303,000	20	0 / 0.0	4.2 - 0.0

High volume, for rapid, contamination-free isopycnic







[†] Selected rotor has the capability (x g, volume, labware) to accommodate the application, but may not be the most optimal/efficient choice for the specific application.

OPTIMA TABLETOP ULTRACENTRIFUGE ROTORS^{††}

	Rotor Type	Part Number	Max Speed (rpm)	Force at r max (x g)	k Factor	No. Tubes x Volume (mL)	Rotor Capacity (mL)	Tube Vol. Range w/ <i>g</i> -Max (mL)	МАХ-ХР	MAX-TL
	FIXED-A	NGLE F	ROTORS							
	MLA-150	393490	150,000	1,003,000	10.4	8x2.0	16.0	1.0 - 2.0	•	
	MLA-130	367114	130,000	1,019,000	8.7	10x2.0	20.0	1.0 - 2.0	•	
310C	TLA-120.2	357656	120,000	627,000	8	10x2.0	20.0	1.0 - 2.0	•	-
	TLA-120.1	357655	120,000	627,000	8	14x0.5	7.0	0.5	•	
вюс	TLA-110	366735	110,000	657,000	13	8x5.1	40.8	1.5 - 5.1	•	
	TLA-100.3	349490	100,000	541,000	14	6x3.5	21.0	1.5 - 3.5	•	
	TLA-100	343837	100,000	436,000	7	20x0.2	4.0	0.2	•	-
	MLA-80	367096	80,000	444,000	29	8x8.0	64.0	4.2 - 8.0	•	
	MLA-55	A31459	55,000	287,000	53	8x13.5	108.0	2.0 - 13.5	•	
вюс	TLA-55	366725	55,000	186,000	66	12x1.5	18.0	1.5	•	-
	MLA-50	A91774	50,000	233,000	92	6x32.4	194.4	4.0 - 32.4		

	Rotor Type	Part Number	Max Speed (rpm)	Force at r max (x g)	k Factor	No. Tubes x Volume (mL)	Rotor Capacity (mL)	Tube Vol. Range w/ g-Max (mL)	MAX-XP	MAX-TL		
	SWINGING BUCKET ROTORS											
o c	TLS-55	346134	55,000	259,000	50	4x2.2	8.8	0.2 - 2.2	•			
	MLS-50	367280	50,000	268,000	71	4x5.0	20.0	0.8 - 5.0	•			
	NEAR-VERTICAL TUBE ROTORS											
	TLN-120	357683	120,000	585,000	7	8x1.2	9.6	1.2	•			
	TLN-100	357614	100,000	450,000	14	8x3.9	31.2	3.3 - 3.9	•			
	MLN-80	367100	80,000	389,000	20	8x8.0	64.0	4.2 - 8.0				

^{††} Maximum rotor speeds may differ between instrument models. For complete rotor specifications, available tubes, bottles and accessories, and required parts, refer to our Ultracentrifuges Catalog (BR-8101) available at www.beckmancentrifuges.com.

BIOC BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility (Health Protection Agency, Porton Down, UK or USAMRIID, Ft. Detrick, MD, USA). Improper use or maintenance may affect seal integrity and, thus, containment.