DESIGN AND INNOVATION Centrifuges and Rotors

Smart Notes





How can maximum versatility be achieved with the Thermo Scientific General Purpose Pro Centrifuge series?

Thermo Scientific™ General Purpose Pro centrifuges achieve maximum flexibility by offering a large variety of 17 rotors: 6 swinging buckets and 11 fixed angle. 7 of these rotors (1 swinging bucket and 6 fixed angle) are Fiberlite™ Carbon Fiber Rotors. By offering the ability to choose between all these rotors with a RCF (relative centrifugal force) up to 25,830 x g and working volumes between 0.2-1000 mL, General Purpose Pro Centrifuges can address a wide variety of applications and sample sizes. The easy to use Auto-Lock™ Rotor Exchange System makes it simple to seamlessly switch between these rotors. 16 of the 17 rotors offered with the General Purpose Pro Centrifuges are equipment with the added security of biocontainment certified¹ sample protection, which is either optional or integrated within the rotor.

Choose from high capacity swinging rotors or high performance and lightweight Fiberlite Carbon Fiber Rotors - all with our Auto-Lock technology.







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Table 1 shows the variety of rotors, range of RCFs and volume and matches them to different applications that can be addressed by each rotor.









Rotor Type	Rotor Name	Maximum RCF	Volume Range (mL)	Biocontainment	Application Type
Fixed Angle	Fiberlite F14-6x250 LE	18533 x g	10-250	Integrated	Environmental studies, chemistry, microbiology
	Fiberlite F15-6x100y	24,652 x g	1.5-85	Integrated	Environmental studies, chemistry, microbiology
	Fiberlite F10-6x100 LEX	17,105 x g	1.5-85	Integrated	Environmental studies, chemistry, microbiology
	Fiberlite F13-14x50cy	15,038 x g	10-50	Integrated	Molecular biology, Protein biology
	Fiberlite F15-8x50cy	24,446 x g	10-50	Integrated	Molecular biology, Protein biology
	HIGHConic II	15,090 x g	1.5-85	Integrated	Molecular biology, Protein biology
	MicroClick 18 x 5	24,652 x g	1.5-5	Integrated	Molecular biology, Protein biology
	Fiberlite F21-48x2	25,055 x g	1.5-2	Integrated	Molecular biology, Protein biology
	Microliter 48x2	25,314 x g	1.5-2	Integrated	Molecular biology, Protein biology
	MicroClick 30x2	21,693 x g	1.5-2 (and spin columns)	Integrated	Molecular biology, Protein biology
	Microliter 30x2	25,830 x g	1.5-2	Integrated	Molecular biology, Protein biology

Rotor Type	Rotor Name	Maximum RCF	Volume Range (mL)	Biocontainment	Application Type
Swinging Bucket	TX-1000	4122 x g	0.2-1000	Optional	Diagnostics, environmental studies, chemistry, microbiology
	TX-750	4816 x g	0.2-750	Optional	Diagnostics, environmental studies, chemistry, microbiology
	BIOShield 1000A	7164 x g	1.5 -250	Integrated	Diagnostics, environmental studies, chemistry, microbiology
	HIGHPlate	6168 x g	0.2	Integrated	Diagnostics, Protein biology, molecular biology
	Fiberlite H3-LV	2738 x g	0.2	None	Diagnostics, Protein biology, molecular biology
	M-20	2272 x g	0.2	Optional	Diagnostics, Protein biology, molecular biology

 $^{^{1}\}mbox{Biocontainment}$ certification by Public Health England, Porton Down, UK

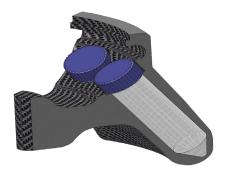


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Over 6 decades of Design and Innovation built into the General Purpose Pro Centrifuges

- Fiberlite Carbon Fiber Rotors: Outstanding features
 - Due to the high strength of carbon fiber, Fiberlite Rotors are backed by a 15-year limited warranty² more than double that of typical aluminum rotors reducing the need for rotor replacement and maintenance costs.
 Corrosion and fatigue-resistance secures the rotor's structural integrity for outstanding durability.
 - Biocontainment: Fiberlite Rotors and lid combinations offer systems that protect the user, the centrifuge and the samples from contamination – biocontainment certified by Public Health England, Porton Down, UK.
 - Fiberlite Rotors "unwind" rather than split or break, protecting the centrifuge from damage in case of a highly unlikely crash situation.
 - Value: On-site clinics and maintenance are available to ensure proper use and care, extending the life of your rotors.
- Aerodynamics
 - Our rotors are designed to reduce drag, enabling higher top speed performance and low noise levels.
 With enhanced aerodynamics, there is also less friction in the chamber, reducing energy required for the motor to turn and the refrigeration system to cool (example: Thermo Scientific™ BIOShield™ Swinging-Bucket Rotor which is a high RCF swinging bucket rotor features a windshield to reduce drag)

- Rotor innovations: Ease of use
 - Fiberlite F10-6 x 100 LEX has been redesigned to offer an well optimized angle of 45 degrees for better pelletization at RCF up to 17,105 x g. (Original F15-6 x100y still available when higher speeds are needed).
 - New microliter MicroClick 18x5 rotor enables compatibility with shorter 5 mL centrifuge tubes. Spin 18 x 5 mL small volume conical tubes.



Thermo Scientific General Purpose Pro centrifuges offer the choice between 17 rotors with RCFs up to 25,830 x g and working volumes between 0.2-1000 mL and can address a wide variety of applications.

²The Fiberlite 15-year warranty is longer than any typical metal rotor lifetime. Available adapters for flexibility in your lab, saving you money throughout the growth of your work and applications. Applies to applicable products, or when the cycle limit or time limit has been reached.

