



Frontier™ 5718 & 5718R

Multi-Pro Centrifuges



Powerful and Versatile Universal Centrifuges for Virtually Every Lab Application

Frontier 5000 Multi-Pro Centrifuges are designed for universal use in virtually every application in research, industrial & clinical laboratories. Combine with our range of rotors & accessories for customized use in specific applications. Available in 5 models with capacities from low microliter to 6x250 ml - and featuring high speed performance at maximum volume, automatic rotor identification system and safety features, these multi-purpose centrifuges are a must for any lab.

Standard Features Include:

- **Powerful Platform Offers Maximum Flexibility for a Range of Applications**
Our multi-purpose centrifuges offer a high-speed centrifugation platform which can be customized to fit workflow needs using a wide variety of rotors and accessories.
- **Intuitively Designed for User-Friendly Operation**
The intuitive design of the centrifuges & accessories enable easy access to parameter settings, and quick rotation between applications. Features include automatic rotor recognition and backlit LCD.
- **Solid Engineering Ensures Reliability and Durability**
The performance of these centrifuges is propelled by German engineering, and high-quality components for reliable use. Constructed of chemical-resistant stainless steel to ensure durability in lab use.
- **Increased Safety With Built-in Protective Features**
Frontier 5000 Series is equipped with protective features, including automatic over-speed protection, imbalance detection and self-diagnostic system to ensure reliable use and operator safety.

Frontier™ 5000 Series Multi-Pro Centrifuges

Maximum Application Flexibility

Choose from five models from small to medium capacity, speed range of 14,000 – 16,000 rpm and non-refrigerated/refrigerated options to suit your application. Ideal for spinning most tubes and bottles in the lab, including microtubes, blood tubes, round bottom tubes, conical tubes and microtiter plates.

FC5718 (non-refrigerated) and FC5718R (refrigerated) Centrifuges

- Compatible with up to 19 optional rotors and 122 accessories
- Capacities from microliter to 4x100 ml
- High-speed centrifugation (>10000 rpm) from 0.2 ml up to 85 ml tubes
- Temperature variable range of -20 °C to 40 °C (FC5718R)



Intuitively Designed for Simple Operation

Frontier 5000 Series was designed to make lab processes more efficient and easier, and includes many user-friendly features & software that allow for intuitive operation.

- Automatic rotor identification makes switching between applications extremely easy
- Simple one-hand operation enabled by the selection button/rotary knob combination —even with gloves on
- Large backlit LCD display shows centrifugation settings and real-time parameters on one interface
- Program storage up to 99 runs including parameter settings and rotor types



Solid Engineering Ensures Reliability

Manufactured with high-quality components for reliable use and German engineered for high performance. Chemical and corrosion-resistant stainless steel housing ensures durability in lab environments.

- Maintenance-free induction drive
- Thread-free rotor locking mechanism
- Optimized airflow system to keep samples cool (non-refrigerated models)
- Pre-cooling program to quickly reach desired temperature (refrigerated models)
- Chemical and corrosion-resistant stainless steel housing ensures durability in lab environments
- Self-diagnostic program to record usage and error history for easy maintenance and to minimize downtime

Safety Features for Increased Security

These centrifuges are equipped with additional protective features for redundancy in safety and reliable operation.

- Over-speed protection, immediately upon rotor insertion
- Active imbalance-detection with individual imbalance tolerances set for each rotor
- Motorized lid-locking system to protect operators from accidental injuries
- Sealed and bio-containment rotors to safeguard operators from harmful aerosols



Frontier™ 5000 Series Multi Pro Centrifuges

Model	FC5718		FC5718R	
Maximum Speed	18000 rpm, 10 rpm/set		18000 rpm, 10 rpm/set	
Maximum RCF	23542 × g, 10 × g/set		23542 × g10 × g/set	
Maximum Capacity	4 × 100ml		4 × 100ml	
TemperaturR range	Air cool		-20~40°C	
Running Time	Short Spin, 10 sec to 99 hr 59 min 59 sec, or continuous		Short Spin, 10 sec to 99 hr 59 min 59 sec, or continuous	
Noise Level (depending on the rotor)	≤ 60 ± 2 dB(A)		≤ 60 ± 2 dB(A)	
Number of Compatible Rotors	19		19	
Acc/Dec Levels	10		10	
Allowable Kinetic Energy	16672 Nm		25111 Nm	
AC Power	120V ~ 50/60 Hz	230 V ~ 50/60 Hz	120V ~ 50/60 Hz	230 V ~ 50/60 Hz
Current Consumption	4.0 A	2.0 A	6.0 A	3.0 A
Power Consumption	475 W	455 W	660 W	660 W
Voltage Fluctuation	± 10 %		± 10 %	
Dimensions (W × D × H)	408 × 499 × 351 mm		407 × 731 × 359 mm	
Net Weight (without rotor)	43 kg		60 kg	
Environment	For indoor use only		For indoor use only	

Other Standard Features and Equipment

Ten acceleration and ten deceleration rates, pre-selection of running time from 10s to 99h 59min or continuous, audible signal at the end of each run with melody options, quick spin, CFC-free refrigeration system, sample temperature indication and standstill cooling (refrigerated models)

Compliance

- **Product Safety:** EN 61010-1; EN 61010-2-020
- **EMC:** EN 61326-1

Rotors for Frontier FC5718 and FC5718R

	Angle Rotor 24 × 1.5/2.0 ml BIOSEALS		
	Item No.	30304361	
	Rotor Capacity	24 x 1.5/2.0 ml	
	Rotor Type	Angle, 45°	
	Permissible Net Weight	24 x 3.4 g	
	Lowest Temperatures	6 °C	
Accessory Specifications	n/a		
Accessory Item No.	n/a	30130884	30130885
Accessory Type	n/a	Adapter	
Max. RPM	14,000/15,000		
Max. RCF	18,624/21,379 x g	16,433/18,863 x g	17,967/20,624 x g
Tube Specifications			
Tube Type	Micro Tube		
Tube volume	1.5/2.0 ml	0.2/0.4 ml	0.5 ml
Tubes per Rotor	24		
Max. Tube Diameter (mm)	11	6	8
Tube Height (mm)	40	20	30

	Swing Out Rotor 4 × 100 ml						
	Item No.	30314822					
	Rotor Capacity	4 x 100 ml					
	Rotor Type	Swing Out, 0-90°					
	Permissible Net Weight	4 x 340 g					
	Lowest Temperatures	-7 °C					
Accessory Specifications							
Accessory Item No.	30314842	30314843	30314844	30314845	30314846	30314847	30314848
Accessory Type	Rack						
Max. RPM	4,500						
Max. RCF	3,192 x g		3,214 x g		3,192 x g	3,237 x g	3,213 x g
Tube Specifications							
Tube Type	Round Bottom				Falcon	Skirted Conical	
Tube volume	100 ml	85 ml	50 ml				30 ml
Tubes per Rotor	4						
Max. Tube Diameter (mm)	46	38	34	29		25	
Tube Height (mm)	90/108	92/118		90/118	116		95/105

Rotors for Frontier FC5718 and FC5718R

Accessory Specifications							
Accessory Item No.	30314849	30314850	30314851	30314852	30314853	30314854	30314855
Accessory Type	Rack						
Max. RPM	4,500						
Max. RCF	3,259 x g	3,350 x g	3,282 x g		3,214 x g	2,241 x g	3,169 x g
Tube Specifications							
Tube Type	Round Bottom	Falcon	Skirted Conical	Round Bottom		Micro Tube	Flat Bottom
Tube volume	25 ml	15 ml			5-7 ml	1.5 ml	4.5 ml
Tubes per Rotor	4	8	4	28	36	40	36
Max. Tube Diameter (mm)	17			13	11	12	13
Tube Height (mm)	95/105	120		90/108	75/100	42	75/100

Accessory Specifications			
Accessory Item No.	30314856	30314857	30314858
Accessory Type	Rack		
Max. RPM	4,500		
Max. RCF	2,626 x g	3,214 x g	3,237 x g
Tube Specifications			
Tube Type	Round Bottom	Vacutainer	Sarstedt
Tube Volume	5-7 ml		4-10 ml
Tubes per Rotor	28		20
Max. Tube Diameter (mm)	13		16
Tube Height (mm)	65/80	75/100	

	Swing Out Rotor 4 x 100 ml Sealable	
	Item No.	30314823
	Rotor Capacity	4 x 100 ml
	Rotor Type	Swing Out, 0-90°
	Permissible Net Weight	4 x 465 g
	Lowest Temperatures	-3 °C

Accessory Specifications							
Accessory Item No.	30314860	30314861	30314862	30314863	30314864	30314865	30314866
Accessory Type	Bucket		Screw Cap	O-Ring	Rack		
Max. RPM	5,000/5,000						
Max. RCF	3,779 x g		n/a		3,672 x g	3,725 x g	
Tube Specifications					n/a		
	Round Bottom						
	100 ml				n/a	85 ml	50 ml
	4						
	n/a				40	38	34
	n/a				90/108		92/118

Accessories					
Items	Bucket, 100ml w/o Cap, 2/pk	Bucket, 100ml w/Cap, Sealable, 2/pk	Screw Cap, 100ml Bucket, Sealable, 2/pk	O-ring, 100ml Bucket, Sealable, 10/pk	n/a

Rotors for Frontier FC5718 and FC5718R

Accessory Specifications							
Accessory Item No.	30314867	30314868	30314869	30314870	30314871	30314872	30314873
Accessory Type	Rack						
Max. RPM	5,000/5,000						
Max. RCF	3,725 x g	3,751 x g	3,699 x g	3,486 x g	3,725 x g	3,752 x g	
Tube Specifications							
Tube Type	Round Bottom	Falcon	Skirted Conical		Round Bottom	Falcon	
Tube volume	50 ml			30 ml	25 ml	15 ml	
Tubes per Rotor	4					120	
Max. Tube Diameter (mm)	29			25		17	
Tube Height (mm)	90/113	116		95/105	95/110	120	

Accessory Specifications							
Accessory Item No.	30314874	30314875	30314876	30314877	30314878	30314879	30314880
Accessory Type	Rack						
Max. RPM	5,000/5,000						
Max. RCF	3,725 x g						
Tube Specifications							
Tube Type	Skirted Conical	Round Bottom		Micro Tube	Sarstedt	Round Bottom	Vacutainer
Tube volume	15 ml		5-7 ml	1.5 ml	10 ml	5-7 ml	10 ml
Tubes per Rotor	8	16	28	20	12	16	
Max. Tube Diameter (mm)	17		13	11	17	13	17
Tube Height (mm)	120	90/108	75/100	42	85/100	75/100	

Accessory Specifications		
Accessory Item No.	30314881	30314882
Accessory Type	Bucket	
Max. RPM	5,000/5,000	
Max. RCF	3,885 x g	
Tube Specifications		
Tube Type	Falcon	
Tube volume	50 ml	15 ml
Tubes per Rotor	8	12
Max. Tube Diameter (mm)	29	17
Tube Height (mm)	116	120

Accessories		
Items	Bucket, 2x50ml D29mm FA, w/Rack, 2/pk	Bucket, 3x15ml D17mm FA, w/Rack, 2/pk

Rotors for Frontier FC5718 and FC5718R

	Swing Out Rotor 2 × 3 MTP w/bucket	
	Item No.	30314824
	Rotor Capacity	2 × 3 MTP
	Rotor Type	Swing Out, 0-90°
	Permissible Net Weight	2 × 310 g
	Lowest Temperatures	-6 °C

Accessory Specifications		
Accessory Item No.	30314890	30314891
Accessory Type	Bucket	Adapter
Max. RPM	4,500	
Max. RCF	2,716 x g	
Tube Specifications	n/a	
Tube Type	Microplate	Microtube
Tube volume	MTP	1.5/2.0 ml
Tubes per Rotor	6 Standard Microplates or 2 Deepwell Plates	96
Max. Tube Diameter (mm)	87 x 128	11
Tube Height (mm)	51	42

Accessories		
Items	Bucket, 3xMTP, 2/pk	N/A

	Angle Rotor 6 × 85 ml	
	Item No.	30314825
	Rotor Capacity	6 x 85 ml
	Rotor Type	Angle, 25°
	Permissible Net Weight	6 x 140 g
	Lowest Temperatures	17 °C

Accessory Specifications	n/a							
Accessory Item No.	n/a	30314893	30314894	30314895	30314896	30314897	30314898	30314899
Accessory Type	n/a	Adapter						
Max. RPM	11,000/13,500							
Max. RCF	13,932/20,984 x g	12,985/19,557 x g		13,526/20,372 x g		12,579/18,946 x g	13,932/20,984 x g	12,850/19,354 x g
Tube Specifications								
Tube Type	Round Bottom				Falcon		Round Bottom	
Tube volume	85 ml	15 ml	30 ml	50 ml		15 ml		16 ml
Tubes per Rotor	6						12	6
Max. Tube Diameter (mm)	38	17	25	29		17		18
Tube Height (mm)	113	103/110	90/103	105	118	120	95/100	103/110

Rotors for Frontier FC5718 and FC5718R



Angle Rotor 6 × 85 ml	
Item No.	30314826
Rotor Capacity	6 x 85 ml
Rotor Type	Angle, 38°
Permissible Net Weight	6 x 140 g
Lowest Temperatures	-5 °C

Accessory Specifications	n/a							
Accessory Item No.	n/a	30314893	30314894	30314895	30314896	30314897	30314898	30314899
Accessory Type	n/a	Adapter						
Max. RPM	9,000/9,000							
Max. RCF	10,413 x g	9,598 x g	9,417 x g	9,870 x g	9,598 x g	9,417 x g	10,051 x g	9,417 x g
Tube Specifications								
Tube Type	Round Bottom				Falcon		Round Bottom	
Tube volume	85 ml	15 ml	30 ml	50 ml		15 ml		16 ml
Tubes per Rotor	6						12	6
Max. Tube Diameter (mm)	38	17	25	29		17		18
Tube Height (mm)	113	103/110	90/103	105	118	120	95/100	103/110



Angle Rotor 4 × 85 ml	
Item No.	30314827
Rotor Capacity	4 x 85 ml
Rotor Type	Angle, 30°
Permissible Net Weight	4 x 140 g
Lowest Temperatures	5 °C

Accessory Specifications	n/a							
Accessory Item No.	n/a	30314893	30314894	30314895	30314896	30314897	30314898	30314899
Accessory Type	n/a	Adapter						
Max. RPM	12,000/12,000							
Max. RCF	14,809 x g	13,682 x g	13521 x g	14,326 x g	13,843 x g	13,360 x g	12,073 x g	13,360 x g
Tube Specifications								
Tube Type	Round Bottom				Falcon		Round Bottom	
Tube volume	85 ml	15 ml	30 ml	50 ml		15 ml		16 ml
Tubes per Rotor	4						12	6
Max. Tube Diameter (mm)	38	17	25	29		17		18
Tube Height (mm)	113	103/110	90/103	105	118	120	95/100	103/110

Rotors for Frontier FC5718 and FC5718R

	Angle Rotor 10 × 50 ml					
	Item No.	30314829				
	Rotor Capacity	10 x 50 ml				
	Rotor Type	Angle, 38°				
	Permissible Net Weight	10 x 74 g				
	Lowest Temperatures	9 °C				
Accessory Specifications	n/a					
Accessory Item No.	n/a	30130886	30130889	30130890	30472300	30472307
Accessory Type	n/a	Adapter				
Max. RPM	7,500/7,500					
Max. RCF	8,174 x g	5,596 x g	7,671 x g	6,539 x g	7,860 x g	8,048 x g
Tube Specifications						
Tube Type	Falcon	Micro Tube	Round Bottom		Round bottom	Conical
Tube Volume	50 ml	1.5/2.0 ml	7 ml	5 ml	15 ml	
Tubes per Rotor	10					
Max. Tube Diameter (mm)	29	11	13.5		17	
Tube Height (mm)	118	42	100	100	97-123	120

	Angle Rotor 6 x 50 ml							
	Item No.	30314830						
	Rotor Capacity	6 x 50 ml						
	Rotor Type	Angle, 40°						
	Permissible Net Weight	6 x 72 g						
	Lowest Temperatures	-8 °C						
Accessory Specifications	n/a							
Accessory Item No.	n/a	30130886	30130891	30130890	30130891	30130892	30130893	30130892
Accessory Type	n/a	Adapter						
Max. RPM	6,000/6,000							
Max. RCF	4,427 x g	2,696 x g	4,105 x g	3,340 x g	4,306 x g	4,145 x g	4,266 x g	
Tube Specifications								
Tube Type	Round Bottom/Falcon	Micro Tube	Round Bottom					
Tube volume	50 ml	15 ml	30 ml	50 ml		15 ml		16 ml
Tubes per Rotor	6						6	6
Max. Tube Diameter (mm)	29	11	13.5		26	17	18	
Tube Height (mm)	116	42	26	65/75	100	100/105		120

Rotors for Frontier FC5718 and FC5718R

Angle Rotor 6 × 50 ml	
Item No.	30314831
Rotor Capacity	6 x 50 ml
Rotor Type	Angle, 26°
Permissible Net Weight	6 x 94 g
Lowest Temperatures	-5 °C

Accessory Specifications	n/a				
Accessory Item No.	n/a	30130891	30130892	30130893	30314892
Accessory Type	n/a	Adapter			
Max. RPM	12,000/12,000				
Max. RCF	13,522 x g	13,200 x g	12,717 x g	12,878 x g	12,395 x g
Tube Specifications					
Tube Type	Round Bottom				Falcon
Tube Volume	50 ml	30 ml	16 ml	15 ml	
Tubes per Rotor	6				
Max. Tube Diameter (mm)	29	26	18	17	17.5
Tube Height (mm)	95/115	100	100/105		116/125

Angle Rotor 30 × 15 ml	
Item No.	30314832
Rotor Capacity	30 x 15 ml
Rotor Type	Angle, 35°
Permissible Net Weight	30 x 32 g
Lowest Temperatures	-9 °C

Accessory Specifications	n/a			
Accessory Item No.	n/a	30130886	30130889	30130890
Accessory Type	n/a	Adapter		
Max. RPM	4,500/4,500			
Max. RCF	2,830 x g	2,038 x g	2,762 x g	2,377 x g
Tube Specifications				
Tube Type	Round Bottom/Falcon	Micro Tube	Round Bottom	
Tube Volume	15 ml	1.5/2.0 ml	7 ml	5 ml
Tubes per Rotor	30			
Max. Tube Diameter (mm)	17	11	13.5	
Tube Height (mm)	95/115	42	100	65/75

Angle Rotor 20 × 10 ml	
Item No.	30314833
Rotor Capacity	20 x 10 ml
Rotor Type	Angle, 30°
Permissible Net Weight	20 x 18 g
Lowest Temperatures	2 °C

*No Adapters

Rotors for Frontier FC5718 and FC5718R

	Angle Rotor 12 × 15 ml			
	Item No.	30314834		
	Rotor Capacity	12 x 15 ml		
	Rotor Type	Angle, 32°		
	Permissible Net Weight	12 x 25 g		
	Lowest Temperatures	-11.5 °C		
Accessory Specifications	n/a			
Accessory Item No.	n/a	30130886	30130889	30130890
Accessory Type	n/a	Adapter		
Max. RPM	6,000/6,000			
Max. RCF	4,427 x g	3,059 x g	4,266 x g	3,662 x g
Tube Specifications				
Tube Type	Round Bottom/Falcon	Micro Tube	Round Bottom	
Tube Volume	15 ml	1.5/2.0 ml	7 ml	5 ml
Tubes per Rotor	12			
Max. Tube Diameter (mm)	17	11	13.5	
Tube Height (mm)	121	42	100	65/75

	Angle Rotor 44 × 1.5/2.0 ml		
	Item No.	30314835	
	Rotor Capacity	44 x 1.5/2.0 ml	
	Rotor Type	Angle, 32°/55°	
	Permissible Net Weight	44 x 3.8 g	
	Lowest Temperatures	1 °C	
Accessory Specifications	n/a		
Accessory Item No.	n/a	30130884	30130885
Accessory Type	n/a	Adapter	
Max. RPM	13,500/13,500		
Max. RCF	17,113 x g	15,687 x g	16,706 x g
Tube Specifications			
Tube Type	Micro Tube		
Tube volume	1.5/2.0 ml	0.2/0.4 ml	0.5 ml
Tubes per Rotor	44		
Max. Tube Diameter (mm)	11	6	8
Tube Height (mm)	40	20	30

Rotors for Frontier FC5718 and FC5718R

	Angle Rotor 30 × 1.5/2.0 ml Sealable		
	Item No.	30314836	
	Rotor Capacity	30 x 1.5/2.0 ml	
	Rotor Type	Angle, 45°	
	Permissible Net Weight	30 x 3.4 g	
	Lowest Temperatures	9 °C	
Accessory Specifications	n/a		
Accessory Item No.	n/a	30130884	30130885
Accessory Type	n/a	Adapter	
Max. RPM	13,000/14,000		
Max. RCF	17,758/20,595 x g	17,191/19,937 x g	15,869/18,404 x g
Tube Specifications			
Tube Type	Micro Tube		
Tube volume	1.5/2.0 ml	0.2/0.4 ml	0.5 ml
Tubes per Rotor	30		
Max. Tube Diameter (mm)	11	6	8
Tube Height (mm)	40	20	30

	Angle Rotor 24 × 1.5/2.0 ml		
	Item No.	30314838	
	Rotor Capacity	24 x 1.5/2.0 ml	
	Rotor Type	Angle, 45°	
	Permissible Net Weight	24 x 3.4 g	
	Lowest Temperatures	6 °C	
Accessory Specifications	n/a		
Accessory Item No.	n/a	30130884	30130885
Accessory Type	n/a	Adapter	
Max. RPM	14,000/15,000		
Max. RCF	18,624/21,379 x g	16,433/18,863 x g	17,967/20,624 x g
Tube Specifications			
Tube Type	Micro Tube		
Tube volume	1.5/2.0 ml	0.2/0.4 ml	0.5 ml
Tubes per Rotor	24		
Max. Tube Diameter (mm)	11	6	8
Tube Height (mm)	40	20	30

Rotors for Frontier FC5718 and FC5718R

	Angle Rotor 12 × 1.5/2.0 ml			
	Item No.	30314839		
	Rotor Capacity	12 x 1.5/2.0 ml		
	Rotor Type	Angle, 40°		
	Permissible Net Weight	12 x 3.4 g		
	Lowest Temperatures	-2 °C		
Accessory Specifications	n/a			
Accessory Item No.	n/a	30314900	30130885	30130884
Accessory Type	n/a	Adapter		
Max. RPM	18,000			
Max. RCF	23,542 x g	23,180 x g	20,282 x g	22,818 x g
Tube Specifications				
Tube Type	Microtube			
Tube Volume	2 ml	1.5 ml	0.5 ml	0.2/0.4 ml
Tubes per Rotor	12			
Max. Tube Diameter (mm)	11	11	8	6
Tube Height (mm)	40	42	30	20

	Angle Rotor 64 × 0.5 ml			
	Item No.	30314840		
	Rotor Capacity	64 × 0.5 ml		
	Rotor Type	Angle, 40°		
	Permissible Net Weight	64 × 2.3 g		
	Lowest Temperatures	2 °C		

*No Adapters

	Angle Rotor 4 × 8-w PCR Strip			
	Item No.	30314841		
	Rotor Capacity	4 × 8-w PCR Strip		
	Rotor Type	Angle, 45°		
	Permissible Net Weight	4 × 3.5 g		
	Lowest Temperatures	-1 °C		

*No Adapters