



FRONTIER™ 5917RF

High-Capacity Multi-Pro Centrifuges



Powerful and Versatile High-throughput Centrifuges for Virtually Every Lab Application

Frontier 5917RF is a high-capacity refrigerated centrifuge suitable for a wide variety of applications in diagnostic, biotech and industrial labs. FC5917RF has a capacity of up to 4 × 1 000 ml and the ability to high-throughput processing of blood bags and collection tubes, urine tubes, variety of bottles and plates in either fixed-angle or swing-out rotor. Available in both floor-standing and under-bench models and boasts high-speed performance at maximum volume, automatic rotor identification, and safety features that provide ergonomic and space-saving benefit.

Features:

- Thanks to its powerful motor, the FC5917RF delivers precise separation results achieving values up to 16 010 rpm and 26 361 G-force. This can be configured to fit workflow needs using a selection of rotors and accessories.
- The intuitive design of the centrifuges & accessories enable easy access to parameter settings, with the flexibility to change parameters during operation without the need to stop the machine. Features include automatic rotor recognition and backlit LCD.
- 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.

FRONTIER™ 5917RF *High-Capacity Multi-Pro Centrifuges*

Maximum Application Flexibility Within Space-Saving Design

- The FC5917RF model is available in two options: as a floor-standing unit or an under-bench unit, maximizing lab space and storage
- Thanks to its ergonomically designed height, the work area has been optimized, allowing for easy loading and unloading of samples
- Integrated wheels make it easy to move around, lending to even more flexibility
- FC5917RF features a convenient storage drawer, perfect for keeping your accessories organized and easily accessible
- Locking mechanism secure the centrifuge feet, ensuring stability during use
- 6 rotor configurations for a broad spectrum of applications and workflows
- From high-throughput samples all the way to cell and blood separation
- Capacity of up to 4×1 000 ml with the ability to spin up to 192 blood tubes or 96 15 ml conical tubes and 40 50 ml conical tubes

Intuitively Designed for Simple Operation

- Automatic rotor identification makes switching between applications extremely easy
- Simple one-hand operation enabled by the selection button / rotary knob combination – even when wearing gloves
- Intuitive, easy-to-read backlit LCD display shows centrifugation settings and real-time parameters on one interface
- Store up to 99 runs for easy recall, including parameter settings and rotor types

Solid Engineering Ensures Reliability

- Maintenance-free induction motor provides maximum G-force of 26 361 × g
- Chemical and corrosion-resistant stainless steel rotor chamber ensures cleanability in lab environments
- Self-diagnostic program to record usage and error history for easy maintenance and to minimize downtime
- FC5917RF has refrigeration capabilities from 40 °C to -20 °C
 - R290, an environmentally friendly coolant, contributes to the eco-friendliness of refrigerated centrifuges by minimizing their environmental impact and supporting efforts to combat global warming
 - Pre-cool feature quickly lowers the temperature of rotor and chamber before a run



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Safety Features for Increased Security

- 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 TÜV certified rotors to safeguard operators from harmful aerosols
- The rotor cycle counter enhances safety by monitoring the number of centrifugation cycles, providing timely alerts for rotor replacement to prevent potential failure and ensure optimal performance.

Specifications

Model		FC5917RF Floor-standing	FC5917RF Under Bench
Order No.		230V: 83042055	230V: 83042056
Speed Range		200 rpm – 16 010 rpm; 10 rpm / increments Angle Rotor: 16 010 rpm Swing out Rotor: 4 600 rpm	
Maximum RCF		26 361×g; 10×g / increments Angle Rotor: 26 361×g Swing out Rotor: 5 204×g	
Maximum Capacity (Rotor)		Angle Rotor: 6×250 ml Swing out Rotor: 4×1 000 ml	
Temperature Range		-20 °C to 40 °C, 1 °C/increments	
Refrigerant		R290 (Propane)	
Running Time		Quick Spin, 10 sec to 99 hr 59 min, or continuous	
Noise Level (depending on the rotor)		≤ 63 + 2 dB(A)	
Acc/Dec Levels		10/10	
Allowable Density at Maximum Speed		1,2 g/ml	
Allowable Kinetic Energy		70412 Nm	
Rated voltage		230 V/50-60 Hz	
Voltage Fluctuation		± 10%	
Rated current		13 A	
Power continues		2,3 kW	
Dimensions (W×D×H)		620×690×980 mm	620×690×700 mm
Net Weight (without rotor)		190 kg	157 kg
Shipping Dimensions (W×D×H)		930×780×1 260 mm	930×780×930 mm
Shipping Weight (without rotor)		225 kg	183 kg
Ambient conditions (EN/ IEC 61010-1)	Environment	For indoor use only	
	Altitude	Use up to an altitude of 2 000 m	
	Ambient temperature	5 °C up to 35 °C	
	Max. relative humidity	Max. relative humidity 80 % for temperatures up to 31 °C, Decreasing linearly to 50 % relative humidity up to 35 °C.	
EMC		EN/IEC 61326-1 Class B emissions, Basic immunity, FCC Class B emissions	
Not suitable for use in hazardous environments.			

Rotors for FRONTIER™ FC5917RF and FC5917RF Under Bench

	Swing Out Rotor 4 x 1000 ml	
	Item No.	83041512
	Rotor Capacity	4 x 1000 ml
	Rotor Type	Swing Out, 0-90°
	Permissible Net Weight	See User Manual
	Lowest Temp. at max. speed	9 °C with 83041513, 4 °C with 83041518; 7 °C with 83041521, 8 °C with 83041523

Accessory Specifications									
Accessory Item No.	83041513*	30553122*	30553123	83041514	30553124	30553125	83041515	30553126	30553127
Accessory Type	Bucket	Lid assembly	Spare O-ring	Rack					
Max. RPM	4,600 rpm								
Quantity in Package	2p/k		10p/k	2p/k					
Max. RCF	5,204 x g	n/a		5,086 x g	5,204 x g	5,086 x g	5,109 x g	5,157 x g	5,086 x g
Tube Specifications		n/a							
Tube Type	Flat Bottom	n/a		Flat Bottom	Conical Bottom Corning®	Flat Bottom	Conical Bottom Corning®	Conical Bottom Falcon®	Round Bottom
Tube volume	1000 ml	n/a		500 ml		250 ml	250 ml	175/225 ml	100 ml
Tubes per Rotor	4	n/a		4					12
Max. Tube Diameter (mm)	98	n/a		69.6	97	62	60	61	41
Tube Height (mm)	173/178	n/a		165	148	122/137	159	118/137	102/123

Accessory Specifications									
Accessory Item No.	30553131	30553128	30553129	30553132	30553135	83041516	30553136	83041517	30553140
Accessory Type	Rack								
Max. RPM	4,600 rpm								
Quantity in Package	2p/k								
Max. RCF	5,180 x g						4,991 x g	5,156 x g	5,133 x g
Tube Specifications									
Tube Type	Round Bottom	Conical Bottom	Skirted Conical	Round Bottom		Conical Bottom	Round Bottom		Vacutainer®/ Sarstedt®
Tube volume	50 ml			30 ml	15 ml		10 ml	5-7 ml	4-10 ml
Tubes per Rotor	28	20		24	72	48	84	140	72
Max. Tube Diameter (mm)	29			26	17		16	13	16
Tube Height (mm)	102/123	116	100/120	102/123	97/120	120	70/121	65/120	75/100

Accessory Specifications			
Accessory Item No.	30553139	30559377	83041040
Accessory Type	Rack		
Max. RPM	4,600 rpm		
Quantity in Package	2/pk		
Max. RCF	5,133 x g	5,109 x g	5,085 x g
Tube Specifications			
Tube Type	Vacutainer®/Sarstedt®		Microtube
Tube volume	1.8-7 ml		1.5/2.0 ml
Tubes per Rotor	108		96
Max. Tube Diameter (mm)	13		11
Tube Height (mm)	65/100		42

* BIOSEALS certified: When using the Lid Assembly (with 1 EA O-ring) on the rotor, the buckets are hermetically sealed. O-ring should be changed when it's worn.

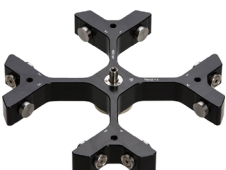
Rotors for FRONTIER™ FC5917RF and FC5917RF Under Bench

Accessory Specifications									
Accessory Item No.	83041518	83041519	83041482	30553124▲	83041483	83041484▲▲	83041485	83041486	83041487
Accessory Type	Bucket	Holder	Rack						
Max. RPM	4,200 rpm								
Quantity in Package	2p/k								
Max. RCF	3,964 xg	n/a	3,865 x g		3,885 x g	3,865 x g		3,944 x g	
Tube Specifications	n/a	n/a							
Tube Type	Microplate	n/a	Flat Bottom	Conical Bottom Corning®	Flat Bottom	Conical Bottom	Round Bottom		Conical Bottom
Tube volume	n/a	n/a	500 ml		250-290 ml	175-225 ml	100 ml	50 ml	
Tubes per Rotor	28 Standard Microplates or 4 Deepwell Plates	n/a	4		8	4	12	40	
Max. Tube Diameter (mm)	87 × 128	n/a	98	97	61		40	29	
Tube Height (mm)	80	n/a	114	148	122/137	118/137	102/123	90/120	116

Accessory Specifications				
Accessory Item No.	83041488	83041489	83041490	83041491
Accessory Type	Rack			
Max. RPM	4,200 rpm			
Quantity in Package	2/pk			
Max. RCF	3,944 x g			
Tube Specifications				
Tube Type	Conical Bottom		Vacutainer®/Sarstedt®	
Tube volume	15 ml		5 ml	
Tubes per Rotor	96		152	
Max. Tube Diameter (mm)	17		16	
Tube Height (mm)	120		60/120	

▲30553124 Can be used only with 83041482

▲▲83041484 Can be used only with 83041483

	Swing Out Rotor 4 × 750 ml	
	Item No.	30553085
	Rotor Capacity	4 x 750 ml
	Rotor Type	Swing Out, 0-90°
	Permissible Net Weight	4 × 995 g
	Lowest Temp. at max. speed	4 °C, however -3 °C when using 30602502

Accessory Specifications									
Accessory Item No.	30602502*	30553122*	30553123	30553124	30553125	30772866	30553126	30553127	30553128
Accessory Type	Bucket	Lid assembly	Spare O-ring	Rack					
Max. RPM	4,500 rpm								
Quantity in Package	2p/k		10p/k	2p/k					
Max. RCF	4,346 × g	n/a		4,324 × g	4,278 × g	4,369 × g	4,324 × g		
Tube Specifications		n/a							
Tube Type	Flat Bottom - Herolab®	n/a		Conical Bottom Corning®	Flat Bottom	Conical Bottom Corning®	Conical Bottom Falcon®	Round Bottom	Conical Bottom
Tube volume	750 ml	n/a		500 ml	250 ml		175/225 ml	100 ml	50 ml
Tubes per Rotor	4	n/a		4				12	20
Max. Tube Diameter (mm)	98	n/a		97	62	60	61	41	29
Tube Height (mm)	152	n/a		148	122/137	159	118/137	102/123	116

Rotors for FRONTIER™ FC5917RF and FC5917RF Under Bench

Accessory Specifications								
Accessory Item No.	30553129	30553130	30553131	30553132	30553133	30553134	30553135	30553136
Accessory Type	Rack							
Max. RPM	4,500 rpm							
Quantity in Package	2p/k							
Max. RCF	4,324 × g			4,324 × g	4,346 × g	4,301 × g	4,256 × g	
Tube Specifications								
Tube Type	Skirted Conical Bottom	Conical Bottom	Round Bottom		Conical Bottom		Round Bottom	
Tube volume	50 ml			30 ml	15 ml			
Tubes per Rotor	20	28		32	56	68	72	84
Max. Tube Diameter (mm)	29			26	17			16
Tube Height (mm)	100/120	116	102/123		120		97/120	70/121

Accessory Specifications									
Accessory Item No.	30553138	83041591	30553139	30553140	30559377	83041040	30553104	30553105	30553117*
Accessory Type	Rack						Bucket	Holder	Lid assembly
Max. RPM	4,500 rpm								
Quantity in Package	2p/k								
Max. RCF	4,233 × g			4,301 × g	4,256 × g		3,961 × g	n/a	
Tube Specifications							n/a		
Tube Type	Round Bottom	Vacutainer®	Vacutainer® / Sarstedt®		Sarstedt®	Microtube	Microplate	n/a	
Tube volume	7 ml	8 ml	1.8-7 ml	4-10 ml	1.1-1.4 ml	1.5/2.0 ml	n/a		
Tubes per Rotor	128	72	108	72	152	96	12 Standard Microplates or 4 Deepwell Plates	n/a	
Max. Tube Diameter (mm)	13	16	13	16	8	11	87 × 128	n/a	
Tube Height (mm)	98/119	125	65/100	75/100	66	42	80	n/a	

Accessory Specifications		
Accessory Item No.	30553118	30553119
Accessory Type	Spare O-ring	Bucket
Max. RPM	4,500 rpm	
Quantity in Package	10/pk	2/pk
Max. RCF	n/a	3,486 × g
Tube Specifications	n/a	
Tube Type	n/a	Microplate
Tube volume	n/a	n/a
Tubes per Rotor	n/a	12 Standard Microplates or 4 Deepwell Plates
Max. Tube Diameter (mm)	n/a	87 × 128
Tube Height (mm)	n/a	72

* BIOSEALS certified: When using the Lid Assembly(with 1 EA O-ring) on the rotor, the buckets are hermetically sealed. O-ring should be changed when it's worn
83041625 Package Cell Culture for 750ml Bucket

Rotors for FRONTIER™ FC5917RF and FC5917RF Under Bench



Angle Rotor 4 x 500 ml	
Item No.	30553086
Rotor Capacity	4 x 500 ml
Rotor Type	Angle, 24°
Permissible Net Weight	4 x 708 g
Lowest Temp. at max. speed	-1°C

Accessory Specifications	n/a							
Accessory Item No.	n/a	30559416	30559417	30559419	30559420	30559421	30559422	30564850
Accessory Type	n/a		Adapter					
Max. RPM	8,000 rpm							
Quantity in Package	n/a		2p/k					
Max. RCF	10,374 × g	9014 × g	9,587 × g	8,871 × g	10,231 × g	9,873 × g		9,801 × g
Tube Specifications								
Tube Type	Flat Bottom	Conical Bottom Corning®	Conical Bottom		Round Bottom		Conical Bottom	Flat Bottom
Tube volume	500 ml	250 ml	175-225 ml	50 ml		30 ml	15 ml	250 ml
Tubes per Rotor	4				12	16	24	4
Max. Tube Diameter (mm)	69.5	60	61	29.5	29	25	17	62
Tube Height (mm)	165	159	118/137	116	103	92	120	122



Angle Rotor 6 x 250 ml	
Item No.	30314821
Rotor Capacity	6 x 250 ml
Rotor Type	Angle, 28°
Permissible Net Weight	6 x 355 g
Lowest Temp. at max. speed	-3°C

Accessory Specifications	n/a								
Accessory Item No.	n/a	30559414	30304369	30304370	30304371	30304372	30304373	30304374	30559412
Accessory Type	n/a		Adapter						
Max. RPM	8,000 rpm								
Quantity in Package	n/a		2p/k						
Max. RCF	10,016 × g	10,016 × g	9,444 × g	9,515 × g	9,301 × g	8,943 × g	8,585 × g	8,371 × g	9,444 × g
Tube Specifications			 						 
Tube Type	Flat Bottom	Conical Bottom	Microtube	Round Bottom	Conical Bottom	Round Bottom		Conical Bottom	Microtube
Tube volume	250 ml	175/225 ml	1.5/2.0 ml	10 ml	15 ml	30 ml	50 ml		1.5/2.0 ml
Tubes per Rotor	6		48	30	24	12	6		90
Max. Tube Diameter (mm)	62	61	11	16	17	26	29		11
Tube Height (mm)	122	118/137	40	80	120	92	103	116	40

Rotors for FRONTIER™ FC5917RF and FC5917RF Under Bench



Angle Rotor 4 x 85 ml	
Item No.	30314827
Rotor Capacity	4 x 85 ml
Rotor Type	Angle, 30°
Permissible Net Weight	4 x 140 g
Lowest Temp. at max. speed	-2°C

Accessory Specifications	n/a							
Accessory Item No.	n/a	30314893	30314894	30314895	30314896*	30314897*	30314898	30314899
Accessory Type	n/a	Adapter						
Max. RPM	16,010 rpm							
Quantity in Package	n/a	2p/k						
Max. RCF	26,361 x g	24,355 x g	24,069 x g	25,501 x g	24,642 x g	23,782 x g	21,490 x g	23,782 x g
Tube Specifications								
Tube Type	Round Bottom				Conical Bottom		Round Bottom	
Tube volume	85 ml	15 ml	30 ml	50 ml		15 ml		16 ml
Tubes per Rotor	4						8	4
Max. Tube Diameter (mm)	38	17	25	29		17		18
Tube Height (mm)	113	103/110	90/103	105	116	120	95/100	103/110

*Only without rotor lid



Angle Rotor 10 x 50 ml	
Item No.	30314829
Rotor Capacity	10 x 50 ml
Rotor Type	Angle, 38°
Permissible Net Weight	10 x 76 g
Lowest Temp. at max. speed	1°C

Accessory Specifications						
Accessory Item No.	n/a	30130886*	30130889*	30130890*	30472300	30472307
Accessory Type	n/a		Adapter			
Max. RPM	10,500 rpm					
Quantity in Package	n/a	6/pk	2p/k			
Max. RCF	16,022 x g	10,229 g	14,050 x g	12,078 x g	15,652 x g	15,775 x g
Tube Specifications						
Tube Type	Conical Bottom	Microtube	Round Bottom/ Vacutainer®	RIA/Vacutainer®/ Sarstedt®	Round Bottom/ Vacutainer®	Conical Bottom
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		17	
Tube Height (mm)	116	40	95/115	70/90	97/123	120

*Only possible with adapter 30472300