



FRONTIER™ 5714

Multi-Pro Centrifuges



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

Frontier 5714 is designed for multipurpose use in various applications within research, industrial, and clinical laboratories. It can be combined with our range of rotors and accessories for customized use. The FC5714 is able to spin containers from 0.2 ml to 4 × 200 ml with swing-out and fixed angle rotors. It features high-speed performance at maximum volume, automatic rotor identification, and multiple safety features. This model can process large quantities and different sizes of blood collection tubes, conical cell culture tubes, plates, and various volumes and types of bottles.

Features:

- Thanks to its powerful motor, the FC5714 delivers precise separation results achieving values up to 14000 rpm and 18624 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. Rotor chamber constructed of chemical-resistant stainless steel to ensure durability in lab use.

FRONTIER™ 5714 Multi-Pro Centrifuges

Maximum Application Flexibility

FC5714 centrifuge is designed for maximum application flexibility efficiently accommodate a wide variety of tubes and bottles, including microtubes, blood tubes, round bottom tubes, conical tubes, and microliter plates, ensuring versatile and reliable performance for diverse laboratory needs.

- Compatible with up to 10 optional rotors and 95 accessories
- Capacity of up to 4 × 200 ml with the ability to spin up to 32 blood tubes or 20 × 15 ml conical tubes and 8 × 50 ml conical tubes
- High-speed centrifugation (>10 000 rpm) from 0.2 ml up to 1.5/2.0 ml tubes

Intuitively Designed for Simple Operation

FC5714 was designed to make lab processes more efficient and easier, and includes many user-friendly features & software that allow for intuitive operation.

- Automatic rotor recognition (RFID) makes switching between applications extremely easy
- Simple one-hand operation enabled by the selection button/rotary knob combination – even when wearing gloves
- 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.

- Maintenance-free induction motor provides maximum G-force of 26361 × g
- Optimized airflow system to keep samples cool
- Chemical and corrosion-resistant stainless steel rotor chamber 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

FC5714 centrifuge is equipped with 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™ 5714 Multi-Pro Centrifuges

Specifications

Model	FC5714	
Order No	230V: 83041557	120V: 83041558
Speed Range	200 rpm – 14000 rpm; 10 rpm / increments Angle Rotor: 14000 rpm Swing out Rotor: 4500 rpm	
Maximum RCF	18624 x g; 10 x g / increments Angle Rotor: 18624 x g Swing out Rotor: 3350 x g	
Maximum Capacity (Rotor)	Angle Rotor: 30 x 15 ml Swing out Rotor: 4 x 200 ml	
Temperature Range	Air cooled	
Refrigerant	N/A	
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	5595 Nm	
AC Power	230 V/50-60 Hz	120 V/50-60 Hz
Voltage Fluctuation	± 10%	
Current Consumption	1.3 A	2.4 A
Power Consumption	240 W	300 W
Dimensions (W x D x H)	355 x 492 x 330 mm	
Net Weight (without rotor)	30 kg	
Shipping Dimensions (W x D x H)	490 x 590 x 540 mm	
Shipping Weight (without rotor)	32.5 kg	
Ambient conditions (EN/IEC 61010-1)	Environment	For indoor use only
	Altitude	Use up to an altitude of 2000 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.		

Tube Type	Tubes Type	Tube diamentions	Number of tubes per centrifuge
	Microtubes	0.2 – 2.0 ml (Ø 6 – 11 x 38 mm)	30
5 ml (Ø 16.5 x 69 mm)		12	
Blood Collection Tubes	1.8 – 5 ml (Ø 13 x 75 mm)	32	
	4 – 7 ml (Ø 13 x 100 mm)	32	
	6 – 10 ml (Ø 16 x 100 mm)	28	
Conical Tubes	15 ml (Ø 17 x 120 mm)	20	
	50 ml (Ø 29 x 116 mm)	8	
	200 ml (Ø 56 x 122 mm)	4	

Tube Type	Tubes Type	Tube diamentions	Number of tubes per centrifuge
	Vials & Bottles	15 ml Round Bottom (Ø 17 x 120 mm)	30
50 ml Round Bottom (Ø 29 x 116 mm)		6	
100 ml Round Bottom (Ø 44 x 100 mm)		4	
145 ml Flat Bottom (Ø 50 x 100 mm)		4	
200 ml Round Bottom (Ø 56 x 112 mm)		4	


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Accessories

	Order No.	83041011				
	Description	Rotor Swing out 4 x 200 ml ID				
	Max. Speed	4500 rpm				
	Max. RCF	3350 x g				
Accessories						
Order No.	Description	Vol./Tube	Diameter	Tube Type	No. of Tubes/Rotor	
Round Bucket (with TUV Certificate) and accessories						
83041012	Bucket 200 ml w/o Cap, 2 pk	-	-	-	-	
83041013	Bucket 200 ml w/Cap BIOSEALS, 2 pk	-	-	-	-	
83041005*	Screw Cap 200 ml Bucket, 2 pk	-	-	-	-	
83041015	O-Ring for 200 ml bucket, 10 pk	-	-	-	-	
83041016	Rack 1 x 200 ml D56 mm FA, 2 pk	200 ml	56 mm	Conical Bottom	4	
83041017	Rack 1 x 100 ml D40 mm RB, 2 pk V1	100 ml	40 mm	Round Bottom	4	
83041018	Rack 1 x 85 ml D38 mm RB, 2 pk V2	85 ml	38 mm	Round Bottom	4	
83041019	Rack 1 x 50 ml D34 mm RB, 2 pk V3	50 ml	34 mm	Round Bottom	4	
83041020	Rack 1 x 50 ml D29 mm RB, 2 pk V2	50 ml	29 mm	Round Bottom	4	
83041021	Rack 1 x 50 ml D29 mm FA, 2 pk V2	50 ml	29 mm	Conical Bottom	4	
83041022	Rack 1 x 50 ml D29 mm Rim, 2 pk V3	50 ml	29 mm	Skirted Conical Bottom	4	
83041023	Rack 1 x 30 ml D25 mm Rim, 2 pk V2	30 ml	25 mm	Skirted Conical Bottom	4	
83041024	Rack 1 x 30 ml D25 mm RB, 2 pk	30 ml	25 mm	Round Bottom	4	
83041025	Rack 4 x 15 ml D17 mm FA, 2 pk	15 ml	17 mm	Conical Bottom	16	
83041026	Rack 3 x 15 ml D17 mm FA, 2 pk	15 ml	17 mm	Conical Bottom	12	
83041027	Rack 7 x 15 ml D17 mm RB/Vac, 2 pk V1	15 ml	17 mm	Round Bottom/Vacutainer®	28	
83041593	Rack 1 x 8 ml D16mm Vac, 2 pk V1	8 ml	16 mm	Round Bottom/Vacutainer®	4	
83041028	Rack 8 x 7 ml D13 mm RB/Vac, 2 pk	7 ml	13 mm	Round Bottom/Vacutainer®	32	
83041029	Rack 4 x 5 ml D17 mm FA, 2 pk	5 ml	17 mm	Conical Bottom	20	
83041030	Rack 8 x 1.5/2.0 ml D11 mm, 2 pk	1.5/2.0 ml	11 mm	Microtube	32	
Round Bucket (without TUV Certificate, can be used only without bucket screw cap)						
83041031	Bucket 2 x 50 ml D29 mm FA w/Rack, 2 pk V1	50 ml	29 mm	Conical Bottom	8	


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

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	Order No.	30314822			
	Description	Rotor Swing out 4 x 145 ml ID			
	Max. Speed	4500 rpm			
	Max. RCF	3350 x g			
Accessories					
Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
83041035	Rack 1 x 145 ml D50 mm FB, 2 pk	145 ml	50 mm	Flat Bottom Nalgene	4
30314842	Rack 1 x 100 ml D46 mm RB, 2 pk	100 ml	46 mm	Round Bottom	4
30314843	Rack 1 x 85 ml D38 mm RB, 2 pk	85 ml	38 mm	Round Bottom	4
30314844	Rack 1 x 50 ml D34 mm RB, 2 pk	50 ml	34 mm	Round Bottom	4
30314845	Rack 1 x 50 ml D29 mm RB, 2 pk	50 ml	29 mm	Round Bottom	4
30314846	Rack 1 x 50 ml D29 mm FA, 2 pk	50 ml	29 mm	Conical Bottom	4
30314847	Rack 1 x 50 ml D29 mm Rim, 2 pk	50 ml	29 mm	Skirted Conical Bottom	4
30314848	Rack 1 x 30 ml D25 mm Rim, 2 pk	30 ml	25 mm	Skirted Conical Bottom	4
30314849	Rack 1 x 25 ml D25 mm RB, 2 pk	25 ml	25 mm	Round Bottom	4
30314852	Rack 7 x 15 ml D17 mm RB/Vac, 2 pk	15 ml	17 mm	Round Bottom/Vacutainer®	28
30314850	Rack 2 x 15 ml D17 mm FA, 2 pk	15 ml	17 mm	Conical Bottom	8
30314851	Rack 1 x 15 ml D17 mm Rim, 2 pk	15 ml	17 mm	Skirted Conical Bottom	4
30314858	Rack 5 x 4-10 ml D16 mm Sar, 2 pk	4-10 ml	16 mm	Sarstedt	20
30314853	Rack 9 x 5-7 ml D13 mm RB, 2 pk	5-7 ml	13 mm	Round Bottom	36
30314856	Rack 7 x 5-7 ml D13 mm RB, 2 pk	5-7 ml	13 mm	Round Bottom	28
30314857	Rack 7 x 5-7 ml D13 mm Vac, 2 pk	5-7 ml	13 mm	Vacutainer®	28
30314855	Rack 9 x 4.5 ml D12 mm FB, 2 pk	4,5 ml	12 mm	Flat Bottom	36
30314854	Rack 10 x 1.5/2.0 ml D11 mm, 2 pk	1.5/2.0 ml	11 mm	Microtube	40

Cell Culture Package

Order No.	Description		
83041631	Package Cell Culture for Rotor 30314822		
Products Included in the Package			
Order No.	Description	Qty	Number of Tubes
30314822	Rotor Swing out 4x145ml ID	1	-
30314846	Rack 1x50ml D29mm FA, 2 pk	2	4
30314850	Rack 2x15ml D17mm FA, 2 pk	2	8

	Order No.	30314832			
	Description	Rotor Angle 30 x 15 ml RB/FA ID			
	Max. Speed	4500 rpm			
	Max. RCF	2830/2467 x g			
Accessories					
Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
Without Adapter	Rotor Angle 30 x 15 ml RB/FA ID	15 ml	17 mm	Round Bottom/Conical Bottom	30
30130889	Adapter 1 x 7 ml D13 mm RB/Vac/Sar, 2 pk	7 ml	13 mm	Round Bottom/Vacutainer®/Sarstedt	30
30130890	Adapter 1 x 5 ml D13 mm RB/Vac/Sar, 2 pk	5 ml	13 mm	Round Bottom/Vacutainer®/Sarstedt	30
30130886	Adapter 1 x 1.5/2.0 D11 mm, 6 pk	1.5/2.0 ml	11 mm	Microtube	30


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	Order No.	30314823				
	Description	Rotor Swing out 4 x 100 ml ID				
	Max. Speed	4000 rpm				
	Max. RCF	2611 x g				
Accessories						
Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor	
Round Bucket and accessories						
30314860	Bucket 100 ml w/o Cap, 2 pk	-	-	-	-	
30314861	Bucket 100 ml w/Cap Sealable, 2 pk	-	-	-	-	
30314862	Screw cap 100 ml Bucket Sealable, 2 pk	-	-	-	-	
30314863	O-Ring for 100 ml Bucket Sealable, 10 pk	-	-	-	-	
30314864	Rack 1 x 100 ml D40 mm RB, 2 pk	100 ml	40 mm	Round Bottom	4	
30314865	Rack 1 x 85 ml D38 mm RB, 2 pk V1	85 ml	38 mm	Round Bottom	4	
30314866	Rack 1 x 50 ml D34 mm RB, 2 pk V1	50 ml	34 mm	Round Bottom	4	
30314867	Rack 1 x 50 ml D29 mm RB, 2 pk V1	50 ml	29 mm	Conical Bottom	4	
30314868	Rack 1 x 50 ml D29 mm FA, 2 pk V1	50 ml	29 mm	Conical Bottom	4	
30314869	Rack 1 x 50 ml D29 mm Rim, 2 pk V1	50 ml	29 mm	Skirted Conical Bottom	4	
30314870	Rack 1 x 30 ml D25 mm Rim, 2 pk V1	30 ml	25 mm	Skirted Conical Bottom	4	
83041032▲	Adapter 1 x 25 ml D29 mm FA, 2 pk	25 ml	29 mm	Conical Bottom	4	
30314871	Rack 1 x 25 ml D25 mm RB, 2 pk V1	25 ml	25 mm	Round Bottom	4	
30314872	Rack 1 x 15 ml D17 mm FA, 2 pk	15 ml	17 mm	Conical Bottom	4	
30314873*	Rack 2 x 15 ml D17 mm FA, 2 pk V1	15 ml	17 mm	Conical Bottom	8	
30314874*	Rack 2 x 15 ml D17 mm Rim, 2 pk	15 ml	17 mm	Skirted Conical Bottom	8	
30314875	Rack 4 x 15 ml D17 mm RB, 2 pk	15 ml	17 mm	Round Bottom	16	
30314878	Rack 3 x 10 ml D17 mm Sar, 2 pk	10 ml	17 mm	Sarstedt	12	
30314880	Rack 4 x 10 ml D17 mm Vac, 2 pk	10 ml	17 mm	Vacutainer®	16	
83041589*	Rack 1 x 8 ml D16 mm Vac, 2 pk	8 ml	16 mm	Vacutainer®	4	
30314876	Rack 7 x 5-7 ml D13 mm RB, 2 pk V1	5-7 ml	13 mm	Round Bottom	28	
30314879	Rack 4 x 5-7 ml D13 mm Vac, 2 pk	5-7 ml	13 mm	Vacutainer®	16	
30314877	Rack 5 x 1.5/2.0 ml D11 mm, 2 pk	1.5/2.0 ml	11 mm	Microtube	20	
Round Bucket (can be used only without bucket screw cap)						
30314881	Bucket 2 x 50 ml D29 mm FA w/Rack, 2 pk	50 ml	29 mm	Conical Bottom	8	
Round Bucket (can be used only without bucket screw cap)						
30314882	Bucket 3 x 15 ml D17 mm FA w/Rack, 2 pk	15 ml	17 mm	Conical Bottom	12	

▲ Only possible with Rack 30314868


*Only without bucket screw cap

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	Order No.	30314824
	Description	Rotor Swing out 2 x 3 MTP w/bucket ID
	Max. Speed	4500 rpm
	Max. RCF	2716 x g


Accessories

Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
MTP Bucket and accessories					
Without Adapter	Rotor Swing out 2 x 3 MTP w/bucket ID	-	-	-	-
30314890	Bucket 3 x MTP, 2 pk	-	-	MTP	6
30314891	Adapter 48 x 1.5/2.0 ml D11 mm, 2 pk	1.5/2.0 ml	11 mm	Microtube	96

	Order No.	30314830
	Description	Rotor Angle 6 x 50 ml RB/FA ID
	Max. Speed	6000 rpm
	Max. RCF	4427 x g

Accessories


Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
Without Adapter	Rotor Angle 6 x 50 ml RB/FA ID	50 ml	29 mm	Round Bottom/Conical Bottom	6
30130891	Adapter 1 x 30 ml D26 mm, 2 pk	30 ml	26 mm	Round Bottom	6
83041032	Adapter 1 x 25 ml D29 mm, FA 2 pk	25 ml	29 mm	Conical Bottom	6
30130892	Adapter 1 x 16 ml D18 mm, 2 pk	16 ml	18 mm	Round Bottom	6
30130893	Adapter 1 x 15 ml D17 mm, 2 pk	15 ml	17 mm	Round Bottom	6
30130894	Adapter 1 x 15 ml D17 mm RB/FA, 2 pk	15 ml	17 mm	Round Bottom/Conical Bottom	6
30130889	Adapter 1 x 7 ml D13 mm RB/Vac/Sar, 2 pk	7 ml	13 mm	Round Bottom/Vacutainer®/Sarstedt	6
30130890	Adapter 1 x 5 ml D13 mm RB/Vac/Sar 2 pk	5 ml	13 mm	Round Bottom/Vacutainer®/Sarstedt	6
30130886	Adapter 1 x 1.5/2.0 ml D11 mm, 6 / pk	1.5/2.0 ml	11 mm	Microtube	6

	Order No.	83041010
	Description	Rotor Angle 12 x 5 ml FA ID
	Max. Speed	14000 rpm
	Max. RCF	18624 x g

Accessories


Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
Without Adapter	Rotor Angle 12 x 5 ml FA ID	5 ml	17 mm	Microtube	12
30130886	Adapter 1 x 1.5/2.0 ml D11 mm, 6 / pk	1.5/2.0 ml	11 mm	Microtube	12
30130887	Adapter 1 x 1 ml D12.6 mm Cryo, 6 / pk	1 ml	12.6 mm	Cryo Tube – Flat Bottom	12
30130888	Adapter 1 x 1.8 ml D12.6 mm Cryo, 6 / pk	1.8 ml	12.6 mm	Cryo Tube – Round Bottom	12

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	Order No.	30314836
	Description	Rotor Angle 30 × 1.5/2.0 ml ID
	Max. Speed	12000 rpm
	Max. RCF	15131 × g


Accessories

Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
Without Adapter	Rotor Angle 30 × 1.5/2.0 ml ID	1.5/2.0 ml	11 mm	Microtube	30
30130885	Adapter 1 × 0.5 ml D8 mm, 6 pk	0.5 ml	8 mm	Microtube	30
30130884	Adapter 1 × 0.2/0.4 ml D6 mm, 6 pk	0.2/0.4 ml	6 mm	Microtube	30

	Order No.	83041238
	Description	Rotor Angle 24 × 1.5/2.0 ml ID BIOSEALS V1
	Max. Speed	14000 rpm
	Max. RCF	18624 × g

Accessories

Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
Without Adapter	Rotor Angle 24 × 1.5/2.0 ml ID BIOSEALS V1	1.5/2.0 ml	11 mm	Microtube	30
30130885	Adapter 1 × 0.5 ml D8 mm, 6 pk	0.5 ml	8 mm	Microtube	30
30130884	Adapter 1 × 0.2/0.4 ml D6 mm, 6 pk	0.2/0.4 ml	6 mm	Microtube	30

	Order No.	30314834
	Description	Rotor Angle 12 × 15 ml RB/FA ID
	Max. Speed	6000 rpm
	Max. RCF	4427 × g

Accessories

Order No.	Description	Vol./Tube	Diameter	Tube Type	No.of Tubes/Rotor
Without Adapter	Rotor Angle 12 × 15 ml RB/FA ID	15 ml	17 mm	Round Bottom/Conical Bottom	12
30130889	Adapter 1 × 7 ml D13 mm RB/Vac/Sar, 2 pk	7 ml	13 mm	Round Bottom/Vacutainer®/Sarstedt	12
30130890	Adapter 1 × 5 ml D13 mm RB/Vac/Sar, 2 pk	5 ml	13 mm	Round Bottom/Vacutainer®/Sarstedt	12
30130886	Adapter 1 × 1.5/2.0 ml D11 mm, 6 pk	1.5/2.0 ml	11 mm	Microtube	12

Shortcut list:

ID – auto rotor identification
FA – Conical bottom / Falcon®

Hi – version with higher speed
FB – Flat bottom

Vac – Vacutainer®
RB – Round bottom

Sar – Sarstedt
Rim – Skirted conical bottom

FRONTIER™ 5714 *Multi-Pro Centrifuges*

Other Standard Features and Equipment

Microprocessor control, Imbalance switch-off, Audible signal at the end of each run with melody options, Emergency release, 99 memory sets, Ten acceleration and ten deceleration rates, Pre-selection of running time from 10 sec to 99 hr 59 min or continuous, Quick spin for short runs.

Compliance

See Declaration of Conformity available CE Declarations | OHAUS

*Intended Use

This centrifuge and its accessories are an in vitro diagnostic medical device within the meaning of the In Vitro Diagnostic Medical Devices Regulation (EU) 2017/746. This centrifuge is intended for the separation of mixtures of substances of different densities, in particular for the preparation and processing of samples from the human body in the context of an in vitro diagnostic application, in order to enable the intended use of the in vitro diagnostic medical device.

These centrifuges are intended exclusively for use in closed rooms under supervision and for operation by trained specialist personnel.

Only the rotors and cups and other accessories specified in the instructions for use may be used. Any other use or use beyond this is considered improper use. We are not liable for any resulting damage. The contents of the operating instructions must be observed.

Contraindication

This centrifuge and its accessories are intended exclusively for the above-mentioned purpose and must not be used to determine any measured values. After centrifugation, no components of human origin may be implanted or administered back into the body.