

Velocity

14 / 14R / 18R Pro

Laboratory Versatile Centrifuge



Velocity Versatile Centrifuge

Velocity 18R Pro

The Velocity 18R Pro delivers exceptional capacity (36 x 15ml, 16 x 50ml), wide range of rotor option, refrigerated centrifugation with an impressive maximum speed of 18,000 RPM (30,318 xg) and all from the convenience of the bench.



Velocity 14/14R Pro

The Velocity 14 Pro and Velocity 14R Pro centrifuges feature a compact footprint and provides the flexibility to alternate from micro-volume centrifugation to medium-volume centrifugation at an impressive maximum speed of 14,000 RPM / 21,780xg.

The Velocity 14R Pro also provides refrigeration for protecting the samples.





Features & Characteristics

User Friendly Operation And Information Rich Display

Parameters are quickly and effortlessly input through the simple touch pad interface and displayed on the brightly backlit and easy to read LCD panel. The LCD panel concurrently displays all experimentation parameters including diagnostic information as it occurs.



Auto Rotor Recognition

Automatic rotor recognition and confirmation once centrifugation has commenced, including rotational speed calculation and optimum temperature control. Furthermore new rotors can be easily loaded onto the on-board database as they are introduced.



Features & Characteristics

Rotor Auto-Lock

With the Velocity 18R Pro, 14/14R Pro, you simply need to place the rotor onto the drive shaft. The auto lock and secure mechanism perform the rest. Once centrifugation is complete, simply lift the rotor off the drive shaft. Quick, easy, efficient and safe.



Actual Sample (Rotor) Temperature Measurement And Display

The temperature displayed on the LCD panel during centrifugation is that of the rotor (and hence samples). This allows more precise, reproducible and efficient experimentation compared to displaying the temperature of the chamber or the temperature at the sensor.



High Imbalance Tolerances

Innovative motor engineering and mounting (including a flexible drive shaft) allow for greater imbalance tolerances, so much so that samples can be balanced simply by eye. No more weighing – just fill tubes or bottles to within 5mm of each other.



Powerful Refrigeration (R Series)

A powerful, non-CFC compressor cools the chamber quickly whilst maintaining the rotor at a set temperature during centrifugation. The twin cooling fans – one for the compressor and motor respectively – dissipate heat quickly to improve cooling efficiency and extend the motor lifespan.



Features & Characteristics

Quiet Operation

Noise abating insulation in the console, including lower noise fans, combine to reduce the audible operating noise to $\leq 58\text{dB}$.



Fast Acceleration And Deceleration

The innovative high-torque drive technology effortlessly accelerates even the heaviest rotors to terminal velocity quickly and efficiently. A full load will achieve maximum velocity within a few minutes. 9 pre-set acceleration and 10 pre-set deceleration profiles (including coasting deceleration) ensure the best separation, even for the most delicate density gradients.



Wide variety of Rotors

Selection of Angle, Swing Out or Microplate rotors suitable for your need. e.g. separation, isolation, purification for Whole blood cells, Subcellular organelles, Plasma membrane, Polysomes, Ribosomes, Chromatin, Nucleic acid, Lipoproteins and Viruses etc..



Safety , Durable and Reliable

Non contact imbalance sensor monitor the centrifuge actual running. Proper alarms and error code display for warning and diagnostic. Centrifuge structure design for high impact prevent any accident.



Dynamica rotor portfolio designed for diverse laboratory application

Swing Out Rotors

*include bucket x 4 **include plate carrier x 2

Velocity 18R Pro Velocity 14/14R Pro

Rotor	P/N	Rotor ID	rpm	xg	Tube Volume	Tube Dimension (mm)	Tube Qty.	Adaptor	
 SW5	0000442*	50	4,800	4,173	 250ml PP bottle	Φ616 x 135	1 x 4	/	
			3,000	4,120	 5ml blood collection tube	Φ12.3 x 106	7 x 4	 SW5.5B	0024451
			3,000	1,610	 10ml blood collection tube	Φ12.3 x 115	7 x 4	 SW5.7B	0025831
			3,000	1,580	 10ml glass tube	Φ12 x 106	7 x 4	 SW5.10G	0025834
			4,800	1,610	 15ml glass tube	Φ16.5 x 113	7 x 4	 SW5.15G	0024458
			4,800	4,120	 15ml culture tube	Φ17 x 119	3 x 4	 SW5.15CA	0025833
			4,800	4,120	 50ml skirted tissue culture tube	Φ29.5 x 76	4 x 4	 SW5.50CB	0025835
			4,800	3,860	 15ml PP tube	Φ16.5 x 113	4 x 4	 SW5.15P	0024449
			4,800	4,120	 50ml glass tube	Φ35 x 100	1 x 4	 SW5.50G	0025832
			4,800	4,060	 50ml culture tube	Φ30 x 116	1 x 4	 SW5.50C	0026346
 SW5L	0033239*	15	4,200	3,550	 300ml PP bottle	Φ72 x 100	1 x 4	/	
				3,388	 15ml culture tube	Φ16.5 x 120	9 x 4	 SW5L.15C	0033249
				3,367	 50ml culture tube	Φ29.6 x 116	4 x 4	 SW5L.50C	0033254
				3,372	 250ml bottle	Φ62 x 120	1 x 4	 SW5L.250P	0033259
				3,076	 275ml bottle	Φ72 x 100	1 x 4	 SW5L.300P	0034362
				3,372	 2ml blood collection tube	Φ12.5 x 82	15 x 4	 SW5L.2B	0033977
				3,372	 5ml blood collection tube	Φ12.5 x 106	15 x 4	 SW5L.5B	0033981
				3,372	 8ml blood collection tube	Φ15.3 x 106	14 x 4	 SW5L.8B	0033985
				3,352	 15ml PP tube	Φ16.5 x 115	9 x 4	 SW5L.15P	0033989
				3,392	 50ml PP tube	Φ29 x 113	4 x 4	 SW5L.50P	0033993
 SW5MP	0000432**	55	4,800	3,120	 96 microplate	128 x 68 x 15	1 x 2	/	
					 96 deep well plate	128 x 65 x 50	1 x 2	/	
 SW4C	0023164*	5	4,000	1,780	 5ml blood collection tube	Φ12.5 x 106	1 x 4	/	

Fixed Angle Rotors

*only for use without rotor lid



Velocity 18R Pro



Velocity 14/14R Pro

Rotor	P/N	Rotor ID	rpm	xg	Tube Volume	Tube Dimension (Φ x H mm)	Tube Qty.	Adaptor	
FA18B	17942	36	18,000	24,990	1.5/2ml	Φ11 x 39	18	/	
					0.5ml micro tube	Φ8 x 32		FA15.05	0026054
					0.2 ml micro tube	Φ6 x 24		FA15.02	0026053
FA18C	0030462	01	18,000	30,318	10ml round bottom	Φ16 x 82	10	/	
FA15A	0000408	19	■ 15,000 ■ 14,000	■ 21,658 ■ 18,866	1.5/2ml	Φ10.8 x 40.5	24	/	
					0.2ml micro tube	Φ6 x 24		FA15.02	0024441
					0.5ml micro tube	Φ8 x 32		FA15.05	0024443
FA15B	0000415	16	■ 15,000 ■ 12,000	■ 21,835 ■ 13,974	50ml round bottom	Φ29 x 106	4	/	
					15ml round bottom	Φ18 x 100		FA15.15R	0024372
					15ml round bottom	Φ15.5 x 113		FA15.15R	0024361
					15ml V bottom	Φ17 x 119		AF15.15C*	0024359
FA15C	0000422	18	■ 15,000 ■ 12,000	■ 23,294 ■ 14,907	50ml round bottom	Φ29 x 106	6	/	
					15ml round bottom	Φ18 x 100		FA15.15R	0024348
					15ml round bottom	Φ15.5 x 113		FA15.15R	0024329
					15ml V bottom	Φ17 x 119		AF15.15C*	0024327
FA15D	0000419	17	15,000	20,900	80ml PP round bottom	Φ38 x 106	4	/	
					50ml round bottom	Φ30 x 116		FA15D.50R	0026051
					15ml V bottom	Φ17 x 119		FA15D.15C*	0024448
					15ml round bottom	Φ16.5 x 113		FA15D.15R	0024440
FA15E	0031050	■ 06 ■ 08	■ 15,000 ■ 14,000	■ 22,600 ■ 19,721	5ml V bottom	Φ16.7 x 60	12	/	
FA15F	0031047	■ 04 ■ 07	■ 15,000 ■ 14,000	■ 22,600 ■ 19,721	5ml round bottom	Φ13.5 x 53.5	16	/	
FA15G	0034277	09	■ 15,000 ■ 12,000	■ 25,004 ■ 16,002	50ml V bottom	Φ30 x 116	6	/	
					15ml V bottom	Φ16.5 x 120		FA15G.15C	0034705
FA15H	0035479	21	15,000	24,950	50ml round bottom	Φ29 x 113	6	/	
FA15K	0035480	22	15,000	23,210	5ml round bottom	Φ13.5 x 53.5	20	/	
FA15L	0035481	23	15,000	25,516	1.5/2ml	Φ10.8 x 42	30	/	
FA14C	0030667	13	14,000	20,926	50ml V bottom	Φ29 x 117	4	/	
					15ml round bottom	Φ16.5 x 113		FA14C.15R	0024469
					15ml V bottom	Φ17 x 119		FA14C.15C	0024360
FA14D	0035355	11	14,000	20,203	0.2ml micro tube	Φ6 x 21.5	48	/	
FA14E	0035356	12	14,000	21,132	1.5/2ml	Φ10.8 x 42	48	/	
FA12A	0000402	03	12,000	■ 14,100 ■ 14,102	0.2ml micro tube	Φ6 x 24	48	/	
FA12B	0031053	02	12,000	■ 13,840 ■ 13,861	1.5/2ml	Φ10.5 x 41	48	/	
FA10B	0020867	20	10,000	11,400	50ml V bottom	Φ30 x 117	6	/	
					15ml V bottom	Φ17 x 119		FA10.15C	
FA5A	0031390	07	5,600	4,733	15ml round bottom	Φ17 x 120	12	/	



Velocity 18R Pro Specification

MODEL	Velocity 18R Pro	
Maximum Speed	18,000 RPM	
Maximum RCF	30,318 x g (FA18C)	
Maximum Capacity	4 x 300ml (SW5L)	
Driving system	Inverted induction motor	
Speed Control Range	300 rpm to 18,000 rpm (100 rpm increments)	
Acceleration / Deceleration mode	1-9 stages / 0-9 stages	
Temperature setting range	-20°C to +40°C in steps of 1°C	
Refrigerant	R134a	
Temperature accuracy	± 2°C	
Timer	Running time from 1 min to 99 hours 59 min. or "HOLD function"	
Program memory	9 Programs	
Display	Backlit LCD	
Noise Level	≤ 58 dB (A)	
Main Power	220V: Single phase,~220-240V, 50/60Hz (110V 60Hz available)	
Dimensions (W x D x H)	730 x 610 x 380 mm	
Weight	Approx. 100 Kg	
Packing Size (W x D x H)	910 x 770 x 670 mm	
Shipping Weight	130 kg	
Ordering Information		
Product Number	0033285	0033284
Description	Velocity 18R Pro (220V-240V, 50Hz)	Velocity 18R Pro (110V, 60Hz)



Velocity 14/14R Pro Specification

MODEL	Velocity 14 pro		Velocity 14R pro	
Maximum Speed	14,000 RPM			
Maximum RCF	21,780 xg			
Maximum Capacity	6 x50 ml (FA15C / FA15G)			
Driving System	Brushless DC Motor			
Temperature Setting Range	NA		-20°C to +40°C	
Refrigerant	NA		R134a	
Acceleration / Deceleration mode	1-9 stages			
Timer	Running time from 1 min to 99 hours 59 mins. or “HOLD function”			
Program memory	9 Programs			
Main Power	220V Single phase, ~220-240V±10%, 50/60Hz±1Hz, 1500VA 110V Single phase, ~110V ±10%, 60Hz±1Hz, 1500VA			
Dimensions (W x D x H)	340 x 490 x 380 mm		560 x 500 x 380 mm	
Weight	40 kg		60 kg	
Packing Size (W x D x H)	650 x 520 x 540 mm		740 x 650 x 640 mm	
Shipping Weight	60 kg		70 kg	
Ordering Information				
Product Number	0034282	0034283	0034279	0034280
Description	Velocity 14 Pro (220V, 50/60Hz)	Velocity 14 Pro (110V, 60Hz)	Velocity 14R Pro (220V, 50/60Hz)	Velocity 14R Pro (110V, 60Hz)



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