

Dynamica



The VELOCITY Range

BENCH TOP CENTRIFUGES

RE^VOLUTION



VELOCITY 18R

Refrigerated Benchtop Centrifuge

The Velocity 18R delivers high capacity, refrigerated centrifugation with an impressive maximum speed of 18,000 RPM (28,978 x g) (with the fixed angle FA18C rotor) and all from the convenience of the bench

Quick Set and forget Rotor System

Screwing or bolting rotors to the drive shaft is a thing of the past. Likewise lost spanners and rotor over tightening. With the Velocity 18R simply place the rotor on the drive shaft and that's all. The auto lock and secure mechanism performs the rest. Once centrifugation is complete simply lift the rotor off the drive shaft. Quicker, easier, more efficient and safer.

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.

Fast Acceleration and Deceleration

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

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 with the naked eye. No more weighing just fill tubes or bottles to within 5mm of each other.

Powerful Refrigeration

A powerful non -CFC compressor cools the chamber quickly whilst maintaining the rotor at set temperature during centrifugation.

Furthermore, twin cooling fans - one each for the compressor and motor respectively - dissipate heat quickly to improve cooling efficiency and extend motor life.

Actual sample (rotor) temperature Measurement and Display

The temperature displayed on the LCD panel during centrifugation is that of the rotor (and hence samples) and not the temperature of the chamber nor the temperature at the sensor to allow for more precise, reproducible and efficient experimentation.

Safety is Paramount

The Velocity 18R offers many safety features in the unlikely event of an emergency such as:

Non-contact imbalance detection and shutdown based on the run profile for each rotor across its entire speed range rather than the inferior and conventional micro-switch detector.

- > Guard barrier
- > Dual lid electronic interlock
- > Auto-hinge for improved sealing and door opening
- > Over speed detection and shutdown
- > Motor overheat detection and shutdown

User friendly operation and information rich display

Parameters are quickly and effortlessly inputted through the uncomplicated 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. Furthermore, once centrifugation has commenced, a real time graphic profile of the centrifugation status is displayed.













Quiet Operation

Noise abating insulation in the console including lower noise fans combine to reduce the audible operating noise to ≤ 58 dB.






Liquid Seeping Prevention

A single continuous rubber cap with strong gasket, firmly seals the motor chamber opening and drive shaft to prevent liquid from seeping into the motor and electronic components. As additional back-up, a highly absorbent sponge positioned beneath the rubber cap soaks up any liquid or condensation which then evaporates during operation.

VELOCITY 18R ROTORS

ROTOR TYPE	CAT. NO.#		MATERIAL	MAX SPEED (RPM)	MAX RCF (XG)	TUBE VOLUME (ML)	TUBE DESCRIPTION	TUBE DIMENSIONS(O X MM)	TUBE MATERIAL	CAPACITY	ADAPTOR	ROTOR AUTOCLAVABLE	ROTOR LID
Fixed Angle	FA12A		Aluminium	12,000	14,100	0.2	PCR single or strip	6 x 24	PP	48 x 0.2 ml	N/A	121°C	Aluminium
Fixed Angle	FA18B		Aluminium	18,000 " "	24,990 " "	1.5/2.0 0.5 0.2	Standard micro-tube PCR single tube PCR single tube	10.5 x 41 8 x 32 6 x 24	PP PP PP	18 x 1.5/2.0 ml 18 x 0.5 ml 18 x 0.2 ml	N/A FA15.05 FA15.02	121°C	Aluminium
Fixed Angle	FA15A		Aluminium	15,000 " "	21,500 " "	1.5 /2.0 0.5 0.2	Standard micro-tube PCR single tube PCR single tube	10.5 x 41 8 x 32 6 x 24	PP PP PP	24 x 1.5/2.0 ml 24 x 0.5 ml 24 x 0.2ml	N/A FA15.05 FA15.02	121°C	Aluminium
Fixed Angle	FA15P		Plastic	15,000 " "	18,800 " "	1.5 /2.0 0.5 0.2	Standard micro-tube PCR single tube PCR single tube	10.5 x 41 8 x 32 6 x 24	PP PP PP	18 x 1.5/2.0 ml 18 x 0.5 ml 18 x 0.2ml	N/A FA15.05 FA15.02	No	N/A
Fixed Angle NEW	FA11A		Aluminum	11,000	12,000	1.5/ 2.0	Standard micro-tube	10.5 x 41	PP	48 x 2 ml	N/A	121°C	Aluminum
Fixed Angle NEW	FA14A		Aluminum	14,000	20,000	5	V Bottom		PP	12 x 5 ml	N/A	121°C	Aluminum
Fixed Angle NEW	FA14B		Aluminum	14,000	20,000	5	Round Bottom		PP	12 x 5 ml	N/A	121°C	Aluminium
Fixed Angle	FA18A		Aluminium	18,000	27,070	10	Round Bottom	16 x 81	PP	8 x 10 ml	N/A	121°C	Aluminium
Fixed Angle NEW	FA18C		Aluminium	18,000	28,978	10	Round Bottom	16 x 81	PP	10 x 10 ml	N/A	121°C	Aluminium
Fixed Angle NEW	FA5A		Aluminium	5,500	5,000	15	Culture V Bottom	17 x 120	PP	12 x 15 ml	N/A	121°C	Aluminium
Fixed Angle	FA15C		Aluminium	15,000 " "	23,300 " "	50 15 15	Round Bottom Culture V Bottom Round Bottom	29 x 106 17 x 120 16.5 x 113	PP/PC PP PP	6 x 50 ml 6 x 15 ml 6 x 15 ml	N/A FA15.15C FA15.15R	121°C	Aluminium
Fixed Angle	FA10B		Aluminium	10,000 "	11,400 "	50 15	Culture V Bottom Culture V Bottom	29 x 115 17 x 120	PP PP	6 x 50 ml 6 x 15 ml	N/A FA10.15C	121°C	Aluminium

VELOCITY 18R ROTORS

ROTOR TYPE	CAT. NO.#		MATERIAL	MAX SPEED (RPM)	MAX RCF (XG)	TUBE VOLUME (ML)	TUBE DESCRIPTION	TUBE DIMENSIONS(O X MM)	TUBE MATERIAL	CAPACITY	ADAPTOR	ROTOR AUTOCLAVABLE	ROTOR LID
Fixed Angle	FA14C*		Aluminium	14,000	21,000	50	himac 50 TC tube ^Δ	30 x 115	PP	4 x 50 ml	N/A	121°C	Aluminium
				10,000	10,600	50	Culture V Bottom	29 x 115	PP	4 x 50 ml	N/A		
				10,000	10,600	15	Culture V Bottom	17 x 120	PP	4 x 15 ml	FA10.15C		
				14,000	21,000	15	Round Bottom	16.5 x 113	PP	4 x 15 ml	N/A		
Fixed Angle	FA15D		Aluminium	15,000	20,900	100	Round Bottom		PC	4 x 100 ml	N/A	121°C	Aluminium
				"	20,900	50	Round Bottom	29 x 106	PP	4 x 50 ml	FA15D.50R		
				"	20,900	15	Culture V Bottom	17 x 120	PP	4 x 15 ml	FA15D.15C		
				"	20,900	15	Round Bottom	16.5 x 113	PP	4 x 15 ml	FA15D.15R		
Swing Bucket	SW5MP		Aluminium	4,800	3,120	96 Well Microplates	PCR / Culture	128W x 86L x 14H	PP/PC	2 x Plates	N/A	121°C	N/A
				"	"	96 Deep Well Plates	PCR / Culture	128W x 86L x 55H	PP/PC	2 x Plates	N/A	(buckets)	
				"	"	1.5 /2.0	Standard micro-tube	10.8 x 40.5	PP	48x 1.5/2.0 ml	SW5MP.15		
				"	"	0.2	PCR single or strip		PP	192x 0.2 ml	SW5MP.02		
Swing Bucket	SW4A		Aluminium	4,000	2,900	15	Culture V Bottom	17 x 120	PP	24 x 15ml	SW4A.15C	121°C	N/A
				4,000	2,860	50	Culture V Bottom	29 x 115	PP	8 x 50ml	SW4A.50C	(buckets)	
Swing Bucket	SW5		Aluminium Bucket	4,800	4,170	250	Bottle	61.6 x 135	PP/PC	4 x 250ml	N/A		
				4,800	4,170	5	Blood collection	12-13 x 75-78		28 x 5ml	SW5.5B	121°C	Plastic Caps with o-ring (Order Separately)
				4,800	4,170	7	Blood collection	12-13 x 100		28 x 7ml	SW5.7B	(buckets)	
				4,800	4,170	10	Blood collection	16 x 100		28 x 10ml	SW5.10B		
				3,000	1,630	10	Round Bottom	12 x 105	Glass	28 x 10ml	SW5.10G		
				3,000	1,630	15	Round Bottom	17 x 110	Glass	28 x 15ml	SW5.15G		
				4,800	4,170	15	Round Bottom	16.5 x 113	PP	16 x 15ml	SW5.15P [#]		
				4,800	4,170	15	Culture V Bottom	17 x 120	PP	12 x 15ml	SW5.15CA		
				4,800	4,170	15	Culture V Bottom	17 x 120	PP	16x 15ml	SW5.15CB [#]		
				4,800	4,170	50	Round Bottom	29 x 104	PP	4 x 50ml	SW5.50P		
				4,800	3,990	50	Round Bottom	35 x 100	Glass	4 x 50ml	SW5.50G		
				4,800	4,170	50	Culture V Bottom	29 x 115	PP	4x 50ml	SW5.50C		
				4,800	4,170	50	Skirted bottom	29 x 115	PP	4x 50ml	SW5.50CB		

PP- Polypropylene PA - Polyallomer PC - Polycarbonate * Plastic seal caps cannot be used with these adaptors

* 50ml TC tubes and 15ml round bottom tubes can be used in FA14C without adaptors. Different volume of tubes cannot be centrifuged together in the same run.

Δ himac 50TC tubes are purchased separately. The tubes are specially designed for higher speed at maximum 14,000 rpm.

Plastic seal caps cannot be used with these adaptors.

VELOCITY 18R SPECIFICATIONS

MODEL	V18R
Maximum Speed	18,000 RPM (FA18A rotor)
Maximum RCF	28,978 x g (FA18C rotor)
Maximum Capacity	1,000 ml (4 x 250 ml)
Drive Mechanism	Brushless Induction
Control	Microprocessor based
Speed Range	300-18,000 RPM (100 RPM increments)
Speed Accuracy	±20 RPM
Speed / RCF Conversion	Yes
Timer	1 min - 99 Hrs 59 mins plus HOLD function
Display	Backlit LCD
Operating Noise	<58dB (A)
Temperature Range	-20°C to +40°C
Temperature Accuracy	±2°C
Memory	9 Programs
Acceleration/Deceleration	9 stages / 10 stages
Automatic Rotor Identification	Yes
Imbalance Detection	Yes
Dimensions (L x D x H)	730 x 610 x 380 mm
Weight (Net)	100 Kg
Power Supply	Single Phase AC220V, 50Hz, 10A AC220V, 60Hz AC110V, 60Hz



VELOCITY 14 / 14R

Benchtop Centrifuges

The Velocity 14 / 14R centrifuges set a new benchmark in versatility and compactness. The clever design results in a compact footprint yet generous capacity which not only frees up precious bench space but also provides the flexibility to alternate from micro-volume centrifugation to medium-volume centrifugation and all at an impressive maximum speed of 14,000 RPM / 20,290xg (with the FA15C rotor). Furthermore the V14R incorporates powerful and efficient refrigeration whilst the absence of refrigeration in the Velocity 14 further reduces its footprint by at least 50% compared to that of the Velocity 14R.

Smart, Compact, 3-in-1 Design

The versatile design of the Velocity 14 / 14R centrifuges offers the best of both worlds from the perspective of micro-volume and medium-volume centrifugation. The FA15A rotor is sufficiently fast and yet accommodating for up to 24 x 1.5/2 ml tubes with a terminal velocity of 14,000 RPM (18,726 x g) whilst the FA15C rotor has sufficient capacity for up to 6 x 50 ml tubes reaching an impressive terminal velocity of 14,000 RPM (20,290 x g) in V14R. The new SW4C Swing Bucket Rotor further expands the flexibility of the Velocity 14/14R centrifuges to incorporate a wide range of new applications.

Quick Set and forget Rotor System

Screwing or bolting rotors to the drive shaft is a thing of the past. Likewise lost spanners and rotor over tightening. With the Velocity 14 / 14R simply place the rotor on the drive shaft and that's all. The auto lock and secure mechanism performs the rest. Once centrifugation is complete simply lift the rotor off the drive shaft. Quicker, easier, more efficient and safer.

Auto rotor recognition.

Microchip technology allows for automatic recognition of rotor 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.

Fast Acceleration and Deceleration.

The innovative high torque, drive technology effortlessly accelerates even the heaviest rotors to terminal velocity quickly and efficiently. Even the heaviest rotors with a full load will achieve maximum velocity within a few minutes. Furthermore, 9 pre-set acceleration and 9 pre-set deceleration profiles ensure the right conditions are set for the most precious of samples including density gradients.

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 with the naked eye. No more weighing, just fill tubes or bottles to within 5mm of each other.

Powerful Refrigeration (Velocity 14R model only)

A powerful non-CFC compressor cools the chamber quickly whilst maintaining the rotor at set temperature during centrifugation.

Furthermore, twin cooling fans - one each for the compressor and motor respectively - dissipate heat quickly to improve cooling efficiency and extend motor life.

Actual sample (rotor) temperature Measurement and Display (Velocity 14R only)

The temperature displayed on the LCD panel during centrifugation is that of the rotor (and hence samples) and not the temperature of the chamber nor the temperature at the sensor to allow for more precise, reproducible and efficient experimentation.

Safety is Paramount

The Velocity 14 / 14R offers many safety features in the unlikely event of an emergency such as:

Non-contact imbalance detection and shutdown based on the run profile for each rotor across its entire speed range rather than the inferior and conventional micro-switch detector.

Guard barrier

Dual lid electronic interlock

Auto-hinge for improved sealing and door opening

Over speed detection and shutdown

Motor overheat detection and shutdown

User friendly operation and information rich display

Parameters are quickly and effortlessly inputted through the uncomplicated 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. Furthermore, once centrifugation has commenced, a real time graphic profile of the centrifugation status is displayed.

Quiet Operation

Noise abating insulation in the console including lower noise fans combine to reduce the audible operating noise to ≤53 dB (≤58 dB for V14R).

Liquid Seeping Prevention

A single continuous rubber cap with strong gasket, firmly seals the motor chamber opening and drive shaft to prevent liquid from seeping into the motor and electronic components. As additional back-up, a highly absorbent sponge positioned beneath the rubber cap soaks up any liquid or condensation which then evaporates during operation.

VELOCITY 14R & 14 ROTORS

ROTOR TYPE	CAT. NO.#	MATERIAL	V14R (V14) MAX SPEED (RPM)	V14R (V14) MAX RCF (XG)	TUBE VOLUME (ML)	TUBE DESCRIPTION	TUBE DIMENSIONS(O X MM)	TUBE MATERIAL	CAPACITY	ADAPTOR	ROTOR AUTOCLAVABLE	ROTOR LID
Fixed Angle	FA12A	Aluminium	12,000 (12,000)	12,290 (12,290)	0.2	PCR single or strip	6 x 24	PP	48 x 0.2 ml	N/A	121°C	Aluminium
Fixed Angle	FA15A	Aluminium	14,000 (14,000)	18,728 (18,728)	1.5 /2.0 0.5 0.2	Standard micro-tube PCR single tube PCR single tube	10.5 x 41 8 x 32 6 x 24	PP PP PP	24 x 1.5/2.0 ml 24 x 0.5 ml 24 x 0.2ml	N/A FA15A.05 FA15A.02	121°C	Aluminium
Fixed Angle NEW	FA11A	Aluminium	11,000 (11,000)	12,000 (12,000)	1.5/ 2.0	Standard micro-tube	10.5 x 41	PP	48 x 2 ml	N/A	121°C	Aluminium
Fixed Angle NEW	FA14A	Aluminium	14,000 (14,000)	20,000 (20,000)	5	V Bottom	17 x 60	PP	12 x 5 ml	N/A	121°C	Aluminium
Fixed Angle NEW	FA14B	Aluminium	14,000 (14,000)	20,000 (20,000)	5	Round Bottom	15 x 62	PP	12 x 5 ml	N/A	121°C	Aluminium
Fixed Angle	FA18A	Aluminium	14,000 (14,000)	16,200 (16,200)	10	Round Bottom	16 x 81	PP	8 x 10 ml	N/A	121°C	Aluminium
Fixed Angle NEW	FA18C	Aluminium	14,000 (14,000)	17,530 (17,530)	10	Round Bottom	16 x 81	PP	10 x 10 ml	N/A	121°C	Aluminium
Fixed Angle	FA15B	Aluminium	14,000 (12,000) " "	18,990 (13,950) " "	50 15 15	Round Bottom Culture V Bottom Round Bottom	29 x 106 17 x 120 16.5 x 113	PP/PC PP PP	4 x 50 ml 4 x 15 ml 4 x 15 ml	N/A FA15.15C FA15.15R	121°C	Aluminium
Fixed Angle	FA15C	Aluminium	14,000 (12,000) " "	20,290 (14,900) " "	50 15 15	Round Bottom Culture V Bottom Round Bottom	29 x 106 17 x 120 16.5 x 113	PP PP PP	6 x 50 ml 6 x 15 ml 6 x 15 ml	N/A FA15.15C FA15.15R	121°C	Aluminium
Fixed Angle*	FA14C	Aluminium	10,000 (10,000) " "	10,600 (10,600) " "	50 15 15	Culture V Bottom Culture V Bottom Round Bottom	29 x 115 17 x 120 16.5 x 113	PP PP PP	4 x 50 ml 4 x 15 ml 4 x 15 ml	N/A FA14.15C N/A	121°C	Aluminium
Swing Bucket*	SW4C	Aluminium	4,000 (4,000)	1,780 (1,780)	7	Blood collection	12 x 81		4 x 5 ml	Included	121°C	N/A
IntelliRotor NEW	CF14A**	Carbon Fibre	14,000 (N/A)	17,750 (N/A)	0.2 ~ 50	← See next page →				No		N/A

IntelliRotor (For Velocity 14R only)

Carbon Fibre Construction

The IntelliRotor's shell is constructed from a carbon fibre composite which imparts strength, durability and reduces overall weight. The benefits include shorter spin times due to reduced acceleration and deceleration cycles and increased capacities for tubes of varying dimensions and volumes. And with a maximum speed of 14,000 RPM and maximum RCF of 17,750 x g, the IntelliRotor's versatility is exceptional.

Simply Set and Forget














The IntelliRotor is extremely user friendly. Simply place the IntelliRotor shell on the drive shaft, position the preferred polypropylene rack (or rack combinations) into the shell and all is set. Neither tools nor securement to the drive shaft is necessary. Once the spin is complete, the IntelliRotor shell remains in position whilst the racks are removed or replaced accordingly for subsequent applications

Smart, Flexible Design Racks

The interchangeable and stackable racks underpin the flexibility of the IntelliRotor. The racks are designed to accommodate a wide range of tubes. Mix and match racks accordingly to create the optimum combination for capacity and volume. For example use a single AR015-24 rack to spin up to 24 x 2 ml tubes. Stack three of the AR015-24 racks into the single IntelliRotor shell and increase the capacity to 72 x 2 ml tubes. Consolidate several rotors to a single IntelliRotor.

Capacity and Volumes

The IntelliRotor handles an impressive range of tube sizes, from as small as 0.2ml PCR tubes with the AR002-64 rack up to 50ml culture tubes with the AR510-04. The PCR96-02 rack is designed for PCR plates. Stack three AR002-64 racks and maximise capacity to 192 x 0.2ml tubes. Mix the AR002-64 and AR015-24 racks to spin 0.2 ml and 2 ml tubes concurrently. Flexibility at your fingertips. Use the table below to configure rack combinations.

Rotor	Rack	Type
IntelliRotor CF14A  Max. Capacity 3xS OR 1xM + 1xS OR 1xL	 6Φ x 24L(mm) AR002-64 8x8-Strip PCR Tube 14,000rpm/Outer row RCF:15,780G/ Inner row RCF:14,240G	S
	 5.7Φ x 50L(mm) AR004-24 24x0.4ml 14,000rpm/17,750G	
	 7.9Φ x 31L(mm) AR005-24 24x0.5ml 14,000rpm/17,310G	
	 11Φ x 42L(mm) AR015-24 24x2ml 14,000rpm/17,750G	
	 11Φ x 42L(mm) AR015-SC24 24x2ml 14,000rpm/17,750G	M
	 25.5Φ x 94.3L(mm) AR300-06 6x30ml 14,000rpm/17,750G	
	 15Φ x 59L(mm) AR050-12 12x5ml 14,000rpm/17,530G	
	 17Φ x 100L(mm) AR141-08 8x14ml 14,000rpm/17,750G	
	 17Φ x 120L(mm) AR150-08 8x15ml 14,000rpm/17,750G	L
	 29Φ x 115L(mm) AR510-04 4x50ml or 15ml 14,000rpm/17,750G	
	 28.8Φ x 107L(mm) AR501-04 4x50ml or 14ml 14,000rpm/17,530G	
	 126 x 85(mm) PCR96-02 2x96 Well PCR Plate 14,000rpm/15,340G Optional adater, A96-01PC is required.	

VELOCITY 14R & 14 SPECIFICATIONS

MODEL	V14R	V14
Maximum Speed	14,000 RPM (FA15C rotor)	14,000 RPM (FA15A rotor)
Maximum RCF	20,290 x g (FA15C rotor)	18,728 x g (FA15A rotor)
Maximum Capacity	300 ml (6 x 50 ml)	
Drive Mechanism	Brushless Induction	
Control	Microprocessor based	
Speed Range	300-14,000 RPM (100 RPM increments)	
Speed Accuracy	±20 RPM	
Speed / RCF Conversion	Yes	
Timer	1 min - 99 Hrs 59 mins plus HOLD function	
Display	Backlit LCD	
Operating Noise	<58dB (A)	<53dB (A)
Temperature Range	-20°C to +40°C	-
Temperature Accuracy	±2°C	-
Acceleration/Deceleration	9 stages / 9 stages	
Automatic Rotor Identification	Yes	
Imbalance Detection	Yes	
Dimensions (L x D x H)	560 x 500 x 380 mm	340 x 490 x 380 mm
Weight (Net)	60 Kg	40 Kg
Power Supply	Single Phase AC220V, 50Hz, 10A AC220V, 60Hz AC110V, 60Hz	Single Phase AC220V, 50Hz/60Hz, 8A AC110V, 60Hz



VELOCITY 10R

Refrigerated Benchtop Centrifuge

The Velocity 10R takes the helm as Dynamica's highest capacity centrifuge – up to 3 litres with the SW3A rotor. Powerful refrigeration combined with an exceptional maximum speed of 10,000 RPM (12,740 x g with the FA10D rotor) offer the versatility and convenience to manage a wide range of larger scale applications and all in a footprint sufficiently compact to fit on a bench.

Auto rotor recognition

Microchip technology allows for 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.

Fast Acceleration and Deceleration

The innovative, heavy duty, frequency conversion motor is purposely designed to handle the heaviest of rotors with abundant power output for smooth, quick and efficient acceleration to terminal velocity under fully laden conditions. Furthermore, 9 pre-set acceleration and 9 pre-set deceleration profiles ensure the right conditions are met for the most precious and vibration sensitive samples.

Powerful Refrigeration

A powerful non-CFC compressor cools the chamber quickly whilst maintaining the rotor at set temperature during centrifugation.

Furthermore, twin cooling fans - one each for the compressor and motor respectively - dissipate heat quickly to improve cooling efficiency and extend motor life.

Actual sample (rotor) temperature Measurement and Display

The temperature displayed on the LCD panel during centrifugation is that of the

rotor (and hence samples) and neither the temperature of the chamber nor the temperature at the sensor. This allows for more precise, reproducible and efficient experimentation.

Safety is Paramount

The Velocity 10R offers many safety features in the unlikely event of an emergency such as:

Non-contact imbalance detection and shutdown based on the run profile for each rotor across its entire speed range rather than the inferior and conventional micro-switch detector.

Guard barrier

Dual lid electronic interlock

Auto-hinge for improved sealing and door opening

Over speed detection and shutdown

Motor overheat detection and shutdown

User friendly operation and information rich display

Parameters are quickly and effortlessly inputted through the ergonomic 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. Furthermore, once centrifugation has commenced, a real time graphic profile of the centrifugation status is displayed.






Quiet Operation

Noise abating insulation in the console including lower noise fans combine to reduce the audible operating noise to ≤62 dB - quite impressive for a large capacity, refrigerated centrifuge such as the Velocity 10R.

Liquid Seeping Prevention

A single continuous rubber cap with

VELOCITY 10R ROTORS

ROTOR TYPE	CAT. NO.#		MATERIAL	MAX SPEED (RPM)	MAX RCF (XG)	TUBE VOLUME (ML)	TUBE DESCRIPTION	TUBE DIMENSIONS(O X MM)	TUBE MATERIAL	CAPACITY	ADAPTOR	ROTOR AUTOCLAVABLE	ROTOR LID
Fixed Angle	FA8B		Aluminium	8,000	9,180	50	Culture V Bottom	29 x 115	PP	10 x 50 ml	N/A	121°C	Aluminium
		8,000		9,000	15	Culture V Bottom	17 x 120	PP	10 x 15 ml	FA8B.15C			
		8,000		8,900	15	Round Bottom	16.5 x 113	PP	10 x 15ml	FA8B.15P			
Fixed Angle	FA8C		Aluminium	8,000	9,560	50	Round Bottom	29 x 106	PP	12 x 50 ml	-	121°C	Aluminium
		8,000		9,200	15	Culture V Bottom	17 x 120	PP	12 x 15 ml	FA8C.15C			
		8,000		9,350	15	Round Bottom	16.5 x 113	PP	12 x 15 ml	FA8C.15P			
Fixed Angle	FA10D		Aluminium	10,000	12,740	100	Round Bottom	38 x 106	PP	6 x 100 ml	-	121°C	Aluminium
		10,000		11,840	50	Culture V Bottom	29 x 115	PP	6 x 50 ml	FA10D.50C			
		10,000		12,070	50	Round Bottom	29 x 106	PP	6 x 50 ml	FA10D.50P			
Swing Bucket	SW4B		Aluminium	4,000	3,500	250 + 50	Bottle + Culture V Bottom	61.6 x 135 & 30 x 116	PP/PC	2 x 250 ml + 2 x 50 ml	SW4B.250P	121°C (buckets)	Plactic Caps with o-ring (Order Separately)
		4,000		3,500	3	Blood Collection	12 x 81		120 x 3 ml	SW4B.3B			
		4,000		3,500	5	Blood Collection	12.5 x 106		120 x 5 ml	SW4B.5B			
		4,000		3,500	7	Blood Collection	12.5 x 106		120 x 7 ml	SW4B.5B			
		4,000		3,450	10	Blood Collection	12.5 x 106		120 x 10 ml	SW4B.10B			
		4,000		3,510	15	Culture V Bottom	17 x 120	PP	64 x 15 ml	SW4B.15C			
		4,000		3,500	50	Culture V Bottom	29 x 115	PP	20 x 50 ml	SW4B.50CB			
		4,000		3,500	50	Culture V Bottom	29 x 115	PP	32 x 50 ml	SW4B.50CA*			
Swing Bucket	SW3A		Aluminium	3,200	2,500	750	Bottle	97 x 157	PP/PC	4 x 750 ml	N/A	121°C (buckets)	N/A

PP Polypropylene
 PA Polyallomer
 PC Polycarbonate
 * Plastic seal caps cannot be used with these adaptors

VELOCITY 10R SPECIFICATIONS

MODEL	V10R
Maximum speed	10,000 RPM (FA10D)
Maximum RCF	12,740 x g (FA10D rotor)
Maximum capacity	3,000 ml (4 x 750ml)
Drive Mechanism	Frequency conversion motor
Control	Microprocessor based
Speed Range	300- 10,000 RPM (100 RPM increments)
Speed Accuracy	±20 RPM
Speed/ RCF conversion	Yes
Timer	1 min- 99 Hrs 59 mins plus HOLD function
Display	Backlit LCD
Operating Noise	≤62 dB (A)
Temperature range	-20°C to 40°C
Temperature accuracy	±2°C
Memory	9 programs
Acceleration	9 stages / 9 stages
Automatic Rotor Identification	Yes
Imbalance Detection	Yes
Dimensions (L x D x H)	876 x 695 x 460 mm
Weight (Net)	160 Kg
Power requirements	Single phase 220V, 50Hz, 15A 110V, 60Hz