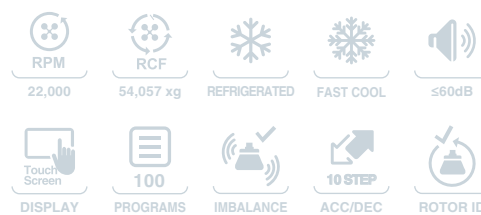




## VELOSPIN 22R

### HIGH SPEED CENTRIFUGE

Multi-purpose refrigerated high-speed centrifuge that maximizes experiment efficiency with powerful power and superior sample throughput



### ● ● ● STANDARD SPECIFICATION



Max. RPM	22,000RPM(Angle Rotor)	4,000RPM(Swing Rotor)
Max. RCF	54,057 xg	3,265 xg
Max. Capacity	1,000ml x 6	250ml x 4
Accel / Decel phase	0 ~ 9 ( 10set)	
Set Temp.	-10°C ~ +40°C ( 1°Cincrements)	
Ref. System	Non-CFC	
Noise Level	≤60dB	
Set Time	99 hour 59 min 59sec or continuous	
Time Count	At set Speed or from starting	
Program	100 memory	
Rotor ID	Automatic Recognition	
Display	4.3" LCD Touch Screen	
RPM Range	400 to 22,000 rpm	
Available Rotor Quantity	14	
Power Supply	230V ± 10%, 50-60Hz, 1Phase	
Power Consumption	5.9 KW	
Dimension(W x D x H)	666 x 772 x 890 mm(H:0mm with open lid)	
Weight (without rotor)	232kg	

## ● ● ● MAIN FEATURE

### ● Wide Range of Application

Various rotor options for multiple purpose in different users

### ● CRYSTE FLIP Touch Controller

- User-friendly 4.3" full color touch LCD controller helps to set the parameter at modern way. All set points are visible at a glance and setting is easy.
- Touch pad lock doesn't allow misuse during operation

### ● A variety of Tubes Applicable

- Various sizes of tube are available from 0.2ml to 1000ml
- Proper tube adaptors are selectable

### ● Refrigeration and Fast Cool Function

- Pre-cooling before use is available so that users can minimize to waste their time for preparation
- Refrigeration performance suitable for separation efficiency even at high RPM

### ● Higher Safety in Operation

Motor shaft safety hub system to prevent rotor slippage during high-speed operation Safe locking system of door through interlock function

### ● Silent Operation

Well-balanced motor minimized vibration, which leads to the most silent operation

### ● Ideal Security

Unauthorized access is prohibited through password

### ● Biocontainment Bucket Option

- Option for handling biohazardous materials
- Biocontainment sealing buckets are certified by TUV NORD in compliance with IEC61010-2-020:2016 Annex AA

### ● Energy Saving

- Pre-set energy saving mode can help to reduce the electrical operating cost
- Unnecessary operation without the real-use can be controlled by Standby Mode and Eco Shut-off setting

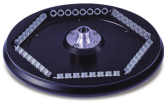



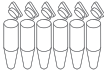










### ● Drainage













Excessive condensation can be treated by drainage at the bottom of chamber.

## ● ● ● ORDER INFORMATION















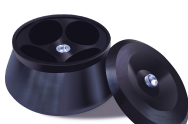







	ITEM	DESCRIPTIONS	ORDER CODE
Main Body	VELOSPIN 22R	VELOSPIN 22R, without rotor, 230V / 50~60Hz	VL22R-MB
Angle Rotor	A480.2H	0.2ml x 48 fixed angle rotor for PCR tubes (Max 12,000RPM)	VL-AR1
	A301.5H	1.5/2.0ml x 30 fixed angle rotor (Max 22,000RPM)	VL-AR2
	A481.5H	1.5/2.0ml x 48 fixed angle rotor (Max 13,000RPM)	VL-AR3
	A1215H	15ml x 12 fixed angle rotor (Max 20,000RPM)	VL-AR4
	A1215HC	15ml x 12 fixed angle rotor for conical tubes (Max 20,000RPM)	VL-AR5
	A650H	50ml x 6 fixed angle rotor (Max 22,000RPM)	VL-AR7
	A650HC	50ml x 6 fixed angle rotor for conical tubes (Max 17,000RPM)	VL-AR8
	A850H	50ml x 8 fixed angle rotor (Max 20,000RPM)	VL-AR9
	A685H	85ml x 6 fixed angle rotor (Max 20,000RPM)	VL-AR10
	A6250H	250ml x 6 fixed angle rotor (Max 12,000RPM)	VL-AR11
	A6500H	500ml x 6 fixed angle rotor (Max 10,000RPM)	VL-AR12
	A41000H	1000ml x 4 fixed angle rotor (Max 8,000RPM)	VL-AR13
	A61000H	1000ml x 6 fixed angle rotor (Max 7,000RPM)	VL-AR14
	Swing Rotor	S4250HE	250ml x 4-wing rotor for rectangular/micro plate buckets (Max 4,000RPM)

## ●●● AVAILABLE ANGLE ROTORS

























<b>Rotor</b>								
	Fixed Angle Rotor : $\angle 45^\circ$ 48 x 0.2ml Radius(mm) : 83.5		Fixed Angle Rotor : $\angle 45^\circ$ 30 x 1.5ml Radius(mm) : 94.8			Fixed Angle Rotor : $\angle 45^\circ$ 48 x 1.5ml Radius(mm) : 94.8		
<b>Item</b>	<b>A480.2H</b>		<b>A301.5H</b>			<b>A481.5H</b>		
<b>Tube</b>								
<b>Volume (ml)</b>	0.2	0.2ml Strips	0.2	0.5	1.5/2.0	0.2	0.5	1.5/2.0
<b>Adaptor / tube rack</b>								
<b>Item</b>	-	-	F1.5A-0.2	F1.5A-0.5	-	F1.5A-0.2	F1.5A-0.5	-
<b>Number per rack / rotor</b>	48	6	30	30	30	48	48	48
<b>Adaptor bore (mm)</b>	6.5	6.5	6.5	8	11.1	6.5	8	11.1
<b>Max. height for use (mm)</b>	-	-	44	50	61	In 51 Out 44	In 62 Out 54	In 70 Out 61
<b>RPM</b>	12,000	12,000	22,000	22,000	22,000	13,000	13,000	13,000
<b>Radius (mm)</b>	83.5	83.5	80.3	86.7	94.8	In 70.3 Out 80.3	In 76.7 Out 86.7	In 84.8 Out 94.8
<b>RCF</b>	13,443	13,443	43,451	46,914	51,297	In 13,283 Out 15,172	In 14,492 Out 16,381	In 16,022 Out 17,912

<b>Rotor</b>								
	Fixed Angle Rotor : $\angle 28^\circ$ 12 x 15ml Radius(mm) : 97.1		Fixed Angle Rotor : $\angle 25^\circ$ 12 x 15ml Conical Radius(mm) : 100.9		Fixed Angle Rotor : $\angle 30^\circ$ 6 x 50ml Radius(mm) : 99.9		Fixed Angle Rotor : $\angle 25^\circ$ 6 x 50ml Conical Radius(mm) : 95.7	
<b>Item</b>	<b>A1215H</b>		<b>A1215HC</b>		<b>A650H</b>		<b>A650HC</b>	
<b>Tube</b>								
<b>Volume (ml)</b>	15(16)		15 Conical		15 Conical	50	15 Conical	50 Conical
<b>Adaptor / tube rack</b>								
<b>Item</b>	-	-	-	-	F50A-15C	-	F50A-15C	-
<b>Number per rack / rotor</b>	12		12		6	6	6	6
<b>Adaptor bore (mm)</b>	18.0		17.0		17.0	29.0	17.0	30.0
<b>Max. height for use (mm)</b>	117		129		122	120	124	121
<b>RPM</b>	20,000		20,000		22,000	22,000	17,000	17,000
<b>Radius (mm)</b>	97.1		100.9		94.3	99.9	91.3	95.7
<b>RCF</b>	43,423		45,122		51,027	54,057	29,499	30,921

• • • AVAILABLE ANGLE ROTORS

<b>Rotor</b>							
	Fixed Angle Rotor : $\angle 30^\circ$ 8 x 50ml Radius(mm) : 103.4		Fixed Angle Rotor : $\angle 25^\circ$ 6 x 85ml Radius(mm) : 99.8			Fixed Angle Rotor $\angle 25^\circ$ 6 x 250ml Radius(mm) : 138.	
<b>Item</b>	<b>A850H</b>		<b>A685H</b>			<b>A6250H</b>	
<b>Tube</b>							
<b>Volume (ml)</b>	15 Conical	50	15 Conical	50 Conical	50	85	250
<b>Adaptor / tube rack</b>							
<b>Item</b>	F50A-15C	-	F85A-15C	F85A-50C	F85A-50	-	-
<b>Number per rack / rotor</b>	8	8	6	6	6	6	6
<b>Adaptor bore (mm)</b>	17.0	29.0	17.0	30.0	29.0	39	62.0
<b>Max. height for use (mm)</b>	123	120	123	122	118	118	126
<b>RPM</b>	20,000	20,000	20,000	20,000	20,000	20,000	12,000
<b>Radius (mm)</b>	97.8	103.4	90.7	94.8	95.3	99.8	138.4
<b>RCF</b>	43,736	46,240	40,561	42,395	42,618	44,631	22,281
<b>Rotor</b>							
	Fixed Angle Rotor : $\angle 25^\circ$ 6 x 500ml Radius(mm) : 158		Fixed Angle Rotor : $\angle 25^\circ$ 4 x 1000ml Radius(mm) : 169.1		Fixed Angle Rotor : $\angle 25^\circ$ 6 x 1000ml Radius(mm) : 198.3		
<b>Item</b>	<b>A6500H</b>		<b>A41000H</b>		<b>A61000H</b>		
<b>Tube</b>							
<b>Volume (ml)</b>	500		500		1,000		
<b>Adaptor / tube rack</b>							
<b>Item</b>	-		-		-		
<b>Number per rack / rotor</b>	6		4		6		
<b>Adaptor bore (mm)</b>	70.0		70.0		98.0		
<b>Max. height for use (mm)</b>	169		169		177		
<b>RPM</b>	10,000		8,000		7,000		
<b>Radius (mm)</b>	158		158		198.3		
<b>RCF</b>	17,664		12,099		10,863		

## ••• AVAILABLE SWING ROTORS

S4250HE	EB250		EBS250							BW250	
											
	S250ET-3-12	S250ET-5-12	S250ET-10-12	S250ET-15-12	S250ET-15C-9	S250ET-50-4	S250ET-50C-3	S250ET-85-2	S250EA-250		
											
											
Swing Out Rotor Max. RPM : 4,000 Radius(mm) : 182.5 Max. RCF : 3,265											
<b>Volume (ml)</b>	3	5	10	15	15 Conical	50	50 Conical	85	250	MTP	DWP
<b>Number per rack / rotor</b>	12/48	12/48	12/48	12/48	9/36	4/16	3/12	2/8	1/4	4/16	1/4
<b>Adaptor bore (mm)</b>	13.2	13.2	16	17.2	17	29.5	29.5	38.5	62.5	-	-
<b>Max. height for use (mm)</b>	124	124	124	124	127	124	127	124	138	-	-
<b>RPM</b>	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
<b>Radius (mm)</b>	177.5	177.5	177.5	177.5	180.7	177.5	180.5	177.5	180.5	153.5	153.5
<b>RCF</b>	3,175	3,175	3,175	3,175	3,232	3,175	3,229	3,175	3,229	2,746	2,746

LAB.SAFETY

CENTRIFUGES

LAB.BASIC

## ECO-FRIENDLY



CRYSTE is striving to preserve the environment by increasing energy efficiency. CRYSTE's refrigerated centrifuge is well-equipped with power saving and shutdown functions which increase the power saving effect.

### Power saving function during Standby

The power can be saved by turning off the screen when there is no operation for a certain period of time while waiting for the use.

### Ending reservation function

For the products with refrigeration function, if the door is closed without turning off the power after use, it maintains already set temperature and waiting time. In case of unexpected long-term standby or a staff does not return to the laboratory, use the shutdown reservation function to shut down the product at a specified time without taking unnecessary steps, which increases energy efficiency and improves product durability.