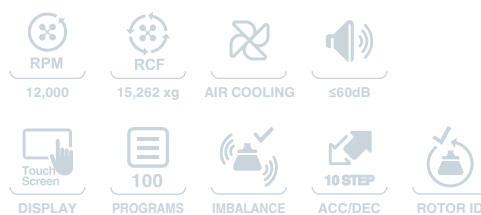




## VARISPIN 12 MULTI CENTRIFUGE

Multi purpose centrifuge with the combined advantage of capacity & space



### ● ● ● STANDARD SPECIFICATION



Max. RPM	12,000RPM(Angle Rotor)	4,500RPM(Swing Rotor)
Max. RCF	16,647 xg	4,381 xg
Max. Capacity	85ml x 6	250ml x 4
Accel / Decel phase	0 ~ 9 (10 Step)	
Noise Level	≤60dB	
Set Time	99 hour 59 min 59sec or continuous	
Time Count	From start / From set-up RPM	
Program	100 memory	
Rotor ID	Automatic Recognition	
Display	4.3" LCD Touch Screen	
RPM Range	400 to 12,000 RPM	
Display message on screen	RPM, RCF, Time, Door open/close, ACC, DEC, Rotor ID, Program	
Available Rotor Quantity	11	
Power Supply	V12-MB	AC 230V ± 10%, 50-60Hz, 1Phase
	V12-MBT	AC 120V ± 10%, 50-60Hz, 1Phase
	V12-MBJ	AC 100V ± 10%, 50-60Hz, 1Phase
Power Consumption	1,3KW	
Dimension(W x D x H)	496 x 657 x 360 mm (H:895mm with open lid)	
Weight (without rotor)	55kg	

## ● ● ● MAIN FEATURE

### ● Wide Range of Application

Various rotor options for multiple purposes 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

### ● Silent Operation

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

### ● Biocontainment Rotor/Bucket Option

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

### ● Space Efficient Design

- Maximized rotor capacity under optimized size
- Cost saving choices for multiple applications

### ● A Variety of Tubes Applicable

- Various sizes of tube are available from 0.2ml to 250ml
- Proper tube adaptors are selectable

### ● 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

### ● Ideal Security

Unauthorized access is prohibited through password

## ● ● ● ORDER INFORMATION

	ITEM	DESCRIPTIONS	ORDER CODE
Main Body	VARISPIN 12	VARISPIN 12, without rotor, 230V/50~60Hz	V12-MB
	VARISPIN 12	VARISPIN 12, without rotor, 110V/50~60Hz	V12-MBT
	VARISPIN 12	VARISPIN 12, without rotor, 100V/50~60Hz	V12-MBJ
Angle Rotor	A480.2T	0.2ml x 48 fixed angle rotor for PCR tubes(x6 PCR strips) (Max 12,000RPM)	V12-AR1
	A301.5T	1.5/2.0ml x 30 fixed angle rotor (Max 12,000RPM)	V12-AR2
	A481.5T	1.5/2.0ml x 48 fixed angle rotor (Max 12,000RPM)	V12-AR3
	A1215T	15ml x 12 fixed angle rotor (Max 12,000RPM)	V12-AR4
	A1215TC	15ml x 12 fixed angle rotor for conical tubes (Max 12,000RPM)	V12-AR5
	A650T	50ml x 6 fixed angle rotor (Max 12,000RPM)	V12-AR6
	A650TC	50ml x 6 fixed angle rotor for conical tubes (Max 12,000RPM)	V12-AR7
	A850T	50ml x 8 fixed angle rotor (Max 12,000RPM)	V12-AR8
	A685T	85ml x 6 fixed angle rotor (Max 12,000RPM)	V12-AR9
Swing Rotor	S4250TE	250ml x 4-wing swing rotor for rectangular/micro plate buckets (Max 4,000RPM)	V12-SR1
	S4250T	250ml x 4-wing swing rotor for round buckets (Max 4,500RPM)	V12-SR2

## ●●● AVAILABLE ANGLE ROTORS













LAB.SAFETY

CENTRIFUGES

LAB.BASIC

<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>A480.2T</b>		<b>A301.5T</b>			<b>A481.5T</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	6.5	8	11
<b>Max. height for use (mm)</b>	-	-	44	52	61	In 51 Out 44	In 62 Out 54	In 70 Out 61
<b>RPM</b>	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
<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	12,928	13,958	15,262	In 11,318 Out 12,928	In 12,348 Out 13,958	In 13,652 Out 15,262
<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>A1215T</b>		<b>A1215TC</b>		<b>A650T</b>		<b>A650TC</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		F50CA-15C	
<b>Number per rack / rotor</b>	12		12		6	6	6	6
<b>Adaptor bore (mm)</b>	19		17		17	29.5	17	30
<b>Max. height for use (mm)</b>	117		129		122	120	124	121
<b>RPM</b>	12,000		12,000		12,000	12,000	12,000	12,000
<b>Radius (mm)</b>	97.1		100.9		94.3	99.9	91.3	95.7
<b>RCF</b>	15,632		16,244		15,182	16,083	14,699	15,407

••● AVAILABLE ANGLE ROTORS

























<b>Rotor</b>	 Fixed Angle Rotor ∠30° 8 x 50ml Radius(mm) : 103.4		 Fixed Angle Rotor ∠25° 6 x 85ml Radius(mm) : 99.8			
<b>Item</b>	<b>A850T</b>		<b>A685T</b>			
<b>Tube</b>						
<b>Volume (ml)</b>	15 Conical	50	15 Conical	50 Conical	50	85
<b>Adaptor / tube rack</b>						
<b>Item</b>	<b>F50A-15C</b>		<b>F85A-15C</b>	<b>F85A-50C</b>	<b>F85A-50</b>	
<b>Number per rack / rotor</b>	8	8	6	6	6	6
<b>Adaptor bore (mm)</b>	17	29.5	17	30	29	39
<b>Max. height for use (mm)</b>	123	120	123	122	118	118
<b>RPM</b>	12,000	12,000	12,000	12,000	12,000	12,000
<b>Radius (mm)</b>	97.8	103.4	90.7	94.8	95.3	99.8
<b>RCF</b>	15,745	16,647	14,602	15,262	15,343	16,067

## ● ● AVAILABLE SWING ROTORS
















LAB.SAFETY

CENTRIFUGES

LAB.BASIC

S4250TE	EB250	EBS250 <sup>1)</sup>								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>Capacity (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

● 1) EBS 250 : certified for dynamic microbiological test(En61010-020) by [TUV NORD](#)

S4250T	B250						
							
	S250T-5-8	S250T-10-7	S250T-15-5	S250T-15C-4	S250T-50-2	S250A-50C	-
							
Swing Out Rotor Max. RPM : 4,500 Radius(mm) : 193.5 Max RCF : 4,381							
<b>Volume (ml)</b>	5	10	15	15 Conical	50	50 Conical	250
<b>Number per rack / rotor</b>	8/32	7/28	5/20	4/16	2/8	1/4	1/4
<b>Adaptor bore (mm)</b>	13.5	16	17.5	17	29.5	30	62.0
<b>Max. height for use (mm)</b>	145	145	145	148	145	150	150
<b>RPM</b>	4,500	4,500	4,500	4,500	4,500	4,500	4,500
<b>Radius (mm)</b>	190.5	190.5	190.5	193.5	190.5	193.5	193.5
<b>RCF</b>	4,313	4,313	4,313	4,381	4,313	4,381	4,381

## CRYSTE FLIP

Modern touching way as in your smart phone,  
Stop reading operating manual  
whenever setting newly.

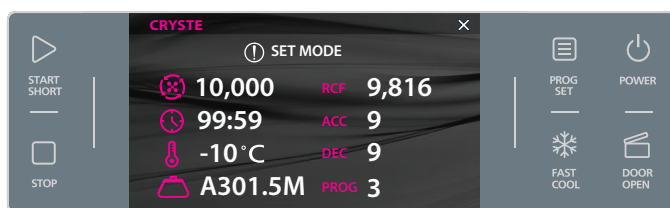


### Applicable model

PURISPIN 18R © VARISPIN 15R © VARISPIN 12R © VELOSPIN 22R © VELOSPIN 12R ©  
PURISPIN 17R © VARISPIN 15 © VARISPIN 12 © VELOSPIN 17R © TERASPIN R-A6 ©



Easy to load the saved program



Easy to check the set value at a time



Easy to recognize the new rotor name

More features optimized for everyday use.

### Setting

- Set for RPM/RCF
- Set for Time
- Set for Temperature (in refrigerated model)
- Set for acceleration / Deceleration
- Activate automatic rotor identification
- Save each program (up to 100 spaces)
- Activate/inactivate touch screen key lock

### Indication icons

- Door status
- Refrigeration status (in refrigerated model)
- Rotor name
- Key lock status
- Enter the set parameter Indication screen

### Alarm Function

- Display alarm message in malfunctioning

### Mode

- Modify user password
- LCD bright level adjustment
- Activate/inactivate buzzer
- Change the time count method
- Activate/inactivate standby mode & adjust standby time
- Activate/inactivate eco shut OFF mode & adjust its time (in refrigerated model)