



TGL-21

BENCHTOP HIGH-SPEED REFRIGERATED CENTRIFUGE

Introduction

TOP INSTRUMENT Benchtop High-speed Refrigerated Centrifuge is a laboratory equipment used for separating components of a liquid or a mixture based on their density. It is commonly used in research labs, medical labs, and industrial settings for applications such as DNA extraction, protein purification, and blood cell separation. It is designed to be user-friendly and easy to operate, with programmable settings and safety features to prevent accidents.

Features

- This machine can be equipped with a variety of angle rotors and horizontal rotors and adapters, suitable for centrifugation of 0.2ml-750ml test tubes/centrifugal bottles and working plates. It is an ideal choice for molecular biology, clinical medicine, inspection and quarantine and other fields.
- Compact structure design, small footprint, saving laboratory space.
- Double lock head, double hydraulic rod design, self-priming silent door lock, safe and reliable.
- The intelligent temperature control system adopts the international first-line brand, and the temperature control is fast and accurate.
- RFID rotor intelligent identification technology can instantly identify the rotor specification, maximum speed, maximum centrifugal force, production date, usage and other information without running it, which is convenient for users to manage the rotor. The number of rotors is not limited, and the system can quickly identify even non-standard customized rotors.
- Using a three-axis gyroscope to monitor the vibration state of the main shaft in real time during operation, it can accurately detect abnormal vibration caused by liquid leakage or unbalanced loading, that is, it will actively stop the machine immediately and activate an unbalanced alarm. Compared with the traditional switch detection, it has better reliability and higher accuracy.
- Adopt maintenance-free variable frequency motor drive, LCD touch screen, easy to operate.
- All steel casing, 316 stainless steel inner cavity, three-layer protective steel sleeve.
- Can store 1000 program groups, and can be password-locked to prevent accidental modification.
- It can store 1000 usage records, which is convenient for users to trace records.
- In addition to locking the host computer with a password, you can also lock the parameters of the program group with a password alone, and the two functions can be used independently without restricting each other.

- It can be set up to 5 stages of step centrifugation to meet the requirements of diversified experiments.
- With curve display function, the operating parameters are intuitively displayed on the screen in the form of curves to monitor the change process and stability of each parameter.
- Countup/countdown optional.
- 40 speed-up and down-speed gears are adjustable. When the speed drops to 500rpm~0, the curve is used to slow down to prevent the sample from reverberating and effectively improve the sample recovery rate.
- Speed/centrifugal force automatic conversion and display on the same screen.
- The volume of the prompt sound can be adjusted.
- Remote switch on and off (optional).
- Standard ECO energy-saving module.

Technical Parameter

Maximum speed	21000 r/min
Max. RCF	30810*g
Maximum capacity	4*750ml (4000rpm)
Speed accuracy	± 10 r/min
Temperature setting range	-20℃ ~ 40℃
Timing range	1min~99H59 min
Noise	≤ 56dB (A)
Power supply	AC 220V 50HZ 15A
Power	1.5KW
Dimensions	600*680*420(L*W*H)mm
Weight	108kg

Rotor Parameter

Rotor	Capacity	Max. Speed	Max. RCF	
No. 1 Angle rotor	12*1.5ml/2.2ml	21000rpm	30810*g	
No. 2 Angle rotor	12*5ml	17000rpm	23460*g	
No. 3-1 Angle rotor	24*1.5ml/2.2ml	16500rpm	26330*g	
No. 3-2 Angle rotor	24*1.5ml/2.2ml (metal cover)	18000rpm	30790*g	
No. 4-1 Angle rotor	12*10ml	15000rpm	20800*g	
No. 4-2 Angle rotor	36*1.5/2.2ml	15000rpm	21760*g	
No. 5-1 Angle rotor	6*50ml (sharp bottom, round bottom)	13000rpm	18420*g	
No. 5-2 Angle rotor	48*1.5/2.2ml	13000rpm	18515*g	
No. 6-1 Angle rotor	4*100ml	11000rpm	13350*g	
No. 6-2 Angle rotor	8*50ml (sharp bottom)	11000rpm	13350*g	
	8*50ml (round bottom)	11000rpm	14030*g	
No. 6-3 Angle rotor	12*15ml	12500rpm	17240*g	
No. 7 Enzyme labeled horizontal rotor	2*3*96 holes	4000rpm	1970*g	
No. 8 Horizontal rotor	4*250ml	4500rpm	3720*g	
	Optional Adapter	8*50ml	4500rpm	3720*g
		20*15ml		
		36*10ml		
		40*7ml vacuum tube		
48*2~7ml vacuum tube	4000rpm	3100*g		
64*2~7ml vacuum tube				
No. 9 Horizontal rotor	4*500ml	4200rpm	3550*g	
	Optional Adapter	16*50ml	4200rpm	3550*g
		36*15ml		
	76*2~7ml vacuum tube			

No. 9 Horizontal rotor	Swinging Rectangular Bucket Rotor	20*50ml	4200rpm	3550*g
		40*15ml		
		80*10ml vacuum tube		
		112*2~7ml vacuum tube		
	100*1.5ml			
	Pendant	148*5ml Release tube		
	96*2~7ml vacuum tube			
	Enzyme labeling plate rack	4*2*96 holes		
No. 10 Horizontal rotor	4*750ml		4000rpm	3500*g
	Optional Adapter	12*100ml	4000rpm	3500*g
		20*50ml		
		56*15ml		
96*2~7ml vacuum tube				
No. 11 Angle rotor	6*100ml		10000rpm	12060*g
No. 12 Angle rotor	8*15ml		14500rpm	18570*g

Rotor Details

NO.T. 012.001.5/002.2A		NO.T. 012.005A		NO.T.40.015H	
NO.T. 024.001.5/002.2A		NO.T. 024.001.5/002.2A (metal cover)		NO.T.80.010H	
NO.T. 012.010A		NO.T. 036.001.5/002.2A		NO.T.112.2.7H	

NO.T.006.050A Pointed bottom		NO.T.006.050 Around bottom		NO.T. 100.001.5H	
NO.T. 048.001.5/002.2A		NO.T.004.100A		NO.T.148.005H	
NO.T.008.050A Around bottom		NO.T.008.050A Pointed bottom		NO.T.96.2.7H	
NO.T.012.015A		NO.T.02.03.96H		NO.T.04.2.96H	
NO.T.04.250H		NO.T.08.050H		NO.T.04.750H	
NO.T.20.015H		NO.T.36.010H		NO.T.12.100H	
NO.T.40.007H		NO.T.48.2.7H		NO.T.20.050H	
NO.T.64.2.7H		NO.T.04.500H		NO.T.56.015H	
NO.T.16.050H		NO.T.36.015H		NO.T.96.2.7H	
NO.T.76.2.7H		NO.T.20.050H		NO.T.06.100A	
NO.T.08.015A					