CENTRIFUGAL CONCENTRA

LAWSON_Chou
WhatsApp

Product Introduction

Vacuum centrifugal concentration is a process of evaporating solvent to concentrate or dry biological (or non-biological) samples. This method combines centrifugal force, vacuum, and heating to rapidly evaporate the solvent from the sample, thus achieving the purpose of centrifugal concentration of the sample.

Operating Principle

Vacuum centrifugal concentration is a process of evaporating solvent to concentrate or dry biological (or non-biological) samples. This method combines centrifugal force, vacuum, and heating to rapidly evaporate the solvent from the sample, thus achieving the purpose of centrifugal concentration of the sample.

The vacuum pump creates a high vacuum state inside the entire system, lowering the boiling point of the solvent and speeding up the concentration process. Solvent vapor is removed from the centrifuge chamber by the vacuum pump. The pumping speed of the vacuum pump limits the concentration rate, so an efficient cold trap is needed to effectively condense the solvent vapor before it reaches the vacuum pump. The cold trap rapidly condenses the solvent vapor before it reaches the vacuum pump, maintaining the vacuum level of the entire system, thereby accelerating the concentration rate and protecting the vacuum pump from solvent vapor corrosion.

Application Range

- DNA/RNA research, biochemistry, biological analysis, life sciences, molecular biology;
- Immunoassay screening, food safety, residue analysis, environmental testing, academic research;
- Forensic medicine, drug analysis, high-performance liquid chromatography (HPLC), efficient liquid phase chromatography, synthesis and separation of organic substrates;
- Toxicology identification, forensic identification;
- Solid phase extraction (SPE), general laboratory concentration, etc.

Product Features

○ Magnetic Suspension Motor:The motor starts almost noiselessly with smooth operation and requires no maintenance.

○ User-Friendly Design

One-button operation, safe and convenient; the control panel (touch screen/buttons) allows setting centrifugation speed, run time, heating temperature, and real-time display of parameters such as vacuum value.

○ Low Loss

Ultra-low temperature concentration ensures sample safety with minimal cross-contamination and loss (vacuum ports are designed in the middle of the centrifuge chamber, preventing liquid splashing and contamination).

○ High Throughput:Large capacity, capable of processing dozens to hundreds of samples simultaneously, suitable for concentrating large batches of small volume samples.

○ Centrifugal Imaging Function:Allows observing sample concentration without stopping the machine.

○ Practical Rotors:Multiple practical rotor options with various capacities available for use in different research fields.

○ High Efficiency, Adjustable Temperature

Characterized by high concentration efficiency and retention of sample activity. Temperature can be adjusted to ensure safe and effective concentration of various samples.

○ High Safety:Equipped with a new electromagnetic drive system and corrosion-resistant materials to ensure safe operation.

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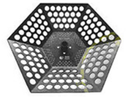
Optional Configuration

Cold trap: -50°C-65°C -70°C-110°C

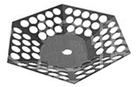
Oil pump

Corrosion resistance

Related Accessories



132x2ml/132x1.5ml



72x5ml

12x10ml/12x15ml

60x4ml Sample vial

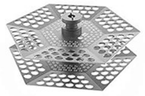
32x8ml Sample vial

28x(10ml~15ml)

6x50ml

8x50ml

Microplatex2



90x2mlx2

4x250ml

8x100ml

Technical Parameters

Model	LAWSON-CC-A	LAWSON-CC-AL	LAWSON-CC-B	LAWSON-CC-C	LAWSON-CC-D	LAWSON-CC-E	LAWSON-CC-EL	LAWSON-CC-F
Name	Basic model	Touch screen	Freezer version	Standard version	Ultra-low temp	Acid and alkali resistant version		All-in-one
Features	Fully automatic vacuum control system		Low-temp concentration	External vacuum pump (optional internal vacuum)	Cold trap temp can reach -110°C	designed to withstand acid, alkali, and organic solvents		Built-in vacuum pump and cold trap
Temp Control	Ambient temp~100°C		-10°C~100°C	Ambient temp~100°C		-10°C~100°C		temp~100°C
Max Centrifugal	550xg							
Sample Vial	604ml / 328ml sample vials / 1321.5ml / 1322ml / 725ml / 1210ml / 1215ml / 650ml / 850ml / 902ml228(10ml-15ml) /							
Rotor	8100ml / 4250ml and other types of rotors are available for selection (customizable)							
Cold Trap	Ultra-low temperature (-110°C), other conventional cold traps -50°C/-65°C/-70°C optional							
Ultimate Vacuum	⩽0.3mbar							
Timing Range	0-99h59min							
Centrifugal Image	Yes							
Max Speed	100-2000r/min							
Power Supply	AC220V 50/60Hz 10A							
Noise Level	65dB							
Vacuum Pump	Optional (variable frequency diaphragm/dual-stage rotary vane)							
Program Groups	Up to 48 program groups can be set, and up to 8 program groups can be selected simultaneously for gradient setting							