



CHROMATOGRAPHY BCHR-105

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ION CHROMATOGRAPHY

Chromatography is a technique that enables the separation, identification, and purification of the components of a mixture for qualitative and quantitative analysis. Our extensive range offers a variety of products like Gas, Ion and Portable Ion chromatography products to meet all separation needs, including improved resolution, enhanced sensitivity, faster analysis and consistent performance.



Cation and anion dual-channel system, with both channels operating independently without disturbing each other and cations and anions being detected simultaneously.

Eluent thermal buffer system in which eluent enters into the columns after preheated, to avoid bubbles generated from rapid heating.

Intelligent flow path mode, one-key operation to complete flow path switch, automatic cleaning to save time and labor.

Built-in low-pressure degassing technology to eliminate bubble interference for more stability.

The world's leading full-range series of chromatographic columns able to detect ions with varied compositions.

Excellent performance to support all your applications. Ion Chromatographic Pump:

SPECIFICATIONS

Model	BCHR-105
Ion Chromatographic Pump	
- Pressure Display Accuracy	≤ 0.1 MPa
- Maximum Pressure	35 MPa (PEEK)
- Flow Range	0.001 ~ 9.999 mL/min
- Resolution of Flow Rate	0.001 mL
- Flow Precision	< 0.1%
- Flow Accuracy	< 0.1%
- Pressure Pulse	$\leq 0.5\%$
- Flow Stability	(0.2-0.5) mL/min $\leq 3\%$; (0.5-1.0) mL/min $\leq 2\%$; >1.0 mL/min $\leq 2\%$
Numerical-control and Electromagnetic Sample Injector	
- Power Supply	24 V (DC)
Column Heater	
- Operating Temperature Range	+20°C~60°C (68~140°F)
- Controlling Temperature Accuracy	$\pm 0.01^\circ\text{C}$
- Allowable Deviation of Column Heater's Temperature	$\pm 1^\circ\text{C}$
- Temperature Stability	$\leq 0.05^\circ\text{C/h}$
Conduction Detection System	
- Cell Volume	$\leq 0.8\mu\text{L}$
- Detection Mode	Bipolar conductivity detection
- Detection Range	0~50000 $\mu\text{S/cm}$
- Detection Resolution	$\leq 0.0020\text{nS/cm}$
- Output Voltage	-6000~+6000 mV (adjustable)
- Electronic Noise	0.02 nS
- Baseline Noise	$\leq 0.001 \mu\text{S/cm}$
- Baseline Drift	$\leq 0.02\mu\text{S}$
- Linear Range	$\geq 10^3$

- Instrument Linearity	≥0.999
- Quantitative Repeatability	≤1.0%
Thermal Buffer System of Eluent	
- Qualitative Repeatability	≤1.0%
- Thermal Buffer System of Eluent	Before entering the column, the eluent is preheated to stabilize baseline and improve analysis efficiency.
- Temperature Range	25~40°C (77~104°F)
Built-in and Low-pressure Degassing Device	
- Vacuum Degree	-70 kPa
- Maximum Flow Rate	10 mL/min
- Internal Volume	30 µL
- Degassing Efficiency	10 mL/min 90%
Flow System	
- Six-way Valve	PEEK material, pressure 5000 psi; Independent automatic collecting and flow function.
Built-in Eluent Generator	
- Eluent Types	KOH/MSA
- Eluent Concentration Range	0.1-120 mM
- Concentration Increment	0.1 mM
- Flow Rate Range	0.1-5.0 mL/min
- Minimum Pressure	5 MPa
Suppressor	
- Type	Self-Regenerating electrolytic micro-membrane suppressor
- Dead Volume	<50 µL
Other Specifications	
- Dimension (LxWxH)	500x500x760 mm
- Net Weight	48 kg
- Gross Weight	73 kg
- Power	350 W
Alt Name	Ion Chromatography

FEATURES

Cation and anion dual-channel system, with both channels operating independently without disturbing each other and cations and anions being detected simultaneously.

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Built-in low-pressure degassing technology to eliminate bubble interference for more stability.

The world's leading full-range series of chromatographic columns able to detect ions with varied compositions.

Excellent performance to support all your applications. Ion Chromatographic Pump: Type - High-pressure and low-pulse two-piston tandem advection pump

Numerical-control and Electromagnetic Sample Injector: Contact Material of the Rotor - PEEK

Numerical-control and Electromagnetic Sample Injector: Control Mode - By Stepper motor

Conduction Detection System: Type - Temperature control and bipolar conductivity detector.

APPLICATIONS

Food Testing, Chemical Industry, Beverage Testing, Drug testing, Forensic Science, Pharmaceutical, Molecular Biology, Medical, Research, Laboratory.



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