

# DW-CIC-D160 Ion Chromatograph

## TECHNOLOGY INDEX

### ● Ion Chromatographic Pump

Pressure range: 0~35 MPa

Volume of flow range: 0.001~9.999 mL/min

Pressure Display accuracy:  $\leq 0.1$  Mpa

Volume of flow accuracy (setting error):  $RSD \leq 0.1\%$

Over pressure and leak protection: It will give an alarm and stop working in these situation.

### ● Digital Temperature-control detection system

#### 1. Conductivity Detector

Structure: Bipolar Conductivity Detector

Detection Mode: Double conductivity detection

Conductance cell size:  $\leq 0.8\mu\text{l}$

Output voltage: -5000~5000 mV (to regulate)

Measure range: 0~100000  $\mu\text{S}/\text{cm}$  (10 level to choose)

Resolution :  $\leq 0.0020$  ns

Conductance cell temperature: 5~60°C(to regulate)

Constant temperature accuracy:  $\pm 0.01^\circ\text{C}$

Baseline noise:  $\leq 0.1\%FS$

Baseline drift:  $\leq 0.3\%FS$

#### 2. Flow System

The whole plastic pipeline: made of PEEK materials

Six-way valve: Rheodyne electromagnetic six-way valve made in America, compression resistance of 7000 psi. Collect signals automatically.

#### 3. Built-in low-pressure degassing device

Degree of vacuum: -70kPa

Inner volume: 300ul

Organic tolerance: 100%

Maximum flow rate: 10 mL / min

Degassing efficiency: degassed at 1.0mL 90%

Degassing volume: 7.5 mL

#### 4. Built-in eluent generator

Type of eluent: KOH / NaOH

Eluent concentration range: 0.1-100mM / L

Concentration increment: 0.1 mM

Flow rate range: 0.1-3.0ml / min

Maximum operating pressure: 20MPa

Minimum operating pressure: 5MPa

### 5、Analytic Capability

For high capacity anion column, pH 0~14, compatible organic solvent, etc. can be analyzed at the same time with one injection.

For high capacity cation column, lycine, ,Choline chloride can be separated and analyzed.

Different types of detectors can detect several transition metallic ions, heavy metallic ions and special ions.

qualitative repeatability:  $\leq 0.5\%$  ( $\text{Cl}^-$ ,  $\text{Na}^+$  )

quantitative repeatability:  $\leq 1.0\%$  ( $\text{Cl}^-$ ,  $\text{Na}^+$ )

Linear range:  $\geq 10^3$

Minimum concentration of detection:  $\text{Cl}^- \leq 0.0005 \text{ ug/ml}$ ,  $\text{BrO}_3^- \leq 0.001 \text{ ug/ml}$ ,  $\text{Li}^+ \leq 0.001 \text{ ug/ml}$