

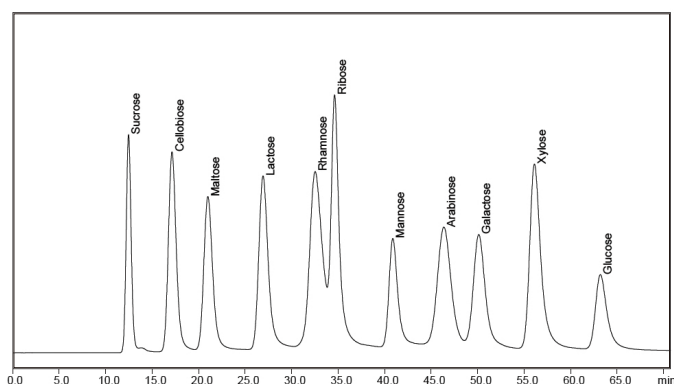
Chemical Reaction Box for Liquid Chromatograph

CRB-40

- Excellent temperature stability
- Supports data integrity
- Reliable analysis with dedicated application systems



The post-column derivatization method is used to selectively detect the target component in a sample containing a large amount of contaminants and to improve sensitivity. The CRB-40 is a reactor compatible with a variety of post-column reaction conditions with temperature settings up to 150°C. Excellent temperature stability contributes to stable post-column reactions and improves the reliability of quantitative values. The CRB-40 is simple to operate with LabSolutions and data integrity is supported through temperature and operation logging.



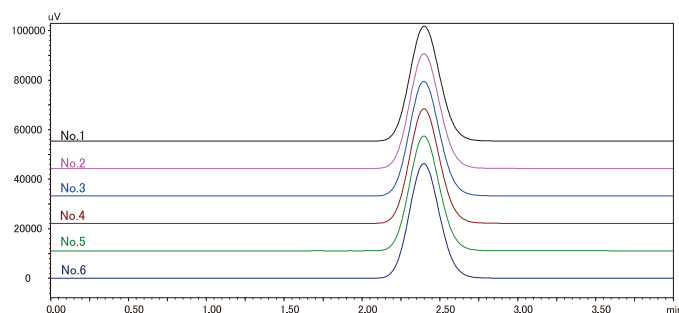
Analysis of reducing sugars (borate complex-anion exchange mode)



Reducing Sugar Analysis System

Superior temperature stability ensures analytical reliability

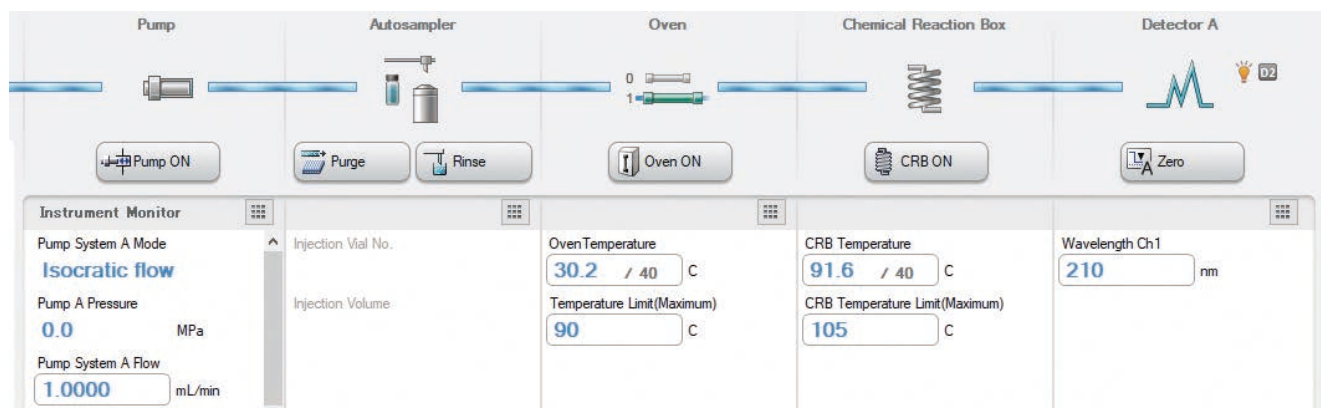
The high-precision temperature control mechanism allows stable analysis independent of temperature changes in the lab. Fluctuations in the baseline and quantitative values are suppressed to ensure analytical reliability.



Data name	Retention time	Area
No.1	2.399	637,418
No.2	2.398	637,388
No.3	2.397	636,482
No.4	2.398	636,253
No.5	2.397	636,415
No.6	2.397	636,437
Average	2.398	636,732
%RSD	0.04	0.08

With respect to an aqueous solution of D-glucose (1 μmol/mL), the reproducibility of the peak area value in 6 consecutive analyses was 0.08%, satisfying the reference value of under 3%.

Supports data integrity



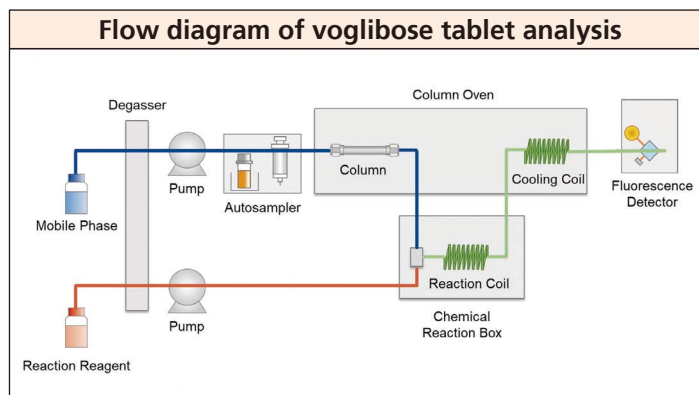
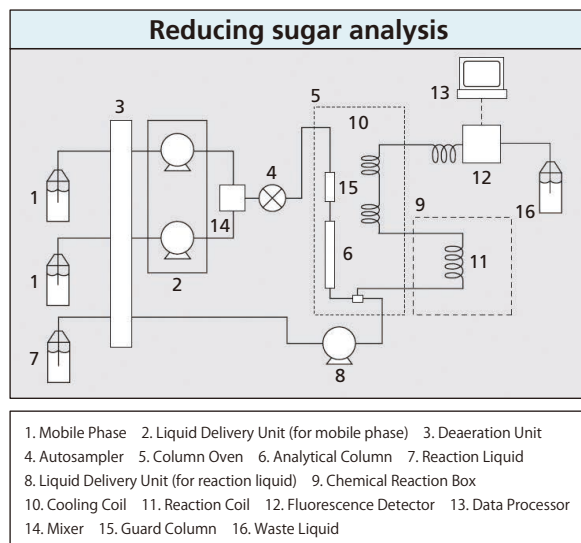
Parameters related to separation and detection (LC) and the temperature of the chemical reaction box are managed by the same method using LabSolutions. The whole workflow from device startup to shutdown can be carried out through LabSolutions.

The analysis method, operation log, and equipment status are managed as one, linked through the analysis results. The system including the reactor is designed to ensure data integrity.



Dedicated application systems with the CRB-40

Specialized systems for various post-column derivatization reactions are available.



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