

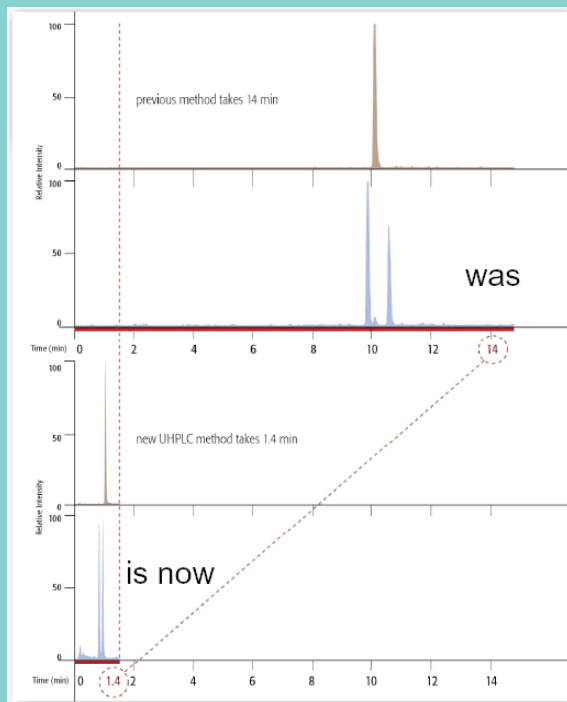
4x Ultra

LC-MS Pump



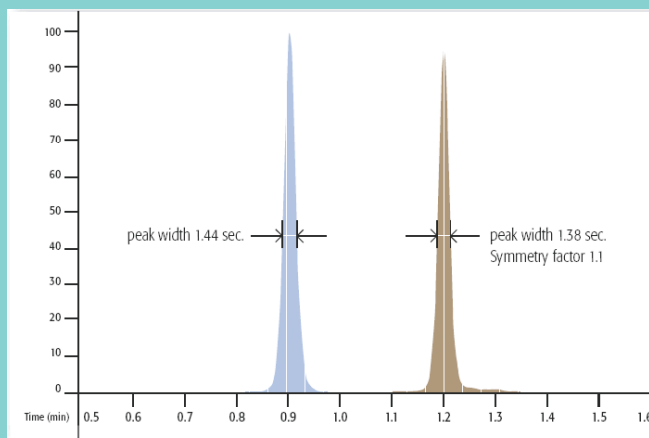
Ultra High Pressure Chromatography Pump Up to 14,500 psi

- Increased Throughput, Up to a 10 Fold increase in Productivity can be Achieved
- Run Time Reduction Leads to Savings in Solvent
- Resolution Aids Identification by Removing Co-Elution
- Controlled by Analyst™, Xcalibur™ and LEAP Shell™

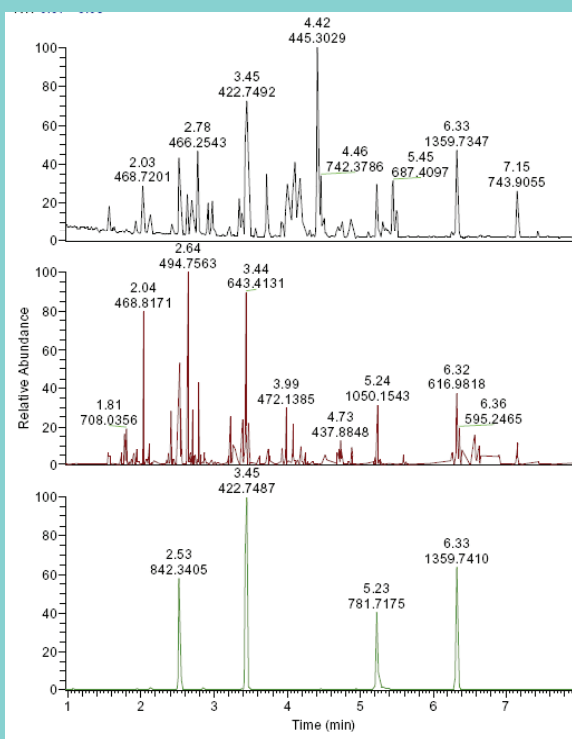


Reduction of Run Time While Maintaining the Separation

High Resolution Gives Efficient Separations



Small Particles Used in UHPLC Give Narrow "GC" Like Peaks (Shown Above)



Narrow Peaks Allow Baseline Separations of Complex Mixtures



LEAP Shell Compatible

Facilitates integration with Analyst™, ChemStation™, Xcalibur™ and CTC PAL for dual channel LC-MS and other "just-in-time" Sample Prep Workstations

| Package Details and Benefits | |
|--|----------|
| Analyst™ & Xcalibur™ instrument drivers | Included |
| Quaternary solvent delivery system | Included |
| Built-in 4 channel degasser | Included |
| Wide flow rate range | Included |
| Reproducible, rapid and precise gradients | Included |
| Extremely low solvent pressure pulsation | Included |
| Normal and Ultra High Pressure (14500 psi) pumping | Included |
| Bio-compatible liquid flow path | Included |
| Open pump architecture | Included |
| Ultra low dead volume | Included |

Specifications

Low pressure or high pressure gradient formation
Gradient delay volume 70µL

Flow accuracy +/- 1% @ 500 bar (7,250 psi)
Flow precision <0.2% RSD @ 200µL/min methanol
Flow range 0.1 - 1000µL/min

Gradient flow range, without splitter (10µl to 1000µl/min with high pressure option)
Maximum pressure 1000bar (14500 psi)
Wetted surfaces sapphire (ruby), zirconia, titanium, PTFE, PEEK
Residual pulsation <1% @ 500-1000 bar

Gradient composition
Accuracy +/- 1% absolute
Precision +/- 0.2% absolute
Gradient capability

Dimensions: 17.5 x 35.5 x 38 cm (HxWxD)
Weight 15.6 kg

Communication:
RS-232 or USB; Remote inputs:
Run/stop, analog
Flow rate control
4 digital outputs,
2 digital inputs:
Ready, run, timed events
Analog Pressure Signal

Software: Janeiro 2.4, CNS, LEAP Shell™

Computer requirements:
PC with Windows2000™ or WindowsXP™

Specifications are subject to change without prior notice