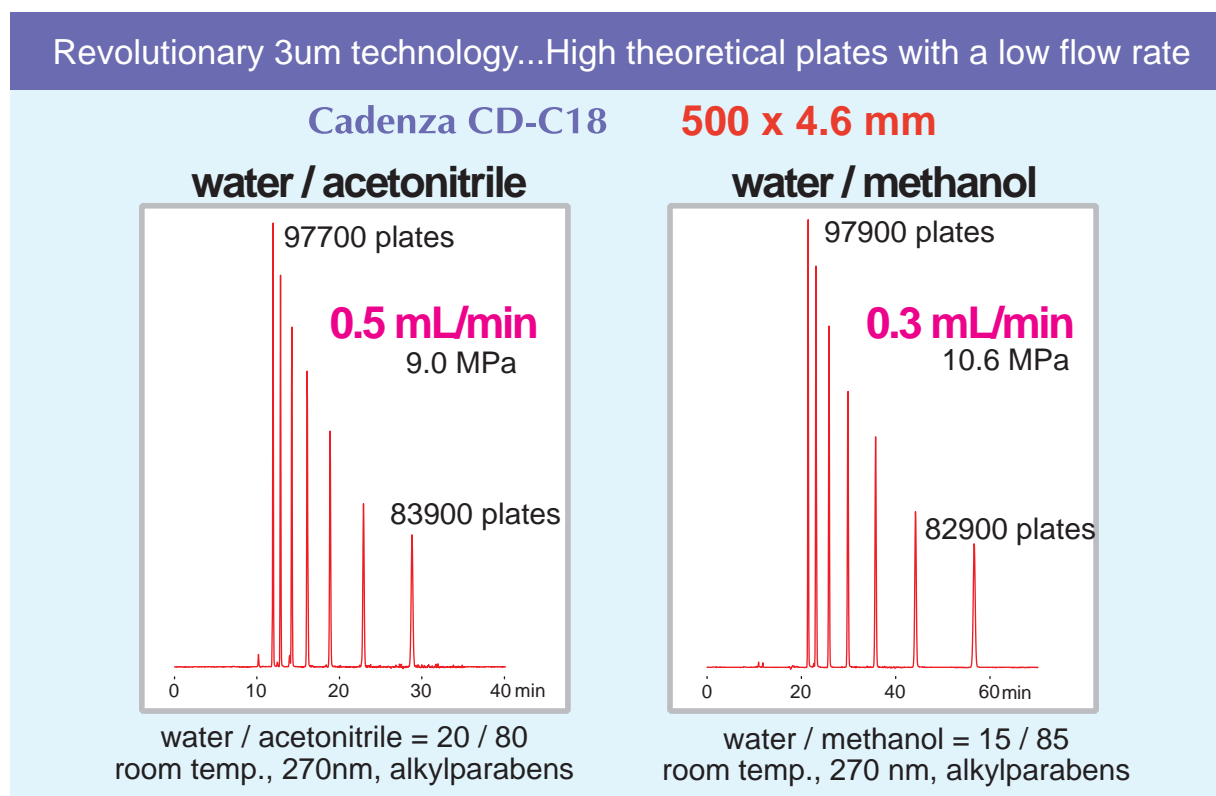


Cadenza CD-C18

500 x 4.6 mm

Technical

Relationship between Flow Rate and Theoretical Plates on a 100,000 Plates Column



Cadenza CD-C18 500 x 4.6mm is a high-efficiency column offering 100,000 plates per column in resolution. Researchers typically use a flow rate of 1mL/min with a 4.6mm I.D. column. In many cases with a 3 μ m particle, this results in high pressure and difficulties for researchers. For that reason, it is necessary to lower the flow rate when using our 500mm column.

The above data demonstrates that this column can achieve high-efficiency even with a low flow rate. The flow rate for acetonitrile is set at 0.5mL/min while the methanol is set at 0.3mL/min. Even with this extremely low flow rate, more than 80,000 plates per column is achieved.

The 3 μ m 500mm column offers greater efficiency than connecting two 250mm columns. By employing a lower flow rate, you can achieve the precise separation unavailable from other columns on the market today. This is especially useful for difficult separations such as that of structural isomers and multiple compounds.