

## Choosing Column Formats



### Column Length

Shorter columns offer faster run times. Longer columns offer greater resolution. 10-50mm length is recommended for fast separations, method development. 150mm length is recommended for general separations. 250mm length is recommended for high resolution separations.

### Column i.d.

The standard column i.d. is 4.6mm. Narrower columns allow smaller sample sizes, and reduce mobile phase flow rates. Wider columns allow for larger sample sizes and minimize the system's dead volume.

### HPLC Column Formats

Vertical offers HPLC columns in several different formats for different applications.

**A. Analytical Columns** – 50 to 300mm lengths, 4.6mm i.d.

**B. Short Columns** – 10 or 50mm lengths, 4.6mm i.d.

**C. Narrow-Bore Columns** – 50 to 300mm lengths, 3.0mm i.d.

Smaller i.d. significantly reduces solvent usage. Compatible with both APCI and ESI.

**D. Capillary and LC/MS Columns** – 50 to 300mm lengths, 150 $\mu$ m-2.1mm i.d.

Small-bore columns compatible with LC/MS instrumentation.

**E. Preparative Columns** – 50 to 300mm lengths, 7-50mm i.d.

High volume and mass loading capacity.

**F. PEEK Columns** – 50 to 300mm lengths, 2.1, 4.6mm i.d.

Complete Bio-compatibility and IC applications

**G. Guard Cartridges** – 7.5mm length 2.1, 3.2, 4.6mm i.d.

The Guard System has disposable cartridges for quick and easy replacement.