

## Short Microbore HPLC Columns

### Applications:

- LC-MS
- Ballistic gradients
- Desalting
- Trap column
- Trace enrichment
- Microbore Guard

### Unique Features:

- Tested and supplied with CofA
- PEEK/Titanium construction
- 6-32 threads for capillary fittings
- High performance

### Standard Sizes:

- 10 x 1.0mm
- 5 x 1.0mm
- 2.5 x 0.5mm

The *Piccolo* family of microbore HPLC columns is a unique high performance product for LC-MS and other high-speed, small volume applications. These efficient columns are the only products of their type that are individually tested. A *Certificate of Analysis* accompanies each column.

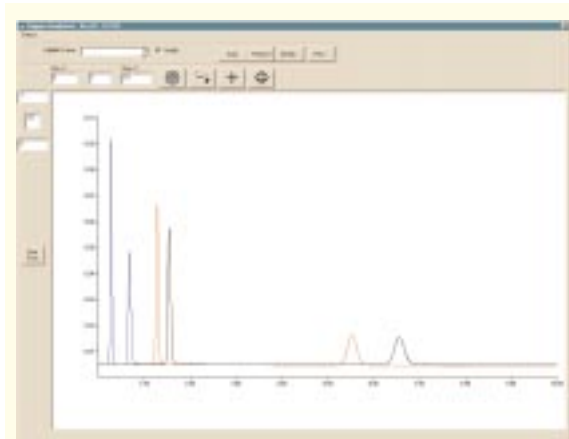
In addition to analytical microbore applications *Piccolo* columns are ideal guards for protecting longer microbore HPLC columns as illustrated below.



10x1.0mm *Piccolo* being used as a guard column for a 50x1.0mm analytical microbore column.



*Piccolo* column void volumes range from approximately 5µl to 300nL, making them perfect for a wide variety of trapping, desalting, and trace enrichment applications. These small columns can be conveniently used with micro injection and switching valves as pictured above.



10x1.0mm *Piccolo* Column performance as an Analytical Column and as a Guard Column.

Blue Trace: 10x1mm Targa C18 5µm *Piccolo* Guard Column alone

Red Trace: 50x1mm TARGA C18 5µm Analytical Column

Black Trace: 10x1mm Guard coupled to 50x1mm Analytical Column

Peak #1: Dimethyl Phthalate

Peak #2: Fluorene

60% MeCN/water, 50µL/min

System Variance ~6µL<sup>2</sup> at 50µL/min

## Piccolo Ordering Information



**TARGA C18 5 $\mu$ m - *Piccolo***  
10 x 1.0mm  
TP-0101-C185

5 x 1.0mm  
TP-M501-C185

2.5 x 0.5mm  
TP-M2M5-C185



**CLIPEUS C18 5 $\mu$ m - *Piccolo***  
10 x 1.0mm  
CP-0101-C185

5 x 1.0mm  
CP-M501-C185

2.5 x 0.5mm  
CP-M2M5-C185



**HAISIL HL C18 5 $\mu$ m - *Piccolo***  
10 x 1.0mm  
LP-0101-C185

5 x 1.0mm  
LP-M501-C185

2.5 x 0.5mm  
LP-M2M5-C185

For more information about Higgins Analytical Products, please ask us or your local distributor for our catalog. It can also be downloaded from our web site [www.higanalyt.com](http://www.higanalyt.com)



*Higgins Analytical Products are sold and supported by distributors worldwide:*



**Higgins Analytical, Inc.**

*Expert Manufacturer of HPLC Consumables*

1235 Pear Ave, Suite 105, Mountain View, CA 94043

Phone: 650-988-8930 or 800-988-6889

Fax: 650-988-8931 or 800-988-6881

e-mail: [hplc@higanalyt.com](mailto:hplc@higanalyt.com)

Please visit our web site: [www.higanalyt.com](http://www.higanalyt.com)