

opti-guard[®] guard columns

The column is the heart of any liquid chromatography system and remains the most problematic component. HPLC columns accumulate retained material which can dramatically reduce longevity and cause costly downtime costs resulting from premature column failure and troubleshooting efforts.

why use a guard column?

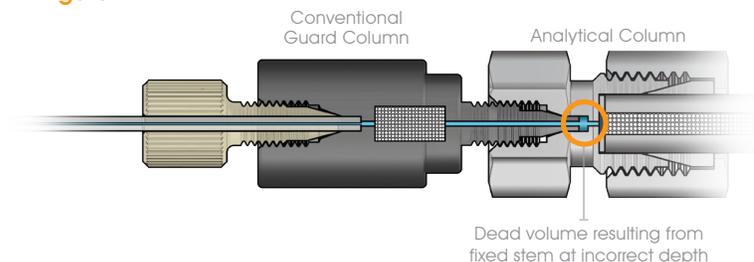
The best way to protect an analytical column from fouling is to install a guard column between the injection valve and the analytical column. The guard column traps particulates, solvent impurities, and retained sample components. The ideal guard column should have no effect on the separation. In order to achieve this, a guard column with matching bonded phase and optimal hardware configuration should be selected.



extra column volume

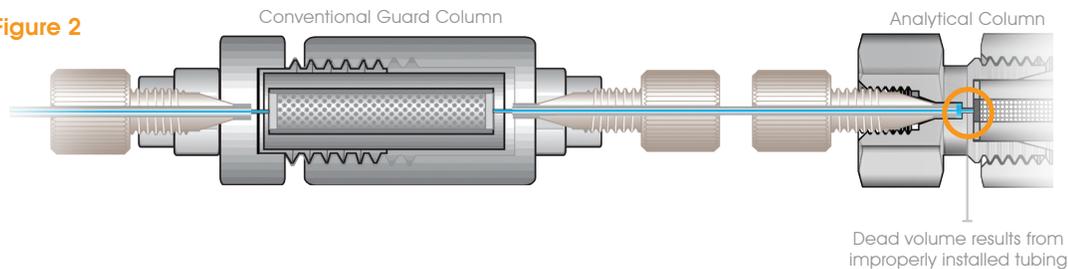
The ever-changing needs of HPLC applications such as smaller bed-volume columns, higher pressures, and increased sensitivity raise new demands on guard columns today. Many guard column manufacturers overlook the dead volume that results when a guard column or holder is connected to the analytical column. The use of pre-swaged or one piece nut and ferrule designs with fixed tube stems will increase extra column volume (shown in blue) and affect column efficiency (Figure 1).

Figure 1

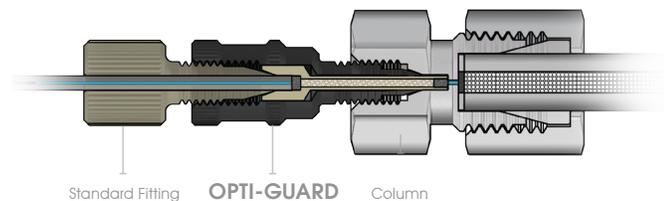


In addition, other cartridge-style guard column systems require extra connections and tubing, adding to extra column volume and decreasing your system's overall performance. (Figure 2)

Figure 2



Floating tube stem provides ZDV connection into any port.



opti-guard[®] 3mm

Opti-Guard sets the standard for low impact, easy to use pre-column protection. Designed for use with analytical (4.6, 3.0 mm i.d.) and narrow-bore (2.1, 1.0 mm i.d.) columns, the patented floating stem design automatically adjusts to any manufacturer's tube stop depth for a zero-dead-volume connection every time. The best part? It's no larger than a standard fitting.

Connecting the Opti-Guard requires no extra tubing or tools, maintaining the minimal impact philosophy that has made the Opti-Guard line so popular. As always, custom packing is available.

opti-guard[®] 1mm

The Opti-Guard 3 mm maintains the tool-free connectivity of the 1 mm, but incorporates a cartridge-based format to allow for a larger bed with more capacity. The two-part holder is designed for use with any analytical column to provide vital protection from dirty samples and strongly retained contaminants. An auto-adjusting stem conforms to any tube stop depth for a perfect zero-dead-volume connection.

OPTI-GUARD 1mm Guard Column

10-02-00007	C18, 5/Pk
10-02-00010	C8, 5/Pk
10-02-03211	C4, 5/Pk
10-02-00014	Silica, 5/Pk
10-02-00018	Phenyl, 5/Pk
10-02-00022	Cyano/CN, 5/Pk
10-02-00026	Amino/NH ₂ , 5/Pk
10-02-00030	Anion Exchange, 5/Pk
10-02-00034	Cation Exchange, 5/Pk
10-02-01714	Method Development Kit (Assorted 5/Pk)
10-02-03463	Custom Packed, 5/Pk

OPTI-GUARD 1mm Biocompatible Guard Column

10-02-03532	Biocompatible C18, 5/Pk
10-02-03680	Biocompatible Anion Exchange, 5/Pk
10-02-03683	Biocompatible Cation Exchange, 5/Pk
10-02-03534	Biocompatible Silica, 5/Pk

OPTI-GUARD 3mm Guard Column Cartridges

10-02-01482	C18 Guard Column Cartridge, 5 μ m, 3/Pk
10-02-01485	C8 Guard Column Cartridge, 5 μ m, 3/Pk
10-02-01494	C4 Guard Column Cartridge, 5 μ m, 3/Pk
10-02-01491	Silica Guard Column Cartridge, 5 μ m, 3/Pk
10-02-01488	Amino/NH ₂ Guard Column Cartridge, 5 μ m, 3/Pk
10-02-03050	Cyano/CN Guard Column Cartridge, 5 μ m, 3/Pk

OPTI-GUARD 3mm Guard Column Holder

10-02-01495	OPTI-GUARD 3 mm PEEK/Stainless Steel Holder
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