

How to Select a Guard Column

Guard columns are installed between the injector and the analytical column of a HPLC system, mainly to protect analytical columns. Guard columns are widely used as a cost effective for prolong HPLC column life. Exchangeable cartridge design and unchangeable packing design are offered.

Exchangeable cartridge design contains holder and cartridge column, and the cartridge columns are disposable, easy-to-use, and you can change the guard column in seconds.

Packed design is packed as same as analytical column, using as a guard column.

| Guard column design | Description | Compatible analytical columns' I.D. | Guard columns' length |
|-------------------------------|---|-------------------------------------|---|
| Exchangeable Cartridge design | Cartridge Guard Column E First choice for Guard Column | 1.0 - 1.5 mm 2.1 - 4.6 mm | 10 mm 10, 20 mm |
| | Cartridge Guard Column Ei Guard column with PEEK inlet and outlet | 1.0 - 3.0 mm | 10 mm |
| | UHPLC Guard Column For high speed, high efficiency separations | 1.0 - 3.0 mm | 10 mm |
| | SILFILTER STD C18 Almightily for various ODS columns | 3.0 - 4.6 mm | 10 mm |
| | GL-Cart Guard Column Direct-Connection and Indirect-Connection designs with economic cost | 4.0, 4.6 mm | 5 mm |
| Unchangeable packed design | Packed Guard Column Packed as same as analytical column | 1.0 - 4.6 mm | 33, 50 mm |
| | Packed Mini Guard Column Short length type of packed guard column | 4.0, 4.6 mm | 10 mm |
| | Preparative Guard Column Guard columns for preparative columns | 6.0 - 100 mm | 50 mm 75 mm (for 50 mm I.D.) 100 mm (for 100 mm I.D.) |

How to Select a Packing Material

When selecting the packing material for the guard columns, we recommend to choose the same with analytical columns'. However, SILFILTER STD C18 is a monolithic guard column, it can fit different kinds of ODS columns.

How to Select Dimensions

- Particle size : To not alter the chromatography of the analytical column, the packing of the guard column should be the same as the analytical column.
- Inner diameter : Choose a guard column with an internal diameter similar to the analytical column internal diameter.

Connectors

Universal self-adjusting connector – Column Coupler, using for when connect guard columns and analytical column.



Pre-column Coupler W (PCTFE)



Pre-column Coupler SUS