

High Performance Packed Column for HPLC

CoreFocus

Shim-pack Scepter™ Guard column (for analysis)

INSTRUCTION MANUAL

■ Introduction

Shim-pack Scepter Guard column (for analysis) is cartridge-type guard column filled with high pressure packing materials. Please read the following instructions before use.

■ Operating Precautions

Check if anything is missing or damaged. If there are any signs of damage, notify your local Shimadzu representative at once.

■ Specifications

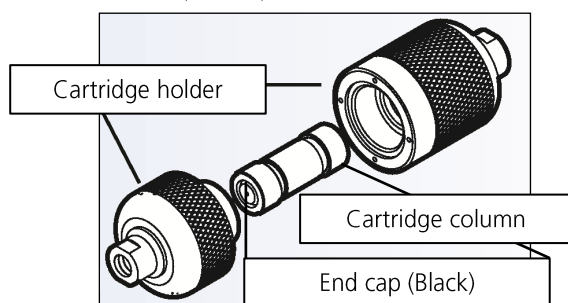
The product specifications are as follows.

Size	Products name	Chemical bonding group
I.D. : 2.1 mm, 3 mm, 4 mm Length : 10 mm, 20 mm Particle size : 3 μm, 5 μm	Shim-pack Scepter C18-120 (G)	Octadecyl group (C18)
	Shim-pack Scepter C18-300 (G)	
	Shim-pack Scepter HD-C18-80 (G)	
	Shim-pack Scepter C8-120 (G)	Octyl group (C8)
	Shim-pack Scepter C4-300 (G)	Butyl group (C4)
	Shim-pack Scepter Phenyl-120 (G)	Phenyl group
	Shim-pack Scepter PFPP-120 (G)	Pentafluorophenyl group
	Shim-pack Scepter Diol-HILIC-120 (G)	Dihydroxypropyl group

■ Installing the column

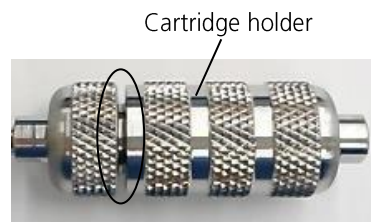
Please note the following when you install the cartridge column.

- The optional cartridge holder is required when you install the column.
- The cartridge column can be replaced by hand.
- Do not remove the black end caps at both ends of the cartridge column.
- The cartridge holder can be used repeatedly. In case of degradation, replace the cartridge column only.
- The cartridge holder and the column coupler can be removed with a wrench (1/4 inch).



■ Use method

- 1) Loosen the cartridge holder by hand and place the cartridge column into the cartridge holder.
- 2) Tighten the cartridge holder by hand. Then additionally tighten it up to 30° using 1/4-inch wrench. At this time, normally, there is a little gap between the cartridge holders (figure below). Tightening more than requirement may cause damage.
- 3) Connect the assembled guard cartridge column in front of the main-column (the injector side) using tools such as a column coupler. Use a short tube to avoid diffusion of the injection sample solution.



■ Safety Guideline

- Select the cartridge columns whose functional groups are basically the same as those of the main column.
- The cartridge holder is sold separately. Select the cartridge holder according to the length of the cartridge column. Use cartridge holder set for Length 10 mm (P/N: 227-31172-03) / 20 mm (P/N: 227-31172-04).
- If the cartridge column is attached and detached repeatedly, the airtightness may be lost, and fluid may leak.
- Once you use the cartridge column, do not change the low direction. Otherwise, the insoluble material adsorbed at the inlet of the cartridge column may flow into the main column.
- The timing of replacement of the cartridge column should be determined by the increase of pressure, the change of peak shapes and the separations, etc.
- If you inject a large amount of a sample repeatedly, it may cause impurities to be adsorbed in the main column. Therefore, it may deteriorate the main column. Early replacement of the cartridge column is recommended to prevent contamination of main column.

■ Disposal Precautions

When disposing of the column, do so in accordance with the processing standards determined by law, separately from general industrial waste and household garbage.

■ Technical Support

Shim-pack Scepter series columns are manufactured, inspected, packaged and shipped under strict standards of quality control. Should you find any defect in performance, please contact your local Shimadzu representative, who will ensure your complete satisfaction.