

High Performance Packed Column for HPLC

CoreFocus

Shim-pack Velox™ Guard column

INSTRUCTION MANUAL

■ Introduction

Shim-pack Velox Guard column is cartridge-type guard column filled with high pressure packing materials. Please read the following instructions before use.

■ Specifications

The product specifications are as follows.

Size	Products name	Chemical bonding group
I.D. : 4.6 mm Particle size : 5 µm	Shim-pack Velox C18	Octadecyl group (C18)
	Shim-pack Velox SP-C18	
	Shim-pack Velox Biphenyl	Biphenyl group
I.D. : 2.1 mm, 3.0 mm, 4.6 mm Particle size : 2.7 µm	Shim-pack Velox C18	Octadecyl group (C18)
	Shim-pack Velox SP-C18	
	Shim-pack Velox Biphenyl	Phenyl group
	Shim-pack Velox PFPP	Pentafluorophenyl group
	Shim-pack Velox HILIC	Bare silica
I.D. : 2.1 mm, 3.0 mm (For UHPLC)	Shim-pack Velox C18	Octadecyl group (C18)
	Shim-pack Velox SP-C18	
	Shim-pack Velox Biphenyl	Biphenyl group
	Shim-pack Velox PFPP	Pentafluorophenyl group

■ Operating Precautions

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

■ Installing the column

Please note the following when you install the guard cartridge column.

- The optional guard cartridge holder is required when you install the column.
- The guard cartridge column can be replaced by hand.
- The cartridge holder can be used repeatedly. In case of degradation, replace the cartridge column only.

■ Use method

Tubing-Side Connection

- 1) Slide the nut and ferrule onto the connecting tubing. The Peek end of the ferrule should face away from the nut.
- 2) Push the tubing into the holder cap. Keep the tubing fully bottomed in the holder cap and tighten the nut by hand.
- 3) Continue to keep the tubing fully bottomed in the holder cap and use a 1/4-inch wrench to tighten the nut an additional 1/4-1/2 turn past hand-tight.

Column-Side Connection

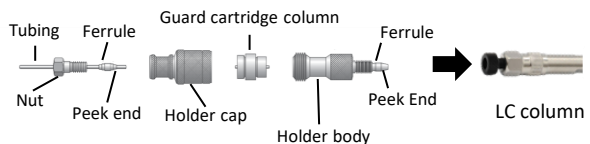
- 1) Slide a ferrule into the front end of the holder body so that the Peek end of the ferrule is facing away from the holder body.
- 2) Thread the holder body into the Shim-pack LC column to the point of initial resistance. Push the holder body into the column and fully tighten by hand.
- 3) Continue to push the holder body into the column and use a 5/16-inch wrench to tighten the holder body an additional 1/4-1/2 turn past hand-tight.

Guard Cartridge Column Installation

- 1) Unscrew the holder cap by hand and insert the unidirectional guard cartridge column into the cartridge holder body.
- 2) Screw the holder cap onto the holder body and tighten fully by hand.

Guard Cartridge Column Replacement

To replace the guard cartridge column, unscrew the holder cap by hand, insert a new guard cartridge column, replace the holder cap, and fully tighten the holder cap by hand.



■ Safety Guideline

- Select the guard cartridge columns whose functional groups are basically the same as those of the main column.
- The cartridge holder for Shim-pack Velox (PN: 227-32041-01) is sold separately.
- Failure to fully hand tighten the holder cap (about 1/8 turn past point of initial resistance) may result in leakage or damage to the guard cartridge column.
- If the guard cartridge columns are attached and detached repeatedly, the airtightness may be lost, and fluid may leak.
- The timing of replacement of the guard 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 guard cartridge column is recommended to prevent contamination of main column.

■ Technical Support

Shim-pack Velox 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.