

High Performance EXP Guard Column for HPLC

CoreFocus

Shim-pack EXP Direct Connect Holder

INSTRUCTION MANUAL

■ Introduction

Shim-pack EXP Direct Connect Holder is used for a cartridge-type guard column filled with high pressure packing materials. Please read the following instructions before use.

■ Specifications

The part number (PN) of EXP Direct Connect Holder is PN: 227-32041-01. The Shim-pack EXP Direct Connect Holder can be used for the cartridge-type guard columns shown in the following table. Regarding the PN of each cartridge guard column, please contact your local Shimadzu representative or check the web page and brochures.

Shim-pack Scepter Series (For UHPLC only)

Size	Products name	Chemical bonding group
I.D. : 2.1 mm, 3 mm Particle size : 1.9 µm (3 pcs)	Shim-pack Scepter C18-120	Octadecyl group (C18)
	Shim-pack Scepter C18-300	
	Shim-pack Scepter HD-C18-80	
	Shim-pack Scepter C8-120	Octyl group (C8)
	Shim-pack Scepter C4-300	Butyl group (C4)
	Shim-pack Scepter Phenyl-120	Phenyl group
	Shim-pack Scepter PFPP-120	Pentafluorophenyl group

Shim-pack Velox Series

Size	Products name	Chemical bonding group
I.D. : 4.6 mm Particle size : 5 µm (3 pcs)	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 (3 pcs)	Shim-pack Velox PFPP	Pentafluorophenyl group
	Shim-pack Velox C18	Octadecyl group (C18)
	Shim-pack Velox SP-C18	
	Shim-pack Velox Biphenyl	Phenyl group
	Shim-pack Velox PFPP	Pentafluorophenyl group
I.D. : 2.1 mm, 3.0 mm Particle size : UHPLC size (3 pcs)	Shim-pack Velox HILIC	Bare silica
	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 cartridge column.

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

■ Use method

Tubing-Side Connection

- 1) Slide the EXP nut and an EXP ferrule onto the connecting tubing. The PEEK end of the ferrule should face away from the nut.
- 2) Push the tubing into the EXP 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 EXP holder cap and use a wrench to tighten the nut an additional 1/4-1/2 turn past hand-tight.

Column-Side Connection

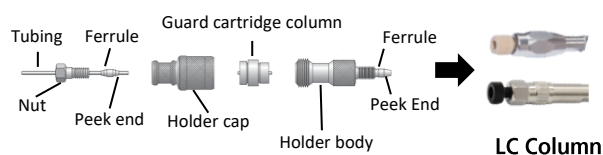
- 1) Slide an EXP ferrule into the front end of the EXP holder body so that the PEEK end of the ferrule faces away from the EXP holder body.
- 2) Thread the EXP holder body into the LC column to the point of initial resistance. Push the EXP holder body into the column and fully tighten by hand.
- 3)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

Guard Cartridge Column Installation

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

Guard Cartridge Column Replacement

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



■ Safety Guideline

- Select the guard cartridge columns whose functional groups are basically the same as those of the main column.
- Failure to fully hand tighten the EXP 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 column is attached and detached repeatedly, the airtightness may be lost, and fluid may leak.
- The timing when you replace 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 series 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.