

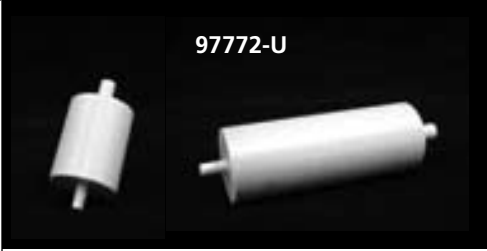





Installation Instructions for VersaPak® Adapters

VersaPak Adapter Kits for Isco® Flash Systems

VersaPak cartridge adapters allow the use of VersaPak cartridges in Isco flash chromatography systems. The adapters are easily installed onto the Isco system with no tools or system hardware modification required. Each adapter is labeled for use with the compatible cartridge and system type. These adapters enable the use of the five different sizes of silica/C18 VersaPak cartridges from 23 x 53 mm (11/15 gram) to 80 x 150 mm (410/500 gram) silica/C18 cartridges. The end user will benefit from the higher efficiency of spherical silica in the VersaPak cartridges along with a broader range of cartridge sizes. The unique, symmetric VersaPak cartridge design also allows users to use rev-elution (the ability to stop flow and rotate the cartridge 180 degrees to reverse flow through the cartridge) to more quickly elute strongly bound compounds.

Fixed vs. Variable Position Flash Systems

Isco has two general types of flash systems, "Fixed Position" and "Variable Position" systems. The older systems such as the CombiFlash® Retrieve, Sq16x, and Sg100c have fixed positions (or distances) between the upper and lower platens that correspond to the length of the cartridges. The new CombiFlash Companion® has a "variable position" upper platen that can move up and down throughout the entire range of cartridge lengths. In addition, the fittings on the two types of systems are different requiring separate adapter connections. In general, to work with one or two different size VersaPak cartridges on one system requires one set of adapters (both an inlet and outlet adapter). To use the entire range of VersaPak cartridges typically only requires three sets of adapters. The 23 mm VersaPak cartridges do not require an outlet adapter on the Fixed Position system as they already have a male luer lock outlet.

Cartridge Dimensions	23 x 53 mm and 23 x 110 mm	40 x 75 mm and 40 x 150 mm	80 x 150 mm
Fixed Position Systems: CombiFlash Retrieve, Sq16x and Sg100c	97772-U 	97774-U 	97773-U 
Variable Position Systems: New Companion, Companion 4X	97775-U 	97777-U 	97776-U 

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1. To use the VersaPak cartridge, simply attach the inlet (upper) and outlet (lower) adapters corresponding to the desired cartridge size onto the Isco system (Figure A).

Figure A. Installing Adapters



2. Be sure to attach the luer fitting on the adapter securely to the system fittings. All adapters are labeled according to the corresponding cartridge size.

3. Attach the cartridge to the inlet (upper) adapter and secure it tightly (Figure B).

Figure B. Attaching Cartridge to Inlet Adapter



4. Attach the cartridge to the outlet (lower) adapter and secure it tightly (Figure C).

Figure C. Cartridge Installed in System



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To use the VersaPak cartridge, simply insert the adapters corresponding to the inlet and outlet of the Isco Companion or Companion 4x system. Be sure to seat the luer fitting snugly. The 80 x 150 mm adapters are designed with one half-inch offset to accommodate the larger diameter of the cartridge.

The inlet adapter is designed with an alignment key (Figure D) to time the half-inch offset properly. To insert the inlet adapter, orient the labeled alignment key to fit into the slot on the top platform of the Companion system.

Figure D. Proper Inlet Adapter Alignment



To insert the outlet adapter, orient the labeled flat on the outlet adapter to the front of the system (Figure E). This will properly align the adapter for the correct offset to accept the cartridge.

Figure E. Proper Outlet Adapter Alignment



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Adapters for Fixed Position Flash Systems (CombiFlash Retrieve, Sq16x and Sg100c)

VersaPak Adapters, 23 mm for Isco Fixed Position Systems	97772-U
VersaPak Adapters, 80 mm for Isco Fixed Position Systems	97773-U
VersaPak Adapters, 40 mm for Isco Fixed Position Systems	97774-U

Adapters for Variable Position Flash Systems (new Companion & Companion 4X)

VersaPak Adapters, 23 mm for Isco Variable Position Systems	97775-U
VersaPak Adapters, 80 mm for Isco Variable Position Systems	97776-U
VersaPak Adapters, 40 mm for Isco Variable Position Systems	97777-U

Trademarks

Isco, CombiFlash, & Companion — Teledyne Isco Corporation
VersaPak — Sigma-Aldrich Co.