

# INSTALLATION INSTRUCTIONS

## INLET FILTERS

### DESIGN

Filters serve several useful purposes in liquid chromatography. A large porosity (5µm - 20µm) should be used on the pump inlet to protect delicate check valves without causing pump cavitation. This inlet filter may be on the end of the inlet line, in the reservoir or actually in the inlet line just ahead of the pump.

A smaller porosity filter (0.5-2µm) may be placed between the pump and injector to give a final polish to the mobile phase before it reaches the critical sample injection/column area.

A very low volume filter may be placed between the injector and column to collect particles from the injector or sample before they could damage the column.

A 10 micron low pressure inlet filter may also be used as a helium sparging diffuser.

### INSTALLATION

#### 1/8" SSI fitting Inlet Filters (05-0100, 05-0101)

1. Slip the 1/8" Teflon® inlet tubing through the large ends of the nut and ferrule respectively.
2. Insert and maintain the tube fully seated in the fitting socket. Tighten the nut 2/3 turn (4 hex flats) past finger-tight. Once the ferrule is swaged to the tubing, 1/3 turn past finger-tight is sufficient to reconnect.

#### 1/8" CPI Inlet Filter (25-0145)

1. Slip the tubing through the knurled cap and the large end of the ferrule.
2. Insert and maintain the tube fully seated in the fitting socket. Finger-tighten the knurled nut securely.

#### 1/8" Slip-On Inlet Filter (05-0141)

3. Slip-On Inlet filters are made with 3 different sizes to accommodate three standard 1/8" Teflon® tubing inner diameters. Mated with the correct ID tubing the tip of the filter will slip into the opening on the reservoir end of the inlet tubing.
4. For intermediate sized tubing select the next larger tipped filter. Heat the end of the tubing by immersion in hot water and expand to fit filter tip. DO NOT HEAT FILTER TIP.

#### 1/8" Bioclean Inlet Filter (06-0110)

5. Slip the tubing through the knurled cap and the small end of the ferrule.
6. Insert and maintain the tube fully seated in the fitting socket. Finger-tighten the knurled nut securely.

### MAINTENANCE

Inlet filters should be replaced when resistance to flow causes pump cavitation or irregular flow. Occasionally filter elements can be cleaned by ultrasonic treatment; however, it is generally more practical to replace the filter element.

REPLACEMENT KITS	FOR FILTER LISTED BELOW
05-0102	05-0100
05-0131	05-0101
06-0111	06-0110
25-0147	25-0145

Replacement kits include pkg. of 2 filter elements and seals

\*Teflon is a registered trademark of E.I. DuPont de Nemours & Co., Inc.

