

HPLC Accessories

In-Line Filters

A precolumn filter is essential for protecting HPLC columns against particulate matter which can accumulate on the column frit, leading to split peaks and high back pressure. Sources of particles include mobile phases (especially when buffers are used as solvents), leaking pump and injector seals, and samples. Use a 2.0µm frit to protect columns containing 5µm or larger particles. Use a 0.5µm frit for columns with particles smaller than 5µm.



Supelco Filter

Direct-connect; protects analytical and guard columns. Our precolumn filter can be connected directly, hand-tight, into any HPLC column or guard column that has Valco-compatible endfittings. PEEK cap and body, 2µm stainless steel frit. For a metal-free system, order PEEK/Teflon replacement frits (Cat. No. 57430-U).

DESCRIPTION	QTY.	CAT. NO.	PRICE
Supelco Precolumn Filter	1	Z227323	
Replacement Frits			
0.5µm pores	5	Z290874	
2µm pore	5	Z227331	
PEEK/Teflon, 2µm ¹	5	57430-U	

¹ Biocompatible, metal-free.



SSI High Pressure Precolumn Filter

In-line installation. The 316 stainless steel filter disc (0.5µm pores) is easily replaced without removing the column end fitting. Maximum operating pressure: 15,000psi (1054kg/cm²). For 1/16" tubing.

DESCRIPTION	QTY.	CAT. NO.	PRICE
SSI High Pressure Precolumn Filter			
10-32 Threads ²	1	59269	
Waters Threads	1	59271	

DESCRIPTION	QTY.	CAT. NO.	PRICE
Replacement Filter Elements			
0.5µm pores	10	59273	
2µm pores	10	59272	

² Most HPLC fittings, except SSI and some Waters fittings, have 10-32 threads.



Isolation Technologies Precolumn Filter

In-line installation. High capacity inlet filter minimizes dead volume and band broadening, to prevent loss of column efficiency while protecting your column. Frit porosity: 0.5µm. Complete as shown.

DESCRIPTION	QTY.	CAT. NO.	PRICE
Isolation Technologies Precolumn Filter			
3mm frit (4.6mm columns)	1	57675-U	
1.5mm frit (2.1mm columns)	1	57676-U	
Replacement Frits			
3mm	5	57677	
1.5mm	5	57678	



Upchurch Precolumn Filter

In-line installation. Stainless steel body with inert polyetherether-ketone (PEEK) endfittings and a 0.5µm or 2µm PEEK frit in one endfiting.

DESCRIPTION	QTY.	CAT. NO.	PRICE
Upchurch Precolumn Filter			
0.5µm frit	1	55079	
2µm frit	1	55078	

DESCRIPTION	QTY.	CAT. NO.	PRICE
Replacement Frits			
0.5µm	10	55080-U	
2µm	10	55081	



SSI High Pressure Preinjector Filter

Place between the pump and injector to provide final filtration for the mobile phase. Easily replaced 316 stainless steel filter element (0.5µm pores). Maximum operating pressure: 15,000psi (105MPa). For 1/16" OD tubing, 10-32 threads.

DESCRIPTION	CAT. NO.	PRICE
SSI High Pressure Preinjector Filter	59262-U	
Replacement Filter Elements (pk. of 2)		
0.5µm pores	59264	
2µm pores	59265	

Upchurch Mini MicroFilter Assembly

Ultra-low swept volume – 0.85µL. Use with Microtight tubing sleeves. Available with 1µm or 2µm frit capsules (stainless steel frit in color-coded PEEK capsule). Includes 2 MicroFingertight II fittings, 3 filter capsules.

DESCRIPTION	CAT. NO.	PRICE
Mini MicroFilter Assembly		
with 1µm Frit	54722-U	
with 2µm Frit	54721-U	
Replacement Mini MicroFilter Capsules		
with 1µm Frit (black PEEK)	54724-U	
with 2µm Frit (natural PEEK)	54723-U	



Order: 1.800.325.3010 Technical Service: 1.800.359.3041 Web: www.sigma-aldrich.com/supelco

HPLC Accessories

In-Line Filters, Back-Pressure Regulators

Upchurch In-Line MicroFilter



Install between 2 pieces of capillary tubing, using Microtight tubing sleeves. Special PEEK fitting encases 0.5µm PEEK frit. 0.006" thru hole, 0.24µL swept volume. Includes 2 MicroFingertight nuts, 5 frits (1 installed).

DESCRIPTION	CAT. NO.	PRICE
In-Line MicroFilter	502707	
Replacement Frits (pk. of 10)	502715	

Upchurch Precolumn MicroFilter



In-line filter connects capillary tubing (using Microtight tubing sleeves) or 1/16" OD tubing to female 10-32 fitting. 0.5µm frit, 0.3µL swept volume. Includes 5 frits (1 installed).

DESCRIPTION	CAT. NO.	PRICE
MicroFilter for 0.025" OD Tubing with PEEK Frits	502677	
with Stainless Steel Frits	502669	
MicroFilter for 1/16" OD Tubing with PEEK Frits	502693	
with Stainless Steel Frits	502685	
Replacement Frits, pk. of 10 PEEK, 0.5µm	502790	
Stainless Steel, 0.5µm	502731	
Stainless Steel, 2.0µm	502723	

Valco Precolumn Frit and Screen Filters³

In-line installation. Efficient, low dead volume filters protect your columns from particles without reducing column performance. The replaceable 1/8" frit has 0.5µm pores to protect 3µm or 5µm column packings, the replaceable screen has 2µm pores. Choose the frit filter for higher filtration capacity (most applications) or the screen filter for less dead volume (e.g., with microbore columns). Use with 1/16" OD tubing; 1/16" fittings included.

DESCRIPTION	QTY.	CAT. NO.	PRICE
Valco Precolumn Filters			
Frit Filter	1	58420-U	
Screen Filter	1	58279-U	
Replacement Frits			
0.5µm pores	10	59037	
2.0µm pores	10	59129	
Replacement Screens	10	58284	

³ Frits and screens should not be interchanged in these filters.

Supelco Silica and C18 Saturator Columns



To protect your column from alkaline mobile phases which can dissolve silica (pH>7.0), saturate the mobile phase with silica by passing it through a silica saturator column. Similarly, to protect your column from acidic mobile phases which can strip bonded phase (pH<2.0), use a C18 saturator column.

Each kit consists of 10g of packing (12µm spherical particles, 180m²/g surface area), a 7.5cm x 4.6mm column, two frits, and fittings to connect the column to 1/16" tubing. The optional plastic funnel is helpful for filling these columns.

DESCRIPTION	CAT. NO.	PRICE
Supelco Silica Saturator Column Kit	58410	
Supelco C18 Saturator Column Kit	58418	
Replacement Components and Accessories		
Spherical Silica, 10g	58411	
C18 packing, 10g	58419	
Funnel and Tubing	20390-U	

SSI Back-Pressure Regulator

Prevents bubbles and improves baseline stability. This 1/16" flange type unit (4 x 1.3cm) has a unique mechanism that ensures constant back-pressure over a wide range of mobile phase flows and viscosities. It is immune to clogging and other problems common to restrictor-type devices. Easily adjusts from 1-4 atm (15-60psi/1-4kg/cm²).

DESCRIPTION	CAT. NO.	PRICE
SSI Back-Pressure Regulator	58788	

SSI Flow-Through Back-Pressure Regulator

Designed to apply constant pressure to an HPLC detector outlet, over a wide range of mobile phase flows and viscosities. Can be used with flowmeters.

Minimizes bubble formation in the detector cell, improves baseline stability. Flow-through design minimizes band spreading. Immune to clogging. Adjustable from 0.3 to 5 atmospheres (factory set at 4 atmospheres), for compatibility with any detector. Small, inert to common HPLC solvents, biocompatible flow path.

DESCRIPTION	CAT. NO.	PRICE
SSI Flow-Through Back-Pressure Regulator	59284	

Upchurch In-Line Check Valve



Place in the flow system where you wish to restrict fluid flow to one direction. Complete with wrench.

DESCRIPTION	CAT. NO.	PRICE
Upchurch In-Line Check Valve	55085-U	