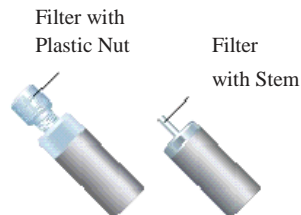


# Inlet Solvent Filters and Accessories

## General Use Inlet Solvent Filters



These economical filters are easy to replace! For those filters using a plastic nut, thread the nut into the filter and finger tighten. Our other filters have stems, allowing easy insertion directly into your inlet tubing.

Please note: The internal design of the A-309 and A-230A filter allow solvent to be drawn to within 1/8" of the bottom of your bottle.

### Filters w/Plastic Nut for Analytical Systems (Max flow 40mL/min)

Cat. No.	Description	For Tubing	Comes with	Price
A-220	10µm filter	1/8" OD	-*	
A-221	A-220, 5/pk	1/8" OD	-*	
A-222	2µm** filter	1/8" OD	-*	
A-223	A-222, 5/pk	1/8" OD	-*	
A-302A	10µm filter	1/8" OD	(1) P-315/P-300	

\* Requires but does not include P-100 fitting.  
\*\* Max flow 10mL/min

### Filters w/Plastic Nut for Prep Systems (Max flow 100mL/min)

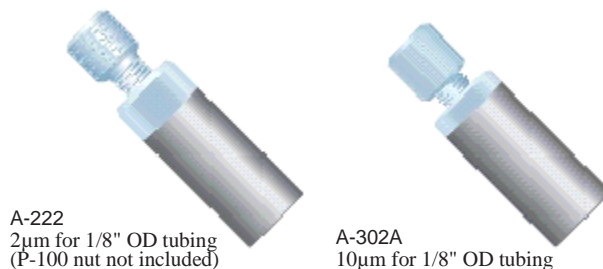
A-311A	10µm filter	1/8" OD	(1)P-315/P-300	45.55
A-225A	20µm filter	1/8" OD	(1)P-315/P-300N	
A-227A	10µm filter	1/4" OD	(1)U-650/U-655	
A-230A	20µm B.O.B.	1/4" OD	(1)U-650/U-655	
A-231A	20µm filter	3/16" OD	(1)P-132/P-133	
A-226A	10µm filter	5/16" OD	(1)U-662/U-660	

### Filters w/Stem for Analytical Systems

Cat. No.	Description	For Tubing	Max Flow	Price
A-302	10µm filter	1/16" ID	40mL/min	
A-309	10µm B.O.B.	1/16" ID	40mL/min	
A-311	10µm filter	1/16" ID	100mL/min	
A-225	20µm filter	1/16" ID	100mL/min	
A-228	2µm filter	1/8" ID (Waters)	10mL/min	
A-310	10µm filter	1/8" ID (Waters)	40mL/min	

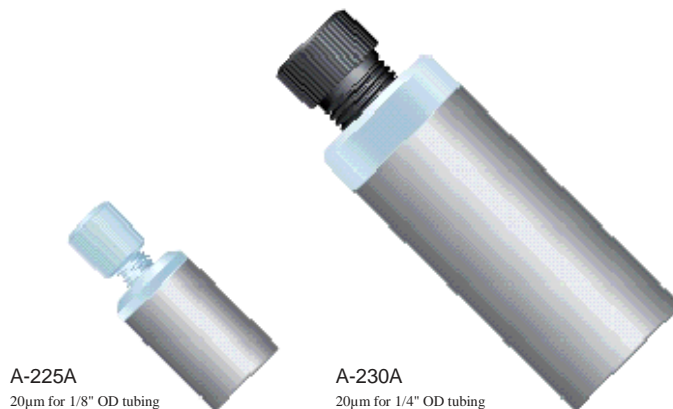
### Inlet Solvent Filter Kits

Cat. No.	Kit Includes:	Price
A-200	10µm kit: (5) A-220, (3') tubing, (1) P-100	
A-201	2µm kit: (5) A-222, (3') tubing, (1) P-100	
A-210	P-100 fitting and 3' Teflon (1/8" OD) tubing	



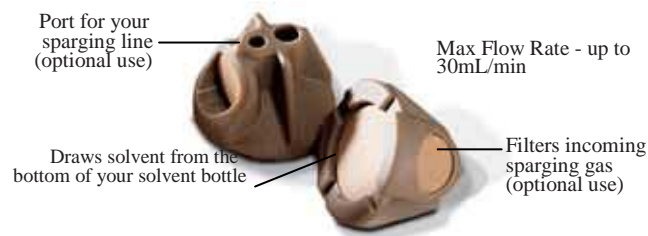
A-222  
2µm for 1/8" OD tubing  
(P-100 nut not included)

A-302A  
10µm for 1/8" OD tubing



A-225A  
20µm for 1/8" OD tubing

A-230A  
20µm for 1/4" OD tubing



Port for your sparging line (optional use)

Max Flow Rate - up to 30mL/min

Draws solvent from the bottom of your solvent bottle

Filters incoming sparging gas (optional use)

## 100% PEEK Bottom-of-the-Bottle Filter

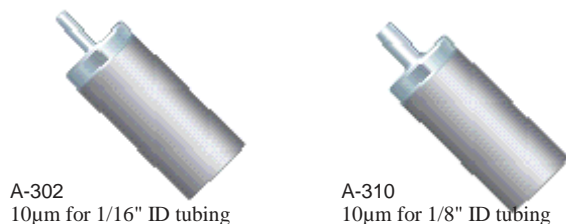
### • Easy operation, no fittings required

For your convenience, we've included 2 filters in this unit; one in the bottom of the filter to draw solvents within .080" of the bottom of the filter, the other PEEK filter may be used for a 1/8" OD helium sparging line. To use, simply press fit your Teflon® tubing firmly into the top holes. That's it!

### PEEK Bottom-of-the-Bottle Filter

Cat. No.	Description	For Tubing	Price
A-435	2µm filter	1/8" OD	
A-437	2µm filter, for small neck bottles	1/8" OD	
A-440	10µm filter	1/8" OD	
A-438	10µm filter, for small neck bottles	1/8" OD	
A-436	2µm filter	3/16" OD*	
A-441	10µm filter	3/16" OD*	

\* Typically for Waters® systems



A-302  
10µm for 1/16" ID tubing

A-310  
10µm for 1/8" ID tubing

# Inlet Solvent Filters and Accessories

## UHMWPE Bottom-of-the-Bottle Filters



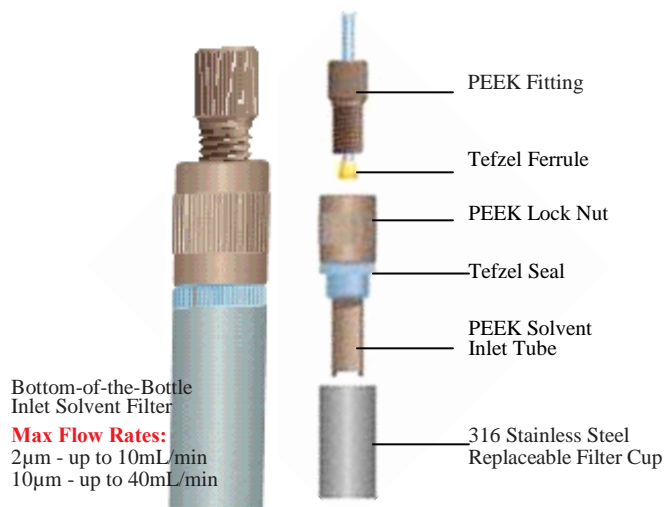
Max Flow Rate  
up to 5mL/min

The design of these solvent filters allows your tubing to pass through to the bottom of the filter cup. This feature enables the filter to draw solvent to within 0.10" of the bottom of your solvent bottle. The replaceable filter cups thread directly into the Tefzel body.

Please note: UHMWPE is a hydrophobic material. To establish proper surface wetting, you may need to prime the filter with methanol or acetonitrile.

### UHMWPE Bottom-of-the-Bottle Filter

Cat. No.	Description For Tubing	Comes with	Price
A-445	10µm Filter 1/16" OD	(1)P-200/P-245	\$14.35
A-446	10µm Filter 1/8" OD	(1)P-300/P-345	
A-447	10µm Filter 1/4", 5/16" OD		
A-427	Replacement 10µm solvent filter cups, 5/pk		



Bottom-of-the-Bottle  
Inlet Solvent Filter

#### Max Flow Rates:

2µm - up to 10mL/min  
10µm - up to 40mL/min

## SS Bottom-of-the-Bottle Filters

- Draws solvent within 1/8" of the bottom of the bottle
- Replaceable stainless steel filter cups

The Bottom-of-the-Bottle filter systems which combines PEEK nuts, Tefzel seals and 316 stainless steel filter cups are completely reusable. To replace the filter cup, simply loosen the lock nut, pull the filter cup off, replace it with a new cup, and retighten the lock nut. Please note: The filter cups are interchangeable.

### Bottom-of-the-Bottle Solvent Filters

Cat. No.	Description	For Tubing	Comes with	Price
A-551	2µm filter	1/8" OD	(1)P-300/P-130	
A-550	10µm filter	1/8" OD	(1)P-300/P-130	
A-553	2µm filter	3/16" OD*	(1)P-133/P-132	
A-552	10µm filter	3/16" OD*	(1)P-133/P-132	

\* Typically for Waters® systems

### Replacement Stainless Steel Replaceable Filter Cups

Cat. No.	Description	Qty.	Price
A-522X	2µm filter cups	10	
A-520X	10µm filter cups	10	

## Inline Solvent Filter

- Excellent for general purpose inline use
- Easy to replace frits



Placed between the pump and sample injection valve, our inline solvent filter traps particles released through normal piston seal wear. Without an inline filter, these particles can be flushed through the capillary tubing to the sample injection valve, resulting in valve damage and further system contamination.

This filter uses a 2µm stainless steel frit with a PEEK ring. An 8° distribution cone spreads the flow of the mobile phase over the entire surface of the .094" diameter x .062" thick frit, while .050" diameter thru holes provide good solvent flow. The inlet and outlet connections are compatible with Upchurch, Swagelok, or Parker. All materials are type 316 stainless steel and PEEK.

Cat. No.	Description	Price
A-314	2µm Inline solvent filter with A-100 frit	
A-100X	2µm Replaceable frit, 10/pk	

## Solvent Debubbler

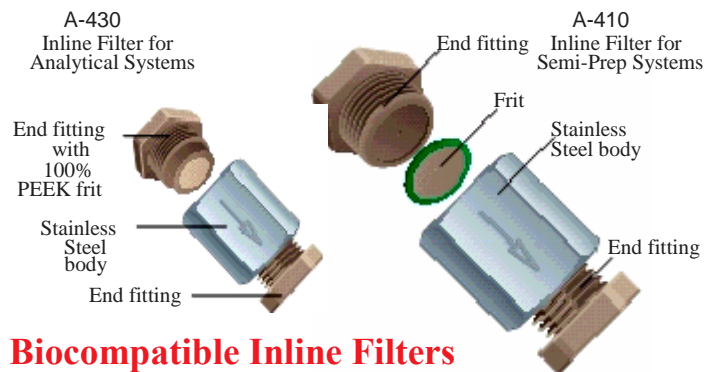
- Traps air bubbles
- Prevents pump cavitation
- Fits most teflon tubing

This solvent debubbler is a small, translucent reservoir with an air-tight cap. It is designed to remove bubbles from the pump inlet line of an HPLC system.

Bubbles entrained in the incoming mobile phase float upward in the housing (an action enhanced by special geometry) while an equivalent volume of displaced fluid passes on to the pump. Periodically the collected air can be replaced with additional solvent by simply loosening the cap, allowing the solvent to refill the housing. By preventing bubbles from entering the pump, associated problems of malfunctioning check valves and reduced or lost pump output are avoided. This is especially important in gradient systems. The debubbler is constructed of materials chosen for their broad chemical compatibility. It is easy to install in the fluid path and comes with a mounting bracket for attaching it to an instrument or stand. Universal tip allows direct connection to the most commonly used tubing diameters.

Cat. No.	Description	Price
SS-10221	Debubbler with bracket and universal tip	

# Inlet Solvent Filters and Accessories



## Biocompatible Inline Filters

- Pressure rated to 6,000 psi

### For Analytical Systems

When you need to replace the frit, simply dispose of the end fitting that contains the frit and replace it with a new one. And, you get the added benefit of biocompatibility since all wetted surfaces are PEEK.

### For Semi-Prep Systems

The A-410 and A-411 are pressure rated up to 6,000 psi, while the A-510 and A-511 are for higher flow, low pressure applications. Tested under flow rates as high as 100mL/min., resulting in a maximum of 50 psi pressure drop at that flow.

### For Analytical HPLC, 10-32 Threads, 1/16" OD

Cat. No.	Description	Comes with	Price
A-430	2µm High pressure filter	A-429	
A-431	0.5µm High pressure filter	A-428	
A-428X	0.5µm PEEK filter end fitting,	10/pk	
A-429X	2µm PEEK filter end fitting,	10/pk	

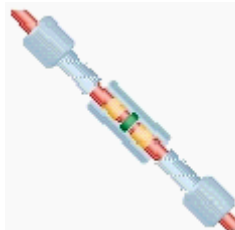
### For Semi-Prep HPLC System

A-410	2µm High pressure filter <sub>1</sub>	OC-802
A-411	10µm High pressure filter <sub>1</sub>	OC-803
A-510	5µm Low pressure filter <sub>2</sub>	OC-805
A-511	5µm Low pressure filter <sub>3</sub>	OC-805

OC-802 2µm PEEK frit, green Kel-F ring, each  
 OC-803 10µm PEEK frit, natural Kel-F ring, each  
 OC-805 5µm PEEK frit, natural Kel-F ring, each

- 1 Use only the all-polymer 1/16" fittings (10-32 threads)
- 2 Use with the 1/8" or 3/16" fittings (5/16-24 threads)
- 3 Use with the 1/4" or 5/16" fittings (1/2-20 threads)

## Economical Low Pressure Filters



The frits are firmly held together by simply tightening two flangeless fittings together. These filters are rated to 1,000 psi.

Please note: The overall diameter of the frit (including polymer ring) must be .200" to properly fit these filters, replacement frits can be found on the next page.

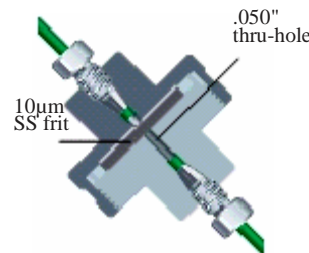
Cat. No.	Description	Qty.	Price
A-415	Filter (2µm SS Frit) for 1/16"	1	
A-416	Filter (2µm SS Frit) for 1/8"	1	
A-424	Filter (2µm UHMWPE Frit) for 1/16"	1	
A-425	Filter (10µm UHMWPE Frit) for 1/16"	1	

### Replacement Frits

A-417	2µm Stainless Steel Frit	1
A-422	2µm UHMWPE Frit	1
A-423	10µm UHMWPE Frit	1

## High Pressure Semi-Prep Inline Filter

- Low swept volume

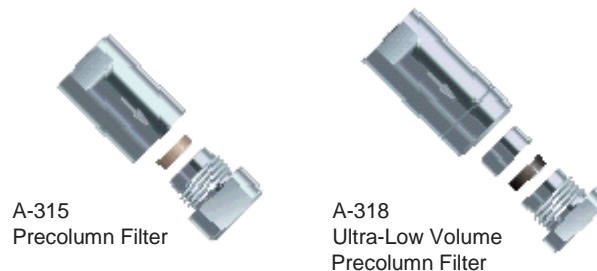


The A-330 High Pressure Semi-Prep Filter has a swept volume of 223µL and has been tested with water at flow rates up to 100mL/min. At this rate, the filter adds only 50 psi additional back pressure. One part of the stainless steel holder is surface treated to prevent galling and to allow the frit to be easily removed.

The .750" diameter passivated stainless steel frit and the .050" thru-hole allow high throughput. The holder accepts any standard 10-32 coned fittings designed for 1/16" OD tubing.

This filter includes one 10µm frit (A-331).

Cat. No.	Description	Qty.	Price
A-330	10µm Semi-Prep filter w/A-331 frit	1	
A-331X	10µm SS frit, Tefzel ring	10	
A-332X	2µm SS frit, Tefzel ring	10	
A-337X	20µm SS frit, Tefzel ring	10	



## Precolumn Filters

- Great column protection

A 0.5µm or 2µm frit is available to stop particles before they reach the column. The 0.5µm frit will stop bacteria and smaller wear particles. The inlet and outlet connections all have 10-32 internal threads for 1/16" OD tubing. All materials are type 316 stainless steel and KEL-F. Any of the frits on the next page with an overall diameter of .250" or .254" can be used with the filters on this page.

### Precolumn Filters (.020" thru-hole and 8° distribution cones)

Cat. No.	Description	Frit included	Swept Vol.	Price
A-315	2µm Assembly	A-101, SS	1.4µL	
A-316	.5µm Assembly	A-102, SS	1.3µL	
A-355	2µm Assembly	A-700, PEEK	1.4µL	
A-356	.5µm Assembly	A-701, PEEK	1.3µL	

### Ultra-Low Volume Precolumn Filters (.010" thru-hole)

A-318	.5µm Assembly	A-102, SS	.84µL
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### Replacement Frits (.250" Outer Diameter)

Cat. No.	Description	Qty.	Price
A-101X	2µm Frits, SS	10	
A-102X	0.5µm Frits, SS	10	
A-700	2µm Frit, PEEK	1	
A-701	0.5µm Frit, PEEK	1	

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