

opti-solv® filtration

Keeping particulates out of the flow path prevents premature wear on vital components, drastically reducing the need for costly replacements or repairs. A holistic approach to filtration addresses potential particulates throughout the solvent flow path and leads to consistent and efficient chromatography. Generally, there are three critical areas where filtration is necessary.

solvent reservoir

While the availability of HPLC-grade solvents diminishes the need for pre-filtering, it is still imperative that a filtration device be installed in the reservoir. Placing a filter in the reservoir is an economical way to filter particles that may result from buffer salt precipitation, airborne dust, improperly cleaned glassware, or microbial contamination; none of which are remedied by the use of HPLC-grade solvents.

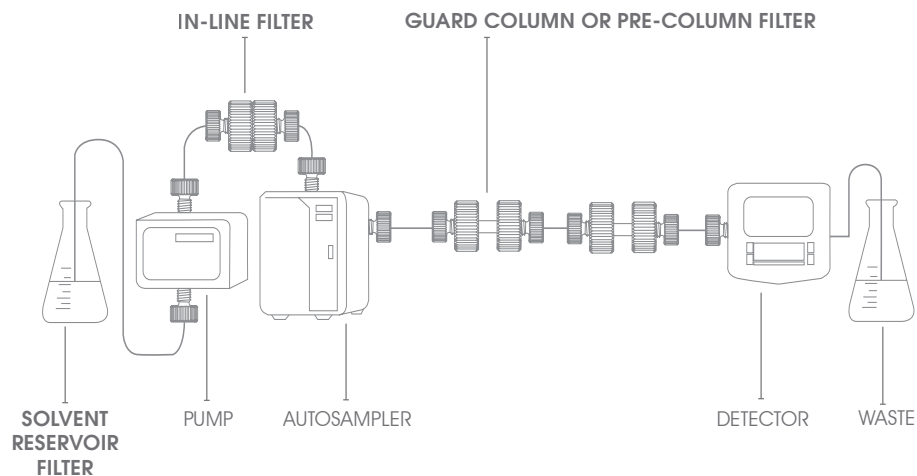
in-line

The frictional forces generated at the piston/seal interface inevitably lead to particulate shedding. Placement of a filtering element between the pump and injector/autosampler removes these particulates, preventing problems with downstream components and costly downtime.

pre-column | direct connect

Many things contribute to particulates in the post-injector region: incompatibilities between sample matrix and mobile phase, septa coring from the sample needle and shedding from moving parts in the injector, among others. Use of a low-impact, pre-column filter removes these particulates from the flow path, saving your analytical column and detector from deleterious effects.

filtration process



solvent reservoir filter

Opti-Solv Reservoir Filters employ a unique conical design inside the filter housing to prevent air bubbles from getting trapped and disturbing your analysis.

A solid PTFE body keeps Opti-Solv in the bottom of the bottle where a bottom-mounted titanium frit provides unrestricted solvent access. As always, Optimize makes installation as simple as possible - no tools or fittings required.



Biocompatible Opti-Solv Analytical Reservoir Filters

		Singles	5 Packs
1/16" OD Tubing	2 μm	10-04-00079	10-04-00080
	10 μm	10-04-00081	10-04-00082
1/8" OD Tubing	2 μm	10-04-00047	10-04-00050
	10 μm	10-04-00051	10-04-00053
3/16" OD Tubing (Waters Style)	2 μm	10-04-00054	10-04-00056
	10 μm	10-04-00057	10-04-00058

Biocompatible Opti-Solv Analytical Reservoir Prep Filters

1/8" OD Tubing	10 μm	10-04-00063	10-04-00065
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All of the above filters are supplied with 5 feet of PTFE tubing pre-installed

Reservoir Filters with Tube Stem

Reservoir Filters with tube stems are made with Hastelloy C[®] for maximum corrosion resistance and inertness.

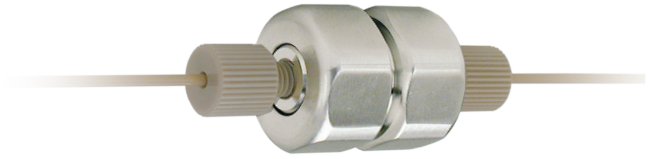
		Singles	5 Packs
1/16" ID Tubing	2 μm	10-04-00071	10-04-00072
	10 μm	10-04-00073	10-04-00074
1/8" ID Tubing (Waters Style)	2 μm	10-04-00115	10-04-00119
	10 μm	10-04-00111	10-04-00114



in-line filter

Installed between the pump and injector/autosampler, the in-line filter prevents damage to downstream components – damage that can cost you in both instrument downtime and troubleshooting labor.

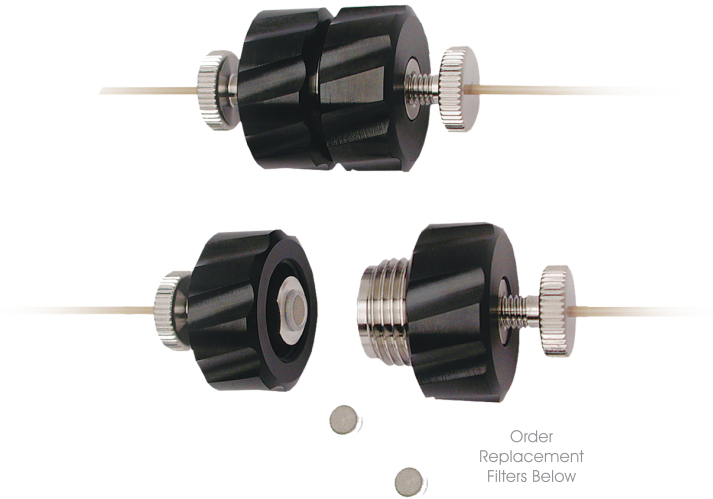
Stainless Steel Wrench-Tight Version



“ We have been using **Opti-Solv® In-Line Filters** for several years in our high-throughput LC/MS Analysis of ADME screening samples. ”

Partner: Pfizer ADME Technology Group

PEEK "Gorilla Grip" Hand-Tight Version



Hand tighten the PEEK holder to make a high-pressure seal, or for those who prefer wrenches, we also offer a wrench-tight stainless steel version. The user-friendly designs are well suited for a number of applications, such as high temperature environments where quick changes are imperative.

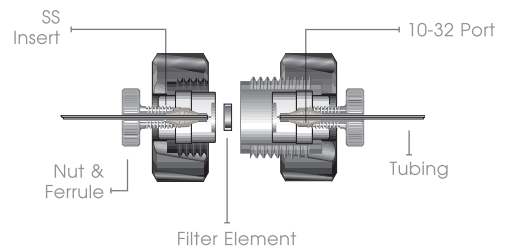
OPTI-SOLV In-Line Solvent Filter Holders

- 10-04-03685 In-Line Solvent PEEK Hand-Tight Holder
- 10-04-03686 In-Line Solvent Stainless Steel Wrench-Tight Holder

OPTI-SOLV Filter Elements (Frits)

- 10-04-03699 0.5 μm , 0.062" Dia. Filter, 10/Pk
- 10-04-03700 2 μm , 0.062" Dia. Filter, 10/Pk
- 10-04-03701 0.5 μm , 0.125" Dia. Filter, 10/Pk
- 10-04-03702 2 μm , 0.125" Dia. Filter, 10/Pk
- 10-04-02370 0.2 μm , 0.187" Dia. Filter, 10/Pk
- 10-04-00100 0.5 μm , 0.187" Dia. Filter, 10/Pk
- 10-04-00103 2 μm , 0.187" Dia. Filter, 10/Pk

Two-Piece PEEK or Stainless Steel Holders



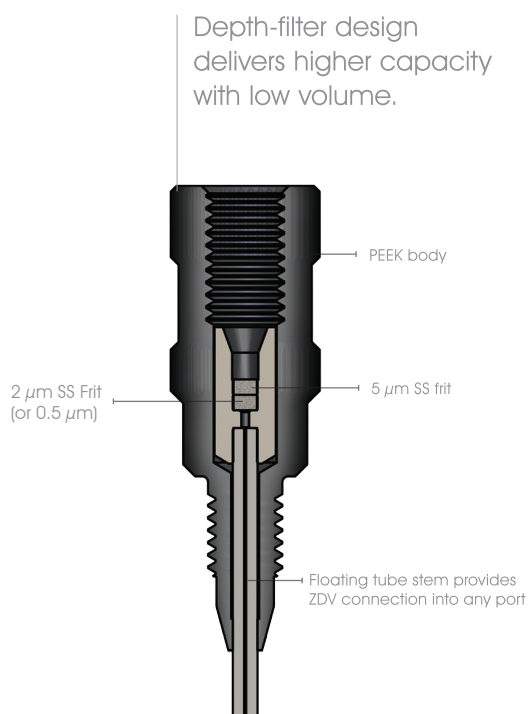
The Opti-Solv's unique swivel design allows frits to be changed without removing the connecting tubing. Just plumb it once and leave it.

opti-solv[®] mini filter

The Opti-Solv Mini Filter provides low-impact filtration in a package no larger than a finger tight fitting. Use them to extend the life of your analytical column, or before your mass spectrometer as a last line of defense against debris.

Perfect zero-dead-volume connections are obtained every time with our patented automatic tube stop depth adjustment. Unique depth-filtering elements allow for greater capacity with no band spreading or loss of performance. The efficient design requires no holder, and threads directly into any 10-32 port.

The **opti-solv[®]** mini filter automatically adjusts to fit all brands of columns.



OPTI-SOLV Mini Filters

10-04-00095	OPTI-SOLV Mini Filter, 0.5 μm , 5/Pk
10-04-00097	OPTI-SOLV Mini Filter, 2.0 μm , 5/Pk
10-04-02768	OPTI-SOLV Mini Filter, 5.0 μm , 5/Pk

opti-solv® micro filter

For your volume critical filtering needs, we now offer the Opti-Solv Micro Filter. Based on the same design that has made the Mini Filter a huge success, the Micro Filter cuts the internal volume to less than 200 nL but retains the ease of use and functionality of the Mini Filter.



The Micro Filter is designed to be used in today's low volume, high sensitivity chromatographic applications as a last line of defense against debris. As with all Optimize column protection products, the Opti-Solv Micro Filter features a zero-dead-volume connection utilizing our patented floating stem (auto-adjusting) technology.

The **optisolv®** micro filter is easy to use and performs exceptionally well for volume-critical applications.

Advantages of the **optisolv®** mini, micro and nano filters:

- Designed to filter out particles extending column life
- Perfect Zero-Dead-Volume connections every time
- Floating stem automatically adjusts to any depth port
- Easy to use finger tight - No tools required
- Rated to 6,000 psi

OPTI-SOLV Micro Filters

10-04-03707	OPTI-SOLV Micro Filter, 10 µm, 5/Pk
10-04-03357	OPTI-SOLV Micro Filter, 1.0 µm, 5/Pk
10-04-03389	OPTI-SOLV Micro Filter, 2.0 µm, 5/Pk
10-04-03621	OPTI-SOLV Micro Filter, 0.5 µm, 5/Pk

OPTI-SOLV Biocompatible Micro Filters

10-04-03936	OPTI-SOLV Biocompatible Micro Filter, 0.5 µm, 5/Pk
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U.S. PATENT
NO. 5,525,303



opti-solv[®] nano filter

The Opti-Solv Nano Filter follows our Micro Filter but cuts the internal volume down even further.

With less than 50 nL of internal volume, the Opti-Solv Nano Filter is ideal for mass spectrometry to protect your electrospray and nanospray tips from clogging with debris.



OPTI-SOLV Nano Filters

10-04-03625 OPTI-SOLV Nano Filter, 0.5 μ m, 5/Pk

OPTI-SOLV Biocompatible Nano Filters

10-04-03939 OPTI-SOLV Biocompatible Nano Filter, 0.5 μ m, 5/Pk