

High Performance HPLC Fittings/Interconnects

Improve HPLC performance with these fittings exclusively from Supelco.

Introduction

Fast HPLC as well as high resolution HPLC is pushing HPLC systems towards their pressure limits. Whether you are increasing flow rates or column lengths or reducing particle size to gain an advantage in HPLC, these all increase the backpressure in your system. Using PEEK tubing as interconnects is no longer suitable in high performance HPLC. PEEK can slip, stretch, or deform which translates to a decrease in performance. Supelco High Performance Fittings maintain the integrity of your HPLC systems all the way to 15,000 psi.

Key Benefits

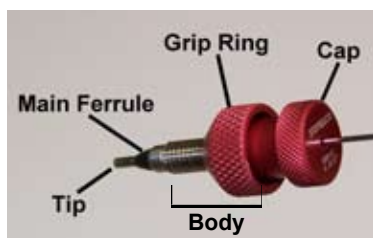
- Eliminate dead volume that contributes to peak broadening and decreased resolution
- Sliding ferrule design allows for use in any port
- Fingertight fittings, no tools required
- Safe to install. Will not damage HPLC ports even if over-tightened
- Rated to 15,000 psi
- 316 stainless steel construction

The fitting allows the user two degrees of freedom in compressing the ferrule. Partial separation of radial and axial tightening forces allow the fitting to withstand pressures greater than 15,000 psi, while providing superior elimination of dead volume.

Easy 1-2-3 Installation

1. Start with tip extended and cap almost completely removed.
2. Insert tip fully into port and fingertighten using the grip ring.
3. Lightly snug the cap.

Use No Tools!

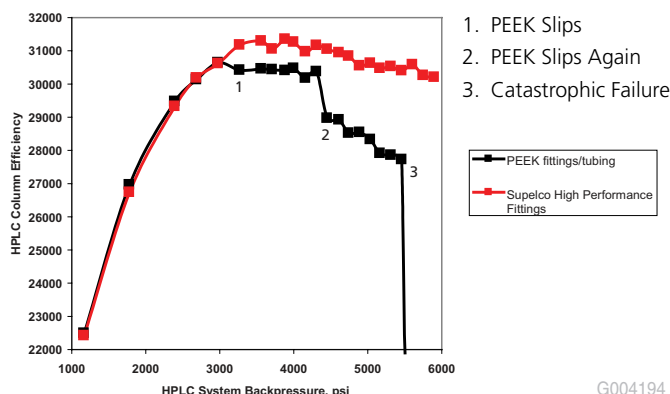


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Eliminate PEEK Slippage

Figure 1 shows the HPLC column efficiency as a function of system backpressure. The system equipped with PEEK fittings illustrates gradual loss of efficiency starting at 3000 psi with an eventual catastrophic failure at 5500 psi. The Supelco High Performance Fittings show no performance loss as a function of pressure.

Figure 1. Supelco High Performance Fittings versus Standard PEEK Fittings



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Double-Ended Fittings

High Performance Fittings are available in a double-ended configuration, with either flexible or rigid stainless tubing. They are safe to install in all HPLC systems and will not damage the ports even if over-tightened.



Cat. No.	Length	I.D.	O.D.	Type	Suggested Application
53681-U	10 cm	0.005"	1/32"	flexible	Column coupling, column-to-detector
53682-U	20 cm	0.005"	1/32"	flexible	Injector-to-column link, injector-to-heater link
53683-U	30 cm	0.005"	1/32"	flexible	Pump to injector link
53684-U	40 cm	0.005"	1/32"	flexible	General long length link, pump-to-injector
53685-U	20 cm	0.010"	1/32"	flexible	High flow flexible link
53686-U	10 cm	0.005"	1/16"	rigid	Column coupler, 'U' shaped
53687-U	10 cm	0.005"	1/16"	rigid	Column coupler, straight
53688-U	10 cm	0.010"	1/16"	rigid	High flow, general purpose
53689-U	20 cm	0.010"	1/16"	rigid	High flow, general purpose
54252-U	55 cm	0.005"	1/16"	rigid	General long length
54253-U	55 cm	0.007"	1/16"	rigid	General long length

Single-Ended Fittings

High Performance Fittings are available in single-ended configurations. The single-ended fitting is useful when only a single-end will have frequent connections and the other end will be permanently connected.



Cat. No.	Length	I.D.	O.D.	Type	Suggested Application
53613-U	10 cm	0.005"	1/32"	flexible	Column coupling, column-to-detector
53614-U	20 cm	0.005"	1/32"	flexible	Injector-to-column link, injector-to-heater link
53617-U	30 cm	0.005"	1/32"	flexible	Pump to injector link
53625-U	40 cm	0.005"	1/32"	flexible	General long length link, pump-to-injector
53627-U	55 cm	0.007"	1/32"	flexible	General long length
53628-U	55 cm	0.005"	1/32"	flexible	General long length

Agilent® 1100/1200 Fitting

The high performance fitting is now available for the Agilent 1100/1200 HPLC system. Semi-rigid 316 stainless steel tubing connects one end to the heater outlet, and allows use of columns by any manufacturer to be completely seated in the column inlet port. An important feature of this fitting is the 'service loop', which allows the column to be semi-rigidly supported.



Replacement Ferrules for High Performance HPLC Fittings

Description	Cat. No.
For use with 1/16" O.D. tubing, black PEEK, with stainless steel lock rings, pk. of 10	53690-U

Cat. No.	Length	I.D.	O.D.	Type	Suggested Application
53629-U	15 cm	0.005"	1/16"	Rigid	HPLC column to heater outlet

Trademarks

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