



HICHROM

Chromatography Columns and Supplies

LC CONSUMABLES AND ACCESSORIES Fittings and Connectors

Catalogue 9

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FITTINGS AND CONNECTORS

PEEK™ Fingertight Fittings

One-Piece Fittings

- Universal fitting, suitable for most HPLC connections
- Fingertight to 5,000psi
- Inert and biocompatible
- Excellent chemical resistance
- Void free connection
- Usable with stainless steel and PEEK tubing
- Compatible with all column end fitting types



The following one-piece PEEK™ fingertight fittings are universal fittings for use with all HPLC columns. They are convenient, easy to use and biocompatible. HI-050 is probably the most commonly used fitting in HPLC. They can be used at temperatures up to 150°C. Unlike stainless steel fittings, PEEK fingertight fittings do not permanently lock into place on the tubing, avoiding potential dead volume connection problems. They have 10-32 threads and are designed for use with all 1/16" o.d. tubing.

Description	Qty/pack	Cat. No.	Price
PEEK fingertight fitting, natural, 10-32, for 1/16" o.d. tubing	10	HI-050X	
PEEK fingertight fitting, natural, 10-32, short, for 1/16" o.d. tubing	10	HI-048	
PEEK fingertight fitting, natural, 10-32, long, for 1/16" o.d. tubing	10	HI-031	

Two-Piece Fittings

Two-piece fingertight fittings are designed for use with 1/16" tubing and come complete with ferrule. They are pressure rated to 6,000psi. Instead of the whole fitting, just the ferrule can be replaced, making these fingertights more economical than the one-piece versions.

Description	Qty/pack	Cat. No.	Price
Double-winged PEEK nuts, natural, with HI-508 ferrules, 10-32	10	HI-505	
Replacement PEEK ferrules, for 1/16" o.d. tubing	10	HI-508	



PEEK Fingertight Column Coupler

- Universal connector
- Ultra low dead volume
- Inert and biocompatible
- Withstands pressure up to 6,000psi
- Female-female connector

PEEK one-piece fingertight column couplers are ideal for connecting two analytical columns or analytical or semi-preparative columns to guard cartridges.



HI-081

Description	Cat. No.	Price
PEEK fingertight column coupler	HI-081	

Column End Plugs

- Extend column lifetime
- Fingertight design
- Fits any column

Column end plugs are used to prevent solvent evaporation from the column bed when the columns are not in use. Before storage, simply attach a column end plug to each end of the column. They are made from a chemically inert polymer and are of fingertight design.



HI-001

Description	Qty/pack	Cat. No.	Price
Column endplugs	10	HI-001	

High Temperature and Pressure Fittings

For high temperature applications, polyketone (PK) fingertights are recommended. Polyketone exhibits excellent biocompatibility and chemical resistance comparable to PEEK. These fingertights are able to withstand pressures up to 12,000psi at room temperature or 6,000psi at 200°C.



HI-035

Description	Qty/pack	Cat. No.	Price
PK fingertight fitting 10-32 for 1/16" o.d. tubing	10	HI-035	

Fittings and Connectors (continued)

SLIPFREE™ Connectors

- Void-free and leak-free connections
- Fingertight to 10,000psi
- Compatible with all commercially available end fittings
- For fast, simple multiple connections and reconnections

SLIPFREE™ HPLC connectors offer a simple, rugged way of ensuring good column connections. They are universal for all HPLC columns and consist of a precision-cut length of 1/16" (0.010" i.d.) stainless steel tubing, a Vespel ferrule and a stainless steel compression nut/locking cap assembly. Versions with 0.005" i.d. and 0.020" i.d. are also available for microbore and preparative analysis. Please enquire for details.

Single connectors are used where one connection is made frequently, such as between injector and guard or analytical column, or column to detector. Double connectors are used where both connections are made frequently, such as between analytical and guard column, or column and filter. Flexible SLIPFREE connectors are designed to bend in the middle, allowing easy connections to be made at any angle.



Description	Catalogue No.	Price	Description	Catalogue No.	Price
Single 6cm	HI-090		Flexible single 15cm	HI-039	
Single 10cm	HI-091		Flexible single 28cm	HI-040	
Single 20cm	HI-092		Flexible single 40cm	HI-041	
Double 6cm	HI-095		Flexible double 15cm	HI-042	
Double 10cm	HI-096		Flexible double 28cm	HI-043	
Double 20cm	HI-097		Flexible double 40cm	HI-044	

Viper™ Fingertight Fittings

- Zero dead volume fingertight connectors for HPLC and UHPLC
- Fingertight up to 1200 bar (17,400psi)
- Compatible with almost all valves and columns
- Suitable for temperatures up to 120°C

The Viper™ stainless steel fingertight fitting system provides zero dead volume by sealing at the tip of the tubing, without the need for ferrules. The system consists of two stainless steel fingertights combined with a flexible stainless steel capillary, which is available in different lengths from 150 to 950mm and in 0.13mm and 0.18mm i.d. Robust connections are guaranteed even under ultra-high pressures. Viper fittings are easy to use and reconnect easily between different column hardware.



Length (mm)	0.13mm i.d.		0.18mm i.d.		Length (mm)	0.13mm i.d.		0.18mm i.d.	
	Cat No.	Price	Cat. No.	Price		Cat. No.	Price	Cat. No.	Price
65	6040.2307		6040.2357		550	6040.2305		6040.2355	
150	6040.2315		6040.2360		650	6040.2310		6040.2395	
250	6040.2325		6040.2385		750	6040.2320		6040.2370	
350	6040.2335		6040.2375		850	6040.2330		6040.2380	
450	6040.2345		6040.2365		950	6040.2340		6040.2390	

Hichrom UHPLC Column Connectors

- Compatible with all UHPLC systems and column brands
- Avoids poor connections
- Pressure rated to >1700 bar (>25,000psi)
- Reusable

Hichrom reusable UHPLC column connectors (HI-903) have 10-32 threads suitable for use with 1/16" o.d. tubing. These fittings are reusable, as they are not permanently swaged onto the inlet tubing. An internal ferrule design prevents tubing slippage, whilst the PEEK-polymer blend front ferrule eliminates the risk of damage to receiving ports.

Description	Qty/pack	Cat. No.	Price
UHPLC connector 10-32 thread for 1/16" o.d. tubing	1	HI-903	
	10	HI-903X	



HI-903

Fittings and Connectors (continued)

PEEK™ Unions

- Use to connect 2 pieces of 1/16" o.d. tubing
- Chemically inert and biocompatible
- Zero dead volume connection
- Pressure rated to 5,000psi
- Complete with two HI-505 fingertight fittings



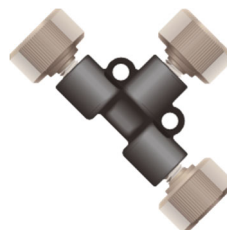
HI-059

Description	Thru-hole	Swept Volume	Cat. No.	Price
PEEK ZDV union, 10-32	0.010"	0.07µl	HI-059	£24
PEEK ZDV union, 10-32	0.020"	0.28µl	HI-055	£24

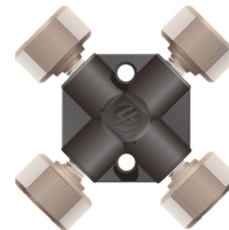
PEEK Tees and Crosses

- Use with 1/16" o.d. PEEK™ or stainless steel tubing
- Maximum operating pressure 3,500psi (241 bar)
- Includes 3 or 4 HI-505 fingertight fittings

Description	Thru-hole	Swept Volume	Cat. No.	Price
PEEK tee, 10-32	0.020"	0.57µl	HI-032	£27
PEEK cross, 10-32	0.020"	0.72µl	HI-034	£36



HI-032



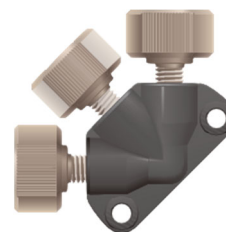
HI-034

Static Mixing Tee

- PEEK body with 2-piece fingertight fittings
- Low swept volume
- Pressure rated to 5,000psi (345 bar)

The static mixing tee HI-454 is ideal for microbore or analytical gradient HPLC. It has a low swept volume (2.2µl) and is designed for flow rates of 0.5 to 3ml/min. and a maximum pressure of 5,000psi (345 bar).

Description	Thru-hole	Swept Volume	Cat. No.	Price
PEEK static mixing tee for 1/16" tubing	0.020"	2.2µl	HI-454	---



HI-454

Stainless Steel Nuts and Ferrules

Now largely replaced by PEEK fingertight fittings, except for the most searching applications, these precision machined stainless steel nuts and ferrules (threads 10-32) provide an excellent connection when needed, and are guaranteed to be both burr and contaminant free.

Description	Cat. No.	Price
Male nut 1/16"	HI-500	£5
Ferrule 1/16"	HI-502	£2



HI-500



HI-502



HI-070



HI-752

Stainless Steel Connectors

The connector HI-070 consists of a 4cm length of 1/16" o.d. x 0.010" i.d. stainless steel tubing with appropriate 1/16" nuts and ferrules and can be used to connect female endfitting Hichrom guard and analytical columns and make similar connections. The ZDV male-male connectors (unions) have internal threads and provide zero dead volume connections. These ZDV unions are rated to 20,000psi.

Description	Cat. No.	Price
SS 1/16" female-female connector, 0.010"	HI-070	£15
SS ZDV union for 1/16" tubing, 0.010" thru-hole, male-male	HI-752	---

Fittings and Connectors (continued)

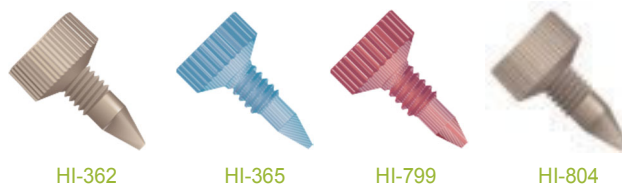
Microflow Fittings

MicroTight® PEEK™ Fittings

- For connecting capillary tubing (360µm or 1/32" o.d. or MicroTight sleeves)
- Pressure rated to 4,000psi (276 bar)
- Temperature stable up to 125°C

MicroTight® 1-piece fingertight PEEK™ fittings, with 6-32 threads, are used to connect capillary tubing to MicroTight unions, adapters or filters.

Description	Qty/pack	Cat. No.	Price
Standard fitting for MicroTight tubing sleeve	10	HI-362	...
Standard fitting for 360µm o.d. tubing	10	HI-365	...
Standard fitting for 1/32" o.d. tubing	10	HI-799	...
Fitting plug	1	HI-804	...



HI-362

HI-365

HI-799

HI-804

MicroTight PEEK Connector

- Use to connect 2 pieces of capillary tubing, using tubing sleeves
- True ZDV union
- Includes fittings and gauge plug
- Pressure rated to 4,000psi

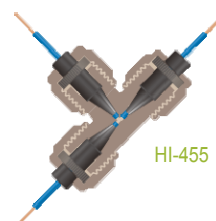


HI-089

Description	Thru-hole	Swept Volume	Cat. No.	Price
PEEK true ZDV union for MicroTight sleeves	N/A	N/A	HI-089	...
MicroTee for MicroTight sleeves (fittings included)	0.006"	29nl	HI-455	...
MicroCross for MicroTight sleeves (fittings included)	0.006"	38nl	HI-456	...

PEEK MicroTee and MicroCross

- Use to connect 1/16", 1/32" and 360µm o.d. tubing
- Low swept volume
- Use tubing sleeves to connect different o.d. tubing



HI-455

MicroTight PEEK Tubing Sleeves

- Colour-coded for easy i.d. identification
- Pressure rated to 4,000psi (276 bar)
- Temperature stable up to 125°C

PEEK tubing sleeves are used with MicroTight fittings to connect capillary tubing. They have an o.d. of 0.025" with a range of i.d.s suitable for use with different ports. The i.d. of the sleeve should be 0.001" - 0.002" larger than the o.d. of the capillary tubing.

Sleeve i.d. ¹	For Tubing o.d.	Colour	Qty/pk	Cat. No.	Price
125µm	70-110µm	Red	10	HI-132	...
180µm	125-165µm	Yellow	10	HI-172	...
230µm	175-215µm	Natural	10	HI-181	...
395µm	340-380µm	Green	10	HI-171	...

¹Other i.d. sleeves available – please enquire



NanoTight Fittings and Tubing Sleeves

- For connecting 1/16" o.d. or capillary tubing using tubing sleeves to standard 10-32 coned ports
- Pressure rated to 4,000psi (276 bar)

NanoTight fittings and sleeves are designed to connect 70µm – 1mm o.d. capillary tubing to any standard 10-32 coned port using NanoTight tubing sleeves. These fittings are made from PEEK, with the ferrule manufactured from ETFE. NanoTight tubing sleeves are manufactured from FEP fluoropolymer and have a maximum recommended operating temperature of 50°C.



Please contact Hichrom for ordering information for NanoTight fittings and sleeves.