

A **revolutionary** quick-connect system.



SEALING ELEMENT (for straight through union)

When Opti-Lynx was first introduced, it was a revolutionary idea in the HPLC industry–eliminating the use of wrenches for holders, stainless steel fittings, and the cranking down of finger tights to prevent leaks.

66 Problems with consistency and column longevity have been virtually eliminated since we started using Opti-Lynx products.

Partner: PFIZER

Opti-Lynx was the first to fulfill the promise of a low dispersion quick-connect system. From highthroughput labs with the need for replacing components with the utmost efficiency, to single instrument labs that enjoy the ease of use Opti-Lynx offers - many have realized the advantages of the Opti-Lynx quick-connect system.

Simple. Innovative. Easy to use.

- Quarter-turn connection rated to 6,000 psi
- Low volume/low dispersion interface for volume critical regions
- True zero-dead-volume connection
- Hardware connection is only made once
- NO TOOLS

Versatility

The Opti-Lynx modular design provides the maximum in versatility for your system. Opti-Lynx inserts can be a filter, guard column, trap cartridge or analytical column. Since the interacting surfaces are identical, the only variable component is the holder tube. Install a guard column for one application and then switch to a pre-column filter for the next. Use an in-line filter with different porosities and diameters just by changing the insert. Switch out columns in an instant with the Velocity' system or retrofit current columns with the universal port adapter. We also offer columns with integrated Opti-Lynx end fittings. You can make and break flow paths for multiple detectors, or anywhere else a break in flow is frequently made. Opti-Lynx allows all of this without ever having to change out the basic components.

Limitless Potential

The potential of Opti-Lynx goes beyond what is listed in this catalog. Opti-Lynx was designed without constraints in mind, and should be viewed as a hardware platform to make your applications easier and more efficient. At Optimize Technologies, we work hard to provide the ideal solution to our customers' applications. If you have a special requirement for your stationary phase, or need Opti-Lynx in a custom dimension or configuration, please contact us.

Our **best** ideas come from the needs of our customers.

The Quick-Connect design makes changing columns fast and easy, eliminating the need for any tools.

Partner: Pfizer

opti-lynx how it works

With Opti-Lynx, you can make and break tubing connections instantly - all it takes is a quarter-turn, by hand. To make an Opti-Lynx connection, two components - a slotted side and a pinned sidecome together around a polymeric insert. One reason why the Opti-Lynx system is so useful and versatile is that the polymeric insert can contain a guard column, a filter, a trap cartridge, or even a whole analytical column. Practically any component found in the HPLC flow path can be made into an Opti-Lynx insert!



phi-lynx

Connect your existing tubing to the Opti-Lynx Holder Cap using the included finger-tight fitting.



Tighten the slotted Holder Tube into the Holder Cap.



Align the Holder Tube and Cap with the Column and Insert.



Bring the pins to the slot guide and twist closed.

www.optimizetech.com

opti-lynx | applications

Opti-Lynx may be used in any number of different applications. Below are just three ways Opti-Lynx quick-connect hardware can be used, but don't let this limit your thinking! We are constantly developing new ways of applying this system through both our applications lab and our customers' imaginations.



Set up a simple columnswitching rig without the need for expensive high-pressure valves. Install Opti-Lynx universal port adapters on your columns and switch between different columns quickly and easily. When columns are not in use, seal them with the Opti-Lynx quick plug. One method requires a filter, while another calls for a guard column - no problem. Simply choose the insert you want, couple it with the correct holder tube, and you're off and running. There is no need to disconnect any tubing, and the only tools you need are your fingers. If you need to reroute flow paths with the utmost efficiency, the Opti-Lynx In-Line Kit is your answer. Simply terminate one tube with a holder cap, and get extra bayonet connectors for each mating tube connection. Switching flow paths becomes a easy task with this setup, not a huge production.

opti-lynx hardware components

All Opti-Lynx hardware can be purchased in kits or separately as needed for your application. Opti-Lynx hardware is precision machined to maintain the highest quality and strictest tolerances. Below are a few examples of individual Opti-Lynx hardware components, and some complete kits are shown on the facing page to demonstrate how Opti-Lynx works.





configurations

There are many ways to use Opti-Lynx, and there are many options for Opti-Lynx inserts. If you have special requirements for your stationary phase or would like Opti-Lynx hardware in custom dimensions or configurations, please contact us. Here are a few examples of how Opti-Lynx can be used:

pre-column filter / direct-connect trap example



in-line filter / trap column example



guard column example



analytical column example





Need more room to change your in-line or pre-column filter? With HPLC systems getting smaller and more compact, the areas to work with are also decreasing in size. This often makes getting to the components that need frequent changing quite a task - especially if you need wrenches.

The Opti-Lynx In-Line Filter System features Optimize Technologies' proprietary Opti-Lynx hardware, allowing filter changes to be done in a quick quarterturn. Opti-Lynx In-Line Filters offer unmatched versatility with a choice of nine different porosity/diameter combinations for every possible filtration need. Our revolutionary quick-connect design is ideal for high temperature GPC and position-emitting radionuclide filtration - not just HPLC.



U.S. PATENT NO. 5,525,303



To change an **opti-lynx**^{**} pre-column filter, simply twist the holder - **no tools required.**

Pre-Column Filters can help extend the life of your analytical column by catching particulates that would otherwise clog the column inlet frit. The Opti-Lynx Pre-Column Filter System brings unparalleled versatility to pre-column protection, with the added convenience of quick-connect operation.

Each **opti-lynx**^{**} filter insert shares the same external dimensions, allowing you to use different diameters and porosities with the same holder hardware.

		Single	10 Pack	
Recommended for Pre-Column use	rah	11-02595-CD	11-02797-CD	Low Volume Filter Insert, 0.5 μ m/0.062" diameter
	TPTF	11-02595-CE	11-02797-CE	Low Volume Filter Insert, 2.0 μ m/0.062" diameter
		11-02595-CF	11-02797-CF	Medium Capacity Filter Insert, 0.5 μ m/0.125" diameter
		11-02595-CG	11-02797-CG	Medium Capacity Filter Insert, 2.0 μ m/0.125" diameter
Recommended for In-Line use		11-02595-CH	11-02797-CH	High Capacity Filter Insert, 0.5 μ m/0.187" diameter
		11-02595-CI	11-02797-CI	High Capacity Filter Insert, 2.0 μ m/0.187" diameter
		11-02595-CJ	11-02797-CJ	Semi-Prep Filter Insert, 2.0 µm/0.250" diameter*
		11-02595-CL	11-02797-CL	Semi-Prep Filter Insert, 10.0 μ m/0.250" diameter*
		Single	5 Pack	
Prep		11-03038-C4	11-03039-C4	Prep Filter Insert, 10.0 μ m/0.250" diameter (For use with OPTI-LYNX Prep Holder only)

OPTI-LYNX FILTER INSERT SELECTION GUIDE

*Opti-Lynx Semi-Prep Filter Inserts are rated for use at pressures of up to 4,000 psi (other Opti-Lynx products are rated to 6,000 psi unless otherwise stated). Opti-Lynx Filter Inserts are rated at temperatures up to 175° C.

In-Line Filter / Prep Filter Holder



Pre-Column Filter



OPTI-LYNX Filter Holders

11-02225-AA	OPTI-LYNX In-Line Filter Holder Includes: Bayonet Connector, Holder Cap, Holder Tube, Fittings
11-03200-AA	OPTI-LYNX In-Line Prep Filter Holder - For use with Prep Inserts only Includes: Bayonet Connector, Holder Cap, Holder Tube, Fittings
11-02226-AA	OPTI-LYNX Pre-Column Filter Holder Includes: Universal Port Adapter, Holder Cap, Holder Tube, Fitting

OPTI-LYNX filter inserts are ordered separately. Please use the table above to find your part number.

opti-lynx trap columns

Opti-Lynx trap columns combine the convenience of our quickconnect holder with a versatile selection of packed-bed cartridges to offer chromatographers numerous options for on-line or off-line sample cleanup and preconcentration. Each cartridge shares the same external dimensions, allowing you to use different diameters and porosities with the same holder hardware.

Opti-Lynx traps are available in packed-bed volumes of $4 \mu L$ to $100 \mu L$ with a wide range of standard and custom packings. Whether you want to separate a peptide digest from its matrix for further analyses, or prepare a



OPTI-LYNX In-line Trap Holder

dilute small molecule sample for LC injection without any sample loss – Opti-Lynx Traps are the ideal tool to optimize your technique. These columns can be loaded and regenerated repeatedly for maximum value. For smaller volume packed-bed trapping columns, please see Opti-Pak on pg. 36.

For more information on Trapping Applications, please visit www.optimizetech.com/literature.

selecting your opti-lynx™ trap

Use the selection guide below to find the five digits that match the trap dimensions you require. Then find the two letter packing code for your phase. **Example:** a five-pack of 20 μ L trap cartridges with SCX phase would have part number 11-02870-TB.



OPTI-LYNX TRAP SELECTION GUIDE

OPTI-LYNX trap cartridges are ordered separately. Please use the table above to find your part number.

Contact us for Biocompatible Holder and Cartridge options.



The Opti-Lynx Guard Column is a high performance, cartridge-based guard system, suitable for use with any analytical column. Some cartridge-based guard column products offer convenience with a price: higher internal volumes. At Optimize Technologies, we refuse to compromise performance for anything. Opti-Lynx utilizes low dispersion component interfaces to keep extra column volume to a minimum: connection paths have a total internal volume of less than 2μ L. You get quick-connect convenience and low dispersion, all in one package.



OPTI-LYN

The Opti-Lynx Guard Column fits any analytical column with a 10-32 port. Start with our Opti-Lynx Guard Column Holder Kit, then select Opti-Lynx Guard Cartridges in the chemistries you require. They are available individually and in packs of five.

selecting your **opti-lynx**[™] guard column cartridges

Use the selection guide below to find the five digits that match the dimension and quantity you require. Then, find the two letter packing code for your sorbent/phase. Complete your guard column cartridge part number by using these codes in the part number template below the table.

Example: a five-pack of 3 mm C18 guard cartridges would have part number 11-02630-EA.



OPTI-LYNX GUARD SELECTION GUIDE

OPTI-LYNX Guard Column Direct-Connect Holder

 11-02232-AA
 Holder for direct connection to analytical columns

 Includes: Universal Port Adapter, Guard Holder Tube, Holder Cap, Fitting

OPTI-LYNX guard cartridges are ordered separately. Please use the table above to find your part number.







Liquid chromatography is no longer limited to the "one column, one assay" setup. Researchers are now being asked to screen thousands upon thousands of compounds, all in less time. This is why Optimize Technologies offers Velocity - a true quick-connect analytical column system.

Velocity incorporates the Opti-Lynx[™] system to provide connections in a quarter-turn. Rated to 6,000 psi, Velocity columns are individually quality tested and certified to guarantee analytical performance. Opti-Lynx quick-connect technology allows columns to be changed effortlessly: scale down column dimensions, switch between stationary phases, or swap methods in seconds - all without the use of tools.

Need to use a pre-column filter or guard column? With Velocity's integral pre-column protection hardware, adding or changing guard columns and filters is as easy as changing Velocity columns - just grab and twist.

Most importantly, Velocity and Opti-Lynx hardware will not adversely affect your chromatographic applications. Velocity is not affected by the shortcomings of other cartridge column designs such as excessive dead volumes and substandard performance versus conventional designs. Velocity has been meticulously engineered to the most stringent of standards. All connections conduct liquid through lowvolume interfaces minimizing hardware contributions to dispersion and peak broadening.



velocity[®] At the speed of discovery.

how does velocity[•] work?

Velocity is based on the Opti-Lynx[™] system, so it uses the same four basic components: bayonet connector, insert, slotted connector, and holder cap. All columns of the same length share the same external dimensions, so switching between different IDs and packings requires no change in hardware configuration. To see a demonstration, go to www.optimizetech.com/velocityhplc.

A simple quarter-turn engages the **opti-lynx**^{**} connection.



Velocity[•] is an improvement over conventional designs plagued with excessive dead volume or cumbersome hardware.

Need to change column lengths? No problem. Just unscrew and install the appropriate slotted connector tube - no need to re-plumb any solvent lines. Once you are ready to go, a simple quarter-turn engages the Opti-Lynx connection. The actuation torque is so small, it's easier than opening a pickle jar.

PHASES & CHEMISTRIES

Velocity cartridge columns are available in multiple flavors, each available in 3 μ m and 5 μ m particle sizes. We also offer a selection of custom phases.

For more information or to order Velocity, contact an Optimize representative or visit our website at www.optimizetech.com.